

Water Resources Data

California

Water Year 2001

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

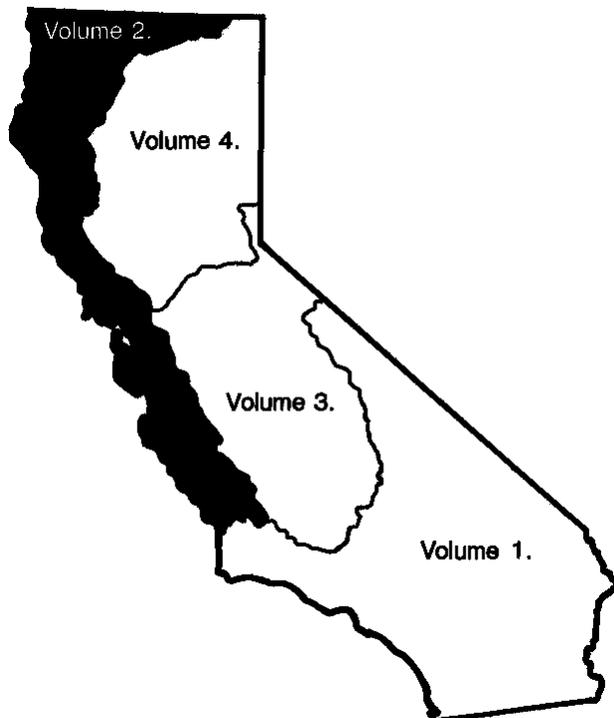
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Water Resources Data California Water Year 2001

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

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

Water-Data Report CA-01-2



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

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

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

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

Station No.	Station name	Drainage area (mi ²)	Period of record
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 Carpofo 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
11149700	San Antonio River at Sam Jones Bridge	272	1958–65
11150000	San Antonio River at Pleyto	204	1929–65
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
11152540	El Toro Creek near Spreckels	31.9	1961–2001
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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
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
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
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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
11175000	Tassajero Creek near Pleasanton	26.8	1915–19, 1922–30
11176000	Arroyo Mocho near Livermore	38.2	1912–30, 1963–2000
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
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	Tuluca 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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
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
11467295	South Fork Gualala River above Wheatfield Fork, near Annapolis	48.25	2001
11467500	South Fork Gualala River near Annapolis	161	1951–71, 1991–94
11467510	South Fork Gualala River near the Sea Ranch	161	1991–92
11467553	North Fork Gualala River above South Fork Gualala River, near Gualala	47.5	2001
11467600	Garcia River near Point Arena	98.5	1962–83
11467800	Rancheria Creek near Boonville	65.6	1959–68
11468010	Albion River near Comptche	14.4	1961–69, 2001
11467850	Soda Creek Tributary near Boonville	1.53	1965–68
11468070	South Fork Big River near Comptche	36.3	1960–1971, 2001
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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
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
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
11517950	East Fork Scott River above Kangaroo Creek	49.5	1970–73
11518050	East Fork Scott River at Callahan	110	1959–74
11518310	Cedar Gulch	.99	1961–73
11530020	Supply Creek at Hoopa	15.8	1982–85

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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
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
11467296	South Fork Gualala River above Wheatfield Fork, near Annapolis	48.25	T	2001
11467585	Wheatfield Fork Gualala River above South Fork Gualala River, near Annapolis	111	T	2001
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 Nacimiento 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
11520500	Klamath River near Seiad Valley	6,940	WQ,C,T, S	1955–79, 1999–2001
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
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
11174000	San Antonio Creek near Sunol	37	S	2000–01
11174600	Alamo Canal near Pleasanton	40.8	C	1979–83

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Type of record	Period of record
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
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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Type of record	Period of record
11467553	North Fork Gualala River above South Fork Gualala River, near Gualala	47.5	T	2001
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
11468010	Albion River near Comptche	14.4	T	2001
11468092	Big River below Two Log Creek, near Comptche	88.71	T	2001
11468070	South Fork Big River near Comptche	36.2	T	2001
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
11516530	Klamath River below Iron Gate Dam	4,630	WQ,C,T, P	1962–80, 1999–2001
11516600	Cottonwood Creek at Hornbrook	89.8	T	1965–71
11517500	Shasta River near Yreka	793	WQ,T,S	1955–56, 1959–79
11519500	Scott River near Fort Jones	653	WQ,S	1955–56, 1959–79
11520500	Klamath River near Seiad Valley	6940	WQ,C,T, S	1955–79, 1999–2001
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	1985–2000

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DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Type of record	Period of record
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).

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VOLUME 2—PACIFIC SLOPE BASINS FROM ARROYO GRANDE
TO OREGON STATE LINE EXCEPT CENTRAL VALLEY

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

INTRODUCTION

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

This volume of the report includes records on surface water in the State. Specifically, it contains: (1) discharge records for 128 streamflow-gaging stations and 9 partial-record stations; (2) stage and content records for 6 lakes and reservoirs; (3) gage-height records for 8 stations; (4) precipitation records for 1 station; and (5) water-quality records for 43 streamflow-gaging stations and 2 water-quality partial-record stations. Records included for stream stages are only a small fraction of those obtained during the water year.

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

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

Publications similar to this report are published annually by the U.S. Geological Survey for all States. Each report has an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CA-01-2." 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.

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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 Flood Control and Water Conservation District, Noel King, Director.
 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 streamflow representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the affects of acid deposition on stream chemistry. Additional information on the Hydrology Benchmark Program can be found at:

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

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande. From 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN program can be found at:

<http://water.usgs.gov/nasqan>

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term nationally consistent monitoring program, coupled

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with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at:

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

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

Assessment activities are being conducted in 59 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

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

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

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 2001 water year that began October 1, 2000, and ended September 30, 2001. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and contents data for lakes and reservoirs, and water-quality data for surface water. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station-Identification Numbers

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

Downstream-Order System

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

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station such as 1119750, which appears just to the left of the station name, includes the two-digit part number "11" plus the six-digit downstream-order number "19750." The part number designates the major river basin; for example, part "11" is the Pacific Slope Basins in California.

Latitude-Longitude System

The identification numbers for miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the

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rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description (fig. 1).

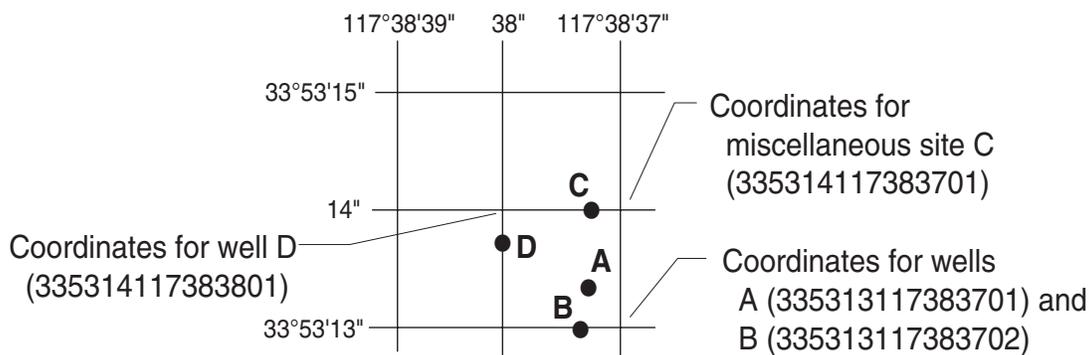


Figure 1. System for numbering miscellaneous sites (latitude and longitude).

Records of Stage and Water Discharge

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

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

Data Collection and Computation

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

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

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

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

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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.

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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

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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.

MAXIMUM 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.)

MAXIMUM 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.

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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 (ft³/s) for values less than 1 ft³/s, to the nearest tenth between 1.0 and 10 ft³/s, to whole numbers between 10 and 1,000 ft³/s, and to three significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

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

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

Records of Surface-Water Quality

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

Change in National Trends Network Procedures

Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences, based on a special intercomparison study, is available from the NADP Program Office, Illinois State Water Survey, 2204 Griffith Drive, Champaign, IL 61820-7495 (Telephone: 217-333-7873).

Classification of Records

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

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

Arrangement of Records

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

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Onsite Measurements and Sample Collection

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

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

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

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

Historical and current (2001) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter (ng/L). If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter ($\mu\text{g/L}$) and could reflect contamination introduced during some phase of the procedure.

Water Temperature

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

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

Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment 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-

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

Cross-Sectional Data

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

Laboratory Measurements

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

Quality-Control Data

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

Blank Samples

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

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

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

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

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

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

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

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

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

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

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

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

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

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Reference Samples

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

Replicate Samples

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

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

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

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

Spike Samples

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

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

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

Data Presentation

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

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

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

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

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

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

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

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

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

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

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

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ACCESS TO USGS WATER DATA

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

<http://water.usgs.gov>

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

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units on the inside of the back cover.

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

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also “[Annual runoff](#)”)

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

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

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

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

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 to September 30). Most low-flow frequency analyses use a climatic year (April 1–March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

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

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

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

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

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

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

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

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

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

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

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

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

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

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "[Phytoplankton](#)")

Bottom material (See "[Bed material](#)")

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

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

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

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

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

Cfs-day (See "[Cubic foot per second-day](#)")

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

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

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

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

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

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

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

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

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

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic feet per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, $[(\text{ft}^3/\text{s})/\text{d}]$) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily-mean discharges reported in the daily-value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

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

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

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

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

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

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

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "[Phytoplankton](#)")

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

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

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

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO₃) can be converted to carbonate concentration by multiplying by 0.60.

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

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

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

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff (See "[Drainage area](#)")

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

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65°C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "[Wet weight](#)")

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

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

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

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

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

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

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

Fecal streptococcal bacteria are present in the intestine of warm-blooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35°C plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

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

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

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

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

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

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

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

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

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

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

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

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

Horizontal datum (See "Datum")

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

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

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

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

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

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

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

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

$$I = I_0 e^{-\lambda L},$$

where I_0 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

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_0}.$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Micrograms per gram (UG/G, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

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

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "[Ash mass](#)", "[Biomass](#)", and "[Dry mass](#)"

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area of habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

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

Classification	Size (mm)	Method of analysis
Clay	0.00024–0.004	Sedimentation
Silt004–.062	Sedimentation
Sand062–2.0	Sedimentation/sieve
Gravel.	2.0–64.0	Sieve

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

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

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

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

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

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

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

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

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

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

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

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

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

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

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

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

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

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

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

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

Return period (See "[Recurrence interval](#)")

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

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

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

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

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

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

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

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

Stage (See "[Gage height](#)")

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

Surficial bed material is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which is sampled using U.S. Series Bed-Material Samplers.

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

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "[Suspended](#)")

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

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Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "[Sediment](#)" and "[Suspended sediment](#)")

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

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

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

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "[Sediment](#)")

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "[Suspended](#)")

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

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

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

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

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	<i>Hexagenia</i>
Species	<i>Hexagenia limbata</i>

Temperature preferences:

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

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

Cool — intermediate between cold and warm water temperature preferences.

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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

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

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent

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in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

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

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

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

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

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

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

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

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

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

Trophic groups:

Filter feeder—diet composed of suspended plant and/or animal material.

Herbivore—diet composed predominantly of plant material.

Invertivore—diet composed predominantly of invertebrates.

Omnivore—diet composed of at least 25-percent plant and 25-percent animal material.

Piscivore—diet composed predominantly of fish.

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

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

Vertical datum (See "**Datum**")

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

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Water table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

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

Water year in USGS reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2001, is called the "2001 water year."

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

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

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

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

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

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

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

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

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

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

- 1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS–TWRI Book 1, Chapter D1. 1975. 65 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI Book 1, Chapter D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI Book 2, Chapter D1. 1974. 116 p.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI Book 2, Chapter D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI Book 2, Chapter E1. 1971. 126 p.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI Book 2, Chapter E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

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

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI Book 3, Chapter A1. 1967. 30 p.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI Book 3, Chapter A2. 1967. 12 p.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI Book 3, Chapter A3. 1968. 60 p.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI Book 3, Chapter A4. 1967. 44 p.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI Book 3. Chapter A5. 1967. 29 p.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI Book 3, Chapter A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI Book 3, Chapter A7. 1968. 28 p.

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- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI Book 3, Chapter A8. 1969. 65 p.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI Book 3, Chapter A9. 1989. 27 p.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS–TWRI Book 3, Chapter A10. 1984. 59 p.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS–TWRI Book 3, Chapter A11. 1969. 22 p.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI Book 3, Chapter A12. 1986. 34 p.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI Book 3, Chapter A13. 1983. 53 p.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI Book 3, Chapter A14. 1983. 46 p.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS–TWRI Book 3, Chapter A15. 1984. 48 p.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI Book 3, Chapter A16. 1985. 52 p.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS–TWRI Book 3, Chapter A17. 1985. 38 p.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI Book 3, Chapter A18. 1989. 52 p.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI Book 3, Chapter A19. 1990. 31 p.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI Book 3, Chapter A20. 1993. 38 p.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS–TWRI Book 3, Chapter A21. 1995. 56 p.

Section B. Ground-Water Techniques

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS–TWRI Book 3, Chapter B1. 1971. 26 p.
- 3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G.D. Bennett: USGS–TWRI Book 3, Chapter B2. 1976. 172 p.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI Book 3, Chapter B3. 1980. 106 p.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI Book 3, Chapter B4. 1990. 232 p.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS–TWRI Book 3, Chapter B4. 1993. 8 p.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI Book 3, Chapter B5. 1987. 15 p.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI Book 3, Chapter B6. 1987. 28 p.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS–TWRI Book 3, Chapter B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS–TWRI Book 3, Chapter B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI Book 3, Chapter C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI Book 3, Chapter C2. 1999. 89 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI Book 3, Chapter C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI Book 4, Chapter A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI Book 4, Chapter A2. 1968. 15 p.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS–TWRI Book 4, Chapter B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI Book 4, Chapter B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS–TWRI Book 4, Chapter B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

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

Book 5. Laboratory Analysis

Section A. Water Analysis

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI Book 5, Chapter A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI Book 5, Chapter A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI Book 5, Chapter A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS–TWRI Book 5, Chapter A4. 1989. 363 p.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI Book 5, Chapter A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS–TWRI Book 5, Chapter A6. 1982. 181 p.

Section C. Sediment Analysis

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

Book 6. Modeling Techniques

Section A. Ground Water

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI Book 6, Chapter A1. 1988. 586 p.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI Book 6, Chapter A2. 1991. 68 p.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI Book 6, Chapter A3. 1993. 136 p.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI Book 6, Chapter A4. 1992. 108 p.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI Book 6, Chapter A5. 1993. 243 p.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI Book 6, Chapter A6. 1996. 125 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI Book 7, Chapter C1. 1976. 116 p.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI Book 7, Chapter C2. 1978. 90 p.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI Book 7, Chapter C3. 1981. 110 p.

Book 8. Instrumentation**Section A. Instruments for Measurement of Water Level**

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI Book 8, Chapter A1. 1968. 23 p.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI Book 8, Chapter A2. 1983. 57 p.

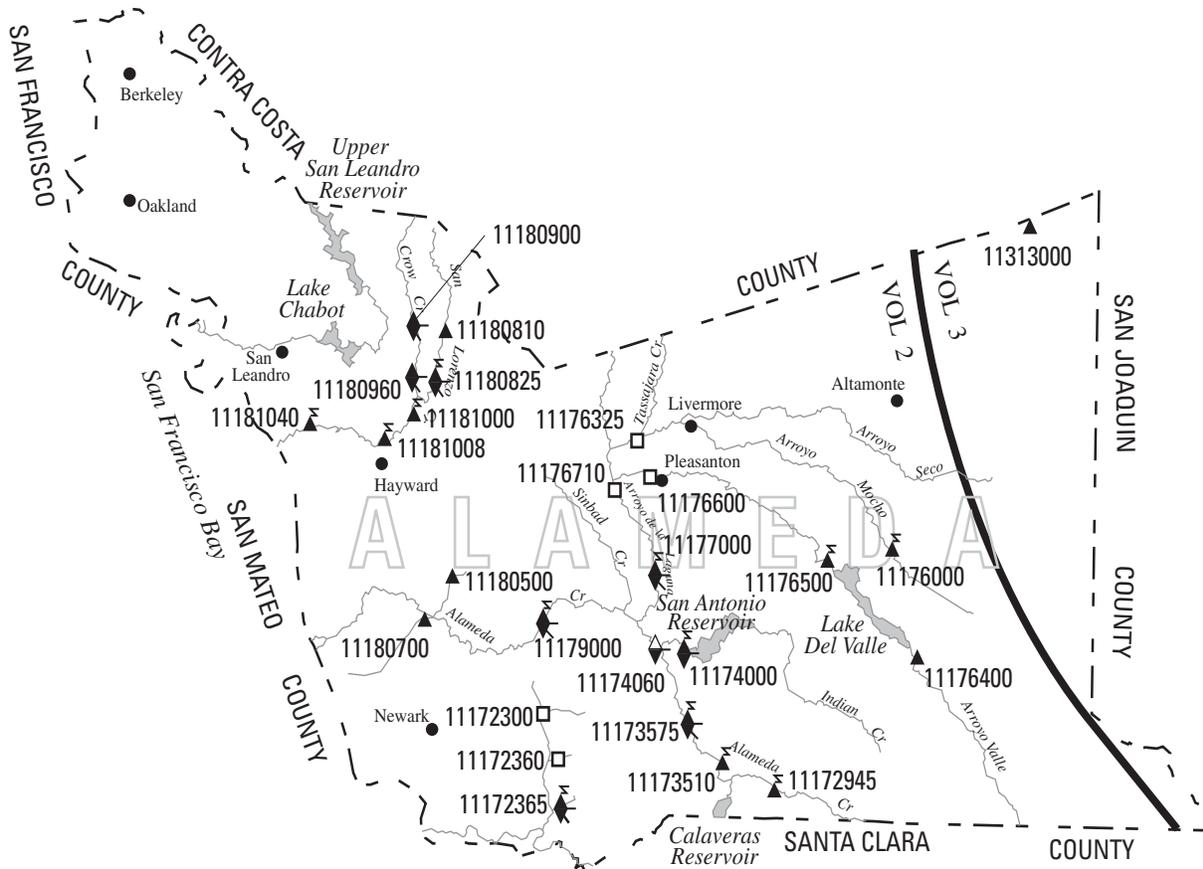
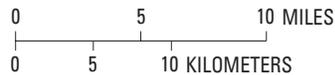
Section B. Instruments for Measurement of Discharge

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

Book 9. Handbooks for Water-Resources Investigations**Section A. National Field Manual for the Collection of Water-Quality Data**

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A2. 1998. 94 p.
- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A3. 1998. 75 p.
- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A4. 1999. 156 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A5. 1999. 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI Book 9, Chapter A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI Book 9, Chapter A7. 1997 and 1999. Variously paginated.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-Material Samples*, by D.B. Radtke: USGS–TWRI Book 9, Chapter A8. 1998. 48 p.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI Book 9, Chapter A9. 1998. 60 p.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

- ▲ Gaging Station
- ▲ Gaging Station with Telemetry
- ◆ Gaging and Water-Quality Station (Sediment, Temperature)
- ◆ Gaging and Water-Quality Station with Telemetry (Sediment)
- ◆ Gaging and Water-Quality Station with Telemetry (Sediment, Temperature)
- ◆ Gaging and Water-Quality Station (Sediment, Miscellaneous Measurement Site)
- Periodic Seasonal Station



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

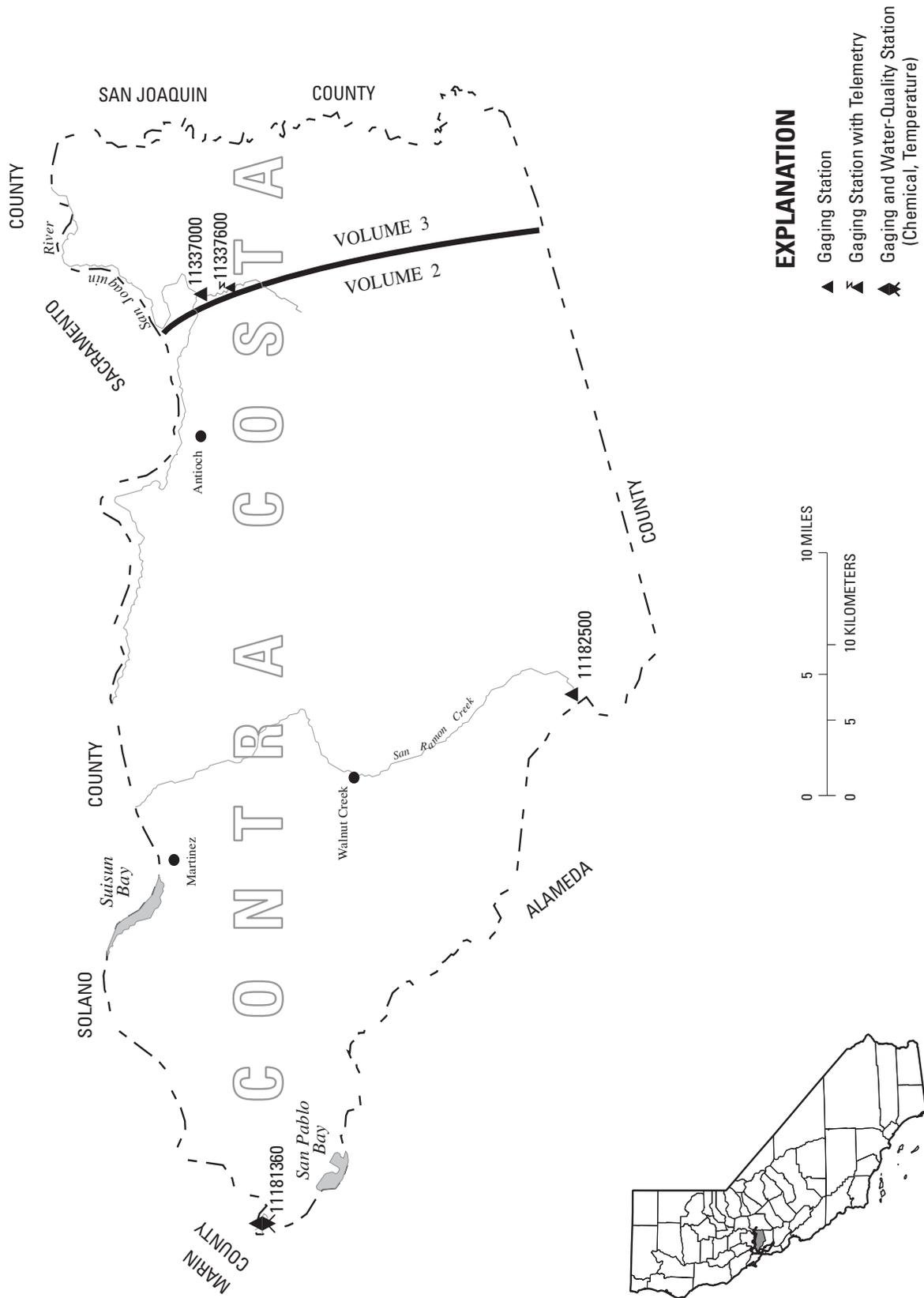


Figure 3. Location of discharge and water-quality stations in Contra Costa County.
(NOTE: Record for station 11337000 published in volume 3.)

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

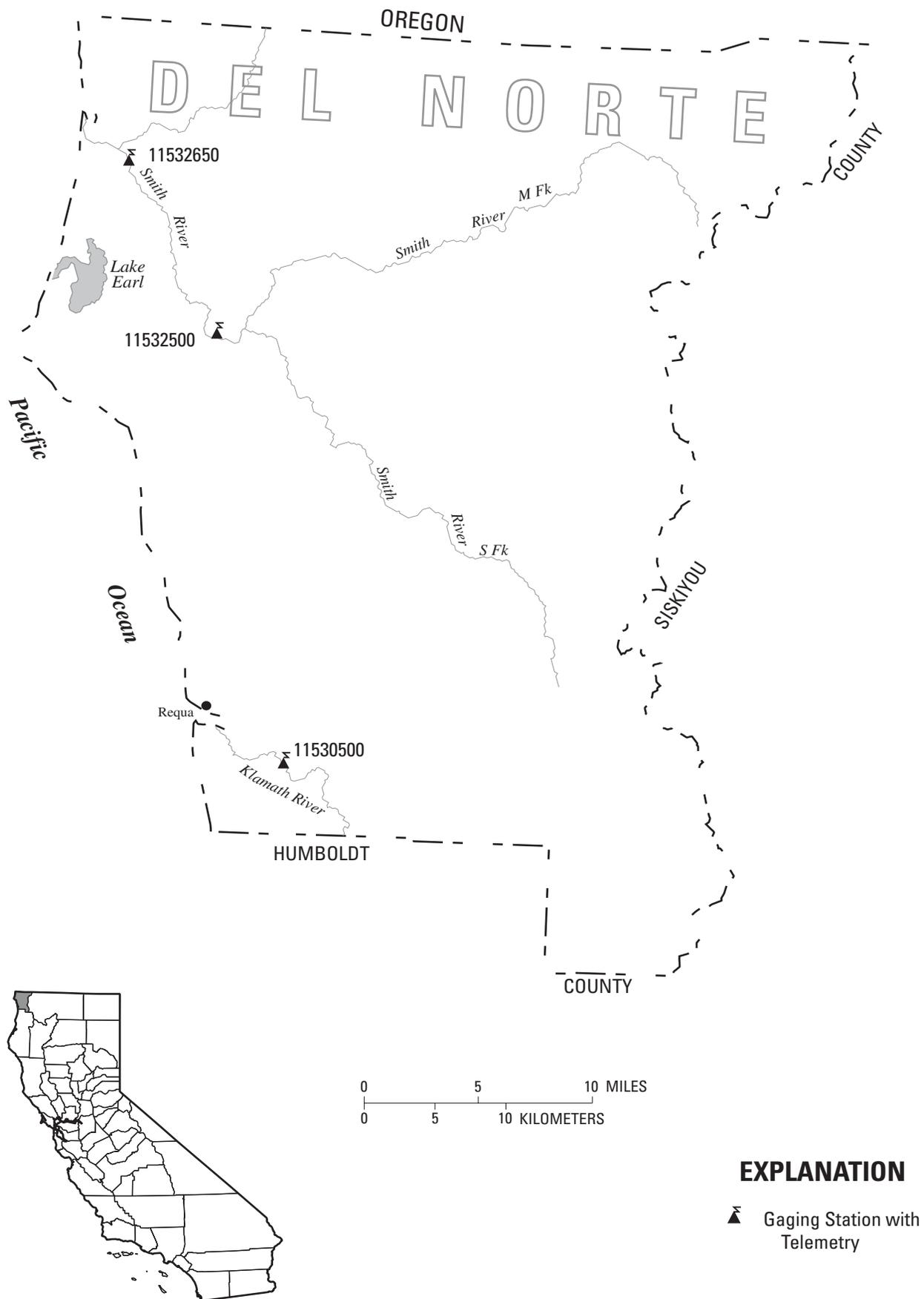


Figure 4. Location of discharge stations in Del Norte County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

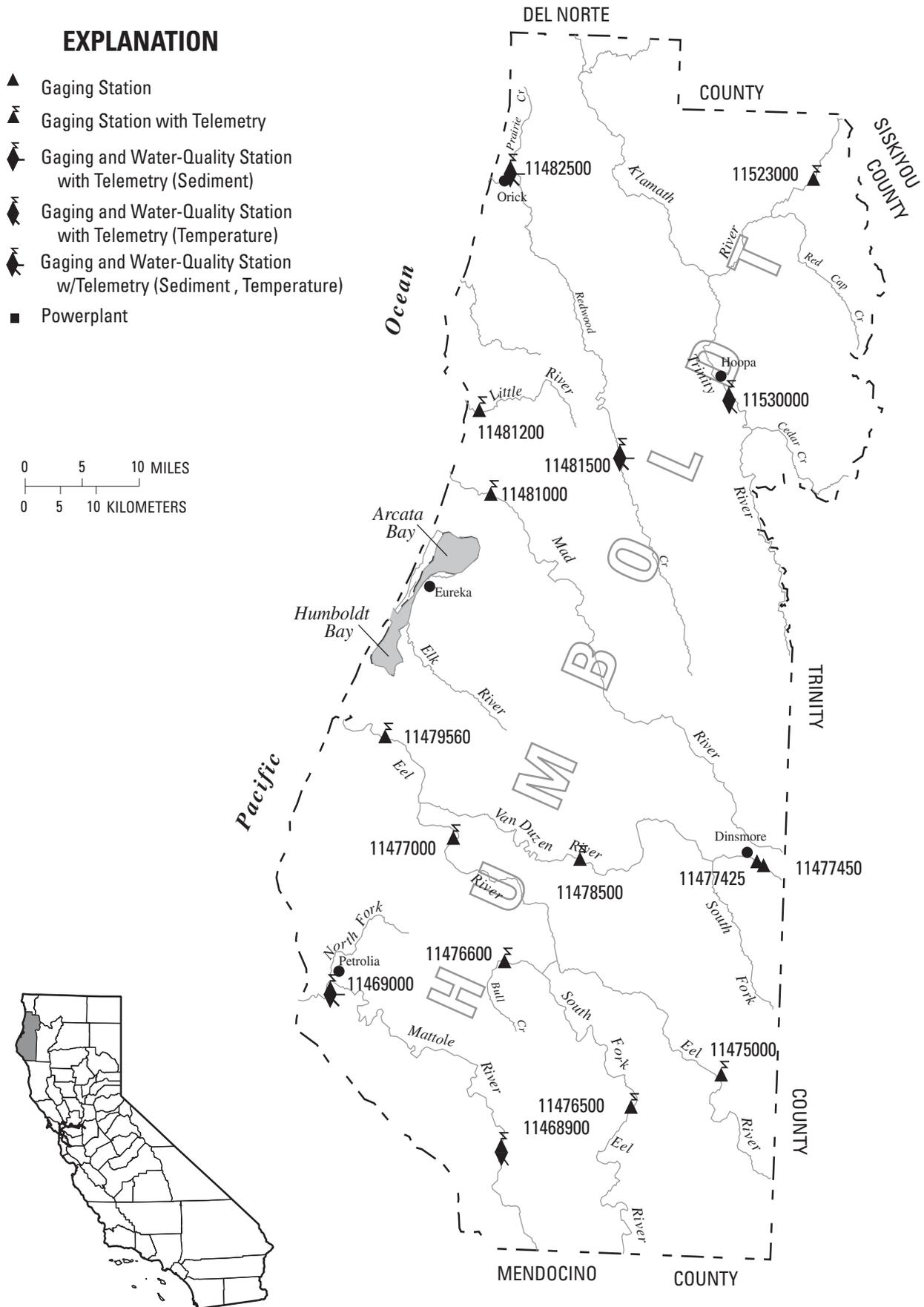


Figure 5. Location of discharge and water-quality stations in Humboldt County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

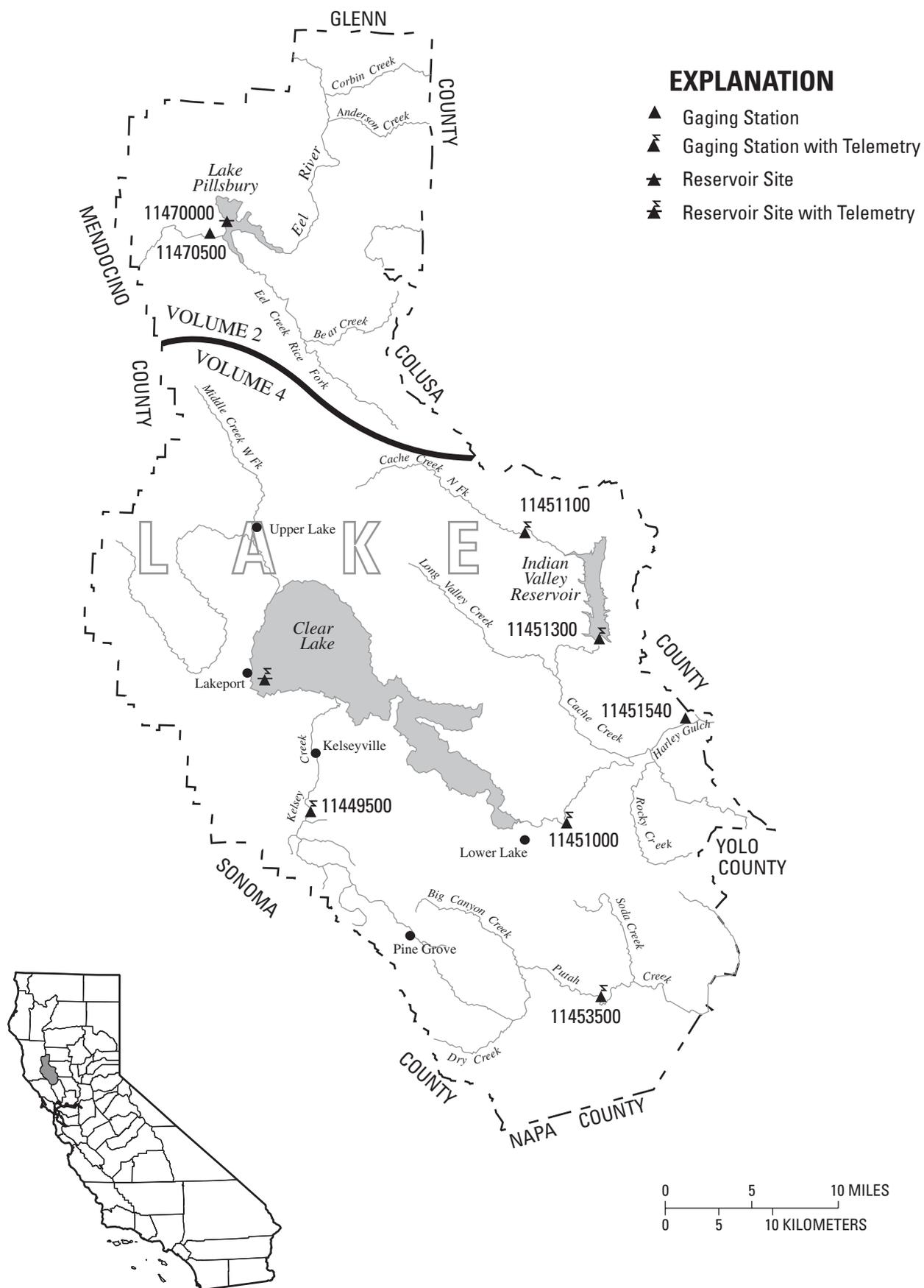


Figure 6. Location of discharge stations in Lake County.
 (NOTE: Records for stations 11449500 through 11453500 published in volume 4.)

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

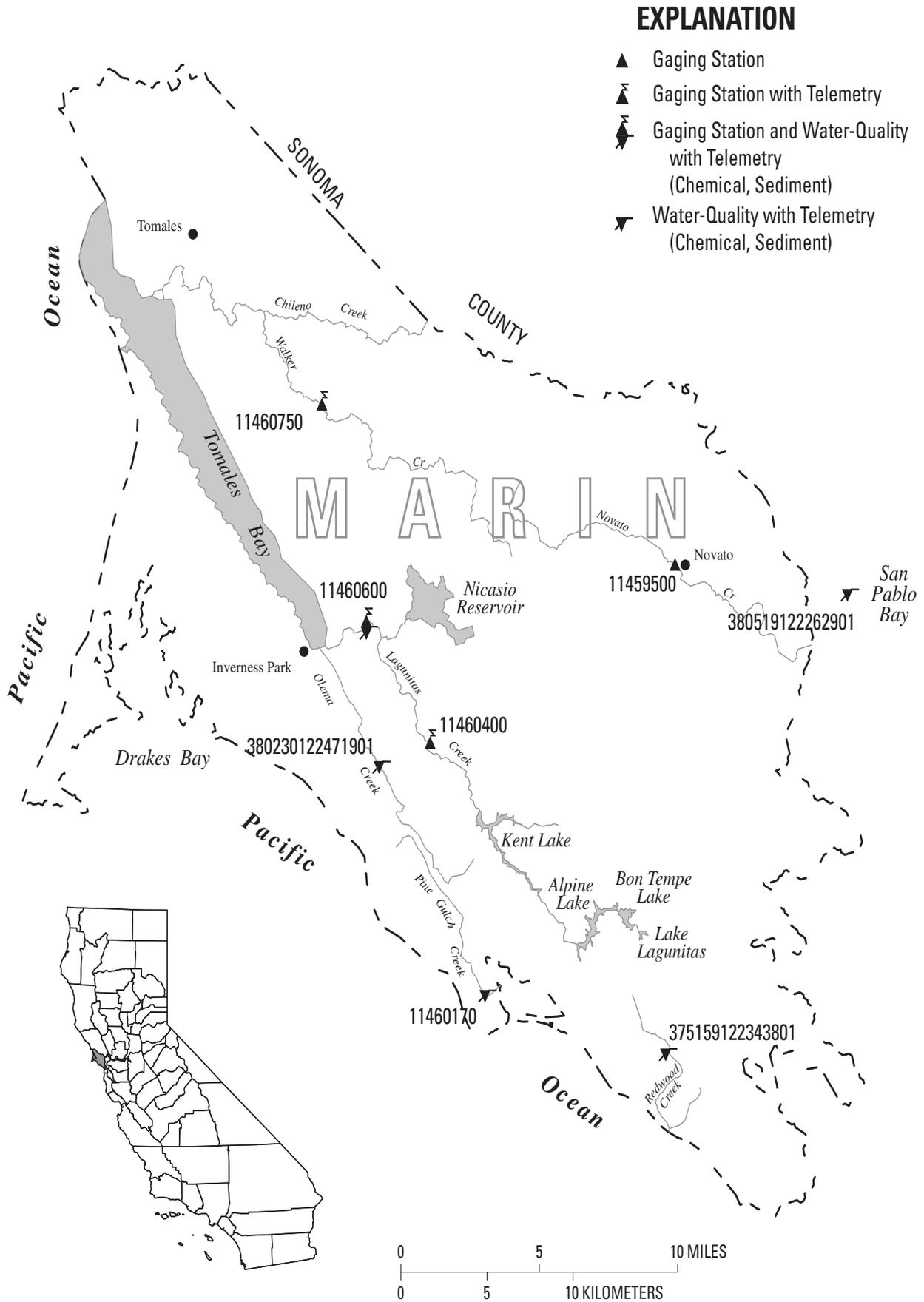


Figure 7. Location of discharge and water-quality stations in Marin County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

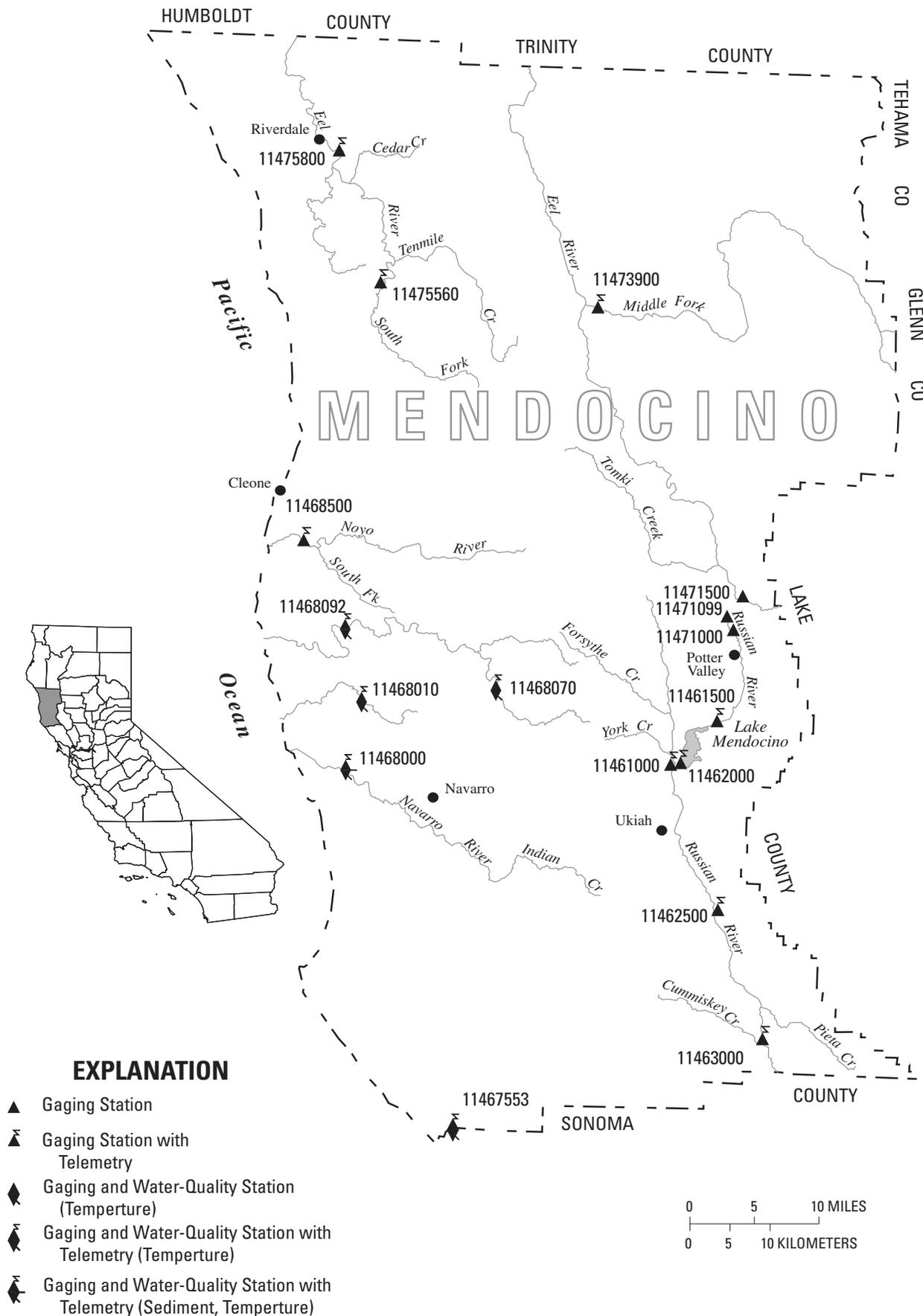
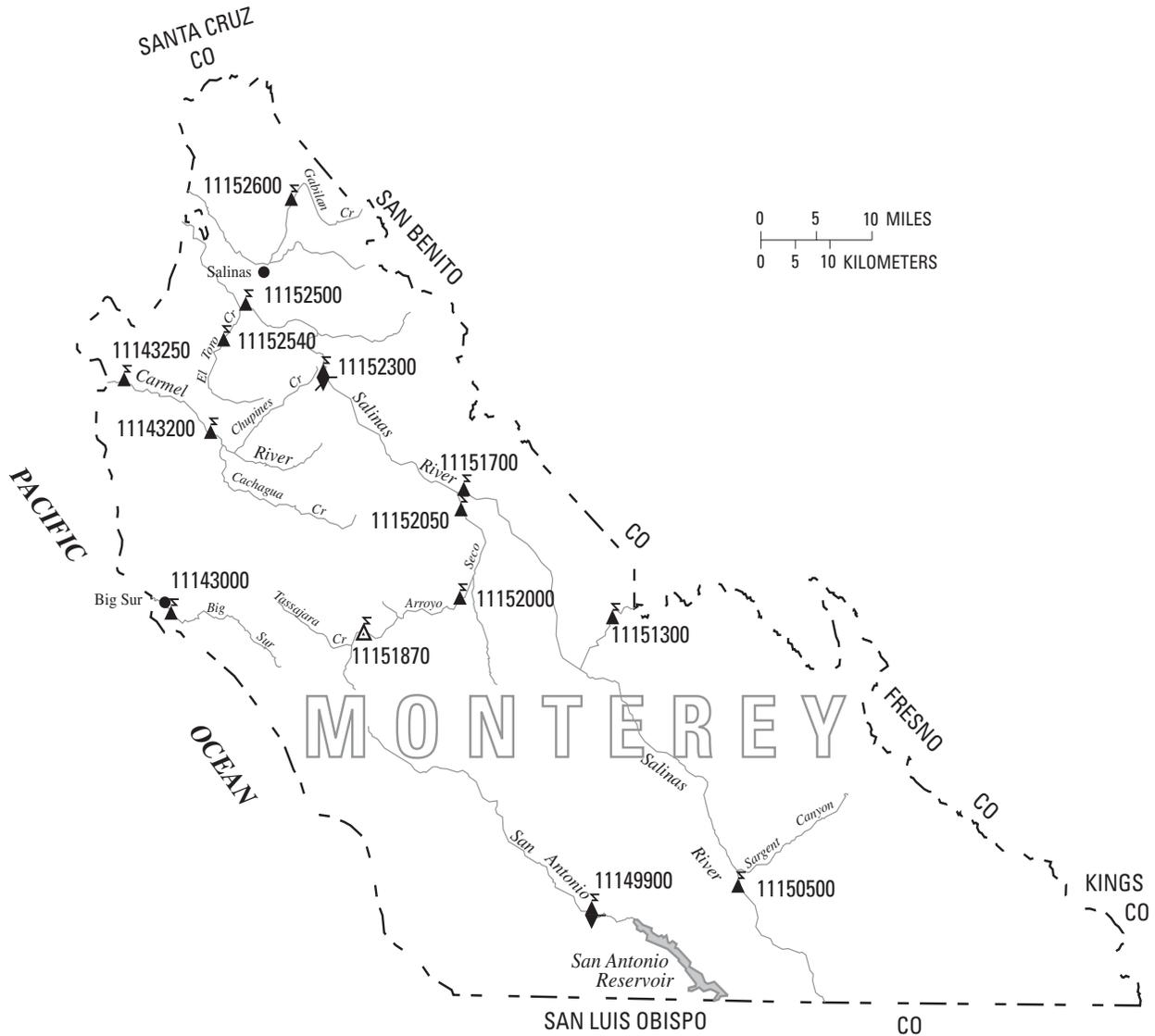


Figure 8. Location of discharge stations in Mendocino County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

- ▲ Gaging Station with Telephone, Radio, or Data-Collection Platform (Partial Record)
- ▲ Gaging Station with Telephone, Radio, or Data-Collection Platform
- ◆ Gaging and Water-Quality Station with Data-Collection Platform (Sediment)
- ◆ Gaging and Water-Quality Station with Data-Collection Platform (Chemical, Sediment)

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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

EXPLANATION

- ▲ Gaging Station with Telemetry
- ▲ Reservoir Site and Contents

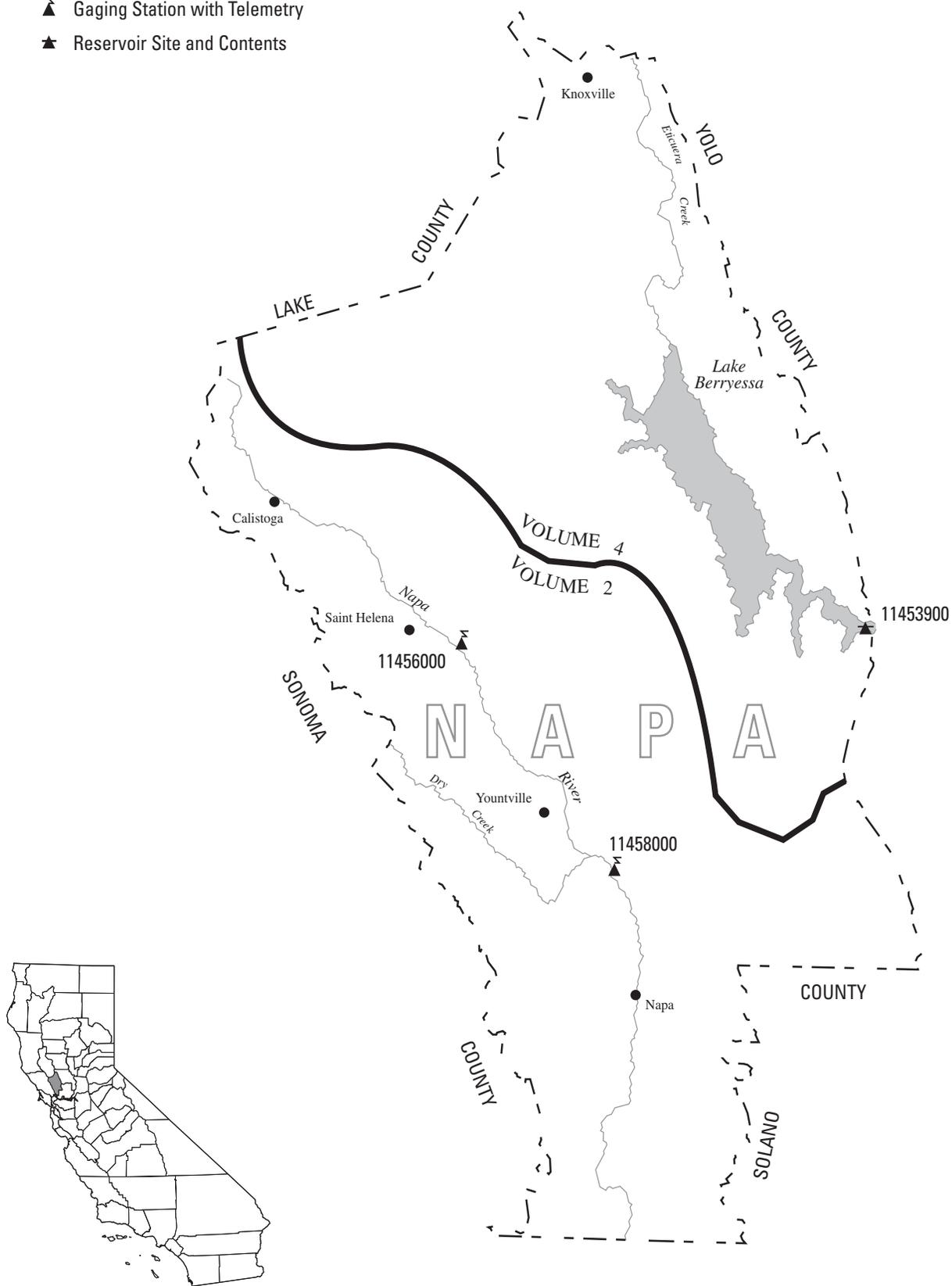
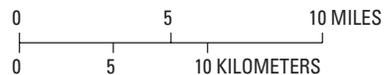
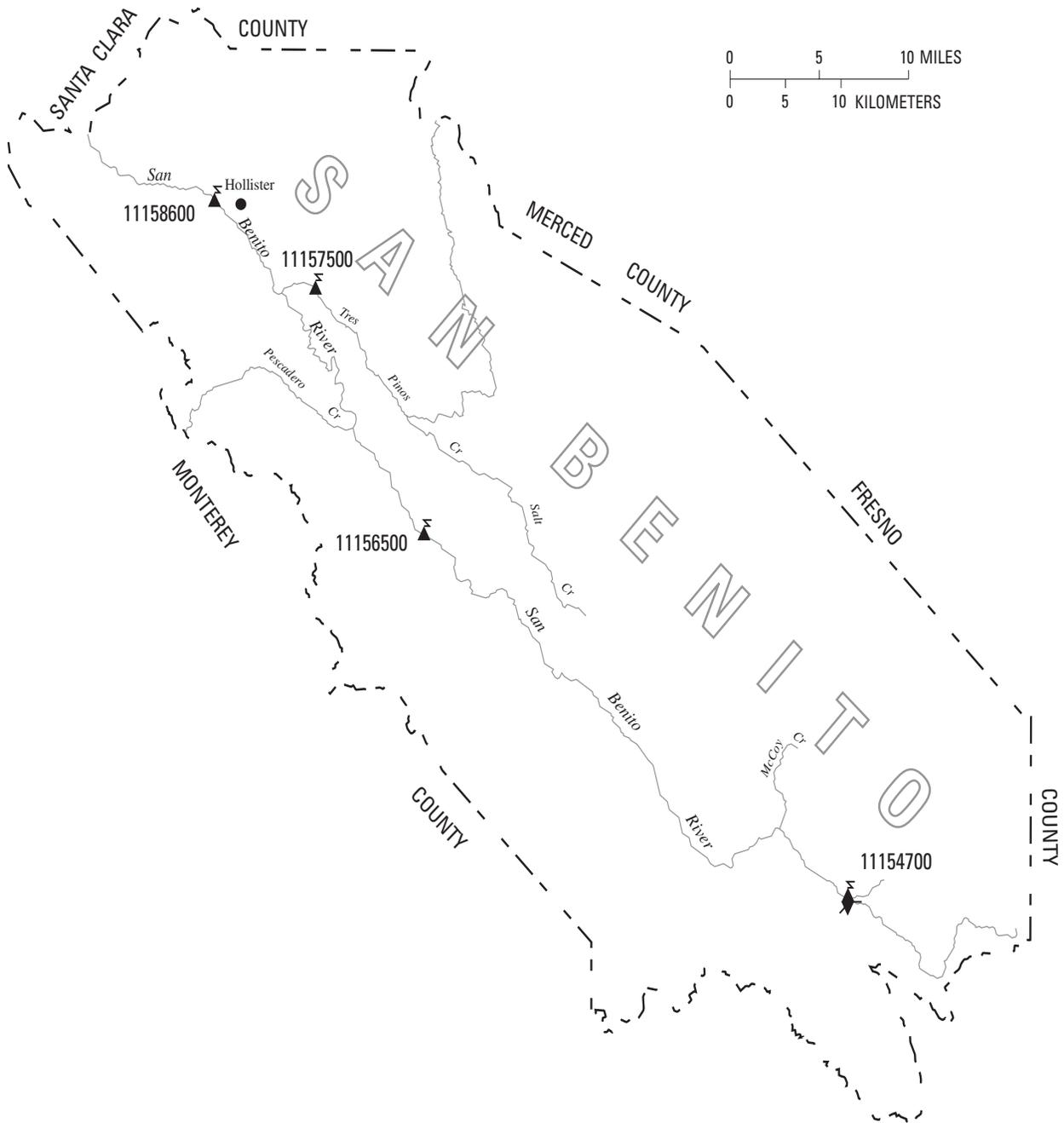


Figure 10. Location of discharge stations in Napa County.
(NOTE: Record for station 11453900 published in volume 4.)

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

-  Gaging Station with Data-Collection Platform
-  Gaging and Water-Quality Station with Data-Collection Platform (Sediment, Chemical)

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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

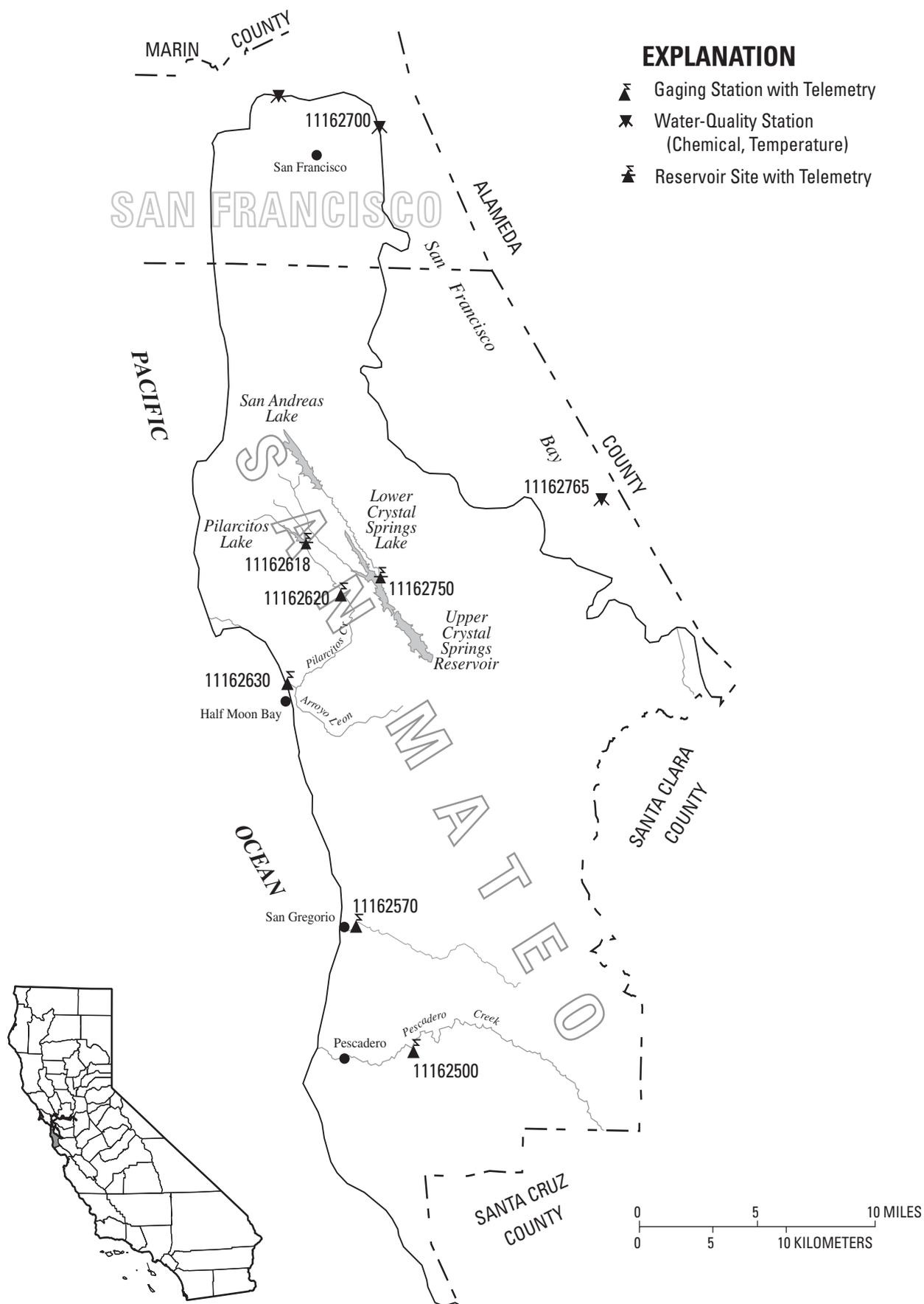
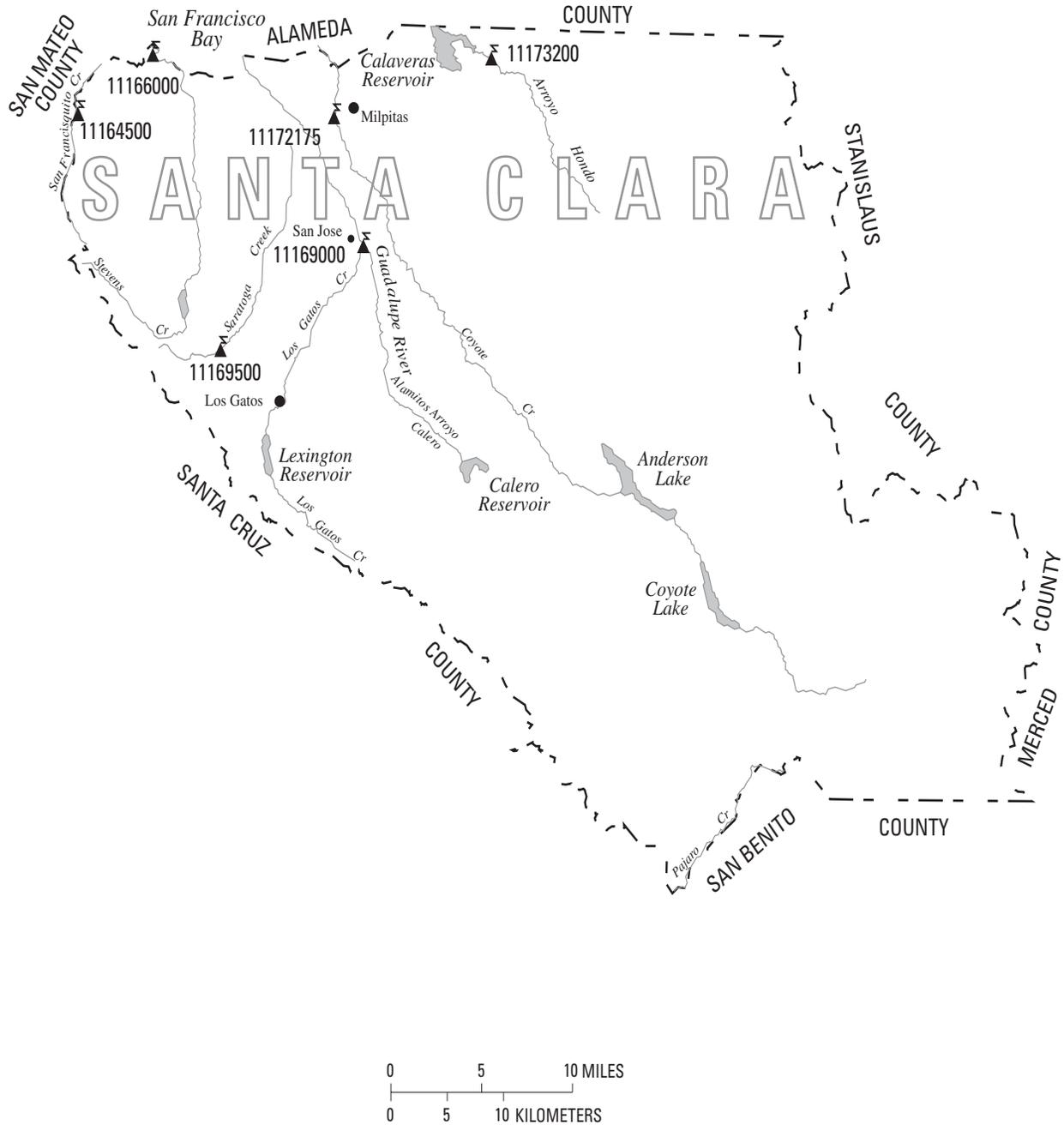


Figure 12. Location of discharge and water-quality stations in San Francisco and San Mateo Counties.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

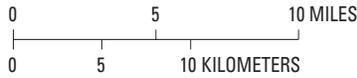


EXPLANATION

- ▲ Gaging Station with Telephone, Radio, or Data-Collection Platform

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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

- ▲ Gaging Station with Telephone, Radio, or Data-Collection Platform



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

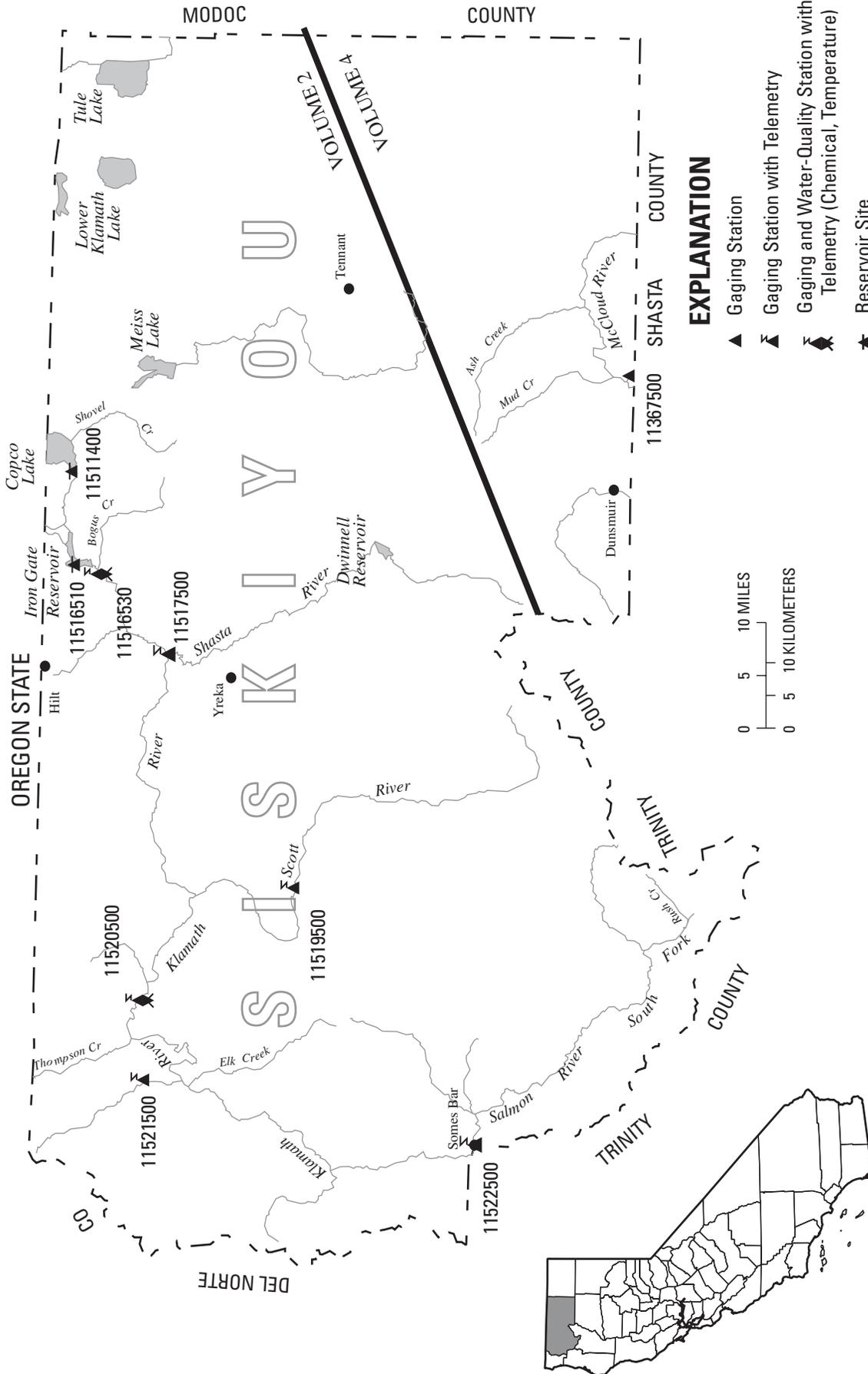
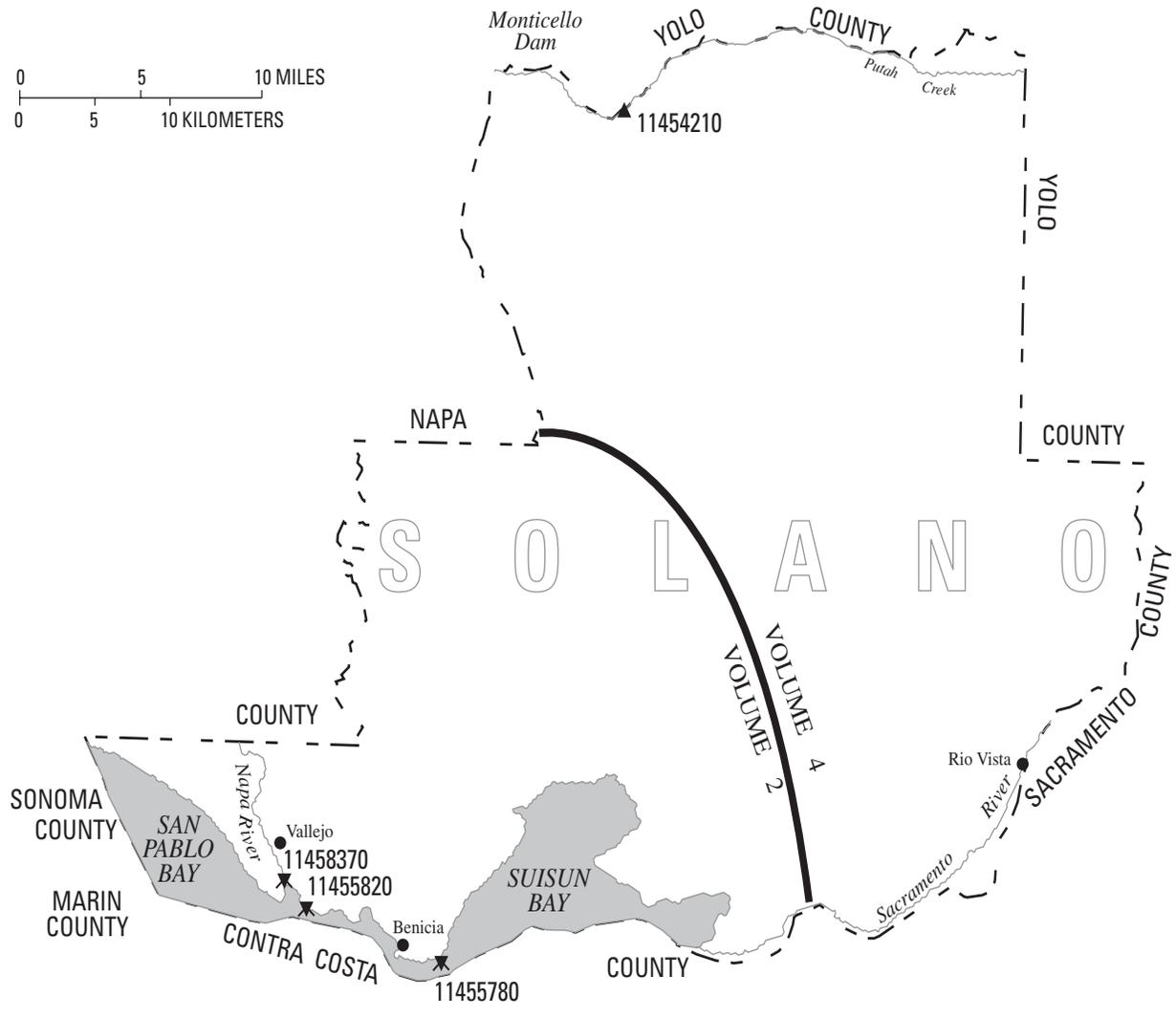


Figure 16. Location of discharge and water-quality stations in Siskiyou County.
(NOTE: Records for station 11367500 published in volume 4.)

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

- ▲ Gaging Station
- ✱ Water-Quality Station
(Chemical, Temperature)

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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

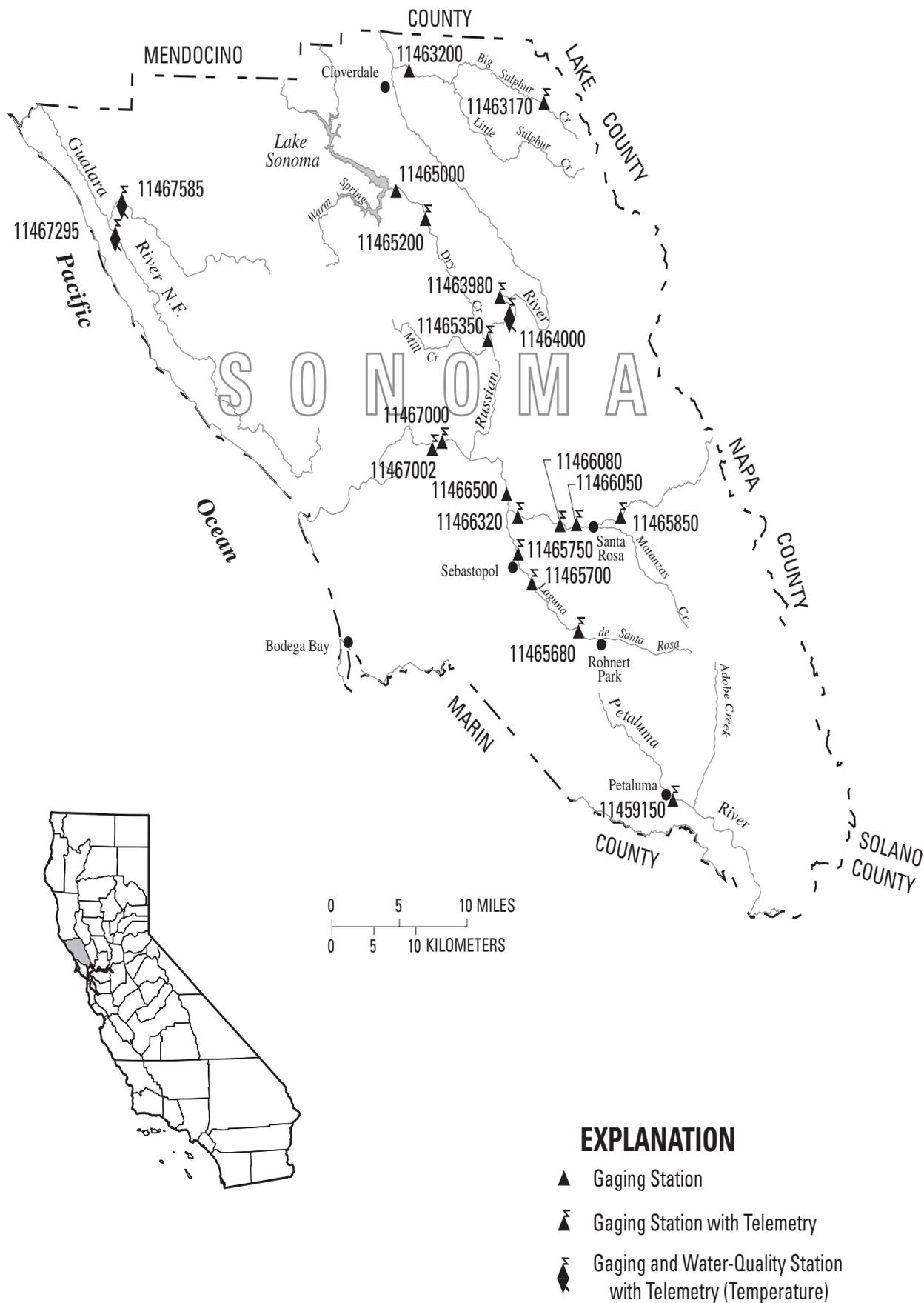


Figure 18. Location of discharge and water-quality stations in Sonoma County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

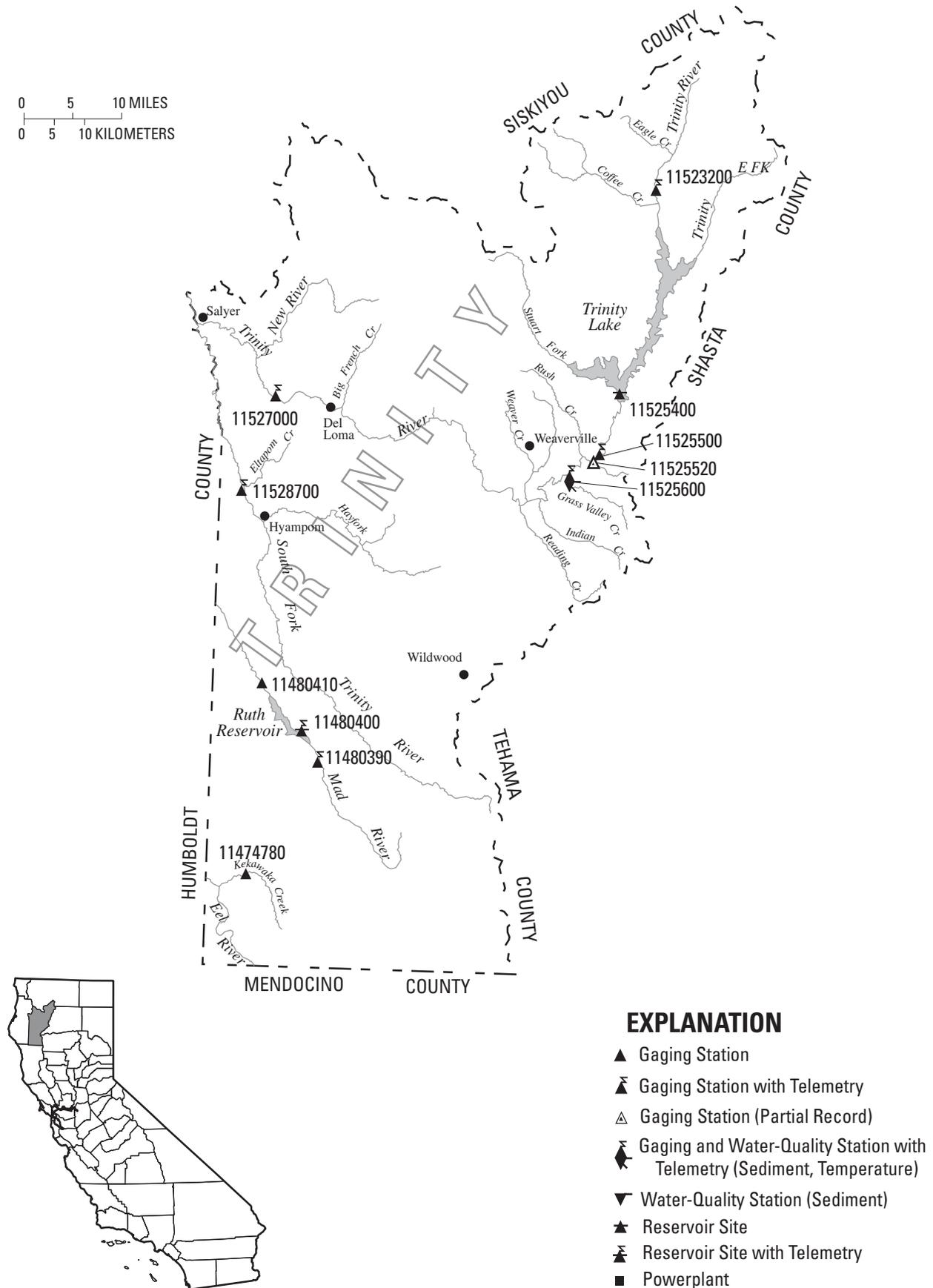


Figure 19. Location of discharge and water-quality stations in Trinity County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

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

Remark Codes

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

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

Dissolved Trace-Element Concentrations

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

Data Precision

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

Change in National Trends Network Procedures

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

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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 mi².

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 ft³/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 ft³/s, on basis of slope-area measurement of peak flow, maximum gage height, 11.21 ft, Mar. 5, 2001; minimum daily discharge, 0.30 ft³/s, Aug. 1, 1977.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 11	1500	212	8.43	Mar. 5	unknown	1,380	11.21

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.6	4.6	3.4	4.4	14	9.2	6.8	4.2	3.3	2.5	2.9
2	3.0	3.5	4.8	3.4	4.1	13	9.0	6.7	4.3	3.1	2.5	3.1
3	3.0	3.4	4.4	3.4	3.8	12	8.3	7.2	4.2	3.0	2.5	2.9
4	2.8	3.4	4.4	3.6	3.7	46	8.1	7.2	4.0	2.9	2.4	2.8
5	2.9	3.6	4.1	3.7	4.1	e450	7.9	7.1	3.7	3.0	2.3	2.5
6	3.0	3.5	3.9	3.8	4.1	103	8.1	7.0	3.5	3.3	2.3	2.7
7	3.3	3.5	4.0	3.8	4.8	64	21	6.6	3.7	3.5	2.3	2.8
8	3.3	3.3	4.0	5.5	5.0	48	12	6.9	3.3	3.3	2.2	2.9
9	3.3	3.0	4.0	4.7	7.5	41	11	6.9	3.3	3.3	2.3	2.8
10	4.6	3.3	4.0	9.0	21	36	12	7.1	3.4	3.1	2.3	2.7
11	4.9	2.9	3.6	24	89	34	10	7.3	3.3	3.0	2.2	2.8
12	4.9	2.9	3.8	24	50	30	9.4	7.4	3.2	3.1	2.3	2.7
13	4.5	3.0	3.7	10	41	28	9.2	7.5	3.3	2.8	2.5	2.6
14	4.0	2.9	3.7	6.9	32	26	8.6	7.1	3.4	2.9	2.4	2.3
15	4.0	3.3	3.6	5.5	20	24	8.1	6.4	3.2	3.2	2.3	2.4
16	3.9	3.1	3.6	4.8	14	e23	7.9	6.5	3.3	3.4	2.2	2.6
17	3.8	2.9	3.9	4.2	9.0	e22	7.7	6.7	3.4	3.1	2.2	2.6
18	3.8	2.9	3.9	3.9	7.5	e19	7.5	6.8	3.4	2.9	2.2	2.2
19	3.9	3.0	3.9	3.5	34	e17	7.6	7.0	3.2	2.9	2.3	2.2
20	3.8	3.2	3.9	3.4	46	e15	9.9	7.0	3.2	2.9	2.4	2.4
21	3.8	3.1	3.8	3.2	32	e15	16	6.8	3.2	2.8	2.2	2.4
22	4.2	2.8	3.3	2.9	22	e15	11	6.7	3.4	2.6	2.3	2.4
23	4.5	2.9	3.4	2.8	22	e14	9.2	5.8	3.3	2.7	2.5	2.4
24	4.6	3.0	3.4	14	48	e14	8.5	5.0	3.8	2.7	2.3	2.3
25	5.0	3.4	3.4	11	47	14	8.0	5.0	3.7	2.6	2.3	2.3
26	7.9	3.6	3.4	17	30	13	7.9	5.2	3.8	2.7	2.3	2.0
27	9.3	3.5	3.5	10	24	12	7.8	5.4	3.8	2.6	2.5	1.9
28	7.0	3.7	3.4	6.8	18	12	7.5	5.2	3.8	2.5	2.4	2.0
29	8.5	4.4	3.4	5.5	---	11	7.3	4.7	3.7	2.5	2.7	2.0
30	4.8	4.4	3.4	4.7	---	10	7.1	4.3	3.6	2.5	2.9	2.1
31	4.0	---	3.4	4.4	---	10	---	4.1	---	2.5	2.9	---
TOTAL	137.2	99.0	117.6	216.8	648.0	1205	282.8	197.4	106.6	90.7	73.9	74.7
MEAN	4.43	3.30	3.79	6.99	23.1	38.9	9.43	6.37	3.55	2.93	2.38	2.49
MAX	9.3	4.4	4.8	24	89	450	21	7.5	4.3	3.5	2.9	3.1
MIN	2.8	2.8	3.3	2.8	3.7	10	7.1	4.1	3.2	2.5	2.2	1.9
AC-FT	272	196	233	430	1290	2390	561	392	211	180	147	148

e Estimated.

PACIFIC SLOPE BASINS IN CALIFORNIA

ARROYO GRANDE BASIN

11141280 LOPEZ CREEK NEAR ARROYO GRANDE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.12	4.40	7.27	21.7	31.9	28.5	14.5	7.92	5.12	3.75	3.13	2.90
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1967 - 2001	
ANNUAL TOTAL	3502.4		3249.7		11.1	
ANNUAL MEAN	9.57		8.90		37.3	
HIGHEST ANNUAL MEAN					1983	
LOWEST ANNUAL MEAN					1977	
HIGHEST DAILY MEAN	258	Feb 14	450	Mar 5	1360	Jan 25 1969
LOWEST DAILY MEAN	1.6	Aug 17	1.9	Sep 27	.30	Aug 1 1977
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 14	2.1	Sep 24	.34	Jul 28 1977
MAXIMUM PEAK FLOW			1380	Mar 5	2830	Jan 25 1969
MAXIMUM PEAK STAGE			11.21	Mar 5	11.21	Mar 5 2001
ANNUAL RUNOFF (AC-FT)	6950		6450		8020	
10 PERCENT EXCEEDS	20		16		19	
50 PERCENT EXCEEDS	4.0		3.8		3.9	
90 PERCENT EXCEEDS	2.8		2.4		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 mi².

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 discharges during summer season, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,700 ft³/s, Jan. 5, 1978, gage height, 14.30 ft, from rating curve extended above 6,800 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 2.6 ft³/s, Aug. 23, 1977, Sept. 9, Oct. 29, Nov. 5, 1990.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,500 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2230	1,500	7.62

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	36	23	20	81	222	86	51	30	20	20	14
2	15	33	22	20	74	204	84	57	29	20	19	13
3	15	31	22	20	69	185	82	58	29	21	18	11
4	15	29	22	20	65	612	82	58	29	21	18	11
5	15	28	22	20	61	1010	80	56	28	22	18	11
6	15	27	22	20	58	692	84	55	27	21	18	11
7	16	26	22	20	57	526	124	53	27	22	17	11
8	19	26	22	36	54	426	95	52	26	21	16	11
9	22	25	22	26	90	362	89	51	26	22	16	12
10	46	26	22	169	116	315	85	50	26	22	17	12
11	33	25	22	518	336	276	82	49	25	23	16	12
12	27	24	26	367	285	245	79	48	25	23	15	13
13	24	24	24	173	228	219	77	49	24	21	15	13
14	20	24	24	116	189	199	77	47	24	20	16	12
15	19	23	23	91	163	182	75	45	23	21	15	11
16	14	23	22	77	146	169	73	43	23	23	15	12
17	14	22	22	67	132	157	72	42	23	24	15	12
18	14	22	22	61	153	147	71	42	25	23	15	12
19	14	22	22	57	250	138	74	42	26	21	14	12
20	14	22	21	53	254	130	109	41	26	21	14	12
21	16	21	22	51	243	123	112	39	26	20	13	12
22	14	23	22	49	247	118	84	37	25	20	12	12
23	13	22	22	61	293	113	74	36	26	20	13	11
24	13	21	21	105	389	109	69	35	26	19	13	11
25	19	21	21	138	401	112	65	34	25	19	12	12
26	93	21	21	274	342	103	62	33	26	19	11	13
27	61	21	21	175	294	98	59	33	27	19	12	12
28	44	21	21	138	254	95	57	34	28	19	11	12
29	151	24	21	114	---	92	55	33	26	19	12	13
30	56	25	21	99	---	91	53	32	21	20	14	12
31	42	---	21	89	---	88	---	31	---	21	15	---
TOTAL	908	738	683	3244	5324	7558	2370	1366	777	647	465	358
MEAN	29.3	24.6	22.0	105	190	244	79.0	44.1	25.9	20.9	15.0	11.9
MAX	151	36	26	518	401	1010	124	58	30	24	20	14
MIN	13	21	21	20	54	88	53	31	21	19	11	11
AC-FT	1800	1460	1350	6430	10560	14990	4700	2710	1540	1280	922	710

BIG SUR RIVER BASIN

11143000 BIG SUR RIVER NEAR BIG SUR, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.8	44.2	101	244	290	227	144	67.6	37.2	24.0	17.6	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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL TOTAL	48341		24438			
ANNUAL MEAN	132		67.0		102	
HIGHEST ANNUAL MEAN					319	
LOWEST ANNUAL MEAN					10.0	
HIGHEST DAILY MEAN	2990	Feb 14	1010	Mar 5	4150	Mar 10 1995
LOWEST DAILY MEAN	13	Oct 23	11	Aug 26	2.6	Aug 23 1977
ANNUAL SEVEN-DAY MINIMUM	14	Oct 18	11	Sep 3	2.9	Nov 4 1990
MAXIMUM PEAK FLOW			1500	Mar 4	10700	Jan 5 1978
MAXIMUM PEAK STAGE			7.62	Mar 4	14.30	Jan 5 1978
INSTANTANEOUS LOW FLOW					2.6	Aug 23 1977
ANNUAL RUNOFF (AC-FT)	95880		48470		73700	
10 PERCENT EXCEEDS	384		165		228	
50 PERCENT EXCEEDS	35		25		29	
90 PERCENT EXCEEDS	19		13		9.8	

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 mi².

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, 1,480 acre-ft (revised), 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 ft³/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 ft³/s, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0030	2,640	4.64

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	20	14	14	78	221	83	67	28	15	e7.7	e5.0
2	7.5	19	14	13	74	205	77	64	27	14	e7.5	e5.0
3	7.5	18	13	13	70	186	75	61	26	14	e7.3	e5.1
4	7.4	17	13	13	67	945	73	59	26	13	e7.1	e5.2
5	8.6	17	12	13	64	1730	73	57	25	13	e6.9	e5.2
6	8.2	20	13	13	62	1090	77	55	26	13	e6.7	e5.3
7	8.5	18	13	14	61	766	116	57	30	13	e6.6	e5.4
8	8.2	16	13	22	58	575	100	62	29	13	e6.4	e5.5
9	7.2	16	13	20	66	462	89	60	29	12	e6.2	e5.6
10	15	16	13	50	109	384	85	59	29	12	6.0	e5.7
11	15	15	13	139	207	321	83	57	28	12	5.9	e5.8
12	16	16	14	437	229	276	81	55	28	11	6.0	e6.0
13	14	15	13	186	180	242	78	56	26	11	6.0	6.1
14	13	16	13	125	153	213	76	55	25	11	5.9	6.2
15	13	15	14	98	135	192	74	53	23	11	5.8	5.8
16	13	15	14	83	123	178	72	52	22	11	5.5	5.7
17	13	15	14	75	115	164	70	50	21	9.9	5.7	5.8
18	13	14	14	68	117	151	69	48	20	9.4	5.2	6.0
19	12	14	14	64	217	141	72	46	19	9.4	5.0	5.9
20	12	14	14	60	296	133	79	44	18	8.6	5.3	5.6
21	13	13	14	57	262	127	138	43	17	8.0	5.9	5.3
22	13	13	14	54	261	121	109	40	17	8.0	5.5	5.2
23	12	14	14	53	299	117	98	39	18	7.6	5.4	5.3
24	12	13	14	81	330	113	90	37	18	7.6	5.6	5.6
25	12	13	14	87	359	112	83	37	17	7.4	5.8	6.7
26	17	13	14	183	321	105	79	35	17	7.3	5.7	6.8
27	22	13	14	141	279	100	75	34	16	6.9	5.6	6.4
28	18	13	14	116	249	98	73	35	15	7.7	5.0	6.1
29	28	13	14	102	---	95	71	34	15	8.0	4.8	5.9
30	26	13	14	91	---	91	69	32	15	8.1	e4.8	5.6
31	22	---	14	83	---	86	---	29	---	e7.9	e4.9	---
TOTAL	415.3	457	422	2568	4841	9740	2487	1512	670	320.8	183.7	170.8
MEAN	13.4	15.2	13.6	82.8	173	314	82.9	48.8	22.3	10.3	5.93	5.69
MAX	28	20	14	437	359	1730	138	67	30	15	7.7	6.8
MIN	7.2	13	12	13	58	86	69	29	15	6.9	4.8	5.0
AC-FT	824	906	837	5090	9600	19320	4930	3000	1330	636	364	339

e Estimated

CARMEL RIVER BASIN

11143200 CARMEL RIVER AT ROBLES DEL RIO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.23	14.1	57.3	205	338	278	166	58.4	21.0	7.61	3.01	2.61
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1957 - 2001	
ANNUAL TOTAL	39176.4		23787.6			
ANNUAL MEAN	107		65.2		95.0	
HIGHEST ANNUAL MEAN					442	
LOWEST ANNUAL MEAN					.050	
HIGHEST DAILY MEAN	2230	Feb 14	1730	Mar 5	9000	Feb 3 1998
LOWEST DAILY MEAN	6.4	Sep 19	4.8	Aug 29	.00	Aug 1 1957
ANNUAL SEVEN-DAY MINIMUM	7.2	Sep 14	4.9	Aug 28	.00	Aug 1 1957
MAXIMUM PEAK FLOW			2640	Mar 5	16000	Mar 10 1995
MAXIMUM PEAK STAGE			4.64	Mar 5	12.90	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	77710		47180		68810	
10 PERCENT EXCEEDS	344		141		227	
50 PERCENT EXCEEDS	16		17		7.5	
90 PERCENT EXCEEDS	8.5		5.9		.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 mi².

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 for estimated discharges and discharges above 1,000 ft³/s, which are fair. Low flow regulated by Los Padres Clemente Reservoir for municipal supply.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16,000 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0250	2,550	11.23

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e4.0	11	6.1	87	224	98	71	14	.00	.00	.00
2	.00	e4.2	11	6.4	80	207	93	66	14	.00	.00	.00
3	.00	e4.4	10	6.0	72	193	89	62	14	.00	.00	.00
4	.00	e5.2	10	4.6	66	744	85	59	12	.00	.00	.00
5	.00	e5.6	10	3.9	64	1930	81	58	11	.00	.00	.00
6	.00	e5.6	9.6	3.4	62	1220	83	56	9.8	.00	.00	.00
7	.00	5.4	9.9	3.9	60	874	125	52	9.0	.00	.00	.00
8	.00	5.2	9.8	7.0	55	671	126	50	7.9	.00	.00	.00
9	.00	5.0	9.8	8.0	59	569	106	48	6.9	.00	.00	.00
10	.00	5.1	9.8	23	112	498	100	46	7.8	.00	.00	.00
11	.00	5.0	9.5	148	255	435	94	43	8.2	.00	.00	.00
12	.00	5.0	9.9	418	310	386	91	43	8.7	.00	.00	.00
13	.00	5.1	10	218	233	342	84	43	8.5	.00	.00	.00
14	.00	5.9	9.5	144	185	308	80	42	6.7	.00	.00	.00
15	.00	6.5	11	114	162	284	79	40	5.6	.00	.00	.00
16	.00	7.5	13	94	142	260	74	38	5.1	.00	.00	.00
17	.00	7.8	12	82	127	242	72	36	4.9	.00	.00	.00
18	.00	7.6	12	71	120	224	69	36	4.8	.00	.00	.00
19	.00	7.8	12	66	221	213	71	33	3.5	.00	.00	.00
20	.00	8.2	11	64	303	199	76	31	3.0	.00	.00	.00
21	.00	8.4	10	59	270	183	153	29	1.7	.00	.00	.00
22	.00	8.7	9.5	54	269	174	127	26	1.1	.00	.00	.00
23	.00	9.0	9.3	50	329	165	116	24	.47	.00	.00	.00
24	.00	9.8	9.6	73	329	155	105	21	.74	.00	.00	.00
25	.00	9.8	9.2	98	366	144	90	19	.69	.00	.00	.00
26	.00	9.7	9.3	208	334	136	85	19	.80	.00	.00	.00
27	.00	10	7.6	173	292	131	82	20	.58	.00	.00	.00
28	.00	10	6.7	142	258	127	80	20	.22	.00	.00	.00
29	.00	9.8	5.8	118	---	119	75	19	.05	.00	.00	.00
30	.00	11	6.3	106	---	113	71	18	.00	.00	.00	.00
31	e4.4	---	6.8	96	---	102	---	16	---	.00	.00	---
TOTAL	4.40	212.3	300.9	2668.3	5222	11572	2760	1184	171.75	0.00	0.00	0.00
MEAN	.14	7.08	9.71	86.1	186	373	92.0	38.2	5.72	.000	.000	.000
MAX	4.4	11	13	418	366	1930	153	71	14	.00	.00	.00
MIN	.00	4.0	5.8	3.4	55	102	69	16	.00	.00	.00	.00
AC-FT	8.7	421	597	5290	10360	22950	5470	2350	341	.00	.00	.00

e Estimated.

CARMEL RIVER BASIN

11143250 CARMEL RIVER NEAR CARMEL, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.37	9.49	60.1	243	392	336	183	71.7	22.7	6.06	1.32	.69
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	38928.93		24095.65			
ANNUAL MEAN	106		66.0		109	
HIGHEST ANNUAL MEAN					508	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	1900	Feb 14	1930	Mar 5	9050	Feb 3 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 6 1962
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Jul 9 1964
MAXIMUM PEAK FLOW			2550	Mar 5	16000	Mar 10 1995
MAXIMUM PEAK STAGE			11.23	Mar 5	20.85	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	77220		47790		79050	
10 PERCENT EXCEEDS	397		188		277	
50 PERCENT EXCEEDS	9.8		9.0		1.0	
90 PERCENT EXCEEDS	.00		.00		.00	

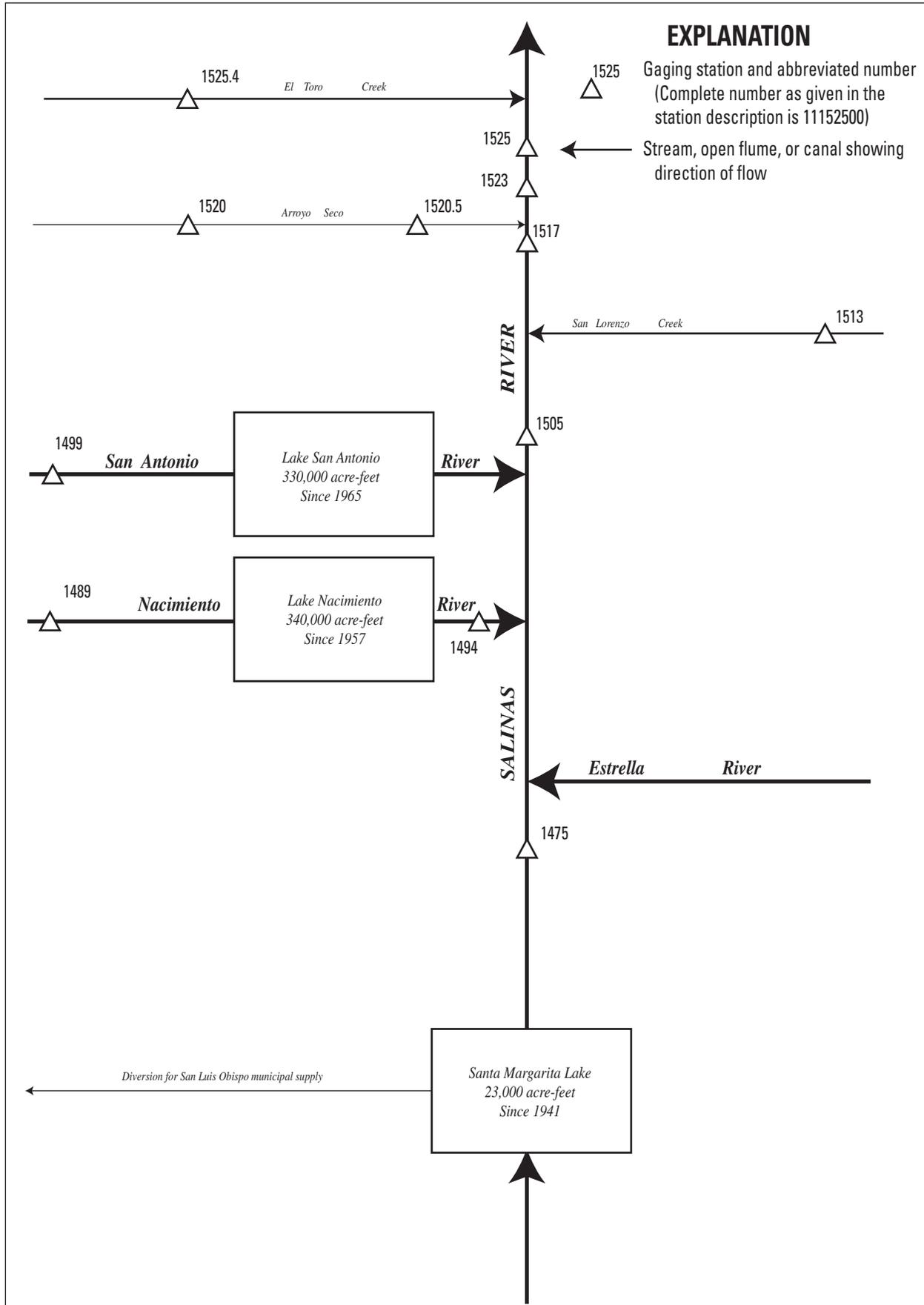


Figure 20. Diversions and storage in Salinas River Basin.

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 mi².

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 fair. 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 ft³/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 ft³/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 850 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 11	2100	1,720	7.40	Feb. 24	2300	2,490	8.25
Feb. 20	1130	1,910	7.61	Mar. 5	1030	10,800	14.17

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.16	.36	.06	17	355	87	39	.40	.05	.00	.00
2	.00	.10	.34	.06	13	298	84	35	.38	.03	.00	.00
3	.00	.09	.44	.06	12	256	78	30	.32	.01	.00	.00
4	.00	.08	.44	.06	9.7	372	73	27	.61	.00	.00	.00
5	.00	.08	.45	.06	8.2	6830	68	24	.29	.00	.00	.00
6	.00	.08	.53	.06	8.2	4120	65	e22	.34	.01	.00	.00
7	.00	.07	.91	.05	7.6	2150	139	e20	.29	.03	.00	.00
8	.00	.07	.46	3.3	6.3	1300	159	e19	.28	.04	.00	.00
9	.00	.07	.37	.74	10	901	126	18	.27	.03	.00	.00
10	.00	.07	.33	43	62	716	118	17	.31	.04	.00	.00
11	.00	.07	.27	39	594	590	113	15	.35	.06	.00	.00
12	.00	.06	.20	130	859	456	102	13	.51	.07	.00	.00
13	.00	.07	.11	33	606	326	93	12	.35	.04	.00	.00
14	.00	.07	.10	6.2	440	275	87	e11	.32	.01	.00	.00
15	.00	.07	.11	3.6	257	251	82	e9.5	.39	.01	.00	.00
16	.00	.07	.15	2.6	189	237	77	e8.0	.23	.03	.00	.00
17	.00	.07	.13	2.1	141	220	74	e6.5	.15	.04	.00	.00
18	.00	.08	.11	1.9	113	203	73	e5.0	.15	.05	.00	.00
19	.00	.09	.10	1.7	371	183	71	e4.0	.13	.05	.00	.00
20	.00	.10	.10	1.5	1290	166	77	e3.4	.14	.05	.00	.00
21	.00	.20	.09	1.5	670	156	95	e3.0	.13	.06	.00	.00
22	.00	.15	.09	1.5	395	150	96	e2.6	.12	.02	.00	.00
23	.00	.17	.09	2.4	376	142	84	2.1	.12	.00	.00	.00
24	.00	.17	.09	57	863	136	74	1.2	.10	.00	.00	.00
25	.00	.27	.08	82	1410	131	70	.73	.09	.00	.00	.00
26	.00	.36	.08	169	807	123	67	.63	.09	.00	.00	.00
27	.00	.28	.08	95	627	115	60	.59	.09	.00	.00	.00
28	.00	.29	.08	57	459	110	53	.55	.10	.00	.00	.00
29	12	.32	.08	37	---	104	47	.51	.09	.00	.00	.00
30	1.5	.38	.07	28	---	97	43	.46	.07	.00	.00	.00
31	.46	---	.06	23	---	90	---	.43	---	.00	.00	---
TOTAL	13.96	4.21	6.90	822.45	10621.0	21559	2535	351.20	7.21	0.73	0.00	0.00
MEAN	.45	.14	.22	26.5	379	695	84.5	11.3	.24	.024	.000	.000
MAX	12	.38	.91	169	1410	6830	159	39	.61	.07	.00	.00
MIN	.00	.06	.06	.05	6.3	90	43	.43	.07	.00	.00	.00
AC-FT	28	8.4	14	1630	21070	42760	5030	697	14	1.4	.00	.00

e Estimated.

11147500 SALINAS RIVER AT PASO ROBLES, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.45	5.34	51.2	243	416	375	161	26.9	3.44	.28	.054	.87
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	29453.48		35921.66			
ANNUAL MEAN	80.5		98.4		106	
HIGHEST ANNUAL MEAN					526	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	4730	Feb 14	6830	Mar 5	19600	Mar 10 1995
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Nov 1 1939
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Nov 1 1939
MAXIMUM PEAK FLOW			10800	Mar 5	28400	Mar 10 1995
MAXIMUM PEAK STAGE			14.17	Mar 5	22.99	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	58420		71250		76520	
10 PERCENT EXCEEDS	200		167		168	
50 PERCENT EXCEEDS	.11		.17		.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 mi².

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 good except flows below 5 ft³/s, which are fair. No storage or diversion upstream from station. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 57,600 ft³/s, Jan. 14, 1993, gage height, 32.14 ft, from rating curve extended above 7,900 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2145	9,980	18.81

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	15	6.3	5.9	80	391	70	44	6.8	.03	.00	.00
2	.00	11	6.7	5.8	69	326	67	41	5.9	.00	.00	.00
3	.00	9.6	6.9	5.7	62	280	64	39	5.5	.00	.00	.00
4	.00	8.2	6.6	5.6	56	3110	62	37	5.4	.00	.00	.00
5	.00	7.2	6.5	5.6	52	4830	61	35	5.3	.00	.00	.00
6	.00	6.6	6.4	5.6	48	2240	61	33	4.8	.00	.00	.00
7	.00	6.1	6.8	5.5	44	1350	133	31	4.4	.00	.00	.00
8	.00	5.9	6.7	8.2	41	885	118	29	3.9	.00	.00	.00
9	.00	5.7	6.6	13	56	672	93	28	3.3	.00	.00	.00
10	.00	5.6	6.6	616	433	541	93	25	3.0	.00	.00	.00
11	.00	5.5	6.5	1220	1600	446	78	24	2.7	.00	.00	.00
12	.00	5.4	6.5	1500	926	375	72	23	2.3	.00	.00	.00
13	.00	5.6	6.5	368	557	317	65	23	2.2	.00	.00	.00
14	.00	5.7	6.6	175	371	275	62	23	2.0	.00	.00	.00
15	.00	5.8	7.2	111	267	242	59	22	1.7	.00	.00	.00
16	.00	6.0	7.8	82	207	217	56	21	1.4	.00	.00	.00
17	.00	6.0	8.2	65	168	195	52	19	1.0	.00	.00	.00
18	.00	6.0	7.8	54	175	177	50	18	.76	.00	.00	.00
19	.00	6.0	7.5	47	1030	162	51	18	.51	.00	.00	.00
20	.00	6.0	7.3	42	865	149	62	17	.34	.00	.00	.00
21	.00	6.0	7.1	38	523	138	188	15	.22	.00	.00	.00
22	.00	5.9	6.9	34	474	127	122	14	.16	.00	.00	.00
23	.00	5.8	6.7	33	876	120	90	13	.12	.00	.00	.00
24	.00	5.7	6.5	219	1800	113	77	11	.09	.00	.00	.00
25	.02	5.7	6.5	234	1260	106	69	10	.06	.00	.00	.00
26	.47	5.8	6.4	987	850	100	62	9.3	.03	.00	.00	.00
27	.30	5.8	6.3	393	634	92	57	8.6	.02	.00	.00	.00
28	.28	5.8	6.2	224	486	87	52	8.5	.01	.00	.00	.00
29	67	6.0	6.1	153	---	82	50	8.9	.01	.00	.00	.00
30	44	6.5	6.0	116	---	78	48	8.7	.06	.00	.00	.00
31	23	---	6.0	95	---	73	---	7.7	---	.00	.00	---
TOTAL	135.07	197.9	208.7	6866.9	14010	18296	2244	664.7	63.99	0.03	0.00	0.00
MEAN	4.36	6.60	6.73	222	500	590	74.8	21.4	2.13	.001	.000	.000
MAX	67	15	8.2	1500	1800	4830	188	44	6.8	.03	.00	.00
MIN	.00	5.4	6.0	5.5	41	73	48	7.7	.01	.00	.00	.00
AC-FT	268	393	414	13620	27790	36290	4450	1320	127	.06	.00	.00

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.67	52.3	171	569	765	515	163	46.1	11.4	2.27	.24	.050
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1971 - 2001	
ANNUAL TOTAL	68018.69		42687.29			
ANNUAL MEAN	186		117		189	
HIGHEST ANNUAL MEAN					623	
LOWEST ANNUAL MEAN					5.74	
HIGHEST DAILY MEAN	7150	Feb 14	4830	Mar 5	24400	Mar 10 1995
LOWEST DAILY MEAN	.00	Jul 31	.00	Oct 1	.00	Sep 16 1971
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 31	.00	Oct 1	.00	Sep 16 1971
MAXIMUM PEAK FLOW			9980	Mar 4	57600	Jan 14 1993
MAXIMUM PEAK STAGE			18.81	Mar 4	35.15	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	134900		84670		136600	
10 PERCENT EXCEEDS	544		252		336	
50 PERCENT EXCEEDS	6.5		6.2		6.5	
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 123 ft³/s during current year.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
JAN					
30...	1025	118	6.0	4	1.3
FEB					
27...	1305	623	11.0	14	24
MAR					
29...	1035	83	16.0	1	.22
MAY					
23...	1135	13	27.0	2	.07

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD (MM) (30333)	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)	
FEB									
27...	1420	1000	1100	.250	1415	1425	30	5.0	
DATE	TIME	COMPSTD SAMPLER IN X-SEC BEDLOAD MEASMT (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 DAY) (04122)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) (80225)
FEB									
27...	1	1	20	2.50	612	11.0	.03	3.5	
DATE	TIME	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80233)
FEB									
27...	1	2	4	21	62	88	99	100	

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 mi².

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 ft³/s, Mar. 10, 1995, gage height, 14.25 ft, current datum, from rating curve extended above 8,000 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0630	2,730	9.00

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	64	262	82	48	8.7	.00	.00	.00
2	.00	.00	.00	.00	59	235	80	48	8.0	.00	.00	.00
3	.00	.00	.00	.00	55	212	79	45	7.6	.00	.00	.00
4	.00	.00	.00	.00	53	375	78	44	7.1	.00	.00	.00
5	.00	.00	.00	.00	51	1990	78	42	6.4	.00	.00	.00
6	.00	.00	.00	.00	50	1430	77	39	5.6	.00	.00	.00
7	.00	.00	.00	.00	49	929	85	38	5.0	.00	.00	.00
8	.00	.00	.00	.00	48	611	92	36	4.2	.00	.00	.00
9	.00	.00	.00	.07	49	479	84	35	3.6	.00	.00	.00
10	.00	.00	.00	7.6	73	403	80	33	3.2	.00	.00	.00
11	.00	.00	.00	189	205	344	78	30	2.7	.00	.00	.00
12	.00	.00	.00	462	346	297	75	29	2.4	.00	.00	.00
13	.00	.00	.00	251	261	259	73	27	1.9	.00	.00	.00
14	.00	.00	.00	155	203	229	72	26	1.4	.00	.00	.00
15	.00	.00	.00	111	159	205	70	25	1.1	.01	.00	.00
16	.00	.00	.00	94	135	184	68	24	.70	.00	.00	.00
17	.00	.00	.00	83	117	171	66	23	.48	.00	.00	.00
18	.00	.00	.00	74	106	158	64	22	.30	.00	.00	.00
19	.00	.00	.00	68	160	148	64	21	.12	.00	.00	.00
20	.00	.00	.00	64	327	139	64	20	.00	.00	.00	.00
21	.00	.00	.00	61	259	130	88	19	.00	.00	.00	.00
22	.00	.00	.00	59	244	122	89	17	.00	.00	.00	.00
23	.00	.00	.00	57	287	115	78	16	.00	.00	.00	.00
24	.00	.00	.00	65	421	109	70	15	.00	.00	.00	.00
25	.00	.00	.00	96	633	103	65	14	.00	.00	.00	.00
26	.00	.00	.00	228	437	98	60	13	.00	.00	.00	.00
27	.00	.00	.00	200	362	94	56	12	.00	.00	.00	.00
28	.00	.00	.00	142	305	91	54	12	.00	.00	.00	.00
29	.00	.00	.00	114	---	90	51	11	.00	.00	.00	.00
30	.00	.00	.00	91	---	86	49	10	.00	.00	.00	.00
31	.00	---	.00	75	---	84	---	9.4	---	.00	.00	---
TOTAL	0.00	0.00	0.00	2746.67	5518	10182	2169	803.4	70.50	0.01	0.00	0.00
MEAN	.000	.000	.000	88.6	197	328	72.3	25.9	2.35	.000	.000	.000
MAX	.00	.00	.00	462	633	1990	92	48	8.7	.01	.00	.00
MIN	.00	.00	.00	.00	48	84	49	9.4	.00	.00	.00	.00
AC-FT	.00	.00	.00	5450	10940	20200	4300	1590	140	.02	.00	.00

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.32	13.4	79.9	303	422	342	126	44.1	13.9	3.45	.39	.053
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1966 - 2001	
ANNUAL TOTAL	36356.05		21489.58			
ANNUAL MEAN	99.3		58.9		111	
HIGHEST ANNUAL MEAN					455	
LOWEST ANNUAL MEAN					.005	
HIGHEST DAILY MEAN	3030	Feb 14	1990	Mar 5	14000	Mar 10 1995
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1965
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1965
MAXIMUM PEAK FLOW			2730	Mar 5	23600	Mar 10 1995
MAXIMUM PEAK STAGE			9.00	Mar 5	14.25	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	72110		42620		80330	
10 PERCENT EXCEEDS	311		159		226	
50 PERCENT EXCEEDS	.00		.00		4.2	
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 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PEN- DED (MG/L) (80154)	SED- IMENT, DIS- CHARGE, SUS- PEN- DED (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...	1400	262	8.5	2130	1510	4	--	--	--	--	--
30...	1215	91	9.0	7	1.7	34	--	--	--	--	--
FEB											
27...	1130	346	11.0	46	43	36	--	--	--	--	--
MAR											
05...	1120	2160	10.5	1040	6070	14	16	20	46	77	92
05...	1505	1810	10.5	574	2810	36	--	--	--	--	--
16...	1325	184	15.5	30	15	51	--	--	--	--	--
APR											
05...	1250	79	17.0	6	1.3	--	--	--	--	--	--
MAY											
01...	1200	49	21.0	5	.66	--	--	--	--	--	--
17...	1530	23	26.5	2	.12	--	--	--	--	--	--
JUN											
05...	1245	6.4	24.5	9	.16	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)
JAN									
30...	1110	1	91	9.0	--	--	2	14	39
30...	1112	1	91	9.0	--	--	1	12	44
30...	1113	1	91	9.0	--	--	2	15	33
30...	1115	1	91	9.0	--	--	--	6	52
30...	1116	1	91	9.0	--	1	5	15	25
30...	1117	1	91	9.0	1	2	4	13	29
30...	1118	1	91	9.0	--	1	1	8	38
30...	1119	1	91	9.0	--	1	2	7	33
30...	1120	1	91	9.0	--	1	5	15	26
30...	1121	1	91	9.0	--	1	2	7	33
APR									
05...	1324	1	79	17.0	--	--	--	6	50
05...	1325	1	79	17.0	--	--	2	15	33
05...	1326	1	79	17.0	--	--	--	6	28
05...	1328	1	79	17.0	--	--	2	9	22
05...	1329	1	79	17.0	--	--	3	16	35
05...	1330	1	79	17.0	--	--	2	10	20
05...	1332	1	79	17.0	--	--	1	11	35
05...	1333	1	79	17.0	--	--	1	6	62
05...	1334	1	79	17.0	--	1	3	8	16
05...	1335	1	79	17.0	1	2	5	11	28

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BED MAT. SIEVE DIAM.					
	% FINER THAN 2.00 MM (80169)	% FINER THAN 4.00 MM (80170)	% FINER THAN 8.00 MM (80171)	% FINER THAN 16.0 MM (80172)	% FINER THAN 32.0 MM (80173)	% FINER THAN 64.0 MM (80174)
JAN						
30...	54	73	85	94	100	--
30...	65	83	90	97	100	--
30...	45	61	77	86	94	100
30...	82	93	95	96	100	--
30...	30	34	39	45	56	100
30...	36	45	55	68	92	100
30...	65	80	89	98	100	--
30...	67	88	94	98	100	--
30...	42	57	69	79	100	--
30...	74	93	98	100	--	--
APR						
05...	89	98	99	100	--	--
05...	48	64	78	90	100	--
05...	60	78	88	95	100	--
05...	31	41	48	62	89	100
05...	45	54	59	72	91	100
05...	26	32	38	51	73	100
05...	59	78	86	94	97	100
05...	95	100	--	--	--	--
05...	27	37	45	54	74	100
05...	54	69	74	80	84	100

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM-PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE SAMPLER (MM) (30333)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS) (82074)	TIME ON BED FOR SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)	COMPSTD IN X-SEC BEDLOAD MEASNT (NUM) (04118)
JAN									
11...	1315	1000	1150	.250	1307	1320	20	4.0	2
11...	1330	1000	1150	.250	1326	1336	20	4.0	2
30...	1130	1000	1150	.250	1120	1138	20	4.0	2
30...	1155	1000	1150	.250	1146	1204	20	4.0	2
FEB									
27...	1150	1000	1150	.250	1141	1151	20	6.0	2
27...	1200	1000	1150	.250	1155	1205	20	6.0	2
MAR									
05...	1215	1000	1140	.250	1156	1223	15	10.0	2
05...	1240	1000	1140	.250	1227	1250	15	10.0	2
05...	1540	1000	1140	.250	1526	1551	15	10.0	2
05...	1600	1000	1140	.250	1548	1614	15	10.0	2
16...	1300	1000	1150	.250	1253	1302	20	4.0	2
16...	1310	1000	1150	.250	1306	1314	20	4.0	2
APR									
05...	1300	1000	1150	.250	1256	1304	20	3.0	2
05...	1310	1000	1150	.250	1306	1314	20	3.0	2
MAY									
01...	1135	1000	1150	.250	1133	1141	20	2.0	2
01...	1145	1000	1150	.250	1143	1151	20	2.0	2
17...	1500	1000	1150	.250	1454	1503	30	1.0	2
17...	1515	1000	1150	.250	1509	1518	30	1.0	2
JUN									
05...	1500	1000	1150	.250	1251	1304	30	.5	2
05...	1510	1000	1150	.250	1305	1318	30	.5	2

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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, CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITIVE SAMPLE T/D/FT (04122)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80227)
JAN									
11...	22	22	4.00	265	8.5	2.85	217	--	--
11...	22	22	4.00	265	8.5	2.08	217	--	--
30...	19	19	2.00	91	9.0	1.74	122	--	--
30...	19	19	2.00	91	9.0	1.49	122	--	--
FEB									
27...	20	20	3.00	346	11.0	1.69	230	--	--
27...	20	20	3.00	346	11.0	2.14	230	--	--
MAR									
05...	21	21	5.00	2050	10.5	14.5	3300	--	--
05...	21	21	5.00	2000	10.5	17.0	3300	--	--
05...	21	21	5.00	1780	10.5	13.7	3320	--	--
05...	21	21	5.00	1780	10.5	17.9	3320	--	--
16...	23	23	2.00	184	15.5	1.66	190	--	--
16...	23	23	2.00	184	15.5	2.47	190	--	--
APR									
05...	20	20	1.50	79	17.0	1.34	70	--	--
05...	20	20	1.50	79	17.0	.99	70	--	--
MAY									
01...	24	24	1.00	49	21.0	1.08	49	--	--
01...	24	24	1.00	49	21.0	.96	49	--	--
17...	21	21	.50	23	26.5	.49	11	--	--
17...	21	21	.50	23	26.5	.58	11	--	--
JUN									
05...	31	31	.25	6.0	24.5	.01	.16	--	1
05...	31	31	.25	6.0	24.5	.01	.16	1	1

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80236)
JAN									
11...	1	12	44	72	86	94	98	100	--
11...	1	15	50	74	85	91	97	100	--
30...	1	16	60	83	93	96	99	100	--
30...	1	14	59	79	90	95	98	100	--
FEB									
27...	2	26	54	74	86	92	96	100	--
27...	1	21	48	65	78	87	94	100	--
MAR									
05...	1	12	34	60	77	88	95	99	100
05...	1	12	34	60	78	90	96	100	--
05...	--	1	15	40	68	90	90	97	100
05...	1	13	41	64	81	91	97	100	--
16...	1	14	51	78	89	95	99	100	--
16...	1	12	49	79	92	97	100	--	--
APR									
05...	--	9	52	85	96	97	99	100	--
05...	--	9	54	83	92	97	99	100	--
MAY									
01...	--	8	43	78	92	96	96	100	--
01...	--	8	42	75	92	97	100	--	--
17...	--	8	52	87	95	99	100	--	--
17...	--	6	39	79	94	97	99	100	--
JUN									
05...	1	19	50	75	88	96	100	--	--
05...	2	18	44	71	86	100	--	--	--

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 mi².

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 good. 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 ft³/s, Mar. 11, 1995, gage height, 23.44 ft, from rating curve extended above 50,000 ft³/s; no flow at times in 1951, 1954–55, 1957.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	37	356	196	82	530	166	96	425	505	511	549
2	31	37	316	194	76	418	168	93	422	496	510	547
3	31	37	271	205	69	366	161	89	421	492	510	547
4	32	37	230	234	63	363	155	83	417	487	507	548
5	32	37	235	231	60	8470	158	76	435	496	504	548
6	31	37	237	241	58	10300	154	149	444	502	502	551
7	32	35	227	240	57	4200	165	391	447	498	496	522
8	31	36	188	252	58	2310	226	430	465	492	513	518
9	30	38	203	224	62	1620	237	443	452	489	531	504
10	32	301	205	232	71	1260	198	447	450	490	540	500
11	33	680	202	249	95	988	191	445	452	484	535	513
12	31	719	197	160	701	804	189	410	454	481	536	529
13	31	749	197	116	799	644	176	410	456	464	539	539
14	29	864	193	98	735	529	155	414	455	473	543	547
15	29	976	198	90	509	468	140	413	454	465	545	519
16	28	932	202	84	381	420	134	410	465	458	534	266
17	28	362	198	76	306	393	132	408	466	483	521	145
18	29	283	194	71	261	371	129	395	471	499	532	99
19	29	270	209	67	277	352	126	403	466	498	536	84
20	31	260	215	63	732	325	114	404	464	491	538	77
21	31	267	210	60	1300	303	129	399	464	491	548	72
22	31	273	209	61	702	293	145	400	468	490	547	68
23	30	398	201	63	545	274	143	391	491	489	547	63
24	30	414	200	71	578	258	126	392	506	496	545	59
25	31	319	196	67	1510	238	122	400	513	496	545	52
26	39	324	190	70	1160	219	117	418	514	487	544	50
27	39	328	195	93	775	212	112	426	513	476	545	46
28	37	336	194	121	588	197	109	428	512	482	542	46
29	44	462	190	109	---	194	99	397	513	508	547	41
30	40	376	191	98	---	190	95	442	512	516	551	40
31	37	---	193	86	---	178	---	425	---	515	554	---
TOTAL	1000	10224	6642	4222	12610	37687	4471	10927	13987	15189	16498	9189
MEAN	32.3	341	214	136	450	1216	149	352	466	490	532	306
MAX	44	976	356	252	1510	10300	237	447	514	516	554	551
MIN	28	35	188	60	57	178	95	76	417	458	496	40
AC-FT	1980	20280	13170	8370	25010	74750	8870	21670	27740	30130	32720	18230

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 mi².

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 fair except for estimated daily discharges, which are 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 ft³/s, Jan. 25, 1969, gage height, 15.33 ft, in gage well, 16.2 ft, from floodmarks, from rating curve extended above 7,100 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 11	2030	338	4.58	Feb. 24	2330	346	4.60
Feb. 19	2015	350	4.61	Mar. 5	0130	2,220	7.69

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	4.3	3.5	2.4	5.9	32	e4.5	3.3	.91	.60	1.2	1.1
2	1.2	3.6	3.6	2.2	5.4	39	e4.2	3.2	.93	.57	1.2	.88
3	1.3	3.3	3.5	2.1	4.9	22	e4.2	3.2	1.0	.52	1.2	.80
4	1.4	3.0	3.5	2.0	4.6	36	e4.2	4.1	1.1	.47	1.2	.71
5	1.5	3.0	3.3	2.0	4.4	1410	e4.2	3.1	1.1	.82	1.2	.66
6	1.4	3.0	3.0	2.1	4.1	405	e4.5	3.0	.94	.80	1.2	.71
7	1.5	2.9	3.1	2.1	3.8	127	e5.9	3.1	.76	1.0	1.1	.81
8	1.7	3.1	3.1	5.6	3.6	63	e4.5	3.0	.69	.89	1.0	.92
9	1.6	3.1	3.4	4.3	4.6	40	e3.9	2.7	.75	.78	.99	.94
10	2.3	3.4	3.2	10	12	31	e3.9	2.7	.87	.83	1.0	1.0
11	2.9	3.6	3.1	60	88	26	e4.2	2.8	.95	.86	1.3	1.0
12	2.3	3.8	3.4	144	136	21	e4.2	2.8	1.0	.97	1.2	.95
13	2.1	3.9	3.3	66	55	17	e4.2	2.9	.96	.99	1.2	.99
14	2.1	3.6	3.2	25	23	e15	e4.2	2.6	.88	.95	1.4	.93
15	2.1	3.5	3.2	11	17	e13	e3.9	2.5	.89	1.0	1.3	.88
16	2.1	3.5	3.0	8.1	11	11	e3.7	2.4	.85	1.1	1.3	.82
17	1.9	3.6	2.9	7.0	9.0	9.8	e3.7	2.2	.80	1.1	1.3	.92
18	1.9	3.6	2.9	6.3	8.6	9.7	e3.7	2.1	.77	1.1	1.3	.92
19	1.9	3.3	3.0	6.1	101	8.0	e4.2	2.1	.68	1.1	1.2	.87
20	1.9	3.1	3.0	5.9	141	6.6	e7.0	2.1	.63	1.1	1.3	.79
21	1.9	3.3	3.0	5.7	53	6.1	11	1.9	.59	1.1	1.4	.77
22	1.8	3.4	2.9	5.6	25	6.4	12	1.6	.56	1.2	1.4	.79
23	1.7	3.4	2.9	5.8	28	6.0	6.4	1.3	.59	1.2	1.4	.82
24	1.7	3.5	2.9	9.4	61	5.9	4.6	1.2	.72	1.1	1.3	.80
25	1.8	3.5	2.9	24	164	6.1	3.8	1.1	.74	1.1	1.2	.99
26	5.6	3.4	2.9	59	93	6.6	3.6	1.3	.76	1.1	1.1	1.0
27	6.2	3.4	2.9	53	77	e4.8	3.7	1.5	.79	1.0	.95	.84
28	5.0	3.5	2.9	24	36	e4.5	3.5	1.5	.80	.95	.86	.66
29	7.9	3.6	2.9	12	---	e4.5	3.3	1.5	.76	.95	.80	.72
30	5.2	3.6	3.0	8.4	---	e4.5	3.4	1.3	.66	1.1	.83	.72
31	4.9	---	3.0	7.0	---	e4.5	---	1.0	---	1.1	1.1	---
TOTAL	80.0	102.8	96.4	588.1	1179.9	2402.0	142.3	71.1	24.43	29.45	36.43	25.71
MEAN	2.58	3.43	3.11	19.0	42.1	77.5	4.74	2.29	.81	.95	1.18	.86
MAX	7.9	4.3	3.6	144	164	1410	12	4.1	1.1	1.2	1.4	1.1
MIN	1.2	2.9	2.9	2.0	3.6	4.5	3.3	1.0	.56	.47	.80	.66
AC-FT	159	204	191	1170	2340	4760	282	141	48	58	72	51

e Estimated.

SALINAS RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.93	4.12	10.7	41.9	61.2	47.1	16.6	6.28	2.59	1.26	.83	1.26
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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1959 - 2001
ANNUAL TOTAL	7045.76	4778.62	
ANNUAL MEAN	19.3	13.1	16.1
HIGHEST ANNUAL MEAN			81.4
LOWEST ANNUAL MEAN			.66
HIGHEST DAILY MEAN	454	Feb 14	1410
LOWEST DAILY MEAN	.46	Jul 24	.47
ANNUAL SEVEN-DAY MINIMUM	.59	Aug 13	.63
MAXIMUM PEAK FLOW			2220
MAXIMUM PEAK STAGE			7.69
ANNUAL RUNOFF (AC-FT)	13980	9480	11650
10 PERCENT EXCEEDS	45	16	21
50 PERCENT EXCEEDS	3.1	2.9	1.4
90 PERCENT EXCEEDS	.69	.82	.10

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 mi².

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 ft³/s, Apr. 3, 1958, gage height, 16.40 ft, datum then in use, from rating curve extended above 12,000 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1930	5,930	7.00

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	33	23	24	99	352	117	85	26	9.3	2.9	.82
2	17	28	22	23	91	316	113	82	25	8.4	3.8	1.1
3	17	26	22	23	85	289	111	78	25	7.7	3.9	1.5
4	17	24	22	23	80	2270	108	75	25	7.1	3.4	2.0
5	17	23	22	23	77	2990	108	73	23	7.3	3.3	1.7
6	18	22	21	23	73	2030	105	71	22	6.9	2.7	1.5
7	19	21	23	23	72	1400	170	66	22	7.0	3.1	1.5
8	19	21	23	30	68	1020	161	68	21	6.6	2.8	1.3
9	19	20	23	48	71	787	126	67	20	7.2	2.2	.81
10	21	21	23	288	176	636	119	63	19	7.2	2.0	1.8
11	31	22	23	884	527	525	111	62	19	7.2	2.1	2.1
12	31	22	24	987	469	449	108	60	19	7.3	2.3	1.9
13	27	20	26	300	334	390	102	60	19	7.6	2.0	1.9
14	26	20	26	178	252	346	99	59	18	7.0	2.2	1.8
15	26	21	25	129	210	311	96	56	17	6.5	2.0	2.3
16	25	20	25	106	186	284	93	53	17	6.0	2.0	2.4
17	23	20	24	91	169	260	90	52	16	6.6	1.9	2.1
18	24	20	24	81	178	243	87	49	15	7.1	1.9	2.3
19	23	20	24	74	487	232	88	47	13	7.0	1.6	2.4
20	24	20	23	69	704	215	94	46	13	5.8	1.3	2.3
21	23	20	24	64	496	202	243	43	13	5.6	1.3	2.3
22	23	20	24	60	466	190	156	41	12	6.2	.77	2.3
23	23	20	24	58	541	182	130	39	11	5.6	.88	1.9
24	23	20	24	139	724	172	119	36	11	5.7	1.6	2.0
25	23	20	24	132	743	166	111	34	e11	5.5	1.9	2.6
26	36	20	24	490	577	155	105	33	e10	5.0	1.8	2.3
27	102	20	23	249	479	146	99	32	10	4.6	1.5	2.3
28	62	20	23	178	406	137	95	32	11	4.2	1.8	2.6
29	148	21	24	142	---	131	93	31	11	3.3	1.3	2.5
30	72	22	24	121	---	126	89	30	11	2.5	1.1	2.6
31	42	---	24	109	---	121	---	27	---	2.4	1.3	---
TOTAL	1019	647	730	5169	8840	17073	3446	1650	505	193.4	64.65	58.93
MEAN	32.9	21.6	23.5	167	316	551	115	53.2	16.8	6.24	2.09	1.96
MAX	148	33	26	987	743	2990	243	85	26	9.3	3.9	2.6
MIN	17	20	21	23	68	121	87	27	10	2.4	.77	.81
AC-FT	2020	1280	1450	10250	17530	33860	6840	3270	1000	384	128	117

e Estimated.

11152000 ARROYO SECO NEAR SOLEDAD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	9.60	53.3	164	393	584	453	253	94.6	39.8	15.0	5.98	4.91
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1902 - 2001	
ANNUAL TOTAL	57360.5		39395.98			
ANNUAL MEAN	157		108		170	
HIGHEST ANNUAL MEAN					709	
LOWEST ANNUAL MEAN					6.97	
HIGHEST DAILY MEAN	4190	Feb 14	2990	Mar 5	16500	Dec 23 1955
LOWEST DAILY MEAN	4.6	Aug 17	.77	Aug 22	.00	Aug 27 1904
ANNUAL SEVEN-DAY MINIMUM	5.2	Aug 16	1.3	Aug 27	.00	Aug 27 1904
MAXIMUM PEAK FLOW			5930	Mar 4	28300	Apr 3 1958
MAXIMUM PEAK STAGE			7.00	Mar 4	16.44	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	113800		78140		123400	
10 PERCENT EXCEEDS	490		250		365	
50 PERCENT EXCEEDS	24		24		28	
90 PERCENT EXCEEDS	7.2		2.1		.10	

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 mi².

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 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2100	5,470	5.38

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	197	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	167	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	144	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	1330	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	2800	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	1730	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	1110	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	717	.66	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	506	.54	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	382	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	356	118	305	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	623	288	249	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	147	159	208	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	36	87	182	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	1.3	53	e168	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	26	e150	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	9.0	131	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	1.3	113	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	120	95	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	327	78	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	268	66	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	273	54	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	322	41	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	389	32	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	498	24	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	151	392	18	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	110	320	12	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	41	248	6.1	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.54	---	2.2	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.13	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	1465.84	3898.30	11017.43	1.20	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	47.3	139	355	.040	.000	.000	.000	.000	.000
MAX	.00	.00	.00	623	498	2800	.66	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	2910	7730	21850	2.4	.00	.00	.00	.00	.00

e Estimated.

11152050 ARROYO SECO BELOW RELIZ CREEK, NEAR SOLEDAD, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	3.27	64.9	621	757	546	135	27.8	1.47	.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	139	49.2	.000	.000	.000	.000	.000	.000
(WY)	1995	1995	1995	1999	2001	1997	1997	1997	1996	1995	1995	1995

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1995 - 2001	
ANNUAL TOTAL	37885.00		16382.77			
ANNUAL MEAN	104		44.9		177	
HIGHEST ANNUAL MEAN					354	
LOWEST ANNUAL MEAN					30.9	
HIGHEST DAILY MEAN	3970	Feb 14	2800	Mar 5	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
MAXIMUM PEAK FLOW			5470	Mar 4	31000	Mar 10 1995
MAXIMUM PEAK STAGE			5.38	Mar 4	9.62	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	75140		32500		128200	
10 PERCENT EXCEEDS	350		101		450	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

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 mi².

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 ft³/s, estimated, Mar. 11, 1995, gage height, 19.70 ft, from rating curve extended above 18,000 ft³/s; peak flow includes an estimate of 8,800 ft³/s bypassing the gage; no flow at times during most years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.00	122	76	51	e900	246	36	57	76	45	83
2	e.00	e.00	131	76	e50	e720	230	e32	56	81	42	82
3	e.00	e.00	121	76	e48	e650	220	e25	54	84	39	89
4	e.00	e.00	115	76	e42	e1800	205	e18	58	78	35	99
5	e.00	e.00	110	76	e36	e4000	190	e12	63	74	32	97
6	e.00	e.00	105	76	e33	e9000	182	e7.8	55	71	36	91
7	e.00	e.00	101	76	e33	12900	173	e5.5	52	64	41	90
8	e.00	e.00	97	87	e32	7840	156	4.0	52	62	37	89
9	e.00	e.00	93	92	e32	5120	152	3.7	50	63	32	77
10	e.00	.00	88	108	e85	3540	152	7.4	60	65	31	70
11	e.00	.00	86	233	e300	2610	156	38	74	60	35	71
12	e.00	.00	83	591	e500	2050	145	66	79	59	43	64
13	e.00	.00	80	586	e420	1660	135	88	79	58	53	66
14	e.00	.00	76	288	e400	1380	129	96	72	56	62	67
15	e.00	.00	74	180	e380	1160	123	100	64	54	65	68
16	e.00	.00	76	146	e370	1010	114	96	58	48	59	74
17	e.00	.00	78	118	e320	889	102	95	52	46	57	86
18	e.00	.00	79	105	e280	794	89	93	62	44	56	60
19	e.00	18	81	93	e350	719	82	89	69	41	56	19
20	e.00	30	83	79	e600	651	81	83	65	41	67	1.9
21	e.00	37	85	72	e550	588	78	80	60	42	74	.00
22	e.00	43	88	68	e520	531	71	81	52	42	69	.00
23	e.00	45	90	58	e980	499	68	68	50	42	70	.00
24	e.00	51	92	57	e960	454	68	60	50	43	69	.00
25	e.00	73	82	56	e1100	416	65	57	64	43	69	.00
26	e.00	107	79	55	e1300	380	60	51	81	41	69	.00
27	e.00	105	78	103	e1500	335	54	51	85	38	80	.00
28	e.00	100	76	106	e1150	322	48	61	80	35	87	.00
29	e.00	97	76	76	---	306	43	74	80	33	83	.00
30	e.00	99	76	57	---	284	41	76	80	33	81	.00
31	e.00	---	76	52	---	265	---	65	---	45	82	---
TOTAL	0.00	805.00	2777	3998	12422	63773	3658	1719.4	1913	1662	1756	1443.90
MEAN	.000	26.8	89.6	129	444	2057	122	55.5	63.8	53.6	56.6	48.1
MAX	.00	107	131	591	1500	12900	246	100	85	84	87	99
MIN	.00	.00	74	52	32	265	41	3.7	50	33	31	.00
AC-FT	.00	1600	5510	7930	24640	126500	7260	3410	3790	3300	3480	2860

e Estimated.

11152300 SALINAS RIVER NEAR CHUALAR, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	52.8	72.9	276	1114	2146	1708	447	184	73.0	64.6	58.9	75.0
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1977 - 2001	
ANNUAL TOTAL	125582.70		95927.30			
ANNUAL MEAN	343		263		514	
HIGHEST ANNUAL MEAN					2796	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	7300	Feb 25	12900	Mar 7	68000	Mar 12 1995
LOWEST DAILY MEAN	.00	Sep 21	.00	Oct 1	.00	Jan 27 1977
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 21	.00	Oct 1	.00	Feb 3 1977
MAXIMUM PEAK FLOW			16000	Mar 7	e92000	Mar 11 1995
MAXIMUM PEAK STAGE			13.17	Mar 7	19.70	Mar 11 1995
ANNUAL RUNOFF (AC-FT)	249100		190300		372600	
10 PERCENT EXCEEDS	658		434		844	
50 PERCENT EXCEEDS	76		69		48	
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 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)			TUR-BID-ITY (NTU) (00076)	TUR-BID-ITY LAB (NTU) (82079)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED SATUR-ATION (MG/L) (00300)	OXYGEN, (PER-CENT) (00301)	PH WATER FIELD (STAND-ARD) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
		FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	TUR-BID-ITY LAB (NTU) (82079)	TUR-BID-ITY LAB (NTU) (82079)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED SATUR-ATION (MG/L) (00300)	OXYGEN, (PER-CENT) (00301)	PH WATER FIELD (STAND-ARD) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	
FEB													
15...	1115	371	350	--	766	11.6	107	8.4	462	12.0	69		
MAR													
07...	1230	12600	1800	--	765	10.0	93.6	8.2	410	12.5	42		
MAY													
14...	1200	98	6.9	--	765	11.6	120	8.7	542	17.0	65		
JUL													
19...	1030	42	--	7.0	761	9.0	93.4	8.6	407	17.0	38		
DATE		HARD-NESS TOTAL (MG/L AS CACO3) (00900)		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT TOT IT FIELD (39086)	BICAR-BONATE WATER DIS IT FIELD (00453)	CAR-BONATE WATER DIS IT FIELD (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
		AS CACO3 (00900)	AS CA (00915)	AS MG (00925)	AS K (00935)	RATIO (00931)	AS NA (00930)	PERCENT (00932)	MG/L AS CACO3 (00932)	MG/L AS HCO3 (00453)	MG/L AS HCO3 (00452)	MG/L AS CL (00940)	
FEB													
15...	159	36.0	16.7	1.83	1.11	32.3	30.4	89	107	1	22.2		
MAR													
07...	127	30.9	12.2	2.98	1.15	29.7	33.1	86	104	--	17.0		
MAY													
14...	208	47.9	21.4	2.09	.950	31.4	24.6	143	167	3	27.2		
JUL													
19...	162	36.8	17.0	1.49	.779	22.8	23.2	124	146	2	15.6		
DATE		FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)		SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
		AS F (00950)	AS SIO2 (00955)	AS SO4 (00945)	PER AC-FT (70303)	(MG/L) (70300)	(MG/L) (70301)	(MG/L AS N) (00608)	(MG/L AS N) (00625)	(MG/L AS N) (00631)	(MG/L AS N) (00613)	(MG/L AS P) (00666)	
FEB													
15...	.3	16.3	82.3	.392	288	265	<.041	1.7	.660	.007	.080		
MAR													
07...	.3	15.8	79.5	.360	265	242	<.041	4.2	.492	e.003	.123		
MAY													
14...	.2	18.5	85.5	.483	355	324	<.041	.54	1.07	.020	<.060		
JUL													
19...	.2	11.8	54.2	.336	247	235	<.040	.33	.166	.006	<.060		

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

11152300 SALINAS RIVER NEAR CHUALAR, CA—Continued

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

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
FEB 15...	.070	.993
MAR 07...	.127	3.13
MAY 14...	<.018	e.059
JUL 19...	<.020	e.047

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)
FEB 15...	1340	371	12.0	748	749	60	69
MAR 07...	1700	11300	14.0	3330	102000	--	--
MAY 14...	1055	98	17.5	43	11	--	--
JUL 19...	1150	42	21.5	29	3.3	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70334)
FEB 15...	87	91	92	93	93	98	100
MAR 07...	--	--	--	72	--	--	--
MAY 14...	--	--	--	46	--	--	--
JUL 19...	--	--	--	86	--	--	--

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

SALINAS RIVER BASIN

11152300 SALINAS RIVER NEAR CHUALAR, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE SAMPLER (MM) (30333)	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 MEASMT (NUM) (04118)	VER- TICALS IN COM- POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)
MAR	07...*	10	1100	.250	1723	1741	15	30.0	1	10	10
DATE	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 DAY) (04122)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) (80225)	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)	
MAR	07...	15.0	10900	14.0	6.62	1990	1	11	64	88	94

* Sample was collected by USGS and analyzed by non-USGS lab.

