

Water Resources Data California Water Year 1994

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



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-94-2
Prepared in cooperation with the California Department of
Water Resources and with other agencies

CALENDAR FOR WATER YEAR 1994

1993

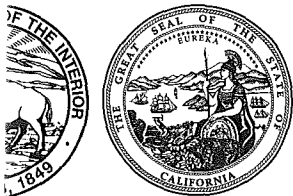
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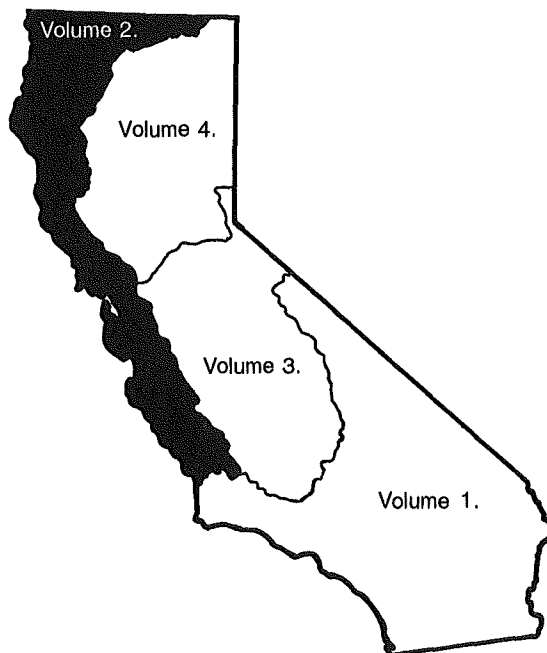
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Water Resources Data California Water Year 1994

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

by Wendell Ayers and others



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-94-2
Prepared in cooperation with the California Department of
Water Resources and with other agencies

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2800 Cottage Way
Sacramento, CA 95825

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.

This report is dedicated to Wendell Ayers, a hydrologic technician with the California District, Salinas Field Office. Wendell died of a heart attack as he and two other members of the Pacific Grove Ocean Rescue team went to the aid of two people aboard a yacht that had run aground on rocks off the California coast near Asilomar State Beach. Wendell also had done volunteer work with the Pacific Grove Fire Department and the Monterey Aquarium, and these endeavors typified his enthusiasm and willingness to help others. Through the years, Wendell trained many California District staff members and was regarded as one of the leaders in water-quality work and instrumentation applications. His many friends at the U.S. Geological Survey will miss his wit and companionship.

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

IX

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

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| <u>LITTLE RIVER BASIN</u> | | |
| Little River near Trinidad (d)..... | 11481200 | 301 |
| <u>REDWOOD CREEK BASIN</u> | | |
| Redwood Creek at Orick (ds)..... | 11482500 | 303 |
| <u>KLAMATH RIVER BASIN</u> | | |
| Klamath River: | | |
| Copco Lake near Copco (l)..... | 11511400 | 307 |
| Iron Gate Reservoir near Hornbrook (l)..... | 11516510 | 307 |
| Klamath River below Iron Gate Dam (d)..... | 11516530 | 308 |
| Shasta River near Yreka (d)..... | 11517500 | 310 |
| Scott River near Fort Jones (d)..... | 11519500 | 312 |
| Klamath River near Seiad Valley (d)..... | 11520500 | 314 |
| Indian Creek near Happy Camp (d)..... | 11521500 | 316 |
| Salmon River at Somes Bar (d)..... | 11522500 | 318 |
| Klamath River at Orleans (d)..... | 11523000 | 320 |
| Trinity River above Coffee Creek, near Trinity Center (d)..... | 11523200 | 322 |
| Clair Engle Lake near Lewiston (l)..... | 11525400 | 324 |
| Judge Francis Carr Powerplant near French Gulch (d)..... | 11525430 | 325 |
| Trinity River at Lewiston (d)..... | 11525500 | 327 |
| Grass Valley Creek: | | |
| Little Grass Valley Creek near Lewiston (s)..... | 11525580 | 329 |
| Grass Valley Creek at Fawn Lodge, near Lewiston (dts)..... | 11525600 | 331 |
| Trinity River near Burnt Ranch (d)..... | 11527000 | 338 |
| South Fork Trinity River below Hyampom (d)..... | 11528700 | 340 |
| Trinity River at Hoopa (d)..... | 11530000 | 342 |
| Klamath River near Klamath (dcs)..... | 11530500 | 344 |
| <u>SMITH RIVER BASIN</u> | | |
| Smith River near Crescent City (d)..... | 11532500 | 349 |
| Smith River near Fort Dick (g)..... | 11532650 | 351 |

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 WATSTORE for the period of record shown for each station.

| Station No. | Station name | Drainage area (mi ²) | Period of record |
|-------------|---|----------------------------------|------------------|
| 11141150 | Arroyo Grande above Phoenix Creek, near Arroyo Grande | 13.4 | 1967-92 |
| 11141160 | Wittenberg Creek near Arroyo Grande | 3.11 | 1967-75 |
| 11141300 | Arroyo Grande near Arroyo Grande | 68.3 | 1958-66 |
| 11141400 | Tar Spring Creek near Arroyo Grande | 18.2 | 1968-79 |
| 11141500 | Arroyo Grande at Arroyo Grande | 102 | 1940-86 |
| 11141600 | Los Berros Creek near Nipomo | 15 | 1968-78 |
| 11142080 | Morro Creek at Morro Bay | 24 | 1971-78 |
| 11142100 | Toro Creek near Morro Bay | 18 | 1971-78 |
| 11142200 | Santa Rosa Creek near Cambria | 12.5 | 1957-72 |
| 11142240 | Perry Creek at Cambria | 22.9 | 1988-89 |
| 11142300 | San Simeon Creek near Cambria | 26.3 | 1988-89 |
| 11142500 | Arroyo de la Cruz near San Simeon | 41.2 | 1951-79 |
| 11142550 | San Carpoforo Creek near San Simeon | 34.6 | 1978 |
| 11142800 | Rat Creek near Lucia | .82 | 1961-63 |
| 11143300 | Arroyo del Rey at Del Rey Oaks | 13.8 | 1967-78 |
| 11143500 | Salinas River near Pozo | 70.3 | 1943-83 |
| 11144000 | Toro Creek near Pozo | 9.56 | 1961-69, 1972-83 |
| 11144200 | Salsipuedes Creek near Pozo | 5.91 | 1970-83 |
| 11144600 | Salinas River below Salinas Dam, near Pozo | 112 | 1974-86 |
| 11145000 | Salinas River above Pilitas Creek, near Santa Margarita | 114 | 1942-75 |
| 11145500 | Salinas River near Santa Margarita | 149 | 1922, 1932-49 |
| 11147000 | Jack Creek near Templeton | 25.3 | 1950-78 |
| 11147040 | Santa Rita Creek Tributary near Templeton | 2.95 | 1967-72 |
| 11147070 | Santa Rita Creek near Templeton | 18.2 | 1962-94 |
| 11147600 | Huerhuero Creek near Creston | 101 | 1959-72 |
| 11147700 | Cholame Creek Tributary near Cholame | 9.26 | 1959-65 |
| 11147800 | Cholame Creek near Shandon | 227 | 1959-72 |
| 11148000 | Estrella Creek near Paso Robles | 787 | 1940-41 |
| 11148800 | Nacimiento River near Bryson | 147 | 1958-71 |
| 11149500 | Nacimiento River near San Miguel | 349 | 1940-57 |
| 11149650 | Sulphur Springs Canyon near Jolon | 5.16 | 1968-69 |
| 11150800 | Cow Creek near San Ardo | 4.8 | 1961-64 |
| 11151000 | San Lorenzo Creek near King City | 210 | 1940-42 |
| 11151500 | San Lorenzo Creek at King City | 259 | 1943-45 |
| 11151870 | Arroyo Seco near Greenfield | 113 | 1961-86 |
| 11152570 | Alisal Creek near Salinas | 14.2 | 1971-74 |
| 11152650 | Reclamation Ditch near Salinas | 53.2 | 1971-86 |
| 11152900 | Cedar Creek near Bell Station | 12.8 | 1962-82 |
| 11153000 | Pacheco Creek near Dunneville | 146 | 1940-82 |
| 11153040 | Pacheco Creek at Dunneville | 154 | 1982-85 |
| 11153470 | Llagas Creek above Chesbro Reservoir, near Morgan Hill | 9.63 | 1972-82 |
| 11153500 | Llagas Creek near Morgan Hill | 19.6 | 1952-71 |
| 11153700 | Pajaro River near Gilroy | 399 | 1959-82 |
| 11153790 | Uvas Creek at Sveadal | 2.88 | 1973-74 |
| 11153800 | Alec Canyon near Morgan Hill | .91 | 1970-72 |
| 11153900 | Uvas Creek above Uvas Reservoir, near Morgan Hill | 21 | 1961-82 |
| 11154000 | Uvas Creek near Morgan Hill | 30.4 | 1931-57 |
| 11154100 | Bodfish Creek near Gilroy | 7.40 | 1960-82 |
| 11154200 | Uvas Creek near Gilroy | 71.2 | 1959-92 |
| 11154500 | Pajaro River at Sargent | 505 | 1941 |
| 11156000 | San Benito River below McCoy Creek, near Hernandez | 108 | 1950-53, 1960-63 |
| 11156450 | Willow Creek Tributary near San Benito | 1.24 | 1964-69 |
| 11156700 | Pescadero Creek near Paicines | 38.3 | 1959-70 |
| 11157500 | Tres Pinos Creek near Tres Pinos | 206 | 1941-83 |
| 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 |

DISCONTINUED GAGING STATIONS--Continued

| Station No. | Station name | Drainage area (mi ²) | Period of record |
|-------------|--|----------------------------------|---------------------------|
| 11161800 | San Vicente Creek near Davenport | 6.07 | 1970-85 |
| 11161900 | Scott Creek above Little Creek, near Davenport | 25.1 | 1959-73 |
| 11162000 | Scott Creek near Davenport | 27.3 | 1937, 1939-41 |
| 11162540 | Butano Creek near Pescadero | 18.3 | 1962-74 |
| 11162570 | San Gregorio Creek at San Gregorio | 50.9 | 1970-84 |
| 11162600 | Purisima Creek near Half Moon Bay | 4.83 | 1959-69 |
| 11162722 | Spruce Branch at South San Francisco | .70 | 1965-69 |
| 11162900 | Sharon Creek near Menlo Park | 0.38 | 1959-69 |
| 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 |
| 11173200 | Arroyo Hondo near San Jose | 77.1 | 1969-81 |
| 11173500 | Calaveras Creek near Sunol | 98.7 | 1898-1908, 1911-30 |
| 11174000 | San Antonio Creek near Sunol | 37.0 | 1912-30, 1961-65 |
| 11174500 | Alamo Creek at Dublin | 38.7 | 1915-20 |
| 11174600 | Alamo Canal near Pleasanton | 40.8 | 1978-83 |
| 11175000 | Tassajero Creek near Pleasanton | 26.8 | 1915-19, 1922-30 |
| 11176090 | Arroyo Mocho at Livermore | 50.8 | 1984-86 |
| 11176100 | Arroyo Las Positas above Livermore | 7.82 | 1972-74 |
| 11176140 | Altamont Creek near Livermore | 13.4 | 1979-80 |
| 11176145 | Arroyo Las Positas at Livermore | 53.3 | 1980-86 |
| 11176150 | Arroyo Las Positas near Livermore | 64.6 | 1912-19, 1922, 1924-30 |
| 11176180 | Arroyo Las Positas at El Charro Road, near Pleasanton | 75.0 | 1978-83 |
| 11176200 | Arroyo Mocho near Pleasanton | 142 | 1962-86 |
| 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 |
| 11180825 | San Lorenzo Creek above Don Castro Reservoir, near Castro Valley | 18.0 | 1981-94 |
| 11181000 | San Lorenzo Creek at Hayward | 37.5 | 1940, 1947-83 |
| 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 |
| 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 |

DISCONTINUED GAGING STATIONS--Continued

| Station No. | Station name | Drainage area (mi ²) | Period of record |
|-------------|---|----------------------------------|---------------------------|
| 11458100 | Milliken Creek near Napa | 17.3 | 1971-83 |
| 11458200 | Redwood Creek near Napa | 9.79 | 1958-73 |
| 11458300 | Napa Creek at Napa | 14.9 | 1971-83 |
| 11458350 | Tulucay Creek at Napa | 12.6 | 1972-83 |
| 11458500 | Sonoma Creek at Agua Caliente | 58.4 | 1955-81 |
| 11459000 | Petaluma River at Petaluma | 30.9 | 1949-63 |
| 11459300 | San Antonio Creek near Petaluma | 28.9 | 1975-81 |
| 11459800 | San Rafael Creek at San Rafael (REVISED RECORDS IN WDR CA-91-2) | 1.24 | 1972-76 |
| 11459830 | Irwin Creek at San Rafael | -- | 1972-76 |
| 11460000 | Corte Madera Creek at Ross | 18.1 | 1951-93 |
| 11460100 | Arroyo Corte Madera del Presidio at Mill Valley | 4.69 | 1966-73, 1975-86 |
| 11460160 | Morses Creek at Bolinas | .70 | 1967-69 |
| 11460500 | Nicasio Creek at Point Reyes Station | 36.6 | 1954-60 |
| 11460800 | Walker Creek near Tomales | 40.1 | 1959-84 |
| 11460920 | Salmon Creek at Bodega | 15.7 | 1962-75 |
| 11460940 | Russian River near Redwood Valley | 14.1 | 1963-68 |
| 11461400 | East Fork Russian River Tributary near Potter Valley | .15 | 1959-61 |
| 11462700 | Feliz Creek near Hopland | 31.3 | 1958-66 |
| 11463160 | Big Sulphur Creek near Middletown | 2.89 | 1978-79 |
| 11463500 | Russian River at Geyserville | 655 | 1911-13 |
| 11463900 | Maacama Creek near Kellogg | 43.4 | 1961-81 |
| 11463940 | Franz Creek near Kellogg | 15.7 | 1964-68 |
| 11464050 | Dry Creek Tributary near Hopland | 1.19 | 1968-69 |
| 11464400 | Dry Creek near Yorkville | 56.0 | 1974-83 |
| 11464860 | Warm Springs Creek near Asti | 12.2 | 1973-83 |
| 11465050 | Dutcher Creek near Asti | 2.24 | 1973 |
| 11465150 | Pena Creek near Geyserville | 22.3 | 1979-90 |
| 11465800 | Santa Rosa Creek near Santa Rosa | 12.5 | 1959-70 |
| 11466200 | Santa Rosa Creek at Santa Rosa | 56.6 | 1940-41 |
| 11467200 | Austin Creek near Cazadero | 63.1 | 1959-66 |
| 11467500 | South Fork Gualala River near Annapolis | 161 | 1951-71, 1991-94 |
| 11467510 | South Fork Gualala River near the Sea Ranch | 161 | 1991-92 |
| 11467600 | Garcia River near Point Arena | 98.5 | 1962-83 |
| 11467800 | Rancheria Creek near Boonville | 65.6 | 1959-68 |
| 11467850 | Soda Creek Tributary near Boonville | 1.53 | 1965-68 |
| 11468010 | Albion River near Comptche | 14.4 | 1961-69 |
| 11468070 | South Fork Big River near Comptche | 36.2 | 1960-71 |
| 11468150 | Warner Creek near Fort Bragg | .61 | 1969 |
| 11468540 | Pudding Creek near Fort Bragg | 12.5 | 1964-71 |
| 11468850 | Dunn Creek near Rockport | 1.88 | 1961-64 |
| 11468990 | Honeydew Creek near Honeydew | 14.9 | 1973-77 |
| 11469500 | North Fork Mattole River at Petrolia | 37.6 | 1951-57 |
| 11469800 | Cold Creek Tributary near Elk Creek | .81 | 1970 |
| 11471800 | Tomki Creek near Willits | 43.4 | 1963-70 |
| 11472000 | Eel River at Hearst | 466 | 1911-13 |
| 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 |
| 11473900 | Middle Fork Eel River near Dos Rios | 745 | 1966-94 |
| 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 |
| 11477500 | Van Duzen River near Dinsmore | 85.2 | 1954-58, 1964-74 |
| 11477700 | Little Van Duzen River near Bridgeville | 36.2 | 1958-67 |
| 11478000 | Van Duzen River at Bridgeville | 202 | 1912-13, 1940-51 |
| 11478400 | Van Duzen River Tributary near Bridgeville | .71 | 1969 |
| 11479000 | Yager Creek near Carlotta | 127 | 1954-55, 1957-60, 1966-72 |
| 11479500 | Yager Creek at Carlotta | 134 | 1912-13 |
| 11479700 | Elk River near Falk | 44.2 | 1958-67 |
| 11480000 | Jacoby Creek near Freshwater | 5.80 | 1955-64 |
| 11480500 | Mad River near Forest Glen | 143 | 1953-94 |

DISCONTINUED GAGING STATIONS--Continued

| Station No. | Station name | Drainage area (mi ²) | Period of record |
|-------------|---|----------------------------------|---------------------------|
| 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 |
| 11481500 | Redwood Creek near Blue Lake | 67.7 | 1953-58, 1972-93 |
| 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 |
| 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, near Callahan | 49.5 | 1970-73 |
| 11518000 | East Fork Scott River near Callahan | 57.5 | 1911 |
| 11518050 | East Fork Scott River at Callahan | 110 | 1960-74 |
| 11518200 | South Fork Scott River near Callahan | 41.5 | 1959-60 |
| 11518300 | Sugar Creek near Callahan | 12.0 | 1957-60 |
| 11518310 | Cedar Gulch near Callahan | .99 | 1966-73 |
| 11518600 | Moffett Creek near Fort Jones | 69.8 | 1959-67 |
| 11519000 | Shackleford Creek near Mugginsville | 17.7 | 1957-60 |
| 11520000 | Scott River near Scott Bar | 804 | 1912-13 |
| 11521000 | Klamath River near Happy Camp | 7,024 | 1912 |
| 11522200 | Elk Creek near Happy Camp | 90.4 | 1957-64 |
| 11522260 | Ti Creek near Somes Bar | 9.46 | 1961-64 |
| 11522300 | South Fork Salmon River near forks of Salmon | 252 | 1957-65 |
| 11522400 | North Fork Salmon River near forks of Salmon | 203 | 1959-64 |
| 11523030 | Red Cap Creek near Orleans | 56.1 | 1958-65 |
| 11523050 | Bluff Creek near Weitchpec | 74.6 | 1959-65 |
| 11523700 | Coffee Creek near Trinity Center | 107 | 1911-13, 1958-66 |
| 11524000 | Trinity River near Trinity Center | 300 | 1911-13 |
| 11525655 | Trinity River below Limekiln Gulch, near Douglas City | 812 | 1981-91 |
| 11525800 | Weaver Creek near Douglas City | 48.4 | 1959-69 |
| 11525900 | Browns Creek near Douglas City | 71.6 | 1957-67 |
| 11526000 | Trinity River near Douglas City | 1,014 | 1944-51 |
| 11527400 | New River at Denny | 173 | 1928-29, 1959-69 |
| 11528000 | Trinity River near China Flat | 1,733 | 1912-13 |
| 11528100 | South Fork Trinity River at Forest Glen | 208 | 1960-65 |
| 11528200 | South Fork Trinity River near Hyampom | 342 | 1956-65 |
| 11528400 | Hayfork Creek near Hayfork | 86.7 | 1957-65 |
| 11528440 | Big Creek near Hayfork | 27.1 | 1961, 1963-67 |
| 11529500 | South Fork Trinity River near China Flat | 932 | 1912-13 |
| 11529800 | Willow Creek near Willow Creek | 40.9 | 1959-74 |
| 11530150 | Mareep Creek near Weitchpec | 3.56 | 1967-69 |
| 11531000 | Middle Fork Smith River at Gasquet | 131 | 1912-17, 1959-65 |
| 11531500 | North Fork Smith River at Gasquet | 158 | 1912-13 |
| 11532700 | Rowdy Creek at Smith River | 33.3 | 1957-62 |
| 11533000 | Lopez Creek near Smith River | .92 | 1962-66 |

DISCONTINUED LAKES AND RESERVOIRS

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

| Station No. | Station name | Drainage area (mi ²) | Period of record |
|-------------|-----------------------------------|----------------------------------|------------------|
| 11144500 | Santa Margarita Lake near Pozo | 112 | 1945-86 |
| 11166740 | Calero Reservoir near New Almaden | 6.93 | 1936-85 |
| 11461800 | Lake Mendocino near Ukiah | 105 | 1966-90 |
| 11464900 | Lake Sonoma near Geyserville | 130 | 1984-90 |

DISCONTINUED WATER-QUALITY STATIONS

The following continuous water-quality stations in California have been discontinued. Daily records were collected and are stored in WATSTORE 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 |
| 11142200 | Santa Rosa Creek near Cambria | 12.5 | WQ | 1988-89 |
| 11142240 | Perry Creek at Cambria | 22.9 | WQ | 1988-89 |
| 11142300 | San Simeon Creek near Cambria | 26.3 | WQ | 1988-89 |
| 11143000 | Big Sur River near Big Sur | 46.5 | WQ,T | 1966-79 |
| 11143250 | Carmel River near Carmel | 246 | WQ | 1954-66 |
| 11147040 | Santa Rita Creek Tributary near Templeton | 2.95 | T | 1968-72 |
| 11147070 | Santa Rita Creek near Templeton | 18.2 | S | 1968-72 |
| 11147500 | Salinas River at Paso Robles | 390 | WQ,S | 1963-66 |
| 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 |
| 11152300 | Salinas River near Chualar | 4,042 | C,T,S | 1966-69, 1977-94 |
| 11152500 | Salinas River near Spreckels | 4,156 | C,T,S | 1950-51, 1967-79 |
| 11153470 | Llagas Creek above Cheshbro 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 |
| 11159000 | Pajaro River at Chittenden | 1,186 | C,T | 1978-81 |
| 11160000 | Soquel Creek at Soquel | 40.2 | T | 1966-79 |
| 11160500 | San Lorenzo River at Big Trees | 106 | S,T | 1966-82 |
| 11162500 | Pesadero Creek near Pesadero | 45.9 | T | 1965-80 |
| 11162720 | Colma Creek at South San Francisco | 10.8 | S | 1966-76 |
| 11162722 | Spruce Branch at South San Francisco | 1.68 | S | 1965-69 |
| 11166575 | Permanente Creek near Monte Vista | 3.86 | T,S | 1984-87 |
| 11166578 | West Fork Permanente Creek near Monte Vista | 2.98 | T,S | 1985-86 |
| 11166710 | Arroyo Calero above Calero Reservoir, near New Almaden | 3.14 | WQ | 1986-90 |
| 11166900 | Alamitos Creek near New Almaden | 31.8 | WQ,S | 1985-91 |
| 11167500 | Guadalupe Creek at Guadalupe | 12.8 | WQ,S | 1980-91 |
| 11168000 | Los Gatos Creek at Los Gatos | 39.0 | WQ | 1952-66, 1980-87, 1989-91 |
| 11168800 | Los Gatos Creek at Lincoln Avenue, at San Jose | 48.4 | WQ | 1980-87, 1989-91 |
| 11169580 | Calabazas Creek Tributary No. 1 at Mt. Eden Road | .37 | T | 1973-77 |
| 11169600 | Prospect Creek above Saratoga Golf Course, near Saratoga | .27 | T | 1973-75 |
| 11169616 | Calabazas Creek at Rainbow Drive, near Cupertino | 3.98 | T | 1974-77 |
| 11169800 | Coyote Creek near Gilroy | 109 | T,S | 1965-76 |
| 11169970 | Coyote Creek below Leroy Anderson Dam, near Madrone | 195 | WQ,S | 1980-88, 1990-91 |
| 11171500 | Coyote Creek near Edenvale | 229 | WQ,S | 1979-88, 1990-91 |
| 11174600 | Alamo Canal near Pleasanton | 40.8 | C | 1979-83 |
| 11176000 | Arroyo Mocho near Livermore | 38.2 | C | 1979-83 |
| 11176140 | Altamont Creek near Livermore | 13.4 | C | 1979-80 |
| 11176145 | Arroyo Las Positas at Livermore | 53.3 | C | 1980-83 |
| 11176180 | Arroyo Las Positas at El Charro, near Pleasanton | 75.0 | C | 1980-83 |
| 11176200 | Arroyo Mocho near Pleasanton | 142 | C | 1980-84 |
| 11176300 | Tassajara Creek near Pleasanton | 26.8 | C | 1979-83 |
| 11176350 | Arroyo de la Laguna above Arroyo Valle, near Pleasanton | 224 | T,S | 1975-79 |

DISCONTINUED WATER-QUALITY STATIONS--Continued

| Station No. | Station name | Drainage area (mi ²) | Type of record | Period of record |
|-------------|---|----------------------------------|----------------|---------------------------|
| 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 | T,S | 1975-79 |
| 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,S,T,C | 1906, 1952-73, 1975-93 |
| 11180825 | San Lorenzo Creek above Don Costro 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,C,S,T | 1971, 1973-93, 1977-93 |
| 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 |
| 11460170 | Pine Creek at Bolinas | 7.83 | T,S | 1967, 1969-70 |
| 11460600 | Lagunitas Creek near Point Reyes | 81.7 | T,S | 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, 1990-92 |
| 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 |
| 11463000 | Russian River near Cloverdale | 503 | S | 1964-68 |
| 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, 1979-80 |
| 11464500 | Dry Creek near Cloverdale | 87.8 | T | 1965-79 |
| 11465150 | Pena Creek near Geyserville | 22.3 | S | 1979-86 |
| 11465000 | Dry Creek below Warm Springs Dam, near Geyserville | 131 | T | 1981-94 |
| 11465200 | Dry Creek near Geyserville | 162 | WQ,S,T | 1964-86 |
| 11467000 | Russian River near Guerneville | 1,338 | C,B,WQ | 1951-94 |
| 11467600 | Garcia River near Point Arena | 98.5 | T | 1964-78 |
| 11468000 | Navarro River near Navarro | -- | T | 1965-79 |
| 11468600 | Middle Fork Ten Mile River near Fort Bragg | 32.9 | T | 1965-73 |
| 11471000 | Potter Valley Powerhouse intake near Potter Valley | -- | S | 1964-68 |
| 11472150 | Eel River near Dos Rios | 528 | S | 1967-77 |
| 11472200 | Outlet Creek near Longvale | 161 | S | 1967-70 |
| 11472500 | Eel River above Dos Rios | 705 | T,S | 1959, 1962-82 |
| 11472800 | Middle Fork Eel River above Black Butte River, near Covelo | 204 | T,S | 1966, 1969-70 |
| 11472900 | Black Butte River near Covelo | 162 | T,S | 1964-66, 1968-75 |
| 11473000 | Middle Fork Eel River below Black Butte River, near Covelo | 367 | T,S | 1961-63, 1968-79 |
| 11473800 | Elk Creek near Hearst | 84.1 | T | 1965-73 |
| 11473900 | Middle Fork Eel River near Dos Rios | 745 | C,S | 1967-69 |
| 11474500 | North Fork Eel River near Mina | 248 | T,S | 1973-75 |
| 11474700 | Chamise Creek near Island Mountain | 22.6 | T,S | 1973-75 |
| 11475000 | Eel River at Fort Seward | 2,107 | S | 1966-76 |
| 11475100 | Dobbyn Creek near Fort Seward | 61.4 | T,S | 1973-76 |
| 11475500 | South Fork Eel River near Branscomb | 43.9 | T,S | 1961-70 |
| 11475560 | Elder Creek near Branscomb | 6.50 | T | 1968-79 |
| 11476500 | South Fork Eel River near Miranda | 537 | S | 1981 |
| 11476600 | Bull Creek near Weott | 28.1 | S | 1960-80 |
| 11477000 | Eel River at Scotia | 3,112 | B,C,T | 1958-82 |
| 11477500 | Van Duzen River near Dinsmore | 85.2 | T | 1966-74 |
| 11477700 | Little Van Duzen River near Bridgeville | 36.2 | T | 1961-65 |
| 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 | 1974-75 |
| 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 |

DISCONTINUED WATER-QUALITY STATIONS--Continued

| Station No. | Station name | Drainage area (mi ²) | Type of record | Period of record |
|-----------------|--|----------------------------------|----------------|---------------------------|
| 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 | 1959-66, 1973-81 |
| 11516600 | Cottonwood Creek at Hornbrook | 89.8 | T | 1965-71 |
| 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 |
| 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 | B,C,T | 1966-81 |
| 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 |
| 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).

WATER RESOURCES DATA--CALIFORNIA, WATER YEAR 1994

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

By Wendell W. Ayers and others

INTRODUCTION

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

This volume of the report includes records on surface water in the State. Specifically, it contains (1) discharge records for 113 streamflow-gaging stations, 1 low-flow partial-record streamflow station, and 2 miscellaneous measurement stations; (2) stage and contents records for 9 lakes and reservoirs; (3) precipitation records for 3 stations; and (4) water-quality records for 22 streamflow-gaging stations. Records included for stream stages are only a small fraction of those obtained during the water year.

The series of annual reports for California began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format changed to include data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1985 water year, 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 the principal cities of the United States and may be purchased from U.S. Geological Survey, Map Distribution, Box 25286, MS 306, Denver Federal Center, Denver, CO 80225.

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-94-2." 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 in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Beginning with the 1990 water year, all water-data reports also are available on Compact Disc--Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, are reproduced on a single CD-ROM disc.

Additional information, including current prices, 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 (916) 979-2605. A limited number of CD-ROM discs are available for purchase from U.S. Geological Survey, Earth Science Information Center, Open-File Reports Section, Box 25286, MS 517, Denver Federal Center, Denver, CO 80225.

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, Donald Labelle, Director of Public Works.
Alameda County Water District, James D. Beard, General Manager.
California Department of Parks and Recreation, Henry R. Agonia, Director.
California Department of Water Resources, David N. Kennedy, Director.
Contra Costa County Flood Control and Water Conservation District, Milton Kubicek, Deputy Chief.

Humboldt Bay Municipal Water District, Arthur Bolli, General Manager.
Marin Municipal Water District, Ronald L. Johnson, General Manager.
Mendocino County Water Agency, Dennis Jackson, Hydrologist.
Monterey County Water Resources Agency, William Hurst, General Manager.
Monterey Peninsula Water Management District, James Cofer, General Manager.

San Benito County Water District, William Rupert, District Manager.
San Francisco Water Department, John Mullane, General Manager.
San Luis Obispo County Engineering Department, Clinton Milne, County Engineer.
San Mateo County, Department of Public Works, R. George Zinckgraf, Senior Civil Engineer.

Santa Clara Valley Water District, Leo F. Cournoyer, Water Supply Manager.
Santa Cruz, city of, Water Department, Terry Tompkins, Deputy Director.
Santa Cruz County Flood Control and Water Conservation District, Planning Department, Ken Hart, Program Manager.
Scotts Valley Water District, Jon Sansing, General Manager.
Sonoma County Planning Department, Jim Olmsted, Assistant Planning Director.
Sonoma County Water Agency, Robert F. Beach, General Manager.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army; 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, Highland Hydro Constructors, STS Hydropower, and North Coast Hydroelectric.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

As is common in California, streamflow varied greatly in the 1994 water year--month by month and regionally. The variations are related to differences in precipitation, temperature, topography, and geology. Runoff during the 1994 water year in the area covered by this volume was 34 percent of the 1961-90 median based on 10 representative streamflow records. Total runoff, in percent of median, at selected stations in California is shown in figure 1. Runoff ranged from 20 percent of median at Santa Rita Creek near Templeton (station 11147070) to 45 percent of median at Smith River near Crescent City (station 11532500). In figure 2, monthly mean discharge in the 1994 water year is compared with the 1961-90 median, maximum, and minimum monthly mean discharge at four representative gaging stations. In addition, a comparison of monthly precipitation in the 1994 water year and the long-term average is shown in figure 2. Annual departure from 1961-90 mean discharge for four selected gaging stations is shown in figure 3. A comparison of peak discharge for the 1994 water year with peaks for period of record for selected stations is given in table 1. A comparison of low-flow data for various years is shown in table 2.

Most demands for water supplies were met in 1994. Reservoir storage accumulated during 1993 provided a buffer to the State's water supply, lessening the adverse impacts of another dry year. By the end of the water year, reservoir storage had declined about 73 percent, slightly above the 70 percent "drought" threshold established by the State. While the entire eight-year period 1987-94 may not be considered one "drought" because of a wet 1993, it is the driest eight-year period in this century.

Precipitation in the area covered by this volume was below normal during the 1994 water year. Precipitation, based on seven representative raingages, was 74 percent of the long-term average. There were moderate storms in January and February, with about average precipitation occurring throughout the region.

Table 1. Comparison of peak discharge for 1994 water year with those for period of record for selected stations

| Station No. | Station name | 1994 water year | | Period of record | |
|-------------|--------------------------------|-----------------|-------------------------------------|------------------|-------------------------------------|
| | | Date | Peak discharge (ft ³ /s) | Water year | Peak discharge (ft ³ /s) |
| 11152000 | Arroyo Seco near Soledad | Feb. 20 | 3,630 | 1958 | 28,300 |
| 11456000 | Napa River near St. Helena | Feb. 20 | 900 | 1986 | 16,900 |
| 11477000 | Eel River at Scotia | Jan. 24 | 48,500 | 1965 | 752,000 |
| 11532500 | Smith River near Crescent City | Dec. 8 | 37,000 | 1965 | 228,000 |

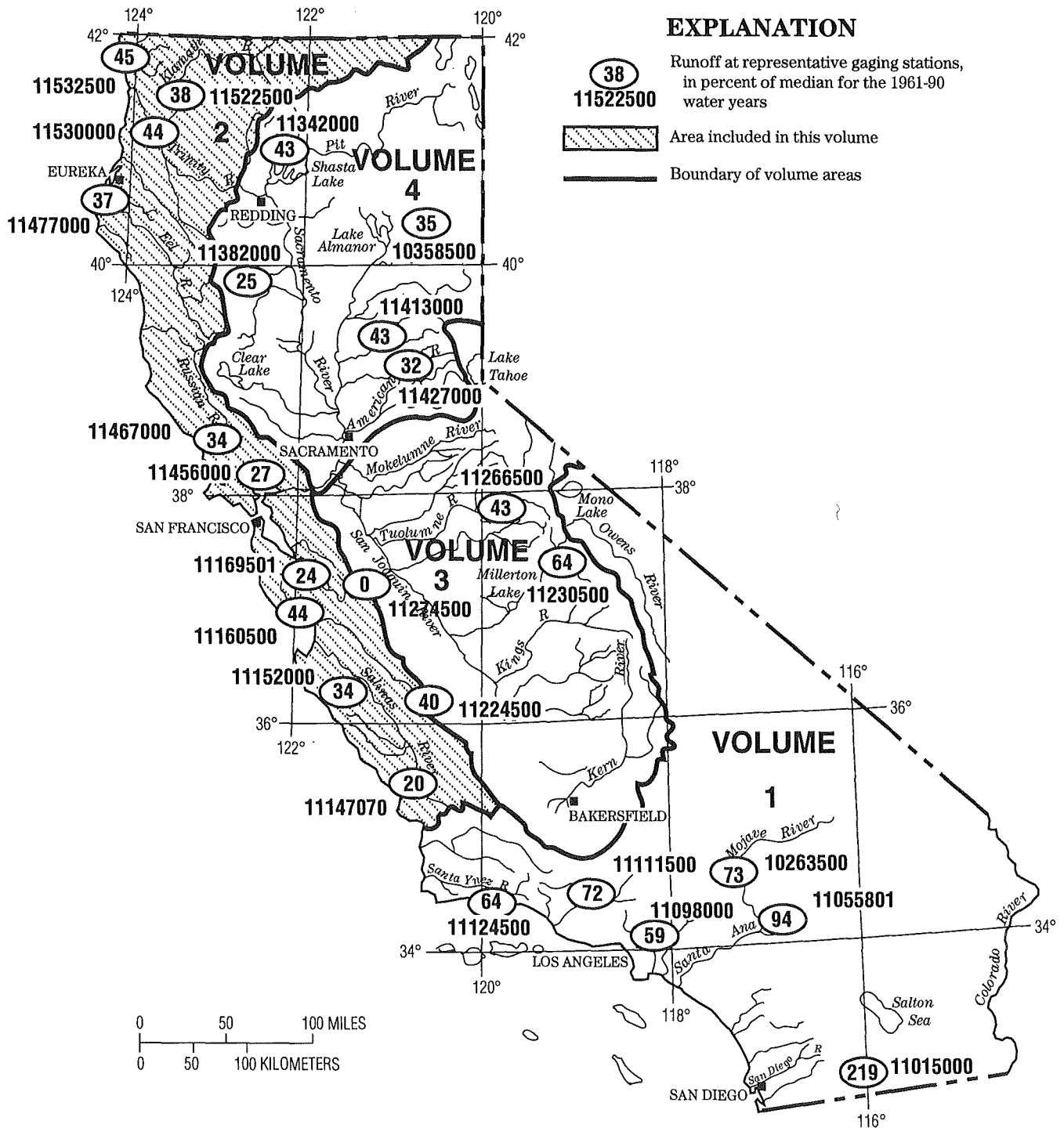


Figure 1. Runoff, in percent of median, for the 1994 water year.

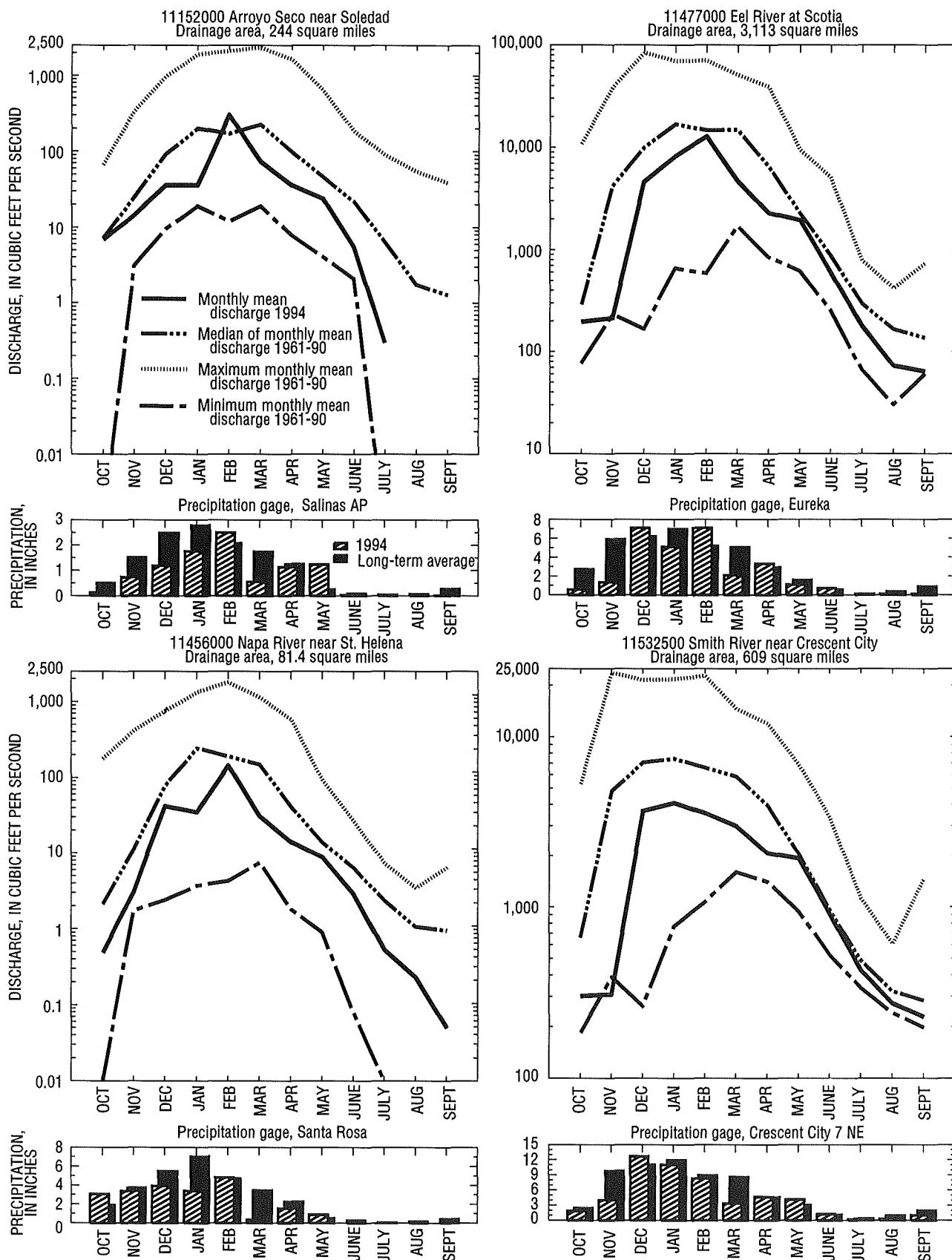


Figure 2. Discharge and precipitation during water year 1994 and long-term average at four representative gaging stations. Precipitation data from National Oceanic and Atmospheric Administration, 1994, Climatological Data, annual summary: v. 98.