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 mi².

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" 1900–1901.

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. 1900–1901, 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 ft³/s, Mar. 12, 1995, gage height, 30.29 ft, from rating extended above 30,000 ft³/s, peak includes estimate of 9,800 ft³/s bypassing gage; no flow at times in 1929–40, many days in 1990–2001.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	14	20	825	218	14	17	17	.00	.00
2	.00	.00	.00	16	16	675	202	11	13	17	.00	.00
3	.00	.00	.00	17	13	607	189	8.2	9.8	20	.00	3.5
4	.00	.00	.00	18	9.7	618	177	6.0	8.4	21	.00	8.9
5	.00	.00	.00	17	3.8	3080	163	5.0	9.8	15	.00	14
6	.00	.00	.00	18	1.2	5190	152	4.1	11	12	.00	17
7	.00	.00	.00	22	.18	12900	167	3.1	6.7	13	.00	17
8	.00	.00	1.3	41	.00	6210	133	2.6	4.2	6.6	.00	14
9	.00	.00	2.5	48	1.1	4330	128	2.4	3.3	4.7	.00	14
10	.00	.00	3.6	70	4.7	3310	123	2.3	2.0	6.9	.00	6.0
11	.00	.00	3.1	144	20	2540	123	2.0	6.0	9.9	.00	6.2
12	.00	.00	5.8	345	29	2090	119	2.0	15	6.2	.00	8.1
13	.00	.00	8.3	614	149	1820	106	1.7	20	1.4	.00	5.4
14	.00	.00	9.0	296	178	1540	99	17	20	.04	.00	6.1
15	.00	.00	7.7	165	256	1280	92	45	14	.00	.00	6.7
16	.00	.00	5.0	104	299	1090	85	49	8.2	.00	.00	7.2
17	.00	.00	5.0	75	287	939	79	47	3.6	.00	.00	9.4
18	.00	.00	6.1	56	232	824	70	47	1.5	.00	.00	14
19	.00	.00	10	43	232	730	61	46	6.0	.00	.00	5.8
20	.00	.00	14	34	272	655	60	43	7.4	.00	.00	.00
21	.00	.00	14	27	523	590	60	38	5.1	.00	.00	.00
22	.00	.00	11	21	477	527	45	39	2.1	.00	.00	.00
23	.00	.00	10	17	753	479	36	35	.31	.00	.00	.00
24	.00	.00	8.2	19	748	434	34	29	.06	.00	.00	.00
25	.00	.00	8.8	21	760	396	32	22	.00	.00	.00	.00
26	.00	.00	12	42	847	358	27	18	2.3	.00	.00	.00
27	.00	.00	15	37	1010	330	25	14	11	.00	.00	.00
28	.00	.00	15	81	1090	303	22	13	17	.00	.00	.00
29	.00	.00	15	45	---	282	20	20	15	.00	.00	.00
30	.00	.00	16	25	---	260	17	30	16	.00	.00	.00
31	.00	---	15	21	---	239	---	28	---	.00	.00	---
TOTAL	0.00	0.00	221.40	2513	8231.68	55451	2864	644.4	255.77	150.74	0.00	163.30
MEAN	.000	.000	7.14	81.1	294	1789	95.5	20.8	8.53	4.86	.000	5.44
MAX	.00	.00	16	614	1090	12900	218	49	20	21	.00	17
MIN	.00	.00	.00	14	.00	239	17	1.7	.00	.00	.00	.00
AC-FT	.00	.00	439	4980	16330	110000	5680	1280	507	299	.00	324

SALINAS RIVER BASIN

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
MAXIMUM PEAK FLOW	75000 Feb 12 1938
MAXIMUM 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 - 2001, BY WATER YEAR (WY)

MEAN	25.0	34.8	217	916	1568	1279	497	126	34.1	20.7	19.6	29.5
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1942 - 2001

ANNUAL TOTAL	114404.40	70495.29	
ANNUAL MEAN	313	193	391
HIGHEST ANNUAL MEAN			2997 1983
LOWEST ANNUAL MEAN			.81 1990
HIGHEST DAILY MEAN	6200 Feb 25	12900 Mar 7	64800 Feb 26 1969
LOWEST DAILY MEAN	.00 May 5	.00 Oct 1	.00 Jan 31 1990
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 16	.00 Oct 1	.00 Jan 31 1990
MAXIMUM PEAK FLOW		16100 Mar 7	95000 Mar 12 1995
MAXIMUM PEAK STAGE		16.31 Mar 7	30.29 Mar 12 1995
ANNUAL RUNOFF (AC-FT)	226900	139800	283300
10 PERCENT EXCEEDS	720	336	619
50 PERCENT EXCEEDS	8.9	7.7	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 mi².

PERIOD OF RECORD.—October 1961 to September 30, 2001 (discontinued).

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 ft³/s, Feb. 3, 1998, gage height, 7.11 ft, from rating curve extended above 240 ft³/s on basis of slope-area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 29 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 29	1315	81	3.70	Feb. 19	0715	38	3.54
Jan. 10	1315	38	3.58	Feb. 23	1115	113	3.81
Jan. 25	2115	44	3.52	Mar. 4	1730	382	5.03
Feb. 11	0545	61	3.64				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	e.33	.21	.30	1.2	e.76	.26	.15	.08	.09	.08	.09
2	.05	e.31	.13	.25	.75	e.67	.24	.12	.08	.09	.08	.07
3	.06	e.30	.14	.25	.54	e.60	.27	.11	.07	.10	.09	.06
4	.07	e.28	.11	.25	.40	116	.25	.12	.07	.11	.08	.07
5	.07	e.27	.11	.38	.40	177	.25	.11	.06	.16	.08	.10
6	.08	e.26	.11	.38	.29	110	.28	.10	.05	.14	.08	.06
7	.09	e.24	.14	.39	.38	64	2.9	.11	.04	.13	.07	.08
8	.08	e.23	.35	3.5	.28	27	.67	.10	.04	.14	.14	.09
9	.09	e.22	.10	e.60	6.7	6.0	.48	.11	.04	.17	.24	.09
10	1.9	e.21	.11	7.3	13	2.7	.39	.11	.05	.15	.09	.08
11	2.2	e.20	.11	8.4	11	1.4	.36	.12	.05	.13	.09	.06
12	e.45	e.19	.17	.89	5.7	.85	.31	.11	.06	.13	.09	.08
13	e.25	e.18	.16	.23	e2.5	e.60	.31	.11	.06	.13	.10	.10
14	e.20	e.18	.18	.21	e1.2	e.50	.29	.11	.05	.17	.14	.09
15	e.18	e.17	.18	.23	e.56	e.43	.26	.11	.06	.19	.09	.09
16	e.17	.16	.21	.26	e.37	e.38	.26	.11	.06	.20	.10	.09
17	e.17	.19	.20	.31	e.29	e.33	.25	.11	.06	.18	.09	.10
18	e.16	.17	.19	.34	e.24	e.29	.25	.12	.05	.15	.09	.11
19	e.15	.21	.17	.42	9.5	e.27	.28	.11	.05	.21	.10	.10
20	e.15	.21	.21	.38	e2.7	.25	1.7	.10	.05	.13	.11	.11
21	e.14	.21	.19	.29	e1.8	.22	2.2	.11	.06	.12	.17	.11
22	e.14	.19	.22	.19	1.5	.24	.47	.11	.06	.11	.09	.11
23	e.14	.23	.23	.20	53	.19	.31	.10	.07	.18	.10	.12
24	e.13	.26	.24	.58	19	.16	.25	.10	.07	.10	.17	.14
25	e.13	.34	.25	5.3	e4.5	.20	.18	.10	.06	.09	.09	.11
26	.73	.24	.21	7.6	e2.9	.19	.14	.09	.07	.09	.12	.16
27	e.47	.20	.27	1.7	e1.6	.17	.17	.09	.07	.10	.08	.10
28	e.27	.19	.27	1.7	e.95	.19	.19	.10	.07	.09	.08	.10
29	4.5	.22	.23	2.0	---	.20	.21	.09	.11	.09	.09	.08
30	e.50	.20	.23	2.0	---	.22	.18	.08	.09	.14	.10	.08
31	e.38	---	.29	1.6	---	.27	---	.07	---	.09	.09	---
TOTAL	14.14	6.79	5.92	48.43	143.25	512.28	14.56	3.29	1.86	4.10	3.21	2.83
MEAN	.46	.23	.19	1.56	5.12	16.5	.49	.11	.062	.13	.10	.094
MAX	4.5	.34	.35	8.4	53	177	2.9	.15	.11	.21	.24	.16
MIN	.04	.16	.10	.19	.24	.16	.14	.07	.04	.09	.07	.06
AC-FT	28	13	12	96	284	1020	29	6.5	3.7	8.1	6.4	5.6

e Estimated.

SALINAS RIVER BASIN

11152540 EL TORO CREEK NEAR SPRECKELS, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.13	.26	.73	5.39	9.34	7.40	2.69	.47	.14	.090	.064	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	1024.87		760.66			
ANNUAL MEAN	2.80		2.08		2.19	
HIGHEST ANNUAL MEAN					14.4	
LOWEST ANNUAL MEAN					.034	
HIGHEST DAILY MEAN	311	Mar 5	177	Mar 5	390	Mar 2 1983
LOWEST DAILY MEAN	.01	Aug 11	.04	Oct 1	.00	Oct 1 1961
ANNUAL SEVEN-DAY MINIMUM	.02	Sep 12	.05	Jun 5	.00	Oct 6 1961
MAXIMUM PEAK FLOW			382	Mar 4	669	Feb 3 1998
MAXIMUM PEAK STAGE			5.03	Mar 4	7.11	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	2030		1510		1590	
10 PERCENT EXCEEDS	2.4		1.5		1.7	
50 PERCENT EXCEEDS	.23		.17		.10	
90 PERCENT EXCEEDS	.05		.07		.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 mi².

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 poor due to lack of measurement opportunities during this dry water year. 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 ft³/s, Feb. 3, 1998, gage height, 5.17 ft, from rating curve extended above 260 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 29	1115	25	2.38

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	3.3	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.68	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.01	.08	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.33	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.07	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.45	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	2.8	.00	.04	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	2.81	0.02	0.06	0.79	0.00	3.99	0.19	0.00	0.00	0.00	0.00	0.00
MEAN	.091	.001	.002	.025	.000	.13	.006	.000	.000	.000	.000	.000
MAX	2.8	.01	.04	.45	.00	3.3	.08	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	5.6	.04	.1	1.6	.00	7.9	.4	.00	.00	.00	.00	.00

TEMBLADERO SLOUGH BASIN

11152600 GABILAN CREEK NEAR SALINAS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.039	.58	3.71	10.7	21.5	16.2	9.04	2.78	1.29	.49	.18	.039
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1971 - 2001	
ANNUAL TOTAL	2258.95		7.86			
ANNUAL MEAN	6.17		.022		5.46	
HIGHEST ANNUAL MEAN					35.4	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	228	Feb 13	3.3	Mar 5	646	Feb 3 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1970
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1970
MAXIMUM PEAK FLOW			25	Oct 29	1030	Feb 3 1998
MAXIMUM PEAK STAGE			2.38	Oct 29	11.13	Apr 1 1974
ANNUAL RUNOFF (AC-FT)	4480		16		3960	
10 PERCENT EXCEEDS	19		.00		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 mi².

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 ft³/s, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,100 ft³/s, Mar. 10, 1995, gage height, 6.75 ft, from rating curve extended above 18 ft³/s, on basis of slope-area measurements at gage heights of 4.44 ft and 6.75 ft; minimum daily, 0.07 ft³/s, Sept. 7, 8, 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 40 ft³/s (revised), or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0730	70	2.41

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	.72	e.69	e.53	2.1	7.3	6.2	3.1	2.4	1.3	.83	.71
2	.40	.65	.59	e.53	2.0	5.9	6.1	2.9	2.4	1.3	.82	.71
3	.38	.64	.61	e.53	2.0	4.8	5.5	2.9	2.3	1.2	.81	.71
4	.31	.64	e.69	e.53	2.1	21	5.3	2.9	2.4	1.4	.81	.72
5	.37	.63	e.69	e.53	2.0	44	5.5	2.9	2.2	1.4	.80	.72
6	.38	.64	e.69	e.53	2.0	29	6.5	2.9	2.2	1.3	.79	.72
7	.36	.62	e.65	e2.0	2.0	22	8.3	2.6	2.1	1.3	.77	.74
8	.47	.63	e.65	e2.5	2.0	18	6.6	2.4	2.1	1.3	.76	.75
9	.41	.64	e.65	e1.9	2.6	18	7.0	2.7	2.0	1.1	.75	.74
10	.55	.66	e.65	e1.9	2.6	15	6.1	3.1	2.0	1.1	.75	.71
11	.53	.63	e.65	e5.0	5.1	15	5.5	3.0	2.0	1.1	.76	.72
12	.53	.59	e.65	12	3.5	13	5.4	3.3	2.0	1.0	.75	.74
13	.63	.53	e.65	3.7	3.7	10	5.1	3.6	1.9	1.0	.75	.74
14	.57	.53	e.60	2.8	3.3	10	5.2	3.0	1.8	.99	.75	.72
15	.66	.51	e.60	2.3	3.1	11	5.1	2.8	1.8	.98	.75	.72
16	.62	.52	e.60	2.3	3.0	10	5.0	3.0	1.7	1.0	.74	.73
17	.63	.55	e.60	2.0	3.1	9.2	5.0	2.7	1.6	.99	.73	.73
18	.61	.56	e.60	2.1	3.5	9.2	4.9	2.8	1.6	.97	.73	.68
19	.63	.46	e.60	1.8	14	9.1	4.9	2.9	1.8	.96	.72	.67
20	.61	.51	e.55	1.8	12	9.8	7.6	3.0	1.8	.95	.72	.66
21	.61	.58	e.55	1.8	7.7	8.2	6.4	2.9	1.8	.94	.73	.66
22	.64	.58	e.55	1.8	6.5	7.3	4.6	2.8	1.7	.93	.74	.66
23	.66	.62	e.55	1.9	5.7	7.7	4.3	2.8	1.5	.91	.74	.66
24	.62	.65	e.55	2.6	10	7.3	3.7	2.4	1.5	.89	.74	.66
25	.61	.65	e.55	2.6	8.1	8.1	3.6	2.7	1.5	.87	.71	.70
26	2.3	.68	e.55	3.6	9.2	7.6	3.7	2.6	1.5	.85	.68	.65
27	1.7	e.69	e.55	2.9	6.4	7.4	3.5	2.6	1.5	.84	.68	.60
28	.95	e.69	e.55	2.5	6.9	7.2	3.5	2.4	1.5	.82	.68	.59
29	3.0	e.69	e.53	2.4	---	6.7	3.0	2.5	1.5	.81	.68	.59
30	1.1	e.69	e.53	2.3	---	6.6	2.9	2.4	1.3	.84	.70	.58
31	.82	---	e.53	2.2	---	7.1	---	2.3	---	.86	.71	---
TOTAL	23.07	18.38	18.65	73.88	136.2	372.5	156.0	86.9	55.4	32.20	23.08	20.69
MEAN	.74	.61	.60	2.38	4.86	12.0	5.20	2.80	1.85	1.04	.74	.69
MAX	3.0	.72	.69	12	14	44	8.3	3.6	2.4	1.4	.83	.75
MIN	.31	.46	.53	.53	2.0	4.8	2.9	2.3	1.3	.81	.68	.58
AC-FT	46	36	37	147	270	739	309	172	110	64	46	41

e Estimated.

PAJARO RIVER BASIN

11154700 CLEAR CREEK NEAR IDRIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.01	1.02	1.91	6.74	12.5	15.1	8.60	6.30	4.25	2.19	1.30	1.03
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	1135.35		1016.95			
ANNUAL MEAN	3.10		2.79		5.13	
HIGHEST ANNUAL MEAN					12.7	
LOWEST ANNUAL MEAN					1.06	
HIGHEST DAILY MEAN	31	Feb 23	44	Mar 5	464	Mar 10 1995
LOWEST DAILY MEAN	.26	Sep 20	.31	Oct 4	.07	Sep 7 1994
ANNUAL SEVEN-DAY MINIMUM	.31	Sep 18	.37	Oct 1	.08	Sep 2 1994
MAXIMUM PEAK FLOW			70	Mar 5	1100	Mar 10 1995
MAXIMUM PEAK STAGE			2.41	Mar 5	6.75	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	2250		2020		3720	
10 PERCENT EXCEEDS	8.4		7.0		13	
50 PERCENT EXCEEDS	1.2		1.3		1.8	
90 PERCENT EXCEEDS	.51		.55		.53	

11154700 CLEAR CREEK NEAR IDRIA, CA—Continued

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

DATE	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	MERCURY RECOVERED FROM BOTTOM MATERIAL (UG/G AS HG) (71921)
JAN 11...	<3.2	<.23	.20	<45.0	e2.35	<2.4	<.2	32.4	<8.0	.32
FEB 22...	e1.9	<.23	.54	<45.0	e1.88	<2.4	<.2	36.5	<8.0	.24
MAR 27...	<3.2	<.01	<.01	<45.0	e1.53	<2.4	<.2	34.0	<8.0	.22
SEP 05...	<3.0	<.01	<.01	<50.0	e2.10	<2.0	<.2	45.1	<8.0	.11

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN 11...	1415	3.7	6.0	72	.72	86
FEB 22...	1225	7.0	6.5	326	6.2	86
MAR 27...	1115	7.8	13.0	8	.17	--
SEP 05...	1110	.77	23.0	3	.01	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE SAMPLER (MM) (30333)	TETHER USED IN SAMPLING (YES=1) (CODE) (04117)	START- ING TIME (2400 HOURS) (82073)	END- ING TIME (2400 HOURS) (82074)	TIME ON BED FOR LOAD SAMPLE (SEC) (04120)	HORI- ZONTAL WIDTH OF VER- TICAL (FEET) (04121)	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (NUM) (04118)	VER- TICALS IN COM- POSITE SAMPLE (NUM) (04119)
FEB 22...	1250	1000	1150	.250	0	1243	1258	30	.4	2	20
22...	1310	1000	1150	.250	0	1259	1313	30	.4	2	20

DATE	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS- CHARGE, INST. CUBIC 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)	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)
FEB 22...	20	.20	6.9	6.5	.04	.28	1	4	25	67	94
22...	20	.20	6.2	6.5	.03	.28	--	4	20	39	77

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

11154700 CLEAR CREEK NEAR IDRIA, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SED.	SED.	SED.
	BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)
FEB			
22...	99	100	--
22...	94	97	100

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 mi².

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 ft³/s, Mar. 10, 1995, gage height, 14.55 ft, from floodmarks, from rating curve extended above 2,100 ft³/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 ft³/s, based on 1941 peak and rating extrapolation.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0845	586	8.01

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	34	e6.5	6.1	e11	13	19	12	18	30	31	27
2	3.2	19	e6.5	6.0	e14	13	19	12	21	30	31	21
3	3.2	7.6	e6.5	5.9	e13	12	19	11	25	29	31	19
4	3.3	7.7	e6.5	5.9	e12	49	19	10	27	29	31	18
5	3.3	7.7	e6.5	5.9	e12	259	18	9.1	27	32	31	18
6	3.2	7.5	e6.5	5.9	e12	e104	18	7.3	28	31	31	18
7	3.3	7.7	e6.5	5.9	e11	e65	22	e6.2	28	32	30	18
8	3.5	7.7	6.0	8.0	e9.4	e46	24	e5.8	28	31	30	18
9	3.6	7.7	6.2	8.0	e11	e46	25	5.1	29	31	30	18
10	5.0	8.0	6.2	17	e13	e39	25	4.6	29	32	30	19
11	5.4	7.9	6.2	e19	e18	e30	24	4.5	30	32	30	19
12	5.2	7.8	6.8	e40	e23	e29	23	11	31	33	30	19
13	5.0	7.9	6.6	e31	e17	e26	22	14	31	33	30	19
14	4.7	7.6	6.5	e21	14	e21	21	15	31	32	30	18
15	4.4	7.5	6.3	e14	11	e20	19	16	31	33	30	18
16	4.1	7.5	6.2	e15	10	20	18	16	31	33	30	18
17	3.8	7.3	6.3	e14	9.2	15	17	17	30	33	30	18
18	3.5	7.3	6.3	e12	9.0	14	17	17	30	33	29	18
19	3.3	7.4	6.4	e12	e23	13	16	17	30	33	29	18
20	3.4	7.4	6.4	e11	e25	13	19	17	30	33	30	18
21	3.3	7.5	6.4	e9.4	17	12	23	17	30	33	31	17
22	3.4	7.7	6.4	e9.4	15	13	24	17	30	32	31	17
23	3.6	7.8	6.4	e11	17	17	23	17	30	32	31	17
24	3.5	8.1	6.4	e13	e39	19	21	17	30	32	31	18
25	3.6	7.9	6.3	e13	e39	21	19	18	31	32	31	19
26	8.2	8.1	6.4	e19	e25	21	17	18	31	32	31	17
27	10	8.4	6.4	e15	e21	22	16	19	31	31	30	13
28	7.1	e6.2	6.4	e13	e17	22	15	19	31	30	30	12
29	10	e6.2	6.3	e13	---	21	14	20	31	30	30	12
30	33	e6.2	6.2	e11	---	21	13	19	31	31	31	11
31	34	---	6.2	e12	---	20	---	18	---	33	32	---
TOTAL	197.5	264.3	197.7	402.4	467.6	1056	589	426.6	871	983	943	530
MEAN	6.37	8.81	6.38	13.0	16.7	34.1	19.6	13.8	29.0	31.7	30.4	17.7
MAX	34	34	6.8	40	39	259	25	20	31	33	32	27
MIN	3.2	6.2	6.0	5.9	9.0	12	13	4.5	18	29	29	11
AC-FT	392	524	392	798	927	2090	1170	846	1730	1950	1870	1050

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.58	5.88	15.4	33.0	72.1	79.4	43.5	22.3	19.9	14.8	14.4	11.2
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	7960.8		6928.1			
ANNUAL MEAN	21.8		19.0		28.0	
HIGHEST ANNUAL MEAN					126	
LOWEST ANNUAL MEAN					.15	
HIGHEST DAILY MEAN	189	Mar 8	259	Mar 5	5000	Mar 10 1995
LOWEST DAILY MEAN	3.2	Oct 2	3.2	Oct 2	.00	Sep 19 1947
ANNUAL SEVEN-DAY MINIMUM	3.3	Oct 1	3.3	Oct 1	.00	Sep 19 1947
MAXIMUM PEAK FLOW			586	Mar 5	9660	Mar 10 1995
MAXIMUM PEAK STAGE			8.01	Mar 5	14.55	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	15790		13740		20260	
10 PERCENT EXCEEDS	34		31		57	
50 PERCENT EXCEEDS	16		17		4.1	
90 PERCENT EXCEEDS	5.4		6.1		.20	

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 mi².

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 ft³/s, Feb. 3, 1998, gage height, 16.00 ft, from floodmarks, from rating curve extended above 9,000 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	Unknown	458	3.31

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	2.5	2.0	2.1	2.7	3.5	1.7	1.5	15	11	8.8	10
2	6.1	e2.4	2.0	2.2	2.6	2.7	1.7	1.5	15	11	8.9	10
3	5.6	e2.3	2.0	2.2	2.5	2.2	1.7	1.4	15	9.9	9.4	10
4	4.3	e2.3	2.0	2.2	2.4	e140	1.8	1.3	15	11	9.5	9.7
5	4.2	e2.3	2.1	2.2	2.4	e60	1.8	1.2	15	12	10	9.7
6	4.1	e2.4	2.0	2.2	2.4	e20	1.9	1.1	15	12	10	10
7	e3.8	e2.4	2.2	2.2	2.3	e10	2.5	1.1	15	12	9.7	9.5
8	e3.2	e2.6	2.1	2.3	1.9	e5.0	2.2	.99	15	11	10	9.5
9	e2.7	e2.7	2.0	2.4	1.9	e3.6	2.1	1.0	14	11	11	10
10	2.9	e2.6	2.0	3.0	1.9	e2.7	2.1	.96	15	11	11	9.8
11	2.8	e2.5	2.0	3.4	2.0	e2.9	2.0	.93	15	10	11	10
12	e2.7	e2.5	2.0	2.8	2.2	e2.4	2.0	1.5	13	10	11	10
13	e2.7	e2.4	2.0	2.4	2.2	e2.3	2.0	1.9	14	10	10	9.4
14	e2.7	e2.3	2.0	2.3	2.2	e3.0	1.9	2.1	12	10	10	8.9
15	2.7	e2.2	2.0	2.3	2.4	e2.9	1.9	3.2	9.2	11	9.7	9.2
16	e2.6	e2.1	2.1	2.3	2.7	e2.7	1.9	6.0	10	11	9.3	9.5
17	e2.6	2.0	2.0	2.2	2.8	2.4	1.9	8.3	11	10	8.6	9.2
18	e2.5	2.1	2.1	2.2	2.4	2.5	1.9	8.6	10	9.5	9.0	8.9
19	e2.5	2.1	2.0	2.3	3.0	2.4	2.1	8.4	9.3	9.0	9.6	8.9
20	e2.5	2.0	2.1	2.2	7.5	2.5	2.3	8.3	9.6	9.4	10	8.7
21	2.6	2.1	2.1	2.2	4.6	2.5	2.1	9.8	9.4	10	10	8.4
22	e2.6	2.0	2.1	2.2	4.2	2.4	1.9	12	8.9	10	9.5	8.4
23	e2.6	2.0	2.1	2.2	4.1	2.3	1.8	12	9.6	9.7	10	8.5
24	e2.5	2.1	2.1	2.2	5.5	2.2	1.6	12	10	9.7	9.9	8.2
25	2.5	2.1	2.1	2.5	16	2.1	1.5	14	7.3	10	10	8.6
26	3.1	2.1	2.1	3.6	12	2.0	1.5	17	3.1	9.8	11	8.8
27	4.3	2.1	2.1	3.1	6.0	2.0	1.6	17	2.2	9.4	10	8.5
28	3.2	2.0	2.1	3.0	3.5	1.9	1.6	17	4.9	8.5	9.2	8.0
29	2.8	2.1	2.1	3.0	---	1.8	1.6	17	8.3	8.8	9.6	7.7
30	2.8	2.1	2.1	2.9	---	1.7	1.5	16	9.7	9.1	10	7.7
31	2.7	---	2.1	2.8	---	1.6	---	16	---	8.4	11	---
TOTAL	101.0	67.4	63.8	77.1	108.3	298.2	56.1	221.08	335.5	315.2	306.7	273.7
MEAN	3.26	2.25	2.06	2.49	3.87	9.62	1.87	7.13	11.2	10.2	9.89	9.12
MAX	6.1	2.7	2.2	3.6	16	140	2.5	17	15	12	11	10
MIN	2.5	2.0	2.0	2.1	1.9	1.6	1.5	.93	2.2	8.4	8.6	7.7
AC-FT	200	134	127	153	215	591	111	439	665	625	608	543

e Estimated.

11157500 TRES PINOS CREEK NEAR TRES PINOS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.78	4.17	15.5	39.3	65.8	40.3	25.4	7.08	5.26	4.81	4.45	3.62
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	4616.2		2224.08			
ANNUAL MEAN	12.6		6.09		17.9	
HIGHEST ANNUAL MEAN					98.9	
LOWEST ANNUAL MEAN					.69	
HIGHEST DAILY MEAN	159	Feb 23	140	Mar 4	9000	Feb 3 1998
LOWEST DAILY MEAN	2.0	Feb 8	.93	May 11	.00	Aug 30 1952
ANNUAL SEVEN-DAY MINIMUM	2.0	Dec 9	1.0	May 5	.05	Aug 4 1999
MAXIMUM PEAK FLOW			458	Mar 4	27200	Feb 3 1998
MAXIMUM PEAK STAGE			3.31	Mar 4	16.00	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	9160		4410		13000	
10 PERCENT EXCEEDS	29		11		18	
50 PERCENT EXCEEDS	7.0		2.8		3.0	
90 PERCENT EXCEEDS	2.1		1.9		.50	

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 mi².

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 ft³/s, Feb. 3, 1998, gage height, 13.48 ft, at datum then in use, from rating curve extended above 3,200 ft³/s, on basis of slope-area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	1400	334	5.37

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.14	.20	.04	e18	13	6.4	.35	.00	.00	.00	e.00
2	.12	.06	.20	.32	17	13	8.0	.39	.00	.00	.00	e.00
3	.18	.05	.22	.44	17	13	7.3	.05	.00	.00	.00	e.00
4	.18	.08	.22	.63	15	27	6.2	.00	.00	.00	.00	e.00
5	.18	.25	.21	.91	14	177	6.1	.00	.00	.00	.00	e.00
6	.22	.25	.21	1.4	14	208	6.2	.00	.00	.00	.00	e.00
7	.20	.07	.15	1.4	14	73	26	.00	.00	.00	.00	e.00
8	.16	.09	.16	5.1	e14	37	7.7	.00	.00	.00	.00	e.00
9	.16	.11	.15	3.5	21	18	6.6	.04	.00	.00	.00	e.00
10	1.3	.16	.16	21	20	13	4.9	.08	.00	.00	.00	e.00
11	.03	.08	.18	28	27	10	4.1	.20	.00	.00	.00	e.00
12	.00	.08	.14	30	23	9.3	3.7	.25	.00	.00	.00	e.00
13	.00	.08	.10	33	26	8.9	3.2	.23	.00	.00	.00	e.00
14	.00	.11	.12	31	22	9.4	3.2	.22	.00	.00	.00	e.00
15	.00	.12	.12	e28	20	12	3.1	.18	.00	.00	.00	e.00
16	.00	.12	.12	e25	19	11	2.7	.16	.00	.00	.00	e.00
17	.00	.12	.10	e23	17	9.8	2.0	.11	.00	.00	.00	e.00
18	.00	.14	.05	e21	17	9.9	2.2	.01	.00	.00	.00	e.00
19	.00	.15	.02	20	34	9.6	3.5	.00	.00	.00	.00	e.00
20	.00	.15	.03	19	27	9.7	17	.00	.00	.00	.00	e.00
21	.00	.16	.03	19	29	9.6	11	.02	.00	.00	.00	e.00
22	.00	.16	.03	18	26	10	7.1	.00	.00	.00	.00	e.00
23	.00	.18	.03	20	28	10	4.8	.00	.00	.00	.00	e.00
24	.04	.23	.02	25	29	9.6	4.1	.00	.00	.00	.00	e.00
25	.10	.21	.01	34	33	8.8	2.6	.00	.00	.00	.00	e.00
26	15	.22	.00	26	41	8.0	2.0	.00	.00	.00	e.00	e.00
27	.58	.22	.00	26	21	7.6	2.4	.00	.00	.00	e.00	e.00
28	.23	.24	.00	e24	15	7.3	1.3	.00	.00	.00	e.00	e.00
29	11	.25	.00	22	---	7.3	.80	.00	.00	.00	e.00	e.00
30	.23	.24	.00	e21	---	6.8	.96	.00	.00	.00	e.00	e.00
31	.18	---	.00	e20	---	6.2	---	.00	---	.00	e.00	---
TOTAL	30.15	4.52	2.98	547.74	618	782.8	167.16	2.29	0.00	0.00	0.00	0.00
MEAN	.97	.15	.096	17.7	22.1	25.3	5.57	.074	.000	.000	.000	.000
MAX	15	.25	.22	34	41	208	26	.39	.00	.00	.00	.00
MIN	.00	.05	.00	.04	14	6.2	.80	.00	.00	.00	.00	.00
AC-FT	60	9.0	5.9	1090	1230	1550	332	4.5	.00	.00	.00	.00

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.91	6.58	19.4	72.9	173	147	42.7	16.9	7.64	5.32	5.11	4.82
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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1971 - 2001
ANNUAL TOTAL	6872.39	2155.64	
ANNUAL MEAN	18.8	5.91	41.3
HIGHEST ANNUAL MEAN			287 1998
LOWEST ANNUAL MEAN			.000 1977
HIGHEST DAILY MEAN	268 Feb 23	208 Mar 6	19800 Feb 3 1998
LOWEST DAILY MEAN	.00 May 19	.00 Oct 12	.00 Feb 1 1971
ANNUAL SEVEN-DAY MINIMUM	.00 May 19	.00 Oct 12	.00 Oct 11 1971
MAXIMUM PEAK FLOW		334 Mar 5	34500 Feb 3 1998
MAXIMUM PEAK STAGE		5.37 Mar 5	13.48 Feb 3 1998
ANNUAL RUNOFF (AC-FT)	13630	4280	29910
10 PERCENT EXCEEDS	48	20	39
50 PERCENT EXCEEDS	.19	.10	1.6
90 PERCENT EXCEEDS	.00	.00	.00

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 mi².

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 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 ft³/s, Feb. 3, 1998, gage height, 33.73 ft, from rating curve extended above 8,300 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 11	2030	922	9.35	Mar. 6	0045	1,280	10.49
Feb. 23	1645	681	9.06				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	34	32	36	87	193	61	49	16	8.0	6.5	6.8
2	8.7	35	e31	37	88	165	65	46	17	8.3	7.2	4.8
3	8.6	35	e30	37	87	144	54	43	17	8.1	7.7	4.9
4	8.8	32	e29	36	83	144	53	e38	16	7.9	7.7	3.6
5	9.6	30	29	33	75	519	54	e36	15	8.0	7.4	3.6
6	10	29	29	32	71	1100	50	e33	14	8.0	7.2	4.5
7	11	27	29	32	71	594	85	e31	15	7.6	6.6	5.5
8	10	26	29	e35	68	404	88	e31	14	8.0	5.7	7.7
9	11	25	30	e45	72	312	72	29	14	8.3	6.0	8.1
10	13	26	33	e58	214	268	71	28	14	8.6	6.6	7.1
11	18	26	32	99	621	212	66	27	13	8.0	6.3	4.6
12	17	25	31	86	464	189	63	26	13	8.2	7.0	4.5
13	15	24	31	81	238	172	60	26	e12	8.1	6.8	5.3
14	14	27	32	85	164	154	58	25	e12	8.2	5.7	5.8
15	15	27	32	78	129	139	56	25	e12	8.6	3.6	6.7
16	14	27	31	75	108	127	55	25	e11	9.4	4.1	5.8
17	13	28	29	67	93	118	51	24	e11	7.9	6.4	5.3
18	14	27	28	63	82	110	49	24	e11	7.3	7.1	4.8
19	15	27	29	63	157	103	52	23	e10	7.6	6.5	5.1
20	15	27	32	61	184	97	58	22	e10	8.1	5.9	4.8
21	16	27	38	57	124	93	138	23	e10	7.9	4.6	4.7
22	16	28	38	55	134	89	100	22	e10	8.2	4.0	5.6
23	16	28	41	54	480	86	79	21	e9.7	7.8	4.3	5.8
24	15	27	39	98	476	85	74	21	e9.4	7.3	5.0	6.0
25	16	28	37	100	527	93	69	20	e9.1	7.5	4.9	5.5
26	21	27	37	234	490	93	64	20	e8.8	7.5	4.9	5.5
27	33	27	36	164	341	82	60	20	e8.6	7.6	5.3	5.7
28	36	27	33	120	250	78	57	19	8.4	7.3	3.7	5.1
29	51	31	38	105	---	70	54	19	8.0	7.8	3.8	4.1
30	46	33	35	97	---	68	52	18	7.8	7.1	5.9	4.4
31	36	---	37	91	---	63	---	16	---	7.0	8.4	---
TOTAL	551.8	847	1017	2314	5978	6164	1968	830	356.8	245.2	182.8	161.7
MEAN	17.8	28.2	32.8	74.6	214	199	65.6	26.8	11.9	7.91	5.90	5.39
MAX	51	35	41	234	621	1100	138	49	17	9.4	8.4	8.1
MIN	8.6	24	28	32	68	63	49	16	7.8	7.0	3.6	3.6
AC-FT	1090	1680	2020	4590	11860	12230	3900	1650	708	486	363	321

e Estimated.

11159000 PAJARO RIVER AT CHITTENDEN, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.56	31.9	144	437	648	474	253	53.6	16.8	8.24	6.40	6.53
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	78237.4		20616.3			
ANNUAL MEAN	214		56.5		171	
HIGHEST ANNUAL MEAN					905	
LOWEST ANNUAL MEAN					1.06	
HIGHEST DAILY MEAN	5800	Feb 14	1100	Mar 6	21700	Dec 24 1955
LOWEST DAILY MEAN	6.3	Aug 19	3.6	Aug 15	.00	Jul 11 1948
ANNUAL SEVEN-DAY MINIMUM	6.7	Aug 16	4.6	Aug 23	.00	Aug 16 1948
MAXIMUM PEAK FLOW			1280	Mar 6	25100	Feb 3 1998
MAXIMUM PEAK STAGE			10.49	Mar 6	33.73	Feb 3 1998
INSTANTANEOUS LOW FLOW					.00	Jul 11 1948
ANNUAL RUNOFF (AC-FT)	155200		40890		124000	
10 PERCENT EXCEEDS	643		119		265	
50 PERCENT EXCEEDS	30		27		12	
90 PERCENT EXCEEDS	8.1		5.8		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 mi².

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 those less than 1 ft³/s, which are poor. No regulation; Watsonville Water Works can divert up to 8.0 ft³/s upstream from station for municipal supply, domestic use, and irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,610 ft³/s, Jan. 4, 1982, gage height, 16.66 ft, from rating curve extended above 1,400 ft³/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 ft³/s, based on contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 600 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 11	0630	510	5.60

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	1.5	.83	.27	3.3	18	4.9	2.1	.47	.38	.18	.16
2	.27	.61	.54	.29	2.7	16	4.5	1.9	.39	.17	.24	.13
3	.31	.44	.46	.27	2.3	14	4.2	2.1	.26	.25	.18	.07
4	.27	.40	.41	.30	2.1	86	3.9	1.2	.19	.16	.18	.06
5	.27	.36	.41	.38	1.9	182	3.7	.92	.19	.28	.26	.13
6	.27	.36	.41	.31	1.8	88	5.9	.85	.32	.23	.15	.14
7	.30	.36	.41	.33	1.6	60	19	.84	.22	.29	.22	.14
8	.27	.36	.41	1.3	1.6	44	8.9	.84	.25	.38	.17	.23
9	.33	.36	.41	.32	13	37	7.5	.76	.40	.29	.19	.21
10	.42	.36	.41	18	49	31	6.3	.73	.40	.23	.25	.13
11	.38	.39	.66	28	175	26	5.7	.72	.30	.22	.17	.14
12	.27	1.0	1.4	28	55	23	5.2	.68	.29	.22	.31	.05
13	.27	1.4	.57	8.0	27	19	4.2	.68	.36	.22	.21	.17
14	.27	.82	5.6	4.6	16	16	4.4	.71	.31	.20	.19	.12
15	.27	.46	2.7	3.5	11	14	3.9	.85	.29	.19	.21	.15
16	.26	.40	.56	3.0	7.9	13	3.5	.74	.35	.21	.28	.13
17	.23	.36	.37	2.6	6.2	12	2.5	.61	.35	.21	.22	.13
18	.23	.36	.31	2.1	7.1	10	2.0	.60	.28	.25	.18	.23
19	.24	.34	.28	1.1	36	9.5	1.8	.61	.34	.29	.22	.16
20	.25	.31	.27	.49	26	8.7	33	.58	.28	.24	.19	.14
21	.26	.31	.27	.34	22	8.3	37	.56	.30	.26	.14	.16
22	.20	.38	.27	1.3	33	7.6	17	.31	.27	.14	.12	.19
23	.16	.41	.31	2.9	125	6.9	12	.31	.27	.18	.17	.13
24	.16	.41	.31	12	81	6.8	9.0	.37	.28	.22	.12	.16
25	.52	.41	.31	21	134	19	6.6	.32	.30	.18	.13	.19
26	3.7	.41	.36	38	61	9.7	5.2	.30	.29	.25	.10	.08
27	3.3	.52	.31	13	36	7.8	4.1	.33	.28	.22	.09	.05
28	16	.54	.30	7.5	24	6.6	3.6	.28	.33	.22	.12	.07
29	23	1.2	.27	5.3	---	6.0	3.1	.25	.33	.23	.15	.04
30	6.0	2.3	.27	4.3	---	4.8	2.4	.19	.41	.17	.16	.02
31	4.6	---	.27	3.9	---	4.9	---	.23	---	.17	.15	---
TOTAL	63.55	17.84	20.67	212.70	962.5	815.6	235.0	22.47	9.30	7.15	5.65	3.91
MEAN	2.05	.59	.67	6.86	34.4	26.3	7.83	.72	.31	.23	.18	.13
MAX	23	2.3	5.6	38	175	182	37	2.1	.47	.38	.31	.23
MIN	.16	.31	.27	.27	1.6	4.8	1.8	.19	.19	.14	.09	.02
AC-FT	126	35	41	422	1910	1620	466	45	18	14	11	7.8

11159200 CORRALITOS CREEK AT FREEDOM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.81	5.02	16.5	51.3	61.9	37.9	22.0	5.28	1.13	.42	.19	.59
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1957 - 2001	
ANNUAL TOTAL	10683.69		2376.34			
ANNUAL MEAN	29.2		6.51		16.7	
HIGHEST ANNUAL MEAN					56.4	
LOWEST ANNUAL MEAN					.17	
HIGHEST DAILY MEAN	1510	Feb 13	182	Mar 5	2290	Jan 4 1982
LOWEST DAILY MEAN	.16	Oct 23	.02	Sep 30	.00	Jun 12 1957
ANNUAL SEVEN-DAY MINIMUM	.21	Oct 18	.09	Sep 24	.00	Jun 12 1957
MAXIMUM PEAK FLOW			510	Feb 11	5610	Jan 4 1982
MAXIMUM PEAK STAGE			5.60	Feb 11	16.66	Jan 4 1982
ANNUAL RUNOFF (AC-FT)	21190		4710		12090	
10 PERCENT EXCEEDS	66		16		34	
50 PERCENT EXCEEDS	.73		.38		.40	
90 PERCENT EXCEEDS	.27		.16		.00	

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 mi².

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 except for estimated daily discharges, which are poor. No regulation; many diversions upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,800 ft³/s, Dec. 23, 1955, gage height, 22.33 ft, from rating curve extended above 2,900 ft³/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 ft³/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 ft³/s, gage height, about 15.33 ft, from rating curve extended above 2,900 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2115	1,510	7.60

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	11	9.2	6.0	14	69	e23	20	7.2	3.9	3.3	2.4
2	7.4	9.1	8.1	5.9	13	64	e23	19	6.9	3.7	3.1	2.4
3	6.7	8.1	7.5	5.8	13	59	e22	19	6.9	3.4	3.0	2.1
4	6.2	7.4	7.2	5.8	12	352	e21	19	6.9	3.3	2.6	1.9
5	5.9	7.0	6.9	5.8	11	441	e21	19	6.5	3.4	2.6	1.9
6	6.4	6.7	6.9	5.8	11	199	e34	18	6.0	3.4	2.3	1.9
7	6.8	6.6	6.9	5.9	10	133	e50	17	5.9	3.3	2.3	2.0
8	6.6	6.4	6.9	14	10	101	e32	16	5.6	3.7	2.5	2.2
9	6.7	6.5	6.9	11	34	84	e30	15	5.4	3.9	2.7	2.3
10	8.8	7.4	6.9	98	64	74	e28	14	5.4	3.8	2.6	2.3
11	7.6	7.8	7.3	166	264	64	e27	14	5.6	3.7	2.5	2.0
12	5.7	6.9	8.7	99	235	58	e27	14	5.6	3.8	2.7	2.0
13	5.3	7.4	8.7	27	123	52	e25	14	5.4	3.7	2.6	2.1
14	4.9	8.4	13	19	68	48	e24	13	4.9	3.7	2.5	2.1
15	4.9	7.3	11	16	51	45	e24	13	4.9	4.1	2.5	2.0
16	4.7	7.2	9.0	14	43	42	e24	12	4.7	4.3	2.3	1.9
17	4.4	6.8	8.3	13	40	e39	e23	11	4.7	3.9	2.3	2.1
18	4.6	6.7	7.8	12	48	e36	e22	11	4.5	3.7	2.1	2.1
19	4.5	6.5	7.3	11	135	e34	e23	11	4.3	3.9	2.3	2.2
20	4.7	6.4	7.1	11	154	e34	e90	11	4.2	4.0	2.6	2.3
21	4.6	6.3	6.9	10	150	e33	74	10	4.1	3.6	2.6	2.2
22	4.3	6.5	6.8	9.8	134	e32	43	10	4.0	3.6	2.5	2.2
23	3.6	6.4	6.7	19	261	e31	34	9.6	3.9	3.5	2.4	2.3
24	3.2	6.4	6.5	48	228	e32	31	8.8	4.1	3.6	2.3	2.5
25	4.5	6.4	6.5	57	252	e41	29	8.3	4.0	3.7	2.0	2.8
26	34	6.4	6.4	107	159	e30	27	8.2	4.5	3.6	2.0	2.3
27	16	6.5	6.2	34	110	e28	24	8.4	4.5	3.5	1.8	2.1
28	25	6.4	6.1	23	84	e27	23	8.6	4.6	3.4	1.7	1.9
29	50	13	6.1	19	---	e26	22	8.2	4.2	3.4	1.9	1.9
30	18	15	6.2	17	---	e25	21	7.8	4.0	3.3	2.3	1.7
31	14	---	6.1	16	---	e24	---	7.1	---	3.0	2.6	---
TOTAL	297.4	226.9	232.1	911.8	2731	2357	921	395.0	153.4	112.8	75.5	64.1
MEAN	9.59	7.56	7.49	29.4	97.5	76.0	30.7	12.7	5.11	3.64	2.44	2.14
MAX	50	15	13	166	264	441	90	20	7.2	4.3	3.3	2.8
MIN	3.2	6.3	6.1	5.8	10	24	21	7.1	3.9	3.0	1.7	1.7
AC-FT	590	450	460	1810	5420	4680	1830	783	304	224	150	127

e Estimated.

11160000 SOQUEL CREEK AT SOQUEL, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.39	16.2	58.1	123	131	96.9	54.4	20.2	9.64	5.44	3.41	3.29
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	21060.2		8478.0			
ANNUAL MEAN	57.5		23.2		43.6	
HIGHEST ANNUAL MEAN					169 1983	
LOWEST ANNUAL MEAN					2.89 1977	
HIGHEST DAILY MEAN	2890	Jan 24	441	Mar 5	8800	Dec 23 1955
LOWEST DAILY MEAN	3.2	Oct 24	1.7	Aug 28	.00	Jul 30 1977
ANNUAL SEVEN-DAY MINIMUM	4.0	Sep 11	2.0	Aug 24	.00	Aug 15 1992
MAXIMUM PEAK FLOW			1510	Mar 4	15800	Dec 23 1955
MAXIMUM PEAK STAGE			7.60	Mar 4	22.33	Dec 23 1955
INSTANTANEOUS LOW FLOW					.00	Jul 30 1977
ANNUAL RUNOFF (AC-FT)	41770		16820		31600	
10 PERCENT EXCEEDS	136		50		86	
50 PERCENT EXCEEDS	9.4		6.9		7.8	
90 PERCENT EXCEEDS	4.7		2.3		1.6	

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 mi².

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 ft³/s, Feb. 3, 1998, gage height, 10.85 ft, from rating curve extended above 310 ft³/s, on basis of slope-area measurement at gage height 9.29 ft; minimum daily, 0.94 ft³/s, Jan. 31, 1992.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	1745	286	6.23	Mar. 4	2045	284	6.22

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.9	3.0	2.4	5.8	25	5.0	3.5	2.2	2.0	2.0	1.8
2	2.6	2.6	2.9	2.4	5.4	24	4.7	3.1	2.1	2.0	2.0	1.6
3	2.5	2.6	2.8	2.4	5.1	23	4.7	3.1	2.2	1.9	2.0	1.6
4	2.6	2.5	2.7	2.4	4.8	98	4.5	3.1	2.1	1.9	1.9	1.6
5	2.6	2.4	2.6	2.4	4.6	117	4.5	3.1	2.2	2.0	1.9	1.7
6	2.6	2.6	2.6	2.4	4.5	63	7.6	3.2	2.2	2.0	1.7	1.6
7	2.7	2.6	2.6	2.4	4.4	44	6.1	3.0	2.2	2.0	1.8	1.7
8	2.7	2.8	2.5	6.3	4.2	33	4.5	2.9	2.2	2.1	1.8	1.7
9	2.8	2.8	2.5	3.1	19	33	4.4	3.1	2.3	2.1	1.8	1.7
10	2.9	2.7	2.6	31	20	28	4.2	3.0	2.2	2.1	1.8	1.7
11	2.4	2.6	2.9	73	46	23	4.1	3.0	2.2	2.1	1.8	1.6
12	2.3	2.6	2.8	29	71	22	4.0	3.2	2.2	2.1	1.9	1.6
13	2.3	3.4	3.9	13	e38	20	4.0	3.0	2.2	2.1	1.8	1.7
14	2.3	2.8	3.9	6.9	e31	e18	3.9	2.9	2.1	2.1	1.8	1.7
15	2.3	2.6	3.1	5.7	24	e16	3.8	2.7	2.1	2.2	1.8	1.7
16	2.3	2.5	2.8	5.1	17	e14	3.6	2.6	2.2	2.1	1.8	1.7
17	2.5	2.4	2.6	4.7	17	12	3.5	2.7	2.2	2.1	1.8	1.7
18	2.5	2.4	2.6	4.2	22	11	3.5	2.8	2.2	2.1	1.8	1.8
19	2.5	2.3	2.6	4.0	46	9.5	3.5	2.7	2.2	2.1	1.8	1.8
20	2.5	2.3	2.6	3.8	49	8.8	15	2.7	2.2	2.0	1.9	1.8
21	2.6	2.3	2.6	3.6	49	7.9	5.9	2.7	2.1	2.0	1.8	1.8
22	2.6	2.4	2.5	3.5	52	7.5	4.3	2.6	2.1	2.0	1.9	1.8
23	2.5	2.4	2.5	12	64	7.1	4.0	2.6	2.2	2.0	1.9	1.8
24	2.6	2.4	2.5	9.7	77	9.0	3.9	2.5	2.2	2.0	1.8	1.8
25	3.0	2.5	2.5	26	76	9.8	3.8	2.4	2.2	2.0	1.8	1.8
26	20	2.4	2.4	29	49	6.6	3.7	2.5	2.2	1.9	1.8	1.8
27	4.2	2.5	2.4	18	36	6.1	3.7	2.5	2.2	2.0	1.8	1.8
28	13	2.5	2.4	12	28	5.7	3.6	2.5	2.1	1.9	1.7	1.8
29	7.3	6.5	2.4	8.5	---	5.4	3.4	2.4	2.1	1.9	1.9	1.8
30	5.6	3.7	2.5	7.3	---	5.3	3.4	2.3	2.1	1.9	2.0	1.8
31	3.5	---	2.4	6.3	---	5.1	---	2.2	---	2.0	2.0	---
TOTAL	117.6	82.0	83.7	342.5	869.8	717.8	138.8	86.6	65.2	62.7	57.3	51.8
MEAN	3.79	2.73	2.70	11.0	31.1	23.2	4.63	2.79	2.17	2.02	1.85	1.73
MAX	20	6.5	3.9	73	77	117	15	3.5	2.3	2.2	2.0	1.8
MIN	2.3	2.3	2.4	2.4	4.2	5.1	3.4	2.2	2.1	1.9	1.7	1.6
AC-FT	233	163	166	679	1730	1420	275	172	129	124	114	103

e Estimated.

11160430 BEAN CREEK NEAR SCOTTS VALLEY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.50	3.53	10.7	37.2	44.0	23.8	8.13	5.18	3.37	2.48	2.18	2.09
MAX	3.79	5.89	72.5	99.7	167	71.8	21.7	12.2	9.41	4.89	3.31	2.63
(WY)	2001	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	1.73
(WY)	2000	1993	1991	1991	1991	1994	1990	1989	1994	1991	1989	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	5809.4		2675.8			
ANNUAL MEAN	15.9		7.33		12.3	
HIGHEST ANNUAL MEAN					26.0	
LOWEST ANNUAL MEAN					3.00	
HIGHEST DAILY MEAN	634	Jan 24	117	Mar 5	900	Dec 10 1996
LOWEST DAILY MEAN	2.1	Sep 18	1.6	Sep 2	.94	Jan 31 1992
ANNUAL SEVEN-DAY MINIMUM	2.3	Aug 15	1.6	Sep 2	1.0	Jan 21 1992
MAXIMUM PEAK FLOW			286	Jan 11	1710	Feb 3 1998
MAXIMUM PEAK STAGE			6.23	Jan 11	10.85	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	11520		5310		8910	
10 PERCENT EXCEEDS	35		19		24	
50 PERCENT EXCEEDS	3.2		2.6		2.8	
90 PERCENT EXCEEDS	2.4		1.8		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 mi².

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 ft³/s, Dec. 23, 1955, gage height, 22.55 ft, site and datum then in use, from rating curve extended above 11,000 ft³/s, on basis of slope-area measurement of peak flow, maximum gage height, 28.85 ft, Jan. 5, 1982; minimum daily discharge, 5.6 ft³/s, July 27, 28, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,800 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2115	1,900	8.73

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	34	29	23	61	179	72	52	31	23	19	16
2	20	30	27	23	57	173	71	50	31	22	19	15
3	20	28	26	22	55	159	68	49	30	22	19	15
4	21	27	25	22	52	892	67	48	30	21	19	15
5	21	26	25	22	50	876	66	48	30	21	18	15
6	21	25	24	22	48	495	85	47	29	20	18	14
7	21	24	24	22	46	361	107	63	28	21	18	14
8	21	24	25	52	45	288	79	52	27	20	18	15
9	22	24	25	35	108	250	75	47	27	20	18	15
10	30	25	24	298	162	220	69	46	27	21	17	15
11	30	25	25	510	403	195	67	45	27	23	17	16
12	24	24	28	e290	432	176	68	45	27	20	17	18
13	23	27	32	e105	276	160	63	44	27	16	17	15
14	22	28	46	75	167	148	61	44	27	21	16	15
15	22	26	40	63	129	138	60	43	26	20	16	15
16	22	26	34	67	110	130	59	41	26	21	16	15
17	21	25	29	53	121	121	57	40	25	21	16	15
18	21	24	27	49	200	114	56	40	25	21	16	15
19	21	24	26	46	420	107	57	39	24	20	16	15
20	21	24	26	44	422	105	169	39	20	20	16	15
21	21	24	25	42	411	104	128	38	25	20	16	16
22	20	24	25	41	397	101	84	37	22	20	16	16
23	19	24	25	98	540	97	74	36	24	20	16	14
24	20	24	24	117	551	99	70	35	24	20	16	14
25	26	24	24	249	534	121	66	34	23	20	16	15
26	152	23	24	300	350	94	62	35	24	20	15	15
27	57	23	23	134	258	88	60	34	25	20	15	14
28	94	23	23	97	211	84	58	34	25	20	15	14
29	104	54	23	82	---	81	55	33	24	19	15	14
30	61	40	23	73	---	78	54	30	24	19	16	14
31	46	---	23	65	---	75	---	31	---	19	16	---
TOTAL	1065	803	829	3141	6616	6309	2187	1299	784	631	518	449
MEAN	34.4	26.8	26.7	101	236	204	72.9	41.9	26.1	20.4	16.7	15.0
MAX	152	54	46	510	551	892	169	63	31	23	19	18
MIN	19	23	23	22	45	75	54	30	20	16	15	14
AC-FT	2110	1590	1640	6230	13120	12510	4340	2580	1560	1250	1030	891

e Estimated.

11160500 SAN LORENZO RIVER AT BIG TREES, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	23.2	53.3	148	321	417	301	175	73.5	41.8	27.2	20.3	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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1937 - 2001	
ANNUAL TOTAL	56805		24631			
ANNUAL MEAN	155		67.5		134	
HIGHEST ANNUAL MEAN					391	
LOWEST ANNUAL MEAN					13.2	
HIGHEST DAILY MEAN	3840	Jan 24	892	Mar 4	17000	Dec 23 1955
LOWEST DAILY MEAN	19	Oct 23	14	Sep 6	5.6	Jul 27 1977
ANNUAL SEVEN-DAY MINIMUM	20	Oct 18	14	Sep 23	5.8	Jul 26 1977
MAXIMUM PEAK FLOW			1900	Mar 4	30400	Dec 23 1955
MAXIMUM PEAK STAGE			8.73	Mar 4	28.85	Jan 5 1982
INSTANTANEOUS LOW FLOW					5.6	Jul 27 1977
ANNUAL RUNOFF (AC-FT)	112700		48860		96720	
10 PERCENT EXCEEDS	413		150		279	
50 PERCENT EXCEEDS	37		27		33	
90 PERCENT EXCEEDS	22		16		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 mi².

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 fair below 100 ft³/s and poor above. 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 ft³/s, Dec. 23, 1955, gage height, 23.10 ft, site and datum then in use, from rating curve extended above 4,500 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2215	2,140	9.43

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	42	e43	e30	68	206	71	47	24	13	9.8	7.2
2	24	37	e36	e30	63	190	69	45	23	12	10	7.0
3	23	34	e35	e30	59	174	67	43	22	12	9.1	6.1
4	24	32	e34	e30	57	1000	66	42	22	12	8.8	6.1
5	24	32	e33	e30	52	1270	65	45	21	12	7.9	5.2
6	24	31	e32	e30	51	630	80	53	20	11	6.8	4.9
7	25	30	e32	e30	51	439	107	62	19	11	6.2	4.8
8	25	29	e33	e30	50	340	76	61	18	11	6.3	5.3
9	26	28	e33	30	98	292	71	53	18	11	6.2	5.9
10	35	32	e33	315	169	257	67	52	17	11	6.2	6.0
11	34	30	e31	615	469	229	65	50	17	14	5.6	6.7
12	29	29	e27	427	532	209	65	50	17	12	5.7	9.7
13	27	29	e32	153	361	191	61	e48	17	6.7	6.4	8.1
14	26	32	e50	108	220	179	59	e47	18	9.5	6.4	5.7
15	25	29	e48	84	158	163	58	e44	17	11	5.4	5.4
16	23	28	e44	78	127	149	55	e42	16	11	4.9	5.5
17	23	e31	e41	63	120	136	54	e40	16	11	4.8	5.0
18	22	e31	e38	57	227	129	55	e38	16	11	4.1	5.3
19	21	e31	e35	55	471	120	53	e36	15	11	4.1	5.6
20	21	e31	e33	49	504	115	154	e35	12	11	4.0	8.6
21	21	e31	29	46	516	120	144	e33	15	10	3.7	8.1
22	25	e31	32	42	480	110	81	e32	12	9.6	3.8	10
23	21	e31	32	78	725	105	68	e30	14	9.7	3.7	5.9
24	19	e31	31	147	715	103	62	e29	14	10	4.3	5.7
25	24	e31	31	236	692	137	58	28	14	10	4.2	7.3
26	166	e31	31	429	442	107	55	28	15	10	3.8	7.1
27	80	e30	31	168	322	98	53	27	16	9.8	3.5	5.5
28	74	e30	31	118	258	97	51	27	16	9.6	3.8	5.7
29	133	e64	31	92	---	93	49	27	15	9.7	e3.7	8.1
30	71	e48	31	79	---	83	48	25	14	8.9	e5.4	7.9
31	55	---	e31	73	---	73	---	24	---	8.8	7.9	---
TOTAL	1194	986	1064	3782	8057	7544	2087	1243	510	330.3	176.5	195.4
MEAN	38.5	32.9	34.3	122	288	243	69.6	40.1	17.0	10.7	5.69	6.51
MAX	166	64	50	615	725	1270	154	62	24	14	10	10
MIN	19	28	27	30	50	73	48	24	12	6.7	3.5	4.8
AC-FT	2370	1960	2110	7500	15980	14960	4140	2470	1010	655	350	388

e Estimated.

SAN LORENZO RIVER BASIN

11161000 SAN LORENZO RIVER AT SANTA CRUZ, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	14.3	29.1	155	342	472	248	145	71.5	36.7	19.9	11.9	11.2
MAX	38.5	86.1	1366	1391	2652	999	1017	212	137	67.2	39.9	40.4
(WY)	2001	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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001	
ANNUAL TOTAL	70176		27169.2			
ANNUAL MEAN	192		74.4		128	
HIGHEST ANNUAL MEAN					384	
LOWEST ANNUAL MEAN					21.5	
HIGHEST DAILY MEAN	6990	Jan 24	1270	Mar 5	17400	Dec 23 1955
LOWEST DAILY MEAN	18	Jan 3	3.5	Aug 27	.00	Sep 3 1955
ANNUAL SEVEN-DAY MINIMUM	19	Jan 3	3.9	Aug 21	.00	Sep 20 1960
MAXIMUM PEAK FLOW			2140	Mar 4	30400	Dec 23 1955
MAXIMUM PEAK STAGE			9.43	Mar 4	23.10	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	139200		53890		92730	
10 PERCENT EXCEEDS	453		167		266	
50 PERCENT EXCEEDS	42		31		27	
90 PERCENT EXCEEDS	25		6.2		3.3	

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 mi².

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 except for estimated daily discharges, which are poor. 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 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	1715	416	6.67

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	e.60	.70	e.50	1.8	5.4	1.1	.64	.40	.35	.32	.15
2	.33	e.70	.69	e.50	1.7	6.6	1.1	.57	.39	.30	.26	.14
3	.37	e.50	.67	e.50	1.6	9.2	1.1	.70	.38	.27	.25	.13
4	.36	e.45	.70	e.50	1.4	87	1.0	.92	.38	.26	.22	.14
5	.34	e.42	.69	e.50	1.5	55	1.0	.94	.36	.29	.19	.12
6	.40	e.52	.70	e.50	1.4	21	5.8	.86	.35	.33	.16	.16
7	.40	e.65	.65	e.70	1.3	12	e4.6	.82	.34	.26	.16	.19
8	.36	e.75	.61	e5.0	1.3	8.3	e2.9	.87	.32	.30	.16	.25
9	.66	e.70	.60	.90	26	7.2	e2.3	1.1	.33	.30	.27	.31
10	2.5	e.65	.63	50	18	4.9	e1.9	.91	.34	.33	.21	.23
11	.33	e.63	1.6	90	41	4.3	e1.7	.71	.36	.34	.16	.25
12	.30	e.60	1.3	14	60	4.0	e1.5	.74	.37	.33	.19	.18
13	.29	e2.9	3.2	4.9	14	3.4	e1.3	.76	.36	.35	.25	.15
14	.28	e.80	3.4	3.3	7.8	3.1	e1.2	.72	.33	.34	.28	.17
15	.27	e.64	1.0	2.6	5.8	3.0	e1.0	.62	.33	.39	.21	.15
16	.25	.55	.73	2.0	4.9	2.9	.95	.44	.34	.36	.21	.19
17	.24	.51	.68	1.6	14	2.5	.91	.47	.34	.33	.18	.19
18	.25	.46	.66	1.4	17	2.2	.95	.47	.31	.32	.19	.22
19	.25	.47	.53	1.3	47	2.0	.94	.41	.38	.26	.22	.20
20	.27	.42	.51	1.2	28	1.9	24	.40	.34	.29	.27	.21
21	.30	.53	.55	1.2	39	1.9	2.6	.41	.33	.23	.27	.18
22	.24	.53	e.53	1.1	51	1.8	1.6	.42	.39	.34	.22	.15
23	.27	.56	e.56	20	39	1.7	1.2	.37	.35	.27	.24	.17
24	.35	.59	e.55	8.0	61	5.9	1.1	.39	.38	.37	.22	.92
25	3.3	.58	e.55	40	33	3.3	.90	.33	.50	.38	.17	.43
26	33	.50	e.47	12	16	1.8	.88	.38	.54	.30	.14	.15
27	1.2	.64	e.47	5.4	11	1.5	1.1	.43	.46	.32	.13	.14
28	e20	.64	e.47	4.0	7.2	1.4	.76	.39	.41	.30	.13	.13
29	e3.5	9.5	e.47	3.0	---	1.4	.71	.39	.36	.30	.20	.12
30	e1.4	.88	e.80	2.6	---	1.3	.66	.35	.32	.27	.28	.11
31	e.80	---	e.49	2.1	---	1.2	---	.34	---	.30	.22	---
TOTAL	73.13	28.87	26.16	281.30	552.7	269.1	68.76	18.27	11.09	9.68	6.58	6.23
MEAN	2.36	.96	.84	9.07	19.7	8.68	2.29	.59	.37	.31	.21	.21
MAX	33	9.5	3.4	90	61	87	24	1.1	.54	.39	.32	.92
MIN	.24	.42	.47	.50	1.3	1.2	.66	.33	.31	.23	.13	.11
AC-FT	145	57	52	558	1100	534	136	36	22	19	13	12

e Estimated.

11161300 CARBONERA CREEK AT SCOTTS VALLEY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.76	2.48	6.08	15.2	21.3	10.9	2.38	1.44	.41	.20	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1985 - 2001	
ANNUAL TOTAL	3376.13		1351.87			
ANNUAL MEAN	9.22		3.70		5.08	
HIGHEST ANNUAL MEAN					10.5	
LOWEST ANNUAL MEAN					1.33	
HIGHEST DAILY MEAN	464	Jan 24	90	Jan 11	464	Jan 24 2000
LOWEST DAILY MEAN	.15	Sep 18	.11	Sep 30	.00	Jun 28 1985
ANNUAL SEVEN-DAY MINIMUM	.21	Sep 13	.15	Sep 1	.00	Jun 28 1985
MAXIMUM PEAK FLOW			416		1620	
MAXIMUM PEAK STAGE			6.67		11.89	
ANNUAL RUNOFF (AC-FT)	6700		2680		3680	
10 PERCENT EXCEEDS	21		6.8		8.9	
50 PERCENT EXCEEDS	.66		.53		.45	
90 PERCENT EXCEEDS	.30		.21		.00	

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 mi².

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. Small diversions upstream from station by pumping.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,600 ft³/s, Feb. 3, 1998, gage height, 22.47 ft, from rating curve extended above 2,700 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2400	710	5.45

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	10	8.2	4.2	17	63	17	13	5.7	4.1	3.2	2.1
2	4.0	7.5	6.8	4.2	15	57	17	12	5.6	4.2	3.2	2.0
3	3.8	6.4	6.3	3.9	13	51	16	12	5.5	4.1	3.0	1.9
4	3.8	5.7	6.1	3.7	12	227	16	11	5.6	3.7	2.9	1.8
5	3.8	5.4	5.9	3.8	12	393	16	11	5.7	3.6	2.8	1.8
6	3.8	5.4	5.9	3.7	11	203	17	10	5.6	3.6	2.8	1.8
7	3.8	5.1	5.7	4.0	9.9	135	29	10	5.6	3.5	2.8	1.7
8	3.9	4.9	5.7	12	9.3	101	23	9.8	5.4	3.5	2.7	1.7
9	4.0	5.0	5.8	14	17	84	20	9.3	5.2	3.6	2.6	1.7
10	6.9	5.3	6.0	47	91	71	17	9.0	5.0	3.7	2.4	1.8
11	11	5.4	6.5	126	237	62	17	9.0	5.2	3.6	2.4	1.8
12	6.1	5.1	6.7	100	190	54	18	8.7	5.4	3.5	2.4	1.9
13	5.1	5.1	7.9	30	125	49	16	8.5	5.4	3.7	2.5	1.9
14	4.9	5.7	9.2	18	72	44	15	8.5	5.2	3.7	2.5	2.0
15	4.6	5.7	19	12	52	41	14	8.4	5.0	3.8	2.4	2.0
16	4.4	5.5	16	9.7	42	38	14	8.2	4.8	3.9	2.4	2.0
17	4.4	5.3	9.8	7.6	43	35	13	8.0	4.6	4.0	2.3	2.0
18	4.3	5.0	7.8	6.9	79	33	13	7.7	4.6	3.8	2.3	2.0
19	4.2	4.7	6.6	6.3	140	30	13	7.7	4.4	3.6	2.2	2.1
20	4.1	4.6	6.1	5.8	172	28	21	7.6	4.3	3.5	2.3	2.0
21	4.2	5.2	5.9	5.3	138	26	42	7.2	4.2	3.6	2.1	1.8
22	4.2	5.9	5.7	5.0	156	25	27	7.1	4.2	3.5	2.4	1.8
23	3.9	6.1	5.5	6.6	280	24	23	6.9	4.1	3.4	2.5	1.7
24	4.0	5.5	5.4	17	228	24	20	6.6	4.2	3.4	2.6	1.8
25	4.6	4.9	5.1	49	187	31	19	6.4	4.2	3.3	2.5	1.9
26	18	4.8	4.8	144	130	24	17	6.3	4.5	3.2	2.3	1.9
27	25	4.7	4.5	59	99	22	16	6.2	4.6	3.1	2.0	1.9
28	15	4.6	4.3	38	77	21	15	6.4	4.4	3.0	2.0	1.9
29	38	7.6	4.4	30	---	20	14	6.6	4.1	3.1	2.0	1.8
30	25	15	4.3	24	---	19	13	6.6	4.1	3.1	2.1	1.8
31	17	---	4.4	20	---	18	---	6.2	---	3.1	2.0	---
TOTAL	254.0	177.1	212.3	820.7	2654.2	2053	548	261.9	146.4	110.5	76.6	56.3
MEAN	8.19	5.90	6.85	26.5	94.8	66.2	18.3	8.45	4.88	3.56	2.47	1.88
MAX	38	15	19	144	280	393	42	13	5.7	4.2	3.2	2.1
MIN	3.8	4.6	4.3	3.7	9.3	18	13	6.2	4.1	3.0	2.0	1.7
AC-FT	504	351	421	1630	5260	4070	1090	519	290	219	152	112

11162500 PESCADERO CREEK NEAR PESCADERO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.54	13.0	54.7	121	140	95.6	54.7	19.0	9.11	5.21	3.57	2.79
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	20905.6		7371.0			
ANNUAL MEAN	57.1		20.2		43.2	
HIGHEST ANNUAL MEAN					164	
LOWEST ANNUAL MEAN					1.72	
HIGHEST DAILY MEAN	1780	Feb 14	393	Mar 5	5560	Dec 23 1955
LOWEST DAILY MEAN	3.8	Oct 3	1.7	Sep 7	.00	Sep 9 1961
ANNUAL SEVEN-DAY MINIMUM	3.8	Oct 2	1.8	Sep 4	.00	Aug 17 1977
MAXIMUM PEAK FLOW			710	Mar 4	10600	Feb 3 1998
MAXIMUM PEAK STAGE			5.45	Mar 4	22.47	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	41470		14620		31290	
10 PERCENT EXCEEDS	124		45		90	
50 PERCENT EXCEEDS	9.1		5.7		7.1	
90 PERCENT EXCEEDS	4.4		2.2		1.5	

11162570 SAN GREGORIO CREEK AT SAN GREGORIO, CA

LOCATION.—Lat 37°19'33", long 122°23'08", in San Gregorio Grant, [San Mateo County](#), Hydrologic Unit 18050006, on right bank at downstream side of bridge on Old Coast Highway, 0.1 mi south of town of San Gregorio, and 1.4 mi upstream from mouth.

DRAINAGE AREA.—50.9 mi².

PERIOD OF RECORD.—October 1969 to September 1994, May 2001 to September 2001.

SEDIMENT DATA: Water years 1986, 1990–1993.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 11.40 ft above sea level.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or known diversion upstream from station. Low flow affected by domestic irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,910 ft³/s, Jan. 4, 1982, gage height, 21.28 ft, from rating curve extended above 560 ft³/s, on basis of contracted-opening measurement of peak flow; no flow for many days in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 22, 1955, reached a stage of 15.6 ft, from floodmarks, discharge, 3,620 ft³/s, based on contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—No peaks occurred for this partial year as it consists of low-flow record only.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e11	4.8	2.7	2.7	1.4
2	---	---	---	---	---	---	---	e11	5.0	2.4	2.3	1.5
3	---	---	---	---	---	---	---	e10	5.0	2.6	2.4	1.4
4	---	---	---	---	---	---	---	e10	5.0	2.5	2.7	1.1
5	---	---	---	---	---	---	---	e9.5	4.8	2.4	2.2	1.5
6	---	---	---	---	---	---	---	e9.2	4.5	2.4	1.5	1.4
7	---	---	---	---	---	---	---	e9.1	4.5	2.7	1.5	1.0
8	---	---	---	---	---	---	---	e8.9	4.4	2.9	1.8	1.1
9	---	---	---	---	---	---	---	e8.5	4.0	2.4	1.6	1.3
10	---	---	---	---	---	---	---	e8.2	4.4	2.4	1.6	1.2
11	---	---	---	---	---	---	---	e7.9	4.2	2.6	1.4	1.3
12	---	---	---	---	---	---	---	e7.7	4.6	2.5	1.6	1.2
13	---	---	---	---	---	---	---	e7.6	4.4	2.6	1.2	1.1
14	---	---	---	---	---	---	---	e7.6	3.7	2.3	1.5	.69
15	---	---	---	---	---	---	---	e7.5	3.2	3.1	1.5	.89
16	---	---	---	---	---	---	---	e7.4	3.2	3.2	1.7	1.3
17	---	---	---	---	---	---	---	7.4	3.4	3.2	1.4	1.5
18	---	---	---	---	---	---	---	7.2	2.9	2.8	1.6	1.6
19	---	---	---	---	---	---	---	6.8	3.0	2.5	1.6	1.7
20	---	---	---	---	---	---	---	7.1	2.9	3.0	1.6	1.5
21	---	---	---	---	---	---	---	6.3	2.8	2.9	1.8	1.6
22	---	---	---	---	---	---	---	6.1	2.6	2.9	2.3	1.6
23	---	---	---	---	---	---	---	5.7	2.3	2.5	2.3	1.6
24	---	---	---	---	---	---	---	6.3	2.5	2.7	1.8	1.5
25	---	---	---	---	---	---	---	5.6	2.3	3.0	1.5	1.6
26	---	---	---	---	---	---	---	5.0	3.0	2.9	2.1	1.1
27	---	---	---	---	---	---	---	5.7	2.9	2.6	1.8	1.1
28	---	---	---	---	---	---	---	5.8	2.8	2.2	1.5	1.1
29	---	---	---	---	---	---	---	5.6	2.9	2.5	1.5	1.5
30	---	---	---	---	---	---	---	5.5	2.4	2.5	1.4	1.3
31	---	---	---	---	---	---	---	5.0	---	3.2	1.8	---
TOTAL	---	---	---	---	---	---	---	232.2	108.4	83.1	55.2	39.68
MEAN	---	---	---	---	---	---	---	7.49	3.61	2.68	1.78	1.32
MAX	---	---	---	---	---	---	---	11	5.0	3.2	2.7	1.7
MIN	---	---	---	---	---	---	---	5.0	2.3	2.2	1.2	.69
AC-FT	---	---	---	---	---	---	---	461	215	165	109	79

e Estimated.

11162570 SAN GREGORIO CREEK AT SAN GREGORIO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.11	25.4	51.8	94.0	106	89.4	40.0	12.2	5.79	2.93	1.54	1.22
MAX	11.6	162	297	345	379	432	259	68.5	20.5	11.7	6.68	4.46
(WY)	1984	1973	1984	1982	1986	1983	1982	1983	1982	1974	1982	1983
MIN	.000	.71	1.70	1.17	2.21	2.98	1.05	1.42	.35	.019	.000	.000
(WY)	1978	1977	1977	1991	1977	1977	1977	1977	1981	1988	1977	1977

SUMMARY STATISTICS

WATER YEARS 1970 - 2001

ANNUAL MEAN	35.8	
HIGHEST ANNUAL MEAN	111	1983
LOWEST ANNUAL MEAN	1.16	1977
HIGHEST DAILY MEAN	4120	Jan 4 1982
LOWEST DAILY MEAN	.00	Aug 11 1972
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 11 1972
MAXIMUM PEAK FLOW	7910	Jan 4 1982
MAXIMUM PEAK STAGE	21.28	Jan 4 1982
INSTANTANEOUS LOW FLOW	.00	Sep 16 1992
ANNUAL RUNOFF (AC-FT)	25920	
10 PERCENT EXCEEDS	68	
50 PERCENT EXCEEDS	4.5	
90 PERCENT EXCEEDS	.19	

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 mi².

PERIOD OF RECORD.—October 1999 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. 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.

RESERVOIR ELEVATION SURFACE WATER (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	689.32	689.29	690.21	690.19	689.94	689.92	691.88	691.83	691.93	691.87
2	---	---	689.36	689.32	690.22	690.20	689.92	689.89	691.98	691.88	691.92	691.89
3	---	---	689.38	689.35	690.23	690.22	689.89	689.86	691.97	691.92	691.97	691.89
4	---	---	689.42	689.38	690.23	690.22	689.87	689.84	691.98	691.97	692.18	691.97
5	---	---	689.46	689.41	690.22	690.22	689.84	689.81	691.98	691.94	692.46	692.18
6	---	---	689.46	689.39	690.22	690.22	689.82	689.79	691.99	691.89	692.71	692.46
7	---	---	689.48	689.45	690.22	690.22	689.79	689.76	692.00	691.96	692.93	692.71
8	---	---	689.51	689.45	690.22	690.21	689.85	689.78	692.02	691.99	693.11	692.93
9	---	---	689.52	689.48	690.21	690.19	689.87	689.84	692.17	692.02	693.27	693.11
10	---	---	689.55	689.52	690.20	690.17	690.02	689.86	692.37	692.15	693.41	693.27
11	---	---	689.58	689.55	690.19	690.16	690.28	690.01	692.94	692.37	693.53	693.41
12	688.41	688.38	689.59	689.57	690.19	690.17	690.41	690.28	693.52	692.94	693.64	693.53
13	688.44	688.41	689.63	689.59	690.22	690.16	690.48	690.40	693.82	693.52	693.74	693.64
14	688.46	688.44	689.66	689.63	690.28	690.21	690.52	690.48	693.94	693.82	693.83	693.74
15	688.48	688.45	689.71	689.66	690.31	690.28	690.56	690.52	693.93	693.59	693.92	693.82
16	688.51	688.48	689.74	689.71	690.31	690.29	690.58	690.55	693.59	693.04	693.98	693.91
17	688.53	688.51	689.75	689.74	690.30	690.28	690.60	690.57	693.04	692.54	694.06	693.98
18	688.56	688.53	689.78	689.75	690.28	690.25	690.62	690.60	692.54	692.05	694.13	694.06
19	688.59	688.56	689.81	689.78	690.26	690.23	690.65	690.62	692.06	691.82	694.19	694.13
20	688.62	688.58	689.83	689.80	690.23	690.21	690.67	690.64	692.02	691.89	694.25	694.19
21	688.64	688.58	689.89	689.83	690.21	690.20	690.68	690.66	691.90	691.74	694.31	694.25
22	688.65	688.59	689.92	689.88	690.20	690.18	690.71	690.68	691.74	691.61	694.37	694.31
23	688.65	688.63	689.94	689.91	690.18	690.15	690.79	690.70	691.66	691.52	694.41	694.36
24	688.69	688.64	689.97	689.94	690.16	690.13	690.85	690.78	691.73	691.51	694.52	694.41
25	688.75	688.67	690.00	689.97	690.13	690.10	691.08	690.85	691.93	691.73	694.60	694.52
26	688.96	688.74	690.03	690.00	690.10	690.07	691.36	691.08	692.07	691.93	694.64	694.59
27	688.99	688.96	690.06	690.03	690.07	690.05	691.52	691.36	692.08	692.04	694.70	694.64
28	689.13	688.99	690.09	690.06	690.05	690.02	691.62	691.51	692.05	691.93	694.74	694.68
29	689.20	689.13	690.17	690.08	690.02	689.99	691.72	691.62	---	---	694.78	694.73
30	689.27	689.20	690.19	690.17	689.99	689.97	691.78	691.72	---	---	694.83	694.78
31	689.29	689.27	---	---	689.97	689.94	691.84	691.78	---	---	694.87	694.83
MONTH	---	---	690.19	689.29	690.31	689.94	691.84	689.76	693.94	691.51	694.87	691.87

11162618 PILARCITOS LAKE NEAR HILLSBOROUGH, CA—Continued

RESERVOIR ELEVATION SURFACE WATER (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	694.93	694.85	692.70	692.65	691.07	691.03	690.10	690.08	690.46	690.44	689.07	689.00				
2	694.94	694.84	692.67	692.60	691.04	690.94	690.12	690.09	690.47	690.44	689.00	688.92				
3	694.87	694.74	692.61	692.53	690.99	690.93	690.12	690.11	690.48	690.46	688.93	688.84				
4	694.74	694.63	692.53	692.47	690.95	690.88	690.14	690.11	690.50	690.47	688.85	688.76				
5	694.63	694.53	692.47	692.41	690.89	690.85	690.15	690.13	690.51	690.48	688.77	688.66				
6	694.54	694.51	692.41	692.35	690.85	690.79	690.17	690.14	690.53	690.50	688.68	688.62				
7	694.53	694.46	692.35	692.30	690.80	690.75	690.18	690.16	690.53	690.52	688.63	688.54				
8	694.50	694.42	692.30	692.25	690.75	690.71	690.19	690.17	690.56	690.53	688.54	688.47				
9	694.43	694.39	692.25	692.19	690.71	690.65	690.21	690.18	690.56	690.54	688.47	688.39				
10	694.39	694.31	692.19	692.13	690.66	690.57	690.22	690.19	690.57	690.56	688.39	688.32				
11	694.34	694.27	692.13	692.07	690.61	690.53	690.22	690.20	690.58	690.54	688.32	688.25				
12	694.28	694.19	692.08	692.02	690.56	690.47	690.23	690.21	690.54	690.51	688.25	688.18				
13	694.20	694.08	692.02	691.96	690.48	690.41	690.24	690.20	690.51	690.44	688.40	687.01				
14	694.08	693.95	691.96	691.89	690.41	690.34	690.25	690.22	690.44	690.32	688.15	688.09				
15	693.95	693.82	691.90	691.84	690.34	690.27	690.27	690.23	690.32	690.19	688.10	688.01				
16	693.83	693.70	691.85	691.77	690.27	690.20	690.28	690.25	690.19	690.10	688.02	687.92				
17	693.70	693.57	691.79	691.72	690.20	690.13	690.29	690.25	690.10	690.01	687.94	687.84				
18	693.57	693.46	691.74	691.68	690.13	690.05	690.31	690.27	690.02	689.93	687.86	687.77				
19	693.46	693.34	691.68	691.63	690.05	689.96	690.32	690.28	689.93	689.85	687.79	687.69				
20	693.38	693.31	691.63	691.59	689.97	689.95	690.34	690.30	689.86	689.78	687.69	687.60				
21	693.36	693.25	691.59	691.54	689.97	689.95	690.36	690.31	689.78	689.68	687.60	687.52				
22	693.26	693.16	691.54	691.49	689.99	689.96	690.37	690.34	689.73	689.68	687.52	687.44				
23	693.17	693.07	691.49	691.44	690.00	689.97	690.39	690.35	689.68	689.64	687.45	687.37				
24	693.07	692.97	691.44	691.37	690.01	689.95	690.40	690.37	689.65	689.59	687.37	687.32				
25	692.97	692.90	691.38	691.32	690.01	689.98	690.41	690.38	689.60	689.53	687.33	687.27				
26	692.90	692.85	691.33	691.27	690.05	690.00	690.42	690.39	689.54	689.46	687.28	687.20				
27	692.85	692.81	691.28	691.21	690.06	690.02	690.43	690.40	689.46	689.36	687.21	687.14				
28	692.82	692.75	691.22	691.11	690.08	690.06	690.43	690.39	689.37	689.25	687.16	687.08				
29	692.79	692.72	691.17	691.14	690.10	690.06	690.44	690.39	689.28	689.20	687.09	687.04				
30	692.74	692.68	691.14	691.10	690.11	690.06	690.43	690.40	689.21	689.14	687.06	687.01				
31	---	---	691.10	691.07	---	---	690.45	690.43	689.14	689.07	---	---				
MONTH	694.94	692.68	692.70	691.07	691.07	689.95	690.45	690.08	690.58	689.07	689.07	687.01				

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., 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 mi².

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 ft³/s, Feb. 7, 1999, gage height, 7.46 ft, from rating curve extended above 90 ft³/s; minimum daily, 0.03 ft³/s, Oct. 13, 1997, Sept. 30, 2001.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.35	.17	.15	.21	.96	.19	e.11	.07	.05	.05	.06
2	.15	.27	.16	.15	.19	.81	.19	e.12	.07	.05	.05	.06
3	.13	.19	.16	.15	.16	.74	.21	e.13	.07	.04	.05	.07
4	.13	.15	.12	.12	.15	.94	.21	e.15	.07	.04	.06	.07
5	.13	.13	.12	.13	.15	1.1	e.23	.16	.07	.05	.06	.07
6	.12	.13	.12	.13	.14	1.1	e.25	.16	.07	.05	.06	.06
7	.11	.12	.12	.15	.15	.98	e.26	.14	.07	.05	.06	.06
8	.12	.12	.12	.40	.16	.93	.27	.12	.07	.06	.06	.05
9	.26	.11	.14	.22	.62	.86	.30	.10	.07	.06	.05	.06
10	.33	.12	.17	.74	1.2	.77	.25	.11	.06	e.07	.05	.06
11	.19	.11	.31	1.4	1.4	.69	.23	e.12	.07	e.06	.05	.07
12	.15	.10	.65	1.2	1.9	.64	.23	e.11	.07	e.05	.05	.06
13	.13	.16	.86	.74	1.4	.59	.21	e.13	.07	e.05	.05	.06
14	.13	.13	1.3	.52	1.0	.57	.19	e.15	.06	e.07	.06	.05
15	.12	.12	1.3	.38	.84	.53	.19	e.14	.06	e.08	.06	.04
16	.12	.19	.72	.35	.67	.51	.19	.13	.06	e.06	.06	.05
17	.12	.11	.49	.30	1.3	.48	.19	.13	.07	e.05	.05	.05
18	.12	.12	.39	.28	3.1	.44	.18	.12	.07	.06	.05	.05
19	.12	.12	.35	.26	3.6	.43	.18	.12	.07	.06	.05	.05
20	.12	.11	.30	.25	3.2	.41	.35	.12	.05	.06	.06	.05
21	.11	.21	.28	.25	1.9	.38	.31	.11	.04	.06	.06	.06
22	.10	.14	.25	.25	2.3	.35	.26	.11	.05	.05	.06	.06
23	.10	.11	.24	.35	4.0	.34	.22	.12	.05	.06	.06	.06
24	.11	.10	.19	.44	3.7	.39	.23	.14	.05	.06	.05	.07
25	.27	.10	.18	.76	2.7	.43	.19	.13	.06	.05	.05	.07
26	1.4	.10	.18	1.1	1.6	.34	.18	.15	.05	.05	.05	.05
27	.69	.10	.17	.79	1.4	.30	.16	.15	.06	.05	.04	.04
28	.93	.10	.16	.58	1.2	.24	e.15	.12	.06	.05	.04	.04
29	.76	.38	.15	.51	---	.23	e.14	.10	.06	.05	.05	.04
30	1.2	.17	.14	.39	---	.21	e.13	.09	.05	.06	.06	.03
31	.62	---	.14	.28	---	.19	---	.08	---	.05	.06	---
TOTAL	9.25	4.47	10.15	13.72	40.34	17.88	6.47	3.87	1.87	1.71	1.67	1.67
MEAN	.30	.15	.33	.44	1.44	.58	.22	.12	.062	.055	.054	.056
MAX	1.4	.38	1.3	1.4	4.0	1.1	.35	.16	.07	.08	.06	.07
MIN	.10	.10	.12	.12	.14	.19	.13	.08	.04	.04	.04	.03
AC-FT	18	8.9	20	27	80	35	13	7.7	3.7	3.4	3.3	3.3

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

MEAN	.19	.33	.33	7.88	26.2	3.46	.81	.42	.27	.22	.16	.14
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	.44	1.44	.58	.22	.12	.062	.055	.054	.056
(WY)	1998	2000	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1998 - 2001	
ANNUAL TOTAL	940.40		113.07			
ANNUAL MEAN	2.57		.31		3.23	
HIGHEST ANNUAL MEAN					7.63	
LOWEST ANNUAL MEAN					.31	
HIGHEST DAILY MEAN	94	Feb 14	4.0	Feb 23	102	Feb 7 1998
LOWEST DAILY MEAN	.05	Jan 1	.03	Sep 30	.03	Oct 13 1997
ANNUAL SEVEN-DAY MINIMUM	.05	Jan 1	.05	Jun 30	.03	Oct 13 1997
MAXIMUM PEAK FLOW			24		279	
MAXIMUM PEAK STAGE			5.78		7.46	
ANNUAL RUNOFF (AC-FT)	1870		224		2340	
10 PERCENT EXCEEDS	3.0		.78		1.9	
50 PERCENT EXCEEDS	.26		.13		.26	
90 PERCENT EXCEEDS	.12		.05		.06	

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 mi².

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 more than 30 ft³/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 ft³/s, Jan. 4, 1982, gage height, 13.08 ft, site and datum then in use, from rating curve extended above 1,000 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 24	1400	194	5.64

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	3.0	2.9	2.7	7.0	25	4.3	4.7	1.2	.88	.99	.59
2	1.2	3.0	3.2	2.2	6.2	25	3.7	4.1	.70	.87	1.0	.63
3	.91	2.6	2.5	1.8	5.6	22	3.8	3.6	1.3	.66	1.0	.52
4	1.1	2.4	2.4	1.8	5.0	54	3.6	3.2	1.3	.46	1.3	.55
5	1.2	2.5	2.4	2.1	4.7	75	3.7	3.6	.91	.78	1.2	.29
6	1.2	2.2	2.3	2.2	4.2	56	5.5	3.8	.81	.53	1.1	.21
7	1.8	1.9	2.4	2.4	3.8	41	21	3.4	.62	.69	.98	.37
8	2.4	2.2	2.5	7.3	3.2	32	14	3.4	.75	.92	.90	.18
9	3.6	2.3	3.3	3.0	8.1	27	15	3.2	.87	.82	.79	.38
10	4.0	2.4	3.9	24	21	23	12	3.1	1.2	.75	.85	e.41
11	2.9	2.4	4.3	47	50	20	12	2.8	1.0	.86	.66	e.20
12	2.6	2.5	5.4	18	100	17	12	3.0	1.2	.78	.76	.15
13	2.3	2.9	5.1	6.8	38	14	11	2.9	1.0	.70	.84	.25
14	2.0	3.3	11	4.7	18	13	11	2.6	.81	.74	1.0	.43
15	2.4	2.5	18	3.8	15	12	11	2.6	1.0	1.1	1.1	.56
16	2.2	2.7	7.4	3.1	6.6	11	9.0	2.2	.97	1.1	.90	.81
17	1.7	3.5	5.4	2.6	25	9.1	8.9	2.4	1.0	.79	.74	.75
18	1.7	2.3	3.7	2.6	75	8.6	9.5	2.2	.87	.69	.39	.62
19	2.2	2.4	3.6	2.5	92	7.8	9.7	2.1	.69	.81	.46	.68
20	2.2	2.1	3.6	2.1	66	7.0	23	2.2	.94	.83	.39	.62
21	1.9	3.8	3.3	1.9	50	6.6	18	2.1	.78	.78	.39	.63
22	1.5	4.5	3.2	2.1	67	6.0	13	2.5	.68	.95	.73	.63
23	1.0	2.9	3.0	3.8	99	5.3	11	2.5	.82	.71	.58	.65
24	.82	2.7	3.2	5.1	138	5.9	8.9	2.2	1.0	.73	.52	.69
25	2.4	2.8	2.8	30	91	11	8.2	2.0	.95	.85	.54	.59
26	22	2.7	2.7	39	61	6.2	7.5	1.9	.93	.71	.59	.40
27	4.9	2.4	2.7	17	43	5.1	6.9	2.2	.83	.90	.54	.40
28	14	2.4	2.4	12	32	4.5	6.4	2.3	.75	1.1	.44	.45
29	6.6	4.4	1.9	12	---	4.3	6.0	2.0	.73	1.2	.22	.39
30	7.1	3.3	1.9	9.3	---	4.2	5.2	1.7	.77	1.6	.48	.38
31	3.7	---	2.4	8.0	---	3.8	---	1.1	---	1.2	.47	---
TOTAL	106.83	83.0	124.8	282.9	1135.4	562.4	294.8	83.6	27.38	26.49	22.85	14.41
MEAN	3.45	2.77	4.03	9.13	40.5	18.1	9.83	2.70	.91	.85	.74	.48
MAX	22	4.5	18	47	138	75	23	4.7	1.3	1.6	1.3	.81
MIN	.82	1.9	1.9	1.8	3.2	3.8	3.6	1.1	.62	.46	.22	.15
AC-FT	212	165	248	561	2250	1120	585	166	54	53	45	29

e Estimated.

PILARCITOS CREEK BASIN

11162630 PILARCITOS CREEK AT HALF MOON BAY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.23	5.53	15.5	47.6	54.4	39.2	18.9	6.22	2.52	1.08	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1966 - 2001	
ANNUAL TOTAL	7711.45		2764.86			
ANNUAL MEAN	21.1		7.57		15.9	
HIGHEST ANNUAL MEAN					73.9	
LOWEST ANNUAL MEAN					.51	
HIGHEST DAILY MEAN	620	Feb 13	138	Feb 24	2150	Jan 4 1982
LOWEST DAILY MEAN	.48	Sep 19	.15	Sep 12	.00	Jul 1 1966
ANNUAL SEVEN-DAY MINIMUM	.78	Sep 15	.27	Sep 6	.00	Jul 1 1966
MAXIMUM PEAK FLOW			194	Feb 24	4750	Jan 4 1982
MAXIMUM PEAK STAGE			5.64	Feb 24	13.08	Jan 4 1982
ANNUAL RUNOFF (AC-FT)	15300		5480		11540	
10 PERCENT EXCEEDS	62		18		32	
50 PERCENT EXCEEDS	3.3		2.4		2.1	
90 PERCENT EXCEEDS	1.2		.62		.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 probes are set about 4 ft below water surface at Mean Lower Low Water (MLLW). MLLW is about 6 ft. Daily maximums and minimums sometimes differ from tidal cycle (24.8 hours) maximums and minimums. The conductivity record is rated good except for the following periods of heavy fouling which are rated poor: Oct. 20–24, Nov. 10–13, Mar. 30 to Apr. 2, Apr. 17–23, May 1–14, May 27 to June 4, June 14–26, July 6–16, July 30 to Aug. 7, Aug. 19–27 and Sept. 9–17. The temperature record is rated excellent except for Sept. 17–30, which is rated good.

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, 50,400 microsiemens, Sept. 2; minimum recorded, 37,100 microsiemens, Mar. 18.

WATER TEMPERATURE: Maximum recorded, 17.5°C, June 14; minimum recorded, 10.0°C, several days in January and February.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	49700	48600	49000	47300	48600	46600	47200	45500	46800	41200	46400	38200
2	50100	48700	48900	47300	48100	46000	47400	45200	46400	40200	46200	38600
3	49700	48500	48800	46400	47800	45500	47600	45100	46000	42900	45800	37600
4	49500	48200	48600	45500	48300	44800	47600	45300	46400	43000	46800	41500
5	49400	47900	48400	46100	48300	45700	47700	45500	46200	43300	46000	39400
6	49200	47500	48400	45200	48200	46000	47800	46100	46400	43300	47700	39800
7	49100	47900	48300	46000	48300	46200	48000	45900	47700	43200	46600	41200
8	49200	48000	48400	46700	48400	46300	48000	46000	47400	43900	46700	40800
9	49300	47900	48600	46800	48300	46200	47800	45800	47200	44600	46500	41200
10	49600	48200	48500	46700	48400	46300	48100	46000	46800	44500	46700	40500
11	49900	48600	48300	46800	48400	46200	48200	45900	46700	44600	45800	40800
12	49700	48500	48400	46600	48400	46200	48000	45900	46300	44500	45700	40800
13	49700	48000	48600	46800	48500	46200	47800	45900	46300	44300	45700	40600
14	49800	48400	48700	46900	48200	46400	47600	45900	46500	44200	46000	40200
15	49800	48400	48600	46700	48200	46100	47300	45800	46700	43900	46100	38100
16	49700	48500	48700	46800	48100	46200	---	---	46600	43900	46500	37400
17	49800	48400	48600	46800	48000	46400	---	---	46900	43600	47500	37300
18	49700	48200	48300	46800	47800	46300	---	---	47000	42200	48100	37100
19	49600	47900	48400	46600	47900	46200	---	---	47100	43900	47500	37700
20	49500	48000	48400	46700	48100	46400	---	---	47500	42100	47400	38600
21	49400	48000	48400	46900	48100	46500	---	---	47100	43100	47500	40700
22	49700	47700	48200	46900	48000	46400	---	---	46900	43000	46500	42200
23	49700	47700	48200	46700	48500	46000	47400	45400	46700	43200	46700	42200
24	49400	47800	48200	46800	48200	46400	47500	45100	46600	41900	46800	43400
25	49500	48000	48400	46700	48000	46300	47300	45200	46300	41900	46600	42700
26	49000	47700	48400	46700	48000	46100	47400	45000	46500	41600	46300	42900
27	49500	48000	48200	46600	48000	46300	---	---	46500	41100	47500	42800
28	49300	48000	48500	46600	48000	46200	---	---	45900	39400	47300	43400
29	49300	47800	48400	46700	47800	46200	---	---	---	---	47700	41500
30	49100	47700	48700	46800	47800	46200	46600	42100	---	---	48100	43100
31	49000	47300	---	---	47500	45700	46800	41100	---	---	48100	43200
MONTH	50100	47300	49000	45200	48600	44800	---	---	47700	39400	48100	37100

11162690 SAN FRANCISCO BAY AT PRESIDIO MILITARY RESERVATION, CA—Continued

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

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	16.0	14.5	13.5	12.0	11.5	11.5	11.0	11.0	10.0	11.5	11.0
2	17.0	16.0	14.5	13.5	12.0	11.5	11.5	11.0	11.0	10.0	11.5	11.0
3	16.5	16.0	14.5	13.5	12.0	11.5	11.5	11.0	11.5	10.5	11.5	11.0
4	16.5	16.0	14.5	13.5	11.5	11.5	11.5	10.5	11.5	10.5	11.5	11.0
5	16.5	16.0	14.5	13.5	12.0	11.0	11.5	11.0	11.5	11.0	12.0	11.0
6	17.0	16.0	14.0	13.5	11.5	11.0	11.5	11.0	11.5	10.5	12.0	11.5
7	16.5	16.0	14.0	13.5	11.5	11.0	11.0	11.0	11.0	10.5	12.0	11.5
8	16.5	16.0	14.0	13.0	11.5	11.5	11.5	11.0	11.0	10.5	12.0	11.5
9	16.5	16.0	13.5	13.0	11.5	11.5	11.0	11.0	11.0	10.5	12.0	11.5
10	16.5	16.0	13.5	13.0	11.5	11.5	11.5	11.0	11.0	10.5	12.0	11.5
11	16.5	15.5	13.5	12.5	11.5	11.5	11.0	10.5	11.0	10.5	12.0	12.0
12	16.5	15.5	13.5	12.5	11.5	11.5	11.0	10.5	10.5	10.0	12.5	12.0
13	16.5	15.5	13.0	12.5	11.5	11.5	11.0	10.5	10.5	10.0	13.0	12.0
14	16.0	15.5	13.0	12.5	11.5	11.5	11.0	10.5	11.0	10.5	13.0	12.0
15	16.0	15.5	13.0	12.5	11.5	11.5	11.0	10.5	11.0	10.0	13.0	12.0
16	16.0	15.5	13.0	12.0	12.0	11.5	11.0	10.5	11.0	10.5	13.5	12.0
17	16.0	15.0	12.5	12.0	12.0	11.5	11.0	10.5	11.0	10.5	13.5	12.0
18	16.0	15.0	12.5	12.0	11.5	11.0	11.0	10.5	11.0	10.5	14.0	12.0
19	16.0	15.0	12.5	12.0	11.5	11.0	11.0	10.5	11.0	10.5	14.0	12.0
20	16.0	14.5	12.5	12.0	11.5	11.0	11.0	10.5	11.0	10.5	14.0	12.0
21	16.0	15.0	12.0	12.0	11.5	11.0	11.0	10.5	11.0	11.0	13.5	12.0
22	15.5	13.5	12.5	12.0	11.5	11.0	11.0	10.5	11.0	11.0	13.5	12.5
23	15.5	13.5	12.0	11.5	11.5	11.0	11.0	10.5	11.0	10.5	13.5	12.5
24	15.0	13.5	12.0	11.5	11.5	11.0	11.0	10.5	11.0	11.0	13.5	12.5
25	14.5	14.0	12.0	12.0	11.5	11.0	11.0	10.5	11.0	11.0	13.5	13.0
26	14.5	14.0	12.0	11.5	11.5	11.0	11.0	10.5	11.0	11.0	13.5	13.0
27	14.5	14.0	12.0	11.5	11.5	11.0	11.0	10.5	11.5	11.0	14.0	12.5
28	14.5	14.0	12.0	11.5	11.5	11.0	11.0	10.5	11.5	10.5	14.0	12.5
29	14.5	14.0	12.0	11.5	11.5	10.5	11.0	10.5	---	---	14.5	12.0
30	14.5	14.0	12.0	11.5	11.5	10.5	11.0	10.0	---	---	14.5	12.0
31	14.5	14.0	---	---	11.5	11.0	11.0	10.0	---	---	14.5	12.0
MONTH	17.0	13.5	14.5	11.5	12.0	10.5	11.5	10.0	11.5	10.0	14.5	11.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	12.0	14.0	11.5	15.0	13.5	16.0	14.5	16.0	15.0	16.0	14.5
2	14.0	12.0	14.5	11.5	15.0	13.0	16.0	15.0	16.5	15.0	16.0	14.5
3	13.5	11.5	14.0	11.5	15.0	13.0	16.5	14.5	16.0	15.0	16.0	14.5
4	13.0	11.0	13.0	11.5	15.5	13.0	16.5	14.5	16.5	15.0	16.0	14.5
5	12.5	11.5	13.0	11.5	15.5	13.0	16.5	14.5	16.5	15.0	16.0	14.5
6	12.5	11.5	13.0	12.0	15.5	13.0	16.5	14.5	17.0	15.0	16.0	14.5
7	12.0	11.5	14.0	12.0	16.0	13.0	16.5	14.5	17.0	15.0	16.0	14.5
8	12.5	11.0	14.0	12.0	15.5	13.0	16.5	14.5	16.5	15.0	16.0	14.5
9	12.5	11.0	14.0	12.0	16.0	13.5	16.5	14.5	16.0	14.5	15.5	14.5
10	12.5	11.0	14.5	12.0	16.0	13.5	16.5	14.5	16.5	15.0	16.0	15.0
11	12.5	10.5	14.0	12.0	16.5	13.0	16.5	15.0	17.0	15.0	16.0	15.0
12	13.0	11.0	14.5	12.5	16.5	12.5	16.5	15.0	16.5	15.5	16.0	15.0
13	12.5	11.0	14.5	12.5	17.0	12.5	16.5	15.5	16.5	15.0	16.0	15.0
14	13.0	11.0	15.5	13.0	17.5	12.5	16.5	15.0	16.5	15.0	16.5	15.0
15	13.0	10.5	16.0	13.0	16.0	12.5	16.0	15.0	16.5	15.0	16.5	15.0
16	13.0	10.5	16.0	12.5	15.5	13.0	16.0	15.0	16.5	14.5	16.5	15.0
17	13.5	11.0	15.5	12.5	15.0	13.0	16.5	15.0	16.5	14.5	16.0	15.0
18	13.0	11.0	15.0	12.5	15.0	13.5	16.5	15.0	16.5	14.5	16.0	15.0
19	13.0	11.5	14.5	12.5	15.5	13.0	16.5	15.0	16.5	14.5	15.5	15.0
20	12.0	11.5	14.5	12.5	16.0	13.0	16.0	15.0	16.0	14.0	16.0	15.0
21	12.5	11.5	14.5	13.0	16.0	13.5	16.5	14.5	16.0	14.5	16.0	15.0
22	12.5	11.5	15.0	13.0	16.0	13.5	16.5	14.5	16.0	14.5	15.5	15.0
23	12.5	11.5	15.0	13.5	16.0	13.5	16.0	14.5	16.0	14.5	16.0	15.0
24	13.0	11.5	15.5	13.5	16.0	13.0	16.0	14.5	15.5	14.5	15.5	15.0
25	13.0	11.5	15.5	13.5	16.0	13.5	16.0	14.5	15.5	14.5	16.0	15.0
26	13.0	11.5	15.5	13.5	16.0	13.5	15.5	14.5	15.5	14.0	16.0	15.0
27	13.0	11.5	15.0	13.5	15.5	13.5	15.5	15.0	15.5	14.5	16.0	15.0
28	14.0	11.5	16.0	13.5	16.0	14.0	16.0	15.0	16.0	14.0	16.0	15.0
29	14.0	11.5	16.0	13.5	16.0	14.5	15.5	15.0	16.0	14.0	16.0	15.0
30	14.0	11.5	16.5	13.5	16.0	14.5	16.0	14.5	16.0	14.0	16.0	15.0
31	---	---	16.0	13.5	---	---	16.0	15.0	16.0	14.5	---	---
MONTH	14.5	10.5	16.5	11.5	17.5	12.5	16.5	14.5	17.0	14.0	16.5	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 about 9 ft below water surface relative to Mean Lower Low Water (MLLW). Lower probe is set about 30 ft below water surface relative to MLLW. MLLW is about 41 ft deep. Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums. The upper conductivity record is rated good except for Oct. 17–26, June 22–27, July 10–17, July 28 to Aug. 8, Aug. 16–28 and Sept. 11–18, which are rated fair. The lower conductivity record is rated good except for Oct. 18–26, June 23–27, July 10–17, July 30 to Aug. 8, and Aug. 14–28, which are rated fair. The upper and lower temperature records are rated excellent.

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, 49,000 microsiemens, Sept. 9, 10; minimum recorded, 30,100 microsiemens, Mar. 15.

(Lower probe) Maximum recorded, 49,100 microsiemens, Sept. 9, 10; minimum recorded, 32,800 microsiemens, Mar. 15.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 19.5°C, July 6, Aug. 16, 18, 19; minimum recorded, 10.0°C, several days in January and February.

(Lower probe) Maximum recorded, 19.0°C, Aug. 16; minimum recorded, 10.0°C, many days in January and February.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

(UPPER PROBE)

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	48000	45200	---	---	46900	44200	43300	37800	42400	32100
2	---	---	47400	45100	47200	44800	46300	43900	43300	36700	42300	33200
3	---	---	46900	44900	46400	44100	45500	42600	43700	38700	42300	31600
4	---	---	47000	43800	45900	43400	46000	43400	44500	39800	45100	37900
5	48200	46500	46900	43500	45900	42800	47400	44800	46400	41800	43100	34400
6	48300	46000	46300	44100	46200	43500	47500	45200	46400	42100	43800	36700
7	48500	46500	46900	44000	47500	44200	47700	45300	47300	42100	44100	37500
8	48400	46900	47500	44800	47500	45300	47700	44900	47400	42300	44600	36400
9	48300	47100	47400	45600	47600	45400	47700	45300	47000	43000	44700	35400
10	48300	47200	47400	45600	47700	45500	47800	45300	46800	42900	44400	34100
11	48400	47300	47300	45400	47500	45500	47700	44600	46600	43100	44400	34800
12	48300	47300	47300	45700	47700	45500	47800	44800	46400	42200	44000	34500
13	48300	47300	47400	45600	47800	45500	47500	45000	46200	42200	41900	34100
14	48400	47300	47400	45500	47800	45500	47100	45000	45900	41400	41700	33300
15	48300	47000	---	---	47500	45100	47100	45000	44300	39300	41500	30100
16	48400	47000	---	---	47300	45200	46900	43500	44400	39800	41300	31900
17	---	---	---	---	47200	45300	46400	42100	44300	39200	41800	33000
18	48300	47100	47200	45800	47300	45500	46200	43200	44400	39100	42200	32500
19	48400	47100	47200	45700	47500	44400	47100	43600	45400	41200	43800	32400
20	48400	47100	---	---	47500	44500	46300	43300	44900	40300	43200	35500
21	48200	46600	---	---	47400	45500	46200	42800	45000	39800	43400	37600
22	48200	46900	47400	46000	47400	45500	---	---	46600	40400	44400	39700
23	48300	46900	47300	45900	47600	45200	---	---	44900	39600	43700	39700
24	48300	47000	47300	45900	47700	45500	---	---	44900	38800	45000	40300
25	48200	47100	47400	45800	47600	45000	---	---	---	---	44900	39500
26	48500	47100	47400	45800	47500	45500	---	---	42400	36000	43500	39800
27	48300	47200	---	---	47500	45100	---	---	42200	35400	43300	39500
28	48300	47100	---	---	47500	45100	---	---	42200	32100	44200	39900
29	48300	47000	47800	45400	47200	45100	---	---	---	---	44600	40300
30	48100	45500	47600	45900	47200	45400	43900	38000	---	---	44500	39500
31	48100	46700	---	---	47100	44800	43100	38700	---	---	44800	38900
MONTH	---	---	---	---	---	---	---	---	---	---	45100	30100

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	45100	40900	45600	40800	47700	45400	48400	46400	48400	46900	48800	47500
2	44800	41000	45800	41500	47500	45300	48700	46400	48200	46700	48800	47700
3	45100	41300	46200	41600	47800	44600	48900	46600	48200	46500	48800	47800
4	45300	40800	46400	42000	47800	44800	48800	46600	48300	46700	48800	47700
5	45600	41400	46500	43100	47700	44700	48800	46500	48300	46800	48900	47700
6	46000	41600	46600	42900	47500	44700	48800	46400	48400	47000	48800	47600
7	46000	42300	46600	42800	47500	44900	48700	46500	48300	47200	48700	47600
8	46300	41900	46800	43000	47300	45100	48700	46700	48500	47600	48800	47800
9	46300	42100	46700	43300	47400	43800	48600	46700	48600	47700	49000	48000
10	46300	42100	46800	43200	47300	44600	48400	46900	48500	46900	49000	47300
11	46200	40000	46900	44300	47200	45300	48700	46600	48500	46900	48900	46900
12	45500	42300	47000	44200	47000	45100	48800	46000	48500	46600	48800	47300
13	45600	42500	46600	44000	46900	43600	48700	45600	48400	46500	48800	47200
14	45200	39600	46600	43600	46900	43400	48900	46900	48500	47200	48800	47400
15	45200	39800	46700	42900	46900	44500	48900	46900	48400	47100	48800	46900
16	45000	39700	46300	42600	47600	44900	48600	47100	48300	47000	48700	47400
17	45500	39700	46200	43200	47700	44500	48700	46900	48400	46900	48600	47200
18	45300	40900	46500	43900	47800	44900	48700	46500	48400	47200	48600	46800
19	45200	41900	47500	43900	47900	45500	48500	46300	48400	47100	48700	48000
20	45500	43100	47300	44300	47900	45300	48500	46500	48500	47400	48600	48000
21	45800	43000	47600	44600	47800	45100	48500	46400	48400	47400	48600	48000
22	46300	42500	47600	44600	48300	45400	48400	46500	48300	47500	48600	48000
23	46500	42800	47700	44300	48300	45900	48300	46500	48500	47600	48600	47900
24	---	---	47600	44300	48400	46000	48200	46400	48500	47500	48600	47900
25	46000	41200	47600	44200	48300	46300	48200	46600	48200	47300	48500	47000
26	45800	41800	47600	44300	48000	46500	48200	46700	48200	47200	48500	47000
27	46300	41900	47500	44500	48200	46800	48100	47000	48600	47300	48500	47700
28	45900	42400	47400	45000	48300	45700	48100	46700	---	---	48500	47700
29	45400	41900	47300	44800	48300	46400	48200	46600	48900	47500	48400	47700
30	45500	41200	47400	43800	48400	46500	48200	46700	48800	47400	48400	47800
31	---	---	47700	44700	---	---	48400	46800	48900	47400	---	---
MONTH	---	---	47700	40800	48400	43400	48900	45600	---	---	49000	46800

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	48300	45700	---	---	47000	44300	44100	38100	43300	34900
2	---	---	48100	45300	47400	44900	47100	43900	44200	37400	44000	36800
3	---	---	47600	45100	46900	44300	47100	42700	44100	39400	43200	33000
4	---	---	47500	43900	46700	43500	47500	43400	44500	40500	45600	38200
5	48800	46500	47300	43900	46800	42900	47500	45000	46200	41700	43700	35200
6	48600	46100	47000	44400	46700	43300	47600	45300	46200	41800	45100	37100
7	48500	46700	47600	44400	47500	44000	47800	45200	47100	41900	45000	38300
8	48500	46900	48000	45200	48000	45400	48100	45100	47400	42200	45100	37700
9	48400	47300	48000	45800	47800	45400	47700	43000	46800	42800	45100	36000
10	48400	47200	48200	45800	48000	45500	47900	45300	46900	43100	44900	37000
11	48500	47300	48000	45900	48000	45400	47600	44400	46400	43200	44400	36200
12	48500	47300	48100	46100	48200	45500	47800	44700	46100	41800	44000	35500
13	48800	47300	48200	46200	48000	45700	47400	44800	45900	41800	44000	35600
14	48800	47300	48300	46300	48100	45500	47000	44700	45600	41400	43000	34700
15	48500	47100	---	---	48000	45100	46800	44700	44700	40500	42300	32800
16	48700	47200	---	---	47600	45100	46700	43500	44600	40600	42900	34000
17	---	---	---	---	47400	45400	46300	42100	45100	40100	45100	35300
18	48700	46900	47900	46100	47500	45400	46300	42600	45100	39900	45600	34800
19	48800	47100	47600	46100	47600	44600	46400	42700	45500	41600	45200	34200
20	48700	47100	---	---	47900	44600	46400	42100	45300	40800	44400	36100
21	48500	47100	---	---	47600	45500	46100	42400	45300	40100	45200	38200
22	48500	47200	47900	46300	47800	45600	46700	42400	46600	40400	45100	40000
23	48500	47000	47900	46100	47800	45400	46800	43600	45200	39700	44900	40300
24	48500	46900	47900	46100	48000	45500	46700	42000	45300	39500	45500	40700
25	48300	47200	47800	46000	48000	45000	46400	42500	---	---	45200	39300
26	48700	47200	47900	45900	48000	45300	46300	41900	44200	37500	44900	40300
27	48700	47200	---	---	47900	45200	45600	41600	43500	36400	44700	40500
28	48600	47100	---	---	47900	45300	45400	41000	43200	34900	44900	40600
29	48600	47100	48400	45600	47500	45200	45300	39600	---	---	45000	40900
30	48400	46000	48100	45900	47400	45200	44300	38300	---	---	45500	40600
31	48400	46800	---	---	47300	44800	43900	38600	---	---	45400	39700
MONTH	---	---	---	---	---	---	48100	38300	---	---	45600	32800
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	45600	41600	47000	42600	47900	44600	48400	46300	48500	47000	48700	47900
2	45200	41700	47200	42900	47800	45500	48700	46000	48400	47200	48900	47700
3	45500	41700	47300	43300	47900	45000	48900	44900	48400	47200	48800	47900
4	45500	41400	47400	43200	47900	45000	48800	46700	48500	47200	48800	47700
5	46100	42100	47500	44200	47800	44600	48700	46600	48500	47300	48800	47900
6	46400	41900	47800	43800	47600	45000	48800	45200	48700	47300	49000	47900
7	46200	42400	47900	44300	47500	44700	48800	45500	48800	47700	48800	47800
8	46200	42400	47900	44200	47600	44300	48600	46900	48900	47500	48900	47900
9	46200	42200	47900	44600	47300	45200	48600	46900	49000	47800	49100	47900
10	46500	42500	47900	44600	47300	45000	48700	46600	49000	47400	49100	47400
11	46300	42400	47800	43700	47300	45500	48800	47200	48800	47100	49000	47200
12	46300	40900	47700	45000	47600	45200	48800	46300	48800	46900	48700	47800
13	45600	42700	47600	45200	47500	44400	49000	46200	48800	47000	48600	47800
14	45300	40500	46900	44000	47400	44100	48700	46800	48600	47400	48700	47600
15	45600	40600	47500	43800	47800	45100	48800	46800	48500	47400	48500	47400
16	45900	40500	47600	43500	47900	44900	48500	47000	48700	47200	48400	47700
17	45800	40800	47500	44100	47800	44800	48800	46800	48800	47500	48500	47300
18	45600	40600	47600	44500	47800	45100	48800	46700	48700	47600	48600	47700
19	46300	41600	47900	44300	48100	45700	48800	46500	48700	47400	48700	48000
20	46200	42900	47900	44900	48200	45600	48700	46900	48700	47600	48700	48000
21	46100	43000	48100	45100	48300	45600	48700	46500	48700	47600	48800	47800
22	46200	43000	48100	44400	48300	45800	48600	47000	48700	47800	48700	47000
23	46600	42900	48200	45000	48300	45900	48500	47100	48600	47700	48700	47900
24	---	---	48200	44900	48300	46000	48500	47200	48600	47700	48600	47900
25	47300	43200	48200	45100	48200	46200	48600	47300	48500	47400	48800	47200
26	47500	43300	48300	45000	48200	46700	48600	47400	48500	47200	48800	47200
27	47400	43400	48200	43600	48300	46900	48500	47400	48900	47600	48700	47800
28	47100	44000	47900	45600	48400	46200	48600	47100	---	---	48500	47800
29	46800	43300	47800	45500	48400	46400	48400	47100	48800	47700	48500	47700
30	46800	43100	48300	45300	48400	46400	48100	46900	48700	47700	48700	47800
31	---	---	48300	45300	---	---	48400	46900	48800	47600	---	---
MONTH	---	---	48300	42600	48400	44100	49000	44900	---	---	49100	47000

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	15.0	14.0	12.0	12.0	11.5	11.0	10.5	10.0	11.5	11.0
2	---	---	15.0	14.5	12.0	11.5	11.5	11.0	10.5	10.0	11.5	11.0
3	---	---	15.0	14.5	12.0	11.5	11.5	10.5	10.5	10.0	11.5	11.0
4	---	---	15.0	14.0	12.0	11.5	11.0	10.5	11.0	10.5	11.5	11.5
5	18.0	17.0	15.0	14.0	12.0	11.5	11.0	10.5	11.0	10.5	11.5	11.5
6	17.5	16.5	15.0	14.0	12.0	11.5	11.0	11.0	11.0	11.0	12.0	11.5
7	17.5	16.0	14.5	14.0	12.0	11.5	11.0	11.0	11.0	10.5	12.0	11.5
8	17.5	16.5	14.5	13.5	12.0	11.5	11.5	11.0	11.0	10.5	12.5	12.0
9	18.0	16.5	14.5	13.5	12.0	11.5	11.0	11.0	11.0	10.5	12.5	12.0
10	17.0	16.0	14.5	13.0	12.0	11.5	11.0	11.0	11.0	10.5	12.5	12.0
11	17.0	16.0	14.5	13.0	12.0	11.5	11.0	10.5	11.0	10.5	12.5	12.0
12	17.5	16.0	14.5	13.0	12.0	11.5	11.0	10.5	11.0	10.0	13.0	12.0
13	17.5	16.0	14.0	12.5	12.0	11.5	11.0	10.5	10.5	10.0	13.0	12.5
14	17.5	15.5	13.5	12.5	12.0	11.5	11.0	10.5	10.5	10.0	13.5	12.5
15	17.5	15.5	13.5	12.5	12.0	11.5	11.0	10.5	10.5	10.0	13.0	12.5
16	17.5	15.5	13.5	12.5	12.0	11.5	11.0	10.5	10.5	10.0	13.5	12.5
17	17.5	15.5	13.0	12.5	12.0	11.5	10.5	10.0	10.5	10.5	13.5	12.5
18	17.0	15.5	13.0	12.5	12.0	11.5	10.5	10.0	10.5	10.5	14.0	12.5
19	17.0	15.5	13.0	12.0	11.5	11.5	10.5	10.0	11.0	10.5	14.5	12.5
20	17.0	15.0	13.0	12.0	11.5	11.0	11.0	10.0	11.0	10.5	14.5	13.0
21	17.0	15.0	12.5	12.0	11.5	11.5	10.5	10.0	11.0	10.5	14.0	13.0
22	16.5	14.5	12.5	12.0	11.5	11.5	10.5	10.5	11.0	11.0	14.0	13.0
23	16.5	14.0	12.5	12.0	11.5	11.5	11.0	10.5	11.0	11.0	14.0	13.0
24	16.5	14.0	12.5	12.0	11.5	11.5	11.0	10.5	11.0	11.0	14.0	13.0
25	16.0	14.0	12.5	12.0	11.5	11.5	11.0	10.0	---	---	14.5	13.0
26	15.5	14.0	12.5	12.0	11.5	11.5	11.0	10.0	---	---	14.5	13.5
27	15.5	14.0	12.5	12.0	11.5	11.0	10.5	10.0	11.5	11.0	15.0	13.5
28	15.5	14.0	12.5	12.0	11.5	11.0	11.0	10.0	11.5	11.0	15.0	13.5
29	15.0	14.0	12.5	12.0	11.5	11.0	11.0	10.0	---	---	15.5	13.5
30	15.5	14.0	12.5	12.0	11.5	11.0	10.5	10.0	---	---	15.5	13.5
31	15.0	14.0	---	---	11.5	11.0	10.5	10.0	---	---	16.0	13.5
MONTH	---	---	15.0	12.0	12.0	11.0	11.5	10.0	---	---	16.0	11.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.0	13.0	15.0	12.5	16.5	14.0	18.0	15.5	18.5	15.5	18.5	15.0
2	15.0	13.0	14.5	12.5	17.0	14.5	18.5	15.0	19.0	15.5	18.5	15.0
3	14.5	12.5	15.0	12.0	17.5	13.5	18.5	15.0	18.5	16.0	18.5	15.0
4	14.0	12.0	14.5	12.0	17.5	13.5	18.0	15.0	18.0	16.0	18.5	15.5
5	14.0	12.0	15.0	12.0	17.5	13.5	19.0	15.0	19.0	16.0	18.0	15.5
6	14.0	11.5	15.5	12.0	17.5	13.5	19.5	15.0	19.0	16.0	18.0	15.5
7	13.5	11.5	15.5	12.5	17.5	14.0	19.0	15.0	19.0	16.0	18.0	15.5
8	13.5	11.5	16.0	12.5	17.5	14.0	19.0	15.0	18.0	16.0	18.0	15.5
9	13.5	11.5	16.5	12.5	18.0	14.0	18.5	15.5	18.0	15.5	17.5	15.0
10	13.5	11.5	17.0	12.5	18.0	14.5	17.5	15.5	18.5	16.0	18.0	15.0
11	13.5	11.5	15.5	13.0	18.0	14.5	17.5	15.5	18.0	16.0	18.0	15.5
12	13.5	12.0	15.5	13.0	17.5	15.0	18.0	16.0	18.0	16.0	17.5	15.5
13	13.0	12.0	16.0	13.5	17.5	15.0	18.0	16.0	19.0	16.0	17.5	15.5
14	13.5	12.0	16.5	14.0	18.5	15.0	17.5	16.0	19.0	16.0	18.5	15.5
15	13.5	12.0	16.5	14.0	17.5	15.0	17.5	15.5	19.0	15.5	18.0	15.5
16	13.5	12.0	17.0	14.5	17.0	14.0	18.0	15.5	19.5	15.0	17.5	15.5
17	14.0	12.0	17.0	14.5	17.5	14.0	17.5	15.5	19.0	15.0	17.5	15.5
18	13.5	12.0	17.0	14.5	17.5	13.5	18.0	15.5	19.5	15.5	17.0	15.5
19	13.0	12.0	16.5	13.0	18.0	13.5	18.5	15.5	19.5	15.0	17.5	15.0
20	13.0	12.0	16.0	13.5	18.5	13.5	18.0	15.5	19.0	15.0	17.5	15.5
21	13.0	12.0	16.5	13.5	19.0	13.5	18.5	15.5	18.5	15.0	17.5	15.5
22	13.5	12.0	17.0	13.5	19.0	13.5	18.5	15.5	17.5	15.5	17.0	15.5
23	14.0	12.0	17.5	13.5	19.0	13.5	18.0	15.0	17.5	15.5	17.0	15.5
24	---	---	17.5	14.0	19.0	14.0	18.0	15.5	17.5	15.5	17.0	15.5
25	14.0	12.0	18.0	14.0	18.0	14.0	18.0	15.5	17.5	15.0	17.5	15.5
26	14.5	12.0	17.5	14.0	17.5	14.5	17.5	15.5	18.0	15.5	17.5	15.5
27	14.5	12.0	17.0	14.0	16.5	14.5	17.5	15.5	18.5	15.0	17.0	15.5
28	14.0	12.0	16.5	14.0	17.0	15.0	18.0	15.5	---	---	17.0	15.5
29	15.0	12.5	17.5	14.0	17.0	15.0	18.0	15.5	19.0	15.0	17.5	15.5
30	15.0	12.5	17.0	14.0	17.5	15.0	18.0	15.5	18.5	15.0	17.0	15.5
31	---	---	17.0	14.0	---	---	18.5	15.5	19.0	15.0	---	---
MONTH	---	---	18.0	12.0	19.0	13.5	19.5	15.0	---	---	18.5	15.0

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	15.0	14.0	12.0	12.0	11.5	11.0	10.5	10.0	11.5	11.0
2	---	---	15.0	14.0	12.0	11.5	11.5	11.0	10.5	10.0	11.5	11.0
3	---	---	15.0	14.0	12.0	11.5	11.0	10.5	10.5	10.0	11.5	11.0
4	---	---	15.0	14.0	12.0	11.5	11.0	10.5	11.0	10.5	11.5	11.0
5	17.5	16.5	15.0	14.0	12.0	11.5	11.0	10.5	11.0	10.5	11.5	11.0
6	17.5	16.0	15.0	14.0	11.5	11.0	11.0	11.0	11.0	10.5	12.0	11.5
7	17.5	16.0	14.5	13.5	12.0	11.0	11.0	11.0	11.0	10.5	12.0	11.5
8	17.5	16.0	14.5	13.5	12.0	11.5	11.0	11.0	11.0	10.5	12.0	11.5
9	17.5	16.0	14.5	13.0	12.0	11.5	11.0	11.0	11.0	10.5	12.5	11.5
10	17.0	16.0	14.5	13.0	12.0	11.5	11.0	11.0	11.0	10.5	12.5	12.0
11	17.0	16.0	14.5	12.5	12.0	11.5	11.0	10.5	10.5	10.5	12.5	12.0
12	17.0	16.0	14.0	12.5	12.0	11.5	11.0	10.5	10.5	10.0	13.0	12.0
13	17.0	15.5	14.0	12.5	12.0	11.5	11.0	10.5	10.5	10.0	13.0	12.0
14	17.0	15.5	13.5	12.5	12.0	11.5	11.0	10.5	10.5	10.0	13.0	12.5
15	17.5	15.5	13.5	12.5	12.0	11.5	11.0	10.5	10.5	10.0	13.0	12.5
16	17.5	15.5	13.0	12.5	12.0	11.5	11.0	10.5	10.5	10.0	13.0	12.5
17	17.5	15.5	13.0	12.0	12.0	11.5	10.5	10.0	10.5	10.5	13.5	12.0
18	17.0	15.0	13.0	12.0	12.0	11.5	10.5	10.0	10.5	10.5	14.0	12.0
19	17.0	15.5	13.0	12.0	11.5	11.0	11.0	10.0	11.0	10.5	14.0	12.5
20	17.0	15.0	12.5	12.0	11.5	11.0	11.0	10.0	11.0	10.5	14.5	12.5
21	17.0	15.0	12.5	12.0	11.5	11.0	10.5	10.0	11.0	10.5	14.0	12.5
22	16.5	14.5	12.5	12.0	11.5	11.0	11.0	10.0	11.0	11.0	14.0	12.5
23	16.5	14.0	12.5	12.0	11.5	11.0	11.0	10.5	11.0	11.0	14.0	13.0
24	16.5	14.0	12.5	12.0	11.5	11.0	11.0	10.5	11.0	11.0	14.0	13.0
25	16.0	14.0	12.5	12.0	11.5	11.0	11.0	10.0	---	---	14.0	13.0
26	15.5	13.5	12.5	11.5	11.5	11.0	10.5	10.0	---	---	14.0	13.0
27	15.5	14.0	12.5	11.5	11.5	11.0	10.5	10.0	11.5	11.0	14.5	13.5
28	15.5	14.0	12.5	11.5	11.5	11.0	10.5	10.0	11.5	11.0	14.5	13.0
29	15.0	14.0	12.5	11.5	11.5	11.0	10.5	10.0	---	---	15.0	13.0
30	15.0	14.0	12.0	12.0	11.5	11.0	10.5	10.0	---	---	15.0	13.0
31	15.0	14.0	---	---	11.5	11.0	10.5	10.0	---	---	15.0	13.0
MONTH	---	---	15.0	11.5	12.0	11.0	11.5	10.0	---	---	15.0	11.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.0	13.0	14.5	12.5	16.5	13.5	17.5	15.0	18.0	15.0	18.0	15.0
2	14.5	13.0	14.5	12.0	16.5	14.0	18.0	14.5	18.5	15.0	18.0	15.0
3	14.0	12.0	14.5	12.0	17.5	13.5	18.0	14.5	17.5	15.5	18.0	15.0
4	14.0	12.0	14.5	12.0	17.5	13.0	17.5	14.5	17.5	15.5	17.5	15.0
5	14.0	11.5	14.5	12.0	17.5	13.0	18.5	14.5	18.0	15.5	17.5	15.0
6	13.5	11.5	15.0	12.0	17.5	13.5	18.5	14.5	18.0	15.5	17.5	15.0
7	13.5	11.5	15.0	12.0	17.5	13.5	18.5	14.5	18.5	15.5	17.5	15.5
8	13.0	11.5	15.5	12.0	17.0	13.5	18.0	15.0	17.5	15.5	18.0	15.0
9	13.0	11.5	16.0	12.5	17.5	14.0	18.5	15.0	17.5	15.0	17.5	15.0
10	13.5	11.5	16.0	12.5	17.0	14.0	17.0	15.0	17.5	15.5	17.5	15.0
11	13.0	11.5	15.5	12.5	17.0	14.0	17.0	15.5	17.5	15.5	17.5	15.0
12	13.5	11.5	15.5	13.0	17.0	14.0	17.5	15.5	17.5	15.5	17.5	15.5
13	13.0	11.5	16.0	13.0	17.0	14.5	17.0	15.5	18.0	15.5	17.5	15.0
14	13.5	11.5	16.0	13.5	18.0	14.5	17.0	15.5	18.5	15.5	18.0	15.5
15	13.5	11.5	16.5	13.5	17.5	13.5	17.0	15.0	18.5	15.0	17.5	15.0
16	13.0	11.5	16.5	14.0	16.5	13.0	17.0	15.0	19.0	14.5	17.5	15.5
17	14.0	11.5	16.5	13.5	17.0	13.5	17.5	15.0	18.0	14.5	17.0	15.0
18	13.5	12.0	16.5	13.5	17.5	13.5	17.5	15.0	18.0	14.5	17.0	15.0
19	13.0	12.0	16.0	13.0	17.5	13.0	17.5	15.0	18.5	14.5	17.0	15.0
20	13.0	11.5	16.0	13.0	18.0	13.0	17.0	15.0	18.0	14.5	17.0	15.0
21	13.0	12.0	16.5	13.5	18.5	13.0	17.5	15.0	17.5	14.5	17.0	15.0
22	13.0	12.0	16.5	13.5	18.5	13.0	17.5	14.5	17.0	14.5	17.0	15.5
23	13.5	12.0	17.5	13.5	18.0	13.0	17.5	15.0	17.0	14.5	17.0	15.0
24	---	---	17.5	13.5	18.0	13.5	17.5	14.5	16.5	15.0	17.0	15.0
25	14.0	11.5	17.5	13.5	17.5	14.0	17.0	15.0	17.0	14.5	17.0	15.0
26	14.0	11.5	17.0	13.5	17.0	14.5	17.0	15.0	17.5	14.5	17.0	15.5
27	14.5	11.5	16.5	13.5	16.5	14.0	17.0	15.0	17.5	14.5	17.0	15.5
28	14.0	12.0	16.5	13.5	16.5	14.5	17.5	15.0	---	---	17.0	15.5
29	15.0	12.5	17.0	14.0	17.0	14.5	17.5	15.0	18.5	14.5	17.0	15.5
30	15.0	12.5	16.5	14.0	17.0	14.5	17.5	15.0	18.5	14.5	17.0	15.5
31	---	---	17.0	13.5	---	---	18.0	15.0	18.5	15.0	---	---
MONTH	---	---	17.5	12.0	18.5	13.0	18.5	14.5	---	---	18.0	15.0

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.

RESERVOIR ELEVATION SURFACE WATER (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	266.30	266.13	267.62	267.39	272.34	272.29	271.41	271.27	270.22	269.87	272.03	271.85
2	266.15	265.97	267.84	267.62	272.47	272.34	271.41	271.41	270.22	269.84	272.26	272.02
3	265.99	265.93	267.92	267.84	272.50	272.47	271.41	270.90	269.84	269.73	272.47	272.26
4	265.93	265.76	268.02	267.91	272.54	272.50	270.90	270.79	269.73	269.62	272.85	272.47
5	265.76	265.67	267.97	267.92	272.62	272.52	270.85	270.79	269.62	269.56	273.22	272.85
6	265.67	265.50	268.06	267.91	272.67	272.62	270.82	270.69	269.58	269.39	273.40	273.22
7	265.50	265.31	268.29	268.06	272.79	272.58	270.69	270.57	269.39	269.23	273.51	273.40
8	265.31	265.14	268.46	268.29	272.92	272.79	270.63	270.58	269.23	269.07	273.64	273.51
9	265.14	265.04	268.66	268.45	273.06	272.92	270.72	270.55	269.27	269.05	273.77	273.64
10	265.04	264.99	268.84	268.66	273.10	273.06	270.99	270.72	269.27	269.06	273.86	273.77
11	265.00	264.95	269.06	268.84	273.11	273.06	270.87	270.58	269.31	269.07	274.01	273.86
12	265.14	265.00	269.19	269.06	273.14	273.06	270.72	270.58	269.56	269.31	274.14	274.01
13	265.19	265.14	269.34	269.19	---	---	270.72	270.72	269.56	269.51	274.21	274.14
14	265.30	265.18	269.51	269.34	---	---	271.25	270.72	269.53	269.51	274.34	274.20
15	265.30	265.25	269.59	269.51	---	---	271.39	271.14	269.54	269.50	274.47	274.34
16	265.27	265.24	269.77	269.59	272.89	272.83	271.20	271.16	269.54	269.48	274.58	274.47
17	265.31	265.24	269.92	269.77	272.83	272.66	271.22	271.19	269.60	269.48	274.68	274.58
18	265.32	265.30	270.14	269.92	272.66	272.63	271.23	271.19	269.73	269.60	274.83	274.68
19	265.40	265.32	270.29	270.13	272.71	272.64	271.19	271.06	270.15	269.73	274.96	274.82
20	265.46	265.40	270.41	270.29	272.64	272.53	271.06	270.92	270.24	270.12	275.03	274.94
21	265.63	265.45	270.62	270.41	---	---	270.92	270.76	270.34	270.23	275.05	274.95
22	265.65	265.60	270.78	270.62	---	---	270.76	270.61	270.67	270.34	275.06	275.02
23	265.71	265.65	271.01	270.78	---	---	270.61	270.50	271.01	270.67	275.15	275.05
24	265.80	265.71	271.29	271.01	---	---	270.50	270.36	271.29	271.01	275.25	275.14
25	265.81	265.72	271.53	271.29	272.16	272.08	270.43	270.30	271.43	271.28	275.42	275.25
26	266.19	265.81	271.72	271.53	272.10	272.05	270.83	270.43	271.58	271.43	275.62	275.41
27	266.37	266.19	271.94	271.72	272.05	271.87	270.70	270.70	271.67	271.58	275.63	275.61
28	266.70	266.37	272.07	271.94	271.87	271.78	270.70	270.23	271.85	271.67	275.61	275.56
29	266.92	266.69	272.15	272.06	271.78	271.60	270.28	270.28	---	---	275.58	275.51
30	267.16	266.91	272.29	272.14	271.60	271.42	270.28	270.12	---	---	275.53	275.49
31	267.39	267.16	---	---	271.43	271.27	270.12	270.08	---	---	275.51	275.38
MONTH	267.39	264.95	272.29	267.39	---	---	271.41	270.08	271.85	269.05	275.63	271.85

11162750 CRYSTAL SPRINGS RESERVOIR AT DAM, NEAR SAN MATEO, CA—Continued

RESERVOIR ELEVATION SURFACE WATER (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	275.40	275.32	274.34	274.28	271.48	271.41	269.58	269.43	266.44	266.35	266.41	266.38				
2	275.34	275.30	274.29	274.22	271.49	271.42	269.43	269.26	266.36	266.29	266.42	266.38				
3	275.31	275.21	274.23	274.16	271.54	271.48	269.26	269.09	266.38	266.28	266.45	266.39				
4	275.21	275.15	274.17	274.10	271.57	271.52	269.10	268.94	266.48	266.38	266.43	266.38				
5	275.16	275.08	274.11	274.05	271.56	271.47	268.95	268.83	266.60	266.48	266.41	266.36				
6	275.13	275.06	274.05	274.00	271.48	271.43	268.85	268.70	266.67	266.60	266.39	266.35				
7	275.11	275.03	274.00	273.95	271.44	271.37	268.71	268.54	266.64	266.61	266.36	266.28				
8	275.10	275.07	273.95	273.90	271.37	271.29	268.54	268.42	266.65	266.60	266.33	266.24				
9	275.13	275.07	273.91	273.85	271.30	271.27	268.42	268.24	---	---	266.30	266.26				
10	275.18	275.11	273.87	273.75	271.31	271.27	268.26	268.11	266.61	266.57	266.31	266.27				
11	275.17	275.13	273.75	273.63	271.39	271.30	268.14	267.99	266.62	266.59	266.30	266.24				
12	275.16	275.12	273.64	273.52	271.43	271.32	267.99	267.85	266.66	266.60	266.30	266.27				
13	275.14	275.11	273.53	273.41	271.39	271.33	267.85	267.71	266.71	266.65	266.32	266.28				
14	275.11	275.01	273.42	273.29	271.33	271.26	267.71	267.56	266.75	266.69	266.33	266.30				
15	275.01	274.97	273.29	273.24	271.26	271.19	267.58	267.46	266.73	266.66	266.34	266.33				
16	274.98	274.92	273.25	273.12	271.19	271.11	267.47	267.40	266.70	266.66	266.37	266.33				
17	274.92	274.84	273.13	273.01	271.13	271.09	267.45	267.29	266.68	266.62	266.43	266.37				
18	274.84	274.76	273.01	272.87	271.11	271.06	267.32	267.23	266.62	266.54	266.47	266.42				
19	274.76	274.70	272.87	272.71	271.09	271.02	267.25	267.22	266.55	266.49	266.48	266.42				
20	274.81	274.71	272.71	272.58	271.02	270.94	267.23	267.21	266.56	266.49	266.46	266.42				
21	274.78	274.73	272.59	272.42	270.95	270.81	267.24	267.21	266.61	266.56	266.47	266.43				
22	274.78	274.73	272.42	272.27	270.81	270.63	267.25	267.20	266.63	266.57	266.48	266.43				
23	274.74	274.68	272.27	272.13	270.66	270.51	267.21	267.15	266.62	266.58	266.51	266.44				
24	274.68	274.61	272.13	271.98	270.51	270.37	267.18	267.05	266.58	266.55	266.53	266.46				
25	274.62	274.53	271.98	271.83	270.37	270.26	267.10	266.99	266.59	266.55	266.62	266.53				
26	274.53	274.49	271.84	271.72	270.26	270.12	267.00	266.89	266.59	266.56	266.65	266.61				
27	274.52	274.47	271.73	271.69	270.14	270.03	266.89	266.82	266.59	266.56	266.66	266.63				
28	274.50	274.43	271.70	271.65	270.03	269.90	266.83	266.68	266.56	266.52	266.67	266.63				
29	274.45	274.38	271.65	271.52	269.90	269.73	266.69	266.57	266.53	266.44	266.66	266.62				
30	274.39	274.33	271.52	271.46	269.73	269.58	266.59	266.50	266.47	266.36	266.63	266.58				
31	---	---	271.47	271.43	---	---	266.50	266.43	266.43	266.40	---	---				
MONTH	275.40	274.33	274.34	271.43	271.57	269.58	269.58	266.43	---	---	266.67	266.24				

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., 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 about 4 ft below water surface at Mean Lower Low Water (MLLW). Lower probe is set about 38 ft below the surface at MLLW. MLLW is about 48 ft deep. Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums. The upper conductivity record is rated excellent except for the following periods of heavy fouling, which are rated fair: May 31 to Jun. 6, Jun. 14–27, Aug. 4–8, and Sept. 10–18. The lower conductivity record is rated excellent except Oct. 1 to Nov. 15, which are rated good, and the following periods of heavy fouling, which are rated fair: May 31 to Jun. 6, Jun. 14–27, Aug. 4–8, and Sept. 10–18. The upper and lower temperature records are rated excellent.

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) Maximum recorded, 48,300 microsiemens, Sept. 5; minimum recorded, 37,000 microsiemens, Mar. 30.

(Lower probe) Maximum recorded, 47,900 microsiemens, Sept. 14–17, 19; minimum recorded, 37,700 microsiemens, Mar. 31, Apr. 7.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 22.5°C, June 23; minimum recorded, 9.5°C, Jan. 27.

(Lower probe) Maximum recorded, 22.5°C, June 23; minimum recorded, 10.0°C, many days in January and February.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

(UPPER PROBE)

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	43200	41100	41400	39700
2	---	---	---	---	---	---	---	---	43200	40600	41200	39700
3	---	---	---	---	---	---	---	---	43400	40400	41200	39500
4	---	---	---	---	---	---	44600	42600	43100	40400	40900	38800
5	---	---	---	---	---	---	44600	42400	42900	40400	40500	38800
6	---	---	---	---	---	---	44500	42300	---	---	40700	38700
7	---	---	---	---	---	---	44300	42400	---	---	40400	38100
8	---	---	---	---	---	---	44000	41900	---	---	40500	38200
9	---	---	---	---	---	---	---	---	---	---	40500	38000
10	---	---	---	---	---	---	---	---	---	---	40200	38500
11	---	---	---	---	---	---	---	---	---	---	40300	38300
12	---	---	---	---	---	---	---	---	---	---	40200	38700
13	---	---	---	---	---	---	---	---	41500	40200	40300	39200
14	---	---	---	---	---	---	---	---	41200	39300	40300	38400
15	---	---	---	---	---	---	44000	42300	41500	38800	40500	38800
16	---	---	---	---	---	---	43800	41800	41400	38700	40300	38300
17	---	---	---	---	---	---	43600	41100	41700	40000	40100	38300
18	---	---	---	---	---	---	43700	41300	41500	40100	39800	37900
19	---	---	---	---	---	---	43700	41100	42100	40200	39800	37800
20	---	---	---	---	---	---	43600	41200	42200	40500	39500	37400
21	---	---	---	---	---	---	43500	41500	42300	40900	39300	37700
22	---	---	---	---	---	---	43700	41400	42000	38900	39300	37600
23	---	---	---	---	---	---	43600	42700	41800	40300	39300	37900
24	---	---	---	---	---	---	44100	42700	41500	39900	39200	37800
25	---	---	---	---	---	---	44000	41900	41400	39900	38900	37800
26	---	---	---	---	---	---	44200	42600	41300	39700	39100	37700
27	---	---	---	---	---	---	43900	42400	41300	39700	38900	37600
28	---	---	---	---	---	---	43400	42100	41600	39700	38800	37500
29	---	---	---	---	---	---	43500	41900	---	---	38600	37100
30	---	---	---	---	---	---	43300	42000	---	---	38500	37000
31	---	---	---	---	---	---	43300	40700	---	---	38500	37300
MONTH	---	---	---	---	---	---	---	---	---	---	41400	37000

11162765 SAN FRANCISCO BAY AT SAN MATEO BRIDGE, NEAR FOSTER CITY, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	42100	38500	42800	40300	45900	43600	46400	44600	47900	45800
2	---	---	41900	38300	43300	40500	46200	43500	46500	44800	47800	45700
3	---	---	41900	38900	43100	40400	46200	43400	46400	44600	47800	45700
4	39800	37900	41800	39000	43100	40400	46000	44100	46300	44600	47700	46600
5	39700	37600	41900	39200	43100	40600	45900	43900	46700	44700	48300	45900
6	39700	38400	42300	39300	43300	40400	45500	43400	46700	45200	47900	45700
7	39900	37600	42000	39500	43400	41100	45300	44200	46300	44700	47700	46000
8	39700	38400	42100	39500	43600	41400	45500	44100	46500	45100	47700	45600
9	39500	38000	42700	39400	43300	40800	45300	43800	46900	45300	47500	45600
10	39700	37700	42000	40300	43300	40900	45400	43600	46800	45200	47900	45800
11	39900	37600	42300	40300	43200	41600	45300	43800	47000	45200	47700	45800
12	40000	38100	42300	40600	43200	41300	45200	43400	---	---	47400	45600
13	40100	38000	43000	40900	43400	41400	45300	43500	---	---	47500	45700
14	40400	38400	42400	40300	43800	41700	45200	44100	---	---	47600	45600
15	40800	38100	42200	39600	44100	41800	45100	43700	---	---	---	---
16	40700	37900	42800	39800	44100	42000	45400	43800	---	---	---	---
17	41400	38000	43500	40100	43900	41800	45600	43900	---	---	---	---
18	40900	38400	43800	40200	44100	41800	46100	44200	---	---	47700	45600
19	41200	38100	43500	40700	44200	42100	45800	44200	---	---	47900	45900
20	40800	38600	43700	40900	44500	42300	45900	44400	---	---	47800	45800
21	40600	38100	43500	41100	44700	42700	45900	44300	---	---	47900	45900
22	40700	37900	43500	40900	44800	43000	46100	44300	---	---	47900	46000
23	40700	38300	43200	41100	44800	43000	45900	44200	---	---	47700	45400
24	40900	37900	43200	40500	44900	43200	---	---	---	---	47700	45900
25	41200	39300	43300	41500	44900	43600	46100	44500	---	---	47900	45700
26	41400	39300	43400	41500	45400	43500	46400	44000	---	---	47500	45300
27	41400	39300	43100	41700	45500	43700	46300	44700	---	---	47800	45700
28	41100	39300	42900	41400	45300	43500	46500	44200	---	---	47600	45300
29	41600	39400	43400	40500	45600	43300	46200	44400	---	---	47400	45400
30	41800	38500	43000	40400	45400	43700	46400	45100	47800	45600	47700	45300
31	---	---	42900	40100	---	---	46300	44600	48000	45800	---	---
MONTH	---	---	43800	38300	45600	40300	---	---	---	---	---	---

11162765 SAN FRANCISCO BAY AT SAN MATEO BRIDGE, NEAR FOSTER CITY, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	45700	44400	45900	44100	45200	44100	44400	43600	43100	42200	41600	40900
2	45800	44700	45800	44200	45100	44000	44400	43400	43100	41700	41600	41000
3	45900	44700	45700	44400	45100	44100	44300	43700	43100	41600	41500	40700
4	45800	44600	45700	44600	45000	44300	44400	43500	42900	41400	41500	40400
5	45800	44500	45600	44200	45000	44100	44400	43300	42800	41200	40900	40100
6	45800	44600	45500	43900	45100	43800	44400	43200	42700	40800	40800	39900
7	---	---	45300	43700	45100	44100	44500	42800	42300	40500	40700	39600
8	---	---	45200	43700	45100	44000	44400	42500	42200	40900	40600	39200
9	---	---	45400	43300	45200	42900	44400	42800	42300	40800	40500	39200
10	---	---	45200	43100	45300	43600	44500	42900	42200	41200	40400	39100
11	---	---	45400	43000	45200	43400	44300	43300	42000	41300	40400	39500
12	---	---	45400	43100	45200	43400	44300	42700	41900	41100	40400	39500
13	---	---	---	---	45100	43600	44200	42500	41800	41000	40500	39300
14	---	---	---	---	45100	43600	43900	42500	41900	40900	40400	39400
15	---	---	---	---	45000	43500	43800	42500	41900	40500	40300	39300
16	---	---	45300	43700	45000	43600	43700	42700	42100	40700	40300	38800
17	---	---	45300	43800	44900	43800	43600	42400	42100	40800	40100	38800
18	---	---	45100	43800	44900	43800	43700	42200	42000	40800	39800	38900
19	---	---	45200	43900	44900	43900	43700	42000	42100	41100	39700	38700
20	---	---	45200	44000	44800	43800	43800	42100	42100	41100	39400	38700
21	---	---	45200	44100	44700	43100	43700	41900	42000	40900	39400	38700
22	---	---	45300	44000	44700	43400	43800	41900	42100	41000	39200	38600
23	---	---	45300	43800	44700	43300	43700	42200	42000	40900	39200	38500
24	---	---	45300	43800	44700	43300	43700	42100	42000	41000	39100	38500
25	---	---	45300	43800	44800	43300	43800	42100	41800	41100	39100	38300
26	---	---	45200	43800	44700	43300	43600	42200	41700	41000	38900	38300
27	---	---	45200	43800	44600	43300	43400	42200	41700	41000	38800	38000
28	46200	44400	45200	43900	44600	43100	43300	42100	41600	40900	38800	37800
29	46100	44300	45200	44100	44500	43500	43300	41800	---	---	38700	37800
30	46000	44300	45300	44200	44500	43600	43100	42200	---	---	38700	37800
31	45900	44000	---	---	44500	43400	43000	42300	---	---	38800	37700
MONTH	---	---	---	---	45300	42900	44500	41800	43100	40500	41600	37700
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	42100	38500	43100	41100	45800	43700	46500	44800	47600	46700
2	---	---	41800	38800	43700	41000	45700	43700	46400	45700	47600	46800
3	---	---	41100	39000	43900	40900	45800	44000	46400	45800	47700	46800
4	39200	37900	41400	39400	43700	41100	45900	43900	47000	45700	47700	46800
5	39500	37900	41600	39400	43900	41400	45900	43900	47000	45300	47500	46900
6	39600	38100	41800	39300	43800	41400	45700	43600	46700	45800	47600	46900
7	39800	37700	41800	39400	44000	41400	45400	43800	46600	45700	47600	47000
8	39500	37900	42000	39600	44000	41500	45400	44000	46600	45800	47700	47000
9	39700	38000	42100	39600	43900	41600	45100	43800	46700	45900	47700	46600
10	39600	37900	41600	39400	43800	41700	44800	43500	46900	45300	47700	46700
11	40000	37800	41800	39600	43800	41700	45400	43300	46800	46000	47700	46600
12	39900	38100	41700	39400	43900	42100	45200	43500	---	---	47800	46900
13	40300	38100	42400	39500	43800	42300	45200	43700	---	---	47800	46700
14	40500	38300	41500	39500	43800	42300	45100	43900	---	---	47900	47000
15	40400	38300	42000	39800	43900	42300	45400	44000	---	---	47900	47100
16	41000	38500	42200	39800	43900	42200	45400	44100	---	---	47900	47000
17	41400	38900	42700	40100	44400	42500	45800	44400	---	---	47900	46900
18	41100	38900	43400	40000	44700	42500	45900	44400	---	---	47800	46900
19	41200	38900	43000	40000	44500	42400	45900	45200	---	---	47900	47100
20	41200	39300	43300	40700	44400	42400	46200	44500	---	---	47800	47000
21	41200	39100	43200	40700	44500	42600	46200	45200	---	---	47800	47100
22	41000	38600	43300	40500	44700	42900	46200	45200	---	---	47700	47000
23	41000	38800	43200	40600	44800	43000	46200	45200	---	---	47800	46900
24	41100	38700	43000	40500	44600	43100	---	---	---	---	47800	46500
25	41200	38800	43000	40600	44800	43200	46400	45300	---	---	47800	46400
26	41400	38600	42900	40800	44800	43500	46300	44800	---	---	47700	46800
27	41100	38600	42900	40900	45400	43600	46300	44600	---	---	47700	46800
28	41200	38500	43000	40600	45300	44100	46300	45400	---	---	47700	46100
29	41500	38700	42900	40800	45700	44000	46300	45400	---	---	47600	46300
30	41500	38600	42900	40900	45500	43900	46400	45500	47600	46700	47700	46700
31	---	---	42900	41200	---	---	46500	45600	47700	46700	---	---
MONTH	---	---	43400	38500	45700	40900	---	---	---	---	47900	46100

11162765 SAN FRANCISCO BAY AT SAN MATEO BRIDGE, NEAR FOSTER CITY, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	16.0	15.5	13.0	12.5	11.5	11.0	10.0	10.0	12.0	11.5
2	---	---	16.5	15.5	13.0	12.5	11.5	11.0	10.5	10.0	12.0	11.5
3	---	---	16.5	15.5	13.0	12.5	---	---	11.0	10.0	12.0	11.5
4	20.5	20.0	16.0	15.5	12.5	12.5	11.5	11.0	11.0	10.5	12.0	11.5
5	20.0	20.0	16.0	16.0	13.0	12.5	11.5	11.0	11.0	10.5	12.0	11.5
6	20.0	19.5	16.0	15.5	12.5	12.5	11.5	11.0	11.0	11.0	12.5	11.5
7	20.0	19.0	16.0	15.5	12.5	12.5	11.5	11.0	11.0	10.5	12.5	12.0
8	---	---	15.5	15.0	12.5	12.5	11.5	11.0	10.5	10.5	13.0	12.0
9	---	---	15.5	14.5	12.5	12.5	11.5	11.0	10.5	10.5	13.0	12.0
10	---	---	14.5	14.5	12.5	12.5	11.0	11.0	10.5	10.0	13.5	12.5
11	---	---	14.5	14.0	12.5	12.5	11.0	10.0	10.5	10.0	13.5	12.5
12	---	---	14.0	14.0	12.5	12.5	11.0	10.5	10.5	10.0	13.5	12.5
13	---	---	---	---	12.5	12.0	11.0	10.5	10.5	10.0	14.0	13.0
14	---	---	---	---	12.5	12.0	11.0	10.5	10.0	10.0	14.0	13.0
15	---	---	---	---	12.5	12.0	10.5	10.5	10.5	10.0	14.0	13.5
16	---	---	13.5	13.0	12.5	12.0	10.5	10.0	10.5	10.0	14.0	13.5
17	---	---	13.5	13.0	12.5	12.5	10.5	10.0	10.5	10.5	14.0	13.5
18	---	---	13.5	13.0	12.5	12.0	10.0	10.0	11.0	10.5	14.5	13.5
19	---	---	13.0	13.0	12.0	12.0	10.5	10.0	11.0	10.5	15.5	13.5
20	---	---	13.0	12.5	12.0	12.0	10.0	10.0	11.0	10.5	16.0	14.0
21	---	---	13.0	12.5	12.0	12.0	10.0	10.0	11.0	10.5	16.0	14.5
22	---	---	13.0	12.5	12.0	12.0	10.0	10.0	11.0	10.5	16.5	15.0
23	---	---	13.0	13.0	12.0	12.0	10.0	10.0	11.0	10.5	16.5	15.0
24	---	---	13.0	12.5	12.0	12.0	10.0	10.0	11.0	10.5	16.5	15.0
25	---	---	13.0	12.5	12.0	11.5	10.0	10.0	11.0	10.5	16.5	15.0
26	---	---	13.0	12.5	12.0	11.5	10.0	10.0	11.5	11.0	16.5	15.5
27	---	---	13.0	12.5	12.0	11.5	10.5	9.5	11.5	11.0	16.5	15.5
28	16.5	16.0	13.0	12.5	11.5	11.5	10.0	10.0	11.5	11.0	16.5	15.5
29	16.0	16.0	13.0	12.5	11.5	11.5	10.0	10.0	---	---	16.5	15.5
30	16.0	15.5	13.0	12.5	11.5	11.5	10.0	10.0	---	---	16.5	16.0
31	16.0	15.5	---	---	11.5	11.5	10.5	10.0	---	---	---	---
MONTH	---	---	---	---	13.0	11.5	---	---	11.5	10.0	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	17.0	16.0	20.5	20.0	21.0	19.5	21.5	20.5	21.0	19.5
2	---	---	17.0	16.0	20.5	19.5	21.5	19.5	21.5	20.5	21.0	19.5
3	---	---	17.0	16.0	21.0	19.0	22.0	20.0	21.5	20.5	21.0	20.0
4	15.0	14.5	18.0	16.5	20.5	19.0	22.0	20.5	21.5	20.5	21.0	20.0
5	15.0	14.5	18.0	16.5	20.5	19.0	22.0	20.5	21.5	20.5	21.0	20.0
6	15.0	14.5	18.5	16.5	20.0	19.0	22.0	20.5	21.5	21.0	21.0	20.0
7	14.5	14.0	19.0	17.0	20.5	19.0	22.0	21.0	21.5	21.0	21.0	20.0
8	14.0	13.5	19.0	17.5	20.5	19.0	22.0	21.0	21.5	21.0	21.0	20.0
9	14.0	13.5	19.5	18.0	20.5	19.5	22.0	21.5	21.5	21.0	21.0	20.0
10	14.0	13.5	20.0	18.5	20.5	19.5	22.0	21.5	22.0	21.5	21.0	20.0
11	14.0	13.5	20.0	18.5	20.0	19.5	21.5	21.5	21.5	21.0	21.0	20.0
12	14.0	13.5	20.0	19.0	19.5	19.0	21.5	21.5	---	---	21.0	20.0
13	14.0	13.5	20.0	19.0	19.5	18.5	21.5	21.0	---	---	21.0	20.0
14	14.0	13.5	19.5	19.0	19.5	18.5	21.5	21.0	---	---	21.0	19.5
15	14.0	13.5	19.5	19.0	20.0	19.0	21.0	20.5	---	---	20.5	19.5
16	15.0	14.0	20.0	19.0	21.0	19.0	20.5	20.0	---	---	20.5	19.0
17	15.0	14.0	20.0	18.5	21.0	19.5	21.0	19.5	---	---	20.0	19.0
18	15.0	14.5	20.0	18.0	21.0	19.5	20.5	19.5	---	---	20.0	19.0
19	15.0	14.5	20.0	18.0	21.0	19.5	20.5	19.5	---	---	20.0	19.0
20	15.0	14.5	20.5	18.5	21.5	19.5	20.5	19.5	---	---	20.0	19.0
21	15.5	14.5	20.5	19.0	22.0	19.5	20.5	19.5	---	---	20.0	19.0
22	15.5	14.5	20.5	19.5	22.0	20.0	20.5	19.0	---	---	19.5	19.0
23	16.0	14.5	21.0	19.5	22.5	20.5	20.5	19.5	---	---	19.5	19.0
24	16.0	14.5	21.0	19.5	22.0	20.5	20.5	20.0	---	---	19.5	19.0
25	16.5	15.0	21.0	19.5	21.0	20.5	20.5	20.0	---	---	19.5	19.0
26	16.5	15.5	20.5	19.5	21.0	20.0	21.0	20.5	---	---	19.5	19.0
27	17.0	16.0	20.0	19.0	21.0	20.0	21.0	20.5	---	---	20.0	19.0
28	17.0	16.0	19.5	19.0	20.5	20.0	21.5	20.5	---	---	19.5	19.0
29	17.0	16.0	19.5	18.5	21.0	20.0	21.5	20.5	---	---	19.5	18.5
30	16.5	16.0	20.0	19.0	21.0	20.0	21.5	20.5	21.0	19.5	19.5	18.5
31	---	---	20.5	19.5	---	---	21.5	20.5	21.0	19.5	---	---
MONTH	---	---	21.0	16.0	22.5	18.5	22.0	19.0	---	---	21.0	18.5

11162765 SAN FRANCISCO BAY AT SAN MATEO BRIDGE, NEAR FOSTER CITY, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	20.0	16.0	15.5	13.0	12.5	11.5	11.5	10.0	10.0	11.5	11.5
2	20.5	20.0	16.0	15.5	13.0	12.5	11.5	11.5	10.5	10.0	12.0	11.5
3	---	---	16.0	15.5	12.5	12.5	---	---	10.5	10.0	12.0	11.5
4	20.5	20.0	16.0	16.0	12.5	12.5	11.5	11.0	11.0	10.5	12.0	11.5
5	20.0	19.5	16.0	16.0	12.5	12.5	11.5	11.0	11.0	10.5	12.0	11.5
6	20.0	19.5	16.0	15.5	12.5	12.5	11.5	11.0	11.5	11.0	12.0	12.0
7	20.0	19.0	15.5	15.5	12.5	12.5	11.5	11.0	11.0	10.5	12.5	12.0
8	---	---	15.5	15.0	12.5	12.5	11.5	11.0	10.5	10.0	13.0	12.0
9	---	---	15.5	14.5	12.5	12.5	11.5	11.0	10.5	10.5	13.0	12.0
10	---	---	14.5	14.5	12.5	12.5	11.5	11.0	10.5	10.5	13.0	12.5
11	---	---	14.5	14.0	12.5	12.5	11.0	10.5	10.5	10.5	13.5	12.5
12	---	---	14.5	14.0	12.5	12.5	11.0	10.5	10.5	10.0	13.5	12.5
13	---	---	---	---	12.5	12.5	11.0	10.5	10.0	10.0	13.5	13.0
14	---	---	---	---	12.5	12.0	11.0	10.5	10.0	10.0	13.5	13.0
15	---	---	---	---	12.5	12.5	11.0	10.5	10.5	10.0	14.0	13.5
16	---	---	13.5	13.0	12.5	12.5	10.5	10.0	10.5	10.0	14.0	13.5
17	---	---	13.5	13.0	12.5	12.5	10.5	10.0	10.5	10.5	14.0	13.5
18	---	---	13.5	13.0	12.5	12.0	10.5	10.0	10.5	10.5	14.0	14.0
19	---	---	13.0	13.0	12.0	12.0	10.5	10.0	11.0	10.5	14.5	14.0
20	---	---	13.0	13.0	12.0	12.0	10.5	10.0	11.0	10.5	15.0	14.5
21	---	---	13.0	13.0	12.0	12.0	10.5	10.0	11.0	10.5	15.5	14.5
22	---	---	13.0	13.0	12.0	12.0	10.5	10.0	11.0	10.5	16.0	15.0
23	---	---	13.0	13.0	12.0	12.0	10.5	10.0	11.0	11.0	16.0	15.0
24	---	---	13.0	13.0	12.0	12.0	10.5	10.0	11.0	10.5	16.5	15.0
25	---	---	13.0	13.0	12.0	12.0	10.0	10.0	11.0	11.0	16.5	15.0
26	---	---	13.0	12.5	12.0	11.5	10.0	10.0	11.0	11.0	16.5	15.5
27	---	---	13.0	12.5	12.0	11.5	10.0	10.0	11.5	11.0	16.5	15.5
28	16.5	16.0	13.0	12.5	12.0	11.5	10.0	10.0	11.5	11.0	16.5	15.5
29	16.0	16.0	13.0	12.5	11.5	11.5	10.0	10.0	---	---	16.5	15.5
30	16.0	16.0	13.0	12.5	11.5	11.5	10.0	10.0	---	---	16.5	15.5
31	16.0	16.0	---	---	11.5	11.5	10.0	10.0	---	---	17.0	16.0
MONTH	---	---	---	---	13.0	11.5	---	---	11.5	10.0	17.0	11.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	17.0	15.5	20.5	19.5	21.0	19.5	21.0	20.5	21.0	19.5
2	---	---	17.0	15.5	20.5	19.0	21.5	19.5	21.5	20.5	21.0	19.5
3	---	---	17.0	16.0	21.0	18.5	21.5	19.5	21.5	20.5	21.0	20.0
4	15.0	14.5	17.0	16.5	20.5	19.0	22.0	20.0	21.5	20.5	21.0	20.0
5	15.0	14.5	18.0	16.5	20.5	18.5	22.0	20.0	21.5	20.5	21.0	20.0
6	15.0	14.5	18.0	16.5	20.0	18.5	22.0	20.5	21.5	20.5	20.5	20.0
7	14.5	14.0	18.5	17.0	20.5	18.5	22.0	21.0	21.5	20.5	21.0	20.0
8	14.0	13.5	19.0	17.5	20.5	19.0	22.0	21.0	21.5	21.0	21.0	20.0
9	14.0	13.5	19.0	17.5	20.5	19.0	22.0	21.0	21.5	21.0	21.0	20.0
10	14.0	13.5	19.5	18.5	20.5	19.5	22.0	21.5	21.5	21.5	20.5	20.0
11	14.0	13.5	20.0	18.5	20.0	19.0	21.5	21.0	21.5	21.0	20.5	20.0
12	14.0	13.5	20.0	19.0	19.5	18.5	21.5	21.0	---	---	21.0	20.0
13	14.0	13.5	20.0	19.0	19.5	18.5	21.5	21.0	---	---	21.0	20.0
14	14.0	13.5	19.5	19.0	19.5	18.5	21.5	21.0	---	---	21.5	19.5
15	14.5	13.5	19.5	18.5	19.5	19.0	21.0	20.0	---	---	20.5	19.5
16	14.5	14.0	19.5	18.5	20.0	19.0	20.5	19.5	---	---	20.5	19.0
17	14.5	14.0	19.5	18.0	20.0	19.5	20.5	19.5	---	---	20.0	19.0
18	15.0	14.5	19.5	17.5	20.5	19.5	20.5	19.5	---	---	20.0	19.0
19	15.5	14.5	19.5	18.0	21.0	19.5	20.5	19.5	---	---	20.0	19.0
20	15.0	14.5	19.5	18.5	21.5	20.0	20.5	19.5	---	---	20.0	19.0
21	15.0	14.5	20.0	19.0	22.0	20.0	20.5	19.5	---	---	20.0	19.0
22	15.5	14.5	20.5	19.5	22.0	20.0	20.5	19.0	---	---	19.5	19.0
23	15.5	14.5	21.0	19.5	22.5	20.5	20.5	19.5	---	---	19.5	19.0
24	16.0	14.5	21.0	19.5	22.0	20.5	20.5	20.0	---	---	19.5	19.0
25	16.5	15.0	21.0	19.0	21.5	20.0	20.5	20.0	---	---	19.5	19.0
26	16.5	15.5	20.5	19.0	21.0	20.0	21.0	20.5	---	---	19.5	19.0
27	16.5	16.0	20.0	19.0	21.0	19.5	21.0	20.5	---	---	20.0	19.0
28	17.0	16.0	19.5	19.0	20.5	19.5	21.0	20.5	---	---	19.5	18.5
29	16.5	15.5	19.5	18.5	20.5	20.0	21.5	20.5	---	---	19.5	18.5
30	16.5	16.0	19.5	18.5	21.0	20.0	21.5	20.5	21.0	19.5	19.0	18.5
31	---	---	20.0	19.0	---	---	21.0	20.5	21.0	19.5	---	---
MONTH	---	---	21.0	15.5	22.5	18.5	22.0	19.0	---	---	21.5	18.5

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 mi².

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 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 22	2400	621	3.62

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	2.2	1.9	2.4	5.7	20	5.9	3.7	.05	.33	.23	.66
2	.39	1.8	1.6	2.3	5.6	19	5.7	4.0	.07	.31	.20	.67
3	.34	1.7	1.5	2.2	5.2	17	5.6	3.2	.15	.29	.21	.65
4	.36	1.5	1.5	2.2	4.7	137	5.4	2.9	.22	.27	.23	.67
5	.37	1.4	1.5	2.1	4.4	191	5.3	2.8	.05	.30	.23	.70
6	.42	1.4	1.8	2.1	4.1	81	7.9	3.1	.01	.29	.23	.75
7	.45	1.3	2.1	2.1	3.8	46	22	2.4	.01	.32	.23	.83
8	.42	1.3	2.0	8.6	3.5	34	11	2.2	.28	.36	.23	.66
9	.47	1.4	2.0	5.1	22	32	9.4	1.9	.61	.37	.23	.65
10	1.2	1.3	2.1	53	105	27	7.6	1.9	.63	.37	.23	.65
11	.92	1.3	2.1	101	234	23	6.5	1.9	.63	.36	.23	.59
12	.78	1.3	2.8	43	138	20	5.8	1.7	.63	.31	.23	.60
13	.65	1.3	3.8	13	58	16	5.2	1.8	.61	.33	.23	.62
14	.58	1.4	5.4	8.6	27	14	4.8	1.4	.58	.33	.23	.66
15	.57	1.4	8.7	6.7	18	13	5.1	1.4	.55	.31	.23	.66
16	.65	3.5	7.1	5.6	15	12	4.9	1.5	.58	.33	.23	.70
17	.51	1.8	5.2	4.9	19	11	4.2	1.7	.46	.32	.23	.60
18	.51	1.3	4.2	4.3	49	10	4.3	1.4	.39	.28	.23	.51
19	.44	1.3	3.6	3.8	115	11	4.1	1.1	.33	.28	.23	.51
20	.41	1.3	3.2	3.6	82	11	17	1.1	.29	.28	.25	.58
21	.47	1.4	3.1	3.6	53	8.4	24	.91	.28	.28	.28	.51
22	.42	1.4	2.9	3.4	165	7.0	10	.81	.30	.24	.28	.51
23	.42	1.4	2.9	4.9	342	6.8	7.3	.59	.32	.23	.28	.51
24	.45	1.4	2.8	10	194	7.0	5.9	.56	.28	.23	.32	.51
25	.52	1.4	2.6	81	102	17	5.1	.47	.31	.23	.41	1.0
26	33	1.4	2.6	69	50	10	4.6	.54	.49	.23	.34	1.3
27	11	1.4	2.4	20	33	7.9	3.5	.53	.51	.23	.33	1.5
28	14	1.4	2.4	11	26	7.2	2.7	.45	.53	.25	.33	1.4
29	11	6.4	2.4	8.1	---	6.7	2.7	.30	.50	.23	.40	1.3
30	5.0	3.1	2.4	6.3	---	6.4	3.0	.22	.46	.21	.45	1.1
31	2.9	---	2.4	5.8	---	5.9	---	.10	---	.23	.55	---
TOTAL	89.98	51.9	93.0	499.7	1884.0	835.3	216.5	48.58	11.11	8.93	8.54	22.56
MEAN	2.90	1.73	3.00	16.1	67.3	26.9	7.22	1.57	.37	.29	.28	.75
MAX	33	6.4	8.7	101	342	191	24	4.0	.63	.37	.55	1.5
MIN	.34	1.3	1.5	2.1	3.5	5.9	2.7	.10	.01	.21	.20	.51
AC-FT	178	103	184	991	3740	1660	429	96	22	18	17	45

11164500 SAN FRANCISQUITO CREEK AT STANFORD UNIVERSITY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.95	5.88	23.8	62.9	80.9	53.3	25.2	3.78	1.16	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1931 - 2001	
ANNUAL TOTAL	10290.30		3770.10			
ANNUAL MEAN	28.1		10.3		21.3	
HIGHEST ANNUAL MEAN					83.4	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	1340	Feb 14	342	Feb 23	2650	Dec 23 1955
LOWEST DAILY MEAN	.26	Sep 20	.01	Jun 6	.00	Oct 1 1930
ANNUAL SEVEN-DAY MINIMUM	.33	Sep 7	.08	Jun 1	.00	Oct 1 1930
MAXIMUM PEAK FLOW			621	Feb 22	7200	Feb 3 1998
MAXIMUM PEAK STAGE			3.62	Feb 22	13.60	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	20410		7480		15420	
10 PERCENT EXCEEDS	51		19		36	
50 PERCENT EXCEEDS	2.4		1.4		.47	
90 PERCENT EXCEEDS	.43		.24		.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 mi².

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 good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,560 ft³/s, Feb. 2, 1998, gage height, 10.00 ft, from rating curve extended above 300 ft³/s, on basis of step-backwater computation; no flow at times.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 26	1800	293	4.65	Jan. 25	1600	269	4.56
Jan. 10	1330	302	4.68				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.60	.72	.76	1.1	2.3	1.4	.88	.43	.31	.29	.37
2	.36	.57	.74	.80	1.0	4.9	1.3	.80	.39	.30	.30	.36
3	.19	.55	.74	.68	.99	4.2	1.2	.70	.33	.31	.31	.36
4	.20	.54	.74	.67	.95	47	1.2	.85	.29	.30	.30	.33
5	.22	.88	.71	.71	e.91	35	1.1	.84	.30	.33	.28	.35
6	.19	.62	.70	.74	e.90	16	4.1	.81	.31	.31	.25	.31
7	.20	.62	.73	.69	e.89	7.6	7.4	.70	.40	.31	.25	.35
8	.16	e.37	.72	8.7	e.88	4.4	1.4	.58	.37	.42	.35	.36
9	.74	e.59	.67	.91	e6.7	3.4	9.2	.53	.35	.31	.38	.34
10	2.0	2.3	.66	39	e18	2.8	1.3	.55	.30	.34	.32	.31
11	.49	.62	.91	40	e25	2.4	1.3	.56	.33	.28	.33	.25
12	.61	.63	1.4	6.4	e28	2.3	1.1	.63	.14	.27	.32	.30
13	.95	.68	.69	2.3	e7.2	2.1	1.1	.53	.14	.31	.44	.33
14	2.1	.75	2.0	1.8	e3.0	2.0	1.1	.54	.22	.33	.30	.36
15	2.1	.83	.91	1.6	e2.0	2.2	1.1	.50	.32	.33	.34	.35
16	1.8	6.6	.69	1.4	e1.7	1.9	1.1	.57	.27	.29	.36	.36
17	1.4	.55	.68	1.3	e12	1.8	.99	.67	.23	.33	.29	.34
18	1.4	.61	.69	1.3	e11	2.1	1.0	.54	.28	.31	.35	.31
19	1.4	.60	.64	1.3	e41	1.7	1.1	.56	.31	.39	.38	.34
20	1.3	.62	.70	1.3	e32	1.7	11	.44	.30	.30	.41	.38
21	1.3	1.6	.72	1.2	e14	1.7	2.5	.48	.31	.34	.49	.32
22	1.2	.78	.70	1.2	e41	1.6	1.2	.54	.29	.29	.41	.38
23	3.9	.65	.70	4.3	e50	1.6	1.1	.64	.29	.63	.47	.38
24	6.8	.66	.71	5.5	e26	2.2	.96	.49	.31	.74	.38	.54
25	5.4	.65	.70	38	e10	1.8	.96	.50	2.2	.46	.35	.51
26	60	.63	.69	12	e5.1	1.4	.86	.57	.59	.46	.36	.30
27	3.4	.63	.70	2.9	3.5	1.4	.85	.47	.45	.45	.34	.32
28	8.4	.70	.70	1.6	2.7	1.4	.79	.68	.43	.33	.36	.28
29	1.8	7.0	.72	1.6	---	1.4	.76	.38	.39	.29	.35	.32
30	1.8	.87	.71	1.2	---	1.4	.88	.43	.34	.28	1.4	.34
31	.72	---	.69	1.1	---	1.4	---	.44	---	.30	1.3	---
TOTAL	112.89	34.30	24.18	182.96	347.52	165.1	61.35	18.40	11.61	10.95	12.76	10.45
MEAN	3.64	1.14	.78	5.90	12.4	5.33	2.04	.59	.39	.35	.41	.35
MAX	60	7.0	2.0	40	50	47	11	.88	2.2	.74	1.4	.54
MIN	.16	.37	.64	.67	.88	1.4	.76	.38	.14	.27	.25	.25
AC-FT	224	68	48	363	689	327	122	36	23	22	25	21

e Estimated.

11166000 MATADERO CREEK AT PALO ALTO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.49	1.65	3.42	8.63	9.45	5.56	2.20	.65	.32	.20	.17	.17
MAX	3.64	9.82	24.3	32.3	77.7	37.8	25.2	4.54	2.86	1.42	.70	.66
(WY)	2001	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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001	
ANNUAL TOTAL	1917.07		992.47			
ANNUAL MEAN	5.24		2.72		2.74	
HIGHEST ANNUAL MEAN					10.9	
LOWEST ANNUAL MEAN					.062	
HIGHEST DAILY MEAN	179	Feb 13	60	Oct 26	437	Feb 3 1998
LOWEST DAILY MEAN	.14	Sep 25	.14	Jun 12	.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	.22	Oct 2	.22	Oct 2	.00	Oct 1 1952
MAXIMUM PEAK FLOW			302	Jan 10	2560	Feb 2 1998
MAXIMUM PEAK STAGE			4.68	Jan 10	10.00	Feb 2 1998
ANNUAL RUNOFF (AC-FT)	3800		1970		1990	
10 PERCENT EXCEEDS	11		4.6		3.5	
50 PERCENT EXCEEDS	.88		.69		.17	
90 PERCENT EXCEEDS	.30		.30		.00	

11169000 GUADALUPE RIVER AT SAN JOSE, CA

LOCATION.—Lat 37°20'04", long 121°53'54", 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 mi².

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 Elsmar (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 ft³/s, Mar. 10, 1995, gage height, 17.4 ft, from rating curve extended above 2,500 ft³/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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	32	15	19	18	32	19	16	7.1	5.8	5.1	4.0
2	12	36	13	21	16	63	19	15	12	5.6	4.9	4.6
3	12	19	17	18	16	31	17	16	11	5.5	4.9	4.2
4	12	18	14	15	17	592	16	14	9.8	5.2	5.1	4.3
5	13	14	16	14	17	653	16	13	8.1	4.9	5.1	4.2
6	13	13	24	12	26	181	43	12	7.2	4.9	5.0	4.1
7	13	11	18	13	17	94	62	13	6.7	4.5	4.8	5.8
8	13	18	16	135	15	65	35	17	6.6	4.6	4.9	6.0
9	13	15	12	24	194	50	92	18	6.2	4.7	5.0	6.3
10	74	17	14	666	311	38	21	14	6.0	5.0	5.1	6.5
11	44	13	16	580	404	32	21	14	6.1	5.0	4.9	5.7
12	26	14	29	162	500	31	19	14	12	5.4	4.8	5.9
13	17	16	19	40	93	31	16	10	6.6	7.5	5.1	5.4
14	16	17	18	28	41	26	15	12	6.1	9.8	5.0	5.6
15	15	16	23	24	32	24	14	11	5.6	8.9	5.0	5.5
16	15	16	19	21	26	25	16	11	5.7	7.4	5.1	4.5
17	14	15	14	17	21	23	16	9.3	8.4	6.4	5.0	4.5
18	16	15	14	16	23	23	14	8.6	7.5	5.7	5.0	7.9
19	14	14	10	15	356	27	35	8.7	11	6.0	4.9	7.6
20	16	15	11	16	413	34	233	8.1	9.6	5.7	5.0	6.8
21	17	25	11	14	128	34	79	7.8	8.4	5.6	5.3	5.7
22	16	21	15	15	183	28	25	7.4	5.7	5.3	5.7	4.3
23	15	22	16	108	191	23	21	8.3	5.6	5.0	5.9	4.5
24	14	19	18	148	167	26	19	7.6	5.7	4.8	5.3	7.8
25	18	18	19	285	205	40	21	7.4	8.4	4.9	4.5	13
26	117	17	20	179	67	25	20	6.7	14	5.4	4.4	6.0
27	35	16	23	41	45	22	19	6.7	7.9	4.7	4.3	8.3
28	84	18	21	27	38	20	17	6.4	6.5	4.4	4.2	13
29	111	62	21	25	---	19	16	10	5.4	4.4	4.3	4.1
30	83	26	19	21	---	19	16	9.2	5.0	4.6	3.9	4.5
31	36	---	18	20	---	19	---	7.2	---	4.7	3.9	---
TOTAL	927	588	533	2739	3580	2350	992	339.4	231.9	172.3	151.4	180.6
MEAN	29.9	19.6	17.2	88.4	128	75.8	33.1	10.9	7.73	5.56	4.88	6.02
MAX	117	62	29	666	500	653	233	18	14	9.8	5.9	13
MIN	12	11	10	12	15	19	14	6.4	5.0	4.4	3.9	4.0
AC-FT	1840	1170	1060	5430	7100	4660	1970	673	460	342	300	358

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

MEAN	6.81	16.0	39.5	104	164	137	65.4	11.8	4.49	3.66	3.39	3.55
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1930 - 2001

ANNUAL TOTAL	26845	12784.6										
ANNUAL MEAN	73.3	35.0								46.0		
HIGHEST ANNUAL MEAN										270		1983
LOWEST ANNUAL MEAN										.000		1931
HIGHEST DAILY MEAN	1420	Jan 24				666	Jan 10		7870	Mar 10	1995	
LOWEST DAILY MEAN	10	Dec 19				3.9	Aug 30		.00	Oct 1	1929	
ANNUAL SEVEN-DAY MINIMUM	12	Jun 27				4.1	Aug 26		.00	Oct 1	1929	
MAXIMUM PEAK FLOW						1840	Mar 4		11000	Mar 10	1995	
MAXIMUM PEAK STAGE						4.53	Mar 4		17.40	Mar 10	1995	
ANNUAL RUNOFF (AC-FT)	53250	25360							33300			
10 PERCENT EXCEEDS	197	62							57			
50 PERCENT EXCEEDS	17	15							.78			
90 PERCENT EXCEEDS	13	4.9							.00			

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 mi².

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 ft³/s, Dec. 22, 1955, from rating curve extended above 510 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	1600	122	3.54	Mar. 4	1900	162	3.75
Feb. 20	0715	151	3.69				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.87	2.3	2.1	1.6	.84	11	1.2	.92	.75	.98	.83	.59
2	.99	2.0	2.1	1.6	1.0	12	1.1	.76	.80	.90	.77	.54
3	1.1	1.8	1.8	1.6	.96	10	1.3	.75	.82	.82	.68	.37
4	1.2	1.8	1.8	1.5	.92	67	1.3	1.2	.73	.78	.65	.74
5	1.2	1.8	1.8	1.5	1.0	92	1.1	.91	.59	.86	.61	.54
6	1.2	1.8	1.7	1.5	1.1	61	1.8	.82	.52	.86	.58	.50
7	1.2	1.7	1.7	1.5	1.1	37	3.6	1.1	.47	.78	.54	.47
8	1.2	1.7	1.8	2.6	1.1	33	2.5	.78	.64	.76	.49	.47
9	1.3	1.7	1.8	1.8	8.5	27	2.8	1.2	1.5	.80	.49	.46
10	2.5	2.0	1.9	21	19	23	1.7	1.6	1.5	.79	.54	.51
11	2.3	2.0	1.9	37	52	17	1.7	.89	1.2	.80	.60	.56
12	2.2	1.8	2.1	12	37	15	1.1	.63	1.5	.82	.63	.59
13	2.1	1.9	2.0	3.6	18	12	1.2	.61	1.5	.80	.66	.57
14	2.1	2.0	2.7	1.3	8.7	8.0	.91	.72	1.4	.79	.62	.59
15	2.1	2.0	2.7	2.5	5.8	5.8	2.1	.71	1.3	.77	.56	.64
16	2.1	2.0	2.3	2.1	3.4	5.8	.85	.68	1.3	.79	.52	.69
17	2.0	1.9	2.1	1.5	4.2	4.6	1.3	.88	1.2	.80	.49	.72
18	1.7	1.8	1.9	.82	3.8	3.1	1.2	.67	1.1	.80	.48	.71
19	1.7	1.8	1.9	.85	35	2.6	1.2	.75	1.1	.82	.49	.67
20	1.7	1.8	1.8	.96	104	2.6	11	.77	1.1	.85	.54	.62
21	1.7	1.8	1.8	.92	45	2.2	4.8	.68	1.0	.84	.54	.63
22	1.6	1.9	1.8	.93	43	2.0	3.7	.83	1.0	.81	.59	.54
23	1.6	1.8	1.8	4.4	53	1.9	2.3	.60	1.0	.78	.59	.52
24	1.4	1.9	1.8	3.3	55	2.4	1.4	.53	.98	.78	.59	.59
25	2.5	1.9	1.8	17	45	4.8	1.4	.61	1.0	.77	.59	.64
26	9.3	1.9	1.7	7.1	29	3.6	.97	1.3	1.2	.75	.61	.59
27	4.0	1.9	1.7	4.5	21	2.1	.78	.61	1.1	.75	.57	.51
28	6.7	1.9	1.7	2.0	16	1.2	.74	.42	1.2	.73	.52	.53
29	5.0	4.0	1.6	1.3	---	1.2	.75	.71	1.1	.71	.54	.56
30	3.8	2.4	1.6	.93	---	1.0	.81	1.1	1.0	.80	.57	e.56
31	2.9	---	1.6	.88	---	1.2	---	.69	---	.89	.63	---
TOTAL	73.26	59.0	58.8	142.09	614.42	473.1	58.61	25.43	31.60	24.98	18.11	17.22
MEAN	2.36	1.97	1.90	4.58	21.9	15.3	1.95	.82	1.05	.81	.58	.57
MAX	9.3	4.0	2.7	37	104	92	11	1.6	1.5	.98	.83	.74
MIN	.87	1.7	1.6	.82	.84	1.0	.74	.42	.47	.71	.48	.37
AC-FT	145	117	117	282	1220	938	116	50	63	50	36	34

e Estimated.

GUADALUPE RIVER BASIN

11169500 SARATOGA CREEK AT SARATOGA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.93	2.73	8.98	22.6	31.3	23.2	13.3	3.83	1.36	.59	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1934 - 2001	
ANNUAL TOTAL	3369.28		1596.62			
ANNUAL MEAN	9.21		4.37		9.02	
HIGHEST ANNUAL MEAN					32.5	
LOWEST ANNUAL MEAN					.54	
HIGHEST DAILY MEAN	228	Feb 14	104	Feb 20	1260	Feb 27 1940
LOWEST DAILY MEAN	.52	Jun 26	.37	Sep 3	.00	Oct 1 1933
ANNUAL SEVEN-DAY MINIMUM	.87	Sep 16	.50	Sep 5	.00	Oct 1 1933
MAXIMUM PEAK FLOW			162	Mar 4	2730	Dec 22 1955
MAXIMUM PEAK STAGE			3.75	Mar 4	7.80	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	6680		3170		6530	
10 PERCENT EXCEEDS	25		7.5		20	
50 PERCENT EXCEEDS	1.7		1.2		.92	
90 PERCENT EXCEEDS	1.0		.59		.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 mi².

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 ft³/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 ft³/s, Jan. 24, 2000, gage height, 13.10 ft, from rating curve extended above 330 ft³/s, on basis of step-backwater computations; minimum daily, 12 ft³/s, Aug. 24, 27, 1999, and several days in January 2000.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	e52	e23	18	20	43	16	23	18	17	18	19
2	18	e62	23	17	20	106	16	23	20	16	18	21
3	18	e22	22	16	20	58	16	21	20	16	15	19
4	18	e20	22	16	20	254	14	21	21	17	14	16
5	18	e18	22	14	19	602	17	20	19	17	16	23
6	19	e18	22	16	23	136	35	20	19	18	18	20
7	18	e17	22	16	19	71	86	19	20	21	15	20
8	20	e24	22	127	17	58	42	17	18	20	16	22
9	18	e22	21	41	119	48	66	20	18	18	17	20
10	122	e25	21	321	308	42	26	18	21	16	17	15
11	73	e20	24	363	281	36	32	18	20	17	20	19
12	48	e22	63	133	424	35	24	19	20	19	18	21
13	20	e24	27	51	97	30	19	19	18	16	19	19
14	19	e25	27	38	63	29	19	18	17	19	17	19
15	18	e24	27	31	47	28	20	18	19	16	19	22
16	17	20	20	26	35	26	18	21	16	18	19	21
17	16	19	19	22	33	26	18	21	17	16	17	21
18	e22	18	19	19	34	24	19	24	15	18	17	23
19	e17	17	19	19	247	23	25	22	20	17	20	20
20	e22	18	20	19	198	21	103	19	17	18	17	18
21	e23	32	20	22	79	24	75	17	17	20	17	17
22	e22	29	21	19	152	25	32	18	16	21	20	18
23	e20	17	19	73	177	25	29	17	17	18	18	18
24	e22	e16	18	198	169	30	28	15	16	20	14	22
25	e43	e15	18	170	165	56	27	17	20	22	15	28
26	e180	e14	18	191	80	25	25	17	33	19	15	22
27	e70	e15	18	43	68	22	24	16	21	21	16	19
28	e100	e30	19	36	52	21	23	17	19	22	17	21
29	e140	e80	19	35	---	20	22	17	19	18	17	25
30	e100	e43	19	27	---	19	23	18	21	14	18	24
31	e56	---	19	21	---	17	---	17	---	14	19	---
TOTAL	1334	778	693	2158	2986	1980	939	587	572	559	533	612
MEAN	43.0	25.9	22.4	69.6	107	63.9	31.3	18.9	19.1	18.0	17.2	20.4
MAX	180	80	63	363	424	602	103	24	33	22	20	28
MIN	16	14	18	14	17	17	14	15	15	14	14	15
AC-FT	2650	1540	1370	4280	5920	3930	1860	1160	1130	1110	1060	1210

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

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	29.8	26.3	20.0	83.3	144	109	40.7	19.9	19.1	17.1	16.3	18.2
MAX	43.0	26.7	22.4	112	207	205	59.4	22.3	21.3	18.0	17.2	20.4
(WY)	2001	2000	2001	2000	2000	2000	1999	2000	2000	2001	2001	2001
MIN	16.6	25.9	17.7	68.4	107	57.0	31.3	18.5	16.9	16.2	15.7	15.9
(WY)	2000	2001	2000	1999	2001	1999	2001	1999	1999	1999	2000	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	22483		13731			
ANNUAL MEAN	61.4		37.6		48.3	
HIGHEST ANNUAL MEAN					58.9	
LOWEST ANNUAL MEAN					37.6	
HIGHEST DAILY MEAN	1240	Feb 23	602	Mar 5	1240	Feb 23 2000
LOWEST DAILY MEAN	12	Jan 3	14	Nov 26	12	Aug 24 1999
ANNUAL SEVEN-DAY MINIMUM	13	Jan 2	16	Jul 30	13	Jan 2 2000
MAXIMUM PEAK FLOW			1250		2550	
MAXIMUM PEAK STAGE			9.84		13.10	
ANNUAL RUNOFF (AC-FT)	44600		27240		34960	
10 PERCENT EXCEEDS	103		70		84	
50 PERCENT EXCEEDS	21		20		19	
90 PERCENT EXCEEDS	16		16		15	

e Estimated.

11172300 AGUA FRIA CREEK AT WARM SPRINGS ROAD, AT FREMONT, CA

LOCATION.—Lat 37°29'19", long 121°55'42", Alameda County, Hydrologic Unit 18050004, in Aqua Caliente Grant, on downstream side of culvert at Warm Springs Road, at Fremont.

DRAINAGE AREA.—1.79 mi².

PERIOD OF RECORD.—October 1999 to current year (storm season only).

SEDIMENT DATA: October 1999 to current year (storm season only).

EXTREMES FOR PERIOD OF RECORD.—

SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 124 mg/L, Mar. 9, 2000; minimum sampled, 12 mg/L, Mar. 20, 2001.

SEDIMENT LOAD (storm season only): Maximum sampled, 2.3 tons, Mar. 9, 2000; minimum sampled, 0.01 ton, Mar. 20, 2001.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 57 mg/L, Mar. 6; minimum sampled, 12 mg/L, Mar. 20.

SEDIMENT LOAD (storm season only): Maximum sampled, e0.04 ton, Oct. 6; minimum sampled, 0.01 ton, Mar. 20.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. THAN .062 MM (70331)
OCT						
06...	0830	e.64	16.5	22	e.04	--
JAN						
26...	1000	.36	9.0		--	--
MAR						
06...	1305	e.20	13.5	57	e.03	65
20...	1525	.30	15.5	12	.01	--

e Estimated.

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 mi².

PERIOD OF RECORD.—October 1999 to current year (storm season only).

SEDIMENT DATA: October 1999 to current year (storm season only).

EXTREMES FOR PERIOD OF RECORD.—

SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 8,130 mg/L, Mar. 9, 2000; minimum sampled, 2 mg/L, Mar. 28, 2001.

SEDIMENT LOAD (storm season only): Maximum sampled, 48 tons, Mar. 9, 2000; minimum sampled, <0.01 ton, Mar. 28, May 1, 2001.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 131 mg/L, Oct. 6; minimum sampled, 2 mg/L, Mar. 28.

SEDIMENT LOAD (storm season only): Maximum sampled, e0.01 ton, Oct. 6, Mar 6; minimum sampled, <0.01 ton, Mar. 28 and May 1.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
06...	0715	e.03	15.0	131	e.01	--
MAR						
06...	1200	e.28	14.0	17	e.01	87
28...	1455	e.30	26.5	2	<.01	--
MAY						
01...	1350	.07	28.5	3	<.01	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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										
06...	1210	1	e.28	14.0	1	1	4	14		
MAY										
01...	1325	1	.07	28.5	1	4	7	11		
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)
MAR										
06...		32	54	72	83	94	100			
MAY										
01...		16	22	30	39	63	100			

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

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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1999 to current year.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 79 ft³/s, Feb. 29, 2000, gage height, 44.82 ft, from rating extension above 44.40 ft at site 10 ft downstream, maximum gage height, 45.02 ft, Jan. 10, 2001; minimum daily, 0.02 ft³/s, Aug. 19–21, Oct. 5, 6, 2000.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 75 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	1945	50	45.02

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.05	.09	.23	.05	.11	e4.7	.04	.18	.25	.15	.06	.05
2	e.04	.10	.23	.05	.10	e.57	.06	.25	.27	.20	.05	.06
3	e.04	.08	.23	.04	.14	e9.8	.08	.38	.23	.09	.05	.06
4	e.03	.08	.22	.05	.18	e17	.16	.95	.23	.08	.04	.09
5	e.02	.08	.13	.06	.17	e5.7	.19	1.6	.30	.05	.04	.06
6	e.02	.09	.14	.16	.15	e2.0	e6.1	2.4	.26	.04	.04	.08
7	e.04	.08	.17	.88	.13	e1.0	e1.4	3.7	.12	.04	.04	.08
8	e.03	.09	.74	3.1	e7.7	e.12	e9.6	4.7	.09	.04	.06	.07
9	e.05	.12	.48	.88	e9.7	e.11	e11	2.1	.12	.04	.03	.07
10	e.09	.32	.23	10	e11	e.10	e1.7	2.3	.16	.04	.04	.06
11	e.05	.12	3.4	e2.1	e14	e.09	e.17	3.5	.12	.04	.03	.07
12	.46	.12	1.5	3.5	e1.2	e.09	e.32	5.8	.13	.04	.03	.09
13	.53	.89	2.7	.91	e.50	e.07	e.30	5.9	.24	.06	.03	.11
14	.67	.17	8.0	1.2	e.30	e.09	e.29	1.5	.17	.05	.03	.10
15	.75	.15	.41	.06	e.07	e.11	e.28	.67	.13	.06	.04	.05
16	.71	.17	.06	1.6	e.04	e.12	e.27	.14	.11	.05	.04	.08
17	.85	.13	.05	1.2	e4.3	e.10	e.26	.12	.07	.05	.04	.08
18	1.0	.12	.04	1.1	e9.6	e.09	e.25	.11	.08	.04	.03	.03
19	.65	.13	.04	.56	e12	e.07	e.23	.10	.08	.05	.03	.04
20	.38	.15	.06	.34	e2.7	.12	e.20	.09	.06	.06	.04	.04
21	.23	.44	.04	.35	e5.8	.08	e.18	.09	.69	.08	.06	.05
22	.12	7.2	.05	8.3	e8.3	.06	e1.6	.12	.07	.08	.17	.08
23	.43	16	.05	e6.5	e7.3	.07	e6.1	.16	.04	.07	.09	.09
24	.13	.31	.04	12	e4.3	e3.2	e1.7	.15	.07	.06	.08	.18
25	1.1	.25	.05	6.3	e1.9	e.23	.26	.21	.30	.08	.11	.13
26	6.7	.25	.04	.64	e1.1	e.18	.19	.25	.06	.08	.11	.48
27	.63	.67	.05	.06	e.04	e.12	.18	.19	.06	.07	.12	.40
28	3.3	.23	.05	.08	e.04	e.14	.13	.19	.07	.06	.09	.34
29	11	1.7	.05	.12	---	.16	.16	.24	.06	.07	.08	.16
30	4.7	.25	.05	.04	---	.03	.16	.16	.08	.05	.12	.05
31	.20	---	.04	.07	---	.03	---	.16	---	.07	.13	---
TOTAL	35.00	30.58	19.57	62.30	102.87	46.35	43.56	38.41	4.72	2.04	1.95	3.33
MEAN	1.13	1.02	.63	2.01	3.67	1.50	1.45	1.24	.16	.066	.063	.11
MAX	11	16	8.0	12	14	17	11	5.9	.69	.20	.17	.48
MIN	.02	.08	.04	.04	.04	.03	.04	.09	.04	.04	.03	.03
AC-FT	69	61	39	124	204	92	86	76	9.4	4.0	3.9	6.6

e Estimated.

11172365 ZONE 6 LINE B AT WARD SPRINGS BOULEVARD, AT FREMONT, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.66	.89	.44	3.00	5.66	2.00	.95	1.04	.14	.068	.052	.19
MAX	1.13	1.02	.63	4.00	7.57	2.50	1.45	1.24	.16	.070	.063	.27
(WY)	2001	2001	2001	2000	2000	2000	2001	2001	2001	2000	2001	2000
MIN	.18	.76	.24	2.01	3.67	1.50	.46	.83	.13	.066	.042	.11
(WY)	2000	2000	2000	2001	2001	2001	2000	2000	2000	2001	2000	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 2000 - 2001	
ANNUAL TOTAL	561.38		390.68			
ANNUAL MEAN	1.53		1.07		1.24	
HIGHEST ANNUAL MEAN					1.40	
LOWEST ANNUAL MEAN					1.07	
HIGHEST DAILY MEAN	42	Jan 23	17	Mar 4	42	Jan 23 2000
LOWEST DAILY MEAN	.02	Aug 19	.02	Oct 5	.02	Aug 19 2000
ANNUAL SEVEN-DAY MINIMUM	.03	Aug 17	.03	Oct 2	.03	Aug 17 2000
MAXIMUM PEAK FLOW			50		79	
MAXIMUM PEAK STAGE			45.02		45.02	
ANNUAL RUNOFF (AC-FT)	1110		775		895	
10 PERCENT EXCEEDS	4.1		3.4		3.4	
50 PERCENT EXCEEDS	.14		.12		.14	
90 PERCENT EXCEEDS	.05		.04		.04	

11172365 ZONE 6 LINE B AT WARM SPRINGS, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1999 to current year (storm season only).

WATER TEMPERATURE: October 1999 to current year (storm season only).

SEDIMENT DATA: October 1999 to current year (storm season only).

PERIOD OF DAILY RECORD.—

SUSPENDED SEDIMENT DISCHARGE: October 1999 to current year (storm season only).

REMARKS.—Sediment samples were collected on most days where water temperature is published. Zero bed-load discharge observed for flows less than 0.16 ft³/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, 15,300 mg/L, Oct. 29; minimum daily mean, 75 mg/L, Oct. 22.

SEDIMENT LOAD (storm season only): Maximum daily, 554 tons, Oct. 29; minimum daily, e0.01 ton, Oct. 5, 6, 8.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-	TEMPER-	SEDI-	SEDI-	SED.	SED.	SED.	
		CHARGE, INST. FEET PER SECOND (00061)			MENT, SUS- PENDE (MG/L) (80154)	MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
OCT									
25...	1330	.32	18.0	7360	6.4	61	73	82	
28...	1630	6.4	15.0	33100	570	35	37	39	
NOV									
01...	1115	.09	24.5	1460	.36	--	--	--	
15...	1530	.12	17.5	1460	.47	--	--	--	
JAN									
10...	1515	3.4	9.0	10600	97	--	--	--	
25...	1730	12	8.5	27200	880	30	31	36	
MAR									
04...	1715	3.4	10.0	65800	600	--	--	--	
06...	1040	.22	14.0	3410	2.0	48	54	66	
20...	1255	.08	22.0	114	.02	--	--	--	
28...	1150	.11	15.5	4760	1.4	40	48	56	
29...	1820	.09	17.5	2690	.65	--	--	--	
APR									
19...	0755	.19	26.5	1290	.66	--	--	--	
24...	0745	.04	13.0	1680	.18	--	--	--	
MAY									
01...	0830	.12	16.0	955	.31	--	--	--	
DATE		SED. SUSP. FALL DIAM. % FINER THAN (70340)	SED. SUSP. FALL DIAM. % FINER THAN (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN (70336)
OCT									
25...	93	99	99	100	--	--	--	--	--
28...	48	62	74	92	99	100	--	--	--
NOV									
01...	--	--	99	--	--	--	--	--	--
15...	--	--	99	--	--	--	--	--	--
JAN									
10...	--	--	74	--	--	--	--	--	--
25...	45	56	64	76	91	100	--	--	--
MAR									
04...	--	--	70	80	95	100	--	--	--
06...	76	84	91	92	94	97	98	100	100
20...	--	--	68	--	--	--	--	--	--
28...	66	77	84	89	93	98	100	--	--
29...	--	--	95	--	--	--	--	--	--
APR									
19...	--	--	92	95	98	99	100	--	--
24...	--	--	97	--	--	--	--	--	--
MAY									
01...	--	--	98	--	--	--	--	--	--

11172365 ZONE 6 LINE B AT WARM SPRINGS, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAMPLING 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)
NOV								
15...	1535	1	.11	17.5	2	10	28	43
15...	1540	1	.10	17.5	2	6	15	24
15...	1545	1	.09	17.5	4	21	58	73
15...	1550	1	.10	17.5	6	20	40	50
15...	1555	1	.11	17.5	2	4	12	26
15...	1600	1	.12	17.5	2	4	9	19
15...	1605	1	.12	17.5	2	4	11	20
MAR								
06...	1110	1	.22	14.0	16	29	39	46
APR								
19...	0800	1	.19	26.5	5	13	26	36
19...	0805	1	.19	26.5	2	7	15	24
19...	0810	1	.19	26.5	3	20	65	80
19...	0815	1	.19	26.5	6	24	57	73
MAY								
01...	0940	1	.12	16.0	3	9	17	22
01...	0945	1	.12	16.0	2	6	13	18
01...	0950	1	.12	16.0	1	4	13	24
01...	0955	1	.12	16.0	2	5	19	26
01...	1000	1	.12	16.0	3	11	23	41

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)
NOV							
15...	54	64	75	85	94	100	--
15...	33	43	58	76	95	100	--
15...	80	85	91	95	100	--	--
15...	57	64	73	85	92	100	--
15...	38	46	56	65	76	100	--
15...	31	41	54	74	95	100	--
15...	31	42	63	84	99	100	--
MAR							
06...	52	64	88	99	100	--	--
APR							
19...	46	54	68	83	92	100	--
19...	42	64	87	95	100	--	--
19...	92	97	100	--	--	--	--
19...	82	90	97	100	--	--	--
MAY							
01...	29	39	57	74	94	100	--
01...	27	38	54	66	81	93	100
01...	35	46	61	74	99	100	--
01...	29	31	36	42	65	100	--
01...	74	86	98	100	--	--	--

11172365 ZONE 6 LINE B AT WARM SPRINGS, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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									
06...	1050	1000	1130	.250	0	1049	1051	120	.5
20...	1220	1000	1130	.250	0	1218	1223	300	.5
20...	1230	1000	1130	.250	0	1228	1233	300	.5
28...	1120	1000	1130	.250	0	1116	1121	300	.5
28...	1130	1000	1130	.250	0	1130	1135	300	.5
APR									
19...	0720	1000	1130	.250	0	0720	0725	300	.5
19...	0730	1000	1130	.250	0	0730	0735	300	.5
MAY									
01...	0910	1000	1130	.250	0	0910	0915	300	.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)
MAR								
06...	1	1	1	.10	.22	14.0	.72	.36
20...	2	1	1	.10	.09	22.0	.14	.08
20...	2	1	1	.10	.08	22.0	.16	.08
28...	2	1	1	.10	.12	15.5	.59	.30
28...	2	1	1	.10	.12	15.5	.61	.30
APR								
19...	2	1	1	.10	.19	26.5	.04	.02
19...	2	1	1	.10	.19	26.5	.04	.02
MAY								
01...	1	1	1	.10	.16	16.0	.01	<.01

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								
06...	--	--	3	30	54	83	99	100
20...	--	1	18	76	95	98	100	--
20...	--	2	17	76	94	98	100	--
28...	1	2	8	33	65	87	99	100
28...	1	2	7	34	68	91	100	--
APR								
19...	--	1	2	35	63	92	100	--
19...	--	1	1	34	62	92	100	--
MAY								
01...	2	3	7	33	49	62	77	100

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

11172365 ZONE 6 LINE B AT WARM SPRINGS, CA—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.0	24.5	---	---	---	---	23.0	16.0	---	---	24.0	---
2	---	---	---	11.0	15.0	---	---	---	---	---	---	---
3	---	---	13.0	---	---	11.0	---	---	---	---	---	---
4	---	14.0	---	11.0	---	10.0	---	---	---	---	---	---
5	---	---	12.0	15.0	19.0	11.0	---	---	---	---	---	---
6	---	---	11.0	---	---	14.0	16.0	---	---	---	---	---
7	---	18.0	---	9.0	---	---	---	---	---	---	---	---
8	20.0	---	16.0	13.0	15.0	15.0	15.5	---	---	---	---	---
9	---	15.0	---	10.0	10.0	---	22.0	---	---	---	---	---
10	20.0	---	---	9.0	---	---	26.0	---	---	---	---	---
11	---	9.0	12.0	8.0	10.0	---	---	---	---	---	---	---
12	21.0	---	12.0	---	11.0	25.0	24.0	---	---	---	---	---
13	---	10.0	10.0	---	---	23.0	---	---	---	---	---	---
14	---	15.0	---	---	---	---	23.5	---	---	---	---	---
15	---	17.5	15.0	10.0	10.0	---	---	---	---	---	---	---
16	---	---	---	10.0	16.0	23.0	24.0	---	---	---	---	---
17	25.0	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	11.5	---	---	24.0	---	---	---	---	---
19	26.0	10.0	7.0	---	---	26.0	26.5	---	26.5	---	---	---
20	---	---	---	10.0	15.0	22.0	13.5	---	---	---	---	---
21	19.0	12.0	10.0	---	---	---	---	---	---	---	---	---
22	---	---	11.0	11.0	10.0	---	---	---	---	---	---	---
23	---	12.0	---	---	---	25.0	27.0	---	---	---	---	---
24	22.0	---	14.0	14.0	11.0	---	13.0	---	---	---	---	---
25	18.0	---	---	8.5	---	---	---	---	---	---	---	---
26	15.0	---	8.0	---	---	26.0	---	---	---	---	---	---
27	---	---	---	11.0	20.0	---	27.0	---	---	---	---	---
28	15.0	15.0	10.0	---	---	15.5	---	---	---	---	---	---
29	---	14.0	---	15.0	---	17.5	20.0	---	---	---	---	---
30	---	---	---	---	---	25.0	30.0	---	---	---	---	---
31	---	---	12.0	---	---	---	---	---	---	---	---	---

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	e.05	---	e.04	.09	1550	.40	.23	600	.37
2	e.04	---	e.03	.10	1210	.31	.23	402	.25
3	e.04	---	e.03	.08	968	.20	.23	216	.14
4	e.03	---	e.02	.08	727	.15	.22	168	.10
5	e.02	---	e.01	.08	524	.12	.13	165	.06
6	e.02	---	e.01	.09	336	.08	.14	234	.09
7	e.04	---	e.02	.08	161	.04	.17	241	.11
8	e.03	---	e.01	.09	142	.04	.74	712	3.0
9	e.05	---	e.03	.12	223	.08	.48	883	3.9
10	e.09	---	e.38	.32	1820	4.7	.23	248	.15
11	e.05	---	e.12	.12	661	.21	3.4	2310	85
12	.46	1230	1.5	.12	727	.23	1.5	2850	25
13	.53	986	1.4	.89	1820	14	2.7	2320	53
14	.67	597	1.1	.17	1910	.84	8.0	6020	178
15	.75	454	.92	.15	1600	.64	.41	2870	4.1
16	.71	381	.73	.17	1330	.63	.06	1970	.34
17	.85	309	.71	.13	1190	.41	.05	1490	.19
18	1.0	241	.68	.12	1040	.35	.04	1010	.10
19	.65	182	.33	.13	895	.32	.04	584	.06
20	.38	187	.19	.15	827	.34	.06	451	.07
21	.23	202	.13	.44	2130	3.4	.04	354	.04
22	.12	75	.03	7.2	5270	144	.05	260	.04
23	.43	551	1.3	16	7630	474	.05	234	.03
24	.13	224	.08	.31	1480	1.4	.04	239	.03
25	1.1	3510	22	.25	580	.40	.05	259	.03
26	6.7	8750	206	.25	518	.35	.04	278	.03
27	.63	1290	2.5	.67	689	2.0	.05	275	.03
28	3.3	9870	159	.23	256	.16	.05	269	.03
29	11	15300	554	1.7	2770	43	.05	266	.04
30	4.7	10800	204	.25	799	.54	.05	264	.03
31	.20	2570	1.5	---	---	---	.04	263	.03
TOTAL	35.00	---	1158.80	30.58	---	693.34	19.57	---	354.39

e Estimated.

11172365 ZONE 6 LINE B AT WARM SPRINGS, CA—Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	35.00	1158.80	1910	3070
NOVEMBER	30.58	693.34	994	1690
DECEMBER	19.57	354.39	703	1060
JANUARY 2001	62.30	1471.59	3390	4860
FEBRUARY	102.87	3055.16	6430	9490
MARCH	46.35	1331.06	2690	4020
APRIL	43.56	1199.37	2680	3880
PERIOD	340.23	9263.71	18797	28070

ALAMEDA CREEK BASIN

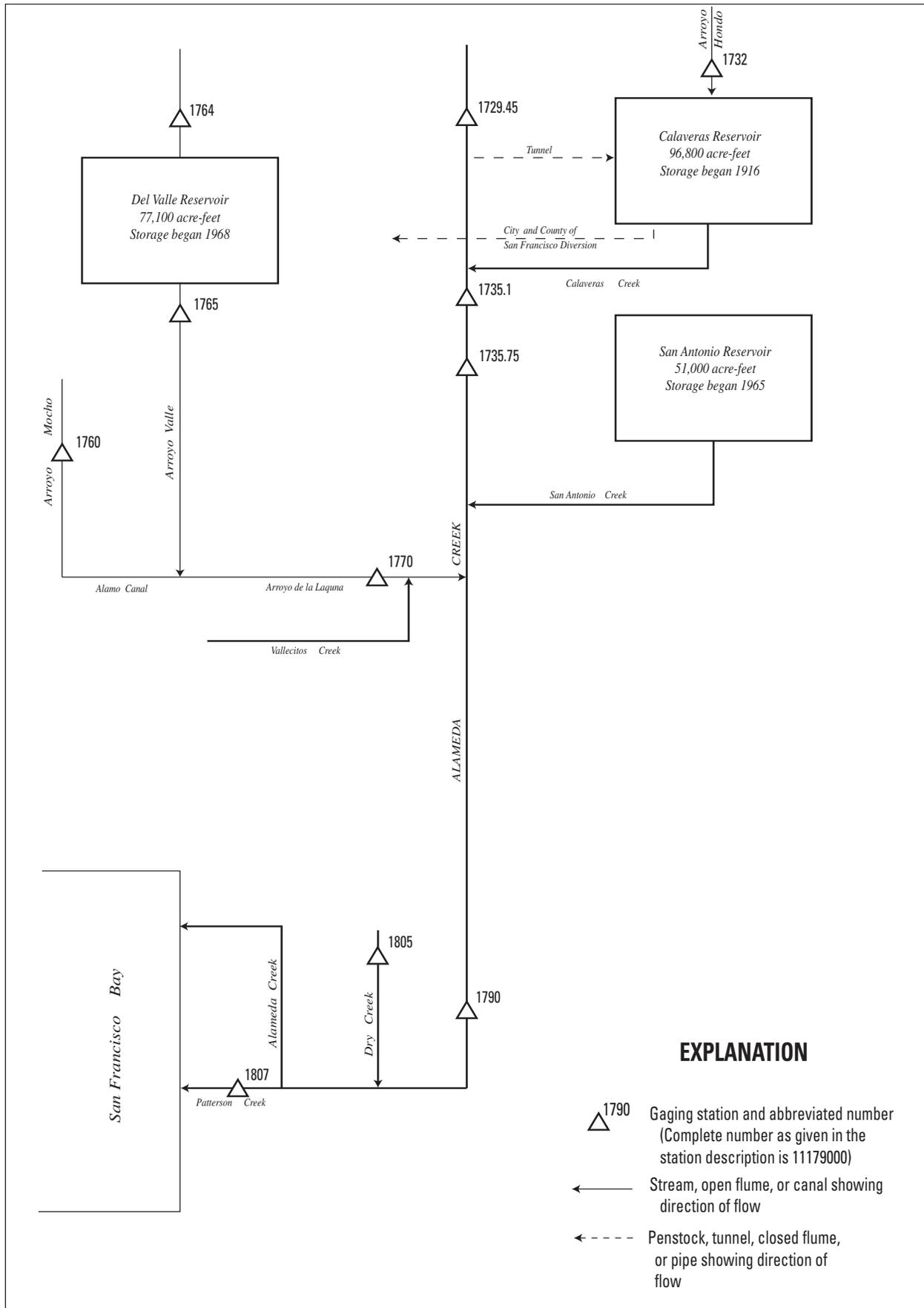


Figure 21. Diversions and storage in Alameda Creek Basin.

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 mi².

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. No regulation or diversion upstream from gage. See schematic diagram of Alameda Creek Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,390 ft³/s, Jan. 9, 1995, gage height, 7.96 ft, from rating curve extended above 100 ft³/s, on basis of flow over dam computation; no flow several days in 1994 and Sep. 7, 8, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2315	641	4.08

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.17	.32	.94	3.3	33	5.9	4.8	1.2	.20	.13	.05
2	.09	.17	.33	.92	2.9	43	5.7	4.6	1.2	.17	.12	.03
3	.09	.16	.33	.90	2.6	42	5.6	4.5	1.1	.16	.12	.01
4	.09	.16	.32	.80	2.2	192	5.7	4.3	1.1	.16	.12	.01
5	.10	.16	.33	.75	2.1	278	5.6	4.1	1.1	.16	.12	.01
6	.11	.17	.33	.77	2.0	80	6.3	3.9	1.0	.17	.12	.01
7	.11	.18	.35	.75	1.9	40	11	3.7	.98	.15	.11	.00
8	.11	.18	.36	1.4	1.8	28	9.2	3.3	.97	.15	.09	.00
9	.12	.19	.39	.78	2.3	22	8.9	3.2	.92	.14	.09	.01
10	.32	.21	.43	1.7	44	19	8.0	3.1	.83	.15	.09	.02
11	.15	.22	.47	15	117	16	7.7	3.0	.78	.15	.10	.02
12	.13	.19	.60	28	83	14	8.0	2.9	.76	.16	.10	.02
13	.12	.24	.52	11	60	13	7.5	2.9	.67	.15	.10	.02
14	.10	.29	.61	5.7	47	12	7.2	2.8	.59	.15	.10	.01
15	.11	.26	.70	3.8	50	11	6.9	2.6	.53	.15	.09	.01
16	.11	.26	.51	3.0	49	10	6.7	2.6	.45	.16	.08	.02
17	.10	.23	.57	2.3	45	9.5	6.3	2.5	.46	.16	.07	.03
18	.10	.23	.55	2.0	44	9.1	6.2	2.4	.41	.15	.06	.02
19	.11	.28	.63	1.8	82	8.4	6.5	2.3	.33	.14	.05	.02
20	.12	.29	.67	1.7	130	7.8	9.3	2.3	.26	.15	.05	.03
21	.13	.45	.70	1.6	71	7.6	24	1.9	.27	.15	.07	.03
22	.13	.40	.71	1.6	88	7.4	14	1.9	.25	.14	.08	.02
23	.14	.35	.72	1.9	121	7.2	11	1.8	.26	.13	.09	.01
24	.15	.36	.72	3.3	159	7.2	9.3	1.7	.26	.13	.08	.03
25	.16	.36	.71	19	203	8.3	8.0	1.6	.26	.13	.06	.09
26	.32	.37	.71	42	97	7.3	6.9	1.6	.32	.13	.05	.09
27	.24	.31	.72	18	53	7.0	6.0	1.5	.32	.12	.04	.09
28	.41	.34	.84	9.6	40	7.0	5.4	1.5	.30	.11	.03	.09
29	.43	.57	.93	6.4	---	6.8	4.9	1.4	.28	.11	.02	.08
30	.32	.33	.93	4.9	---	6.4	4.8	1.3	.23	.13	.05	.06
31	.22	---	.93	3.8	---	5.9	---	1.2	---	.14	.06	---
TOTAL	5.03	8.08	17.94	196.11	1604.1	965.9	238.5	83.2	18.39	4.55	2.54	0.94
MEAN	.16	.27	.58	6.33	57.3	31.2	7.95	2.68	.61	.15	.082	.031
MAX	.43	.57	.93	42	203	278	24	4.8	1.2	.20	.13	.09
MIN	.09	.16	.32	.75	1.8	5.9	4.8	1.2	.23	.11	.02	.00
AC-FT	10	16	36	389	3180	1920	473	165	36	9.0	5.0	1.9

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

MEAN	.29	4.27	24.2	127	129	76.4	24.3	10.6	4.23	1.46	.58	.37
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	.58	6.33	16.7	10.7	5.58	2.68	.61	.15	.082	.031
(WY)	1995	1996	2001	2001	1995	1997	1997	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1995 - 2001

ANNUAL TOTAL	7706.21	3145.28		
ANNUAL MEAN	21.1	8.62	33.1	
HIGHEST ANNUAL MEAN			49.8	1998
LOWEST ANNUAL MEAN			8.62	2001
HIGHEST DAILY MEAN	693	Jan 24	278	Mar 5
LOWEST DAILY MEAN	.07	Sep 19	.00	Sep 7
ANNUAL SEVEN-DAY MINIMUM	.08	Sep 16	.01	Sep 3
MAXIMUM PEAK FLOW			641	Mar 4
MAXIMUM PEAK STAGE			4.08	Mar 4
ANNUAL RUNOFF (AC-FT)	15290	6240	23980	7.96
10 PERCENT EXCEEDS	45	14	73	
50 PERCENT EXCEEDS	.82	.57	2.5	
90 PERCENT EXCEEDS	.11	.07	.16	

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 mi².

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 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, 7,340 ft³/s, Feb. 3, 1998, gage height, 15.85 ft; minimum daily, 0.11 ft³/s, July 28–30, 1972.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 800 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0030	1,480	9.10

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	e3.2	5.7	3.4	9.4	78	16	13	4.2	1.4	.80	e.60
2	1.8	e2.8	5.2	3.3	7.9	83	15	12	4.0	1.4	.77	e.55
3	1.8	2.7	4.9	3.3	6.9	87	14	11	3.8	1.4	.77	e.52
4	1.6	2.5	4.7	3.3	6.1	371	14	11	3.8	1.4	.79	e.51
5	1.6	2.4	4.5	3.3	5.7	942	14	10	3.7	1.4	.76	e.45
6	1.4	2.3	4.4	3.3	5.2	340	15	10	3.6	1.4	.69	e.44
7	1.4	2.3	4.4	3.2	4.7	199	28	9.6	3.5	1.4	.65	e.42
8	1.2	2.3	4.3	4.1	4.4	134	29	9.3	3.3	1.3	.64	e.43
9	1.3	2.3	4.4	7.2	6.0	104	29	9.0	3.1	1.3	.65	e.44
10	1.7	2.3	4.6	8.8	106	88	24	8.5	3.1	1.2	.65	e.49
11	1.4	2.4	4.7	58	279	72	22	8.1	3.0	1.2	.64	e.50
12	e3.0	2.6	5.0	84	181	60	21	7.7	3.0	1.2	.64	e.52
13	e1.8	2.7	5.7	39	109	51	19	7.6	2.9	1.1	.63	e.51
14	e1.7	2.7	6.7	18	70	45	17	7.6	2.9	1.1	.63	e.47
15	e1.6	3.0	8.1	11	68	40	16	7.4	2.8	1.0	.63	e.45
16	e1.4	3.1	8.5	8.0	67	37	15	7.3	2.7	.96	.63	e.53
17	e1.2	3.0	6.4	6.2	71	33	14	7.2	2.5	.94	.62	e.55
18	e1.2	2.8	5.3	5.1	71	30	14	7.0	2.4	.90	.62	e.50
19	e1.1	2.7	4.7	4.5	191	28	15	6.6	2.2	.90	.57	e.51
20	e1.1	2.7	4.3	4.1	404	26	21	6.2	2.0	.89	.59	e.50
21	e1.2	3.0	4.2	3.8	191	24	116	5.9	1.9	.87	.61	e.56
22	e1.2	3.2	4.0	3.6	167	23	59	5.7	1.8	.87	.67	e.55
23	e1.3	3.3	3.9	4.2	258	22	40	5.3	1.7	.88	.66	e.50
24	e1.3	3.3	3.9	14	329	21	31	5.1	1.6	.90	.62	e.48
25	e1.4	3.3	3.9	42	501	26	26	4.8	1.6	.89	.53	e.68
26	e2.6	3.2	3.8	144	312	23	22	4.5	1.6	.88	.52	e.69
27	e3.6	3.1	3.6	65	163	20	19	4.4	1.6	.85	.50	e.69
28	e4.2	3.3	3.6	36	107	19	17	4.4	1.5	.84	.52	e.67
29	e6.0	4.2	3.6	22	---	18	14	4.6	1.4	.80	.55	e.68
30	e5.5	5.1	3.5	16	---	17	14	4.5	1.4	.86	.56	e.65
31	e4.0	---	3.5	12	---	16	---	4.3	---	.85	.54	---
TOTAL	63.5	87.8	148.0	643.7	3701.3	3077	730	229.6	78.6	33.28	19.65	16.04
MEAN	2.05	2.93	4.77	20.8	132	99.3	24.3	7.41	2.62	1.07	.63	.53
MAX	6.0	5.1	8.5	144	501	942	116	13	4.2	1.4	.80	.69
MIN	1.1	2.3	3.5	3.2	4.4	16	14	4.3	1.4	.80	.50	.42
AC-FT	126	174	294	1280	7340	6100	1450	455	156	66	39	32

e Estimated.

11173200 ARROYO HONDO NEAR SAN JOSE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.71	13.0	48.4	182	221	140	50.8	16.0	7.14	3.04	1.53	1.21
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1969 - 2001	
ANNUAL TOTAL	16384.8		8828.47			
ANNUAL MEAN	44.8		24.2		56.4	
HIGHEST ANNUAL MEAN					132	
LOWEST ANNUAL MEAN					2.12	
HIGHEST DAILY MEAN	1590	Feb 14	942	Mar 5	3580	Jan 10 1995
LOWEST DAILY MEAN	1.0	Aug 17	.42	Sep 7	.11	Jul 28 1972
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 16	.45	Sep 5	.13	Jul 27 1972
MAXIMUM PEAK FLOW			1480	Mar 5	7340	Feb 3 1998
MAXIMUM PEAK STAGE			9.10	Mar 5	15.85	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	32500		17510		40820	
10 PERCENT EXCEEDS	104		58		118	
50 PERCENT EXCEEDS	4.4		3.6		4.7	
90 PERCENT EXCEEDS	1.4		.62		.73	

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 mi².

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 except for estimated daily discharges, which are poor. No records computed above 200 ft³/s. Flow regulated by Calaveras Reservoir, usable capacity, 96,800 acre-ft, 1.1 mi upstream from gage and by diversion dam on Alameda Creek, 2.9 mi upstream. Dead storage, 3,200 acre-ft. 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.32	.31	.57	1.1	4.0	1.2	1.2	.93	e.49	e.29	.13
2	.19	.32	.32	.60	1.1	5.1	1.1	1.2	.92	.47	e.28	.13
3	.19	.32	.32	.60	1.1	4.5	1.1	1.2	.88	.45	e.28	.13
4	.19	.35	.33	.60	1.0	26	1.1	1.2	.83	.44	e.28	.12
5	.19	.36	.34	.60	1.0	41	1.1	1.2	.82	.42	e.27	.12
6	.19	.36	.34	.60	1.0	11	1.1	1.2	.82	.42	e.27	.12
7	.21	.36	.34	.60	1.0	6.5	1.2	1.2	.81	.43	e.26	.12
8	.23	.37	.36	.81	1.0	4.7	1.1	1.3	.81	.39	e.25	.13
9	.25	.39	.36	.65	1.2	3.8	1.1	1.2	.82	.34	e.25	.13
10	.39	.39	.36	.97	1.5	3.2	1.2	1.2	.86	.35	e.24	.14
11	.32	.39	.38	2.2	5.8	2.7	1.3	1.2	.84	.35	e.22	.14
12	.30	.38	.39	2.2	7.1	2.2	1.3	1.2	.84	.35	e.20	.14
13	.30	.39	.39	1.5	5.2	1.9	1.3	e1.2	.82	.34	e.18	.14
14	.30	.39	.41	1.4	2.6	1.8	1.2	e1.2	.81	.33	.16	.14
15	.29	.39	.42	1.3	1.9	1.6	1.0	e1.2	.80	.32	.16	.14
16	.28	.37	.39	1.2	1.5	1.6	1.0	e1.2	.80	.32	.16	.13
17	.27	.37	.43	1.1	1.4	1.5	.99	e1.2	.77	e.32	.15	.12
18	.27	.36	.46	1.1	1.4	1.4	.97	e1.2	.75	e.32	.15	.13
19	.28	.31	.47	1.1	1.8	1.4	.96	e1.2	.77	e.31	.12	.12
20	.28	.26	.49	1.1	5.8	1.4	1.4	e1.1	.77	e.31	.12	.12
21	.27	.30	.49	1.2	3.8	1.3	1.1	e1.1	.80	e.31	.12	.12
22	.26	.30	.49	1.3	7.5	1.3	1.2	e1.1	e.71	e.30	.13	.13
23	.27	.29	.51	1.6	16	1.3	1.1	e1.1	e.69	e.30	.12	.13
24	.27	.30	.52	2.2	13	1.3	1.1	e1.1	e.66	e.30	.10	.14
25	.29	.29	.52	3.1	11	1.3	1.0	e1.1	e.63	e.30	.10	.15
26	.36	.30	.52	5.2	8.0	1.3	1.0	e1.1	e.61	e.30	.10	.15
27	.33	.30	.54	2.3	5.9	1.3	.99	e1.1	e.58	e.30	.10	.15
28	.44	.31	.55	1.6	4.7	1.2	1.2	1.1	e.55	e.30	.10	.15
29	.39	.33	.55	1.4	---	1.2	1.3	1.1	e.52	e.30	.11	.15
30	.37	.32	.55	1.3	---	1.2	1.3	1.0	e.50	e.30	.13	.14
31	.34	---	.55	1.2	---	1.2	---	.99	---	e.29	.13	---
TOTAL	8.69	10.19	13.40	43.20	115.4	141.2	34.01	35.89	22.72	10.77	5.53	4.00
MEAN	.28	.34	.43	1.39	4.12	4.55	1.13	1.16	.76	.35	.18	.13
MAX	.44	.39	.55	5.2	16	41	1.4	1.3	.93	.49	.29	.15
MIN	.18	.26	.31	.57	1.0	1.2	.96	.99	.50	.29	.10	.12
AC-FT	17	20	27	86	229	280	67	71	45	21	11	7.9

e Estimated.

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA

LOCATION.—Lat 37°32'26", long 121°51'19" (revised), in Valle de San Jose Grant 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.—145 mi².

PERIOD OF RECORD.—October 1999 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 300 ft above sea level, from levels (revised).

REMARKS.—Records good except those below 1 ft³/s, which are fair. 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. Dead storage, 3,200 acre-feet. 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 ft³/s, Feb. 13, 2000, gage height, 15.98 ft, from rating curve extension above 664 ft³/s; minimum daily, 0.04 ft³/s, Sept. 13–15, 21, 2001.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.86	.84	1.3	2.9	3.8	2.9	2.9	1.0	.59	.36	.09
2	.55	.81	.77	1.3	2.8	4.4	3.1	2.8	1.1	.55	.39	.08
3	.50	.79	.75	1.3	2.8	4.1	3.1	2.5	1.1	.49	.43	.07
4	.51	.82	.86	1.3	2.7	25	3.0	2.4	1.2	.47	.44	.07
5	.62	.87	.91	1.3	2.7	75	3.0	2.1	1.1	.43	.44	.15
6	.69	.92	.96	1.3	2.7	18	3.4	2.0	1.1	.43	.40	.08
7	.62	.93	1.0	1.3	2.7	11	5.0	1.9	1.1	.40	.37	.06
8	.61	.99	1.0	2.1	2.7	8.4	3.5	1.9	1.1	.39	.37	.08
9	.89	1.1	.93	1.5	4.2	7.4	3.8	2.0	1.1	.39	.36	.07
10	2.3	1.1	.87	2.5	6.5	7.1	3.5	2.1	1.1	.39	.34	.13
11	1.4	1.1	1.0	4.3	12	7.0	3.8	1.9	1.1	.37	.31	.06
12	1.1	1.1	1.3	4.0	12	5.6	3.6	1.9	1.1	.38	.29	.05
13	.89	1.2	1.2	3.2	8.8	5.0	3.7	1.8	1.0	.40	.28	.04
14	.81	1.3	1.5	2.9	5.0	4.9	3.7	1.7	.98	.39	.27	.04
15	.80	1.1	1.6	2.7	3.8	4.8	3.3	1.7	1.1	.36	.25	.04
16	.78	1.1	1.4	2.7	3.3	5.2	3.3	1.6	1.0	.36	.23	.06
17	.73	1.1	1.2	2.5	3.0	3.9	3.4	1.5	.99	.37	.23	.07
18	.70	1.1	1.2	2.5	3.0	3.3	3.7	1.4	.97	.37	.22	.07
19	.71	1.1	1.4	2.5	4.1	3.3	3.6	1.3	.81	.45	.23	.07
20	.77	1.0	1.2	2.6	9.6	3.2	7.5	1.2	.75	.34	.25	.07
21	.84	1.1	1.1	2.6	6.2	3.1	4.5	1.2	.67	.36	.24	.04
22	.93	1.3	1.1	2.6	15	3.1	2.9	1.3	.73	.40	.25	.05
23	.91	1.2	1.1	3.2	27	3.1	2.9	1.3	.72	.43	.21	.06
24	.77	1.2	1.1	3.9	19	3.3	2.9	1.2	.69	.44	.21	1.6
25	.82	1.2	1.1	5.3	14	4.7	2.9	1.3	.70	.43	.18	.05
26	1.3	1.2	1.2	9.4	9.1	3.4	2.6	1.3	.91	.39	.14	.16
27	1.0	.76	1.2	5.0	6.2	3.3	2.6	1.4	.75	.37	.10	.17
28	1.4	.54	1.3	3.9	4.6	3.1	2.8	1.4	.90	.36	.12	.16
29	2.2	.84	1.3	3.6	---	3.3	2.9	1.3	.82	.36	.15	.16
30	1.2	.92	1.3	3.1	---	3.0	3.0	1.2	.68	.38	.08	.17
31	1.1	---	1.3	3.0	---	3.0	---	1.1	---	.32	.09	---
TOTAL	29.01	30.65	34.99	90.7	198.4	246.8	103.9	52.6	28.37	12.56	8.23	4.07
MEAN	.94	1.02	1.13	2.93	7.09	7.96	3.46	1.70	.95	.41	.27	.14
MAX	2.3	1.3	1.6	9.4	27	75	7.5	2.9	1.2	.59	.44	1.6
MIN	.50	.54	.75	1.3	2.7	3.0	2.6	1.1	.67	.32	.08	.04
AC-FT	58	61	69	180	394	490	206	104	56	25	16	8.1

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

MEAN	.68	.93	1.36	9.88	96.5	147	8.39	4.65	2.17	1.03	.45	.38
MAX	.94	1.02	1.59	16.8	183	287	13.3	7.60	3.39	1.66	.63	.62
(WY)	2001	2001	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	.42	.83	1.13	2.93	7.09	7.96	3.46	1.70	.95	.41	.27	.14
(WY)	2000	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

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

ANNUAL TOTAL	15641.95	840.28	
ANNUAL MEAN	42.7	2.30	22.5
HIGHEST ANNUAL MEAN			42.7
LOWEST ANNUAL MEAN			2.30
HIGHEST DAILY MEAN	1040	75	1040
LOWEST DAILY MEAN	.37	.04	.04
ANNUAL SEVEN-DAY MINIMUM	.42	.05	.05
MAXIMUM PEAK FLOW		291	2910
MAXIMUM PEAK STAGE		10.98	15.98
ANNUAL RUNOFF (AC-FT)	31030	1670	16330
10 PERCENT EXCEEDS	64	4.2	14
50 PERCENT EXCEEDS	1.8	1.1	1.4
90 PERCENT EXCEEDS	.59	.20	.39

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1999 to current year (storm season only).

WATER TEMPERATURE: October 1999 to current year.

SEDIMENT DATA: October 1999 to current year.

PERIOD OF DAILY RECORD.—October 1999 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1999 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SEDIMENT CONCENTRATION: Maximum daily mean, 1,180 mg/L, Feb. 14, 2000; minimum daily mean, 0 mg/L, Feb. 5–7, 2001.

SEDIMENT LOAD: Maximum daily, 5,230 tons, Feb. 13, 2000; minimum daily, 0 ton, many days.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 172 mg/L, Mar. 5; minimum daily mean, 0 mg/L, Feb. 5–7.

SEDIMENT LOAD (storm season only): Maximum daily, 56 tons, Mar. 5; minimum daily, 0 ton, many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
13...	1400	.83	16.5	3	.01	--
25...	1455	.93	15.5	2	.01	--
NOV						
02...	1145	.82	15.0	2	<.01	--
30...	1135	.90	11.0	8	.02	--
DEC						
29...	1055	1.3	6.5	1	<.01	--
JAN						
11...	1120	3.6	8.0	4	.04	--
FEB						
01...	1350	2.9	8.0	1	.01	--
13...	1330	7.9	8.0	3	.06	--
23...	1020	26	8.5	92	6.5	95
24...	1425	20	9.5	37	2.0	98
MAR						
05...	1255	50	11.5	56	7.6	94
06...	1555	17	13.5	10	.46	88
28...	0850	3.1	13.5	10	.08	--
MAY						
03...	1145	2.4	16.0	6	.04	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
FEB								
13...	1520	1	7.4	8.0	9	21	32	39
13...	1522	1	7.4	8.0	14	30	45	56
13...	1524	1	7.3	8.0	7	25	46	61
13...	1526	1	7.3	8.0	--	--	1	4
13...	1528	1	7.2	8.0	--	--	1	2
13...	1530	1	7.2	8.0	--	--	--	1
13...	1532	1	7.2	8.0	--	--	1	2
13...	1534	1	7.2	8.0	--	1	3	7
13...	1536	1	7.2	8.0	10	33	55	70
13...	1538	1	7.2	8.0	10	31	60	90
MAY								
03...	1300	1	2.2	16.0	5	24	57	90
03...	1303	1	2.2	16.0	2	5	8	10
03...	1306	1	2.2	16.0	1	3	6	12
03...	1309	1	2.3	16.0	1	3	6	15
03...	1312	1	2.3	16.0	--	--	--	1
03...	1315	1	2.3	16.0	--	--	--	--
03...	1318	1	2.3	16.0	--	1	1	4
03...	1321	1	2.3	16.0	1	3	7	12
03...	1324	1	2.3	16.0	5	20	42	52
03...	1327	1	2.3	16.0	10	36	68	84

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

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	.56		2 .00	.86		2 .01	.84		6 .01
2	.55		2 .00	.81		2 .01	.77		5 .01
3	.50		2 .00	.79		3 .01	.75		4 .01
4	.51		2 .00	.82		2 .01	.86		2 .01
5	.62		2 .00	.87		2 .00	.91		2 .01
6	.69		2 .00	.92		2 .01	.96		2 .01
7	.62		2 .00	.93		2 .01	1.0		3 .01
8	.61		2 .00	.99		2 .01	1.0		3 .01
9	.89		2 .01	1.1		2 .01	.93		3 .01
10	2.3		4 .02	1.1		2 .01	.87		3 .01
11	1.4		4 .01	1.1		3 .01	1.0		2 .01
12	1.1		3 .01	1.1		3 .01	1.3		2 .01
13	.89		3 .01	1.2		3 .01	1.2		2 .01
14	.81		3 .01	1.3		3 .01	1.5		2 .01
15	.80		2 .01	1.1		3 .01	1.6		1 .01
16	.78		2 .00	1.1		2 .01	1.4		1 .00
17	.73		2 .00	1.1		2 .01	1.2		1 .00
18	.70		2 .00	1.1		2 .01	1.2		1 .00
19	.71		2 .00	1.1		2 .00	1.4		1 .00
20	.77		2 .00	1.0		2 .00	1.2		1 .00
21	.84		2 .00	1.1		1 .00	1.1		1 .00
22	.93		2 .01	1.3		1 .00	1.1		1 .00
23	.91		2 .00	1.2		1 .00	1.1		1 .00
24	.77		2 .00	1.2		2 .00	1.1		1 .00
25	.82		2 .00	1.2		2 .01	1.1		1 .00
26	1.3		3 .01	1.2		2 .01	1.2		1 .00
27	1.0		2 .01	.76		4 .01	1.2		1 .00
28	1.4		3 .01	.54		5 .01	1.3		1 .00
29	2.2		4 .02	.84		6 .01	1.3		1 .00
30	1.2		3 .01	.92		7 .02	1.3		1 .00
31	1.1		2 .01	---		---	1.3		1 .00
TOTAL	29.01		---	0.16		30.65	---		0.15
	JANUARY			FEBRUARY			MARCH		
1	1.3		1 .00	2.9		1 .01	3.8		10 .11
2	1.3		1 .00	2.8		1 .01	4.4		8 .09
3	1.3		1 .00	2.8		1 .01	4.1		6 .06
4	1.3		1 .00	2.7		1 .00	25		89 28
5	1.3		1 .00	2.7		0 .00	75		172 56
6	1.3		1 .00	2.7		0 .00	18		15 .81
7	1.3		1 .00	2.7		0 .00	11		9 .28
8	2.1		2 .01	2.7		1 .00	8.4		9 .20
9	1.5		2 .01	4.2		18 .26	7.4		8 .17
10	2.5		4 .04	6.5		38 .69	7.1		8 .16
11	4.3		7 .08	12		68 2.3	7.0		8 .16
12	4.0		6 .06	12		52 1.8	5.6		8 .12
13	3.2		4 .04	8.8		17 .51	5.0		9 .12
14	2.9		3 .03	5.0		3 .04	4.9		10 .13
15	2.7		3 .02	3.8		3 .03	4.8		11 .14
16	2.7		2 .02	3.3		5 .04	5.2		12 .17
17	2.5		2 .01	3.0		6 .05	3.9		12 .12
18	2.5		1 .01	3.0		6 .05	3.3		12 .10
19	2.5		1 .01	4.1		21 .25	3.3		11 .10
20	2.6		1 .01	9.6		44 1.2	3.2		11 .09
21	2.6		2 .01	6.2		8 .15	3.1		11 .09
22	2.6		2 .01	15		51 3.3	3.1		11 .09
23	3.2		4 .04	27		121 12	3.1		10 .09
24	3.9		6 .07	19		54 3.0	3.3		10 .09
25	5.3		6 .11	14		42 1.7	4.7		9 .11
26	9.4		14 .40	9.1		26 .64	3.4		7 .07
27	5.0		2 .03	6.2		18 .31	3.3		8 .07
28	3.9		2 .02	4.6		14 .18	3.1		10 .08
29	3.6		2 .02	---		---	3.3		9 .08
30	3.1		3 .02	---		---	3.0		8 .07
31	3.0		3 .02	---		---	3.0		8 .06
TOTAL	90.7		---	1.10		198.4	---		88.03

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	2.9	7	.06
2	3.1	7	.06
3	3.1	6	.05
4	3.0	6	.05
5	3.0	6	.05
6	3.4	5	.05
7	5.0	6	.07
8	3.5	7	.07
9	3.8	8	.08
10	3.5	8	.07
11	3.8	9	.09
12	3.6	10	.09
13	3.7	9	.09
14	3.7	9	.09
15	3.3	8	.07
16	3.3	7	.06
17	3.4	6	.06
18	3.7	6	.06
19	3.6	5	.05
20	7.5	18	.51
21	4.5	12	.16
22	2.9	8	.06
23	2.9	7	.06
24	2.9	7	.06
25	2.9	7	.06
26	2.6	7	.05
27	2.6	7	.05
28	2.8	7	.05
29	2.9	6	.05
30	3.0	4	.04
31	---	---	---
TOTAL	103.9	---	2.42
PERIOD	734.45		120.63

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	29.01	0.16	0	0
NOVEMBER	30.65	0.24	0	0
DECEMBER	34.99	0.15	0	0
JANUARY 2001	90.70	1.10	0	1
FEBRUARY	198.40	28.53	0	29
MARCH	246.80	88.03	5	93
APRIL	103.90	2.42	0	2
PERIOD	734.45	120.63	5	125

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 mi².

PERIOD OF RECORD.—January 1912 to September 1930 (records furnished by Spring Valley Water Company), February 1960 to September 1965, and October 1999 to current year. 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 fair. 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 ft³/s, Jan. 31, 1963, gage height, 7.16 ft. Maximum discharge for period after regulation, 320 ft³/s, Jan. 16, 2001, gage height, 4.72 ft; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 23, 1955, 5,180 ft³/s (by slope-area measurement of peak flow).

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.09	.09	.09	.13	.21	.11	.09	.00	.00	.00	.01
2	.00	.08	.09	.09	.13	.23	.11	.08	.00	.00	.00	.01
3	.00	.08	.08	.09	.13	.21	.11	.07	.00	.00	.00	.00
4	.00	.07	.07	.09	.13	.97	.11	.07	.00	.00	.00	.00
5	.02	.07	.07	.09	.13	.90	.11	.07	.00	.00	.00	.00
6	.03	.07	.07	.10	.13	.41	.13	.07	.00	.00	.00	.00
7	.03	.06	.07	.10	.11	.31	.17	.07	.00	.00	.00	.00
8	.03	.06	.07	.12	.12	.27	.15	.08	.00	.00	.00	.00
9	.03	.06	.07	.11	.15	.25	.18	.08	.00	.00	.00	.00
10	.08	.07	.07	.18	.20	.25	.15	.08	.00	.00	.00	.01
11	.06	.07	.08	.19	.31	.20	.15	.08	.00	.00	.00	.01
12	.06	.07	.09	.18	.47	.17	.15	.08	.00	.00	.00	.01
13	.05	.08	.07	.15	.28	.17	.13	.08	.00	.00	.00	.02
14	.04	.09	.06	.15	.22	.16	.13	.08	.00	.00	.00	.02
15	.03	.09	.06	.13	.20	.15	.13	.07	.00	.00	.00	.02
16	.03	.08	.06	61	.19	.14	.12	.08	.00	.00	.00	.03
17	.03	.08	.07	.54	.18	.13	.11	.07	.00	.00	.00	.04
18	.03	.08	.07	.25	.16	.13	.11	.07	.00	.00	.00	.04
19	.03	.09	.07	.21	.21	.13	.12	.06	.00	.00	.00	.04
20	.03	.09	.07	.19	.23	.13	.17	.05	.00	.00	.00	.04
21	.04	.09	.08	.17	.20	.13	.16	.05	.00	.00	.01	.04
22	.03	.09	.09	.17	.48	.13	.14	.04	.00	.00	.02	.04
23	.03	.09	.08	.16	.43	.13	.12	.03	.00	.00	.02	.04
24	.03	.09	.08	.18	.44	.13	.12	.03	.00	.00	.03	.05
25	.04	.09	.07	.42	.29	.16	.11	.03	.00	.00	.02	.05
26	.06	.09	.08	.33	.24	.13	.11	.03	.00	.00	.02	.05
27	.05	.09	.08	.21	.23	.13	.11	.04	.00	.00	.02	.07
28	.09	.10	.08	.19	.21	.12	.11	.05	.00	.00	.01	.06
29	.10	.11	.09	.17	---	.13	.11	.05	.00	.00	.00	.06
30	.11	.09	.09	.16	---	.12	.10	.02	.00	.00	.01	.05
31	.10	---	.09	.15	---	.11	---	.00	---	.00	.01	---
TOTAL	1.29	2.46	2.36	66.36	6.33	6.94	3.84	1.85	0.00	0.00	0.17	0.81
MEAN	.042	.082	.076	2.14	.23	.22	.13	.060	.000	.000	.005	.027
MAX	.11	.11	.09	.61	.48	.97	.18	.09	.00	.00	.03	.07
MIN	.00	.06	.06	.09	.11	.11	.10	.00	.00	.00	.00	.00
AC-FT	2.6	4.9	4.7	132	13	14	7.6	3.7	.00	.00	.3	1.6

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
MAXIMUM PEAK FLOW	1970 Jan 31 1963
MAXIMUM 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 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.024	.054	.052	1.16	.93	.44	.15	.11	.037	.004	.003	.013
MAX	.042	.082	.076	2.14	1.61	.65	.17	.16	.074	.009	.005	.027
(WY)	2001	2001	2001	2001	2000	2000	2000	2000	2000	2000	2001	2001
MIN	.007	.025	.027	.17	.23	.22	.13	.060	.000	.000	.000	.000
(WY)	2000	2000	2000	2000	2001	2001	2001	2001	2001	2001	2000	2000

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 2000 - 2001

ANNUAL TOTAL	90.71	92.41	
ANNUAL MEAN	.25	.25	.24
HIGHEST ANNUAL MEAN			.25 2001
LOWEST ANNUAL MEAN			.24 2000
HIGHEST DAILY MEAN	8.2 Feb 23	61 Jan 16	61 Jan 16 2001
LOWEST DAILY MEAN	.00 Jun 26	.00 Oct 1	.00 Oct 1 1999
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 26	.00 May 31	.00 Oct 1 1999
MAXIMUM PEAK FLOW		320 Jan 16	320 Jan 16 2001
MAXIMUM PEAK STAGE		4.72 Jan 16	4.72 Jan 16 2001
ANNUAL RUNOFF (AC-FT)	180	183	177
10 PERCENT EXCEEDS	.36	.19	.24
50 PERCENT EXCEEDS	.08	.07	.05
90 PERCENT EXCEEDS	.00	.00	.00

11174000 SAN ANTONIO CREEK NEAR SUNOL, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—January 2000 to April 2001 (discontinued).

SEDIMENT DATA: January 2000 to April 2001 (discontinued).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT					
13...	0850	.06	12.5	2	<.01
NOV					
30...	0930	.10	9.5	1	<.01
DEC					
28...	1505	.09	8.5	1	<.01
JAN					
31...	0945	.15	6.0	2	<.01
FEB					
13...	0915	.28	7.5	<.5	<.01
23...	1045	.37	10.0	3	<.01
MAR					
27...	1510	.13	16.0	1	<.01

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

11174060 ALAMEDA CREEK AT HIGHWAY 680, NEAR SUNOL, CA

LOCATION.—Lat 37°34'33", long 121°52'23", in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004 (revised), 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 mi².

PERIOD OF RECORD.—October 1999 to current year.

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 7.0 ft³/s during current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. THAN .062 MM (70331)
OCT						
25...	1140	3.2	16.5	26	.23	94
DEC						
27...	1450	3.6	12.5	19	.18	92
JAN						
11...	1335	3.0	11.0	94	.76	97
FEB						
01...	0830	2.8	9.0	10	.08	--
22...	1030	7.0	12.0	40	.76	98
MAR						
28...	1225	5.2	17.5	4	.06	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
FEB								
22...	0930	1	7.0	12.0	18	42	66	78
22...	0933	1	7.0	12.0	1	1	3	9
22...	0936	1	7.0	12.0	--	--	--	1
22...	0939	1	7.0	12.0	1	1	2	9
22...	0942	1	7.0	12.0	--	1	1	4
22...	0945	1	7.0	12.0	1	2	3	6
22...	0948	1	7.0	12.0	1	2	8	22
22...	0951	1	7.0	12.0	1	2	5	11
22...	0954	1	7.0	12.0	2	4	6	9
22...	0958	1	7.0	12.0	15	42	64	74
JUN								
20...	1514	1	4.0	24.0	1	1	2	6
20...	1517	1	4.0	24.0	--	1	2	7
20...	1519	1	4.0	24.0	--	1	2	10
20...	1521	1	4.0	24.0	--	1	2	8
20...	1523	1	4.0	24.0	--	--	1	4
20...	1525	1	4.0	24.0	1	2	3	10
20...	1526	1	4.0	24.0	--	1	2	5
20...	1528	1	4.0	24.0	1	3	6	14
20...	1531	1	4.0	24.0	--	1	4	11
20...	1533	1	4.0	24.0	2	6	12	2

ALAMEDA CREEK BASIN

11174060 ALAMEDA CREEK AT HIGHWAY 680, NEAR SUNOL, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BED						
	MAT.						
	SIEVE						
	DIAM.						
	% FINER						
	THAN						
	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM
	(80168)	(80169)	(80170)	(80171)	(80172)	(80173)	(80174)
FEB							
22...	86	92	98	100	--	--	--
22...	16	30	48	63	85	100	--
22...	2	4	7	19	38	100	--
22...	24	30	38	54	82	100	--
22...	9	15	20	28	45	64	100
22...	14	21	29	38	58	76	100
22...	29	33	38	45	58	81	100
22...	13	15	22	38	68	100	--
22...	13	16	20	22	37	65	100
22...	82	87	95	99	100	--	--
JUN							
20...	12	21	35	53	79	100	--
20...	15	22	31	43	62	92	100
20...	27	34	40	53	72	89	100
20...	17	23	29	38	53	72	100
20...	11	18	24	33	43	75	100
20...	22	33	41	50	65	100	--
20...	11	17	22	30	41	63	100
20...	21	31	42	49	66	100	--
20...	14	16	23	35	63	92	100
20...	38	44	54	66	90	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 mi².

PERIOD OF RECORD.—January 1912 to September 1930, October 1963 to September 2001 (discontinued). 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 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 ft³/s, Jan. 24, 1983, gage height, 8.80 ft, from rating curve extended above 600 ft³/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 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 90 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2015	303	5.35

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	e.91	.64	.35	1.1	4.4	1.2	.84	.09	.05	.11	e.00
2	.04	e.87	.56	.35	1.1	5.6	1.1	.75	.07	.05	.10	e.00
3	.04	e.83	.51	.35	.98	5.8	1.1	.58	.07	.05	.09	e.00
4	.04	e.79	.39	.35	.92	41	1.1	.50	.07	.06	.08	e.00
5	e.04	e.74	.39	.36	.93	111	1.1	.49	.07	.06	.07	e.00
6	e.04	e.70	.38	.36	.92	32	1.4	.42	.07	.07	.06	e.00
7	e.04	e.66	.39	.37	.86	16	2.2	.37	.12	.06	.07	e.00
8	e.04	e.62	.39	.75	.82	10	1.9	.34	.12	.06	.06	e.00
9	e.04	e.58	.40	.97	1.1	7.4	1.6	.32	.30	.06	.05	e.00
10	e.04	e.54	.41	e.93	5.8	5.9	1.4	.28	.71	.08	.06	e.00
11	e.04	e.68	.39	e5.5	15	4.7	1.2	.27	.74	.08	.06	e.00
12	e.04	e.61	.49	3.5	13	3.9	1.2	.26	.33	.08	.06	e.00
13	e.04	e.68	.47	2.9	8.5	3.3	1.1	.25	.10	.15	.32	e.00
14	e.04	e.54	.61	1.9	5.3	2.9	1.0	.24	.07	.12	.56	e.00
15	e.04	e.40	.61	1.4	3.9	2.6	1.0	.23	.10	.09	.05	e.00
16	e.04	.27	.56	1.1	3.4	2.4	1.0	.23	.11	.11	.05	e.00
17	e.04	.26	.50	.99	2.9	2.2	.97	.19	.05	.14	.05	e.00
18	e.04	.24	.47	.90	2.5	2.1	1.1	.18	.04	.09	.05	e.00
19	e.04	.25	.44	.85	6.2	2.0	1.2	.17	.04	.09	.03	e.00
20	e.04	.25	.43	.80	16	1.9	1.9	.17	.04	.10	.03	e.00
21	e.04	.34	.42	.75	9.4	1.8	5.5	.16	.04	.11	.03	e.00
22	e.04	.57	.41	.70	9.2	1.8	3.3	.16	.04	.16	.03	e.00
23	e.04	.50	.42	.77	18	1.7	2.1	.14	.04	.16	.03	e.00
24	e.04	.50	.45	1.4	24	1.6	1.6	.14	.04	.16	.03	e.00
25	e.04	.45	.44	1.9	35	1.8	1.4	.13	.04	.16	.03	e.00
26	e.04	.45	.41	7.7	18	1.6	1.2	.12	.04	.16	.02	e.00
27	e.04	.43	.40	4.2	9.8	1.5	1.1	.12	.04	.15	.02	e.00
28	e.04	.43	.38	2.7	6.2	1.4	1.0	.11	.04	.15	.01	e.00
29	e.75	.56	.34	1.9	---	1.4	.98	.11	.05	.14	e.00	e.00
30	e1.2	.62	.34	1.6	---	1.3	.92	.10	.06	.13	e.00	e.00
31	e.95	---	.35	1.3	---	1.2	---	.09	---	.11	e.00	---
TOTAL	4.03	16.27	13.79	49.90	220.83	284.2	44.87	8.46	3.74	3.24	2.21	0.00
MEAN	.13	.54	.44	1.61	7.89	9.17	1.50	.27	.12	.10	.071	.000
MAX	1.2	.91	.64	7.7	35	111	5.5	.84	.74	.16	.56	.00
MIN	.04	.24	.34	.35	.82	1.2	.92	.09	.04	.05	.00	.00
AC-FT	8.0	32	27	99	438	564	89	17	7.4	6.4	4.4	.00

e Estimated.

ALAMEDA CREEK BASIN

11176000 ARROYO MOCHO NEAR LIVERMORE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.11	.86	3.91	14.0	23.3	14.1	4.94	1.71	.65	.22	.099	.081
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1913 - 2001	
ANNUAL TOTAL	1327.31		651.54			
ANNUAL MEAN	3.63		1.79		5.32	
HIGHEST ANNUAL MEAN					38.8	
LOWEST ANNUAL MEAN					.035	
HIGHEST DAILY MEAN	189	Feb 14	111	Mar 5	1510	Mar 1 1983
LOWEST DAILY MEAN	.04	Oct 2	.00	Aug 29	.00	Oct 1 1912
ANNUAL SEVEN-DAY MINIMUM	.04	Oct 2	.00	Aug 29	.00	Oct 1 1912
MAXIMUM PEAK FLOW			303	Mar 4	2250	Jan 24 1983
MAXIMUM PEAK STAGE			5.35	Mar 4	10.44	Feb 19 1986
ANNUAL RUNOFF (AC-FT)	2630		1290		3850	
10 PERCENT EXCEEDS	5.5		3.1		7.0	
50 PERCENT EXCEEDS	.44		.35		.27	
90 PERCENT EXCEEDS	.06		.03		.00	

11176325 ARROYO MOCHO AT HOPYARD ROAD, AT PLEASANTON, CA

LOCATION.—Lat 37°40'49", long 121°54'10", Alameda County, Hydrologic Unit 18050004, at Hopyard Road bridge over Arroyo Mocho, in Pleasanton City limits.

DRAINAGE AREA.—170 mi².

PERIOD OF RECORD.—October 1999 to current year (storm season only).

SEDIMENT DATA: October 1999 to current year (storm season only).

EXTREMES FOR PERIOD OF RECORD.—

SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 414 mg/L, Mar. 8, 2000; minimum sampled, 38 mg/L, Apr. 25, 2001.

SEDIMENT LOAD (storm season only): Maximum sampled, 184 tons, Jan. 25, 2000; minimum sampled, 0.39 ton, Apr. 25, 2001.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 68 mg/L, Apr. 6; minimum sampled, 38 mg/L, Apr. 25.

SEDIMENT LOAD (storm season only): Maximum sampled, 7.7 tons, Nov. 29; minimum sampled, 0.39 ton, Apr. 25.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 05...	1215	11	18.0	44	1.3	95
NOV 29...	1620	e45	12.5	56	e6.8	88
JAN 12...	1020	21	9.0	64	3.6	--
APR 06...	1135	e23	--	68	e4.3	90
APR 25...	0945	3.8	20.0	38	.39	88

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)
OCT 05...	1225	1	11	18.0	--	1	7	19	26
OCT 05...	1230	1	11	18.0	1	2	5	14	24
OCT 05...	1235	1	11	18.0	--	--	2	8	12
OCT 05...	1240	1	11	18.0	1	3	12	49	71
OCT 05...	1245	1	11	18.0	3	7	23	67	75
APR 25...	1000	1	3.8	20.0	1	2	12	28	38
APR 25...	1010	1	3.8	20.0	--	2	11	34	45
APR 25...	1015	1	3.8	20.0	--	1	5	24	40
APR 25...	1020	1	3.8	20.0	--	1	4	20	35
APR 25...	1025	1	3.8	20.0	--	--	3	13	20

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)
OCT 05...	32	36	41	56	87	100
OCT 05...	34	52	70	85	87	100
OCT 05...	16	24	37	46	58	100
OCT 05...	80	85	90	96	100	--
OCT 05...	79	84	100	--	--	--
APR 25...	48	60	71	81	100	--
APR 25...	52	59	65	66	100	--
APR 25...	54	68	79	93	100	--
APR 25...	44	51	59	70	100	--
APR 25...	23	29	35	38	100	--

e Estimated.

11176325 ARROYO MOCHO AT HOPYARD ROAD, AT PLEASANTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLING (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)
NOV									
29...	1330	1000	1120	.250	0	1325	1340	60	1.0
29...	1645	1000	1120	.250	0	1630	1655	60	.5
JAN									
12...	0930	1000	1120	.250	0	0925	0940	30	1.0
12...	0945	1000	1120	.250	0	0940	0950	30	1.0
APR									
06...	1310	1000	1120	.250	0	1255	1320	60	1.0
06...	1350	1000	1120	.250	0	1340	1405	60	1.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (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)
NOV									
29...	1	17	17	.50	51	12.5	.33	5.6	--
29...	1	34	34	.25	e45	12.5	.20	3.4	--
JAN									
12...	2	24	24	.50	21	9.0	.40	10	1
12...	2	24	24	.50	21	9.0	.45	10	1
APR									
06...	2	21	21	2.00	e20	--	.09	2.0	--
06...	2	21	21	2.00	e20	--	.10	2.0	--

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)
NOV								
29...	2	26	51	61	74	85	92	100
29...	2	32	58	73	84	92	98	100
JAN								
12...	5	49	73	84	92	100	--	--
12...	8	53	78	86	94	100	--	--
APR								
06...	2	28	53	67	83	96	96	100
06...	2	29	53	65	84	95	100	--

e Estimated.

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 mi².

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 ft³/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 ft³/s, Feb. 17, 1986, gage height, 7.36 ft, from rating curve extended above 1,000 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 24	2215	604	2.16	Mar. 5	0100	1,320	2.82

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.69	.66	.94	2.9	47	7.7	4.7	.00	.00	.00	.00
2	.00	.49	.53	.93	2.7	49	7.4	4.3	.00	.00	.00	.00
3	.00	.34	.53	.88	2.5	49	7.0	3.9	.00	.00	.00	.00
4	.00	.32	.45	.90	2.5	191	6.7	3.7	.00	.00	.00	.00
5	.00	.24	.38	.88	2.4	945	6.7	3.5	.00	.00	.00	.00
6	.00	.18	.36	.86	2.7	328	7.4	3.4	.00	.00	.00	.00
7	.00	.14	.39	.95	2.7	160	11	3.3	.00	.00	.00	.00
8	.00	.14	.37	1.9	2.5	98	9.6	3.2	.00	.00	.00	.00
9	.00	.17	.35	2.7	3.3	72	8.9	2.6	.00	.00	.00	.00
10	.00	.28	.35	4.6	13	61	8.3	2.1	.00	.00	.00	.00
11	.00	.42	.38	16	45	49	7.6	2.0	.00	.00	.00	.00
12	.00	.35	.40	12	50	39	7.3	1.9	.00	.00	.00	.00
13	.00	.42	.43	6.1	37	34	6.7	1.8	.00	.00	.00	.00
14	.00	.50	.50	3.6	25	31	6.4	1.8	.00	.00	.00	.00
15	.00	.47	.63	2.5	21	26	6.3	1.7	.00	.00	.00	.00
16	.00	.43	1.4	2.3	19	23	6.0	1.7	.00	.00	.00	.00
17	.00	.41	1.6	1.9	21	21	5.6	1.5	.00	.00	.00	.00
18	.00	.42	1.4	1.9	26	21	5.6	1.5	.00	.00	.00	.00
19	.00	.41	1.2	1.9	48	18	5.9	1.3	.00	.00	.00	.00
20	.00	.42	1.1	1.9	103	17	8.7	1.2	.00	.00	.00	.00
21	.00	.35	1.1	1.8	69	15	22	.99	.00	.00	.00	.00
22	.00	.37	1.2	1.7	58	14	14	.85	.00	.00	.00	.00
23	.00	.37	1.1	1.9	100	13	11	.72	.00	.00	.00	.00
24	.00	.34	1.1	2.9	235	13	9.1	.63	.00	.00	.00	.00
25	.00	.34	1.1	4.7	425	13	8.0	.64	.00	.00	.00	.00
26	.00	.33	1.0	12	194	11	7.0	.85	.00	.00	.00	.00
27	.00	.33	.99	10	106	10	6.1	.78	.00	.00	.00	.00
28	.00	.33	.97	6.4	67	9.7	5.6	.77	.00	.00	.00	.00
29	.67	.68	.89	4.4	---	9.1	5.4	.83	.00	.00	.00	.00
30	1.1	.81	.88	3.8	---	8.7	5.1	.76	.00	.00	.00	.00
31	.87	---	.88	3.3	---	8.1	---	.49	---	.00	.00	---
TOTAL	2.64	11.49	24.62	118.54	1686.2	2403.6	240.1	59.41	0.00	0.00	0.00	0.00
MEAN	.085	.38	.79	3.82	60.2	77.5	8.00	1.92	.000	.000	.000	.000
MAX	1.1	.81	1.6	16	425	945	22	4.7	.00	.00	.00	.00
MIN	.00	.14	.35	.86	2.4	8.1	5.1	.49	.00	.00	.00	.00
AC-FT	5.2	23	49	235	3340	4770	476	118	.00	.00	.00	.00

ALAMEDA CREEK BASIN

11176400 ARROYO VALLE BELOW LANG CANYON, NEAR LIVERMORE, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.23	6.91	31.6	117	157	103	38.4	9.36	2.93	.74	.18	.10
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1964 - 2001	
ANNUAL TOTAL	11210.33		4546.60			
ANNUAL MEAN	30.6		12.5		38.3	
HIGHEST ANNUAL MEAN					174	
LOWEST ANNUAL MEAN					.24	
HIGHEST DAILY MEAN	2030	Feb 14	945	Mar 5	4920	Feb 3 1998
LOWEST DAILY MEAN	.00	Jun 28	.00	Oct 1	.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 28	.00	Oct 1	.00	Oct 1 1963
MAXIMUM PEAK FLOW			1320	Mar 5	8790	Feb 17 1986
MAXIMUM PEAK STAGE			2.82	Mar 5	7.36	Feb 17 1986
ANNUAL RUNOFF (AC-FT)	22240		9020		27740	
10 PERCENT EXCEEDS	62		20		58	
50 PERCENT EXCEEDS	.67		.43		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 mi².

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 ft³/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 ft³/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 ft³/s, on basis of contracted-opening and slope-area measurement of peak flow.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.26	.27	.32	.48	.76	.24	.12	.05	e.00	e.00	12
2	.12	.23	.27	.32	.48	1.0	.23	.12	.06	e.00	e.00	12
3	.14	.23	.28	.32	.46	.85	.22	.12	.06	e.00	e.00	12
4	.15	.23	.32	.32	.42	1.0	.21	.12	.06	.00	e.00	11
5	.16	.23	.32	.32	.48	1.7	.20	.12	.06	.00	e.00	8.5
6	.15	.23	.32	.32	.48	1.0	.27	.09	.06	.00	e.00	8.4
7	.17	.23	.32	.30	.48	.92	.60	.08	.05	.00	e.00	5.8
8	.17	.25	.32	.33	.54	.98	.36	.08	.05	.00	e.00	.23
9	.22	.27	.32	.32	.56	1.0	.36	.08	.05	.00	e.00	.16
10	.32	.27	.32	.42	.67	.79	.24	.09	.05	.00	e.00	.13
11	.27	.27	.32	.54	.77	.72	.23	.09	.06	.00	e.00	.11
12	.22	.27	.36	.48	.72	.72	.22	.10	.06	.00	e.00	.11
13	.20	.27	.36	.46	.72	.72	.23	.11	.05	.00	7.0	.10
14	.19	.27	.36	.42	.64	.66	.24	.11	.04	.00	22	.08
15	.20	.27	.36	.42	.64	.70	.19	.07	.04	.00	28	.08
16	.19	.27	.36	.42	.63	.75	.18	.07	.04	e.00	39	.17
17	.18	.27	.36	.42	.63	.72	.20	.07	.04	e.00	38	1.6
18	.19	.27	.36	.37	.63	.72	.20	.06	.03	e.00	39	2.4
19	.19	.27	.36	.36	.65	.79	.19	.06	.03	e.00	39	3.3
20	.21	.27	.36	.36	.64	.74	.34	.06	.02	e.00	39	2.4
21	.23	.27	.36	.33	.55	.56	.41	.05	.01	e.00	36	.21
22	.23	.27	.36	.32	.70	.51	.37	.05	.00	e.00	25	2.5
23	.26	.27	.34	.33	.68	.48	.58	.05	.00	e.00	21	5.1
24	.23	.27	.32	.39	.74	.46	.63	.05	.00	e.00	20	5.2
25	.20	.27	.32	.62	.91	.48	.64	.05	.00	e.00	20	5.2
26	.27	.27	.32	.61	.89	.40	.64	.05	.00	e.00	20	5.9
27	.26	.25	.32	.48	.89	.32	.63	.05	e.00	e.00	19	10
28	.27	.27	.32	.48	1.0	.32	.55	.06	e.00	e.00	16	12
29	.38	.27	.32	.43	---	.32	.34	.07	e.00	e.00	12	11
30	.32	.27	.32	.38	---	.28	.20	.07	e.00	e.00	12	11
31	.28	---	.32	.45	---	.25	---	.06	---	e.00	12	---
TOTAL	6.67	7.81	10.24	12.36	18.08	21.62	10.14	2.43	0.97	0.00	464.00	148.68
MEAN	.22	.26	.33	.40	.65	.70	.34	.078	.032	.000	15.0	4.96
MAX	.38	.27	.36	.62	1.0	1.7	.64	.12	.06	.00	39	12
MIN	.10	.23	.27	.30	.42	.25	.18	.05	.00	.00	.00	.08
AC-FT	13	15	20	25	36	43	20	4.8	1.9	.00	920	295

e Estimated.

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
MAXIMUM PEAK FLOW	12200 Apr 2 1958
MAXIMUM 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 - 2001, BY WATER YEAR (WY)

MEAN	8.03	7.54	6.96	46.6	108	67.1	19.4	5.37	8.01	12.1	11.4	9.16
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	.078	.032	.000	.043	.14
(WY)	1987	2000	2001	1990	1991	1994	1990	2001	2001	2001	1999	1999

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1970 - 2001

ANNUAL TOTAL	1754.62	703.00	
ANNUAL MEAN	4.79	1.93	25.4
HIGHEST ANNUAL MEAN			131 1983
LOWEST ANNUAL MEAN			.39 1999
HIGHEST DAILY MEAN	304 Feb 28	39 Aug 16	2370 Mar 3 1983
LOWEST DAILY MEAN	.04 Jun 27	.00 Jun 22	.00 Jun 25 1983
ANNUAL SEVEN-DAY MINIMUM	.04 Jun 25	.00 Jun 22	.00 Jun 22 2001
MAXIMUM PEAK FLOW		40 Aug 15	2980 Feb 4 1998
MAXIMUM PEAK STAGE		3.37 Aug 15	9.17 Feb 4 1998
ANNUAL RUNOFF (AC-FT)	3480	1390	18370
10 PERCENT EXCEEDS	5.4	2.4	33
50 PERCENT EXCEEDS	.23	.27	1.0
90 PERCENT EXCEEDS	.05	.00	.20

11176600 ARROYO VALLE AT PLEASANTON, CA

LOCATION.—Lat 37°40'02", long 121°52'54", 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 mi².

PERIOD OF RECORD.—October 1957 to December 1985, October 1999 to current year (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 current year (storm season only).

SEDIMENT DATA: October 1999 to current year (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, 8 mg/L, Apr. 24; minimum sampled, 4 mg/L, Jan. 24.

SEDIMENT LOAD (storm season only): Maximum sampled, 0.12 ton, Apr. 24; minimum sampled, 0.01 ton, Jan. 24.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SED- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
04...	1310	5.7	18.0	7	.11	86
DEC						
01...	1215	8.1	9.0	5	.11	68
JAN						
24...	1415	1.0	--	4	.01	--
APR						
24...	1135	5.6	16.5	8	.12	60

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)
OCT								
04...	1435	1	5.7	18.0	--	1	4	9
04...	1440	1	5.7	18.0	--	1	2	3
04...	1445	1	5.7	18.0	--	--	--	--
04...	1450	1	5.7	18.0	--	--	--	--
04...	1455	1	5.7	18.0	--	--	--	--
APR								
24...	1245	1	5.6	16.5	1	3	4	7
24...	1250	1	5.6	16.5	--	--	--	1
24...	1255	1	5.6	16.5	--	--	--	--
24...	1300	1	5.6	16.5	--	--	--	--
24...	1305	1	5.6	16.5	--	--	--	--

ALAMEDA CREEK BASIN

11176600 ARROYO VALLE AT PLEASANTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
	% FINER THAN 2.00 MM (80169)	% FINER THAN 4.00 MM (80170)	% FINER THAN 8.00 MM (80171)	% FINER THAN 16.0 MM (80172)	% FINER THAN 32.0 MM (80173)	% FINER THAN 64.0 MM (80174)	% FINER THAN 128 MM (80175)
OCT							
04...	18	30	44	67	98	100	--
04...	7	20	37	55	77	100	--
04...	--	--	1	4	66	100	--
04...	--	--	--	--	--	100	--
04...	--	--	--	--	--	--	100
APR							
24...	12	21	33	45	65	100	--
24...	1	6	15	34	73	100	--
24...	--	--	--	--	8	37	100
24...	--	--	--	--	--	100	--
24...	--	--	--	--	4	100	--

11176710 ARROYO DE LA LAGUNA AT BERNAL AVENUE, AT PLEASANTON, CA

LOCATION.—Lat 37°39'19", long 121°54'15", Alameda County, Hydrologic Unit 18050004, located 100 ft upstream of Bernal Avenue bridge over Arroyo de la Laguna.

DRAINAGE AREA.—396 mi².

PERIOD OF RECORD.—October 1999 to current year (storm season only).

SEDIMENT DATA: October 1999 to current year (storm season only).

EXTREMES FOR PERIOD OF RECORD.—

SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 126 mg/L, Jan. 11, 2001; minimum sampled, 15 mg/L, Apr. 5, 2001.

SEDIMENT LOAD (storm season only): Maximum sampled, 38 tons, Jan. 11, 2001; minimum sampled, 0.77 ton, Apr. 5, 2001.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 126 mg/L, Jan. 11; minimum sampled, 15 mg/L, Apr. 5.

SEDIMENT LOAD (storm season only): Maximum sampled, 38 tons, Jan. 11; minimum sampled, 0.77 ton, Apr. 5.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
05...	1555	16	21.0	78	3.5	74
NOV						
30...	1245	34	12.0	34	3.1	93
JAN						
11...	1615	e111	9.5	126	e38	--
APR						
05...	1500	19	16.0	15	.77	79
25...	1430	17	24.0	32	1.5	40

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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								
05...	1620	1	16	21.0	--	--	1	5
05...	1625	1	16	21.0	--	--	1	8
05...	1630	1	16	21.0	--	1	2	7
05...	1635	1	16	21.0	--	1	2	8
05...	1640	1	16	21.0	--	1	2	9
APR								
25...	1445	1	17	24.0	--	1	1	18
25...	1450	1	17	24.0	--	--	2	14
25...	1455	1	17	24.0	--	--	1	9
25...	1500	1	17	24.0	2	4	9	20
25...	1505	1	17	24.0	--	1	2	11

e Estimated.

11176710 ARROYO DE LA LAGUNA AT BERNAL AVENUE, AT PLEASANTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BED MAT. SIEVE DIAM.						
	% FINER THAN (80168)	% FINER THAN (80169)	% FINER THAN (80170)	% FINER THAN (80171)	% FINER THAN (80172)	% FINER THAN (80173)	% FINER THAN (80174)
OCT							
05...	14	17	20	23	29	50	100
05...	19	23	27	34	46	70	100
05...	17	21	25	32	44	75	100
05...	20	25	31	39	55	91	100
05...	18	22	27	33	46	67	100
APR							
25...	64	81	86	90	96	100	--
25...	25	30	35	48	68	100	--
25...	16	20	27	38	56	100	--
25...	31	46	63	80	98	100	--
25...	23	32	41	50	65	100	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS) (82074)	TIME ON BED FOR BED LOAD (04120)	
NOV									
30...	1315	1000	1120	.250	0	1300	1330	60	
JAN									
11...	1530	1000	1120	.250	0	1520	1540	30	
11...	1545	1000	1120	.250	0	1540	1555	30	
DATE	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)	COMPSTD 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)
NOV									
30...	.9	1	27	27	.50	34	12.0	.02	.49
JAN									
11...	1.0	2	27	27	1.00	e111	9.5	.36	6.8
11...	1.0	2	27	27	1.00	e111	9.5	.14	6.8
DATE	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	
	% FINER THAN .250 MM (80228)	% FINER THAN .500 MM (80229)	% FINER THAN 1.00 MM (80230)	% FINER THAN 2.00 MM (80231)	% FINER THAN 4.00 MM (80232)	% FINER THAN 8.00 MM (80233)	% FINER THAN 16.0 MM (80234)	% FINER THAN 32.0 MM (80235)	
NOV									
30...	2	37	82	96	99	100	--	--	
JAN									
11...	--	19	56	81	96	98	98	100	
11...	--	25	69	87	94	97	100	--	

e Estimated.