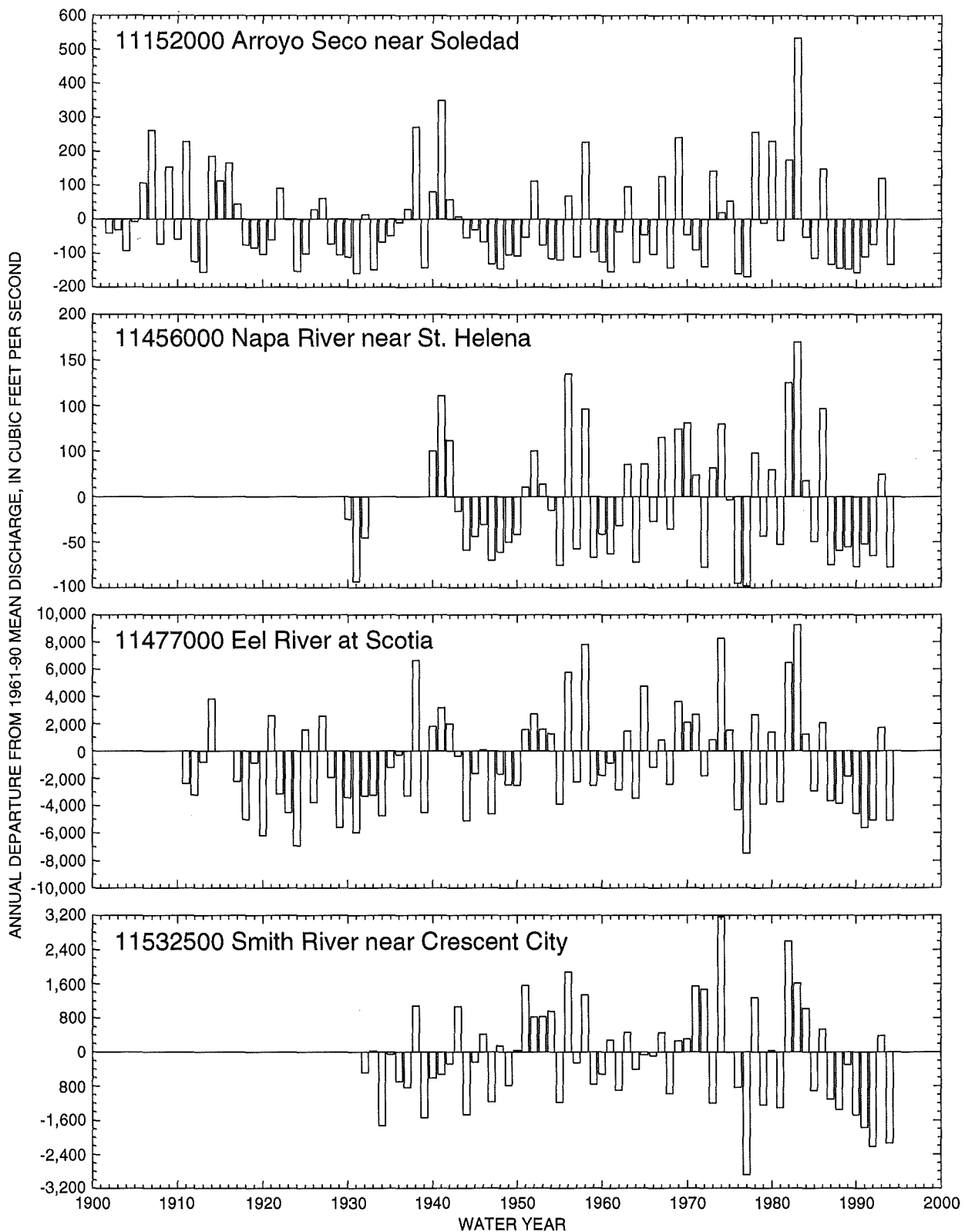


Figure 3. Annual departure from 1961-90 mean discharge for period of record at selected gaging stations.

Table 2. Comparison of 7-day and 1-day low flow for 1994 water year with 7-day, 1-day, and minimum daily flow for 30-year base period 1961-90 for selected stations

| Station No. | Station name | 7-day low flow (ft ³ /s) | | 1-day low flow (ft ³ /s) | | Period of record | |
|-------------|--------------------------------|-------------------------------------|---------------------|-------------------------------------|---------------------|------------------|------------------------------------|
| | | 1994 water year | Base period 1961-90 | 1994 water year | Base period 1961-90 | Water year | Minimum daily (ft ³ /s) |
| 11152000 | Arroyo Seco near Soledad | 0 | 0 | 0 | 0 | Several | 0 |
| 11456000 | Napa River near St. Helena | 0 | 0 | 0 | 0 | Several | 0 |
| 11477000 | Eel River at Scotia | 57 | 25 | 54 | 25 | 1924 | 12 |
| 11532500 | Smith River near Crescent City | 195 | 163 | 190 | 160 | 1964 | 160 |

Water Quality

Water samples collected at four NASQAN stations and one Hydrologic Benchmark station reported in this volume were analyzed for water-quality constituents. Dissolved-solids concentrations generally decreased slightly from the previous year and were largest at the Salinas River near Chualar (station 11152300), where the median concentration was 258 milligrams per liter. The smallest concentration was in water sampled from Elder Creek near Branscomb (station 11475560), where the median concentration was 99 milligrams per liter. Figure 4 shows the monthly mean dissolved-solids concentrations during water year 1994 compared with long-term mean dissolved-solids concentrations at two selected stations. No chemical-constituent concentrations exceeded water-quality criteria recommended by the U.S. Environmental Protection Agency.

The largest densities of fecal-coliform (89 colonies per 100 milliliters) and fecal streptococcus bacteria (210 colonies per 100 milliliters) were in water samples collected from the Salinas River near Chualar (station 11152300).

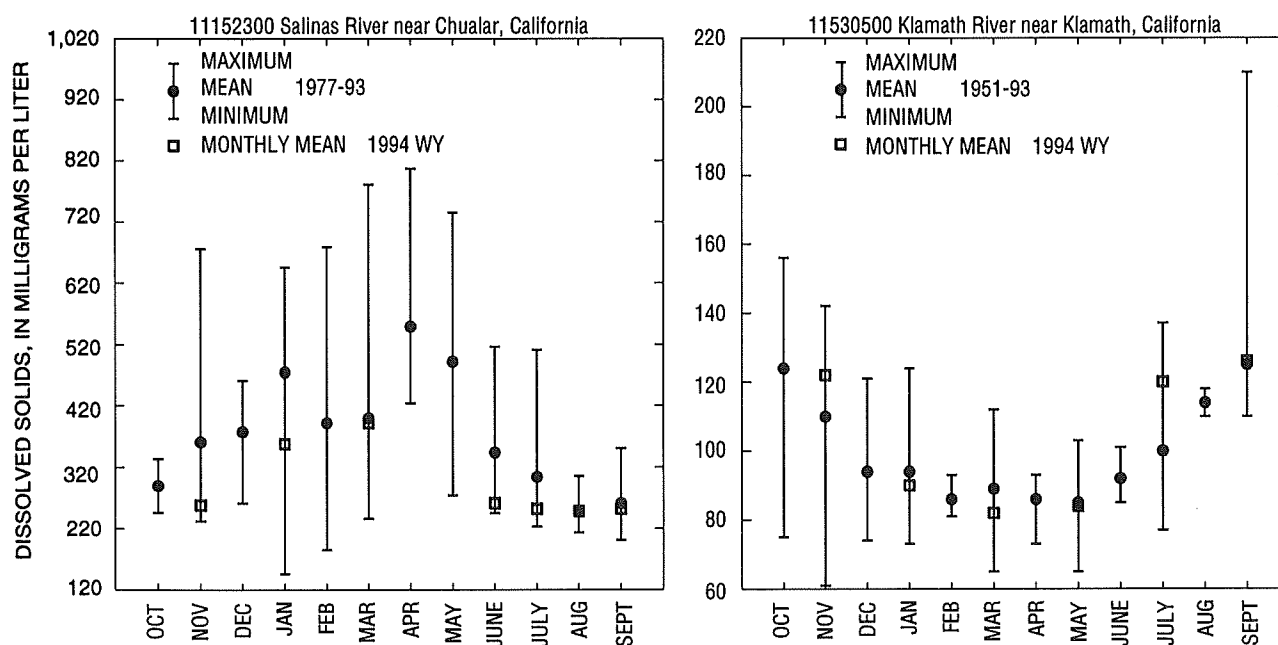


Figure 4. Comparison of monthly mean dissolved-solids concentrations during water year 1994 with long-term dissolved-solids concentrations at two selected stations.

Sediment

Suspended-sediment discharge and concentrations were monitored daily at 3 stations and periodically at 13 stations in the area included in this volume. Monthly and annual bedload discharge were estimated for all daily stations. Sediment-monitoring stations are located as far north as Crescent City and as far south as Bryson in San Luis Obispo County. Large variations in precipitation and drainage-basin characteristics result in significant differences in sediment-discharge rates.

Sediment discharges at the 3 daily sites included in this volume were considerably less than that for the 1993 water year. This reflects the return to drought-like conditions in the state. Annual sediment discharge was 1 percent of long-term average (1979-93) for Cull Creek above Cull Creek Reservoir, near Castro Valley (station 11180960), and 3.4 percent of the long-term average (1981-93) for San Lorenzo Creek above Don Castro Reservoir, near Castro Valley (station 11180825), and 0.3 percent of the long-term average for Grass Valley Creek at Fawn Lodge, near Lewiston (station 11525600).

During the 1994 water year, suspended-sediment discharge for the 3 daily stations ranged from 83.5 tons per year for Grass Valley Creek at Fawn Lodge, near Lewiston (station 11525600) to 685 tons per year for San Lorenzo Creek above Don Castro Reservoir near Castro Valley (station 11180825). Annual sediment yield ranged from a minimum of 2.7 tons per square mile for Grass Valley Creek at Fawn Lodge, near Lewiston (drainage area, 30.8 square miles) to a maximum of 43.7 tons per square mile for Cull Creek above Cull Reservoir, near Castro Valley (drainage area, 5.79 square miles).

HYDRODYNAMIC DATA FOR SAN FRANCISCO BAY

The U.S. Geological Survey has collected and continues to collect hydrodynamic data for San Francisco Bay. The data include 15-minute interval time-series of salinity, specific conductance, temperature, velocity, and surface water, in addition to time-series of wind velocity, air temperature, and atmospheric pressure.

The data are stored in a data base that was designed specifically for the storage and retrieval of hydrodynamics data for San Francisco Bay. The data base contains time-series data collected by the U.S. Geological Survey, as well as those collected by other agencies. Only the data collected by the U.S. Geological Survey will be described here.

The data base resides on a workstation in the U.S. Geological Survey office in Sacramento, California. Data requests for U.S. Geological Survey collected data can be obtained by contacting the California District Public Information Officer.

| <u>Station No.</u> | <u>Station name</u> | <u>Period of record</u> |
|---|--|----------------------------------|
| Surface-water data | | |
| 11181360 | San Pablo Strait at Point San Pablo | June 1986 to current year |
| 11182130 | Carquinez Strait at Selby | October 1986 to current year |
| 11182450 | Carquinez Strait at Martinez | June 1986 to September 1988 |
| 11185185 | Suisun Bay at Mallard Island | September 1986 to September 1987 |
| 11455470 | Threemile Slough at Sacramento River | March 1979 to May 1985 |
| Specific conductance, salinity, temperature | | |
| 11182130 | Carquinez Strait at Selby (two depths) | October 1986 to current year |
| Meteorological data | | |
| SUBAY1 | Suisun Bay at channel marker #13 | August 1988 to April 1990 |
| SUBAY2 | Suisun Bay at channel marker #27 | July 1992 to current year |
| SPBAY | San Pablo Bay at channel marker #11 | August 1988 to current year |
| Velocity data | | |

The U.S. Geological Survey has collected velocity data at numerous locations throughout the bay using in situ current meters and acoustic Doppler current profilers. Most of these data have been published by the U.S. Geological Survey using report series other than the annual water resources data report series.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 53 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream-Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 284 sites in NASQAN are located generally at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis and reporting that the data may be used for, (2) to describe the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) to detect changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) to provide a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in about two-thirds of the study units and ultimately will be conducted in 60 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.

Radiochemical Programs is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data also are obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 1994 water year that began October 1, 1993, and ended September 30, 1994. 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 main-stream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

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

Latitude-Longitude System

The identification numbers for miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the other sites within a 1-second grid (fig. 5). This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description.

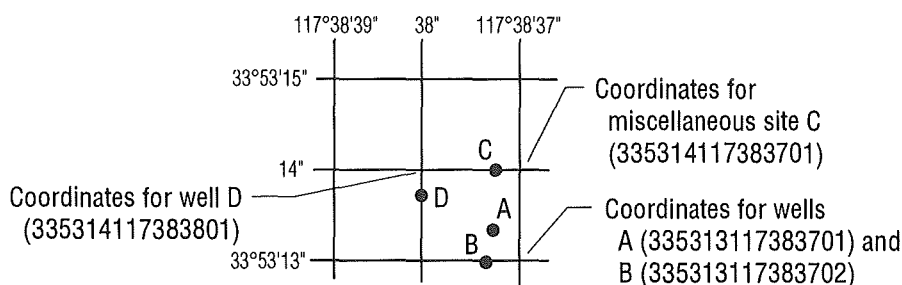


Figure 5. System for numbering miscellaneous sites (latitude and longitude).

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 and partial-record stations for which data are given in this report are shown, by county, in figures 6 through 22.

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 relationships 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 relationship 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 analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes 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, Chapter A6.

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

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

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

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

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

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

Data Presentation

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

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

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow 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 in current use, the datum of the current gage referred to sea level (see Definition of Terms), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

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

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

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage, 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. The minimum for the current water year appears below the table of peak data.

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

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

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow 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. At least 5 complete years of record must be available before this statistic is published for the designated period.

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

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

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

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

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

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

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

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

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal 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 (INCHES) indicates the depth to which the drainage area would be covered if all the runoff for a given period were distributed on it uniformly.

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

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

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

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

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

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

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

Other Records Available

The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of sites as well as an index of records of discharge collected by other agencies but not published by the U.S. Geological Survey. Information on records at specific sites can be obtained from that office upon request.

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

Records of Surface-Water Quality

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

Classification of Records

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

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. 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 6 through 22.

Arrangement of Records

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

Onsite Measurements and Sample Collection

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

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

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

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

Historical and current (1994) 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 the suspended sediment and bed material are included for some stations.

Estimates of bedload and total-sediment discharge are included for some stations. Computations of monthly bedload discharges are based on the relation between instantaneous water discharge and corresponding bedload discharge for the station. Values of bedload discharge used in defining this relation are based on samples obtained by use of the Helley-Smith bedload sampler or by modified-Einstein or Meyer-Peter Muller computation procedures. Application of the bedload-transport relation at a station was made on a daily basis or subdivided-day basis. The Helley-Smith sampler is designed to collect a time-weighted sample 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 Helley-Smith sampler has not been completed, and a trap efficiency of 1.0 has been assumed applicable to this device. 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 bedload 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 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, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance 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.

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, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

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

ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products ranging from data tables to complex statistical analyses, such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- * Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- * Daily Values File - Contains more than 220 million daily values of streamflows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- * Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- * Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- * Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, VA 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5 1/4-inch floppy disk and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports also are available on Compact Disc--Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, are reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs are available for purchase from U.S. Geological Survey, Earth Science Information Center, Open-File Reports Section, Box 25286, MS 517, Denver Federal Center, Denver, CO 80225.

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. For the membrane filter method, these bacteria are defined as the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C \pm 0.5°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milligrams per liter of sample.

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

Fecal-streptococcal bacteria are bacteria found in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. For the membrane filter method they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C \pm 0.5°C on KF streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milligrams per liter of sample.

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

Benthic organisms (invertebrates) are the group of animals living in or on 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.

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 micro-organisms, such as bacteria.

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³) and periphyton and benthic organisms in grams per square meter (g/m²).

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

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

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

Bottom material: See Bed material.

Cell volume determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell numbers of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements on cell dimensions (that is, 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 (that is, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

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

From cell volume, total algal biomass expressed as biovolume ($\pi\text{m}^3/\text{mL}$) 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.

Cells per volume (cells/volume) refers to the number of cells of any organism that are 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, usually in milliliters (mL) or liters (L).

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 natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

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

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.

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.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, 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 (ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic foot per second-day (cfs.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, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic meters.

Discharge is the volume of water (or more broadly, total fluid plus suspended sediment), that passes a given point within a given period of time.

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

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

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

Dissolved refers to that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate. It is recognized that certain kinds of samples cannot be filtered; to provide for this, procedures that are considered equivalent to filtering through a 0.45-micrometer membrane filter will be identified and announced at a later date.

Dissolved-solids concentration of water is determined either analytically or 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 of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

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

$$\bar{d} = \sum_{i=1}^s \frac{n_i}{n} \log^2 \frac{n_i}{n},$$

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

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the Earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water, together with all tributary surface streams and bodies of impounded surface water.

Gage datum is the elevation of the zero point of the reference gage from which gage height is determined as compared to sea level. This elevation is established by a system of levels from known bench marks or by approximation from topographic maps.

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

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

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

Hydrologic Benchmark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

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

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

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.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This development 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-pupa-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic 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 liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter.

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

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

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 408 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting that the data may be used for, (2) to describe the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) to detect changes in trends with time in the pattern occurrence of water-quality characteristics, and (4) to provide a nationally consistent data base useful for water-quality assessment and hydrologic research.

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

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

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

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

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

Parameter code is a five-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

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

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

| <u>Classification</u> | <u>Size (mm)</u> | <u>Method of analysis</u> |
|-----------------------|------------------|---------------------------|
| Clay..... | 0.00024-0.004 | Sedimentation |
| Silt..... | 0.004-0.062 | Sedimentation |
| Sand..... | 0.062-2.0 | Sedimentation or sieve |
| Gravel..... | 2.0-64.0 | Sieve |

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

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

Periphyton is the assemblage of micro-organisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, the periphyton 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. Insecticides and herbicides, which control insects and plants, respectively, are the two categories reported.

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

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

Plankton are suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

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

Blue-green algae are phytoplankton organisms having a blue pigment in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

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

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

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

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

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 carbon assimilated by plants (carbon method) or the amount of oxygen released (oxygen method).

Milligrams of carbon per area or volume per unit time [mg C/(m²/time) for periphyton and macrophytes and mg C/(m³/time) for phytoplankton] are the units for expressing primary productivity. They define 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.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}_2/(\text{m}^2/\text{time})$ for periphyton and macrophytes and $\text{mg O}_2/(\text{m}^3/\text{time})$ for phytoplankton] are the units for expressing primary productivity. They define 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.

Radiochemical Program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment; 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.

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

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

Bedload is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bedload is considered to consist of particles in transit within 0.25 ft of the streambed.

Bedload discharge (tons per day) is the quantity of sediment, as measured by dry weight, that moves past a section as bedload in a given time.

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

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

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

Suspended-sediment discharge (tons per day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day by multiplying discharge times milligrams per liter times 0.0027.

Suspended-sediment load (tons per day) is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total-sediment discharge or total-sediment load (tons per day) is the sum of suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry mass, that passes a section in a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

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

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating dissolved-solids concentration in water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 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.

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

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." 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.

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

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

Surface area of a lake is the area, in square miles or acres, outlined on the latest U.S. Geological Survey topographic map as the boundary of the lake and measured by a planimeter. In localities not covered by topographic maps, the areas are computed from the best maps available. Areas shown are for the lake stage at the time the map was made.

Surficial bed material is the part (upper 0.1 to 0.2 ft or 0.03 to 0.06 m) of the bed material that is sampled by 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. The water-sediment mixture is associated with (or sorbed on) 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 water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment; 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 would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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

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

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

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

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

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

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

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

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total load (tons) is the total amount of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the milligrams per liter of the constituent, times the factor 0.0027, times the number of days.

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

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

Turbidity of a sample is the reduction of transparency due to the presence of particulate matter. In this report it is expressed in Nephelometric turbidity units (NTU), obtained from the Nephelometric method for turbidity determination which measures the intensity of light scattered by suspended particles at 90° from the path of incident light source.

Water year in U.S. Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1994, is called the "1994 water year."

WDR is used as an abbreviation for "Water-Data Reports" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

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.

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

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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, Branch of Information Services, Box 25286, Federal Center, Denver, CO 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to U.S. Geological Survey, Department of the Interior. 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 "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 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 pages.
- 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 pages.
- 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 pages.
- 2-D2. Application of seismic-refraction techniques to hydrologic studies, by F.P. Haeni: USGS--TWRI Book 2, Chapter D2 1988. 86 pages.
- 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 pages.
- 2-E2. Borehole geophysics applied to ground-water investigations, by W.S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 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 pages.
- 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 pages.
- 3-A2. Measurement of peak discharge by slope-area method, by Tate Dalrymple and M.A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. Measurement of peak discharge at culverts by indirect methods, by G.L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. Measurement of peak discharge at width contractions by indirect methods, by H.F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. General procedure for gaging streams, by R.W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. Stage measurements at gaging stations, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. Discharge measurements at gaging stations, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 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 pages.
- 3-A10. Discharge ratings at gaging stations, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. Measurement of discharge by moving-boat method, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. Fluorometric procedures for dye tracing, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. Computation of continuous records of streamflow, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. Use of flumes in measuring discharge, by F.A. Kilpatrick and V.R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. Measurement of discharge using tracers, by F.A. Kilpatrick and E.D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.

- 3-A17. Acoustic velocity meter systems, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. Determination of stream reaeration coefficients by use of tracers, by F.A. Kilpatrick, R.E. Rathbun, N. Yotsukura, G.W. Parker, and L.L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. Levels of streamflow gaging stations, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
- 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 pages.
- 3-B1. Aquifer-test design, observation, and data analysis, by R.W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 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 pages.
- 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 pages.
- 3-B4. Regression modeling of ground-water flow, by Richard L. Cooley and Richard L. Naff: USGS--TWRI: Book 3, Chapter B4. 1990. 232 pages.
- 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 pages.
- 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 pages.
- 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 pages.
- 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 pages.
- 3-C1. Fluvial sediment concepts, by H.P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. Field methods for measurement of fluvial sediment, by H.P. Guy and V.W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. Computation of fluvial sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. Some statistical tools in hydrology, by H.C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. Frequency curves, by H.C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. Low-flow investigations by H.C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. Storage analyses for water supply, by H.C. Riggs and C.H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. Regional analyses of streamflow characteristics, by H.C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. Computation of rate and volume of stream depletion by wells, by C.T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. Methods for determination of inorganic substances in water and fluvial sediments, edited by M.J. Fishman and L.C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 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 pages.
- 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 pages.
- 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 pages.
- 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 pages.
- 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 pages.
- 5-C1. Laboratory theory and methods for sediment analysis, by H.P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 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 pages.

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

EXPLANATION

- ▲ GAGING STATION
- ◆ GAGING AND WATER-QUALITY (TEMPERATURE, SEDIMENT) STATION

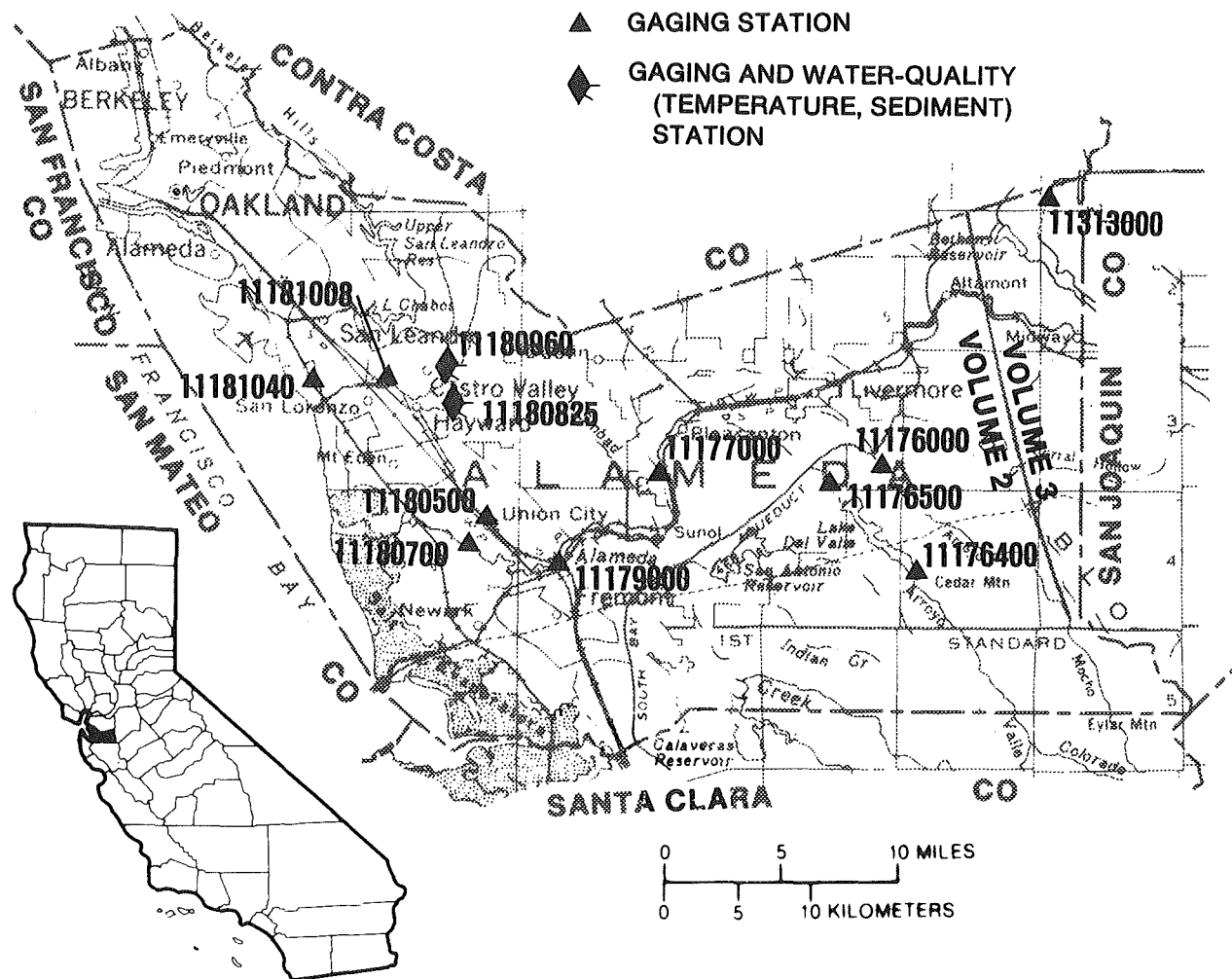


Figure 6. Location of discharge and water-quality stations in Alameda County.
(NOTE: Record for station 111313000 published in volume 3.)

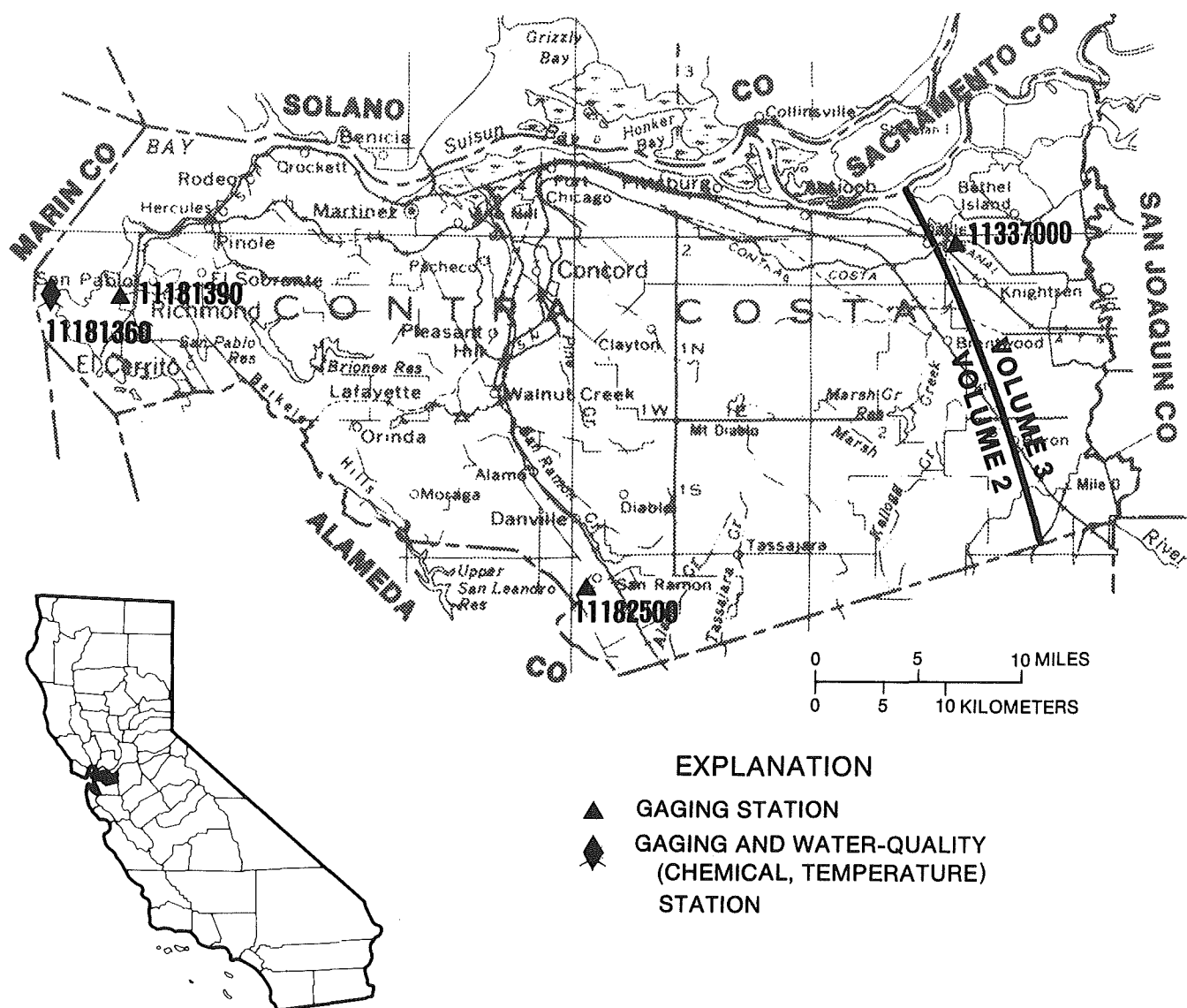


Figure 7. Location of discharge and water-quality stations in Contra Costa County.
(NOTE: Record for station 11337000 published in volume 3.)

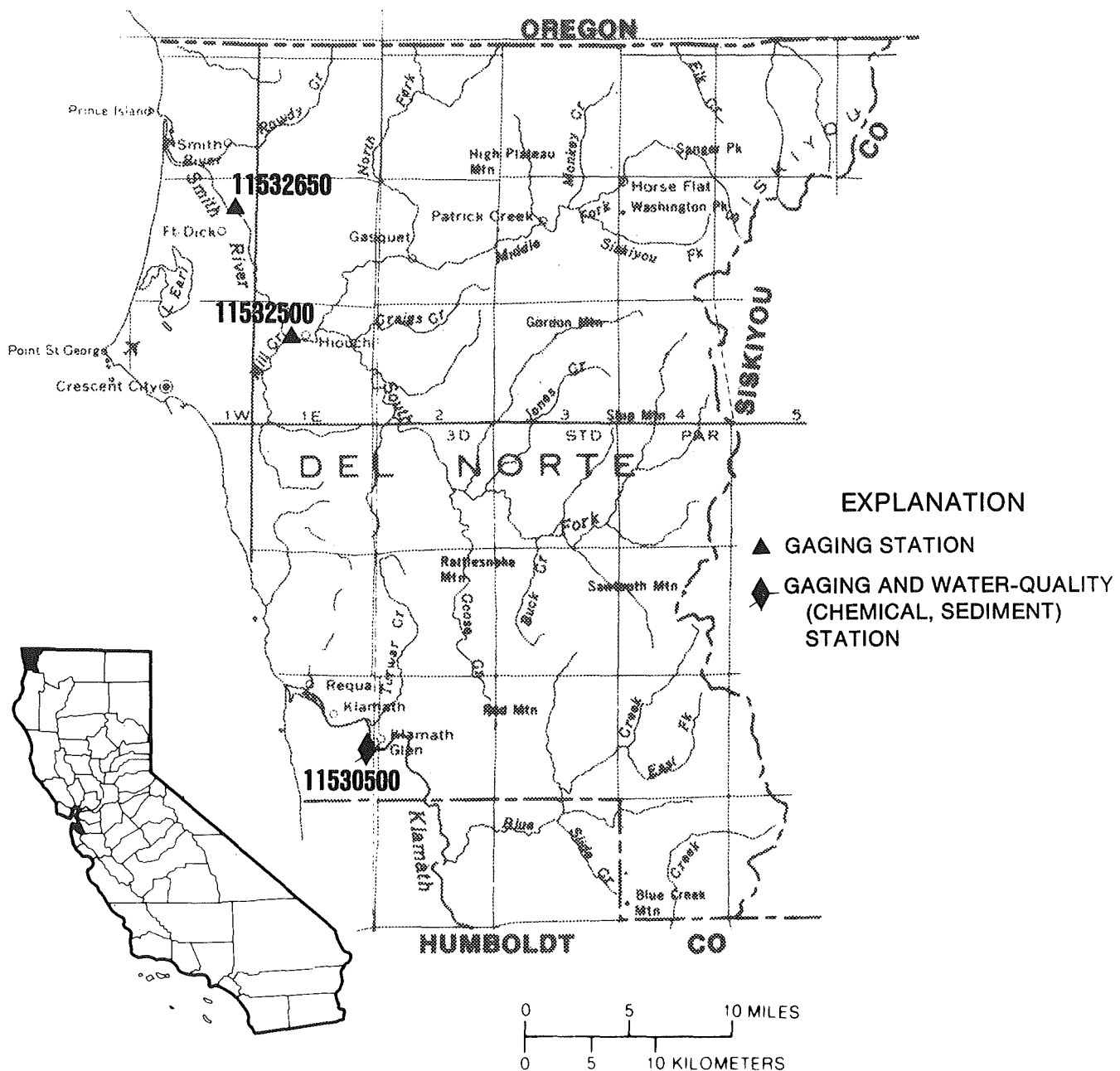
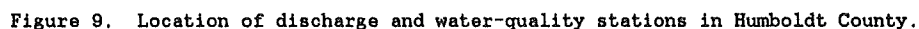
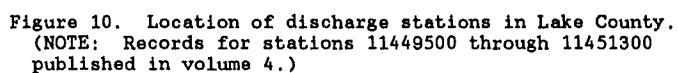


Figure 8. Location of discharge and water-quality stations in Del Norte County.





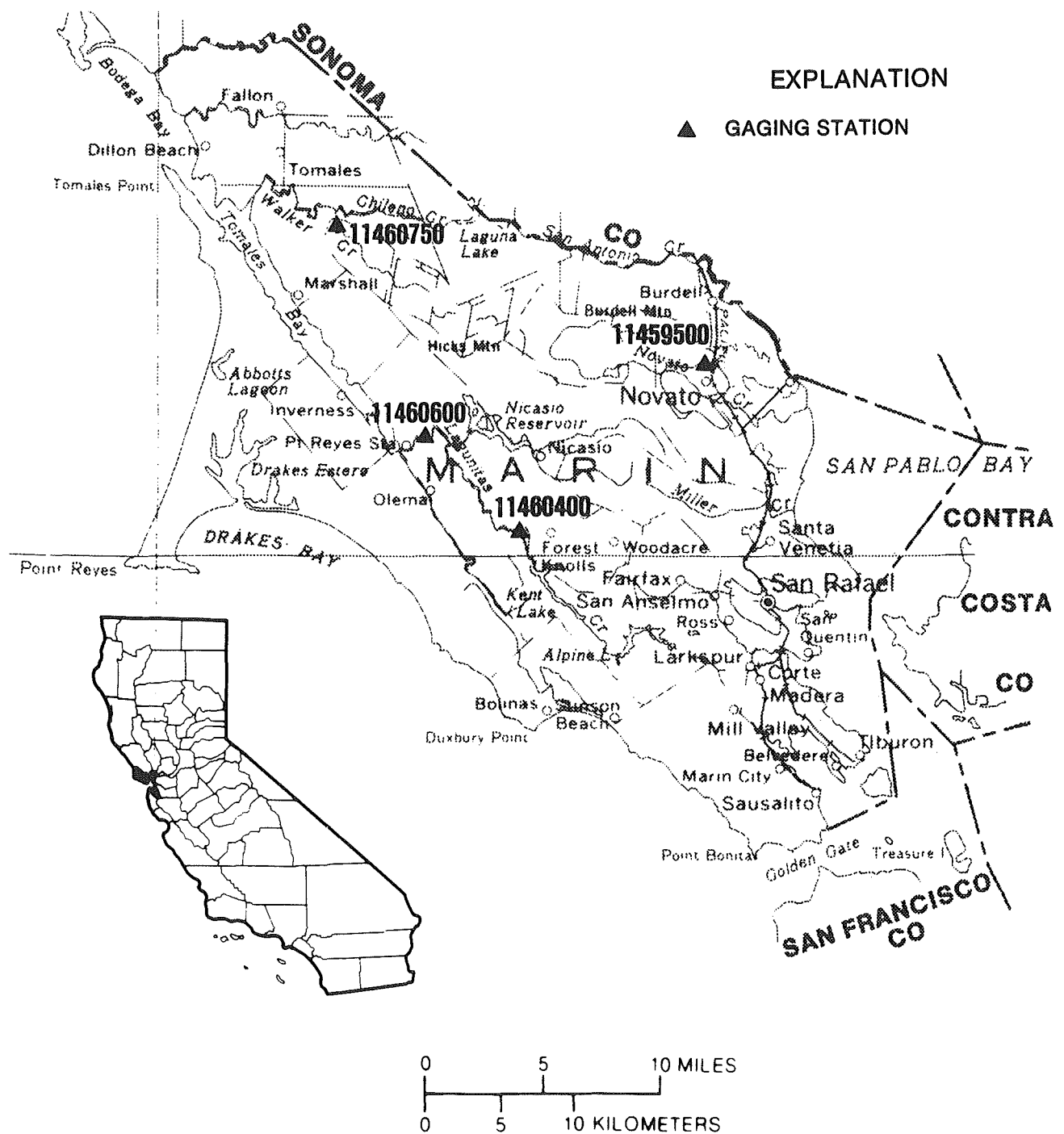


Figure 11. Location of discharge stations in Marin County.