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 mi².

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 except for estimated daily discharges, which are poor. 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 ft³/s, Jan. 5, 1982, gage height, 22.61 ft, present datum; no flow at times.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	24	22	24	31	48	16	12	11	17	11	12
2	17	19	23	19	30	136	15	14	13	16	10	12
3	19	18	21	16	32	72	19	16	14	16	10	12
4	19	18	21	15	30	202	22	16	14	13	10	12
5	16	18	e15	14	29	401	20	15	15	13	10	12
6	13	18	16	15	30	141	51	16	14	13	9.3	12
7	13	18	e12	16	27	78	155	17	12	12	9.1	12
8	13	17	e13	58	26	59	37	20	12	12	8.6	12
9	17	18	e12	32	158	56	51	18	12	12	8.4	12
10	75	17	e12	258	231	55	27	19	15	11	8.4	12
11	38	16	e12	188	358	48	21	16	16	10	8.6	11
12	23	17	e27	62	570	47	21	16	16	10	8.3	12
13	20	22	e15	36	145	46	21	16	16	10	8.4	e12
14	19	24	121	e29	84	47	19	17	16	11	8.3	e11
15	20	19	58	e26	60	45	18	17	12	12	8.4	e10
16	20	16	21	e52	54	45	17	16	12	12	8.8	e10
17	19	14	20	e44	51	44	17	16	12	12	9.3	e11
18	16	16	19	e12	79	42	16	14	12	12	8.4	11
19	14	15	18	7.7	150	41	18	15	11	11	9.2	10
20	13	15	16	e5.0	102	35	176	17	11	13	9.5	8.7
21	9.0	19	16	15	67	32	90	17	11	11	9.7	8.4
22	9.5	33	15	17	274	32	27	17	12	12	16	9.0
23	10	21	15	e25	268	31	23	17	12	14	16	8.1
24	10	17	15	e69	290	47	19	16	11	14	16	7.6
25	16	13	14	357	144	165	17	15	12	14	15	11
26	144	15	15	215	75	44	15	14	27	13	17	13
27	95	14	15	63	57	31	14	16	16	12	17	11
28	83	13	21	47	52	27	14	18	18	11	15	10
29	189	112	21	46	---	26	13	18	22	12	15	8.2
30	149	33	23	40	---	25	12	16	17	12	14	10
31	49	---	26	33	---	17	---	11	---	12	13	---
TOTAL	1182.5	649	690	1855.7	3504	2165	1001	498	424	385	345.7	323.0
MEAN	38.1	21.6	22.3	59.9	125	69.8	33.4	16.1	14.1	12.4	11.2	10.8
MAX	189	112	121	357	570	401	176	20	27	17	17	13
MIN	9.0	13	12	5.0	26	17	12	11	11	10	8.3	7.6
AC-FT	2350	1290	1370	3680	6950	4290	1990	988	841	764	686	641

e Estimated.

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1979–1983, October 1999 to current year (storm season only).

CHEMICAL ANALYSES: Water years 1979–1983.

SPECIFIC CONDUCTANCE: Water years 1979–1983.

WATER TEMPERATURE: December 17, 1999 to current year (storm season only).

SEDIMENT DATA: October 1999 to current year (storm season only).

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: August 1979 to September 1983.

WATER TEMPERATURE: December 17, 1999 to May 2000.

SUSPENDED-SEDIMENT DISCHARGE: October 1999 to current year (storm season only).

REMARKS.—Sediment samples were collected on most days where water temperature is published. Zero bed-load discharge observed for flows less than 25.5 ft³/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, 5 mg/L, Jan. 7, 2001.

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.—

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 651 mg/L, Jan. 10; minimum daily mean, 5 mg/L, Jan. 7.

SEDIMENT LOAD (storm season only): Maximum daily, 1,200 tons, Jan. 10; minimum daily, 0.20 ton, Jan. 7, Apr. 30.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
10...	1345	82	16.0	243	54	97
29...	1415	203	15.0	235	129	89
31...	1345	42	14.5	134	15	99
DEC						
01...	1015	23	9.5	19	1.2	95
12...	1530	e27	10.0	46	e3.4	92
14...	1500	100	12.0	98	26	97
15...	1600	44	12.5	53	6.3	97
JAN						
08...	1600	87	9.5	98	23	95
31...	1515	36	9.0	20	1.9	92
APR						
04...	1645	18	14.5	16	.78	62
19...	1700	17	18.0	13	.60	80
26...	1030	15	20.0	6	.24	80

e Estimated.

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAMPLING POINTS (COUNT) (00063)	DIS-CHARGE OF 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								
03...	1525	1	21	22.0	1	3	6	15
03...	1530	1	21	22.0	--	1	2	10
03...	1535	1	21	22.0	1	2	4	16
03...	1540	1	21	22.0	1	2	3	12
03...	1545	1	21	22.0	--	1	4	18
APR								
26...	1100	1	15	20.0	--	--	--	--
26...	1105	1	15	20.0	--	--	1	8
26...	1110	1	15	20.0	--	--	1	8
26...	1115	1	15	20.0	--	--	2	10
26...	1120	1	15	20.0	--	--	1	8

DATE	% FINER THAN 1.00 MM (80168)	% FINER THAN 2.00 MM (80169)	% FINER THAN 4.00 MM (80170)	% FINER THAN 8.00 MM (80171)	% FINER THAN 16.0 MM (80172)	% FINER THAN 32.0 MM (80173)	% FINER THAN 64.0 MM (80174)
OCT							
03...	30	44	59	72	90	100	--
03...	21	30	43	60	78	100	--
03...	30	38	48	59	82	100	--
03...	22	33	48	62	81	91	100
03...	25	32	43	58	80	100	--
APR							
26...	1	2	4	8	17	31	100
26...	15	22	31	46	72	100	--
26...	12	16	28	48	83	100	--
26...	19	30	44	61	82	100	--
26...	18	26	40	59	84	100	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM-PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE (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)	COMPS-TD IN X-SEC OF BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)
JAN												
11...	1155	1000	1120	.25	0	1150	1205	30	2.0	2	25	25
11...	1215	1000	1120	.25	0	1210	1225	30	2.0	2	25	25

DATE	SAMPLE SECTION (FT BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD FOR COM-SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, (TONS/DAY) (80225)	SED. BEDLOAD % FINER THAN .250 MM (80228)	SED. BEDLOAD % FINER THAN .500 MM (80229)	SED. BEDLOAD % FINER THAN 1.00 MM (80230)	SED. BEDLOAD % FINER THAN 2.00 MM (80231)	SED. BEDLOAD % FINER THAN 4.00 MM (80232)	SED. BEDLOAD % FINER THAN 8.00 MM (80233)	SED. BEDLOAD % FINER THAN 16.0 MM (80234)
JAN												
11...	5.0	146	9.0	.26	10	1	17	36	54	74	95	100
11...	5.0	138	9.0	.16	10	1	13	36	55	76	94	100

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

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

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	9.5	---	---	---	---	23.0	---	---	---	---
2	23.0	15.5	---	---	---	---	---	---	---	---	---	---
3	22.0	---	---	8.5	---	---	---	---	---	---	---	---
4	---	---	10.0	8.5	---	---	14.5	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	13.5	---	---	---	---	---	---
7	---	---	---	---	11.0	---	14.0	---	---	---	---	---
8	---	14.0	11.0	9.5	---	---	---	---	---	---	---	---
9	19.0	---	---	---	---	---	15.5	---	---	---	---	---
10	16.0	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	9.0	---	---	---	---	---	---	---	---
12	---	---	10.0	10.0	---	14.0	17.0	---	---	---	---	---
13	18.0	16.0	11.0	---	8.5	---	---	---	---	---	---	19.5
14	---	---	12.0	---	9.5	---	---	---	---	---	---	---
15	---	10.5	12.5	---	---	---	---	---	---	---	---	---
16	---	---	---	8.5	---	15.0	---	---	---	---	---	---
17	---	---	---	---	10.0	---	---	---	---	---	---	19.0
18	---	---	9.5	---	11.5	---	---	---	---	---	---	---
19	20.0	---	---	---	11.5	---	18.0	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	9.5	9.0	---	12.0	---	---	---	---	---	---	---
22	---	---	---	9.0	---	---	---	---	---	---	---	---
23	---	---	---	9.0	10.5	---	---	---	---	---	---	---
24	---	---	---	---	---	19.5	---	---	---	---	---	---
25	15.5	---	---	---	---	---	---	---	---	---	---	---
26	15.0	---	---	8.5	---	---	20.0	---	---	---	---	---
27	16.0	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	21.0	---	---	---	---	---
29	15.0	---	---	---	---	---	---	---	---	---	---	---
30	---	11.5	---	---	---	21.0	22.5	---	---	---	---	---
31	14.5	---	---	9.0	---	---	---	---	---	18.5	---	---

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	15	23	.93	24	45	3.0	22	20	1.2
2	17	25	1.1	19	22	1.1	23	19	1.2
3	19	28	1.4	18	19	.93	21	19	1.1
4	19	28	1.4	18	18	.88	21	19	1.1
5	16	28	1.2	18	17	.83	e15	---	e.73
6	13	25	.90	18	16	.78	16	16	.67
7	13	23	.79	18	15	.75	e12	---	e.49
8	13	23	.82	17	14	.65	e13	---	e.60
9	17	28	1.5	18	14	.69	e12	---	e.65
10	75	224	52	17	15	.65	e12	---	e.65
11	38	55	6.2	16	15	.64	e12	---	e.81
12	23	23	1.5	17	24	1.1	e27	---	e2.6
13	20	16	.86	22	53	3.2	e15	---	e.81
14	19	16	.85	24	69	4.6	121	244	126
15	20	17	.96	19	20	1.0	58	69	12
16	20	18	.98	16	12	.51	21	27	1.6
17	19	18	.93	14	12	.45	20	23	1.2
18	16	15	.63	16	12	.53	19	20	1.0
19	14	15	.60	15	12	.50	18	24	1.2
20	13	14	.49	15	12	.49	16	29	1.3
21	9.0	14	.33	19	22	1.4	16	34	1.4
22	9.5	13	.34	33	55	5.1	15	33	1.3
23	10	13	.35	21	19	1.1	15	31	1.3
24	10	12	.34	17	15	.66	15	29	1.2
25	16	30	1.6	13	12	.44	14	27	1.1
26	144	275	141	15	17	.72	15	25	1.0
27	95	306	104	14	13	.49	15	23	.96
28	83	301	165	13	12	.42	21	21	1.2
29	189	320	222	112	411	274	21	19	1.1
30	149	428	259	33	71	7.4	23	17	1.1
31	49	224	38	---	---	---	26	15	1.1
TOTAL	1182.5	---	1008.00	649	---	315.01	690	---	169.67

e Estimated.

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	24	13	.88	31	19	1.6	48	37	4.8
2	19	11	.57	30	18	1.5	136	137	57
3	16	9	.40	32	18	1.5	72	66	14
4	15	8	.32	30	17	1.3	202	226	165
5	14	7	.27	29	16	1.2	401	339	397
6	15	6	.24	30	15	1.2	141	73	32
7	16	5	.20	27	14	1.1	78	30	6.6
8	58	81	17	26	14	.97	59	20	3.2
9	32	20	1.7	158	103	82	56	19	2.9
10	258	651	1200	231	161	108	55	19	2.9
11	188	437	315	358	200	243	48	14	1.8
12	62	60	11	570	526	954	47	13	1.7
13	36	36	3.5	145	130	58	46	14	1.8
14	e29	---	e1.8	84	42	9.7	47	14	1.7
15	e26	---	e2.1	60	31	5.0	45	13	1.6
16	e52	---	e2.9	54	32	4.7	45	12	1.5
17	e44	---	e3.0	51	34	4.7	44	11	1.3
18	e12	---	e.65	79	44	9.7	42	10	1.2
19	7.7	14	.29	150	123	63	41	10	1.1
20	e5.0	---	e.26	102	78	25	35	10	.89
21	15	15	.60	67	39	7.6	32	9	.79
22	17	18	.83	274	339	395	32	9	.75
23	e25	---	e1.4	268	342	331	31	8	.71
24	e69	---	e4.8	290	368	351	47	25	9.5
25	357	264	802	144	144	60	165	87	53
26	215	255	178	75	56	12	44	14	1.8
27	63	95	16	57	38	5.8	31	11	.93
28	47	62	7.8	52	32	4.5	27	10	.73
29	46	48	6.0	---	---	---	26	10	.68
30	40	35	3.8	---	---	---	25	10	.66
31	33	23	2.0	---	---	---	17	8	.36
TOTAL	1855.7	---	2585.31	3504	---	2744.07	2165	---	769.90
	APRIL								
				1	16	8	.33		
				2	15	8	.31		
				3	19	12	.61		
				4	22	18	1.2		
				5	20	19	1.1		
				6	51	67	15		
				7	155	154	79		
				8	37	27	2.8		
				9	51	40	6.4		
				10	27	18	1.3		
				11	21	12	.75		
				12	21	11	.63		
				13	21	11	.63		
				14	19	13	.68		
				15	18	12	.55		
				16	17	13	.59		
				17	17	12	.54		
				18	16	11	.53		
				19	18	13	.65		
				20	176	163	148		
				21	90	49	18		
				22	27	17	1.2		
				23	23	14	.89		
				24	19	12	.61		
				25	17	9	.41		
				26	15	7	.29		
				27	14	6	.25		
				28	14	6	.23		
				29	13	6	.21		
				30	12	6	.20		
				31	---	---	---		
			TOTAL	1001	---	283.89			
			PERIOD	11047.20		7875.85			

e Estimated.

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	1182.50	1008.00	184	1190
NOVEMBER	649.00	315.01	11	326
DECEMBER	690.00	169.67	23	193
JANUARY 2001	1855.70	2585.31	618	3200
FEBRUARY	3504.00	2744.07	1560	4300
MARCH	2165.00	769.90	468	1240
APRIL	1001.00	283.89	156	440
PERIOD	11047.20	7875.85	3020	10889

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 mi².

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 ft³/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 ft³/s, Oct. 7–10, 1984.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	33	51	40	22	54	22	21	11	16	12	31
2	14	24	49	24	21	130	22	28	13	15	8.3	33
3	17	22	48	23	23	97	22	27	16	13	10	33
4	17	24	48	22	22	166	26	23	16	11	14	31
5	24	22	45	22	21	496	29	23	15	9.5	30	29
6	28	26	40	22	21	191	46	25	13	9.3	30	29
7	28	47	39	24	21	108	199	26	12	9.4	29	28
8	29	46	43	61	20	77	61	28	11	10	28	29
9	26	45	41	49	117	66	70	24	11	11	26	32
10	72	50	38	215	218	68	40	23	14	8.5	26	33
11	47	46	40	232	353	56	30	25	18	9.3	27	32
12	24	44	65	78	579	53	28	24	18	8.2	28	33
13	30	31	30	48	175	52	27	25	16	7.9	26	30
14	32	33	117	37	80	50	25	24	17	8.7	22	28
15	33	35	79	32	60	50	23	23	14	11	23	25
16	34	32	31	54	57	49	22	23	13	11	23	26
17	35	29	27	48	53	48	21	21	13	9.5	25	27
18	32	22	55	25	75	45	20	18	12	9.7	25	27
19	30	18	58	19	124	44	20	19	9.9	9.7	26	25
20	28	18	63	18	127	37	142	21	8.4	8.7	27	17
21	26	19	62	23	75	36	150	20	8.0	7.7	25	8.2
22	25	33	62	28	247	35	46	20	9.1	8.8	31	12
23	25	20	62	43	339	35	38	20	9.7	12	35	22
24	33	17	61	141	315	34	34	18	11	12	35	22
25	38	16	61	263	183	174	29	17	10	12	34	26
26	135	19	61	243	102	55	25	17	25	12	36	29
27	135	40	60	51	66	34	24	19	15	9.7	35	25
28	42	43	67	36	61	28	25	21	14	8.9	34	25
29	242	119	68	34	---	26	24	21	21	11	32	25
30	166	70	68	30	---	27	22	19	15	11	32	25
31	96	---	70	24	---	24	---	14	---	11	32	---
TOTAL	1557	1043	1709	2009	3577	2445	1312	677	409.1	322.5	826.3	797.2
MEAN	50.2	34.8	55.1	64.8	128	78.9	43.7	21.8	13.6	10.4	26.7	26.6
MAX	242	119	117	263	579	496	199	28	25	16	36	33
MIN	14	16	27	18	20	24	20	14	8.0	7.7	8.3	8.2
AC-FT	3090	2070	3390	3980	7090	4850	2600	1340	811	640	1640	1580

ALAMEDA CREEK BASIN

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
MAXIMUM PEAK FLOW	29000 Dec 23 1955
MAXIMUM 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 - 2001, BY WATER YEAR (WY)

MEAN	30.3	58.1	106	307	500	371	138	59.7	44.9	39.6	38.9	32.6
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	13.6	10.4	15.8	2.51
(WY)	1979	1996	1979	1985	1977	1977	1991	1971	2001	2001	1995	1984

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1970 - 2001

ANNUAL TOTAL	48522		16684.1									
ANNUAL MEAN	133		45.7						142			
HIGHEST ANNUAL MEAN									621			1983
LOWEST ANNUAL MEAN									31.5			1977
HIGHEST DAILY MEAN	3350	Feb 14		579	Feb 12				9770			Feb 3 1998
LOWEST DAILY MEAN	14	Jan 1		7.7	Jul 21				.63			Oct 7 1984
ANNUAL SEVEN-DAY MINIMUM	16	Sep 8		9.1	Jul 8				.66			Oct 4 1984
MAXIMUM PEAK FLOW				1590	Jan 25				17900			Feb 3 1998
MAXIMUM PEAK STAGE				5.54	Jan 25				14.83			Feb 3 1998
ANNUAL RUNOFF (AC-FT)	96240			33090					102800			
10 PERCENT EXCEEDS	243			78					190			
50 PERCENT EXCEEDS	36			27					42			
90 PERCENT EXCEEDS	20			11					17			

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1906, 1952–73, 1975–93, October 1999 to current year (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 current year (storm season only).

SEDIMENT DATA: Water years 1957–73, October 1999 to current year (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 (storm season only).

SUSPENDED-SEDIMENT DISCHARGE: October 1999 to current year (storm season only).

REMARKS.—Sediment samples were collected on most days where water temperature is published. Zero bed-load discharge estimated at flows less than 29 ft³/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.—

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 532 mg/L, Jan. 26; minimum daily mean, 2 mg/L, several days in January and March.

SEDIMENT LOAD (storm season only): Maximum daily mean, 1,080 tons, Jan. 25; minimum daily mean, 0.12 ton, Jan. 3–6.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
02...	1515	14	21.5	5	.19	79
NOV						
17...	1130	27	10.0	6	.44	86
JAN						
24...	1430	120	10.0	58	18.8	97
27...	1445	50	9.0	43	5.8	89
MAR						
06...	1430	170	13.5	68	31.2	70
30...	1330	29	19.0	10	.78	69
APR						
26...	1635	24	21.5	3	.19	74
30...	1630	22	21.5	4	.24	67

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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								
02...	1700	1	14	22.0	1	4	9	16
02...	1705	1	14	22.0	--	--	2	6
02...	1710	1	14	22.0	--	1	4	11
02...	1715	1	14	22.0	--	1	3	8
02...	1720	1	14	22.0	1	3	11	14
MAY								
01...	1505	1	21	22.0	2	3	6	10
01...	1510	1	21	22.0	--	1	2	9
01...	1515	1	21	22.0	--	1	3	16
01...	1520	1	21	22.0	--	1	2	7
01...	1525	1	21	22.0	1	2	3	4

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BED						
	MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
OCT							
02...	27	41	54	69	94	100	--
02...	13	21	28	36	52	78	100
02...	23	33	44	58	80	97	100
02...	14	23	37	60	85	100	--
02...	16	25	52	83	99	100	--
MAY							
01...	22	39	59	73	94	100	--
01...	19	28	36	46	65	88	100
01...	32	44	58	75	93	100	--
01...	16	29	46	72	94	100	--
01...	4	12	55	91	99	100	--

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	22.0	---	---	---	---
2	21.5	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	6.0	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	14.5	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	13.5	---	---	---	---	---	---
7	---	---	---	---	9.0	---	13.0	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	10.5	---	---	---	14.0	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	12.0	---	---	14.5	14.5	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	15.5
14	---	---	11.5	---	9.0	---	---	---	---	---	---	---
15	---	---	13.0	---	---	---	---	---	---	---	---	---
16	---	11.0	6.5	---	---	15.5	---	---	---	---	---	---
17	---	10.0	---	---	10.0	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	9.5	---	---	17.0	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	21.0	---	---	---
22	---	---	10.0	---	---	18.0	---	---	---	---	---	---
23	---	---	---	8.5	---	---	---	---	---	---	---	---
24	---	---	---	10.0	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	11.0	---	---	---	---	21.5	---	---	---	---	---
27	---	---	---	9.0	---	---	---	---	---	---	---	---
28	---	---	7.5	---	---	---	19.0	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	10.0	---	---	---	19.0	21.5	---	---	---	---	---
31	---	---	---	7.5	---	---	---	---	---	23.5	---	---

ALAMEDA CREEK BASIN

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	
	OCTOBER			NOVEMBER			DECEMBER		
1	14	5	.19	33	34	3.1	51	13	1.9
2	14	6	.21	24	15	.98	49	9	1.2
3	17	6	.28	22	10	.61	48	8	1.1
4	17	6	.26	24	8	.52	48	8	1.0
5	24	10	.75	22	6	.37	45	8	.92
6	28	12	.90	26	6	.46	40	7	.77
7	28	13	1.0	47	7	.85	39	7	.71
8	29	12	.97	46	7	.87	43	6	.73
9	26	10	.76	45	7	.90	41	6	.64
10	72	60	15	50	8	1.1	38	6	.60
11	47	36	4.9	46	8	1.0	40	9	.95
12	24	16	1.1	44	8	1.0	65	49	9.7
13	30	15	1.2	31	9	.75	30	19	1.8
14	32	18	1.6	33	9	.82	117	144	70
15	33	21	1.9	35	8	.78	79	89	20
16	34	24	2.2	32	7	.61	31	21	2.0
17	35	25	2.4	29	6	.46	27	5	.35
18	32	24	2.0	22	5	.28	55	7	1.0
19	30	21	1.7	18	4	.20	58	9	1.4
20	28	18	1.4	18	4	.19	63	10	1.6
21	26	16	1.1	19	3	.16	62	9	1.5
22	25	14	.99	33	31	3.0	62	8	1.3
23	25	13	.88	20	18	1.0	62	8	1.3
24	33	16	1.5	17	13	.60	61	8	1.3
25	38	28	3.0	16	10	.46	61	8	1.2
26	135	206	111	19	13	.82	61	7	1.2
27	135	203	100	40	39	4.3	60	7	1.2
28	42	36	12	43	38	4.4	67	7	1.2
29	242	402	291	119	151	96	68	6	1.0
30	166	205	105	70	35	6.9	68	4	.80
31	96	99	34	---	---	---	70	3	.58
TOTAL	1557	---	701.19	1043	---	133.49	1709	---	130.95
	JANUARY			FEBRUARY			MARCH		
1	40	2	.23	22	10	.63	54	15	2.1
2	24	2	.13	21	9	.53	130	27	11
3	23	2	.12	23	9	.56	97	16	4.3
4	22	2	.12	22	9	.53	166	37	22
5	22	2	.12	21	9	.52	496	224	321
6	22	2	.12	21	9	.51	191	84	48
7	24	2	.13	21	9	.51	108	32	9.4
8	61	12	3.1	20	9	.47	77	19	4.0
9	49	3	.49	117	105	87	66	14	2.4
10	215	162	312	218	98	62	68	11	2.0
11	232	113	91	353	167	226	56	8	1.2
12	78	22	4.9	579	496	943	53	6	.78
13	48	15	2.0	175	198	105	52	4	.60
14	37	15	1.5	80	45	10	50	4	.48
15	32	16	1.3	60	18	2.9	50	3	.38
16	54	50	27	57	13	2.1	49	2	.28
17	48	31	8.4	53	15	2.2	48	2	.28
18	25	26	2.5	75	32	6.9	45	2	.28
19	19	16	.82	124	97	49	44	2	.30
20	18	15	.71	127	84	33	37	3	.27
21	23	23	1.5	75	30	6.3	36	3	.27
22	28	17	1.3	247	137	174	35	3	.28
23	43	57	34	339	192	217	35	3	.28
24	141	118	55	315	162	180	34	3	.29
25	263	367	1080	183	76	40	174	111	67
26	243	532	517	102	26	7.4	55	20	3.0
27	51	77	11	66	18	3.3	34	14	1.3
28	36	28	2.8	61	15	2.5	28	11	.82
29	34	25	2.4	---	---	---	26	10	.70
30	30	21	1.7	---	---	---	27	10	.74
31	24	13	.85	---	---	---	24	10	.65
TOTAL	2009	---	2164.24	3577	---	2163.86	2445	---	506.38

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	22	10	.59
2	22	10	.57
3	22	10	.57
4	26	10	.68
5	29	10	.73
6	46	10	1.4
7	199	88	58
8	61	8	1.5
9	70	15	3.3
10	40	8	.81
11	30	5	.40
12	28	4	.31
13	27	4	.28
14	25	4	.25
15	23	4	.22
16	22	3	.20
17	21	3	.19
18	20	3	.17
19	20	3	.16
20	142	78	86
21	150	100	60
22	46	11	1.4
23	38	7	.68
24	34	5	.46
25	29	4	.31
26	25	3	.21
27	24	4	.23
28	25	4	.29
29	24	4	.26
30	22	4	.24
31	---	---	---
TOTAL	1312	---	220.41
PERIOD	13652.00		6020.52

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	1557.00	701.19	7	708
NOVEMBER	1043.00	133.49	1	134
DECEMBER	1709.00	130.95	1	132
JANUARY 2001	2009.00	2164.24	72	2240
FEBRUARY	3577.00	2163.86	121	2280
MARCH	2445.00	506.38	37	543
APRIL	1312.00	220.41	8	228
PERIOD	13652.00	6020.52	247	6265

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 mi².

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. No regulation or diversion upstream from station. See schematic diagram of Alameda Creek Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,680 ft³/s, Jan. 9, 1995, gage height, 5.32 ft, from rating curve extended above 600 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 24	0915	37	2.22

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	2.0	.11	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	2.8	.09	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	2.4	.07	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	8.2	.05	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	15	.08	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	7.3	.59	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	4.7	3.5	.00	.00	.00	.00	.00
8	.00	.00	.00	.03	.00	3.4	1.3	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.34	2.8	3.2	.00	.00	.00	.00	.00
10	.00	.00	.00	.62	1.2	2.3	1.5	.00	.00	.00	.00	.00
11	.00	.00	.01	1.0	3.8	1.8	.95	.00	.00	.00	.00	.00
12	.00	.00	.00	.28	13	1.5	.70	.00	.00	.00	.00	.00
13	.00	.00	.00	.05	5.7	1.1	.50	.00	.00	.00	.00	.00
14	.00	.00	.06	.01	2.5	.97	.49	.00	.00	.00	.00	.00
15	.00	.00	.03	.00	1.5	.81	.36	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.99	.72	.25	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.86	.61	.17	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	1.1	.52	.13	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	1.8	.52	.13	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	1.9	.38	.83	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	1.7	.27	1.4	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	5.0	.24	.48	.00	.00	.00	.00	.00
23	.00	.00	.00	.03	18	.22	.24	.00	.00	.00	.00	.00
24	.00	.00	.00	.03	21	.58	.15	.00	.00	.00	.00	.00
25	.00	.00	.00	.92	11	2.7	.08	.00	.00	.00	.00	.00
26	.14	.00	.00	1.9	6.2	1.0	.05	.00	.00	.00	.00	.00
27	.00	.00	.00	.67	4.1	.51	.08	.00	.00	.00	.00	.00
28	.14	.00	.00	.43	2.6	.38	.02	.00	.00	.00	.00	.00
29	.10	.05	.00	.65	---	.30	.02	.00	.00	.00	.00	.00
30	.05	.00	.00	.21	---	.21	.01	.00	.00	.00	.00	.00
31	.00	---	.00	.02	---	.14	---	.00	---	.00	.00	---
TOTAL	0.43	0.05	0.10	6.85	104.29	66.38	17.53	0.00	0.00	0.00	0.00	0.00
MEAN	.014	.002	.003	.22	3.72	2.14	.58	.000	.000	.000	.000	.000
MAX	.14	.05	.06	1.9	21	15	3.5	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.14	.01	.00	.00	.00	.00	.00
AC-FT	.9	.1	.2	14	207	132	35	.00	.00	.00	.00	.00

ALAMEDA CREEK BASIN

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11180500 DRY CREEK AT UNION CITY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.15	.55	2.28	8.33	10.5	6.86	2.94	.64	.18	.035	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1917 - 2001	
ANNUAL TOTAL	1604.35		195.63			
ANNUAL MEAN	4.38		.54		2.67	
HIGHEST ANNUAL MEAN					13.0	
LOWEST ANNUAL MEAN					.002	
HIGHEST DAILY MEAN	203	Feb 13	21	Feb 24	453	Feb 3 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1916
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1916
MAXIMUM PEAK FLOW			37	Feb 24	1680	Jan 9 1995
MAXIMUM PEAK STAGE			2.22	Feb 24	5.32	Jan 9 1995
ANNUAL RUNOFF (AC-FT)	3180		388		1940	
10 PERCENT EXCEEDS	9.6		1.1		4.7	
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 fair except for estimated daily discharges, which are 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 ft³/s, Feb. 3, 1998, gage height, 20.43 ft; no flow at times in each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e4.5	.91	1.1	.95	1.7	4.6	3.7	3.0	2.3	1.0	.46
2	e.00	e3.0	.91	.65	1.0	7.2	4.2	3.8	3.0	2.3	1.0	.45
3	e.20	e2.4	1.0	.55	1.0	3.7	4.1	3.0	2.9	2.2	1.1	.51
4	e.40	e2.0	1.0	.58	1.1	32	3.8	3.1	3.0	2.0	1.3	.52
5	e.60	e1.7	1.0	.60	1.1	465	3.6	3.4	2.9	2.0	1.3	.43
6	e1.0	e1.5	1.0	.58	1.3	117	11	3.1	2.8	2.1	1.1	.45
7	e1.0	e1.3	1.0	.59	1.1	10	30	2.9	2.9	2.0	1.2	.43
8	e1.1	e1.2	1.0	8.5	1.2	3.2	9.0	3.3	3.0	2.0	1.2	.42
9	e1.2	e1.1	.91	1.0	12	4.0	21	3.9	2.7	2.0	.79	.40
10	e8.5	e1.0	.88	117	114	3.4	5.8	4.2	2.7	2.0	.95	.46
11	e2.5	e1.0	2.2	276	277	2.9	4.7	3.7	2.8	1.9	1.2	.46
12	e2.0	e1.1	4.4	42	552	2.7	4.2	3.5	3.0	1.9	.99	.50
13	e2.0	e1.2	1.1	1.1	12	2.8	4.1	3.5	2.9	2.1	1.0	.53
14	e1.4	e1.1	5.0	.69	3.3	3.0	3.8	3.4	2.8	2.2	.98	.58
15	e1.0	e1.0	6.6	.57	2.2	2.7	4.0	3.1	2.6	2.3	.98	.59
16	e.95	e1.0	1.0	.49	1.6	2.7	4.0	3.0	2.3	2.2	.92	.60
17	e.92	e.95	.82	.52	2.9	2.9	3.9	3.0	2.1	2.3	.83	.65
18	e.90	e.93	.80	.50	3.2	3.0	4.0	2.8	2.2	2.1	.78	.77
19	e.88	e.90	.80	.49	9.5	3.2	4.3	2.7	2.2	2.1	.77	.80
20	e.85	e.90	.89	.56	2.9	3.6	19	2.5	2.1	2.0	.75	.79
21	e.85	e.88	.91	.59	1.1	5.1	36	2.5	2.0	1.9	.83	.77
22	e.90	e.85	.87	.60	89	4.4	5.3	2.5	2.0	1.7	.82	.78
23	e.90	e.85	.90	2.6	255	3.7	5.0	2.6	2.1	1.6	.80	.80
24	e.95	e.80	.83	4.4	128	10	4.6	2.7	2.2	1.6	.70	.84
25	e1.0	e.75	.85	156	54	54	4.5	3.2	3.6	1.4	.85	2.3
26	e15	.76	.95	305	9.1	4.8	4.1	3.0	4.5	1.4	.72	1.4
27	e75	.83	.82	2.7	2.4	3.6	4.1	3.1	2.7	1.3	.57	1.0
28	e10	.97	.86	.99	1.7	3.7	4.1	3.2	2.6	1.2	.54	1.1
29	e80	7.2	.86	1.7	---	4.0	3.8	3.2	2.5	1.2	.55	.97
30	e110	1.2	.83	.92	---	4.2	3.7	3.1	2.5	1.2	.50	.88
31	e12	---	.76	.91	---	4.5	---	3.0	---	1.1	.67	---
TOTAL	334.00	44.87	42.66	930.48	1541.65	778.7	228.3	97.7	80.6	57.6	27.69	21.64
MEAN	10.8	1.50	1.38	30.0	55.1	25.1	7.61	3.15	2.69	1.86	.89	.72
MAX	110	7.2	6.6	305	552	465	36	4.2	4.5	2.3	1.3	2.3
MIN	.00	.75	.76	.49	.95	1.7	3.6	2.5	2.0	1.1	.50	.40
AC-FT	662	89	85	1850	3060	1540	453	194	160	114	55	43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2001, BY WATER YEAR (WY)

MEAN	6.49	40.9	86.7	269	404	267	111	27.8	9.40	2.10	.61	1.20
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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1959 - 2001
ANNUAL TOTAL	21435.63	4185.89	
ANNUAL MEAN	58.6	11.5	101
HIGHEST ANNUAL MEAN			703
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	3000	Feb 14	552
LOWEST DAILY MEAN	.00	Jan 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 7	.44
MAXIMUM PEAK FLOW			1290
MAXIMUM PEAK STAGE			8.85
ANNUAL RUNOFF (AC-FT)	42520	8300	72850
10 PERCENT EXCEEDS	106	7.7	145
50 PERCENT EXCEEDS	5.9	2.0	.04
90 PERCENT EXCEEDS	.40	.60	.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 mi².

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 good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,940 ft³/s, Feb. 3, 1998, gage height, 10.67 ft, from rating curve extended above 300 ft³/s; no flow many days during water year 2000 and 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 250 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 24	0900	34	2.29

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.06	e.28	.08	.48	5.9	1.4	1.2	.23	.09	.03	.00
2	.24	.06	.13	.08	.47	6.4	1.4	1.2	.23	.08	.03	.00
3	.20	.07	.14	.08	.48	5.4	1.3	1.2	.26	.08	.02	.00
4	.16	.07	.18	.08	.50	11	1.2	1.2	.26	.07	.03	.00
5	.12	.08	.18	.09	.50	13	1.0	1.1	.23	.07	.04	.00
6	.17	.08	.19	.12	.48	9.2	1.4	.93	.23	.08	.02	.00
7	.12	.08	.20	.12	.50	8.1	2.6	.84	.24	.07	.00	.00
8	.07	.09	.20	.18	.53	6.7	1.5	.80	.21	.08	.00	.00
9	.12	.09	.26	.10	1.0	4.2	2.1	.67	.20	.10	.00	.00
10	.26	.09	.24	1.0	1.9	3.7	1.6	.63	.24	.11	.00	.00
11	e.18	.08	.39	.49	4.4	3.3	1.4	.71	.24	.11	.00	.00
12	e.12	.08	.50	.20	7.9	2.9	1.3	.72	.24	.09	.00	.00
13	e.10	.11	.52	.16	4.0	2.7	1.3	.73	.22	.09	.00	.00
14	e.13	.11	.56	.18	2.5	2.5	1.3	.74	.20	.08	.00	e.00
15	e.09	.11	.34	.17	2.0	2.5	1.3	.67	.19	.11	.00	e.00
16	e.09	.10	.10	.23	1.9	2.3	1.3	.60	.18	.09	.00	e.00
17	e.08	.10	.09	.23	2.0	1.6	1.1	.56	.18	.08	.00	e.00
18	e.07	.10	.09	.18	2.4	1.5	1.2	.48	.17	.08	.00	e.00
19	e.07	.10	.09	.20	3.8	1.9	1.3	.45	.17	.06	.00	e.00
20	e.07	.12	.09	.20	3.5	1.8	2.5	.41	.14	.05	.00	e.00
21	e.08	.14	.09	.18	4.0	1.7	2.1	.40	.11	.05	.00	e.00
22	.17	.14	.08	.21	11	1.6	1.6	.39	.10	.05	.00	e.00
23	.15	.12	.08	.36	17	1.5	1.5	.44	.11	.03	.00	.04
24	.21	.12	.08	.30	21	2.0	1.4	.45	.10	.03	.00	.02
25	.41	.11	.08	1.4	13	3.0	1.4	.44	.10	.03	.00	e.00
26	1.2	.11	.08	.77	9.3	1.8	1.3	.42	.11	.03	.00	e.00
27	.58	.11	.08	.63	7.3	1.6	1.4	.37	.11	.04	.00	e.00
28	.97	.11	.08	.53	6.1	1.5	1.3	.32	.10	.02	.00	e.00
29	.12	.55	.09	.53	---	1.5	1.2	.31	.09	.03	.00	e.00
30	.24	e.48	.09	.48	---	1.4	1.2	.25	.09	.05	.00	.00
31	.07	---	.08	.50	---	1.3	---	.21	---	.04	.00	---
TOTAL	6.67	3.77	5.68	10.06	129.94	115.5	43.9	19.84	5.28	2.07	0.17	0.06
MEAN	.22	.13	.18	.32	4.64	3.73	1.46	.64	.18	.067	.005	.002
MAX	1.2	.55	.56	1.4	21	13	2.6	1.2	.26	.11	.04	.04
MIN	.01	.06	.08	.08	.47	1.3	1.0	.21	.09	.02	.00	.00
AC-FT	13	7.5	11	20	258	229	87	39	10	4.1	.3	.1

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

	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MEAN	.18	.36	.60	10.4	33.3	10.6	4.94	1.67	.77	.38	.15	.12
MAX (WY)	.24	.57	1.18	30.8	72.1	18.1	10.0	3.16	1.70	.76	.37	.27
MIN (WY)	.082	.13	.18	.32	4.64	3.73	1.46	.64	.18	.067	.005	.002
(WY)	1998	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1998 - 2001

ANNUAL TOTAL	1871.42	342.94	
ANNUAL MEAN	5.11	.94	
HIGHEST ANNUAL MEAN			10.7 1998
LOWEST ANNUAL MEAN			.94 2001
HIGHEST DAILY MEAN	202	Feb 13	410 Feb 3 1998
LOWEST DAILY MEAN	.00	Aug 13	.00 Oct 17 1999
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 8	.00 Nov 20 1999
MAXIMUM PEAK FLOW		34	Feb 24 1940 Feb 3 1998
MAXIMUM PEAK STAGE		2.29	Feb 24 10.67 Feb 3 1998
ANNUAL RUNOFF (AC-FT)	3710	680	3710
10 PERCENT EXCEEDS	15	2.0	11
50 PERCENT EXCEEDS	.30	.18	.46
90 PERCENT EXCEEDS	.01	.00	.05

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 mi².

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 fair except for estimated daily discharges, which are poor. Some regulation of low flow by ponds upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,890 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 25	1630	205	4.55

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	1.0	1.1	1.2	1.2	4.1	2.4	.87	1.6	.64	.29	.24
2	.89	.82	1.1	1.2	1.1	5.1	2.2	.93	1.3	.64	.30	.23
3	.99	.83	.92	1.2	1.2	3.8	2.0	.96	1.3	.63	.30	.21
4	.68	.76	.92	1.1	1.2	20	1.9	1.0	1.2	.57	.31	.21
5	.40	.77	.88	1.1	1.3	14	1.8	1.0	1.3	.56	.30	.24
6	.29	.75	.86	1.1	1.3	7.2	3.3	.91	1.8	.59	.28	.22
7	.20	.68	.86	1.1	1.2	5.7	6.9	.75	1.6	.50	.27	.22
8	.16	.72	.96	2.0	1.2	5.2	2.9	.70	1.4	.57	.25	.24
9	1.4	.86	1.0	1.2	4.2	5.0	3.9	.78	e1.3	.53	.26	.22
10	1.7	1.1	1.2	12	5.9	4.5	2.6	.85	e1.2	.74	.26	.22
11	.66	.58	2.1	3.9	13	4.4	2.4	.83	e1.1	.98	.25	.22
12	.73	.62	1.3	1.7	15	4.0	2.0	.90	e1.0	.94	.23	.24
13	.57	1.3	1.8	1.5	4.5	3.9	1.8	.97	e.95	.94	.22	.25
14	.62	.98	4.5	1.4	2.7	3.8	1.7	1.1	e.85	.93	.22	.21
15	1.9	1.4	2.7	1.3	2.2	3.8	1.6	1.2	e.80	.89	.23	.17
16	1.0	1.3	1.1	1.2	2.0	3.2	1.6	1.6	e.75	.95	.23	.20
17	1.3	1.1	1.1	1.1	3.5	2.7	1.5	1.4	e.67	.59	.21	.23
18	1.2	.98	1.1	1.1	2.6	2.4	1.6	1.4	e.60	.46	.21	.24
19	.28	.85	1.1	1.1	6.7	2.5	1.5	1.5	e.50	.48	.20	.26
20	.25	.75	1.0	1.1	3.3	2.7	5.9	1.3	.45	.50	.23	.24
21	.25	1.2	.97	1.1	3.6	3.3	1.9	1.5	.35	.53	.24	.23
22	.24	1.2	.99	1.1	15	3.9	1.5	1.7	.55	.44	.23	.20
23	1.9	.92	1.1	3.4	17	3.8	1.5	1.9	.64	.33	.25	.19
24	1.8	.88	1.1	1.7	28	8.4	1.7	2.5	.76	.33	.26	.35
25	1.5	.89	1.1	16	14	6.0	1.7	2.2	1.1	e.30	.25	.43
26	5.6	.78	1.1	3.0	8.8	2.3	1.4	1.9	1.0	.28	.24	.21
27	1.7	.81	1.2	1.6	6.4	2.1	1.3	1.9	.93	.28	.23	.20
28	5.8	.76	1.2	1.5	5.0	2.7	1.1	1.5	1.0	.29	.23	.21
29	4.0	3.3	1.2	1.5	---	3.0	.97	1.6	.86	.28	.24	.20
30	6.1	1.2	1.2	1.1	---	2.9	.85	1.8	.75	.31	.26	.18
31	.90	---	1.2	1.1	---	2.6	---	1.8	---	.31	.24	---
TOTAL	45.19	30.09	39.96	71.7	173.1	149.0	65.42	41.25	29.61	17.31	7.72	6.91
MEAN	1.46	1.00	1.29	2.31	6.18	4.81	2.18	1.33	.99	.56	.25	.23
MAX	6.1	3.3	4.5	16	28	20	6.9	2.5	1.8	.98	.31	.43
MIN	.16	.58	.86	1.1	1.1	2.1	.85	.70	.35	.28	.20	.17
AC-FT	90	60	79	142	343	296	130	82	59	34	15	14

e Estimated.

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.89	3.04	5.76	16.2	35.3	17.6	7.19	2.91	1.41	.57	.27	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1981 - 2001	
ANNUAL TOTAL	3801.40		677.26			
ANNUAL MEAN	10.4		1.86		7.46	
HIGHEST ANNUAL MEAN					25.8	
LOWEST ANNUAL MEAN					.70	
HIGHEST DAILY MEAN	578	Feb 13	28	Feb 24	1270	Feb 3 1998
LOWEST DAILY MEAN	.01	Sep 27	.16	Oct 8	.00	Aug 28 1981
ANNUAL SEVEN-DAY MINIMUM	.04	Sep 13	.22	Sep 10	.00	Sep 6 1981
MAXIMUM PEAK FLOW			205	Jan 25	3890	Feb 3 1998
MAXIMUM PEAK STAGE			4.55	Jan 25	15.48	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	7540		1340		5400	
10 PERCENT EXCEEDS	18		3.9		13	
50 PERCENT EXCEEDS	1.2		1.1		.84	
90 PERCENT EXCEEDS	.30		.24		.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 1999 to May 2000.

SUSPENDED-SEDIMENT DISCHARGE: December 1980 to September 1994, October 1997 to current year.

REMARKS.—Sediment samples were collected on most days where water temperature is published. Zero bed-load discharge observed for flows less than 2.90 ft³/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, 648 mg/L, Feb. 11; minimum daily mean, 4 mg/L, Oct. 19, 20.

SEDIMENT LOAD (storm season only): Maximum daily, 51 tons, Jan. 25; minimum daily, 0 ton, Oct. 19–21.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED.	SED.	SED.	SED.
						SUSP. DIAM. % FINER THAN .002 MM (70337)	SUSP. DIAM. % FINER THAN .004 MM (70338)	SUSP. DIAM. % FINER THAN .008 MM (70339)	SUSP. DIAM. % FINER THAN .016 MM (70340)
OCT									
04...	1600	.45	16.0	40	.05	--	--	--	--
10...	1545	.85	14.5	210	.48	--	--	--	--
28...	1730	17	14.0	243	11	--	--	--	--
28...	1740	42	14.0	857	97	--	--	--	--
NOV									
21...	1630	1.2	10.0	34	.11	--	--	--	--
30...	1500	1.2	10.0	10	.03	--	--	--	--
DEC									
14...	1330	1.5	11.5	66	.27	--	--	--	--
JAN									
10...	1045	4.2	10.5	2080	24	36	40	56	70
25...	1640	185	8.0	2040	1020	29	37	51	63
FEB									
24...	1300	34	9.0	376	34	--	--	--	--
MAR									
20...	1100	2.9	12.5	6	.05	--	--	--	--
26...	1530	2.4	13.5	50	.32	--	--	--	--
APR									
20...	1555	12	12.0	255	8.3	--	--	--	--
20...	1605	16	12.0	615	27	--	--	--	--
30...	1415	1.2	17.0	12	.04	--	--	--	--
MAY									
15...	1430	1.2	16.0	21	.07	--	--	--	--

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SED.	SED.	SED.	SED.	SED.	SED.
	SUSP. FALL DIAM. % FINER THAN (70341)	SUSP. SIEVE DIAM. % FINER THAN (70331)	SUSP. SIEVE DIAM. % FINER THAN (70332)	SUSP. SIEVE DIAM. % FINER THAN (70333)	SUSP. SIEVE DIAM. % FINER THAN (70334)	SUSP. SIEVE DIAM. % FINER THAN (70335)
OCT						
04...	--	46	--	--	--	--
10...	--	98	98	100	--	--
28...	--	90	--	--	--	--
28...	--	72	86	98	100	--
NOV						
21...	--	97	--	--	--	--
30...	--	74	--	--	--	--
DEC						
14...	--	96	97	100	--	--
JAN						
10...	83	89	95	98	100	--
25...	75	83	90	96	98	100
FEB						
24...	--	95	97	99	100	--
MAR						
20...	--	74	--	--	--	--
26...	--	40	--	--	--	--
APR						
20...	--	95	--	--	--	--
20...	--	86	95	99	100	--
30...	--	60	--	--	--	--
MAY						
15...	--	28	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	DIS-	TEMPER-	BED	BED	BED
			CHARGE, INST. CUBIC FEET PER SECOND (00061)		ATU- RE WATER (DEG C) (00010)	MAT. SIEVE DIAM. % FINER THAN (80164)	MAT. SIEVE DIAM. % FINER THAN (80165)
OCT							
12...	0805	1	.58	12.0	8	18	31
12...	0810	1	.71	12.0	19	36	48
12...	0815	1	.85	12.0	1	2	4
12...	0820	1	.89	12.0	1	3	8
12...	0825	1	.93	12.0	8	36	84
12...	0830	1	.97	12.0	16	45	80
12...	0835	1	.98	12.0	7	32	85
12...	0840	1	.99	12.0	7	15	23
MAY							
15...	1600	1	1.2	16.0	16	30	42
15...	1605	1	1.2	16.0	1	3	6
15...	1610	1	1.2	16.0	--	1	2
15...	1615	1	1.2	16.0	1	2	6
15...	1620	1	1.2	16.0	3	7	17
15...	1625	1	1.2	16.0	8	22	49
15...	1630	1	1.2	16.0	11	37	76

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	.18	25	.01	1.0	25	.07	1.1	8	.02
2	.89	40	.15	.82	19	.04	1.1	10	.03
3	.99	55	.15	.83	20	.04	.92	10	.03
4	.68	42	.08	.76	22	.05	.92	21	.05
5	.40	38	.04	.77	24	.05	.88	24	.06
6	.29	36	.03	.75	26	.05	.86	23	.05
7	.20	34	.02	.68	28	.05	.86	23	.05
8	.16	31	.01	.72	30	.06	.96	22	.06
9	1.4	93	.71	.86	31	.07	1.0	21	.06
10	1.7	266	1.7	1.1	32	.10	1.2	21	.06
11	.66	133	.24	.58	33	.05	2.1	38	.37
12	.73	77	.15	.62	34	.06	1.3	6	.03
13	.57	25	.04	1.3	102	.50	1.8	14	.13
14	.62	9	.01	.98	77	.23	4.5	167	3.0
15	1.9	31	.19	1.4	111	.43	2.7	70	1.1
16	1.0	23	.07	1.3	95	.35	1.1	25	.08
17	1.3	43	.18	1.1	88	.26	1.1	18	.05
18	1.2	33	.12	.98	83	.22	1.1	12	.04
19	.28	4	.00	.85	79	.18	1.1	19	.06
20	.25	4	.00	.75	75	.15	1.0	30	.08
21	.25	6	.00	1.2	87	.33	.97	39	.10
22	.24	10	.01	1.2	37	.13	.99	36	.10
23	1.9	69	.37	.92	26	.06	1.1	30	.09
24	1.8	48	.24	.88	24	.06	1.1	25	.07
25	1.5	50	.31	.89	23	.05	1.1	25	.07
26	5.6	152	3.2	.78	21	.04	1.1	26	.08
27	1.7	27	.18	.81	19	.04	1.2	27	.09
28	5.8	110	8.0	.76	22	.05	1.2	28	.09
29	4.0	110	2.6	3.3	194	5.0	1.2	29	.09
30	6.1	281	7.4	1.2	12	.04	1.2	30	.09
31	.90	43	.10	---	---	---	1.2	31	.10
TOTAL	45.19	---	26.31	30.09	---	8.81	39.96	---	6.38
	JANUARY			FEBRUARY			MARCH		
1	1.2	32	.10	1.2	8	.03	4.1	19	.21
2	1.2	33	.11	1.1	8	.02	5.1	25	.36
3	1.2	34	.11	1.2	7	.02	3.8	16	.18
4	1.1	33	.10	1.2	6	.02	20	173	26
5	1.1	32	.10	1.3	6	.02	14	165	7.0
6	1.1	31	.10	1.3	5	.02	7.2	47	.95
7	1.1	30	.09	1.2	5	.02	5.7	17	.26
8	2.0	35	.25	1.2	5	.02	5.2	9	.12
9	1.2	16	.05	4.2	72	1.3	5.0	7	.10
10	12	256	27	5.9	297	5.7	4.5	7	.08
11	3.9	91	1.2	13	648	39	4.4	7	.08
12	1.7	44	.20	15	449	24	4.0	7	.07
13	1.5	31	.12	4.5	75	.94	3.9	6	.07
14	1.4	26	.10	2.7	27	.20	3.8	7	.07
15	1.3	23	.08	2.2	16	.09	3.8	7	.07
16	1.2	20	.07	2.0	14	.08	3.2	7	.06
17	1.1	17	.05	3.5	62	1.2	2.7	7	.05
18	1.1	14	.04	2.6	29	.22	2.4	6	.04
19	1.1	13	.04	6.7	148	4.8	2.5	6	.04
20	1.1	12	.04	3.3	26	.24	2.7	6	.04
21	1.1	11	.03	3.6	17	.18	3.3	17	.18
22	1.1	10	.03	15	133	8.8	3.9	24	.25
23	3.4	75	1.9	17	133	7.5	3.8	21	.22
24	1.7	15	.08	28	290	27	8.4	41	1.9
25	16	273	51	14	94	3.7	6.0	103	2.4
26	3.0	172	1.5	8.8	34	.83	2.3	51	.32
27	1.6	33	.14	6.4	21	.36	2.1	43	.25
28	1.5	22	.09	5.0	20	.27	2.7	35	.25
29	1.5	19	.09	---	---	---	3.0	27	.22
30	1.1	11	.03	---	---	---	2.9	25	.19
31	1.1	10	.03	---	---	---	2.6	23	.16
TOTAL	71.7	---	84.87	173.1	---	126.58	149.0	---	42.19

SAN LORENZO CREEK BASIN

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	2.4	22	.14
2	2.2	20	.12
3	2.0	19	.10
4	1.9	18	.09
5	1.8	16	.08
6	3.3	51	.63
7	6.9	120	3.6
8	2.9	25	.20
9	3.9	29	.33
10	2.6	23	.16
11	2.4	22	.14
12	2.0	21	.12
13	1.8	20	.10
14	1.7	19	.09
15	1.6	18	.08
16	1.6	17	.07
17	1.5	16	.07
18	1.6	15	.07
19	1.5	14	.06
20	5.9	167	5.6
21	1.9	35	.19
22	1.5	28	.11
23	1.5	26	.10
24	1.7	23	.11
25	1.7	20	.09
26	1.4	19	.07
27	1.3	17	.06
28	1.1	15	.05
29	.97	14	.04
30	.85	12	.03
31	---	---	---
TOTAL	65.42	---	12.7
PERIOD	574.46		307.84

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	45.19	26.31	8	34
NOVEMBER	30.09	8.81	1	10
DECEMBER	39.96	6.38	2	8
JANUARY 2001	71.70	84.87	14	99
FEBRUARY	173.10	126.58	70	197
MARCH	149.00	42.19	31	73
APRIL	65.42	12.70	5	18
PERIOD	574.46	307.84	131	439

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 mi².

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 good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,990 ft³/s, Feb. 3, 1998, gage height, 13.07 ft, from rating curve extended above 700 ft³/s; minimum daily, 0.04 ft³/s, Sept. 26–30, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 350 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 25	1530	92	4.87

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.49	1.1	1.1	1.0	1.1	2.2	1.2	.80	.20	.11	.09	.09
2	e.40	1.0	1.1	1.0	1.1	2.9	1.1	.75	.19	.10	.10	.09
3	e.40	.96	1.1	1.0	1.1	2.3	1.1	.67	.18	.10	.08	.09
4	e.40	.94	1.1	1.0	1.0	15	1.2	.68	.15	.10	.08	.09
5	e.45	.94	1.1	1.0	1.0	9.4	1.1	.68	.15	.10	.09	.10
6	e.40	.96	1.1	1.0	1.0	3.6	1.7	.67	.14	.10	.08	.10
7	e.38	.92	1.1	1.0	1.0	2.7	2.8	.62	.13	.10	.08	.11
8	e.45	.94	1.1	1.8	.98	2.4	1.2	.59	.12	.10	.08	.11
9	e.75	.96	1.1	1.2	2.0	2.3	1.3	.53	.12	.10	.09	.10
10	e1.1	.98	1.1	6.3	4.2	2.2	1.1	.54	.13	.10	.09	.10
11	e.70	.96	1.6	3.3	9.9	2.1	1.1	.51	.15	.10	.09	.09
12	e.55	.96	1.3	1.6	12	2.0	1.0	.53	.16	.07	.07	.11
13	.51	1.1	1.7	1.3	3.0	1.9	1.0	.55	.14	.07	.06	.08
14	.48	.98	4.0	1.3	1.9	1.8	1.0	.56	.12	.08	.06	.07
15	.47	.96	3.2	1.2	1.6	1.8	1.0	.53	.11	.08	.06	.07
16	.44	.97	1.4	1.2	1.5	1.8	.97	.44	.12	.08	.06	.08
17	.42	.91	1.3	1.1	2.3	1.7	.93	.47	.11	.08	.07	.08
18	.41	.90	1.1	1.1	2.1	1.7	.96	.46	.11	.09	.07	.08
19	.43	.91	1.1	1.1	3.6	1.6	.97	.41	.11	.08	.09	.08
20	.45	.90	1.1	1.1	3.4	1.6	3.2	.36	.12	.10	.09	.09
21	.48	1.1	1.1	1.2	2.6	1.6	1.5	.34	.09	.08	.08	.06
22	.63	1.1	1.1	1.2	7.4	1.5	1.0	.29	.09	.07	.09	.06
23	.76	.92	1.1	2.3	10	1.5	.98	.31	.09	.07	.08	.07
24	.77	.90	1.1	1.9	15	4.3	.93	.30	.09	.07	.08	.18
25	.85	.90	1.1	9.2	5.4	4.3	.90	.27	.22	.08	.08	.05
26	2.4	.90	1.0	3.2	3.5	1.6	.87	.29	.10	.09	.09	.04
27	.70	.90	1.0	1.5	2.7	1.4	.86	.35	.10	.09	.09	.04
28	2.2	.91	1.0	1.2	2.2	1.3	.89	.36	.10	.09	.09	.04
29	4.4	2.2	1.0	1.4	---	1.3	.83	.32	.11	.08	.10	.04
30	5.1	1.3	1.0	1.2	---	1.2	.80	.28	.10	.09	.11	.06
31	1.3	---	1.0	1.1	---	1.2	---	.24	---	.10	.11	---
TOTAL	29.67	30.38	40.3	56.0	104.58	84.2	35.49	14.70	3.85	2.75	2.58	2.45
MEAN	.96	1.01	1.30	1.81	3.74	2.72	1.18	.47	.13	.089	.083	.082
MAX	5.1	2.2	4.0	9.2	15	15	3.2	.80	.22	.11	.11	.18
MIN	.38	.90	1.0	1.0	.98	1.2	.80	.24	.09	.07	.06	.04
AC-FT	59	60	80	111	207	167	70	29	7.6	5.5	5.1	4.9

e Estimated.

SAN LORENZO CREEK BASIN

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.56	1.24	1.76	17.2	55.5	14.0	7.61	3.15	1.51	.78	.48	.40
MAX	.96	1.69	3.11	50.4	122	21.8	16.0	6.16	3.28	1.58	.77	.61
(WY)	2001	1999	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.20	.94	.80	1.81	3.73	2.72	1.18	.47	.13	.089	.083	.082
(WY)	1998	1998	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1998 - 2001	
ANNUAL TOTAL	2649.71		406.95			
ANNUAL MEAN	7.24		1.11		8.39	
HIGHEST ANNUAL MEAN					18.2	
LOWEST ANNUAL MEAN					1.11	
HIGHEST DAILY MEAN	429	Feb 13	15	Feb 24	465	Feb 3 1998
LOWEST DAILY MEAN	.38	Oct 7	.04	Sep 26	.04	Sep 26 2001
ANNUAL SEVEN-DAY MINIMUM	.41	Oct 2	.06	Aug 12	.06	Aug 12 2001
MAXIMUM PEAK FLOW			92	Jan 25	1990	Feb 3 1998
MAXIMUM PEAK STAGE			4.87	Jan 25	13.07	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	5260		807		6080	
10 PERCENT EXCEEDS	15		2.2		15	
50 PERCENT EXCEEDS	1.1		.89		1.1	
90 PERCENT EXCEEDS	.46		.08		.18	

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1999 to current year (storm season only).

WATER TEMPERATURE: October 1999 to current year (storm season only).

SEDIMENT DATA: October 1999 to current year(storm season only).

PERIOD OF DAILY RECORD.—

SUSPENDED-SEDIMENT DISCHARGE: October 1999 to current year (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 2.80 ft³/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, 5 mg/L, Mar. 20, Apr. 22, 2001.

SEDIMENT LOAD (storm season only): Maximum daily, 21,400 tons, Feb. 13, 2000; minimum daily, 0.01 ton, Oct. 13, 1999, Apr. 22, 2001.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 1,010 mg/L, Feb. 11; minimum daily mean, 5 mg/L, Mar. 20, Apr. 22.

SEDIMENT LOAD (storm season only): Maximum daily, 112 tons, Mar. 4; minimum daily, 0.01 ton, Apr. 22.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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								
12...	1715	.54	13.5	32	.05	--	--	--
26...	1130	3.2	13.5	45	.39	--	--	--
30...	1305	41	13.5	661	73	--	--	--
30...	1315	18	13.5	440	21	--	--	--
NOV								
29...	0845	3.7	11.0	32	.32	--	--	--
29...	1240	2.3	11.0	31	.19	--	--	--
DEC								
14...	1100	2.8	10.5	38	.29	--	--	--
JAN								
10...	1600	20	9.5	1080	58	--	--	--
11...	1145	2.8	8.5	100	.76	--	--	--
26...	1315	2.2	7.5	184	1.1	--	--	--
FEB								
12...	1500	14	7.0	578	22	--	--	--
24...	1130	32	8.0	1270	110	49	60	70
MAR								
05...	1445	6.1	11.5	170	2.8	--	--	--
22...	1030	1.5	12.5	30	.12	--	--	--
26...	1330	1.6	13.0	54	.23	--	--	--
APR								
20...	1700	5.1	11.5	103	1.4	--	--	--
29...	1500	.85	14.0	48	.11	--	--	--
MAY								
16...	0915	.55	15.0	47	.07	--	--	--

SAN LORENZO CREEK BASIN

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SED.						
	SUSP.						
	FALL	FALL	SIEVE	SIEVE	SIEVE	SIEVE	SIEVE
	DIAM.						
	% FINER						
	THAN						
	.016 MM	.031 MM	.062 MM	.125 MM	.250 MM	.500 MM	1.00 MM
	(70340)	(70341)	(70331)	(70332)	(70333)	(70334)	(70335)
OCT							
12...	--	--	71	--	--	--	--
26...	--	--	72	77	88	100	--
30...	--	--	82	89	97	100	--
30...	--	--	88	--	--	--	--
NOV							
29...	--	--	84	90	98	100	--
29...	--	--	58	63	74	91	100
DEC							
14...	--	--	92	92	100	--	--
JAN							
10...	--	--	97	99	100	--	--
11...	--	--	96	96	99	100	--
26...	--	--	98	99	99	100	--
FEB							
12...	--	--	96	99	100	--	--
24...	83	90	95	97	99	100	--
MAR							
05...	--	--	94	95	98	100	--
22...	--	--	43	--	--	--	--
26...	--	--	58	--	--	--	--
APR							
20...	--	--	90	95	99	100	--
29...	--	--	28	--	--	--	--
MAY							
16...	--	--	18	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAM- PLING POINTS (COUNT)	DIS-	TEMPER-	BED	BED	BED
			CHARGE, INST. CUBIC FEET PER SECOND		MAT. SIEVE DIAM. % FINER THAN	MAT. SIEVE DIAM. % FINER THAN	MAT. SIEVE DIAM. % FINER THAN
			(00063)	(00010)	(80164)	(80165)	(80166)
OCT							
12...	1720	1	.54	13.5	8	35	79
12...	1725	1	.54	13.5	2	13	51
12...	1730	1	.54	13.5	6	19	50
12...	1735	1	.54	13.5	--	1	8
12...	1740	1	.54	13.5	--	1	4
12...	1745	1	.54	13.5	1	2	10
12...	1750	1	.54	13.5	16	39	68
12...	1755	1	.54	13.5	15	43	76
12...	1800	1	.54	13.5	8	26	64
MAY							
16...	1100	1	.55	15.0	3	17	64
16...	1105	1	.55	15.0	5	16	46
16...	1110	1	.55	15.0	--	1	7
16...	1115	1	.55	15.0	1	3	11
16...	1120	1	.55	15.0	10	37	80

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	e.49	e36	e.05	1.1	18	.05	1.1	36	.11
2	e.40	e33	e.04	1.0	25	.07	1.1	36	.11
3	e.40	e30	e.03	.96	27	.07	1.1	36	.11
4	e.40	e27	e.03	.94	28	.07	1.1	36	.11
5	e.45	e60	e.07	.94	30	.07	1.1	34	.10
6	e.40	e45	e.05	.96	31	.08	1.1	31	.09
7	e.38	e30	e.03	.92	32	.08	1.1	29	.09
8	e.45	e65	e.08	.94	34	.09	1.1	26	.08
9	e.75	e90	e.18	.96	39	.10	1.1	27	.08
10	e1.1	e160	e.48	.98	43	.12	1.1	27	.08
11	e.70	e135	e.26	.96	48	.12	1.6	60	.55
12	e.55	e85	e.13	.96	53	.14	1.3	54	.20
13	.51	49	.07	1.1	69	.24	1.7	57	.75
14	.48	48	.06	.98	60	.16	4.0	79	1.4
15	.47	42	.05	.96	60	.16	3.2	106	1.4
16	.44	35	.04	.97	62	.16	1.4	54	.21
17	.42	29	.03	.91	63	.15	1.3	56	.19
18	.41	27	.03	.90	63	.15	1.1	57	.17
19	.43	25	.03	.91	63	.15	1.1	52	.15
20	.45	27	.03	.90	71	.17	1.1	45	.14
21	.48	28	.04	1.1	50	.15	1.1	39	.12
22	.63	30	.05	1.1	71	.23	1.1	35	.10
23	.76	31	.06	.92	48	.12	1.1	31	.09
24	.77	33	.07	.90	45	.11	1.1	27	.08
25	.85	45	.18	.90	45	.11	1.1	26	.07
26	2.4	76	.76	.90	45	.11	1.0	26	.07
27	.70	16	.03	.90	45	.11	1.0	25	.07
28	2.2	46	.81	.91	44	.11	1.0	25	.07
29	4.4	428	13	2.2	48	.43	1.0	25	.07
30	5.1	173	12	1.3	35	.12	1.0	25	.07
31	1.3	23	.09	---	---	---	1.0	25	.07
TOTAL	29.67	---	28.86	30.38	---	4.00	40.3	---	7.00
	JANUARY			FEBRUARY			MARCH		
1	1.0	24	.07	1.1	32	.09	2.2	38	.23
2	1.0	24	.07	1.1	31	.09	2.9	34	.28
3	1.0	24	.06	1.1	31	.09	2.3	13	.08
4	1.0	23	.06	1.0	32	.09	15	763	112
5	1.0	22	.06	1.0	32	.09	9.4	323	11
6	1.0	21	.06	1.0	33	.09	3.6	59	.59
7	1.0	20	.06	1.0	31	.09	2.7	24	.18
8	1.8	42	.26	.98	29	.08	2.4	12	.07
9	1.2	20	.07	2.0	111	1.1	2.3	10	.06
10	6.3	299	14	4.2	227	2.8	2.2	9	.05
11	3.3	163	1.6	9.9	1010	41	2.1	8	.05
12	1.6	51	.24	12	826	34	2.0	8	.04
13	1.3	45	.16	3.0	48	.41	1.9	8	.04
14	1.3	53	.18	1.9	36	.18	1.8	7	.04
15	1.2	61	.20	1.6	41	.18	1.8	7	.03
16	1.2	67	.21	1.5	45	.18	1.8	7	.03
17	1.1	66	.20	2.3	69	.57	1.7	6	.03
18	1.1	63	.19	2.1	28	.17	1.7	6	.03
19	1.1	56	.17	3.6	271	3.3	1.6	6	.02
20	1.1	47	.14	3.4	274	2.7	1.6	5	.02
21	1.2	38	.12	2.6	190	1.4	1.6	8	.03
22	1.2	29	.09	7.4	584	15	1.5	27	.11
23	2.3	67	.83	10	610	26	1.5	28	.11
24	1.9	37	.21	15	665	33	4.3	167	5.7
25	9.2	257	20	5.4	268	4.2	4.3	194	3.2
26	3.2	193	1.7	3.5	139	1.3	1.6	61	.26
27	1.5	119	.47	2.7	98	.72	1.4	55	.20
28	1.2	88	.29	2.2	61	.37	1.3	55	.19
29	1.4	82	.34	---	---	---	1.3	55	.19
30	1.2	60	.19	---	---	---	1.2	51	.17
31	1.1	45	.13	---	---	---	1.2	47	.15
TOTAL	56.0	---	42.43	104.58	---	169.29	84.2	---	135.18

e Estimated.

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	1.2	42	.13
2	1.1	37	.11
3	1.1	33	.10
4	1.2	30	.10
5	1.1	23	.07
6	1.7	31	.20
7	2.8	134	1.2
8	1.2	60	.20
9	1.3	68	.25
10	1.1	61	.18
11	1.1	63	.18
12	1.0	60	.17
13	1.0	55	.15
14	1.0	52	.14
15	1.0	50	.13
16	.97	47	.12
17	.93	45	.11
18	.96	44	.11
19	.97	40	.11
20	3.2	75	1.2
21	1.5	8	.03
22	1.0	5	.01
23	.98	14	.04
24	.93	33	.08
25	.90	51	.12
26	.87	53	.12
27	.86	51	.12
28	.89	50	.12
29	.83	48	.11
30	.80	48	.10
31	---	---	---
TOTAL	35.49	---	5.81
PERIOD	380.62		392.57

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	29.67	28.86	4	33
NOVEMBER	30.38	4.00	0	4
DECEMBER	40.30	7.00	0	7
JANUARY 2001	56.00	42.43	7	49
FEBRUARY	104.58	169.29	11	180
MARCH	84.20	135.18	16	151
APRIL	35.49	5.81	0	6
PERIOD	380.62	392.57	38	430

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 mi².

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 except for estimated daily discharges, which are poor. No storage or diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,690 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 23	unknown	unknown	unknown

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.10	.05	.10	e2.7	1.0	.42	.02	.00	.00	.00
2	.00	.00	.07	.05	.10	e2.5	1.0	.35	.02	.00	.00	.00
3	.00	.00	.07	.05	.10	e2.0	1.0	.29	.02	.00	.00	.00
4	.00	.00	.06	.05	.11	e10	.97	.31	.02	.00	.00	.00
5	.00	.00	.06	.05	.11	e19	.97	.36	.01	.00	.00	.00
6	.00	.00	.06	.05	.11	e5.0	.96	.29	.01	.00	.00	.00
7	.00	.00	.06	.05	.09	e3.2	2.1	.32	.01	.00	.00	.00
8	.00	.00	.06	.11	.08	e3.0	.79	.31	.01	.00	.00	.00
9	.00	.00	.06	.10	.18	e2.5	.98	.28	.01	.00	.00	.00
10	.00	.00	.06	.61	3.9	e2.0	.82	.30	.01	.00	.00	.00
11	.00	.00	.08	.73	8.6	e1.8	.82	.25	.01	.00	.00	.00
12	.00	.00	.13	.19	12	e1.7	.81	.29	.01	.00	.00	.00
13	.00	.01	.13	.12	3.8	e1.5	.77	.28	.01	.00	.00	.00
14	.00	.01	.43	.10	1.8	e1.4	.82	.31	.01	.00	.00	.00
15	.00	.01	.65	.07	1.1	e1.5	.55	.28	.01	.00	.00	.00
16	.00	.01	.13	.07	e.78	e1.4	.43	.20	.01	.00	.00	.00
17	.00	.00	.08	.07	e.90	e1.1	.50	.12	.01	.00	.00	.00
18	.00	.00	.07	.06	e1.2	e.98	.52	.10	.00	.00	.00	.00
19	.00	.00	.06	.07	e3.6	e.90	.53	.09	.00	.00	.00	.00
20	.00	.00	.06	.06	e1.8	e.86	1.7	.07	.00	.00	.00	.00
21	.00	.01	.06	.06	e1.2	.83	1.4	.06	.00	.00	.00	.00
22	.00	.01	.06	.06	e12	.80	.68	.04	.00	.00	.00	.00
23	.00	.01	.06	.09	e30	.81	.64	.04	.00	.00	.00	.00
24	.00	.07	.06	.15	e6.5	1.4	.65	.04	.00	.00	.00	.00
25	.00	.14	.05	2.1	e5.8	3.3	.61	.04	.01	.00	.00	.00
26	.15	.14	.05	1.5	e5.0	1.3	.51	.05	.00	.00	.00	.00
27	.01	.13	.05	.17	e3.7	1.0	.53	.08	.00	.00	.00	.00
28	.12	.14	.05	.12	e2.9	1.2	.47	.09	.00	.00	.00	.00
29	.35	.18	.05	.13	---	1.3	.42	.07	.00	.00	.00	.00
30	.23	.17	.05	.12	---	1.1	.41	.04	.00	.00	.00	.00
31	.04	---	.05	.11	---	.84	---	.02	---	.00	.00	---
TOTAL	0.90	1.05	3.07	7.32	107.56	78.92	24.36	5.79	0.22	0.00	0.00	0.00
MEAN	.029	.035	.099	.24	3.84	2.55	.81	.19	.007	.000	.000	.000
MAX	.35	.18	.65	2.1	30	19	2.1	.42	.02	.00	.00	.00
MIN	.00	.00	.05	.05	.08	.80	.41	.02	.00	.00	.00	.00
AC-FT	1.8	2.1	6.1	15	213	157	48	11	.4	.00	.00	.00

e Estimated

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.042	.73	2.50	9.66	14.0	9.05	2.93	.85	.29	.081	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1979 - 2001	
ANNUAL TOTAL	1210.56		229.19			
ANNUAL MEAN	3.31		.63		3.29	
HIGHEST ANNUAL MEAN					10.3	
LOWEST ANNUAL MEAN					.054	
HIGHEST DAILY MEAN	200	Feb 13	30	Feb 23	445	Feb 15 1982
LOWEST DAILY MEAN	.00	Aug 21	.00	Oct 1	.00	Oct 1 1978
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 3	.00	Oct 1	.00	Oct 1 1978
MAXIMUM PEAK FLOW					1690	
MAXIMUM PEAK STAGE					8.71	
ANNUAL RUNOFF (AC-FT)	2400		455		2390	
10 PERCENT EXCEEDS	5.5		1.4		6.1	
50 PERCENT EXCEEDS	.15		.05		.12	
90 PERCENT EXCEEDS	.00		.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.

SUSPENDED-SEDIMENT DISCHARGE: October 1978 to current year.

REMARKS.—Zero bed-load discharge observed at flows less than 0.80 ft³/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; 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, 1,160 mg/L, Jan. 25; no flow many days.

SEDIMENT LOAD (storm season only): Maximum daily, 31 tons, Feb. 12; minimum daily, 0 ton, many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- SUS- PENDED (T/DAY) (80155)	SED.	SED.	SED.	SED.	SED.
						SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
OCT										
30...	1625	.21	12.0	56	.03	60	67	82	91	100
NOV										
29...	1200	.23	10.0	6	<.01	90	--	--	--	--
29...	1400	.18	11.0	16	.01	60	--	--	--	--
DEC										
14...	1145	.55	10.0	12	.02	92	--	--	--	--
JAN										
26...	1405	.52	7.0	202	.28	93	95	96	100	--
FEB										
11...	1340	7.7	7.5	604	13	98	98	100	--	--
12...	1545	14	7.0	590	22	98	99	100	--	--
23...	1400	e7.6	9.5	196	e4.0	98	98	100	--	--
MAR										
20...	1400	e1.0	15.0	7	e.02	68	--	--	--	--
26...	1415	.83	13.0	33	.07	40	--	--	--	--
APR										
20...	1430	1.3	10.5	38	.13	71	--	--	--	--
MAY										
16...	1420	.21	17.0	20	.01	25	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	BED	BED	BED
					MAT. SIEVE DIAM. % FINER THAN (80164)	MAT. SIEVE DIAM. % FINER THAN (80165)	MAT. SIEVE DIAM. % FINER THAN (80166)
OCT							
12...	1355	1	0	13.0	2	8	31
12...	1400	1	0	13.0	3	14	58
12...	1405	1	0	13.0	1	3	10
12...	1410	1	0	13.0	1	3	11
12...	1415	1	0	13.0	1	2	6
12...	1420	1	0	13.0	5	14	35
12...	1425	1	0	13.0	6	18	37
MAY							
16...	1555	1	.22	17.0	4	15	47
16...	1600	1	.23	17.0	1	3	9
16...	1605	1	.20	17.0	--	1	4
16...	1610	1	.16	17.0	1	2	6

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

SAN LORENZO CREEK BASIN

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	.00	---	.00	.01	0	.00	.10	7	.00
2	.00	---	.00	.00	0	.00	.07	5	.00
3	.00	---	.00	.00	0	.00	.07	4	.00
4	.00	---	.00	.00	0	.00	.06	3	.00
5	.00	---	.00	.00	0	.00	.06	3	.00
6	.00	---	.00	.00	0	.00	.06	2	.00
7	.00	---	.00	.00	0	.00	.06	2	.00
8	.00	---	.00	.00	0	.00	.06	3	.00
9	.00	---	.00	.00	0	.00	.06	4	.00
10	.00	---	.00	.00	0	.00	.06	4	.00
11	.00	0	.00	.00	0	.00	.08	7	.00
12	.00	0	.00	.00	0	.00	.13	14	.01
13	.00	0	.00	.01	2	.00	.13	15	.01
14	.00	0	.00	.01	3	.00	.43	20	.02
15	.00	0	.00	.01	2	.00	.65	15	.03
16	.00	0	.00	.01	1	.00	.13	5	.00
17	.00	0	.00	.00	0	.00	.08	3	.00
18	.00	0	.00	.00	0	.00	.07	11	.00
19	.00	0	.00	.00	0	.00	.06	10	.00
20	.00	0	.00	.00	0	.00	.06	9	.00
21	.00	0	.00	.01	0	.00	.06	8	.00
22	.00	0	.00	.01	4	.00	.06	8	.00
23	.00	0	.00	.01	0	.00	.06	9	.00
24	.00	0	.00	.07	19	.01	.06	9	.00
25	.00	0	.00	.14	19	.01	.05	9	.00
26	.15	35	.02	.14	13	.00	.05	8	.00
27	.01	0	.00	.13	12	.00	.05	8	.00
28	.12	34	.04	.14	12	.00	.05	8	.00
29	.35	69	.19	.18	18	.01	.05	8	.00
30	.23	33	.06	.17	15	.01	.05	7	.00
31	.04	6	.00	---	---	---	.05	7	.00
TOTAL	0.90	---	0.31	1.05	---	0.04	3.07	---	0.07
	JANUARY			FEBRUARY			MARCH		
1	.05	7	.00	.10	19	.01	e2.7	---	e.20
2	.05	6	.00	.10	17	.00	e2.5	---	e.22
3	.05	6	.00	.10	15	.00	e2.0	---	e.19
4	.05	6	.00	.11	13	.00	e10	---	e1.5
5	.05	6	.00	.11	10	.00	e19	---	e6.8
6	.05	6	.00	.11	8	.00	e5.0	---	e.18
7	.05	6	.00	.09	8	.00	e3.2	---	e.10
8	.11	25	.01	.08	8	.00	e3.0	---	e.09
9	.10	19	.01	.18	51	.05	e2.5	---	e.07
10	.61	138	.46	3.9	479	6.5	e2.0	---	e.06
11	.73	145	.41	8.6	637	23	e1.8	---	e.04
12	.19	27	.01	12	751	31	e1.7	---	e.04
13	.12	23	.01	3.8	63	.69	e1.5	---	e.03
14	.10	20	.01	1.8	25	.14	e1.4	---	e.03
15	.07	17	.00	1.1	13	.04	e1.5	---	e.04
16	.07	14	.00	e.78	---	e.02	e1.4	---	e.03
17	.07	13	.00	e.90	---	e.07	e1.1	---	e.02
18	.06	12	.00	e1.2	---	e.26	e.98	---	e.02
19	.07	12	.00	e3.6	---	e3.4	e.90	---	e.02
20	.06	12	.00	e1.8	---	e1.0	e.86	---	e.02
21	.06	13	.00	e1.2	---	e.32	.83	6	.01
22	.06	13	.00	e12	---	e18	.80	6	.01
23	.09	30	.01	e30	---	e16	.81	6	.01
24	.15	34	.02	e6.5	---	e5.6	1.4	43	.42
25	2.1	1160	17	e5.8	---	e1.2	3.3	176	1.9
26	1.5	537	3.8	e5.0	---	e.39	1.3	51	.18
27	.17	41	.02	e3.7	---	e.29	1.0	25	.07
28	.12	25	.01	e2.9	---	e.31	1.2	13	.04
29	.13	23	.01	---	---	---	1.3	12	.04
30	.12	21	.01	---	---	---	1.1	8	.02
31	.11	19	.01	---	---	---	.84	6	.01
TOTAL	7.32	---	21.81	107.56	---	108.29	78.92	---	12.41

e Estimated.

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	1.0	21	.06
2	1.0	22	.06
3	1.0	21	.06
4	.97	19	.05
5	.97	18	.05
6	.96	33	.11
7	2.1	113	.74
8	.79	40	.09
9	.98	35	.09
10	.82	20	.04
11	.82	18	.04
12	.81	16	.03
13	.77	14	.03
14	.82	12	.03
15	.55	11	.02
16	.43	9	.01
17	.50	9	.01
18	.52	9	.01
19	.53	17	.02
20	1.7	81	.59
21	1.4	56	.25
22	.68	23	.04
23	.64	22	.04
24	.65	21	.04
25	.61	19	.03
26	.51	18	.02
27	.53	17	.02
28	.47	15	.02
29	.42	14	.02
30	.41	15	.02
31	---	---	---
TOTAL	24.36	---	2.64
PERIOD	223.18		145.57

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	0.90	0.31	0	0
NOVEMBER	1.05	0.04	0	0
DECEMBER	3.07	0.07	0	0
JANUARY 2001	7.32	21.81	0	22
FEBRUARY	107.56	108.29	37	145
MARCH	78.92	12.41	13	25
APRIL	24.36	2.64	0	3
PERIOD	223.18	145.57	50	195

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 mi².

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 except for estimated daily discharges, which are poor. 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 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 25	1630	137	5.06

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.5	2.1	1.7	3.6	11	3.6	2.6	.96	.47	e.45	e.65
2	1.1	2.1	2.0	1.6	3.5	15	3.7	2.4	1.0	.50	e.42	e.45
3	1.4	2.1	2.0	1.6	3.4	11	3.4	2.1	1.1	.52	.42	e.42
4	1.5	1.9	2.1	1.5	3.4	37	3.4	1.9	1.0	.40	.47	e.44
5	1.4	2.1	2.1	1.5	3.4	36	3.2	1.9	.98	.35	e.46	e.42
6	1.3	2.2	2.1	1.5	3.4	18	6.5	1.9	.92	.38	e.44	e.40
7	1.3	2.0	1.8	1.6	3.7	15	14	1.9	.92	.37	e.44	e.38
8	1.2	2.2	1.9	5.5	2.9	13	3.6	1.7	.95	.32	e.40	e.40
9	4.0	2.6	1.7	1.8	12	12	6.5	1.7	.92	.34	e.44	e.40
10	7.6	2.3	2.1	25	23	11	4.4	1.8	.93	.39	e.50	e.38
11	1.9	2.2	4.2	17	39	11	4.0	1.7	1.1	.39	e.48	e.36
12	1.4	2.1	4.3	5.7	45	9.6	3.9	1.8	1.4	.39	e.50	e.42
13	1.3	3.2	4.2	3.4	16	8.7	3.6	1.8	1.4	.45	e.52	e.36
14	1.2	2.8	16	2.9	9.6	8.6	3.6	2.2	1.1	.48	e.48	e.36
15	1.2	2.1	13	2.6	7.4	8.4	3.6	2.2	1.1	.48	e.46	e.44
16	1.1	2.2	3.4	2.4	6.5	7.8	3.6	2.0	1.1	.50	e.42	e.50
17	1.0	2.0	2.8	2.3	10	7.2	3.4	2.0	.98	.52	e.44	e.46
18	1.0	1.8	2.7	2.1	11	6.5	3.5	2.1	.96	.44	e.46	e.44
19	1.0	1.8	2.4	2.1	19	6.8	4.3	1.9	.84	.40	e.48	e.42
20	1.1	1.9	2.3	2.1	16	6.7	18	1.7	.63	.45	e.52	e.40
21	1.3	3.0	2.2	2.1	14	6.5	7.6	1.7	.52	.54	e.42	e.42
22	2.1	3.5	2.2	2.1	32	6.7	4.2	1.5	.54	.47	e.43	e.47
23	1.9	2.1	2.2	8.8	39	6.4	3.7	1.5	.58	.41	e.44	e.50
24	2.1	2.0	2.2	6.3	52	15	3.6	1.4	.42	.51	e.46	e.75
25	5.0	2.0	2.2	28	28	21	3.3	1.3	.57	.43	e.44	e.55
26	19	2.0	2.1	17	19	6.2	3.2	1.3	1.1	.41	e.44	e.50
27	4.4	2.2	2.2	7.3	15	5.1	3.2	1.4	.53	.41	e.45	e.52
28	13	2.0	2.3	5.0	12	4.9	3.1	1.6	.51	e.36	e.44	e.49
29	15	10	2.2	6.5	---	4.8	2.9	1.4	.61	e.40	e.45	e.45
30	20	2.8	2.1	4.5	---	4.4	2.7	1.2	.44	e.40	e.46	e.42
31	4.3	---	1.7	3.9	---	3.6	---	.97	---	e.39	e.40	---
TOTAL	122.3	75.7	98.8	177.4	452.8	344.9	141.3	54.57	26.11	13.27	14.03	13.57
MEAN	3.95	2.52	3.19	5.72	16.2	11.1	4.71	1.76	.87	.43	.45	.45
MAX	20	10	16	28	52	37	18	2.6	1.4	.54	.52	.75
MIN	1.0	1.8	1.7	1.5	2.9	3.6	2.7	.97	.42	.32	.40	.36
AC-FT	243	150	196	352	898	684	280	108	52	26	28	27

e Estimated.

11181000 SAN LORENZO CREEK AT HAYWARD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.66	3.55	20.3	53.5	55.2	37.5	24.6	5.67	2.32	1.05	.72	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	7160.11		1534.75			
ANNUAL MEAN	19.6		4.20		16.2	
HIGHEST ANNUAL MEAN					56.4	
LOWEST ANNUAL MEAN					.63	
HIGHEST DAILY MEAN	848	Feb 13	52	Feb 24	2600	Oct 13 1962
LOWEST DAILY MEAN	.85	Aug 18	.32	Jul 8	.00	Sep 19 1940
ANNUAL SEVEN-DAY MINIMUM	.97	Sep 4	.36	Jul 5	.00	Oct 1 1946
MAXIMUM PEAK FLOW			137	Jan 25	8140	Feb 3 1998
MAXIMUM PEAK STAGE			5.06	Jan 25	21.85	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	14200		3040		11730	
10 PERCENT EXCEEDS	50		11		33	
50 PERCENT EXCEEDS	2.8		2.0		1.6	
90 PERCENT EXCEEDS	1.1		.42		.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 mi².

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 ft³/s, Feb. 2, 1998, gage height, 9.12 ft, from rating curve extended above 61 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 29	0205	501	5.24	Jan. 25	unknown	847	6.75

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.87	1.2	.86	.72	.61	2.3	.57	.55	.45	.51	.42	.35
2	.81	1.1	.79	.69	.61	7.6	.49	.49	.41	.49	.40	.42
3	.62	1.0	.79	.73	.58	4.6	.77	.43	.44	.51	.44	.39
4	.67	.97	.81	.72	.58	27	.52	.46	.41	.46	.45	.37
5	.50	.90	.77	.56	.55	11	.60	.48	.45	.48	.42	.34
6	.56	.93	.80	.31	.49	3.3	7.7	.53	.38	.38	.43	.34
7	1.3	.93	.78	.35	.48	2.3	12	.48	.35	.36	.42	.34
8	1.1	.96	.77	6.8	6.4	1.9	.84	.49	.29	.43	.44	.33
9	7.5	1.0	.78	1.2	22	1.7	2.1	.49	.33	.39	.47	.34
10	3.9	.91	.81	32	31	1.5	.64	.56	.37	.35	.48	.33
11	.85	.84	6.0	11	34	1.4	.57	.46	.39	.38	.46	.34
12	.70	.85	.96	2.6	7.2	1.2	.52	.43	.38	.40	.45	.36
13	.66	2.4	8.4	.86	2.5	1.2	.51	.72	.43	.39	.46	.35
14	.65	.75	20	.66	1.6	1.1	.51	.44	.48	.39	.49	.35
15	.68	.71	11	.69	1.3	1.0	.48	.45	.43	.39	.47	.33
16	.75	.77	1.3	.68	1.3	1.0	.47	.48	.49	.39	.48	.35
17	.70	.70	1.0	.46	13	1.0	.46	.49	.44	.41	.46	.42
18	.60	.68	.93	.48	4.8	.93	1.0	.49	.51	.41	.49	.36
19	.65	.71	.88	.44	19	.89	1.3	.45	.44	.39	.47	.38
20	.62	.82	.85	.43	7.7	.87	21	.49	.44	.37	.48	.39
21	.62	2.7	.81	.42	6.6	.69	1.3	.52	.47	.40	.46	.40
22	.72	.73	.81	.40	25	.52	.78	.51	.46	.43	.43	.39
23	1.0	.34	.78	7.7	8.9	.51	.68	.50	.41	.44	.43	.40
24	.96	.32	.81	2.6	30	13	.64	.58	.44	.57	.40	.59
25	4.6	.30	.75	e40	5.5	7.2	.74	.54	e2.7	.58	.41	.43
26	36	.29	.74	e8.5	3.1	.87	.62	.51	e.52	.48	.39	.20
27	1.8	.28	.75	e1.5	2.3	.72	.59	.49	e.53	.44	.40	.23
28	20	.29	.74	e.8	1.7	.69	.54	.49	e.51	.40	e.41	.21
29	23	12	.74	e9.0	---	.64	.51	.41	.48	.39	e.40	.21
30	20	.89	.75	.74	---	.59	.53	.45	.48	.40	e.39	.22
31	1.8	---	.73	.66	---	.59	---	.44	---	.50	e.38	---
TOTAL	135.19	37.27	67.69	134.70	238.80	99.81	59.98	15.30	15.31	13.31	13.58	10.46
MEAN	4.36	1.24	2.18	4.35	8.53	3.22	2.00	.49	.51	.43	.44	.35
MAX	36	12	20	40	34	27	21	.72	2.7	.58	.49	.59
MIN	.50	.28	.73	.31	.48	.51	.46	.41	.29	.35	.38	.20
AC-FT	268	74	134	267	474	198	119	30	30	26	27	21

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

MEAN	1.62	4.66	5.10	9.97	11.0	7.31	2.77	1.15	.58	.39	.38	.50
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1972 - 2001	
ANNUAL TOTAL	1724.95		841.40			
ANNUAL MEAN	4.71		2.31		3.95	
HIGHEST ANNUAL MEAN					9.14	
LOWEST ANNUAL MEAN					1.51	
HIGHEST DAILY MEAN	223	Feb 13	40	Jan 25	322	Jan 4 1982
LOWEST DAILY MEAN	.16	Aug 20	.20	Sep 26	.00	Oct 11 1977
ANNUAL SEVEN-DAY MINIMUM	.17	Aug 14	.30	Sep 24	.00	Oct 11 1977
MAXIMUM PEAK FLOW			847		1550	
MAXIMUM PEAK STAGE			6.75		9.12	
ANNUAL RUNOFF (AC-FT)	3420		1670		2860	
10 PERCENT EXCEEDS	10		6.2		6.8	
50 PERCENT EXCEEDS	.70		.57		.49	
90 PERCENT EXCEEDS	.28		.38		.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 mi².

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 ft³/s, Feb. 3, 1998, gage height, 14.27 ft, from rating curve extended above 1,200 ft³/s; minimum daily, 0.01 ft³/s, several days in June and July 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,500 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 25	1600	2,050	6.58

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.3	e5.0	3.6	7.2	20	49	4.8	2.6	e1.6	3.4	6.8	1.1
2	e1.6	e4.5	3.1	7.1	18	73	4.4	2.3	e1.6	3.3	7.5	1.2
3	e1.9	e4.4	3.2	6.9	18	59	4.3	1.7	e1.6	3.1	e6.0	1.1
4	e1.8	e3.5	2.8	6.9	18	189	4.0	1.6	e1.5	2.6	e5.2	1.1
5	e1.8	e3.2	3.2	7.3	18	151	4.2	2.0	e1.5	2.4	e4.4	1.1
6	e1.7	e3.3	2.9	7.1	18	60	16	2.1	e1.5	2.0	e3.3	1.0
7	e1.6	e3.2	2.9	7.2	19	41	37	2.0	e1.4	1.9	e3.0	1.0
8	e1.7	e3.4	2.8	41	17	31	6.7	1.9	e1.4	2.1	e2.8	1.7
9	e2.4	e3.6	2.9	16	77	25	10	1.9	e1.4	2.0	e2.6	1.4
10	e9.0	e3.4	2.8	147	154	19	5.2	2.0	e1.4	2.0	e2.4	.97
11	e23	e3.2	13	83	255	18	4.4	2.1	e1.4	2.2	e2.2	.98
12	e5.5	e3.2	15	37	309	16	4.2	2.2	e1.4	2.1	e2.1	1.0
13	e3.0	e11	14	19	101	12	3.8	2.9	e1.3	2.2	e2.0	1.3
14	e2.5	e7.5	72	17	75	10	3.8	2.9	e1.3	2.3	e1.9	1.3
15	e2.3	e5.5	56	15	63	9.0	3.8	3.3	e1.3	2.4	e1.9	1.0
16	e1.9	e4.5	15	14	51	8.1	3.7	3.5	e1.3	2.6	e1.9	1.2
17	e1.8	e4.0	9.4	12	97	7.9	3.5	3.8	e1.3	4.0	1.8	1.6
18	e1.7	e3.5	8.2	11	96	7.5	3.7	4.1	e1.3	2.6	1.8	1.5
19	e1.7	e3.2	8.0	11	115	8.3	5.8	4.5	e1.3	2.4	1.7	1.6
20	e1.8	e3.3	7.8	11	75	8.5	54	4.5	e1.2	2.7	1.6	1.5
21	e2.2	e14	7.3	11	75	8.8	12	e3.9	e1.2	2.9	1.7	1.6
22	e3.0	e8.0	6.9	9.1	173	8.6	4.8	e3.4	e1.4	2.9	1.5	1.6
23	e3.2	e3.8	6.7	42	159	8.3	4.0	e3.1	1.6	2.9	1.4	1.7
24	e3.8	e3.0	6.8	46	253	37	3.5	e2.9	1.9	3.1	1.4	2.7
25	e29	e3.0	6.9	181	119	41	3.3	e2.7	8.0	2.9	1.3	3.7
26	e130	e2.9	7.0	90	78	9.5	3.0	e2.5	7.3	e2.9	1.3	2.3
27	e22	e5.0	6.4	44	56	7.6	3.1	e2.3	4.5	e2.8	1.3	1.8
28	e90	e4.2	6.6	26	51	6.4	3.0	e2.2	4.5	3.0	1.2	2.1
29	e104	e45	6.6	43	---	5.9	2.7	e2.0	4.3	3.6	1.2	1.8
30	e100	e5.5	6.7	24	---	5.4	2.5	e1.9	4.1	4.6	1.2	1.6
31	e15.0	---	6.8	21	---	5.0	---	e1.8	---	6.1	1.1	---
TOTAL	572.2	180.8	323.3	1020.8	2578	945.8	229.2	82.6	66.8	88.0	77.5	45.55
MEAN	18.5	6.03	10.4	32.9	92.1	30.5	7.64	2.66	2.23	2.84	2.50	1.52
MAX	130	45	72	181	309	189	54	4.5	8.0	6.1	7.5	3.7
MIN	1.3	2.9	2.8	6.9	17	5.0	2.5	1.6	1.2	1.9	1.1	.97
AC-FT	1130	359	641	2020	5110	1880	455	164	132	175	154	90

e Estimated.

SAN LORENZO CREEK BASIN

11181040 SAN LORENZO CREEK AT SAN LORENZO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.74	9.76	23.4	71.6	72.1	44.3	22.5	9.28	4.16	1.96	1.59	1.80
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1968 - 2001	
ANNUAL TOTAL	9110.8		6210.55			
ANNUAL MEAN	24.9		17.0		22.1	
HIGHEST ANNUAL MEAN					65.6	
LOWEST ANNUAL MEAN					2.38	
HIGHEST DAILY MEAN	1030	Feb 14	309	Feb 12	2400	Jan 21 1970
LOWEST DAILY MEAN	1.3	Sep 30	.97	Sep 10	.01	Jun 12 1977
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 25	1.1	Sep 1	.01	Jun 10 1977
MAXIMUM PEAK FLOW			2050	Jan 25	10300	Feb 3 1998
MAXIMUM PEAK STAGE			6.58	Jan 25	14.27	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	18070		12320		16030	
10 PERCENT EXCEEDS	46		50		45	
50 PERCENT EXCEEDS	6.9		3.5		2.9	
90 PERCENT EXCEEDS	1.8		1.4		.63	

380519122262901 SAN PABLO BAY AT PETALUMA RIVER CHANNEL MARKER 9, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	30000	23600	34200	31900	36300	35600	39600	37700	---	---	---	---
2	32600	22200	34200	31200	36300	35400	39700	36900	---	---	---	---
3	33900	23200	33800	32400	36300	35000	39900	37000	41100	39700	---	---
4	33900	23800	33600	32700	36300	34600	40100	36600	41200	39900	---	---
5	33400	25900	33700	32400	36500	34600	40000	36300	---	---	---	---
6	33400	27300	33700	32300	36700	34800	39800	35900	---	---	---	---
7	33500	28100	33700	32200	36800	34900	40100	35900	---	---	---	---
8	33500	27700	33800	31900	37100	35200	39700	35800	---	---	---	---
9	32800	27800	34000	31900	37100	35500	39900	36600	---	---	---	---
10	33000	27400	33600	31800	37200	35600	38900	36900	---	---	---	---
11	33300	28400	33800	32100	37200	35500	39600	37800	---	---	---	---
12	34000	27800	34100	32700	38100	35200	---	---	---	---	---	---
13	33700	28600	34300	33100	38000	35900	---	---	---	---	---	---
14	33600	28300	36100	33100	38200	35100	---	---	---	---	---	---
15	33900	29100	36100	34300	37500	33000	---	---	---	---	---	---
16	---	---	35500	33500	37600	32300	---	---	---	---	---	---
17	33800	29000	35600	32700	37900	32800	---	---	---	---	---	---
18	33700	30200	35300	32500	38200	33100	---	---	---	---	---	---
19	34500	30500	35300	32600	38300	33600	---	---	43000	40200	---	---
20	34700	30500	35300	32700	38000	34200	---	---	42900	38300	---	---
21	34700	31000	35300	32700	37900	34300	---	---	43000	39800	---	---
22	34600	30500	35700	32700	37600	34000	---	---	42900	39200	---	---
23	34300	30800	35700	33600	38000	34500	40900	36500	---	---	---	---
24	34200	30600	35700	33400	37500	35700	---	---	---	---	---	---
25	---	---	35700	33700	37900	36300	---	---	---	---	---	---
26	---	---	36100	33800	37500	36300	---	---	42900	40000	---	---
27	---	---	37100	34200	38100	36000	---	---	---	---	---	---
28	---	---	36900	34600	38200	36900	---	---	---	---	---	---
29	---	---	36100	34900	38400	37400	---	---	---	---	---	---
30	---	---	36300	35200	38200	37700	---	---	42900	40600	---	---
31	---	---	36300	35400	---	---	---	---	43200	41200	---	---
MONTH	---	---	37100	31200	38400	32300	---	---	---	---	---	---

380519122262901 SAN PABLO BAY AT PETALUMA RIVER CHANNEL MARKER 9, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	11.0	9.5	10.0	7.5	10.0	8.5	12.5	11.0
2	---	---	15.0	12.5	11.0	9.0	10.0	7.5	10.5	9.0	12.0	11.0
3	---	---	15.0	13.0	10.5	9.0	10.5	8.0	11.0	9.5	11.5	11.0
4	---	---	15.5	13.5	11.0	9.0	10.5	9.0	12.5	10.0	11.5	11.0
5	---	---	15.5	13.5	10.5	9.0	10.0	9.0	13.0	10.5	13.0	11.0
6	---	---	15.0	14.0	10.0	9.0	10.0	8.5	11.5	10.0	13.5	11.5
7	---	---	14.5	13.0	10.5	9.0	10.0	8.5	10.5	8.5	14.0	11.5
8	---	---	14.5	13.0	11.0	10.0	10.0	9.0	9.5	7.5	14.0	12.5
9	---	---	14.0	12.0	11.0	10.0	10.0	8.5	10.0	8.0	13.5	12.5
10	---	---	13.5	10.5	11.0	10.5	9.5	8.5	9.5	8.0	13.5	11.0
11	---	---	13.0	9.5	11.0	10.0	9.5	8.0	9.5	8.0	13.5	11.5
12	---	---	12.0	8.5	11.0	10.0	9.0	8.0	9.0	7.5	14.5	11.5
13	---	---	12.0	8.5	11.0	9.5	9.5	8.5	9.0	7.0	14.5	12.5
14	---	---	11.5	8.0	11.0	10.0	10.0	9.0	9.5	8.0	15.5	13.5
15	---	---	11.0	8.5	11.5	10.0	9.5	8.5	10.5	9.0	15.5	14.0
16	---	---	10.5	9.0	11.5	10.0	9.0	7.5	11.0	9.0	16.5	13.0
17	---	---	11.0	8.5	11.0	10.0	8.5	7.5	11.0	10.0	17.5	13.0
18	---	---	11.0	8.5	10.5	9.5	8.5	7.5	11.5	10.0	18.5	14.0
19	---	---	11.5	8.5	10.5	9.5	9.5	8.0	11.0	10.5	19.0	14.5
20	---	---	11.5	9.0	10.5	9.5	9.0	8.5	11.0	10.5	19.5	15.0
21	---	---	11.5	9.5	10.5	9.5	9.0	8.0	11.5	10.5	19.0	15.0
22	---	---	11.5	9.5	10.5	9.5	9.0	8.0	11.5	10.5	18.5	14.5
23	---	---	11.5	9.5	10.5	9.0	9.0	8.0	11.5	10.0	17.5	15.0
24	---	---	11.5	10.0	10.5	9.0	9.5	8.5	11.5	10.0	16.5	15.5
25	---	---	11.5	9.5	10.0	8.5	9.0	8.0	11.0	10.0	17.0	15.5
26	---	---	11.0	10.0	10.0	8.0	9.0	7.5	11.5	10.0	16.5	14.5
27	---	---	11.0	9.5	---	---	9.0	7.5	12.5	10.5	17.0	14.5
28	---	---	11.0	9.5	10.0	7.5	9.0	7.5	12.5	11.0	17.5	15.5
29	---	---	11.0	10.0	10.0	7.5	9.5	8.0	---	---	18.0	15.5
30	---	---	---	---	9.5	7.0	9.5	8.0	---	---	18.5	16.0
31	---	---	---	---	10.0	7.5	9.5	7.5	---	---	21.0	16.5
MONTH	---	---	---	---	---	---	10.5	7.5	13.0	7.0	21.0	11.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21.0	16.0	23.5	16.5	26.0	21.0	24.0	20.5	22.0	19.5	21.0	19.0
2	18.5	14.0	20.5	15.5	23.5	20.5	24.0	21.0	21.5	19.5	21.5	19.5
3	17.0	13.0	19.5	15.5	22.0	19.5	25.5	22.0	22.0	20.0	21.5	19.5
4	16.0	13.5	20.0	16.5	21.5	20.0	24.5	22.0	22.0	19.5	21.0	19.5
5	15.0	13.5	20.0	17.5	21.5	19.5	24.0	21.5	22.5	20.0	21.0	19.0
6	14.5	13.0	21.0	18.0	22.5	19.5	23.0	20.5	23.5	20.5	21.5	19.0
7	14.0	12.5	22.5	18.0	23.0	20.5	23.0	20.5	23.5	21.0	21.0	19.0
8	13.0	11.5	23.5	18.5	24.0	21.0	23.0	20.5	23.0	21.0	20.0	18.5
9	14.0	12.0	23.5	19.0	24.5	21.0	23.0	20.5	22.5	21.0	20.0	18.5
10	14.0	12.0	24.0	19.5	24.5	20.5	23.5	20.5	23.0	20.5	20.5	18.5
11	14.0	13.0	24.5	19.5	24.5	20.0	22.5	20.0	22.5	21.0	21.5	19.0
12	15.0	13.0	24.0	19.0	24.0	19.5	22.5	20.0	22.5	20.5	20.5	19.0
13	16.5	13.5	24.0	18.5	24.0	19.5	22.0	19.5	22.0	19.5	20.0	19.0
14	17.0	13.0	23.0	17.5	25.5	20.0	22.5	20.0	21.5	20.0	20.0	18.5
15	18.0	13.5	23.0	17.5	24.0	21.0	20.5	19.0	21.5	20.0	20.0	18.5
16	18.5	14.0	23.0	18.0	24.0	21.0	21.0	18.5	22.0	19.5	20.0	18.5
17	20.0	15.0	22.5	18.5	24.0	21.0	21.5	18.5	22.0	20.0	19.5	18.0
18	19.0	14.5	22.5	19.0	24.0	21.5	22.0	19.0	22.0	19.5	19.5	18.0
19	17.5	14.0	23.0	19.5	25.0	21.0	21.5	19.5	21.5	19.5	19.0	17.5
20	16.0	13.0	23.0	19.5	25.5	21.5	21.0	19.5	21.0	18.5	19.0	17.5
21	15.5	13.0	23.0	20.0	25.5	21.0	21.0	19.5	20.5	18.5	19.5	17.5
22	16.5	14.0	23.0	20.0	25.0	21.5	22.5	19.5	21.5	19.0	19.0	17.5
23	17.5	15.0	22.5	20.0	24.5	21.0	22.5	19.5	22.5	19.0	19.0	17.5
24	19.0	15.5	22.0	20.0	23.5	20.0	22.0	19.5	22.5	20.0	18.5	17.5
25	19.5	16.0	22.5	19.5	23.0	19.5	23.0	19.5	22.5	20.0	19.5	18.0
26	20.0	16.0	23.0	19.0	21.5	18.5	22.5	19.5	22.5	20.0	20.5	18.0
27	20.5	16.5	22.5	18.5	20.5	18.5	22.5	19.5	22.5	20.0	20.0	18.5
28	20.5	15.5	22.5	18.0	22.0	18.5	21.5	19.0	22.5	20.0	20.0	18.0
29	20.5	15.0	23.5	18.0	23.0	19.5	21.5	19.5	22.5	20.0	19.5	17.5
30	---	---	25.0	19.5	23.5	20.0	21.5	19.5	20.5	18.5	20.0	18.0
31	---	---	26.5	21.0	---	---	22.0	19.5	20.5	18.5	---	---
MONTH	---	---	26.5	15.5	26.0	18.5	25.5	18.5	23.5	18.5	21.5	17.5

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.

DRAINAGE AREA.—Indeterminate.

GAGE-HEIGHT RECORDS

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.—Station temporarily discontinued January 2, 2001. 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, 14.29 ft, Dec. 12; minimum gage height recorded, 5.66 ft, Dec. 12.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY	
1	13.60	8.01	12.69	7.33	12.45	7.41	12.28	7.85
2	13.46	8.13	12.45	7.72	12.12	7.71	---	---
3	13.32	8.22	12.13	7.92	12.28	7.81	---	---
4	13.00	8.25	12.33	7.92	12.44	7.95	---	---
5	12.73	8.26	12.40	7.96	12.70	8.10	---	---
6	12.73	8.20	12.45	7.95	12.93	8.32	---	---
7	12.70	8.17	12.57	7.78	13.36	7.93	---	---
8	12.78	8.00	12.93	8.07	13.69	7.27	---	---
9	13.03	7.98	13.13	7.90	13.94	6.66	---	---
10	13.01	8.19	13.70	7.42	14.21	6.12	---	---
11	13.16	8.18	13.63	6.56	14.27	5.92	---	---
12	13.05	8.00	13.55	6.08	14.29	5.66	---	---
13	13.17	7.63	13.92	6.11	14.28	5.84	---	---
14	13.43	7.40	13.82	6.09	13.67	5.72	---	---
15	13.61	7.15	13.64	6.26	12.98	5.85	---	---
16	13.57	6.92	13.27	6.39	12.39	6.38	---	---
17	13.58	6.87	12.73	6.55	12.42	6.97	---	---
18	13.38	7.00	12.35	6.75	12.72	7.02	---	---
19	13.17	7.02	12.41	6.80	12.96	7.57	---	---
20	13.03	7.06	12.89	7.18	13.40	7.72	---	---
21	12.69	7.06	13.27	7.73	13.62	7.28	---	---
22	12.74	6.74	13.29	7.48	13.57	6.79	---	---
23	12.90	7.22	13.33	6.82	13.59	6.40	---	---
24	13.02	7.35	13.40	6.52	13.45	6.26	---	---
25	13.61	7.96	13.60	6.44	13.50	6.20	---	---
26	13.94	7.63	13.44	6.34	13.51	6.19	---	---
27	13.77	7.27	13.39	6.38	13.23	6.36	---	---
28	14.19	7.27	13.39	6.81	13.11	6.61	---	---
29	13.72	7.09	13.37	6.95	12.79	6.90	---	---
30	13.55	7.04	12.75	7.10	12.52	7.22	---	---
31	13.08	7.19	---	---	12.19	7.63	---	---
MONTH	14.19	6.74	13.92	6.08	14.29	5.66	---	---

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.—Upper probe specific conductance record is rated good, lower probe specific conductance record is rated excellent. Upper and lower probe temperature records are rated excellent. The station was temporarily discontinued on January 2, 2001. Other 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, 46,200 microsiemens, Oct. 3; minimum recorded, 35,100 microsiemens, Dec. 31.

(Lower probe) Maximum recorded, 47,300 microsiemens, Oct. 17; minimum recorded, 34,200 microsiemens, Dec. 2.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 19.5°C, Oct. 1; minimum recorded, 9.5°C, Dec. 28, 29, 30.

(Lower probe) Maximum recorded, 19.5°C, Oct. 1; minimum recorded, 9.5°C, Dec. 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY	
1	46000	39300	44700	37700	43300	36900	42200	35300
2	46000	40400	44900	35600	43300	35600	---	---
3	46200	40500	44500	36400	43300	36100	---	---
4	45500	40600	44900	35700	43000	35500	---	---
5	45900	40800	44400	36400	43300	36000	---	---
6	45300	39100	44600	36800	43500	36800	---	---
7	45100	39900	44500	38500	43100	37500	---	---
8	45300	40300	44400	37800	43400	37400	---	---
9	45300	39100	44800	38800	43400	37200	---	---
10	45500	40000	45300	39400	43700	37500	---	---
11	45800	40300	45200	39000	43900	37700	---	---
12	45300	39800	45000	38300	43700	36500	---	---
13	45500	39500	45300	38500	43900	37700	---	---
14	45800	39200	45200	38300	43700	37100	---	---
15	46000	38800	45300	38100	43500	35200	---	---
16	46000	39300	45300	38800	43000	36600	---	---
17	45900	38900	44500	38800	42900	36600	---	---
18	45400	39300	44500	38700	43000	36400	---	---
19	45300	39400	44500	38500	43100	36300	---	---
20	45200	38700	44400	39000	43100	37500	---	---
21	45200	39300	44600	39600	43200	37100	---	---
22	45700	40400	44400	39100	43200	36700	---	---
23	45600	39700	44500	38400	43200	36900	---	---
24	45700	39300	44700	38000	43300	36900	---	---
25	45900	39500	44500	38100	43200	36600	---	---
26	45800	39300	44500	38000	43100	35900	---	---
27	45600	39400	44300	38000	42900	36400	---	---
28	45900	39000	44400	37400	43000	37000	---	---
29	45200	38600	44100	38300	42500	37000	---	---
30	45300	38600	43600	37900	42400	36700	---	---
31	45300	38000	---	---	42300	35100	---	---
MONTH	46200	38000	45300	35600	43900	35100	---	---

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY	
1	47100	38500	45300	36700	44900	35800	44000	35500
2	46800	39500	45700	35100	44700	34200	---	---
3	46300	39300	45700	36400	44500	35400	---	---
4	46000	39300	45500	36500	44500	35100	---	---
5	46900	39300	45200	37000	44400	35700	---	---
6	46500	39300	45100	37900	44700	36300	---	---
7	46400	40100	45100	37900	44300	36900	---	---
8	46500	40500	45200	37500	44600	36900	---	---
9	46500	39100	45500	38800	45000	36600	---	---
10	46800	40500	45900	39100	45300	37000	---	---
11	46900	40400	45900	38700	45600	37200	---	---
12	46500	39800	46000	37600	45500	37700	---	---
13	46800	39900	45900	37700	45700	37900	---	---
14	47100	39200	46100	37600	45400	36600	---	---
15	47100	38800	46100	37100	45100	36900	---	---
16	47000	39200	46000	37100	44700	36300	---	---
17	47300	38900	45600	37000	44300	36300	---	---
18	46800	39300	44800	37300	44500	36300	---	---
19	46700	39300	44800	36700	45000	35600	---	---
20	46500	38700	45100	37700	44900	37500	---	---
21	46500	39200	45300	38400	45000	36600	---	---
22	47000	40200	44800	37900	44900	36300	---	---
23	46800	39800	45100	37000	44900	36400	---	---
24	46700	39300	45300	36600	45200	36600	---	---
25	46900	40200	45200	36700	45200	36400	---	---
26	46900	39800	45400	36900	45000	36100	---	---
27	46700	39400	45400	36600	45100	36200	---	---
28	47000	38600	45400	36500	45200	36900	---	---
29	46500	38400	45600	37700	44800	36900	---	---
30	45900	37600	44800	37100	44700	36600	---	---
31	46000	37400	---	---	44300	34900	---	---
MONTH	47300	37400	46100	35100	45700	34200	---	---

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY	
1	19.5	17.5	15.0	14.5	12.0	11.0	11.0	10.0
2	19.0	17.5	15.5	14.5	12.0	11.0	---	---
3	19.0	17.5	15.5	14.5	11.5	11.0	---	---
4	18.5	17.5	15.5	14.5	11.5	11.0	---	---
5	18.5	17.0	15.5	14.5	11.5	10.5	---	---
6	19.0	17.0	15.0	14.0	11.5	10.5	---	---
7	18.5	17.0	15.0	14.0	11.5	10.5	---	---
8	18.5	17.0	15.0	14.0	12.0	11.0	---	---
9	18.0	17.0	14.0	13.5	11.5	11.0	---	---
10	18.0	16.5	14.0	12.0	11.5	10.5	---	---
11	17.5	16.0	13.5	12.0	---	---	---	---
12	17.5	15.5	---	---	---	---	---	---
13	18.0	16.0	---	---	11.5	11.0	---	---
14	18.0	16.5	---	---	12.0	11.0	---	---
15	17.5	16.0	---	---	12.0	11.0	---	---
16	18.0	16.0	---	---	---	---	---	---
17	17.5	16.5	---	---	12.0	11.0	---	---
18	17.5	16.5	13.0	11.5	11.5	10.0	---	---
19	17.5	16.5	12.5	11.5	11.5	10.0	---	---
20	17.5	16.5	12.5	11.5	11.5	10.5	---	---
21	17.0	16.0	12.0	11.5	11.5	10.5	---	---
22	16.5	14.0	12.5	11.5	11.5	10.5	---	---
23	16.0	14.5	12.0	11.5	11.5	10.0	---	---
24	16.5	14.5	12.0	11.0	11.5	10.5	---	---
25	16.0	14.5	12.0	11.5	11.5	10.0	---	---
26	15.5	14.5	---	---	---	---	---	---
27	16.0	14.5	12.0	11.0	11.0	10.0	---	---
28	15.0	14.5	12.0	10.5	11.0	9.5	---	---
29	15.5	14.5	12.0	11.5	11.0	9.5	---	---
30	15.0	14.0	12.0	11.0	11.0	9.5	---	---
31	15.0	14.0	---	---	11.0	10.0	---	---
MONTH	19.5	14.0	---	---	---	---	---	---

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY	
1	19.5	17.0	15.0	14.0	12.0	11.0	11.0	10.0
2	19.0	17.0	15.5	14.0	12.0	11.0	---	---
3	18.5	17.0	15.5	14.0	12.0	11.0	---	---
4	18.5	17.0	15.0	14.0	11.5	11.0	---	---
5	18.5	17.0	15.0	14.0	11.5	10.5	---	---
6	18.0	17.0	15.0	14.0	11.5	10.0	---	---
7	18.5	17.0	15.0	14.0	11.5	10.5	---	---
8	18.0	16.5	15.0	14.0	12.0	11.0	---	---
9	18.0	16.5	14.0	13.5	11.5	11.0	---	---
10	17.5	16.5	14.0	12.0	11.5	11.0	---	---
11	17.0	16.5	13.5	12.0	11.5	11.0	---	---
12	17.5	15.5	13.5	12.0	11.5	11.0	---	---
13	18.0	16.0	13.5	11.0	11.5	11.0	---	---
14	18.0	16.0	13.0	11.0	11.5	11.0	---	---
15	17.5	16.0	13.0	11.5	12.0	11.0	---	---
16	17.5	16.0	13.0	11.5	11.5	11.0	---	---
17	17.5	16.0	12.5	11.5	11.5	11.0	---	---
18	17.5	16.0	12.5	11.5	11.5	10.0	---	---
19	17.5	16.0	12.5	11.5	11.5	10.0	---	---
20	17.5	16.0	12.0	11.5	11.5	10.5	---	---
21	17.0	16.0	12.0	11.5	11.5	10.5	---	---
22	16.5	14.0	12.5	11.5	11.5	10.5	---	---
23	16.0	14.5	12.0	11.5	11.5	10.5	---	---
24	16.0	14.5	12.0	11.5	11.5	10.5	---	---
25	16.0	14.5	12.0	11.5	11.5	10.5	---	---
26	15.5	14.5	12.0	11.0	11.5	10.0	---	---
27	15.5	14.5	12.0	11.0	11.5	10.5	---	---
28	15.0	14.0	12.0	10.5	11.5	10.0	---	---
29	15.0	14.0	12.0	11.0	11.0	9.5	---	---
30	15.0	14.0	12.0	11.5	11.0	10.0	---	---
31	15.0	14.0	---	---	11.0	10.0	---	---
MONTH	19.5	14.0	15.5	10.5	12.0	9.5	---	---

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 mi².

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 good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,600 ft³/s, Oct. 13, 1962, gage height, 16.98 ft, from rating curve extended above 200 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2100	39	2.53

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.22	.24	.30	.39	1.6	.81	.51	.09	.03	.03	.01
2	.10	.20	.22	.30	.39	2.1	.81	.47	.11	.03	.03	.01
3	.11	.16	.22	.30	.39	1.7	.81	.39	.15	.03	.03	.01
4	.11	.14	.22	.30	.39	6.0	.78	.39	.15	.03	.03	.01
5	.11	.14	.22	.30	.39	6.0	.73	.39	.11	.04	.03	.02
6	.11	.14	.22	.30	.39	2.7	1.3	.39	.12	.05	.03	.01
7	.11	.12	.22	.30	.39	2.1	1.8	.37	.11	.04	.03	.01
8	.13	.11	.22	.64	.35	1.9	.91	.34	.09	.03	.02	.01
9	.23	.13	.22	.44	1.0	1.8	.92	.34	.09	.03	.02	.02
10	.35	.14	.22	2.2	4.4	1.6	.81	.33	.11	.03	.01	.01
11	.24	.14	.29	1.8	9.7	1.5	.73	.31	.13	.03	.01	.02
12	.22	.14	.32	.67	11	1.4	.73	.30	.12	.04	.01	.02
13	.18	.18	.40	.48	2.7	1.3	.73	.33	.10	.03	.02	.01
14	.17	.19	2.2	.45	1.3	1.3	.73	.32	.08	.03	.01	.00
15	.14	.18	1.5	.42	.94	1.2	.71	.31	.06	.04	.01	.00
16	.14	.18	.51	.39	.84	1.2	.65	.32	.05	.04	.02	.00
17	.13	.18	.41	.39	.91	1.1	.65	.31	.04	.03	.02	.00
18	.11	.15	.35	.39	1.4	1.1	.62	.30	.04	.03	.02	.00
19	.11	.14	.34	.39	2.6	1.1	.60	.27	.03	.04	.02	.00
20	.11	.14	.34	.39	3.5	.99	2.3	.22	.03	.04	.02	.00
21	.13	.19	.34	.39	2.5	.99	1.3	.20	.03	.04	.02	.00
22	.13	.22	.34	.39	6.5	.94	.77	.18	.03	.04	.02	.00
23	.10	.18	.34	.79	12	.89	.70	.18	.03	.03	.02	.00
24	.09	.18	.34	1.0	12	1.8	.64	.17	.03	.02	.01	.01
25	.14	.18	.32	3.9	5.1	3.5	.58	.15	.05	.02	.01	.00
26	.93	.18	.30	1.4	3.0	1.3	.58	.16	.04	.02	.01	.00
27	.46	.18	.30	.60	2.3	1.1	.58	.20	.03	.03	.01	.00
28	1.1	.18	.30	.48	1.9	.99	.58	.23	.04	.03	.01	.00
29	1.1	.84	.30	.53	---	.97	.56	.19	.05	.04	.01	.00
30	.79	.35	.30	.45	---	.90	.51	.14	.04	.04	.01	.00
31	.35	---	.30	.39	---	.87	.55	.11	---	.03	.01	---
TOTAL	8.34	5.80	12.36	21.47	88.67	53.94	24.93	8.82	2.18	1.03	0.56	0.18
MEAN	.27	.19	.40	.69	3.17	1.74	.83	.28	.073	.033	.018	.006
MAX	1.1	.84	2.2	3.9	12	6.0	2.3	.51	.15	.05	.03	.02
MIN	.09	.11	.22	.30	.35	.87	.51	.11	.03	.02	.01	.00
AC-FT	17	12	25	43	176	107	49	17	4.3	2.0	1.1	.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

MEAN	.48	.62	3.24	9.20	10.8	7.81	4.73	1.39	.55	.22	.090	.059
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1953 - 2001

ANNUAL TOTAL	1356.96	228.28	
ANNUAL MEAN	3.71	.63	3.23
HIGHEST ANNUAL MEAN			12.4
LOWEST ANNUAL MEAN			.029
HIGHEST DAILY MEAN	192	Feb 13	411
LOWEST DAILY MEAN	.08	Sep 20	.00
ANNUAL SEVEN-DAY MINIMUM	.11	Sep 15	.00
MAXIMUM PEAK FLOW			39
MAXIMUM PEAK STAGE			2.53
ANNUAL RUNOFF (AC-FT)	2690	453	2340
10 PERCENT EXCEEDS	8.3	1.4	6.6
50 PERCENT EXCEEDS	.44	.22	.30
90 PERCENT EXCEEDS	.13	.01	.00

11455780 SUISUN BAY AT BENICIA BRIDGE, NEAR BENICIA, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	31200	18600	32800	18400	---	---	35800	22200
2	---	---	25900	8370	31300	14000	33700	17500	---	---	35800	21800
3	---	---	26500	10400	31200	15100	34200	17600	---	---	35500	22900
4	---	---	28100	13600	31000	14500	34900	18200	---	---	34900	22500
5	---	---	29000	14500	31700	14100	34600	18600	---	---	34200	22100
6	---	---	29700	12500	31600	13900	35000	18600	---	---	33700	23400
7	---	---	30400	11900	32300	13800	34900	17500	---	---	34900	23200
8	---	---	31000	11600	33200	14300	34700	18200	---	---	35900	24800
9	---	---	32200	13300	33100	13700	34500	18700	---	---	36500	26400
10	---	---	32100	14100	33100	12900	---	---	---	---	37100	23000
11	---	---	32500	14300	---	---	33400	17900	---	---	37200	23100
12	---	---	32800	15300	31200	13200	31800	17100	---	---	37300	22900
13	---	---	32100	13000	29600	12900	33300	20700	---	---	36900	22700
14	---	---	30600	12300	32300	17200	33400	24100	---	---	36700	22400
15	---	---	30300	13100	32500	20400	33900	24000	---	---	36900	22600
16	---	---	31300	14400	33000	21700	34200	20800	---	---	37000	21600
17	---	---	31100	17300	33000	21700	34700	19800	---	---	36600	21400
18	---	---	30700	18500	33100	19500	34800	20000	---	---	35900	22400
19	---	---	31000	19000	33500	18200	35400	20200	---	---	36200	22600
20	---	---	30300	17200	34300	19100	36500	20500	---	---	36000	23300
21	---	---	31200	16800	35200	19100	36400	20000	---	---	36100	24200
22	---	---	31400	16000	35300	18800	36100	19900	---	---	36600	22800
23	---	---	---	---	35600	18900	36000	20100	---	---	36800	23400
24	---	---	---	---	35300	18200	35400	20500	34800	23000	36900	23300
25	---	---	33200	15500	34800	17600	35000	20700	35600	22800	36800	21800
26	---	---	33800	15900	33800	16800	34200	21300	36200	23300	36800	21300
27	---	---	34200	15600	32900	13900	34200	22400	36400	22500	36300	22100
28	---	---	33500	14700	30800	17600	34600	23400	36800	22400	36300	21600
29	---	---	31800	13200	31800	18600	34800	20500	36500	23300	35000	21900
30	---	---	29800	12300	32400	19400	35300	20600	36600	23000	34800	21800
31	---	---	30600	15600	---	---	35300	20200	36300	22400	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	37300	21300

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(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	22.5	20.5	---	---	20.5	19.5
2	---	---	18.0	17.0	21.0	19.5	23.5	20.5	20.0	19.0	21.0	19.5
3	---	---	18.0	16.5	21.0	19.5	23.5	21.0	20.5	19.0	20.5	19.5
4	---	---	19.0	16.5	20.5	19.5	22.5	21.0	20.5	19.0	20.5	20.0
5	---	---	20.0	16.5	20.5	19.0	22.0	21.0	20.5	19.0	21.0	19.5
6	---	---	19.5	17.0	20.5	19.0	22.0	20.5	20.5	19.5	20.5	19.5
7	---	---	20.5	17.0	21.5	19.5	---	---	21.0	19.5	21.0	19.5
8	---	---	20.0	17.5	21.0	19.5	22.0	20.5	21.5	20.0	20.5	19.5
9	---	---	20.0	18.0	21.0	19.5	21.5	20.5	21.0	20.0	20.0	19.0
10	---	---	20.5	18.0	21.0	19.0	---	---	21.0	20.0	20.0	19.0
11	---	---	20.5	18.5	21.0	19.5	---	---	21.0	20.0	20.5	19.0
12	---	---	19.5	18.5	21.0	19.5	---	---	20.5	20.0	19.5	19.0
13	---	---	19.5	18.0	21.5	19.5	---	---	20.5	19.5	20.0	18.5
14	---	---	19.5	17.5	22.5	20.0	---	---	20.5	19.5	20.5	18.5
15	---	---	19.5	18.0	23.0	20.0	---	---	20.5	19.5	19.5	18.5
16	---	---	20.5	18.0	23.5	20.0	---	---	21.5	19.5	19.5	18.5
17	---	---	20.5	18.0	22.5	20.0	---	---	20.5	19.5	19.0	18.0
18	---	---	20.5	18.5	23.5	20.0	---	---	20.5	19.5	19.0	18.0
19	---	---	21.0	18.5	22.5	20.5	---	---	21.0	19.5	19.0	18.0
20	---	---	21.5	18.5	22.5	20.5	---	---	20.5	19.5	19.0	18.0
21	---	---	21.5	19.0	22.5	20.5	---	---	20.5	18.5	18.5	18.0
22	---	---	20.5	19.0	23.0	21.0	---	---	20.0	19.5	19.0	18.0
23	---	---	20.5	19.0	---	---	---	---	---	---	18.5	18.0
24	---	---	21.0	19.0	---	---	---	---	21.0	19.5	18.5	17.5
25	---	---	20.5	19.0	21.5	20.0	---	---	21.5	20.0	20.0	18.0
26	---	---	20.0	19.0	21.0	20.0	---	---	21.5	20.0	19.5	18.0
27	---	---	19.5	18.5	21.0	20.0	---	---	21.5	20.0	19.0	18.0
28	---	---	19.5	18.0	21.5	20.0	---	---	21.5	20.0	19.0	17.5
29	---	---	20.0	18.0	22.0	20.0	---	---	21.0	20.0	19.5	17.5
30	---	---	21.0	19.0	22.5	20.5	---	---	20.5	20.0	20.0	18.0
31	---	---	22.5	19.5	---	---	---	---	21.0	19.5	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	21.0	17.5

11455780 SUISUN BAY AT BENICIA BRIDGE, NEAR BENICIA, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	20.5	19.5	21.0	20.5	---	---	20.5	20.0
2	---	---	18.0	17.0	20.5	19.5	21.0	20.5	---	---	20.5	20.0
3	---	---	17.5	16.5	20.0	19.5	22.0	20.5	---	---	20.5	20.0
4	---	---	17.5	16.5	20.0	19.5	22.0	21.0	---	---	20.5	20.0
5	---	---	18.0	16.5	20.0	19.0	21.5	21.0	---	---	20.5	20.5
6	---	---	18.0	17.0	20.0	19.0	21.5	20.5	---	---	20.5	20.0
7	---	---	18.5	17.0	20.5	19.5	21.5	20.5	---	---	20.5	20.0
8	---	---	19.0	17.5	20.5	20.0	21.0	20.5	---	---	20.5	19.5
9	---	---	19.5	18.0	20.5	20.0	21.0	20.0	---	---	20.0	19.5
10	---	---	19.5	18.5	20.5	19.5	---	---	---	---	19.5	19.0
11	---	---	20.0	18.5	20.5	19.5	21.0	19.5	---	---	20.0	19.0
12	---	---	19.0	18.5	20.5	19.5	20.5	19.5	---	---	19.5	19.0
13	---	---	19.0	18.0	20.5	20.0	20.5	20.0	---	---	19.5	19.0
14	---	---	18.5	18.0	20.5	20.0	20.0	20.0	---	---	19.5	19.0
15	---	---	18.5	18.0	21.0	20.0	20.0	19.5	---	---	19.5	19.0
16	---	---	19.0	18.0	21.0	20.0	20.0	19.5	---	---	19.5	19.0
17	---	---	19.0	18.0	21.0	20.0	19.5	19.0	---	---	19.5	18.5
18	---	---	19.0	18.5	21.5	20.0	20.0	19.5	---	---	19.0	18.5
19	---	---	19.5	18.5	21.5	20.5	20.0	19.5	---	---	19.0	18.5
20	---	---	20.0	18.5	22.0	20.5	20.0	19.5	---	---	19.0	18.5
21	---	---	20.0	19.0	22.0	20.5	20.0	19.0	---	---	18.5	18.5
22	---	---	20.0	19.0	22.5	21.0	20.0	19.5	---	---	18.5	18.0
23	---	---	20.0	19.0	22.0	20.5	20.0	19.5	---	---	18.5	18.0
24	---	---	20.0	19.0	21.5	20.5	20.0	19.5	20.5	20.0	18.5	18.0
25	---	---	19.5	19.0	21.0	20.5	20.0	19.5	20.5	20.0	18.5	18.0
26	---	---	19.5	19.0	21.0	20.0	20.0	19.5	20.5	20.0	18.5	18.0
27	---	---	19.5	18.5	20.5	20.0	20.0	19.5	20.5	20.0	18.5	18.5
28	---	---	19.0	18.5	20.5	20.0	20.0	19.5	21.0	20.0	18.5	18.0
29	---	---	19.5	18.5	21.0	20.0	20.0	19.5	21.0	20.5	18.5	18.0
30	---	---	20.5	19.0	21.0	20.5	20.0	19.5	20.5	20.5	19.0	18.5
31	---	---	21.0	19.5	---	---	20.0	19.5	20.5	20.0	---	---
MONTH	---	---	---	---	22.5	19.0	---	---	---	---	20.5	18.0

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 about 30 ft below water surface relative to Mean Lower Low Water (MLLW). Lower probe is set about 72 ft below water surface relative to MLLW. MLLW is about 78 ft deep. The upper conductivity record is rated excellent except for the following periods of fouling: Oct. 28 to Nov. 1 and Mar. 20 to Apr. 30, which are rated good. The lower conductivity, upper temperature, and lower temperature records are rated excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 42,100 microsiemens, Sept. 9, 10, 1999, and Aug. 17, 2001; minimum recorded, 170 microsiemens, Mar. 11, 2000.

(Lower probe) Maximum recorded, 43,200 microsiemens, Sept. 11, 2001; minimum recorded, 166 microsiemens, Mar. 11, 2000.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 21.5°C, Aug. 22, 1999, Sept. 19, 2000, and several days in June–August 2001; minimum recorded, 7.5°C, several days in December 1998 and January 1999.

(Lower probe) Maximum recorded, 21.0°C, July 13, 1999, Sept. 20, 2000, several days in June, July, and September 2001; minimum recorded, 9.0°C, Jan. 21, 25, 2001.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 42,100 microsiemens, Aug. 17; minimum recorded, 2,340 microsiemens, Mar. 11.

(Lower probe) Maximum recorded, 43,200 microsiemens, Sept. 11; minimum recorded, 2,590 microsiemens, Mar. 10.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 21.5°C, several days in June–August; minimum recorded, 9.0°C, several days in January and February.