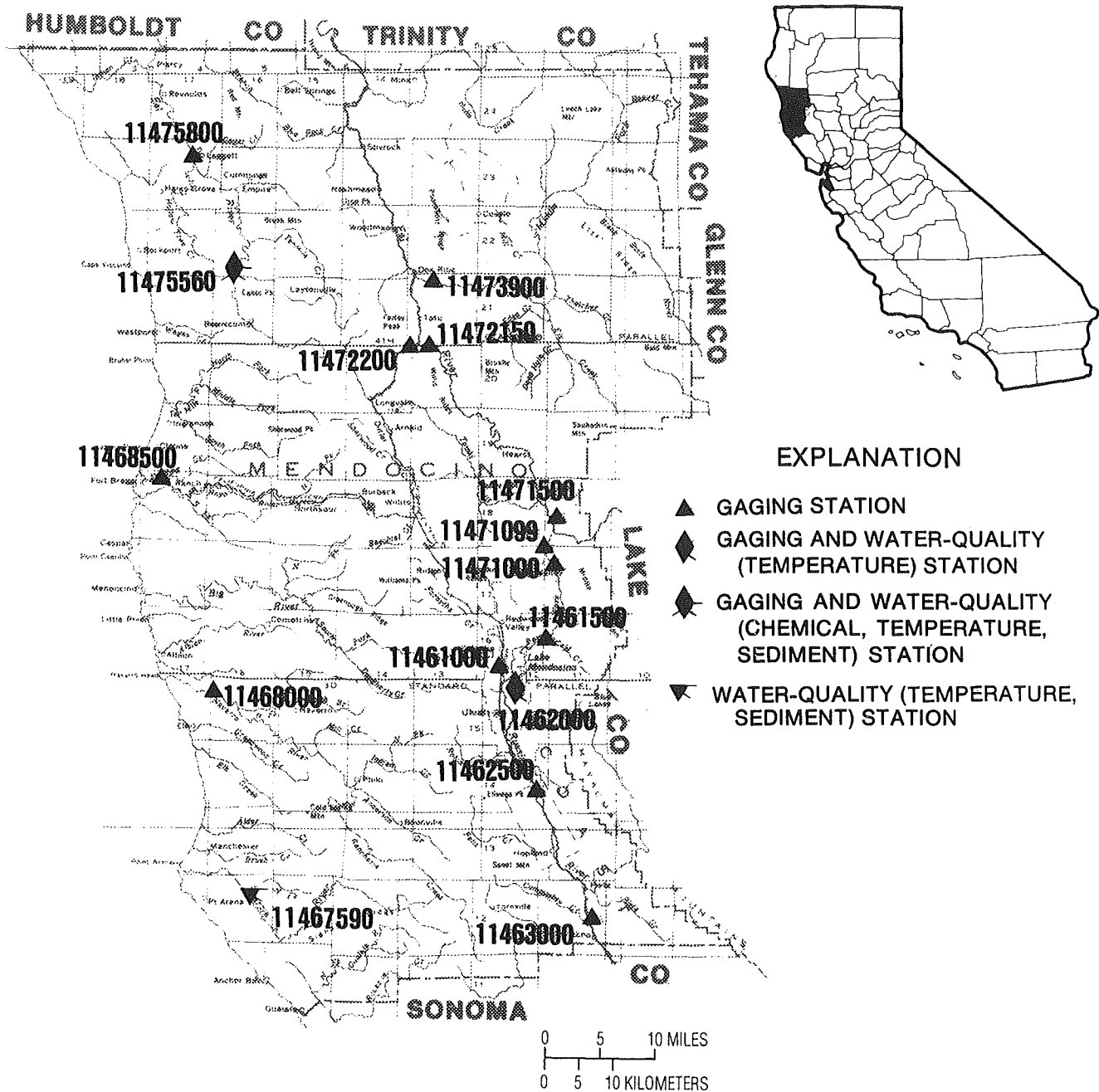


Figure 12. Location of discharge and water-quality stations in Mendocino County.

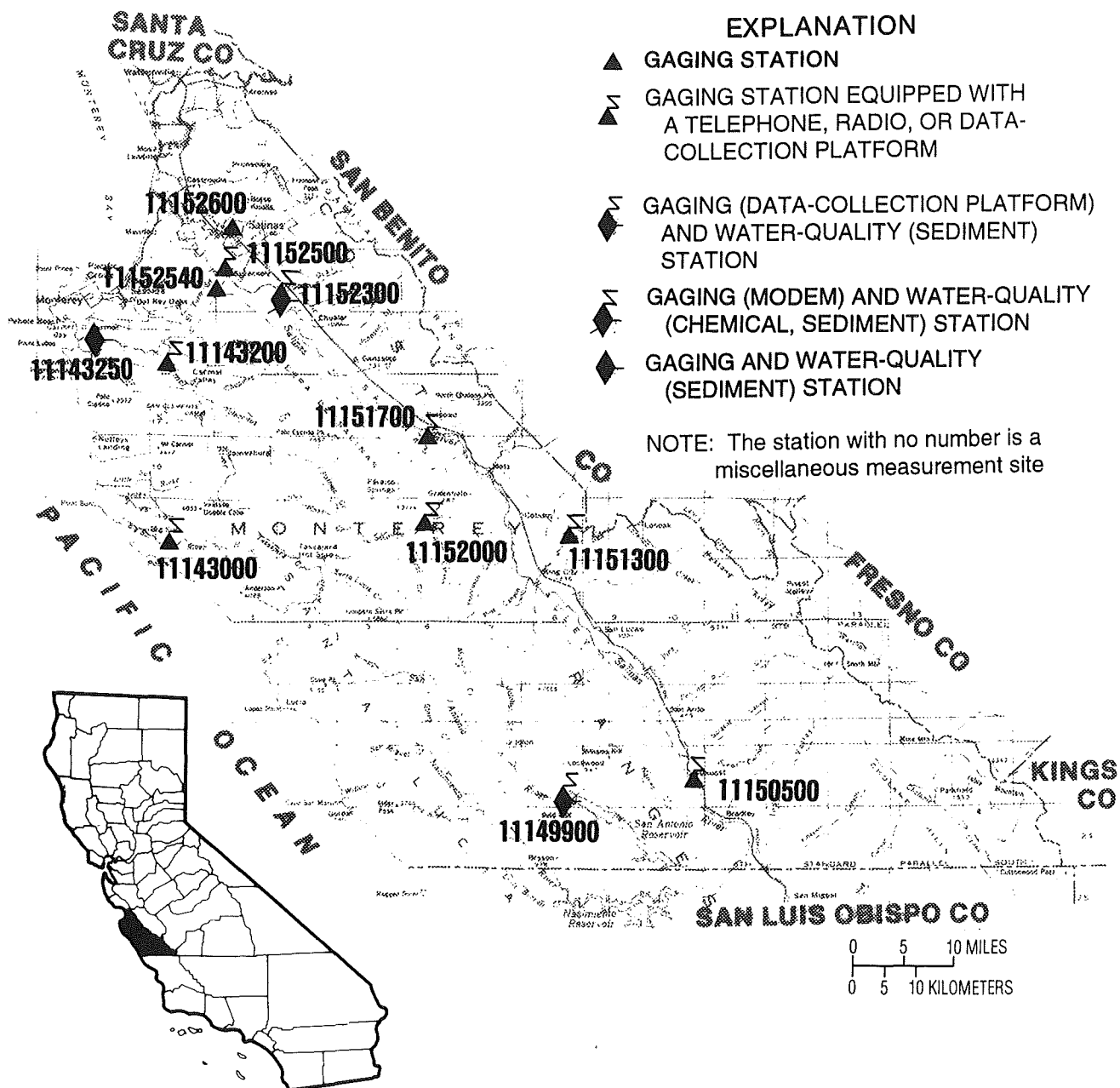
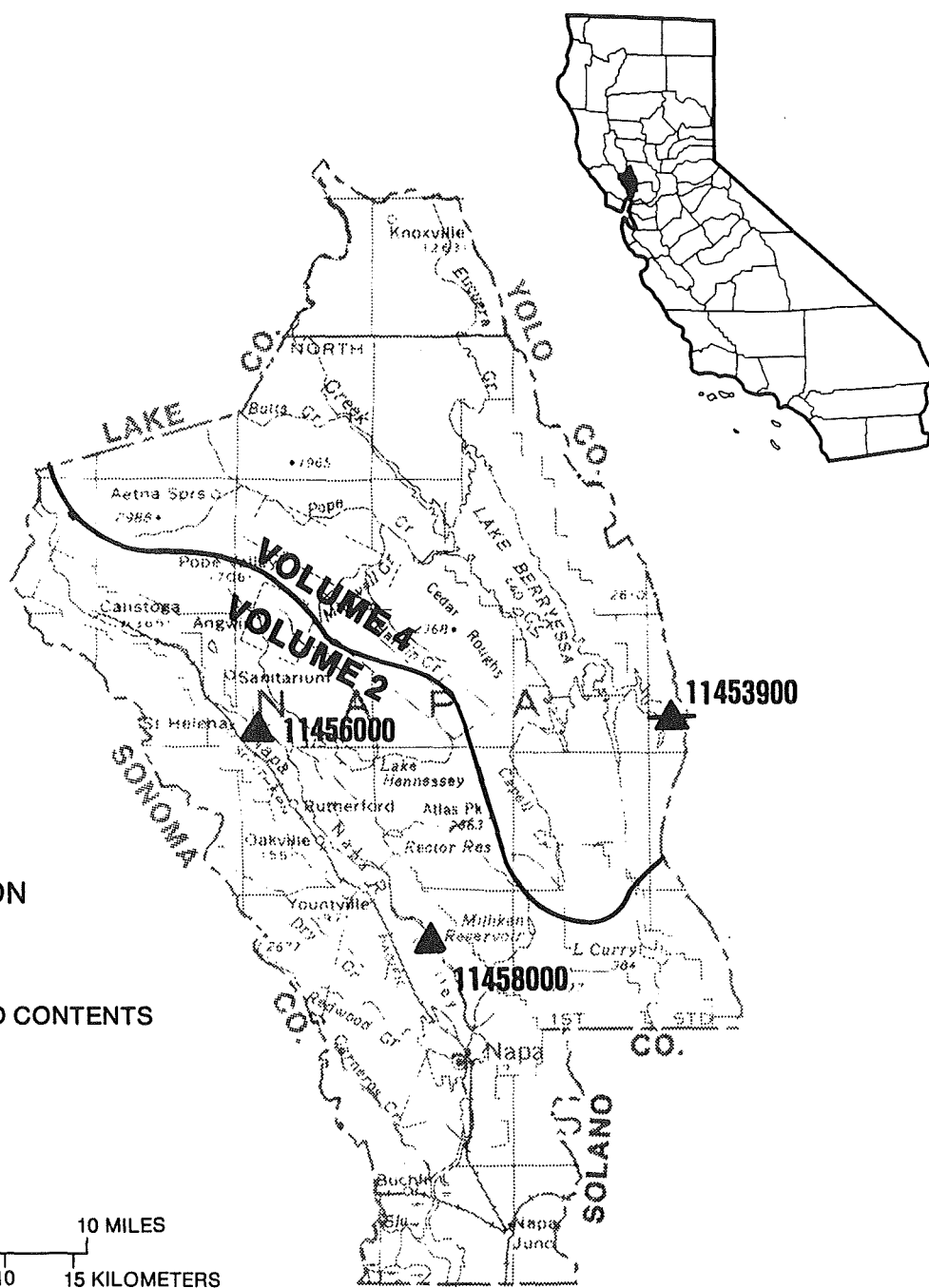


Figure 13. Location of discharge and water-quality stations in Monterey County.



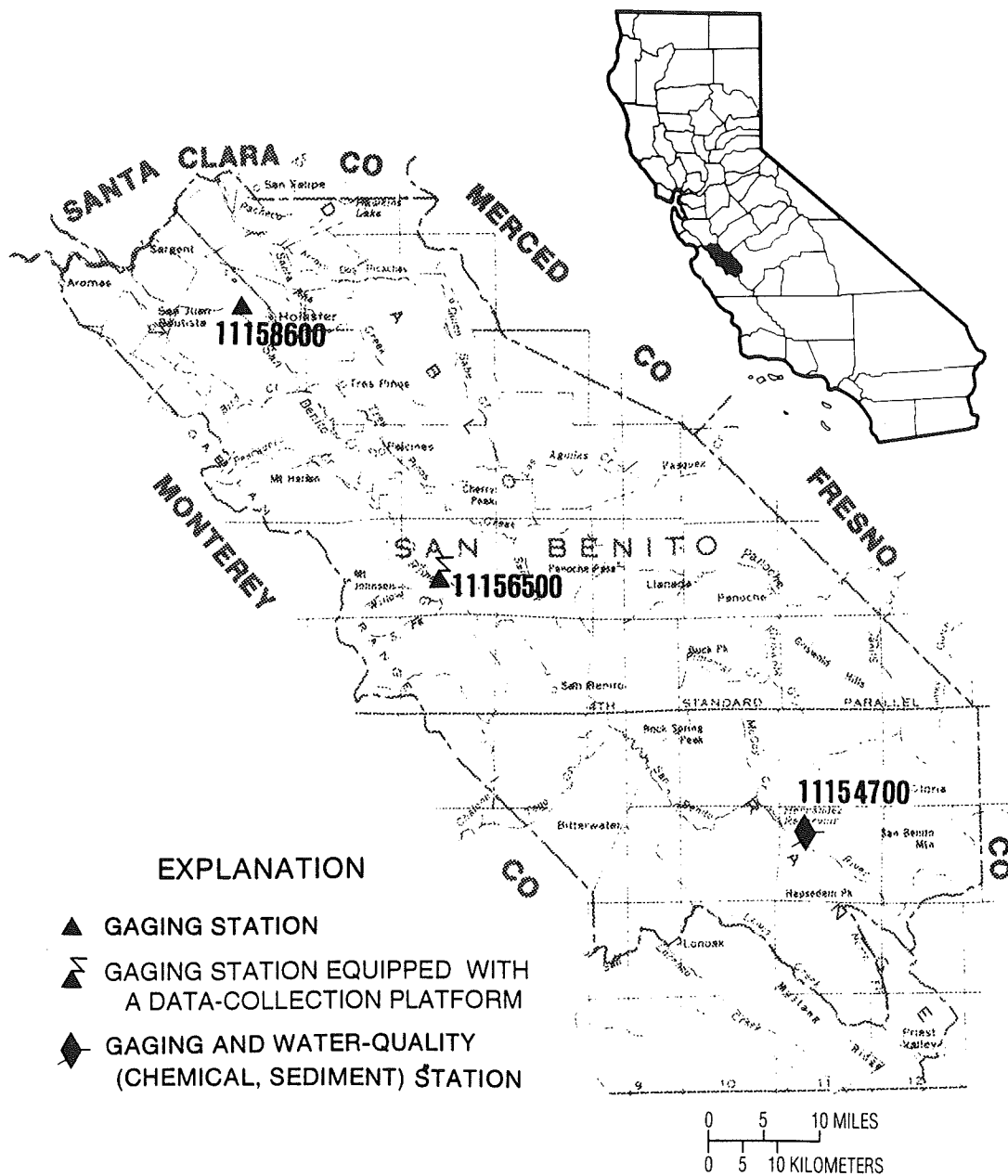


Figure 15. Location of discharge stations in San Benito County.

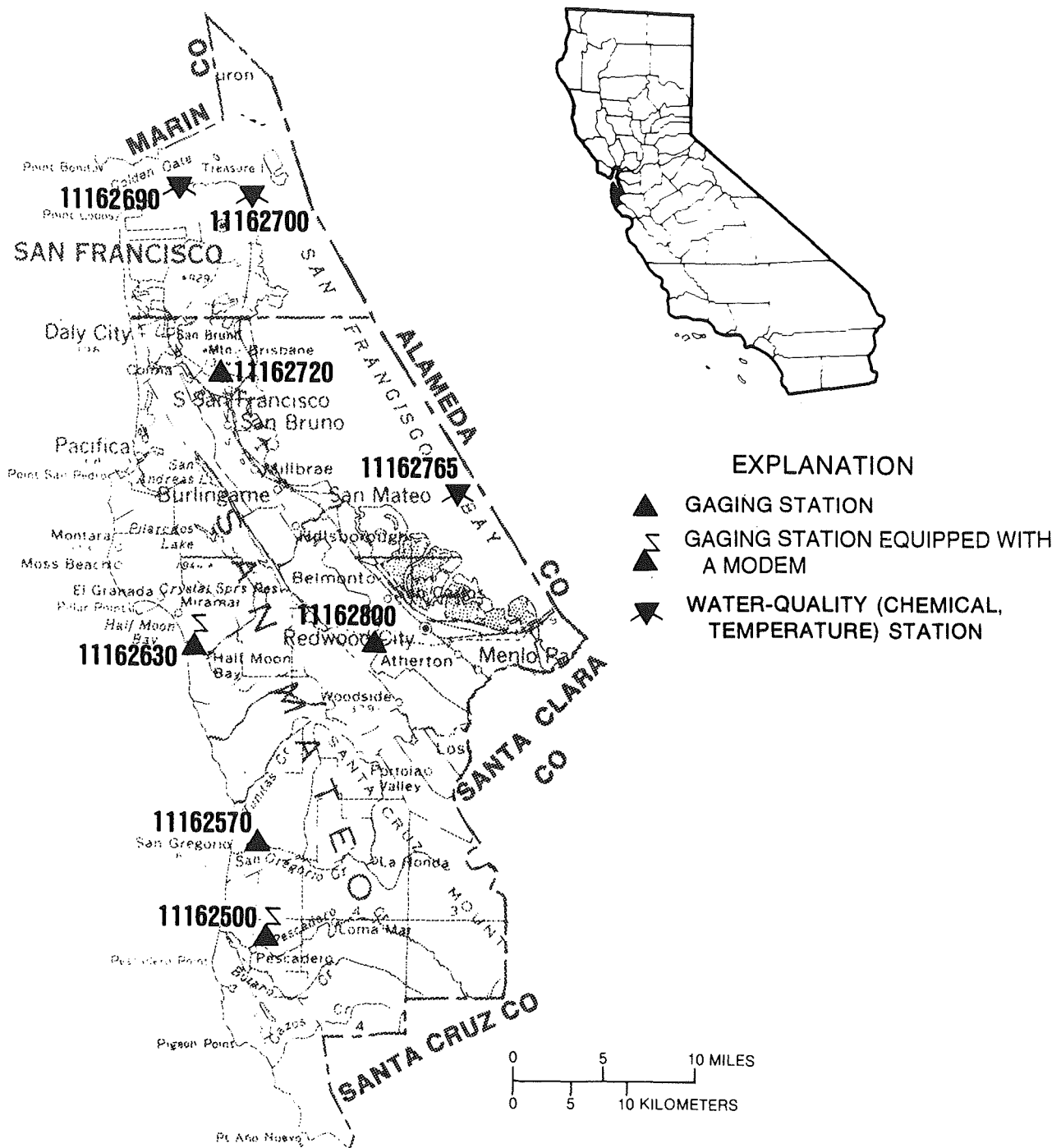


Figure 16. Location of discharge and water-quality stations in San Francisco and San Mateo Counties.

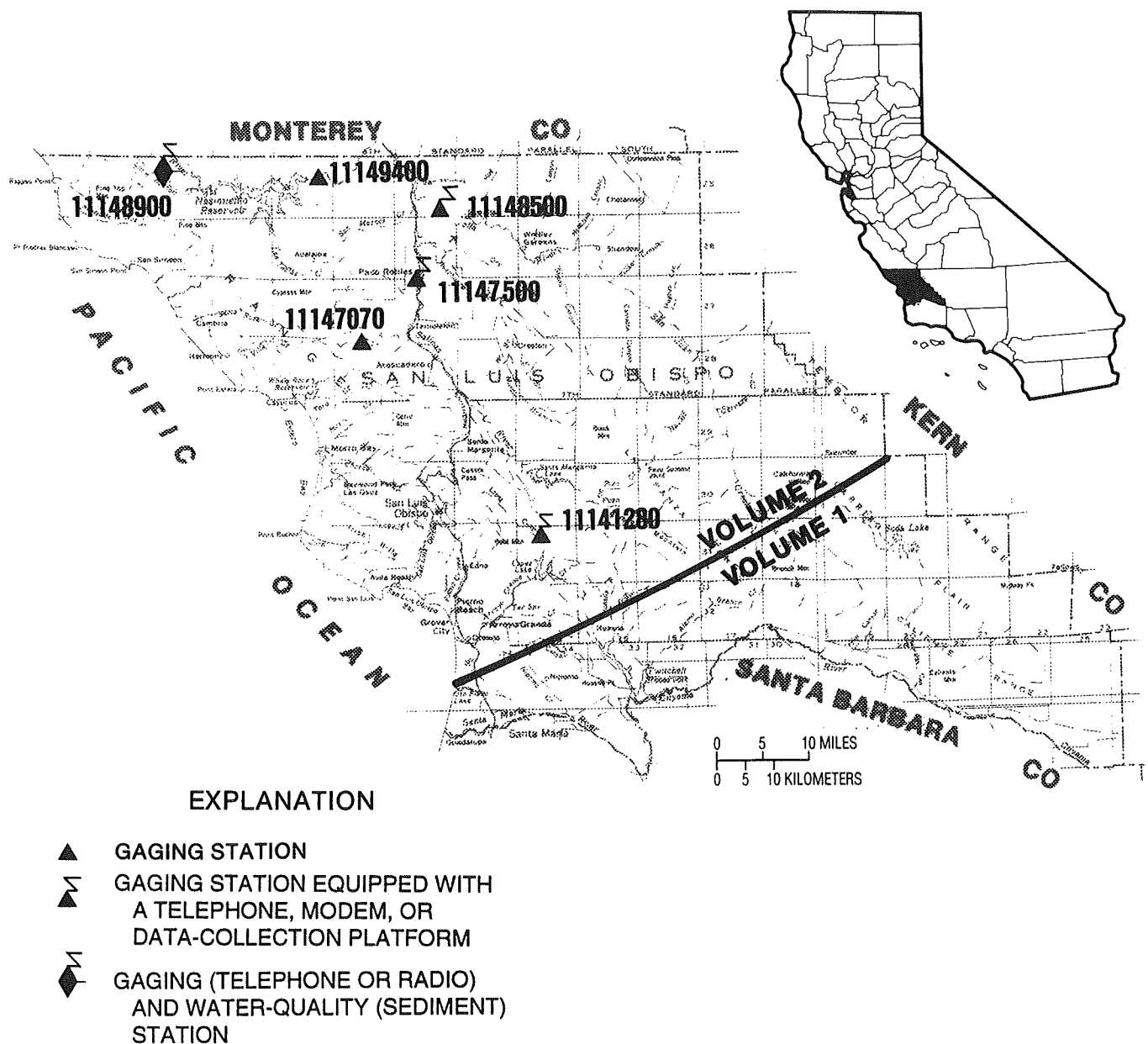
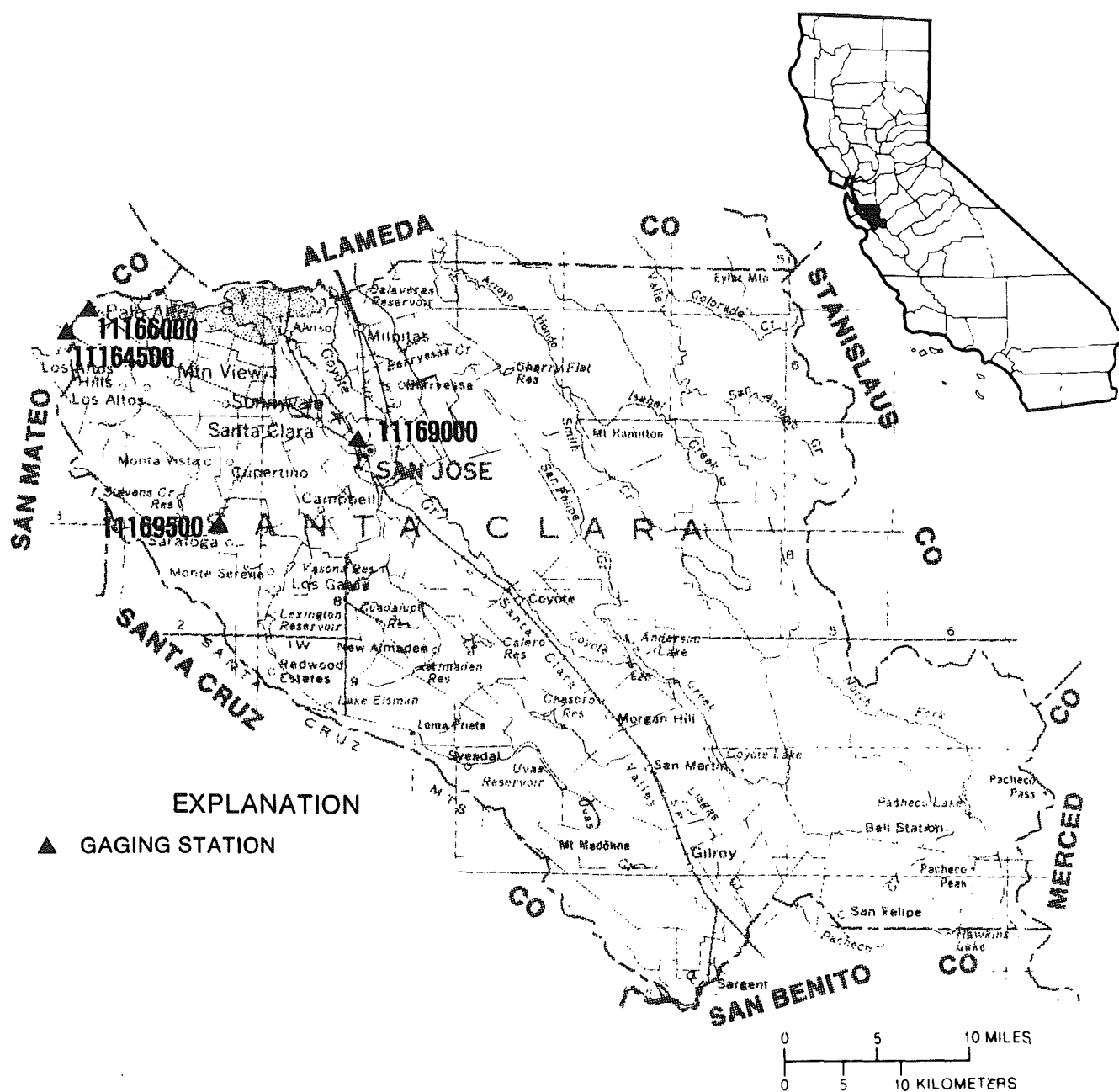


Figure 17. Location of discharge and water-quality stations in San Luis Obispo County.



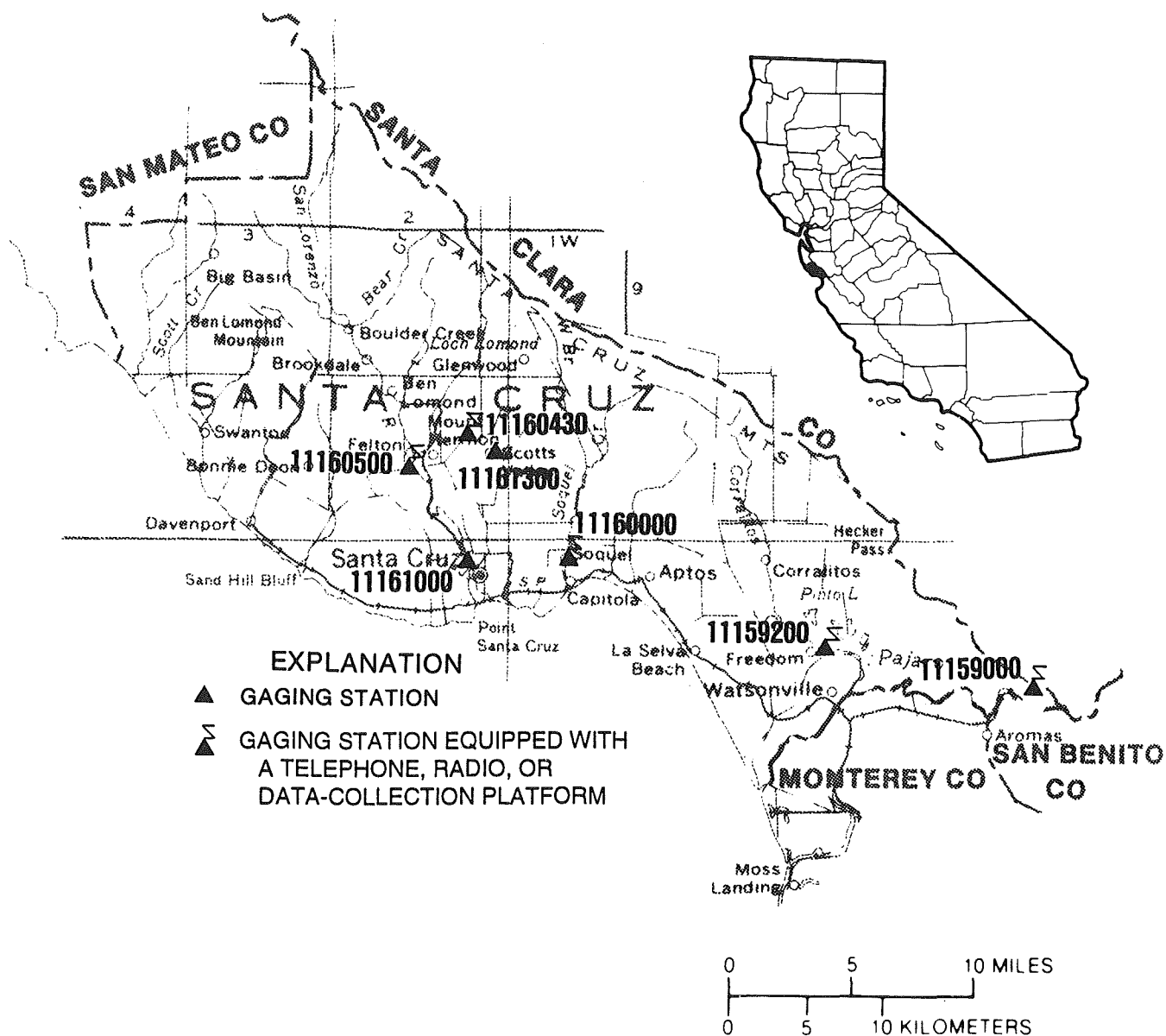


Figure 19. Location of discharge and water-quality stations in Santa Cruz County.

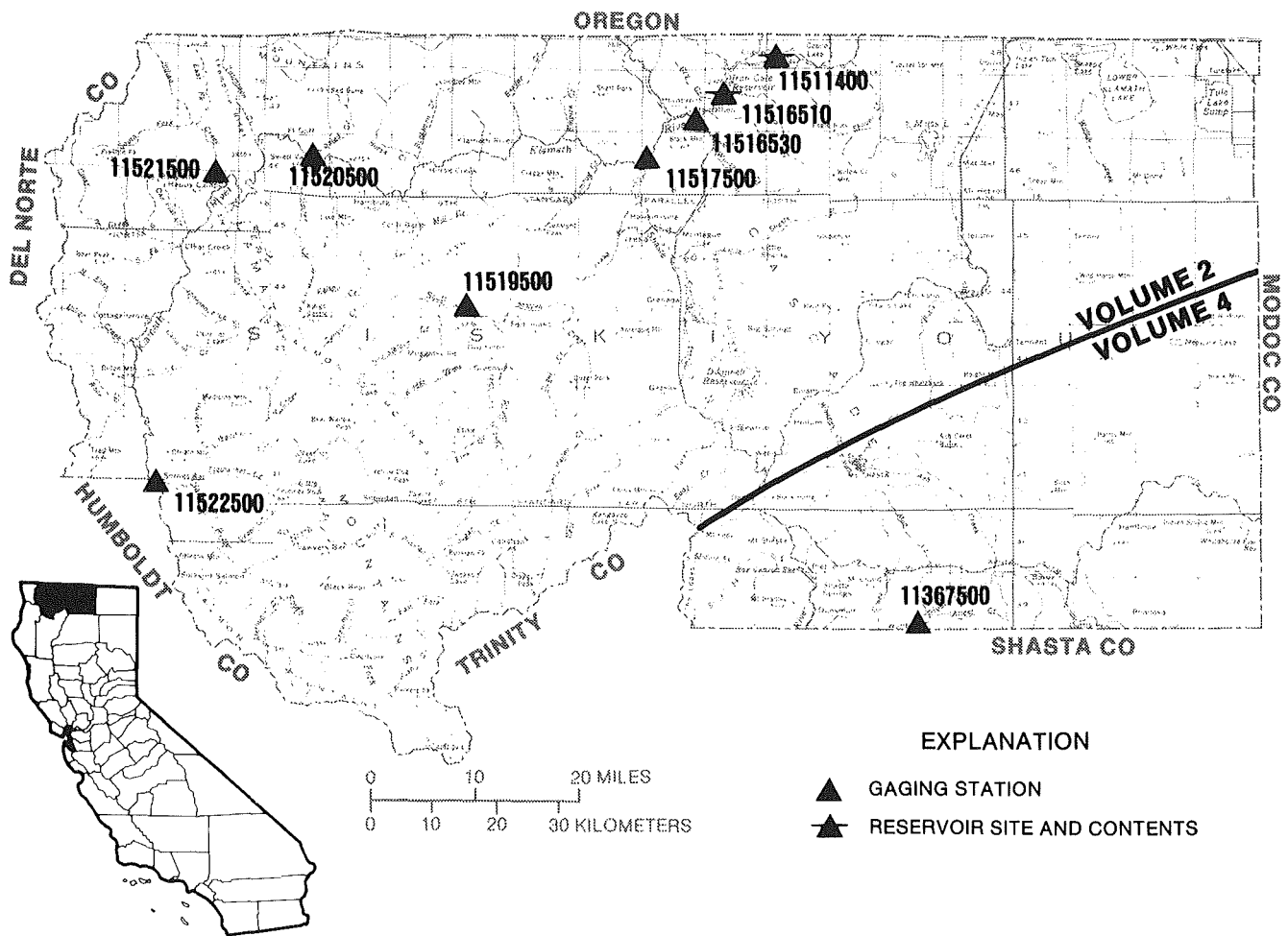


Figure 20. Location of discharge stations in Siskiyou County.
 (NOTE: Records for station 11367500 published in volume 4.)



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

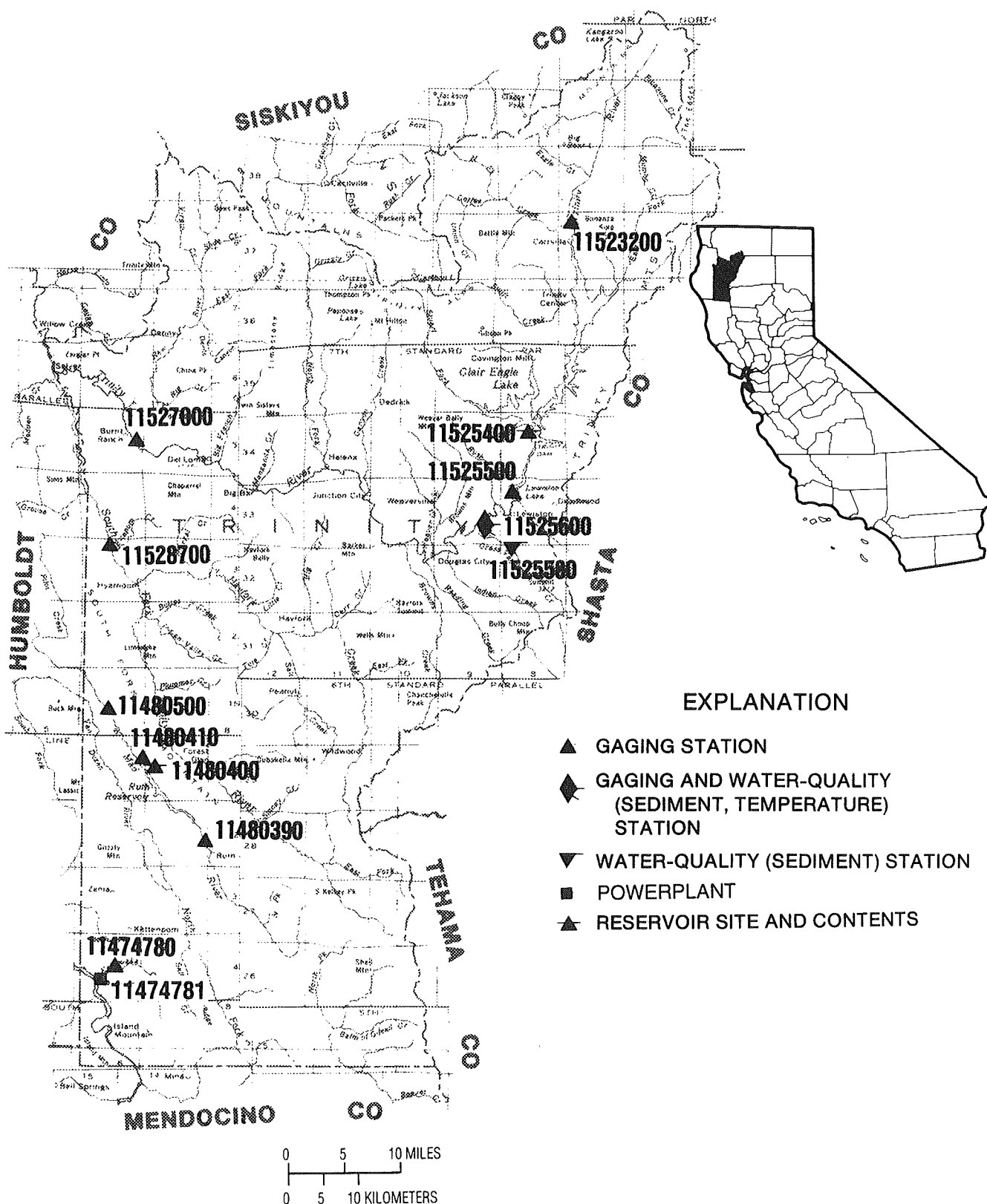


Figure 22. Location of discharge and water-quality stations in Trinity County.

GAGING STATION AND WATER-QUALITY RECORDS

Remark Codes

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

PRINTED OUTPUTREMARK

| | |
|----|--|
| e | Estimated value |
| > | Actual value is greater than value shown |
| < | Actual value is less than value shown |
| K | Results based on colony count outside the acceptable range (non-ideal colony count) |
| L | Biological organism count less than 0.5 percent (organism may be observed rather than counted) |
| D | Biological organism count equal to or greater than 15 percent (dominant) |
| & | Biological organism estimated as dominant |
| * | Instantaneous streamflow at the time of cross-sectional measurements |
| ** | Partial sampled width |
| 1 | Laboratory value |

Dissolved Trace-Element Concentrations

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. Full implementation of the protocols is intended during the 1995 water year.