(Lower probe) Maximum recorded, 21.0°C, several days in June, July and September; minimum recorded, 9.0°C, Jan. 21, 25.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(UPPER PROBE)

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	39600	28100	---	---	39200	25600	38000	24300	35300	18400	29600	8990
2	39300	28900	37400	22900	38200	24900	38400	23800	36000	19100	29800	11100
3	39400	28800	37000	21800	38000	24200	38000	26100	36300	19400	32900	11000
4	39000	29100	37900	22700	38600	22900	40100	29700	36400	19600	34100	13800
5	39000	27000	36900	24800	38900	26300	40400	29900	36600	19600	30800	12200
6	39400	28300	36700	25500	39500	27400	41200	30100	36400	21700	30400	11400
7	38600	30000	37300	24900	40000	29300	41300	30200	34400	19100	28800	8750
8	38000	29000	37600	26700	40500	30400	41900	29500	36400	19600	27600	5720
9	38700	28300	37400	29700	40500	29500	41100	28400	36400	20500	25900	3730
10	39100	28900	39000	27500	40400	28400	41900	28800	36200	20500	21200	2470
11	38600	27400	38800	26300	40300	27900	41100	26500	34900	19900	23000	2340
12	37900	26800	38500	25700	40500	27200	39900	24600	34800	20200	23800	3040
13	37800	26200	39700	26900	40800	27500	37700	23600	34300	17900	23600	4580
14	38500	26800	39300	26100	39900	26500	35700	22800	33800	18300	25900	4460
15	38000	25800	39700	25900	39200	26100	35300	21000	34800	17300	23800	4850
16	---	---	40300	25300	38200	25100	35900	19800	33600	16700	24600	5540
17	39200	24400	38900	25100	37300	24500	36700	19900	35200	16700	30800	5850
18	39000	24900	37500	24700	38200	23700	36600	21400	34700	17500	31300	7860
19	---	---	38000	25300	39100	25000	36900	20000	34900	19400	30700	10100
20	36900	24300	38300	25600	39500	28400	37700	20200	32400	17100	32600	12200
21	35700	25200	---	---	39900	29000	36900	19400	31200	16100	32100	16400
22	36600	23000	39400	27800	39300	28200	37100	20200	30500	16100	30600	17500
23	36500	23900	38900	27000	39900	27200	38300	22200	31200	12800	30600	15400
24	36900	24700	---	---	39900	26400	36400	20900	30800	11500	31300	16500
25	37000	27000	39600	26300	40000	25700	---	---	27400	9300	30400	15900
26	---	---	39900	26300	---	---	---	---	26100	9460	28700	14700
27	37100	24300	40000	25700	---	---	---	---	27200	9320	29300	13300
28	37600	24100	40700	26300	---	---	---	---	29400	8850	30200	14500
29	36600	25100	40700	26800	39400	25600	---	---	---	---	30500	14300
30	34000	21600	39000	27500	39700	25400	---	---	---	---	32300	13400
31	35700	24400	---	---	37900	25800	32600	15000	---	---	33200	14700
MONTH	---	---	---	---	---	---	---	---	36600	8850	34100	2340

11455820 CARQUINEZ STRAIT AT CARQUINEZ BRIDGE, NEAR CROCKETT, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	34000	16100	31800	13900	37500	22100	38900	25300	---	---	---	---
2	30400	15500	32000	13600	37700	24700	---	---	40900	27300	---	---
3	31300	11100	33800	15200	37300	23300	39700	24200	40700	27200	---	---
4	34200	14300	35800	18900	37200	21500	40300	25000	40000	28300	---	---
5	34600	16800	35400	21100	38200	22900	40000	25300	39600	26800	---	---
6	33900	18000	36500	20800	37200	20700	40400	25600	39200	26000	---	---
7	33400	17600	36800	19700	37700	19700	39700	24100	38500	26600	---	---
8	31500	15900	37200	19300	38400	21300	39400	23800	38800	28100	---	---
9	33600	15200	37500	20400	34700	21400	39000	26100	39500	30900	---	---
10	34000	14900	37800	20500	37100	20400	---	---	39700	29500	---	---
11	32800	15000	37900	21300	34900	20300	---	---	40700	28400	---	---
12	28500	11200	38400	23000	34200	19500	38100	23500	40500	30800	---	---
13	31000	13000	36000	19300	36200	17000	39400	25600	40900	30400	---	---
14	32900	13100	36200	18300	36500	19300	40100	28800	41500	28900	---	---
15	35400	13900	37200	18100	37300	24200	40000	30000	41900	27700	---	---
16	34800	15600	36000	19600	38500	26400	40100	29700	41900	27100	---	---
17	35100	16800	---	---	38600	27900	40000	27200	42100	27300	---	---
18	35300	22600	---	---	38500	26400	41100	27200	---	---	---	---
19	35200	24900	---	---	39600	25300	41100	27500	41500	28600	---	---
20	34600	24000	---	---	40000	24900	41400	27200	41200	29800	---	---
21	34500	21600	---	---	40000	25200	41000	26900	40900	28100	41800	30500
22	34300	19800	---	---	40400	25200	41800	26700	---	---	41600	30000
23	34100	19000	---	---	41100	26300	40900	26500	---	---	41700	29200
24	34800	18100	---	---	40500	25000	40500	27800	---	---	41200	29800
25	35300	18000	38300	21800	39300	24700	39900	28500	---	---	41500	28500
26	35000	18700	39000	22300	38400	24500	40100	28300	---	---	40600	24700
27	36000	18000	38600	23200	36900	23300	40400	26200	---	---	40000	28700
28	33400	16600	37000	22300	38000	22900	---	---	---	---	40400	29700
29	31600	13300	35800	19300	38400	23600	40600	28100	---	---	40100	28800
30	---	---	35800	18400	38700	26300	39900	28300	---	---	40600	24800
31	---	---	37700	19200	---	---	39900	27300	---	---	---	---
MONTH	---	---	---	---	41100	17000	---	---	---	---	---	---

11455820 CARQUINEZ STRAIT AT CARQUINEZ BRIDGE, NEAR CROCKETT, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	40500	29900	39600	24800	41600	27800	41100	28300	37100	23800	33700	16100
2	40200	30600	40500	24400	41800	27700	40700	29700	38400	23800	34200	16300
3	40700	29800	41000	26200	42000	26700	40300	31000	37800	22700	35000	16900
4	40500	31000	40400	27200	41900	30400	41500	32400	37800	22200	36400	19600
5	41400	30500	39500	28100	40800	31900	41300	31000	37400	20800	32500	13500
6	41300	31200	37800	29200	40800	32200	41900	30700	37100	22600	32200	12200
7	40100	31400	37700	28600	40800	31600	42200	31200	35200	20100	31100	9370
8	40000	29900	38200	25300	41100	31200	42300	30500	37700	20800	29400	5980
9	40000	30500	38000	30500	41100	30000	---	---	37500	21800	27800	3940
10	40300	30400	39500	28500	41100	29300	---	---	37000	21100	25200	2590
11	39700	29500	39600	26900	41100	28400	41800	27500	35700	22600	24900	2970
12	39500	25400	39800	26400	41300	28300	40600	25400	35700	21100	25700	4220
13	39500	26300	40300	27600	41400	28200	38900	23900	---	---	26500	6380
14	40100	28500	40300	26600	40800	27500	36800	23400	35900	20500	27600	6380
15	40600	27000	---	---	40100	26800	36400	22600	36300	20000	28500	9100
16	40700	27200	41100	26500	39700	26000	37300	22000	37200	21100	30000	8190
17	41100	28400	40600	27100	39000	26700	38300	24000	37700	21200	34000	12300
18	41000	27900	40100	27400	39200	26300	38600	23800	36600	19900	35800	16700
19	41300	27800	39200	27300	39700	27900	38900	22800	35700	22000	35300	15600
20	40600	28000	39100	28100	40200	30400	38700	22100	---	---	35500	18900
21	39600	28100	39800	30400	40600	30100	38300	22400	33000	16600	34200	19800
22	40000	26100	39900	28800	40400	29100	38700	22600	32400	16700	33200	19600
23	39400	28100	39800	27300	40800	28100	38800	24900	32600	13100	31800	18000
24	40200	28200	40100	27200	40800	27300	37800	21800	32200	14400	32300	19400
25	40300	29200	40600	27500	41000	26700	38100	22200	30300	11600	31500	18300
26	40700	28400	40500	26900	40700	26600	---	---	29800	12700	30500	17400
27	40300	28100	40800	26600	40800	26700	---	---	30600	12900	30700	16400
28	40900	28900	41200	28600	41100	28100	---	---	32000	14700	32200	17000
29	38400	25300	41400	28700	40900	27700	---	---	---	---	32600	16800
30	39300	24800	40700	29200	41100	27900	---	---	---	---	34500	16500
31	39800	26300	---	---	41200	27900	35700	24800	---	---	35000	17200
MONTH	41400	24800	---	---	42000	26000	---	---	---	---	36400	2590
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	35400	19000	35800	16800	39000	28600	40400	27000	---	---	42000	30800
2	32800	17100	35100	16800	38700	27000	40600	25700	41600	28400	41600	31000
3	34700	15500	36400	18300	38200	25200	41200	25200	41700	28700	41800	31500
4	35500	16800	37300	23700	39100	23100	41400	26500	41000	29100	41500	31100
5	35700	19900	36300	23600	39300	23900	41200	26800	40400	28200	40800	32200
6	34900	19700	37000	22700	38400	22400	41300	27000	40600	28400	40800	32300
7	33400	20000	37400	21400	39600	22600	40400	25700	39600	28900	---	---
8	31600	17700	37700	21400	39900	23600	40300	25000	40500	25200	---	---
9	34500	14900	38100	22800	39600	23400	39900	27300	40200	32900	42100	32800
10	35000	15400	38200	22200	39400	23100	---	---	40300	28100	42600	30600
11	33700	16900	38000	22200	38500	23500	---	---	40900	31900	43200	31000
12	34200	15700	37800	22400	37700	22200	39000	27500	41800	30400	---	---
13	34900	16800	37600	21900	38700	22600	40300	31500	41600	31900	42700	30200
14	36300	18100	37800	21400	40600	30900	40800	31000	42700	30000	42600	29300
15	37700	19400	39400	23700	39700	31600	40600	30500	42800	28900	43000	30400
16	38300	16100	38400	24900	39800	31400	41000	31000	42800	26100	41700	29900
17	37200	21400	---	---	39700	29600	41100	28500	42800	28300	42500	29500
18	37500	19600	---	---	40100	27800	42100	28200	43000	29400	42200	30600
19	36400	25900	---	---	40700	26800	42300	28500	---	---	42400	25300
20	35700	26100	---	---	40900	26000	42200	28000	42600	30800	---	---
21	35500	23500	---	---	41600	26200	42200	27800	42600	27700	42700	31800
22	34600	22000	---	---	41500	26000	---	---	---	---	42600	31100
23	33900	20200	---	---	42100	27400	42300	27700	41200	30800	42500	30000
24	35400	18400	---	---	41400	26200	41100	29300	42000	31800	42500	31900
25	36300	19300	39800	23600	40200	26300	40600	31000	42700	30600	43100	30600
26	36200	18900	40300	23600	40100	26400	41000	30200	42000	31200	42600	25600
27	36500	18100	40100	24500	38800	26500	41500	30700	42400	30200	41300	31100
28	33700	17000	38700	23500	39000	26600	42000	31400	42600	27300	40800	29900
29	33900	11800	38700	22200	39400	28100	42000	29300	42500	27000	41300	31100
30	---	---	38900	22000	40500	27800	---	---	41400	31600	41600	29600
31	---	---	39000	25100	---	---	---	---	40800	30600	---	---
MONTH	---	---	---	---	42100	22200	---	---	---	---	---	---

11455820 CARQUINEZ STRAIT AT CARQUINEZ BRIDGE, NEAR CROCKETT, CA—Continued

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

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

11455820 CARQUINEZ STRAIT AT CARQUINEZ BRIDGE, NEAR CROCKETT, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.0	19.0	15.0	15.0	11.5	11.5	10.5	10.0	10.0	9.5	11.5	11.0
2	19.5	19.0	15.0	15.0	11.5	11.5	10.5	10.0	10.0	9.5	11.5	11.0
3	19.5	18.5	15.0	15.0	11.5	11.0	10.5	10.0	10.0	10.0	11.5	11.0
4	19.5	18.5	15.0	15.0	11.5	11.0	10.5	10.5	10.0	10.0	11.5	11.0
5	19.0	18.5	15.0	15.0	11.5	11.0	10.5	10.0	10.5	10.0	11.5	11.0
6	19.0	18.5	15.0	15.0	11.0	11.0	10.5	10.0	10.5	10.5	11.5	11.5
7	18.5	18.0	15.0	14.5	11.0	11.0	10.5	10.0	10.5	10.0	12.0	11.5
8	18.5	18.0	15.0	14.5	11.0	11.0	10.5	10.0	10.5	10.0	12.5	12.0
9	18.5	18.0	14.5	14.0	11.0	11.0	---	---	10.5	10.0	12.5	12.0
10	18.0	17.5	14.0	13.5	11.5	11.0	10.5	10.0	10.0	9.5	12.5	12.0
11	18.0	17.5	14.0	13.5	11.5	11.0	10.0	9.5	10.0	9.5	12.5	12.0
12	17.5	17.5	14.0	13.5	11.5	11.0	10.0	9.5	10.0	9.5	12.5	12.5
13	17.5	17.0	13.5	13.0	11.5	11.0	10.0	9.5	10.0	9.5	13.0	12.5
14	17.5	17.5	13.0	13.0	11.5	11.0	10.0	9.5	10.0	9.5	13.0	12.5
15	17.5	17.0	13.0	12.5	11.5	11.0	10.0	9.5	10.0	9.5	13.0	13.0
16	17.5	17.0	12.5	12.5	11.5	11.0	10.0	9.5	10.0	10.0	13.5	13.0
17	18.0	17.5	12.5	12.0	11.5	11.0	9.5	9.5	10.0	10.0	14.0	13.0
18	18.0	17.5	12.5	12.0	11.5	11.0	9.5	9.5	10.0	10.0	14.0	13.0
19	17.5	17.5	12.5	12.0	11.0	11.0	9.5	9.5	10.0	10.0	14.5	13.0
20	17.5	17.5	12.0	12.0	11.0	11.0	9.5	9.5	10.5	10.0	14.5	13.0
21	17.5	17.0	12.0	12.0	11.0	11.0	9.5	9.0	10.5	10.5	15.0	13.5
22	17.0	16.5	12.0	12.0	11.0	11.0	9.5	9.5	10.5	10.5	15.0	14.0
23	16.5	16.0	12.0	12.0	11.0	11.0	10.0	9.5	10.5	10.5	15.0	14.5
24	16.0	16.0	12.0	12.0	11.0	11.0	10.0	9.5	11.0	10.5	15.0	14.5
25	16.0	16.0	12.0	12.0	11.0	10.5	10.0	9.0	10.5	10.5	15.5	14.5
26	16.0	15.5	12.0	11.5	10.5	10.5	---	---	11.0	10.5	15.5	15.0
27	16.0	15.5	12.0	11.5	10.5	10.5	---	---	11.0	10.5	15.5	15.0
28	16.0	15.5	11.5	11.5	10.5	10.5	---	---	11.0	10.5	16.0	15.0
29	15.5	15.0	11.5	11.5	10.5	10.5	---	---	---	---	16.5	15.5
30	15.5	15.0	11.5	11.5	10.5	10.5	---	---	---	---	16.0	15.0
31	15.0	15.0	---	---	10.5	10.0	10.0	9.5	---	---	16.5	15.0
MONTH	20.0	15.0	15.0	11.5	11.5	10.0	---	---	11.0	9.5	16.5	11.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	16.5	15.0	17.0	15.5	20.0	18.5	20.5	19.0	---	---	20.0	19.0
2	16.0	15.5	17.0	15.5	19.5	19.0	20.5	19.0	19.5	19.0	20.0	19.5
3	16.0	14.5	17.0	15.5	19.5	18.5	21.0	19.5	20.0	19.0	20.0	19.5
4	15.5	14.0	17.0	15.0	19.5	18.5	21.0	19.5	20.0	19.5	20.0	19.5
5	15.5	14.0	17.0	15.5	20.0	18.5	21.0	20.0	20.5	19.5	20.0	19.5
6	15.0	14.0	17.0	16.0	20.0	19.0	21.0	19.5	21.0	20.0	20.0	19.0
7	14.5	14.0	17.5	16.0	20.5	18.5	21.0	19.5	21.0	20.0	20.0	19.0
8	14.5	13.5	18.0	16.5	20.5	19.0	21.0	19.5	21.0	20.0	20.0	19.0
9	14.5	13.5	18.5	17.0	20.5	19.0	21.0	20.0	21.0	20.0	19.5	19.0
10	14.5	13.5	19.0	17.0	20.5	19.0	---	---	21.0	20.0	19.5	19.0
11	14.5	13.5	19.0	17.0	20.5	19.0	---	---	21.0	20.0	19.5	19.0
12	14.5	13.5	18.5	17.0	20.5	19.0	20.5	19.5	20.5	20.0	19.5	19.0
13	14.5	13.5	18.5	17.5	20.0	19.0	20.5	19.0	20.5	20.0	19.0	19.0
14	14.5	13.0	18.5	17.0	20.0	18.5	20.0	19.0	20.5	20.0	19.0	18.5
15	14.5	13.0	18.0	16.5	20.0	18.5	20.0	18.5	20.5	19.5	19.0	18.5
16	14.5	13.0	18.5	16.5	20.0	18.5	19.5	18.5	20.0	19.5	19.0	18.5
17	14.5	13.0	18.5	17.0	20.0	18.5	19.5	19.0	20.5	19.5	19.0	18.5
18	14.5	13.5	18.5	17.0	20.5	18.5	19.5	18.5	20.5	19.5	19.0	18.0
19	14.5	13.5	18.5	17.5	20.5	18.5	19.5	18.5	20.5	19.0	18.5	18.0
20	14.5	13.5	18.5	17.5	21.0	19.0	19.5	18.5	20.0	19.0	---	---
21	14.5	13.5	19.0	17.5	21.0	19.0	19.5	19.0	20.0	18.5	18.5	18.0
22	14.5	14.0	19.0	18.0	21.0	19.0	20.0	18.5	---	---	18.5	18.0
23	15.0	14.0	19.5	18.0	21.0	19.0	20.0	18.5	20.0	19.5	18.5	18.0
24	16.0	14.5	---	---	20.5	18.5	19.5	19.0	20.0	19.5	18.0	17.5
25	16.0	14.5	19.5	18.0	20.5	19.0	20.0	19.0	20.0	19.5	18.0	17.5
26	16.0	15.0	19.0	18.0	20.5	18.5	20.0	19.0	20.0	19.5	18.5	18.0
27	16.5	15.0	19.0	18.0	20.0	19.0	20.0	19.0	20.5	19.5	18.5	18.0
28	16.5	15.5	19.0	18.0	20.0	19.0	19.5	19.0	20.5	19.5	18.5	18.0
29	16.5	15.5	19.5	18.0	20.0	19.0	19.5	18.5	20.5	20.0	18.5	18.0
30	---	---	19.5	18.0	20.5	19.0	19.5	19.0	20.0	19.5	18.5	18.0
31	---	---	20.0	18.5	---	---	19.5	19.0	20.0	19.5	---	---
MONTH	---	---	---	---	21.0	18.5	---	---	---	---	---	---

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 mi².

PERIOD OF RECORD.—October 1929 to September 1932, October 1939 to June 30, 1995, June 2000 to current year. 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.—Records fair. 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 ft³/s, Feb. 17, 1986, gage height, 18.52 ft, from rating curve extended above 11,000 ft³/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 4,200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2200	3,280	10.19

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	3.8	6.7	4.3	31	113	31	15	4.9	.75	.17	.39
2	.50	3.2	5.0	4.1	28	99	30	14	4.3	.86	.22	.43
3	.44	2.8	4.6	4.0	27	78	26	13	4.1	.70	.28	.44
4	.33	2.5	4.4	4.1	26	929	22	13	4.5	.66	.29	.34
5	.34	2.5	4.2	4.2	24	1170	20	11	4.3	.70	.44	.25
6	.32	2.9	4.2	4.2	22	520	23	12	3.3	.70	.51	.17
7	.34	3.0	4.2	4.4	21	350	24	11	2.9	.54	.44	.15
8	.41	3.1	4.2	15	21	253	20	10	3.1	.49	.47	.17
9	.41	3.2	4.1	12	46	196	18	9.7	2.3	.70	.50	.20
10	.37	3.8	4.1	53	93	152	19	9.4	2.0	.68	.42	.21
11	.34	3.7	5.2	228	314	125	21	8.3	2.0	.45	.47	.17
12	.36	4.2	6.4	206	257	104	22	7.2	2.4	.54	.52	.18
13	.33	5.3	6.1	52	180	88	20	8.3	2.3	.53	.50	.20
14	.29	5.6	8.9	32	106	79	20	8.8	2.1	.57	.59	.08
15	1.1	5.7	11	26	77	72	17	8.6	1.5	.49	.54	.07
16	2.4	5.2	7.8	20	64	68	15	8.3	1.3	.58	.42	.10
17	2.4	5.0	6.4	17	81	63	17	8.4	1.3	.33	.38	.11
18	2.7	5.0	5.8	15	155	59	18	7.6	1.4	.31	.43	.14
19	2.4	4.7	5.5	13	307	56	19	6.1	1.5	.30	.45	.15
20	2.2	4.7	5.3	12	632	53	34	6.3	1.2	.47	.44	.16
21	2.1	6.6	5.1	12	601	50	30	5.9	.90	.41	.37	.16
22	2.2	8.4	5.4	11	535	48	21	5.9	.67	.34	.35	.14
23	1.7	6.1	5.5	26	584	46	20	6.0	.68	.34	.36	.16
24	1.9	4.9	5.3	49	546	48	19	5.5	.76	.35	.43	.19
25	2.3	5.0	4.8	157	766	50	18	5.3	.76	.27	.41	.26
26	16	4.7	4.5	235	457	45	16	4.8	.72	.26	.34	.30
27	7.2	4.4	4.8	106	265	41	17	5.2	.53	.27	.35	.28
28	17	4.3	4.7	59	167	38	16	6.1	.25	.25	.36	.28
29	21	13	4.9	47	---	37	16	5.4	.44	.22	.35	.27
30	12	13	4.7	39	---	34	16	5.1	.57	.23	.31	.26
31	6.9	---	4.4	34	---	32	---	5.1	---	.21	.34	---
TOTAL	108.68	150.3	168.2	1505.3	6433	5096	625	256.3	58.98	14.50	12.45	6.41
MEAN	3.51	5.01	5.43	48.6	230	164	20.8	8.27	1.97	.47	.40	.21
MAX	21	13	11	235	766	1170	34	15	4.9	.86	.59	.44
MIN	.29	2.5	4.1	4.0	21	32	15	4.8	.25	.21	.17	.07
AC-FT	216	298	334	2990	12760	10110	1240	508	117	29	25	13

NAPA RIVER BASIN

11456000 NAPA RIVER NEAR ST. HELENA, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.10	34.3	169	299	294	198	87.3	22.1	7.32	2.49	1.26	.99
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

FOR 2001 WATER YEAR

WATER YEARS 1930 - 2001

ANNUAL TOTAL	14435.12		
ANNUAL MEAN	39.5	90.5	
HIGHEST ANNUAL MEAN		270	1983
LOWEST ANNUAL MEAN		1.90	1977
HIGHEST DAILY MEAN	1170	Mar 5	13700
LOWEST DAILY MEAN	.07	Sep 15	.00
ANNUAL SEVEN-DAY MINIMUM	.12	Sep 14	.00
MAXIMUM PEAK FLOW	3280	Mar 4	16900
MAXIMUM PEAK STAGE	10.19	Mar 4	18.52
ANNUAL RUNOFF (AC-FT)	28630		65570
10 PERCENT EXCEEDS	77		174
50 PERCENT EXCEEDS	4.8		6.5
90 PERCENT EXCEEDS	.29		.43

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 mi².

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. 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 ft³/s, Feb. 18, 1986, gage height, 30.20 ft, from floodmarks, maximum gage height, 30.50 ft, Mar. 9, 1995; no flow at times.

REVISIONS.—Revised figures of discharge for June–September of water year 2000, superseding those published in the report for 2000 are given below.

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

DAILY MEAN VALUES

(REVISED)

DAY	JUN	JUL	AUG	SEP
1	19	4.6	.40	.12
2	19	5.1	.29	.12
3	20	4.7	.21	.11
4	17	4.6	.21	.15
5	17	4.6	.26	.18
6	16	4.5	.18	.11
7	16	4.4	.68	.12
8	18	4.2	.56	.12
9	18	4.3	.69	.12
10	17	3.8	.72	.12
11	15	1.9	.60	.11
12	14	1.5	.74	.09
13	13	e1.6	.51	.08
14	12	e3.7	.68	.06
15	8.9	e2.6	.38	.04
16	7.0	e1.8	.30	.04
17	6.3	e1.7	.28	e.02
18	7.2	e1.9	.26	e.01
19	7.1	2.3	.19	e.00
20	6.2	2.8	.14	e.00
21	5.8	3.7	.21	e.00
22	5.7	1.6	.17	e.00
23	5.8	1.7	.14	e.00
24	6.2	2.6	.12	e.00
25	7.0	1.5	.12	e.00
26	6.2	1.2	.10	e.00
27	5.3	.96	.11	e.00
28	5.1	.64	.25	.00
29	4.8	.54	.20	.00
30	4.6	.52	.18	.00
31	---	.43	.17	---
TOTAL	330.2	81.99	10.05	1.72
MEAN	11.0	2.64	.32	.057
MAX	20	5.1	.74	.18
MIN	4.6	.43	.10	.00
AC-FT	655	163	20	3.4

e Estimated.

NAPA RIVER BASIN

11458000 NAPA RIVER NEAR NAPA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	11.9	78.3	267	716	743	492	185	51.0	17.6	5.68	2.71	2.23
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		56300.68			
ANNUAL MEAN	192		154		212	
HIGHEST ANNUAL MEAN					585	
LOWEST ANNUAL MEAN					.72	
HIGHEST DAILY MEAN	5960	Feb 7	5750	Feb 14	26200	Feb 17 1986
LOWEST DAILY MEAN	.48	Oct 21	.00	Sep 19	.00	Jul 14 1960
ANNUAL SEVEN-DAY MINIMUM	.55	Oct 21	.00	Sep 19	.00	Jul 14 1960
MAXIMUM PEAK FLOW			7140	Feb 14	37100	Feb 18 1986
MAXIMUM PEAK STAGE			19.45	Feb 14	30.50	Mar 9 1995
ANNUAL RUNOFF (AC-FT)	138800		111700		153500	
10 PERCENT EXCEEDS	525		416		438	
50 PERCENT EXCEEDS	15		6.7		14	
90 PERCENT EXCEEDS	.73		.17		.54	

11458000 NAPA RIVER NEAR NAPA, CA—Continued

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	9.8	13	5.9	45	356	70	31	9.2	1.8	.08	.00
2	.00	6.6	8.1	5.8	41	317	66	30	8.7	1.9	.09	.00
3	.00	4.8	6.7	5.6	38	273	54	30	8.3	1.6	.12	.00
4	.00	4.3	5.9	5.3	36	881	42	28	7.9	.94	.12	.00
5	.00	4.1	5.3	5.3	34	2370	37	28	6.6	1.6	.11	.00
6	.00	3.7	4.9	5.3	30	840	39	28	5.8	1.5	.10	.00
7	.00	2.8	4.8	5.3	27	574	49	27	5.9	1.3	.09	.00
8	.00	2.6	4.8	7.1	27	448	41	25	5.8	1.2	.08	.00
9	.00	2.5	4.8	14	56	361	35	23	5.5	1.2	.08	.00
10	.04	2.6	5.0	19	166	315	33	24	5.6	1.1	.08	.00
11	.12	2.6	5.0	177	428	270	33	23	5.1	.64	.08	.00
12	.12	2.0	5.5	410	430	235	35	22	5.0	.42	.07	.00
13	.12	1.9	7.1	123	349	204	35	19	4.5	.27	.04	.00
14	.10	2.5	11	61	211	187	35	24	4.7	.26	.04	.00
15	.10	3.5	13	43	149	166	31	15	4.1	.66	.03	.00
16	.10	4.3	12	36	114	157	24	16	3.6	.76	.02	.00
17	.10	4.4	11	29	104	146	28	16	3.7	1.1	.00	.00
18	.10	4.1	8.3	25	313	132	30	15	3.5	1.0	.00	.00
19	.10	4.0	6.9	23	356	123	29	14	2.7	.78	.00	.00
20	.10	4.0	6.4	21	1390	115	36	13	2.4	.61	.00	.00
21	.10	4.1	6.0	20	1290	109	69	13	2.0	.32	.00	.00
22	.10	5.5	5.8	19	993	101	43	12	1.8	.23	.00	.00
23	.10	7.1	5.9	20	1090	96	38	12	1.6	.15	.00	.00
24	.11	6.3	6.0	66	1020	93	37	10	1.4	.15	.00	.00
25	.16	5.4	6.0	110	1600	104	37	11	2.7	.15	.00	.00
26	1.2	5.1	6.0	422	976	93	35	10	2.3	.14	.00	.00
27	2.1	5.0	6.0	228	622	87	33	11	1.7	.10	.00	.00
28	4.3	4.7	6.0	115	452	83	32	11	2.7	.10	.00	.00
29	28	5.6	6.0	77	---	80	31	10	2.1	.10	.00	.00
30	20	12	6.0	61	---	76	31	9.9	1.8	.10	.00	.00
31	14	---	6.0	51	---	72	---	9.7	---	.10	.00	---
TOTAL	71.27	137.9	215.2	2215.6	12387	9464	1168	570.6	128.7	22.28	1.23	0.00
MEAN	2.30	4.60	6.94	71.5	442	305	38.9	18.4	4.29	.72	.040	.000
MAX	28	12	13	422	1600	2370	70	31	9.2	1.9	.12	.00
MIN	.00	1.9	4.8	5.3	27	72	24	9.7	1.4	.10	.00	.00
AC-FT	141	274	427	4390	24570	18770	2320	1130	255	44	2.4	.00

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

MEAN	11.6	76.6	261	701	736	487	182	50.3	17.3	5.57	2.65	2.18
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1960 - 2001

ANNUAL TOTAL	56245.63	26381.78		
ANNUAL MEAN	154	72.3	209	
HIGHEST ANNUAL MEAN			585	1983
LOWEST ANNUAL MEAN			.72	1977
HIGHEST DAILY MEAN	5750	Feb 14	2370	Mar 5
LOWEST DAILY MEAN	.00	Sep 19	.00	Oct 1
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 19	.00	Oct 1
MAXIMUM PEAK FLOW			4320	Mar 5
MAXIMUM PEAK STAGE			15.91	Mar 5
ANNUAL RUNOFF (AC-FT)	111600	52330	151100	
10 PERCENT EXCEEDS	416	152	431	
50 PERCENT EXCEEDS	6.2	5.8	14	
90 PERCENT EXCEEDS	.10	.00	.50	

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.—Upper probes are set about 5 ft below water surface at Mean Lower Low Water (MLLW). Lower probes are set about 27 ft below water surface at MLLW. MLLW is about 30 ft. Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums. The upper and lower conductivity records are rated excellent except for Oct. 1 to Nov. 13, which are rated good; Feb. 20 to May 2, May 5-14, and May 29 to June 4, which are rated fair. The upper and lower temperature records are rated excellent.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 39,000 microsiemens, Jan. 8, 2001; 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, 23.0°C, July 3, 4, 2001; minimum recorded, 6.5°C, Jan. 11, 1999.

(Lower probe) Maximum recorded, 23.0°C, July 4, 2001; minimum recorded, 6.5°C, Dec. 24, 1998.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 39,000 microsiemens, Jan. 8; minimum recorded, 3,820 microsiemens, Mar. 11.

(Lower probe) Maximum recorded, 38,900 microsiemens, Jan. 8; minimum recorded, 4,290 microsiemens, Mar. 11.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 23.0°C, July 3, 4; minimum recorded, 8.5°C, several days in January and February.

(Lower probe) Maximum recorded, 23.0°C, July 4; minimum recorded, 8.0°C, Jan. 17.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

(UPPER PROBE)

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	33200	28000	32700	26400	33300	28000	31800	28100	27800	20300	22000	9260
2	34200	29900	32800	26100	32500	27600	32400	28200	30900	21400	25100	10400
3	35100	30300	32200	26200	31700	27100	33600	29000	30200	21800	25500	11000
4	35700	30400	33100	26000	31800	26900	35400	29300	31200	21500	34200	13800
5	35600	30500	32500	28000	34200	28600	35000	29700	31900	21800	25300	8830
6	35700	30700	32300	28300	33500	28800	35200	30100	30800	22200	25400	9560
7	35200	30900	30900	28000	33400	29100	37600	30300	29300	22000	21400	9820
8	34200	30800	32700	28600	34600	29600	39000	30200	29100	21500	18900	7100
9	34000	29900	32800	28800	35700	29900	38100	30100	29900	21900	15300	5280
10	33600	30500	33400	29200	36600	30000	38400	29900	29400	22300	11000	3970
11	32700	29800	33600	28500	36600	29900	37600	29600	27300	21700	8110	3820
12	31500	29000	33200	28000	36600	29500	33400	28400	24400	19600	11600	4680
13	31200	28500	35300	27600	36500	29100	30400	26000	23800	18700	15100	6300
14	32100	28500	34900	28700	35100	29000	28500	24700	26500	18500	15200	6810
15	33500	29400	34800	27900	33400	27800	27600	23800	26700	18000	17200	7070
16	32600	28200	34800	27500	32200	27000	27300	23300	28800	18200	16900	7580
17	35100	27400	33300	27300	31000	26900	29700	23500	30100	18900	18200	7980
18	34800	27700	31900	27400	29900	26700	31000	23700	28500	18400	23000	9080
19	34900	28400	31900	27300	31800	27800	29900	22900	32200	18700	24400	10700
20	34500	27700	31700	28100	33200	28700	29800	22500	27900	14600	26500	13000
21	32600	27900	31600	28700	33700	29100	31900	22300	25100	10900	24800	14700
22	31400	26200	31900	28800	34700	29500	32000	22300	24300	10200	24400	15500
23	31700	27800	31900	28400	34200	29300	32400	22700	19600	9380	22600	16500
24	31800	28700	32000	28400	34000	28700	30200	23600	21700	9360	21300	16800
25	32700	29400	33400	28300	33900	27800	29500	22700	17100	6520	20700	16600
26	33400	29000	33900	28300	33500	27500	28500	22200	16900	6520	20600	16500
27	33200	28800	33900	28000	33500	27300	27600	22100	17200	6580	19600	16200
28	35100	28800	34900	27800	33400	27400	24500	21200	19400	8010	22600	16400
29	33400	29400	37600	28100	33400	27500	23200	19900	---	---	24100	16400
30	33400	27700	33900	28900	33200	27800	23500	18200	---	---	25000	16500
31	32900	26700	---	---	33000	28000	24600	19100	---	---	28600	16700
MONTH	35700	26200	37600	26000	36600	26700	39000	18200	32200	6520	34200	3820

11458370 NAPA RIVER AT MARE ISLAND CAUSEWAY, NEAR VALLEJO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	25800	17100	25200	17400	29100	24500	32100	27900	34600	29000	34900	31000
2	26700	17000	24800	17500	29400	25000	35100	26400	34900	28900	35100	30200
3	24100	16400	27100	19100	29000	25300	33600	26200	34900	29300	34600	30800
4	24700	17100	27100	20200	30900	23700	33700	26900	35400	29700	33900	31200
5	26800	17700	27300	21100	30400	24800	33700	27300	34800	28500	34100	30900
6	25300	18300	27500	22200	30900	23200	34200	27600	33300	28000	34200	31200
7	23300	18700	28100	22100	31900	22100	33400	26300	32700	28300	34000	31900
8	23200	18000	29200	21800	32200	23100	32700	26200	32700	29100	34900	32600
9	22500	16800	31100	22800	30700	23200	33400	27700	33000	30000	35300	31400
10	24300	16800	30700	22800	30700	23100	32100	27800	33700	30700	36400	33000
11	24400	17200	32300	23200	29300	23300	31900	27600	33700	30900	35900	31500
12	23600	16000	31900	23600	29600	23000	31200	26800	34700	31600	37400	31500
13	24900	16500	30400	22500	27900	21300	31200	27400	34600	31800	36100	29100
14	25700	16300	28000	21100	31100	22800	31500	27300	34800	31000	35700	29800
15	25800	17400	28200	21400	32100	25100	31700	28800	36000	29600	36300	27900
16	27200	18800	28500	23100	32300	26200	33600	29200	35800	29100	35900	31200
17	27800	19300	30700	24300	31300	26400	33800	29300	36200	28800	35600	31500
18	28000	20600	31500	24700	33000	26800	33800	28800	35400	30000	34500	32300
19	28400	21600	30200	25000	33000	27100	35100	27900	36400	30000	34600	32900
20	27900	22700	31000	25300	33500	26700	35100	28100	35600	30700	35100	32500
21	26500	22900	30400	25700	33500	27000	35300	28000	35300	29700	35000	31900
22	24800	21900	30500	25800	34100	26600	35000	28000	33000	30000	35600	31300
23	24500	20800	32000	25100	34500	27800	34300	28100	32900	29700	35800	30800
24	25400	19700	32100	23800	34100	26700	33800	29100	32900	30600	36000	31100
25	27700	19500	32800	24100	33300	26300	34300	29300	33800	31100	35100	30400
26	28000	20500	31400	24200	31900	25800	33600	28800	34000	30700	35700	30100
27	27800	19700	32500	24500	31200	25900	32100	30000	35600	30000	35100	30700
28	27800	18400	31500	23700	29600	25700	33600	30700	36400	30500	33900	30600
29	27300	16800	28500	21800	29600	26600	32800	29700	35700	31200	33700	30000
30	26600	17300	27400	21700	30400	27700	34200	29600	34900	31700	33500	30300
31	---	---	28400	23000	---	---	34100	29100	35200	31100	---	---
MONTH	28400	16000	32800	17400	34500	21300	35300	26200	36400	28000	37400	27900

11458370 NAPA RIVER AT MARE ISLAND CAUSEWAY, NEAR VALLEJO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
(LOWER PROBE)

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1	35800	29200	34200	27300	33900	28800	33000	28800	33100	21100	30800	12400
2	34500	30000	35600	28000	33800	28700	34700	28800	35800	21900	31000	13700
3	35400	30200	35000	28200	33300	28500	36300	28900	34500	22200	32300	15100
4	36200	30300	35300	28200	35300	28400	36800	29200	32500	22000	34800	16800
5	36200	30400	33200	28200	36300	28500	35600	29500	32200	22200	28300	13200
6	36600	30600	32700	28300	36100	28800	36500	30000	31600	22000	28100	10300
7	35800	30500	31500	28500	35400	29200	38000	30100	30400	22200	24000	10200
8	33900	30900	32700	28700	35000	29500	38900	30100	31400	21600	21400	7580
9	34100	30200	32800	28700	35700	29800	37900	30300	31000	22000	19100	5900
10	33700	30500	33400	29600	36800	29800	38300	29600	30300	22300	13700	5580
11	32600	29600	34200	29100	36900	29800	37600	29700	28500	21600	13600	4290
12	31200	28900	34500	28200	37200	29500	35000	28300	25700	20700	14000	5560
13	30800	28900	37200	27900	37100	29000	31100	26100	26500	19700	17000	6670
14	32800	28700	35800	28600	35000	29200	28400	24900	28500	19400	18400	7090
15	34000	29200	36100	28000	33400	27800	27600	23800	30500	18900	24200	7300
16	35100	28500	36300	27700	32200	27100	28300	23900	33800	19700	23000	9030
17	36600	28000	33700	28100	31200	27300	31500	24700	33800	19900	28800	11600
18	37100	28000	32600	27900	30100	27200	32600	24700	32200	19500	31000	14400
19	35700	28900	31900	27900	33000	28100	32200	24100	32900	18800	30600	16300
20	35200	28300	31700	28300	33900	28600	33000	23300	28500	16500	31600	17100
21	33100	28100	32600	28500	35000	28900	33700	23000	26300	14000	27900	16800
22	34600	27300	32300	28700	35000	29300	33300	23100	26400	11600	25100	17200
23	33000	28000	32800	28700	34900	29400	33800	23700	22600	11300	23400	17100
24	32300	28800	33800	28700	35400	28900	31400	24300	24900	9910	23000	17000
25	33600	29200	34500	28400	35200	28100	31800	23100	19100	8430	22600	17200
26	34500	29400	35500	28400	36200	27600	30500	22700	19800	8520	22200	16800
27	34800	29400	35500	28000	35900	27500	28200	22400	21100	8850	21700	16600
28	35800	29000	37100	27900	35500	27700	25400	21700	26000	10500	24600	16500
29	34600	29500	37700	28500	33900	28200	24900	21200	---	---	26100	16500
30	34200	28000	34300	28900	33400	28500	26700	21100	---	---	29500	16600
31	34100	27600	---	---	33100	28800	29300	21000	---	---	32700	17600
MONTH	37100	27300	37700	27300	37200	27100	38900	21000	35800	8430	34800	4290
1	31100	17600	28700	19900	31100	25100	33100	26500	36000	29800	35800	31500
2	27100	18600	27000	19700	31000	25500	35400	27300	36300	29200	35700	31000
3	26000	17600	28200	19500	31600	26100	36300	26500	36500	29200	35100	31100
4	28900	17700	28600	20100	32700	24700	36200	27400	36100	29800	34200	31600
5	29000	17900	28000	20700	32900	25200	35500	27500	35300	28900	33800	31600
6	26500	18500	29300	21800	32500	24000	35600	27800	33600	28400	34000	32000
7	25200	18800	29900	22400	33600	23300	35100	26900	32800	29000	34100	32300
8	24500	18600	31400	22500	34600	24100	34600	26900	32800	29700	35100	33000
9	24600	17900	32800	22800	32700	24000	33500	28000	33400	30200	35600	33300
10	26000	17700	32600	23100	32900	24500	33000	28200	34000	30900	38000	33600
11	26400	18500	32600	23300	32200	24600	32900	28300	35400	31300	38200	33200
12	25800	17800	32300	23800	31900	25100	31600	28500	36800	31400	38700	32300
13	30500	18300	31300	24000	30000	25100	34300	28300	35700	31800	37700	29500
14	30200	18600	30200	23600	33300	25100	33200	28500	36500	31600	37600	30700
15	29900	20200	30700	24000	34400	25600	32900	28800	37500	31000	37200	28800
16	31400	21300	32000	24500	33700	26500	34400	28500	38200	30300	37200	31700
17	29900	21500	32400	24800	32100	26500	35400	29500	37600	29400	36400	31500
18	30100	21900	32300	25200	33800	26700	35700	29100	37700	30400	34900	32200
19	29500	22800	31500	25500	35200	27400	37100	29000	36900	30500	34900	32700
20	28800	22900	32200	25700	35700	27200	37100	28800	36000	31100	35000	32700
21	28900	23200	32800	25900	35800	27200	37400	28700	35800	30300	35200	32100
22	26900	22800	32900	26000	36100	27000	36800	28700	33300	30800	36000	31800
23	26200	21600	33400	26000	36200	27800	36700	29100	33200	30300	36400	31500
24	27800	20800	34300	24700	35700	27200	35200	29700	33300	31100	35900	31900
25	29500	20800	34900	25000	35200	26900	34700	30200	35400	31600	35700	31200
26	30700	21500	34900	25400	32700	26600	34000	30100	35800	31600	35900	30800
27	30300	21000	34900	26000	32300	27000	33600	30700	37400	31400	35000	31600
28	29500	19800	32300	25100	30700	26900	34800	31000	38100	31500	33800	31100
29	28500	19200	30800	24400	31400	27200	35300	30600	36100	31800	33400	30200
30	31800	20200	28700	24400	32200	27400	36200	30500	35300	32300	33400	30200
31	---	---	30900	24500	---	---	36300	29900	35700	31400	---	---
MONTH	31800	17600	34900	19500	36200	23300	37400	26500	38200	28400	38700	28800

11458370 NAPA RIVER AT MARE ISLAND CAUSEWAY, NEAR VALLEJO, CA—Continued

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

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	19.5	15.0	15.0	11.5	11.0	10.5	9.5	9.5	8.5	11.5	10.5
2	20.5	19.5	15.0	14.5	11.5	11.0	10.5	9.5	9.5	9.0	11.5	11.0
3	20.0	19.0	15.5	15.0	11.5	11.0	10.5	9.5	10.0	9.5	11.0	11.0
4	19.5	19.0	15.5	15.0	11.0	10.5	10.5	9.5	11.0	9.5	11.0	11.0
5	19.0	18.5	15.5	15.0	11.0	10.5	10.5	9.5	11.0	10.0	11.5	11.0
6	19.0	18.0	15.0	14.5	11.0	10.5	10.5	9.5	11.0	10.0	12.5	11.0
7	18.5	18.0	15.0	14.5	11.0	10.5	10.5	9.5	10.5	10.0	13.0	11.5
8	18.5	18.0	15.0	14.5	11.5	10.5	10.5	10.0	10.5	9.0	13.5	12.0
9	18.5	18.0	14.5	14.0	11.0	11.0	10.0	9.5	10.0	9.5	13.5	12.0
10	18.0	17.5	14.5	13.5	11.0	11.0	10.0	9.5	10.0	9.5	13.5	12.0
11	18.0	17.0	14.0	13.0	11.0	11.0	10.0	9.0	10.0	9.5	13.5	12.0
12	17.5	16.5	14.0	12.5	11.5	11.0	10.0	9.0	9.5	8.5	14.0	12.0
13	17.5	16.5	13.5	12.0	11.0	11.0	10.0	9.0	9.5	8.5	14.0	12.5
14	17.5	16.5	13.0	11.5	11.0	11.0	10.0	9.5	9.5	8.5	14.0	12.5
15	18.0	17.0	13.0	11.5	11.5	11.0	9.5	9.0	9.5	9.0	14.0	13.0
16	18.0	17.0	13.0	11.5	11.5	11.0	9.5	8.5	10.0	9.5	14.0	13.0
17	18.0	17.0	12.5	11.5	11.5	11.0	9.5	8.5	10.0	9.5	14.5	13.0
18	18.0	17.0	12.5	11.5	11.0	10.5	9.5	8.5	10.5	10.0	15.5	13.0
19	18.0	17.5	12.5	11.5	11.0	10.0	9.5	8.5	10.5	10.0	16.5	13.5
20	18.0	17.5	12.0	11.0	11.0	10.0	9.5	8.5	11.0	10.0	17.0	13.5
21	17.5	16.5	12.0	11.0	11.0	10.5	9.5	8.5	12.0	10.5	16.5	14.0
22	17.0	16.0	12.0	11.0	11.0	10.5	9.5	8.5	11.5	10.5	16.5	14.5
23	16.5	15.0	12.0	11.5	11.0	10.5	9.5	9.0	11.5	10.5	16.0	14.5
24	16.5	15.5	12.0	11.5	11.0	10.5	9.5	9.0	11.0	10.5	16.0	15.0
25	16.0	15.5	12.0	11.5	11.0	10.0	9.5	8.5	11.0	10.5	16.5	15.0
26	16.0	15.5	12.0	11.5	10.5	10.0	9.5	8.5	11.0	10.5	16.5	15.0
27	16.0	15.5	11.5	11.0	10.5	10.0	9.5	8.5	11.5	10.5	16.5	15.0
28	16.0	15.0	11.5	11.0	10.5	10.0	9.5	8.5	11.5	10.5	16.5	15.0
29	15.5	15.0	11.5	11.0	10.5	9.5	9.5	8.5	---	---	16.5	15.5
30	15.5	15.0	11.5	11.0	10.5	9.5	9.5	8.5	---	---	17.5	15.5
31	15.5	14.5	---	---	10.5	9.5	9.5	8.5	---	---	17.5	15.5
MONTH	20.5	14.5	15.5	11.0	11.5	9.5	10.5	8.5	12.0	8.5	17.5	10.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17.5	15.5	18.0	16.5	21.5	19.5	22.0	20.0	20.0	19.0	21.0	19.5
2	16.0	15.5	17.0	16.5	21.0	19.5	22.5	20.0	20.5	19.0	21.0	20.0
3	15.5	14.5	17.5	16.0	20.5	19.5	23.0	20.5	20.5	19.5	21.5	20.0
4	15.5	14.5	18.5	16.0	20.5	19.5	23.0	20.5	21.0	19.5	21.0	20.0
5	16.0	14.5	19.0	16.5	21.0	19.0	22.5	20.5	21.5	19.5	20.5	20.0
6	15.0	14.5	19.0	16.5	21.0	19.0	21.5	20.5	21.5	20.0	21.0	19.5
7	15.0	14.0	20.5	17.0	21.5	19.5	21.5	20.5	22.0	20.0	20.5	20.0
8	14.5	13.5	20.5	17.5	21.0	19.5	21.5	20.5	21.5	20.5	20.5	19.5
9	15.0	13.5	20.0	17.5	21.0	19.5	21.0	20.5	21.0	20.5	20.0	19.0
10	14.5	13.5	20.5	18.0	20.5	19.5	20.5	20.0	21.0	20.0	20.0	19.0
11	14.5	14.0	20.5	18.0	20.5	19.5	20.5	19.5	21.5	20.0	20.0	19.0
12	15.0	13.5	19.5	18.5	20.5	19.0	20.5	19.5	21.0	20.0	20.0	19.0
13	14.5	13.5	19.0	18.0	20.5	19.5	20.5	19.5	21.0	20.0	19.5	19.0
14	14.5	13.5	18.5	17.5	21.5	19.5	20.5	19.5	21.0	19.5	20.0	19.0
15	15.0	13.5	19.0	18.0	21.5	19.5	20.0	19.0	21.0	19.5	20.0	18.5
16	15.0	14.0	19.5	18.0	21.5	19.5	20.0	18.5	21.5	19.5	20.0	18.5
17	16.5	14.0	20.0	18.0	21.5	20.0	20.0	19.0	21.0	19.5	19.5	18.5
18	16.0	14.5	20.0	18.0	22.0	20.0	20.0	19.0	21.0	20.0	19.0	18.0
19	16.0	14.5	20.5	18.0	22.5	20.0	20.0	19.0	20.5	20.0	19.0	18.0
20	15.0	14.0	21.0	18.5	22.5	20.5	20.0	19.0	20.0	19.0	19.0	18.0
21	15.5	14.0	21.0	18.5	22.5	20.5	20.0	19.0	20.0	18.5	18.5	18.0
22	16.0	14.5	20.5	19.0	22.5	20.5	20.5	19.0	20.0	19.0	18.5	18.0
23	16.5	14.5	20.5	19.0	21.0	20.0	20.0	19.0	20.5	19.5	18.5	18.0
24	18.0	15.0	21.0	19.0	21.0	20.0	20.0	19.5	20.5	19.5	18.5	18.0
25	18.0	15.0	20.5	19.0	20.5	19.5	20.0	19.0	21.0	19.5	19.5	18.0
26	18.0	15.5	19.5	19.0	20.5	19.0	20.0	19.0	21.5	19.5	19.5	18.0
27	17.5	15.5	19.0	18.5	20.0	19.0	20.0	19.0	22.0	20.0	19.5	18.0
28	16.5	16.0	19.0	18.0	20.5	19.0	20.0	19.0	22.0	20.0	19.0	18.0
29	17.0	15.5	19.5	18.0	21.0	19.5	20.0	19.0	21.0	20.0	19.5	18.0
30	17.5	16.0	21.0	18.5	21.5	20.0	20.5	19.0	20.5	19.5	20.0	18.5
31	---	---	22.0	19.0	---	---	20.5	19.0	21.0	19.5	---	---
MONTH	18.0	13.5	22.0	16.0	22.5	19.0	23.0	18.5	22.0	18.5	21.5	18.0

11458370 NAPA RIVER AT MARE ISLAND CAUSEWAY, NEAR VALLEJO, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	19.5	15.0	15.0	11.5	11.0	10.5	9.5	10.0	8.5	11.0	10.5
2	20.0	19.5	15.0	15.0	11.5	11.0	10.5	9.5	10.0	9.0	11.0	11.0
3	19.5	19.0	15.5	15.0	11.5	11.0	10.5	9.5	10.0	9.5	11.0	11.0
4	19.5	19.0	15.5	15.0	11.5	11.0	10.5	9.5	11.0	10.0	11.0	11.0
5	19.0	18.5	15.5	15.0	11.5	10.5	10.5	9.5	11.5	10.0	11.5	11.0
6	19.0	18.5	15.0	15.0	11.0	10.5	10.5	10.0	10.5	10.5	12.5	11.0
7	18.5	18.0	15.0	14.0	11.0	10.5	10.0	9.5	10.5	10.0	13.5	11.5
8	18.5	17.5	15.0	14.5	11.0	10.5	10.5	10.0	10.0	9.5	13.5	12.0
9	18.5	18.0	14.5	13.5	11.0	11.0	10.0	9.5	10.0	9.5	13.5	12.0
10	18.0	17.5	14.5	13.5	11.5	11.0	10.0	9.5	10.0	9.5	13.5	12.0
11	18.0	17.0	14.0	13.0	11.0	11.0	10.0	9.0	10.0	9.5	13.5	12.0
12	17.5	16.5	13.5	12.5	11.0	11.0	10.0	9.0	9.5	9.0	14.0	12.5
13	17.5	16.5	13.5	11.5	11.0	11.0	10.0	9.0	9.5	8.5	14.0	12.5
14	17.5	17.0	13.0	11.5	11.0	11.0	10.0	9.5	9.5	9.0	13.5	12.5
15	17.5	17.0	12.5	11.5	11.5	11.0	9.5	9.0	9.5	9.0	13.5	13.0
16	18.0	17.0	12.5	11.5	11.5	11.0	9.5	8.5	10.0	9.5	13.5	13.0
17	18.0	17.0	12.5	11.5	11.5	11.0	9.5	8.0	10.0	10.0	14.0	13.0
18	18.0	17.0	12.5	11.5	11.0	10.5	9.5	8.5	10.5	10.0	14.0	13.0
19	18.0	17.5	12.5	11.0	11.0	10.0	9.5	8.5	10.5	10.0	14.5	13.0
20	17.5	17.5	12.0	11.0	11.0	10.0	9.5	8.5	11.0	10.0	15.5	13.5
21	17.5	16.5	12.0	11.0	11.0	10.5	9.5	8.5	11.5	10.0	16.0	14.0
22	17.0	15.5	12.0	11.0	11.0	10.5	9.5	8.5	11.5	10.5	15.5	14.5
23	16.5	15.0	12.0	11.5	11.0	10.5	9.5	9.0	11.5	10.5	16.0	14.5
24	16.5	15.5	12.0	11.5	11.0	10.5	9.5	9.0	11.0	10.5	16.0	14.5
25	16.0	15.5	12.0	11.5	11.0	10.0	9.5	8.5	11.5	10.5	16.5	15.0
26	16.0	15.5	12.0	11.5	10.5	10.0	9.5	8.5	11.0	10.5	16.0	15.0
27	16.0	15.5	11.5	11.0	10.5	10.0	9.0	8.5	11.0	10.5	16.0	15.0
28	16.0	15.0	11.5	11.0	10.5	10.0	9.0	8.5	11.0	10.5	16.5	15.0
29	15.5	15.0	11.5	11.0	10.5	9.5	9.0	9.0	---	---	16.5	15.5
30	15.5	15.0	11.5	11.0	10.5	9.5	9.5	8.5	---	---	16.5	15.0
31	15.0	14.5	---	---	10.5	9.5	9.5	8.5	---	---	16.5	15.0
MONTH	20.5	14.5	15.5	11.0	11.5	9.5	10.5	8.0	11.5	8.5	16.5	10.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	16.5	15.5	17.0	16.0	21.5	19.5	21.0	20.0	20.0	19.0	20.5	19.5
2	16.5	15.5	17.0	16.5	20.5	19.5	21.5	19.5	20.0	19.0	21.0	19.5
3	16.0	15.0	17.0	16.0	20.0	19.0	22.5	20.0	20.5	19.0	21.0	20.0
4	15.5	14.5	17.5	16.0	20.5	19.0	23.0	20.0	20.5	19.5	21.0	20.0
5	16.0	14.5	18.0	16.0	20.5	19.0	22.0	20.5	21.0	19.5	20.5	20.0
6	15.0	14.5	18.5	16.5	20.5	19.0	21.5	20.5	21.0	20.0	21.0	20.0
7	15.0	14.0	19.0	16.5	20.5	19.5	21.5	20.5	21.5	20.0	20.5	19.5
8	14.5	13.0	19.5	17.0	21.0	19.5	21.5	20.5	21.5	20.5	20.5	19.5
9	14.5	13.0	20.0	17.0	20.5	19.5	21.0	20.0	21.0	20.5	20.0	19.0
10	14.5	13.0	19.5	17.5	20.5	19.5	20.5	19.5	21.0	20.0	19.5	19.0
11	14.5	13.5	19.5	18.0	20.0	19.5	20.5	19.5	21.0	20.0	19.5	19.0
12	14.5	13.5	19.0	18.0	20.0	19.0	20.0	19.0	20.5	20.0	20.0	19.0
13	14.5	13.5	18.5	18.0	20.5	19.5	20.0	19.5	20.5	19.5	19.5	18.5
14	14.5	13.5	18.5	17.5	20.5	19.0	20.0	19.5	20.0	20.0	19.5	19.0
15	14.5	13.5	18.5	17.5	20.5	19.0	19.5	19.0	20.0	19.5	19.5	18.5
16	14.5	13.5	18.5	17.5	20.5	19.0	19.5	18.5	20.0	19.5	19.5	18.5
17	15.0	13.5	18.5	17.5	20.5	19.5	19.5	18.5	21.0	19.5	19.5	18.5
18	15.5	14.0	19.0	17.5	20.5	19.5	19.5	19.0	21.0	20.0	19.0	18.5
19	15.5	14.0	19.0	18.0	21.5	19.5	20.0	19.0	20.5	20.0	19.0	18.0
20	15.0	14.0	19.5	18.0	22.0	19.5	20.0	19.0	20.0	19.0	19.0	18.0
21	15.0	14.0	20.0	18.0	22.0	20.0	20.0	19.0	20.0	18.5	18.5	18.0
22	15.5	14.0	20.0	18.5	22.0	20.0	20.0	19.0	20.0	19.0	18.5	18.0
23	16.0	14.5	20.0	18.5	21.0	20.0	20.0	19.5	20.5	19.5	18.5	18.0
24	17.0	14.5	20.5	18.5	20.5	19.5	20.0	19.5	20.5	19.5	18.5	18.0
25	17.5	15.0	20.0	18.5	20.5	19.5	19.5	19.0	20.5	19.5	18.5	18.0
26	17.5	15.5	19.5	18.5	20.0	19.0	19.5	19.0	20.5	19.5	19.0	18.0
27	17.0	16.0	19.0	18.0	20.0	19.0	19.5	19.0	21.0	19.5	19.5	18.0
28	16.5	16.0	18.5	17.5	20.0	19.0	19.5	19.0	21.0	20.0	19.0	18.0
29	16.5	15.5	19.0	18.0	20.5	19.5	19.5	19.0	21.0	20.0	19.5	18.0
30	16.5	15.5	20.0	18.5	21.0	19.5	20.0	19.0	20.5	20.0	20.0	18.0
31	---	---	21.5	19.0	---	---	20.0	19.0	20.5	19.5	---	---
MONTH	17.5	13.0	21.5	16.0	22.0	19.0	23.0	18.5	21.5	18.5	21.0	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 mi².

PERIOD OF RECORD.—October 1998 to current year (high-flow above 50 ft³/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 ft³/s, Feb. 13, 2000, gage height, 6.04 ft, Feb. 7, 1999.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	1445	(a)	6.01	Mar. 4	0845	(a)	5.01
Jan. 10	unknown	unknown		Mar. 4	unknown	unknown	

(a) Affected by tide

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	e284	---	---	---	---	---	---
5	---	---	---	---	---	71	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	e53	e53	---	---	---	---	e53	---	---
11	---	---	---	e166	e149	---	---	---	---	---	---	---
12	---	---	---	e108	e110	---	---	---	---	---	---	---
13	---	---	---	---	e77	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	e76	---	---	---	---	---	---	---
19	---	---	---	---	e133	---	---	---	---	---	---	---
20	---	---	---	---	e183	---	---	---	---	---	---	---
21	---	---	---	---	e257	---	---	---	---	---	---	---
22	---	---	---	---	e255	---	---	---	---	---	---	---
23	---	---	---	---	e237	---	---	---	---	---	---	---
24	---	---	---	---	e295	---	---	---	---	---	---	---
25	---	---	---	e74	e235	---	---	---	---	---	---	---
26	---	---	---	e254	e96	---	---	---	---	---	---	---
27	---	---	---	e104	e60	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	e67	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated.

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 mi².

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 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 ft³/s, Jan. 4, 1982, gage height, 14.52 ft, from contracted opening and slope-area measurements of 3,800 ft³/s, at the gage site, and slope-conveyance computations of 1,200 ft³/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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	.53	.49	.80	2.0	13	2.0	.89	.36	.37	1.8	.19
2	.27	.44	.45	1.7	1.8	13	2.0	.77	.45	.37	1.7	.18
3	.29	.37	.42	.71	1.6	11	2.0	.84	.53	.54	.40	.18
4	.28	.36	.41	.60	1.3	160	2.0	.95	.49	.32	.82	.18
5	.28	.36	.61	.51	1.3	57	2.0	.91	.46	.31	.28	.18
6	.76	.36	.66	.45	1.2	32	2.5	.90	.46	.31	.22	.33
7	.31	.35	.43	.49	1.2	23	2.0	.85	.45	.63	.21	.39
8	.29	.36	.42	6.9	1.0	18	1.8	.76	.46	.22	.21	.18
9	.94	.45	.44	1.0	13	15	1.8	.70	.45	.24	.21	.18
10	.79	.51	.45	31	7.7	13	1.8	.77	.47	.30	.21	.18
11	.36	.48	2.0	40	21	11	1.8	.68	.50	.33	.21	.17
12	.32	.45	.92	6.0	35	9.4	1.8	.69	.46	.38	.24	.19
13	.32	.98	1.2	1.1	15	7.8	1.8	.73	.39	.42	.21	.21
14	.28	.37	11	.56	7.5	7.1	1.8	.70	.40	.41	.24	.66
15	.25	.36	1.9	.38	4.9	6.3	1.7	.69	.37	.45	.25	.39
16	.26	.72	.93	.28	3.9	5.9	1.5	.67	.64	.41	.24	.20
17	.28	.39	.77	.23	13	5.6	1.6	.60	.36	.47	.25	.22
18	.27	.35	.68	.25	15	4.9	1.5	.60	.30	.39	.55	.20
19	.28	.34	.68	.21	36	4.6	1.9	.60	.31	1.7	.24	.19
20	.29	.35	.68	.20	32	4.2	3.3	.58	.30	2.2	.21	.19
21	.27	2.9	.61	.19	42	3.9	1.2	.57	.30	.76	.22	.19
22	.13	.58	.60	.20	51	5.6	.96	.55	.30	.29	.21	.19
23	.16	.38	.60	8.5	47	5.8	.85	.94	.32	1.0	.24	.18
24	.22	.36	.60	1.7	71	3.5	.85	1.8	.34	2.8	.23	.48
25	2.8	.37	.59	43	77	3.3	1.2	3.5	.34	2.4	.21	.30
26	7.9	.37	.54	43	33	5.6	.85	.53	.41	.46	.24	.19
27	.67	.38	.54	13	21	5.6	.94	.34	.46	.26	.41	.19
28	4.4	.41	.77	6.3	16	4.5	1.0	.34	.48	.22	.76	.31
29	2.0	5.4	.77	4.6	---	2.4	.84	.32	.46	.22	.29	.20
30	6.0	.68	.64	3.1	---	2.1	.85	.26	.40	.21	.20	.17
31	.97	---	.52	2.5	---	2.0	---	.40	---	2.2	.20	---
TOTAL	32.90	20.71	32.32	219.46	573.4	466.1	48.14	24.43	12.42	21.59	11.91	7.19
MEAN	1.06	.69	1.04	7.08	20.5	15.0	1.60	.79	.41	.70	.38	.24
MAX	7.9	5.4	11	43	77	160	3.3	3.5	.64	2.8	1.8	.66
MIN	.13	.34	.41	.19	1.0	2.0	.84	.26	.30	.21	.20	.17
AC-FT	65	41	64	435	1140	925	95	48	25	43	24	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)

MEAN	.72	3.13	14.9	47.4	48.2	26.3	9.16	1.48	.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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1947 - 2001
ANNUAL TOTAL	2903.15	1470.57	
ANNUAL MEAN	7.93	4.03	12.6
HIGHEST ANNUAL MEAN			47.9
LOWEST ANNUAL MEAN			.40
HIGHEST DAILY MEAN	193	Feb 13	160
LOWEST DAILY MEAN	.13	Oct 22	.13
ANNUAL SEVEN-DAY MINIMUM	.23	Oct 18	.19
MAXIMUM PEAK FLOW		393	Mar 4
MAXIMUM PEAK STAGE		5.60	Mar 4
INSTANTANEOUS LOW FLOW			14.52
ANNUAL RUNOFF (AC-FT)	5760	2920	9140
10 PERCENT EXCEEDS	21	7.8	22
50 PERCENT EXCEEDS	.90	.56	.61
90 PERCENT EXCEEDS	.28	.21	.00

11460170 PINE GULCH CREEK AT BOLINAS, CA

LOCATION.—Lat 37°55'07", long 122°41'31", in Las Baulinas Grant, Marin County, Hydrologic Unit 18050005, on right bank, 100 ft upstream from highway bridge, 0.4 mile upstream from mouth, and 0.9 mile north of Bolinas.

DRAINAGE AREA. 7.83 mi².

PERIOD OF RECORD.—May 1967 to September 1970, November 1998 to September 1999, October 2000 to September 2001.

CHEMICAL DATA: November 1998 to September 1999, October 2000 to September 2001.

WATER TEMPERATURE: May 1967 to September 1970.

SEDIMENT DATA: June 1967 to September 1970, October 2000 to September 2001.

REMARKS.—Water year 2000 data available in the files of the U.S. Geological Survey.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
NOV	15...	1400	1.0	765	10.1	88.1	7.7	296	9.5	2.4	81.4	15.8	10.2	1.59
JAN	30...	1300	8.5	769	9.7	81.2	7.7	238	8.0	16	71.2	14.0	8.81	1.46
MAR	27...	1310	3.5	765	9.6	90.8	7.6	237	13.0	11	69.3	13.6	8.61	1.53
MAY	10...	1040	1.4	757	9.2	88.9	7.6	210	13.5	14	79.7	15.4	10.0	1.85
JUL	05...	1300	e.10	760	7.4	73.6	7.7	283	15.0	4.9	85.9	16.6	10.8	1.79
SEP	26...	1050	.27	760	7.0	68.9	7.5	291	14.5	6.5	84.5	16.0	10.8	1.84

DATE	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT.DIS GRAN T. FIELD CACO3 (MG/L) (29802)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	
NOV	15...	1.12	23.2	37.8	79	21.4	.2	17.4	30.2	.2	178	168	<.041	.13
JAN	30...	.940	18.2	35.2	55	19.2	e.1	17.2	24.6	.2	149	141	<.040	.21
MAR	27...	1.00	19.1	36.9	58	17.4	e.1	18.5	25.2	.2	156	141	<.041	.12
MAY	10...	1.14	23.3	38.3	66	20.1	.2	18.9	27.7	.2	177	159	<.041	.13
JUL	05...	1.27	27.1	40.1	110	21.2	.2	19.2	28.1	.3	188	176	e.026	.12
SEP	26...	1.34	28.4	41.6	78	23.1	e.2	18.6	26.1	.3	190	173	<.040	.13

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
NOV	15...	<.08	.172	<.006	.063	.052	.073	70	6.3
JAN	30...	.26	.991	<.006	.049	.045	.062	30	6.0
MAR	27...	.13	.341	<.006	.057	.060	.068	40	5.1
MAY	10...	.20	.386	e.004	.069	.060	.076	60	5.3
JUL	05...	.16	.511	.008	.068	.045	.086	40	3.8
SEP	26...	.15	.171	<.006	.069	.055	.085	90	6.2

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

PINE GULCH CREEK BASIN

11460170 PINE GULCH CREEK AT BOLINAS, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- SUS- PENDEDED (T/DAY) (80155)
NOV						
15...N	1400	1.0	9.5	87	4	.01
JAN						
30...N	1300	8.5	8.0	63	3	.07
MAR						
27...N	1310	3.5	13.0	80	3	.03
MAY						
10...N	1040	1.4	13.5	26	5	.02
JUL						
05...N	1300	e.10	15.0	70	8	<.01
SEP						
26...N	1050	.27	14.5	62	5	<.01

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

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

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 mi².

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 ft³/s, Feb. 3, 1998, gage height, 10.00 ft; minimum daily, 3.8 ft³/s, Oct. 16–18, 1986.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e6.9	9.7	40	23	26	30	20	16	e12	e6.5	8.6	8.7
2	e6.9	9.6	40	31	27	28	18	15	e12	e6.4	8.4	8.7
3	e7.0	9.7	34	37	28	26	17	14	e12	e6.4	8.5	8.6
4	e6.9	10	24	37	27	101	17	14	e12	e6.3	8.4	8.6
5	e7.0	9.9	24	31	26	93	17	13	e12	e6.4	8.5	8.5
6	e7.0	10	24	26	26	58	18	13	e12	e6.4	8.4	8.5
7	e7.0	10	24	26	26	42	18	13	e12	e6.4	8.4	8.5
8	e7.1	9.9	24	31	26	33	17	13	e12	e6.3	8.4	8.6
9	e7.4	10	23	28	39	28	17	13	e12	e6.5	8.5	8.6
10	e8.2	10	23	62	44	26	16	13	e12	e6.7	8.5	8.5
11	e7.3	10	23	111	114	25	16	13	e12	e6.9	8.5	8.6
12	e6.7	10	23	69	114	26	16	14	e12	e7.0	8.6	8.7
13	e6.6	11	24	40	65	25	17	14	e11	e7.0	8.6	8.6
14	e8.0	10	27	34	38	23	17	14	e11	e6.8	8.6	8.6
15	e7.9	10	29	31	27	22	17	14	e11	e7.0	8.6	8.6
16	e8.0	10	26	29	25	22	17	14	e10	e7.2	8.6	8.7
17	e8.0	10	25	28	63	22	17	14	e9.0	e7.2	8.5	8.6
18	e8.0	10	25	27	73	21	17	14	e8.5	e7.5	8.4	8.5
19	e8.0	10	24	27	131	21	17	14	e8.0	e8.0	8.5	8.5
20	e8.0	10	24	26	127	20	18	14	e7.9	8.5	8.5	8.4
21	e8.1	11	24	26	244	21	18	13	e7.7	8.7	8.5	8.4
22	e8.1	11	24	25	142	20	17	13	e6.5	8.6	8.5	8.5
23	e8.2	11	24	62	118	21	17	13	e6.3	8.5	8.5	8.4
24	e8.4	11	24	63	152	23	17	13	e6.3	8.5	8.6	8.5
25	e10	11	24	123	141	24	17	13	e6.4	8.7	8.6	8.6
26	e14	11	24	181	89	22	17	13	e6.6	8.7	8.6	8.6
27	9.1	24	24	84	56	21	17	13	e7.0	8.6	8.6	8.5
28	19	39	24	41	39	21	17	12	e8.0	8.4	8.5	8.6
29	e24	44	23	28	---	21	16	12	e7.0	8.5	8.6	8.6
30	11	41	23	25	---	20	16	12	e6.5	8.5	8.7	8.6
31	9.2	---	23	26	---	20	---	e12	---	8.6	8.6	---
TOTAL	277.0	413.8	791	1438	2053	926	513	415	288.7	231.7	264.3	256.9
MEAN	8.94	13.8	25.5	46.4	73.3	29.9	17.1	13.4	9.62	7.47	8.53	8.56
MAX	24	44	40	181	244	101	20	16	12	8.7	8.7	8.7
MIN	6.6	9.6	23	23	25	20	16	12	6.3	6.3	8.4	8.4
AC-FT	549	821	1570	2850	4070	1840	1020	823	573	460	524	510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	8.35	23.7	50.5	125	175	110	29.4	18.4	9.74	7.01	6.42	6.33							
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	1995	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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1983 - 2001	
ANNUAL TOTAL	14206.7		7868.4			
ANNUAL MEAN	38.8		21.6		43.7	
HIGHEST ANNUAL MEAN					112	
LOWEST ANNUAL MEAN					14.7	
HIGHEST DAILY MEAN	899	Feb 13	244	Feb 21	2870	Feb 3 1998
LOWEST DAILY MEAN	6.6	Oct 13	6.3	Jun 23	3.8	Oct 16 1986
ANNUAL SEVEN-DAY MINIMUM	7.0	Oct 1	6.4	Jul 2	4.0	Oct 16 1986
MAXIMUM PEAK FLOW			504	Feb 21	5830	Feb 3 1998
MAXIMUM PEAK STAGE			4.77	Feb 21	10.00	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	28180		15610		31630	
10 PERCENT EXCEEDS	67		38		82	
50 PERCENT EXCEEDS	13		13		12	
90 PERCENT EXCEEDS	7.8		7.4		5.3	

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 mi².

WATER-DISCHARGE RECORDS

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 ft³/s, Jan. 4, 1982, gage height, 26.96 ft, from rating curve extended above 6,200 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 0.01 ft³/s, Sept. 26, 1977.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	10	43	24	34	126	27	18	12	7.1	8.9	8.1
2	8.1	9.7	43	29	33	112	25	16	12	6.9	8.8	8.2
3	8.2	9.7	39	39	34	97	22	15	12	6.8	8.8	8.1
4	8.1	9.9	26	39	33	361	21	15	12	6.9	8.8	8.0
5	8.2	9.9	25	35	32	560	21	14	12	6.8	8.7	8.0
6	8.2	9.9	25	27	31	350	24	14	12	6.8	8.7	8.0
7	8.2	9.8	25	27	31	216	27	14	12	6.8	8.3	8.0
8	8.3	9.6	25	34	30	154	23	13	12	6.8	8.2	8.0
9	8.6	9.7	25	31	45	120	22	13	12	6.9	8.3	8.2
10	9.6	9.7	25	62	55	99	20	13	12	7.5	8.3	8.3
11	8.3	9.7	25	134	143	85	20	13	12	7.7	8.4	8.3
12	8.1	9.8	25	113	161	75	20	14	12	7.9	8.4	8.3
13	8.1	10	26	53	104	66	20	14	12	7.8	8.4	8.2
14	9.4	10	30	42	63	60	20	14	11	7.8	8.5	8.1
15	9.6	10	32	37	46	52	20	14	11	7.9	8.6	8.2
16	9.5	10	29	34	38	49	20	14	10	8.0	8.3	8.3
17	9.6	10	27	32	80	47	20	14	9.1	7.9	8.1	8.3
18	9.6	9.9	26	31	122	44	20	14	8.9	7.8	7.9	8.2
19	9.6	10	26	30	208	42	20	14	8.1	8.0	7.9	8.1
20	9.7	9.8	26	29	235	40	22	14	7.9	8.3	8.1	8.1
21	9.6	11	25	28	411	37	24	14	7.7	9.4	8.1	8.3
22	9.4	12	25	28	267	37	21	13	6.8	9.4	8.0	8.3
23	9.7	11	25	60	417	36	20	13	6.7	9.2	8.0	8.5
24	9.7	11	25	103	630	38	19	12	6.8	9.1	8.0	8.5
25	11	10	25	164	720	44	19	12	7.0	9.0	8.1	8.9
26	15	10	25	278	459	37	19	13	7.0	9.1	8.0	8.7
27	12	18	25	137	287	34	19	13	8.7	9.1	8.0	8.7
28	20	41	25	68	179	32	19	13	9.4	8.9	8.0	8.6
29	25	47	24	46	---	30	18	12	7.7	8.8	8.1	8.6
30	14	45	24	36	---	29	18	12	7.3	9.0	8.2	8.6
31	9.6	---	25	35	---	28	---	12	---	9.0	8.1	---
TOTAL	320.0	413.1	846	1865	4928	3137	630	423	297.1	248.4	257.0	248.7
MEAN	10.3	13.8	27.3	60.2	176	101	21.0	13.6	9.90	8.01	8.29	8.29
MAX	25	47	43	278	720	560	27	18	12	9.4	8.9	8.9
MIN	8.0	9.6	24	24	30	28	18	12	6.7	6.8	7.9	8.0
AC-FT	635	819	1680	3700	9770	6220	1250	839	589	493	510	493

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

MEAN	7.60	35.8	96.0	291	368	222	64.5	20.2	8.74	6.16	5.38	5.13
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1975 - 2001

ANNUAL TOTAL	29165.7	13613.3		
ANNUAL MEAN	79.7	37.3	92.8	
HIGHEST ANNUAL MEAN			269	1983
LOWEST ANNUAL MEAN			2.54	1977
HIGHEST DAILY MEAN	2710	Feb 13	720	Feb 25
LOWEST DAILY MEAN	7.5	Sep 20	6.7	Jun 23
ANNUAL SEVEN-DAY MINIMUM	7.8	Sep 14	6.8	Jul 2
MAXIMUM PEAK FLOW			818	Feb 25
MAXIMUM PEAK STAGE			5.92	Feb 25
ANNUAL RUNOFF (AC-FT)	57850	27000	67220	26.96
10 PERCENT EXCEEDS	150	62	153	Jan 4 1982
50 PERCENT EXCEEDS	16	13	10	Jan 4 1982
90 PERCENT EXCEEDS	8.0	8.0	2.6	

11460600 LAGUNITAS CREEK NEAR POINT REYES STATION, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.— August 1977, October 1989 to August 1990, November 1998 to September 1999, October 2000 to September 2001.

CHEMICAL DATA: August 1977, November 1998 to September 1999, October 2000 to September 2001.

SEDIMENT DATA: October 1989 to August 1990, November 1998 to September 1999, October 2000 to September 2001.

REMARKS.—Water year 2000 data available in the files of the U.S. Geological Survey.

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, CENT SOLVED (MG/L) (00300)	OXYGEN, PH DIS- SOLVED WHOLE FIELD (STAND- ARD UNITS) (00301) (00400)	PH WATER SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
NOV	15...1230	9.9	765	10.7	91.1	7.5	213	8.5	--	79.9	14.1	10.9	.83
JAN	30...1100	34	769	10.9	90.1	7.7	234	7.5	6.8	96.8	16.6	13.4	.96
MAR	27...1130	34	765	11.2	107	7.4	213	13.5	1.1	86.1	15.2	11.7	1.10
MAY	10...0730	13	757	8.7	85.0	7.5	169	14.0	--	88.9	15.4	12.3	1.10
JUL	05...1440	7.0	760	8.4	89.9	7.5	194	18.5	7.7	85.7	15.1	11.7	.95
SEP	26...0740	8.9	759	8.1	79.8	7.6	181	14.5	1.6	75.6	12.9	10.6	4.20

DATE	RATIO	SODIUM AD- SORP- TION SOLVED (MG/L AS NA) (00931)	SODIUM, DIS- SOLVED SODIUM PERCENT (00930)	ALKA- LINITY WAT.DIS GRAN T. FIELD CACO3 (MG/L) (29802)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV	15... .380	7.8	17.3	83	9.3	e.1	13.8	4.7	.2	115	111	<.041	e.10
JAN	30... .420	9.5	17.4	90	12.6	<.2	14.5	8.0	.2	139	133	<.041	.16
MAR	27... .419	8.9	18.2	85	9.8	<.2	10.5	6.4	.2	126	115	<.041	.15
MAY	10... .411	8.9	17.7	92	9.3	e.1	12.7	5.5	.2	139	121	<.041	.14
JUL	05... .418	8.9	18.2	78	9.1	e.1	13.5	4.5	.2	125	111	e.023	.12
SEP	26... .386	7.7	17.2	74	11.8	<.2	12.6	4.2	.2	116	108	<.040	.17

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV	15... .54	e.041	<.006	.013	e.011	.017	70	28.0
JAN	30... .21	.700	<.006	.021	.022	.030	20	25.2
MAR	27... .12	.072	<.006	.010	<.018	.015	20	16.9
MAY	10... .17	.060	.006	.016	<.018	.023	20	24.1
JUL	05... 1.5	.056	e.005	.021	<.020	.028	40	39.3
SEP	26... .15	<.050	<.006	.023	e.013	.023	50	24.0

e Estimated.

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

LAGUNITAS CREEK BASIN

11460600 LAGUNITAS CREEK NEAR POINT REYES STATION, CA—Continued

PARTICLE-SIZEDISTRIBUTIONOFSUSPENDEDSEDIMENT,WATERYEAROCTOBER2000TOSEPTEMBER2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV						
15...N	1230	9.9	8.5	3	.08	88
JAN						
30...N	1100	34	7.5	4	.37	81
MAR						
27...N	1130	34	13.5	4	.37	97
MAY						
10...N	0730	13	14.0	4	.14	86
JUL						
05...N	1440	7.0	18.5	3	.06	87
SEP						
26...N	0740	8.9	14.5	5	.12	73

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

11460750 WALKER CREEK NEAR MARSHALL, CA

LOCATION.—Lat 38°10'33", long 122°49'02", in Soulagule (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 mi².

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 good except for estimated daily discharges, which are fair. Flow affected by regulation and diversions and by Soulagule Reservoir on Arroyo Sausal; reservoir capacity, 10,570 acre-ft.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,500 ft³/s, Feb. 2, 1998, gage height, 14.21 ft, from rating curve extended above 1,100 ft³/s, on basis of comparison with discontinued downstream station "Walker Creek near Tomales"; minimum daily, 0.73 ft³/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 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.1	5.3	12	14	29	14	12	5.2	5.1	4.9	5.0
2	5.0	4.9	5.3	12	14	29	14	12	5.1	5.0	5.0	5.0
3	5.0	4.8	5.2	12	14	26	14	12	5.1	5.0	5.1	5.1
4	5.0	4.8	5.2	12	14	111	14	9.6	5.1	5.0	5.0	5.0
5	5.0	4.8	5.1	12	14	88	14	5.7	5.0	5.1	5.0	5.1
6	5.1	4.9	5.1	12	14	58	15	5.6	5.0	5.0	5.0	5.1
7	5.2	5.0	5.0	12	14	44	14	5.4	4.9	5.0	4.9	5.1
8	5.1	4.9	5.0	13	14	36	14	5.3	5.1	5.0	4.9	5.1
9	5.4	4.8	5.0	12	18	31	14	5.3	5.0	5.1	4.9	5.1
10	e5.5	4.8	4.9	19	20	27	14	5.3	5.1	5.1	4.9	5.1
11	5.3	4.8	5.3	27	45	24	14	5.2	5.1	5.2	5.0	5.2
12	e5.1	4.8	5.1	19	51	21	14	5.3	5.0	5.2	5.1	5.3
13	e5.2	5.3	5.1	14	37	20	14	5.3	5.0	5.1	5.0	5.3
14	e5.2	5.1	7.9	13	26	19	14	5.2	5.0	5.2	5.0	5.2
15	e5.0	5.1	6.6	12	21	17	13	5.3	5.0	5.1	5.0	5.2
16	e5.0	5.0	6.1	12	19	17	13	5.2	5.0	5.2	4.9	5.3
17	5.0	4.9	6.1	12	32	16	13	5.2	5.1	5.1	4.9	5.2
18	5.0	4.9	5.9	12	35	15	13	5.2	5.1	5.1	4.9	5.2
19	5.0	4.8	5.8	12	60	15	13	5.2	5.1	5.2	4.9	5.2
20	5.0	4.8	5.8	12	57	15	16	5.1	5.0	5.1	5.0	5.1
21	5.0	5.9	7.7	12	97	15	14	5.1	5.0	5.1	4.9	5.2
22	5.0	5.2	13	12	100	14	13	5.1	5.1	5.1	5.0	5.1
23	5.1	5.0	13	13	98	14	13	5.1	5.1	5.1	5.0	5.0
24	5.2	5.0	12	15	150	15	13	5.0	5.1	5.1	5.0	5.2
25	5.9	5.1	12	40	124	16	13	5.1	5.2	5.1	4.9	5.3
26	e5.5	5.0	12	58	69	15	13	5.3	5.1	5.0	4.8	5.2
27	5.5	5.1	12	37	48	14	12	5.3	5.5	5.0	4.8	5.2
28	6.9	5.2	12	23	36	14	13	5.2	5.2	5.0	4.9	5.1
29	5.0	6.0	12	19	---	14	12	5.1	5.1	5.0	4.9	5.1
30	5.1	5.5	12	16	---	14	12	5.0	5.1	5.0	5.0	5.1
31	4.8	---	12	15	---	14	---	5.1	---	5.0	5.0	---
TOTAL	161.1	151.3	240.5	533	1255	817	406	186.8	152.5	157.4	153.5	154.4
MEAN	5.20	5.04	7.76	17.2	44.8	26.4	13.5	6.03	5.08	5.08	4.95	5.15
MAX	6.9	6.0	13	58	150	111	16	12	5.5	5.2	5.1	5.3
MIN	4.8	4.8	4.9	12	14	14	12	5.0	4.9	5.0	4.8	5.0
AC-FT	320	300	477	1060	2490	1620	805	371	302	312	304	306

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

MEAN	4.85	10.4	37.6	112	150	64.0	15.1	7.32	5.36	4.82	4.66	4.74
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1984 - 2001	
ANNUAL TOTAL	11565.1		4368.5			
ANNUAL MEAN	31.6		12.0		34.5	
HIGHEST ANNUAL MEAN					98.3	
LOWEST ANNUAL MEAN					7.41	
HIGHEST DAILY MEAN	981	Feb 14	150	Feb 24	4940	Feb 17 1986
LOWEST DAILY MEAN	4.8	Oct 31	4.8	Oct 31	.73	Nov 26 1991
ANNUAL SEVEN-DAY MINIMUM	4.9	Nov 3	4.9	Nov 3	.78	Nov 23 1991
MAXIMUM PEAK FLOW			237		10500	
MAXIMUM PEAK STAGE			2.66		14.21	
ANNUAL RUNOFF (AC-FT)	22940		8660		25010	
10 PERCENT EXCEEDS	62		19		45	
50 PERCENT EXCEEDS	6.0		5.2		5.8	
90 PERCENT EXCEEDS	5.0		5.0		4.1	

e Estimated

RUSSIAN RIVER BASIN

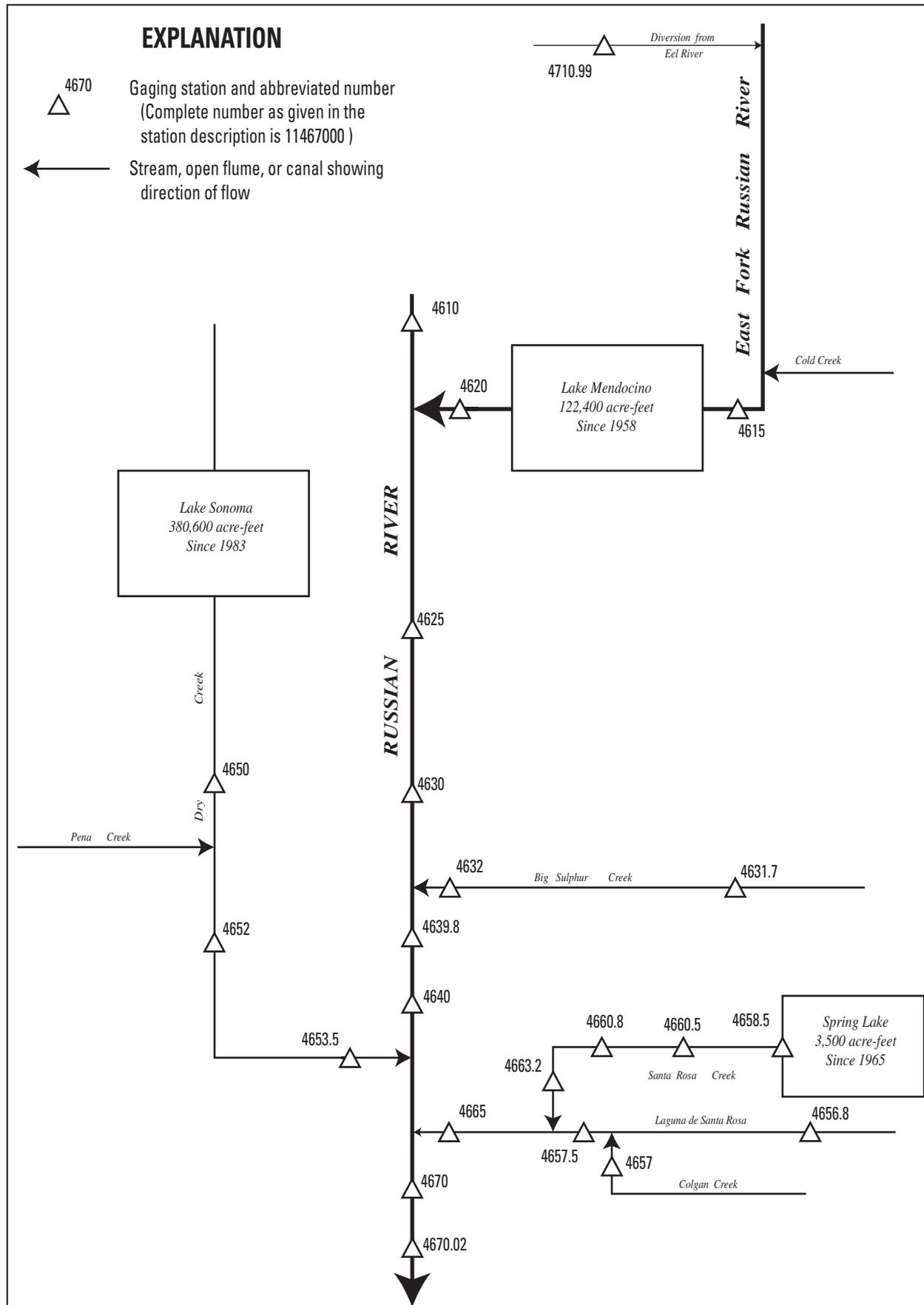


Figure 22. Diversions and storage in Russian River Basin.

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 mi².

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 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1600	4,690	12.01

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	6.5	17	9.3	49	238	30	18	4.4	2.7	.00	.00
2	.54	4.6	12	8.8	41	261	27	17	3.2	2.4	.00	.00
3	.57	3.7	9.4	8.3	37	233	22	16	3.8	2.2	.00	.00
4	.49	3.2	8.1	8.1	32	2170	19	16	4.0	1.8	.00	.00
5	.50	2.9	7.2	7.8	29	1100	20	16	3.6	1.5	.00	.00
6	.55	2.6	6.6	8.1	27	526	26	15	4.0	1.3	.00	.00
7	.53	2.4	6.3	7.9	24	339	30	13	3.0	.92	.00	.00
8	.63	2.3	6.1	28	23	243	24	12	2.8	.59	.00	.00
9	.50	2.3	5.9	48	42	194	27	11	2.1	1.3	.00	.00
10	1.1	2.4	5.7	400	142	156	21	11	3.6	1.0	.00	.00
11	1.1	2.4	8.5	342	390	131	26	12	3.8	.97	.00	.00
12	1.0	2.4	13	147	454	113	22	11	3.2	1.4	.00	.00
13	1.1	3.6	15	73	314	97	23	11	3.4	1.4	.00	.00
14	.83	4.4	122	47	231	86	18	11	3.2	1.2	.00	.00
15	.94	5.3	116	36	181	77	21	11	3.0	1.2	.00	.00
16	.77	6.2	46	30	177	71	21	11	3.3	1.3	.00	.00
17	.75	4.6	27	25	412	64	23	10	2.9	1.5	.00	.00
18	.75	3.9	20	22	389	59	22	9.9	2.7	1.2	.00	.00
19	.81	3.4	16	20	517	55	23	9.2	2.2	.66	.00	.00
20	.67	3.2	14	19	1750	52	31	8.2	2.1	1.2	.00	.00
21	.70	3.3	14	18	953	47	43	7.6	2.2	.62	.00	.00
22	.64	3.4	17	17	1350	45	32	6.0	1.7	.63	.00	.00
23	.59	3.3	17	88	752	43	26	5.2	2.1	.75	.00	.00
24	.67	3.5	18	459	892	43	24	5.9	2.1	.00	.00	.00
25	1.6	3.5	17	359	996	58	24	5.1	2.5	.00	.00	.32
26	4.8	3.3	15	573	579	43	22	5.7	3.0	.00	.00	1.2
27	2.7	3.5	13	284	391	38	22	6.6	5.5	.65	.00	1.2
28	9.1	4.2	12	154	289	37	20	6.8	5.1	.00	.00	1.0
29	13	49	11	111	---	35	19	6.5	3.4	.00	.00	.81
30	40	35	10	80	---	33	19	5.1	2.7	.00	.00	.84
31	15	---	9.8	61	---	31	---	4.6	---	.00	.00	---
TOTAL	103.54	184.3	635.6	3499.3	11463	6718	727	314.4	94.6	30.39	0.00	5.37
MEAN	3.34	6.14	20.5	113	409	217	24.2	10.1	3.15	.98	.000	.18
MAX	40	49	122	573	1750	2170	43	18	5.5	2.7	.00	1.2
MIN	.49	2.3	5.7	7.8	23	31	18	4.6	1.7	.00	.00	.00
AC-FT	205	366	1260	6940	22740	13330	1440	624	188	60	.00	11

RUSSIAN RIVER BASIN

11461000 RUSSIAN RIVER NEAR UKIAH, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.34	111	333	564	512	358	153	42.6	11.5	2.35	.63	.62
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1912 - 2001	
ANNUAL TOTAL	42746.89		23775.50			
ANNUAL MEAN	117		65.1		173	
HIGHEST ANNUAL MEAN					420	
LOWEST ANNUAL MEAN					5.76	
HIGHEST DAILY MEAN	2800	Feb 14	2170	Mar 4	13300	Dec 22 1964
LOWEST DAILY MEAN	.39	Sep 25	.00	Jul 24	.00	Oct 1 1911
ANNUAL SEVEN-DAY MINIMUM	.54	Oct 3	.00	Jul 28	.00	Oct 1 1911
MAXIMUM PEAK FLOW			4690	Mar 4	18900	Dec 21 1955
MAXIMUM PEAK STAGE			12.01	Mar 4	20.87	Jan 20 1993
ANNUAL RUNOFF (AC-FT)	84790		47160		125600	
10 PERCENT EXCEEDS	414		144		416	
50 PERCENT EXCEEDS	9.6		5.9		13	
90 PERCENT EXCEEDS	.79		.00		.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 mi².

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 ft³/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 ft³/s, July 23, 1990.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 3,300 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1645	6,720	18.58

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	163	146	60	83	109	362	135	109	69	43	57
2	126	158	107	59	57	115	347	116	125	86	44	54
3	143	169	106	57	56	90	283	106	116	68	50	53
4	128	239	80	54	58	2680	231	103	114	64	43	45
5	113	237	57	54	61	1010	248	109	131	63	50	48
6	118	203	71	53	48	362	296	118	97	50	52	46
7	e118	274	63	50	42	220	318	115	86	49	49	46
8	e127	283	63	66	45	161	273	104	93	40	40	47
9	e127	287	62	77	64	128	275	108	105	43	51	47
10	144	284	63	424	117	111	268	115	105	46	51	55
11	136	288	66	280	372	95	302	107	116	40	39	58
12	174	297	69	132	371	81	271	104	109	48	47	61
13	173	313	73	96	193	71	284	103	108	41	60	57
14	173	317	134	87	130	62	214	105	74	45	55	66
15	168	318	105	74	91	58	212	91	56	49	59	71
16	164	324	75	57	85	65	190	99	44	56	48	74
17	169	335	73	49	319	148	177	116	64	55	48	71
18	181	335	61	48	381	174	173	134	58	60	48	58
19	176	330	56	46	806	169	174	119	e57	51	49	55
20	167	326	55	44	1840	167	198	120	e58	49	51	46
21	157	335	54	46	975	165	184	118	e60	57	44	54
22	151	302	61	46	1360	199	169	102	e57	64	43	48
23	152	179	66	98	460	291	164	116	51	59	49	55
24	167	177	66	509	715	260	159	115	57	54	57	67
25	200	146	65	566	852	369	170	109	56	56	47	76
26	259	156	63	478	327	344	161	115	56	46	52	81
27	218	152	63	232	200	331	157	116	72	41	53	87
28	195	151	62	146	143	354	146	117	75	36	45	86
29	162	238	61	121	---	367	142	116	69	39	57	80
30	173	200	61	108	---	363	136	106	63	50	55	82
31	152	---	60	98	---	359	---	102	---	45	59	---
TOTAL	4932	7516	2267	4315	10251	9478	6684	3459	2441	1619	1538	1831
MEAN	159	251	73.1	139	366	306	223	112	81.4	52.2	49.6	61.0
MAX	259	335	146	566	1840	2680	362	135	131	86	60	87
MIN	113	146	54	44	42	58	136	91	44	36	39	45
AC-FT	9780	14910	4500	8560	20330	18800	13260	6860	4840	3210	3050	3630

e Estimated.

RUSSIAN RIVER BASIN

11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	227	286	462	630	626	519	344	230	161	136	136	186
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1942 - 2001	
ANNUAL TOTAL	97448		56331			
ANNUAL MEAN	266		154		327	
HIGHEST ANNUAL MEAN					586	
LOWEST ANNUAL MEAN					76.8	
HIGHEST DAILY MEAN	2920	Feb 13	2680	Mar 4	12500	Dec 22 1964
LOWEST DAILY MEAN	54	Dec 21	36	Jul 28	1.7	Jul 23 1990
ANNUAL SEVEN-DAY MINIMUM	60	Dec 18	43	Jul 27	3.2	Jul 11 1977
MAXIMUM PEAK FLOW			6720	Mar 4	18700	Dec 22 1964
MAXIMUM PEAK STAGE			18.58	Mar 4	22.89	Jan 20 1993
ANNUAL RUNOFF (AC-FT)	193300		111700		237100	
10 PERCENT EXCEEDS	637		317		552	
50 PERCENT EXCEEDS	146		103		248	
90 PERCENT EXCEEDS	84		48		78	

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 mi².

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 except for estimated daily discharges, which are fair. 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 ft³/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 ft³/s, Dec. 21, 1955, gage height, 16.86 ft, site and datum then in use, from rating curve extended above 6,300 ft³/s, on basis of maximum flow at station upstream which was defined to 8,600 ft³/s; no flow Aug. 13–15, 1913. Maximum discharge, since regulation (1959), 7,350 ft³/s, Jan. 24, 1970, gage height, 10.84 ft; minimum daily, 0.02 ft³/s, Apr. 17, 1973.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	166	162	163	110	14	40	129	153	131	188	199
2	246	168	160	163	56	14	41	132	170	131	188	199
3	249	170	160	163	24	13	48	134	170	148	186	197
4	250	170	160	163	24	13	57	134	170	170	184	196
5	250	170	160	163	24	13	57	134	170	170	184	198
6	249	170	164	163	24	13	59	134	170	170	184	265
7	246	164	162	163	24	14	59	134	170	170	184	307
8	246	160	161	163	24	14	59	134	170	184	184	298
9	246	160	163	163	24	14	59	134	170	191	184	298
10	246	160	163	130	24	13	59	134	170	191	184	298
11	246	160	163	64	24	12	59	134	170	191	184	298
12	213	160	163	30	19	12	60	134	170	191	183	298
13	238	160	163	96	14	15	61	134	170	191	182	298
14	238	160	163	137	14	18	61	134	170	191	180	279
15	238	160	163	137	14	18	61	135	170	191	181	261
16	238	160	163	137	14	18	61	115	170	191	181	259
17	238	160	163	137	14	18	61	93	170	191	180	259
18	238	160	163	137	14	18	61	93	170	191	180	259
19	235	160	163	137	14	18	61	93	170	191	180	211
20	230	160	163	137	14	18	61	93	185	191	180	147
21	230	160	163	137	14	18	61	93	207	191	172	146
22	230	160	163	137	13	30	62	93	210	191	161	146
23	230	160	161	135	13	39	63	93	210	191	163	146
24	230	160	160	65	13	40	64	94	208	191	163	e145
25	230	160	163	24	13	40	65	120	198	191	163	e105
26	211	160	163	24	13	40	92	137	189	191	163	e113
27	181	160	163	24	13	40	125	137	168	190	186	105
28	177	161	163	82	14	40	125	137	131	188	197	160
29	177	162	163	112	---	40	125	139	131	188	195	199
30	171	162	163	110	---	40	125	140	131	188	199	199
31	166	---	163	110	---	40	---	140	---	188	199	---
TOTAL	7063	4863	5033	3706	619	707	2052	3814	5181	5654	5622	6488
MEAN	228	162	162	120	22.1	22.8	68.4	123	173	182	181	216
MAX	250	170	164	163	110	40	125	140	210	191	199	307
MIN	166	160	160	24	13	12	40	93	131	131	161	105
AC-FT	14010	9650	9980	7350	1230	1400	4070	7570	10280	11210	11150	12870

e Estimated.

RUSSIAN RIVER BASIN

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
MAXIMUM PEAK FLOW	13300	Dec 21 1955
MAXIMUM 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 - 2001, BY WATER YEAR (WY)

MEAN	227	242	355	614	615	436	308	223	219	248	258	244
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1960 - 2001

ANNUAL TOTAL	97785		50802		
ANNUAL MEAN	267		139		331
HIGHEST ANNUAL MEAN					598
LOWEST ANNUAL MEAN					103
HIGHEST DAILY MEAN	3450	Feb 17	307	Sep 7	6620
LOWEST DAILY MEAN	19	Jan 26	12	Mar 11	.02
ANNUAL SEVEN-DAY MINIMUM	23	Feb 1	13	Feb 21	.14
MAXIMUM PEAK FLOW			591	Oct 12	7350
MAXIMUM PEAK STAGE			2.69	Oct 12	10.84
ANNUAL RUNOFF (AC-FT)	194000		100800		239900
10 PERCENT EXCEEDS	303		230		514
50 PERCENT EXCEEDS	219		160		229
90 PERCENT EXCEEDS	136		18		65

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 mi².

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 good. 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 ft³/s, Dec. 22, 1955, gage height, 27.00 ft; minimum daily, 9.1 ft³/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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	178	194	181	260	595	173	174	99	95	142	169
2	212	175	186	181	224	575	168	172	132	90	145	165
3	204	173	182	181	162	523	133	165	142	94	147	167
4	198	172	180	180	151	5010	120	163	141	123	143	171
5	199	172	178	179	143	4120	122	163	141	126	147	167
6	194	169	179	179	138	1600	147	165	144	118	149	190
7	194	169	180	179	134	1030	153	164	141	111	143	266
8	203	169	180	197	130	765	115	160	133	117	137	257
9	207	170	179	232	173	620	145	158	127	130	138	261
10	211	170	179	782	382	521	128	149	135	135	150	267
11	209	171	183	774	679	450	144	146	140	136	148	272
12	182	171	189	432	972	394	135	149	138	135	149	270
13	203	174	188	269	704	348	139	148	137	128	151	272
14	200	175	287	266	538	314	127	149	135	138	145	262
15	214	175	310	240	436	289	134	147	125	146	142	233
16	214	183	248	222	409	267	136	143	121	148	142	229
17	213	176	216	212	792	252	140	118	121	145	140	230
18	207	175	200	203	943	239	139	112	127	142	141	228
19	202	173	194	198	1270	226	138	113	123	136	147	218
20	196	172	190	194	5020	217	147	105	120	135	149	132
21	200	173	190	191	2760	208	171	100	151	140	143	115
22	213	172	191	190	3100	204	158	92	162	142	130	102
23	208	173	191	246	1990	210	151	94	155	137	135	106
24	201	172	191	1040	2100	210	144	95	163	138	134	111
25	220	173	191	742	3250	249	143	97	166	140	129	105
26	228	174	189	1060	1580	215	144	119	157	134	127	91
27	184	173	187	619	991	200	178	123	161	140	136	92
28	201	174	185	402	728	192	180	128	113	139	163	102
29	196	231	184	367	---	188	179	130	105	141	166	164
30	206	226	184	320	---	184	177	126	101	142	170	174
31	190	---	183	284	---	177	---	112	---	143	171	---
TOTAL	6318	5303	6088	10942	30159	20592	4408	4179	4056	4064	4499	5588
MEAN	204	177	196	353	1077	664	147	135	135	131	145	186
MAX	228	231	310	1060	5020	5010	180	174	166	148	171	272
MIN	182	169	178	179	130	177	115	92	99	90	127	91
AC-FT	12530	10520	12080	21700	59820	40840	8740	8290	8050	8060	8920	11080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

MEAN	230	421	1116	1818	1817	1269	698	325	216	198	207	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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1940 - 2001
ANNUAL TOTAL	198204	106196	
ANNUAL MEAN	542	291	706
HIGHEST ANNUAL MEAN			1587
LOWEST ANNUAL MEAN			94.0
HIGHEST DAILY MEAN	7920	Feb 14	5020
LOWEST DAILY MEAN	169	Nov 6	90
ANNUAL SEVEN-DAY MINIMUM	170	Nov 6	99
MAXIMUM PEAK FLOW			12200
MAXIMUM PEAK STAGE			14.22
ANNUAL RUNOFF (AC-FT)	393100	210600	511200
10 PERCENT EXCEEDS	1230	405	1540
50 PERCENT EXCEEDS	231	173	253
90 PERCENT EXCEEDS	183	123	138

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 mi².

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 ft³/s, Dec. 22, 1964, gage height, 31.60 ft, site and datum then in use; minimum daily, 12 ft³/s, Apr. 22, 1977.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	188	224	204	341	1100	219	189	90	86	126	147
2	205	180	209	203	307	975	212	187	117	83	127	144
3	197	176	202	202	230	869	169	181	132	79	135	150
4	194	172	198	202	201	6530	134	175	140	92	130	150
5	197	174	196	200	183	7340	125	176	139	120	127	147
6	194	174	194	200	169	2830	162	180	152	111	133	147
7	182	172	199	200	157	1850	180	180	151	95	124	224
8	193	174	197	225	148	1400	128	175	140	94	121	241
9	206	174	198	259	294	1130	150	173	118	113	116	247
10	214	174	198	907	709	937	137	168	114	139	132	254
11	e215	173	200	1570	1140	797	158	154	144	148	136	254
12	e202	174	211	887	1770	684	149	161	152	148	139	253
13	e209	178	209	444	1250	595	162	163	140	126	136	250
14	e207	182	281	374	923	530	142	163	136	134	128	243
15	e218	181	342	314	722	480	143	162	122	138	124	226
16	e219	190	298	281	674	440	157	155	109	143	121	222
17	e222	184	255	260	1290	403	161	132	108	139	117	228
18	e212	182	237	245	1730	374	161	115	116	132	116	219
19	e210	181	227	241	2620	346	158	109	113	126	120	212
20	e208	181	221	228	7650	326	171	107	103	114	126	155
21	e210	181	218	219	5270	307	217	106	119	120	124	117
22	e216	180	220	215	4830	289	197	95	160	125	115	100
23	e215	177	219	489	3960	288	183	97	163	128	107	99
24	e213	177	219	1680	3850	287	169	98	170	127	106	105
25	e228	182	218	1550	6290	373	165	96	181	131	94	111
26	e238	183	215	1760	3190	310	161	112	171	122	89	89
27	205	182	212	1110	2010	275	185	124	184	124	98	89
28	206	183	210	655	1440	257	199	131	155	122	125	86
29	223	235	208	543	---	247	198	135	113	122	136	133
30	222	262	207	451	---	238	195	132	95	132	144	162
31	213	---	206	386	---	226	---	111	---	129	146	---
TOTAL	6488	5506	6848	16704	53348	33033	5047	4442	4047	3742	3818	5204
MEAN	209	184	221	539	1905	1066	168	143	135	121	123	173
MAX	238	262	342	1760	7650	7340	219	189	184	148	146	254
MIN	182	172	194	200	148	226	125	95	90	79	89	86
AC-FT	12870	10920	13580	33130	105800	65520	10010	8810	8030	7420	7570	10320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

MEAN	246	567	1524	2687	2619	1811	898	389	243	213	220	216
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	275301		148227			
ANNUAL MEAN	752		406		963	
HIGHEST ANNUAL MEAN					2144	
LOWEST ANNUAL MEAN					99.2	
HIGHEST DAILY MEAN	12100	Feb 14	7650	Feb 20	42800	Dec 22 1964
LOWEST DAILY MEAN	166	Sep 16	79	Jul 3	12	Apr 22 1977
ANNUAL SEVEN-DAY MINIMUM	173	Nov 4	95	Jun 30	16	Apr 16 1977
MAXIMUM PEAK FLOW			15300	Mar 4	55200	Dec 22 1964
MAXIMUM PEAK STAGE			14.75	Mar 4	31.60	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	546100		294000		697300	
10 PERCENT EXCEEDS	2170		694		2260	
50 PERCENT EXCEEDS	226		182		266	
90 PERCENT EXCEEDS	182		114		155	

e Estimated.

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 mi².

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 ft³/s. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,010 ft³/s, Jan. 1, 1997, gage height, 9.78 ft, from rating curve extended above 1,200 ft³/s, on basis of culvert computation of peak flow; minimum daily, 0.08 ft³/s, Aug. 31, 1983.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 25	0145	1,050	6.11

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	4.6	5.4	3.2	19	54	13	9.4	2.6	2.7	1.1	1.1
2	1.2	3.8	4.6	3.0	19	42	12	9.0	2.7	2.6	1.0	1.0
3	1.4	2.5	4.1	3.1	17	32	11	8.6	2.7	2.4	1.0	1.0
4	1.0	2.2	3.6	3.0	16	269	12	8.3	2.7	2.3	1.1	1.1
5	1.0	2.6	3.3	2.9	14	251	12	8.0	2.7	2.4	1.0	.87
6	1.0	2.5	3.1	2.9	14	132	12	7.6	2.6	2.3	.99	.72
7	1.0	2.3	2.9	2.9	13	83	13	7.3	2.6	2.2	.96	.65
8	1.0	2.4	3.1	7.5	12	56	12	7.0	2.5	2.1	.91	.65
9	1.1	2.4	3.1	5.9	28	40	12	6.8	2.5	2.0	.93	.71
10	1.2	2.5	3.1	63	20	28	11	6.2	2.4	2.0	.93	.70
11	1.3	2.4	3.4	118	25	19	11	6.2	2.4	2.0	.93	.71
12	1.3	2.3	4.0	41	16	13	10	6.5	2.4	2.1	.97	.74
13	1.2	2.8	5.4	19	15	13	9.9	6.3	2.3	1.9	.95	.70
14	1.2	2.8	18	19	15	12	9.5	5.9	2.3	1.8	.91	.72
15	1.2	2.4	15	17	15	12	9.1	5.1	2.2	1.7	.91	.73
16	1.1	2.4	9.3	14	18	13	9.0	4.6	2.2	1.7	.92	.74
17	1.1	2.4	7.1	12	137	13	9.8	4.7	2.1	1.7	.90	.74
18	1.0	2.2	6.0	10	131	13	9.2	4.5	2.0	1.6	.90	.68
19	1.1	2.1	5.2	9.4	352	12	9.9	4.4	2.0	1.4	.87	.65
20	1.1	2.0	4.9	8.6	552	12	13	4.3	1.9	1.7	.94	.67
21	1.1	3.1	4.7	8.0	524	13	12	4.0	1.9	1.2	.93	.71
22	1.1	3.1	5.0	7.5	346	13	12	4.6	1.8	1.2	.95	.69
23	1.1	2.6	4.8	53	209	12	12	4.2	1.8	1.2	.99	.71
24	1.1	2.6	4.5	45	212	16	11	4.4	1.7	1.1	1.1	1.0
25	3.1	2.5	4.2	64	583	14	11	4.4	1.6	1.1	1.1	.86
26	6.1	2.3	4.0	53	237	12	10	4.4	1.8	1.1	1.0	.83
27	3.3	2.3	3.9	29	133	12	10	3.9	6.3	1.1	1.0	.78
28	32	2.3	3.6	19	84	12	9.6	3.5	5.1	1.1	.99	.74
29	8.8	15	3.5	19	---	12	9.8	3.0	3.4	1.0	.99	.74
30	7.1	8.2	3.5	19	---	12	9.8	2.8	3.0	1.0	1.1	.66
31	5.8	---	3.3	19	---	13	---	2.6	---	1.1	1.2	---
TOTAL	93.03	95.6	159.6	700.9	3776	1260	327.6	172.5	76.2	52.8	30.47	23.30
MEAN	3.00	3.19	5.15	22.6	135	40.6	10.9	5.56	2.54	1.70	.98	.78
MAX	32	15	18	118	583	269	13	9.4	6.3	2.7	1.2	1.1
MIN	.93	2.0	2.9	2.9	12	12	9.0	2.6	1.6	1.0	.87	.65
AC-FT	185	190	317	1390	7490	2500	650	342	151	105	60	46

RUSSIAN RIVER BASIN

11463170 BIG SULPHUR CREEK AT GEYSERS RESORT, NEAR CLOVERDALE, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.18	24.9	72.6	114	133	99.9	31.0	18.8	6.24	2.85	1.46	1.30
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	2.54	.86	.70	.65
(WY)	1989	1981	1991	1991	1989	1988	1990	1986	2001	1984	1988	1988

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1981 - 2001	
ANNUAL TOTAL	14116.16		6768.00			
ANNUAL MEAN	38.6		18.5		42.1	
HIGHEST ANNUAL MEAN					101 1995	
LOWEST ANNUAL MEAN					15.5 1994	
HIGHEST DAILY MEAN	1190	Feb 14	583	Feb 25	3920	Feb 17 1986
LOWEST DAILY MEAN	.90	Sep 18	.65	Sep 7	.08	Aug 31 1983
ANNUAL SEVEN-DAY MINIMUM	.96	Sep 25	.69	Sep 17	.24	Oct 13 1983
MAXIMUM PEAK FLOW			1050	Feb 25	8010	Jan 1 1997
MAXIMUM PEAK STAGE			6.11	Feb 25	9.78	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	28000		13420		30480	
10 PERCENT EXCEEDS	112		19		90	
50 PERCENT EXCEEDS	4.6		3.1		6.0	
90 PERCENT EXCEEDS	1.1		.93		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 mi².

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 ft³/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 ft³/s, Dec. 22, 1964, gage height, 15.08 ft, site and datum then in use, from rating curve extended above 5,700 ft³/s, on basis of slope-area measurement at gage height, 16.8 ft; minimum daily, 0.90 ft³/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 ft³/s, by slope-area measurement of peak flow.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	e18	24	e11	49	---	58	32	8.4	6.5	1.8	1.5
2	3.4	e16	17	e10	45	---	57	30	8.2	5.7	1.8	1.4
3	3.3	e15	15	e10	41	179	53	28	8.2	5.2	2.0	1.1
4	3.8	e14	13	e9.7	37	---	54	28	8.1	4.4	2.2	.94
5	3.5	e13	12	e9.7	33	---	52	27	7.9	3.7	1.9	.86
6	3.1	e13	11	e9.3	31	---	55	26	7.8	3.6	1.5	1.0
7	3.0	e12	10	e9.3	29	---	59	25	7.6	3.6	1.4	1.3
8	3.1	e12	9.9	e9.2	26	---	54	23	7.3	3.3	1.0	1.2
9	3.2	e11	10	e9.1	91	---	53	22	7.0	3.2	.91	1.2
10	4.1	e12	11	e105	---	---	49	21	6.9	3.2	.85	1.1
11	5.5	e11	11	---	---	197	47	20	6.9	3.2	.85	.91
12	5.5	e11	16	e72	---	163	45	20	6.7	3.3	.87	.99
13	5.4	e13	15	e42	174	144	43	21	6.5	3.3	.93	1.2
14	5.1	e15	41	e39	132	130	42	20	5.9	2.9	1.0	1.4
15	4.9	e11	52	e35	112	121	40	20	5.6	2.5	1.3	1.3
16	4.8	e10	37	e33	99	112	39	20	5.5	2.4	1.3	1.2
17	4.9	e9.0	28	e31	---	105	42	19	4.6	2.3	1.1	1.1
18	4.7	e9.2	22	e29	---	98	40	18	4.0	2.2	.98	1.3
19	4.7	e9.0	18	26	---	92	40	17	3.4	2.1	.93	1.7
20	4.8	e9.1	16	24	---	87	52	15	3.0	1.9	.91	1.7
21	5.1	8.9	16	22	---	84	64	14	2.6	1.9	.90	1.7
22	4.7	13	17	21	---	81	47	14	2.5	1.9	.98	1.8
23	3.8	11	e15	---	---	78	44	13	2.4	1.8	1.1	1.8
24	3.9	9.6	e15	---	---	81	41	13	2.5	1.6	1.4	1.8
25	8.7	9.3	e14	---	---	118	38	12	2.6	1.5	1.4	2.6
26	35	9.0	e14	---	---	82	36	12	3.3	1.9	1.4	3.8
27	20	8.9	e13	196	---	74	35	12	10	2.1	1.1	3.4
28	e70	8.9	e13	106	---	70	34	12	24	2.0	.93	2.8
29	e54	30	e12	84	---	67	33	11	12	1.8	.85	2.4
30	e35	39	e12	67	---	63	33	10	8.0	1.6	1.0	2.1
31	e22	---	e11	56	---	60	---	9.0	---	1.7	1.3	---
TOTAL	346.7	390.9	540.9	---	---	---	1379	584.0	199.4	88.3	37.89	48.60
MEAN	11.2	13.0	17.4	---	---	---	46.0	18.8	6.65	2.85	1.22	1.62
MAX	70	39	52	---	---	---	64	32	24	6.5	2.2	3.8
MIN	3.0	8.9	9.9	---	---	---	33	9.0	2.4	1.5	.85	.86
AC-FT	688	775	1070	---	---	---	2740	1160	396	175	75	96

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 mi².

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 ft³/s. See schematic diagram of [Russian River Basin](#).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	243	266	214	---	---	---	291	115	112	105	117
2	170	217	239	212	---	---	397	285	99	95	101	121
3	174	204	225	211	---	---	379	281	105	80	106	120
4	174	194	218	209	370	---	321	273	122	67	106	123
5	172	189	212	208	319	---	284	258	130	66	106	127
6	173	186	208	207	284	---	290	246	129	87	106	128
7	167	184	206	206	258	---	324	252	132	88	102	128
8	160	181	206	230	239	---	315	237	129	79	94	175
9	171	180	205	252	---	---	279	219	126	78	93	203
10	184	179	204	---	---	---	283	219	117	87	89	211
11	196	179	206	---	---	---	265	218	110	104	99	214
12	196	179	215	---	---	---	276	210	116	113	106	207
13	186	182	220	---	---	---	265	203	123	112	112	208
14	186	188	234	---	---	---	270	196	119	101	112	213
15	187	190	340	---	---	---	254	191	115	104	105	207
16	193	194	369	---	---	---	244	189	107	110	100	203
17	197	197	310	388	---	---	255	187	101	114	103	209
18	196	191	273	344	---	---	270	168	98	110	100	204
19	193	189	255	313	---	---	265	152	94	103	89	200
20	190	188	243	293	---	---	274	142	84	99	93	194
21	185	192	236	278	---	---	333	136	76	93	102	159
22	180	192	235	266	---	---	341	128	83	97	101	131
23	190	190	234	---	---	---	310	119	106	100	95	116
24	191	187	233	---	---	---	295	116	118	100	86	107
25	196	186	231	---	---	---	293	114	126	101	84	107
26	244	188	229	---	---	---	276	115	136	105	78	108
27	247	188	225	---	---	---	264	128	152	102	72	92
28	236	189	222	---	---	---	297	137	168	101	68	84
29	303	205	e218	---	---	---	317	140	154	100	80	75
30	281	268	e217	---	---	---	295	137	130	103	96	95
31	266	---	215	---	---	---	---	131	---	103	108	---
TOTAL	6152	5819	7349	---	---	---	---	5818	3520	3014	2997	4586
MEAN	198	194	237	---	---	---	---	188	117	97.2	96.7	153
MAX	303	268	369	---	---	---	---	291	168	114	112	214
MIN	160	179	204	---	---	---	---	114	76	66	68	75
AC-FT	12200	11540	14580	---	---	---	---	11540	6980	5980	5940	9100

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 mi².

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 ft³/s, Jan. 9, 1995, gage height, 26.23 ft, maximum gage height, 30.0 ft, Feb. 28, 1940; minimum daily discharge, 12 ft³/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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	248	285	228	577	2210	395	268	112	108	103	113
2	173	221	261	228	531	1850	379	255	96	96	102	116
3	179	204	246	224	482	1660	358	250	99	82	102	118
4	178	195	236	222	399	5260	304	248	116	61	106	137
5	177	188	228	222	360	15800	259	241	124	54	106	145
6	177	187	222	222	327	6100	248	236	124	77	107	132
7	171	182	219	222	298	3930	291	233	126	84	107	125
8	163	182	221	247	276	2860	283	225	122	80	102	164
9	173	181	216	271	334	2260	244	219	118	75	100	203
10	187	179	216	417	995	1860	253	213	109	79	98	219
11	198	179	220	2000	1730	1570	235	205	103	97	104	222
12	201	178	231	2060	2580	1340	248	193	110	104	108	246
13	192	182	239	907	2170	1180	237	194	115	107	114	224
14	190	187	253	608	1480	1040	244	200	110	102	117	227
15	193	190	354	506	1160	939	220	197	105	101	112	228
16	198	195	383	437	975	854	211	192	97	106	107	222
17	202	197	337	393	1140	784	225	183	91	114	106	222
18	202	193	301	359	3090	770	235	163	87	106	102	222
19	201	187	281	331	3570	694	234	148	84	100	100	216
20	198	188	268	312	10600	655	247	136	73	98	101	209
21	196	193	262	297	11000	621	315	130	67	94	107	165
22	184	193	261	285	8140	581	317	121	54	95	107	124
23	196	191	258	326	8410	555	291	113	90	97	104	108
24	199	187	257	1670	6310	541	274	113	107	98	98	100
25	205	187	252	2230	12000	591	260	107	97	99	96	101
26	258	187	251	3530	7130	618	250	106	126	100	91	101
27	268	188	246	2100	4350	538	245	113	144	100	83	96
28	256	187	245	1220	3000	492	266	125	157	98	75	88
29	320	207	239	903	---	458	271	136	153	100	84	79
30	300	272	234	764	---	436	274	133	118	100	98	93
31	275	---	233	653	---	413	---	129	---	102	107	---
TOTAL	6383	5835	7955	24394	93414	59460	8113	5525	3234	2914	3154	4765
MEAN	206	194	257	787	3336	1918	270	178	108	94.0	102	159
MAX	320	272	383	3530	12000	15800	395	268	157	114	117	246
MIN	163	178	216	222	276	413	211	106	54	54	75	79
AC-FT	12660	11570	15780	48390	185300	117900	16090	10960	6410	5780	6260	9450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

MEAN	272	767	2384	4071	4133	2816	1439	558	268	185	185	191
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1940 - 2001

ANNUAL TOTAL	447143	225146	
ANNUAL MEAN	1222	617	1427
HIGHEST ANNUAL MEAN			3277
LOWEST ANNUAL MEAN			101
HIGHEST DAILY MEAN	23900	Feb 14	15800
LOWEST DAILY MEAN	162	Sep 16	54
ANNUAL SEVEN-DAY MINIMUM	167	Sep 10	73
MAXIMUM PEAK FLOW			23100
MAXIMUM PEAK STAGE			13.28
ANNUAL RUNOFF (AC-FT)	886900	446600	1034000
10 PERCENT EXCEEDS	3600	1150	3380
50 PERCENT EXCEEDS	247	205	310
90 PERCENT EXCEEDS	180	98	140

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.—Records excellent. Interruptions in record were due to malfunction of the sensing and (or) recording instruments. 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, Aug. 3, 1998; minimum recorded, 3.0°C, Dec. 23, 1990.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURE: Maximum recorded, 29.5°C, July 4; minimum recorded, 5.5°C, Feb. 13.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.0	19.5	15.5	13.5	12.0	10.5	9.5	7.5	---	---	11.0	9.5
2	23.0	19.5	16.5	14.0	11.0	9.5	9.0	8.0	---	---	11.5	10.0
3	22.0	18.0	16.5	14.5	11.0	9.5	9.0	7.5	11.0	9.0	11.0	9.5
4	21.0	18.0	16.0	14.0	11.5	10.0	9.0	7.5	12.5	10.5	10.5	10.0
5	21.0	18.0	17.0	14.5	11.0	9.5	9.0	7.5	12.5	10.5	11.0	9.5
6	21.0	18.0	15.5	13.5	11.0	9.5	9.5	7.5	11.5	9.5	12.5	10.5
7	19.5	17.5	15.0	12.5	12.0	10.5	9.5	8.0	10.0	8.0	13.5	11.0
8	21.0	17.0	15.0	13.0	12.5	11.5	11.0	9.5	10.5	8.0	13.5	11.5
9	19.5	18.0	13.5	12.0	13.0	12.0	10.0	8.5	11.0	10.0	13.0	11.0
10	18.5	17.0	12.5	10.5	13.5	12.0	9.5	9.0	10.0	8.5	13.0	10.5
11	17.5	15.5	12.0	10.0	12.0	11.5	9.5	8.0	9.0	8.0	13.5	11.0
12	18.5	15.0	11.5	9.5	11.5	11.0	8.5	7.0	8.0	6.5	14.0	11.5
13	19.0	15.0	10.5	9.0	12.0	11.0	9.5	7.5	8.0	5.5	14.0	12.0
14	19.5	15.5	11.0	10.0	12.0	11.5	9.5	8.0	8.5	6.5	14.5	12.0
15	20.0	16.5	11.5	9.5	12.0	11.5	8.5	7.5	9.0	7.5	14.0	12.5
16	19.5	16.0	12.5	10.5	11.5	10.5	8.0	7.0	10.0	8.5	14.5	12.0
17	19.0	15.5	11.5	9.5	10.5	9.5	8.0	6.5	10.0	9.0	15.0	13.0
18	19.0	15.5	11.0	9.0	10.0	8.5	8.5	6.5	10.0	9.0	16.5	13.5
19	19.5	16.5	11.5	9.5	10.0	8.5	9.5	8.0	10.0	9.5	17.0	14.5
20	18.0	16.5	11.5	9.5	10.5	9.0	9.5	8.0	9.5	9.0	18.0	15.5
21	17.0	14.5	11.5	10.5	10.0	9.0	9.5	8.0	11.0	9.5	18.0	16.0
22	15.5	13.0	12.5	11.0	11.5	10.0	10.0	8.0	10.5	9.5	16.5	15.5
23	16.5	13.5	12.0	11.0	11.0	10.5	10.0	9.0	10.0	8.5	17.0	15.0
24	16.5	14.0	12.5	11.5	11.0	10.0	10.0	8.5	9.5	9.0	16.0	15.0
25	16.0	15.5	13.5	11.5	10.5	9.0	8.5	7.0	10.0	9.0	16.0	14.0
26	16.0	15.0	13.0	12.0	9.5	8.0	7.5	6.5	11.0	9.0	16.5	13.5
27	16.5	14.0	13.0	12.0	9.5	8.0	8.0	6.0	11.5	9.5	17.0	14.0
28	16.0	15.0	13.0	12.5	9.5	8.0	8.5	6.5	11.5	9.5	18.5	15.0
29	16.0	14.5	13.5	12.5	9.5	7.5	9.5	8.0	---	---	19.0	15.5
30	16.0	14.5	13.0	11.5	9.0	7.5	9.0	7.5	---	---	19.5	16.0
31	15.5	13.5	---	---	9.0	7.5	9.0	7.0	---	---	19.5	16.0
MONTH	24.0	13.0	17.0	9.0	13.5	7.5	11.0	6.0	---	---	19.5	9.5

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	19.0	16.0	22.0	18.0	26.0	22.5	27.0	23.5	26.0	22.5	25.0	22.0
2	16.5	13.5	20.5	16.5	25.5	20.5	28.0	24.0	26.0	22.5	25.0	22.5
3	15.5	12.0	21.5	16.0	24.5	18.5	29.0	25.5	26.0	22.5	25.0	22.5
4	16.0	12.5	22.5	17.0	25.0	19.0	29.5	25.5	26.5	23.0	24.5	22.0
5	17.0	13.0	23.0	18.0	24.5	19.5	29.0	24.0	26.5	23.0	24.0	21.5
6	15.5	14.0	23.5	18.5	25.5	19.5	28.0	23.5	27.0	23.5	23.5	20.5
7	15.5	13.0	24.5	19.0	27.0	21.0	27.0	22.5	27.0	23.5	23.5	20.5
8	15.0	12.5	25.5	20.0	26.5	21.5	27.5	22.5	27.5	24.0	22.5	20.5
9	16.0	12.0	25.0	20.5	26.5	20.5	26.0	22.5	26.0	23.5	22.0	20.5
10	17.0	12.5	25.5	20.0	26.0	21.0	25.5	22.0	26.0	23.0	22.5	19.5
11	17.0	13.5	24.5	20.0	24.5	20.5	25.0	21.5	25.5	22.0	22.5	19.5
12	17.0	13.0	22.0	19.5	25.0	20.0	25.0	21.5	24.5	22.0	22.5	19.5
13	17.5	14.0	23.0	18.5	26.0	19.5	25.5	21.5	24.5	22.0	23.0	19.5
14	17.5	13.5	22.5	18.0	26.5	20.5	26.5	22.5	25.0	21.5	23.5	19.5
15	18.0	14.0	22.0	19.0	27.5	21.5	26.0	22.0	25.5	22.0	23.0	19.5
16	17.0	14.0	24.0	19.0	28.0	22.0	25.5	22.0	26.0	22.0	22.5	19.5
17	19.5	15.5	24.5	19.0	28.0	22.0	25.0	21.5	26.5	23.0	23.0	19.0
18	17.5	15.5	25.5	19.5	28.0	21.5	25.5	22.0	26.5	23.0	22.5	19.0
19	16.5	14.5	26.0	20.5	28.5	22.5	26.0	22.5	26.5	23.0	22.5	19.0
20	15.0	13.5	26.5	20.5	29.0	22.5	25.5	22.5	25.0	22.0	22.5	19.0
21	17.5	12.0	27.0	21.5	29.0	23.0	26.0	22.0	25.0	21.5	22.5	19.0
22	19.0	14.5	26.5	21.5	28.0	23.0	26.0	22.0	25.0	21.5	22.0	18.5
23	20.0	15.5	26.5	21.0	25.5	22.5	26.5	22.5	25.0	22.0	21.0	18.5
24	21.5	16.5	26.5	20.5	24.0	21.5	26.0	22.5	26.0	22.0	20.5	18.5
25	22.5	18.0	23.0	20.5	22.5	20.5	25.5	22.5	26.5	22.5	22.0	19.0
26	22.0	18.0	24.0	19.5	21.0	20.0	25.5	22.5	26.5	22.5	23.0	18.5
27	22.0	18.0	23.5	19.5	20.0	19.5	26.0	22.0	27.0	22.5	22.5	19.5
28	21.0	18.0	24.0	18.5	23.5	19.5	26.0	22.0	27.0	22.5	21.5	18.0
29	21.0	16.5	25.5	19.5	25.5	21.5	26.5	22.5	26.5	22.5	22.5	18.0
30	22.0	17.0	27.0	20.5	26.5	23.0	26.0	22.5	25.0	22.5	23.0	18.5
31	---	---	28.0	22.5	---	---	26.0	22.5	25.0	21.5	---	---
MONTH	22.5	12.0	28.0	16.0	29.0	18.5	29.5	21.5	27.5	21.5	25.0	18.0

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 mi².

PERIOD OF RECORD.—October 1939 to September 1942 (published as "Dry Creek near Healdsburg"), October 1981 to current year.

WATER TEMPERATURE: 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 ft³/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 ft³/s, Feb. 11, 1998, gage height, 10.38 ft; minimum daily, 6.1 ft³/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 ft³/s.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	106	115	113	86	248	87	86	92	107	139	178
2	54	111	115	102	85	248	87	86	92	105	139	178
3	31	111	115	89	85	248	87	86	92	105	139	178
4	31	111	115	91	85	255	86	86	92	111	139	178
5	31	111	115	90	85	739	85	86	92	132	140	178
6	32	110	115	90	85	1280	85	86	92	137	140	178
7	92	114	115	90	85	1360	85	86	92	137	143	178
8	93	116	115	89	85	1180	85	87	92	137	140	178
9	93	116	115	89	85	1010	85	87	93	137	145	178
10	96	117	115	89	85	1010	85	87	93	154	150	110
11	101	118	115	88	85	1010	85	87	98	167	150	46
12	109	116	114	90	86	880	85	87	111	158	150	e41
13	150	118	114	90	85	566	85	87	116	166	149	e41
14	149	120	114	89	85	634	85	87	116	166	149	e41
15	149	120	114	89	85	948	85	86	116	166	149	e40
16	132	118	114	88	85	784	87	86	116	165	149	e40
17	112	116	113	88	87	175	87	87	117	165	149	e40
18	103	116	114	88	86	175	86	86	133	150	148	e45
19	97	116	114	88	87	175	87	86	146	136	149	e89
20	97	116	114	88	88	175	86	86	146	136	149	e133
21	97	116	114	88	88	175	86	86	161	140	148	e168
22	97	115	114	88	90	175	86	86	175	138	149	e168
23	97	115	113	89	87	175	86	86	175	138	149	e168
24	97	115	113	88	90	175	86	86	175	139	153	e150
25	98	116	113	91	92	175	86	86	165	138	164	e128
26	94	116	114	89	148	176	86	86	154	139	170	128
27	90	116	114	88	177	139	86	86	140	140	172	128
28	91	116	114	88	218	84	86	86	114	140	172	127
29	90	115	114	86	---	84	86	86	105	140	175	127
30	90	116	114	84	---	87	86	86	102	139	178	127
31	94	---	114	86	---	87	---	89	---	139	178	---
TOTAL	2902	3453	3541	2783	2700	14632	2575	2677	3603	4367	4713	3687
MEAN	93.6	115	114	89.8	96.4	472	85.8	86.4	120	141	152	123
MAX	150	120	115	113	218	1360	87	89	175	167	178	178
MIN	31	106	113	84	85	84	85	86	92	105	139	40
AC-FT	5760	6850	7020	5520	5360	29020	5110	5310	7150	8660	9350	7310

e Estimated.

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	83.2	150	185	400	561	446	177	94.7	114	117	112	93.8
MAX	120	524	1501	1986	2583	1494	948	265	276	274	169	123
(WY)	1997	1984	1984	1997	1998	1995	1995	1995	1998	1987	1987	2001
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1984 - 2001	
ANNUAL TOTAL	80769		51633			
ANNUAL MEAN	221		141		209	
HIGHEST ANNUAL MEAN					512	
LOWEST ANNUAL MEAN					46.0	
HIGHEST DAILY MEAN	3270	Mar 2	1360	Mar 7	5300	Feb 11 1998
LOWEST DAILY MEAN	31	Oct 3	31	Oct 3	6.1	Oct 21 1983
ANNUAL SEVEN-DAY MINIMUM	52	Oct 2	41	Sep 12	6.3	Oct 18 1983
MAXIMUM PEAK FLOW			1360	Mar 6	5590	Feb 11 1998
MAXIMUM PEAK STAGE			7.20	Mar 6	10.38	Feb 11 1998
ANNUAL RUNOFF (AC-FT)	160200		102400		151600	
10 PERCENT EXCEEDS	259		175		248	
50 PERCENT EXCEEDS	110		113		101	
90 PERCENT EXCEEDS	90		85		44	

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 mi².

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 good except for estimated daily discharges, which are fair. 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 ft³/s, Jan. 31, 1963, gage height, 20.50 ft, present datum; no flow at times. Maximum discharge since regulation by Lake Sonoma, 7,600 ft³/s, Jan. 8, 1995, gage height, 15.48 ft; minimum daily, 19 ft³/s, Oct. 18–25, 1984.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	116	124	120	114	420	111	98	88	109	141	192
2	72	123	124	106	111	400	111	98	88	108	142	194
3	44	122	123	89	110	383	110	97	89	105	144	193
4	43	123	121	90	109	1410	107	96	88	109	146	190
5	43	123	122	88	107	1490	104	96	88	130	146	190
6	43	122	121	88	104	1770	106	96	88	134	148	191
7	84	126	121	88	104	1770	106	94	88	134	149	190
8	91	128	120	90	103	1540	106	94	87	134	147	194
9	92	125	120	88	114	1310	106	93	88	134	152	194
10	95	122	120	138	143	1290	106	93	88	147	156	139
11	100	120	120	213	171	1280	105	92	93	161	157	50
12	103	119	119	180	209	1130	105	92	110	e164	157	44
13	141	122	122	119	187	711	104	92	115	e164	155	43
14	140	124	125	108	155	755	104	91	115	e164	157	41
15	142	123	126	104	138	1060	103	90	115	e162	160	41
16	131	123	126	100	129	995	104	90	116	e160	160	42
17	111	118	126	99	177	225	104	91	116	e148	159	43
18	103	119	125	103	187	210	102	90	126	e140	157	53
19	95	120	126	98	394	205	102	89	139	e140	159	105
20	95	120	126	97	562	203	105	89	141	e140	160	152
21	96	120	126	94	637	201	106	88	152	e136	159	181
22	98	120	124	94	644	200	102	86	169	e139	160	180
23	100	118	123	105	504	199	101	87	169	e138	159	181
24	100	118	125	125	500	202	101	87	169	e134	162	166
25	105	119	125	327	904	205	100	87	161	135	173	145
26	103	119	122	288	524	200	99	85	147	135	183	145
27	95	119	121	185	413	172	99	84	141	136	186	148
28	99	119	123	147	399	113	99	84	120	137	187	149
29	97	123	121	131	---	111	99	83	109	140	193	148
30	96	125	122	121	---	111	98	82	105	139	196	150
31	98	---	121	117	---	111	---	84	---	139	192	---
TOTAL	2969	3638	3810	3940	7953	20382	3115	2798	3508	4295	5002	4074
MEAN	95.8	121	123	127	284	657	104	90.3	117	139	161	136
MAX	142	128	126	327	904	1770	111	98	169	164	196	194
MIN	43	116	119	88	103	111	98	82	87	105	141	41
AC-FT	5890	7220	7560	7810	15770	40430	6180	5550	6960	8520	9920	8080

e Estimated.

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
MAXIMUM PEAK FLOW	32400 Jan 31 1963
MAXIMUM 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 - 2001, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	91.5	142	170	621	930	681	224	114	133	129	121	100				
MAX	116	459	539	2634	3890	2110	1115	341	379	296	180	136				
(WY)	1997	1987	1997	1997	1998	1995	1995	1995	1998	1987	1987	2001				
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1986 - 2001

ANNUAL TOTAL	110157	65484	
ANNUAL MEAN	301	179	276
HIGHEST ANNUAL MEAN			676 1995
LOWEST ANNUAL MEAN			90.5 1990
HIGHEST DAILY MEAN	3740 Mar 2	1770 Mar 6	6260 Feb 16 1998
LOWEST DAILY MEAN	43 Oct 4	41 Sep 14	27 May 20 1992
ANNUAL SEVEN-DAY MINIMUM	60 Oct 2	43 Sep 11	29 Oct 7 1997
MAXIMUM PEAK FLOW		3090 Mar 4	7600 Jan 8 1995
MAXIMUM PEAK STAGE		9.93 Mar 4	15.48 Jan 8 1995
ANNUAL RUNOFF (AC-FT)	218500	129900	200200
10 PERCENT EXCEEDS	565	201	441
50 PERCENT EXCEEDS	118	122	112
90 PERCENT EXCEEDS	103	88	81

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 mi².

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 ft³/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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	94	120	122	136	---	109	97	71	94	117	156
2	86	103	119	118	126	---	106	96	74	94	117	155
3	48	105	120	95	120	---	101	96	75	88	116	152
4	36	106	119	90	116	---	93	95	75	88	116	150
5	33	106	119	88	113	---	86	94	73	102	117	150
6	32	106	119	87	110	---	95	94	73	113	117	150
7	44	107	120	87	108	---	94	93	70	115	117	150
8	70	113	120	100	106	---	87	92	70	117	115	154
9	76	113	121	97	144	---	91	90	70	118	116	157
10	81	113	122	---	---	---	89	88	71	122	124	142
11	86	113	124	---	---	---	89	88	72	137	126	65
12	88	114	124	---	---	---	87	89	88	137	130	46
13	114	115	127	173	---	---	86	89	97	139	129	41
14	130	118	131	128	---	---	85	88	99	141	128	38
15	134	119	130	114	---	---	79	88	99	143	127	35
16	134	120	128	106	188	---	99	88	101	143	127	34
17	108	116	127	101	---	---	110	86	104	141	126	33
18	101	115	127	98	---	---	104	84	111	136	127	33
19	88	115	127	95	---	---	105	81	135	122	129	53
20	85	115	127	94	---	---	135	81	138	118	130	89
21	84	116	127	93	---	---	124	78	149	120	129	122
22	83	115	127	92	---	---	109	76	195	119	127	133
23	83	115	126	163	---	---	104	76	---	118	127	141
24	83	115	126	---	---	---	103	75	---	117	129	142
25	92	116	126	---	---	---	101	76	---	117	134	121
26	102	116	125	---	---	---	100	77	177	118	143	118
27	85	116	124	---	---	---	100	76	---	117	146	117
28	116	116	124	---	---	143	99	75	125	116	146	116
29	92	129	124	199	---	126	99	73	100	118	147	116
30	90	120	123	162	---	118	98	69	95	117	154	117
31	84	---	122	146	---	112	---	65	---	118	155	---
TOTAL	2667	3400	3845	---	---	---	2967	2613	---	3703	3988	3226
MEAN	86.0	113	124	---	---	---	98.9	84.3	---	119	129	108
MAX	134	129	131	---	---	---	135	97	---	143	155	157
MIN	32	94	119	---	---	---	79	65	---	88	115	33
AC-FT	5290	6740	7630	---	---	---	5890	5180	---	7340	7910	6400

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 mi².