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

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 right 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 except for estimated daily discharges and for discharges greater than 5.0 ft³/s, which are poor. 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, 9.62 ft, Mar. 1, 1983, site and datum then in use; minimum daily discharge, 0.30 ft³/s, Aug. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|---------|------|-----------------------------------|---------------------|
| Feb. 7 | 2045 | 117 | 5.43 | Feb. 19 | 2400 | *307 | *6.19 |

Minimum daily, 1.2 ft³/s, Aug. 30 and several days in September.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1 | 2.3 | 2.9 | 3.6 | 3.0 | 3.4 | 6.1 | 3.7 | 2.5 | 2.4 | 1.5 | e1.6 | 1.3 |
| 2 | 2.3 | 2.7 | 3.5 | 3.0 | 3.3 | 5.7 | 3.6 | 2.5 | 2.5 | 1.5 | e1.6 | 1.2 |
| 3 | 2.4 | 2.9 | 3.5 | 3.0 | 3.3 | 5.3 | 3.5 | 2.5 | 2.4 | 1.5 | 1.6 | 1.2 |
| 4 | 2.4 | 2.8 | 3.5 | 3.0 | 3.4 | 5.1 | 3.5 | 2.4 | 2.3 | 1.5 | 1.6 | 1.2 |
| 5 | 2.5 | 2.7 | 3.5 | 3.0 | 3.3 | 4.8 | 3.4 | 2.5 | 2.4 | 1.5 | 1.6 | 1.2 |
| 6 | 2.5 | 2.5 | 3.5 | 3.0 | 3.3 | 6.5 | 3.5 | 2.8 | 2.4 | e1.5 | 1.5 | 1.2 |
| 7 | 2.5 | 2.5 | 3.5 | 3.0 | 17 | 5.4 | 3.6 | 3.3 | 2.5 | e1.5 | 1.5 | 1.2 |
| 8 | 2.4 | 2.5 | 3.5 | 3.0 | 31 | 4.9 | 4.0 | 3.6 | 2.2 | e1.5 | 1.6 | 1.2 |
| 9 | 2.5 | 2.5 | 3.5 | 3.0 | 8.0 | 4.7 | 4.8 | 3.1 | 2.2 | e1.5 | 1.6 | 1.2 |
| 10 | 2.6 | 2.6 | 3.5 | 3.0 | 5.8 | 4.5 | 4.3 | 2.8 | 2.1 | e1.5 | 1.5 | 1.2 |
| 11 | 2.8 | 4.3 | 5.9 | 3.0 | 5.2 | 4.5 | 4.0 | 2.7 | 2.1 | e1.5 | 1.4 | 1.2 |
| 12 | 2.7 | 3.5 | 4.6 | 3.0 | 4.5 | 5.1 | 3.9 | 2.7 | 2.2 | e1.5 | 1.4 | 1.2 |
| 13 | 2.8 | 3.2 | 3.4 | 3.1 | 4.1 | 5.2 | 3.7 | 2.6 | e2.2 | e1.5 | 1.5 | 1.3 |
| 14 | 2.6 | 3.0 | 4.0 | 3.0 | 3.9 | 4.8 | 3.7 | 2.6 | e2.1 | e1.5 | 1.4 | 1.2 |
| 15 | 2.7 | 3.0 | 3.7 | 2.8 | 3.6 | 4.6 | 3.6 | 2.6 | e2.0 | e1.5 | 1.4 | 1.2 |
| 16 | 2.8 | 3.0 | 3.5 | 3.0 | 3.4 | 4.9 | 3.7 | 2.5 | 2.1 | e1.5 | 1.4 | 1.2 |
| 17 | 2.8 | 3.0 | 3.3 | 3.0 | 11 | 6.0 | 3.6 | 3.2 | 2.0 | e1.5 | 1.4 | 1.3 |
| 18 | 2.7 | 3.0 | 3.3 | 3.0 | 14 | 5.7 | 3.3 | 3.3 | 2.0 | e1.5 | 1.5 | 1.3 |
| 19 | 2.7 | 3.0 | 3.3 | 3.0 | 23 | 5.0 | 3.1 | 3.2 | 2.0 | e1.6 | 1.4 | 1.3 |
| 20 | 2.6 | 3.0 | 3.3 | 2.9 | 114 | 4.7 | 2.8 | 2.9 | e2.1 | e1.6 | 1.4 | 1.3 |
| 21 | 2.6 | 3.0 | 3.3 | 2.8 | 31 | 4.6 | 2.8 | 2.8 | e2.0 | e1.6 | 1.4 | 1.3 |
| 22 | 2.6 | 3.0 | 3.3 | 2.9 | 18 | 4.6 | 2.8 | 3.0 | e2.0 | e1.7 | 1.4 | 1.4 |
| 23 | 2.6 | 3.0 | 3.3 | 6.0 | 12 | 4.4 | 2.9 | 2.7 | 2.3 | e1.7 | 1.4 | 1.4 |
| 24 | 2.6 | 3.0 | 3.3 | 8.0 | 10 | 5.9 | 3.0 | 2.7 | 2.0 | e1.7 | 1.4 | 1.4 |
| 25 | 2.6 | 3.2 | 3.2 | 10 | 8.5 | 7.3 | 4.0 | 2.7 | 2.0 | e1.6 | 1.4 | 1.4 |
| 26 | 2.6 | 3.3 | 3.0 | 6.4 | 7.8 | 6.3 | 4.4 | 2.7 | 1.9 | e1.6 | 1.4 | 1.3 |
| 27 | 2.6 | 3.3 | 3.0 | 5.1 | 7.2 | 5.1 | 3.2 | 2.7 | 1.8 | e1.6 | 1.3 | 1.2 |
| 28 | 2.7 | 3.3 | 3.0 | 4.3 | 6.8 | 4.0 | 2.9 | 2.6 | 1.6 | e1.6 | 1.3 | 2.0 |
| 29 | 2.6 | 3.8 | 3.0 | 4.1 | --- | 4.2 | 2.6 | 2.5 | 1.6 | e1.7 | 1.3 | 1.9 |
| 30 | 2.7 | 4.1 | 3.0 | 3.7 | --- | 3.9 | 2.6 | 2.6 | 1.5 | e1.7 | 1.2 | 1.7 |
| 31 | 2.8 | --- | 3.0 | 3.5 | --- | 3.9 | --- | 2.5 | --- | e1.7 | 1.3 | --- |
| TOTAL | 80.6 | 91.6 | 107.8 | 116.6 | 369.8 | 157.7 | 104.5 | 85.8 | 62.9 | 48.4 | 44.7 | 39.6 |
| MEAN | 2.60 | 3.05 | 3.48 | 3.76 | 13.2 | 5.09 | 3.48 | 2.77 | 2.10 | 1.56 | 1.44 | 1.32 |
| MAX | 2.8 | 4.3 | 5.9 | 10 | 114 | 7.3 | 4.8 | 3.6 | 2.5 | 1.7 | 1.6 | 2.0 |
| MIN | 2.3 | 2.5 | 3.0 | 2.8 | 3.3 | 3.9 | 2.6 | 2.4 | 1.5 | 1.5 | 1.2 | 1.2 |
| AC-FT | 160 | 182 | 214 | 231 | 733 | 313 | 207 | 170 | 125 | 96 | 89 | 79 |

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 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.85 | 4.18 | 6.67 | 19.8 | 26.4 | 25.4 | 12.6 | 6.62 | 4.34 | 3.14 | 2.70 | 2.52 |
| MAX | 9.12 | 13.6 | 26.4 | 145 | 133 | 133 | 65.2 | 46.1 | 20.8 | 13.8 | 9.82 | 8.30 |
| (WY) | 1984 | 1984 | 1984 | 1969 | 1969 | 1983 | 1983 | 1983 | 1983 | 1983 | 1983 | 1983 |
| 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1967 - 1994

| | | | |
|--------------------------|--------|--------|------|
| ANNUAL TOTAL | 4305.6 | 1310.0 | |
| ANNUAL MEAN | 11.8 | 3.59 | 9.68 |
| HIGHEST ANNUAL MEAN | | | 37.3 |
| LOWEST ANNUAL MEAN | | | 1.89 |
| HIGHEST DAILY MEAN | 162 | Feb 23 | 114 |
| LOWEST DAILY MEAN | 2.3 | Oct 1 | 1.2 |
| ANNUAL SEVEN-DAY MINIMUM | 2.4 | Sep 28 | 1.2 |
| INSTANTANEOUS PEAK FLOW | | | 307 |
| INSTANTANEOUS PEAK STAGE | | | 6.19 |
| ANNUAL RUNOFF (AC-FT) | 8540 | 2600 | 7010 |
| 10 PERCENT EXCEEDS | 25 | 5.1 | 15 |
| 50 PERCENT EXCEEDS | 3.8 | 2.8 | 3.5 |
| 90 PERCENT EXCEEDS | 2.6 | 1.4 | 1.5 |

BIG SUR RIVER BASIN

49

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 fair except for estimated daily discharges, 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2330 | *1,100 | *6.78 | | | | |

Minimum daily, 5.5 ft³/s, Sept. 27-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1 | 19 | 17 | 29 | 19 | 21 | 66 | 27 | 28 | e14 | e11 | e8.9 | e6.6 |
| 2 | 19 | 16 | 26 | 19 | 20 | 61 | 26 | 26 | e14 | e11 | e8.8 | e6.6 |
| 3 | 18 | 15 | 24 | 19 | 19 | 57 | 25 | 26 | e14 | e11 | e8.7 | e6.5 |
| 4 | 18 | 15 | 24 | 19 | 19 | 54 | 30 | 24 | e13 | e10 | e8.6 | e6.5 |
| 5 | 19 | 15 | 24 | 18 | 18 | 52 | 36 | 24 | e13 | e10 | e8.5 | e6.4 |
| 6 | 20 | 16 | 24 | 18 | 20 | 50 | 33 | 24 | e13 | e10 | e8.4 | e6.4 |
| 7 | 19 | 16 | 24 | 18 | 143 | 48 | 31 | 30 | e13 | e10 | e8.3 | e6.3 |
| 8 | 17 | 16 | 25 | 18 | 168 | 46 | 30 | 28 | e13 | e10 | e8.2 | e6.2 |
| 9 | 17 | 16 | 34 | 18 | 101 | 44 | 34 | 25 | e12 | e10 | e8.2 | e6.2 |
| 10 | 18 | 20 | 32 | 17 | 80 | 43 | 29 | 24 | e12 | e10 | e8.1 | e6.2 |
| 11 | 20 | 36 | 80 | 17 | 68 | 41 | 27 | 23 | e12 | e10 | e8.0 | e6.1 |
| 12 | 21 | 27 | 54 | 17 | 60 | 39 | 26 | 22 | e12 | e10 | e7.9 | e6.1 |
| 13 | 20 | 21 | 33 | 17 | 55 | 38 | 26 | 21 | e12 | e10 | e7.9 | e6.0 |
| 14 | 19 | 18 | 54 | 16 | 51 | 37 | 25 | 20 | e12 | e9.9 | e7.8 | e6.0 |
| 15 | 21 | 19 | 45 | 16 | 48 | 37 | 25 | 20 | e12 | e9.9 | e7.7 | e6.0 |
| 16 | 21 | 19 | 34 | 16 | 46 | 36 | 24 | 20 | e12 | e9.8 | e7.6 | e5.9 |
| 17 | 22 | 19 | 30 | 16 | 213 | 35 | 23 | 28 | e12 | e9.8 | e7.6 | e5.9 |
| 18 | 22 | 19 | 27 | 16 | 145 | 34 | 22 | 25 | e12 | e9.7 | e7.5 | e5.9 |
| 19 | 21 | 19 | 25 | 17 | 303 | 33 | 22 | 22 | e12 | e9.7 | e7.4 | e5.8 |
| 20 | 21 | 18 | 24 | 17 | 556 | 32 | 22 | 21 | e11 | e9.6 | e7.3 | e5.8 |
| 21 | 20 | 18 | 23 | 17 | 255 | 32 | 21 | 20 | e11 | e9.6 | e7.2 | e5.7 |
| 22 | 20 | 19 | 23 | 18 | 173 | 31 | 22 | 19 | e11 | e9.5 | e7.2 | e5.7 |
| 23 | 19 | 18 | 23 | 57 | 132 | 31 | 29 | 18 | e11 | e9.5 | e7.1 | e5.7 |
| 24 | 19 | 18 | 21 | 94 | 110 | 39 | 34 | 17 | e11 | e9.4 | e7.1 | e5.6 |
| 25 | 18 | 18 | 21 | 63 | 95 | 42 | 39 | 16 | e11 | e9.3 | e7.0 | e5.6 |
| 26 | 18 | 20 | 20 | 51 | 85 | 34 | 50 | 17 | e11 | e9.3 | e6.9 | e5.6 |
| 27 | 17 | 22 | 20 | 40 | 77 | 32 | 37 | 16 | e11 | e9.2 | e6.9 | e5.5 |
| 28 | 17 | 32 | 20 | 32 | 71 | 31 | 33 | 16 | e11 | e9.1 | e6.8 | e5.5 |
| 29 | 17 | 43 | 19 | 28 | --- | 30 | 31 | e15 | e11 | e9.1 | e6.8 | e5.5 |
| 30 | 16 | 44 | 19 | 25 | --- | 29 | 29 | e15 | e11 | e9.0 | e6.7 | e5.5 |
| 31 | 16 | --- | 19 | 23 | --- | 28 | --- | e14 | --- | e8.9 | e6.7 | --- |
| TOTAL | 589 | 629 | 900 | 796 | 3152 | 1242 | 868 | 664 | 360 | 303.3 | 237.8 | 179.3 |
| MEAN | 19.0 | 21.0 | 29.0 | 25.7 | 113 | 40.1 | 28.9 | 21.4 | 12.0 | 9.78 | 7.67 | 5.98 |
| MAX | 22 | 44 | 80 | 94 | 556 | 66 | 50 | 30 | 14 | 11 | 8.9 | 6.6 |
| MIN | 16 | 15 | 19 | 16 | 18 | 28 | 21 | 14 | 11 | 8.9 | 6.7 | 5.5 |
| AC-FT | 1170 | 1250 | 1790 | 1580 | 6250 | 2460 | 1720 | 1320 | 714 | 602 | 472 | 356 |

e Estimated.

BIG SUR RIVER BASIN

11143000 BIG SUR RIVER NEAR BIG SUR, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 17.6 | 46.4 | 102 | 220 | 256 | 214 | 143 | 64.2 | 34.8 | 22.3 | 16.5 | 14.8 |
| MAX | 86.8 | 302 | 449 | 986 | 940 | 964 | 843 | 333 | 90.8 | 53.5 | 40.4 | 39.4 |
| (WY) | 1963 | 1951 | 1956 | 1952 | 1983 | 1983 | 1958 | 1983 | 1983 | 1983 | 1983 | 1983 |
| MIN | 5.08 | 4.97 | 7.52 | 8.27 | 11.3 | 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

| | | | | | | | | | | | | |
|--------------------------|--------|--------|--------|--|--|-------|--------|--|--|-------|--------|------|
| ANNUAL TOTAL | 52629 | | 9920.4 | | | | | | | | | |
| ANNUAL MEAN | 144 | | 27.2 | | | | | | | 95.4 | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | | 319 | | 1983 |
| LOWEST ANNUAL MEAN | | | | | | | | | | 10.0 | | 1977 |
| HIGHEST DAILY MEAN | 2070 | Jan 14 | | | | 556 | Feb 20 | | | 4120 | Dec 23 | 1955 |
| LOWEST DAILY MEAN | 15 | Nov 3 | | | | 5.5 | Sep 27 | | | 2.6 | Aug 23 | 1977 |
| ANNUAL SEVEN-DAY MINIMUM | 16 | Nov 2 | | | | 5.5 | Sep 24 | | | 2.9 | Nov 4 | 1990 |
| INSTANTANEOUS PEAK FLOW | | | | | | 1100 | Feb 19 | | | 10700 | Jan 5 | 1978 |
| INSTANTANEOUS PEAK STAGE | | | | | | 6.78 | Feb 19 | | | 14.30 | Jan 5 | 1978 |
| ANNUAL RUNOFF (AC-FT) | 104400 | | | | | 19680 | | | | 69140 | | |
| 10 PERCENT EXCEEDS | 372 | | | | | 47 | | | | 210 | | |
| 50 PERCENT EXCEEDS | 43 | | | | | 19 | | | | 28 | | |
| 90 PERCENT EXCEEDS | 18 | | | | | 7.0 | | | | 9.1 | | |

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 left bank in Cal American Water Company pumphouse, 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 (revised) 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, 2,180 acre-ft, and San Clemente Reservoir 4 mi upstream, usable capacity, 796 acre-ft. Diversion from San Clemente Reservoir for municipal supply amounted to 2,900 acre-ft for the current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,380 ft³/s, Feb. 28, 1983, gage height, 11.49 ft, from rating curve extended above 2,800 ft³/s on basis of slope-area measurement at gage height 9.97 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0400 | *533 | *6.12 | | | | |

Minimum daily, 1.5 ft³/s, Aug. 15-16, 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|------|------|------|------|-------|------|------|------|
| 1 | 4.5 | 4.4 | 5.3 | 6.3 | 17 | 66 | 17 | 13 | 10 | 2.7 | 2.3 | 2.0 |
| 2 | 4.5 | 4.3 | 5.2 | 6.4 | 15 | 62 | 17 | 13 | 10 | 2.8 | 2.3 | 2.0 |
| 3 | 4.6 | 4.3 | 5.3 | 6.2 | 14 | 59 | 17 | 12 | 9.9 | 2.7 | 2.3 | 2.1 |
| 4 | 4.6 | 4.5 | 5.2 | 6.1 | 13 | 58 | 17 | 12 | 10 | 2.7 | 2.2 | 2.1 |
| 5 | 4.6 | 4.6 | 5.3 | 6.3 | 13 | 56 | 18 | 11 | 10 | 2.8 | 2.1 | 1.8 |
| 6 | 4.6 | 4.5 | 5.2 | 6.2 | 12 | 54 | 16 | 11 | 10 | 2.8 | 2.0 | 2.2 |
| 7 | 4.5 | 4.5 | 5.3 | 6.1 | 64 | 51 | 15 | 12 | 10 | 2.7 | 2.0 | 2.3 |
| 8 | 4.4 | 4.3 | 5.3 | 6.2 | 151 | 47 | 16 | 14 | 9.7 | 2.5 | 2.0 | 2.3 |
| 9 | 4.3 | 4.7 | 5.3 | 6.2 | 115 | 42 | 16 | 16 | 8.6 | 2.4 | 1.9 | 2.3 |
| 10 | 4.3 | 5.0 | 5.2 | 6.0 | 87 | 40 | 16 | 16 | 7.7 | 2.5 | 1.7 | 2.3 |
| 11 | 4.4 | 6.7 | 8.5 | 5.9 | 74 | 38 | 16 | 17 | 7.2 | 2.4 | 1.9 | 2.4 |
| 12 | 4.4 | 7.1 | 8.9 | 5.9 | 63 | 36 | 15 | 17 | 6.8 | 2.5 | 1.7 | 2.3 |
| 13 | 4.3 | 5.4 | 7.8 | 5.9 | 56 | 32 | 15 | 17 | 6.6 | 2.6 | 1.7 | 2.3 |
| 14 | 4.3 | 5.0 | 9.1 | 5.9 | 49 | 31 | 14 | 16 | 5.8 | 2.3 | 1.6 | 2.3 |
| 15 | 4.4 | 5.0 | 11 | 5.7 | 43 | 26 | 13 | 16 | 5.4 | 2.1 | 1.5 | 2.3 |
| 16 | 4.4 | 5.0 | 9.4 | 5.6 | 39 | 22 | 13 | 15 | 4.7 | 2.1 | 1.5 | 2.3 |
| 17 | 4.4 | 5.0 | 8.2 | 5.6 | 169 | 21 | 13 | 15 | 4.4 | 1.9 | 1.6 | 2.5 |
| 18 | 4.3 | 5.0 | 7.7 | 5.3 | 217 | 22 | 13 | 14 | 3.9 | 1.9 | 1.6 | 2.4 |
| 19 | 4.2 | 5.0 | 7.6 | 5.2 | 198 | 23 | 13 | 18 | 3.5 | 1.9 | 1.6 | 2.5 |
| 20 | 4.2 | 5.0 | 7.6 | 5.2 | 415 | 22 | 13 | 18 | 3.3 | 2.4 | 1.6 | 2.5 |
| 21 | 4.2 | 5.1 | 7.2 | 5.2 | 227 | 21 | 13 | 16 | 3.2 | 2.4 | 1.6 | 2.4 |
| 22 | 4.2 | 5.1 | 7.2 | 5.2 | 163 | 21 | 13 | 15 | 3.2 | 2.2 | 1.6 | 2.4 |
| 23 | 4.2 | 5.1 | 6.9 | 6.0 | 128 | 21 | 13 | 13 | 3.0 | 2.5 | 1.7 | 2.5 |
| 24 | 4.2 | 5.2 | 6.6 | 11 | 106 | 22 | 14 | 14 | 3.0 | 2.2 | 1.5 | 2.6 |
| 25 | 4.2 | 5.2 | 7.3 | 28 | 93 | 32 | 15 | 13 | 3.0 | 2.2 | 1.7 | 2.6 |
| 26 | 4.3 | 5.2 | 7.3 | 47 | 85 | 26 | 15 | 14 | 2.9 | 2.4 | 1.6 | e2.6 |
| 27 | 4.2 | 5.3 | 6.6 | 40 | 78 | 23 | 14 | 14 | 2.8 | 2.5 | 1.6 | e2.6 |
| 28 | 4.2 | 5.3 | 6.8 | 32 | 72 | 28 | 13 | 13 | 2.7 | 2.4 | 1.6 | e2.7 |
| 29 | 4.2 | 5.4 | 7.2 | 25 | --- | 17 | 13 | 13 | 2.7 | 2.3 | 2.0 | 2.8 |
| 30 | 4.2 | 5.9 | 6.5 | 21 | --- | 19 | 13 | 12 | 2.6 | 2.3 | 2.0 | 2.7 |
| 31 | 4.3 | --- | 6.3 | 19 | --- | 17 | --- | 11 | --- | 2.2 | 1.7 | --- |
| TOTAL | 134.6 | 152.1 | 214.3 | 357.6 | 2776 | 1055 | 439 | 441 | 176.6 | 74.3 | 55.7 | 71.1 |
| MEAN | 4.34 | 5.07 | 6.91 | 11.5 | 99.1 | 34.0 | 14.6 | 14.2 | 5.89 | 2.40 | 1.80 | 2.37 |
| MAX | 4.6 | 7.1 | 11 | 47 | 415 | 66 | 18 | 18 | 10 | 2.8 | 2.3 | 2.8 |
| MIN | 4.2 | 4.3 | 5.2 | 5.2 | 12 | 17 | 13 | 11 | 2.6 | 1.9 | 1.5 | 1.8 |
| AC-FT | 267 | 302 | 425 | 709 | 5510 | 2090 | 871 | 875 | 350 | 147 | 110 | 141 |

e Estimated.

CARMEL RIVER BASIN

11143200 CARMEL RIVER AT ROBLES DEL RIO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.05 | 14.0 | 55.9 | 173 | 288 | 256 | 164 | 52.3 | 16.3 | 4.94 | 1.50 | 1.38 |
| MAX | 23.3 | 135 | 480 | 769 | 1206 | 1855 | 1071 | 410 | 129 | 50.9 | 13.4 | 10.6 |
| (WY) | 1984 | 1984 | 1984 | 1969 | 1969 | 1983 | 1958 | 1983 | 1983 | 1983 | 1983 | 1983 |
| 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1957 - 1994

| | | | |
|--------------------------|---------|--------|-------|
| ANNUAL TOTAL | 54760.3 | 5947.3 | |
| ANNUAL MEAN | 150 | 16.3 | 84.7 |
| HIGHEST ANNUAL MEAN | | | 442 |
| LOWEST ANNUAL MEAN | | | .050 |
| HIGHEST DAILY MEAN | 3270 | Jan 14 | 415 |
| LOWEST DAILY MEAN | 4.2 | Oct 19 | 1.5 |
| ANNUAL SEVEN-DAY MINIMUM | 4.2 | Oct 19 | 1.6 |
| INSTANTANEOUS PEAK FLOW | | | 533 |
| INSTANTANEOUS PEAK STAGE | | | 6.12 |
| ANNUAL RUNOFF (AC-FT) | 108600 | 11800 | 61330 |
| 10 PERCENT EXCEEDS | 361 | 34 | 198 |
| 50 PERCENT EXCEEDS | 19 | 5.6 | 4.3 |
| 90 PERCENT EXCEEDS | 4.5 | 2.1 | .00 |

11143250 CARMEL RIVER NEAR CARMEL, CA

LOCATION.--Lat 36°32'20", long 121°52'25", in Canada de la Segunda Grant, Monterey County, Hydrologic Unit 18060012, on right bank 0.3 mi downstream from Potrero Canyon and 3 mi east of Carmel.

DRAINAGE AREA.--246 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1962 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 45 ft above sea level, from topographic map.

REMARKS.--Records fair. Low flow regulated by Los Padres Reservoir, usable capacity, 2,180 acre-ft, and San Clemente Reservoir, usable capacity, 796 acre-ft. Diversion from San Clemente Reservoir for municipal supply amounted to 2,900 acre-ft for the current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,590 ft³/s, Feb. 28, 1983, gage height, 18.22 ft, from rating curve extended above 2,800 ft³/s on basis of slope-area measurement at gage height 17.35 ft; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0800 | *636 | *4.92 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|---------|------|-------|-------|------|------|------|------|
| 1 | .00 | .00 | .00 | .00 | .00 | 73 | 11 | 6.4 | 2.0 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | .00 | .00 | 67 | 9.1 | 5.4 | .99 | .00 | .00 | .00 |
| 3 | .00 | .00 | .00 | .00 | .00 | 61 | 8.2 | 4.7 | .00 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | .00 | .00 | 57 | 9.5 | 4.0 | .00 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | .00 | .00 | 57 | 9.5 | 4.3 | .00 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | .00 | .00 | 53 | 9.3 | 4.0 | .00 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | .00 | .00 | 49 | 8.1 | 4.7 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .00 | .00 | 55 | 45 | 8.9 | 5.8 | .00 | .00 | .00 | .00 |
| 9 | .00 | .00 | .00 | .00 | 83 | 41 | 9.9 | 7.8 | .00 | .00 | .00 | .00 |
| 10 | .00 | .00 | .00 | .00 | 64 | 38 | 10 | 9.3 | .00 | .00 | .00 | .00 |
| 11 | .00 | .00 | .00 | .00 | 52 | 36 | 9.9 | 9.2 | .00 | .00 | .00 | .00 |
| 12 | .00 | .00 | .00 | .00 | 41 | 33 | 8.2 | 9.4 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | .00 | .00 | 34 | 31 | 8.5 | 9.2 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | .00 | .00 | 30 | 30 | 8.0 | 8.5 | .00 | .00 | .00 | .00 |
| 15 | .00 | .00 | .00 | .00 | 25 | 26 | 6.5 | 7.5 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | .00 | .00 | 23 | 24 | 6.3 | 7.6 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | .00 | .00 | 106 | 23 | 6.4 | 7.3 | .00 | .00 | .00 | .00 |
| 18 | .00 | .00 | .00 | .00 | 228 | 22 | 4.7 | 8.9 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | .00 | .00 | 203 | 22 | 4.7 | 9.3 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | .00 | .00 | 521 | 21 | 5.0 | 11 | .00 | .00 | .00 | .00 |
| 21 | .00 | .00 | .00 | .00 | 312 | 20 | 3.8 | 11 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | .00 | .00 | 214 | 18 | 3.0 | 9.4 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | .00 | .00 | 164 | 20 | 4.5 | 7.5 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .00 | .00 | 133 | 20 | 7.3 | 5.8 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | .00 | .00 | 112 | 23 | 8.7 | 5.8 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | .00 | .00 | 100 | 24 | 9.6 | 5.7 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | .00 | .00 | 90 | 20 | 10 | 5.8 | .00 | .00 | .00 | .00 |
| 28 | .00 | .00 | .00 | .00 | 81 | 19 | 9.4 | 5.0 | .00 | .00 | .00 | .00 |
| 29 | .00 | .00 | .00 | .00 | --- | 17 | 7.2 | 4.6 | .00 | .00 | .00 | .00 |
| 30 | .00 | .00 | .00 | .00 | --- | 13 | 6.7 | 3.9 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | .00 | .00 | --- | 13 | --- | 2.9 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 2671.00 | 1016 | 231.9 | 211.7 | 2.99 | 0.00 | 0.00 | 0.00 |
| MEAN | .000 | .000 | .000 | .000 | 95.4 | 32.8 | 7.73 | 6.83 | .10 | .000 | .000 | .000 |
| MAX | .00 | .00 | .00 | .00 | 521 | 73 | 11 | 11 | 2.0 | .00 | .00 | .00 |
| MIN | .00 | .00 | .00 | .00 | .00 | 13 | 3.0 | 2.9 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | .00 | .00 | .00 | 5300 | 2020 | 460 | 420 | 5.9 | .00 | .00 | .00 |

CARMEL RIVER BASIN

11143250 CARMEL RIVER NEAR CARMEL, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .87 | 10.0 | 60.6 | 217 | 340 | 307 | 176 | 64.7 | 17.4 | 3.58 | .67 | .24 |
| MAX | 22.3 | 110 | 479 | 1034 | 1754 | 2196 | 1006 | 533 | 130 | 51.4 | 13.1 | 3.80 |
| (WY) | 1984 | 1984 | 1983 | 1969 | 1969 | 1983 | 1982 | 1983 | 1983 | 1983 | 1983 | 1983 |
| 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 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1962 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 62238.22 | | 4133.59 | | | |
| ANNUAL MEAN | 171 | | 11.3 | | 98.6 | |
| HIGHEST ANNUAL MEAN | | | | | 508 | |
| LOWEST ANNUAL MEAN | | | | | .000 | |
| HIGHEST DAILY MEAN | 3380 | Jan 14 | 521 | Feb 20 | 8000 | Mar 1 1983 |
| LOWEST DAILY MEAN | .00 | Jul 11 | .00 | Oct 1 | .00 | Oct 6 1962 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jul 23 | .00 | Oct 1 | .00 | Jul 9 1964 |
| INSTANTANEOUS PEAK FLOW | | | 636 | Feb 20 | 9590 | Feb 28 1983 |
| INSTANTANEOUS PEAK STAGE | | | 4.92 | Feb 20 | 18.22 | Feb 28 1983 |
| ANNUAL RUNOFF (AC-FT) | 123400 | | 8200 | | 71460 | |
| 10 PERCENT EXCEEDS | 510 | | 24 | | 248 | |
| 50 PERCENT EXCEEDS | 4.9 | | .00 | | .50 | |
| 90 PERCENT EXCEEDS | .00 | | .00 | | .00 | |

11143250 CARMEL RIVER NEAR CARMEL, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-66, 1990, December 1991 to current year.

CHEMICAL DATA: Water years 1954-66.

SEDIMENT DATA: Water years 1990, December 1991 to current year.

REMARKS.--Zero bedload discharge observed for flows less than 50 ft³/s during current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--|--------------------------------------|--|---|---|---|---|---|
| FEB | | | | | | | | | |
| 08... | 1130 | 63 | 10.5 | 30 | 5.1 | 89 | -- | -- | -- |
| 11... | 1540 | 50 | 13.0 | 1 | 0.13 | 90 | -- | -- | -- |
| 18... | 1315 | 234 | 10.0 | 20 | 13 | 74 | 84 | 93 | 100 |
| MAR | | | | | | | | | |
| 29... | 1035 | 15 | 14.0 | 1 | 0.04 | 74 | -- | -- | -- |
| APR | | | | | | | | | |
| 20... | 1455 | 4.4 | 20.5 | 2 | 0.02 | -- | -- | -- | -- |
| MAY | | | | | | | | | |
| 03... | 1020 | 5.1 | 17.0 | 2 | 0.03 | -- | -- | -- | -- |
| 18... | 1415 | 8.7 | 15.5 | 2 | 0.05 | 94 | -- | -- | -- |

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | NUMBER OF SAM- PLING POINTS (COUNT) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM | BED MAT. SIEVE DIAM. % FINER THAN .125 MM | BED MAT. SIEVE DIAM. % FINER THAN .250 MM | BED MAT. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--|--|--------------------------------------|---|---|---|---|
| FEB | | | | | | | | |
| 08... | 1215 | 1 | 67 | 10.5 | -- | -- | -- | 2 |
| 08... | 1217 | 1 | 67 | 10.5 | -- | -- | 1 | 3 |
| 08... | 1219 | 1 | 67 | 10.5 | -- | -- | -- | 2 |
| 08... | 1221 | 1 | 67 | 10.5 | -- | -- | 2 | 7 |
| 08... | 1223 | 1 | 67 | 10.5 | -- | -- | 2 | 4 |
| 08... | 1225 | 1 | 67 | 10.5 | -- | 2 | 4 | 11 |
| MAR | | | | | | | | |
| 29... | 1110 | 1 | 15 | 14.0 | -- | -- | 2 | 5 |
| 29... | 1115 | 1 | 15 | 14.0 | -- | -- | 1 | 4 |
| 29... | 1118 | 1 | 15 | 14.0 | -- | -- | -- | 1 |
| 29... | 1122 | 1 | 15 | 14.0 | -- | -- | -- | 2 |
| 29... | 1125 | 1 | 15 | 14.0 | -- | -- | 1 | 2 |
| 29... | 1127 | 1 | 15 | 14.0 | 1 | 3 | 12 | 18 |
| 29... | 1130 | 1 | 15 | 14.0 | 6 | 26 | 60 | 79 |

| DATE | BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 128 MM |
|-------|---|---|---|---|---|---|---|--|
| FEB | | | | | | | | |
| 08... | 23 | 70 | 82 | 83 | 85 | 100 | -- | -- |
| 08... | 9 | 13 | 18 | 28 | 50 | 100 | -- | -- |
| 08... | 5 | 7 | 9 | 15 | 26 | 68 | 100 | -- |
| 08... | 11 | 12 | 15 | 19 | 29 | 60 | 100 | -- |
| 08... | 9 | 12 | 14 | 17 | 31 | 83 | 100 | -- |
| 08... | 16 | 22 | 30 | 39 | 56 | 87 | 100 | -- |
| MAR | | | | | | | | |
| 29... | 17 | 35 | 49 | 58 | 76 | 97 | 100 | -- |
| 29... | 14 | 25 | 35 | 44 | 58 | 88 | 100 | -- |
| 29... | 4 | 7 | 9 | 11 | 17 | 26 | 65 | 100 |
| 29... | 7 | 13 | 17 | 23 | 35 | 59 | 100 | -- |
| 29... | 6 | 13 | 17 | 23 | 38 | 65 | 100 | -- |
| 29... | 33 | 70 | 84 | 91 | 97 | 100 | -- | -- |
| 29... | 93 | 99 | 100 | -- | -- | -- | -- | -- |

CARMEL RIVER BASIN

11143250 CARMEL RIVER NEAR CARMEL, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | SAM- PLING METHOD, CODES | SAMPLER TYPE (CODE) | BAG MESH SIZE BEDLOAD SAMPLER (MM) | TETHER LINE USED IN SAMPLNG (YES=1) (CODE) | START- ING TIME (2400 HOURS) | END- ING TIME (2400 HOURS) | TIME ON BED FOR BED LOAD SAMPLE (SEC) | HORI- ZONTAL WIDTH OF VER- TICAL (FEET) |
|-------|------|-----------------------------------|---------------------------|---|---|--|--|---|---|
| FEB | | | | | | | | | |
| 08... | 1148 | 1000 | 1150 | 0.250 | 0 | 1142 | 1155 | 30 | 2.0 |
| 08... | 1204 | 1000 | 1150 | 0.250 | 0 | 1158 | 1210 | 30 | 2.0 |
| 18... | 1325 | 1000 | 1150 | 0.250 | 0 | 1320 | 1330 | 20 | 2.8 |
| 18... | 1345 | 1000 | 1150 | 0.250 | 0 | 1340 | 1350 | 20 | 2.8 |

| DATE | COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (NUM) | VER- TICALS IN COM- POSITE SAMPLE (NUM) | NUMBER OF SAM- PLING POINTS (COUNT) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT | SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) | SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM |
|-------|---|---|--|---|--|--------------------------------------|---|---|---|
| FEB | | | | | | | | | |
| 08... | 2 | 21 | 21 | 3.00 | 63 | 10.5 | 0.002 | 0.16 | -- |
| 08... | 2 | 21 | 21 | 3.00 | 65 | 10.5 | 0.006 | 0.16 | 2 |
| 18... | 2 | 20 | 20 | 1.40 | 234 | 10.0 | 0.26 | 22 | -- |
| 18... | 2 | 20 | 20 | 1.40 | 234 | 10.0 | 0.51 | 22 | -- |

| DATE | SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM |
|-------|---|---|---|---|---|---|---|---|---|
| FEB | | | | | | | | | |
| 08... | 4 | 11 | 25 | 46 | 71 | 86 | 100 | -- | -- |
| 08... | 5 | 9 | 17 | 40 | 78 | 97 | 100 | -- | -- |
| 18... | -- | 1 | 12 | 48 | 85 | 95 | 98 | 98 | 100 |
| 18... | -- | 1 | 10 | 42 | 75 | 84 | 90 | 91 | 100 |

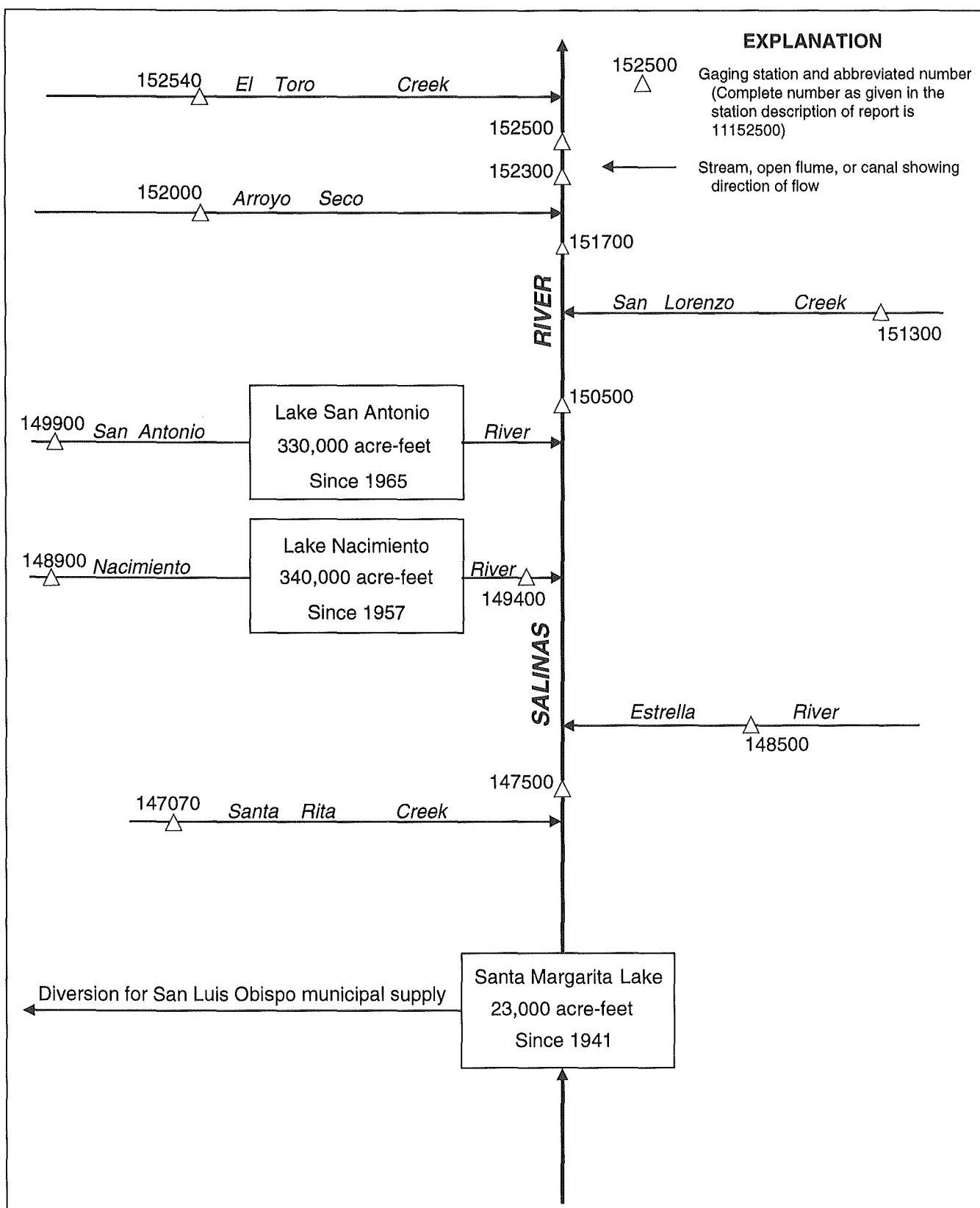


Figure 23. Diversions and storage in Salinas River basin.

SALINAS RIVER BASIN

11147070 SANTA RITA CREEK NEAR TEMPLETON, CA

LOCATION.--Lat 35°31'26", long 120°45'54", in Asuncion Grant, San Luis Obispo County, Hydrologic Unit 18060005, on left bank 1.6 mi upstream from mouth and 4 mi west of Templeton.

DRAINAGE AREA.--18.2 mi².

PERIOD OF RECORD.--October 1961 to September 1994 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 860 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Some regulation by stockponds and small diversions by irrigation pumps upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,060 ft³/s, Jan. 19, 1969, gage height, 11.12 ft in gage well, 11.75 ft from floodmarks, from rating curve extended above 1,300 ft³/s on basis of slope-area measurement of peak flow; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2315 | *586 | *5.82 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|--------|------|-------|------|------|------|------|------|
| 1 | .00 | .07 | .33 | .17 | .83 | 3.8 | 1.2 | .30 | .04 | .00 | .00 | .00 |
| 2 | .00 | .06 | .19 | .17 | .66 | 3.5 | 1.1 | .29 | .04 | .00 | .00 | .00 |
| 3 | .00 | .05 | .15 | .17 | .71 | 3.1 | 1.1 | .23 | .03 | .00 | .00 | .00 |
| 4 | .00 | .04 | .14 | .17 | .84 | 2.9 | 3.9 | .20 | .02 | .00 | .00 | .00 |
| 5 | .00 | .04 | .14 | .20 | .84 | 2.9 | 2.4 | .16 | .02 | .00 | .00 | .00 |
| 6 | .00 | .03 | .13 | .18 | .82 | 3.4 | .57 | .17 | .01 | .00 | .00 | .00 |
| 7 | .00 | .03 | .11 | .17 | 12 | 2.9 | .39 | .21 | .01 | .00 | .00 | .00 |
| 8 | .00 | .02 | .11 | .17 | 28 | 2.5 | .30 | .37 | .00 | .00 | .00 | .00 |
| 9 | .00 | .02 | .11 | .20 | 7.6 | 2.2 | 1.3 | .37 | .00 | .00 | .00 | .00 |
| 10 | .00 | .02 | .12 | .21 | 4.5 | 2.1 | 1.1 | .29 | .00 | .00 | .00 | .00 |
| 11 | .00 | .03 | 4.2 | .19 | 3.2 | 2.1 | .64 | .21 | .00 | .00 | .00 | .00 |
| 12 | .00 | .08 | 2.8 | .17 | 2.7 | 1.7 | .48 | .17 | .00 | .00 | .00 | .00 |
| 13 | .00 | .06 | .65 | .21 | 2.1 | 1.6 | .39 | .14 | .00 | .00 | .00 | .00 |
| 14 | .00 | .06 | .68 | .23 | 2.1 | 1.6 | .37 | .12 | .00 | .00 | .00 | .00 |
| 15 | .00 | .06 | .85 | .23 | 1.8 | 1.6 | .30 | .11 | .00 | .00 | .00 | .00 |
| 16 | .00 | .05 | .43 | .23 | 1.6 | 1.6 | .30 | .11 | .00 | .00 | .00 | .00 |
| 17 | .10 | .05 | .31 | .23 | 34 | 1.6 | .30 | .16 | .00 | .00 | .00 | .00 |
| 18 | .34 | .04 | .27 | .23 | 35 | 1.4 | .28 | .38 | .00 | .00 | .00 | .00 |
| 19 | .67 | .04 | .23 | .23 | 71 | 1.4 | .23 | .36 | .00 | .00 | .00 | .00 |
| 20 | .84 | .04 | .23 | .23 | 122 | 1.3 | .22 | .27 | .00 | .00 | .00 | .00 |
| 21 | 1.9 | .04 | .21 | .23 | 29 | 1.3 | .18 | .21 | .00 | .00 | .00 | .00 |
| 22 | 2.2 | .05 | .18 | .25 | 17 | 1.3 | .17 | .14 | .00 | .00 | .00 | .00 |
| 23 | 2.2 | .05 | .17 | 8.1 | 11 | 1.2 | .20 | .11 | .00 | .00 | .00 | .00 |
| 24 | 2.4 | .05 | .17 | 24 | 8.9 | 3.9 | .30 | .10 | .00 | .00 | .00 | .00 |
| 25 | 2.5 | .05 | .17 | 16 | 7.2 | 7.9 | 1.6 | .10 | .00 | .00 | .00 | .00 |
| 26 | 2.6 | .05 | .19 | 6.8 | 5.7 | 2.9 | 2.2 | .09 | .00 | .00 | .00 | .00 |
| 27 | 2.8 | .05 | .18 | 3.4 | 4.8 | 1.8 | .99 | .08 | .00 | .00 | .00 | .00 |
| 28 | 3.0 | .05 | .17 | 2.4 | 4.2 | 1.6 | .62 | .08 | .00 | .00 | .00 | .00 |
| 29 | 2.8 | .22 | .17 | 1.5 | --- | 1.4 | .47 | .07 | .00 | .00 | .00 | .00 |
| 30 | .50 | .87 | .17 | 1.2 | --- | 1.3 | .39 | .06 | .00 | .00 | .00 | .00 |
| 31 | .13 | --- | .17 | .99 | --- | 1.3 | --- | .05 | --- | .00 | .00 | --- |
| TOTAL | 24.98 | 2.37 | 14.13 | 68.86 | 420.10 | 71.1 | 23.99 | 5.71 | 0.17 | 0.00 | 0.00 | 0.00 |
| MEAN | .81 | .079 | .46 | 2.22 | 15.0 | 2.29 | .80 | .18 | .006 | .000 | .000 | .000 |
| MAX | 3.0 | .87 | 4.2 | 24 | 122 | 7.9 | 3.9 | .38 | .04 | .00 | .00 | .00 |
| MIN | .00 | .02 | .11 | .17 | .66 | 1.2 | .17 | .05 | .00 | .00 | .00 | .00 |
| AC-FT | 50 | 4.7 | 28 | 137 | 833 | 141 | 48 | 11 | .3 | .00 | .00 | .00 |

11147070 SANTA RITA CREEK NEAR TEMPLETON, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .37 | 3.86 | 14.7 | 38.5 | 48.6 | 36.0 | 15.4 | 2.85 | .65 | .13 | .025 | .028 |
| MAX | 4.35 | 29.0 | 131 | 227 | 207 | 185 | 114 | 24.2 | 3.72 | 1.29 | .68 | .55 |
| (WY) | 1983 | 1983 | 1967 | 1969 | 1962 | 1983 | 1982 | 1983 | 1983 | 1983 | 1983 | 1967 |
| MIN | .000 | .000 | .000 | .000 | .000 | .22 | .10 | .015 | .000 | .000 | .000 | .000 |
| (WY) | 1962 | 1962 | 1977 | 1991 | 1991 | 1977 | 1977 | 1990 | 1972 | 1966 | 1962 | 1962 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1962 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 8480.02 | | | | 631.41 | | | | | | | |
| ANNUAL MEAN | 23.2 | | | | 1.73 | | | | 13.2 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 52.7 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .16 | | | |
| HIGHEST DAILY MEAN | 724 | | | | 122 | | | | 2190 | | | |
| LOWEST DAILY MEAN | .00 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .00 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 586 | | | | 6060 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 5.82 | | | | 11.12 | | | |
| ANNUAL RUNOFF (AC-FT) | 16820 | | | | 1250 | | | | 9600 | | | |
| 10 PERCENT EXCEEDS | 60 | | | | 2.8 | | | | 21 | | | |
| 50 PERCENT EXCEEDS | .58 | | | | .12 | | | | .22 | | | |
| 90 PERCENT EXCEEDS | .00 | | | | .00 | | | | .00 | | | |

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 fair. Low flows regulated by Santa Margarita Lake 32 mi upstream beginning in December 1941, usable capacity, 23,000 acre-ft. Diversion from Santa Margarita Lake for San Luis Obispo municipal supply amounted to 1,080 acre-ft for the current year. Small diversions for irrigation upstream from station. See schematic diagram of Salinas River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,500 ft³/s, Feb. 16, 1980, gage height, 15.99 ft, from rating curve extended above 11,000 ft³/s; maximum gage height, 18.80 ft, Jan. 14, 1993; 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0530 | *2,290 | *8.30 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-------|---------|-------|-------|------|------|------|------|------|
| 1 | .00 | .00 | .00 | .00 | .00 | 28 | 7.9 | .00 | .00 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | .00 | .00 | 26 | 7.3 | .00 | .00 | .00 | .00 | .00 |
| 3 | .00 | .00 | .00 | .00 | .00 | 24 | 6.5 | .00 | .00 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | .00 | .00 | 21 | 6.6 | .00 | .00 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | .00 | .00 | 19 | 5.3 | .00 | .00 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | .00 | .00 | 25 | 4.9 | .00 | .00 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | .00 | 9.5 | 19 | 4.3 | 1.3 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .00 | .00 | 4.7 | 17 | 3.5 | .91 | .00 | .00 | .00 | .00 |
| 9 | .00 | .00 | .00 | .00 | .33 | 16 | 3.2 | .23 | .00 | .00 | .00 | .00 |
| 10 | .00 | .00 | .00 | .00 | .06 | 15 | 2.6 | .03 | .00 | .00 | .00 | .00 |
| 11 | .00 | .00 | 2.3 | .00 | .00 | 15 | 2.6 | .00 | .00 | .00 | .00 | .00 |
| 12 | .00 | .00 | .00 | .00 | .00 | 14 | 2.3 | .00 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | .00 | .00 | .00 | 13 | 2.1 | .00 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | .00 | .00 | .00 | 13 | 1.8 | .00 | .00 | .00 | .00 | .00 |
| 15 | .00 | .00 | .00 | .00 | .00 | 13 | 1.4 | .00 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | .00 | .00 | .00 | 12 | 1.3 | .00 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | .00 | .00 | 5.2 | 12 | 1.2 | 1.5 | .00 | .00 | .00 | .00 |
| 18 | .00 | e.00 | .00 | .00 | 64 | 11 | 1.3 | 1.4 | .00 | .00 | .00 | .00 |
| 19 | .00 | e.00 | .00 | .00 | 107 | 11 | 1.2 | .29 | .00 | .00 | .00 | .00 |
| 20 | .00 | e.00 | .00 | .00 | 1170 | 11 | 1.2 | .00 | .00 | .00 | .00 | .00 |
| 21 | .00 | e.00 | .00 | .00 | 303 | 11 | 1.1 | .00 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | .00 | .00 | 152 | 10 | .81 | .00 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | .00 | .00 | 5.8 | 10 | 1.0 | .00 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .00 | .00 | 8.2 | 71 | 1.1 | .00 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | .00 | .00 | 4.2 | 42 | 1.5 | .00 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | .00 | 1.6 | 37 | 20 | .63 | .00 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | .00 | .85 | 34 | 17 | .07 | .00 | .00 | .00 | .00 | .00 |
| 28 | .00 | .00 | .00 | .24 | 30 | 16 | .00 | .00 | .00 | .00 | .00 | .00 |
| 29 | .00 | .00 | .00 | .00 | --- | 13 | .00 | .00 | .00 | .00 | .00 | .00 |
| 30 | .00 | .00 | .00 | .00 | --- | 10 | .01 | .00 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | .00 | .00 | --- | 9.2 | --- | .00 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 0.00 | 2.30 | 20.89 | 2141.79 | 488.2 | 74.72 | 5.66 | 0.00 | 0.00 | 0.00 | 0.00 |
| MEAN | .000 | .000 | .074 | .67 | 76.5 | 15.7 | 2.49 | .18 | .000 | .000 | .000 | .000 |
| MAX | .00 | .00 | 2.3 | 8.2 | 1170 | 28 | 7.9 | 1.5 | .00 | .00 | .00 | .00 |
| MIN | .00 | .00 | .00 | .00 | .00 | 9.2 | .00 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | .00 | 4.6 | 41 | 4250 | 968 | 148 | 11 | .00 | .00 | .00 | .00 |

e Estimated.

11147500 SALINAS RIVER AT PASO ROBLES, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.76 | 5.17 | 46.9 | 203 | 359 | 338 | 160 | 21.8 | 2.32 | .26 | .061 | .99 |
| MAX | 117 | 86.0 | 581 | 1409 | 2026 | 1978 | 1980 | 247 | 30.5 | 4.84 | 1.91 | 44.0 |
| (WY) | 1943 | 1983 | 1983 | 1983 | 1980 | 1983 | 1958 | 1983 | 1941 | 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 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1940 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 104445.28 | | 2733.56 | | | |
| ANNUAL MEAN | 286 | | 7.49 | | 93.5 | |
| HIGHEST ANNUAL MEAN | | | | | 526 | |
| LOWEST ANNUAL MEAN | | | | | .000 | |
| HIGHEST DAILY MEAN | 7850 | Jan 14 | 1170 | Feb 20 | 11800 | Feb 18 1980 |
| LOWEST DAILY MEAN | .00 | Jun 20 | .00 | Oct 1 | .00 | Nov 1 1939 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jun 20 | .00 | Oct 1 | .00 | Nov 1 1939 |
| INSTANTANEOUS PEAK FLOW | | | 2290 | Feb 20 | 18500 | Feb 16 1980 |
| INSTANTANEOUS PEAK STAGE | | | 8.30 | Feb 20 | 18.80 | Jan 14 1993 |
| ANNUAL RUNOFF (AC-FT) | 207200 | | 5420 | | 67720 | |
| 10 PERCENT EXCEEDS | 845 | | 11 | | 141 | |
| 50 PERCENT EXCEEDS | .00 | | .00 | | .00 | |
| 90 PERCENT EXCEEDS | .00 | | .00 | | .00 | |

SALINAS RIVER BASIN

11148500 ESTRELLA RIVER NEAR ESTRELLA, CA

LOCATION.--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.

DRAINAGE AREA.--922 mi², not including Carrizo Plains.

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1960, published as Estrella Creek near Estrella.

SEDIMENT DATA: June 1990.

REVISED RECORDS.--WSP 2129: 1969, drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 671.59 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. No regulation; pumpage from wells along river for irrigation upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft³/s, Feb. 24, 1969, gage height, 10.4 ft, from floodmarks, by slope-area measurement of peak flow; maximum gage height, 10.9 ft, Jan. 25, 1969, from floodmarks; no flow for several months in each year and from May 13, 1993 to September 30, 1994.

EXTREMES FOR CURRENT YEAR.--No flow for water year 1994.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .040 | 1.16 | 12.7 | 42.4 | 130 | 74.9 | 30.3 | 1.59 | .14 | .000 | .000 | .25 |
| MAX | .93 | 29.6 | 371 | 910 | 1671 | 1016 | 670 | 25.1 | 2.58 | .000 | .000 | 6.53 |
| (WY) | 1977 | 1973 | 1967 | 1969 | 1969 | 1978 | 1958 | 1983 | 1969 | 1955 | 1955 | 1976 |
| MIN | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| (WY) | 1955 | 1956 | 1960 | 1975 | 1976 | 1976 | 1972 | 1961 | 1956 | 1955 | 1955 | 1955 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | FOR 1994 WATER YEAR | WATER YEARS 1955 - 1994 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 13090.89 | | |
| ANNUAL MEAN | 35.9 | | 23.9 |
| HIGHEST ANNUAL MEAN | | | 256 |
| LOWEST ANNUAL MEAN | | | .000 |
| HIGHEST DAILY MEAN | 1910 | Feb 23 | 18500 |
| LOWEST DAILY MEAN | .00 | Jan 1 | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jan 1 | .00 |
| INSTANTANEOUS PEAK FLOW | | | 32500 |
| INSTANTANEOUS PEAK STAGE | | | 10.90 |
| ANNUAL RUNOFF (AC-FT) | 25970 | | 17300 |
| 10 PERCENT EXCEEDS | 26 | .00 | 6.6 |
| 50 PERCENT EXCEEDS | .00 | .00 | .00 |
| 90 PERCENT EXCEEDS | .00 | .00 | .00 |

11148900 NACIMIENTO RIVER BELOW SAPAQUE CREEK, NEAR BRYSON, CA

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

DRAINAGE AREA.--162 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 for estimated daily discharges, which are poor. No storage or diversion upstream from station.

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; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2230 | *7,710 | *17.15 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|--------|--------|-------|------|------|-------|-------|------|------|------|
| 1 | .00 | .00 | .10 | 7.6 | 23 | 130 | 26 | 15 | 4.0 | .00 | .00 | .00 |
| 2 | .00 | .00 | .10 | 7.5 | 20 | 113 | 24 | 14 | 3.3 | .00 | .00 | .00 |
| 3 | .00 | .00 | .17 | 7.6 | 19 | 99 | 23 | 13 | 2.4 | .00 | .00 | .00 |
| 4 | .00 | .00 | .38 | 7.3 | 26 | 89 | 22 | 13 | 2.0 | .00 | .00 | .00 |
| 5 | .00 | .00 | .41 | 7.3 | 30 | 79 | 20 | 12 | 1.8 | .00 | .00 | .00 |
| 6 | .00 | .00 | .39 | 7.0 | 24 | 74 | 19 | 11 | 1.6 | .00 | .00 | .00 |
| 7 | .00 | .00 | .39 | 6.9 | 1180 | 69 | 18 | 15 | 1.5 | .00 | .00 | .00 |
| 8 | .00 | .00 | .39 | 6.9 | 831 | 61 | 18 | 24 | 1.5 | .00 | .00 | .00 |
| 9 | .00 | .00 | .76 | 6.7 | 360 | 57 | 20 | 24 | 1.4 | .00 | .00 | .00 |
| 10 | .00 | e.00 | 3.7 | 6.7 | 202 | 52 | 27 | 17 | 1.4 | .00 | .00 | .00 |
| 11 | .00 | e.00 | 52 | 6.1 | 135 | 49 | 22 | 14 | 1.2 | .00 | .00 | .00 |
| 12 | .00 | e.07 | 192 | 6.3 | 96 | 44 | 18 | 12 | .95 | .00 | .00 | .00 |
| 13 | .00 | .05 | 57 | 6.2 | 74 | 41 | 17 | 10 | .85 | .00 | .00 | .00 |
| 14 | .00 | .03 | 37 | 6.1 | 60 | 38 | 16 | 9.1 | .76 | .00 | .00 | .00 |
| 15 | .00 | .02 | 63 | 6.2 | 51 | 37 | 15 | 8.1 | .70 | .00 | .00 | .00 |
| 16 | .00 | .03 | 37 | 6.0 | 44 | 34 | 14 | 7.7 | .64 | .00 | .00 | .00 |
| 17 | .00 | .04 | 26 | 5.8 | 1080 | 33 | 14 | 9.4 | .56 | .00 | .00 | .00 |
| 18 | .00 | .04 | 21 | 5.9 | 737 | 32 | 13 | 13 | .53 | .00 | .00 | .00 |
| 19 | .00 | .04 | 18 | 5.7 | 1590 | 30 | 12 | 15 | .47 | .00 | .00 | .00 |
| 20 | .00 | .04 | 15 | 5.6 | 2910 | 28 | 12 | 12 | .40 | .00 | .00 | .00 |
| 21 | .00 | .04 | 13 | 5.6 | 854 | 27 | 11 | 11 | .37 | .00 | .00 | .00 |
| 22 | .00 | .06 | 12 | 5.3 | 562 | 26 | 11 | 9.8 | .33 | .00 | .00 | .00 |
| 23 | .00 | .08 | 11 | 21 | 403 | 25 | 11 | 8.5 | .26 | .00 | .00 | .00 |
| 24 | .00 | .06 | 10 | 249 | 312 | 31 | 16 | 7.6 | .25 | .00 | .00 | .00 |
| 25 | .00 | .06 | 9.9 | 288 | 252 | 115 | 24 | 7.2 | .19 | .00 | .00 | .00 |
| 26 | .00 | .08 | 9.9 | 131 | 206 | 62 | 33 | 6.8 | .15 | .00 | .00 | .00 |
| 27 | .00 | .10 | 9.4 | 81 | 174 | 43 | 32 | 6.4 | .13 | .00 | .00 | .00 |
| 28 | .00 | .13 | 8.7 | 55 | 149 | 36 | 26 | 5.9 | .06 | .00 | .00 | .00 |
| 29 | .00 | .41 | 8.2 | 40 | --- | 32 | 21 | 6.0 | .02 | .00 | .00 | .00 |
| 30 | .00 | .27 | 7.9 | 32 | --- | 29 | 18 | 5.1 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | 7.9 | 27 | --- | 27 | --- | 4.3 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 1.65 | 632.69 | 1066.3 | 12404 | 1642 | 573 | 346.9 | 29.72 | 0.00 | 0.00 | 0.00 |
| MEAN | .000 | .055 | 20.4 | 34.4 | 443 | 53.0 | 19.1 | 11.2 | .99 | .000 | .000 | .000 |
| MAX | .00 | .41 | 192 | 288 | 2910 | 130 | 33 | 24 | 4.0 | .00 | .00 | .00 |
| MIN | .00 | .00 | .10 | 5.3 | 19 | 25 | 11 | 4.3 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | 3.3 | 1250 | 2120 | 24600 | 3260 | 1140 | 688 | 59 | .00 | .00 | .00 |

e Estimated.

SALINAS RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .60 | 59.5 | 170 | 519 | 672 | 489 | 168 | 40.6 | 9.11 | 1.81 | .17 | .048 |
| MAX | 4.90 | 413 | 911 | 2440 | 2057 | 2048 | 1142 | 318 | 43.1 | 11.2 | 2.86 | .77 |
| (WY) | 1973 | 1973 | 1983 | 1978 | 1973 | 1983 | 1982 | 1983 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | | FOR 1994 WATER YEAR | | | WATER YEARS 1971 - 1994 | | |
|--------------------------|------------------------|--|--|---------------------|--|--|-------------------------|--|--|
| ANNUAL TOTAL | 119700.01 | | | 16696.26 | | | | | |
| ANNUAL MEAN | 328 | | | 45.7 | | | 175 | | |
| HIGHEST ANNUAL MEAN | | | | | | | 623 | | |
| LOWEST ANNUAL MEAN | | | | | | | 5.74 | | |
| HIGHEST DAILY MEAN | 18900 | | | 2910 | | | 18900 | | |
| LOWEST DAILY MEAN | .00 | | | .00 | | | .00 | | |
| ANNUAL SEVEN-DAY MINIMUM | .00 | | | .00 | | | .00 | | |
| INSTANTANEOUS PEAK FLOW | | | | 7710 | | | 57600 | | |
| INSTANTANEOUS PEAK STAGE | | | | 17.15 | | | 32.14 | | |
| ANNUAL RUNOFF (AC-FT) | 237400 | | | 33120 | | | 126900 | | |
| 10 PERCENT EXCEEDS | 759 | | | 58 | | | 289 | | |
| 50 PERCENT EXCEEDS | 9.9 | | | 1.4 | | | 5.7 | | |
| 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.--

WATER TEMPERATURE: October 1971 to September 1973.

SUSPENDED-SEDIMENT DISCHARGE: October 1971 to September 1973.

REMARKS.--Zero bedload discharge observed for flows less than 52 ft³/s during current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|-------|------|--|--------------------------------------|---|---|---|
| FEB | | | | | | |
| 15... | 1250 | 52 | 8.0 | 0 | 0.0 | -- |
| 17... | 1310 | 1530 | 10.0 | 130 | 537 | 85 |
| MAR | | | | | | |
| 21... | 1145 | 27 | 15.5 | 0 | 0.0 | -- |
| APR | | | | | | |
| 19... | 1225 | 13 | 21.5 | 2 | 0.07 | -- |
| MAY | | | | | | |
| 12... | 1300 | 12 | 23.0 | 1 | 0.03 | -- |

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | NUMBER OF SAM- PLING POINTS (COUNT) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | BED MAT. SIEVE DIAM. % FINER THAN .125 MM | BED MAT. SIEVE DIAM. % FINER THAN .250 MM | BED MAT. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--|--|--------------------------------------|---|---|---|
| FEB | | | | | | | |
| 15... | 1310 | 1 | 52 | 8.0 | 2 | 2 | 3 |
| 15... | 1311 | 1 | 52 | 8.0 | 1 | 2 | 2 |
| 15... | 1312 | 1 | 52 | 8.0 | 2 | 3 | 3 |
| 15... | 1313 | 1 | 52 | 8.0 | -- | 2 | 4 |
| 15... | 1314 | 1 | 52 | 8.0 | 2 | 2 | 9 |
| 15... | 1315 | 1 | 52 | 8.0 | -- | 2 | 14 |
| 15... | 1316 | 1 | 52 | 8.0 | 2 | 2 | 41 |
| APR | | | | | | | |
| 19... | 1230 | 1 | 13 | 21.5 | -- | -- | 1 |
| 19... | 1231 | 1 | 13 | 21.5 | -- | -- | -- |
| 19... | 1232 | 1 | 13 | 21.5 | -- | 1 | 2 |
| 19... | 1233 | 1 | 13 | 21.5 | -- | 1 | 6 |
| 19... | 1234 | 1 | 13 | 21.5 | -- | 2 | 10 |
| 19... | 1235 | 1 | 13 | 21.5 | -- | 1 | 5 |
| 19... | 1236 | 1 | 13 | 21.5 | 1 | 3 | 15 |

| DATE | BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM |
|-------|---|---|---|---|---|---|---|
| FEB | | | | | | | |
| 15... | 4 | 5 | 6 | 13 | 43 | 100 | -- |
| 15... | 3 | 3 | 3 | 4 | 15 | 49 | 100 |
| 15... | 3 | 4 | 4 | 5 | 16 | 58 | 100 |
| 15... | 5 | 11 | 20 | 36 | 62 | 100 | -- |
| 15... | 17 | 22 | 31 | 45 | 80 | 100 | -- |
| 15... | 23 | 29 | 38 | 53 | 75 | 92 | 100 |
| 15... | 88 | 97 | 99 | 100 | -- | -- | -- |
| APR | | | | | | | |
| 19... | 1 | 1 | 2 | 8 | 23 | 65 | 100 |
| 19... | -- | -- | -- | 1 | 15 | 65 | 100 |
| 19... | 4 | 10 | 24 | 41 | 72 | 91 | 100 |
| 19... | 10 | 14 | 23 | 41 | 63 | 86 | 100 |
| 19... | 14 | 18 | 25 | 37 | 60 | 92 | 100 |
| 19... | 12 | 26 | 48 | 74 | 94 | 100 | -- |
| 19... | 28 | 38 | 51 | 66 | 83 | 100 | -- |

SALINAS RIVER BASIN

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

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | SAM- PLING METHOD, CODES | SAMPLER TYPE (CODE) | BAG MESH SIZE BEDLOAD SAMPLER (MM) | TETHER LINE USED IN SAMPLING (YES=1) (CODE) | START- ING TIME (2400 HOURS) | END- ING TIME (2400 HOURS) | TIME ON BED FOR BED LOAD SAMPLE (SEC) | HORI- ZONTAL WIDTH OF VER- TICAL (FEET) | COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (NUM) | VER- TICALS IN COM- POSITE SAMPLE (NUM) | NUMBER OF SAM- PLING POINTS (COUNT) |
|-------|---|--|--------------------------------------|---|---|---|---|---|---|---|---|---|
| FEB | | | | | | | | | | | | |
| 17... | 1345 | 1000 | 1100 | 0.250 | 0 | 1340 | 1350 | 15 | 5.0 | 2 | 20 | 20 |
| 17... | 1405 | 1000 | 1100 | 0.250 | 0 | 1400 | 1410 | 15 | 5.0 | 2 | 20 | 20 |
| DATE | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT | SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) | SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM |
| FEB | | | | | | | | | | | | |
| 17... | 2.50 | 1440 | 10.0 | 1.13 | 97 | 1 | 32 | 69 | 80 | 90 | 98 | 100 |
| 17... | 2.50 | 1380 | 10.0 | 0.81 | 97 | -- | 34 | 71 | 83 | 93 | 99 | 100 |

11149400 NACIMIENTO RIVER BELOW NACIMIENTO DAM, NEAR BRADLEY, CA

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

DRAINAGE AREA.--329 mi².

PERIOD OF RECORD.--October 1957 to current year.

CHEMICAL DATA: Water years 1963-66.

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,340 ft³/s, Feb. 25, 1969, gage height, 10.92 ft; no flow at times in 1958-63, 1965, 1977, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 458 ft³/s, Sept. 14, gage height, 4.84 ft; maximum gage height, 5.01 ft, Sept. 30; minimum daily, 6.5 ft³/s, Feb. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|--------|--------|-------|------|------|-------|-------|-------|-------|
| 1 | 378 | 342 | 185 | 143 | 141 | 6.9 | 13 | 12 | 60 | 387 | 396 | 374 |
| 2 | 376 | 341 | 160 | 143 | 145 | 7.1 | 13 | 12 | 256 | 386 | 382 | 387 |
| 3 | 373 | 345 | 192 | 141 | 144 | 8.5 | 13 | 12 | 396 | 347 | 396 | 385 |
| 4 | 372 | 346 | 192 | 154 | 143 | 15 | 13 | 12 | 386 | 382 | 396 | 391 |
| 5 | 369 | 349 | 185 | 153 | 141 | 14 | 12 | 12 | 379 | 381 | 396 | 391 |
| 6 | 368 | 350 | 75 | 152 | 140 | 16 | 12 | 12 | 375 | 372 | 396 | 393 |
| 7 | 366 | 351 | 47 | 152 | 140 | 13 | 12 | 13 | 372 | 380 | 389 | 396 |
| 8 | 368 | 354 | 180 | 151 | 83 | 13 | 12 | 13 | 369 | 377 | 384 | 396 |
| 9 | 369 | 309 | 194 | 149 | 8.5 | 13 | 12 | 17 | 369 | 379 | 377 | 395 |
| 10 | 367 | 314 | 193 | 149 | 7.5 | 13 | 12 | 13 | 366 | 379 | 370 | 386 |
| 11 | 348 | 292 | 196 | 149 | 7.3 | 12 | 12 | 13 | 367 | 315 | 336 | 438 |
| 12 | 356 | 293 | 191 | 148 | 7.4 | 12 | 13 | 13 | 367 | 256 | 362 | 436 |
| 13 | 332 | 297 | 191 | 146 | 7.7 | 12 | 13 | 13 | 364 | 277 | 359 | 423 |
| 14 | 360 | 298 | 194 | 145 | 7.9 | 11 | 12 | 13 | 357 | 277 | 355 | 446 |
| 15 | 358 | 299 | 179 | 143 | 7.7 | 11 | 12 | 14 | 358 | 326 | 353 | 425 |
| 16 | 357 | 301 | 145 | 143 | 7.4 | 11 | 12 | 14 | 359 | 397 | 348 | 406 |
| 17 | 356 | 303 | 155 | 143 | 9.6 | 11 | 12 | 17 | 360 | 398 | 345 | 405 |
| 18 | 357 | 279 | 134 | 141 | 8.3 | 12 | 13 | 14 | 360 | 399 | 342 | 402 |
| 19 | 356 | 259 | 155 | 142 | 10 | 12 | 13 | 15 | 362 | 400 | 339 | 402 |
| 20 | 355 | 261 | 155 | 140 | 10 | 12 | 13 | 15 | 366 | 398 | 337 | 400 |
| 21 | 353 | 264 | 155 | 140 | 8.5 | 12 | 13 | 15 | 366 | 398 | 337 | 399 |
| 22 | 353 | 256 | 155 | 140 | 6.9 | 12 | 13 | 16 | 369 | 398 | 333 | 398 |
| 23 | 350 | 235 | 154 | 141 | 6.8 | 12 | 13 | 16 | 369 | 399 | 335 | 398 |
| 24 | 347 | 236 | 151 | 139 | 6.7 | 12 | 13 | 16 | 370 | 400 | 333 | 396 |
| 25 | 350 | 229 | 148 | 126 | 6.6 | 12 | 13 | 16 | 373 | 399 | 335 | 394 |
| 26 | 350 | 226 | 147 | 137 | 6.5 | 12 | 13 | 17 | 372 | 397 | 338 | 390 |
| 27 | 348 | 226 | 146 | 108 | 6.6 | 13 | 12 | 17 | 380 | 397 | 344 | 386 |
| 28 | 346 | 227 | 146 | 17 | 7.0 | 12 | 12 | 17 | 383 | 398 | 351 | 382 |
| 29 | 345 | 227 | 145 | 7.8 | --- | 13 | 12 | 17 | 384 | 397 | 358 | 379 |
| 30 | 343 | 217 | 144 | 80 | --- | 13 | 12 | 17 | 386 | 396 | 371 | 374 |
| 31 | 342 | --- | 144 | 131 | --- | 13 | --- | 18 | --- | 396 | 379 | --- |
| TOTAL | 11068 | 8626 | 4933 | 4093.8 | 1231.9 | 371.5 | 375 | 451 | 10700 | 11588 | 11172 | 11973 |
| MEAN | 357 | 288 | 159 | 132 | 44.0 | 12.0 | 12.5 | 14.5 | 357 | 374 | 360 | 399 |
| MAX | 378 | 354 | 196 | 154 | 145 | 16 | 13 | 18 | 396 | 400 | 396 | 446 |
| MIN | 332 | 217 | 47 | 7.8 | 6.5 | 6.9 | 12 | 12 | 60 | 256 | 333 | 374 |
| AC-FT | 21950 | 17110 | 9780 | 8120 | 2440 | 737 | 744 | 895 | 21220 | 22980 | 22160 | 23750 |

SALINAS RIVER BASIN

11149400 NACIMIENTO RIVER BELOW NACIMIENTO DAM, NEAR BRADLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 235 | 112 | 115 | 225 | 449 | 273 | 163 | 219 | 301 | 381 | 408 | 359 |
| MAX | 501 | 618 | 1629 | 1868 | 2787 | 3016 | 1501 | 1067 | 581 | 662 | 802 | 571 |
| (WY) | 1983 | 1983 | 1983 | 1980 | 1983 | 1969 | 1958 | 1983 | 1969 | 1958 | 1967 | 1967 |
| MIN | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | 1.16 | 2.44 | .000 | .000 |
| (WY) | 1958 | 1958 | 1958 | 1962 | 1962 | 1961 | 1961 | 1961 | 1990 | 1990 | 1961 | 1961 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1958 - 1994 | |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL | 138459.9 | | 76583.2 | | | |
| ANNUAL MEAN | 379 | | 210 | | 269 | |
| HIGHEST ANNUAL MEAN | | | | | 1038 | |
| LOWEST ANNUAL MEAN | | | | | 3.43 | |
| HIGHEST DAILY MEAN | 4180 | | Feb 26 | | 6770 | |
| LOWEST DAILY MEAN | 6.9 | | Jan 11 | | .00 | |
| ANNUAL SEVEN-DAY MINIMUM | 9.2 | | Jan 3 | | .00 | |
| INSTANTANEOUS PEAK FLOW | | | 458 | | 7340 | |
| INSTANTANEOUS PEAK STAGE | | | 5.01 | | 10.92 | |
| ANNUAL RUNOFF (AC-FT) | 274600 | | 151900 | | 194800 | |
| 10 PERCENT EXCEEDS | 581 | | 396 | | 511 | |
| 50 PERCENT EXCEEDS | 346 | | 196 | | 125 | |
| 90 PERCENT EXCEEDS | 24 | | 12 | | 1.0 | |

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA

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

DRAINAGE AREA.--217 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 except for estimated daily discharges, which are poor. No regulation; some pumping upstream from station. See schematic diagram of Salinas River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,000 ft³/s, Jan. 26, 1969, gage height, 13.25 ft, current datum; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0845 | *1,230 | *8.18 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|------|------|-------|-------|-------|------|------|------|
| 1 | .00 | .00 | .00 | 4.7 | 15 | 60 | 22 | 13 | 3.1 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | 4.8 | 14 | 56 | 21 | 12 | 2.5 | .00 | .00 | .00 |
| 3 | .00 | .00 | .00 | 4.8 | 13 | 54 | 20 | 11 | 2.3 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | 4.8 | 15 | 50 | 19 | 9.5 | e1.9 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | 4.8 | 12 | 48 | 19 | 8.8 | e1.6 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | 4.8 | 13 | 45 | 18 | 8.9 | e1.3 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | 4.6 | 40 | 43 | 17 | 11 | e.98 | .00 | .00 | .00 |
| 8 | .00 | .00 | .00 | 4.5 | 199 | 40 | 17 | 13 | e.70 | .00 | .00 | .00 |
| 9 | .00 | .00 | .00 | 4.5 | 128 | 38 | 17 | 15 | e.42 | .00 | .00 | .00 |
| 10 | .00 | .00 | .00 | 4.5 | 84 | 35 | 17 | 14 | e.30 | .00 | .00 | .00 |
| 11 | .00 | .00 | .00 | 4.5 | 62 | 33 | 17 | 12 | e.24 | .00 | .00 | .00 |
| 12 | .00 | .00 | .00 | 4.5 | 51 | 32 | 17 | 10 | e.09 | .00 | .00 | .00 |
| 13 | .00 | .00 | .00 | 4.6 | 45 | 29 | 17 | 9.1 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | .00 | 4.8 | 41 | 29 | 16 | 7.8 | .00 | .00 | .00 | .00 |
| 15 | .00 | .00 | .00 | 4.8 | 39 | 28 | 15 | 7.5 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | .00 | 4.7 | 37 | 27 | 14 | 7.2 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | .04 | 4.3 | 55 | 26 | 13 | 7.7 | .00 | .00 | .00 | .00 |
| 18 | .00 | .00 | 1.1 | 4.4 | 160 | 26 | 13 | 7.8 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | 2.3 | 4.5 | 156 | 26 | 12 | 7.5 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | 3.1 | 4.5 | 691 | 25 | 11 | 7.5 | .00 | .00 | .00 | .00 |
| 21 | .00 | .00 | 3.5 | 4.5 | 355 | 24 | 10 | 6.8 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | 3.6 | 4.5 | 221 | 24 | 9.6 | 6.0 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | 3.7 | 6.2 | 162 | 24 | 9.5 | 5.4 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | 4.1 | 8.3 | 123 | 26 | 9.8 | 5.0 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | 4.2 | 35 | 98 | 32 | 11 | 4.6 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | 4.3 | 43 | 85 | 35 | 14 | 4.2 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | 4.5 | 36 | 73 | 31 | 16 | 4.1 | .00 | .00 | .00 | .00 |
| 28 | .00 | .00 | 4.5 | 28 | 66 | 27 | 17 | 3.9 | .00 | .00 | .00 | .00 |
| 29 | .00 | .00 | 4.5 | 22 | --- | 25 | 16 | 3.5 | .00 | .00 | .00 | .00 |
| 30 | .00 | .00 | 4.5 | 19 | --- | 23 | 14 | 3.2 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | 4.5 | 17 | --- | 22 | --- | 3.2 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 0.00 | 52.44 | 315.9 | 3053 | 1043 | 458.9 | 250.2 | 15.43 | 0.00 | 0.00 | 0.00 |
| MEAN | .000 | .000 | 1.69 | 10.2 | 109 | 33.6 | 15.3 | 8.07 | .51 | .000 | .000 | .000 |
| MAX | .00 | .00 | 4.5 | 43 | 691 | 60 | 22 | 15 | 3.1 | .00 | .00 | .00 |
| MIN | .00 | .00 | .00 | 4.3 | 12 | 22 | 9.5 | 3.2 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | .00 | 104 | 627 | 6060 | 2070 | 910 | 496 | 31 | .00 | .00 | .00 |

e Estimated.