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 ft³/s, Feb. 13, 2000, gage height, 87.29 ft; minimum daily, 0.04 ft³/s, Sept. 30, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2100	604	82.64

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	14	2.2	.74	7.4	41	3.6	1.6	.62	1.2	.52	.22
2	.29	3.3	1.3	.73	6.3	48	3.4	1.5	.60	1.1	.52	.22
3	.31	1.6	.89	.70	4.8	47	3.1	1.3	.67	.96	.51	.24
4	.34	1.0	.71	.70	4.1	260	2.9	1.2	.65	.88	.49	.25
5	.37	.84	.54	.72	3.7	275	2.6	1.2	.56	.81	.49	.22
6	.40	.69	.52	.74	3.4	107	6.2	1.1	.54	.76	.47	.19
7	.40	.59	.51	.80	3.1	69	10	1.0	.52	.76	.45	.18
8	.39	.55	.48	28	2.9	56	5.0	.92	.50	.79	.46	.16
9	.41	.52	.47	12	33	49	3.3	.85	.49	.78	.48	.15
10	.48	.49	.49	64	64	38	2.7	.78	.49	.77	.46	.13
11	.55	.47	.53	160	146	27	2.4	.76	.54	.77	.43	.12
12	.55	.46	3.0	111	113	17	2.1	.78	.66	.76	.40	.11
13	.52	.65	3.0	32	85	13	2.0	.78	.71	.75	.39	.11
14	.48	3.5	52	7.2	46	12	1.8	.74	.76	.75	.39	.12
15	.45	2.2	35	3.9	18	11	1.8	.76	.78	.75	.38	.13
16	.42	3.3	6.1	2.7	10	10	1.6	.92	.78	.73	.40	.12
17	.40	2.4	2.6	2.2	30	9.3	e1.6	.90	.76	.73	.41	.10
18	.37	1.3	1.6	2.0	84	8.4	e1.5	.88	.75	.73	.38	.09
19	.35	.90	1.2	2.1	132	7.7	e1.5	.80	.74	.71	.34	.09
20	.34	.69	1.0	1.9	175	7.3	e42	.73	.74	.70	.31	.08
21	.35	16	.92	1.8	237	7.1	e30	.66	.80	.67	.29	.08
22	.34	32	.93	1.7	236	6.6	e9.0	.62	.84	.65	.27	.07
23	.32	5.4	.95	16	220	6.1	3.3	.61	.82	.63	.27	.06
24	.30	2.0	.91	58	270	6.0	3.1	.60	.82	.61	.26	.06
25	1.8	1.2	.85	82	219	7.1	2.4	.58	.86	.60	.25	.07
26	53	.86	.80	235	101	6.4	2.2	.58	.93	.59	.25	.08
27	32	.68	.77	108	70	5.5	2.1	.64	.99	.58	.24	.07
28	27	.60	.75	48	55	4.9	2.0	.62	1.2	.58	.23	.07
29	76	1.7	.74	25	---	4.8	1.8	.61	1.4	.58	.23	.05
30	38	3.7	.74	14	---	4.4	1.7	.60	1.3	.56	.22	.04
31	56	---	.74	9.2	---	4.1	---	.62	---	.53	.22	---
TOTAL	293.20	103.59	123.24	1032.83	2379.7	1175.7	158.7	26.24	22.82	22.77	11.41	3.68
MEAN	9.46	3.45	3.98	33.3	85.0	37.9	5.29	.85	.76	.73	.37	.12
MAX	76	32	52	235	270	275	42	1.6	1.4	1.2	.52	.25
MIN	.27	.46	.47	.70	2.9	4.1	1.5	.58	.49	.53	.22	.04
AC-FT	582	205	244	2050	4720	2330	315	52	45	45	23	7.3

e Estimated.

11465680 LAGUNA DE SANTA ROSA AT STONY POINT ROAD, NEAR COTATI, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.36	7.20	7.53	37.3	183	62.7	18.1	3.79	1.08	.72	.57	.48
MAX	9.46	10.9	16.3	40.0	253	75.8	33.2	6.64	1.32	.77	.91	.92
(WY)	2001	2000	1999	1999	2000	2000	1999	2000	2000	1999	1999	1999
MIN	3.26	3.45	2.28	33.3	85.0	37.9	5.29	.85	.76	.66	.37	.12
(WY)	2000	2001	2000	2001	2001	2001	2001	2001	2001	2000	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	12165.07		5353.88			
ANNUAL MEAN	33.2		14.7		23.9	
HIGHEST ANNUAL MEAN					33.2	
LOWEST ANNUAL MEAN					14.7	
HIGHEST DAILY MEAN	1940	Feb 13	275	Mar 5	1940	Feb 13 2000
LOWEST DAILY MEAN	.26	Sep 20	.04	Sep 30	.04	Sep 30 2001
ANNUAL SEVEN-DAY MINIMUM	.27	Sep 17	.06	Sep 24	.06	Sep 24 2001
MAXIMUM PEAK FLOW			604	Mar 4	2850	Feb 13 2000
MAXIMUM PEAK STAGE			82.64	Mar 4	87.29	Feb 13 2000
ANNUAL RUNOFF (AC-FT)	24130		10620		17340	
10 PERCENT EXCEEDS	81		44		69	
50 PERCENT EXCEEDS	1.2		.80		1.2	
90 PERCENT EXCEEDS	.37		.25		.43	

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 mi².

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 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2000	288	(a)	Mar. 4	2030	(a)	74.43

(a) Backwater from Laguna de Santa Rosa.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e1.0	.10	.07	.75	2.7	.93	.51	.08	.02	.00	.00
2	e.00	e.30	.07	.04	.68	5.3	.90	.39	.07	.01	.00	.00
3	e.00	e.10	.05	.05	.64	3.7	.87	.34	.07	.01	.00	.00
4	e.00	e.04	.04	.12	.55	123	.88	.32	.07	.01	.00	.00
5	e.00	e.01	.03	.10	.50	94	.90	.37	.06	.02	.00	.00
6	e.00	e.01	.02	.13	.46	20	3.4	.35	.05	.00	.00	.00
7	e.00	e.01	.02	.12	.41	14	1.7	.37	.04	.02	.00	.00
8	e.00	e.01	.03	5.8	.46	8.2	1.0	.42	.02	.00	.00	.00
9	e.00	e.01	.04	1.4	9.2	4.5	.85	.38	.03	.01	.00	.00
10	e.00	e.01	.02	29	7.9	2.4	.83	.32	.02	.01	.00	.00
11	e.00	e.01	1.1	34	41	1.8	.73	.33	.01	.01	.00	.00
12	e.00	e.02	2.0	13	16	2.4	.72	.27	.00	.00	.00	.00
13	e.00	e.40	1.4	.92	23	2.5	.64	.29	.02	.01	.00	.00
14	e.00	e5.0	4.5	.56	17	2.4	.60	.25	.02	.01	.00	.00
15	e.00	e.08	1.6	.39	8.8	2.3	.55	.32	.01	.00	.00	.00
16	e.00	e1.0	.26	.33	4.4	2.2	.50	.22	.00	.01	.00	.00
17	e.00	e.50	.09	.30	18	2.0	.63	.20	.00	.00	.00	.00
18	e.00	e.20	.08	.24	20	2.0	.52	.23	.00	.00	.00	.00
19	e.00	e.10	.09	.35	36	1.9	.61	.18	.00	.00	.00	.00
20	e.00	e.04	.09	.33	30	1.9	16	.17	.00	.00	.00	.00
21	e.00	e6.0	.09	.32	70	1.8	6.7	.15	.00	.00	.00	.00
22	e.00	.56	.65	.21	49	1.6	1.1	.14	.00	.00	.00	.00
23	e.00	.10	.35	12	69	1.6	.82	.13	.00	.00	.00	.00
24	e.00	.07	.11	4.4	100	1.7	.72	.13	.00	.00	.00	.00
25	e.30	.04	.09	35	64	2.1	.63	.12	.00	.00	.00	.00
26	e8.0	.03	.08	52	21	1.4	.55	.13	.00	.00	.00	.00
27	e4.0	.02	.07	21	13	1.2	.51	.14	.01	.00	.00	.00
28	e2.0	.01	.06	2.6	5.1	1.2	.68	.15	1.8	.00	.00	.00
29	e12	8.3	.05	2.3	---	1.1	.66	.15	.28	.00	.00	.00
30	e9.0	.27	.07	1.1	---	1.0	.65	.12	.07	.00	.00	.00
31	e10	---	.05	.82	---	.96	---	.10	---	.00	.00	---
TOTAL	45.30	24.25	13.30	219.00	626.85	314.86	46.78	7.69	2.73	0.15	0.00	0.00
MEAN	1.46	.81	.43	7.06	22.4	10.2	1.56	.25	.091	.005	.000	.000
MAX	12	8.3	4.5	52	100	123	16	.51	1.8	.02	.00	.00
MIN	.00	.01	.02	.04	.41	.96	.50	.10	.00	.00	.00	.00
AC-FT	90	48	26	434	1240	625	93	15	5.4	.3	.00	.00

e Estimated.

RUSSIAN RIVER BASIN

11465700 COLGAN CREEK NEAR SEBASTOPOL, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.04	1.99	1.50	9.03	46.1	15.8	4.10	.93	.23	.054	.017	.002
MAX	1.46	3.17	3.76	10.3	62.7	21.3	6.77	1.85	.35	.13	.044	.005
(WY)	2001	2000	1999	1999	2000	2000	1999	2000	2000	2000	2000	1999
MIN	.61	.81	.30	7.06	22.4	10.2	1.56	.25	.091	.005	.000	.000
(WY)	2000	2001	2000	2001	2001	2001	2001	2001	2001	2001	2001	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	3055.84		1300.91			
ANNUAL MEAN	8.35		3.56		6.02	
HIGHEST ANNUAL MEAN					8.46	
LOWEST ANNUAL MEAN					3.56	
HIGHEST DAILY MEAN	488	Feb 13	123	Mar 4	488	Feb 13 2000
LOWEST DAILY MEAN	.00	Aug 30	.00	Oct 1	.00	Jul 16 1999
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 30	.00	Oct 1	.00	Aug 12 1999
MAXIMUM PEAK FLOW			288	Mar 4	818	Feb 13 2000
MAXIMUM PEAK STAGE			74.43	Mar 4	77.21	Feb 7 1999
ANNUAL RUNOFF (AC-FT)	6060		2580		4360	
10 PERCENT EXCEEDS	17		7.2		13	
50 PERCENT EXCEEDS	.19		.09		.27	
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 mi².

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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 25	0915	680	60.66

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	e46	32	22	73	167	9.7	5.9	1.3	1.7	.31	.09
2	.06	36	27	22	63	119	9.1	5.6	1.2	1.5	.29	.09
3	.06	23	21	21	59	104	8.8	5.2	1.2	1.2	.30	.09
4	.06	e14	19	19	57	175	8.6	4.9	1.1	1.0	.29	.09
5	.06	11	17	18	55	501	8.5	4.5	1.0	.89	.28	.09
6	.06	e8.8	16	20	54	351	8.6	4.2	.93	.77	.27	.08
7	.06	7.1	14	20	51	216	9.9	3.8	.89	.70	.24	.08
8	.07	e5.7	13	33	47	151	12	3.6	.82	.65	.21	.08
9	.06	e4.8	13	45	49	114	12	3.4	.80	.64	.21	.08
10	.07	e4.5	13	63	78	89	10	3.1	.75	.64	.20	.08
11	.08	e4.2	14	122	207	74	8.9	2.7	.72	.70	.21	.08
12	.09	e3.9	18	185	287	60	8.1	2.5	.69	.68	.20	.08
13	.10	e3.8	24	159	289	53	7.5	2.3	.65	.63	.19	.08
14	.12	4.3	35	114	265	49	7.1	2.3	.61	.62	.20	.08
15	.12	4.4	49	82	213	44	6.7	2.3	.61	.60	.19	.08
16	.13	e7.0	51	62	151	40	6.5	2.5	.61	.58	.19	.08
17	.13	e7.8	41	51	136	38	6.3	2.6	.59	.58	.16	.08
18	.13	e8.0	33	47	237	34	6.1	2.6	.60	.55	.16	.08
19	.15	e8.3	29	46	264	30	5.9	2.4	.60	.55	.14	.08
20	.15	e8.8	28	45	338	23	6.2	2.2	.60	.51	.13	.08
21	.15	12	25	38	392	18	16	2.2	.60	.52	.13	.08
22	.13	17	26	32	437	16	35	2.1	.58	.50	.12	.08
23	.11	29	27	49	601	15	18	2.0	.60	.46	.12	.08
24	.10	30	27	120	540	14	12	2.0	.61	.44	.11	.08
25	.17	23	25	140	651	14	9.7	1.9	.66	.43	.11	.08
26	1.0	17	24	309	461	14	8.4	1.8	.68	.43	.10	.08
27	3.8	15	23	368	321	14	7.5	1.7	.76	.44	.10	.09
28	15	14	23	295	254	13	6.9	1.6	1.4	.40	.10	.08
29	38	17	20	230	---	12	6.5	1.5	1.8	.41	.09	.08
30	58	27	19	147	---	11	6.1	1.5	1.8	.37	.08	.08
31	e54	---	21	98	---	10	---	1.4	---	.35	.08	---
TOTAL	172.29	422.4	767	3022	6630	2583	292.6	88.3	25.76	20.44	5.51	2.46
MEAN	5.56	14.1	24.7	97.5	237	83.3	9.75	2.85	.86	.66	.18	.082
MAX	58	46	51	368	651	501	35	5.9	1.8	1.7	.31	.09
MIN	.06	3.8	13	18	47	10	5.9	1.4	.58	.35	.08	.08
AC-FT	342	838	1520	5990	13150	5120	580	175	51	41	11	4.9

e Estimated.

RUSSIAN RIVER BASIN

11465750 LAGUNA DE SANTA ROSA NEAR SEBASTOPOL, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.32	20.7	57.1	117	479	151	44.1	9.11	3.22	1.36	.57	.45
MAX	5.56	27.4	117	161	630	210	77.5	13.0	5.38	2.30	1.32	.98
(WY)	2001	2000	1999	1999	2000	2000	1999	2000	1999	1999	1999	1999
MIN	3.09	14.1	24.7	93.3	237	83.3	9.75	2.85	.86	.66	.18	.082
(WY)	2000	2001	2001	2000	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	30947.04		14031.76			
ANNUAL MEAN	84.6		38.4		62.2	
HIGHEST ANNUAL MEAN					85.8	
LOWEST ANNUAL MEAN					38.4	
HIGHEST DAILY MEAN	3710	Feb 14	651	Feb 25	3710	Feb 14 2000
LOWEST DAILY MEAN	.01	Sep 20	.06	Oct 2	.01	Sep 20 2000
ANNUAL SEVEN-DAY MINIMUM	.02	Sep 19	.06	Oct 1	.02	Sep 19 2000
MAXIMUM PEAK FLOW			680	Jan 25	5140	Feb 13 2000
MAXIMUM PEAK STAGE			60.66	Jan 25	66.85	Feb 14 2000
ANNUAL RUNOFF (AC-FT)	61380		27830		45040	
10 PERCENT EXCEEDS	166		114		184	
50 PERCENT EXCEEDS	12		4.8		9.5	
90 PERCENT EXCEEDS	.11		.08		.19	

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 2001 water year when the elevation was above 291.50 ft.

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 mi².

PERIOD OF RECORD.—December 1998 to current year.

GAGE.—Water-stage and dopler-velocity recorder. Datum of gage is sea level.

REMARKS.—Records 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, 4,340 ft³/s, Feb. 7, 1999, gage height, 68.94 ft; minimum daily, 2.8 ft³/s, Oct. 23, 2000.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1930	2,310	65.95

REVISIONS.—Revised maximum discharges for peak above base discharge of 2,000 ft³/s for water years 1999–2000, and revised daily discharges, in cubic feet per second, for January and February 1999. These figures supersede those published in reports for 1999 and 2000.

Water Year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
1999	Feb. 7	0800	4,340	68.94
	Feb. 16	2345	3,050	66.98
2000	Feb. 13	2115	4,260	68.83
	Feb. 22	2245	2,780	66.50
	Feb. 27	0045	2,340	65.61

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

(REVISED)

DAY	JAN	FEB
1	21	185
2	21	128
3	21	98
4	20	81
5	20	72
6	17	1560
7	12	2740
8	12	1360
9	11	2010
10	11	719
11	11	330
12	11	232
13	11	192
14	10	175
15	36	141
16	48	861
17	61	1110
18	285	558
19	365	343
20	558	513
21	347	630
22	288	353
23	501	239
24	251	276
25	204	650
26	233	277
27	189	207
28	175	395
29	167	---
30	162	---
31	626	---
TOTAL	4705	16435
MEAN	152	587
MAX	626	2740
MIN	10	72
AC-FT	9330	32600

11466320 SANTA ROSA CREEK AT WILLOWSIDE ROAD, NEAR SANTA ROSA, CA—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	5.7	11	9.2	30	91	12	11	10	4.7	4.5	3.8
2	3.9	4.8	8.7	8.0	26	101	10	8.7	11	4.1	4.1	3.8
3	4.9	4.0	8.1	7.6	23	84	10	8.6	10	4.1	4.2	3.7
4	3.5	4.2	8.8	7.8	18	789	10	7.7	10	3.5	4.1	3.7
5	3.7	4.0	8.3	8.1	16	546	10	7.7	9.2	3.4	4.0	3.5
6	3.8	3.8	8.0	9.9	15	206	47	7.8	8.4	3.2	4.2	3.3
7	4.0	3.5	7.9	12	14	147	27	7.7	8.0	3.2	4.2	3.2
8	4.8	3.4	6.9	125	12	113	17	7.5	7.8	3.2	4.2	3.1
9	4.6	3.8	7.3	54	120	92	14	7.3	7.5	3.4	4.3	3.2
10	5.4	3.8	7.3	347	175	75	13	8.0	7.4	5.0	4.4	3.5
11	6.1	4.2	41	388	418	63	13	8.0	6.8	4.0	4.3	3.5
12	4.8	4.3	44	203	291	52	13	9.4	6.6	3.2	4.5	3.5
13	4.9	36	23	90	167	48	12	10	6.1	3.2	4.9	3.6
14	4.1	19	48	63	99	43	13	9.5	6.0	2.9	4.4	3.7
15	4.0	4.7	37	48	70	39	13	8.6	5.6	3.1	4.3	3.4
16	4.5	8.2	13	35	55	36	14	8.6	5.0	3.3	4.2	3.5
17	4.2	4.4	8.9	25	161	31	17	9.0	4.8	3.3	4.2	3.6
18	3.7	3.7	8.3	18	167	30	15	8.5	4.5	4.2	4.1	3.5
19	3.5	4.1	8.6	14	374	27	16	8.4	4.6	4.2	4.1	3.5
20	3.6	3.8	9.0	12	450	27	146	7.6	5.3	4.5	4.2	3.5
21	3.7	103	16	9.7	582	24	75	7.6	5.1	4.4	4.3	3.6
22	3.2	25	20	9.0	628	23	20	9.3	4.8	4.3	4.3	3.5
23	2.8	6.1	12	159	541	21	14	9.0	4.9	4.2	4.2	3.4
24	2.9	4.7	10	123	695	30	12	9.3	5.7	4.2	4.2	3.6
25	101	4.5	10	454	611	43	11	9.0	5.4	4.2	4.2	5.2
26	172	4.7	11	507	256	21	11	9.3	5.3	5.7	4.1	4.4
27	21	5.1	10	166	168	17	10	9.7	62	4.4	4.0	3.7
28	294	5.5	10	89	122	17	10	9.5	36	5.0	3.7	3.4
29	175	147	9.5	80	---	14	11	8.4	7.2	4.3	3.6	3.2
30	62	34	9.0	53	---	13	12	8.6	5.4	4.3	3.6	3.0
31	17	---	9.4	43	---	12	---	11	---	4.0	4.1	---
TOTAL	940.6	473.0	450.0	3177.3	6304	2875	628	270.3	286.4	122.7	129.7	107.1
MEAN	30.3	15.8	14.5	102	225	92.7	20.9	8.72	9.55	3.96	4.18	3.57
MAX	294	147	48	507	695	789	146	11	62	5.7	4.9	5.2
MIN	2.8	3.4	6.9	7.6	12	12	10	7.3	4.5	2.9	3.6	3.0
AC-FT	1870	938	893	6300	12500	5700	1250	536	568	243	257	212

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

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	22.2	22.2	13.9	120	452	158	57.2	18.8	9.72	4.95	4.27	4.85
MAX	30.3	28.6	14.5	152	587	194	108	24.5	9.95	5.54	4.50	6.37
(WY)	2001	2000	2001	1999	1999	2000	1999	2000	1999	2000	1999	2000
MIN	14.1	15.8	13.3	102	225	92.7	20.9	8.72	9.55	3.96	4.12	3.57
(WY)	2000	2001	2000	2001	2001	2001	2001	2001	2001	2001	2000	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	29686.8		15764.1			
ANNUAL MEAN	81.1		43.2		62.0	
HIGHEST ANNUAL MEAN					80.7	
LOWEST ANNUAL MEAN					43.2	
HIGHEST DAILY MEAN	2710	Feb 13	789	Mar 4	2740	Feb 7 1999
LOWEST DAILY MEAN	2.8	Oct 23	2.8	Oct 23	2.8	Oct 23 2000
ANNUAL SEVEN-DAY MINIMUM	3.3	Oct 18	3.3	Jul 11	3.3	Jul 11 2001
MAXIMUM PEAK FLOW			2310		4340	
MAXIMUM PEAK STAGE			65.95		68.94	
ANNUAL RUNOFF (AC-FT)	58880		31270		44890	
10 PERCENT EXCEEDS	193		107		178	
50 PERCENT EXCEEDS	9.0		8.3		9.9	
90 PERCENT EXCEEDS	4.0		3.5		3.9	

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 mi².

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 fair. 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 ft³/s, Feb. 18, 1986, gage height, 48.56 ft, from rating curve extended above 57,000 ft³/s, maximum gage height, 49.7 ft, Dec. 23, 1955, site and datum then in use, from floodmarks; minimum daily discharge, 0.75 ft³/s, May 6, 1977.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	357	403	336	893	3430	558	332	120	110	102	130
2	143	339	376	332	774	2850	535	322	97	103	101	140
3	127	349	361	309	693	2550	504	307	96	91	99	143
4	130	296	349	279	629	5050	454	330	105	79	102	145
5	129	302	341	275	587	21200	404	304	97	72	104	158
6	120	259	334	272	556	10500	394	305	108	79	119	158
7	133	284	327	274	529	6900	431	302	98	82	103	150
8	143	264	324	336	501	5260	416	265	98	78	99	156
9	150	263	320	357	578	4090	398	269	97	80	96	190
10	169	286	317	565	1200	3500	389	265	98	107	96	205
11	187	278	319	2280	2320	3100	379	283	94	120	98	163
12	202	268	349	3040	3400	2800	374	241	93	123	107	150
13	212	267	352	1800	3330	2300	366	263	124	105	114	145
14	221	285	373	1190	2400	2070	362	253	109	105	123	153
15	231	283	422	911	1850	1980	342	248	96	107	127	113
16	236	287	471	733	1510	2230	331	237	113	115	113	124
17	235	291	446	616	1620	1440	342	222	94	120	104	112
18	205	282	411	540	3580	1220	348	202	99	136	108	125
19	202	278	393	490	4150	1110	351	179	92	117	104	139
20	197	276	381	456	11400	1030	371	162	90	113	103	163
21	194	282	373	429	15200	962	372	150	85	95	134	186
22	187	310	371	410	10900	904	415	144	84	100	106	168
23	198	297	369	488	12600	858	395	138	117	102	123	160
24	199	297	367	1590	9640	840	377	114	119	113	106	147
25	190	295	363	2770	15700	914	354	117	124	111	104	138
26	296	295	359	5640	11700	906	324	117	123	114	102	131
27	289	290	355	3900	6720	815	296	120	173	114	101	130
28	318	277	347	2510	4540	715	318	133	218	112	92	130
29	420	339	342	1740	---	654	324	143	174	120	89	117
30	411	386	341	1340	---	616	331	130	136	114	106	113
31	378	---	337	1070	---	584	---	136	---	110	120	---
TOTAL	6631	8862	11293	37278	129500	93378	11555	6733	3371	3247	3305	4382
MEAN	214	295	364	1203	4625	3012	385	217	112	105	107	146
MAX	420	386	471	5640	15700	21200	558	332	218	136	134	205
MIN	120	259	317	272	501	584	296	114	84	72	89	112
AC-FT	13150	17580	22400	73940	256900	185200	22920	13350	6690	6440	6560	8690

RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA—Continued
(National Stream-Quality Accounting Network Station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	307	1160	3921	6862	6998	4614	2257	729	308	179	168	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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	635667		319535			
ANNUAL MEAN	1737		875		2287	
HIGHEST ANNUAL MEAN					5898	
LOWEST ANNUAL MEAN					88.7	
HIGHEST DAILY MEAN	34400	Feb 14	21200	Mar 5	97700	Feb 18 1986
LOWEST DAILY MEAN	120	Oct 6	72	Jul 5	.75	May 6 1977
ANNUAL SEVEN-DAY MINIMUM	132	Oct 2	80	Jul 3	5.9	Jul 29 1977
MAXIMUM PEAK FLOW			24700	Mar 5	102000	Feb 18 1986
MAXIMUM PEAK STAGE			24.15	Mar 5	49.70	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	1261000		633800		1657000	
10 PERCENT EXCEEDS	4940		2020		5510	
50 PERCENT EXCEEDS	336		279		358	
90 PERCENT EXCEEDS	167		102		140	

11467002 RUSSIAN RIVER AT JOHNSONS BEACH, AT GUERNEVILLE, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	8.41	8.34	8.41	8.35	8.45	8.42
2	---	---	---	---	---	---	8.37	8.33	8.36	8.34	8.47	8.45
3	---	---	---	---	---	---	8.34	8.29	8.36	8.33	8.48	8.46
4	---	---	---	---	---	---	8.30	8.25	8.36	8.34	8.49	8.46
5	---	---	---	---	---	---	8.25	8.20	8.37	8.34	8.53	8.49
6	---	---	---	---	---	---	8.26	8.23	8.45	8.36	8.53	8.49
7	---	---	---	---	---	---	8.29	8.26	8.45	8.35	8.50	8.46
8	---	---	---	---	---	---	8.28	8.24	8.36	8.33	8.53	8.47
9	---	---	---	---	---	---	8.28	8.24	8.35	8.32	8.59	8.53
10	---	---	---	---	---	---	8.39	8.28	8.35	8.33	8.61	8.58
11	---	---	---	---	---	---	8.42	8.38	8.36	8.33	8.60	8.49
12	---	---	---	---	---	---	8.44	8.39	8.39	8.36	8.53	8.46
13	---	---	---	---	---	---	8.40	8.35	8.41	8.38	8.51	8.47
14	---	---	---	---	---	---	8.38	8.36	8.46	8.39	8.55	8.45
15	---	---	---	---	6.53	---	8.38	8.35	8.48	8.38	8.45	8.41
16	---	---	---	---	7.74	6.53	8.41	8.38	8.47	8.39	8.48	8.41
17	---	---	---	---	8.05	7.74	8.42	8.39	8.40	8.37	8.46	8.40
18	---	---	---	---	8.20	8.05	8.48	8.41	8.41	8.37	8.47	8.41
19	---	---	---	---	8.23	8.19	8.46	8.37	8.40	8.34	8.50	8.42
20	---	---	---	---	8.25	8.21	8.44	8.36	8.41	8.36	8.55	8.47
21	---	---	---	---	8.24	8.22	8.36	8.32	8.46	8.37	8.60	8.53
22	---	---	---	---	8.25	8.21	8.38	8.33	8.46	8.36	8.60	8.51
23	---	---	---	---	8.42	8.23	8.39	8.32	8.45	8.36	8.54	8.50
24	---	---	---	---	8.39	8.35	8.42	8.38	8.44	8.35	8.52	8.48
25	---	---	---	---	8.40	8.37	8.40	8.37	8.40	8.34	8.49	8.45
26	---	---	---	---	8.42	8.34	8.40	8.38	8.40	8.34	8.46	8.44
27	---	---	---	---	8.55	8.42	8.40	8.38	8.41	8.35	8.45	6.80
28	---	---	---	---	8.62	8.55	8.43	8.36	8.35	8.33	6.80	6.21
29	---	---	---	---	8.55	8.48	8.46	8.35	8.34	8.31	6.43	6.37
30	---	---	---	---	8.48	8.41	8.44	8.34	8.41	8.33	6.37	6.35
31	---	---	---	---	---	---	8.42	8.35	8.43	8.40	---	---
MONTH	---	---	---	---	---	---	8.48	8.20	8.48	8.31	8.61	6.21

11467295 SOUTH FORK GUALALA RIVER ABOVE WHEATFIELD FORK, NEAR ANNAPOLIS, CA

LOCATION.—Lat 38°41'39", long 123°24'33", in SW 1/4 sec. 15, T.10 N., R.14 W., Sonoma County, Hydrologic Unit 18010109, on right bank, 0.8 mi upstream of confluence with Wheatfield Fork Gualala River, and 2.9 mi southwest of Annapolis.

DRAINAGE AREA.—48.25 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—November 18, 2000 to September 30, 2001 (discontinued).

GAGE.—Water stage recorder and crest stage gage. Elevation of gage is 75 ft above sea level, from topographic map.

REMARKS.—Records are poor. No regulation or diversions above gage.

EXTREMES FOR CURRENT YEAR.—Peak discharges above base discharge of 2,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	unknown	unknown	unknown	Mar. 4	unknown	unknown	unknown

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	11	3.8	e87	e140	27	11	3.2	e6.0	e.23	e.00
2	---	---	8.0	3.7	e77	e120	25	9.9	2.9	e4.8	e.22	e.00
3	---	---	6.4	3.6	e72	e100	24	9.3	2.7	e4.1	e.21	e.00
4	---	---	5.2	3.5	e66	e1300	23	8.9	2.5	e3.7	e.21	e.00
5	---	---	4.7	3.4	e62	e900	23	8.5	2.2	e3.2	e.20	e.00
6	---	---	4.2	3.3	e59	e400	23	8.2	2.0	e3.0	e.20	e.00
7	---	---	4.0	3.6	e56	219	25	7.9	1.9	e2.8	e.19	e.00
8	---	---	3.7	17	e53	166	22	7.5	1.8	e2.6	e.18	e.00
9	---	---	3.6	28	e51	137	21	7.1	1.8	e2.5	e.17	e.00
10	---	---	3.5	e220	e110	e120	e20	6.8	1.6	e2.3	e.17	e.00
11	---	---	4.0	e170	e190	e110	e19	6.4	1.5	e2.1	e.16	e.00
12	---	---	5.3	e90	e280	e90	18	6.3	1.7	e1.9	e.15	e.00
13	---	---	7.2	e60	e170	78	17	6.3	1.6	e1.7	e.14	e.00
14	---	---	18	e48	e120	71	16	6.4	1.3	e1.6	e.13	e.00
15	---	---	40	e36	e110	e66	15	6.4	1.1	e1.3	e.11	e.00
16	---	---	29	e28	e90	e62	15	6.6	1.0	e1.1	e.09	e.00
17	---	---	18	e24	e150	e59	16	6.6	.93	e.96	e.07	e.00
18	---	3.5	13	e21	e320	e56	17	6.2	.83	e.82	e.05	e.00
19	---	3.1	10	e19	e600	e53	16	5.7	.74	e.70	e.02	.00
20	---	2.9	8.1	e17	e1200	e51	19	5.2	.66	e.53	e.00	.00
21	---	3.2	7.1	e15	e1000	e49	31	5.0	.58	e.48	e.00	.00
22	---	4.2	6.5	e25	e800	e47	22	4.5	.51	e.45	e.00	.00
23	---	4.1	6.4	e40	843	e45	18	4.2	.44	e.41	e.00	.00
24	---	4.2	5.8	e120	678	e46	17	4.1	.40	e.39	e.00	.00
25	---	4.1	5.4	e400	863	e68	15	3.9	.38	e.38	e.00	.00
26	---	3.7	5.0	e260	339	e53	14	3.7	.39	e.36	e.00	.00
27	---	3.4	4.7	e180	197	e43	13	3.8	6.8	e.33	e.00	.00
28	---	3.3	4.4	e140	149	e36	12	4.0	32	e.30	e.00	.00
29	---	7.2	4.2	e120	---	33	12	3.9	12	e.27	e.00	.00
30	---	16	4.0	e110	---	31	11	3.8	6.6	e.25	e.00	.00
31	---	---	3.9	e95	---	28	---	3.5	---	e.23	.00	---
TOTAL	---	62.9	264.3	2307.9	8792	4777	566	191.6	94.06	51.56	2.90	0.00
MEAN	---	4.84	8.53	74.4	314	154	18.9	6.18	3.14	1.66	.094	.000
MAX	---	16	40	400	1200	1300	31	11	32	6.0	.23	.00
MIN	---	2.9	3.5	3.3	51	28	11	3.5	.38	.23	.00	.00
AC-FT	---	125	524	4580	17440	9480	1120	380	187	102	5.8	.00

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

	---	---	8.53	74.4	314	154	18.9	6.18	3.14	1.66	.094	.000
MEAN	---	---	8.53	74.4	314	154	18.9	6.18	3.14	1.66	.094	.000
MAX	---	---	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
(WY)	---	---	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	---	---	8.53	74.4	314	154	18.9	6.18	3.14	1.66	.094	.000
(WY)	---	---	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

HIGHEST DAILY MEAN	1300	Mar 4
LOWEST DAILY MEAN	.00	Aug 20
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 20
10 PERCENT EXCEEDS	120	
50 PERCENT EXCEEDS	5.0	
90 PERCENT EXCEEDS	.00	

e Estimated.

11467295 SOUTH FORK GUALALA RIVER ABOVE WHEATFIELD FORK, NEAR ANNAPLOIS, CA—Continued

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

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

11467553 NORTH FORK GUALALA RIVER ABOVE SOUTH FORK GUALALA RIVER, NEAR GUALALA, CA

LOCATION.—Lat 38°47'05", long 123°30'07", in SE 1/4 sec.23, T.1 N., R.15 W., Mendocino County, Hydrologic Unit 18010109, on right bank, 0.6 mi upstream of confluence with Gualala River, 0.8 mi downstream of Little North Fork Gualala River, and 1.9 mi northeast of Gualala.

DRAINAGE AREA.—47.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 2000 to September 2001 (discontinued).

GAGE.—Water stage recorder and crest stage gage. Elevation of gage is 30 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are fair. No regulation above gage.

EXTREMES FOR CURRENT YEAR.—Peak discharges above base discharge of 2,500 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	1530	3,310	11.50	Mar. 4	2030	2,980	11.18

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.8	e19	22	7.8	57	209	42	19	9.5	14	6.2	3.5
2	e2.8	e11	17	7.6	49	180	40	19	9.2	12	6.1	3.3
3	e2.9	e8.6	14	7.4	44	150	38	18	9.1	11	6.1	3.2
4	e2.7	e8.2	12	7.2	40	1160	37	18	9.1	9.8	6.0	2.9
5	e2.6	e7.6	11	7.1	37	1090	36	17	9.0	9.2	6.0	3.1
6	e2.6	e7.2	10	6.9	34	549	36	17	8.8	9.1	6.2	3.1
7	e2.5	e6.8	9.6	7.1	32	359	37	16	8.7	8.9	e6.1	3.1
8	e2.6	e6.4	9.2	26	30	262	34	16	8.6	8.9	e6.0	3.1
9	e2.6	e6.3	8.8	32	48	209	32	16	8.5	8.8	e6.0	3.1
10	e3.1	e6.3	8.5	163	152	172	31	15	8.4	8.8	e5.9	3.1
11	e3.6	e6.2	10	177	237	145	30	15	8.3	8.9	e5.8	2.9
12	e4.1	e6.0	12	143	284	125	29	15	8.2	8.8	e5.7	2.9
13	e3.8	e6.3	14	73	218	110	28	15	8.0	8.5	e5.5	2.9
14	e3.6	e7.0	26	50	146	99	26	14	7.9	8.3	e5.4	2.9
15	e3.4	e7.7	40	38	107	91	26	14	7.7	8.0	e5.3	2.9
16	e3.4	e7.9	31	31	90	83	26	14	7.5	7.8	e5.2	2.9
17	e3.4	8.0	24	26	172	77	28	14	7.3	7.6	e5.1	3.0
18	e3.3	7.5	19	23	243	72	27	13	7.1	7.5	e5.0	3.0
19	e3.4	7.2	17	21	e335	67	26	13	6.9	7.4	e4.8	2.9
20	e3.5	7.1	15	19	1960	64	31	13	6.6	7.2	e4.7	2.9
21	e3.6	7.7	13	18	1500	61	37	12	6.5	7.1	e4.6	2.9
22	e3.6	7.9	13	16	1070	59	29	12	6.5	7.1	e4.5	2.9
23	e3.6	7.6	12	56	974	59	26	11	6.5	7.1	e4.4	2.9
24	e3.6	8.1	11	294	671	64	25	11	6.4	7.0	e4.3	3.0
25	e4.4	7.7	11	338	790	95	24	11	6.5	7.1	e4.2	3.3
26	e5.6	7.5	10	471	582	68	23	11	7.1	7.3	e4.1	3.1
27	e8.3	7.3	9.5	258	397	58	22	e11	57	7.3	e4.0	2.9
28	e10	7.5	9.0	149	283	54	21	e10	43	7.1	e3.8	3.2
29	e19	40	8.6	108	---	50	21	e10	23	6.7	e3.7	3.0
30	e22	35	8.3	81	---	47	20	e10	17	6.3	e3.6	2.9
31	e23	---	8.0	66	---	44	---	e9.8	---	6.3	3.5	---
TOTAL	169.4	294.6	443.5	2728.1	10582	5932	888	429.8	343.9	256.9	157.8	90.8
MEAN	5.46	9.82	14.3	88.0	378	191	29.6	13.9	11.5	8.29	5.09	3.03
MAX	23	40	40	471	1960	1160	42	19	57	14	6.2	3.5
MIN	2.5	6.0	8.0	6.9	30	44	20	9.8	6.4	6.3	3.5	2.9
AC-FT	336	584	880	5410	20990	11770	1760	853	682	510	313	180

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

MEAN	5.46	9.82	14.3	88.0	378	191	29.6	13.9	11.5	8.29	5.09	3.03
MAX	5.46	9.82	14.3	88.0	378	191	29.6	13.9	11.5	8.29	5.09	3.03
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	5.46	9.82	14.3	88.0	378	191	29.6	13.9	11.5	8.29	5.09	3.03
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

ANNUAL TOTAL	22316.8
ANNUAL MEAN	61.1
HIGHEST DAILY MEAN	1960 Feb 20
LOWEST DAILY MEAN	2.5 Oct 7
ANNUAL SEVEN-DAY MINIMUM	2.6 Oct 3
MAXIMUM PEAK FLOW	3310 Feb 20
MAXIMUM PEAK STAGE	11.50 Feb 20
ANNUAL RUNOFF (AC-FT)	44270
10 PERCENT EXCEEDS	132
50 PERCENT EXCEEDS	9.6
90 PERCENT EXCEEDS	3.2

e Estimated.

11467553 NORTH FORK GUALALA RIVER ABOVE SOUTH FORK GUALALA RIVER, NEAR GUALALA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—February 20, 2001, to September 30, 2001 (discontinued).

WATER TEMPERATURE: February 20, 2001, to September 30, 2001 (discontinued).

PERIOD OF DAILY RECORD.—February 20, 2001, to September 30, 2001 (discontinued).

WATER TEMPERATURE: February 20, 2001, to September 30, 2001 (discontinued).

INSTRUMENTATION.—Temperature record provides hourly recordings.

REMARKS.—Records excellent except for Mar. 11 to July 11, which are good.

EXTREMES FOR PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: Maximum recorded, 19.5°C, Aug. 6, 2001; minimum recorded, 9.0°C, Feb. 28, Mar. 1, 3, 13, Apr. 9, 2001

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURE: Maximum recorded, 19.5°C, Aug. 6; minimum recorded, 9.0°C, Feb. 28, Mar. 1, 3, 13, Apr. 9.

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

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOC- ATION, (FEET) (81903)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
MAR				
14...*	1400	1.62	11.5	5.00
14...*	1401	1.25	11.5	10.0
14...*	1402	1.30	11.5	15.0
14...*	1403	1.30	11.5	20.0
14...*	1404	1.48	11.5	25.0
14...*	1405	1.48	11.5	30.0
APR				
17...*	1400	.80	13.5	15.0
17...*	1401	.86	13.5	25.0
17...*	1402	.89	13.5	35.0
17...*	1403	.93	13.5	45.0
17...*	1404	1.10	13.5	55.0
MAY				
24...*	1245	.60	16.0	4.00
24...*	1246	.69	16.0	8.00
24...*	1247	.90	16.0	12.0
24...*	1248	1.22	16.0	16.0
24...*	1249	1.19	16.0	20.0
JUN				
27...*	1500	1.47	15.5	5.00
27...*	1501	1.38	15.5	15.0
27...*	1502	1.23	15.5	25.0
27...*	1503	1.18	15.5	35.0
27...*	1504	1.50	15.5	45.0
AUG				
30...*	1140	.20	15.0	4.00
30...*	1141	.40	15.0	12.0
30...*	1142	.40	15.0	20.0

* Instantaneous discharge at time of the cross-sectional measurement: Mar. 14, 98 ft³/s; Apr. 17, 29 ft³/s; May 24, 11 ft³/s; June 27, 7.3 ft³/s, Aug. 30, 3.2 ft³/s.

11467553 NORTH FORK GUALALA RIVER ABOVE SOUTH FORK GUALALA RIVER, NEAR GUALALA, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	10.0	9.0
2	---	---	---	---	---	---	---	---	---	---	11.0	9.5
3	---	---	---	---	---	---	---	---	---	---	10.0	9.0
4	---	---	---	---	---	---	---	---	---	---	10.5	9.5
5	---	---	---	---	---	---	---	---	---	---	11.5	10.5
6	---	---	---	---	---	---	---	---	---	---	12.0	10.5
7	---	---	---	---	---	---	---	---	---	---	12.0	10.5
8	---	---	---	---	---	---	---	---	---	---	12.0	10.5
9	---	---	---	---	---	---	---	---	---	---	11.5	9.5
10	---	---	---	---	---	---	---	---	---	---	11.5	9.5
11	---	---	---	---	---	---	---	---	---	---	11.5	9.5
12	---	---	---	---	---	---	---	---	---	---	11.5	9.5
13	---	---	---	---	---	---	---	---	---	---	11.5	9.0
14	---	---	---	---	---	---	---	---	---	---	12.0	9.5
15	---	---	---	---	---	---	---	---	---	---	11.0	10.0
16	---	---	---	---	---	---	---	---	---	---	12.0	9.5
17	---	---	---	---	---	---	---	---	---	---	12.5	10.0
18	---	---	---	---	---	---	---	---	---	---	13.5	10.5
19	---	---	---	---	---	---	---	---	---	---	13.5	11.0
20	---	---	---	---	---	---	---	---	11.0	10.0	14.0	11.5
21	---	---	---	---	---	---	---	---	11.5	11.0	13.0	12.0
22	---	---	---	---	---	---	---	---	11.0	10.0	12.5	12.0
23	---	---	---	---	---	---	---	---	11.0	9.5	12.5	12.0
24	---	---	---	---	---	---	---	---	10.5	10.0	12.0	11.5
25	---	---	---	---	---	---	---	---	11.0	10.0	13.5	11.5
26	---	---	---	---	---	---	---	---	11.0	9.5	13.0	10.5
27	---	---	---	---	---	---	---	---	11.0	9.5	13.0	11.0
28	---	---	---	---	---	---	---	---	10.5	9.0	14.0	11.5
29	---	---	---	---	---	---	---	---	---	---	14.0	11.5
30	---	---	---	---	---	---	---	---	---	---	14.0	11.5
31	---	---	---	---	---	---	---	---	---	---	14.0	12.0
MONTH	---	---	---	---	---	---	---	---	---	---	14.0	9.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	12.0	15.0	12.5	17.5	14.5	18.0	14.5	18.0	14.5	17.5	14.5
2	12.5	11.0	15.0	12.0	17.0	14.0	18.5	14.5	18.5	14.5	18.0	14.5
3	12.0	10.0	15.5	11.5	16.5	13.5	19.0	15.5	19.0	15.0	17.5	14.5
4	12.0	9.5	15.5	12.0	17.0	13.5	18.5	15.5	18.5	15.0	17.5	14.0
5	12.0	9.5	15.5	12.5	17.0	13.5	18.5	15.0	18.5	15.0	17.5	14.5
6	11.5	10.5	16.0	12.5	17.5	13.5	18.0	14.5	19.5	15.5	17.0	14.0
7	12.0	10.0	16.5	12.5	18.0	14.0	17.0	14.5	19.0	15.5	17.0	13.5
8	11.0	9.5	17.0	13.5	18.0	14.0	17.5	14.5	18.5	15.0	16.5	14.5
9	12.0	9.0	16.0	13.5	18.0	14.5	16.5	14.5	17.0	15.5	16.0	15.0
10	12.0	9.5	16.5	13.0	17.5	14.0	15.5	15.0	17.5	15.5	17.0	14.5
11	12.5	10.5	15.0	13.0	17.0	14.5	15.5	14.5	18.0	14.5	16.0	13.5
12	12.5	10.0	14.5	13.5	18.0	14.5	17.0	15.0	16.5	15.0	17.0	14.5
13	12.0	10.5	16.0	12.5	18.0	14.0	18.0	14.5	18.0	14.5	16.5	14.5
14	12.5	9.5	15.0	12.5	18.0	14.0	18.0	14.5	18.5	14.5	17.0	14.5
15	12.0	9.5	15.0	13.5	18.0	14.0	18.0	14.5	18.0	15.0	16.5	14.5
16	12.0	10.0	16.5	13.5	18.5	14.0	18.0	14.5	18.0	14.5	16.5	14.5
17	13.5	11.5	16.5	13.0	18.0	14.0	17.5	14.0	17.5	14.5	16.5	14.0
18	12.5	11.5	16.5	13.0	18.5	14.0	18.0	14.5	18.0	14.5	16.0	14.0
19	13.0	11.0	16.5	13.5	18.5	14.5	18.0	15.0	18.0	14.5	15.0	13.5
20	11.5	10.5	17.0	13.5	19.0	14.5	18.0	14.5	17.5	14.5	15.0	14.0
21	13.0	10.0	17.0	13.5	19.0	14.5	18.5	14.5	18.0	14.5	15.0	14.0
22	13.0	10.5	17.0	14.0	18.5	14.5	18.0	14.5	17.5	15.5	15.0	12.5
23	14.0	10.5	17.5	14.0	18.0	14.0	17.5	14.5	18.0	15.5	14.5	13.5
24	14.5	11.5	17.0	14.0	17.0	14.0	16.5	14.5	18.5	15.0	15.5	14.0
25	15.0	12.0	15.5	13.5	16.5	14.5	16.0	15.0	18.0	15.0	16.5	14.5
26	15.0	12.5	16.5	13.5	15.5	14.5	16.5	14.5	18.5	15.0	16.0	13.5
27	14.5	11.5	16.5	14.0	16.0	14.5	17.5	14.5	18.5	15.0	16.0	14.0
28	14.5	12.5	16.5	13.5	17.5	15.5	18.0	14.0	18.0	15.0	16.0	13.0
29	14.5	11.5	17.0	13.5	18.0	15.0	18.0	14.5	18.0	15.0	15.5	13.0
30	15.0	12.0	18.0	14.0	18.0	15.0	17.5	15.0	17.0	15.0	16.0	13.0
31	---	---	18.5	14.5	---	---	17.5	14.5	17.5	14.5	---	---
MONTH	15.0	9.0	18.5	11.5	19.0	13.5	19.0	14.0	19.5	14.5	18.0	12.5

11467585 WHEATFIELD FORK GUALALA RIVER ABOVE SOUTH FORK GUALALA RIVER, NEAR ANNAPOLIS, CA

LOCATION.—Lat 38°42'34", long 123°24'24", in SE 1/4 sec.15, T.10 N., R.14 W., in Sonoma County, Hydrologic Unit 18010109, on right bank, 1.0 mi above confluence of South Fork Gualala River, and 2.1 mi southwest of Annapolis.

DRAINAGE AREA.—111 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 2000 to September 2001.

GAGE.—Water stage recorder and crest stage gage. Elevation of gage is 240 ft above sea level, from topographic map.

REMARKS.—Records are good except for estimated daily discharges, which are fair. No regulation above gage.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 5,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	1845	7,390	13.03

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e45	e64	14	133	439	67	27	8.6	7.6	.81	.20
2	e.00	e30	e45	13	119	391	65	26	7.9	6.0	.77	.19
3	e.00	e24	e40	9.8	108	346	62	25	7.4	4.9	.77	.15
4	e.00	e17	e32	8.2	101	3090	61	24	7.4	4.3	.74	.13
5	e.00	e13	e26	8.0	95	2380	60	24	7.0	3.8	.63	.10
6	e.00	e10	e20	8.0	90	896	61	22	6.8	3.3	.58	.05
7	e.00	e9.0	e17	8.6	84	575	64	22	6.7	3.0	.56	.05
8	e.00	e8.4	e15	51	80	433	57	21	6.2	3.0	.55	.05
9	e.00	e8.4	e13	60	110	360	56	20	5.7	2.8	.55	.03
10	e.50	e8.4	e12	304	259	312	56	19	5.7	2.7	.55	.03
11	e2.5	e7.6	e17	560	537	257	54	18	5.7	2.7	.58	.00
12	e4.0	e7.6	e27	455	738	218	52	18	5.4	2.8	.53	.00
13	e3.6	e9.0	e35	163	529	192	47	18	5.0	2.9	.49	.00
14	e2.5	e11	e45	95	332	167	41	18	4.7	2.9	.49	.00
15	e2.0	e14	e90	66	232	149	40	17	4.5	2.9	.50	.00
16	e1.6	e16	e94	50	180	138	40	18	4.1	2.8	.50	.00
17	e1.5	e20	e62	41	597	129	43	17	3.9	2.5	.51	.00
18	e1.2	e18	e40	35	692	120	40	16	3.4	2.2	.50	.00
19	e1.1	e16	e27	29	872	113	39	15	3.0	2.0	.49	.00
20	e1.5	e14	e18	23	2950	107	43	14	2.5	1.8	.41	.00
21	e1.6	e16	13	20	2660	100	58	13	2.1	1.6	.38	.00
22	e1.5	e17	13	18	1810	95	43	12	2.1	1.5	.37	.00
23	e1.4	e16	13	181	1980	92	38	12	1.9	1.4	.37	.00
24	e1.3	e15	12	826	1460	94	36	11	1.8	1.3	.34	.00
25	e2.0	e14	11	1110	2160	122	34	11	1.7	1.3	.31	.00
26	e11	e14	10	1290	1400	98	32	11	1.8	1.3	.31	.00
27	e20	e14	10	568	845	87	31	11	17	1.2	.23	.00
28	e28	e14	9.5	343	572	81	30	11	31	1.2	.21	.00
29	e32	e30	9.2	263	---	77	30	11	17	.94	.19	.00
30	e70	e70	13	205	---	74	28	9.8	10	.91	.17	.00
31	e72	---	14	160	---	70	---	9.2	---	.86	.19	---
TOTAL	262.80	526.4	866.7	6985.6	21725	11802	1408	521.0	198.0	80.41	14.58	0.98
MEAN	8.48	17.5	28.0	225	776	381	46.9	16.8	6.60	2.59	.47	.033
MAX	72	70	94	1290	2950	3090	67	27	31	7.6	.81	.20
MIN	.00	7.6	9.2	8.0	80	70	28	9.2	1.7	.86	.17	.00
AC-FT	521	1040	1720	13860	43090	23410	2790	1030	393	159	29	1.9

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

MEAN	8.48	17.5	28.0	225	776	381	46.9	16.8	6.60	2.59	.47	.033
MAX	8.48	17.5	28.0	225	776	381	46.9	16.8	6.60	2.59	.47	.033
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	8.48	17.5	28.0	225	776	381	46.9	16.8	6.60	2.59	.47	.033
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

ANNUAL TOTAL	44391.47
ANNUAL MEAN	122
HIGHEST DAILY MEAN	3090 Mar 4
LOWEST DAILY MEAN	.00 Oct 1
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 1
MAXIMUM PEAK FLOW	7390 Mar 4
MAXIMUM PEAK STAGE	13.03 Mar 4
ANNUAL RUNOFF (AC-FT)	88050
10 PERCENT EXCEEDS	258
50 PERCENT EXCEEDS	13
90 PERCENT EXCEEDS	.14

e Estimated.

11467585 WHEATFIELD FORK GUALALA RIVER ABOVE SOUTH FORK GUALALA RIVER, NEAR ANNAPOLIS, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—February 21, 2001 to September 30, 2001 (discontinued).

WATER TEMPERATURE: February 21, 2001 to September 30, 2001 (discontinued).

PERIOD OF DAILY RECORD.—February 21, 2001 to September 30, 2001 (discontinued).

WATER TEMPERATURE: February 21, 2001 to September 30, 2001 (discontinued).

INSTRUMENTATION.—Temperature record provides 15 minute recordings.

REMARKS.—Records excellent except for June 24 to July 29, which are good.

EXTREMES FOR PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: Maximum recorded, 23.0°C, May 30, 31, July 2, 3, 2001; minimum recorded, 8.5°C, Feb. 23, Mar. 1, 3, 2001.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURE: Maximum recorded, 23.0°C, May 30, 31, July 2, 3; minimum recorded, 8.5°C, Feb. 23, Mar. 1, 3.

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

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOC- ATION, (FEET) (81903)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
MAR				
14...*	1040	.60	10.0	10.0
14...*	1041	.90	10.0	20.0
14...*	1042	1.43	10.0	30.0
14...*	1043	1.86	10.0	40.0
14...*	1044	1.84	10.0	50.0
14...*	1045	2.10	10.0	60.0
14...*	1046	2.30	10.0	70.0
14...*	1047	1.48	10.0	80.0
APR				
17...*	1345	1.02	13.5	5.00
17...*	1346	.90	13.5	10.0
17...*	1347	.77	13.5	15.0
17...*	1348	.92	13.5	20.0
MAY				
24...*	1040	.56	17.5	4.00
24...*	1041	.52	17.5	8.00
24...*	1042	.62	17.5	12.0
24...*	1043	.82	17.5	16.0
24...*	1044	.68	17.5	20.0
JUN				
27...*	0930	.60	17.0	4.00
27...*	0931	.55	17.0	8.00
27...*	0932	.68	17.0	8.00
27...*	0933	.87	17.0	16.0
27...*	0934	.59	17.0	20.0

* Instantaneous discharge at time of the cross-sectional measurements: Mar. 14, 168 ft³/s; Apr. 17, 43 ft³/s; May 24, 12 ft³/s; June 27, 10 ft³/s.

11467585 WHEATFIELD FORK GUALALA RIVER ABOVE SOUTH FORK GUALALA RIVER, NEAR ANNAPOLIS, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	9.5	8.5
2	---	---	---	---	---	---	---	---	---	---	11.0	9.0
3	---	---	---	---	---	---	---	---	---	---	9.5	8.5
4	---	---	---	---	---	---	---	---	---	---	10.5	9.0
5	---	---	---	---	---	---	---	---	---	---	12.0	10.0
6	---	---	---	---	---	---	---	---	---	---	12.0	11.0
7	---	---	---	---	---	---	---	---	---	---	12.0	10.5
8	---	---	---	---	---	---	---	---	---	---	12.5	10.5
9	---	---	---	---	---	---	---	---	---	---	11.5	10.0
10	---	---	---	---	---	---	---	---	---	---	11.5	9.0
11	---	---	---	---	---	---	---	---	---	---	12.5	10.0
12	---	---	---	---	---	---	---	---	---	---	12.5	10.0
13	---	---	---	---	---	---	---	---	---	---	12.5	10.0
14	---	---	---	---	---	---	---	---	---	---	13.0	9.5
15	---	---	---	---	---	---	---	---	---	---	12.0	10.0
16	---	---	---	---	---	---	---	---	---	---	13.0	9.5
17	---	---	---	---	---	---	---	---	---	---	14.5	10.5
18	---	---	---	---	---	---	---	---	---	---	15.0	11.5
19	---	---	---	---	---	---	---	---	---	---	15.5	12.0
20	---	---	---	---	---	---	---	---	---	---	16.0	13.0
21	---	---	---	---	---	---	---	---	---	---	15.0	13.5
22	---	---	---	---	---	---	---	---	10.5	9.5	14.5	14.0
23	---	---	---	---	---	---	---	---	10.5	8.5	15.0	13.0
24	---	---	---	---	---	---	---	---	10.0	9.5	14.0	13.0
25	---	---	---	---	---	---	---	---	11.0	10.0	15.5	13.0
26	---	---	---	---	---	---	---	---	11.0	9.5	15.5	12.0
27	---	---	---	---	---	---	---	---	11.0	9.5	15.5	11.5
28	---	---	---	---	---	---	---	---	10.5	9.0	17.0	13.0
29	---	---	---	---	---	---	---	---	---	---	17.0	13.0
30	---	---	---	---	---	---	---	---	---	---	17.5	13.0
31	---	---	---	---	---	---	---	---	---	---	18.0	13.5
MONTH	---	---	---	---	---	---	---	---	---	---	18.0	8.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17.5	13.5	19.5	14.5	21.0	18.0	22.5	17.5	19.0	16.5	18.5	16.5
2	15.5	12.5	19.5	14.5	21.0	16.5	23.0	17.5	19.5	17.0	19.0	16.5
3	15.0	11.0	20.0	14.0	20.5	16.0	23.0	18.5	20.0	17.0	18.5	16.0
4	15.0	10.5	19.5	15.0	20.5	16.0	21.5	18.5	20.0	17.5	18.5	16.0
5	15.0	10.5	20.0	15.0	21.0	16.5	21.5	17.5	20.0	17.0	18.5	16.0
6	13.5	12.0	20.5	15.0	21.5	16.5	20.5	17.0	20.5	17.5	18.0	15.5
7	15.0	11.0	21.5	16.0	22.5	17.0	19.5	17.0	20.0	17.5	18.0	15.5
8	13.5	10.5	21.5	16.5	21.5	17.0	19.5	17.0	20.0	17.5	18.5	16.0
9	15.0	10.0	20.5	16.5	22.0	17.0	19.0	17.0	20.0	17.5	17.5	16.5
10	15.0	10.5	21.0	16.0	21.0	16.5	18.5	17.0	20.0	18.0	18.5	16.5
11	15.5	11.5	20.5	16.5	20.5	17.0	18.0	17.0	19.0	17.0	18.0	16.0
12	15.5	11.0	18.5	17.0	21.5	17.0	19.0	17.0	18.5	17.5	18.0	16.0
13	15.0	11.5	20.0	16.0	21.5	16.5	20.0	16.5	19.0	16.5	17.5	16.0
14	15.5	10.5	19.0	15.5	21.5	17.0	20.0	16.5	19.5	17.0	17.5	15.5
15	15.0	11.0	18.5	16.5	21.0	17.0	19.5	16.5	19.5	16.5	17.5	15.5
16	15.0	11.0	20.5	16.0	21.5	17.0	20.0	16.5	19.0	16.5	17.5	15.5
17	17.0	13.0	20.5	16.0	21.5	17.0	19.5	16.5	18.5	16.5	17.0	15.5
18	15.0	13.0	21.0	16.0	21.5	17.0	19.5	16.5	19.5	16.5	16.5	15.0
19	16.0	12.5	21.0	16.5	21.0	17.0	20.0	17.0	19.0	16.5	16.0	15.0
20	14.0	12.5	21.0	17.0	22.0	17.5	20.0	17.0	19.0	16.5	15.5	15.0
21	16.5	11.0	21.5	16.5	21.0	18.0	20.0	17.0	19.0	16.0	15.5	14.5
22	17.0	12.0	21.5	17.5	20.5	17.5	19.5	17.0	18.5	17.0	16.0	14.0
23	17.5	12.5	21.5	17.0	19.5	17.0	19.5	17.0	19.5	17.5	15.5	14.5
24	18.5	13.5	21.0	17.0	19.0	16.5	18.5	17.0	20.0	17.5	16.5	15.0
25	18.5	14.0	18.5	17.0	18.5	17.0	19.0	17.0	19.5	16.5	17.0	15.5
26	19.0	14.5	19.5	16.0	18.0	17.0	18.5	17.0	19.5	17.0	17.0	15.0
27	18.0	14.5	20.0	16.5	18.5	17.0	18.0	16.5	19.5	17.0	17.0	15.5
28	18.0	14.5	20.0	15.5	22.5	18.0	19.5	16.0	19.5	17.0	16.5	14.0
29	18.5	13.5	21.0	16.0	22.5	17.5	19.5	16.5	19.5	17.0	16.5	14.0
30	19.5	14.0	23.0	17.0	22.5	18.0	18.5	17.0	18.5	17.0	17.0	14.5
31	---	---	23.0	18.0	---	---	19.0	17.0	18.5	16.0	---	---
MONTH	19.5	10.0	23.0	14.0	22.5	16.0	23.0	16.0	20.5	16.0	19.0	14.0

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 mi².

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 except for estimated daily discharges, which are fair. Minor diversion upstream from station at discharges above 200 ft³/s for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 64,500 ft³/s, Dec. 22, 1955, gage height, 40.60 ft, site and datum then in use, from rating curve extended above 19,000 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 0.23 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	1815	7,090	17.55	Mar. 4	2235	9,560	20.51

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	56	82	30	185	777	e130	60	22	19	3.0	1.5
2	7.3	40	55	29	155	636	e125	57	20	15	4.1	1.6
3	7.6	32	44	28	133	531	e119	55	19	14	3.8	1.7
4	6.8	28	38	e27	117	3380	113	53	19	13	3.5	1.5
5	6.6	26	34	e26	105	5080	109	51	19	12	3.1	1.5
6	6.8	24	31	e26	95	2350	106	49	19	11	2.7	1.7
7	6.3	22	29	e27	86	1480	114	48	18	11	2.7	1.6
8	6.5	21	28	e60	79	1040	109	46	17	10	2.4	1.4
9	6.9	20	27	e140	89	798	112	44	16	9.8	2.3	1.4
10	7.8	20	26	e370	406	659	103	42	14	9.5	3.1	1.2
11	9.9	20	27	e900	732	558	96	41	14	8.8	3.0	1.4
12	12	19	35	e400	1300	473	93	39	15	9.5	2.3	2.1
13	11	20	40	e270	978	402	88	38	14	9.3	2.0	2.1
14	10	23	68	e196	644	351	83	38	14	8.8	1.7	2.1
15	9.6	26	133	e157	468	305	81	38	13	9.0	1.6	2.6
16	9.5	27	128	e120	397	258	81	37	13	8.5	1.5	2.7
17	9.6	28	88	e91	532	231	83	37	12	8.0	2.5	2.3
18	9.2	27	66	81	1160	211	83	35	12	8.2	2.9	1.8
19	9.3	24	55	71	1210	195	81	33	11	7.8	2.3	1.6
20	9.8	23	48	65	5460	181	86	32	10	7.7	2.1	1.3
21	10	26	44	59	4220	e170	128	31	9.9	7.3	1.8	1.2
22	10	28	42	54	3610	e165	109	30	9.6	6.0	1.8	1.2
23	10	26	41	59	3020	e160	88	28	9.0	5.7	1.9	1.1
24	10	25	42	933	2250	e155	80	26	8.3	4.5	1.7	1.4
25	12	25	40	838	3320	e340	75	25	8.0	4.2	1.5	2.1
26	18	24	38	1530	2520	e260	71	25	8.9	3.9	2.5	2.0
27	29	24	36	901	1600	e200	68	25	18	3.8	2.4	2.1
28	33	24	34	521	1070	e175	65	25	31	4.0	2.1	2.3
29	58	48	33	375	---	e160	63	25	34	3.7	2.0	2.2
30	82	142	31	294	---	e145	61	24	24	3.5	1.7	2.1
31	85	---	31	226	---	e137	---	23	---	3.2	1.5	---
TOTAL	526.6	918	1494	8904	35941	21963	2803	1160	471.7	259.7	73.5	52.8
MEAN	17.0	30.6	48.2	287	1284	708	93.4	37.4	15.7	8.38	2.37	1.76
MAX	85	142	133	1530	5460	5080	130	60	34	19	4.1	2.7
MIN	6.3	19	26	26	79	137	61	23	8.0	3.2	1.5	1.1
AC-FT	1040	1820	2960	17660	71290	43560	5560	2300	936	515	146	105

e Estimated.

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	38.8	264	940	1684	1521	1077	482	138	54.1	21.3	11.4	10.1
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	143995.5		74567.3			
ANNUAL MEAN	393		204		516	
HIGHEST ANNUAL MEAN					1310	
LOWEST ANNUAL MEAN					25.0	
HIGHEST DAILY MEAN	10200	Feb 14	5460	Feb 20	45100	Jan 16 1974
LOWEST DAILY MEAN	6.3	Sep 23	1.1	Sep 23	.23	Jul 13 1977
ANNUAL SEVEN-DAY MINIMUM	6.8	Oct 3	1.4	Sep 18	.28	Jul 8 1977
MAXIMUM PEAK FLOW			9560	Mar 4	64500	Dec 22 1955
MAXIMUM PEAK STAGE			20.51	Mar 4	40.60	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	285600		147900		373900	
10 PERCENT EXCEEDS	1370		404		1230	
50 PERCENT EXCEEDS	44		27		60	
90 PERCENT EXCEEDS	7.8		2.1		7.7	

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 (storm season only).

SUSPENDED-SEDIMENT DISCHARGE: October 1998 to current year (storm season only).

REMARKS.—Sediment samples were collected on most days where water temperature is published. Zero bed-load discharge observed at flows less than 61.9 ft³/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, 0.03 ton, Oct. 7, 2000.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 840 mg/L, Feb. 20; minimum daily mean, 2 mg/L, on many days.

SEDIMENT LOAD (storm season only): Maximum daily, 12,600 tons, Feb. 20; minimum daily, 0.03 ton, Oct. 7.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-	TEMPER-	SEDI-	SEDI-	SED.	SED.	SED.	SED.	SED.
		CHARGE,			MENT,	SUSP.	SUSP.	SUSP.	SUSP.	SUSP.
		INST.	ATURE	MENT,	DIS-	SIEVE	SIEVE	SIEVE	SIEVE	SIEVE
		CUBIC		SUS-	CHARGE,	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.
		FEET	WATER	SUS-	SUS-	% FINER				
		PER	(DEG C)	PENDE	PENDE	THAN	THAN	THAN	THAN	THAN
		SECOND		(MG/L)	(T/DAY)	.062 MM	.125 MM	.250 MM	.500 MM	1.00 MM
		(00061)	(00010)	(80154)	(80155)	(70331)	(70332)	(70333)	(70334)	(70335)
FEB										
13...	1410	913	7.0	38	94	73	78	86	98	100
MAR										
16...	1400	254	11.0	6	4.1	79	--	--	--	--

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAMPLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN (80164)	BED MAT. SIEVE DIAM. % FINER THAN (80165)	BED MAT. SIEVE DIAM. % FINER THAN (80166)	BED MAT. SIEVE DIAM. % FINER THAN (80167)
OCT								
12...	1300	1	12	15.0	2	6	23	47
12...	1303	1	12	15.0	--	1	6	15
12...	1306	1	12	15.0	--	--	2	7
12...	1309	1	12	15.0	--	--	1	10
12...	1313	1	12	15.0	--	--	1	4
12...	1315	1	12	15.0	--	1	3	15
12...	1319	1	12	15.0	--	--	2	11
12...	1322	1	12	15.0	--	1	2	12
12...	1326	1	12	15.0	--	1	4	18
12...	1330	1	12	15.0	4	17	69	98
MAY								
24...	1330	1	25	20.0	8	26	78	98
24...	1332	1	25	20.0	--	1	2	9
24...	1335	1	25	20.0	--	1	2	10
24...	1337	1	25	20.0	--	--	1	9
24...	1339	1	25	20.0	--	--	1	5
24...	1345	1	25	20.0	--	1	2	10
24...	1349	1	25	20.0	--	1	2	8
24...	1352	1	25	20.0	--	1	2	6
24...	1355	1	25	20.0	--	1	2	12
24...	1400	1	25	20.0	1	3	17	37

DATE	BED MAT. SIEVE DIAM. % FINER THAN (80168)	BED MAT. SIEVE DIAM. % FINER THAN (80169)	BED MAT. SIEVE DIAM. % FINER THAN (80170)	BED MAT. SIEVE DIAM. % FINER THAN (80171)	BED MAT. SIEVE DIAM. % FINER THAN (80172)	BED MAT. SIEVE DIAM. % FINER THAN (80173)	BED MAT. SIEVE DIAM. % FINER THAN (80174)
OCT							
12...	54	61	72	87	100	--	--
12...	16	18	23	34	54	79	100
12...	10	12	15	22	36	63	100
12...	20	26	32	40	50	68	100
12...	9	13	18	24	36	53	100
12...	23	30	40	56	78	100	--
12...	19	27	38	53	73	100	--
12...	17	22	36	67	89	100	--
12...	26	33	44	61	81	100	--
12...	100	--	--	--	--	--	--
MAY							
24...	99	99	100	--	--	--	--
24...	17	27	42	60	78	100	--
24...	17	23	37	54	77	93	100
24...	18	36	63	78	86	92	100
24...	10	16	29	51	78	100	--
24...	20	28	37	48	64	92	100
24...	15	22	29	41	61	86	100
24...	9	13	19	28	41	60	100
24...	16	20	28	40	60	92	100
24...	41	46	58	72	94	100	--

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	7.1	2	e.04	56	18	2.3	82	9	2.0
2	7.3	2	.04	40	14	1.5	55	7	1.0
3	7.6	2	.05	32	13	1.1	44	6	.66
4	6.8	2	.05	28	12	.88	38	5	.48
5	6.6	2	.04	26	11	.73	34	4	.35
6	6.8	2	.04	24	10	.61	31	3	.26
7	6.3	2	.03	22	8	.50	29	3	.22
8	6.5	2	.04	21	8	.45	28	3	.20
9	6.9	2	.04	20	8	.43	27	2	.18
10	7.8	3	.06	20	8	.41	26	2	.16
11	9.9	4	.10	20	8	.39	27	2	.15
12	12	5	.14	19	8	.37	35	2	.19
13	11	5	.12	20	8	.38	40	2	.22
14	10	4	.11	23	10	.41	68	2	.74
15	9.6	4	.11	26	12	.45	133	5	2.2
16	9.5	4	.11	27	12	.44	128	6	1.5
17	9.6	4	.12	28	12	.45	88	4	.95
18	9.2	3	.11	27	9	.41	66	4	.59
19	9.3	3	.12	24	6	.36	55	3	.42
20	9.8	3	.13	23	5	.32	48	3	.38
21	10	4	.14	26	5	.35	44	3	.34
22	10	4	.14	28	5	.38	42	2	.25
23	10	4	.14	26	5	.37	41	2	.28
24	10	4	.14	25	5	.37	42	3	.33
25	12	4	.17	25	5	.37	40	4	.32
26	18	7	.26	24	4	.37	38	4	.31
27	29	10	.54	24	4	.38	36	3	.29
28	33	10	.92	24	4	.39	34	3	.28
29	58	24	4.0	48	10	1.6	33	3	.26
30	82	26	5.9	142	15	6.2	31	3	.25
31	85	32	5.8	---	---	---	31	3	.25
TOTAL	526.6	---	19.75	918	---	23.67	1494	---	16.01
	JANUARY			FEBRUARY			MARCH		
1	30	3	.24	185	9	4.6	777	46	68
2	29	3	.24	155	8	3.5	636	36	46
3	28	3	.23	133	8	2.7	531	32	44
4	e27	e3	e.24	117	7	2.1	3380	591	9750
5	e26	e2	e.14	105	6	1.6	5080	546	7590
6	e26	e2	e.14	95	5	1.2	2350	187	714
7	e27	e2	e.14	86	4	.91	1480	90	168
8	e60	e3	e.49	79	3	.72	1040	59	82
9	e140	e10	e4.0	89	4	1.6	798	42	46
10	e370	e130	e130	406	31	83	659	32	30
11	e900	e240	e584	732	71	174	558	23	21
12	e400	e90	e97	1300	171	627	473	18	16
13	e270	e25	e18	978	66	184	402	14	12
14	e196	e14	e6.3	644	30	54	351	10	9.4
15	e157	e12	e5.1	468	18	23	305	8	6.6
16	e120	e11	e3.6	397	15	16	258	6	4.5
17	e91	e10	e2.5	532	37	101	231	6	3.5
18	81	8	2.0	1160	142	502	211	6	2.4
19	71	7	1.5	1210	169	704	195	6	1.5
20	65	5	.88	5460	840	12600	181	3	1.0
21	59	4	.59	4220	386	4470	e170	2	e.92
22	54	4	.49	3610	353	3510	e165	e2	e.89
23	59	8	1.4	3020	287	2430	e160	e2	e.86
24	933	324	997	2250	171	1140	e155	e2	e.84
25	838	173	648	3320	354	4050	e340	e10	e9.2
26	1530	270	1180	2520	160	1090	e260	e8	e5.6
27	901	64	164	1600	93	297	e200	e2	e1.1
28	521	29	41	1070	63	109	e175	e2	e.94
29	375	16	16	---	---	---	e160	e2	e.86
30	294	12	9.2	---	---	---	e145	e2	e.78
31	226	10	6.2	---	---	---	e137	e2	e.74
TOTAL	8904	---	3920.62	35941	---	32182.93	21963	---	18638.63

e Estimated.

NAVARRO RIVER BASIN

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	e130	e2	e.70
2	e125	e2	e.67
3	e119	e2	e.64
4	113	2	.58
5	109	2	.58
6	106	3	.81
7	114	4	1.2
8	109	3	1.0
9	112	4	1.1
10	103	3	.89
11	96	3	.76
12	93	3	.65
13	88	2	.56
14	83	2	.50
15	81	2	.49
16	81	2	.51
17	83	3	.65
18	83	3	.71
19	81	3	.65
20	86	5	1.0
21	128	7	2.3
22	109	4	.92
23	88	3	.58
24	80	3	.48
25	75	2	.43
26	71	2	.40
27	68	2	.38
28	65	2	.35
29	63	2	.34
30	61	2	.33
31	---	---	---
TOTAL	2803	---	21.16
PERIOD	72549.60		54822.77

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	526.60	19.75	9	29
NOVEMBER	918.00	23.67	15	39
DECEMBER	1494.00	16.01	39	55
JANUARY 2001	8904.00	3920.62	1150	5070
FEBRUARY	35941.00	32182.93	4050	36200
MARCH	21963.00	18638.63	1880	20500
APRIL	2803.00	21.16	34	55
PERIOD	72549.60	54822.77	7177	61948

e Estimated.

11468010 ALBION RIVER NEAR COMPTCHE, CA

LOCATION.—Lat 39°15'40", long 123°37'00", in SW 1/4 sec.11, T.16 N., R.16 W., Mendocino County, Hydrologic Unit 18010108, on right bank, 2000 ft downstream of Morrison Gulch, and 1.7 mi west of Comptche.

DRAINAGE AREA.—14.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1961 to September 1969, January 30, 2001 to September 30, 2001 (discontinued).

GAGE.—Water-stage recorder. Datum of gage is 106.59 ft above mean sea level.

REMARKS.—Records good except for estimated daily discharges, which are fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,390 ft³/s, Jan. 4, 1966, gage height, 9.98 ft, from rating curve extended above 480 ft³/s, on basis of slope-area measurement at gage height 9.50 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.—Maximum discharge during the period of Jan. 30 to Sept. 30, unknown, Feb. 20, gage-height, unknown; minimum discharge, 0.01 ft³/s, several days in August and September.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	9.0	e35	2.8	1.3	.23	.17	.04	.03
2	---	---	---	---	7.2	e29	2.6	1.3	.21	.16	.03	.03
3	---	---	---	---	5.9	e24	2.4	1.2	.24	.14	.02	.02
4	---	---	---	---	4.9	e154	2.3	1.1	.20	.13	.02	.02
5	---	---	---	---	4.3	e231	2.2	1.0	.22	.11	.02	.02
6	---	---	---	---	3.6	e107	2.3	.94	.24	.10	.02	.02
7	---	---	---	---	3.1	e67	2.6	.86	.22	.09	.02	.02
8	---	---	---	---	3.0	e47	2.2	.79	.18	.08	.02	.02
9	---	---	---	---	5.3	e36	2.2	.70	.18	.08	.02	.02
10	---	---	---	---	7.3	e29	2.0	.70	.19	.08	.02	.02
11	---	---	---	---	29	e22	1.9	.65	.17	.08	.01	.01
12	---	---	---	---	68	e18	1.8	.64	.18	.09	.02	.01
13	---	---	---	---	46	e14	1.6	.61	.16	.12	.02	.02
14	---	---	---	---	30	e12	1.6	.56	.13	.11	.02	.02
15	---	---	---	---	24	e9.8	1.6	.58	.11	.11	.02	.02
16	---	---	---	---	18	8.1	1.6	.60	.10	.10	.02	.03
17	---	---	---	---	e24	6.9	2.0	.53	.11	.10	.02	.03
18	---	---	---	---	e53	6.0	1.9	.51	.11	.10	.03	.03
19	---	---	---	---	e55	5.3	1.9	.47	.10	.09	.03	.02
20	---	---	---	---	e248	4.8	6.9	.40	.10	.08	.02	.02
21	---	---	---	---	e192	3.8	5.1	.36	.11	.08	.01	.01
22	---	---	---	---	e164	4.0	2.9	.34	.12	.07	.02	.01
23	---	---	---	---	e137	3.8	2.3	.31	.09	.07	.03	.02
24	---	---	---	---	e102	6.4	2.1	.31	.10	.07	.03	.03
25	---	---	---	---	e151	13	2.0	.32	.10	.06	.04	.02
26	---	---	---	---	e114	6.4	1.8	.32	.11	.05	.04	.02
27	---	---	---	---	e73	4.9	1.7	.34	.89	.05	.03	.02
28	---	---	---	---	e49	4.4	1.6	.35	.38	.05	.03	.01
29	---	---	---	---	---	4.0	1.5	.32	.21	.05	.03	.01
30	---	---	---	---	---	3.5	1.4	.30	.21	.05	.03	.01
31	---	---	---	12	---	3.0	---	.26	---	.05	.03	---
TOTAL	---	---	---	---	1630.6	923.1	68.8	18.97	5.70	2.77	0.76	0.59
MEAN	---	---	---	---	58.2	29.8	2.29	.61	.19	.089	.025	.020
MAX	---	---	---	---	248	231	6.9	1.3	.89	.17	.04	.03
MIN	---	---	---	---	3.0	3.0	1.4	.26	.09	.05	.01	.01
AC-FT	---	---	---	---	3230	1830	136	38	11	5.5	1.5	1.2

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

	1961	1962	1963	1964	1965	1966	1967	1968	1969	2001		
MEAN	1.45	9.40	48.6	78.2	45.9	29.9	22.9	2.34	.58	.13	.047	.025
MAX	10.6	32.0	175	184	102	55.7	84.6	6.10	1.48	.24	.092	.080
(WY)	1963	1964	1965	1969	1969	1967	1963	1967	1967	1967	1968	1968
MIN	.023	.44	7.61	20.5	6.64	4.88	2.29	.61	.19	.053	.000	.000
(WY)	1967	1968	1964	1962	1964	1965	2001	2001	2001	1968	1964	1963

SUMMARY STATISTICS

WATER YEARS 1961 - 2001

ANNUAL MEAN	20.0
HIGHEST ANNUAL MEAN	34.1
LOWEST ANNUAL MEAN	11.2
HIGHEST DAILY MEAN	1360
LOWEST DAILY MEAN	.00
ANNUAL SEVEN-DAY MINIMUM	.00
ANNUAL RUNOFF (AC-FT)	14490
10 PERCENT EXCEEDS	49
50 PERCENT EXCEEDS	1.2
90 PERCENT EXCEEDS	.00

e Estimated.

11468010 ALBION RIVER NEAR COMPTCHE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—February 6, 2001 to September 30, 2001 (discontinued).

WATER TEMPERATURE: February 6, 2001 to September 30, 2001 (discontinued).

PERIOD OF DAILY RECORD.—February 6, 2001 to September 30, 2001 (discontinued).

WATER TEMPERATURE: February 6, 2001 to September 30, 2001 (discontinued).

INSTRUMENTATION.—Temperature recorder provides hourly recordings.

REMARKS.—Records excellent. Interruptions in record were due to malfunction of the recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.—

WATER TEMPERATURE.—Maximum recorded, 18.5°C, Aug. 7, 8, 2001; minimum recorded, 4.5°C, Feb. 8, 2001.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURE.—Maximum recorded, 18.5°C, Aug. 7, 8; minimum recorded, 4.5°C, Feb. 8.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MI
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	8.5	7.5
2	---	---	---	---	---	---	---	---	---	---	9.0	8.5
3	---	---	---	---	---	---	---	---	---	---	8.5	7.5
4	---	---	---	---	---	---	---	---	---	---	10.0	8.0
5	---	---	---	---	---	---	---	---	---	---	10.5	9.0
6	---	---	---	---	---	---	---	---	---	---	10.5	9.5
7	---	---	---	---	---	---	---	---	6.5	5.5	10.5	9.0
8	---	---	---	---	---	---	---	---	5.5	4.5	10.5	10.0
9	---	---	---	---	---	---	---	---	6.5	5.5	10.0	8.5
10	---	---	---	---	---	---	---	---	7.0	6.5	9.0	7.5
11	---	---	---	---	---	---	---	---	7.0	6.5	9.5	8.0
12	---	---	---	---	---	---	---	---	8.0	7.0	9.0	7.5
13	---	---	---	---	---	---	---	---	8.0	6.5	9.5	8.0
14	---	---	---	---	---	---	---	---	7.5	6.5	9.5	8.5
15	---	---	---	---	---	---	---	---	7.5	6.5	9.5	9.0
16	---	---	---	---	---	---	---	---	8.5	7.5	10.0	9.0
17	---	---	---	---	---	---	---	---	8.5	8.0	10.0	8.5
18	---	---	---	---	---	---	---	---	9.0	8.5	11.0	9.5
19	---	---	---	---	---	---	---	---	9.0	9.0	11.0	10.0
20	---	---	---	---	---	---	---	---	10.0	9.0	12.0	11.0
21	---	---	---	---	---	---	---	---	10.5	9.5	11.5	11.0
22	---	---	---	---	---	---	---	---	10.0	9.0	11.5	11.0
23	---	---	---	---	---	---	---	---	9.5	8.5	11.5	11.0
24	---	---	---	---	---	---	---	---	9.5	8.5	11.5	11.0
25	---	---	---	---	---	---	---	---	10.5	9.0	12.0	11.0
26	---	---	---	---	---	---	---	---	10.0	8.5	11.0	10.0
27	---	---	---	---	---	---	---	---	10.0	8.5	10.0	9.0
28	---	---	---	---	---	---	---	---	9.5	7.5	11.0	10.0
29	---	---	---	---	---	---	---	---	---	---	12.0	10.5
30	---	---	---	---	---	---	---	---	---	---	11.5	10.0
31	---	---	---	---	---	---	---	---	---	---	11.0	9.5
MONTH	---	---	---	---	---	---	---	---	---	---	12.0	7.5

11468010 ALBION RIVER NEAR COMPTCHE, CA—Continued

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

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

11468070 SOUTH FORK BIG RIVER NEAR COMPTCHE, CA

LOCATION.—Lat 39°13'45", long 123°27'55" (revised), in sec.19, T.16 N., R.14 W., Mendocino County, Hydrologic Unit 18010108, on right bank, 150 ft downstream of Daugherty Creek, and 7.2 mi east of Comptche.

DRAINAGE AREA.—36.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—August 1960 to September 1971, February 22, 2001, to September 30, 2001 (discontinued).

GAGE.—Water-stage recorder. Elevation of gage is 500 ft above sea level, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,200 ft³/s, Dec. 22, 1964, gage height, 16.30 ft, at site 150 ft downstream, from rating curve extended above 1,650 ft³/s, on basis of slope-area measurement; minimum daily discharge, 0.03 ft³/s, Sept. 10, 2001.

EXTREMES FOR CURRENT YEAR.—Maximum discharge unknown; minimum daily discharge, 0.03 ft³/s, Sept. 10.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	41	9.2	2.8	1.3	1.3	.29	.13
2	---	---	---	---	---	38	8.7	3.0	1.3	1.1	.30	.09
3	---	---	---	---	---	34	8.5	2.8	1.4	1.0	.26	.09
4	---	---	---	---	---	436	8.4	2.6	1.5	.90	.20	.08
5	---	---	---	---	---	353	8.0	2.5	1.5	.82	.23	.08
6	---	---	---	---	---	179	9.0	2.4	1.5	.59	.23	.07
7	---	---	---	---	---	114	10	2.4	1.4	.51	.22	.10
8	---	---	---	---	---	84	9.5	2.3	1.4	.49	.19	.08
9	---	---	---	---	---	67	10	2.2	1.3	.49	.19	.05
10	---	---	---	---	---	54	8.8	2.1	1.3	.45	.21	.03
11	---	---	---	---	---	44	8.2	2.1	1.3	.51	.10	.07
12	---	---	---	---	---	36	7.6	2.0	1.3	.58	.12	.09
13	---	---	---	---	---	30	7.1	2.0	1.3	.49	.14	.10
14	---	---	---	---	---	26	6.7	2.0	1.2	.48	.18	.16
15	---	---	---	---	---	23	6.5	2.2	1.1	.48	.15	.08
16	---	---	---	---	---	22	6.4	2.6	1.1	.49	.17	.06
17	---	---	---	---	---	21	6.9	2.4	.95	.44	.20	.06
18	---	---	---	---	---	20	6.3	2.4	.85	.41	.14	.07
19	---	---	---	---	---	19	5.8	2.4	.77	.45	.10	.13
20	---	---	---	---	---	19	9.9	2.3	.79	.40	.10	.10
21	---	---	---	---	---	14	10	2.2	.81	.35	.10	.10
22	---	---	---	---	---	12	6.5	1.8	.70	.36	.12	.11
23	---	---	---	---	---	198	12	5.1	1.9	.68	.34	.19
24	---	---	---	---	---	167	12	4.5	1.7	.63	.32	.24
25	---	---	---	---	---	209	16	4.0	1.5	.66	.30	.16
26	---	---	---	---	---	135	12	3.6	1.4	.93	.30	.15
27	---	---	---	---	---	83	11	3.2	1.4	3.3	.30	.14
28	---	---	---	---	---	56	10	3.1	1.3	3.0	.23	.11
29	---	---	---	---	---	10	2.9	1.3	1.8	.22	.12	.11
30	---	---	---	---	---	10	2.7	1.3	1.5	.23	.12	.08
31	---	---	---	---	---	9.6	---	1.3	---	.30	.16	---
TOTAL	---	---	---	---	---	1788.6	207.1	64.6	38.57	15.63	5.33	2.78
MEAN	---	---	---	---	---	57.7	6.90	2.08	1.29	.50	.17	.093
MAX	---	---	---	---	---	436	10	3.0	3.3	1.3	.30	.16
MIN	---	---	---	---	---	9.6	2.7	1.3	.63	.22	.10	.03
AC-FT	---	---	---	---	---	3550	411	128	77	31	11	5.5

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

MEAN	5.30	19.9	140	218	109	91.4	52.5	11.7	4.55	1.98	1.15	.89
MAX	39.9	54.3	597	607	287	196	210	24.4	9.39	3.36	1.82	1.34
(WY)	1963	1964	1965	1970	1969	1971	1963	1967	1967	1963	1963	1963
MIN	.97	3.14	14.5	18.1	18.7	16.9	6.90	2.08	1.29	.50	.17	.093
(WY)	1961	1970	1964	1961	1971	1965	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

WATER YEARS 1960 - 2001

ANNUAL MEAN	55.4
HIGHEST ANNUAL MEAN	89.2
LOWEST ANNUAL MEAN	26.9
HIGHEST DAILY MEAN	5520
LOWEST DAILY MEAN	.03
ANNUAL SEVEN-DAY MINIMUM	.07
MAXIMUM PEAK FLOW	8200
MAXIMUM PEAK STAGE	16.30
ANNUAL RUNOFF (AC-FT)	40100
10 PERCENT EXCEEDS	116
50 PERCENT EXCEEDS	6.5
90 PERCENT EXCEEDS	.90

11468070 SOUTH FORK BIG RIVER NEAR COMPTCHE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—February 22, 2001 to September 30, 2001 (discontinued).

WATER TEMPERATURE: February 22, 2001 to September 30, 2001 (discontinued).

PERIOD OF DAILY RECORD.—February 22, 2001 to September 30, 2001 (discontinued).

WATER TEMPERATURE: February 22, 2001 to September 30, 2001 (discontinued).

INSTRUMENTATION.—Interruptions in record were due to malfunction of the sensing and (or) recording instruments.

REMARKS.—Records excellent except July 14–29 and Sept. 19–30, which are good.

EXTREMES FOR PERIOD OF DAILY RECORD.—Maximum recorded, 21.5°C, July 4, Aug. 8, 2001; minimum recorded, 6.0°C, Apr. 4, 5, 2001.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURE: Maximum recorded, 21.5°C, July 4, Aug. 8; minimum recorded, 6.0°C, April 4, 5.

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

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOC- ATION, (FEET) (81903)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
MAY				
23...*	1120	.13	16.5	6.50
23...*	1121	.40	16.5	5.50
23...*	1122	.50	16.5	4.50
23...*	1123	.49	16.5	3.50
AUG				
29...*	0915	.22	14.5	.40
29...*	0916	.27	14.5	.70
29...*	0917	.26	14.5	1.00
29...*	0918	.26	14.5	1.20

* Instantaneous discharge at time of the cross-sectional measurements: May 23, 2.0 ft³/s; Aug. 29, 0.10 ft³/s.

11468070 SOUTH FORK BIG RIVER NEAR COMPTCHE, CA—Continued

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

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

11468092 BIG RIVER BELOW TWO LOG CREEK, NEAR COMPTCHE, CA

LOCATION.—Lat 39°19'06", long 123°36'49", in NW 1/4 sec. SE 1/4 sec. 23, T.17 N., R.16 W., Mendocino County, Hydrologic Unit 18010108, on right bank, 150 ft downstream of Two Log Creek, 3.8 mi northwest of Comptche.

DRAINAGE AREA.—88.71 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—May 30, 2001, to September 30, 2001.

GAGE.—Water-stage recorder. Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.—Records good. Partial record only, May 30 to September 30. No regulation or diversion above station.

EXTREMES FOR CURRENT YEAR.—Maximum discharge unknown; minimum daily discharge, 1.1 ft³/s, several days in September.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	9.0	8.5	2.2	1.3
2	---	---	---	---	---	---	---	---	8.4	7.4	2.1	1.2
3	---	---	---	---	---	---	---	---	8.1	7.0	2.0	1.2
4	---	---	---	---	---	---	---	---	8.0	6.5	2.0	1.1
5	---	---	---	---	---	---	---	---	8.0	6.0	2.0	1.1
6	---	---	---	---	---	---	---	---	7.8	5.4	2.0	1.1
7	---	---	---	---	---	---	---	---	7.5	5.0	2.0	1.1
8	---	---	---	---	---	---	---	---	7.3	4.9	2.0	1.1
9	---	---	---	---	---	---	---	---	7.0	4.5	2.0	1.1
10	---	---	---	---	---	---	---	---	6.8	4.2	1.9	1.2
11	---	---	---	---	---	---	---	---	6.6	4.1	1.9	1.1
12	---	---	---	---	---	---	---	---	6.7	4.2	2.0	1.2
13	---	---	---	---	---	---	---	---	6.3	4.3	2.1	1.2
14	---	---	---	---	---	---	---	---	6.0	4.3	2.2	1.3
15	---	---	---	---	---	---	---	---	5.9	4.2	2.2	1.2
16	---	---	---	---	---	---	---	---	5.6	4.0	2.0	1.2
17	---	---	---	---	---	---	---	---	5.4	3.7	1.9	1.2
18	---	---	---	---	---	---	---	---	5.1	3.6	1.8	1.2
19	---	---	---	---	---	---	---	---	4.8	3.4	1.8	1.3
20	---	---	---	---	---	---	---	---	4.5	3.3	1.7	1.4
21	---	---	---	---	---	---	---	---	4.4	3.1	1.7	1.4
22	---	---	---	---	---	---	---	---	4.2	3.1	1.8	1.4
23	---	---	---	---	---	---	---	---	4.1	3.0	2.0	1.4
24	---	---	---	---	---	---	---	---	4.2	2.8	2.0	1.4
25	---	---	---	---	---	---	---	---	4.3	2.6	1.9	1.5
26	---	---	---	---	---	---	---	---	5.4	2.5	1.9	1.5
27	---	---	---	---	---	---	---	---	20	2.4	1.7	1.6
28	---	---	---	---	---	---	---	---	22	2.4	1.4	1.6
29	---	---	---	---	---	---	---	---	14	2.1	1.4	1.6
30	---	---	---	---	---	---	---	---	10	2.0	1.3	1.6
31	---	---	---	---	---	---	---	9.8	---	2.1	1.3	---
TOTAL	---	---	---	---	---	---	---	---	227.4	126.6	58.2	38.8
MEAN	---	---	---	---	---	---	---	---	7.58	4.08	1.88	1.29
MAX	---	---	---	---	---	---	---	---	22	8.5	2.2	1.6
MIN	---	---	---	---	---	---	---	---	4.1	2.0	1.3	1.1
AC-FT	---	---	---	---	---	---	---	---	451	251	115	77

11468092 BIG RIVER BELOW TWO LOG CREEK, NEAR COMPTCHE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—May 31, 2001, to September 30, 2001 (discontinued).

WATER TEMPERATURE: May 31, 2001, to September 30, 2001 (discontinued).

PERIOD OF DAILY RECORD.—May 31, 2001, to September 30, 2001 (discontinued).

WATER TEMPERATURE.—May 31, 2001, to September 30, 2001 (discontinued).

INSTRUMENTATION.—Temperature recorder provides 15 minute recordings.

REMARKS.—Records rated excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: Maximum recorded for period, 23.0°C, July 3–5, Aug. 7, 2001; minimum recorded, 13.0°C, Sept. 29, 2001.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURE: Maximum recorded for period, 23.0°C, July 3–5, Aug. 7; minimum recorded, 13.0°C, Sept. 29.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	21.5	18.5	21.5	18.0	21.5	18.0	19.0	17.0
2	---	---	---	---	19.5	16.5	22.5	18.0	22.0	18.5	19.0	17.0
3	---	---	---	---	19.0	16.0	23.0	19.0	21.0	19.0	19.0	17.0
4	---	---	---	---	19.0	15.5	23.0	19.5	21.5	19.5	18.5	16.5
5	---	---	---	---	19.0	16.0	23.0	19.5	21.5	18.5	19.0	17.0
6	---	---	---	---	20.0	16.5	22.5	19.0	22.0	19.0	17.5	15.5
7	---	---	---	---	21.0	16.5	22.0	18.0	23.0	19.0	18.0	15.5
8	---	---	---	---	21.0	17.5	22.5	18.0	22.5	19.5	17.0	15.5
9	---	---	---	---	21.5	18.0	22.0	18.5	21.5	19.5	17.5	16.0
10	---	---	---	---	20.0	17.5	21.5	18.5	21.0	19.5	18.0	16.5
11	---	---	---	---	19.5	17.5	20.0	18.0	20.5	18.5	17.0	16.0
12	---	---	---	---	21.0	17.5	21.0	18.0	20.0	18.5	17.0	15.5
13	---	---	---	---	20.5	16.5	21.5	18.0	20.5	18.5	17.5	16.0
14	---	---	---	---	21.0	16.5	21.0	18.0	20.5	18.5	17.5	16.0
15	---	---	---	---	21.0	17.0	21.5	18.0	20.0	18.5	17.5	16.0
16	---	---	---	---	21.0	17.0	21.0	18.0	20.5	18.0	17.0	16.0
17	---	---	---	---	21.0	17.0	21.0	17.0	19.5	17.5	17.0	15.5
18	---	---	---	---	21.5	17.0	21.5	17.0	20.0	17.5	16.5	15.5
19	---	---	---	---	21.5	17.5	21.5	18.5	19.5	17.0	16.0	14.5
20	---	---	---	---	22.0	17.5	21.5	18.0	19.0	17.0	16.5	15.0
21	---	---	---	---	22.5	18.0	22.0	18.5	18.0	16.5	16.5	15.0
22	---	---	---	---	22.0	18.0	22.0	18.0	19.0	17.5	16.0	14.5
23	---	---	---	---	21.5	18.0	22.5	18.0	19.5	18.0	16.0	15.0
24	---	---	---	---	20.0	17.5	22.5	19.0	20.0	18.0	16.5	15.5
25	---	---	---	---	19.0	17.5	22.0	19.0	19.0	17.0	17.0	16.0
26	---	---	---	---	18.0	17.0	21.5	19.0	19.5	17.0	16.5	15.0
27	---	---	---	---	19.0	16.5	22.0	18.5	19.0	16.5	17.0	15.5
28	---	---	---	---	20.0	17.5	21.5	18.0	18.5	16.5	15.5	14.5
29	---	---	---	---	21.0	17.5	21.5	18.0	18.5	17.0	15.0	13.0
30	---	---	---	---	21.5	18.0	20.0	19.0	19.5	17.5	15.0	13.5
31	---	---	22.5	18.0	---	---	21.5	18.0	18.5	16.5	---	---
MONTH	---	---	---	---	22.5	15.5	23.0	17.0	23.0	16.5	19.0	13.0

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 mi².

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 fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 26,600 ft³/s, Mar. 29, 1974, gage height, 27.14 ft, from rating curve extended above 4,500 ft³/s, on basis of slope-conveyance study; minimum daily, 0.79 ft³/s, Sept. 8, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,400 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	2015	1,810	9.73

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	38	53	20	75	256	61	36	18	13	4.8	2.6
2	5.5	25	38	19	64	225	58	34	16	11	4.8	2.6
3	5.3	20	29	18	55	194	53	32	12	9.5	4.5	2.5
4	5.1	16	23	17	49	549	51	31	12	9.0	4.1	2.4
5	5.1	14	20	17	45	1140	48	33	13	8.4	4.0	2.5
6	5.1	12	17	17	41	646	48	33	15	7.4	3.3	2.4
7	5.1	12	16	17	37	419	55	32	15	6.7	2.8	2.3
8	5.0	11	15	37	34	312	51	30	15	6.4	3.1	2.3
9	5.0	10	15	59	45	247	49	28	16	6.3	3.6	2.4
10	6.7	10	14	128	113	214	46	28	17	6.1	3.5	2.4
11	7.6	9.5	15	213	296	185	43	27	17	6.8	3.5	2.4
12	6.9	9.3	20	141	460	160	42	26	16	7.1	3.5	2.4
13	6.6	10	22	95	333	141	39	26	15	7.1	3.6	2.5
14	5.9	13	37	72	225	126	36	26	13	7.1	3.5	2.6
15	5.9	15	84	58	166	114	35	25	14	7.1	3.6	2.6
16	5.9	15	71	50	131	107	34	26	13	7.0	3.8	2.6
17	5.9	14	52	43	134	98	38	26	14	6.6	3.6	2.6
18	5.9	13	40	39	195	91	35	26	16	6.5	3.5	2.6
19	5.9	12	33	36	210	85	37	24	14	6.3	3.4	2.6
20	6.2	12	29	34	1260	79	61	22	10	6.3	3.3	2.6
21	6.8	13	27	32	1290	74	105	21	7.9	5.9	3.3	2.6
22	6.8	18	28	29	1490	70	87	20	7.9	5.9	3.6	2.6
23	6.6	17	30	32	1060	68	72	19	8.9	5.7	3.8	2.5
24	6.3	17	30	76	642	76	64	19	9.0	5.5	3.8	2.4
25	8.5	17	29	133	898	122	58	19	8.8	5.5	3.8	2.5
26	18	16	28	411	727	101	52	19	10	5.4	3.7	2.4
27	12	16	26	324	477	90	49	20	31	5.2	3.4	2.4
28	27	16	24	198	341	81	46	20	33	5.0	3.1	2.4
29	47	48	22	149	---	77	42	21	21	4.8	2.9	2.3
30	100	83	21	111	---	70	38	20	15	4.8	2.8	2.2
31	70	---	20	90	---	65	---	19	---	5.0	2.6	---
TOTAL	431.6	551.8	928	2715	10893	6282	1533	788	443.5	210.4	110.6	74.2
MEAN	13.9	18.4	29.9	87.6	389	203	51.1	25.4	14.8	6.79	3.57	2.47
MAX	100	83	84	411	1490	1140	105	36	33	13	4.8	2.6
MIN	5.0	9.3	14	17	34	65	34	19	7.9	4.8	2.6	2.2
AC-FT	856	1090	1840	5390	21610	12460	3040	1560	880	417	219	147

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2001, BY WATER YEAR (WY)

MEAN	16.5	113	391	656	567	448	210	77.1	34.8	14.4	7.96	6.42
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1952 - 2001

ANNUAL TOTAL	56857.3	24961.1		
ANNUAL MEAN	155	68.4	211	
HIGHEST ANNUAL MEAN			484	1983
LOWEST ANNUAL MEAN			10.9	1977
HIGHEST DAILY MEAN	3080	Feb 14	1490	Feb 22
LOWEST DAILY MEAN	4.7	Sep 20	2.2	Sep 30
ANNUAL SEVEN-DAY MINIMUM	4.9	Sep 10	2.4	Sep 6
MAXIMUM PEAK FLOW			1810	Feb 20
MAXIMUM PEAK STAGE			9.73	Feb 20
ANNUAL RUNOFF (AC-FT)	112800	49510	152600	27.14
10 PERCENT EXCEEDS	526	133	530	
50 PERCENT EXCEEDS	29	19	33	
90 PERCENT EXCEEDS	5.9	3.2	5.2	

11468900 MATTOLE RIVER NEAR ETTERSBURG, CA

LOCATION.—Lat 40°08'22", long 123°59'25", in NW 1/4, SE 1/4 sec. 6, T.4 S., R.2 E., Humboldt County, 0.04 mi downstream of Bear Creek, and 0.3 mi east of Ettersburg, on left bank, upstream side of Ettersburg Honeydew Road.

DRAINAGE AREA.—58.11 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—June 21, 2001, to September 30, 2001.

GAGE.—Water stage recorder. Elevation of gage is 578.93 ft above sea level.

REMARKS.—Records are poor. No regulation or diversion upstream.

EXTREMES FOR CURRENT YEAR.—Maximum discharge unknown; minimum daily discharge, 4.6 ft³/s, Sept. 7–9.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	34	11	5.5
2	---	---	---	---	---	---	---	---	---	31	10	5.1
3	---	---	---	---	---	---	---	---	---	29	11	5.1
4	---	---	---	---	---	---	---	---	---	27	11	5.0
5	---	---	---	---	---	---	---	---	---	25	11	4.9
6	---	---	---	---	---	---	---	---	---	24	11	4.8
7	---	---	---	---	---	---	---	---	---	23	10	4.6
8	---	---	---	---	---	---	---	---	---	22	10	4.6
9	---	---	---	---	---	---	---	---	---	21	9.3	4.6
10	---	---	---	---	---	---	---	---	---	21	9.0	5.2
11	---	---	---	---	---	---	---	---	---	21	9.3	5.9
12	---	---	---	---	---	---	---	---	---	21	9.3	6.6
13	---	---	---	---	---	---	---	---	---	21	9.2	6.4
14	---	---	---	---	---	---	---	---	---	20	9.8	5.7
15	---	---	---	---	---	---	---	---	---	19	9.6	5.5
16	---	---	---	---	---	---	---	---	---	18	9.0	5.5
17	---	---	---	---	---	---	---	---	---	18	8.5	5.4
18	---	---	---	---	---	---	---	---	---	17	8.0	5.2
19	---	---	---	---	---	---	---	---	---	16	7.8	5.1
20	---	---	---	---	---	---	---	---	---	16	7.6	4.8
21	---	---	---	---	---	---	---	---	e16	16	7.5	4.9
22	---	---	---	---	---	---	---	---	15	15	7.8	5.1
23	---	---	---	---	---	---	---	---	15	15	11	e5.0
24	---	---	---	---	---	---	---	---	16	14	13	e4.9
25	---	---	---	---	---	---	---	---	16	13	9.0	e5.1
26	---	---	---	---	---	---	---	---	44	13	7.7	e5.5
27	---	---	---	---	---	---	---	---	218	12	6.9	e6.1
28	---	---	---	---	---	---	---	---	100	12	6.5	e6.3
29	---	---	---	---	---	---	---	---	53	11	6.2	e6.1
30	---	---	---	---	---	---	---	---	41	11	6.0	e5.7
31	---	---	---	---	---	---	---	---	---	12	5.7	---
TOTAL	---	---	---	---	---	---	---	---	---	588	278.7	160.2
MEAN	---	---	---	---	---	---	---	---	---	19.0	8.99	5.34
MAX	---	---	---	---	---	---	---	---	---	34	13	6.6
MIN	---	---	---	---	---	---	---	---	---	11	5.7	4.6
AC-FT	---	---	---	---	---	---	---	---	---	1170	553	318

e Estimated.

11468900 MATTOLE RIVER NEAR ETTERSBERG, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—June 2001 to September 2001.

WATER TEMPERATURE: June 2001 to September 2001.

PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: June 2001 to September 2001.

INSTRUMENTATION.—Water temperature recorded since June 21, 2001.

REMARKS.—Records excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: Maximum recorded, 26.5°C, July 24, 25, Aug. 7, 8, 2001; minimum recorded, 14.0°C, June 27, 2001.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURE: Maximum recorded, 26.5°C, July 24, 25, Aug. 7, 8; minimum recorded, 14.0°C, June 27.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOC- ATION, (FEET) (81903)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL				
12...*	1435	1.00	22.0	20.0
12...*	1437	1.00	22.0	40.0
12...*	1439	3.00	21.5	60.0
AUG				
10...*	1525	1.00	23.5	5.00
10...*	1527	1.00	24.0	40.0
10...*	1529	3.00	24.0	60.0
SEP				
06...*	1400	1.00	17.5	10.0
06...*	1402	1.00	17.5	20.0
06...*	1404	1.00	17.5	40.0
06...*	1406	3.00	18.0	60.0
06...*	1408	3.00	18.0	70.0

* Instantaneous discharge at time of the cross-sectional measurements: July 12, 20 ft³/s; Aug. 10, 8.61 ft³/s; Sept. 6, 4.98 ft³/s.

11468900 MATTOLE RIVER NEAR ETTERSBERG, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	22.0	15.5	24.5	18.0	23.0	17.5
2	---	---	---	---	---	---	23.0	15.5	24.5	18.0	23.5	17.5
3	---	---	---	---	---	---	25.0	17.0	24.5	19.0	23.0	17.5
4	---	---	---	---	---	---	25.5	18.5	23.5	20.0	22.5	17.0
5	---	---	---	---	---	---	25.5	19.0	24.5	18.0	21.0	17.0
6	---	---	---	---	---	---	25.0	18.0	25.0	18.5	21.0	15.5
7	---	---	---	---	---	---	24.5	18.0	26.5	19.5	22.0	16.0
8	---	---	---	---	---	---	24.5	17.5	26.5	20.5	22.0	17.0
9	---	---	---	---	---	---	25.0	18.0	25.5	20.5	21.0	17.0
10	---	---	---	---	---	---	24.5	18.5	25.0	20.0	20.5	16.5
11	---	---	---	---	---	---	24.0	18.5	25.0	19.0	19.0	16.0
12	---	---	---	---	---	---	24.0	18.5	24.5	19.0	21.0	15.5
13	---	---	---	---	---	---	25.0	18.5	24.0	19.0	21.5	16.5
14	---	---	---	---	---	---	24.5	18.5	24.5	18.0	22.0	17.0
15	---	---	---	---	---	---	23.5	18.0	25.0	19.0	21.5	17.0
16	---	---	---	---	---	---	23.0	17.5	24.5	18.5	22.0	17.5
17	---	---	---	---	---	---	23.0	16.5	24.0	17.5	22.0	16.5
18	---	---	---	---	---	---	24.0	17.0	23.0	18.0	21.5	16.5
19	---	---	---	---	---	---	24.0	18.0	23.5	17.5	21.5	16.0
20	---	---	---	---	---	---	23.5	18.5	23.0	17.5	20.5	16.0
21	---	---	---	---	---	---	23.5	17.5	22.5	17.0	20.5	15.5
22	---	---	---	---	24.5	17.5	24.5	17.5	21.0	19.0	20.0	15.0
23	---	---	---	---	23.5	17.5	25.5	18.5	22.0	19.0	---	---
24	---	---	---	---	22.5	17.0	26.5	19.5	23.0	17.5	---	---
25	---	---	---	---	19.5	17.0	26.5	20.0	23.0	16.5	---	---
26	---	---	---	---	18.0	15.0	26.0	19.5	23.0	17.0	---	---
27	---	---	---	---	16.0	14.0	25.5	19.0	22.5	17.0	---	---
28	---	---	---	---	18.5	14.5	24.5	19.5	23.0	17.5	---	---
29	---	---	---	---	21.5	15.0	24.0	18.5	23.5	18.0	---	---
30	---	---	---	---	22.0	15.5	23.5	20.0	23.5	18.0	---	---
31	---	---	---	---	---	---	24.0	18.0	23.0	17.5	---	---
MONTH	---	---	---	---	---	---	26.5	15.5	26.5	16.5	---	---

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 mi².

WATER-DISCHARGE RECORDS

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 ft³/s, Dec. 22, 1955, gage height, 36.60 ft, site and datum then in use, from rating curve extended above 26,000 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 17 ft³/s, Sept. 5, 15, 1977, Sept. 23, 24, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 22	1015	11,400	18.94

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	294	457	198	920	2460	444	277	112	129	34	21
2	19	215	314	183	826	2170	431	263	104	110	33	20
3	19	169	250	168	750	1810	413	255	99	99	33	20
4	18	141	202	154	685	3780	390	240	97	90	33	20
5	18	123	167	138	638	5320	381	229	96	83	32	19
6	19	100	149	130	584	3460	403	218	93	77	32	19
7	19	81	134	128	546	2840	405	211	90	73	32	18
8	19	76	122	376	506	2500	381	203	87	70	31	18
9	21	84	113	510	844	2070	361	193	83	66	30	18
10	28	82	106	1280	1410	1770	335	187	81	64	29	19
11	28	78	117	2530	1480	1480	330	182	81	63	28	19
12	28	73	186	1500	1510	1260	315	178	80	61	28	21
13	29	85	201	1070	1310	1090	299	175	77	60	29	22
14	26	128	955	892	1140	974	288	174	72	59	28	22
15	26	136	764	754	1010	910	280	200	69	56	27	22
16	25	124	543	657	942	855	314	227	66	53	27	21
17	25	122	409	584	1530	798	620	194	64	52	25	20
18	25	110	323	531	3080	749	422	171	60	50	24	19
19	25	101	274	489	2480	701	368	162	57	49	24	19
20	32	93	236	455	5430	659	483	153	54	47	23	19
21	40	98	290	426	7350	623	700	147	52	46	23	18
22	40	108	438	397	9370	585	531	141	50	45	24	18
23	39	124	419	507	6140	555	452	134	49	44	27	17
24	34	151	427	742	4750	696	399	130	49	42	30	17
25	43	162	377	1410	5910	1120	382	128	50	40	29	18
26	241	146	323	4060	4960	725	357	124	90	39	29	19
27	187	138	282	2750	3820	613	337	123	658	37	25	20
28	285	131	247	1750	2950	582	338	121	478	35	23	20
29	483	525	221	1460	---	535	312	117	231	34	22	20
30	1050	916	203	1200	---	497	292	114	162	35	22	20
31	497	---	195	1030	---	466	---	111	---	35	22	---
TOTAL	3407	4914	9444	28459	72871	44653	11763	5482	3491	1843	858	583
MEAN	110	164	305	918	2603	1440	392	177	116	59.5	27.7	19.4
MAX	1050	916	955	4060	9370	5320	700	277	658	129	34	22
MIN	18	73	106	128	506	466	280	111	49	34	22	17
AC-FT	6760	9750	18730	56450	144500	88570	23330	10870	6920	3660	1700	1160

MATTOLE RIVER BASIN

11469000 MATTOLE RIVER NEAR PETROLIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	224	1389	2838	3587	3142	2289	1187	537	211	82.1	49.9	59.2
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	19.4
(WY)	1988	1960	1977	1977	1977	1988	1988	1970	1977	1977	1977	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1912 - 2001	
ANNUAL TOTAL	408715		187768			
ANNUAL MEAN	1117		514		1292	
HIGHEST ANNUAL MEAN					2642	
LOWEST ANNUAL MEAN					157	
HIGHEST DAILY MEAN	19200	Feb 14	9370	Feb 22	55200	Dec 22 1964
LOWEST DAILY MEAN	18	Oct 4	17	Sep 23	17	Sep 5 1977
ANNUAL SEVEN-DAY MINIMUM	19	Sep 29	18	Sep 19	17	Sep 5 1977
MAXIMUM PEAK FLOW			11400	Feb 22	90400	Dec 22 1955
MAXIMUM PEAK STAGE			18.94	Feb 22	36.60	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	810700		372400		936200	
10 PERCENT EXCEEDS	4110		1220		3350	
50 PERCENT EXCEEDS	190		141		272	
90 PERCENT EXCEEDS	26		22		36	

11469000 MATTOLE RIVER NEAR PETROLIA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—

WATER TEMPERATURE: October 2000 to September 2001 (storm season only).

SEDIMENT DATA: October 2000 to September 2001 (storm season only).

PERIOD OF DAILY RECORD.—

SUSPENDED SEDIMENT DISCHARGE: October 2000 to September 2001.

REMARKS.—Sediment samples were collected on most days where water temperature is published. Zero bed-load discharge observed for flows less than 971 ft³/s.

EXTREMES FOR PERIOD OF RECORD.—

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 3120 mg/L, Feb. 22, 2001; minimum daily mean, 1 mg/L, Nov. 5, 7, 8, Dec. 10, 2001.

SEDIMENT LOAD (storm season only): Maximum daily, 80,100 tons, Feb. 22, 2001; minimum daily, 0.1 ton, Oct. 1–4, 2001.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 3120 mg/L, Feb. 22; minimum daily mean, 1 mg/L, Nov. 5, 7, 8, Dec. 10.

SEDIMENT LOAD (storm season only): Maximum daily, 80,100 tons, Feb. 22; minimum daily, 0.1 ton, Oct. 1–4

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED-IMENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED.	SED.	SED.	SED.	SED.	SED.
						SIEVE DIAM. % FINER THAN .062 MM (70331)	SIEVE DIAM. % FINER THAN .125 MM (70332)	SIEVE DIAM. % FINER THAN .250 MM (70333)	SIEVE DIAM. % FINER THAN .500 MM (70334)	SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SIEVE DIAM. % FINER THAN 2.00 MM (70336)
DEC											
12...	1345	184	9.5	10	4.97	93	--	--	--	--	--
JAN											
11...	1445	2430	9.0	389	2550	76	81	86	92	94	96
25...	1515	1870	7.5	824	4160	78	--	--	--	--	--
26...	0815	4270	7.0	1440	16600	71	--	--	--	--	--
FEB											
23...	1245	5960	9.5	514	8270	72	--	--	--	--	--
MAR											
14...	1315	969	11.5	24	62.8	84	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE (DEG C) (00010)	BED	BED	BED	BED	BED
					MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)
AUG									
07...	1135	1	32	24.5	5	16	32	35	35
07...	1140	1	32	24.5	2	3	4	7	10
07...	1145	1	32	24.5	--	1	2	7	13
07...	1150	1	32	24.5	--	--	1	6	13
07...	1155	1	32	24.5	--	--	--	4	9
07...	1200	1	32	24.5	--	--	1	4	9
07...	1205	1	32	24.5	--	--	--	2	9
07...	1210	1	32	24.5	--	--	1	3	6
07...	1220	1	32	24.5	1	2	6	9	10
07...	1225	1	32	24.5	--	--	--	--	--
07...	1230	1	32	24.5	4	7	13	18	18
07...	1235	1	32	24.5	7	29	82	94	96

MATTOLE RIVER BASIN

11469000 MATTOLE RIVER NEAR PETROLIA, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BED	BED	BED	BED	BED	BED
	MAT.	MAT.	MAT.	MAT.	MAT.	MAT.
	SIEVE	SIEVE	SIEVE	SIEVE	SIEVE	SIEVE
	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.
	% FINER					
	THAN	THAN	THAN	THAN	THAN	THAN
	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM
	(80169)	(80170)	(80171)	(80172)	(80173)	(80174)
AUG						
07...	36	46	79	97	100	--
07...	14	24	45	73	100	--
07...	18	26	38	55	100	--
07...	22	33	47	66	100	--
07...	14	21	30	45	79	100
07...	14	19	25	38	100	--
07...	15	22	31	40	71	100
07...	11	22	33	45	70	100
07...	13	22	35	54	86	100
07...	1	20	70	90	100	--
07...	19	27	40	55	92	100
07...	97	98	99	100	--	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (NO=0) (CODE) (04117)	START- ING TIME (2400 HOURS) (82073)	END- ING TIME (2400 HOURS) (82074)	TIME	HORI-	
								ON BED FOR LOAD SAMPLE (SEC) (04120)	ZONTAL WIDTH OF VER- TICAL (FEET) (04121)	
JAN										
11...	1120	1000	1100	.250	0	1100	1145	15	10.0	
11...	1220	1000	1100	.250	0	1155	1240	15	10.0	
FEB										
01...	1250	1000	1100	.250	0	1235	1310	15	10.0	
01...	1315	1000	1100	.250	0	1300	1330	15	10.0	
23...	1350	1000	1100	.250	0	1330	1415	15	10.0	
23...	1435	1000	1100	.250	0	1410	1455	15	10.0	
APR										
05...	1350	1000	1120	.250	0	1340	1355	15	3.0	
05...	1405	1000	1120	.250	0	1400	1410	15	3.0	
DATE	TIME	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)	DISCH, BEDLOAD AV UNIT FOR COM TEMPER- ATURE WATER SAMPLE (DEG C) (00010)	SED- IMENT DIS- CHARGE, BEDLOAD (TONS/ T/D/FT DAY) (04122)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ T/D/FT DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)
JAN										
11...	2	24	24	5.00	2670	9.0	5.93	1860	--	
11...	2	24	24	5.00	2590	9.0	10.2	1860	--	
FEB										
01...	2	23	23	5.00	921	8.0	.30	47	21	
01...	2	23	23	5.00	901	8.0	.11	47	11	
23...	2	24	24	5.00	5840	9.5	25.8	4740	2	
23...	2	24	24	5.00	5870	9.5	13.7	4740	--	
APR										
05...	2	23	23	1.50	373	13.0	.10	8.0	6	
05...	2	23	23	1.50	373	13.0	.13	8.0	5	

11469000 MATTOLE RIVER NEAR PETROLIA, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	19	2	.10	294	5	4.2	457	33	43
2	19	2	.10	215	3	1.6	314	16	14
3	19	2	.10	169	4	1.8	250	8	5.4
4	18	2	.10	141	2	.68	202	4	2.4
5	18	3	.14	123	1	.48	167	2	1.2
6	19	4	.20	100	2	.48	149	3	1.4
7	19	4	.21	81	1	.11	134	5	1.7
8	19	4	.21	76	1	.16	122	4	1.2
9	21	4	.24	84	3	.66	113	2	.71
10	28	4	.32	82	2	.44	106	1	.41
11	28	4	.33	78	2	.47	117	3	.88
12	28	4	.33	73	3	.68	186	8	4.3
13	29	4	.34	85	6	1.3	201	12	8.5
14	26	4	.32	128	5	1.6	955	296	843
15	26	5	.31	136	2	.83	764	77	161
16	25	5	.31	124	2	.72	543	44	65
17	25	5	.32	122	2	.74	409	36	40
18	25	5	.32	110	2	.70	323	28	25
19	25	5	.32	101	2	.68	274	20	15
20	32	5	.42	93	3	.66	236	12	7.9
21	40	5	.53	98	3	.73	290	37	37
22	40	5	.54	108	3	.83	438	74	88
23	39	5	.50	124	3	1.0	419	31	36
24	34	3	.27	151	3	1.2	427	21	24
25	43	4	.55	162	3	1.2	377	15	15
26	241	37	26	146	2	.99	323	10	8.6
27	187	8	4.8	138	2	.85	282	8	6.1
28	285	57	58	131	9	3.2	247	7	4.7
29	483	61	83	525	304	558	221	6	3.6
30	1050	348	1070	916	328	987	203	5	2.8
31	497	35	56	---	---	---	195	4	2.2
TOTAL	3407	---	1305.23	4914	---	1573.99	9444	---	1470.00
	JANUARY			FEBRUARY			MARCH		
1	198	4	2.0	920	17	42	2460	258	1730
2	183	3	1.7	826	15	34	2170	165	978
3	168	3	1.4	750	15	30	1810	150	728
4	154	3	1.1	685	11	20	3780	1300	16700
5	138	2	.85	638	10	18	5320	1060	16300
6	130	2	.68	584	10	16	3460	232	2200
7	128	2	.55	546	7	10	2840	205	1570
8	376	202	241	506	11	15	2500	155	1040
9	510	183	359	844	192	580	2070	128	721
10	1280	568	2200	1410	265	1060	1770	67	322
11	2530	670	4970	1480	236	954	1480	49	195
12	1500	91	377	1510	161	667	1260	36	122
13	1070	49	144	1310	116	419	1090	29	86
14	892	25	62	1140	45	140	974	22	58
15	754	17	35	1010	36	97	910	18	44
16	657	12	22	942	41	104	855	17	40
17	584	8	13	1530	564	3030	798	16	35
18	531	8	12	3080	893	7550	749	15	31
19	489	10	14	2480	267	1790	701	14	27
20	455	12	15	5430	2380	43000	659	13	24
21	426	14	16	7350	2440	48800	623	12	21
22	397	16	17	9370	3120	80100	585	11	18
23	507	23	35	6140	1670	28800	555	10	16
24	742	41	84	4750	649	8390	696	78	175
25	1410	765	4720	5910	2370	38100	1120	147	466
26	4060	1350	14200	4960	1990	27000	725	64	126
27	2750	259	2060	3820	594	6290	613	37	61
28	1750	109	525	2950	339	2690	582	13	20
29	1460	94	369	---	---	---	535	10	14
30	1200	53	174	---	---	---	497	9	12
31	1030	28	78	---	---	---	466	9	11
TOTAL	28459	---	30750.28	72871	---	299746	44653	---	43891

11469000 MATTOLE RIVER NEAR PETROLIA, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	444	8	10
2	431	8	9.2
3	413	7	8.3
4	390	7	7.4
5	381	5	5.0
6	403	3	3.3
7	405	3	3.4
8	381	3	3.3
9	361	3	3.2
10	335	3	3.0
11	330	3	3.0
12	315	3	2.9
13	299	3	2.8
14	288	4	2.7
15	280	4	2.7
16	314	18	18
17	620	72	123
18	422	22	26
19	368	5	5.2
20	483	48	75
21	700	74	141
22	531	52	75
23	452	30	37
24	399	10	11
25	382	7	7.0
26	357	6	5.3
27	337	4	3.9
28	338	5	4.8
29	312	3	2.2
30	292	2	1.8
31	---	---	---
TOTAL	11763	---	606.4
PERIOD	175511.00		379342.90

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	3407.00	1305.23	349	1650
NOVEMBER	4914.00	1573.99	273	1850
DECEMBER	9444.00	1470.00	486	1960
JANUARY 2001	28459.00	30750.28	11800	42600
FEBRUARY	72871.00	299746.00	49200	349000
MARCH	44653.00	43891.00	22800	66700
APRIL	11763.00	606.40	421	1030
PERIOD	175511.00	379342.90	85329	464790

EEL RIVER BASIN

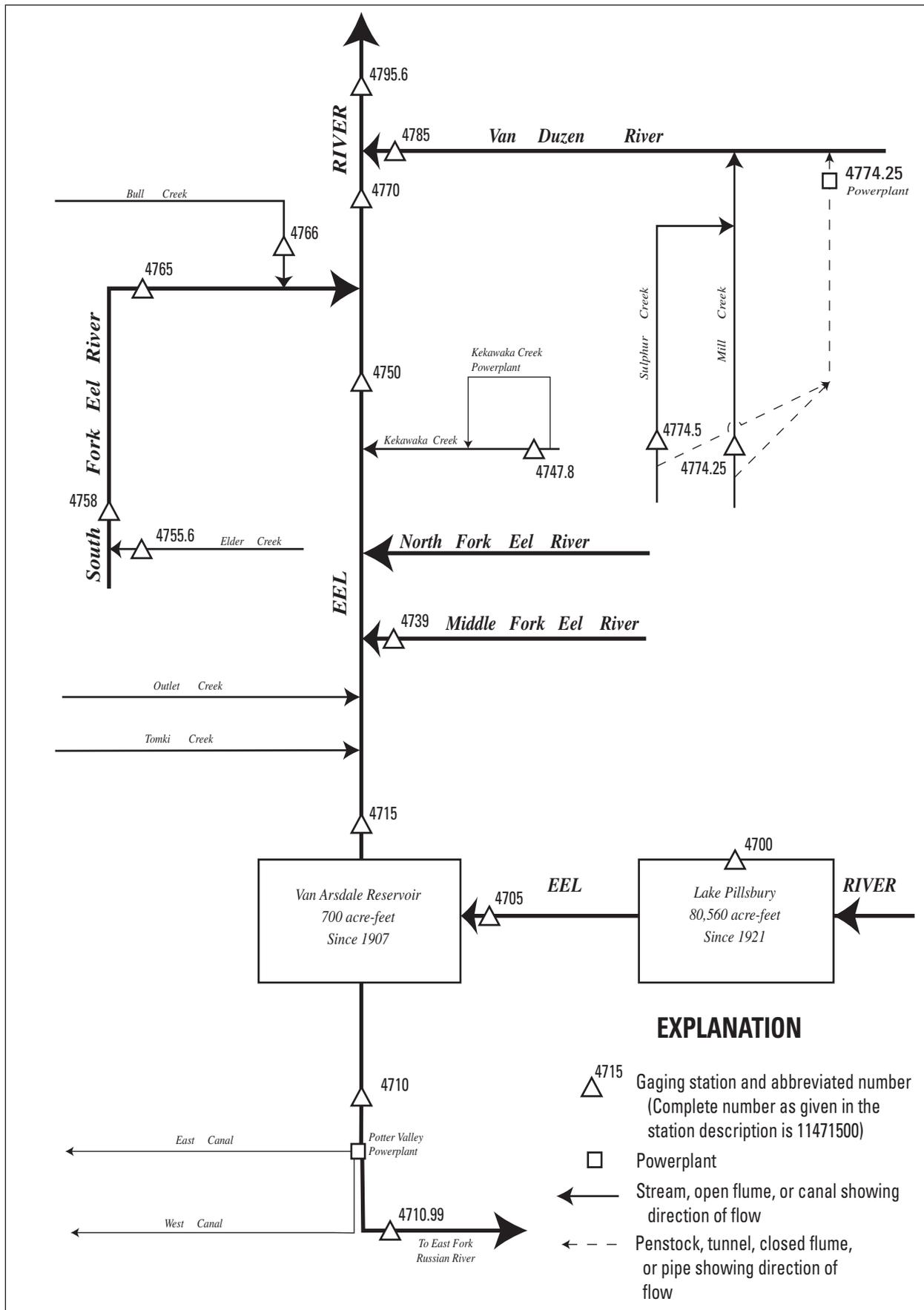


Figure 23. Diversions and storage in Eel River Basin.

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 mi².

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, 80,560 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	1,840	2,463	1,865	13,701	1,890	41,811
1,824	153	1,845	3,391	1,870	17,664	1,895	50,179
1,827	333	1,850	5,710	1,875	22,451	1,900	59,469
1,830	626	1,855	7,831	1,880	28,071	1,905	69,675
1,835	1,371	1,860	10,456	1,885	34,474	1,910	80,643

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45500	34900	20300	16500	20400	50700	78500	76600	70500	63400	59700	50000
2	45300	34500	20100	16400	20500	51500	78700	76500	70100	63200	59600	49800
3	45000	34100	19900	16200	20700	52300	78700	76400	69800	63000	59500	49600
4	44700	33500	19700	16100	21000	57200	78600	76300	69500	62900	59500	49300
5	44400	32900	19600	15900	21300	61800	78500	76200	69200	62900	57600	49100
6	44100	32200	19400	15800	21600	61800	78400	76100	68800	62800	57300	48900
7	43800	31600	19200	15700	21800	61600	78200	76100	68600	61700	57000	48700
8	43400	31000	19000	15700	22000	61500	78000	76000	68300	61600	56700	48400
9	43100	30300	18900	15700	22300	61300	77800	75900	68000	61500	56300	48200
10	42800	29700	18700	16800	22600	61000	77600	75800	67700	61400	56000	48000
11	42500	29100	18600	17700	23100	60800	77300	75600	67500	61400	55700	47800
12	42100	28500	18400	18000	23500	60700	76900	75400	67200	61300	55300	47600
13	41700	27900	18300	18100	23800	60700	76600	75300	66900	61300	55000	47400
14	41300	27200	18500	18100	24200	61100	76400	75100	66700	61200	54700	47200
15	40900	26600	18600	18100	24500	62000	76200	74900	66500	61100	54400	4700
16	40600	26000	18600	18100	24700	62800	76100	74700	66300	61000	53800	46800
17	40200	25400	18500	18000	26000	63600	76100	74500	66000	60900	53300	46500
18	39800	24700	18400	18000	27400	64700	76000	74200	65800	60800	53100	46300
19	39400	24100	18200	17900	28900	65900	76000	74000	65600	60800	52900	46100
20	39100	23600	18100	17900	33700	67600	76100	73700	65400	60700	52600	45900
21	38700	23100	18000	17800	37600	69800	76100	73400	65200	60600	52400	45700
22	38300	22500	17800	17800	40600	71100	76200	73100	64900	60600	52200	45500
23	37900	22200	17700	17900	42300	72400	76200	72800	64700	60500	52000	45200
24	37500	21700	17600	18400	44000	73800	76300	72600	64500	60400	51800	45100
25	37100	21400	17500	18900	46300	76000	76300	72400	64300	60300	51500	4490
26	36500	21100	17400	19400	47800	77200	76400	72100	64100	60200	51300	44700
27	36100	20800	17200	19800	49000	77900	76500	71900	64100	60200	51100	44500
28	35900	20500	17100	20000	49900	78700	76600	71600	64000	60100	50900	44300
29	35700	20600	17000	20100	---	78500	76600	71400	63800	60000	50700	44100
30	35600	20500	16800	20300	---	78300	76600	71100	63600	59900	50400	43900
31	35300	---	16700	20300	---	78200	---	70800	---	59800	50200	---
TOTAL	1254300	802200	569800	551400	831500	2042500	2310500	2302500	1997600	1897500	1684500	1406500
MEAN	40461	26740	18381	17787	29696	65887	77017	74274	66587	61210	54339	46883
MAX	45500	34900	20300	20300	49900	78700	78700	76600	70500	63400	59700	50000
MIN	35300	20500	16700	15700	20400	50700	76000	70800	63600	59800	50200	43900
a	1885.58	1873.11	1868.83	1872.90	1894.86	1908.91	1908.18	1905.55	1902.09	1900.17	1895.03	1891.29
b	-10500	-14800	-3800	3600	29600	28300	-1600	-5800	-7200	-3800	-9600	-6300
CAL YR 2000	TOTAL 19958600	MEAN 54532	MAX 80500	MIN 16700								
WTR YR 2001	TOTAL 17650800	MEAN 48358	MAX 78700	MIN 15700								

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

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 mi².

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 ft³/s, Dec. 22, 1964, gage height, 24.24 ft, from floodmarks, from rating curve extended above 37,000 ft³/s; minimum daily, 0.1 ft³/s, Sept. 8, 1924.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	228	159	111	83	60	436	241	194	114	100	105
2	145	228	154	111	74	60	432	239	193	119	96	104
3	140	249	144	110	74	60	429	239	193	116	95	104
4	145	337	111	110	74	71	428	241	191	99	97	103
5	144	372	120	106	72	624	427	241	188	91	99	103
6	134	374	120	100	72	1310	429	241	187	91	101	103
7	141	389	116	100	71	1220	428	242	166	103	104	103
8	149	403	116	100	74	1150	425	241	141	113	105	104
9	149	401	116	100	67	1060	422	240	149	108	105	104
10	150	399	116	72	56	948	417	240	158	96	105	104
11	170	397	116	52	57	831	414	239	157	88	104	103
12	174	396	116	94	56	730	413	236	155	94	103	103
13	176	396	116	97	56	701	388	235	141	100	103	103
14	177	392	110	101	56	419	357	234	113	105	103	103
15	177	389	102	94	56	105	323	233	111	110	103	103
16	177	387	107	89	56	105	271	243	121	110	102	102
17	177	384	117	89	57	105	258	251	116	103	103	102
18	176	382	117	90	57	106	257	240	114	96	101	102
19	176	379	117	92	58	108	259	233	114	95	103	102
20	176	377	120	93	62	109	259	230	114	95	103	103
21	176	374	123	93	61	124	253	228	114	95	103	103
22	176	270	123	93	62	427	226	221	114	98	104	103
23	176	201	118	93	60	230	225	196	112	103	104	102
24	232	186	113	94	61	242	237	179	111	105	103	102
25	272	171	112	95	62	300	243	165	109	105	103	102
26	374	170	112	95	61	315	240	158	107	100	103	102
27	258	170	111	95	61	324	241	162	107	93	104	102
28	199	170	111	94	60	457	241	166	106	96	104	102
29	177	172	111	94	---	859	241	167	108	100	105	102
30	177	170	111	94	---	874	241	168	111	103	105	103
31	206	---	111	94	---	731	---	172	---	102	105	---
TOTAL	5631	9313	3666	2945	1776	14765	9860	6761	4115	3146	3178	3086
MEAN	182	310	118	95.0	63.4	476	329	218	137	101	103	103
MAX	374	403	159	111	83	1310	436	251	194	119	105	105
MIN	134	170	102	52	56	60	225	158	106	88	95	102
AC-FT	11170	18470	7270	5840	3520	29290	19560	13410	8160	6240	6300	6120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2001, BY WATER YEAR (WY)

MEAN	221	279	732	1281	1442	1066	660	335	201	176	178	208
MAX	361	1851	4945	5687	6624	4536	3357	1184	717	329	334	336
(WY)	1963	1974	1965	1970	1986	1983	1982	1983	1959	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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1923 - 2001

ANNUAL TOTAL	171012	68242		
ANNUAL MEAN	467	187		561
HIGHEST ANNUAL MEAN				1443
LOWEST ANNUAL MEAN				85.4
HIGHEST DAILY MEAN	9230	Feb 14	1310	Mar 6
LOWEST DAILY MEAN	102	Dec 15	52	Jan 11
ANNUAL SEVEN-DAY MINIMUM	111	Dec 25	56	Feb 10
MAXIMUM PEAK FLOW			1340	Mar 6
MAXIMUM PEAK STAGE			7.58	Mar 6
ANNUAL RUNOFF (AC-FT)	339200	135400	406300	24.24
10 PERCENT EXCEEDS	1320	388	1130	
50 PERCENT EXCEEDS	171	114	232	
90 PERCENT EXCEEDS	132	89	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 ft³/s, Oct. 31, 1982; no flow at times in several years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	117	88	57	54	.23	326	137	147	91	92	88
2	160	120	64	56	35	.23	326	135	156	91	90	90
3	173	130	62	55	38	.23	306	132	156	91	89	92
4	147	185	38	56	46	.51	289	135	165	91	87	92
5	142	198	37	54	44	.20	287	135	158	91	89	92
6	141	197	49	45	34	.20	291	134	133	90	88	91
7	141	212	44	44	32	.20	294	134	133	89	88	91
8	147	208	39	58	27	.20	289	133	132	89	91	90
9	147	205	39	61	39	.20	285	133	131	89	94	90
10	141	214	39	117	32	.20	280	132	135	90	93	90
11	139	219	42	99	57	.20	277	131	142	89	93	92
12	171	226	40	78	53	.20	273	129	143	89	94	92
13	174	237	82	67	49	.20	261	130	133	89	94	92
14	173	239	43	67	46	.18	231	121	99	89	94	92
15	170	244	51	56	40	1.0	217	117	94	89	94	92
16	167	245	47	44	39	.24	175	121	97	89	94	92
17	176	256	49	40	88	121	162	141	95	89	92	95
18	186	251	39	38	165	138	159	150	94	89	90	94
19	185	249	36	38	189	139	158	142	93	88	89	92
20	175	247	39	39	189	140	167	140	91	88	88	93
21	166	244	35	39	266	137	166	137	93	88	89	94
22	161	205	41	38	174	195	146	145	93	88	89	95
23	163	139	47	54	.24	253	136	148	89	88	89	93
24	183	132	45	109	.23	244	138	149	90	88	88	95
25	196	111	44	95	.23	318	147	148	92	88	89	98
26	250	109	43	109	.23	307	143	136	91	89	89	101
27	138	109	40	103	.23	299	141	134	91	89	88	99
28	137	109	42	83	.23	318	140	134	91	89	88	98
29	113	161	56	80	---	326	139	132	91	89	88	96
30	108	134	56	74	---	325	138	134	91	89	88	96
31	108	---	56	69	---	326	---	127	---	89	88	---
TOTAL	4930	5652	1472	2022	1737.39	3614.18	6487	4186	3439	2764	2796	2797
MEAN	159	188	47.5	65.2	62.0	117	216	135	115	89.2	90.2	93.2
MAX	250	256	88	117	266	326	326	150	165	91	94	101
MIN	108	109	35	38	.23	.18	136	117	89	88	87	88
AC-FT	9780	11210	2920	4010	3450	7170	12870	8300	6820	5480	5550	5550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2001, BY WATER YEAR (WY)

MEAN	188	195	209	223	240	244	231	213	177	158	154	178
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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1910 - 2001
ANNUAL TOTAL	64114	41896.57	
ANNUAL MEAN	175	115	201
HIGHEST ANNUAL MEAN			305
LOWEST ANNUAL MEAN			84.0
HIGHEST DAILY MEAN	325	326	351
LOWEST DAILY MEAN	35	.18	.00
ANNUAL SEVEN-DAY MINIMUM	40	.20	.00
ANNUAL RUNOFF (AC-FT)	127200	83100	145700
10 PERCENT EXCEEDS	310	218	312
50 PERCENT EXCEEDS	149	94	215
90 PERCENT EXCEEDS	61	39	59

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 ft³/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 and 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	116	87	56	53	.00	325	108	115	64	45	49
2	146	118	63	56	34	.00	320	96	125	70	46	49
3	160	127	61	55	37	.00	277	88	126	60	46	48
4	129	179	36	55	46	.31	242	86	136	63	45	47
5	128	196	36	53	43	.00	245	86	131	57	46	47
6	130	195	48	45	33	.00	259	90	100	50	47	47
7	135	209	43	44	31	.00	274	91	99	46	48	46
8	143	205	38	58	26	.00	253	92	94	46	51	46
9	145	202	38	61	37	.00	241	96	94	48	54	46
10	140	211	38	116	31	.00	243	99	101	48	47	45
11	139	216	41	98	54	.00	251	99	108	47	47	51
12	171	223	39	77	52	.00	246	97	109	47	53	53
13	174	233	81	66	42	.00	238	100	97	47	54	51
14	172	235	42	65	36	.00	197	90	66	46	50	63
15	169	241	50	56	30	.00	184	84	57	47	48	69
16	167	242	46	43	34	22	151	95	60	50	49	72
17	175	253	48	39	84	120	142	115	62	52	48	69
18	185	248	38	36	163	137	140	123	51	51	46	57
19	182	246	35	36	185	137	144	115	53	48	44	60
20	172	244	38	36	180	138	160	110	52	49	41	61
21	163	240	34	37	261	136	151	104	53	55	43	59
22	158	202	40	36	168	193	126	111	52	59	42	59
23	160	137	46	51	.00	251	127	114	51	56	43	58
24	180	130	44	108	.00	242	138	113	50	45	48	65
25	193	110	43	92	.00	315	144	113	51	48	49	71
26	249	108	42	108	.00	304	136	108	51	52	49	69
27	138	108	39	102	.00	295	129	108	54	48	49	65
28	136	108	41	81	.00	313	125	108	59	42	48	71
29	112	159	56	77	---	324	120	110	63	41	48	69
30	107	132	56	72	---	324	111	106	58	42	48	71
31	107	---	56	68	---	325	---	96	---	42	48	---
TOTAL	4803	5573	1443	1983	1660.00	3576.31	5839	3151	2378	1566	1470	1733
MEAN	155	186	46.5	64.0	59.3	115	195	102	79.3	50.5	47.4	57.8
MAX	249	253	87	116	261	325	325	123	136	70	54	72
MIN	107	108	34	36	.00	.00	111	84	50	41	41	45
AC-FT	9530	11050	2860	3930	3290	7090	11580	6250	4720	3110	2920	3440

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

	190	186	184	194	216	242	204	179	145	104	104	148
MEAN	190	186	184	194	216	242	204	179	145	104	104	148
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	46.5	35.8	45.0	51.4	53.7	97.0	59.0	50.5	47.4	57.8
(WY)	1989	1988	2001	1991	1991	1995	1990	1988	1994	2001	2001	2001

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1988 - 2001
ANNUAL TOTAL	60594	35175.31	
ANNUAL MEAN	166	96.4	174
HIGHEST ANNUAL MEAN			248
LOWEST ANNUAL MEAN			82.8
HIGHEST DAILY MEAN	324	Mar 23	335
LOWEST DAILY MEAN	34	Dec 21	.00
ANNUAL SEVEN-DAY MINIMUM	39	Dec 18	.00
ANNUAL RUNOFF (AC-FT)	120200	69770	126400
10 PERCENT EXCEEDS	309	210	319
50 PERCENT EXCEEDS	135	65	136
90 PERCENT EXCEEDS	60	36	64

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 mi².

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 ft³/s, Dec. 22, 1964, gage height, 33.9 ft, from floodmarks; no flow at times.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	10	11	70	71	141	155	112	56	23	5.8	9.0
2	7.7	10	11	70	72	191	128	112	46	18	5.9	9.0
3	7.5	11	11	70	72	61	114	111	44	15	6.2	8.9
4	7.5	12	11	69	71	228	115	112	28	12	6.4	8.8
5	7.0	13	11	69	71	484	114	111	25	11	6.7	9.0
6	7.2	13	11	69	72	1220	113	112	23	8.4	5.9	8.9
7	7.2	12	11	69	72	1190	113	112	22	7.5	5.7	8.5
8	7.1	12	11	69	72	1230	113	113	22	7.5	6.2	8.4
9	7.8	12	11	70	72	653	112	111	23	7.7	6.5	8.2
10	7.4	12	11	70	52	533	113	111	23	7.8	6.2	8.1
11	6.3	11	11	70	52	597	174	112	23	7.8	5.6	8.1
12	8.0	12	11	72	52	563	173	111	23	7.5	5.7	7.7
13	9.9	12	11	72	52	704	113	112	22	7.3	5.6	7.0
14	10	12	11	71	52	621	112	113	22	7.4	5.5	6.1
15	10	11	11	72	52	257	112	114	23	7.7	7.3	5.4
16	9.9	11	11	71	52	219	113	99	22	7.8	8.8	5.4
17	9.9	11	11	71	66	82	111	96	23	8.1	8.5	5.4
18	9.8	11	11	71	55	72	112	94	23	8.1	8.6	5.3
19	9.9	11	11	71	64	72	113	94	23	8.0	8.5	5.3
20	9.9	11	11	71	364	70	112	94	23	7.8	8.5	4.9
21	9.8	11	11	71	407	72	112	94	23	7.7	8.7	5.2
22	10	11	11	71	231	83	111	73	23	7.4	8.6	5.5
23	9.9	11	11	70	114	83	111	53	24	7.0	8.6	6.1
24	9.7	11	11	71	134	83	113	32	24	6.8	8.3	5.9
25	9.9	11	11	71	259	83	112	34	24	6.9	9.5	5.8
26	9.8	11	11	71	269	62	112	34	24	6.6	9.5	7.4
27	9.8	10	11	71	299	68	112	42	24	6.3	9.5	7.1
28	9.9	11	11	71	236	120	111	39	24	5.9	9.4	6.3
29	9.9	10	11	70	---	575	112	43	23	5.6	9.5	5.9
30	10	8.9	11	71	---	621	112	41	23	5.7	9.4	5.6
31	9.9	---	11	72	---	492	---	56	---	5.5	9.5	---
TOTAL	276.4	335.9	341	2187	3507	11530	3553	2697	775	266.8	234.6	208.2
MEAN	8.92	11.2	11.0	70.5	125	372	118	87.0	25.8	8.61	7.57	6.94
MAX	10	13	11	72	407	1230	174	114	56	23	9.5	9.0
MIN	6.3	8.9	11	69	52	61	111	32	22	5.5	5.5	4.9
AC-FT	548	666	676	4340	6960	22870	7050	5350	1540	529	465	413

EEL RIVER BASIN

11471500 EEL RIVER AT VAN ARSDALE DAM, NEAR POTTER VALLEY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.1	125	696	1385	1539	1053	550	178	28.8	5.72	5.71	5.46
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1923 - 2001	
ANNUAL TOTAL	132700.9		25911.9			
ANNUAL MEAN	363		71.0		456	
HIGHEST ANNUAL MEAN					1546	
LOWEST ANNUAL MEAN					3.46	
HIGHEST DAILY MEAN	9410	Feb 14	1230	Mar 8	49500	Dec 22 1964
LOWEST DAILY MEAN	6.3	Oct 11	4.9	Sep 20	.00	Sep 13 1953
ANNUAL SEVEN-DAY MINIMUM	7.1	Oct 5	5.3	Sep 15	.16	Dec 5 1965
MAXIMUM PEAK FLOW			1870	Mar 6	64100	Dec 22 1964
MAXIMUM PEAK STAGE			12.08	Mar 6	33.90	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	263200		51400		330600	
10 PERCENT EXCEEDS	1270		113		1090	
50 PERCENT EXCEEDS	30		18		9.5	
90 PERCENT EXCEEDS	8.9		6.8		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 mi².

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, 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 ft³/s, Jan. 1, 1997, gage height, 31.46 ft, from rating curve extended above 52,000 ft³/s, maximum gage height, 32.86 ft, Jan. 4, 1966; minimum daily, 0.39 ft³/s, Sept. 1, 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 25,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0030	13,000	13.04

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	110	290	147	350	1270	1890	1010	137	58	10	4.5
2	10	87	208	140	346	1350	1620	913	125	49	9.4	4.4
3	9.8	79	170	133	462	1290	1370	821	118	43	8.5	4.1
4	9.7	87	149	127	758	4160	1190	775	113	38	8.2	3.9
5	9.4	78	136	123	919	6150	1060	778	107	34	8.1	3.8
6	9.4	69	128	119	738	2880	987	757	101	31	7.8	3.8
7	9.4	64	124	117	571	2390	998	761	96	29	7.6	3.7
8	9.2	60	120	156	442	2280	904	775	90	e27	7.6	3.5
9	9.2	57	125	340	444	2040	869	784	84	e25	7.3	3.5
10	10	56	122	906	562	1700	852	738	79	e24	7.0	3.5
11	12	55	121	1300	728	1470	833	693	74	23	6.6	6.9
12	13	53	133	547	657	e1360	831	660	72	22	6.1	6.5
13	14	52	131	337	537	e1420	789	604	70	21	5.7	5.5
14	14	53	595	274	521	1520	759	553	66	20	5.6	4.9
15	14	53	706	229	457	1430	741	524	62	20	5.5	4.6
16	14	53	485	205	483	1280	729	614	57	20	5.3	4.6
17	13	52	294	187	988	1200	795	537	52	19	5.2	4.6
18	13	51	234	176	1660	1660	895	488	49	19	5.1	4.5
19	13	49	194	176	1390	1920	998	456	45	18	5.1	4.5
20	13	e51	180	174	3810	2430	931	425	43	18	5.0	4.3
21	13	48	169	175	4120	2720	962	400	40	17	4.9	4.1
22	13	51	371	176	4060	3050	1050	377	38	17	4.9	3.9
23	14	51	403	268	2800	2840	1010	349	35	16	4.9	3.8
24	13	54	327	1210	2400	2650	1050	320	33	16	5.0	3.9
25	14	56	285	1110	2380	4310	1170	295	32	15	4.8	4.6
26	16	60	236	1190	1910	2810	1290	269	34	14	4.9	4.8
27	18	60	205	854	1620	2130	1240	242	47	13	5.1	5.1
28	25	61	187	563	1450	2510	1150	218	176	12	5.2	6.0
29	87	247	171	564	---	2430	1010	198	118	12	5.1	6.3
30	153	654	163	520	---	2090	934	178	75	11	4.8	6.3
31	150	---	154	389	---	1950	---	156	---	11	4.7	---
TOTAL	745.1	2611	7316	12932	37563	70690	30907	16668	2268	712	191.0	138.4
MEAN	24.0	87.0	236	417	1342	2280	1030	538	75.6	23.0	6.16	4.61
MAX	153	654	706	1300	4120	6150	1890	1010	176	58	10	6.9
MIN	9.2	48	120	117	346	1200	729	156	32	11	4.7	3.5
AC-FT	1480	5180	14510	25650	74510	140200	61300	33060	4500	1410	379	275

e Estimated.

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	94.5	1117	2367	4279	3588	3441	2051	1242	414	83.6	25.3	22.7
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	75.6	13.2	4.33	1.04
(WY)	1995	1996	1977	1977	1977	1977	1977	1977	2001	1977	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1966 - 2001	
ANNUAL TOTAL	446117.1		182741.5		1552	
ANNUAL MEAN	1219		501		121	
HIGHEST ANNUAL MEAN					3351	
LOWEST ANNUAL MEAN					1977	
HIGHEST DAILY MEAN	25100	Feb 14	6150	Mar 5	81200	Jan 1 1997
LOWEST DAILY MEAN	9.2	Oct 8	3.5	Sep 8	.39	Sep 1 1994
ANNUAL SEVEN-DAY MINIMUM	9.4	Oct 3	3.7	Sep 4	.42	Aug 28 1994
MAXIMUM PEAK FLOW			13000	Mar 5	135000	Jan 1 1997
MAXIMUM PEAK STAGE			13.04	Mar 5	32.86	Jan 4 1966
ANNUAL RUNOFF (AC-FT)	884900		362500		1125000	
10 PERCENT EXCEEDS	3870		1420		3830	
50 PERCENT EXCEEDS	154		124		342	
90 PERCENT EXCEEDS	12		5.1		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 mi².

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 ft³/s, Dec. 31, 1996, gage height, 11.03 ft.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	2.8	4.5	3.3	3.8	12	3.5	3.2	1.2	.50	.00	.00
2	.40	2.3	4.6	3.1	3.9	8.2	3.5	3.1	1.3	.40	.00	.00
3	.40	1.9	3.8	3.0	4.1	6.0	3.5	6.2	1.4	.30	.00	.00
4	.40	1.8	3.3	2.8	3.9	225	3.5	5.9	1.4	.20	.00	.00
5	.30	1.7	3.3	2.7	3.7	199	3.5	5.6	1.3	.20	.00	.00
6	.30	1.6	3.2	2.6	3.6	57	3.5	5.3	1.3	.20	.00	.00
7	.30	1.5	3.1	2.6	3.5	18	3.5	4.9	1.1	.10	.00	.00
8	.20	1.6	3.0	5.8	3.5	9.3	4.1	4.6	1.0	.10	.00	.00
9	.40	1.6	2.9	e15	14	6.9	4.2	4.3	1.0	.10	.00	.00
10	1.3	1.6	2.8	e22	25	5.9	4.2	4.1	1.0	.10	.00	.00
11	1.1	1.5	2.9	e36	30	5.4	4.2	3.9	1.0	.10	.00	.00
12	.90	1.5	3.8	e25	17	4.9	4.2	3.6	1.0	.10	.00	.00
13	.80	1.7	6.5	e17	3.5	4.8	3.9	3.5	.90	.10	.00	.00
14	.80	2.2	12	e13	3.5	5.0	3.5	3.4	.80	.10	.00	.00
15	.80	2.2	3.7	e9.0	3.5	5.0	3.5	3.7	.80	.10	.00	.00
16	.80	2.3	3.4	e7.1	3.8	4.9	3.4	3.8	.60	.10	.00	.00
17	.70	2.2	3.4	e5.9	56	4.8	3.6	3.5	.50	.10	.00	.00
18	.70	2.1	4.5	e4.7	45	4.8	3.5	3.3	.40	.10	.00	.00
19	.70	2.0	5.6	e4.0	12	4.6	3.6	3.0	.40	.10	.00	.00
20	1.2	1.9	4.9	3.5	205	5.0	4.0	2.7	.30	.10	.00	.00
21	1.3	2.0	4.5	5.1	184	4.4	4.6	2.4	.30	.10	.00	.00
22	.80	2.1	7.9	5.4	192	4.4	4.4	2.1	.30	.10	.00	.00
23	.60	2.1	8.8	15	87	3.7	4.3	1.9	.40	.10	.00	.00
24	.70	2.4	8.5	5.2	70	3.6	4.2	1.8	.90	.10	.00	.00
25	1.0	2.2	7.1	9.6	104	5.6	4.2	1.7	2.2	.00	.00	.00
26	2.1	2.1	6.0	6.9	51	15	4.2	1.6	1.7	.00	.00	.00
27	1.6	2.2	5.2	4.6	20	4.3	4.2	1.6	1.1	.00	.00	.00
28	4.1	2.2	4.6	3.4	9.2	4.3	3.9	1.8	.90	.00	.00	.00
29	6.9	9.1	4.2	8.6	---	4.3	3.7	1.7	.70	.00	.00	.00
30	11	3.5	3.8	4.5	---	3.6	3.6	1.6	.60	.00	.00	.00
31	4.7	---	3.5	3.9	---	3.5	---	1.3	---	.00	.00	---
TOTAL	47.70	67.9	149.3	260.3	1165.5	653.2	115.7	101.1	27.80	3.60	0.00	0.00
MEAN	1.54	2.26	4.82	8.40	41.6	21.1	3.86	3.26	.93	.12	.000	.000
MAX	11	9.1	12	36	205	225	4.6	6.2	2.2	.50	.00	.00
MIN	.20	1.5	2.8	2.6	3.5	3.5	3.4	1.3	.30	.00	.00	.00
AC-FT	95	135	296	516	2310	1300	229	201	55	7.1	.00	.00

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

MEAN	1.10	6.63	38.2	97.5	79.4	46.0	11.5	7.87	4.71	1.82	.70	.49
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	3.26	.93	.12	.000	.000
(WY)	1995	1991	1991	1991	1991	1994	1991	2001	2001	2001	2001	2001

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1990 - 2001
ANNUAL TOTAL	6208.50	2592.10	
ANNUAL MEAN	17.0	7.10	25.1
HIGHEST ANNUAL MEAN			53.5
LOWEST ANNUAL MEAN			6.47
HIGHEST DAILY MEAN	682	Feb 14	225
LOWEST DAILY MEAN	.10	Aug 31	.00
ANNUAL SEVEN-DAY MINIMUM	.17	Sep 18	.00
MAXIMUM PEAK FLOW			610
MAXIMUM PEAK STAGE			5.22
ANNUAL RUNOFF (AC-FT)	12310	5140	18200
10 PERCENT EXCEEDS	39	8.7	46
50 PERCENT EXCEEDS	3.0	2.2	3.2
90 PERCENT EXCEEDS	.30	.00	.30

e Estimated.

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 mi².

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. 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 ft³/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 ft³/s, on basis of slope-area measurement at gage height 72.5 ft; minimum daily, 1.2 ft³/s, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 41,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0545	36,700	23.15

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	567	1490	414	1720	4140	3130	1470	275	193	19	11
2	24	413	820	391	1570	3930	2690	1530	250	155	18	11
3	25	344	581	374	1660	4110	2270	1370	240	134	18	12
4	25	302	473	354	1940	10100	1960	1220	237	119	16	13
5	25	289	404	339	2130	27000	1760	1150	230	108	15	13
6	25	254	361	323	1960	13700	1630	1150	220	94	15	12
7	23	252	332	315	1650	10100	1670	1100	206	85	14	12
8	22	308	318	380	1410	8060	1650	1100	195	79	14	12
9	23	229	309	1100	1400	6740	1570	1110	182	72	14	11
10	29	211	308	3140	2030	5610	1550	1100	171	66	13	11
11	37	201	313	7120	2730	4690	1480	1030	159	60	12	11
12	45	203	342	3540	3180	4080	1450	959	154	56	12	12
13	53	210	448	2050	2710	3690	1390	912	148	51	12	12
14	64	210	1910	1420	2610	3640	1320	842	143	47	11	13
15	78	206	2620	1080	2430	3420	1260	787	138	44	11	14
16	75	204	2080	860	2350	2870	1230	792	132	41	10	16
17	70	194	1300	729	3610	2590	1250	910	126	39	9.6	18
18	68	189	887	640	9090	2620	1420	782	119	39	8.8	16
19	71	184	695	577	6260	3040	1600	696	113	39	8.6	14
20	79	164	581	546	15700	3460	1770	632	107	37	9.4	13
21	83	160	525	523	19700	3980	2110	589	101	35	8.9	12
22	73	161	674	502	18200	4290	2150	545	96	35	8.1	12
23	64	164	1370	554	14800	4390	2000	508	92	34	7.9	11
24	62	172	1210	3240	10900	4020	1840	469	89	34	7.6	10
25	76	175	1020	4360	12800	6090	1860	423	88	32	8.0	9.8
26	89	179	820	5980	10200	5210	1960	380	94	31	11	9.7
27	100	186	681	4940	7150	3660	1980	349	110	30	13	9.4
28	186	193	588	3300	5270	3240	1870	326	133	29	12	9.1
29	331	310	525	2700	---	3840	1740	307	217	28	12	9.5
30	707	1800	476	2640	---	3580	1530	300	269	24	12	10
31	817	---	442	2060	---	3390	---	293	---	22	12	---
TOTAL	3473	8634	24903	56491	167160	173280	53090	25131	4834	1892	372.9	359.5
MEAN	112	288	803	1822	5970	5590	1770	811	161	61.0	12.0	12.0
MAX	817	1800	2620	7120	19700	27000	3130	1530	275	193	19	18
MIN	22	160	308	315	1400	2590	1230	293	88	22	7.6	9.1
AC-FT	6890	17130	49400	112000	331600	343700	105300	49850	9590	3750	740	713

11475000 EEL RIVER AT FORT SEWARD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	363	2842	8485	13140	12850	9773	5154	2283	710	147	53.4	53.5
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1955 - 2001	
ANNUAL TOTAL	1324726		519620.4			
ANNUAL MEAN	3619		1424		4620	
HIGHEST ANNUAL MEAN					10350	
LOWEST ANNUAL MEAN					260	
HIGHEST DAILY MEAN	75900	Feb 14	27000	Mar 5	434000	Dec 22 1964
LOWEST DAILY MEAN	17	Aug 20	7.6	Aug 24	1.2	Sep 13 1977
ANNUAL SEVEN-DAY MINIMUM	18	Aug 17	8.4	Aug 19	1.4	Sep 7 1977
MAXIMUM PEAK FLOW			36700	Mar 5	561000	Dec 22 1964
MAXIMUM PEAK STAGE			23.15	Mar 5	82.60	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	2628000		1031000		3347000	
10 PERCENT EXCEEDS	12600		3650		11700	
50 PERCENT EXCEEDS	538		315		718	
90 PERCENT EXCEEDS	24		12		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 mi².

PERIOD OF RECORD.—October 1967 to current year.

CHEMICAL DATA: Water years 1968 to March 1996.

SEDIMENT DATA: Water years 1969 to March 1996.

WATER TEMPERATURE: Water years 1968–79.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 1,391.08 ft above sea level.

REMARKS.—Records good. 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 ft³/s, Dec. 30, 1996, gage height, 9.88 ft, from rating curve extended above 700 ft³/s, on basis of slope-area measurements at gage heights 9.40 and 11.41 ft; minimum daily, 0.27 ft³/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 ft³/s, by slope-area measurement of peak flow.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	1700	326	5.74

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	2.9	5.9	3.5	12	48	8.9	5.2	2.4	2.1	.94	.71
2	.63	2.3	4.3	3.3	11	45	8.6	5.0	2.3	1.9	.89	.71
3	.63	2.0	3.6	3.1	11	40	8.3	4.8	2.4	1.8	.88	.67
4	.62	1.8	3.1	3.0	11	85	7.9	4.6	2.4	1.7	.90	.65
5	.61	1.7	2.7	2.8	10	125	7.6	4.5	2.3	1.6	.93	.65
6	.61	1.6	2.5	2.7	9.1	91	7.9	4.3	2.3	1.6	.89	.63
7	.60	1.5	2.3	2.6	7.8	72	7.7	4.2	2.3	1.6	.87	.61
8	.58	1.5	2.1	6.8	7.0	58	7.2	4.1	2.1	1.6	.80	.59
9	1.0	1.5	2.0	8.5	11	48	6.9	4.1	2.1	1.5	.75	.61
10	1.3	1.5	1.9	17	10	40	6.6	3.9	2.0	1.5	.75	.64
11	1.0	1.5	2.5	26	13	34	6.5	3.9	2.1	1.5	.75	.67
12	.92	1.4	2.6	19	13	29	6.2	3.8	2.1	1.5	.72	.70
13	.92	2.0	4.0	14	13	26	6.0	3.7	2.0	1.4	.74	.65
14	.92	1.9	17	11	13	23	5.8	3.6	2.0	1.4	.73	.63
15	.87	1.9	13	9.9	12	21	5.6	3.6	1.9	1.4	.70	.60
16	.84	1.9	9.7	8.8	14	19	5.8	3.6	1.8	1.4	.74	.58
17	.83	1.8	7.4	7.8	26	17	6.2	3.5	1.7	1.3	.75	.58
18	.81	1.6	6.0	7.0	43	16	5.8	3.4	1.7	1.3	.71	.58
19	.83	1.5	5.1	6.4	48	14	5.7	3.2	1.7	1.3	.72	.56
20	1.2	1.5	4.4	5.9	209	13	7.7	3.1	1.7	1.3	.70	.55
21	1.2	2.0	4.6	5.5	216	12	7.9	3.0	1.6	1.3	.70	.53
22	1.1	2.0	8.1	5.1	154	12	7.6	2.9	1.6	1.2	.75	.52
23	.99	2.1	7.8	7.9	104	11	7.3	2.8	1.5	1.2	.92	.51
24	.92	2.2	7.6	11	85	14	6.9	2.7	1.5	1.1	.97	.51
25	1.2	2.1	6.7	16	112	17	6.6	2.7	1.6	1.0	.91	.63
26	1.6	2.0	6.0	29	96	13	6.2	2.7	2.2	.99	.84	.63
27	1.3	2.0	5.4	26	74	12	6.0	2.7	4.4	.95	.77	.65
28	4.9	2.0	4.8	20	58	11	5.9	2.7	3.7	.92	.72	.63
29	5.6	7.2	4.4	19	---	10	5.6	2.6	2.7	.90	.70	.62
30	9.2	10	4.0	16	---	9.7	5.4	2.5	2.3	.93	.71	.59
31	4.2	---	3.8	14	---	9.3	---	2.4	---	.96	.71	---
TOTAL	48.58	68.9	165.3	338.6	1402.9	995.0	204.3	109.8	64.4	42.15	24.56	18.39
MEAN	1.57	2.30	5.33	10.9	50.1	32.1	6.81	3.54	2.15	1.36	.79	.61
MAX	9.2	10	17	29	216	125	8.9	5.2	4.4	2.1	.97	.71
MIN	.58	1.4	1.9	2.6	7.0	9.3	5.4	2.4	1.5	.90	.70	.51
AC-FT	96	137	328	672	2780	1970	405	218	128	84	49	36

11475560 ELDER CREEK NEAR BRANSCOMB, CA—Continued
 (Hydrologic-Benchmark Station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.16	18.8	47.2	72.0	63.1	54.5	25.2	11.4	5.75	2.36	1.31	1.08
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1968 - 2001	
ANNUAL TOTAL	7808.02		3482.88			
ANNUAL MEAN	21.3		9.54		25.3	
HIGHEST ANNUAL MEAN					54.4	
LOWEST ANNUAL MEAN					2.12	
HIGHEST DAILY MEAN	459	Feb 14	216	Feb 21	1620	Jan 1 1997
LOWEST DAILY MEAN	.58	Oct 8	.51	Sep 23	.27	Sep 10 1981
ANNUAL SEVEN-DAY MINIMUM	.61	Oct 2	.54	Sep 18	.27	Sep 9 1981
MAXIMUM PEAK FLOW			326	Feb 20	2480	Dec 30 1996
MAXIMUM PEAK STAGE			5.74	Feb 20	9.88	Dec 30 1996
ANNUAL RUNOFF (AC-FT)	15490		6910		18300	
10 PERCENT EXCEEDS	69		17		66	
50 PERCENT EXCEEDS	4.4		2.6		5.3	
90 PERCENT EXCEEDS	.87		.70		.92	

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 mi².

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. No regulation or diversion upstream from station. See schematic diagram of [Eel River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 72,700 ft³/s, Jan. 4, 1966, gage height, 27.4 ft, from floodmarks, present datum, from rating curve extended above 21,000 ft³/s, on basis of slope-area measurement at gage height 28.13 ft; minimum daily, 7.3 ft³/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 ft³/s, by slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 8,500 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	1930	5,630	8.02

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	120	229	97	358	997	312	170	58	53	18	14
2	15	85	154	92	322	1020	299	161	56	48	18	13
3	15	68	121	85	305	883	289	155	54	45	18	13
4	16	58	100	80	277	2570	277	148	54	42	18	12
5	16	51	87	77	251	2930	264	141	54	39	19	12
6	15	46	78	74	231	1820	271	136	54	36	19	12
7	16	42	71	72	212	1350	287	132	52	33	18	12
8	16	41	66	182	197	1090	265	125	51	31	17	11
9	18	40	63	356	252	934	253	120	49	29	17	11
10	27	39	60	810	442	825	247	116	48	28	16	12
11	28	38	65	998	603	728	237	112	47	27	17	12
12	26	37	95	547	595	653	225	108	48	27	16	12
13	27	45	117	387	591	589	214	108	46	27	16	12
14	26	57	694	304	579	533	206	106	45	27	16	12
15	25	59	540	256	533	486	199	108	43	26	16	12
16	24	62	340	225	588	456	196	112	41	25	16	12
17	23	58	233	199	1040	427	221	107	39	24	15	12
18	23	53	179	180	1470	403	210	99	37	23	15	11
19	23	49	148	167	1200	380	211	95	36	23	15	11
20	27	46	128	157	4100	360	250	90	35	22	14	11
21	33	48	124	147	3770	341	414	84	34	22	14	11
22	31	56	302	138	3960	324	330	79	33	22	14	11
23	32	63	271	155	2710	311	276	76	33	22	16	11
24	29	72	242	516	2220	363	252	72	33	21	18	11
25	30	72	203	558	3180	737	232	69	34	21	17	11
26	39	66	171	1150	2200	523	215	68	41	20	16	12
27	41	63	150	931	1580	437	203	68	87	20	15	12
28	92	63	133	643	1210	404	199	68	123	19	14	11
29	204	199	121	606	---	375	189	68	90	18	15	11
30	410	404	111	504	---	350	179	65	61	18	14	11
31	219	---	104	410	---	327	---	62	---	19	14	---
TOTAL	1581	2200	5500	11103	34976	23926	7422	3228	1516	857	501	351
MEAN	51.0	73.3	177	358	1249	772	247	104	50.5	27.6	16.2	11.7
MAX	410	404	694	1150	4100	2930	414	170	123	53	19	14
MIN	15	37	60	72	197	311	179	62	33	18	14	11
AC-FT	3140	4360	10910	22020	69370	47460	14720	6400	3010	1700	994	696

11475800 SOUTH FORK EEL RIVER AT LEGGETT, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	68.9	726	1519	2377	2198	1811	795	286	127	49.0	28.9	29.2
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 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1966 - 2001	
ANNUAL TOTAL	229042		93161			
ANNUAL MEAN	626		255		789	
HIGHEST ANNUAL MEAN					1778	
LOWEST ANNUAL MEAN					69.5	
HIGHEST DAILY MEAN	10200	Feb 14	4100	Feb 20	49800	Jan 4 1966
LOWEST DAILY MEAN	15	Sep 25	11	Sep 8	7.3	Aug 4 1977
ANNUAL SEVEN-DAY MINIMUM	15	Sep 25	11	Sep 18	7.5	Jul 31 1977
MAXIMUM PEAK FLOW			5630	Feb 20	72700	Jan 4 1966
MAXIMUM PEAK STAGE			8.02	Feb 20	27.40	Jan 4 1966
ANNUAL RUNOFF (AC-FT)	454300		184800		571500	
10 PERCENT EXCEEDS	2320		588		2260	
50 PERCENT EXCEEDS	124		72		153	
90 PERCENT EXCEEDS	21		15		22	

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 mi².

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 ft³/s, Dec. 22, 1964, gage height, 46.0 ft, from floodmarks, from rating curve extended above 53,000 ft³/s, on basis of slope-area measurement at gage height 42.7 ft; minimum observed, 9 ft³/s, Oct. 17, 1944.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 22	0745	13,800	14.78

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	334	628	207	773	2360	672	356	111	115	26	20
2	28	210	405	192	695	2170	645	334	105	104	25	19
3	27	156	294	180	646	1990	617	318	101	93	25	19
4	27	130	230	169	601	4680	577	301	99	84	24	19
5	26	112	189	160	547	8000	542	285	98	77	24	18
6	27	98	164	153	501	4710	546	272	98	41	24	18
7	27	87	148	148	455	3420	602	263	95	35	25	18
8	27	82	137	273	414	2600	557	251	93	37	23	18
9	28	78	129	592	600	2110	525	239	89	38	21	18
10	31	79	123	1350	957	1790	497	228	87	38	22	18
11	42	76	127	2290	1420	1550	478	220	85	39	22	18
12	46	73	175	1330	1530	1360	452	212	85	42	22	19
13	44	86	238	899	1320	1230	422	208	82	45	22	18
14	41	119	1280	708	1220	1130	397	204	79	45	22	119
15	40	127	1150	587	1090	1050	385	211	76	43	22	100
16	38	128	854	503	1030	992	380	225	73	41	21	47
17	37	125	600	437	1650	935	502	211	70	40	21	24
18	36	115	452	385	3590	887	471	195	66	39	21	23
19	36	105	361	348	2660	838	475	183	63	38	20	31
20	39	97	304	321	7300	793	660	174	59	37	20	19
21	46	100	279	296	9850	755	891	164	36	37	20	18
22	49	110	469	272	12400	714	827	155	31	36	19	17
23	48	112	644	351	8120	682	675	146	38	35	20	16
24	45	131	546	812	5590	741	583	140	44	34	20	17
25	48	140	478	1180	7250	1440	526	135	45	31	19	17
26	58	136	404	2840	5720	1180	482	130	58	30	20	17
27	68	129	347	2240	4080	956	441	129	102	30	21	17
28	113	124	304	1450	3020	879	422	130	132	29	21	17
29	390	396	269	1220	---	820	405	127	132	29	21	16
30	845	797	243	1100	---	765	380	122	128	28	20	16
31	648	---	223	892	---	714	---	117	---	27	20	---
TOTAL	3033	4592	12194	23885	85029	54241	16034	6385	2460	1417	673	771
MEAN	97.8	153	393	770	3037	1750	534	206	82.0	45.7	21.7	25.7
MAX	845	797	1280	2840	12400	8000	891	356	132	115	26	119
MIN	26	73	123	148	414	682	380	117	31	27	19	16
AC-FT	6020	9110	24190	47380	168700	107600	31800	12660	4880	2810	1330	1530

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	257	1444	3970	5394	4842	3593	1817	688	302	112	60.2	59.5
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	25.7
(WY)	1940	1940	1977	1977	1977	1988	1977	1977	1977	1977	1977	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	470220		210714			
ANNUAL MEAN	1285		577		1867	
HIGHEST ANNUAL MEAN					4393	
LOWEST ANNUAL MEAN					156	
HIGHEST DAILY MEAN	30800	Feb 14	12400	Feb 22	161000	Dec 22 1964
LOWEST DAILY MEAN	26	Oct 5	16	Sep 23	10	Aug 30 1964
ANNUAL SEVEN-DAY MINIMUM	27	Oct 2	17	Sep 23	14	Jul 30 1977
MAXIMUM PEAK FLOW			13800		199000	
MAXIMUM PEAK STAGE			14.78		46.00	
ANNUAL RUNOFF (AC-FT)	932700		418000		1352000	
10 PERCENT EXCEEDS	4220		1220		4850	
50 PERCENT EXCEEDS	218		135		342	
90 PERCENT EXCEEDS	33		21		44	

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 mi².

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 ft³/s, Dec. 31, 1996, gage height, 12.84 ft, maximum gage height, 20.6 ft³/s, Dec. 22, 1964, site and datum then in use; minimum daily, 0.25 ft³/s, Sept. 27, 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,700 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 22	0330	970	5.29

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	12	27	20	83	226	47	29	10	6.2	1.9	.76
2	.42	8.8	20	18	77	205	48	28	10	5.5	1.8	.74
3	.50	7.4	16	17	69	173	44	27	10	5.1	1.8	.72
4	.49	6.4	13	16	63	451	42	26	10	4.8	1.7	.71
5	.39	5.8	12	15	58	476	40	25	10	4.6	1.7	.70
6	.41	5.2	10	15	55	361	43	24	9.6	4.4	1.6	.71
7	.38	4.9	9.3	14	50	297	42	23	9.1	4.2	1.5	.65
8	.37	4.7	8.6	29	47	252	39	22	8.9	3.9	1.5	.56
9	.49	5.1	8.0	42	82	217	38	21	8.9	3.7	1.4	.52
10	.91	5.1	7.6	115	90	184	36	21	8.8	3.5	1.3	.52
11	1.1	4.7	10	187	108	157	36	20	8.8	3.5	1.3	.63
12	1.0	4.5	11	109	104	136	34	19	8.7	3.4	1.2	.77
13	1.0	5.8	27	83	101	117	32	19	8.2	3.3	1.2	.73
14	.94	8.3	63	69	96	104	31	19	7.8	3.3	1.2	.62
15	.95	7.2	44	60	92	95	30	22	6.8	3.2	1.2	.56
16	.99	7.4	33	53	93	86	33	19	6.6	3.2	1.2	.55
17	.97	6.6	28	47	217	79	39	18	6.3	3.1	1.1	.53
18	.96	6.1	23	43	336	73	34	17	6.2	3.0	1.0	.50
19	.95	5.8	20	39	256	68	32	16	5.8	2.9	1.0	.49
20	1.4	5.4	18	36	475	64	52	15	5.4	2.9	1.0	.48
21	2.0	6.5	35	34	590	59	51	15	5.2	2.9	.99	.43
22	1.7	6.3	59	31	748	56	44	14	5.2	2.8	1.0	.38
23	1.6	6.3	50	42	523	53	41	13	5.4	2.6	1.2	.37
24	1.5	8.0	45	43	443	79	39	13	5.5	2.5	1.5	.36
25	4.6	7.0	39	113	467	90	37	12	5.5	2.3	1.3	.40
26	14	6.3	34	253	388	68	35	12	8.7	2.2	1.1	.47
27	4.9	6.2	30	175	320	62	34	12	27	2.1	1.0	.57
28	16	6.0	27	137	267	59	35	12	12	2.0	.94	.54
29	26	54	25	125	---	55	32	11	8.3	2.0	.85	.50
30	58	47	23	106	---	52	31	11	6.9	2.0	.84	.46
31	18	---	21	93	---	49	---	10	---	2.0	.81	---
TOTAL	163.34	280.8	796.5	2179	6298	4503	1151	565	255.6	103.1	39.13	16.93
MEAN	5.27	9.36	25.7	70.3	225	145	38.4	18.2	8.52	3.33	1.26	.56
MAX	58	54	63	253	748	476	52	29	27	6.2	1.9	.77
MIN	.37	4.5	7.6	14	47	49	30	10	5.2	2.0	.81	.36
AC-FT	324	557	1580	4320	12490	8930	2280	1120	507	204	78	34

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

MEAN	12.5	107	253	327	307	236	117	40.1	16.9	6.51	3.36	2.81
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1961 - 2001

ANNUAL TOTAL	36558.00	16351.40	
ANNUAL MEAN	99.9	44.8	118
HIGHEST ANNUAL MEAN			287
LOWEST ANNUAL MEAN			9.72
HIGHEST DAILY MEAN	2040	Feb 14	748
LOWEST DAILY MEAN	.37	Oct 8	.36
ANNUAL SEVEN-DAY MINIMUM	.42	Oct 2	.41
MAXIMUM PEAK FLOW			970
MAXIMUM PEAK STAGE			5.29
ANNUAL RUNOFF (AC-FT)	72510	32430	85710
10 PERCENT EXCEEDS	377	104	315
50 PERCENT EXCEEDS	12	11	22
90 PERCENT EXCEEDS	.99	.74	1.9

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 mi².

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.

SEDIMENT DATA: Water years 1955–95, 1998.

SPECIFIC CONDUCTANCE: Water years 1979–81.

WATER TEMPERATURE: Water years 1958–82.

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 except for estimated daily discharges, which are fair. 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 ft³/s, Dec. 23, 1964, gage height, 72.0 ft, from floodmarks, from rating curve extended above 220,000 ft³/s, on basis of maximum flow at upstream stations; minimum observed, 10 ft³/s, Aug. 12–14, 1924.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 72,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	1230	59,000	24.97

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	1620	3210	941	3620	9040	4660	2320	510	502	83	52
2	66	1090	2040	877	3170	8000	4420	2280	486	431	74	52
3	68	793	1400	823	2960	8020	3850	2170	456	368	68	52
4	68	623	1100	773	3050	12700	3430	1980	431	326	67	49
5	68	526	924	728	3250	e49900	3120	1840	425	292	63	47
6	68	469	791	695	3200	e23400	2960	1770	416	269	59	47
7	68	421	700	664	2810	17300	3000	1730	403	239	55	45
8	68	404	635	853	2410	13600	3050	1670	382	206	53	47
9	73	454	593	1340	2540	11500	2900	1650	361	184	52	46
10	81	374	560	4350	4080	9680	2770	1640	350	171	51	47
11	89	332	556	10700	5120	8180	2720	1580	338	161	49	48
12	87	312	634	8170	6410	7100	2600	1500	e323	153	48	49
13	92	323	763	4660	5720	6200	2520	1420	e305	121	47	48
14	102	386	2450	3300	5100	5710	2380	1360	293	140	47	46
15	110	413	4990	2540	4790	5560	2250	1320	272	134	49	46
16	112	415	4100	2070	4420	4990	2180	1280	275	129	47	123
17	122	407	2940	1740	5510	4490	2370	1310	265	122	49	122
18	121	384	2040	1540	14800	4200	2450	1320	255	116	46	88
19	121	357	1570	1390	12700	4480	2720	1180	241	113	50	68
20	124	332	1320	1280	20000	4710	3280	1080	228	109	47	59
21	134	307	1220	1200	41300	5290	4210	1010	217	109	47	59
22	145	317	1560	1140	42300	5580	4200	944	203	108	48	56
23	143	314	2210	1170	33200	5910	3850	884	182	106	49	52
24	136	333	2640	2510	20700	5780	3420	826	169	100	50	49
25	141	363	2170	7000	22700	7490	3230	771	168	94	54	48
26	153	376	1850	12000	21100	9290	3180	714	187	93	44	45
27	171	377	e1580	10600	14800	6260	3210	653	349	89	51	45
28	224	378	1360	7420	11400	5130	3090	609	470	83	48	47
29	515	724	1210	5670	---	5380	2860	575	411	85	48	45
30	1470	2360	1100	5250	---	5240	2590	553	428	92	52	46
31	2200	---	1010	4440	---	5020	---	538	---	92	53	---
TOTAL	7206	16284	51226	107834	323160	285130	93470	40477	9799	5337	1648	1673
MEAN	232	543	1652	3479	11540	9198	3116	1306	327	172	53.2	55.8
MAX	2200	2360	4990	12000	42300	49900	4660	2320	510	502	83	123
MIN	66	307	556	664	2410	4200	2180	538	168	83	44	45
AC-FT	14290	32300	101600	213900	641000	565600	185400	80290	19440	10590	3270	3320

e Estimated.

EEL RIVER BASIN

11477000 EEL RIVER AT SCOTIA, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	661	5055	13690	20000	20090	14390	8799	3646	1277	340	150	142
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1911 - 2001	
ANNUAL TOTAL	2192650		943244			
ANNUAL MEAN	5991		2584		7296	
HIGHEST ANNUAL MEAN					17300	
LOWEST ANNUAL MEAN					563	
HIGHEST DAILY MEAN	111000	Feb 14	49900	Mar 5	648000	Dec 23 1964
LOWEST DAILY MEAN	65	Sep 28	44	Aug 26	12	Aug 12 1924
ANNUAL SEVEN-DAY MINIMUM	66	Sep 26	46	Sep 24	14	Aug 10 1924
MAXIMUM PEAK FLOW			59000	Mar 5	752000	Dec 23 1964
MAXIMUM PEAK STAGE			24.97	Mar 5	72.00	Dec 23 1964
INSTANTANEOUS LOW FLOW					10	Aug 12 1924
ANNUAL RUNOFF (AC-FT)	4349000		1871000		5286000	
10 PERCENT EXCEEDS	20700		5740		17900	
50 PERCENT EXCEEDS	1000		623		1390	
90 PERCENT EXCEEDS	86		51		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 mi².

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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	.35	---	e.33	.37	.35	e.35	---	---	---	---
2	---	---	.35	---	e.34	.37	.31	e.35	---	---	---	---
3	---	---	---	---	e.34	.37	.40	e.35	---	---	---	---
4	---	---	---	---	e.35	.37	.37	e.35	---	---	---	---
5	---	---	---	---	.35	.40	.37	e.35	---	---	---	---
6	---	---	---	---	.35	.40	.37	e.35	---	---	---	---
7	---	---	---	---	.35	.42	.37	---	---	---	---	---
8	---	---	---	.33	.33	.42	.37	---	---	---	---	---
9	---	---	---	.31	.33	.40	.37	---	---	---	---	---
10	---	---	---	.31	.33	.40	.37	---	---	---	---	---
11	---	---	---	.31	.33	.40	.37	---	---	---	---	---
12	---	---	---	.31	.33	.42	.37	---	---	---	---	---
13	---	---	.35	.31	.31	.42	.37	---	---	---	---	---
14	---	---	.33	.31	.31	.40	.37	---	---	---	---	---
15	---	---	.33	.31	.31	.40	.37	---	---	---	---	---
16	---	---	.31	---	.31	.40	.37	---	---	---	---	---
17	---	---	.29	---	.33	.42	.37	---	---	---	---	---
18	---	---	.29	---	.35	.42	.37	---	---	---	---	---
19	---	---	---	---	.35	.42	.37	---	---	---	---	---
20	---	---	---	---	.37	.42	.37	---	---	---	---	---
21	---	---	.33	---	.40	.42	.37	---	---	---	---	---
22	---	---	.33	---	.37	.42	.37	---	---	---	---	---
23	---	---	.33	.35	.37	.42	.37	---	---	---	---	---
24	---	---	.31	.33	.37	.44	.37	---	---	---	---	---
25	---	---	.31	.33	.37	.42	.37	---	---	---	---	---
26	---	---	e.31	.33	.37	.40	.37	---	---	---	---	---
27	---	---	e.31	.33	.37	.40	.35	---	---	---	---	---
28	---	---	e.31	.33	.37	.37	.35	---	---	---	---	---
29	.37	.46	---	.33	---	.37	.35	---	---	---	---	---
30	.37	.40	---	.33	---	.35	.35	---	---	---	---	---
31	---	---	---	.33	---	.35	---	---	---	---	---	---
TOTAL	---	---	---	---	9.69	12.40	10.97	---	---	---	---	---
MEAN	---	---	---	---	.35	.40	.37	---	---	---	---	---
MAX	---	---	---	---	.40	.44	.40	---	---	---	---	---
MIN	---	---	---	---	.31	.35	.31	---	---	---	---	---
AC-FT	---	---	---	---	19	25	22	---	---	---	---	---

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 mi².

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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	.54	---	.37	.40	.40	.40	---	---	---	---
2	---	---	.51	---	.37	.42	.40	.37	---	---	---	---
3	---	---	---	---	.40	.40	.40	.37	---	---	---	---
4	---	---	---	---	.42	.44	.40	.40	---	---	---	---
5	---	---	---	---	.40	.54	.40	.40	---	---	---	---
6	---	---	---	---	.37	.54	.40	.40	---	---	---	---
7	---	---	---	---	.35	.54	.40	---	---	---	---	---
8	---	---	---	.46	.35	.54	.40	---	---	---	---	---
9	---	---	---	.46	.35	.42	.40	---	---	---	---	---
10	---	---	---	.46	.35	.40	.40	---	---	---	---	---
11	---	---	---	.46	.35	.40	.40	---	---	---	---	---
12	---	---	---	.44	.33	.40	.40	---	---	---	---	---
13	---	---	.60	.44	.33	.42	.40	---	---	---	---	---
14	---	---	.51	.44	.33	.42	.40	---	---	---	---	---
15	---	---	.49	.44	.33	.42	.37	---	---	---	---	---
16	---	---	.44	---	.33	.42	.40	---	---	---	---	---
17	---	---	.48	---	.40	.42	.44	---	---	---	---	---
18	---	---	e.48	---	.42	.42	.44	---	---	---	---	---
19	---	---	---	---	.33	.42	.44	---	---	---	---	---
20	---	---	---	---	.27	.44	.42	---	---	---	---	---
21	---	---	e.31	---	.04	.44	.44	---	---	---	---	---
22	---	---	.31	---	.04	.42	.44	---	---	---	---	---
23	---	---	.51	.46	.04	.42	.42	---	---	---	---	---
24	---	---	.46	.40	.04	.49	.42	---	---	---	---	---
25	---	---	.46	.40	.04	.54	.40	---	---	---	---	---
26	---	---	e.46	.40	.23	.42	.40	---	---	---	---	---
27	---	---	e.46	.40	.42	.42	.37	---	---	---	---	---
28	---	---	e.46	.37	.40	.42	.37	---	---	---	---	---
29	.63	.49	---	.37	---	.40	.37	---	---	---	---	---
30	.72	.40	---	.37	---	.40	.37	---	---	---	---	---
31	---	---	---	.35	---	.40	---	---	---	---	---	---
TOTAL	---	---	---	---	8.40	13.59	12.11	---	---	---	---	---
MEAN	---	---	---	---	.30	.44	.40	---	---	---	---	---
MAX	---	---	---	---	.42	.54	.44	---	---	---	---	---
MIN	---	---	---	---	.04	.40	.37	---	---	---	---	---
AC-FT	---	---	---	---	17	27	24	---	---	---	---	---

e Estimated.

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 mi².

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 ft³/s, Dec. 22, 1964, gage height, 24.0 ft, from floodmarks, present site and datum, from rating curve extended above 20,000 ft³/s, on basis of slope-area measurement at gage height 21.3 ft, former site and datum; minimum daily, 3.7 ft³/s, Sept. 24, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0115	5,450	6.13

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	134	420	144	417	888	558	304	65	60	10	6.4
2	7.0	93	254	130	412	1060	496	279	63	51	10	6.2
3	7.0	73	185	118	546	964	443	253	62	45	9.8	5.8
4	7.0	63	146	108	696	2290	388	231	61	40	9.3	5.6
5	7.0	56	121	100	666	3250	351	220	61	37	9.0	5.4
6	7.0	50	103	95	528	1750	358	210	59	34	8.6	5.2
7	7.0	43	91	90	423	1550	429	196	56	32	8.4	5.0
8	6.6	41	84	232	351	1420	391	190	55	29	8.1	4.8
9	8.3	42	77	489	505	1230	403	183	52	27	7.9	4.8
10	13	40	72	972	506	1030	367	170	50	25	7.3	4.7
11	18	37	72	1190	563	879	358	162	50	23	6.8	4.8
12	15	34	131	729	466	768	355	154	49	21	6.4	4.8
13	13	38	163	496	418	743	320	147	47	21	6.1	4.9
14	12	49	1300	411	391	742	297	142	45	20	6.0	5.1
15	12	54	1180	332	373	660	280	173	43	20	6.0	5.1
16	11	57	628	278	385	593	270	182	41	19	6.0	4.9
17	11	57	405	237	870	557	589	154	39	19	5.9	4.7
18	11	52	290	209	1800	706	553	138	37	18	5.6	4.3
19	11	47	226	191	1320	721	677	128	35	18	5.9	4.2
20	13	43	188	182	2310	787	868	120	34	17	6.0	4.1
21	17	46	261	173	3240	804	975	112	33	16	6.2	3.9
22	21	47	970	168	3080	826	858	104	32	16	6.3	3.8
23	18	49	827	237	1620	785	675	97	30	15	6.6	3.8
24	15	65	761	693	1360	886	577	91	29	15	6.9	3.7
25	16	72	506	850	1330	2070	532	88	29	14	6.9	3.9
26	18	65	369	1080	1260	1190	499	83	34	12	7.0	4.2
27	19	59	291	764	1150	905	440	81	69	11	6.9	4.5
28	42	57	241	567	1050	919	406	79	146	10	6.9	5.2
29	212	515	204	729	---	800	369	77	103	10	6.9	5.2
30	487	938	179	621	---	676	320	75	74	10	6.8	5.1
31	237	---	160	486	---	598	---	71	---	10	6.6	---
TOTAL	1305.9	3016	10905	13101	28036	33047	14402	4694	1583	715	223.1	144.1
MEAN	42.1	101	352	423	1001	1066	480	151	52.8	23.1	7.20	4.80
MAX	487	938	1300	1190	3240	3250	975	304	146	60	10	6.4
MIN	6.6	34	72	90	351	557	270	71	29	10	5.6	3.7
AC-FT	2590	5980	21630	25990	55610	65550	28570	9310	3140	1420	443	286

11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	144	882	1818	2266	2054	1624	913	438	141	36.1	16.8	19.4
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	4.80
(WY)	1988	1960	1977	1977	1977	1988	1977	1985	1987	1977	1977	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	239643.0		111172.1			
ANNUAL MEAN	655		305		858	
HIGHEST ANNUAL MEAN					1610	
LOWEST ANNUAL MEAN					95.7	
HIGHEST DAILY MEAN	15500	Feb 14	3250	Mar 5	33900	Dec 22 1964
LOWEST DAILY MEAN	6.5	Sep 26	3.7	Sep 24	3.7	Sep 24 2001
ANNUAL SEVEN-DAY MINIMUM	6.6	Sep 23	3.9	Sep 19	3.9	Sep 19 2001
MAXIMUM PEAK FLOW			5450	Mar 5	48700	Dec 22 1964
MAXIMUM PEAK STAGE			6.13	Mar 5	24.00	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	475300		220500		621500	
10 PERCENT EXCEEDS	1830		869		2120	
50 PERCENT EXCEEDS	130		83		179	
90 PERCENT EXCEEDS	8.7		6.2		11	

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 mi².

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 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	.99	---	1.91	1.51	---	---	2.14	1.81	4.25	3.64
2	---	---	---	---	1.51	.89	---	---	1.81	1.64	3.77	3.57
3	---	---	---	---	.89	---	---	---	1.76	1.62	3.71	3.52
4	---	---	---	---	---	---	---	---	1.72	1.62	7.57	3.49
5	---	---	---	---	---	---	---	---	1.85	1.72	11.52	7.57
6	---	---	---	---	---	---	.71	---	1.97	1.67	9.61	6.59
7	---	---	---	---	---	---	1.21	---	1.81	1.41	6.59	5.51
8	---	---	---	---	---	---	1.80	---	1.53	1.18	5.54	4.82
9	---	---	---	---	---	---	1.74	---	1.82	1.15	4.82	4.27
10	---	---	---	---	.72	---	3.14	1.01	2.42	1.67	4.27	3.79
11	---	---	---	---	.67	---	4.92	3.14	2.79	2.17	3.80	3.37
12	---	---	---	---	2.05	---	4.75	3.07	3.08	2.78	3.38	3.05
13	---	---	---	---	1.13	---	3.07	2.14	2.95	2.61	3.05	2.79
14	---	---	.79	---	2.39	---	2.14	1.65	2.61	2.43	2.80	2.66
15	---	---	---	---	3.13	2.24	1.65	1.29	2.46	2.27	2.66	2.54
16	---	---	---	---	2.61	2.06	1.29	1.04	2.28	2.17	2.54	2.25
17	.54	---	---	---	2.06	1.43	1.04	.84	3.87	2.17	2.25	2.08
18	---	---	---	---	1.43	.99	.86	.69	6.26	3.87	2.08	2.01
19	---	---	---	---	.99	.70	1.21	.56	5.98	4.73	2.21	1.99
20	---	---	---	---	.70	---	1.02	---	9.28	4.70	2.29	2.11
21	---	---	---	---	.60	---	1.27	---	10.12	9.28	2.48	2.21
22	---	---	---	---	2.00	---	.75	---	10.66	9.37	2.61	2.37
23	---	---	---	---	1.52	1.26	1.05	---	9.98	7.57	2.77	2.39
24	---	---	.70	---	2.01	1.50	1.76	.56	7.57	6.49	2.66	2.48
25	---	---	---	---	1.53	1.21	3.90	1.76	7.31	6.53	3.90	2.53
26	.67	---	.72	---	1.21	.95	5.16	3.90	7.32	6.05	4.21	3.30
27	---	---	.61	---	.98	.73	5.01	4.01	6.06	5.03	3.30	2.65
28	.85	---	---	---	.73	.55	4.01	3.05	5.03	4.25	2.65	2.40
29	1.55	---	.61	---	.55	---	3.05	2.88	---	---	2.64	2.35
30	.96	---	1.91	.61	---	---	2.89	2.60	---	---	2.51	2.33
31	1.14	.96	---	---	---	---	2.60	2.13	---	---	2.37	2.22
MONTH	---	---	---	---	---	---	---	---	10.66	1.15	11.52	1.99

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 mi².

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 ft³/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 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0030	2,080	6.38

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.73	48	21	77	207	63	44	6.6	2.5	.02	.00
2	.00	.52	34	19	78	225	58	40	6.3	2.5	.02	.00
3	.00	.27	26	16	110	214	54	37	6.1	2.4	.00	.00
4	.00	.13	21	15	177	549	51	35	6.0	2.2	.00	.00
5	.00	.07	17	13	161	1210	47	33	6.2	2.3	.00	.00
6	.00	.00	15	12	125	591	47	32	6.2	2.2	.00	.00
7	.00	.00	13	12	99	428	52	30	6.2	2.0	.00	.00
8	.00	.00	12	32	81	346	48	28	6.2	1.9	.00	.00
9	.00	.00	10	60	79	273	47	26	6.0	2.0	.00	.00
10	.00	.00	9.4	182	73	218	46	25	5.5	1.8	.00	.00
11	.00	.00	9.4	255	73	178	47	23	5.2	1.8	.00	.00
12	.00	.00	11	144	64	151	47	22	4.9	1.9	.00	.00
13	.00	.14	36	100	60	137	44	21	4.5	1.6	.00	.00
14	.00	.57	206	80	60	128	42	20	4.1	1.5	.00	.00
15	.00	1.7	159	65	60	115	40	27	3.8	1.1	.00	.00
16	.00	2.9	96	54	65	104	39	28	3.6	1.0	.00	.00
17	.00	4.0	66	47	136	95	43	25	3.3	.87	.00	.00
18	.00	4.4	50	42	282	94	43	22	3.1	.82	.00	.00
19	.00	4.9	40	37	254	95	53	20	2.8	.67	.00	.00
20	.00	4.9	33	33	501	101	64	19	2.7	.59	.00	.00
21	.00	4.9	35	30	719	101	80	17	2.5	.48	.00	.00
22	.00	4.9	80	28	616	105	94	15	2.3	.42	.00	.00
23	.00	5.3	75	35	425	96	88	14	2.2	.33	.00	.00
24	.00	6.4	69	72	366	96	79	12	2.2	.25	.00	.00
25	.00	6.9	60	95	341	167	71	11	2.0	.17	.00	.00
26	.00	7.2	50	105	318	124	64	10	2.8	.12	.00	.00
27	.00	7.2	42	109	285	101	58	9.7	4.4	.09	.00	.00
28	.00	7.2	36	98	250	93	56	9.3	3.8	.08	.00	.00
29	3.5	38	31	103	---	84	52	8.8	3.3	.05	.00	.00
30	5.3	81	27	97	---	76	48	7.9	2.8	.03	.00	.00
31	1.6	---	24	85	---	68	---	7.2	---	.05	.00	---
TOTAL	10.40	194.23	1440.8	2096	5935	6570	1665	678.9	127.6	35.72	0.04	0.00
MEAN	.34	6.47	46.5	67.6	212	212	55.5	21.9	4.25	1.15	.001	.000
MAX	5.3	81	206	255	719	1210	94	44	6.6	2.5	.02	.00
MIN	.00	.00	9.4	12	60	68	39	7.2	2.0	.03	.00	.00
AC-FT	21	385	2860	4160	11770	13030	3300	1350	253	71	.08	.00

MAD RIVER BASIN

11480390 MAD RIVER ABOVE RUTH RESERVOIR, NEAR FOREST GLEN, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.47	164	407	612	647	508	251	108	45.5	7.13	1.13	.90
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	4.25	1.15	.000	.000
(WY)	1988	1994	1991	1991	1991	1988	1988	1987	2001	2001	1984	1984

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1980 - 2001	
ANNUAL TOTAL	70716.97		18753.69			
ANNUAL MEAN	193		51.4		228	
HIGHEST ANNUAL MEAN					419	
LOWEST ANNUAL MEAN					51.4	
HIGHEST DAILY MEAN	5220	Feb 14	1210	Mar 5	10300	Jan 1 1997
LOWEST DAILY MEAN	.00	Aug 22	.00	Oct 1	.00	Oct 8 1980
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 22	.00	Oct 1	.00	Sep 11 1982
MAXIMUM PEAK FLOW			2080	Mar 5	15000	Feb 17 1986
MAXIMUM PEAK STAGE			6.38	Mar 5	13.10	Jan 20 1993
ANNUAL RUNOFF (AC-FT)	140300		37200		165100	
10 PERCENT EXCEEDS	641		119		595	
50 PERCENT EXCEEDS	22		7.9		32	
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 mi².

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, 49,400 acre-ft, Mar. 6, elevation, 2,655.21 ft; minimum contents, 21,800 acre-ft, Dec. 12, elevation, 2625.40 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	2,615	15,100	2,635	29,400	2,655	49,200
2,600	7,810	2,620	18,100	2,640	33,800	2,660	55,100
2,605	10,000	2,625	21,500	2,645	38,600	2,664	60,200
2,610	12,500	2,630	25,300	2,650	43,700		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32200	27600	22700	22900	27100	44100	47700	48200	46700	43700	40800	37300
2	32000	27400	22600	22800	27300	44600	47700	48300	46600	43700	40700	37200
3	31900	27200	22500	22800	27600	45000	47800	48100	46500	43600	40600	37100
4	31700	27100	22400	22700	28000	46700	47800	47900	46400	43500	40500	37000
5	31600	26900	22300	22600	28400	49200	47800	47900	46300	43500	40400	36800
6	31400	26700	22200	22500	28600	49400	47800	47900	46300	43400	40300	36700
7	31200	26500	22100	22500	28800	49300	47700	47900	46200	43300	40200	36600
8	31100	26300	22100	22600	29000	49100	47700	47900	46100	43200	40100	36500
9	31000	26100	22000	22700	29200	48800	47700	47900	46000	43100	40000	36400
10	30800	25900	21900	23200	29500	48600	47700	47900	45900	43000	39900	36200
11	30700	25800	21900	23800	29700	48400	47700	47800	45800	42900	39800	36100
12	30500	25600	21800	24100	29800	48200	47800	47700	45700	42800	39700	36000
13	30400	25400	21900	24200	30000	48000	47800	47700	45600	42700	39600	35900
14	30200	25300	22300	24300	30100	47900	47800	47700	45600	42600	39500	35800
15	30100	25100	22500	24400	30200	47600	47800	47700	45400	42500	39400	35600
16	29900	24900	22700	24400	30400	47500	47800	47700	45300	42400	39300	35500
17	29800	24700	22700	24400	31000	47600	47900	47700	45200	42300	39100	35500
18	29600	24500	22700	24400	31900	47600	48000	47600	45100	42200	39000	35300
19	29500	24300	22700	24500	32600	47600	48100	47600	44900	42100	38900	35200
20	29300	24100	22700	24500	34400	47600	48200	47600	44800	42000	38700	35100
21	29200	24000	22700	24600	36600	47600	48200	47500	44700	41900	38600	35000
22	28900	23800	22800	24600	38400	47600	48200	47500	44600	41800	38500	34800
23	28800	23600	22900	24800	39600	47600	48200	47400	44400	41700	38400	34700
24	28700	23400	23000	25000	40700	47800	48200	47300	44300	41600	38200	34600
25	28600	23300	23000	25300	41700	47800	48100	47300	44200	41500	38100	34500
26	28500	23100	23100	25600	42500	47600	48100	47200	44200	41400	38000	34400
27	28300	22900	23100	25900	43200	47500	48100	47100	44100	41300	37600	34200
28	28200	22800	23000	26100	43700	47500	48200	47000	44000	41200	37500	34100
29	28100	22800	23000	26400	---	47600	48200	46900	43900	41100	37600	34000
30	28000	22800	23000	26700	---	47600	48200	46800	43900	41000	37500	34000
31	27800	---	22900	26800	---	47700	---	46800	---	40900	37400	---
MAX	32200	27600	23100	26800	43700	49400	48200	48300	46700	43700	40800	37300
MIN	27800	22800	21800	22500	27100	44100	47700	46800	43900	40900	37400	34000
a	2633.03	2626.75	2626.93	2631.90	2650.04	2653.71	2654.18	2652.88	2650.18	2647.31	2643.77	2640.16
b	-4600	-5000	+100	+3900	+16900	+4000	+500	-1400	-2900	-3000	-3500	-3400

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 mi².

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 except for estimated daily discharges and flows below 10 ft³/s, which are fair. Flow regulated by Ruth Reservoir (station 11480400) 1,200 ft upstream.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 17,800 ft³/s, Feb. 17, 1986, gage height, 17.61 ft, from floodmarks, from rating curve extended above 8,800 ft³/s; minimum daily, 5.6 ft³/s, Mar. 2, 1991.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	92	90	51	7.8	81	62	39	45	42	45	55
2	75	92	90	51	7.8	81	64	30	45	42	45	55
3	82	92	90	52	7.9	79	62	e48	45	42	45	55
4	69	91	90	51	7.9	104	58	e75	45	42	45	55
5	70	91	67	51	7.9	324	55	42	45	43	45	56
6	69	91	50	51	7.9	651	86	42	45	43	45	55
7	69	91	50	51	7.9	640	108	43	45	44	48	55
8	69	91	50	53	e7.9	559	108	43	45	44	46	55
9	69	91	50	51	8.0	478	70	43	45	46	46	55
10	69	91	50	52	8.0	405	43	43	45	51	46	58
11	69	90	51	52	8.0	349	43	43	46	49	46	56
12	68	90	50	52	8.0	306	44	43	45	44	46	56
13	68	91	51	52	13	282	50	43	45	44	47	56
14	68	90	51	52	e7.9	276	43	43	54	44	47	57
15	68	91	51	52	7.9	276	43	43	61	44	54	55
16	68	91	51	e56	7.9	189	45	43	61	53	58	55
17	68	91	51	e51	8.6	122	45	46	61	54	58	56
18	68	90	51	e49	9.3	122	45	45	58	54	58	56
19	68	90	51	29	8.8	122	46	45	54	54	58	56
20	69	90	51	13	18	129	67	45	55	55	59	57
21	68	90	51	13	11	121	139	45	64	44	58	56
22	67	90	51	13	10	121	135	e45	63	44	58	56
23	67	90	51	13	9.6	121	108	e44	80	46	58	56
24	67	90	51	14	9.5	97	111	44	56	44	58	56
25	67	89	52	14	9.6	264	96	44	48	44	58	56
26	67	89	51	14	53	274	89	44	62	44	58	58
27	80	90	52	14	76	179	64	44	66	44	60	57
28	90	89	51	e13	75	108	52	45	56	44	55	55
29	89	90	51	9.9	---	85	55	45	49	44	54	55
30	89	86	51	7.7	---	72	49	46	42	44	55	55
31	92	---	51	8.3	---	62	---	45	---	45	55	---
TOTAL	2240	2710	1749	1105.9	430.1	7079	2085	1378	1576	1421	1614	1674
MEAN	72.3	90.3	56.4	35.7	15.4	228	69.5	44.5	52.5	45.8	52.1	55.8
MAX	92	92	90	56	76	651	139	75	80	55	60	58
MIN	67	86	50	7.7	7.8	62	43	30	42	42	45	55
AC-FT	4440	5380	3470	2190	853	14040	4140	2730	3130	2820	3200	3320

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

MEAN	85.0	143	430	735	846	706	355	152	86.6	62.1	76.9	83.6
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	44.5	38.2	42.5	44.6	54.1
(WY)	1982	1993	1987	1992	1991	1988	1988	2001	1991	1982	1998	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1981 - 2001	
ANNUAL TOTAL	100088		25062.0			
ANNUAL MEAN	273		68.7		311	
HIGHEST ANNUAL MEAN					591	
LOWEST ANNUAL MEAN					68.7	
HIGHEST DAILY MEAN	4320	Feb 14	651	Mar 6	13600	Jan 1 1997
LOWEST DAILY MEAN	43	Jun 15	7.7	Jan 30	5.6	Mar 2 1991
ANNUAL SEVEN-DAY MINIMUM	43	Jun 15	7.9	Feb 1	6.0	Feb 19 1991
MAXIMUM PEAK FLOW			685		17800	
MAXIMUM PEAK STAGE			6.31		17.61	
ANNUAL RUNOFF (AC-FT)	198500		49710		225400	
10 PERCENT EXCEEDS	847		91		737	
50 PERCENT EXCEEDS	77		54		88	
90 PERCENT EXCEEDS	49		16		40	

e Estimated.

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 mi².

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 ft³/s, Dec. 22, 1964, gage height, 30.7 ft, prior datum, from high-water profile and flood-routing study; minimum daily, 0.10 ft³/s, Aug. 29, 1977.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	164	546	224	568	919	498	394	97	69	20	21
2	51	140	344	202	508	1070	479	365	97	59	16	22
3	50	129	264	188	605	1050	475	327	96	54	17	23
4	51	121	218	177	705	1610	440	305	92	55	16	19
5	56	115	188	169	712	3720	412	405	91	53	16	21
6	54	111	171	161	592	2380	467	291	90	52	15	19
7	54	108	142	156	490	2120	775	268	85	53	14	18
8	52	113	120	250	413	1880	649	250	81	48	16	14
9	58	129	118	560	407	1610	655	235	76	48	14	17
10	72	126	112	902	503	1370	616	223	76	48	13	19
11	74	118	115	1370	739	1180	570	210	73	45	12	17
12	65	113	169	897	677	1020	596	198	74	48	11	20
13	63	136	204	624	541	906	533	192	73	47	13	21
14	63	214	1400	567	475	839	490	188	70	42	12	22
15	63	208	1830	474	435	779	456	265	66	42	11	20
16	61	188	1020	405	414	733	431	375	66	41	13	23
17	60	166	760	353	493	647	494	286	73	39	12	22
18	59	151	561	315	1820	614	501	228	71	37	18	20
19	63	142	424	286	1570	613	558	197	68	39	19	21
20	77	137	351	265	1860	613	633	179	65	35	18	21
21	97	148	305	239	3110	609	808	164	61	34	17	21
22	86	157	573	208	4000	606	770	153	60	33	16	20
23	72	169	798	225	2880	588	697	143	64	30	22	21
24	67	250	953	463	1960	582	603	136	73	23	29	22
25	67	218	722	749	1620	1170	575	129	85	22	28	23
26	70	180	535	1130	1380	924	525	124	81	16	27	27
27	73	168	420	830	1220	750	483	121	90	17	26	29
28	100	163	356	625	1070	824	488	118	112	17	24	28
29	170	367	310	905	---	701	464	114	104	16	25	21
30	317	887	274	950	---	606	415	111	78	19	27	22
31	263	---	247	705	---	540	---	103	---	21	24	---
TOTAL	2579	5536	14550	15574	31767	33573	16556	6797	2388	1202	561	634
MEAN	83.2	185	469	502	1135	1083	552	219	79.6	38.8	18.1	21.1
MAX	317	887	1830	1370	4000	3720	808	405	112	69	29	29
MIN	50	108	112	156	407	540	412	103	60	16	11	14
AC-FT	5120	10980	28860	30890	63010	66590	32840	13480	4740	2380	1110	1260

MAD RIVER BASIN

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
MAXIMUM PEAK FLOW	77800 Dec 22 1955
MAXIMUM 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 - 2001, BY WATER YEAR (WY)

MEAN	199	1257	2684	3536	3052	2847	1717	667	231	58.6	44.3	63.1
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1963 - 2001

ANNUAL TOTAL	397799	131717	
ANNUAL MEAN	1087	361	1356
HIGHEST ANNUAL MEAN			2478 1974
LOWEST ANNUAL MEAN			151 1977
HIGHEST DAILY MEAN	16900 Feb 14	4000 Feb 22	58000 Dec 22 1964
LOWEST DAILY MEAN	34 Aug 4	11 Aug 12	.10 Aug 29 1977
ANNUAL SEVEN-DAY MINIMUM	38 Aug 2	12 Aug 11	.63 Aug 23 1977
MAXIMUM PEAK FLOW		4790 Feb 22	81000 Dec 22 1964
MAXIMUM PEAK STAGE		9.88 Feb 22	30.70 Dec 22 1964
ANNUAL RUNOFF (AC-FT)	789000	261300	982500
10 PERCENT EXCEEDS	3240	891	3710
50 PERCENT EXCEEDS	266	157	276
90 PERCENT EXCEEDS	47	20	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 mi².

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 15 ft³/s, which are fair. No storage or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,830 ft³/s, Mar. 18, 1975, gage height, 14.19 ft, from rating curve extended above 3,100 ft³/s, on basis of slope-area measurement at gage height 14.08 ft; minimum daily, 1.8 ft³/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 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 22	2000	788	4.06

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	13	45	25	65	76	31	39	15	10	5.5	3.8
2	4.1	11	31	23	58	99	37	35	15	9.3	5.0	3.8
3	3.8	9.4	24	21	51	85	40	32	14	9.0	4.9	3.4
4	3.8	8.3	20	20	46	119	33	29	14	8.5	4.9	3.2
5	3.6	7.7	17	19	41	141	30	26	14	8.4	5.3	3.3
6	3.6	7.4	14	19	38	107	60	25	14	8.5	5.4	3.2
7	3.5	7.1	13	18	35	88	133	24	13	8.2	4.9	3.1
8	3.4	9.2	12	35	32	77	80	22	12	7.9	4.6	2.9
9	7.7	16	12	41	63	69	64	22	12	7.4	4.4	3.2
10	12	15	12	76	90	63	54	21	12	7.1	4.3	2.9
11	9.4	11	16	70	234	57	57	20	12	7.3	4.2	2.9
12	6.9	9.1	36	49	151	52	52	20	12	7.3	4.6	3.3
13	5.1	16	45	43	105	47	45	20	12	7.4	4.7	3.1
14	4.7	75	244	46	81	44	41	20	11	7.3	4.9	2.9
15	4.7	41	251	41	67	42	38	58	11	7.3	5.1	2.8
16	4.5	35	105	36	60	41	38	76	11	7.1	4.9	2.9
17	4.0	23	126	32	62	38	50	49	10	6.6	4.7	3.3
18	3.7	17	81	29	94	37	40	37	9.7	6.2	4.4	3.2
19	3.8	14	58	27	84	35	38	31	9.5	6.3	4.2	3.0
20	14	12	45	26	93	34	58	27	9.1	6.9	4.1	2.6
21	18	16	42	24	222	32	70	24	8.7	6.8	3.8	2.6
22	7.6	16	58	22	585	30	54	22	8.7	6.5	4.0	2.5
23	4.9	28	78	32	403	30	47	20	8.9	6.1	5.3	2.4
24	4.4	58	106	68	227	35	42	20	9.4	5.8	5.9	2.5
25	4.4	30	73	108	166	57	39	20	8.9	5.4	4.9	3.2
26	4.3	21	55	159	124	39	36	19	14	5.1	4.3	5.3
27	4.5	18	44	104	100	34	34	19	27	5.0	4.2	5.8
28	19	16	37	72	85	51	56	18	15	4.9	3.8	5.0
29	32	146	33	153	---	44	51	17	12	4.9	3.8	4.5
30	86	93	30	120	---	37	41	16	11	5.8	4.0	3.9
31	23	---	27	85	---	33	---	15	---	6.1	4.3	---
TOTAL	318.9	799.2	1790	1643	3462	1773	1489	843	365.9	216.4	143.3	100.5
MEAN	10.3	26.6	57.7	53.0	124	57.2	49.6	27.2	12.2	6.98	4.62	3.35
MAX	86	146	251	159	585	141	133	76	27	10	5.9	5.8
MIN	3.4	7.1	12	18	32	30	30	15	8.7	4.9	3.8	2.4
AC-FT	633	1590	3550	3260	6870	3520	2950	1670	726	429	284	199

LITTLE RIVER BASIN

11481200 LITTLE RIVER NEAR TRINIDAD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	26.8	161	309	342	294	256	138	74.9	32.8	13.2	8.25	7.74
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	3.35
(WY)	1988	1994	1977	1977	1977	1988	1977	1987	1966	1959	1959	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1956 - 2001	
ANNUAL TOTAL	39068.9		12944.2			
ANNUAL MEAN	107		35.5		138	
HIGHEST ANNUAL MEAN					240	
LOWEST ANNUAL MEAN					23.8	
HIGHEST DAILY MEAN	2400	Jan 14	585	Feb 22	7860	Mar 18 1975
LOWEST DAILY MEAN	3.4	Oct 8	2.4	Sep 23	1.8	Sep 25 1991
ANNUAL SEVEN-DAY MINIMUM	3.7	Oct 2	2.7	Sep 18	1.9	Sep 24 1991
MAXIMUM PEAK FLOW			788	Feb 22	9830	Mar 18 1975
MAXIMUM PEAK STAGE			4.06	Feb 22	14.19	Mar 18 1975
ANNUAL RUNOFF (AC-FT)	77490		25670		100000	
10 PERCENT EXCEEDS	294		82		360	
50 PERCENT EXCEEDS	36		19		35	
90 PERCENT EXCEEDS	5.7		3.9		5.8	

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 mi².

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 good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,200 ft³/s, Mar. 18, 1975, gage height, 13.70 ft, from rating curve extended above 6,400 ft³/s; minimum daily, 0.69 ft³/s, Sept. 30, 1993.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,300 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 4	2315	1,020	4.24

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	17	68	40	95	169	162	138	35	17	6.8	3.2
2	3.0	14	47	37	118	295	155	127	36	16	6.2	3.1
3	3.0	13	38	34	144	234	142	117	36	15	5.9	3.1
4	2.9	12	32	32	152	518	134	110	34	14	6.2	3.0
5	2.7	11	28	31	145	593	130	104	33	13	6.4	3.0
6	2.4	9.8	25	29	126	379	173	98	33	12	6.1	3.0
7	2.2	9.2	23	28	108	319	190	93	31	12	5.7	2.9
8	2.0	10	21	81	95	280	173	89	30	11	5.2	2.7
9	4.1	15	20	104	100	243	180	84	29	11	4.3	2.5
10	10	15	20	219	97	212	187	80	28	10	4.1	2.5
11	7.5	13	25	213	105	188	192	75	27	10	4.1	2.7
12	5.4	11	48	123	96	170	188	71	27	9.9	4.0	3.0
13	4.8	15	62	103	91	165	171	69	26	9.5	3.9	2.9
14	4.7	23	289	103	87	163	157	69	24	9.4	4.0	2.8
15	4.6	25	270	85	83	152	149	153	23	9.2	3.9	2.6
16	4.4	22	134	74	84	144	145	136	22	9.2	3.7	2.4
17	4.3	18	114	64	198	143	198	103	21	9.4	3.5	2.4
18	4.2	15	85	59	334	172	186	88	20	9.2	3.4	2.4
19	4.2	14	69	56	241	185	196	79	19	8.8	3.6	2.1
20	11	14	59	53	428	192	220	70	18	8.9	3.6	2.0
21	20	16	57	51	451	199	227	63	17	8.9	3.6	1.9
22	9.6	22	114	50	519	207	212	58	17	8.7	3.6	1.9
23	7.1	23	128	62	389	201	196	54	16	8.0	4.2	1.8
24	6.1	45	151	107	317	269	186	51	16	7.3	5.0	1.9
25	6.1	30	105	122	264	418	184	48	17	6.9	4.6	2.8
26	6.5	23	83	133	231	242	175	45	18	6.5	4.3	4.0
27	7.0	24	69	106	204	195	160	44	23	6.1	4.0	5.6
28	26	24	60	92	184	261	181	43	22	5.9	3.5	4.8
29	39	116	53	137	---	216	159	42	21	5.9	3.2	4.0
30	61	117	48	124	---	187	143	40	18	6.2	3.2	3.6
31	27	---	44	105	---	169	---	36	---	6.9	3.2	---
TOTAL	305.7	736.0	2389	2657	5486	7480	5251	2477	737	301.8	137.0	86.6
MEAN	9.86	24.5	77.1	85.7	196	241	175	79.9	24.6	9.74	4.42	2.89
MAX	61	117	289	219	519	593	227	153	36	17	6.8	5.6
MIN	2.0	9.2	20	28	83	143	130	36	16	5.9	3.2	1.8
AC-FT	606	1460	4740	5270	10880	14840	10420	4910	1460	599	272	172

REDWOOD CREEK BASIN

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	36.6	246	427	501	564	475	295	154	67.3	21.3	9.57	8.61
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	9.74	3.14	2.19
(WY)	1988	1977	1977	1977	1977	1988	1988	1992	1987	2001	1992	1987

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1954 - 2001	
ANNUAL TOTAL	65199.3		28044.1			
ANNUAL MEAN	178		76.8		232	
HIGHEST ANNUAL MEAN					423	
LOWEST ANNUAL MEAN					44.2	
HIGHEST DAILY MEAN	2770	Feb 14	593	Mar 5	8360	Mar 18 1975
LOWEST DAILY MEAN	2.0	Oct 8	1.8	Sep 23	.69	Sep 30 1993
ANNUAL SEVEN-DAY MINIMUM	2.6	Oct 2	2.0	Sep 18	1.0	Sep 24 1993
MAXIMUM PEAK FLOW			1020	Mar 4	12200	Mar 18 1975
MAXIMUM PEAK STAGE			4.24	Mar 4	13.70	Mar 18 1975
ANNUAL RUNOFF (AC-FT)	129300		55630		168200	
10 PERCENT EXCEEDS	503		197		587	
50 PERCENT EXCEEDS	58		32		74	
90 PERCENT EXCEEDS	4.8		3.3		6.3	

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, October 2000 to September 2001.

SEDIMENT DATA: Water years 1973–92, October 2000 to September 2001.

PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: October 1972 to September 1992 (storm season only).

SUSPENDED-SEDIMENT DISCHARGE: October 1972 to September 1992, October 2000 to September 2001 (storm season only).

REMARKS.—Sediment samples are collected on most days where water temperature is published. Zero bed-load discharge observed for flows less than 182 ft³/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.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 169 mg/L, Mar. 4; minimum daily mean, 0 mg/L, on many days.

SEDIMENT LOAD (storm season only): Maximum daily, 322 tons, Mar. 4; minimum daily, 0 ton, on many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SED- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC						
07...	1200	22	5.5	<0.5	--	--
14...	1330	206	6.5	22	12.2	85
JAN						
19...	1255	56	5.0	1	.15	--
FEB						
28...	1355	183	6.0	6	2.96	77
MAR						
28...	1400	264	10.0	12	8.55	82
APR						
17...	1400	193	9.5	9	4.69	82
MAY						
03...	1415	118	11.5	2	.64	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (80164)	BED MAT. SIEVE DIAM. % FINER THAN (80165)	BED MAT. SIEVE DIAM. % FINER THAN (80166)	BED MAT. SIEVE DIAM. % FINER THAN (80167)
AUG								
10...	1100	1	3.8	20.0	6	28	72	93
10...	1105	1	3.8	20.0	--	1	3	5
10...	1110	1	3.8	20.0	--	1	1	2
10...	1115	1	3.8	20.0	--	1	2	5
10...	1120	1	3.8	20.0	--	--	1	6
10...	1125	1	3.8	20.0	--	--	--	1
10...	1135	1	3.8	20.0	--	--	1	3
10...	1145	1	3.8	20.0	--	2	7	26
10...	1150	1	3.8	20.0	2	8	47	88

< Actual values are known to be less than value shown.

REDWOOD CREEK BASIN

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.						
	% FINER THAN 1.00 MM (80168)	% FINER THAN 2.00 MM (80169)	% FINER THAN 4.00 MM (80170)	% FINER THAN 8.00 MM (80171)	% FINER THAN 16.0 MM (80172)	% FINER THAN 32.0 MM (80173)	% FINER THAN 64.0 MM (80174)	% FINER THAN 128 MM (80175)
AUG								
10...	96	97	98	99	100	--	--	--
10...	7	7	8	9	15	57	75	100
10...	4	5	6	7	9	24	60	100
10...	8	10	12	15	20	32	49	100
10...	12	14	16	18	22	36	36	100
10...	3	5	7	8	11	19	31	100
10...	8	14	22	30	42	70	85	100
10...	55	72	87	94	98	100	--	--
10...	98	99	99	99	99	100	--	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM-PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE	TETHER LINE USED IN SAMPLING (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS) (82074)	TIME ON BED OF LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
				BEDLOAD SAMPLER (MM) (30333)					
MAR									
28...	1215	1000	1120	.250	0	1210	1218	15	3.0
28...	1230	1000	1120	.250	0	1225	1233	15	3.0
APR									
17...	1425	1000	1120	.250	0	1420	1432	15	3.0
17...	1435	1000	1120	.250	0	1428	1440	15	3.0

DATE	COMPSTD IN X-SEC BEDLOAD MEASNT (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, CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, AV UNIT FOR COM POSITE SAMPLE (TONS/ DAY) (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)
MAR									
28...	2	21	21	1.50	270	10.0	.07	3.5	--
28...	2	21	21	1.50	267	10.0	.04	3.5	--
APR									
17...	2	20	20	1.50	198	9.5	.01	1.2	1
17...	2	20	20	1.50	195	9.5	.03	1.2	--

DATE	SED. BEDLOAD SIEVE DIAM.							
	% FINER THAN .125 MM (80227)	% FINER THAN .250 MM (80228)	% FINER THAN .500 MM (80229)	% FINER THAN 1.00 MM (80230)	% FINER THAN 2.00 MM (80231)	% FINER THAN 4.00 MM (80232)	% FINER THAN 8.00 MM (80233)	% FINER THAN 16.0 MM (80234)
MAR								
28...	--	3	42	80	89	96	99	100
28...	1	2	39	65	74	88	100	--
APR								
17	2	3	26	43	57	82	100	--
17	1	2	25	46	59	72	100	--

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	5.0	---	---	---	11.5	---	---	---	---
4	13.0	---	---	---	---	6.5	---	---	---	---	---	---
5	---	---	---	---	---	7.5	---	---	---	---	---	---
6	---	---	---	---	---	---	7.0	---	---	---	---	---
7	---	---	5.5	---	---	9.0	---	---	---	---	---	---
8	---	---	---	---	---	---	6.0	---	---	---	17.5	---
9	---	---	---	6.0	5.0	---	---	---	---	---	---	---
10	---	---	---	6.0	---	---	6.5	---	---	---	20.0	17.0
11	---	---	---	6.0	---	---	7.0	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	6.5	---	---	---	---	---	19.0	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	9.5	---	---	20.0	---	---
18	---	---	---	---	7.0	---	7.5	---	---	---	---	---
19	---	---	---	5.0	7.0	---	---	---	14.0	---	---	---
20	---	---	---	---	7.0	---	7.0	---	---	---	---	---
21	---	---	---	---	7.0	---	---	---	---	---	---	---
22	---	---	---	---	6.0	---	---	---	---	---	---	---
23	---	---	---	---	5.5	---	---	---	---	---	---	---
24	---	---	---	6.5	---	9.0	13.0	---	---	---	---	---
25	---	---	---	---	5.5	8.5	---	---	---	---	---	---
26	---	---	---	---	---	9.5	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	6.0	10.0	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	9.0	---	---	---	---	---	10.0	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	2.9	0	.00	17	0	.00	68	2	.47
2	3.0	0	.00	14	0	.00	47	2	.25
3	3.0	0	.00	13	0	.00	38	2	.16
4	2.9	0	.00	12	0	.00	32	1	.10
5	2.7	1	.00	11	0	.00	28	1	.06
6	2.4	1	.00	9.8	0	.00	25	0	.03
7	2.2	1	.00	9.2	0	.00	23	0	.00
8	2.0	1	.00	10	0	.00	21	0	.00
9	4.1	1	.01	15	0	.00	20	0	.00
10	10	1	.02	15	0	.00	20	0	.00
11	7.5	0	.00	13	0	.00	25	0	.03
12	5.4	0	.00	11	0	.00	48	2	.27
13	4.8	0	.00	15	0	.00	62	7	3.3
14	4.7	0	.00	23	0	.01	289	38	34
15	4.6	0	.00	25	0	.01	270	25	20
16	4.4	0	.00	22	0	.00	134	14	5.0
17	4.3	0	.00	18	0	.00	114	11	3.3
18	4.2	0	.00	15	0	.00	85	10	2.2
19	4.2	0	.00	14	0	.00	69	9	1.6
20	11	0	.00	14	0	.00	59	8	1.3
21	20	0	.00	16	0	.00	57	8	1.2
22	9.6	0	.00	22	0	.00	114	8	2.6
23	7.1	0	.00	23	0	.02	128	9	3.5
24	6.1	0	.00	45	1	.11	151	11	4.6
25	6.1	0	.00	30	0	.00	105	7	1.9
26	6.5	0	.00	23	0	.00	83	4	.94
27	7.0	0	.00	24	0	.00	69	2	.35
28	26	0	.05	24	0	.00	60	1	.20
29	39	0	.02	116	6	3.0	53	1	.12
30	61	2	.31	117	3	1.1	48	1	.06
31	27	0	.00	---	---	---	44	0	.05
TOTAL	305.7	---	0.41	736.0	---	4.25	2389	---	87.59

REDWOOD CREEK BASIN

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	
JANUARY			FEBRUARY			MARCH			
1	40	0	.04	95	6	1.4	169	4	1.7
2	37	0	.05	118	7	2.2	295	41	34
3	34	1	.05	144	9	3.5	234	31	20
4	32	1	.06	152	8	3.2	518	169	322
5	31	1	.07	145	7	2.6	593	127	254
6	29	1	.07	126	6	1.9	379	25	26
7	28	1	.10	108	4	1.3	319	11	9.3
8	81	5	1.3	95	3	.85	280	7	5.5
9	104	8	2.6	100	2	.60	243	6	4.2
10	219	24	16	97	2	.49	212	6	3.1
11	213	20	12	105	2	.49	188	5	2.4
12	123	11	3.8	96	2	.41	170	4	1.7
13	103	8	2.2	91	1	.35	165	3	1.5
14	103	7	1.9	87	1	.30	163	4	1.6
15	85	5	1.2	83	1	.25	152	4	1.6
16	74	4	.85	84	1	.23	144	4	1.6
17	64	3	.55	198	29	29	143	4	1.7
18	59	2	.34	334	47	45	172	4	2.1
19	56	1	.17	241	17	11	185	5	2.4
20	53	1	.14	428	85	108	192	5	2.6
21	51	1	.14	451	53	65	199	5	2.8
22	50	1	.14	519	80	116	207	6	3.1
23	62	4	1.1	389	29	31	201	6	3.1
24	107	14	4.1	317	17	14	269	38	44
25	122	10	3.4	264	14	9.9	418	101	136
26	133	9	3.3	231	11	6.8	242	17	12
27	106	7	2.0	204	8	4.4	195	9	4.5
28	92	5	1.3	184	5	2.6	261	16	11
29	137	8	3.0	---	---	---	216	10	6.1
30	124	7	2.4	---	---	---	187	10	5.0
31	105	6	1.8	---	---	---	169	9	4.3
TOTAL	2657	---	66.17	5486	---	462.77	7480	---	930.90

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	162	9	3.8
2	155	8	3.5
3	142	8	2.9
4	134	7	2.6
5	130	6	2.3
6	173	10	5.1
7	190	10	5.2
8	173	5	2.3
9	180	5	2.5
10	187	7	3.5
11	192	4	2.0
12	188	3	1.7
13	171	3	1.2
14	157	2	.84
15	149	1	.54
16	145	1	.41
17	198	13	7.1
18	186	6	3.2
19	196	10	5.3
20	220	15	9.1
21	227	14	8.8
22	212	11	6.2
23	196	7	3.8
24	186	4	1.9
25	184	3	1.4
26	175	3	1.3
27	160	2	1.1
28	181	2	1.1
29	159	2	.94
30	143	2	.79
31	---	---	---
TOTAL	5251	---	92.42
PERIOD	24304.70		1644.51

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	305.70	0.41	0	0
NOVEMBER	736.00	4.25	0	4
DECEMBER	2389.00	87.59	17	105
JANUARY 2001	2657.00	66.17	5	71
FEBRUARY	5486.00	462.77	194	657
MARCH	7480.00	930.90	306	1240
APRIL	5251.00	92.42	15	107
PERIOD	24304.70	1644.51	537	2184

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 mi².

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 daily discharges below 10 ft³/s, which are fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 50,500 ft³/s, Dec. 22, 1964, former site, from outside high-water marks, maximum gage height, 28.22 ft, Jan. 1, 1997; minimum daily, 2.1 ft³/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 ft³/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 9,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 22	1445	2,320	15.15

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	101	287	195	462	739	390	395	125	71	20	7.8
2	11	73	199	180	432	973	421	366	122	63	18	7.5
3	11	59	155	165	470	938	437	341	120	60	18	7.1
4	11	50	128	155	446	1060	389	316	117	56	18	6.7
5	11	45	110	146	426	1610	361	296	115	53	17	6.3
6	10	41	97	140	395	1110	423	282	112	51	16	5.7
7	10	38	88	134	355	934	683	267	108	48	16	5.4
8	9.9	44	81	197	321	826	594	256	103	45	16	5.1
9	16	60	77	314	386	743	573	243	99	43	15	4.8
10	29	55	74	521	484	670	537	233	98	41	14	4.8
11	27	51	82	692	676	604	538	223	96	39	13	4.8
12	26	45	191	482	649	551	542	211	97	39	13	4.7
13	23	52	198	382	560	506	492	206	93	37	12	4.8
14	19	135	1150	369	496	479	457	205	88	36	12	4.7
15	18	175	1210	328	447	457	427	404	85	36	12	4.7
16	17	148	702	293	419	438	411	541	81	33	12	4.8
17	16	113	614	264	449	413	496	393	78	32	12	4.9
18	16	89	454	242	871	413	462	317	71	31	11	4.7
19	17	74	357	226	780	425	468	276	69	31	11	4.6
20	47	64	300	214	808	429	551	246	66	31	9.6	4.1
21	76	71	272	203	1250	426	674	224	63	31	9.2	3.9
22	59	70	374	192	2050	424	582	206	59	30	8.7	3.7
23	45	88	473	201	1930	421	525	190	56	28	11	3.4
24	35	142	637	279	1470	436	492	179	51	27	14	3.2
25	29	131	504	381	1240	792	474	172	53	25	12	3.8
26	26	106	403	642	1060	594	450	163	71	23	11	5.1
27	24	90	335	496	928	464	420	156	151	21	10	5.5
28	67	80	289	405	824	559	485	152	110	19	9.5	5.5
29	163	312	257	653	---	530	477	147	88	18	9.3	5.5
30	311	473	231	674	---	457	410	141	78	19	8.6	5.8
31	180	---	212	542	---	409	---	133	---	20	8.2	---
TOTAL	1370.9	3075	10541	10307	21084	19830	14641	7880	2723	1137	397.1	153.4
MEAN	44.2	102	340	332	753	640	488	254	90.8	36.7	12.8	5.11
MAX	311	473	1210	692	2050	1610	683	541	151	71	20	7.8
MIN	9.9	38	74	134	321	409	361	133	51	18	8.2	3.2
AC-FT	2720	6100	20910	20440	41820	39330	29040	15630	5400	2260	788	304

11482500 REDWOOD CREEK AT ORICK, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	150	1045	2095	2514	2212	1935	1197	624	254	86.3	41.3	38.2
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1911 - 2001	
ANNUAL TOTAL	278510.9		93139.4			
ANNUAL MEAN	761		255		1011	
HIGHEST ANNUAL MEAN					1726	
LOWEST ANNUAL MEAN					192	
HIGHEST DAILY MEAN	13900	Jan 11	2050	Feb 22	43200	Dec 22 1964
LOWEST DAILY MEAN	9.9	Oct 8	3.2	Sep 24	2.1	Oct 20 1987
ANNUAL SEVEN-DAY MINIMUM	11	Oct 2	3.8	Sep 19	2.2	Oct 17 1987
MAXIMUM PEAK FLOW			2320	Feb 22	50500	Dec 22 1964
MAXIMUM PEAK STAGE			15.15	Feb 22	28.22	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	552400		184700		732500	
10 PERCENT EXCEEDS	2170		598		2710	
50 PERCENT EXCEEDS	251		134		306	
90 PERCENT EXCEEDS	22		9.6		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, October 2000 to September 2001.

SEDIMENT DATA: Water years 1955–56, 1970–92, October 2000 to September 2001.

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, October 2000 to September 2001 (storm season only).

REMARKS: Sediment samples were collected on most days where water temperature is published. Zero bed-load discharge observed for flows less than 216 ft³/s.

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 and 2001.

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 and 2001.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 191 mg/L, Feb. 22; minimum daily mean, 0 mg/L, for many days.

SEDIMENT LOAD (storm season only): Maximum daily mean, 1090 tons, Feb. 22; minimum daily mean, 0 ton, many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV						
30...	1125	476	10.0	27	34.7	70
DEC						
19...	1335	348	7.5	5	4.70	74
JAN						
30...	1455	656	7.0	8	14.2	81
FEB						
26...	1345	1050	9.5	15	42.5	72
MAR						
29...	1635	513	14.0	5	6.93	82

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (80164)	BED MAT. SIEVE DIAM. % FINER THAN (80165)	BED MAT. SIEVE DIAM. % FINER THAN (80166)	BED MAT. SIEVE DIAM. % FINER THAN (80167)
AUG								
10...	1520	1	14	17.0	1	2	3	5
10...	1525	1	14	17.0	1	2	3	6
10...	1530	1	14	17.0	--	1	1	3
10...	1535	1	14	17.0	1	2	5	14
10...	1540	1	14	17.0	5	15	28	38
10...	1545	1	14	17.0	--	--	--	2
10...	1550	1	14	17.0	--	1	2	10
10...	1555	1	14	17.0	--	--	1	15
10...	1600	1	14	17.0	--	--	--	4
10...	1605	1	14	17.0	--	--	--	1
10...	1610	1	14	17.0	8	22	61	80
10...	1615	1	14	17.0	13	41	75	86

11482500 REDWOOD CREEK AT ORICK, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BED MAT. SIEVE DIAM.						
	% FINER THAN 1.00 MM (80168)	% FINER THAN 2.00 MM (80169)	% FINER THAN 4.00 MM (80170)	% FINER THAN 8.00 MM (80171)	% FINER THAN 16.0 MM (80172)	% FINER THAN 32.0 MM (80173)	% FINER THAN 64.0 MM (80174)
AUG							
10...	12	17	25	34	48	88	100
10...	15	21	26	32	42	68	100
10...	12	20	28	38	51	77	100
10...	33	46	59	79	96	100	--
10...	44	50	56	61	72	100	--
10...	10	32	70	93	100	--	--
10...	24	38	57	80	96	100	--
10...	27	32	40	51	80	100	--
10...	33	52	64	71	92	100	--
10...	11	26	44	72	98	100	--
10...	86	91	96	100	--	--	--
10...	90	94	97	100	--	--	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BEDLOAD SIZE (MM) (30333)	TETHER LINE USED IN SAMPLING (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS) (82074)	TIME ON BED FOR LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF TICAL (FEET) (04121)
DEC									
19...	1215	1000	1100	.250	0	1215	1220	15	5.0
19...	1225	1000	1100	.250	0	1225	1230	15	5.0
JAN									
12...	1505	1000	1100	.250	0	1500	1510	15	5.0
12...	1520	1000	1100	.250	0	1513	1524	15	5.0
30...	1535	1000	1100	.250	0	1531	1542	15	6.0
30...	1550	1000	1100	.250	0	1545	1556	15	6.0
FEB									
26...	1425	1000	1100	.250	0	1415	1433	15	5.0
26...	1450	1000	1100	.250	0	1440	1457	15	5.0
MAR									
29...	1710	1000	1100	.250	0	1708	1717	15	6.0
29...	1725	1000	1100	.250	0	1720	1730	15	6.0

DATE	COMPSTD SAMPLE IN X-SEC BEDLOAD MEASMNT (04118)	VER-TICALS IN COM-SAMPLE POSITE (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 FOR COM-SAMPLE (04122)	SEDI-MENT DIS-CHARGE, (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. THAN .250 MM (80228)
DEC									
19...	2	27	27	2.50	357	7.5	.09	14	--
19...	2	27	27	2.50	357	7.5	.11	14	--
JAN									
12...	2	30	30	2.50	447	7.0	.34	53	--
12...	2	30	30	2.50	454	7.0	.38	53	--
30...	2	25	25	3.00	652	7.0	.75	148	--
30...	2	25	25	3.00	652	7.0	1.18	148	--
FEB									
26...	2	26	26	2.50	1040	9.5	1.64	143	--
26...	2	26	26	2.50	050	9.5	.57	143	1
MAR									
29...	2	25	25	3.00	506	14.0	.48	59	--
29...	2	25	25	3.00	504	14.0	.31	59	1

11482500 REDWOOD CREEK AT ORICK, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	11	0	.00	101	0	.07	287	14	11
2	11	0	.00	73	0	.02	199	4	2.4
3	11	0	.00	59	0	.01	155	3	1.3
4	11	0	.00	50	0	.00	128	3	1.2
5	11	0	.00	45	0	.00	110	4	1.1
6	10	0	.00	41	0	.00	97	4	1.0
7	10	0	.00	38	0	.00	88	4	.97
8	9.9	0	.00	44	0	.02	81	4	.94
9	16	0	.00	60	0	.08	77	4	.94
10	29	0	.00	55	0	.02	74	5	.94
11	27	0	.00	51	0	.00	82	5	1.1
12	26	0	.00	45	0	.00	191	6	2.9
13	23	0	.00	52	0	.02	198	17	9.8
14	19	0	.00	135	0	.17	1150	141	451
15	18	0	.00	175	1	.31	1210	95	325
16	17	0	.00	148	0	.17	702	19	38
17	16	0	.00	113	0	.06	614	9	15
18	16	0	.00	89	0	.01	454	7	8.5
19	17	0	.00	74	0	.00	357	6	5.3
20	47	0	.03	64	0	.00	300	6	4.9
21	76	0	.06	71	0	.00	272	7	5.2
22	59	0	.02	70	0	.00	374	7	7.4
23	45	0	.01	88	0	.12	473	6	8.4
24	35	0	.00	142	0	.10	637	14	23
25	29	0	.00	131	0	.01	504	8	11
26	26	0	.00	106	0	.00	403	2	2.6
27	24	0	.00	90	0	.00	335	2	1.8
28	67	0	.09	80	0	.10	289	2	1.6
29	163	2	1.1	312	18	21	257	2	1.4
30	311	4	3.0	473	28	37	231	2	1.4
31	180	1	.35	---	---	---	212	2	1.4
TOTAL	1370.9	---	4.66	3075	---	59.29	10541	---	948.49

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	195	3	1.5	462	4	5.3	739	27	53
2	180	3	1.4	432	4	4.8	973	29	75
3	165	3	1.2	470	5	5.8	938	28	72
4	155	2	1.0	446	4	4.2	1060	61	188
5	146	2	.88	426	5	5.8	1610	124	554
6	140	2	.82	395	6	6.9	1110	38	116
7	134	3	1.1	355	5	4.4	934	24	61
8	197	4	2.2	321	2	2.1	826	20	45
9	314	7	5.9	386	7	7.8	743	16	33
10	521	17	25	484	13	17	670	12	23
11	692	27	51	676	21	39	604	9	14
12	482	11	15	649	7	12	551	5	7.8
13	382	5	5.2	560	3	5.2	506	5	6.5
14	369	4	3.7	496	3	4.0	479	4	5.8
15	328	3	2.5	447	3	3.6	457	4	5.2
16	293	2	1.7	419	3	3.5	438	4	4.6
17	264	2	1.8	449	13	17	413	4	4.0
18	242	3	2.0	871	53	125	413	3	3.7
19	226	4	2.2	780	18	39	425	3	3.2
20	214	4	2.2	808	22	53	429	2	2.9
21	203	3	1.6	1250	69	236	426	3	3.5
22	192	2	.99	2050	191	1090	424	4	4.2
23	201	2	1.0	1930	109	599	421	4	4.9
24	279	7	5.2	1470	39	157	436	8	9.3
25	381	15	16	1240	28	94	792	54	121
26	642	17	30	1060	17	50	594	27	45
27	496	9	13	928	18	45	464	12	16
28	405	11	12	824	22	50	559	9	14
29	653	21	39	---	---	---	530	7	10
30	674	15	28	---	---	---	457	5	6.2
31	542	10	15	---	---	---	409	5	5.5
TOTAL	10307	---	290.09	21084	---	2686.4	19830	---	1517.3

REDWOOD CREEK BASIN

11482500 REDWOOD CREEK AT ORICK, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	390	5	5.3
2	421	4	4.9
3	437	3	3.6
4	389	3	3.3
5	361	3	3.1
6	423	8	10
7	683	20	38
8	594	12	19
9	573	7	10
10	537	5	7.2
11	538	5	7.3
12	542	5	7.1
13	492	5	6.1
14	457	4	5.3
15	427	4	4.7
16	411	4	5.0
17	496	8	10
18	462	5	6.4
19	468	4	4.9
20	551	8	12
21	674	17	31
22	582	8	12
23	525	6	7.7
24	492	4	5.7
25	474	3	4.2
26	450	4	4.3
27	420	4	4.7
28	485	5	6.2
29	477	4	5.1
30	410	2	2.7
31	---	---	---
TOTAL	14641	---	256.8
PERIOD	80848.90		5763.03

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	1370.90	4.66	6	11
NOVEMBER	3075.00	59.29	84	143
DECEMBER	10541.00	948.49	1830	2780
JANUARY 2001	10307.00	290.09	1010	1300
FEBRUARY	21084.00	2686.40	7520	10200
MARCH	19830.00	1517.30	5100	6620
APRIL	14641.00	256.80	1860	2120
PERIOD	80848.90	5763.03	17410	23174

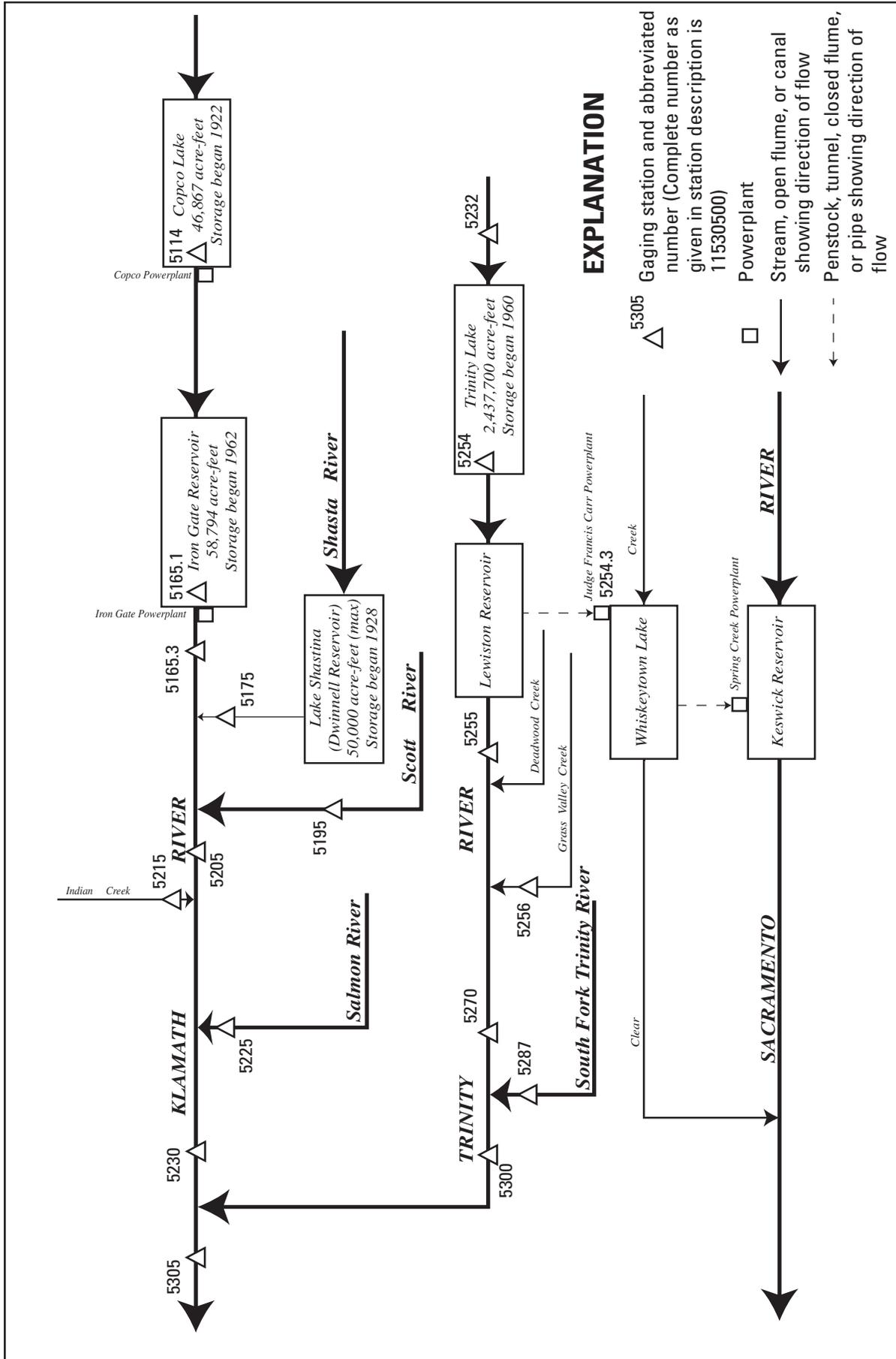


Figure 24. Diversions and storage in Klamath River and Trinity River Basins

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 mi², 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, 46,581 acre-ft, July 22, elevation, 2,607.21 ft; minimum, 39,338 acre-ft, Dec. 4, elevation, 2,599.60 ft.

11516510 IRON GATE RESERVOIR NEAR HORN BROOK

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 mi², 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, 59,426 acre-ft, May 13, elevation, 2,328.64 ft; minimum, 54,184 acre-ft, Oct. 7, elevation, 2,323.10 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800 HOURS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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	2,601.57	41,164	—	2,323.72	54,748	—
Oct. 31	2,602.97	42,480	+1,316	2,325.74	56,620	+1,872
Nov. 30	2,601.00	40,632	-1,848	2,325.48	56,377	-283
Dec. 31	2,600.10	39,799	-833	2,326.88	57,707	+1,330
CAL YR 2000	—	—	-2,142	—	—	-446
Jan. 31	2,604.00	43,458	+3,659	2,324.06	55,059	-2,648
Feb. 28	2,601.90	41,474	+1,675	2,325.58	56,470	-1,237
Mar. 31	2,604.80	44,225	+2,751	2,325.74	56,620	+150
Apr. 30	2,604.80	44,225	0	2,325.90	56,771	+151
May 31	2,604.80	44,225	0	2,325.90	56,771	0
June 30	2,602.82	42,338	-1,887	2,326.99	57,813	+1,042
July 31	2,606.85	46,223	+3,885	2,325.66	56,546	-1,267
Aug. 31	2,605.20	44,611	-1,612	2,324.80	55,742	-804
Sept. 30	2,605.05	44,466	-145	2,325.62	56,508	+766
WTR YR 2001	—	—	+3,302	—	—	+1,760

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 mi², 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 excellent. 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 ft³/s, Dec. 22, 1964, gage height, 13.63 ft, from rating curve extended above 15,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 389 ft³/s, Aug. 25–28, 1992.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	1330	1290	1300	1290	1280	1300	1660	2070	1280	1010	1020
2	1320	1330	1290	1300	1290	1290	1300	1660	2100	977	1020	1030
3	1310	1340	1290	1290	1290	1280	1300	1660	2090	977	1020	1030
4	1320	1340	1300	1290	1300	1280	1300	1660	2110	981	1020	1030
5	1320	1340	1300	1290	1300	1290	1300	1660	2120	979	1020	1030
6	1330	1340	1290	1290	1300	1290	1370	1660	2110	981	1020	1020
7	1320	1340	1290	1290	1300	1280	1670	1660	2100	980	1020	1030
8	1330	1340	1290	1290	1300	1280	1670	1660	2100	979	1020	1020
9	1340	1340	1290	1290	1300	1280	1670	1660	2090	977	1030	1020
10	1330	1340	1290	1290	1300	1280	1670	1670	2090	981	1030	1030
11	1320	1330	1290	1290	1300	1280	1670	1690	2100	995	1030	1030
12	1320	1330	1290	1290	1300	1280	1670	1970	2100	1010	1030	1020
13	1320	1330	1290	1290	1300	1280	1670	2070	2100	1010	1030	1020
14	1320	1330	1290	1290	1300	1290	1680	2010	2100	1010	1030	1020
15	1320	1320	1290	1290	1300	1280	1680	1880	2110	1010	1030	1020
16	1320	1300	1290	1290	1300	1290	1670	1760	2010	1010	1020	1020
17	1330	1300	1290	1300	1300	1290	1670	1810	1750	1010	1020	1030
18	1330	1300	1290	1290	1300	1290	1680	1950	1670	1020	1020	1030
19	1330	1290	1290	1290	1300	1290	1680	1710	1670	1020	1030	1020
20	1340	1300	1290	1290	1300	1290	1670	1660	1670	1020	1030	1020
21	1330	1300	1290	1290	1300	1290	1670	1660	1670	1020	1020	1020
22	1330	1300	1290	1290	1300	1290	1670	1660	1660	1020	1030	1020
23	1330	1300	1290	1290	1300	1290	1660	1660	1660	1010	1030	1020
24	1320	1300	1290	1300	1300	1290	1660	1660	1660	1010	1020	1020
25	1320	1310	1290	1300	1300	1300	1670	1660	1660	1010	1020	1040
26	1320	1310	1290	1290	1290	1300	1670	1660	1670	1020	1020	1030
27	1330	1310	1290	1290	1270	1300	1660	1670	1660	1020	1020	1030
28	1340	1300	1290	1290	1280	1300	1660	1670	1670	1020	1020	1030
29	1330	1300	1290	1290	---	1300	1660	1670	1670	1020	1020	1030
30	1330	1290	1290	1290	---	1300	1660	1670	1680	1020	1020	1040
31	1330	---	1290	1290	---	1300	---	1740	---	1010	1020	---
TOTAL	41100	39530	40010	40040	36310	39950	47930	53500	56920	31387	31720	30770
MEAN	1326	1318	1291	1292	1297	1289	1598	1726	1897	1012	1023	1026
MAX	1340	1340	1300	1300	1300	1300	1680	2070	2120	1280	1030	1040
MIN	1310	1290	1290	1290	1270	1280	1300	1660	1660	977	1010	1020
AC-FT	81520	78410	79360	79420	72020	79240	95070	106100	112900	62260	62920	61030

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

MEAN	1632	2088	2693	2986	3145	3650	3021	2157	1158	796	983	1292
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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1961 - 2001
ANNUAL TOTAL	720350	489167	
ANNUAL MEAN	1968	1340	2128
HIGHEST ANNUAL MEAN			3657
LOWEST ANNUAL MEAN			641
HIGHEST DAILY MEAN	5060	Mar 8	25000
LOWEST DAILY MEAN	1040	Jun 20	389
ANNUAL SEVEN-DAY MINIMUM	1040	Jul 1	390
MAXIMUM PEAK FLOW		2280	May 18
MAXIMUM PEAK STAGE		4.28	May 18
INSTANTANEOUS LOW FLOW			13.63
ANNUAL RUNOFF (AC-FT)	1429000	970300	1542000
10 PERCENT EXCEEDS	3630	1670	4200
50 PERCENT EXCEEDS	1340	1300	1410
90 PERCENT EXCEEDS	1060	1020	734

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1962–80, December 1999 to September 2001 (discontinued).

CHEMICAL DATA: Water years 1962–81.

DISSOLVED OXYGEN: Water years December 1999 to September 2001 (discontinued).

pH: December Water years December 1999 to September 2001 (discontinued).

SPECIFIC CONDUCTANCE: Water years December 1999 to September 2001 (discontinued)..

AIR TEMPERATURE: Water years December 1999 to September 2001 (discontinued).

WATER TEMPERATURE: Water years 1962–80, December 1999 to September 2001 (discontinued).

PRECIPITATION: Water years December 1999 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.—

DISSOLVED OXYGEN: December 1999 to September 2001 (discontinued).

pH: December 1999 to September 2001 (discontinued).

SPECIFIC CONDUCTANCE: December 1999 to September 2001 (discontinued).

AIR TEMPERATURE: December 1999 to September 2001 (discontinued).

WATER TEMPERATURE: October 1962 to June 1980, December 1999 to September 2001 (discontinued).

PRECIPITATION: December 1999 to September 2001 (discontinued).

INSTRUMENTATION.—Water-quality monitor December 1999 to September 2001. Electronic data logger with 15 minute interval.

REMARKS.—Dissolved Oxygen records rated good except for Oct. 1 to Nov. 15, Mar. 6 to Apr. 2, and July 30 to Sept. 4, which are rated fair. pH records rated good. Specific conductance records rated good except for Apr. 2 to May 2, which is rated fair. Air temperature records rated fair. Water temperature records rated excellent except for Oct. 4 to Dec. 12, and Mar. 6 to May 2, which are rated good. Precipitation records rated good. Interruption in record due to malfunction of the recording equipment or data exceeded maximum allowable limits.

EXTREMES FOR PERIOD OF DAILY RECORD.—

DISSOLVED OXYGEN: Maximum recorded, 13.5 mg/L, Mar. 8, 2001; minimum recorded, 3.0 mg/L, July 23, 2001.

pH: Maximum recorded, 9.3 standard units, Aug. 20, 2001; minimum recorded, 6.4 standard units, Dec. 7, 8, 2001.

SPECIFIC CONDUCTANCE: Maximum recorded, 219 microsiemens, June 16, 17, 2000; minimum recorded, 132 microsiemens, June 17, 2001.

AIR TEMPERATURE: Maximum recorded, 109°F, May 22, 2001; minimum recorded, 13°F, Dec. 30, 2000, and Jan. 17, 2001.

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, 13.5 mg/L, Mar. 8; minimum recorded, 3.0 mg/L, July 23.

pH: Maximum recorded, 9.3 standard units, Aug. 20; minimum recorded, 6.4 standard units, Dec. 7, 8.

SPECIFIC CONDUCTANCE: Maximum recorded, 203 microsiemens, Oct. 20, 21; minimum recorded, 132 microsiemens, June 17.

AIR TEMPERATURE: Maximum recorded, 109°F, May 22; minimum recorded, 13°F, Dec. 30 and Jan. 17.

WATER TEMPERATURE: Maximum recorded, 22.5°C, July 14 and Aug. 18, 20; minimum recorded, 3.5°C, several days during the year.

PRECIPITATION: Maximum daily rainfall, 0.14 inches, Oct. 28 and Dec. 13; no rainfall for many days.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOC- ATION, (FEET) (81903)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION (PER- CENT) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL									
02...*	1250	2.80	669	6.8	85.5	7.8	130	20.0	108
02...*	1255	4.20	669	6.6	82.2	7.8	130	19.5	82.0
02...*	1300	4.60	669	6.6	82.2	7.8	130	19.5	65.0
02...*	1305	4.20	669	6.7	83.4	7.8	133	19.5	47.0
02...*	1310	5.00	669	6.7	83.4	7.8	135	19.5	25.0

* Instantaneous discharge at the time of the cross-sectional measurement: July 2, 971 ft³/s.

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	5.2	4.5	9.0	8.4	10.6	10.3	11.2	10.5	11.7	9.3
2	---	---	---	---	9.2	8.7	10.6	10.3	11.2	10.9	11.7	10.8
3	---	---	---	---	9.4	8.9	11.4	10.3	11.3	10.9	11.7	11.2
4	---	---	---	---	9.3	8.9	10.6	10.4	11.1	10.8	11.6	10.9
5	6.5	5.5	---	---	9.5	9.0	10.7	10.4	11.3	10.8	11.6	10.7
6	5.9	5.0	---	---	9.7	9.2	10.6	10.4	11.4	11.0	11.6	10.8
7	5.7	4.9	---	---	9.9	9.3	10.7	10.4	11.3	10.8	12.5	10.9
8	---	---	---	---	9.9	9.4	10.6	10.3	11.2	10.9	13.5	11.9
9	7.3	4.7	---	---	10.0	9.4	10.5	10.1	11.1	10.8	12.7	12.0
10	5.0	4.4	---	---	10.1	9.7	10.4	10.1	11.1	10.7	12.5	11.8
11	5.0	4.3	---	---	10.3	9.8	10.4	10.1	11.1	10.7	12.1	11.1
12	5.1	4.4	---	---	10.7	9.6	10.4	10.1	11.0	10.6	12.4	10.8
13	5.0	4.3	---	---	9.9	9.4	10.4	9.9	11.0	10.6	11.8	8.7
14	4.9	4.4	---	---	9.7	9.1	10.5	9.5	10.9	10.6	11.0	7.7
15	---	---	---	---	9.8	9.4	10.5	10.2	10.9	10.4	9.3	7.3
16	---	---	7.2	6.7	9.9	9.5	10.6	10.3	10.8	10.3	9.2	7.9
17	---	---	7.2	6.9	10.0	9.6	10.7	10.4	10.8	10.3	---	---
18	---	---	7.2	6.9	10.0	9.7	10.9	10.5	10.9	10.3	---	---
19	---	---	7.3	7.0	10.1	9.7	11.0	10.7	10.7	10.2	---	---
20	---	---	7.3	7.0	10.2	9.9	11.0	10.8	10.8	10.4	---	---
21	---	---	7.4	7.0	10.4	9.9	11.3	11.0	10.8	10.4	---	---
22	---	---	7.4	7.1	10.4	10.1	11.2	10.9	10.7	10.3	---	---
23	---	---	7.6	7.2	10.4	10.1	11.1	10.1	10.8	9.8	---	---
24	---	---	7.6	7.2	10.4	10.1	10.8	10.4	10.6	10.0	---	---
25	---	---	8.1	7.4	10.5	10.2	10.8	10.2	10.9	10.4	---	---
26	4.9	4.2	8.1	7.7	10.5	10.2	10.9	10.6	11.3	10.6	---	---
27	4.9	4.3	8.4	7.8	10.5	10.2	11.0	10.6	11.6	10.8	---	---
28	5.2	4.2	8.3	7.9	10.6	10.3	11.1	10.7	11.6	11.1	---	---
29	5.2	4.4	8.8	8.0	10.6	10.2	11.2	10.7	---	---	---	---
30	5.2	4.6	8.7	8.2	10.6	9.6	11.2	10.9	---	---	---	---
31	5.3	4.8	---	---	10.6	10.1	11.2	10.8	---	---	---	---
MONTH	---	---	---	---	10.7	8.4	11.4	9.5	11.6	9.8	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	9.8	8.6	7.4	6.6	8.4	6.7	7.3	3.2	7.7	6.2
2	---	---	8.8	7.9	7.2	6.4	8.9	6.4	6.8	3.1	7.2	5.5
3	8.5	8.0	8.7	7.8	7.3	6.7	8.2	6.2	---	---	8.3	6.6
4	8.6	8.0	8.7	7.8	7.2	6.6	8.3	6.1	---	---	8.6	6.3
5	8.5	8.0	8.7	7.9	7.0	6.5	8.3	5.9	---	---	9.8	6.3
6	9.3	7.9	8.8	7.8	7.1	6.6	8.1	5.9	---	---	7.8	5.9
7	8.1	7.8	8.7	7.1	7.0	6.5	8.0	5.1	---	---	8.2	5.1
8	8.3	7.8	8.8	6.6	7.3	6.6	8.6	5.4	---	---	7.8	6.3
9	8.4	8.0	8.5	6.8	7.0	6.4	8.4	4.9	---	---	6.5	5.2
10	8.3	7.8	8.6	7.5	7.3	6.5	8.5	4.5	7.7	6.1	6.8	4.8
11	8.3	7.8	8.4	7.1	7.2	6.2	7.8	3.5	7.8	5.7	6.5	5.1
12	8.3	7.7	8.3	7.2	7.8	6.7	8.1	4.6	7.3	4.5	6.6	5.5
13	8.2	7.7	8.4	7.8	7.4	7.0	8.4	5.0	7.4	4.9	7.1	5.9
14	8.2	7.5	8.0	7.5	7.6	6.9	8.5	4.0	7.6	5.2	7.9	5.4
15	8.1	7.4	8.1	7.7	7.4	5.8	8.4	4.5	7.5	6.3	6.8	5.8
16	8.1	7.5	8.3	7.5	7.6	5.3	8.3	4.5	7.7	5.9	7.8	5.4
17	8.3	7.6	8.2	7.2	8.0	6.9	8.5	5.2	7.2	5.4	6.9	5.7
18	8.3	7.3	7.6	7.0	7.6	6.9	8.0	3.6	8.0	5.2	7.8	5.6
19	8.3	7.7	8.0	7.1	7.8	6.7	7.7	4.4	6.7	5.6	6.8	5.4
20	8.3	7.5	7.8	7.1	8.1	6.6	8.7	3.8	8.4	5.4	6.7	5.4
21	8.4	7.8	8.0	6.9	8.1	6.9	8.3	3.6	7.0	5.6	6.7	5.4
22	8.5	7.8	8.0	6.8	8.0	6.9	8.1	4.4	6.5	4.5	6.6	5.2
23	8.4	7.8	8.0	6.9	8.0	6.9	8.7	3.0	7.2	4.5	6.9	3.6
24	8.6	7.7	8.0	6.9	8.0	7.0	8.8	3.3	7.3	5.8	6.6	3.6
25	8.7	7.8	7.9	6.7	7.6	6.5	8.4	4.3	7.3	5.6	6.4	4.2
26	9.0	7.9	7.4	4.1	7.6	6.7	8.3	6.2	8.1	4.5	6.9	5.4
27	9.1	8.1	7.5	5.6	7.4	6.3	9.5	6.6	8.4	6.0	6.9	5.6
28	8.8	8.3	7.4	6.2	8.0	7.0	9.2	6.0	8.3	6.0	6.7	5.3
29	9.2	8.3	7.6	6.6	8.2	7.4	8.8	6.9	7.6	6.3	6.6	5.0
30	9.4	8.1	7.5	6.5	8.3	7.3	10.0	7.0	8.6	6.2	6.5	5.0
31	---	---	7.5	6.5	---	---	7.6	4.7	8.0	6.1	---	---
MONTH	---	---	9.8	4.1	8.3	5.3	10.0	3.0	---	---	9.8	3.6

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.9	6.8	7.1	7.0	6.6	6.5	7.1	7.0	7.9	7.8	8.1	7.7
2	6.9	6.8	7.1	7.0	6.7	6.6	7.1	7.0	7.9	7.8	8.0	7.8
3	6.8	6.7	7.0	7.0	6.7	6.7	7.6	7.0	7.9	7.8	8.0	7.8
4	7.0	6.7	7.0	7.0	6.7	6.5	7.5	7.4	7.9	7.8	8.0	7.8
5	6.9	6.8	7.0	7.0	6.6	6.5	7.5	7.4	8.0	7.8	7.9	7.8
6	6.9	6.8	7.1	7.0	6.7	6.6	7.5	7.4	8.0	7.9	8.1	7.8
7	6.8	6.8	7.0	7.0	6.7	6.4	7.5	7.4	8.0	7.9	8.3	7.9
8	6.9	6.8	7.1	7.0	6.7	6.4	7.5	7.4	8.0	7.9	8.7	8.2
9	6.9	6.8	7.0	6.9	6.7	6.5	7.6	7.4	8.0	7.9	8.5	8.3
10	6.9	6.9	7.1	7.0	6.8	6.5	7.6	7.5	8.0	7.8	8.4	8.2
11	6.9	6.8	7.1	7.0	6.8	6.7	7.6	7.5	7.9	7.8	8.5	8.2
12	6.9	6.8	7.1	7.0	6.8	6.7	7.6	7.5	7.9	7.8	8.4	8.2
13	6.9	6.8	7.1	7.0	6.8	6.8	7.6	7.5	7.9	7.8	8.6	8.3
14	6.9	6.8	7.1	7.0	6.8	6.8	7.6	7.5	7.9	7.8	8.5	8.4
15	6.9	6.8	7.1	7.0	6.8	6.8	7.6	7.5	7.9	7.8	8.5	8.3
16	6.9	6.8	7.1	7.1	6.8	6.8	7.6	7.5	7.9	7.8	8.6	8.3
17	6.9	6.8	7.1	7.0	6.8	6.8	7.6	7.5	7.9	7.8	8.5	8.4
18	6.9	6.8	7.1	6.9	6.9	6.8	7.6	7.6	7.9	7.8	8.5	8.3
19	6.9	6.8	7.0	6.9	6.9	6.9	7.7	7.6	7.9	7.8	8.4	8.2
20	6.9	6.8	7.0	6.9	7.0	6.9	7.8	7.6	7.9	7.8	8.4	8.2
21	7.0	6.9	7.0	6.9	6.9	6.9	7.8	7.7	7.8	7.8	8.3	8.1
22	7.0	6.9	7.0	6.9	7.0	6.9	7.8	7.7	7.8	7.8	8.2	8.1
23	6.9	6.9	7.0	6.8	7.0	6.9	7.8	7.6	7.8	7.8	8.2	7.8
24	7.0	6.9	6.8	6.7	7.0	6.9	7.8	7.7	7.9	7.8	8.1	7.8
25	6.9	6.9	6.8	6.6	7.0	6.9	7.8	7.7	7.9	7.8	8.1	7.8
26	7.0	6.9	6.7	6.6	6.9	6.9	7.8	7.7	8.0	7.8	8.1	7.8
27	7.0	6.9	6.7	6.7	7.0	6.9	7.8	7.7	8.0	7.9	8.1	7.8
28	7.0	6.9	6.8	6.7	7.0	6.9	7.8	7.7	8.1	7.9	8.0	7.8
29	7.0	6.9	6.7	6.6	7.1	6.9	7.8	7.7	---	---	8.1	7.8
30	7.0	6.9	6.6	6.5	7.1	7.0	7.8	7.7	---	---	8.0	7.8
31	7.1	7.0	---	---	7.1	7.0	7.9	7.7	---	---	7.8	7.6
MONTH	7.1	6.7	7.1	6.5	7.1	6.4	7.9	7.0	8.1	7.8	8.7	7.6
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	7.7	8.3	8.1	8.4	7.9	7.8	7.6	8.7	8.2	8.4	7.7
2	8.1	7.7	8.3	8.0	8.2	7.9	8.1	7.4	8.5	7.3	8.2	7.4
3	8.1	8.0	8.3	8.0	8.1	7.8	7.9	7.4	8.9	7.5	8.6	7.8
4	8.1	8.0	8.3	7.9	8.0	7.8	7.9	7.3	8.8	8.1	8.8	7.7
5	8.1	8.0	8.3	8.0	8.0	7.8	8.1	7.3	8.7	7.9	9.0	8.0
6	8.1	8.0	8.3	8.0	8.1	7.8	7.9	7.3	8.9	8.2	8.5	7.9
7	8.1	8.0	8.3	7.9	8.1	7.8	8.0	7.3	8.7	8.2	8.6	7.4
8	8.1	8.0	8.3	7.9	8.2	7.8	8.2	7.3	8.7	8.2	8.4	7.8
9	8.1	8.0	8.4	8.0	8.0	7.8	8.2	7.4	8.8	8.0	7.8	7.3
10	8.2	8.1	8.4	8.0	8.1	7.8	8.2	7.3	8.8	8.2	7.7	7.2
11	8.2	8.0	8.4	7.9	8.1	7.7	8.1	7.3	8.9	8.2	7.5	7.2
12	8.2	8.1	8.4	7.9	8.4	7.9	8.1	7.3	8.8	7.5	7.5	7.3
13	8.2	8.1	8.4	8.1	8.2	7.9	8.3	7.4	8.9	7.8	7.6	7.3
14	8.2	8.0	8.3	8.1	8.3	7.9	8.5	7.4	9.0	7.9	7.7	7.3
15	8.2	8.0	8.2	8.1	8.0	7.6	8.4	7.5	9.0	8.6	7.5	7.2
16	8.2	8.0	8.3	8.1	7.8	7.5	8.5	7.5	9.1	8.4	7.9	7.3
17	8.2	8.0	8.3	8.0	7.7	7.4	8.5	7.6	9.0	8.3	7.5	7.2
18	8.1	8.0	8.2	7.9	7.5	7.4	8.1	7.6	9.1	8.1	7.6	7.1
19	8.2	8.0	8.4	8.0	7.6	7.3	7.9	7.4	9.0	8.5	7.4	7.2
20	8.2	8.1	8.3	8.0	7.6	7.4	8.1	7.4	9.3	8.6	7.3	7.1
21	8.2	8.0	8.5	8.1	7.9	7.5	7.9	7.5	9.0	8.4	7.3	7.1
22	8.2	8.0	8.5	8.0	7.8	7.5	8.0	7.5	8.8	7.8	7.3	7.1
23	8.2	8.1	8.5	8.1	7.8	7.5	8.1	7.6	8.9	7.8	7.3	6.9
24	8.2	8.1	8.6	8.1	7.8	7.5	8.4	7.6	8.8	8.2	7.3	6.9
25	8.3	8.1	8.6	8.1	7.8	7.5	9.0	7.7	8.6	8.0	7.2	7.0
26	8.3	8.1	8.5	7.9	7.8	7.6	9.0	8.2	8.9	7.9	7.3	7.1
27	8.3	8.1	8.5	7.8	7.7	7.5	9.2	8.3	8.9	8.1	7.3	7.1
28	8.2	8.1	8.4	7.9	7.8	7.5	9.0	7.9	8.7	8.1	7.2	7.1
29	8.3	8.1	8.4	8.0	7.7	7.5	9.1	8.2	8.4	8.0	7.2	7.0
30	8.2	8.0	8.3	7.8	7.9	7.6	9.1	8.5	8.7	7.8	7.2	7.0
31	---	---	8.3	7.8	---	---	8.7	8.2	8.6	7.8	---	---
MONTH	8.3	7.7	8.6	7.8	8.4	7.3	9.2	7.3	9.3	7.3	9.0	6.9

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	182	179	188	186	164	163	163	162	168	167	169	168
2	182	178	186	185	163	163	162	161	168	167	170	168
3	183	180	185	183	164	163	164	161	168	167	170	168
4	183	178	184	181	166	163	164	164	168	167	169	167
5	183	178	184	181	166	164	165	164	168	160	172	167
6	186	183	183	181	165	163	165	164	162	161	172	168
7	188	186	182	178	164	163	166	165	163	162	169	167
8	190	188	180	178	164	163	166	165	163	162	167	165
9	195	189	180	177	164	163	166	166	164	163	166	165
10	198	194	177	174	164	163	166	166	165	163	166	165
11	198	194	175	174	164	163	166	166	165	164	166	165
12	197	195	174	172	164	163	167	166	166	165	166	165
13	198	195	174	171	168	163	167	167	166	166	166	165
14	198	196	172	170	172	164	177	167	167	166	167	166
15	198	196	171	161	168	167	168	167	168	167	167	166
16	198	197	167	166	167	165	168	167	168	167	168	166
17	199	197	166	165	165	164	168	167	168	167	170	167
18	198	197	165	164	165	164	168	167	170	167	170	169
19	198	197	165	164	164	162	168	167	169	167	171	169
20	203	192	165	164	163	162	167	167	169	167	172	171
21	203	198	164	164	164	162	167	166	168	168	175	172
22	199	196	164	164	164	162	167	166	169	168	177	174
23	197	194	164	164	162	162	172	167	170	168	179	175
24	194	193	164	163	162	161	169	167	170	169	179	169
25	194	190	164	163	162	161	170	168	170	169	180	170
26	193	190	164	163	162	162	169	168	170	169	181	179
27	192	191	163	162	164	162	170	168	169	168	181	179
28	200	185	164	163	163	162	169	168	169	168	182	179
29	197	188	164	162	163	162	168	168	---	---	183	181
30	190	188	164	163	163	161	168	167	---	---	184	181
31	189	188	---	---	162	161	168	167	---	---	187	181
MONTH	203	178	188	161	172	161	177	161	170	160	187	165
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	186	182	165	160	142	140	143	138	145	140	153	150
2	184	180	177	165	144	140	142	137	146	141	153	150
3	183	180	199	170	142	140	140	138	144	141	156	151
4	182	180	198	165	143	139	141	138	145	142	157	148
5	181	179	185	172	141	139	140	138	146	143	151	148
6	182	179	180	167	141	139	143	136	149	142	155	149
7	183	180	171	165	141	139	141	136	147	143	152	148
8	181	179	167	161	142	140	139	136	153	144	154	150
9	181	179	164	158	155	140	139	136	151	142	161	151
10	180	178	161	155	144	140	141	137	145	141	154	152
11	180	178	158	154	144	139	143	139	144	141	156	152
12	180	178	168	152	146	139	140	138	146	142	156	152
13	182	179	155	151	143	139	139	137	146	142	157	155
14	183	179	155	152	142	138	139	136	146	142	158	155
15	182	177	174	155	142	137	141	137	146	141	162	153
16	182	170	168	150	139	136	142	137	145	142	156	154
17	179	172	161	154	139	132	144	139	149	144	157	155
18	180	176	155	152	138	136	145	141	149	143	157	155
19	183	176	155	149	139	136	147	142	147	145	157	148
20	182	179	154	151	138	136	152	144	147	142	157	156
21	182	180	154	148	139	136	159	144	147	144	159	156
22	181	179	153	148	139	136	149	140	152	147	160	157
23	181	177	151	146	144	135	148	141	154	143	160	156
24	181	176	147	144	139	135	---	---	149	144	159	156
25	179	170	146	142	142	137	---	---	149	145	177	159
26	174	169	145	142	150	139	143	141	150	145	168	160
27	172	168	145	142	153	145	144	142	167	148	161	158
28	170	165	145	142	155	142	148	142	171	157	159	157
29	167	163	144	141	147	142	149	142	175	150	158	157
30	166	160	143	141	144	139	151	140	153	148	162	156
31	---	---	143	141	---	---	144	141	152	148	---	---
MONTH	186	160	199	141	155	132	---	---	175	140	177	148

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.0	16.5	11.5	11.0	7.0	6.5	4.5	4.5	4.0	3.5	5.0	4.5
2	18.0	16.5	12.0	11.5	7.0	6.5	5.0	4.5	4.5	4.0	5.5	5.0
3	17.0	16.5	11.5	11.0	6.5	6.5	4.5	4.5	4.5	4.0	5.0	4.5
4	17.0	16.0	11.5	11.0	6.5	6.0	4.5	4.5	4.5	4.0	5.0	5.0
5	17.0	16.0	11.0	11.0	6.0	6.0	4.5	4.5	4.5	4.0	5.5	5.0
6	16.5	15.5	11.0	10.5	6.0	5.5	4.5	4.5	4.5	4.0	6.0	5.0
7	16.5	15.5	10.5	10.0	6.0	5.5	4.5	4.0	4.5	4.0	6.5	5.0
8	16.5	15.5	11.0	10.5	6.0	6.0	4.5	4.5	4.0	3.5	7.0	5.5
9	16.0	15.5	10.5	9.5	6.0	6.0	4.5	4.5	4.0	4.0	6.5	6.0
10	15.5	15.0	10.0	9.5	6.0	5.5	4.5	4.0	4.5	4.0	7.0	5.5
11	15.5	15.0	9.5	9.0	6.0	5.5	4.5	4.0	4.5	4.0	7.0	5.5
12	15.0	14.5	9.5	9.0	6.0	5.5	4.5	4.5	4.5	3.5	7.0	5.5
13	15.0	14.5	9.0	8.5	6.0	5.5	4.5	4.5	4.5	3.5	7.5	5.5
14	15.0	14.5	9.0	9.0	5.5	5.5	4.5	4.0	4.5	4.0	7.5	6.0
15	15.0	14.5	9.0	9.0	6.0	5.0	4.5	4.0	4.5	4.0	6.5	6.0
16	15.0	14.0	9.0	8.5	5.5	5.5	4.5	4.0	4.5	4.0	7.0	6.0
17	15.0	14.0	8.5	8.0	5.5	5.0	4.0	3.5	5.0	4.0	7.5	6.5
18	14.5	14.0	8.5	8.0	5.5	5.0	4.0	4.0	4.5	4.0	7.5	7.0
19	14.5	13.5	8.0	8.0	5.5	5.0	4.0	4.0	5.0	4.5	7.5	7.0
20	14.0	13.5	8.0	7.5	5.5	5.0	4.0	3.5	5.0	4.5	8.0	7.0
21	14.0	13.5	8.0	7.5	5.5	5.0	4.0	3.5	5.0	4.5	8.5	7.0
22	13.5	13.0	8.0	7.5	5.5	5.0	4.0	4.0	4.5	4.5	9.0	8.0
23	13.5	12.5	7.5	7.5	5.5	5.0	4.5	4.0	5.0	4.5	9.0	7.5
24	13.5	12.5	7.5	7.0	5.5	5.0	4.5	4.0	5.0	4.5	9.5	6.0
25	13.0	12.5	7.5	7.5	5.0	4.5	4.0	4.0	5.0	4.5	9.0	6.0
26	13.0	12.5	7.5	7.0	5.0	4.5	4.0	4.0	5.5	4.5	9.5	8.0
27	12.5	12.0	7.5	7.0	5.0	4.5	4.0	3.5	5.5	4.5	9.0	8.5
28	12.5	11.5	7.5	7.0	5.0	4.5	4.0	3.5	5.5	4.5	9.5	8.5
29	12.0	11.5	7.5	7.0	5.0	4.5	4.5	4.0	---	---	11.0	9.0
30	12.5	11.5	7.0	6.5	4.5	4.5	4.0	3.5	---	---	11.0	8.5
31	12.0	11.5	---	---	4.5	4.5	4.0	3.5	---	---	11.0	9.0
MONTH	18.0	11.5	12.0	6.5	7.0	4.5	5.0	3.5	5.5	3.5	11.0	4.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	9.0	14.0	12.0	20.5	18.5	20.0	18.5	21.0	20.0	21.5	20.0
2	10.5	9.0	13.5	12.0	19.5	18.5	20.5	19.0	21.0	19.5	21.0	20.0
3	10.5	8.5	14.0	12.0	19.0	18.0	20.5	19.0	21.0	19.5	21.0	20.0
4	10.5	9.0	14.0	12.0	18.5	17.5	20.5	19.5	21.0	20.0	21.0	20.0
5	10.0	9.0	14.5	13.0	18.5	18.0	22.0	19.5	21.0	20.0	21.0	20.0
6	9.5	9.0	15.0	13.0	19.0	17.5	21.5	19.5	21.5	20.0	20.5	19.5
7	10.0	8.5	14.5	13.5	19.0	18.0	21.0	19.0	21.5	20.0	20.5	19.0
8	10.0	9.0	16.0	13.5	20.0	18.0	21.5	19.5	21.5	20.5	20.0	19.0
9	10.5	8.5	16.0	14.0	19.5	18.0	21.5	19.5	21.5	19.0	19.5	18.5
10	9.5	9.0	15.5	14.0	19.0	18.0	22.0	19.5	21.5	20.5	19.5	18.5
11	10.0	9.0	15.5	13.5	18.5	18.0	21.0	20.0	21.5	20.0	18.5	18.0
12	9.5	9.0	16.0	14.0	19.0	18.0	21.5	19.5	21.5	20.0	19.0	18.0
13	10.5	9.0	17.0	15.0	19.0	17.5	22.0	19.5	21.5	20.0	19.0	18.5
14	10.0	9.0	16.0	15.5	19.5	17.5	22.5	20.0	21.5	20.0	19.5	18.0
15	10.0	8.5	15.5	15.5	19.5	18.0	22.0	20.0	22.0	20.5	19.5	18.5
16	10.0	8.0	17.0	15.0	19.5	18.0	22.0	20.0	22.0	20.5	20.0	18.5
17	10.0	8.0	17.0	15.5	19.5	18.0	21.5	19.5	22.0	20.5	19.5	18.0
18	10.0	9.5	17.0	15.5	19.0	17.5	21.0	19.5	22.5	20.5	19.5	18.0
19	10.5	9.5	18.0	15.5	19.5	18.0	20.5	19.5	22.0	20.5	19.0	18.0
20	10.5	9.5	18.0	16.0	20.0	18.0	21.5	19.5	22.5	20.5	19.0	18.0
21	12.0	9.5	18.5	17.0	20.5	18.5	21.5	19.5	21.5	20.5	19.0	18.0
22	11.0	10.0	18.0	16.0	20.5	18.5	21.0	19.5	21.0	20.0	19.0	17.5
23	12.0	10.0	19.0	17.0	20.0	18.5	22.0	20.0	21.0	20.0	18.5	17.5
24	12.0	11.0	19.5	17.0	20.0	18.5	22.0	20.0	21.0	20.0	18.5	17.5
25	12.0	11.0	19.0	17.5	19.0	18.0	22.0	19.5	21.0	20.0	18.0	17.0
26	13.0	11.0	19.5	18.0	18.5	17.5	22.0	20.0	21.5	20.0	18.0	17.0
27	13.0	11.5	20.5	18.0	18.0	17.0	22.0	20.0	21.5	20.0	18.0	17.0
28	13.0	11.0	19.5	18.0	19.5	17.5	22.0	20.0	21.5	20.0	18.0	16.5
29	12.5	12.0	19.5	18.0	19.5	18.0	21.5	20.0	21.5	20.0	18.0	16.5
30	12.5	11.0	19.5	18.0	20.5	18.5	22.0	20.5	21.5	20.5	18.0	16.5
31	---	---	20.0	19.0	---	---	21.5	20.0	21.5	20.0	---	---
MONTH	13.0	8.0	20.5	12.0	20.5	17.0	22.5	18.5	22.5	19.0	21.5	16.5

KLAMATH RIVER BASIN

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.01	.03	.03	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.04	.00	.00	.02	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.07	.02	.05	.01	.05	.00	.00	.00	.00	.00	.00	.00
10	.05	.00	.00	.01	.00	.00	.00	.00	.00	.12	.00	.00
11	.01	.00	.03	.05	.08	.00	.01	.00	.00	.01	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.03	.14	.02	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.02	.01	.00	.00	.00	.00	.05	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.02	.01	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.13	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
20	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
22	.01	.00	.00	.00	.03	.01	.00	.00	.00	.00	.00	.00
23	.00	.01	.01	.03	.02	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.07	.00	.01	.00	.00	.00	.00	.00	.13
25	.00	.00	.01	.00	.00	.02	.00	.00	.00	.00	.00	.13
26	.00	.00	.00	.00	.00	.00	.00	.02	.02	.00	.00	.01
27	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
28	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.07	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.01	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.39	0.17	0.25	0.19	0.21	0.19	0.28	0.17	0.04	0.13	0.00	0.27

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 mi².