SALINAS RIVER BASIN

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .40 | 15.7 | 79.6 | 277 | 364 | 319 | 126 | 39.5 | 11.4 | 2.62 | .24 | .066 |
| MAX | 11.7 | 108 | 573 | 1515 | 1807 | 1856 | 637 | 167 | 51.9 | 22.9 | 6.83 | 1.81 |
| (WY) | 1984 | 1984 | 1967 | 1969 | 1986 | 1983 | 1982 | 1983 | 1978 | 1983 | 1983 | 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1966 - 1994

| | | | |
|--------------------------|----------|---------|-------|
| ANNUAL TOTAL | 68229.82 | 5188.87 | |
| ANNUAL MEAN | 187 | 14.2 | 102 |
| HIGHEST ANNUAL MEAN | | | 455 |
| LOWEST ANNUAL MEAN | | | .005 |
| HIGHEST DAILY MEAN | 5820 | Jan 14 | 691 |
| LOWEST DAILY MEAN | .00 | Jul 24 | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jul 31 | .00 |
| INSTANTANEOUS PEAK FLOW | | | 1230 |
| INSTANTANEOUS PEAK STAGE | | | 8.18 |
| ANNUAL RUNOFF (AC-FT) | 135300 | 10290 | 73680 |
| 10 PERCENT EXCEEDS | 538 | 34 | 204 |
| 50 PERCENT EXCEEDS | 4.5 | .00 | 3.1 |
| 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.--

WATER TEMPERATURE: October 1965 to September 1973.

SUSPENDED-SEDIMENT DISCHARGE: October 1965 to September 1973.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDED (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|-------|------|--|--------------------------------------|--|--|---|
| JAN | | | | | | |
| 13... | 1500 | 4.8 | -- | 4 | 0.05 | -- |
| FEB | | | | | | |
| 14... | 1310 | 42 | 14.5 | 2 | 0.23 | 77 |
| MAR | | | | | | |
| 22... | 1055 | 24 | 17.0 | 2 | 0.13 | -- |
| APR | | | | | | |
| 18... | 1225 | 13 | 22.5 | 2 | 0.07 | -- |
| MAY | | | | | | |
| 13... | 1050 | 9.8 | 20.5 | 0 | 0.0 | -- |

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | NUMBER OF SAM- PLING POINTS (COUNT) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | BED MAT. SIEVE DIAM. % FINER THAN .125 MM | BED MAT. SIEVE DIAM. % FINER THAN .250 MM | BED MAT. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--|--|--------------------------------------|---|---|---|
| FEB | | | | | | | |
| 14... | 1345 | 1 | 42 | 14.5 | -- | -- | 4 |
| 14... | 1346 | 1 | 42 | 14.5 | -- | 1 | 11 |
| 14... | 1347 | 1 | 42 | 14.5 | -- | -- | 8 |
| 14... | 1348 | 1 | 42 | 14.5 | -- | 1 | 10 |
| 14... | 1349 | 1 | 42 | 14.5 | -- | 2 | 18 |
| 14... | 1350 | 1 | 42 | 14.5 | -- | 1 | 6 |
| 14... | 1351 | 1 | 42 | 14.5 | -- | 1 | 5 |
| 14... | 1352 | 1 | 42 | 14.5 | -- | 1 | 8 |
| 14... | 1353 | 1 | 42 | 14.5 | -- | -- | 5 |
| 14... | 1354 | 1 | 42 | 14.5 | 1 | 6 | 16 |
| APR | | | | | | | |
| 18... | 1330 | 1 | 13 | 22.5 | -- | -- | 8 |
| 18... | 1331 | 1 | 13 | 22.5 | -- | -- | 7 |
| 18... | 1332 | 1 | 13 | 22.5 | -- | -- | 11 |
| 18... | 1333 | 1 | 13 | 22.5 | -- | 1 | 9 |
| 18... | 1334 | 1 | 13 | 22.5 | -- | 1 | 14 |
| 18... | 1335 | 1 | 13 | 22.5 | -- | 1 | 8 |
| 18... | 1336 | 1 | 13 | 22.5 | -- | 1 | 7 |
| 18... | 1337 | 1 | 13 | 22.5 | -- | 1 | 10 |
| 18... | 1338 | 1 | 13 | 22.5 | -- | -- | 5 |
| 18... | 1339 | 1 | 13 | 22.5 | 1 | 3 | 9 |

SALINAS RIVER BASIN

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM |
|-------|---|---|---|---|---|---|---|
| FEB | | | | | | | |
| 14... | 17 | 34 | 49 | 63 | 80 | 94 | 100 |
| 14... | 29 | 50 | 69 | 82 | 95 | 100 | -- |
| 14... | 32 | 51 | 61 | 70 | 85 | 94 | 100 |
| 14... | 32 | 51 | 66 | 73 | 89 | 100 | -- |
| 14... | 38 | 56 | 73 | 84 | 93 | 100 | -- |
| 14... | 20 | 28 | 33 | 40 | 54 | 74 | 100 |
| 14... | 16 | 26 | 34 | 43 | 57 | 100 | -- |
| 14... | 26 | 47 | 64 | 83 | 97 | 100 | -- |
| 14... | 26 | 61 | 83 | 93 | 97 | 100 | -- |
| 14... | 40 | 66 | 80 | 88 | 94 | 100 | -- |
| APR | | | | | | | |
| 18... | 28 | 47 | 63 | 75 | 89 | 100 | -- |
| 18... | 22 | 41 | 59 | 76 | 92 | 100 | -- |
| 18... | 35 | 56 | 71 | 82 | 92 | 100 | -- |
| 18... | 33 | 58 | 76 | 89 | 96 | 100 | -- |
| 18... | 34 | 62 | 82 | 92 | 96 | 100 | -- |
| 18... | 22 | 36 | 47 | 66 | 81 | 97 | 100 |
| 18... | 23 | 44 | 64 | 77 | 87 | 89 | 100 |
| 18... | 30 | 50 | 66 | 83 | 97 | 100 | -- |
| 18... | 21 | 46 | 66 | 78 | 88 | 100 | -- |
| 18... | 22 | 32 | 40 | 51 | 71 | 100 | -- |

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | SAM- PLING METHOD, CODES | SAMPLER TYPE (CODE) | BAG MESH SIZE BEDLOAD SAMPLER (MM) | TETHER LINE USED IN SAMPLING (YES=1) (CODE) | START- ING TIME (2400 HOURS) | END- ING TIME (2400 HOURS) | TIME ON BED FOR BED LOAD SAMPLE (SEC) | HORI- ZONTAL WIDTH OF VER- TICAL (FEET) |
|-------|------|-----------------------------------|---------------------------|---|--|--|--|---|---|
| JAN | | | | | | | | | |
| 13... | 1505 | 1000 | 1120 | 0.250 | 0 | 1503 | 1509 | 30 | 0.5 |
| FEB | | | | | | | | | |
| 14... | 1325 | 1000 | 1120 | 0.250 | 0 | 1319 | 1327 | 20 | 2.0 |
| 14... | 1335 | 1000 | 1120 | 0.250 | 0 | 1330 | 1338 | 20 | 2.0 |
| MAR | | | | | | | | | |
| 22... | 1130 | 1000 | 1150 | 0.250 | 0 | 1120 | 1135 | 30 | 1.0 |
| 22... | 1155 | 1000 | 1150 | 0.250 | 0 | 1145 | 1203 | 30 | 1.0 |
| APR | | | | | | | | | |
| 18... | 1250 | 1000 | 1150 | 0.250 | 0 | 1240 | 1256 | 30 | 0.5 |
| 18... | 1310 | 1000 | 1150 | 0.250 | 0 | 1259 | 1315 | 30 | 0.5 |
| MAY | | | | | | | | | |
| 13... | 1105 | 1000 | 1150 | 0.250 | 0 | 1100 | 1114 | 30 | 0.5 |
| 13... | 1125 | 1000 | 1150 | 0.250 | 0 | 1120 | 1134 | 30 | 0.5 |

| DATE | COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (NUM) | VER- TICALS IN COM- POSITE SAMPLE (NUM) | NUMBER OF SAM- PLING POINTS (COUNT) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT | SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) | SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM |
|-------|---|---|--|---|--|--------------------------------------|---|---|---|
| JAN | | | | | | | | | |
| 13... | 1 | 13 | 13 | 3.75 | 4.8 | -- | 0.02 | 0.15 | 1 |
| FEB | | | | | | | | | |
| 14... | 2 | 21 | 21 | 0.30 | 42 | 14.5 | 0.74 | 31 | -- |
| 14... | 2 | 21 | 21 | 0.30 | 42 | 14.5 | 0.74 | 31 | -- |
| MAR | | | | | | | | | |
| 22... | 2 | 32 | 32 | 0.50 | 24 | 17.0 | 0.11 | 3.8 | -- |
| 22... | 2 | 32 | 32 | 0.50 | 24 | 17.0 | 0.13 | 3.8 | -- |
| APR | | | | | | | | | |
| 18... | 2 | 29 | 29 | 0.25 | 13 | 22.5 | 0.25 | 3.5 | -- |
| 18... | 2 | 29 | 29 | 0.25 | 13 | 22.5 | 0.23 | 3.5 | -- |
| MAY | | | | | | | | | |
| 13... | 2 | 25 | 25 | 0.75 | 9.8 | 20.5 | 0.08 | 1.2 | -- |
| 13... | 2 | 25 | 25 | 0.75 | 9.8 | 20.5 | 0.11 | 1.2 | -- |

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM |
|-------|---|---|---|---|---|---|---|---|
| JAN | | | | | | | | |
| 13... | 1 | 10 | 58 | 85 | 95 | 100 | -- | -- |
| FEB | | | | | | | | |
| 14... | -- | 6 | 50 | 84 | 94 | 98 | 100 | -- |
| 14... | -- | 6 | 53 | 87 | 96 | 98 | 100 | -- |
| MAR | | | | | | | | |
| 22... | -- | 6 | 44 | 82 | 94 | 97 | 100 | -- |
| 22... | -- | 4 | 37 | 77 | 91 | 94 | 98 | 100 |
| APR | | | | | | | | |
| 18... | -- | 3 | 37 | 83 | 96 | 98 | 100 | -- |
| 18... | -- | 4 | 41 | 82 | 95 | 98 | 100 | -- |
| MAY | | | | | | | | |
| 13... | -- | 3 | 35 | 82 | 97 | 99 | 100 | -- |
| 13... | -- | 4 | 42 | 86 | 97 | 99 | 100 | -- |

SALINAS RIVER BASIN

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 September 1956, October 1957 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 fair except for estimated daily discharges, which are poor. 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, 117,000 ft³/s, Feb. 24, 1969, gage height, 20.34 ft, from floodmarks; no flow at times in 1951, 1954-55, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,390 ft³/s, June 12, gage height, 6.28 ft; minimum daily, 14 ft³/s, May 30-June 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|
| 1 | 389 | 426 | 242 | 165 | 132 | 90 | 39 | 20 | 14 | 620 | 613 | 672 |
| 2 | 402 | 432 | 212 | 165 | 141 | 82 | 38 | 19 | 83 | 636 | 585 | 692 |
| 3 | 440 | 425 | 218 | 158 | 145 | 75 | 36 | 18 | 637 | 621 | 594 | 689 |
| 4 | 447 | 404 | 223 | 165 | 150 | 70 | 34 | 19 | 855 | 648 | 609 | 680 |
| 5 | 447 | 401 | 223 | 174 | 150 | 70 | 32 | 19 | 874 | 767 | 617 | 667 |
| 6 | 442 | 401 | 195 | 171 | 156 | 80 | 31 | 19 | 896 | 838 | 642 | 653 |
| 7 | 440 | 403 | 121 | 167 | 165 | 74 | 30 | 24 | 903 | 815 | 662 | 637 |
| 8 | 437 | 406 | 129 | 172 | 161 | 68 | 29 | 23 | 958 | 786 | 670 | 619 |
| 9 | 432 | 401 | 202 | 172 | 95 | 65 | 29 | 20 | 1320 | 778 | 676 | 612 |
| 10 | 434 | 342 | 218 | 173 | 64 | 62 | 28 | 22 | 1340 | 781 | 689 | 592 |
| 11 | 420 | 349 | 232 | 171 | 54 | 60 | 27 | 20 | 1350 | 766 | 656 | 605 |
| 12 | 414 | 324 | 221 | 166 | 47 | 56 | 26 | 17 | 1350 | 687 | 633 | 590 |
| 13 | 428 | 309 | 208 | 167 | 44 | 53 | 26 | 17 | 1030 | 668 | 665 | 566 |
| 14 | 417 | 306 | 221 | 176 | 40 | 52 | 25 | 17 | 857 | 719 | 670 | 578 |
| 15 | 445 | 308 | 220 | 174 | 35 | 51 | 24 | 16 | 852 | 738 | 673 | 619 |
| 16 | 452 | 303 | 195 | 166 | 33 | 49 | 23 | 15 | 868 | 664 | 684 | 615 |
| 17 | 451 | 311 | 183 | 163 | 37 | 48 | 23 | 19 | 881 | 676 | 672 | 606 |
| 18 | 445 | 322 | 174 | 166 | 36 | 47 | e23 | 26 | 850 | 679 | 642 | 595 |
| 19 | 434 | 309 | 171 | 166 | 42 | 48 | e24 | 23 | 808 | 649 | 626 | 580 |
| 20 | 428 | 301 | 174 | 166 | 225 | 47 | e24 | 20 | 824 | 635 | 614 | e585 |
| 21 | 435 | 279 | 182 | 167 | 637 | 47 | e23 | 19 | 824 | 651 | 609 | e592 |
| 22 | 444 | 284 | 176 | 168 | 314 | 49 | e23 | 17 | 825 | 684 | 617 | e580 |
| 23 | 441 | 274 | 172 | 184 | 215 | 48 | e23 | 16 | 811 | 679 | 624 | e582 |
| 24 | 433 | 263 | 174 | 174 | 170 | 48 | e23 | 15 | 763 | 659 | 627 | e568 |
| 25 | 435 | 255 | 171 | 179 | 146 | 52 | e23 | 16 | 756 | 651 | 648 | e560 |
| 26 | 444 | 249 | 170 | 164 | 126 | 53 | e23 | 16 | 786 | 634 | 676 | e560 |
| 27 | 443 | 251 | 166 | 172 | 110 | 53 | e23 | 16 | 807 | 619 | 688 | e559 |
| 28 | 444 | 263 | 166 | 118 | 99 | 50 | e22 | 15 | 814 | 597 | 697 | e550 |
| 29 | 423 | 273 | 165 | 81 | --- | 44 | e22 | 15 | 794 | 604 | 689 | e540 |
| 30 | 426 | 272 | 160 | 66 | --- | 42 | 21 | 14 | 632 | 615 | 674 | e538 |
| 31 | 431 | --- | 163 | 105 | --- | 40 | --- | 14 | --- | 620 | 676 | --- |
| TOTAL | 13443 | 9846 | 5847 | 4941 | 3769 | 1773 | 797 | 566 | 25362 | 21184 | 20117 | 18081 |
| MEAN | 434 | 328 | 189 | 159 | 135 | 57.2 | 26.6 | 18.3 | 845 | 683 | 649 | 603 |
| MAX | 452 | 432 | 242 | 184 | 637 | 90 | 39 | 26 | 1350 | 838 | 697 | 692 |
| MIN | 389 | 249 | 121 | 66 | 33 | 40 | 21 | 14 | 14 | 597 | 585 | 538 |
| AC-FT | 26660 | 19530 | 11600 | 9800 | 7480 | 3520 | 1580 | 1120 | 50310 | 42020 | 39900 | 35860 |

e Estimated.

11150500 SALINAS RIVER NEAR BRADLEY, CA--Continued

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

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

SUMMARY STATISTICS

WATER YEARS 1949 - 1956

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 278 | 154 | 208 | 594 | 1314 | 889 | 497 | 322 | 395 | 468 | 511 | 432 |
| MAX | 632 | 559 | 2152 | 4641 | 8425 | 6415 | 5642 | 1792 | 845 | 683 | 770 | 743 |
| (WY) | 1970 | 1983 | 1983 | 1969 | 1969 | 1983 | 1958 | 1983 | 1994 | 1994 | 1991 | 1969 |
| MIN | 3.00 | 5.00 | 7.58 | 9.26 | 10.6 | 16.3 | 12.1 | 4.50 | 2.98 | .84 | .37 | 1.47 |
| (WY) | 1962 | 1962 | 1991 | 1991 | 1991 | 1990 | 1990 | 1961 | 1990 | 1990 | 1990 | 1990 |

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1958 - 1994

| | | | |
|--------------------------|--------|--------|--------|
| ANNUAL TOTAL | 284396 | 125726 | |
| ANNUAL MEAN | 779 | 344 | 501 |
| HIGHEST ANNUAL MEAN | | | 1997 |
| LOWEST ANNUAL MEAN | | | 9.39 |
| HIGHEST DAILY MEAN | 12800 | Jan 14 | 1350 |
| LOWEST DAILY MEAN | 37 | Jan 1 | 14 |
| ANNUAL SEVEN-DAY MINIMUM | 79 | Jan 1 | 15 |
| INSTANTANEOUS PEAK FLOW | | | 1390 |
| INSTANTANEOUS PEAK STAGE | | | 6.28 |
| ANNUAL RUNOFF (AC-FT) | 564100 | 249400 | 362600 |
| 10 PERCENT EXCEEDS | 1290 | 694 | 650 |
| 50 PERCENT EXCEEDS | 423 | 249 | 300 |
| 90 PERCENT EXCEEDS | 172 | 23 | 20 |

SALINAS RIVER BASIN

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 and for discharges less than 0.20 ft³/s, which are poor. No regulation; small diversions upstream from station by ranchers and sand-processing plant.

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 1993 WATER YEAR (NOT PREVIOUSLY PUBLISHED).--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|---------|------|-----------------------------------|---------------------|
| Jan. 8 | 0345 | 588 | 6.37 | Feb. 19 | 0230 | 1,250 | 6.36 |
| Jan. 14 | 0500 | *9,900 | *14.14 | Feb. 23 | 0900 | 748 | 5.22 |
| Feb. 8 | 1515 | 897 | 5.68 | Feb. 26 | 2115 | 359 | 4.02 |
| | | | | Mar. 25 | 2230 | 1,110 | 6.07 |

Minimum daily, 0.03 ft³/s, Oct. 8, Jul. 8, 9.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0530 | *714 | *5.13 | | | | |

Minimum daily, 0.06 ft³/s, Jul. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAILY MEAN VALUES
(NOT PREVIOUSLY PUBLISHED)

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|--------|------|------|-------|-------|-------|------|------|------|
| 1 | .04 | .17 | .05 | 6.6 | e14 | e42 | 26 | 4.9 | 1.2 | .12 | .08 | .07 |
| 2 | .04 | .17 | .05 | 84 | e14 | e35 | 24 | 4.3 | .61 | .07 | .08 | .07 |
| 3 | .04 | .16 | .10 | 17 | e13 | e31 | 21 | 3.9 | .51 | .07 | .08 | .07 |
| 4 | .10 | .15 | .06 | 4.8 | e13 | e29 | 20 | 3.7 | .56 | .06 | .08 | .07 |
| 5 | .11 | .15 | .06 | 2.9 | e16 | e27 | 18 | 4.0 | .89 | .06 | .08 | .08 |
| 6 | .14 | .10 | .58 | 2.7 | e15 | e25 | 18 | 3.5 | .97 | .06 | .08 | .08 |
| 7 | .15 | .09 | .19 | 68 | e14 | e24 | 17 | 3.1 | .83 | .05 | .08 | .08 |
| 8 | .03 | .09 | .08 | 191 | e445 | e23 | 16 | 3.2 | .59 | .03 | .08 | .08 |
| 9 | .04 | .08 | .07 | 26 | 220 | e22 | 14 | 3.9 | .68 | .03 | .08 | .08 |
| 10 | .04 | .08 | .09 | 178 | 111 | e21 | 13 | 3.3 | .41 | .04 | .08 | .08 |
| 11 | .04 | .09 | .25 | 65 | e38 | e21 | 13 | 2.1 | .29 | .04 | .08 | .08 |
| 12 | .04 | .09 | .10 | 19 | 40 | e20 | 12 | 3.3 | .28 | .04 | .08 | .09 |
| 13 | .05 | .09 | .07 | 343 | 27 | 20 | 11 | 3.9 | .28 | .04 | .08 | .09 |
| 14 | .05 | .11 | .06 | 2540 | 24 | 20 | 11 | 3.4 | .29 | .05 | .08 | .09 |
| 15 | .06 | .11 | .06 | 809 | 22 | 19 | 11 | 3.3 | .20 | .05 | .08 | .09 |
| 16 | .06 | .09 | .06 | 427 | 20 | 20 | 9.9 | 2.6 | .21 | .05 | .09 | .09 |
| 17 | .06 | .07 | .10 | 705 | 22 | 20 | 10 | 2.0 | .26 | .06 | .06 | .09 |
| 18 | .07 | .05 | .11 | 536 | 180 | 20 | 12 | 1.8 | .25 | .06 | .05 | .14 |
| 19 | .07 | .05 | .11 | 86 | 514 | 18 | 11 | 1.7 | .20 | .06 | .05 | .28 |
| 20 | .07 | .05 | .16 | e45 | 228 | 17 | 11 | 1.2 | .15 | .07 | .06 | .30 |
| 21 | .34 | .05 | .31 | e36 | 52 | 16 | 11 | .94 | .11 | .07 | .06 | .30 |
| 22 | .13 | .05 | .54 | e40 | e29 | 16 | 11 | 1.1 | .11 | .07 | .06 | .30 |
| 23 | .11 | .05 | .88 | e33 | e365 | 15 | 10 | .95 | .13 | .07 | .06 | .30 |
| 24 | .11 | .05 | 1.2 | e27 | e100 | 28 | 9.7 | .91 | .29 | .08 | .06 | .30 |
| 25 | .10 | .05 | 1.4 | e23 | e40 | 234 | 9.1 | 1.4 | .32 | .08 | .06 | .30 |
| 26 | .13 | .06 | 1.5 | e21 | 143 | 374 | 8.9 | 1.1 | .18 | .08 | .06 | .30 |
| 27 | .14 | .06 | 1.6 | e19 | 103 | 77 | 8.5 | 1.1 | .12 | .09 | .06 | .33 |
| 28 | .15 | .06 | 2.6 | e17 | e60 | 95 | 8.2 | 1.0 | .09 | .09 | .07 | .33 |
| 29 | .19 | .05 | 8.4 | e16 | --- | 52 | e6.6 | 1.0 | .10 | .09 | .07 | .33 |
| 30 | .34 | .05 | 42 | e15 | --- | 41 | e4.8 | .98 | .11 | .09 | .07 | .33 |
| 31 | .20 | --- | 16 | e15 | --- | 33 | --- | 1.4 | --- | .09 | .07 | --- |
| TOTAL | 3.24 | 2.57 | 78.84 | 6418.0 | 2882 | 1455 | 386.7 | 74.98 | 11.22 | 2.01 | 2.21 | 5.22 |
| MEAN | .10 | .086 | 2.54 | 207 | 103 | 46.9 | 12.9 | 2.42 | .37 | .065 | .071 | .17 |
| MAX | .34 | .17 | 42 | 2540 | 514 | 374 | 26 | 4.9 | 1.2 | .12 | .09 | .33 |
| MIN | .03 | .05 | .05 | 2.7 | 13 | 15 | 4.8 | .91 | .09 | .03 | .05 | .07 |
| AC-FT | 6.4 | 5.1 | 156 | 12730 | 5720 | 2890 | 767 | 149 | 22 | 4.0 | 4.4 | 10 |

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1993, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.72 | 4.05 | 9.82 | 39.8 | 50.2 | 36.4 | 15.0 | 4.21 | 1.81 | .85 | .62 | 1.16 |
| MAX | 20.0 | 34.7 | 62.6 | 401 | 409 | 299 | 113 | 63.6 | 31.9 | 15.0 | 7.26 | 17.9 |
| (WY) | 1977 | 1966 | 1967 | 1969 | 1969 | 1983 | 1983 | 1983 | 1983 | 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 1992 CALENDAR YEAR | | | | FOR 1993 WATER YEAR | | | | WATER YEARS 1959 - 1993 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 2486.70 | | | | 11321.99 | | | | | | | |
| ANNUAL MEAN | 6.79 | | | | 31.0 | | | | 13.6 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 80.8 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .66 | | | |
| HIGHEST DAILY MEAN | 507 | | | | 2540 | | | | 4490 | | | |
| LOWEST DAILY MEAN | .01 | | | | .03 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .01 | | | | .04 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 9900 | | | | 11500 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 14.14 | | | | 15.33 | | | |
| ANNUAL RUNOFF (AC-FT) | 4930 | | | | 22460 | | | | 9860 | | | |
| 10 PERCENT EXCEEDS | 3.8 | | | | 39 | | | | 16 | | | |
| 50 PERCENT EXCEEDS | .08 | | | | .30 | | | | 1.1 | | | |
| 90 PERCENT EXCEEDS | .02 | | | | .06 | | | | .10 | | | |

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|
| 1 | .33 | 1.2 | 2.2 | 2.0 | e2.5 | 3.0 | 1.9 | 1.5 | .73 | .16 | .22 | .17 |
| 2 | .36 | 1.2 | 2.0 | 2.0 | e2.4 | 2.8 | 1.9 | 1.3 | .59 | .12 | .22 | .17 |
| 3 | .89 | 1.2 | 2.0 | 2.0 | e2.4 | 2.8 | 2.0 | 1.2 | .46 | .13 | .23 | .17 |
| 4 | .89 | 1.3 | 2.0 | 2.0 | e2.6 | 2.8 | 1.8 | 1.2 | .42 | .13 | .25 | .18 |
| 5 | .89 | 1.3 | 2.0 | 2.0 | e2.4 | 2.7 | 1.7 | 1.2 | .41 | .14 | .28 | .23 |
| 6 | .93 | 1.3 | 2.0 | 2.0 | e2.3 | 2.8 | 1.9 | 1.3 | .44 | .16 | .28 | .24 |
| 7 | 1.2 | 1.3 | 2.2 | 2.0 | e2.4 | 2.8 | 1.9 | 2.2 | .47 | .15 | .27 | .24 |
| 8 | 1.0 | 1.4 | 2.3 | 2.0 | e2.6 | 2.6 | 1.9 | 2.9 | .44 | .15 | .28 | .23 |
| 9 | .84 | 1.6 | 2.3 | 2.0 | 17 | 2.3 | 2.4 | 2.2 | .43 | .09 | .25 | .25 |
| 10 | .95 | 1.6 | 2.3 | 2.0 | 8.1 | 2.4 | 2.4 | 1.7 | .35 | .06 | .25 | .25 |
| 11 | 1.0 | 2.8 | 4.7 | 2.0 | 5.1 | 2.1 | 2.2 | 1.4 | .33 | .07 | .22 | .29 |
| 12 | 1.0 | 2.5 | 4.5 | 2.0 | 4.1 | 2.1 | 1.9 | 1.2 | .28 | .09 | .20 | .29 |
| 13 | 1.0 | 2.1 | 2.6 | 2.0 | 3.4 | 2.1 | 1.8 | 1.1 | .34 | .10 | .20 | .34 |
| 14 | 1.0 | 1.8 | 2.5 | 2.0 | 2.9 | 2.2 | 1.7 | .99 | .35 | .10 | .19 | .40 |
| 15 | 1.0 | 1.5 | 2.5 | 2.0 | 2.8 | 2.3 | 1.7 | .92 | .33 | .13 | .12 | .41 |
| 16 | 1.1 | 1.5 | 2.3 | 2.0 | 2.6 | 2.3 | 1.7 | .98 | .29 | .13 | .12 | .44 |
| 17 | 1.1 | 1.5 | 2.2 | 2.0 | 4.1 | 2.2 | 1.7 | 1.3 | .31 | .10 | .13 | .41 |
| 18 | 1.0 | 1.6 | 2.0 | 2.0 | 8.4 | 2.2 | 1.6 | 2.6 | .37 | .09 | .16 | .40 |
| 19 | 1.0 | 1.5 | 2.0 | 2.0 | 11 | 2.2 | 1.4 | 2.5 | .43 | .10 | .12 | .47 |
| 20 | 1.1 | 1.6 | 2.0 | 2.0 | 215 | 2.1 | 1.4 | 1.7 | .43 | .10 | .11 | .51 |
| 21 | 1.0 | 1.7 | 2.0 | 2.0 | e20 | 2.0 | 1.4 | 1.4 | .41 | .14 | .11 | .55 |
| 22 | 1.1 | 1.8 | 2.0 | 2.0 | e8.0 | 2.0 | 1.3 | 1.2 | .42 | .15 | .11 | .56 |
| 23 | 1.1 | 1.7 | 2.0 | 4.6 | e6.0 | 2.0 | 1.6 | 1.0 | .39 | .14 | .08 | .57 |
| 24 | 1.1 | 1.6 | 2.0 | 13 | e5.0 | 3.0 | 2.8 | .91 | .28 | .30 | .08 | .65 |
| 25 | 1.0 | 1.9 | 2.0 | 17 | 4.2 | 5.0 | 2.5 | .93 | .21 | .15 | .08 | .74 |
| 26 | 1.0 | 2.0 | 2.0 | 9.2 | 3.8 | 3.9 | 2.6 | .96 | .22 | .15 | .09 | .77 |
| 27 | 1.1 | 2.0 | 2.0 | e5.5 | 3.6 | 2.6 | 2.3 | .99 | .21 | .17 | .09 | .70 |
| 28 | 1.0 | 2.1 | 2.0 | e3.6 | 3.4 | 2.4 | 2.1 | .90 | .20 | .18 | .10 | .63 |
| 29 | 1.1 | 2.7 | 2.0 | e3.0 | --- | 2.2 | 1.6 | .78 | .20 | .20 | .11 | .66 |
| 30 | 1.1 | 2.8 | 2.0 | e2.6 | --- | 2.1 | 1.5 | .76 | .19 | .20 | .13 | .75 |
| 31 | 1.2 | --- | 2.0 | e2.5 | --- | 2.0 | --- | .82 | --- | .20 | .14 | --- |
| TOTAL | 30.38 | 52.1 | 70.6 | 105.0 | 403.1 | 78.0 | 56.6 | 42.04 | 10.93 | 4.28 | 5.22 | 12.67 |
| MEAN | .98 | 1.74 | 2.28 | 3.39 | 14.4 | 2.52 | 1.89 | 1.36 | .36 | .14 | .17 | .42 |
| MAX | 1.2 | 2.8 | 4.7 | 17 | 215 | 5.0 | 2.8 | 2.9 | .73 | .30 | .28 | .77 |
| MIN | .33 | 1.2 | 2.0 | 2.0 | 2.3 | 2.0 | 1.3 | .76 | .19 | .06 | .08 | .17 |
| AC-FT | 60 | 103 | 140 | 208 | 800 | 155 | 112 | 83 | 22 | 8.5 | 10 | 25 |

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.70 | 3.98 | 9.61 | 38.8 | 49.2 | 35.5 | 14.6 | 4.13 | 1.77 | .83 | .61 | 1.13 |
| MAX | 20.0 | 34.7 | 62.6 | 401 | 409 | 299 | 113 | 63.6 | 31.9 | 15.0 | 7.26 | 17.9 |
| (WY) | 1977 | 1966 | 1967 | 1969 | 1969 | 1983 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1959 - 1994

| | | | |
|--------------------------|----------|--------|------|
| ANNUAL TOTAL | 11390.42 | 870.92 | |
| ANNUAL MEAN | 31.2 | 2.39 | 13.3 |
| HIGHEST ANNUAL MEAN | | | 80.8 |
| LOWEST ANNUAL MEAN | | | .66 |
| HIGHEST DAILY MEAN | 2540 | Jan 14 | 4490 |
| LOWEST DAILY MEAN | .03 | Jul 8 | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .04 | Jul 7 | .00 |
| INSTANTANEOUS PEAK FLOW | | | 714 |
| INSTANTANEOUS PEAK STAGE | | | 5.13 |
| ANNUAL RUNOFF (AC-FT) | 22590 | 1730 | 9640 |
| 10 PERCENT EXCEEDS | 37 | 2.8 | 15 |
| 50 PERCENT EXCEEDS | 1.7 | 1.4 | 1.1 |
| 90 PERCENT EXCEEDS | .07 | .15 | .10 |

11151700 SALINAS RIVER AT SOLEDAD, CA

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

DRAINAGE AREA.--3,563 mi².

PERIOD OF RECORD.--October 1968 to September 1978, October 1983 to current year.

CHEMICAL DATA: Water years 1972-75, 1977.

SEDIMENT DATA: Water years 1990, 1992.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 170 ft above sea level, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 106,000 ft³/s, Feb. 25, 1969, gage height, 23.31 ft; maximum gage height, 23.39 ft, Jan. 26, 1969; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 688 ft³/s, Jun. 13, gage height, 10.62 ft; no flow for several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|------|------|------|-------|-------|---------|-------|-------|-------|
| 1 | 168 | 288 | 217 | 135 | 102 | 106 | 9.6 | 3.4 | .00 | 307 | 253 | 255 |
| 2 | 166 | 289 | 210 | 133 | 107 | 96 | 8.9 | 3.4 | .00 | 259 | 256 | 257 |
| 3 | 166 | 287 | 203 | 135 | 117 | 86 | 8.4 | 3.4 | .00 | 239 | 254 | 255 |
| 4 | 181 | 289 | 189 | 135 | 123 | 77 | 8.5 | 3.4 | .00 | 239 | 243 | 262 |
| 5 | 189 | 285 | 184 | 133 | 124 | 74 | 8.0 | 3.4 | .00 | 236 | 235 | 273 |
| 6 | 186 | 282 | 181 | 131 | 129 | 70 | 7.5 | 2.7 | .00 | 259 | 230 | 288 |
| 7 | 194 | 273 | 174 | 129 | 145 | 65 | 7.1 | 2.5 | .00 | 335 | 227 | 293 |
| 8 | 201 | 282 | 160 | 129 | 151 | 63 | 7.1 | 2.8 | .00 | 353 | 231 | 289 |
| 9 | 206 | 284 | 140 | 129 | 146 | 59 | 7.1 | 3.1 | 24 | 351 | 233 | 286 |
| 10 | 213 | 274 | 125 | 133 | 146 | 54 | 7.1 | 2.8 | 243 | 350 | 231 | 285 |
| 11 | 234 | 288 | 144 | 138 | 122 | 48 | 7.0 | 2.4 | 443 | 365 | 226 | 287 |
| 12 | 240 | 292 | 160 | 135 | 101 | 42 | 6.5 | 2.3 | 554 | 367 | 222 | 296 |
| 13 | 237 | 288 | 161 | 131 | 91 | 38 | 6.0 | 1.9 | 655 | 333 | 206 | 307 |
| 14 | 241 | 280 | 163 | 137 | 84 | 34 | 5.8 | e1.6 | 577 | 313 | 206 | 305 |
| 15 | 241 | 271 | 169 | 138 | 80 | 33 | 5.8 | e1.4 | 448 | 312 | 218 | 292 |
| 16 | 239 | 267 | 167 | 138 | 73 | 32 | 5.1 | e1.3 | 411 | 310 | 220 | 285 |
| 17 | 249 | 264 | 158 | 139 | 79 | 28 | 5.1 | e1.2 | 417 | 268 | 216 | 283 |
| 18 | 262 | 254 | 152 | 140 | 79 | 26 | 5.3 | 1.4 | 408 | 252 | 223 | 283 |
| 19 | 267 | 249 | 142 | 140 | 74 | 23 | 5.0 | 1.7 | 397 | 244 | 226 | 289 |
| 20 | 262 | 247 | 134 | 139 | 95 | 20 | 4.4 | 1.6 | 373 | 232 | 226 | 292 |
| 21 | 258 | 243 | 132 | 129 | 186 | 18 | 4.3 | 1.3 | 369 | 221 | 228 | 283 |
| 22 | 260 | 240 | 133 | 129 | 229 | 16 | 4.0 | 1.2 | 356 | 222 | 243 | 277 |
| 23 | 264 | 236 | 133 | 140 | 273 | 16 | 3.4 | .98 | 350 | 233 | 240 | 285 |
| 24 | 265 | 225 | 127 | 150 | 218 | 15 | 3.9 | .55 | 345 | 237 | 243 | 289 |
| 25 | 276 | 228 | 127 | 165 | 180 | 16 | 4.5 | .21 | 340 | 252 | 241 | 284 |
| 26 | 272 | 230 | 128 | 160 | 152 | 15 | 4.7 | .00 | 344 | 251 | 237 | 290 |
| 27 | 269 | 226 | 130 | 154 | 133 | 13 | 4.7 | .00 | 351 | 245 | 237 | 290 |
| 28 | 271 | 226 | 129 | 151 | 118 | 13 | 4.4 | .00 | 353 | 240 | 238 | 289 |
| 29 | 279 | 225 | 128 | 140 | --- | 12 | 4.1 | .00 | 357 | 235 | 244 | 291 |
| 30 | 272 | 224 | 129 | 125 | --- | 11 | 3.7 | .00 | 359 | 232 | 256 | 293 |
| 31 | 271 | --- | 133 | 112 | --- | 10 | --- | .00 | --- | 240 | 254 | --- |
| TOTAL | 7299 | 7836 | 4762 | 4252 | 3657 | 1229 | 177.0 | 51.94 | 8474.00 | 8532 | 7243 | 8533 |
| MEAN | 235 | 261 | 154 | 137 | 131 | 39.6 | 5.90 | 1.68 | 282 | 275 | 234 | 284 |
| MAX | 279 | 292 | 217 | 165 | 273 | 106 | 9.6 | 3.4 | 655 | 367 | 256 | 307 |
| MIN | 166 | 224 | 125 | 112 | 73 | 10 | 3.4 | .00 | .00 | 221 | 206 | 255 |
| AC-FT | 14480 | 15540 | 9450 | 8430 | 7250 | 2440 | 351 | 103 | 16810 | 16920 | 14370 | 16930 |

e Estimated.