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 Dwinell) 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 ft³/s, Dec. 22, 1964, gage height, 12.92 ft, in gage well, 13.85 ft, from floodmarks, from rating curve extended above 4,100 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 1.5 ft³/s, Aug. 24, 1981, July 17, 1985.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 630 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 22	2245	313	3.80

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	182	170	174	171	168	141	57	37	26	22	23
2	113	183	171	172	176	168	90	55	35	22	26	29
3	139	189	171	174	177	170	91	60	41	28	26	36
4	139	183	170	179	177	170	86	56	40	30	35	38
5	143	179	170	180	177	185	72	54	40	21	23	22
6	144	178	170	180	175	241	66	49	26	18	13	25
7	137	178	170	177	174	218	90	54	23	20	14	20
8	139	179	168	177	172	194	110	44	18	12	13	24
9	139	181	169	177	171	187	97	56	19	22	13	20
10	150	179	170	177	174	179	80	48	21	22	14	24
11	150	176	170	179	176	172	81	50	22	34	13	31
12	156	172	177	181	180	170	81	48	22	39	18	38
13	152	173	181	179	177	170	82	89	20	26	24	37
14	152	182	200	179	177	164	74	81	22	28	20	38
15	153	187	194	178	174	153	81	40	21	27	21	39
16	156	184	189	177	171	150	88	47	19	30	17	39
17	163	181	189	176	170	152	90	51	24	28	20	40
18	162	177	185	174	170	151	101	35	22	21	20	43
19	163	177	183	177	170	154	177	25	16	21	22	51
20	171	177	183	177	171	154	184	30	21	29	23	47
21	179	177	184	177	174	152	178	28	30	29	24	52
22	173	180	182	178	174	158	156	24	22	23	22	50
23	170	178	179	181	178	155	148	37	16	22	21	41
24	169	174	177	182	181	152	137	29	24	21	19	46
25	170	175	175	187	179	155	121	27	23	15	17	97
26	175	177	171	185	177	175	94	21	28	17	23	114
27	173	175	171	179	175	183	57	35	35	20	14	95
28	180	169	174	177	170	175	67	33	29	22	10	85
29	183	168	172	177	---	173	70	32	28	18	13	84
30	176	170	170	176	---	176	66	31	26	19	23	83
31	185	---	171	172	---	162	---	31	---	21	19	---
TOTAL	4852	5340	5476	5515	4888	5286	3056	1357	770	731	602	1411
MEAN	157	178	177	178	175	171	102	43.8	25.7	23.6	19.4	47.0
MAX	185	189	200	187	181	241	184	89	41	39	35	114
MIN	98	168	168	172	170	150	57	21	16	12	10	20
AC-FT	9620	10590	10860	10940	9700	10480	6060	2690	1530	1450	1190	2800

KLAMATH RIVER BASIN

11517500 SHASTA RIVER NEAR YREKA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	152	196	278	340	343	315	204	140	103	45.2	38.7	74.6
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1934 - 2001	
ANNUAL TOTAL	64851		39284			
ANNUAL MEAN	177		108		185	
HIGHEST ANNUAL MEAN					364	
LOWEST ANNUAL MEAN					77.9	
HIGHEST DAILY MEAN	749	Mar 5	241	Mar 6	10400	Dec 23 1964
LOWEST DAILY MEAN	15	Aug 18	10	Aug 28	1.5	Aug 24 1981
ANNUAL SEVEN-DAY MINIMUM	17	Aug 16	14	Aug 6	5.5	Aug 9 1939
MAXIMUM PEAK FLOW			313		21500	
MAXIMUM PEAK STAGE			3.80		12.92	
ANNUAL RUNOFF (AC-FT)	128600		77920		134300	
10 PERCENT EXCEEDS	337		180		351	
50 PERCENT EXCEEDS	170		139		153	
90 PERCENT EXCEEDS	40		21		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 mi².

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 ft³/s, Dec. 22, 1964, gage height, 25.34 ft, from floodmarks, from rating curve extended above 15,000 ft³/s on basis of slope-area measurement at 21.40 ft, site and datum then in use; minimum daily, 3.4 ft³/s, Sept. 20–22, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,700 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 25	1400	1,200	7.48

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	73	97	92	98	136	591	422	151	9.4	7.4	6.2
2	34	73	96	91	99	136	525	411	133	8.8	7.6	6.5
3	33	73	93	90	101	133	457	350	125	8.9	6.5	5.9
4	34	74	91	90	105	134	375	311	122	8.0	6.6	5.4
5	34	77	91	90	112	312	314	310	105	8.2	6.6	5.6
6	35	76	89	91	118	360	280	321	100	7.7	6.5	5.3
7	35	73	90	92	120	282	258	337	98	7.5	5.6	4.8
8	36	76	90	95	117	250	243	374	86	7.7	5.0	4.4
9	39	79	90	98	116	237	225	432	77	7.6	5.1	4.4
10	40	83	91	103	116	223	201	442	64	7.7	5.4	4.3
11	39	83	97	108	116	206	185	411	56	9.1	5.6	4.4
12	39	83	100	109	116	192	169	437	50	8.6	5.3	4.5
13	41	82	102	110	114	185	152	469	42	7.6	5.9	4.4
14	42	84	111	107	109	182	133	439	35	7.6	5.4	4.2
15	44	83	114	105	108	182	120	662	29	8.0	4.8	4.0
16	45	83	114	103	109	180	114	1040	23	8.2	5.0	4.2
17	46	83	109	99	110	176	109	712	22	8.3	5.1	4.0
18	49	83	105	95	112	182	133	552	21	8.4	5.3	3.9
19	50	82	101	97	122	219	213	478	19	8.5	4.9	3.5
20	54	82	99	97	133	302	222	433	16	8.4	5.6	3.4
21	55	83	99	97	159	375	197	417	14	8.3	5.9	3.4
22	55	82	98	96	193	526	178	390	12	8.0	5.3	3.4
23	57	83	98	97	185	651	174	348	12	7.4	4.5	3.5
24	60	84	97	103	171	742	181	314	12	7.3	5.5	3.9
25	60	84	97	106	159	1060	232	291	12	7.3	5.1	4.3
26	62	86	97	107	150	865	375	267	12	7.5	4.4	4.1
27	62	87	95	106	144	628	525	245	11	7.3	4.3	4.2
28	68	86	95	104	139	756	542	231	11	7.4	4.9	4.3
29	72	91	94	103	---	809	455	215	9.8	7.2	4.7	4.3
30	81	92	95	101	---	722	395	194	9.4	7.5	5.5	4.2
31	78	---	93	100	---	629	---	171	---	7.7	5.8	---
TOTAL	1512	2443	3028	3082	3551	11972	8273	12426	1489.2	247.1	171.1	132.9
MEAN	48.8	81.4	97.7	99.4	127	386	276	401	49.6	7.97	5.52	4.43
MAX	81	92	114	110	193	1060	591	1040	151	9.4	7.6	6.5
MIN	33	73	89	90	98	133	109	171	9.4	7.2	4.3	3.4
AC-FT	3000	4850	6010	6110	7040	23750	16410	24650	2950	490	339	264

KLAMATH RIVER BASIN

11519500 SCOTT RIVER NEAR FORT JONES, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	109	336	801	1063	1158	1051	1026	1143	717	189	63.5	53.8
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	49.6	7.97	5.52	4.43
(WY)	1995	1995	1995	1977	1977	1977	1977	1977	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1942 - 2001	
ANNUAL TOTAL	205123		48327.3			
ANNUAL MEAN	560		132		640	
HIGHEST ANNUAL MEAN					1496	
LOWEST ANNUAL MEAN					74.9	
HIGHEST DAILY MEAN	2700	Jan 16	1060	Mar 25	39500	Dec 23 1964
LOWEST DAILY MEAN	12	Aug 29	3.4	Sep 20	3.4	Sep 20 2001
ANNUAL SEVEN-DAY MINIMUM	13	Aug 25	3.6	Sep 18	3.6	Sep 18 2001
MAXIMUM PEAK FLOW			1200	Mar 25	54600	Dec 22 1964
MAXIMUM PEAK STAGE			7.48	Mar 25	25.34	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	406900		95860		463500	
10 PERCENT EXCEEDS	1360		374		1550	
50 PERCENT EXCEEDS	190		91		300	
90 PERCENT EXCEEDS	24		5.2		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 mi², 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 excellent. 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 ft³/s, Dec. 23, 1964, gage height, 33.75 ft, from floodmarks, from rating curve extended above 49,000 ft³/s on basis of slope-area measurements at gage heights 20.1 and 29.2 ft; minimum daily, 320 ft³/s, Nov. 25, 1917.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 10,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 16	0800	3,560	5.00

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1510	1770	1740	1740	1730	1770	2430	2500	2220	1770	1060	1040
2	1510	1760	1720	1740	1750	1800	2310	2490	2390	1200	1060	1040
3	1540	1790	1720	1740	1770	1770	2210	2410	2380	1060	1070	1050
4	1570	1770	1720	1730	1790	1780	2120	2350	2390	1070	1070	1050
5	1580	1760	1720	1720	1800	1830	2030	2340	2390	1050	1070	1050
6	1580	1760	1720	1720	1790	2090	1990	2340	2370	1030	1060	1040
7	1590	1750	1710	1720	1780	2040	2180	2360	2350	1030	1050	1030
8	1580	1770	1710	1740	1760	1970	2320	2390	2320	1030	1060	1030
9	1620	1790	1700	1740	1780	1930	2300	2450	2310	1020	1060	1040
10	1650	1770	1720	1760	1770	1890	2260	2470	2290	1050	1070	1030
11	1640	1740	1720	1760	1780	1860	2240	2440	2290	1070	1070	1050
12	1640	1720	1740	1770	1770	1840	2210	2570	2300	1110	1080	1060
13	1630	1720	1780	1760	1750	1830	2200	2850	2280	1100	1090	1060
14	1640	e1750	1920	1750	1750	1820	2180	2920	2270	1100	1050	1060
15	1630	1700	1870	1740	1740	1820	2160	3030	2260	1090	1030	1070
16	1640	1740	1810	1730	1740	1810	2170	3410	2240	1080	1030	1060
17	1650	1730	1810	1720	1740	1820	2210	2920	2060	1080	1010	1060
18	1660	1710	1770	1720	1750	1900	2240	2880	1840	1080	1020	1060
19	1670	1710	1760	1720	1750	1950	2340	2580	1820	1080	1020	1060
20	1720	1710	1750	1720	1770	2040	2400	2380	1810	1090	1030	1060
21	1770	1710	1770	1720	1800	2120	2360	2340	1820	1090	1040	1060
22	1720	1710	1790	1720	1860	2240	2320	2310	1790	1090	1040	1070
23	1690	1720	1780	1740	1860	2420	2310	2280	1780	1070	1040	1060
24	1690	1720	1780	1800	1850	2530	2310	2230	1780	1070	1050	1050
25	1690	1720	1760	1790	1830	2910	2360	2200	1790	1070	1030	1140
26	1700	1730	1750	1780	1810	2810	2480	2170	1820	1060	1040	1190
27	1710	1730	1750	1750	1780	2520	2620	2130	1900	1060	1030	1150
28	1810	1720	1750	1740	1760	2680	2640	2110	1880	1060	1010	1130
29	1820	1810	1740	1750	---	2770	2580	2080	1850	1060	1020	1120
30	1780	1780	1740	1730	---	2620	2490	2060	1820	1060	1030	1120
31	1760	---	1740	1720	---	2500	---	2030	---	1060	1040	---
TOTAL	51390	52270	54460	53980	49810	65680	68970	76020	62810	33940	32430	32090
MEAN	1658	1742	1757	1741	1779	2119	2299	2452	2094	1095	1046	1070
MAX	1820	1810	1920	1800	1860	2910	2640	3410	2390	1770	1090	1190
MIN	1510	1700	1700	1720	1730	1770	1990	2030	1780	1020	1010	1030
AC-FT	101900	103700	108000	107100	98800	130300	136800	150800	124600	67320	64320	63650

e Estimated.

KLAMATH RIVER BASIN

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2122	3050	4578	5798	6224	6532	5946	5136	3250	1673	1423	1659
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1913 - 2001	
ANNUAL TOTAL	1214360		633850			
ANNUAL MEAN	3318		1737		3937	
HIGHEST ANNUAL MEAN					7434	
LOWEST ANNUAL MEAN					1151	
HIGHEST DAILY MEAN	9360	Feb 15	3410	May 16	115000	Dec 23 1964
LOWEST DAILY MEAN	1180	Aug 12	1010	Aug 17	320	Nov 25 1917
ANNUAL SEVEN-DAY MINIMUM	1180	Aug 12	1030	Aug 15	417	Aug 18 1992
MAXIMUM PEAK FLOW			3560	May 16	165000	Dec 23 1964
MAXIMUM PEAK STAGE			5.00	May 16	33.75	Dec 23 1964
INSTANTANEOUS LOW FLOW					320	Nov 25 1917
ANNUAL RUNOFF (AC-FT)	2409000		1257000		2852000	
10 PERCENT EXCEEDS	6640		2370		8140	
50 PERCENT EXCEEDS	1800		1750		2690	
90 PERCENT EXCEEDS	1250		1050		1210	

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1955–79, December 1999 to September 2001 (discontinued).

CHEMICAL DATA: Water years 1959–66.

DISSOLVED OXYGEN: January 2000 to September 2001 (discontinued).

pH: January 2000 to September 2001 (discontinued).

SPECIFIC CONDUCTANCE: January 2000 to September 2001 (discontinued).

AIR TEMPERATURE: December 1999 to September 2001 (discontinued).

WATER TEMPERATURE: Water years 1964–79, January 2000 to September 2001 (discontinued).

SEDIMENT DATA: Water years 1955–56.

PERIOD OF DAILY RECORD.—

DISSOLVED OXYGEN: January 2000 to September 2001 (discontinued).

pH: January 2000 to September 2001 (discontinued).

SPECIFIC CONDUCTANCE: January 2000 to September 2001 (discontinued).

AIR TEMPERATURE: December 1999 to September 2001 (discontinued).

WATER TEMPERATURE: October 1963 to May 1979, January 2000 to September 2001 (discontinued).

INSTRUMENTATION.—Water-quality monitor January 2000 to September 2001. Electronic data logger with 15 minute interval.

REMARKS.—Dissolved oxygen records rated fair except for Oct. 1 to Jan. 4, Mar. 24 to Apr. 3, and Aug. 8 to Sept. 30, which are rated poor. pH records rated good. Specific conductance records rated good except for Oct. 1 to Dec. 13, and Mar. 7 to May 3, which are rated fair. Air temperature records rated good. Water temperature records rated excellent except for Oct. 1 to Mar. 7, which are rated good. Interruption in record due to malfunction of the recording equipment or data exceeded maximum allowable limits.

EXTREMES FOR PERIOD OF DAILY RECORD.—

DISSOLVED OXYGEN: Maximum recorded, 17.8 mg/L, Apr. 13, 2000; minimum recorded, 5.2 mg/L, Aug. 26, 2001.

pH: Maximum recorded, 9.4 standard units, July 2, 2001; minimum recorded, 6.3 standard units, Nov. 16, 2001.

SPECIFIC CONDUCTANCE: Maximum recorded, 414 microsiemens, Feb. 22, 23, 2000; minimum recorded, 129 microsiemens, May 16, 2001.

AIR TEMPERATURE: Maximum recorded, 98°F, Aug. 8, 2001; minimum recorded, 19°F, Feb. 13, 2001.

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, 14.5 mg/L, Mar. 22; minimum recorded, 5.2 mg/L, Aug. 26.

pH: Maximum recorded, 9.4 standard units, July 2; minimum recorded, 6.3 standard units, Nov. 16.

SPECIFIC CONDUCTANCE: Maximum recorded, 266 microsiemens, Nov. 18; minimum recorded, 129 microsiemens, May 16.

AIR TEMPERATURE: Maximum recorded, 98°F, Aug. 8; minimum recorded, 19°F, Feb. 13.

WATER TEMPERATURE: Maximum recorded, 26.5°C, Aug. 8; minimum recorded, 1.5°C, Jan. 17.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOC- ATION, (FEET) (81903)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	
JUL									
03...*	1210	3.20	707	9.1	115	8.7	157	23.0	150
03...*	1215	3.00	707	9.1	115	8.7	157	23.0	123
03...*	1220	3.00	707	9.0	113	8.7	157	23.0	96.0
03...*	1225	2.60	707	9.0	113	8.7	157	23.0	65.0
03...*	1230	2.50	707	9.1	115	8.7	157	23.0	29.0

* Instantaneous discharge at the time of the cross-sectional measurement: July 3, 1060 ft³/s.

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	13.3	12.2	13.4	11.4
2	---	---	---	---	---	---	---	---	13.2	11.9	13.9	12.3
3	---	---	---	---	---	---	---	---	13.9	11.9	13.5	12.1
4	---	---	---	---	---	---	---	---	13.1	11.9	13.5	12.0
5	10.5	8.4	---	---	---	---	13.7	11.0	12.9	11.9	13.3	12.0
6	10.4	8.4	---	---	---	---	11.3	10.5	---	---	13.3	11.6
7	10.2	8.2	---	---	---	---	11.2	10.4	12.0	10.7	13.3	10.7
8	10.2	8.1	---	---	---	---	11.1	10.2	11.6	10.8	13.3	11.0
9	9.6	7.8	---	---	---	---	10.7	10.1	13.4	10.9	12.8	11.1
10	9.5	8.1	---	---	---	---	11.0	10.4	12.8	10.8	13.2	11.3
11	9.4	7.9	---	---	---	---	11.2	10.3	11.7	10.7	13.5	11.8
12	9.5	7.8	---	---	---	---	11.5	10.5	11.8	10.6	13.6	11.8
13	9.3	7.6	---	---	---	---	11.1	10.2	11.5	10.6	13.8	11.9
14	9.1	7.3	---	---	---	---	11.4	10.3	11.4	10.5	13.7	11.6
15	8.9	6.9	---	---	---	---	11.6	10.7	12.8	10.5	14.2	11.9
16	9.0	7.3	---	---	---	---	12.0	11.0	12.1	10.8	14.0	11.7
17	9.1	6.9	---	---	---	---	13.4	11.3	12.8	11.0	13.9	12.0
18	---	---	---	---	---	---	12.3	11.4	12.6	11.1	14.3	12.0
19	---	---	---	---	---	---	12.1	11.4	13.1	11.8	14.3	12.6
20	---	---	---	---	---	---	12.4	11.3	13.7	12.2	13.7	12.5
21	---	---	---	---	---	---	12.3	11.3	13.1	12.0	13.8	12.0
22	---	---	---	---	---	---	12.9	11.3	13.0	11.9	14.5	11.9
23	---	---	---	---	---	---	12.3	11.2	13.0	11.8	13.8	11.6
24	---	---	---	---	---	---	12.6	11.2	13.2	11.9	---	---
25	---	---	---	---	---	---	12.2	11.3	13.3	11.9	---	---
26	---	---	---	---	---	---	12.5	11.3	12.8	11.7	---	---
27	---	---	---	---	---	---	11.9	11.1	12.9	11.4	---	---
28	---	---	---	---	---	---	12.5	11.4	13.4	11.5	---	---
29	---	---	---	---	---	---	12.5	11.6	---	---	---	---
30	---	---	---	---	---	---	13.0	11.8	---	---	---	---
31	---	---	---	---	---	---	12.9	12.0	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	11.8	9.0	9.2	7.1	11.5	8.7	10.2	6.4	---	---
2	---	---	12.1	9.5	9.7	7.7	11.8	8.7	9.4	6.2	---	---
3	---	---	10.3	8.3	9.7	7.7	10.2	7.1	9.1	6.2	---	---
4	11.6	10.3	9.7	8.1	9.3	7.3	10.2	6.7	9.0	5.3	---	---
5	11.4	10.2	9.7	8.1	8.9	7.1	10.3	6.6	9.2	5.9	---	---
6	10.8	10.1	9.6	7.9	8.6	7.0	10.5	6.6	9.0	5.3	10.7	7.0
7	11.1	10.1	9.5	7.6	8.4	6.8	10.7	6.7	8.7	5.6	11.1	7.1
8	10.8	9.6	9.2	7.6	8.5	6.8	11.1	7.1	---	---	11.0	7.0
9	10.6	9.3	9.2	7.5	8.6	6.8	11.2	7.0	---	---	11.0	7.1
10	10.4	9.3	9.2	7.5	8.6	6.9	11.1	6.8	---	---	11.2	7.1
11	10.6	9.3	9.2	7.6	9.0	7.1	10.4	6.7	---	---	10.8	7.2
12	10.4	9.0	9.0	6.9	9.2	7.3	11.7	7.6	---	---	10.9	7.8
13	10.1	8.8	9.4	7.6	9.2	7.3	11.8	6.9	---	---	11.4	7.9
14	9.9	8.7	9.3	8.1	9.2	7.1	11.7	7.3	---	---	11.3	7.7
15	10.1	8.5	9.8	8.1	9.3	7.6	11.8	7.3	---	---	11.0	7.5
16	9.7	8.6	9.4	8.2	9.4	7.5	12.0	7.5	9.8	6.7	11.2	7.4
17	9.8	8.7	9.2	7.5	9.6	7.6	12.4	7.3	10.0	6.8	11.2	7.7
18	9.8	8.8	9.2	7.6	9.9	7.6	12.4	7.7	10.3	6.8	11.5	7.7
19	10.2	8.2	9.2	7.3	9.9	7.6	12.4	7.4	10.6	7.1	11.7	8.3
20	8.7	7.5	9.2	6.7	9.9	7.7	12.5	7.4	10.8	7.4	11.8	8.4
21	8.8	7.2	8.8	6.9	10.0	7.6	12.6	7.4	10.9	7.5	12.0	8.7
22	8.6	7.1	8.5	6.3	9.9	7.4	12.4	7.1	10.3	7.2	12.0	8.7
23	8.9	7.2	8.3	6.1	10.3	7.6	12.5	7.5	10.6	7.6	11.9	8.7
24	9.1	7.2	8.7	6.1	10.8	8.0	12.4	7.1	10.6	7.3	12.0	8.7
25	9.2	7.2	9.0	6.7	11.2	8.9	11.4	6.5	9.5	6.4	11.8	8.7
26	9.7	7.0	8.9	6.6	10.6	9.0	10.8	6.2	7.9	5.2	11.9	9.6
27	10.5	7.4	8.9	6.8	11.3	9.2	10.7	6.1	---	---	12.0	9.8
28	11.6	9.1	9.5	7.3	11.5	9.1	10.6	5.8	---	---	12.2	9.7
29	11.6	8.8	9.6	7.5	11.4	8.9	10.1	6.1	---	---	12.1	9.7
30	11.1	8.7	9.5	7.3	11.1	7.8	10.6	6.6	---	---	11.9	9.4
31	---	---	9.3	6.7	---	---	10.0	6.7	---	---	---	---
MONTH	---	---	12.1	6.1	11.5	6.8	12.6	5.8	---	---	---	---

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.5	6.5	6.9	6.7	7.4	7.4	8.1	7.9	8.2	8.1	8.4	8.3
2	6.5	6.4	6.9	6.7	7.4	7.4	8.2	7.9	8.2	8.0	8.4	8.3
3	6.6	6.5	6.9	6.7	7.4	7.4	8.3	8.1	8.2	8.0	8.4	8.3
4	7.2	6.5	6.9	6.7	7.4	7.4	8.3	8.1	8.2	8.0	8.4	8.3
5	7.1	6.7	6.9	6.7	7.5	7.4	8.4	8.1	8.2	8.0	8.5	8.3
6	7.1	6.7	6.9	6.7	7.5	7.5	8.3	8.1	8.3	8.0	8.4	8.3
7	7.1	6.7	6.9	6.7	7.5	7.4	8.3	8.1	8.4	8.1	9.0	8.3
8	7.1	6.7	6.9	6.7	7.4	7.4	8.3	8.1	8.4	8.2	8.6	8.2
9	6.9	6.6	6.9	6.7	7.4	7.4	8.2	8.1	8.4	8.2	8.7	8.3
10	7.0	6.6	6.9	6.7	7.5	7.4	8.3	8.1	8.5	8.2	8.8	8.3
11	7.0	6.6	6.9	6.7	7.5	7.5	8.3	8.1	8.5	8.3	8.9	8.3
12	7.0	6.6	6.9	6.7	7.5	7.5	8.3	8.1	8.4	8.2	8.8	8.4
13	7.0	6.6	6.8	6.7	7.6	7.5	8.3	8.1	8.5	8.2	8.8	8.4
14	7.0	6.6	---	---	7.9	7.4	8.3	8.1	8.5	8.3	8.9	8.5
15	7.0	6.6	---	---	7.8	7.4	8.3	8.1	8.5	8.3	8.9	8.5
16	7.0	6.7	7.0	6.3	7.8	7.6	8.2	8.1	8.5	8.3	8.9	8.5
17	7.0	6.7	7.1	7.0	7.8	7.6	8.2	8.1	8.4	8.2	9.0	8.6
18	6.9	6.6	7.2	7.1	7.8	7.6	8.3	8.1	8.5	8.2	9.0	8.6
19	7.0	6.7	7.2	7.2	7.9	7.7	8.3	8.1	8.4	8.3	9.0	8.6
20	6.8	6.6	7.2	7.2	7.9	7.7	8.3	8.1	8.4	8.2	9.0	8.6
21	6.9	6.7	7.2	7.2	7.9	7.7	8.3	8.1	8.4	8.2	9.0	8.6
22	7.0	6.7	7.2	7.2	8.0	7.7	8.2	8.1	8.3	8.2	9.0	8.6
23	7.0	6.7	7.3	7.2	7.9	7.8	8.2	8.1	8.4	8.2	8.9	8.7
24	7.0	6.7	7.3	7.3	8.0	7.7	8.2	8.0	8.4	8.2	8.7	8.6
25	6.9	6.7	7.3	7.3	7.9	7.7	8.2	8.1	8.4	8.2	8.8	8.6
26	6.9	6.6	7.3	7.3	8.0	7.7	8.3	8.1	8.3	8.2	8.6	8.4
27	6.9	6.7	7.3	7.3	8.0	7.8	8.3	8.1	8.3	8.2	8.6	8.3
28	6.9	6.7	7.3	7.3	8.0	7.8	8.3	8.1	8.4	8.2	8.8	8.4
29	6.9	6.7	7.4	7.3	8.0	7.8	8.3	8.1	---	---	8.6	8.4
30	6.9	6.7	7.4	7.4	8.1	7.9	8.2	8.1	---	---	8.8	8.4
31	7.0	6.7	---	---	8.1	7.9	8.2	8.1	---	---	8.8	8.5
MONTH	7.2	6.4	---	---	8.1	7.4	8.4	7.9	8.5	8.0	9.0	8.2
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.7	8.5	8.9	8.4	9.0	8.1	9.3	8.3	8.9	7.7	8.7	7.6
2	8.6	8.4	8.9	8.5	9.0	8.2	9.4	8.3	8.6	7.6	8.6	7.6
3	8.5	8.3	8.8	8.0	9.0	8.2	9.1	8.3	8.6	7.5	8.6	7.6
4	8.6	8.2	8.8	8.1	9.0	8.3	9.1	7.9	8.5	7.5	8.6	7.6
5	8.6	8.2	8.8	8.1	8.8	8.2	9.0	7.9	8.7	7.5	8.6	7.6
6	8.5	8.2	8.8	8.1	8.9	8.0	9.1	7.9	8.7	7.6	8.7	7.6
7	8.6	8.3	8.8	8.0	8.8	8.0	8.9	7.7	8.6	7.5	8.7	7.6
8	8.6	8.3	8.8	8.0	8.8	7.9	9.0	7.8	8.6	7.4	8.6	7.5
9	8.6	8.3	8.8	8.0	8.9	8.0	8.9	7.7	8.5	7.5	8.6	7.4
10	8.6	8.3	8.8	8.0	8.8	8.1	8.9	7.7	8.5	7.5	8.4	7.4
11	8.6	8.3	8.8	8.0	8.8	8.0	8.3	7.5	8.5	7.5	8.1	7.3
12	8.6	8.3	8.7	7.9	8.9	8.0	8.7	7.4	8.4	7.5	8.1	7.3
13	8.6	8.3	8.5	7.8	8.9	8.0	8.7	7.4	8.4	7.4	8.1	7.3
14	8.7	8.3	8.1	7.7	8.9	8.0	8.6	7.5	8.5	7.5	8.2	7.3
15	8.7	8.4	8.1	7.6	8.8	8.0	8.6	7.4	8.6	7.5	8.3	7.3
16	8.6	8.3	7.9	7.5	8.9	8.1	8.7	7.4	8.6	7.6	8.2	7.3
17	8.7	8.3	8.2	7.4	8.9	8.0	8.6	7.4	8.6	7.6	8.2	7.3
18	8.5	8.3	8.4	7.8	8.9	8.0	8.6	7.3	8.7	7.6	8.2	7.4
19	8.6	8.3	8.3	7.7	9.0	8.1	8.4	7.2	8.7	7.7	8.2	7.4
20	8.6	8.3	8.1	7.8	9.0	8.0	8.4	7.2	8.7	7.7	8.1	7.3
21	8.7	8.3	8.1	7.9	9.0	8.1	8.3	7.1	8.8	7.7	8.1	7.4
22	8.8	8.4	8.3	8.1	9.1	8.0	8.3	7.0	8.2	7.7	8.1	7.3
23	8.8	8.4	8.8	8.1	9.2	8.2	8.4	7.1	8.4	7.5	8.1	7.4
24	8.8	8.4	8.9	8.5	9.1	8.3	8.3	6.9	8.3	7.5	8.0	7.4
25	8.9	8.4	8.9	8.4	9.1	8.2	8.8	6.9	8.8	7.7	7.9	7.3
26	8.8	8.4	8.9	8.0	8.7	8.2	8.1	7.8	8.7	7.8	8.0	7.4
27	8.8	8.4	8.9	8.0	9.0	8.2	8.1	7.8	8.9	7.8	8.1	7.5
28	8.7	8.4	9.0	8.1	9.1	8.2	8.2	7.7	8.9	7.8	8.1	7.6
29	8.9	8.4	9.1	8.1	9.2	8.3	8.1	7.8	9.0	7.9	8.1	7.6
30	8.8	8.4	9.1	8.2	9.3	8.3	8.4	8.0	9.0	7.9	8.1	7.5
31	---	---	9.0	8.1	---	---	8.8	8.1	8.7	7.9	---	---
MONTH	8.9	8.2	9.1	7.4	9.3	7.9	9.4	6.9	9.0	7.4	8.7	7.3

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	209	204	236	234	230	226	218	216	218	214	217	213
2	215	208	234	231	226	218	217	216	216	214	214	211
3	218	214	234	231	221	215	218	216	216	214	215	213
4	232	217	234	233	222	218	218	211	217	215	216	213
5	233	227	233	229	221	216	216	213	216	214	215	213
6	231	226	232	230	224	219	217	215	217	213	220	210
7	233	230	231	228	219	216	217	215	215	213	231	220
8	234	229	229	225	217	212	216	214	214	212	228	226
9	235	232	227	224	214	211	216	213	213	210	227	221
10	237	232	227	224	212	211	216	214	212	210	222	218
11	241	237	225	221	217	210	217	216	214	212	220	216
12	244	238	223	219	220	216	219	217	216	213	219	215
13	247	243	220	218	217	208	223	219	218	216	217	213
14	247	243	---	---	216	208	223	220	217	216	218	215
15	248	244	---	---	225	216	221	219	217	214	222	215
16	246	242	256	234	226	222	221	219	216	213	223	217
17	244	241	265	256	223	221	220	217	215	213	219	212
18	244	241	266	262	222	221	218	216	215	213	216	211
19	244	240	262	255	221	218	217	216	215	212	213	210
20	242	238	255	245	219	217	218	216	214	212	212	207
21	240	238	245	239	219	216	219	216	214	211	208	203
22	244	240	240	236	218	216	218	215	214	211	204	201
23	244	240	236	232	218	216	218	215	214	212	205	192
24	241	237	237	231	217	215	217	215	217	214	199	187
25	240	237	237	230	216	215	220	216	218	216	188	169
26	239	237	233	230	216	215	224	220	219	216	184	164
27	238	234	234	232	216	214	225	222	218	216	194	183
28	238	230	234	229	217	215	223	219	218	214	192	184
29	234	229	231	228	217	215	220	217	---	---	184	174
30	236	232	233	229	218	216	219	216	---	---	191	181
31	236	232	---	---	218	216	219	217	---	---	195	185
MONTH	248	204	---	---	230	208	225	211	219	210	231	164
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	194	187	173	167	152	148	155	145	163	160	175	166
2	192	188	171	160	150	146	165	152	164	161	173	170
3	193	188	167	164	147	146	168	160	164	162	176	172
4	199	193	170	167	149	147	164	160	170	161	179	175
5	200	198	171	168	148	146	180	164	171	157	180	174
6	200	199	170	166	147	145	165	159	171	160	177	167
7	201	198	167	165	145	143	166	155	168	160	174	167
8	207	199	166	163	145	143	161	157	170	155	173	169
9	209	205	164	157	145	142	160	155	164	160	174	168
10	209	204	162	157	145	143	160	154	162	157	175	169
11	207	203	158	152	145	143	163	157	159	155	173	159
12	208	203	156	153	145	143	171	159	161	156	177	173
13	208	205	156	148	146	142	172	166	161	155	179	175
14	208	206	156	152	144	140	169	161	168	161	180	178
15	209	204	152	141	144	141	165	162	169	165	180	177
16	208	204	141	129	143	141	165	161	168	163	180	177
17	206	198	145	132	145	140	165	163	168	163	181	176
18	202	197	147	144	146	143	167	162	169	161	180	177
19	207	199	148	145	146	142	164	159	170	163	184	175
20	216	207	148	146	146	141	163	157	168	160	183	177
21	218	214	150	148	148	141	166	160	168	162	184	178
22	221	216	150	147	151	146	167	162	170	164	183	179
23	218	210	152	146	149	142	168	161	173	163	183	178
24	212	207	153	149	148	145	164	159	173	166	184	178
25	208	202	150	146	152	147	166	158	185	169	178	172
26	202	187	148	147	149	140	165	156	195	181	209	172
27	187	173	148	146	145	140	161	154	190	167	213	208
28	173	165	152	147	151	145	164	159	188	155	208	199
29	172	166	152	148	155	149	163	160	176	155	202	194
30	173	170	151	149	151	147	164	159	177	150	195	193
31	---	---	151	149	---	---	164	158	175	161	---	---
MONTH	221	165	173	129	155	140	180	145	195	150	213	159

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

TEMPERATURE, AIR, DEGREES FAHRENHEIT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	75	49	46	36	42	35	42	28	43	25	39	27
2	71	44	53	42	42	32	43	28	44	36	44	29
3	72	40	57	40	42	31	40	27	44	39	43	27
4	73	39	51	38	40	30	40	27	49	39	48	34
5	75	39	51	36	43	29	44	29	45	33	48	34
6	71	39	49	32	40	27	42	29	39	29	58	35
7	73	40	49	29	42	30	40	29	37	25	58	34
8	70	32	46	37	41	32	44	36	35	22	51	33
9	55	47	43	32	48	36	36	30	39	29	46	32
10	53	44	45	27	42	28	42	30	40	30	50	27
11	57	41	39	25	32	29	39	29	34	28	53	29
12	58	38	36	22	36	30	40	32	40	25	62	29
13	62	40	32	25	39	34	40	34	47	19	61	22
14	61	40	---	---	42	35	41	32	44	24	54	27
15	58	41	---	---	46	34	41	25	45	23	43	32
16	57	35	42	27	43	32	38	22	51	34	52	33
17	62	34	38	25	42	27	37	22	53	37	50	38
18	59	42	37	24	40	27	40	24	48	36	60	45
19	62	45	40	26	41	30	38	27	53	35	61	45
20	54	43	42	25	42	31	39	26	47	38	61	42
21	50	37	41	27	40	31	47	33	44	36	66	43
22	57	31	38	28	44	38	45	30	42	33	68	41
23	59	38	37	28	40	37	49	30	46	32	67	42
24	56	31	45	34	42	31	42	31	41	33	55	43
25	60	42	41	34	42	28	34	30	50	31	51	40
26	56	39	45	37	44	28	40	29	54	28	54	37
27	52	39	48	40	43	27	41	27	54	26	50	32
28	48	38	46	38	37	25	39	23	54	24	58	44
29	47	38	42	37	35	25	41	28	---	---	62	41
30	51	39	44	37	35	26	38	25	---	---	63	34
31	48	37	---	---	37	25	40	23	---	---	67	39
MONTH	75	31	---	---	48	25	49	22	54	19	68	22
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	59	38	57	35	75	51	81	46	85	51	83	53
2	41	32	60	35	64	42	87	50	86	51	83	53
3	44	30	72	36	62	38	91	56	79	52	84	46
4	53	29	76	38	69	37	92	59	77	61	84	49
5	59	27	71	39	62	50	88	59	84	51	68	49
6	43	35	76	37	72	42	86	52	89	52	77	43
7	44	31	83	41	78	46	85	53	94	56	83	44
8	46	30	83	45	78	48	87	51	98	59	84	48
9	48	31	77	46	75	46	90	49	96	59	87	45
10	51	30	82	41	69	44	89	58	93	58	84	48
11	50	35	85	44	68	45	72	56	90	56	75	47
12	50	30	78	50	68	44	82	55	92	57	73	50
13	51	33	72	42	75	39	85	54	90	54	81	55
14	57	27	53	46	81	43	83	55	89	53	83	51
15	62	32	59	48	81	47	79	51	90	54	77	57
16	66	34	64	45	81	46	75	49	90	54	80	50
17	58	42	72	41	77	45	76	47	88	55	83	47
18	44	39	75	44	81	45	79	49	80	54	81	45
19	51	37	77	46	83	46	80	53	86	48	80	45
20	51	37	81	47	86	51	76	53	83	48	79	43
21	60	35	86	50	89	53	80	51	77	52	78	41
22	60	37	89	49	87	52	84	51	70	57	80	41
23	68	42	85	51	79	49	87	54	69	55	82	45
24	74	40	84	50	65	51	88	55	76	48	82	46
25	78	43	85	52	68	46	92	56	85	49	58	49
26	75	47	84	55	58	52	91	53	88	52	63	48
27	65	40	70	48	66	51	88	52	88	51	64	47
28	53	39	68	41	70	51	81	52	86	51	62	42
29	61	36	75	39	76	49	78	53	91	54	72	39
30	62	44	83	45	79	50	74	56	89	56	74	42
31	---	---	90	51	---	---	81	48	85	54	---	---
MONTH	78	27	90	35	89	37	92	46	98	48	87	39

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	17.5	11.0	10.0	7.5	7.0	3.5	2.5	4.0	2.5	6.0	5.0
2	18.5	17.0	11.5	10.0	7.0	6.5	4.0	3.0	5.5	4.0	7.0	5.0
3	18.0	16.0	12.0	11.0	7.0	6.0	3.5	3.0	6.0	5.0	6.0	5.5
4	17.0	14.5	11.5	10.5	6.5	6.0	3.5	2.5	6.5	5.5	6.5	5.0
5	16.5	14.5	11.0	10.0	6.0	5.5	4.0	3.0	7.0	6.0	7.0	6.0
6	16.5	14.5	10.5	10.0	5.5	5.0	4.0	3.0	6.0	5.0	8.0	6.0
7	16.5	14.5	10.0	8.5	6.0	5.0	4.0	3.0	5.0	3.5	9.5	7.0
8	16.5	14.5	10.0	9.5	6.0	5.0	5.0	4.0	3.5	2.5	9.5	7.5
9	16.5	14.5	10.0	9.0	7.0	6.0	5.0	4.0	4.0	3.0	8.5	7.5
10	15.5	14.0	9.5	8.0	7.0	6.0	4.0	3.5	4.5	3.5	8.5	6.0
11	15.0	13.5	8.0	7.0	6.0	5.0	4.0	3.5	5.0	3.5	8.5	6.5
12	14.5	13.0	7.0	6.0	6.0	5.0	4.5	3.5	5.0	3.5	9.5	7.0
13	15.0	13.0	6.5	6.0	6.0	5.5	4.5	4.0	4.5	3.0	9.5	7.5
14	15.0	13.5	---	---	6.0	5.5	4.5	4.0	4.5	3.0	9.5	7.5
15	15.0	13.5	---	---	6.0	5.5	4.0	3.0	5.0	3.0	8.5	7.5
16	14.0	12.5	8.0	7.5	6.0	5.5	3.0	2.0	6.0	4.0	8.5	7.0
17	14.0	12.5	7.5	6.0	5.5	5.0	2.5	1.5	6.5	5.0	9.5	7.5
18	14.0	12.5	6.5	5.5	5.0	4.0	3.0	2.0	6.5	5.5	11.0	9.0
19	14.5	13.0	6.5	5.5	5.0	4.0	4.0	3.0	6.5	5.0	11.5	10.0
20	14.0	13.0	6.5	5.5	5.5	4.5	3.5	3.0	7.0	6.0	11.0	9.5
21	13.5	12.5	6.5	5.5	5.5	4.5	4.0	3.0	7.0	6.0	12.0	9.5
22	12.5	11.0	6.5	6.0	6.0	5.0	4.5	3.5	6.5	6.0	13.0	10.5
23	12.0	10.5	6.5	5.5	6.0	5.5	5.0	3.5	6.5	5.0	13.5	11.0
24	12.5	10.5	7.5	6.5	5.5	5.0	5.0	4.0	6.0	5.5	12.5	11.0
25	12.5	11.5	7.5	6.5	5.0	4.0	4.5	4.0	6.5	5.0	11.5	10.0
26	12.5	11.5	7.5	7.0	4.0	3.0	4.5	3.5	7.0	5.0	10.5	8.5
27	12.5	11.0	8.0	7.5	4.0	3.0	4.5	3.5	6.5	5.0	10.0	9.0
28	12.5	11.5	8.0	7.5	3.5	3.0	3.5	2.5	6.5	5.0	11.5	9.5
29	12.0	11.0	8.0	7.5	3.5	2.5	4.5	3.5	---	---	13.0	10.5
30	12.0	10.5	8.0	7.5	3.0	2.5	4.0	3.0	---	---	13.0	10.5
31	11.5	10.5	---	---	3.0	2.0	3.5	2.5	---	---	13.5	11.0
MONTH	19.0	10.5	---	---	7.5	2.0	5.0	1.5	7.0	2.5	13.5	5.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	11.5	15.0	12.5	22.5	20.0	23.0	20.0	24.5	21.5	24.0	22.0
2	12.0	10.0	15.0	12.0	21.0	18.5	24.5	20.5	24.0	21.5	23.5	21.5
3	10.5	9.0	16.0	12.5	20.5	18.0	25.0	22.5	23.5	22.0	23.0	21.0
4	11.0	8.0	16.5	13.0	20.0	17.5	25.5	23.0	23.5	21.5	23.0	21.0
5	11.5	8.5	16.5	13.5	19.5	17.5	26.0	23.0	24.5	21.5	22.0	20.5
6	11.0	10.0	17.0	13.5	20.5	17.5	25.5	23.0	24.5	22.0	21.5	19.0
7	10.0	8.5	18.0	14.5	22.0	18.5	24.5	22.5	25.5	23.0	21.5	18.5
8	10.5	8.5	18.5	15.5	22.5	20.0	24.5	21.5	26.5	24.0	21.5	19.5
9	11.5	9.0	18.5	15.5	22.0	19.0	24.5	22.0	26.0	24.0	21.5	19.0
10	11.0	9.0	18.0	15.0	20.5	19.0	25.5	23.0	26.0	24.0	21.5	19.5
11	11.5	9.5	18.5	15.0	20.0	18.5	23.0	21.5	25.0	23.0	20.5	19.0
12	11.0	9.0	19.5	16.5	21.0	18.0	24.5	21.0	24.5	23.0	19.5	18.5
13	12.0	9.5	18.0	16.0	21.0	18.0	25.0	21.5	24.5	22.0	21.0	19.0
14	12.0	9.5	16.5	15.0	21.5	18.5	25.0	22.5	24.5	22.0	21.5	19.5
15	13.0	10.0	16.0	15.0	22.5	19.0	24.5	22.5	25.5	21.0	22.5	20.5
16	12.5	10.0	16.5	14.5	22.0	19.5	24.0	21.5	25.0	22.5	22.0	20.0
17	13.5	10.5	18.0	15.0	22.0	19.0	23.5	21.5	25.0	23.0	22.0	19.5
18	12.0	10.5	19.0	16.0	22.5	18.5	24.0	21.0	24.5	22.0	21.5	19.5
19	11.5	10.0	20.0	17.0	22.5	19.0	24.5	22.0	24.0	21.5	21.0	19.0
20	12.0	10.0	20.5	17.0	23.5	19.5	24.0	21.5	23.5	21.5	20.5	18.5
21	13.5	10.5	21.5	18.0	24.0	20.5	24.0	21.0	23.5	21.0	20.0	18.0
22	13.5	11.0	22.0	18.5	24.0	21.0	24.5	21.5	22.0	21.0	20.0	18.0
23	15.0	12.0	22.0	19.0	22.5	20.5	25.0	22.0	22.0	21.0	20.0	18.5
24	16.0	12.5	22.5	19.0	21.0	19.0	25.5	22.5	22.5	20.0	20.0	18.5
25	17.0	13.5	23.5	19.5	20.0	18.5	26.0	23.0	23.5	20.5	19.0	18.0
26	17.5	14.5	23.0	20.0	19.0	18.5	25.5	22.5	24.0	21.5	18.5	17.5
27	16.0	13.5	21.5	19.5	20.5	18.0	25.0	22.5	24.0	21.5	18.0	17.0
28	14.5	13.0	20.0	17.5	22.0	18.5	24.5	22.5	24.0	21.5	18.0	16.5
29	14.0	12.0	20.5	17.0	23.0	19.0	23.5	21.5	24.5	21.5	18.0	16.0
30	14.5	12.5	22.0	18.0	23.0	20.0	23.5	21.0	24.5	22.5	18.5	16.5
31	---	---	23.5	19.5	---	---	24.0	20.5	24.5	22.5	---	---
MONTH	17.5	8.0	23.5	12.0	24.0	17.5	26.0	20.0	26.5	20.0	24.0	16.0

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 mi².

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 ft³/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 ft³/s on basis of slope-area measurement at gage height 29.0 ft, previous site and datum; minimum discharge observed, 20 ft³/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 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 3,100 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 28	0115	853	6.13

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	70	129	101	114	165	314	203	76	55	30	24
2	39	68	107	99	120	185	277	178	75	52	28	24
3	39	83	98	97	136	166	245	164	75	50	28	23
4	38	79	93	97	160	192	222	161	74	48	28	23
5	38	78	89	97	174	214	208	169	73	46	28	23
6	37	71	85	98	165	202	202	163	74	45	27	23
7	37	65	82	97	151	216	190	163	71	44	27	23
8	37	97	80	126	141	245	181	175	68	44	26	23
9	40	93	83	140	137	226	173	176	65	43	25	22
10	45	75	86	150	129	206	171	160	64	42	25	22
11	43	67	83	137	131	190	168	154	64	44	24	22
12	43	62	82	125	123	180	163	158	64	45	24	23
13	42	61	104	120	117	182	157	147	60	43	23	24
14	42	66	191	119	112	185	152	139	58	42	23	23
15	42	64	234	115	109	181	150	253	56	40	23	23
16	42	62	165	111	108	174	153	231	54	40	23	24
17	41	59	145	107	113	182	201	172	53	39	23	23
18	40	58	123	104	162	245	192	150	51	39	23	23
19	40	57	112	102	159	294	187	138	50	39	23	22
20	51	57	104	100	171	321	181	130	49	38	23	22
21	63	57	120	99	280	338	174	126	48	38	23	22
22	48	57	250	102	318	371	170	119	47	37	24	22
23	45	58	266	107	265	381	172	112	46	36	26	22
24	45	68	221	132	233	455	190	105	46	32	30	22
25	44	65	177	137	210	570	237	100	47	31	29	30
26	44	65	150	135	193	379	271	95	57	30	27	37
27	45	71	132	127	181	330	243	92	132	30	25	33
28	84	73	122	120	171	632	217	89	85	29	25	31
29	122	170	114	124	---	439	190	85	67	29	24	30
30	125	170	109	120	---	363	182	81	60	30	24	29
31	87	---	104	117	---	329	---	79	---	30	24	---
TOTAL	1567	2246	4040	3562	4583	8738	5933	4467	1909	1230	785	737
MEAN	50.5	74.9	130	115	164	282	198	144	63.6	39.7	25.3	24.6
MAX	125	170	266	150	318	632	314	253	132	55	30	37
MIN	37	57	80	97	108	165	150	79	46	29	23	22
AC-FT	3110	4450	8010	7070	9090	17330	11770	8860	3790	2440	1560	1460

KLAMATH RIVER BASIN

11521500 INDIAN CREEK NEAR HAPPY CAMP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	79.5	311	607	737	820	779	659	549	262	100	59.8	51.6
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	198	144	63.6	36.5	25.3	24.6
(WY)	1992	1960	1977	1977	1977	1977	2001	2001	2001	1977	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1957 - 2001	
ANNUAL TOTAL	126075		39797			
ANNUAL MEAN	344		109		416	
HIGHEST ANNUAL MEAN					817	
LOWEST ANNUAL MEAN					83.7	
HIGHEST DAILY MEAN	3020	Jan 14	632	Mar 28	30700	Dec 22 1964
LOWEST DAILY MEAN	37	Oct 6	22	Sep 9	21	Sep 12 1977
ANNUAL SEVEN-DAY MINIMUM	38	Oct 2	22	Sep 18	22	Sep 8 1977
MAXIMUM PEAK FLOW			853	Mar 28	39000	Dec 22 1964
MAXIMUM PEAK STAGE			6.13	Mar 28	24.30	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	250100		78940		301700	
10 PERCENT EXCEEDS	818		212		960	
50 PERCENT EXCEEDS	144		85		202	
90 PERCENT EXCEEDS	45		24		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 mi².

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 ft³/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 ft³/s; minimum daily, 60 ft³/s, Sept. 21–24, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 10,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 15	2315	4,180	6.04

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	286	385	341	336	425	1610	1440	597	323	120	72
2	155	271	341	334	360	500	1410	1290	563	291	117	70
3	155	289	327	333	418	466	1210	1140	519	270	112	69
4	154	309	322	332	464	511	1080	1120	487	254	111	68
5	151	296	313	334	505	802	992	1230	463	237	112	67
6	149	281	307	339	479	749	971	1190	462	223	110	65
7	148	269	300	338	446	705	931	1270	446	213	108	65
8	147	290	295	381	417	730	864	1460	439	206	103	65
9	169	398	297	402	426	691	820	1600	423	196	96	63
10	225	343	336	449	412	626	791	1440	407	188	91	61
11	220	299	346	463	409	575	788	1370	394	199	89	61
12	196	274	357	409	397	540	760	1480	392	215	87	68
13	188	265	362	390	377	542	729	1350	378	217	85	75
14	186	278	633	378	368	555	708	1230	355	190	85	74
15	185	275	643	353	364	547	706	2980	340	199	84	73
16	182	263	490	339	362	534	720	2850	331	199	83	69
17	179	251	435	326	372	524	918	1760	319	181	81	68
18	177	243	391	330	415	667	1040	1420	306	172	80	64
19	177	240	367	331	405	868	1080	1280	293	166	81	62
20	223	241	357	326	424	1100	999	1210	285	161	80	61
21	315	241	380	322	478	1220	941	1220	279	158	81	60
22	249	239	461	326	594	1580	925	1160	270	154	82	60
23	212	243	469	331	575	1690	946	1080	260	149	92	60
24	201	278	489	410	527	1840	1070	1010	250	142	100	60
25	194	275	438	407	492	2860	1420	932	249	136	96	141
26	192	265	403	392	462	1890	1850	857	272	129	92	204
27	203	277	388	373	445	1470	1800	808	859	125	86	149
28	317	277	377	358	432	2400	1620	723	760	120	79	118
29	433	449	364	374	---	2130	1320	648	470	119	75	110
30	403	495	356	357	---	1830	1210	604	372	121	74	105
31	334	---	348	342	---	1640	---	600	---	123	72	---
TOTAL	6576	8700	12077	11220	12161	33207	32229	39752	12240	5776	2844	2407
MEAN	212	290	390	362	434	1071	1074	1282	408	186	91.7	80.2
MAX	433	495	643	463	594	2860	1850	2980	859	323	120	204
MIN	147	239	295	322	336	425	706	600	249	119	72	60
AC-FT	13040	17260	23950	22250	24120	65870	63930	78850	24280	11460	5640	4770

KLAMATH RIVER BASIN

11522500 SALMON RIVER AT SOMES BAR, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	346	1097	2165	2930	2969	2938	2989	3108	1912	621	262	202
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	80.2
(WY)	1988	1937	1937	1937	1977	1977	1977	1977	1992	1931	1931	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1912 - 2001	
ANNUAL TOTAL	524351		179189			
ANNUAL MEAN	1433		491		1789	
HIGHEST ANNUAL MEAN					3754	
LOWEST ANNUAL MEAN					339	
HIGHEST DAILY MEAN	8040	Feb 14	2980	May 15	100000	Dec 22 1964
LOWEST DAILY MEAN	147	Oct 8	60	Sep 21	60	Sep 21 2001
ANNUAL SEVEN-DAY MINIMUM	151	Oct 2	61	Sep 18	61	Sep 18 2001
MAXIMUM PEAK FLOW			4180	May 15	133000	Dec 22 1964
MAXIMUM PEAK STAGE			6.04	May 15	46.60	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	1040000		355400		1296000	
10 PERCENT EXCEEDS	3200		1210		4210	
50 PERCENT EXCEEDS	571		341		1020	
90 PERCENT EXCEEDS	184		85		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 mi², 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 1315-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 ft³/s, Dec. 22, 1964, gage height, 76.5 ft, from floodmarks, site and datum then in use, from rating curve extended above 80,000 ft³/s on basis of slope-conveyance study, gage height, 59.4 ft; minimum daily, 320 ft³/s, Aug. 25, Sept. 1, 1931.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 40,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 25	0900	11,000	8.93

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1940	2540	3180	2640	2600	3140	6120	5210	2930	2310	1270	1190
2	1940	2460	2870	2610	2690	3440	5590	4990	3230	2110	1260	1190
3	1940	2560	2750	2590	2950	3270	5050	4670	3250	1600	1250	1190
4	1970	2630	2710	2570	3140	3380	4620	4510	3200	1500	1250	1190
5	1970	2560	2660	2570	3350	3950	4280	4620	3180	1470	1250	1190
6	1970	2490	2620	2560	3260	4010	4120	4550	3190	1440	1250	1190
7	1970	2440	2580	2560	3100	4190	4020	4590	3120	1410	1230	1190
8	1970	2470	2540	2740	2960	4270	4250	4880	3070	1390	1220	1190
9	2030	2820	2520	2850	2960	4090	4170	5140	3000	1370	1210	1190
10	2210	2640	2590	3080	2900	3810	4040	4940	2950	1360	1200	1190
11	2160	2500	2630	2990	2920	3600	3990	4810	2920	1390	1190	1190
12	2110	2430	2670	2840	2840	3450	3920	4910	2920	1440	1190	1190
13	2100	2400	2710	2790	2740	3430	3810	5030	2890	1460	1190	1200
14	2090	2460	4310	2730	2690	3450	3730	5060	2830	1420	1190	1200
15	2090	2470	4580	2650	2660	3400	3680	7900	2800	1410	1190	1200
16	2090	2430	3700	2590	2650	3340	3690	8740	2760	1400	1190	1210
17	2090	2380	3330	2530	2680	3290	4350	6500	2680	1380	1190	1200
18	2100	2350	3060	2520	3030	3790	4500	5410	2410	1370	1190	1190
19	2100	2340	2890	2520	3030	4400	4600	5150	2230	1360	1190	1190
20	2210	2340	2790	2500	3100	5030	4560	4590	2200	1360	1190	1190
21	2550	2350	2850	2490	3690	5260	4480	4380	2180	1360	1190	1190
22	2340	2350	3940	2500	4480	5990	4350	4240	2160	1350	1190	1190
23	2210	2370	4260	2530	4250	6380	4320	4050	2130	1340	1210	1190
24	2170	2500	4010	2820	3910	6800	4510	3870	2100	1320	1230	1190
25	2170	2490	3520	2880	3670	9720	5110	3690	2110	1310	1220	1290
26	2160	2460	3210	2860	3450	7620	5940	3540	2210	1290	1200	1460
27	2180	2500	3030	2750	3310	6200	5980	3400	3600	1280	1190	1400
28	2550	2530	2910	2670	3200	8500	5730	3260	3350	1270	1190	1330
29	3370	3230	2810	2760	---	7970	5260	3130	2660	1270	1190	1310
30	3250	3850	2740	2720	---	7020	4890	3030	2420	1270	1190	1300
31	2830	---	2680	2640	---	6370	---	2970	---	1280	1190	---
TOTAL	68830	76340	95650	83050	88210	152560	137660	145760	82680	44290	37480	36710
MEAN	2220	2545	3085	2679	3150	4921	4589	4702	2756	1429	1209	1224
MAX	3370	3850	4580	3080	4480	9720	6120	8740	3600	2310	1270	1460
MIN	1940	2340	2520	2490	2600	3140	3680	2970	2100	1270	1190	1190
AC-FT	136500	151400	189700	164700	175000	302600	273000	289100	164000	87850	74340	72810

KLAMATH RIVER BASIN

11523000 KLAMATH RIVER AT ORLEANS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3014	6007	10610	13680	14100	13920	12680	11010	6504	2816	2056	2204
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1928 - 2001	
ANNUAL TOTAL	2645300		1049220			
ANNUAL MEAN	7228		2875		8187	
HIGHEST ANNUAL MEAN					17030	
LOWEST ANNUAL MEAN					2520	
HIGHEST DAILY MEAN	34500	Jan 14	9720	Mar 25	240000	Dec 23 1964
LOWEST DAILY MEAN	1660	Aug 30	1190	Aug 11	320	Aug 25 1931
ANNUAL SEVEN-DAY MINIMUM	1680	Aug 26	1190	Aug 11	453	Aug 1 1931
MAXIMUM PEAK FLOW			11000	Mar 25	307000	Dec 22 1964
MAXIMUM PEAK STAGE			8.93	Mar 25	76.50	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	5247000		2081000		5931000	
10 PERCENT EXCEEDS	15700		4640		18000	
50 PERCENT EXCEEDS	3680		2660		4840	
90 PERCENT EXCEEDS	1860		1200		1890	

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 mi².

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 ft³/s, Jan. 16, 1974, gage height, 12.96 ft, site and datum then in use, from rating curve extended above 4,500 ft³/s, on basis of slope-area measurement of peak flow, maximum gage height, 16.82 ft, Jan. 1, 1997, present datum; minimum daily, 16 ft³/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 ft³/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,300 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 24	2245	3,160	7.88

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	63	74	57	e79	165	1190	980	201	96	38	30
2	37	64	64	57	e86	166	976	807	186	90	38	30
3	37	82	62	58	e97	153	759	730	173	84	37	29
4	37	70	59	58	e120	235	627	759	163	79	37	29
5	37	63	58	62	e111	408	545	815	157	75	37	28
6	37	60	57	63	e110	337	522	803	150	73	36	28
7	36	53	56	61	e102	365	467	881	142	70	35	28
8	36	59	58	84	102	442	412	1000	134	67	34	27
9	43	59	61	77	113	409	378	1020	126	64	34	26
10	56	52	65	86	106	342	356	937	118	67	33	26
11	53	47	60	96	e101	318	343	919	114	87	32	28
12	52	43	60	86	e100	324	323	922	111	90	32	33
13	50	45	66	79	e99	390	313	823	106	72	32	35
14	47	50	82	e76	e96	416	308	740	102	66	31	33
15	46	46	80	e73	e95	377	326	1060	99	65	31	32
16	46	45	70	e70	e98	339	361	826	96	61	31	38
17	44	42	67	e69	101	340	534	672	91	60	31	33
18	43	43	58	68	144	490	843	626	87	58	31	29
19	43	43	62	67	204	731	738	601	84	57	31	26
20	52	43	61	68	288	883	598	598	82	56	31	25
21	69	42	73	67	370	1050	516	583	80	55	31	25
22	53	42	81	e67	298	1380	516	522	76	52	32	25
23	49	40	83	e70	225	1500	604	481	74	49	33	24
24	47	42	76	e80	195	1950	815	431	72	47	35	26
25	57	40	66	e86	174	2380	1160	385	73	44	33	73
26	82	40	63	e85	162	1370	1420	347	106	41	31	62
27	64	42	62	84	164	1020	1420	309	353	40	30	44
28	150	45	59	79	169	1280	1220	271	206	39	29	39
29	111	91	60	83	---	1320	928	240	133	39	28	36
30	101	96	60	e80	---	1230	944	223	108	39	28	34
31	77	---	59	e78	---	1190	---	214	---	39	29	---
TOTAL	1730	1592	2022	2274	4109	23300	20462	20525	3803	1921	1011	981
MEAN	55.8	53.1	65.2	73.4	147	752	682	662	127	62.0	32.6	32.7
MAX	150	96	83	96	370	2380	1420	1060	353	96	38	73
MIN	36	40	56	57	79	153	308	214	72	39	28	24
AC-FT	3430	3160	4010	4510	8150	46220	40590	40710	7540	3810	2010	1950

e Estimated.

11523200 TRINITY RIVER ABOVE COFFEE CREEK, NEAR TRINITY CENTER, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	76.4	206	329	454	571	673	857	1057	504	134	55.2	44.6
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1958 - 2001	
ANNUAL TOTAL	183975		83730			
ANNUAL MEAN	503		229		412	
HIGHEST ANNUAL MEAN					851 1974	
LOWEST ANNUAL MEAN					66.2 1977	
HIGHEST DAILY MEAN	3830	Apr 13	2380	Mar 25	18900	Jan 16 1974
LOWEST DAILY MEAN	36	Oct 7	24	Sep 23	16	Sep 11 1977
ANNUAL SEVEN-DAY MINIMUM	37	Oct 2	26	Sep 18	16	Sep 8 1977
MAXIMUM PEAK FLOW			3160	Mar 24	26500	Jan 16 1974
MAXIMUM PEAK STAGE			7.88	Mar 24	16.82	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	364900		166100		298700	
10 PERCENT EXCEEDS	1320		759		1050	
50 PERCENT EXCEEDS	148		74		171	
90 PERCENT EXCEEDS	43		32		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 mi².

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, 2,035,008 acre-ft, May 24, elevation, 2,343.34 ft; minimum, 1,428,163 acre-ft, Sept. 30, elevation, 2,297.10 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	2,190	529,611	2,310	1,583,586	2,380	2,616,989
2,140	292,859	2,250	955,140				

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

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1789167	1770512	1744399	1708276	1682210	1708669	1889555	1967247	2018634	1911687	1734465	1548231
2	1788226	1770512	1744133	1707884	1682599	1710631	1893886	1969398	2015131	1907754	1729051	1543207
3	1785806	1770512	1744133	1707099	1683117	1712336	1896262	1971263	2012514	1903681	1723509	1538436
4	1783924	1770780	1743603	1706314	1683505	1718646	1899755	1973566	2009024	1899196	1717857	1533303
5	1782580	1770914	1743072	1705529	1683894	1730371	1902136	1977170	2005970	1894166	1712205	1527826
6	1781101	1770646	1742807	1704483	1684282	1736710	1904664	1980630	2003498	1888577	1706183	1522471
7	1780294	1770780	1742807	1703828	1683764	1741348	1906209	1983224	2000590	1882732	1700689	1517868
8	1777606	1770512	1742674	1704090	1683764	1745460	1908737	1987555	1997549	1877589	1695470	1512782
9	1776535	1770244	1742541	1704221	1683894	1749307	1909721	1992479	1994217	1872036	1690004	1507467
10	1775465	1770378	1742409	1706183	1682081	1752230	1910563	1997259	1990596	1866506	1683764	1502528
11	1774528	1769709	1742409	1707753	1680786	1754762	1911125	2001607	1986686	1861114	1677290	1496513
12	1773858	1769441	1742011	1708015	1678973	1756894	1911547	2004516	1983801	1855879	1670953	1490760
13	1772654	1769575	1741215	1708146	1676384	1760091	1912670	2008006	1980485	1850240	1665027	1485847
14	1772252	1769174	1740154	1706706	1673924	1762490	1913092	2010769	1976161	1844880	1659104	1481554
15	1771851	1769174	1737370	1705137	1674830	1765024	1914777	2017174	1971550	1839406	1653465	1477620
16	1771048	1768772	1734069	1704875	1675607	1767434	1913794	2021846	1967247	1833111	1647570	1474281
17	1770244	1768772	1731031	1703959	1676384	1769575	1914918	2024475	1962658	1827519	1641573	1471671
18	1770244	1768504	1727730	1701474	1677549	1772788	1918305	2027249	1958212	1822342	1635836	1468587
19	1769441	1767969	1724430	1700427	1680139	1777338	1921129	2029585	1953643	1817440	1629992	1465384
20	1769441	1767166	1722458	1698334	1683117	1782580	1923812	2032222	1949077	1810658	1623397	1462775
21	1768772	1763822	1721669	1697553	1687140	1789436	1926777	2033688	1945510	1803879	1616572	1460177
22	1768371	1760624	1720749	1695470	1687140	1797801	1929461	2034568	1941099	1797396	1609885	1457110
23	1767701	1757160	1718909	1694690	1699381	1806859	1931874	2034861	1936132	1791454	1604105	1452981
24	1767701	1753429	1717200	1693909	1702128	1818118	1934712	2035008	1930596	1785000	1598708	1448392
25	1767434	1750766	1715622	1693258	1704221	1833521	1939538	2034128	1925647	1778547	1593200	1443818
26	1768103	1749705	1713388	1691566	1705922	1842553	1945938	2033248	1922823	1771984	1587582	1441589
27	1767835	1749837	1710893	1689353	1707099	1849140	1951931	2030756	1923247	1765158	1580232	1438657
28	1768772	1748113	1709454	1689093	1707622	1858079	1956782	2027979	1921412	1758492	1571910	1435975
29	1769575	1746256	1708930	1687401	---	1867059	1959933	2026227	1918305	1751564	1565727	1432361
30	1770378	1744399	1708538	1684930	---	1874949	1963231	2024183	1915340	1745460	1559918	1428163
31	1770780	---	1708276	1682599	---	1882454	---	2021700	---	1739888	1553888	---
a	2324.48	2322.50	2319.76	2317.79	2319.71	2332.67	2338.39	2342.43	2335.02	2322.16	2307.60	2297.10
b	-20270	-26381	-36123	-25677	+25023	+174832	+80777	+58469	-106360	-175452	-186000	-125725
MAX	1789167	1770914	1744399	1708276	1707622	1882454	1963231	2035008	2018634	1911687	1734465	1548231
MIN	1767434	1744399	1708276	1682599	1673924	1708669	1889555	1967247	1915340	1739888	1553888	1428163

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 ft³/s, Oct. 18, 1987; no flow for many days most years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363	0	0	0	4	0	0	376	675	1920	2601	2401
2	242	0	0	242	0	0	964	391	738	2036	2367	1856
3	568	0	0	191	0	0	760	393	750	2271	2357	1979
4	414	0	0	350	0	0	635	0	982	2458	2556	2053
5	0	0	0	254	0	0	313	0	920	2442	2486	1981
6	446	0	0	311	0	0	631	118	941	2633	2584	2060
7	0	0	0	330	257	0	636	636	1181	2652	2617	2144
8	799	0	0	331	0	0	0	483	1233	2608	2343	2318
9	0	0	0	0	760	0	617	260	1188	2684	2580	1929
10	0	0	0	0	1190	0	689	30	1199	2515	2712	2251
11	0	0	0	0	1293	0	691	108	1251	2485	2710	2352
12	0	0	472	574	1324	0	454	839	1193	2352	2794	2017
13	0	0	932	0	1264	0	507	0	1226	2598	2330	2018
14	0	0	1175	744	1207	0	618	0	1937	2437	2302	1726
15	67	0	1542	558	0	0	0	0	1919	2574	2415	1701
16	14	0	1594	0	0	0	1558	0	1947	2556	2845	1210
17	0	0	1574	677	397	0	819	0	1950	2443	2415	767
18	0	0	1577	1224	0	0	804	96	1919	2318	2208	1217
19	0	0	1598	607	0	0	781	0	1983	2492	2370	1159
20	0	371	748	889	0	0	621	0	2098	3084	2904	760
21	0	1638	88	328	0	0	0	737	1950	3398	2720	1210
22	0	1485	858	1258	0	0	0	797	1946	2946	2542	1591
23	0	1660	886	771	0	0	209	792	2017	2943	2501	1191
24	0	1652	930	775	0	0	0	790	1966	3007	2436	1265
25	0	1252	965	1033	0	0	0	885	1957	2996	2487	1196
26	0	0	1123	1313	0	0	0	756	2015	3146	2429	1170
27	0	0	1120	1031	0	0	0	663	1965	3103	2313	1030
28	0	1075	410	0	0	0	311	719	1961	2975	2613	1436
29	0	1099	153	1203	---	0	355	741	1947	2375	2512	1936
30	0	901	0	1188	---	0	0	733	2007	2634	2130	1034
31	0	---	0	1052	---	2	---	1153	---	2561	3119	---
TOTAL	2913	11133	17745	17234	7696	2	12973	12496	46961	81642	78298	48958
MEAN	94.0	371	572	556	275	.065	432	403	1565	2634	2526	1632
MAX	799	1660	1598	1313	1324	2	1558	1153	2098	3398	3119	2401
MIN	0	0	0	0	0	0	0	0	675	1920	2130	760
AC-FT	5780	22080	35200	34180	15270	4.0	25730	24790	93150	161900	155300	97110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)

MEAN	1265	821	672	612	783	852	1177	1338	1850	2398	2258	2044
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	94.0	18.0	.16	.000	.34	.000	.000	.097	.63	253	507	415
(WY)	2001	1992	1993	1986	1988	1988	1978	1991	1993	1978	1992	1997

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1963 - 2001

ANNUAL TOTAL	537860	338051		
ANNUAL MEAN	1470	926		1353
HIGHEST ANNUAL MEAN				2485
LOWEST ANNUAL MEAN				301
HIGHEST DAILY MEAN	3360	Jul 18	3398	Jul 21
LOWEST DAILY MEAN	0	Jan 6	0	Oct 5
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 27	.00	Oct 17
ANNUAL RUNOFF (AC-FT)	1067000	670500	980200	
10 PERCENT EXCEEDS	3070	2490	3110	
50 PERCENT EXCEEDS	1370	675	1100	
90 PERCENT EXCEEDS	.00	.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 mi².

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 ft³/s, Dec. 22, 1955, gage height, 27.3 ft, from floodmarks, site and datum then in use; minimum, 23 ft³/s, July 30, 1924. Since completion of Trinity Dam in 1960, maximum discharge, 14,400 ft³/s, Jan. 18, 1974, gage height, 10.41 ft; minimum daily, 100 ft³/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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	504	321	323	280	284	300	281	1560	1450	460	468	462
2	501	318	318	280	284	299	282	1560	1360	479	468	462
3	501	326	318	282	280	297	282	1560	1320	480	469	463
4	504	298	321	278	279	302	289	1560	1250	469	467	463
5	505	296	325	315	279	300	296	1560	1220	471	465	466
6	495	299	329	310	280	295	298	1560	1150	468	477	466
7	493	298	328	296	283	294	299	1530	1100	472	476	471
8	493	301	321	298	282	292	296	1540	1060	468	472	479
9	500	320	326	297	283	295	296	1570	1020	476	473	479
10	494	335	324	302	310	291	296	1520	993	474	478	478
11	502	339	321	300	303	293	296	1550	920	474	477	476
12	498	342	325	296	300	294	296	1570	886	472	474	479
13	497	342	325	291	301	293	296	1560	834	472	471	481
14	492	335	328	292	300	292	296	1560	764	477	474	479
15	326	316	303	295	299	294	296	1540	744	469	479	480
16	312	336	279	298	299	292	296	1550	729	473	481	474
17	309	340	277	298	303	292	296	1560	704	472	484	472
18	308	345	280	296	300	294	296	1540	674	471	487	479
19	309	306	281	297	291	294	296	1540	655	466	482	480
20	312	305	278	299	293	310	298	1540	634	469	481	478
21	311	318	283	298	295	296	298	1560	599	466	481	475
22	305	320	280	293	298	284	297	1560	577	466	485	473
23	315	319	283	286	294	285	655	1560	545	466	486	474
24	329	322	285	293	295	283	1320	1560	516	467	482	480
25	323	322	282	293	294	283	1550	1600	495	468	484	480
26	316	324	279	307	292	282	1540	1580	484	469	673	481
27	322	320	280	286	293	282	1550	1590	478	469	1760	476
28	324	321	284	279	296	281	1530	1600	485	465	993	474
29	319	326	280	279	---	281	1540	1600	494	469	471	472
30	319	327	280	282	---	281	1570	1550	475	470	467	478
31	321	---	282	282	---	281	---	1500	---	471	468	---
TOTAL	12359	9637	9328	9078	8190	9032	17727	48290	24615	14578	16753	14230
MEAN	399	321	301	293	292	291	591	1558	820	470	540	474
MAX	505	345	329	315	310	310	1570	1600	1450	480	1760	481
MIN	305	296	277	278	279	281	281	1500	475	460	465	462
AC-FT	24510	19110	18500	18010	16240	17910	35160	95780	48820	28920	33230	28230

KLAMATH RIVER BASIN

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
MAXIMUM PEAK FLOW	71600 Dec 22 1955
MAXIMUM 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 - 2001, BY WATER YEAR (WY)

MEAN	291	302	376	616	608	728	744	873	749	383	332	323
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1962 - 2001

ANNUAL TOTAL	284091	193817	
ANNUAL MEAN	776	531	526
HIGHEST ANNUAL MEAN			1795 1998
LOWEST ANNUAL MEAN			165 1977
HIGHEST DAILY MEAN	5310 Mar 6	1760 Aug 27	13800 Jan 19 1974
LOWEST DAILY MEAN	277 Dec 17	277 Dec 17	100 Apr 14 1976
ANNUAL SEVEN-DAY MINIMUM	280 Dec 16	280 Dec 16	103 Apr 12 1976
MAXIMUM PEAK FLOW		2140 May 9	14400 Jan 18 1974
MAXIMUM PEAK STAGE		5.81 May 9	10.41 Jan 18 1974
ANNUAL RUNOFF (AC-FT)	563500	384400	381400
10 PERCENT EXCEEDS	1590	1520	750
50 PERCENT EXCEEDS	474	335	304
90 PERCENT EXCEEDS	306	283	155

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 mi².

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 ft³/s, Feb. 28, 1983, gage height, 10.11 ft, from rating curve extended above 700 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 3.8 ft³/s, July 29, 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 220 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 21	0845	225	4.44	Mar. 4	2330	1030	6.47

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	20	18	17	20	52	92	63	30	23	12	9.5
2	15	19	18	17	20	53	87	60	29	23	12	9.6
3	15	19	18	17	21	51	80	58	29	22	11	9.5
4	15	19	18	17	21	288	76	56	28	21	11	9.6
5	15	19	18	17	21	551	72	56	27	21	11	9.6
6	15	19	17	17	21	308	73	56	27	21	11	9.6
7	15	19	17	17	21	211	70	56	26	20	11	9.7
8	15	19	17	22	21	172	65	58	25	20	11	9.5
9	17	18	17	20	23	144	62	59	25	20	11	9.2
10	17	18	17	40	24	125	61	58	25	20	9.9	9.2
11	17	18	18	55	23	110	60	57	24	19	9.6	9.5
12	17	18	19	32	22	100	57	57	24	19	9.6	11
13	17	18	22	26	21	94	57	54	24	18	9.8	11
14	17	18	28	23	21	91	56	53	24	18	9.9	11
15	17	18	21	22	20	86	54	53	23	18	9.9	11
16	16	18	20	21	20	83	53	52	23	17	9.7	10
17	16	18	19	20	27	80	57	49	22	17	9.6	9.9
18	16	18	19	20	34	83	60	47	22	16	9.6	9.9
19	16	18	18	20	67	87	60	46	22	16	9.6	9.6
20	18	18	18	20	154	92	63	44	21	16	9.7	9.2
21	18	18	18	20	197	94	60	42	21	16	9.8	9.2
22	17	18	18	20	125	95	57	41	20	15	9.9	9.2
23	17	18	18	26	91	99	56	40	19	15	10	9.2
24	17	18	18	31	80	117	56	38	20	14	11	9.6
25	18	18	18	27	74	143	59	38	20	14	10	17
26	31	18	18	25	66	113	64	36	22	14	9.9	13
27	20	18	17	23	59	100	66	35	34	13	9.6	12
28	24	18	17	22	55	98	64	33	31	13	9.5	12
29	23	21	17	22	---	99	60	33	27	13	9.3	12
30	23	19	17	21	---	94	61	31	25	12	9.4	12
31	21	---	17	21	---	92	---	31	---	12	9.5	---
TOTAL	550	553	570	718	1369	4005	1918	1490	739	536	315.8	312.3
MEAN	17.7	18.4	18.4	23.2	48.9	129	63.9	48.1	24.6	17.3	10.2	10.4
MAX	31	21	28	55	197	551	92	63	34	23	12	17
MIN	15	18	17	17	20	51	53	31	19	12	9.3	9.2
AC-FT	1090	1100	1130	1420	2720	7940	3800	2960	1470	1060	626	619

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.1	23.4	40.8	73.3	104	113	73.4	53.7	33.7	18.3	12.2	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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1976 - 2001	
ANNUAL TOTAL	23289		13076.1			
ANNUAL MEAN	63.6		35.8		48.3	
HIGHEST ANNUAL MEAN					136	
LOWEST ANNUAL MEAN					10.2	
HIGHEST DAILY MEAN	553	Apr 17	551	Mar 5	2420	Mar 2 1983
LOWEST DAILY MEAN	14	Aug 26	9.2	Sep 9	3.8	Jul 29 1994
ANNUAL SEVEN-DAY MINIMUM	14	Aug 24	9.4	Sep 18	4.0	Jul 25 1994
MAXIMUM PEAK FLOW			1030	Mar 4	3500	Feb 28 1983
MAXIMUM PEAK STAGE			6.47	Mar 4	10.11	Feb 28 1983
ANNUAL RUNOFF (AC-FT)	46190		25940		35020	
10 PERCENT EXCEEDS	162		78		104	
50 PERCENT EXCEEDS	28		20		21	
90 PERCENT EXCEEDS	15		9.9		9.2	

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 45 ft³/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 in most years.

SEDIMENT LOAD: Maximum daily, 65,200 tons, Mar. 2, 1983; minimum daily, 0 ton, several days in most years.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATION: Maximum daily mean, 706 mg/L, Mar. 5; minimum daily mean, 1 mg/L, many days during the year.

SEDIMENT LOAD: Maximum daily, 1,150 tons, Mar. 5; minimum daily, 0.03 ton, several days during September.

REVISIONS.—Monthly totals for the Summary of Water and Sediment Discharge, for water year 2000, have been revised.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	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)
FEB											
20...	1210	154	4.0	102	42	55	59	65	71	81	100
21...	1035	222	4.5	56	34	37	48	63	77	100	--
MAR											
05...	1100	498	4.0	714	960	29	38	53	67	82	93

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	
AUG								
02...	1415	1	11	19.5	2	4	8	
02...	1420	1	11	19.5	1	1	3	
02...	1425	1	11	19.5	--	--	1	
DATE	TIME	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)
AUG								
02...	16	25	34	40	50	84	100	
02...	7	15	24	31	41	69	100	
02...	2	5	8	10	13	45	100	

KLAMATH RIVER BASIN

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
FEB									
20...	1250	1000	1100	.250	0	1240	1300	30	2.0
20...	1315	1000	1100	.250	0	1305	1320	30	2.0
MAR									
02...	1020	1000	1120	.250	0	1015	1025	30	1.0
02...	1030	1000	1120	.250	0	1025	1035	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 (DEG C) (00010)	DISCH, AV UNIT FOR POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/DAY) (80225)
FEB								
20...	2	9	9	12.0	154	4.0	.08	1.3
20...	2	9	9	12.0	154	4.0	.06	1.3
MAR								
02...	2	11	11	5.00	53	3.5	.04	1.7
02...	2	11	11	5.00	53	3.5	.27	1.7

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)
FEB								
20...	--	1	6	19	34	53	83	100
20...	7	33	55	78	94	100	--	--
MAR								
02...	--	1	1	4	19	62	98	100
02...	--	--	--	1	11	41	90	100

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	
OCTOBER									
1	15	1	.04	20	1	.08	18	1	.05
2	15	1	.04	19	1	.06	18	1	.05
3	15	1	.04	19	1	.06	18	1	.05
4	15	1	.04	19	1	.07	18	1	.05
5	15	1	.04	19	1	.07	18	1	.05
6	15	1	.04	19	2	.08	17	2	.07
7	15	1	.04	19	2	.09	17	2	.11
8	15	1	.04	19	2	.09	17	3	.12
9	17	2	.09	18	2	.10	17	3	.14
10	17	1	.05	18	2	.10	17	3	.16
11	17	1	.05	18	2	.11	18	4	.19
12	17	1	.05	18	2	.12	19	4	.20
13	17	1	.05	18	3	.12	22	4	.23
14	17	1	.05	18	3	.13	28	4	.27
15	17	1	.05	18	3	.14	21	4	.20
16	16	1	.04	18	3	.14	20	3	.18
17	16	1	.04	18	3	.14	19	3	.17
18	16	1	.04	18	3	.14	19	3	.16
19	16	1	.04	18	3	.14	18	3	.16
20	18	3	.13	18	3	.14	18	3	.15
21	18	1	.06	18	3	.14	18	3	.15
22	17	1	.05	18	3	.15	18	3	.15
23	17	1	.05	18	3	.14	18	3	.15
24	17	1	.05	18	3	.15	18	3	.15
25	18	2	.08	18	3	.15	18	3	.15
26	31	3	.29	18	3	.14	18	3	.14
27	20	1	.06	18	3	.13	17	3	.14
28	24	2	.17	18	1	.07	17	3	.14
29	23	2	.10	21	3	.20	17	3	.14
30	23	4	.23	19	1	.08	17	3	.14
31	21	3	.17	---	---	---	17	3	.14
TOTAL	550	---	2.31	553	---	3.47	570	---	4.35
NOVEMBER									
DECEMBER									
JANUARY									
FEBRUARY									
MARCH									
1	17	3	.14	20	1	.07	52	5	.73
2	17	2	.11	20	2	.10	53	4	.57
3	17	2	.07	21	2	.13	51	2	.21
4	17	1	.06	21	3	.16	288	526	931
5	17	1	.05	21	3	.19	551	706	1150
6	17	1	.05	21	4	.22	308	250	217
7	17	1	.05	21	4	.21	211	102	59
8	22	3	.18	21	3	.19	172	68	32
9	20	2	.09	23	3	.21	144	43	17
10	40	20	3.3	24	2	.15	125	29	9.6
11	55	12	1.8	23	2	.14	110	26	7.7
12	32	4	.33	22	3	.17	100	23	6.3
13	26	2	.13	21	3	.15	94	21	5.4
14	23	1	.09	21	2	.12	91	19	4.6
15	22	1	.07	20	2	.11	86	17	3.9
16	21	1	.06	20	2	.11	83	15	3.3
17	20	2	.09	27	6	.57	80	13	2.9
18	20	3	.14	34	5	.46	83	14	3.1
19	20	4	.20	67	32	6.8	87	15	3.4
20	20	4	.22	154	120	52	92	15	3.8
21	20	4	.23	197	67	37	94	16	4.0
22	20	5	.24	125	18	6.2	95	14	3.7
23	26	5	.34	91	13	3.3	99	13	3.5
24	31	5	.39	80	8	1.7	117	27	9.9
25	27	3	.25	74	6	1.2	143	31	12
26	25	2	.15	66	6	1.1	113	19	5.9
27	23	2	.09	59	6	.92	100	15	4.1
28	22	1	.06	55	5	.81	98	16	4.3
29	22	1	.07	---	---	---	99	15	3.9
30	21	2	.09	---	---	---	94	13	3.2
31	21	2	.10	---	---	---	92	11	2.8
TOTAL	718	---	9.24	1369	---	114.49	4005	---	2518.81

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	92	10	2.4	63	3	.54	30	5	.38
2	87	8	2.0	60	4	.62	29	5	.36
3	80	7	1.6	58	4	.63	29	4	.35
4	76	9	1.8	56	4	.63	28	4	.33
5	72	9	1.8	56	4	.66	27	4	.31
6	73	9	1.8	56	4	.67	27	4	.29
7	70	8	1.4	56	5	.69	26	3	.19
8	65	7	1.3	58	5	.73	25	2	.14
9	62	6	1.1	59	5	.75	25	2	.15
10	61	6	.95	58	5	.76	25	2	.16
11	60	5	.83	57	5	.77	24	3	.17
12	57	5	.73	57	5	.80	24	3	.17
13	57	4	.66	54	5	.80	24	3	.19
14	56	4	.59	53	6	.83	24	3	.19
15	54	3	.47	53	6	.85	23	3	.20
16	53	3	.47	52	6	.84	23	3	.21
17	57	8	1.2	49	6	.80	22	4	.21
18	60	11	1.7	47	6	.76	22	4	.23
19	60	10	1.7	46	6	.74	22	4	.24
20	63	14	2.4	44	6	.71	21	4	.25
21	60	7	1.1	42	6	.68	21	5	.26
22	57	5	.74	41	6	.66	20	5	.26
23	56	4	.53	40	6	.64	19	5	.25
24	56	3	.50	38	6	.62	20	4	.24
25	59	4	.66	38	6	.59	20	4	.23
26	64	5	.90	36	6	.56	22	8	.52
27	66	6	1.0	35	5	.51	34	12	1.1
28	64	5	.85	33	5	.48	31	5	.45
29	60	4	.68	33	5	.45	27	5	.36
30	61	4	.58	31	5	.43	25	5	.33
31	---	---	---	31	5	.40	---	---	---
TOTAL	1918	---	34.44	1490	---	20.60	739	---	8.72

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	23	5	.29	12	3	.10	9.5	3	.07
2	23	5	.28	12	3	.08	9.6	3	.07
3	22	4	.26	11	2	.06	9.5	2	.06
4	21	4	.25	11	2	.07	9.6	2	.06
5	21	4	.24	11	3	.08	9.6	2	.05
6	21	4	.23	11	3	.09	9.6	2	.05
7	20	4	.23	11	4	.11	9.7	2	.04
8	20	5	.29	11	4	.13	9.5	1	.03
9	20	7	.36	11	5	.14	9.2	2	.04
10	20	6	.31	9.9	4	.11	9.2	2	.05
11	19	2	.12	9.6	3	.09	9.5	2	.06
12	19	3	.14	9.6	3	.07	11	3	.09
13	18	3	.16	9.8	2	.06	11	4	.11
14	18	4	.18	9.9	2	.05	11	5	.14
15	18	4	.19	9.9	2	.06	11	4	.11
16	17	4	.19	9.7	3	.07	10	3	.08
17	17	4	.18	9.6	3	.07	9.9	2	.06
18	16	4	.18	9.6	3	.08	9.9	2	.05
19	16	4	.17	9.6	4	.09	9.6	1	.04
20	16	4	.17	9.7	4	.10	9.2	1	.03
21	16	4	.17	9.8	4	.10	9.2	1	.03
22	15	4	.16	9.9	4	.10	9.2	1	.03
23	15	4	.16	10	4	.10	9.2	1	.03
24	14	4	.15	11	4	.10	9.6	2	.04
25	14	4	.15	10	4	.10	17	10	.46
26	14	4	.14	9.9	3	.09	13	2	.08
27	13	4	.14	9.6	3	.09	12	2	.06
28	13	4	.13	9.5	3	.08	12	1	.05
29	13	4	.12	9.3	3	.08	12	1	.04
30	12	3	.11	9.4	3	.08	12	1	.03
31	12	3	.11	9.5	3	.08	---	---	---
TOTAL	536	---	5.96	315.8	---	2.71	312.3	---	2.14
YEAR	13076.1		2727.24						

KLAMATH RIVER BASIN

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
(REVISED)

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	497	1950
MARCH	4614.00	222.20	38	260
APRIL	4306.00	1602.26	61	1660
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	603	3993

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 2000	550.00	2.31	0	2
NOVEMBER	553.00	3.47	0	3
DECEMBER	570.00	4.35	0	4
JANUARY 2001	718.00	9.24	0	9
FEBRUARY	1369.00	114.49	5	119
MARCH	4005.00	2518.81	66	2580
APRIL	1918.00	34.44	3	37
MAY	1490.00	20.60	1	22
JUNE	739.00	8.72	0	9
JULY	536.00	5.96	0	6
AUGUST	315.80	2.71	0	3
SEPTEMBER ...	312.30	2.14	0	2
TOTAL.....	13076.10	2727.24	75	2796

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 mi².

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 Trinity 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 ft³/s, Feb. 25, 1958, gage height, 30.50 ft, from rating curve extended above 40,000 ft³/s on basis of slope-area measurement at gage height 43.2 ft; minimum, 82 ft³/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 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 12,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0845	6,810	9.74

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	573	607	552	648	1150	1820	2490	1860	707	553	525
2	595	552	575	546	650	1210	1660	2390	1760	668	550	520
3	595	581	560	541	678	1220	1480	2280	1650	667	545	519
4	597	589	555	541	773	1400	1330	2260	1560	651	544	517
5	597	558	552	537	876	5270	1230	2340	1490	628	541	515
6	597	552	551	562	858	3840	1180	2310	1440	623	541	518
7	589	546	552	559	797	2870	1170	2380	1380	615	549	519
8	584	539	549	585	746	2600	1090	2510	1340	613	544	524
9	596	631	543	618	752	2260	1050	2650	1290	604	538	528
10	629	575	561	683	744	1940	1010	2560	1260	606	537	529
11	620	560	570	1040	763	1710	991	2460	1210	616	539	528
12	623	547	590	911	735	1560	966	2600	1140	619	538	536
13	618	548	588	754	703	1510	940	2510	1110	605	533	539
14	618	553	844	682	689	1540	919	2390	1030	597	531	540
15	609	540	817	640	678	1500	908	3230	970	614	535	536
16	486	519	684	618	674	1410	906	3380	955	593	536	533
17	463	528	612	599	698	1330	961	2580	926	593	532	528
18	456	529	585	594	894	1600	1060	2390	895	587	534	526
19	452	530	571	591	1000	1820	1150	2330	856	583	536	531
20	463	502	564	585	1880	2070	1080	2300	832	576	530	531
21	501	499	581	582	3010	2150	1120	2430	801	577	532	529
22	483	510	651	580	2740	2320	1070	2370	764	572	532	526
23	467	511	635	593	2100	2290	1080	2310	743	569	539	524
24	474	521	636	758	1720	2440	1640	2270	703	565	546	526
25	483	527	614	802	1550	3460	2400	2210	676	560	542	593
26	509	521	592	816	1420	2450	2720	2150	674	556	541	606
27	541	525	581	774	1290	1960	2760	2110	1210	554	921	569
28	552	524	570	720	1210	2240	2610	2030	1240	550	1510	560
29	680	592	565	706	---	2180	2400	1960	887	546	840	559
30	669	673	559	680	---	1970	2320	1920	782	549	549	555
31	623	---	555	660	---	1830	---	1910	---	551	532	---
TOTAL	17369	16455	18569	20409	31276	65100	43021	74010	33434	18514	18370	16089
MEAN	560	548	599	658	1117	2100	1434	2387	1114	597	593	536
MAX	680	673	844	1040	3010	5270	2760	3380	1860	707	1510	606
MIN	452	499	543	537	648	1150	906	1910	674	546	530	515
AC-FT	34450	32640	36830	40480	62040	129100	85330	146800	66320	36720	36440	31910

KLAMATH RIVER BASIN

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
MAXIMUM PEAK FLOW	81500 Feb 25 1958
MAXIMUM 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 - 2001, BY WATER YEAR (WY)

MEAN	486	1083	2132	3273	3244	3461	2492	2235	1584	746	484	444
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1964 - 2001

ANNUAL TOTAL	714363	372616	
ANNUAL MEAN	1952	1021	1799
HIGHEST ANNUAL MEAN			4816 1983
LOWEST ANNUAL MEAN			372 1977
HIGHEST DAILY MEAN	9670 Feb 14	5270 Mar 5	53300 Jan 1 1997
LOWEST DAILY MEAN	452 Oct 19	452 Oct 19	165 Aug 24 1966
ANNUAL SEVEN-DAY MINIMUM	469 Oct 17	469 Oct 17	170 Aug 21 1966
MAXIMUM PEAK FLOW		6810 Mar 5	78100 Dec 22 1964
MAXIMUM PEAK STAGE		9.74 Mar 5	29.82 Dec 22 1964
ANNUAL RUNOFF (AC-FT)	1417000	739100	1303000
10 PERCENT EXCEEDS	4170	2300	3840
50 PERCENT EXCEEDS	984	628	974
90 PERCENT EXCEEDS	552	528	357

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 mi².

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 fair. 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 ft³/s, Feb. 17, 1986, gage height, 28.47 ft, present datum, from rating curve extended above 15,000 ft³/s, on basis of slope-area measurement of peak flow; maximum gage height, 31.00 ft, Jan. 26, 1983, present datum; minimum daily, 12 ft³/s, Aug. 19, 20, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 22, 1964, reached a stage of 33.45 ft, present datum, from floodmarks, discharge, 88,000 ft³/s, on basis of flood-routing study.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 8,600 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	1000	4,190	9.15

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	176	366	179	348	1020	1040	558	e215	78	22	14
2	48	147	261	173	358	1050	963	541	e200	77	21	13
3	47	131	208	168	392	1040	890	520	e190	71	21	13
4	47	122	181	163	522	1310	819	507	e182	78	21	13
5	46	115	167	160	727	3470	767	496	e172	66	20	13
6	45	110	158	156	693	2730	736	485	e165	55	20	13
7	44	108	151	154	595	2160	724	477	e152	53	19	13
8	44	106	146	206	513	2040	680	473	e148	56	19	13
9	46	105	144	290	488	1760	653	465	e140	57	18	13
10	60	106	141	421	472	1450	625	456	e136	53	17	13
11	67	107	144	640	450	1240	612	446	e128	53	16	13
12	71	107	161	551	421	1120	594	436	e122	41	15	14
13	73	114	201	438	385	1090	573	422	e116	37	15	15
14	72	122	544	372	360	1140	552	413	e110	40	14	16
15	71	127	610	326	348	1090	539	505	e108	40	14	18
16	71	130	464	285	350	1010	532	499	e102	45	13	18
17	70	129	363	248	416	946	578	451	e97	51	13	17
18	69	125	289	232	713	1070	582	e410	e92	46	13	16
19	68	123	244	234	868	1290	606	e390	e89	42	12	16
20	71	122	217	224	1630	1470	599	e370	e87	39	12	16
21	82	124	231	213	2480	1540	621	e350	e85	37	13	15
22	84	125	348	211	2530	1710	609	e325	e81	38	13	15
23	83	128	387	235	1980	1690	616	e310	e80	35	13	15
24	78	133	391	378	1540	1730	617	e290	e79	33	15	15
25	76	132	352	459	1340	2460	627	e275	e78	31	17	18
26	84	131	307	490	1200	1860	640	e260	e150	28	17	21
27	98	130	265	445	1120	1450	623	e250	e245	26	17	25
28	136	130	236	405	1070	1360	612	e235	e190	24	16	30
29	251	233	217	408	---	1310	586	e225	e150	23	14	33
30	314	460	203	397	---	1180	565	e220	89	22	14	33
31	232	---	190	369	---	1090	---	e220	---	22	14	---
TOTAL	2697	4158	8287	9630	24309	46876	19780	12280	3978	1397	498	510
MEAN	87.0	139	267	311	868	1512	659	396	133	45.1	16.1	17.0
MAX	314	460	610	640	2530	3470	1040	558	245	78	22	33
MIN	44	105	141	154	348	946	532	220	78	22	12	13
AC-FT	5350	8250	16440	19100	48220	92980	39230	24360	7890	2770	988	1010

e Estimated.

11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	122	715	1932	3523	3468	3390	1890	1010	465	181	89.4	75.2
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	16.1	17.0
(WY)	1988	1988	1977	1977	1977	1977	1977	1977	1977	1977	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1966 - 2001	
ANNUAL TOTAL	420103		134400			
ANNUAL MEAN	1148		368		1396	
HIGHEST ANNUAL MEAN					3049	
LOWEST ANNUAL MEAN					131	
HIGHEST DAILY MEAN	16600	Feb 14	3470	Mar 5	59200	Jan 16 1974
LOWEST DAILY MEAN	44	Sep 22	12	Aug 19	12	Aug 19 2001
ANNUAL SEVEN-DAY MINIMUM	46	Oct 3	13	Aug 16	13	Aug 16 2001
MAXIMUM PEAK FLOW			4190	Mar 5	75000	Feb 17 1986
MAXIMUM PEAK STAGE			9.15	Mar 5	31.00	Jan 26 1983
ANNUAL RUNOFF (AC-FT)	833300		266600		1012000	
10 PERCENT EXCEEDS	3680		1040		3540	
50 PERCENT EXCEEDS	272		168		403	
90 PERCENT EXCEEDS	60		16		66	

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 mi².

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 ft³/s, Dec. 22, 1964, gage height, 57.0 ft, present site and datum, from floodmarks, from rating curve extended above 123,000 ft³/s; minimum daily, 162 ft³/s, Oct. 4, 1931.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 30,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	1500	13,200	19.85

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	766	1060	1490	1120	1540	3180	4010	3710	2470	1130	709	625
2	770	959	1250	1090	1550	3410	3780	3660	2380	1030	705	613
3	777	919	1120	1060	1700	3400	3450	3500	2240	994	697	609
4	774	939	1050	1040	1890	3780	3140	3410	2140	974	695	603
5	780	906	1010	1030	2290	9580	2920	3450	2040	940	687	604
6	773	860	981	1030	2360	8750	2830	3440	1990	900	680	600
7	769	851	959	1030	2150	7000	2820	3440	1920	885	688	607
8	759	839	944	1150	1940	6440	2650	3530	1860	871	688	602
9	775	921	927	1290	1860	5890	2540	3660	1810	857	674	611
10	847	906	921	1590	1840	5100	2460	3570	1750	841	666	612
11	862	873	971	2300	1810	4450	2420	3460	1700	843	659	615
12	845	838	1050	2270	1750	4040	2390	3520	1630	871	658	621
13	847	854	1080	1860	1630	3860	2310	3460	1560	849	654	634
14	845	893	1990	1610	1560	3910	2240	3320	1500	827	650	638
15	842	890	2610	1450	1510	3880	2190	4120	1400	828	650	631
16	772	861	2070	1350	1490	3650	2160	5090	1340	826	648	626
17	664	856	1650	1270	1600	3420	2290	3910	1320	812	647	618
18	649	844	1430	1210	2330	3670	2460	3550	1270	812	644	613
19	640	841	1290	1200	2780	4240	2670	3380	1230	800	648	609
20	681	827	1220	1180	4070	4790	2660	3290	1190	790	643	613
21	774	807	1200	1160	6640	5010	2720	3330	1160	782	635	615
22	760	816	1450	1150	7150	5440	2640	3250	1110	777	642	607
23	701	841	1640	1170	6040	5430	2640	3150	1070	768	652	602
24	691	903	1790	1450	4840	5510	2930	3080	1030	755	669	601
25	686	906	1640	1720	4300	7510	3760	2970	998	740	668	689
26	704	883	1490	1860	3890	6240	4200	2880	1010	729	660	791
27	762	880	1380	1750	3570	4880	4230	2810	1230	718	652	727
28	862	884	1290	1630	3350	4930	4080	2730	2000	711	1610	693
29	1160	1110	1230	1670	---	5010	3830	2630	1480	701	1270	686
30	1360	1590	1180	1670	---	4530	3630	2560	1250	700	739	679
31	1280	---	1150	1610	---	4180	---	2520	---	706	636	---
TOTAL	25177	27357	41453	43970	79430	155110	89050	104380	47078	25767	22223	18994
MEAN	812	912	1337	1418	2837	5004	2968	3367	1569	831	717	633
MAX	1360	1590	2610	2300	7150	9580	4230	5090	2470	1130	1610	791
MIN	640	807	921	1030	1490	3180	2160	2520	998	700	635	600
AC-FT	49940	54260	82220	87210	157500	307700	176600	207000	93380	51110	44080	37670

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.

REMARKS.—Records rated excellent except for Jan. 9 to May 9, which are rated good.

EXTREMES FOR PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: Maximum recorded, 26.0°C, July 25, 26, 2001; minimum recorded, 2.0°C, Dec. 23, 24, 1998.

EXTREME FOR CURRENT YEAR.—

WATER TEMPERATURE: Maximum recorded, 26.0°C, July 25, 26; minimum recorded, 3.5°C, Jan. 18.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	17.5	12.0	11.5	9.5	9.0	5.5	5.0	5.5	5.0	6.5	6.0
2	19.0	17.5	12.5	11.5	9.0	8.5	5.5	5.0	6.0	5.5	7.5	6.0
3	18.5	17.0	13.0	12.0	8.5	8.0	5.5	5.0	7.0	6.0	6.5	6.0
4	18.0	16.5	12.5	12.0	8.5	8.0	5.5	5.0	8.0	7.0	6.5	6.0
5	17.5	16.0	12.5	12.0	8.0	8.0	6.0	5.0	8.5	7.5	7.0	6.0
6	17.5	15.5	12.5	11.5	8.0	7.0	5.5	5.0	8.0	6.5	8.0	6.5
7	17.0	15.5	11.5	10.5	7.5	7.0	6.0	5.0	6.5	5.0	9.0	7.5
8	17.0	15.0	11.5	11.0	8.0	7.5	6.5	6.0	5.5	4.0	8.5	8.0
9	16.0	15.0	11.0	10.0	8.5	8.0	6.5	6.0	4.5	4.5	9.0	7.5
10	16.0	15.0	10.0	9.0	9.0	8.5	6.0	6.0	5.5	4.5	8.5	7.5
11	15.5	14.5	9.5	8.5	8.5	7.5	6.5	6.0	5.5	5.0	8.5	7.5
12	15.0	14.0	8.5	7.5	8.0	7.5	6.0	5.5	6.0	5.0	9.0	7.5
13	15.5	14.0	8.0	6.5	7.5	7.5	6.5	5.5	6.0	5.0	10.0	8.0
14	15.5	14.0	7.0	6.0	7.5	7.5	7.0	6.0	6.0	4.5	10.0	8.5
15	15.0	14.0	7.5	7.0	8.0	7.5	6.5	6.0	6.0	4.5	9.0	8.0
16	15.0	13.5	8.0	7.0	7.5	7.0	6.0	5.0	6.0	5.5	9.5	7.5
17	14.5	13.5	8.0	7.0	7.5	7.0	5.0	4.0	6.5	6.0	9.5	8.5
18	14.5	13.5	7.5	7.0	7.0	6.0	4.5	3.5	7.5	6.0	11.5	9.0
19	15.0	13.5	7.5	7.0	6.5	5.5	4.5	4.0	7.5	7.0	11.5	10.5
20	14.5	13.5	7.5	6.5	6.5	5.5	5.0	4.0	7.5	7.0	11.0	10.5
21	14.0	13.0	7.5	6.5	6.5	6.0	5.5	4.5	7.5	7.0	12.0	10.5
22	13.5	12.5	8.0	7.0	7.5	6.5	6.0	5.5	7.5	6.5	12.5	10.5
23	13.0	12.0	7.5	7.0	7.5	7.0	6.0	5.5	7.0	6.5	12.5	11.0
24	12.5	11.5	8.0	7.5	7.5	7.0	6.5	6.0	7.0	6.5	12.0	11.0
25	12.0	12.0	8.5	8.0	7.5	7.0	6.5	6.0	8.0	6.5	11.0	9.5
26	13.0	11.5	9.0	8.5	7.0	6.5	6.0	5.5	7.5	6.5	10.5	9.5
27	13.0	12.0	10.0	9.0	7.0	6.0	6.0	5.0	8.0	6.5	10.0	9.5
28	13.0	12.5	10.0	9.5	6.5	5.5	6.0	5.0	7.5	6.0	11.5	9.5
29	12.5	12.0	10.0	9.5	6.0	5.5	6.5	5.5	---	---	13.0	11.0
30	12.5	12.0	10.0	9.5	5.5	5.0	6.5	5.5	---	---	13.0	11.0
31	12.5	12.0	---	---	5.5	5.0	6.0	5.0	---	---	13.0	11.0
MONTH	19.5	11.5	13.0	6.0	9.5	5.0	7.0	3.5	8.5	4.0	13.0	6.0

KLAMATH RIVER BASIN

11530000 TRINITY RIVER AT HOOPA, CA—Continued

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

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

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 mi², 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.

SEDIMENT DATA: Water years 1955–56, 1975–95.

SPECIFIC CONDUCTANCE: Water years 1975–81.

WATER TEMPERATURE: Water years 1966–81.

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 30,000 ft³/s. See schematic diagram of [Klamath River and Trinity River Basins](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 557,000 ft³/s, Dec. 23, 1964, gage height, 55.3 ft, former datum, from floodmarks, from rating curve extended above 230,000 ft³/s, on basis of flood-routing study; minimum daily, 1,310 ft³/s, Sept. 4, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of December 1861 reached a stage of 60 ft, site and datum then in use, discharge 450,000 ft³/s; flood of February 1881 reached a discharge of 360,000 ft³/s; flood of February 1890 reached a stage of 63 ft, site and datum then in use, discharge, 425,000 ft³/s. Maximum discharges for 1927 and 1932–50, determined from upstream stations, are published in WSP 1686, Part 11, Volume 2.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3530	5200	7460	5880	e6020	e8790	13700	12500	7420	4830	2910	e2550
2	3520	4710	6370	5790	6620	10600	13100	e11400	7510	4590	2860	e2530
3	3490	4540	5600	5620	7270	e9540	12200	11800	7630	e3590	3000	e2530
4	3490	4640	5280	5620	7400	10700	11100	11100	7410	3630	e2730	e2520
5	3510	4630	5120	5540	8010	e18100	10300	11000	7210	3520	e2720	e2520
6	3510	4470	5010	e5080	8340	e16900	10000	11200	7110	3440	e2710	e2510
7	3510	4610	5090	e5060	8000	e14900	e9250	10900	6980	3350	e2700	e2520
8	3540	4800	4880	e5540	7500	15500	10100	11200	6800	3290	e2680	e2510
9	3800	e5050	4820	e5910	e6760	14700	9980	11800	6680	3200	e2650	e2520
10	4290	e4790	4840	e7250	e6660	e13200	9580	11900	6540	3130	e2620	e2520
11	e4030	e4560	5000	e7670	e6780	e11800	9390	11400	6440	3110	e2600	e2530
12	4110	e4410	e5120	e7250	e6600	e10700	9280	11200	6340	3160	e2600	e2540
13	e3910	e4390	5740	e6620	e6300	10500	9090	11400	6190	3200	e2600	e2560
14	e3900	e4650	e12100	e6200	e6110	10300	8890	11300	6040	3190	e2590	e2570
15	3830	e4800	13800	e5860	e5980	10200	8560	e16100	5850	3130	e2590	e2560
16	3800	e4630	e9330	e5630	e5930	9840	8470	20700	5690	3140	e2580	e2570
17	3810	e4510	8670	e5420	6750	9370	9080	e14200	5600	3110	e2580	e2540
18	3600	e4400	7570	e5300	7940	9480	9830	e12100	5350	3120	e2580	e2520
19	3540	e4360	6870	6270	9060	10900	10100	12400	4990	3150	e2580	e2510
20	3750	e4330	6430	e5200	9900	12400	10300	11500	4810	3190	e2570	e2520
21	4330	e4320	6420	e5150	14300	13100	10500	10900	4790	3220	e2560	e2520
22	4260	e4340	9640	e5130	e17300	14000	10200	10600	e4400	3270	e2570	e2510
23	3950	e4420	e11300	e5190	e15000	14900	9950	10200	e4310	3220	e2650	e2500
24	e3820	e4880	10600	6310	e12700	15200	10000	9760	4520	3140	e2700	e2500
25	e3810	e4800	9210	6980	e11400	e22000	11500	9380	4410	e2870	e2660	e2730
26	4000	e4670	8080	e6620	e10400	19600	13200	9010	4500	3040	e2620	e3060
27	3870	e4680	7420	e6290	e9670	15700	13800	8640	e6520	2970	e2590	e2920
28	4740	e4700	6860	e6020	10000	e18100	13700	8300	7410	2880	e3720	e2790
29	6660	6100	6480	7140	---	17500	13200	8020	e5500	2800	e3320	2920
30	7180	9940	6250	7300	---	15800	12200	7700	5240	2890	e2690	2930
31	6150	---	6050	6920	---	14400	---	7530	---	3030	e2560	---
TOTAL	127240	145330	223410	187760	244700	418720	320550	347140	180190	101400	84090	78030
MEAN	4105	4844	7207	6057	8739	13510	10680	11200	6006	3271	2713	2601
MAX	7180	9940	13800	7670	17300	22000	13800	20700	7630	4830	3720	3060
MIN	3490	4320	4820	5060	5930	8790	8470	7530	4310	2800	2560	2500
AC-FT	252400	288300	443100	372400	485400	830500	635800	688600	357400	201100	166800	154800

e Estimated.

KLAMATH RIVER BASIN

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
MAXIMUM PEAK FLOW	a425000 Dec 22 1955
MAXIMUM PEAK STAGE	b49.7 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 - 2001, BY WATER YEAR (WY)

MEAN	4899	14650	25810	33300	33560	34200	26030	19470	11290	4704	3141	3253
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 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1963 - 2001

ANNUAL TOTAL	5721850	2458560	
ANNUAL MEAN	15630	6736	17610
HIGHEST ANNUAL MEAN			36100 1983
LOWEST ANNUAL MEAN			4036 1977
HIGHEST DAILY MEAN	121000 Feb 15	22000 Mar 25	420000 Dec 23 1964
LOWEST DAILY MEAN	3260 Sep 1	2500 Sep 23	1310 Sep 4 1977
ANNUAL SEVEN-DAY MINIMUM	3340 Aug 18	2510 Sep 18	1370 Aug 18 1977
MAXIMUM PEAK FLOW		25500 Mar 25	557000 Dec 23 1964
MAXIMUM PEAK STAGE		10.39 Mar 6	55.30 Dec 23 1964
ANNUAL RUNOFF (AC-FT)	11350000	4877000	12760000
10 PERCENT EXCEEDS	37900	12100	40300
50 PERCENT EXCEEDS	7700	5630	9500
90 PERCENT EXCEEDS	3530	2600	2850

a From rating curve extended above 140,000 ft³/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 mi².

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 ft³/s, Dec. 22, 1964, gage height, 48.5 ft, from floodmarks, from rating curve extended above 110,000 ft³/s, on basis of slope-area measurement at gage height 39.51 ft, former site and datum; minimum daily, 160 ft³/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 ft³/s, from rating extension above 39.51 ft.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 36,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	2400	12,100	12.85

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	855	2770	1470	1640	2010	1890	1730	803	509	293	227
2	249	670	1850	1360	1570	2840	1790	1600	797	485	286	225
3	245	620	1450	1260	1890	2690	1670	1480	767	467	283	222
4	242	579	1220	1180	1960	3160	1550	1380	744	450	285	219
5	241	526	1050	1120	1910	3540	1460	1300	732	436	285	216
6	239	480	937	1070	1720	2970	1550	1240	738	425	279	211
7	237	443	850	1030	1550	2640	1710	1170	694	413	275	206
8	234	471	783	1280	1420	2410	1700	1130	669	404	271	201
9	279	656	736	1420	1510	2180	1730	1090	652	394	263	201
10	375	611	704	2830	1510	1980	1720	1040	636	388	256	203
11	323	551	693	2210	1770	1810	1810	992	626	392	257	205
12	280	504	854	1810	1740	1670	1850	956	641	399	256	209
13	270	503	1570	1640	1650	1590	1760	929	608	385	252	211
14	267	787	8650	1540	1570	1520	1640	929	583	373	252	207
15	264	1070	8450	1430	1490	1460	1540	3060	566	363	249	208
16	262	886	4370	1340	1470	1430	1530	5360	551	356	241	219
17	260	759	3480	1260	1630	1380	2410	3210	535	352	237	208
18	257	667	2730	1190	3040	1440	2250	2340	521	347	235	200
19	258	610	2240	1140	2900	1510	2090	1910	506	344	232	196
20	415	578	1890	1100	2620	1520	2010	1650	494	343	228	192
21	703	590	2080	1070	4950	1470	1940	1470	483	346	227	190
22	389	597	7650	1030	6470	1460	1860	1350	471	338	232	189
23	312	662	8010	1030	5020	1440	1750	1240	464	326	317	188
24	286	1120	7000	1100	3980	1470	1660	1160	467	314	338	187
25	277	966	4700	1300	3260	2530	1640	1090	464	303	273	198
26	277	844	3480	1480	2770	2490	1590	1040	517	293	254	215
27	278	780	2790	1330	2440	2120	1480	990	1020	288	247	231
28	855	726	2340	1260	2200	3720	1730	957	773	284	241	221
29	2220	2750	2020	2170	---	3050	1790	920	610	284	235	206
30	3040	4930	1790	2220	---	2450	1660	873	545	299	231	199
31	1420	---	1620	1870	---	2090	---	832	---	307	230	---
TOTAL	15504	26791	90757	44540	67650	66040	52760	46418	18677	11407	8040	6210
MEAN	500	893	2928	1437	2416	2130	1759	1497	623	368	259	207
MAX	3040	4930	8650	2830	6470	3720	2410	5360	1020	509	338	231
MIN	234	443	693	1030	1420	1380	1460	832	464	284	227	187
AC-FT	30750	53140	180000	88350	134200	131000	104600	92070	37050	22630	15950	12320

SMITH RIVER BASIN

11532500 SMITH RIVER NEAR CRESCENT CITY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1020	4601	7479	8580	7536	6476	4344	2765	1277	533	339	334
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1932 - 2001	
ANNUAL TOTAL	1117090		454794			
ANNUAL MEAN	3052		1246		3758	
HIGHEST ANNUAL MEAN					7027	
LOWEST ANNUAL MEAN					975	
HIGHEST DAILY MEAN	47100	Jan 14	8650	Dec 14	180000	Dec 22 1964
LOWEST DAILY MEAN	234	Oct 8	187	Sep 24	160	Oct 24 1964
ANNUAL SEVEN-DAY MINIMUM	241	Oct 2	191	Sep 19	163	Oct 20 1964
MAXIMUM PEAK FLOW			12100		228000	
MAXIMUM PEAK STAGE			12.85		48.50	
ANNUAL RUNOFF (AC-FT)	2216000		902100		2722000	
10 PERCENT EXCEEDS	7430		2570		8820	
50 PERCENT EXCEEDS	1400		920		1580	
90 PERCENT EXCEEDS	286		233		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 mi².

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. Interruptions in record were due to malfunction of the sensing equipment.

EXTREMES FOR PERIOD OF RECORD.—Maximum gage height, 34.12 ft, Jan. 8, 1990.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.65	12.61	13.94	13.57	15.45	14.68	14.26	14.15	14.41	14.27	14.63	14.55
2	12.65	12.62	13.58	13.40	14.69	14.30	14.16	14.06	14.31	14.24	15.19	14.58
3	12.64	12.61	13.41	13.35	14.30	14.08	14.07	13.98	14.49	14.31	15.06	14.87
4	12.63	12.60	13.36	13.28	14.09	13.91	13.99	13.92	14.52	14.48	15.45	14.86
5	12.62	12.59	13.28	13.18	13.92	13.77	13.93	13.86	14.50	14.41	15.47	15.23
6	12.62	12.59	13.20	13.10	13.78	13.66	13.87	13.82	14.42	14.29	15.23	14.99
7	12.61	12.58	13.11	13.05	13.68	13.58	13.83	13.77	14.29	14.18	14.99	14.85
8	12.60	12.58	13.17	13.05	13.59	13.49	14.19	13.79	14.18	14.10	14.86	14.73
9	12.81	12.58	13.40	13.17	13.50	13.44	14.41	14.01	14.27	14.09	14.73	14.60
10	12.95	12.81	13.40	13.29	13.47	13.40	15.16	14.41	14.32	14.16	14.61	14.46
11	12.92	12.76	13.29	13.20	13.47	13.36	14.86	14.54	14.54	14.32	14.46	14.37
12	12.77	12.71	13.21	13.12	13.65	13.47	14.54	14.34	14.48	14.40	14.38	14.29
13	12.73	12.67	13.22	13.11	15.78	13.52	14.35	14.27	14.41	14.33	14.30	14.24
14	12.69	12.66	13.77	13.20	18.24	15.78	14.29	14.19	14.34	14.25	14.26	14.19
15	12.68	12.66	13.94	13.76	18.36	16.30	14.19	14.11	14.27	14.20	14.21	14.16
16	12.68	12.64	13.78	13.63	16.32	15.51	14.13	14.05	14.21	14.18	14.18	14.11
17	12.68	12.64	13.63	13.48	15.61	15.20	14.06	13.98	14.50	14.18	14.14	14.09
18	12.68	12.65	13.49	13.38	15.21	14.88	13.99	13.92	15.26	14.50	14.17	14.12
19	12.68	12.65	13.38	13.31	14.89	14.63	13.93	13.88	15.17	14.90	14.21	14.15
20	13.34	12.65	13.32	13.27	14.64	14.43	---	---	15.03	14.81	14.22	14.16
21	13.62	13.22	13.33	13.27	15.03	14.37	---	---	16.69	15.03	14.18	14.13
22	13.22	12.90	13.33	13.30	17.98	15.01	13.82	13.78	16.72	16.36	14.16	14.12
23	12.91	12.78	13.57	13.28	17.81	16.82	13.83	13.77	16.38	15.80	14.16	14.09
24	12.80	12.74	13.95	13.56	17.19	16.31	13.88	13.83	15.80	15.46	14.32	14.09
25	12.76	12.72	13.85	13.67	16.31	15.63	14.32	13.87	15.46	15.14	15.01	14.32
26	12.75	12.71	13.67	13.57	15.63	15.19	14.32	14.15	15.14	14.93	14.86	14.70
27	12.74	12.71	13.57	13.50	15.20	14.89	14.16	14.06	14.94	14.77	14.70	14.53
28	14.24	12.72	13.52	13.43	14.90	14.68	14.07	14.00	14.77	14.63	15.59	14.67
29	15.00	14.15	15.96	13.43	14.68	14.51	14.87	14.06	---	---	15.32	14.95
30	15.54	14.77	16.22	15.45	14.51	14.36	14.83	14.61	---	---	14.95	14.69
31	14.83	13.94	---	---	14.38	14.25	14.61	14.41	---	---	14.69	14.53
MONTH	15.54	12.58	16.22	13.05	18.36	13.36	---	---	16.72	14.09	15.59	14.09

11532650 SMITH RIVER NEAR FORT DICK, CA—Continued

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

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	14.54	14.43	14.38	14.29	13.56	13.53	13.22	13.15	12.79	12.74	12.66	12.61				
2	14.43	14.38	14.30	14.20	13.55	13.52	13.17	13.11	12.76	12.72	12.65	12.60				
3	14.43	14.27	14.21	14.12	13.53	13.48	13.13	13.08	12.75	12.70	12.65	12.59				
4	14.30	14.20	14.13	14.05	13.51	13.46	13.10	13.04	12.76	12.72	12.64	12.59				
5	14.22	14.14	14.06	13.99	13.49	13.44	13.07	13.01	12.76	12.72	12.64	12.58				
6	14.33	14.13	14.01	13.94	13.50	13.44	13.04	12.99	12.76	12.71	12.64	12.56				
7	14.38	14.29	13.94	13.89	13.46	13.39	13.02	12.97	12.73	12.70	12.58	12.55				
8	14.36	14.28	13.90	13.84	13.41	13.36	13.00	12.96	12.72	12.68	12.57	12.54				
9	14.38	14.31	13.85	13.81	13.40	13.34	13.00	12.95	12.70	12.66	12.55	12.54				
10	14.36	14.31	13.82	13.77	13.38	13.32	12.97	12.93	12.68	12.65	12.56	12.55				
11	14.45	14.34	13.77	13.73	13.36	13.31	12.97	12.95	12.67	12.65	12.57	12.55				
12	14.45	14.38	13.73	13.69	13.38	13.32	12.98	12.95	12.67	12.64	12.57	12.56				
13	14.39	14.31	13.71	13.66	13.37	13.27	12.98	12.93	12.66	12.63	12.58	12.57				
14	14.31	14.23	13.79	13.65	13.31	13.25	12.95	12.91	12.66	12.63	12.58	12.56				
15	14.23	14.17	16.21	13.79	13.28	13.21	12.93	12.88	12.66	12.63	12.61	12.55				
16	14.31	14.13	16.53	15.65	13.26	13.19	12.91	12.88	12.66	12.62	12.60	12.58				
17	14.85	14.31	15.65	14.97	13.24	13.17	12.90	12.87	12.65	12.62	12.60	12.56				
18	14.73	14.60	14.97	14.63	13.21	13.15	12.89	12.86	12.65	12.62	12.56	12.54				
19	14.61	14.50	14.63	14.41	13.20	13.13	12.88	12.85	12.64	12.60	12.54	12.53				
20	14.53	14.51	14.41	14.25	13.31	13.10	12.88	12.86	12.63	12.59	12.53	12.52				
21	14.53	14.43	14.26	14.14	13.15	13.08	12.88	12.86	12.62	12.59	12.53	12.51				
22	14.46	14.39	14.14	14.04	13.13	13.06	12.88	12.83	12.68	12.59	12.52	12.51				
23	14.40	14.31	14.05	13.97	13.10	13.05	12.86	12.81	12.90	12.66	12.52	12.50				
24	14.33	14.26	13.97	13.90	13.09	13.06	12.83	12.78	12.94	12.82	12.52	12.50				
25	14.29	14.24	13.91	13.84	13.10	13.06	12.81	12.76	12.84	12.71	12.55	12.51				
26	14.26	14.19	13.85	13.79	13.35	13.07	12.78	12.73	12.76	12.68	12.61	12.54				
27	14.21	14.13	13.79	13.74	13.95	13.34	12.76	12.73	12.73	12.65	12.63	12.60				
28	14.45	14.14	13.74	13.70	13.82	13.43	12.75	12.72	12.70	12.65	12.63	12.59				
29	14.43	14.31	13.71	13.65	13.44	13.29	12.75	12.72	12.70	12.63	12.59	12.56				
30	14.31	14.27	13.66	13.61	13.30	13.21	12.78	12.74	12.67	12.62	12.57	12.55				
31	---	---	13.61	13.56	---	---	12.80	12.77	12.68	12.61	---	---				
MONTH	14.85	14.13	16.53	13.56	13.95	13.05	13.22	12.72	12.94	12.59	12.66	12.50				

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 2001

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	1954–2000	03-20-2001	10.8
					03-28-2001	6.12
					04-23-2001	2.64
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	1962–2000	11-15-2000	19.4
					12-12-2000	19.7
					01-16-2001	84.4
					01-31-2001	73.1
					02-21-2001	444
					03-20-2001	187
04-20-2001	81.2					
05-17-2001	50.6					
PAJARO RIVER BASIN						
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.	—	2000	03-01-2001	230
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.	—	2000	03-01-2001	202
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.	—	2000	03-01-2001	208
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.	—	2000	03-01-2001	220
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.	—	2000	03-01-2001	68.7
11159500 Pajaro River at Watonsville, CA	Pajaro River	Lat 36°54'19", long 121°45'01", T.12 S., R.2 E., in Bolsa del Pajaro Grant, Santa Cruz County , Hydrologic Unit 18060002, on right bank, at downstream side of bridge on State Highway 1, at Watsonville and 5 mi upstream of mouth.	1272	1911–13, 1971–73, 2000	03-01-2001	342

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water year)	Measurements	
					Date	Discharge (ft ³ /s)
SAN LORENZO CREEK BASIN						
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.	—	1999–2000	01-10-2001	33.9
					01-10-2001	17.4
ALAMEDA CREEK BASIN						
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.	—	1999–2000	01-24-2000	112
					01-24-2000	129
					01-10-2001	2.61
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.	—	1999–2000	01-24-2000	301
					01-11-2001	7.38
					03-06-2001	3.58
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	1999–2000	01-11-2001	17.5

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.

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 2001

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, 1976–2001	10-05-00 12-15-00 08-02-01	b1.08 b3.70 b0.80

a Published as a miscellaneous measurement.
b Base flow.

Water-quality partial-record stations are particular sites where chemical-quality, biological, and (or) sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly. Samples collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin are referred to as miscellaneous sites.

REDWOOD CREEK BASIN

375159122343801 REDWOOD CREEK AT BIG LAGOON BRIDGE, NEAR MUIR BEACH, CA

LOCATION.—Lat 37°51'59", long 122°34'38", in Point Reyes National Seashore, Marin County, Hydrologic Unit 18050005, downstream from Big Lagoon Bridge at Shoreline Highway.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.— November 1998 to September 1999, October 2000 to September 2001.

CHEMICAL DATA: November 1998 to September 1999, October 2000 to September 2001.

SEDIMENT DATA: November 1998 to September 1999, October 2000 to September 2001.

REMARKS.—Water year 2000 data available in the files of the U.S. Geological Survey.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL AS CACO3 (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
NOV	15...1500	.52	765	8.8	77.7	7.7	255	10.0	--	90.5	14.5	13.2	.78
JAN	30...1330	5.8	769	11.2	93.7	7.8	255	8.0	14	96.9	15.4	14.2	.75
MAR	27...1350	3.5	765	10.2	96.4	7.3	222	13.0	4.2	82.2	13.1	12.0	.80
MAY	10...1240	.92	757	8.6	82.2	7.6	186	13.0	1.3	91.3	14.4	13.4	.90
JUL	05...1130	--	760	6.6	63.5	7.4	256	13.5	7.5	95.5	14.8	14.2	.93
SEP	26...1300	.05	760	4.2	40.9	7.4	273	14.0	14	105	16.0	15.8	.90

DATE	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT.DIS GRAN T. FIELD CACO3 (MG/L) (29802)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV	15... .613	13.4	24.2	91	16.4	e.1	15.3	12.0	.2	147	140	<.041	e.07
JAN	30... .561	12.7	22.0	83	19.2	<.2	15.2	13.0	.2	148	141	<.041	.11
MAR	27... .589	12.3	24.3	78	13.8	<.2	15.9	9.7	.2	139	124	<.041	e.08
MAY	10... .624	13.7	24.4	90	14.6	e.1	16.1	10.8	.2	152	138	<.041	<.10
JUL	05... .673	15.1	25.4	88	15.8	e.1	16.8	10.0	.2	154	141	e.029	e.07
SEP	26... .685	16.1	24.9	91	19.6	<.2	17.4	9.1	.2	156	150	<.040	<.10

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

e Estimated.

REDWOOD CREEK BASIN

375159122343801 REDWOOD CREEK AT BIG LAGOON BRIDGE, NEAR MUIR BEACH, CA—Continued

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

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 15...	.80	<.047	<.006	.011	<.018	.011	20	6.6
JAN 30...	.12	.226	<.006	.011	<.018	.012	M	3.5
MAR 27...	<.08	e.038	<.006	.011	e.013	.013	M	e3.1
MAY 10...	.11	e.042	e.005	.017	<.018	.021	20	6.0
JUL 05...	.09	.065	e.004	.016	<.020	.022	20	14.6
SEP 26...	.14	<.050	<.006	.015	<.020	.019	10	14.6

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
NOV 15...N	1500	.52	10.0	74	4	.01
JAN 30...N	1330	5.8	8.0	49	6	.09
MAR 27...N	1350	3.5	13.0	75	2	.02
MAY 10...N	1240	.92	13.0	65	3	.01
JUL 05...N	1130	--	13.5	60	2	--
SEP 26...N	1300	.05	14.0	48	6	<.01

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

e Estimated.

M Presence of material verified, but not quantified.

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

LAGUNITAS CREEK BASIN

380230122471901 OLEMA CREEK AT BEAR VALLEY ROAD BRIDGE, NEAR OLEMA, CA

LOCATION.—Lat 38°02'30", long 122°47'19", in Point Reyes National Seashore, Marin County, Hydrologic Unit 18050005, downstream from Bear Valley Road Bridge, east of Francis Drake Highway, near Olema.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—February 1998 to September 1999, October 2000 to September 2001.

CHEMICAL DATA: February 1998 to September 1999, October 2000 to September 2001.

SEDIMENT DATA: February 1998 to September 1999, October 2000 to September 2001

REMARKS.—Water year 2000 data available in the files of the U.S. Geological Survey.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE OF (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT OXYGEN SATUR- ATION) (00301)	PH WATER SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD- NESS TOTAL AS CACO3 (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)		
NOV	15...1330	1.4	765	11.7	99.7	7.5	340	8.5	36	128	28.1	14.0	1.76
JAN	30...1220	20	769	11.7	95.5	7.7	187	7.0	13	63.1	13.9	6.90	1.20
MAR	27...1230	6.1	765	11.2	108	7.6	232	14.0	12	83.7	18.4	9.20	1.55
MAY	10...0820	1.7	757	8.4	79.4	7.6	227	12.5	17	112	24.3	12.5	1.93
JUL	05...1340	--	760	6.8	72.8	7.7	312	18.5	14	126	27.4	14.0	2.02
SEP	26...0830	.54	759	6.1	59.5	7.4	340	14.0	16	135	29.0	15.1	2.12

DATE	SODIUM AD-SORP- TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT. DIS- GRAN T. FIELD CACO3 (MG/L) (29802)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (TONS PER SOLVED (MG/L) (70303)	SOLIDS, SUM OF CONSTI- TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA, DIS-SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)		
NOV	15... .602	15.6	20.7	92	20.3	.2	13.2	28.1	.3	200	177	<.041	.14
JAN	30... .588	10.7	26.5	50	14.7	<.2	12.4	12.3	.2	113	106	<.041	.18
MAR	27... .599	12.6	24.2	72	14.2	e.1	12.9	15.7	.2	144	129	<.041	.14
MAY	10... .637	15.5	22.8	95	17.3	e.2	13.7	20.8	.3	184	165	<.041	.15
JUL	05... .679	17.5	22.9	110	19.3	.2	14.1	21.9	.3	198	184	e.026	.10
SEP	26... .670	17.9	22.1	120	22.7	e.1	13.9	23.1	.3	202	195	<.040	.10

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS-SOLVED (UG/L AS MN) (01056)	
NOV	15...	.64	.094	<.006	.050	.040	.060	30	37.7
JAN	30...	.27	.863	<.006	.043	.037	.059	20	8.1
MAR	27...	.12	.236	<.006	.043	.039	.055	40	15.4
MAY	10...	.20	.349	e.005	.051	.043	.066	20	22.5
JUL	05...	.17	.065	e.005	.054	.032	.072	10	32.7
SEP	26...	.14	e.028	<.006	.056	.042	.067	30	47.9

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

LAGUNITAS CREEK BASIN

380230122471901 OLEMA CREEK AT BEAR VALLEY ROAD BRIDGE, NEAR OLEMA, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
NOV						
15...N	1330	1.4	8.5	85	2	.01
JAN						
30...N	1220	20	7.0	82	5	.26
MAR						
27...N	1230	6.1	14.0	69	4	.07
MAY						
10...N	0820	1.7	12.5	38	2	.01
JUL						
05...N	1340	--	18.5	72	4	--
SEP						
26...N	0830	.54	14.0	89	3	<.01

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

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

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

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