SALINAS RIVER BASIN

11151700 SALINAS RIVER AT SOLEDAD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 174 | 114 | 138 | 718 | 1331 | 882 | 264 | 129 | 139 | 143 | 160 | 190 |
| MAX | 488 | 336 | 876 | 5099 | 9295 | 5428 | 1834 | 661 | 456 | 390 | 327 | 478 |
| (WY) | 1970 | 1970 | 1984 | 1969 | 1969 | 1989 | 1969 | 1969 | 1969 | 1969 | 1969 | 1969 |
| MIN | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| (WY) | 1990 | 1990 | 1990 | 1990 | 1990 | 1990 | 1990 | 1990 | 1990 | 1990 | 1990 | 1990 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1969 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 269171.20 | | | | 62045.94 | | | | | | | |
| ANNUAL MEAN | 737 | | | | 170 | | | | 360 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 1981 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .000 | | | |
| HIGHEST DAILY MEAN | 14400 | | | | 655 | | | | 68300 | | | |
| LOWEST DAILY MEAN | .00 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 17 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 688 | | | | 106000 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 10.62 | | | | 23.39 | | | |
| ANNUAL RUNOFF (AC-FT) | 533900 | | | | 123100 | | | | 260700 | | | |
| 10 PERCENT EXCEEDS | 1780 | | | | 292 | | | | 429 | | | |
| 50 PERCENT EXCEEDS | 244 | | | | 174 | | | | 122 | | | |
| 90 PERCENT EXCEEDS | 128 | | | | 3.4 | | | | .00 | | | |

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 good except for daily discharges from May 8 to July 31, which are poor. No regulation or large diversion upstream from station. Low flows affected by upstream gravel mining 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; no flow at times during several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0100 | *3,630 | *6.35 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|------|-------|------|------|------|-------|------|------|------|
| 1 | 3.8 | 6.9 | 38 | 23 | 39 | 152 | 40 | 33 | 13 | 1.6 | .00 | .00 |
| 2 | 3.3 | 7.5 | 26 | 23 | 37 | 141 | 39 | 31 | 12 | e1.4 | .00 | .00 |
| 3 | 3.7 | 7.6 | 22 | 23 | 35 | 129 | 37 | 28 | 11 | e1.3 | .00 | .00 |
| 4 | 3.6 | 7.7 | 21 | 22 | 35 | 118 | 37 | 27 | 10 | e1.1 | .00 | .00 |
| 5 | 4.2 | 8.0 | 20 | 22 | 35 | 108 | 35 | 26 | 9.4 | e1.0 | .00 | .00 |
| 6 | 3.8 | 8.7 | 20 | 22 | 33 | 103 | 34 | 26 | 8.8 | e.85 | .00 | .00 |
| 7 | 5.5 | 8.7 | 20 | 21 | 671 | 97 | 33 | 31 | 9.1 | e.70 | .00 | .00 |
| 8 | 6.5 | 8.7 | 20 | 21 | 672 | 90 | 33 | 47 | 8.7 | e.55 | .00 | .00 |
| 9 | 6.2 | 9.0 | 20 | 21 | 271 | 83 | 35 | 37 | 7.4 | e.35 | .00 | .00 |
| 10 | 5.6 | 9.7 | 22 | 20 | 157 | 78 | 40 | 32 | 6.3 | e.20 | .00 | .00 |
| 11 | 5.7 | 15 | 38 | 20 | 111 | 73 | 35 | 27 | 6.0 | e.10 | .00 | .00 |
| 12 | 6.5 | 25 | 191 | 20 | 87 | 70 | 32 | 24 | 5.8 | e.00 | .00 | .00 |
| 13 | 7.1 | 19 | 64 | 20 | 74 | 67 | 31 | 23 | 5.3 | e.00 | .00 | .00 |
| 14 | 8.9 | 16 | 46 | 20 | 67 | 63 | 30 | 21 | 4.8 | e.00 | .00 | .00 |
| 15 | 8.8 | 15 | 73 | 20 | 60 | 58 | 31 | 19 | 4.6 | e.00 | .00 | .00 |
| 16 | 8.6 | 13 | 51 | 19 | 55 | 57 | 29 | 18 | 4.2 | e.00 | .00 | .00 |
| 17 | 10 | 13 | 40 | 19 | 610 | 56 | 29 | 19 | 4.1 | e.00 | .00 | .00 |
| 18 | 9.5 | 13 | 36 | 19 | 569 | 55 | 28 | 29 | 4.4 | e.00 | .00 | .00 |
| 19 | 9.7 | 13 | 34 | 19 | 569 | 53 | 26 | 27 | 4.4 | e.00 | .00 | .00 |
| 20 | 9.6 | 14 | 32 | 19 | 1840 | 51 | 26 | 24 | 3.8 | e.00 | .00 | .00 |
| 21 | 9.2 | 14 | 29 | 19 | 648 | 48 | 25 | 22 | 3.5 | e.00 | .00 | .00 |
| 22 | 8.8 | 14 | 29 | 19 | 427 | 48 | 24 | 21 | 3.1 | e.00 | .00 | .00 |
| 23 | 8.4 | 14 | 28 | 26 | 320 | 47 | 25 | 19 | 3.0 | e.00 | .00 | .00 |
| 24 | 7.4 | 15 | 27 | 100 | 262 | 52 | 36 | 18 | 2.3 | e.00 | .00 | .00 |
| 25 | 7.7 | 16 | 27 | 177 | 226 | 89 | 41 | 16 | 2.2 | e.00 | .00 | .00 |
| 26 | 7.1 | 16 | 27 | 91 | 199 | 64 | 69 | 16 | 2.0 | e.00 | .00 | .00 |
| 27 | 7.0 | 16 | 26 | 73 | 182 | 55 | 69 | 15 | 1.6 | e.00 | .00 | .00 |
| 28 | 7.0 | 17 | 24 | 58 | 167 | 50 | 49 | 15 | 1.6 | e.00 | .00 | .00 |
| 29 | 7.3 | 19 | 24 | 49 | --- | 46 | 41 | 15 | 1.7 | e.00 | .00 | .00 |
| 30 | 7.3 | 52 | 24 | 44 | --- | 44 | 36 | 15 | 1.6 | e.00 | .00 | .00 |
| 31 | 7.1 | --- | 23 | 41 | --- | 42 | --- | 14 | --- | e.00 | .00 | --- |
| TOTAL | 214.9 | 431.5 | 1122 | 1110 | 8458 | 2288 | 1075 | 735 | 165.7 | 9.15 | 0.00 | 0.00 |
| MEAN | 6.93 | 14.4 | 36.2 | 35.8 | 302 | 73.8 | 35.8 | 23.7 | 5.52 | .30 | .000 | .000 |
| MAX | 10 | 52 | 191 | 177 | 1840 | 152 | 69 | 47 | 13 | 1.6 | .00 | .00 |
| MIN | 3.3 | 6.9 | 20 | 19 | 33 | 42 | 24 | 14 | 1.6 | .00 | .00 | .00 |
| AC-FT | 426 | 856 | 2230 | 2200 | 16780 | 4540 | 2130 | 1460 | 329 | 18 | .00 | .00 |

e Estimated.

SALINAS RIVER BASIN

11152000 ARROYO SECO NEAR SOLEDAD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 9.27 | 54.6 | 167 | 376 | 565 | 440 | 252 | 91.2 | 37.9 | 14.0 | 5.63 | 4.65 |
| MAX | 75.5 | 650 | 1161 | 2425 | 2611 | 2344 | 2043 | 644 | 185 | 90.8 | 54.5 | 38.8 |
| (WY) | 1905 | 1927 | 1956 | 1914 | 1938 | 1983 | 1958 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1902 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 105666.8 | | | | 15609.25 | | | | | | | |
| ANNUAL MEAN | 289 | | | | 42.8 | | | | 166 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 709 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 6.97 | | | |
| HIGHEST DAILY MEAN | 7740 | | | | 1840 | | | | 16500 | | | |
| LOWEST DAILY MEAN | 2.3 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 2.4 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 3630 | | | | 28300 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 6.35 | | | | 16.40 | | | |
| ANNUAL RUNOFF (AC-FT) | 209600 | | | | 30960 | | | | 120300 | | | |
| 10 PERCENT EXCEEDS | 776 | | | | 73 | | | | 350 | | | |
| 50 PERCENT EXCEEDS | 34 | | | | 16 | | | | 27 | | | |
| 90 PERCENT EXCEEDS | 3.7 | | | | .00 | | | | .00 | | | |

SALINAS RIVER BASIN

83

11152300 SALINAS RIVER NEAR CHUALAR, CA
(National Stream Quality Accounting Network Station)

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 except for estimated daily discharges, which are poor. 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, 53,000 ft³/s, Mar. 3, 1983, gage height, 14.92 ft, from rating curve extended above 21,000 ft³/s; no flow at times during most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,120 ft³/s, Feb. 20, gage height, 8.08 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|---------|------|------|------|--------|--------|-------|-------|---------|------|------|------|
| 1 | .00 | 80 | 69 | 25 | 19 | 49 | .00 | .00 | .00 | 123 | 42 | 67 |
| 2 | .00 | 88 | 65 | 25 | 11 | 39 | .00 | .00 | .00 | 72 | 56 | 66 |
| 3 | .00 | 89 | 62 | 28 | 19 | 30 | .00 | .00 | .00 | 47 | 58 | 65 |
| 4 | .00 | 90 | 53 | 30 | 26 | 22 | .00 | .00 | .00 | 40 | 50 | 69 |
| 5 | 2.0 | 92 | 46 | 30 | 30 | 17 | .00 | .00 | .00 | 41 | 43 | 78 |
| 6 | 6.5 | 81 | 46 | 25 | 36 | 14 | .00 | .00 | .00 | 42 | 41 | 91 |
| 7 | 8.0 | 78 | 46 | 26 | 58 | 10 | .00 | .00 | .00 | 61 | 37 | 95 |
| 8 | 11 | 84 | 42 | 28 | 338 | 5.7 | .00 | .00 | .00 | 110 | 42 | 94 |
| 9 | 16 | 88 | 33 | 32 | 363 | e2.5 | .00 | .00 | .00 | 133 | 48 | 90 |
| 10 | 20 | 92 | 19 | 33 | 150 | e1.0 | .00 | .00 | .00 | 141 | 46 | 94 |
| 11 | 27 | 107 | 30 | 33 | 81 | e.00 | .00 | .00 | .00 | 155 | 42 | 96 |
| 12 | 35 | 107 | e56 | 31 | 39 | e.00 | .00 | .00 | .00 | 178 | 39 | 104 |
| 13 | 40 | 110 | e78 | 30 | 21 | e.00 | .00 | .00 | .00 | 190 | e36 | 112 |
| 14 | 42 | 99 | e70 | 31 | 14 | e.00 | .00 | .00 | .00 | 151 | e32 | 118 |
| 15 | 47 | 91 | e71 | 33 | 9.0 | e.00 | .00 | .00 | 44 | 129 | e29 | 105 |
| 16 | 45 | 88 | e64 | 32 | 6.1 | e.00 | .00 | .00 | 66 | 124 | 28 | 90 |
| 17 | 53 | 88 | e63 | 33 | 9.0 | e.00 | .00 | .00 | 83 | 112 | 30 | 89 |
| 18 | 60 | 90 | 61 | 34 | 228 | e.00 | .00 | .00 | 107 | 76 | 31 | 88 |
| 19 | 67 | 86 | 49 | 34 | 257 | e.00 | .00 | .00 | 128 | 62 | 36 | 101 |
| 20 | 69 | 88 | 41 | 31 | 930 | e.00 | .00 | .00 | 139 | 52 | 37 | 118 |
| 21 | 67 | 88 | e36 | 26 | 902 | e.00 | .00 | .00 | 133 | 45 | 37 | 111 |
| 22 | 68 | 88 | e33 | 24 | 454 | e.00 | .00 | .00 | 133 | 40 | 45 | 106 |
| 23 | 69 | 85 | e32 | 39 | 409 | e.00 | .00 | .00 | 131 | 38 | 53 | 113 |
| 24 | 70 | 76 | 29 | 56 | 277 | e.00 | .00 | .00 | 126 | 42 | 55 | 121 |
| 25 | 76 | 79 | 31 | 77 | 181 | e.00 | .00 | .00 | 120 | 50 | 57 | 118 |
| 26 | 82 | 77 | 39 | 76 | 122 | e.00 | .00 | .00 | 119 | 57 | 57 | 124 |
| 27 | 76 | 76 | 40 | 68 | 83 | e.00 | .00 | .00 | 123 | 54 | 54 | 127 |
| 28 | 75 | 76 | 32 | 60 | 62 | e.00 | .00 | .00 | 125 | 48 | 52 | 119 |
| 29 | 78 | 75 | 26 | 55 | --- | e.00 | .00 | .00 | 123 | 44 | 56 | 120 |
| 30 | 75 | 76 | 28 | 47 | --- | e.00 | .00 | .00 | 128 | 37 | 65 | 126 |
| 31 | 72 | --- | 28 | 32 | --- | .00 | --- | .00 | --- | 34 | 67 | --- |
| TOTAL | 1356.50 | 2612 | 1418 | 1164 | 5134.1 | 190.20 | 0.00 | 0.00 | 1828.00 | 2528 | 1401 | 3015 |
| MEAN | 43.8 | 87.1 | 45.7 | 37.5 | 183 | 6.14 | .0000 | .0000 | 60.9 | 81.5 | 45.2 | 100 |
| MAX | 82 | 110 | 78 | 77 | 930 | 49 | .00 | .00 | 139 | 190 | 67 | 127 |
| MIN | .00 | 75 | 19 | 24 | 6.1 | .00 | .00 | .00 | .00 | 34 | 28 | 65 |
| AC-FT | 2690 | 5180 | 2810 | 2310 | 10180 | 377 | .00 | .00 | 3630 | 5010 | 2780 | 5980 |

e Estimated.

SALINAS RIVER BASIN

11152300 SALINAS RIVER NEAR CHUALAR, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| MEAN | 57.8 | 72.9 | 304 | 884 | 1615 | 1416 | 430 | 188 | 66.0 | 55.4 | 59.5 | 80.9 |
| MAX | 286 | 474 | 2757 | 5000 | 7804 | 10690 | 2793 | 2418 | 767 | 462 | 381 | 425 |
| (WY) | 1983 | 1983 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1977 - 1994

| | | | |
|--------------------------|-----------|----------|--------|
| ANNUAL TOTAL | 228367.16 | 20646.80 | |
| ANNUAL MEAN | 626 | 56.6 | 430 |
| HIGHEST ANNUAL MEAN | | | 2796 |
| LOWEST ANNUAL MEAN | | | .000 |
| HIGHEST DAILY MEAN | 12000 | Jan 16 | 930 |
| LOWEST DAILY MEAN | .00 | Jan 1 | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | May 4 | .00 |
| INSTANTANEOUS PEAK FLOW | | | 2120 |
| INSTANTANEOUS PEAK STAGE | | | 8.08 |
| ANNUAL RUNOFF (AC-FT) | 453000 | 40950 | 311300 |
| 10 PERCENT EXCEEDS | 1640 | 120 | 642 |
| 50 PERCENT EXCEEDS | 57 | 40 | 36 |
| 90 PERCENT EXCEEDS | .00 | .00 | .00 |

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.

BIOLOGICAL DATA: Water years 1977-81.

SPECIFIC CONDUCTANCE: Water years 1977-81.

WATER TEMPERATURE: Water years 1967-69, 1977-81.

SEDIMENT DATA: December 1966 to September 1969, January 1977 to September 1994 (discontinued).

PERIOD OF DAILY RECORD.--

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 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH WATER WHOLE FIELD (STAND- ARD UNITS) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (NTU) | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, (PER- CENT SATUR- ATION) | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP- TOCOCOCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD- NESS TOTAL (MG/L AS CACO3) |
|-------|------|--|---|---|--------------------------------------|------------------------------|--|-------------------------------------|--|--|---|---|
| NOV | | | | | | | | | | | | |
| 16... | 1110 | 90 | 411 | 8.3 | 8.5 | 8.4 | 774 | 12.6 | 106 | K13 | K40 | 180 |
| JAN | | | | | | | | | | | | |
| 10... | 1205 | 33 | 562 | 8.4 | 13.0 | 5.3 | 766 | 13.2 | 125 | K4 | K19 | 230 |
| JUN | | | | | | | | | | | | |
| 16... | 1245 | 69 | 421 | 8.3 | 19.5 | 9.7 | 764 | 9.5 | 103 | K38 | 210 | 180 |
| JUL | | | | | | | | | | | | |
| 20... | 1315 | 53 | 395 | 8.5 | 19.0 | 9.6 | 762 | 10.1 | 109 | 42 | K28 | 170 |
| AUG | | | | | | | | | | | | |
| 15... | 1145 | 26 | 407 | 8.6 | 24.0 | 6.0 | 760 | 10.2 | 122 | 40 | 54 | 170 |
| SEP | | | | | | | | | | | | |
| 06... | 1045 | 91 | 417 | 8.3 | 19.0 | 29 | 764 | 9.7 | 104 | 89 | 140 | 170 |

| DATE | HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | SODIUM PERCENT | SODIUM AD- SORP- TION RATIO | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 | CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 | ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) |
|-------|---|--|--|--|-------------------|---|---|---|--|---|---|---|
| NOV | | | | | | | | | | | | |
| 16... | 46 | 43 | 17 | 19 | 19 | 0.6 | 1.4 | 161 | 0 | 132 | 62 | 15 |
| JAN | | | | | | | | | | | | |
| 10... | 66 | 54 | 22 | 33 | 24 | 1 | 1.7 | 185 | 5 | 160 | 99 | 27 |
| JUN | | | | | | | | | | | | |
| 16... | 44 | 47 | 16 | 16 | 16 | 0.5 | 2.3 | 170 | 0 | 139 | 63 | 12 |
| JUL | | | | | | | | | | | | |
| 20... | 37 | 44 | 15 | 15 | 16 | 0.5 | 1.9 | 154 | 5 | 135 | 55 | 12 |
| AUG | | | | | | | | | | | | |
| 15... | 30 | 42 | 16 | 16 | 17 | 0.5 | 2.1 | 157 | 7 | 141 | 57 | 12 |
| SEP | | | | | | | | | | | | |
| 06... | 38 | 43 | 16 | 17 | 17 | 0.6 | 2.2 | 163 | 1 | 135 | 59 | 13 |

| DATE | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, DIS- SOLVED (TONS PER AC-FT) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHORUS TOTAL (MG/L AS P) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) |
|-------|--|---|--|---|---|---|---|---|--|--|---|---|
| NOV | | | | | | | | | | | | |
| 16... | 0.20 | 16 | 258 | 255 | 0.35 | <0.010 | 0.410 | 0.020 | 0.20 | 0.090 | 0.040 | 0.040 |
| JAN | | | | | | | | | | | | |
| 10... | 0.20 | 17 | 358 | 355 | 0.49 | <0.010 | 1.10 | 0.020 | 0.20 | 0.080 | 0.050 | 0.040 |
| JUN | | | | | | | | | | | | |
| 16... | 0.20 | 11 | 261 | 251 | 0.35 | <0.010 | <0.050 | 0.010 | 0.50 | 0.180 | 0.110 | 0.090 |
| JUL | | | | | | | | | | | | |
| 20... | 0.20 | 12 | 252 | 236 | 0.34 | <0.010 | <0.050 | 0.010 | 0.40 | 0.170 | 0.100 | 0.100 |
| AUG | | | | | | | | | | | | |
| 15... | 0.30 | 14 | 248 | 244 | 0.34 | <0.010 | 0.079 | 0.020 | 0.90 | 0.300 | 0.090 | 0.080 |
| SEP | | | | | | | | | | | | |
| 06... | 0.20 | 13 | 252 | 247 | 0.34 | <0.010 | 0.430 | 0.020 | 0.50 | 0.280 | 0.140 | 0.130 |

SALINAS RIVER BASIN

11152300 SALINAS RIVER NEAR CHUALAR CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | BARIUM, DIS- SOLVED (UG/L AS BA) | COBALT, DIS- SOLVED (UG/L AS CO) | IRON, DIS- SOLVED (UG/L AS FE) | LITHIUM DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) |
|--------------|---|--|--|--|--|--|---|--|---|--|--|--|
| NOV 16... | <10 | 33 | <3 | 7 | 7 | 1 | <10 | <1 | <1 | <1.0 | 260 | <6 |
| JAN 10... | <10 | 48 | <3 | <3 | 14 | <1 | <10 | 1 | 1 | <1.0 | 360 | <6 |
| JUN 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL 20... | <10 | 33 | <3 | 17 | 18 | 1 | <10 | 2 | <1 | <1.0 | 230 | <6 |
| AUG 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP 06... | 10 | 35 | <3 | 26 | 8 | 2 | 10 | 1 | <1 | <1.0 | 250 | <6 |

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|--------------|------|--|--------------------------------------|---|---|---|
| NOV 16... | 1150 | 88 | 9.5 | 22 | 5.2 | 97 |
| JAN 10... | 1145 | 33 | 10.0 | 18 | 1.6 | 98 |
| JUN 16... | 1220 | 69 | 19.5 | 36 | 6.7 | 89 |
| JUL 20... | 1220 | 53 | 19.0 | 36 | 5.2 | 98 |
| AUG 15... | 1215 | 26 | 24.0 | 102 | 7.2 | 90 |
| SEP 06... | 1155 | 93 | 19.0 | 68 | 17 | 94 |

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, 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" 1900-01.

CHEMICAL DATA: Water years 1952-54, 1958-70, 1972-79. Published incorrectly as station 11152300 "near Chualar" in 1967.

BIOLOGICAL DATA: Water years 1975-77.

SPECIFIC CONDUCTANCE: Water years 1975 to January 1977, daily.

WATER TEMPERATURE: Water years 1967-79, daily. Published incorrectly as station 11152300 "near Chualar" in 1967-69.

SEDIMENT DATA: Water years 1950-51; 1967-79, daily; 1986, monthly; August 1990. Published incorrectly as station 11152300 "near Chualar" in 1967-69.

TURBIDITY: Water year 1973.

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

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

REMARKS.--No estimated daily discharges. Records poor. 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, 83,100 ft³/s, Feb. 26, 1969, gage height, 26.51 ft, site and datum then in use; maximum gage height, 26.85 ft, Jan. 16, 1952, site and datum then in use, from floodmarks; no flow at times in 1929-40, many days in 1990-94.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,070 ft³/s, Feb. 21, gage height, 8.91 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|---------|--------|-------|-------|-------|-------|-------|-------|
| 1 | .00 | .00 | .00 | .00 | .00 | 35 | .00 | .00 | .00 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | .00 | .00 | 25 | .00 | .00 | .00 | .00 | .00 | .00 |
| 3 | .00 | .00 | .00 | .00 | .00 | 15 | .00 | .00 | .00 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | .00 | .00 | 7.7 | .00 | .00 | .00 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | .00 | .00 | 6.1 | .00 | .00 | .00 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | .00 | .00 | 4.1 | .00 | .00 | .00 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | .00 | .00 | 3.3 | .00 | .00 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .00 | .00 | .00 | 2.8 | .00 | .00 | .00 | .00 | .00 | .00 |
| 9 | .00 | .00 | .00 | .00 | .00 | 2.3 | .00 | .00 | .00 | .00 | .00 | .00 |
| 10 | .00 | .00 | .00 | .00 | 45 | 1.9 | .00 | .00 | .00 | .00 | .00 | .00 |
| 11 | .00 | .00 | .00 | .00 | 35 | 1.5 | .00 | .00 | .00 | .00 | .00 | .00 |
| 12 | .00 | .00 | .00 | .00 | 9.9 | 1.1 | .00 | .00 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | .00 | .00 | 1.1 | .64 | .00 | .00 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | .00 | .00 | .00 | .33 | .00 | .00 | .00 | .00 | .00 | .00 |
| 15 | .00 | .00 | .00 | .00 | .00 | .01 | .00 | .00 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 18 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | .00 | .00 | 82 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | .00 | .00 | 301 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 21 | .00 | .00 | .00 | .00 | 865 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | .00 | .00 | 482 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | .00 | .00 | 320 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .00 | .00 | 263 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | .00 | .00 | 172 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | .00 | .00 | 116 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | .00 | .00 | 79 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 28 | .00 | .00 | .00 | .00 | 50 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 29 | .00 | .00 | .00 | .00 | --- | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 30 | .00 | .00 | .00 | .00 | --- | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | .00 | .00 | --- | .00 | --- | .00 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 2821.00 | 106.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MEAN | .0000 | .0000 | .0000 | .0000 | 101 | 3.44 | .0000 | .0000 | .0000 | .0000 | .0000 | .0000 |
| MAX | .00 | .00 | .00 | .00 | 865 | 35 | .00 | .00 | .00 | .00 | .00 | .00 |
| MIN | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | .00 | .00 | .00 | 5600 | 212 | .00 | .00 | .00 | .00 | .00 | .00 |

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 |
| LOWEST ANNUAL MEAN | 2.66 |
| HIGHEST DAILY MEAN | 69900 |
| LOWEST DAILY MEAN | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .00 |
| INSTANTANEOUS PEAK FLOW | 75000 |
| INSTANTANEOUS PEAK STAGE | 25.00 |
| 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 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| MEAN | 27.1 | 33.9 | 219 | 841 | 1292 | 1146 | 492 | 117 | 33.6 | 19.6 | 21.2 | 32.2 |
| MAX | 402 | 389 | 2511 | 5959 | 9862 | 12640 | 6714 | 2839 | 767 | 403 | 354 | 394 |
| (WY) | 1970 | 1983 | 1983 | 1969 | 1969 | 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1942 - 1994

| | | | |
|--------------------------|-----------|---------|--------|
| ANNUAL TOTAL | 198277.33 | 2927.78 | |
| ANNUAL MEAN | 543 | 8.02 | 352 |
| HIGHEST ANNUAL MEAN | | | 2997 |
| LOWEST ANNUAL MEAN | | | .81 |
| HIGHEST DAILY MEAN | 10600 | Feb 25 | 64800 |
| LOWEST DAILY MEAN | .00 | Jan 1 | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jan 1 | .00 |
| INSTANTANEOUS PEAK FLOW | | | 1070 |
| INSTANTANEOUS PEAK STAGE | | | 8.91 |
| ANNUAL RUNOFF (AC-FT) | 393300 | 5810 | 254700 |
| 10 PERCENT EXCEEDS | 1520 | .00 | 523 |
| 50 PERCENT EXCEEDS | .00 | .00 | 3.1 |
| 90 PERCENT EXCEEDS | .00 | .00 | .65 |

SALINAS RIVER BASIN

89

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 current year.

SEDIMENT DATA: Water years 1986, 1990.

GAGE.--Water-stage recorder, concrete weir control since Oct. 1, 1992, and crest-stage gage. 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.--No estimated daily discharges. Records good. No regulation or diversion upstream from station except for small stock ponds. Low flow at times affected by irrigation runoff from upstream golf course. See schematic diagram of Salinas River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 630 ft³/s, Mar. 2, 1983, gage height, 6.10 ft, site and datum then in use, from rating curve extended above 93 ft³/s on basis of slope-area measurement at gage height 6.07 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|---------|------|-----------------------------------|---------------------|
| Jan. 24 | 0930 | 21 | 1.75 | Feb. 19 | 2015 | *59 | *2.29 |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-------|-------|------|------|------|------|------|------|------|
| 1 | .03 | .05 | .11 | .15 | .18 | .21 | .15 | .11 | .05 | .01 | .01 | .00 |
| 2 | .03 | .04 | .11 | .14 | .18 | .18 | .15 | .12 | .05 | .00 | .01 | .00 |
| 3 | .04 | .05 | .12 | .13 | .18 | .15 | .15 | .09 | .05 | .00 | .00 | .00 |
| 4 | .04 | .04 | .13 | .15 | .20 | .14 | .15 | .09 | .05 | .00 | .00 | .00 |
| 5 | .05 | .05 | .13 | .15 | .21 | 1.3 | .15 | .09 | .07 | .00 | .00 | .00 |
| 6 | .07 | .04 | .13 | .13 | .21 | .31 | .13 | .10 | .05 | .06 | .00 | .00 |
| 7 | .06 | .04 | .13 | .13 | 1.4 | .23 | .19 | .88 | .04 | .03 | .00 | .00 |
| 8 | .06 | .06 | .14 | .13 | 1.6 | .18 | .17 | .16 | .04 | .02 | .00 | .00 |
| 9 | .04 | .07 | .13 | .13 | .25 | .18 | .18 | .12 | .04 | .01 | .00 | .00 |
| 10 | .04 | .30 | .13 | .13 | .35 | .19 | .14 | .11 | .04 | .00 | .00 | .00 |
| 11 | .09 | .72 | 2.5 | .13 | .26 | .19 | .11 | .10 | .03 | .00 | .00 | .00 |
| 12 | .05 | .91 | .37 | .13 | .25 | .18 | .11 | .09 | .04 | .00 | .00 | .00 |
| 13 | .06 | .16 | .21 | .13 | .25 | .18 | .12 | .08 | .06 | .00 | .00 | .00 |
| 14 | .05 | .11 | 1.1 | .13 | .23 | .18 | .15 | .07 | .04 | .00 | .00 | .00 |
| 15 | .12 | .09 | .25 | .13 | .19 | .18 | .13 | .07 | .05 | .01 | .00 | .00 |
| 16 | .05 | .09 | .20 | .13 | .17 | .18 | .13 | .08 | .04 | .01 | .00 | .00 |
| 17 | .05 | .09 | .18 | .13 | 1.8 | .18 | .12 | .10 | .05 | .01 | .00 | .00 |
| 18 | .05 | .09 | .18 | .14 | 2.1 | .19 | .10 | .12 | .04 | .01 | .00 | .00 |
| 19 | .06 | .09 | .16 | .15 | 14 | .17 | .10 | .10 | .03 | .01 | .00 | .00 |
| 20 | .05 | .09 | .15 | .15 | 22 | .15 | .11 | .12 | .03 | .01 | .00 | .00 |
| 21 | .05 | .09 | .15 | .15 | 6.1 | .15 | .11 | .08 | .03 | .01 | .00 | .00 |
| 22 | .05 | .09 | .15 | .16 | 2.6 | .16 | .13 | .07 | .03 | .01 | .00 | .00 |
| 23 | .04 | .09 | .15 | .60 | .65 | .15 | .83 | .07 | .03 | .01 | .00 | .00 |
| 24 | .04 | .13 | .15 | 3.0 | .35 | .23 | 1.1 | .07 | .02 | .01 | .00 | .00 |
| 25 | .04 | .12 | .15 | 2.4 | .21 | .16 | .18 | .07 | .02 | .01 | .00 | .00 |
| 26 | .03 | .11 | .15 | .82 | .46 | .15 | .24 | .07 | .02 | .01 | .00 | .00 |
| 27 | .03 | .11 | .15 | 1.0 | .29 | .15 | .13 | .07 | .01 | .01 | .00 | .00 |
| 28 | .03 | .11 | .15 | .26 | .22 | .15 | .12 | .07 | .01 | .01 | .00 | .00 |
| 29 | .03 | .13 | .15 | .21 | --- | .13 | .12 | .06 | .02 | .01 | .00 | .00 |
| 30 | .03 | .12 | .15 | .21 | --- | .14 | .11 | .05 | .02 | .01 | .00 | .00 |
| 31 | .05 | --- | .15 | .21 | --- | .15 | --- | .05 | --- | .01 | .00 | --- |
| TOTAL | 1.51 | 4.28 | 8.21 | 11.74 | 56.89 | 6.57 | 5.81 | 3.53 | 1.10 | 0.30 | 0.02 | 0.00 |
| MEAN | .049 | .14 | .26 | .38 | 2.03 | .21 | .19 | .11 | .037 | .010 | .001 | .000 |
| MAX | .12 | .91 | 2.5 | 3.0 | .22 | 1.3 | 1.1 | .88 | .07 | .06 | .01 | .00 |
| MIN | .03 | .04 | .11 | .13 | .17 | .13 | .10 | .05 | .01 | .00 | .00 | .00 |
| AC-FT | 3.0 | 8.5 | 16 | 23 | 113 | 13 | 12 | 7.0 | 2.2 | .6 | .04 | .00 |

SALINAS RIVER BASIN

11152540 EL TORO CREEK NEAR SPRECKELS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .11 | .24 | .66 | 3.90 | 7.18 | 5.85 | 2.23 | .34 | .11 | .070 | .046 | .045 |
| MAX | 1.52 | 2.23 | 7.08 | 27.4 | 77.8 | 62.2 | 14.8 | 5.18 | .63 | .49 | .28 | .22 |
| (WY) | 1980 | 1983 | 1983 | 1969 | 1969 | 1983 | 1982 | 1983 | 1983 | 1969 | 1983 | 1983 |
| 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 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1962 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|------------|
| ANNUAL TOTAL | 2552.66 | | 99.96 | | | |
| ANNUAL MEAN | 6.99 | | .27 | | 1.70 | |
| HIGHEST ANNUAL MEAN | | | | | 11.3 | |
| LOWEST ANNUAL MEAN | | | | | .034 | |
| HIGHEST DAILY MEAN | 196 | Jan 14 | 22 | Feb 20 | 390 | Mar 2 1983 |
| LOWEST DAILY MEAN | .02 | Aug 28 | .00 | Jul 2 | .00 | Oct 1 1961 |
| ANNUAL SEVEN-DAY MINIMUM | .03 | Aug 27 | .00 | Aug 3 | .00 | Oct 6 1961 |
| INSTANTANEOUS PEAK FLOW | | | 59 | Feb 19 | 630 | Mar 2 1983 |
| INSTANTANEOUS PEAK STAGE | | | 2.29 | Feb 19 | 6.10 | Mar 2 1983 |
| ANNUAL RUNOFF (AC-FT) | 5060 | | 198 | | 1230 | |
| 10 PERCENT EXCEEDS | 13 | | .23 | | 1.1 | |
| 50 PERCENT EXCEEDS | .14 | | .09 | | .10 | |
| 90 PERCENT EXCEEDS | .04 | | .00 | | .00 | |

TEMBLADERO SLOUGH BASIN

91

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 fair except for estimated daily discharges, which are poor. Natural flow of stream affected by small diversions, storage reservoirs, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 898 ft³/s, Apr. 1, 1974, gage height, 11.13 ft, at datum then in use, from rating curve extended above 260 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 60 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2015 | *35 | *2.47 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|-------|------|------|------|------|------|------|------|
| 1 | .00 | .00 | .00 | .00 | .01 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 3 | .00 | .02 | .00 | .00 | .00 | .01 | .00 | .00 | .00 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | .00 | .00 | .02 | .00 | .00 | .00 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | .00 | .00 | .04 | .00 | .00 | .00 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | .00 | .00 | .09 | .00 | .00 | .00 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | .00 | .47 | .06 | .00 | .00 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .00 | .00 | .34 | .04 | .00 | .00 | .00 | .00 | .00 | .00 |
| 9 | .00 | .00 | .00 | .00 | .00 | .03 | .00 | .00 | .00 | .00 | .00 | .00 |
| 10 | .00 | .00 | .00 | .00 | .04 | .06 | .00 | .00 | .00 | .00 | .00 | .00 |
| 11 | .00 | .00 | .23 | .00 | .00 | .05 | .00 | .00 | .00 | .00 | .00 | .00 |
| 12 | .00 | .00 | .00 | .00 | .00 | .04 | .00 | .00 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | .00 | .00 | .00 | .01 | .00 | .00 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | .42 | .00 | .00 | .02 | .00 | .00 | .00 | .00 | .00 | .00 |
| 15 | .00 | .00 | .00 | .00 | .00 | .01 | .00 | .00 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | .00 | .00 | e1.6 | .01 | .00 | .00 | .00 | .00 | .00 | .00 |
| 18 | .00 | .00 | .00 | .00 | e2.3 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | .00 | .00 | 6.5 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | .00 | .00 | 5.6 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 21 | .00 | .00 | .00 | .00 | 1.9 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | .00 | .00 | .55 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | .00 | .19 | .30 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .00 | 3.0 | .13 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | .00 | 1.2 | .02 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | .00 | .19 | .02 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | .00 | .02 | .01 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 28 | .00 | .00 | .00 | .00 | .02 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 29 | .00 | .00 | .00 | .00 | --- | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 30 | .00 | .00 | .00 | .00 | --- | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | .00 | .00 | --- | .00 | --- | .00 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 0.02 | 0.65 | 4.60 | 19.81 | 0.49 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MEAN | .000 | .001 | .021 | .15 | .71 | .016 | .000 | .000 | .000 | .000 | .000 | .000 |
| MAX | .00 | .02 | .42 | 3.0 | 6.5 | .09 | .00 | .00 | .00 | .00 | .00 | .00 |
| MIN | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | .04 | 1.3 | 9.1 | 39 | 1.0 | .00 | .00 | .00 | .00 | .00 | .00 |

e Estimated.

TEMLADERO SLOUGH BASIN

11152600 GABILAN CREEK NEAR SALINAS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .040 | .50 | 2.30 | 6.80 | 11.4 | 13.5 | 8.13 | 2.11 | .86 | .29 | .13 | .032 |
| MAX | .50 | 6.20 | 20.0 | 35.1 | 88.6 | 124 | 58.7 | 23.4 | 9.27 | 5.14 | 2.85 | .58 |
| (WY) | 1984 | 1983 | 1983 | 1983 | 1983 | 1983 | 1974 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1971 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|------------|
| ANNUAL TOTAL | 1554.04 | | 25.57 | | | |
| ANNUAL MEAN | 4.26 | | .070 | | 3.79 | |
| HIGHEST ANNUAL MEAN | | | | | 29.7 | |
| LOWEST ANNUAL MEAN | | | | | .000 | |
| HIGHEST DAILY MEAN | 146 | Jan 17 | 6.5 | Feb 19 | 298 | Apr 2 1974 |
| LOWEST DAILY MEAN | .00 | Jan 2 | .00 | Oct 1 | .00 | Oct 1 1970 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jul 4 | .00 | Oct 1 | .00 | Oct 1 1970 |
| INSTANTANEOUS PEAK FLOW | | | 35 | Feb 19 | 898 | Apr 1 1974 |
| INSTANTANEOUS PEAK STAGE | | | 2.47 | Feb 19 | 11.13 | Apr 1 1974 |
| ANNUAL RUNOFF (AC-FT) | 3080 | | 51 | | 2750 | |
| 10 PERCENT EXCEEDS | 7.5 | | .01 | | 6.8 | |
| 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 September 1994.

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

REMARKS.--No estimated daily discharges. Records good except for daily discharges greater than 5.0 ft³/s, which are fair. No regulation or diversion upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*), from rating curve extended above 7.6 ft³/s:

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2230 | *19 | *2.33 | | | | |

Minimum daily, 0.04 ft³/s, Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|-------|------|------|------|-------|-------|------|------|------|
| 1 | 1.1 | .98 | 1.1 | .99 | 1.1 | 2.5 | 1.3 | 1.2 | .85 | .38 | .15 | .08 |
| 2 | 1.1 | .97 | 1.0 | 1.0 | 1.1 | 2.3 | 1.3 | 1.2 | .82 | .37 | .15 | .08 |
| 3 | 1.1 | .96 | 1.0 | 1.0 | 1.2 | 2.2 | 1.3 | 1.1 | .78 | .38 | .15 | .08 |
| 4 | 1.1 | .96 | 1.0 | .98 | 1.5 | 2.1 | 1.2 | 1.1 | .79 | .36 | .14 | .09 |
| 5 | 1.1 | .95 | 1.0 | 1.0 | 1.2 | 2.1 | 1.2 | 1.2 | .79 | .35 | .14 | .08 |
| 6 | 1.1 | .95 | 1.0 | .97 | 1.4 | 2.3 | 1.2 | 1.3 | .82 | .35 | .12 | .08 |
| 7 | 1.1 | .95 | 1.0 | .95 | 7.2 | 2.0 | 1.3 | 1.8 | .79 | .35 | .11 | .07 |
| 8 | 1.1 | .95 | 1.0 | .95 | 4.1 | 1.9 | 1.4 | 1.4 | .74 | .33 | .11 | .07 |
| 9 | 1.1 | .95 | 1.0 | .98 | 2.5 | 1.8 | 1.8 | 1.2 | .71 | .31 | .11 | .08 |
| 10 | 1.1 | .99 | 1.0 | .96 | 2.2 | 1.8 | 1.4 | 1.2 | .69 | .30 | .11 | .10 |
| 11 | 1.2 | 1.8 | 4.2 | .92 | 2.0 | 1.8 | 1.3 | 1.1 | .66 | .28 | .11 | .10 |
| 12 | 1.1 | 1.2 | 1.9 | .93 | 1.7 | 1.8 | 1.3 | 1.1 | .65 | .28 | .10 | .11 |
| 13 | 1.1 | 1.1 | 1.3 | .93 | 1.6 | 1.7 | 1.3 | 1.0 | .65 | .27 | .10 | .12 |
| 14 | 1.1 | 1.0 | 1.8 | .94 | 1.6 | 1.7 | 1.3 | 1.0 | .64 | .26 | .09 | .08 |
| 15 | 1.1 | 1.0 | 1.5 | .93 | 1.5 | 1.7 | 1.2 | 1.1 | .63 | .26 | .08 | .06 |
| 16 | 1.1 | .98 | 1.3 | .93 | 1.4 | 1.7 | 1.3 | 1.0 | .62 | .25 | .08 | .07 |
| 17 | 1.1 | .99 | 1.2 | .91 | 3.7 | 1.6 | 1.2 | 1.4 | .62 | .24 | .08 | .07 |
| 18 | 1.1 | .99 | 1.2 | .91 | 2.4 | 1.6 | 1.2 | 1.5 | .61 | .25 | .09 | .06 |
| 19 | 1.1 | 1.0 | 1.2 | .90 | 5.1 | 1.7 | 1.1 | 1.2 | .60 | .24 | .09 | .07 |
| 20 | 1.1 | .99 | 1.1 | .90 | 9.4 | 1.6 | 1.1 | 1.1 | .58 | .27 | .08 | .06 |
| 21 | 1.0 | 1.0 | 1.2 | .90 | 4.7 | 1.6 | 1.1 | 1.1 | .55 | .29 | .08 | .07 |
| 22 | 1.0 | 1.0 | 1.4 | .90 | 3.8 | 1.5 | 1.1 | 1.0 | .53 | .29 | .08 | .04 |
| 23 | 1.0 | 1.0 | 1.3 | 4.0 | 3.4 | 1.5 | 1.5 | .99 | .51 | .24 | .09 | .23 |
| 24 | 1.0 | .97 | 1.1 | 4.1 | 3.1 | 2.0 | 1.8 | .95 | .49 | .23 | .10 | .18 |
| 25 | 1.0 | .98 | 1.1 | 2.1 | 3.0 | 1.9 | 1.8 | .93 | .48 | .23 | .09 | .11 |
| 26 | .99 | .97 | 1.0 | 1.6 | 2.9 | 1.7 | 1.7 | .93 | .46 | .21 | .08 | .07 |
| 27 | .98 | .98 | 1.0 | 1.4 | 2.8 | 1.5 | 1.6 | .91 | .44 | .19 | .08 | .06 |
| 28 | .99 | 1.0 | 1.0 | 1.3 | 2.7 | 1.5 | 1.5 | .89 | .42 | .17 | .08 | .17 |
| 29 | .98 | 1.6 | 1.0 | 1.2 | --- | 1.5 | 1.3 | .87 | .40 | .16 | .08 | .29 |
| 30 | .97 | 1.4 | 1.0 | 1.2 | --- | 1.4 | 1.3 | .90 | .39 | .15 | .08 | .14 |
| 31 | .96 | --- | 1.0 | 1.2 | --- | 1.4 | --- | .89 | --- | .15 | .08 | --- |
| TOTAL | 32.97 | 31.56 | 38.9 | 38.88 | 80.3 | 55.4 | 40.4 | 34.56 | 18.71 | 8.39 | 3.11 | 2.97 |
| MEAN | 1.06 | 1.05 | 1.25 | 1.25 | 2.87 | 1.79 | 1.35 | 1.11 | .62 | .27 | .10 | .099 |
| MAX | 1.2 | 1.8 | 4.2 | 4.1 | 9.4 | 2.5 | 1.8 | 1.8 | .85 | .38 | .15 | .29 |
| MIN | .96 | .95 | 1.0 | .90 | 1.1 | 1.4 | 1.1 | .87 | .39 | .15 | .08 | .04 |
| AC-FT | 65 | 63 | 77 | 77 | 159 | 110 | 80 | 69 | 37 | 17 | 6.2 | 5.9 |

PAJARO RIVER BASIN

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

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

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.06 | 1.05 | 1.25 | 1.25 | 2.87 | 1.79 | 1.35 | 1.11 | .62 | .27 | .10 | .099 |
| MAX | 1.06 | 1.05 | 1.25 | 1.25 | 2.87 | 1.79 | 1.35 | 1.11 | .62 | .27 | .10 | .099 |
| (WY) | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 |
| MIN | 1.06 | 1.05 | 1.25 | 1.25 | 2.87 | 1.79 | 1.35 | 1.11 | .62 | .27 | .10 | .099 |
| (WY) | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 | 1994 |

SUMMARY STATISTICS

FOR 1994 WATER YEAR

| | | |
|--------------------------|--------|--------|
| ANNUAL TOTAL | 386.15 | |
| ANNUAL MEAN | 1.06 | |
| HIGHEST DAILY MEAN | 9.4 | Feb 20 |
| LOWEST DAILY MEAN | .04 | Sep 22 |
| ANNUAL SEVEN-DAY MINIMUM | .06 | Sep 16 |
| INSTANTANEOUS PEAK FLOW | 19 | Feb 19 |
| INSTANTANEOUS PEAK STAGE | 2.33 | Feb 19 |
| ANNUAL RUNOFF (AC-FT) | 766 | |
| 10 PERCENT EXCEEDS | 1.8 | |
| 50 PERCENT EXCEEDS | 1.0 | |
| 90 PERCENT EXCEEDS | .09 | |

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to September 1994.

CHEMICAL DATA: November 1993 to July 1994.

WATER TEMPERATURE: October 1993 to September 1994.

SEDIMENT DATA: November 1993 to July 1994.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1993 to September 1994.

INSTRUMENTATION.--Water-temperature recorder since October 1993.

REMARKS.--Zero bedload discharge observed for flows less than 2.4 ft³/s during current year. Interruptions in temperature record were due to malfunction of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 35.5°C, Aug. 13-15, 1994; minimum recorded, 0.0°C, several days during water year 1994.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 35.5°C, Aug. 13-15; minimum recorded, 0.0°C, several days during the year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| | | DIS- CHARGE, INST. CUBIC FEET PER SECOND | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH WATER WHOLE FIELD (STAND- ARD UNITS) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (NTU) | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) | HARD- NESS TOTAL (MG/L AS CACO3) | HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) | CALCIUM DIS- SOLVED (MG/L AS CA) |
|-------|------|--|---|---|---|--|---|--|--|---|---|---|
| NOV | | | | | | | | | | | | |
| 30... | 1215 | 1.4 | 1030 | 18.8 | 9.5 | 0.20 | -- | -- | -- | -- | -- | -- |
| DEC | | | | | | | | | | | | |
| 16... | 1145 | 1.3 | 1020 | 18.7 | 5.0 | 0.30 | -- | -- | -- | -- | -- | -- |
| JAN | | | | | | | | | | | | |
| 18... | 1130 | 0.98 | 1070 | 8.8 | 6.0 | 0.20 | -- | -- | -- | -- | -- | -- |
| 24... | 1255 | 9.8 | 658 | 8.6 | 6.5 | 740 | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | |
| 18... | 1135 | 2.4 | 1050 | 8.6 | 7.0 | 7.0 | -- | -- | -- | -- | -- | -- |
| MAR | | | | | | | | | | | | |
| 31... | 1145 | 1.5 | 1070 | 8.7 | 18.0 | 0.40 | -- | -- | -- | -- | -- | -- |
| APR | | | | | | | | | | | | |
| 25... | 1150 | 2.1 | 1000 | 8.8 | 10.0 | 2.5 | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | | | |
| 16... | 1145 | 1.2 | 1070 | 8.7 | 17.5 | 0.30 | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | | |
| 26... | 1500 | 0.22 | 1160 | 8.8 | 32.5 | 0.30 | 695 | 6.7 | 102 | 710 | 0 | 3.0 |
| | | | | | | | | | | | | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | SODIUM AD- SORP- TION RATIO | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 | CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 | ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SIO2) |
| NOV | | | | | | | | | | | | |
| 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC | | | | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN | | | | | | | | | | | | |
| 18... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 24... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | |
| 18... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR | | | | | | | | | | | | |
| 31... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR | | | | | | | | | | | | |
| 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | | |
| 26... | 170 | 17 | 5 | 0.3 | 2.9 | 777 | 46 | 713 | 7.4 | 28 | <0.10 | 3.8 |

PAJARO RIVER BASIN

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) | SOLIDS, DIS- SOLVED (TONS PER AC-FT) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHORUS TOTAL (MG/L AS P) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) |
|-------|--|--|--|---|---|---|---|--|--|---|---|---|
| NOV | | | | | | | | | | | | |
| 30... | 618 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC | | | | | | | | | | | | |
| 16... | 664 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN | | | | | | | | | | | | |
| 18... | 674 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 24... | 2100 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | |
| 18... | 706 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR | | | | | | | | | | | | |
| 31... | 645 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR | | | | | | | | | | | | |
| 25... | 662 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | | | |
| 16... | 712 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | | |
| 26... | -- | 678 | 660 | 0.92 | <0.010 | <0.050 | <0.010 | <0.20 | 0.010 | <0.010 | <0.010 | <10 |

| DATE | BARIUM, DIS- SOLVED (UG/L AS BA) | COBALT, DIS- SOLVED (UG/L AS CO) | IRON, DIS- SOLVED (UG/L AS FE) | LITHIUM, DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) |
|-------|--|--|--|---|--|---|--|---|--|--|--|
| NOV | | | | | | | | | | | |
| 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC | | | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN | | | | | | | | | | | |
| 18... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 24... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | |
| 18... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR | | | | | | | | | | | |
| 31... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR | | | | | | | | | | | |
| 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | |
| 26... | 110 | <3 | <3 | 26 | 2 | <10 | <1 | <1 | <1.0 | 61 | <6 |

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDED (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|-------|------|--|--------------------------------------|--|--|---|
| NOV | | | | | | |
| 30... | 1155 | 1.4 | 9.5 | 8 | 0.03 | -- |
| DEC | | | | | | |
| 16... | 1130 | 1.3 | 4.0 | 5 | 0.02 | -- |
| JAN | | | | | | |
| 18... | 1125 | 0.98 | 6.0 | 1 | 0.00 | -- |
| 24... | 1225 | 8.4 | 6.5 | 1640 | 37 | 98 |
| FEB | | | | | | |
| 18... | 1130 | 2.4 | 7.0 | 16 | 0.10 | -- |
| MAR | | | | | | |
| 31... | 1125 | 1.5 | 18.0 | 3 | 0.01 | -- |
| APR | | | | | | |
| 25... | 1140 | 2.1 | 10.0 | 30 | 0.17 | -- |
| MAY | | | | | | |
| 16... | 1135 | 1.2 | 17.5 | 6 | 0.02 | -- |
| JUL | | | | | | |
| 26... | 1345 | 0.25 | 32.5 | 1 | 0.00 | -- |

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | NUMBER OF SAM- PLING POINTS (COUNT) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM | BED MAT. SIEVE DIAM. % FINER THAN .125 MM | BED MAT. SIEVE DIAM. % FINER THAN .250 MM | BED MAT. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--|--|--------------------------------------|---|---|---|---|
| JAN | | | | | | | | |
| 18... | 1140 | 3 | 0.98 | 6.0 | -- | 1 | 5 | 17 |
| MAR | | | | | | | | |
| 31... | 1130 | 1 | 1.5 | 18.0 | -- | 1 | 6 | 17 |
| 31... | 1135 | 1 | 1.5 | 18.0 | 1 | 1 | 5 | 15 |
| 31... | 1140 | 1 | 1.5 | 18.0 | -- | 1 | 3 | 11 |
| MAY | | | | | | | | |
| 16... | 1155 | 1 | 1.2 | 17.5 | -- | 1 | 2 | 6 |
| 16... | 1200 | 1 | 1.2 | 17.5 | -- | 1 | 4 | 14 |
| 16... | 1205 | 1 | 1.2 | 17.5 | -- | 1 | 3 | 13 |

| DATE | BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM |
|-------|---|---|---|---|---|---|---|
| JAN | | | | | | | |
| 18... | 29 | 36 | 43 | 55 | 72 | 91 | 100 |
| MAR | | | | | | | |
| 31... | 28 | 40 | 57 | 72 | 87 | 100 | -- |
| 31... | 26 | 40 | 64 | 84 | 94 | 100 | -- |
| 31... | 23 | 32 | 41 | 52 | 65 | 76 | 100 |
| MAY | | | | | | | |
| 16... | 14 | 22 | 35 | 47 | 61 | 82 | 100 |
| 16... | 26 | 35 | 46 | 58 | 69 | 79 | 100 |
| 16... | 28 | 37 | 44 | 53 | 63 | 76 | 100 |

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | SAM- PLING METHOD, CODES | SAMPLER TYPE (CODE) | BAG MESH SIZE BEDLOAD SAMPLER (MM) | TETHER LINE USED IN SAMPLNG (YES=1) (CODE) | START- ING TIME (2400 HOURS) | END- ING TIME (2400 HOURS) | TIME ON BED FOR BED LOAD SAMPLE (SEC) | HORI- ZONTAL WIDTH OF VER- TICAL (FEET) |
|-------|------|-----------------------------------|---------------------------|---|---|--|--|---|---|
| JAN | | | | | | | | | |
| 24... | 1230 | 1000 | 1150 | 0.250 | 0 | 1228 | 1234 | 30 | 0.5 |
| 24... | 1240 | 1000 | 1150 | 0.250 | 0 | 1238 | 1245 | 30 | 0.5 |

| DATE | COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (NUM) | VER- TICALS IN COM- POSITE SAMPLE (NUM) | NUMBER OF SAM- PLING POINTS (COUNT) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT | SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) |
|-------|---|---|--|---|--|--------------------------------------|---|---|
| JAN | | | | | | | | |
| 24... | 2 | 13 | 13 | 0.70 | 8.8 | 6.5 | 0.01 | 0.06 |
| 24... | 2 | 13 | 13 | 0.70 | 9.6 | 6.5 | .009 | 0.06 |

| DATE | SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM |
|-------|---|---|---|---|---|---|---|---|
| JAN | | | | | | | | |
| 24... | 2 | 4 | 11 | 35 | 65 | 80 | 90 | 100 |
| 24... | 4 | 10 | 23 | 52 | 66 | 78 | 94 | 100 |

PAJARO RIVER BASIN

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|------|----------|-----|----------|-----|---------|-----|----------|-----|-------|-----|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | --- | --- | 17.0 | 8.0 | 9.5 | 3.0 | 8.5 | 2.0 | 7.5 | 1.0 | --- | --- |
| 2 | --- | --- | 17.0 | 7.0 | 10.5 | 5.0 | 10.0 | 3.5 | 8.0 | 1.0 | --- | --- |
| 3 | --- | --- | 16.0 | 6.5 | 11.0 | 4.0 | 10.5 | 3.0 | 8.5 | 2.5 | --- | --- |
| 4 | --- | --- | 16.0 | 6.5 | 11.0 | 4.0 | 9.5 | 5.0 | 9.5 | 4.0 | --- | --- |
| 5 | --- | --- | 15.5 | 6.5 | 9.0 | 2.5 | 9.5 | 4.0 | 9.0 | 3.0 | --- | --- |
| 6 | --- | --- | 15.0 | 5.5 | 8.0 | 2.0 | 7.5 | 1.5 | 8.5 | 6.5 | --- | --- |
| 7 | --- | --- | 15.0 | 5.5 | 9.0 | 2.0 | 7.5 | .0 | 8.5 | 6.5 | --- | --- |
| 8 | 22.0 | 10.0 | 14.5 | 5.5 | 11.0 | 5.0 | 8.0 | .5 | 9.5 | 5.0 | --- | --- |
| 9 | 20.0 | 12.5 | 14.0 | 5.0 | 12.5 | 6.5 | 9.0 | 3.0 | 12.0 | 2.5 | --- | --- |
| 10 | 21.5 | 12.0 | 13.5 | 7.5 | 12.0 | 5.0 | 8.0 | 2.5 | 11.5 | 2.5 | --- | --- |
| 11 | 18.5 | 14.0 | 12.0 | 9.0 | 8.5 | 6.5 | 7.5 | .0 | 10.5 | 3.0 | --- | --- |
| 12 | 20.0 | 11.5 | 11.0 | 6.0 | 8.0 | 3.5 | 8.5 | .0 | 12.0 | 5.0 | --- | --- |
| 13 | 20.5 | 12.0 | 11.5 | 4.0 | 8.0 | 3.0 | 9.0 | 1.0 | 13.0 | 4.5 | --- | --- |
| 14 | 19.5 | 11.0 | 9.5 | 3.5 | 9.0 | 4.0 | 10.5 | 3.0 | 12.5 | 4.5 | --- | --- |
| 15 | 19.5 | 13.0 | 10.5 | 2.0 | 8.0 | 3.0 | 10.5 | 3.0 | 12.5 | 5.0 | --- | --- |
| 16 | 19.5 | 11.5 | 10.0 | 2.0 | 7.0 | 1.5 | 10.0 | 1.5 | 11.5 | 6.0 | --- | --- |
| 17 | 17.5 | 11.0 | 9.0 | 3.5 | 7.5 | 1.5 | 10.0 | 1.5 | 9.5 | 5.5 | --- | --- |
| 18 | 18.5 | 8.0 | 11.5 | 4.5 | 7.0 | 1.5 | 10.5 | 2.0 | 10.0 | 4.0 | --- | --- |
| 19 | 19.5 | 8.5 | 11.5 | 3.0 | 7.5 | 2.0 | 10.5 | 2.5 | 7.0 | 1.0 | --- | --- |
| 20 | 20.0 | 9.0 | 10.5 | 2.5 | 6.5 | .5 | 10.5 | 2.0 | 8.5 | 2.5 | --- | --- |
| 21 | 17.0 | 10.5 | 8.5 | 3.5 | 6.5 | .0 | 11.5 | 5.0 | 9.5 | 4.5 | --- | --- |
| 22 | 19.0 | 8.5 | 12.5 | 6.5 | 6.0 | .0 | 12.0 | 3.5 | 12.0 | 4.5 | --- | --- |
| 23 | 19.5 | 8.5 | 9.5 | 2.5 | 5.5 | .0 | 11.5 | 7.0 | 12.5 | 4.0 | --- | --- |
| 24 | 19.0 | 9.5 | 8.0 | .5 | 6.5 | .0 | 7.0 | 4.0 | 14.0 | 2.5 | --- | --- |
| 25 | 19.0 | 8.5 | 8.0 | .0 | 7.5 | .5 | 8.5 | 3.5 | 15.0 | 4.5 | --- | --- |
| 26 | 19.5 | 9.0 | 8.5 | 1.0 | 9.0 | 4.0 | 9.5 | 5.0 | --- | --- | --- | --- |
| 27 | 18.5 | 8.5 | 7.0 | 3.5 | 10.0 | 4.5 | 10.5 | 3.5 | --- | --- | --- | --- |
| 28 | 16.5 | 8.5 | 9.5 | 4.0 | 9.0 | 2.5 | 10.5 | 1.0 | --- | --- | --- | --- |
| 29 | 18.0 | 8.0 | 11.0 | 8.5 | 9.0 | 2.0 | 9.5 | .5 | --- | --- | --- | --- |
| 30 | 18.0 | 8.5 | 11.0 | 5.0 | 9.0 | 2.5 | 10.0 | 1.0 | --- | --- | --- | --- |
| 31 | 16.5 | 9.5 | --- | --- | 8.5 | 1.5 | 9.0 | 1.0 | --- | --- | --- | --- |
| MONTH | --- | --- | 17.0 | .0 | 12.5 | .0 | 12.0 | .0 | --- | --- | --- | --- |

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|------|------|------|------|------|------|------|--------|------|-----------|------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | --- | --- | 24.5 | 9.0 | 30.0 | 12.5 | 33.0 | 16.5 | 32.5 | 13.0 | 31.5 | 11.5 |
| 2 | --- | --- | 25.0 | 8.5 | 30.0 | 13.0 | 32.5 | 14.5 | 32.5 | 13.5 | 30.0 | 11.0 |
| 3 | --- | --- | 25.5 | 9.5 | 29.0 | 11.0 | 32.5 | 15.5 | 33.0 | 13.5 | 30.5 | 10.0 |
| 4 | --- | --- | 25.5 | 10.0 | 28.5 | 11.0 | 31.5 | 14.0 | 33.5 | 13.5 | 32.0 | 11.5 |
| 5 | --- | --- | 24.5 | 11.5 | 28.5 | 12.5 | 31.0 | 13.0 | 34.5 | 14.5 | 32.0 | 12.5 |
| 6 | --- | --- | 18.0 | 10.5 | 25.0 | 12.5 | 33.0 | 13.0 | 35.0 | 15.0 | 32.0 | 12.5 |
| 7 | --- | --- | 16.0 | 10.5 | 27.5 | 10.0 | 33.0 | 14.5 | 34.5 | 15.5 | 32.0 | 11.5 |
| 8 | --- | --- | 22.0 | 10.0 | 29.0 | 10.5 | 34.5 | 14.5 | 33.5 | 15.0 | 31.5 | 11.0 |
| 9 | --- | --- | 27.0 | 10.0 | 30.5 | 11.5 | 34.0 | 15.5 | 33.0 | 14.5 | 27.0 | 11.5 |
| 10 | --- | --- | 29.0 | 11.5 | 32.0 | 13.5 | 33.5 | 15.5 | 34.5 | 14.5 | 29.0 | 11.0 |
| 11 | --- | --- | 28.0 | 13.5 | 32.0 | 15.0 | 33.5 | 13.5 | 35.0 | 16.5 | 27.5 | 10.5 |
| 12 | --- | --- | 26.5 | 9.5 | 30.5 | 13.5 | 33.5 | 14.5 | 35.0 | 16.0 | 27.5 | 9.5 |
| 13 | 24.5 | 9.0 | 27.5 | 10.5 | 30.5 | 14.0 | 33.5 | 13.0 | 35.5 | 16.0 | 27.5 | 10.0 |
| 14 | 23.5 | 8.5 | 26.5 | 10.5 | 30.0 | 13.0 | 33.5 | 14.0 | 35.5 | 16.5 | 28.0 | 10.0 |
| 15 | 26.0 | 9.5 | 21.5 | 10.5 | 28.5 | 11.0 | 34.0 | 14.5 | 35.5 | 16.5 | 29.5 | 10.5 |
| 16 | 21.5 | 11.0 | 23.5 | 9.5 | 28.5 | 9.5 | 34.0 | 15.0 | 35.0 | 14.5 | 25.5 | 12.0 |
| 17 | 26.5 | 10.0 | 16.5 | 10.5 | 29.0 | 11.0 | 33.5 | 14.5 | 32.5 | 14.5 | 29.0 | 11.5 |
| 18 | 27.0 | 11.5 | 16.0 | 10.5 | 30.0 | 11.5 | 32.0 | 16.0 | 32.0 | 15.0 | 26.5 | 12.5 |
| 19 | 27.5 | 12.0 | 23.5 | 10.0 | 30.0 | 13.0 | --- | --- | 33.5 | 14.0 | 28.5 | 13.0 |
| 20 | 26.5 | 10.5 | 19.5 | 8.0 | 29.5 | 13.0 | --- | --- | 33.5 | 12.5 | 30.0 | 12.5 |
| 21 | 25.0 | 9.5 | 26.5 | 9.0 | 31.0 | 12.0 | --- | --- | 32.0 | 11.5 | 30.5 | 13.5 |
| 22 | 24.0 | 8.0 | 26.0 | 11.0 | 31.5 | 13.0 | --- | --- | 32.0 | 11.5 | 28.0 | 13.5 |
| 23 | 12.5 | 9.0 | 28.5 | 11.0 | 32.0 | 14.0 | --- | --- | 32.5 | 12.5 | 26.5 | 16.5 |
| 24 | 12.0 | 8.0 | 29.0 | 12.0 | 31.5 | 14.0 | --- | --- | 33.5 | 13.5 | 29.5 | 14.5 |
| 25 | 15.0 | 7.5 | 28.5 | 12.5 | 31.5 | 13.0 | --- | --- | 32.5 | 14.0 | 28.5 | 12.5 |
| 26 | 15.5 | 8.0 | 26.0 | 11.5 | 32.0 | 13.5 | --- | --- | 33.5 | 14.5 | 29.0 | 12.0 |
| 27 | 11.5 | 6.5 | 28.0 | 10.0 | 33.0 | 15.0 | 34.0 | 16.0 | 33.5 | 15.0 | 30.5 | 15.0 |
| 28 | 20.0 | 6.0 | 29.5 | 11.5 | 34.0 | 16.0 | 33.0 | 14.5 | 32.5 | 13.0 | 20.5 | 16.0 |
| 29 | 24.0 | 8.0 | 30.5 | 13.0 | 34.5 | 16.5 | 33.0 | 14.5 | 32.5 | 13.0 | 27.0 | 14.0 |
| 30 | 25.0 | 8.5 | 24.5 | 14.0 | 33.5 | 16.5 | 32.5 | 14.5 | 32.5 | 12.5 | 26.5 | 11.0 |
| 31 | --- | --- | 29.0 | 12.5 | --- | --- | 32.0 | 14.0 | 32.0 | 13.0 | --- | --- |
| MONTH | --- | --- | 30.5 | 8.0 | 34.5 | 9.5 | --- | --- | 35.5 | 11.5 | 32.0 | 9.5 |

PAJARO RIVER BASIN

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 fair except for estimated daily discharges, which are poor. Low flow 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, 8,210 ft³/s, Apr. 3, 1958, gage height, 8.35 ft, site and datum then in use, from rating curve extended above 600 ft³/s on basis of slope-area measurement of peak flow; 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2300 | *94 | *6.48 | | | | |

Minimum daily, 0.16 ft³/s, Sept. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 1 | 36 | 15 | 71 | 6.0 | 5.4 | e9.0 | 3.3 | 30 | 1.2 | .48 | .23 | .26 |
| 2 | 35 | 14 | 68 | 5.9 | 5.3 | e8.1 | 3.2 | 28 | 1.1 | .51 | .24 | .26 |
| 3 | 35 | 14 | 44 | 5.7 | 5.3 | e7.3 | 3.0 | 29 | 1.1 | .49 | .22 | .25 |
| 4 | 37 | 24 | 29 | 5.9 | 5.6 | e6.7 | 3.2 | 17 | 1.0 | .43 | .22 | .24 |
| 5 | 39 | 37 | 23 | 6.2 | 5.1 | e6.2 | 3.0 | 8.2 | .96 | .43 | .25 | .24 |
| 6 | 44 | 39 | 20 | 5.8 | 5.0 | e7.0 | 3.0 | 7.4 | 1.0 | .43 | .27 | .26 |
| 7 | 47 | 41 | e17 | 5.6 | 19 | e6.2 | 2.9 | 10 | 1.0 | .43 | .26 | .26 |
| 8 | 46 | 40 | e14 | 5.7 | 21 | e5.8 | 3.0 | 8.3 | .90 | .43 | .24 | .23 |
| 9 | 45 | 40 | e11 | 5.3 | 12 | e5.4 | 4.9 | 7.3 | .89 | .43 | .24 | .20 |
| 10 | 45 | 42 | 9.2 | 4.9 | 9.2 | e5.0 | 14 | 6.0 | .84 | .43 | .26 | .19 |
| 11 | 50 | 45 | 18 | 4.9 | 8.2 | e4.8 | 17 | 5.0 | .77 | .43 | .26 | .19 |
| 12 | 52 | 40 | 17 | 4.9 | 7.5 | e4.6 | 22 | 4.3 | .72 | .40 | .28 | .19 |
| 13 | 52 | 35 | 12 | 4.9 | 7.0 | e4.4 | 28 | 3.7 | .70 | .40 | .30 | .17 |
| 14 | 48 | 34 | 12 | 4.8 | 6.5 | e4.2 | 30 | 3.3 | .67 | .40 | .28 | .16 |
| 15 | 45 | 33 | 12 | 4.6 | 5.9 | e4.0 | 30 | 3.0 | .68 | .37 | .32 | .19 |
| 16 | 35 | 33 | 10 | 4.3 | 5.6 | e3.8 | 29 | 2.7 | .66 | .34 | .33 | .22 |
| 17 | 26 | 33 | 9.6 | 4.3 | 11 | e3.7 | 28 | e3.4 | .61 | .31 | .35 | .25 |
| 18 | 23 | 33 | 8.7 | 4.1 | 16 | e3.6 | 28 | 4.1 | .61 | .30 | .34 | .24 |
| 19 | 19 | 33 | 8.3 | 4.1 | 24 | e3.5 | 28 | 3.9 | .61 | .28 | .31 | .26 |
| 20 | 17 | 29 | 7.4 | 3.9 | 61 | e3.4 | 28 | 3.3 | .62 | .30 | .32 | .28 |
| 21 | 16 | 29 | 7.3 | 3.7 | 39 | e3.4 | 28 | 2.9 | .60 | .29 | .33 | .31 |
| 22 | 15 | 28 | 7.2 | 3.5 | e29 | e3.3 | 28 | 2.5 | .56 | .28 | .33 | .30 |
| 23 | 15 | 26 | 7.2 | 8.4 | e21 | e3.3 | 31 | 2.3 | .55 | .25 | .31 | .33 |
| 24 | 14 | 27 | 7.3 | 13 | e16 | e4.3 | 36 | 2.1 | .54 | .23 | .27 | .30 |
| 25 | 13 | 46 | 7.3 | 17 | e13 | 6.2 | 38 | 1.8 | .55 | .25 | .28 | .30 |
| 26 | 12 | 65 | 7.3 | 11 | e12 | 4.2 | 38 | 1.7 | .49 | .26 | .26 | .27 |
| 27 | 11 | 65 | 6.8 | 7.5 | e12 | 3.6 | 36 | 1.6 | .49 | .24 | .28 | .26 |
| 28 | 9.3 | 65 | 6.3 | 6.6 | e10 | 3.3 | 36 | 1.5 | .50 | .24 | .30 | .26 |
| 29 | 12 | 65 | 6.2 | 6.1 | --- | 3.1 | 33 | 1.4 | .49 | .23 | .24 | .26 |
| 30 | 18 | 74 | 6.2 | 5.7 | --- | 3.1 | 30 | 1.3 | .49 | .22 | .22 | .28 |
| 31 | 17 | --- | 6.2 | 5.7 | --- | 3.1 | --- | 1.4 | --- | .22 | .24 | --- |
| TOTAL | 928.3 | 1144 | 496.5 | 190.0 | 397.6 | 147.6 | 645.5 | 208.4 | 21.90 | 10.73 | 8.58 | 7.41 |
| MEAN | 29.9 | 38.1 | 16.0 | 6.13 | 14.2 | 4.76 | 21.5 | 6.72 | .73 | .35 | .28 | .25 |
| MAX | 52 | 74 | 71 | 17 | 61 | 9.0 | 38 | 30 | 1.2 | .51 | .35 | .33 |
| MIN | 9.3 | 14 | 6.2 | 3.5 | 5.0 | 3.1 | 2.9 | 1.3 | .49 | .22 | .22 | .16 |
| AC-FT | 1840 | 2270 | 985 | 377 | 789 | 293 | 1280 | 413 | 43 | 21 | 17 | 15 |

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 5.70 | 4.97 | 15.9 | 28.8 | 58.9 | 67.8 | 42.4 | 20.9 | 19.6 | 14.5 | 13.2 | 9.93 |
| MAX | 42.2 | 38.1 | 181 | 238 | 471 | 655 | 532 | 130 | 88.5 | 79.2 | 71.0 | 67.2 |
| (WY) | 1974 | 1994 | 1956 | 1952 | 1941 | 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 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1940 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 25191.2 | | 4206.52 | | | |
| ANNUAL MEAN | 69.0 | | 11.5 | | 25.0 | |
| HIGHEST ANNUAL MEAN | | | | | 126 | |
| LOWEST ANNUAL MEAN | | | | | .15 | |
| HIGHEST DAILY MEAN | 891 | Jan 18 | 74 | Nov 30 | 3540 | Apr 3 1958 |
| LOWEST DAILY MEAN | 6.2 | Dec 29 | .16 | Sep 14 | .00 | Sep 19 1947 |
| ANNUAL SEVEN-DAY MINIMUM | 6.6 | Dec 25 | .18 | Sep 9 | .00 | Sep 19 1947 |
| INSTANTANEOUS PEAK FLOW | | | 94 | Feb 19 | 8210 | Apr 3 1958 |
| INSTANTANEOUS PEAK STAGE | | | 6.48 | Feb 19 | 8.35 | Apr 3 1958 |
| ANNUAL RUNOFF (AC-FT) | 49970 | | 8340 | | 18130 | |
| 10 PERCENT EXCEEDS | 127 | | 36 | | 55 | |
| 50 PERCENT EXCEEDS | 42 | | 4.9 | | 3.2 | |
| 90 PERCENT EXCEEDS | 12 | | .26 | | .17 | |

PAJARO RIVER BASIN

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.--No estimated daily discharges. Records fair. Low flows regulated by Hernandez Reservoir 73 mi upstream, capacity, 18,500 acre-ft. Some diversions upstream from station for irrigation. Percolation ponds are constructed upstream from station during summer months.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft³/s, Mar. 1, 1983, gage height, 11.97 ft, from rating curve extended above 4,100 ft³/s; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 1745 | *334 | *3.93 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|-------|-------|-------|-------|--------|--------|------|------|------|------|
| 1 | 5.4 | .34 | 2.3 | .00 | 2.4 | 5.4 | .00 | 21 | .08 | .00 | .00 | .00 |
| 2 | 6.4 | .38 | 2.1 | .00 | 3.7 | 4.5 | .00 | 19 | .01 | .00 | .00 | .00 |
| 3 | 6.4 | .02 | 2.4 | .00 | 4.9 | 4.4 | .00 | 12 | .00 | .00 | .00 | .00 |
| 4 | 6.7 | .00 | 2.2 | .00 | 4.4 | 3.6 | .00 | 12 | .00 | .00 | .00 | .00 |
| 5 | 7.4 | .00 | 1.4 | .00 | 5.0 | 4.3 | .00 | 8.2 | .00 | .00 | .00 | .00 |
| 6 | 8.3 | 2.4 | .70 | .00 | 5.5 | 3.1 | .00 | 1.2 | .08 | .00 | .00 | .00 |
| 7 | 9.3 | 5.3 | .20 | .00 | 8.1 | 2.2 | .00 | 23 | .00 | .00 | .00 | .00 |
| 8 | 11 | 10 | .01 | .00 | 9.7 | 1.4 | .18 | 1.1 | .00 | .00 | .00 | .00 |
| 9 | 12 | 13 | 1.6 | .00 | 13 | .57 | .05 | 1.3 | .00 | .00 | .00 | .00 |
| 10 | 13 | 27 | 1.5 | .00 | 7.4 | .21 | .00 | .00 | .00 | .00 | .00 | .00 |
| 11 | 18 | 19 | 15 | .00 | 8.3 | .00 | .00 | .00 | .09 | .00 | .00 | .00 |
| 12 | 18 | 20 | 1.1 | .00 | 7.6 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 13 | 17 | 14 | .62 | .00 | 6.2 | .00 | .00 | .00 | .07 | .00 | .00 | .00 |
| 14 | 18 | 14 | 7.3 | .00 | 5.2 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 15 | 23 | 13 | 4.1 | .00 | 4.2 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 16 | 18 | 14 | 3.9 | .00 | 5.1 | .00 | .01 | .00 | .00 | .00 | .00 | .00 |
| 17 | 15 | 15 | 3.5 | .00 | 19 | .00 | 1.4 | .50 | .00 | .00 | .00 | .00 |
| 18 | 8.7 | 15 | 3.1 | .00 | 29 | .00 | 1.7 | .29 | .00 | .00 | .00 | .00 |
| 19 | 5.1 | 15 | 2.6 | .00 | 38 | .00 | 1.4 | .00 | .00 | .00 | .00 | .00 |
| 20 | 3.0 | 15 | 2.2 | .00 | 148 | .00 | 1.4 | .00 | .00 | .00 | .00 | .00 |
| 21 | 9.5 | 16 | 1.8 | 1.3 | 208 | .00 | 2.3 | .00 | .00 | .09 | .00 | .00 |
| 22 | 8.7 | 14 | 1.7 | 1.7 | 78 | .00 | 1.9 | .00 | .00 | .00 | .00 | .00 |
| 23 | 2.4 | 13 | 1.6 | 7.1 | 44 | .00 | 8.1 | .00 | .00 | .00 | .00 | .23 |
| 24 | 1.2 | 12 | 1.6 | 22 | 27 | .00 | 9.6 | .00 | .00 | .00 | .00 | .07 |
| 25 | .60 | 12 | 1.6 | 11 | 17 | .00 | 47 | .00 | .00 | .00 | .00 | .00 |
| 26 | .22 | 5.2 | 1.6 | 8.6 | 11 | .00 | 39 | .00 | .05 | .00 | .00 | .00 |
| 27 | .01 | 5.6 | 1.4 | 5.5 | 8.3 | .00 | 37 | .00 | .00 | .00 | .00 | .00 |
| 28 | .00 | 5.2 | .93 | 4.1 | 7.0 | .00 | 16 | .00 | .00 | .00 | .00 | .15 |
| 29 | .00 | 5.1 | .39 | 3.4 | --- | .00 | 14 | .00 | .00 | .00 | .00 | .00 |
| 30 | .00 | 4.1 | .00 | 2.9 | --- | .00 | 25 | 1.5 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | .00 | 2.5 | --- | .00 | --- | .18 | --- | .00 | .00 | --- |
| TOTAL | 252.33 | 304.64 | 70.45 | 70.10 | 735.0 | 29.68 | 206.04 | 101.27 | 0.38 | 0.09 | 0.00 | 0.45 |
| MEAN | 8.14 | 10.2 | 2.27 | 2.26 | 26.2 | .96 | 6.87 | 3.27 | .013 | .003 | .000 | .015 |
| MAX | 23 | 27 | 15 | 22 | 208 | 5.4 | 47 | 23 | .09 | .09 | .00 | .23 |
| MIN | .00 | .00 | .00 | .00 | 2.4 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | 500 | 604 | 140 | 139 | 1460 | 59 | 409 | 201 | .8 | .2 | .00 | .9 |

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.19 | 4.83 | 15.5 | 50.0 | 104 | 109 | 32.7 | 10.4 | 5.84 | 4.74 | 5.06 | 4.50 |
| MAX | 8.73 | 38.2 | 154 | 335 | 613 | 1545 | 373 | 184 | 18.1 | 18.0 | 18.6 | 16.3 |
| (WY) | 1974 | 1984 | 1984 | 1983 | 1978 | 1983 | 1983 | 1983 | 1983 | 1980 | 1978 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1971 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 19332.87 | | | | 1770.43 | | | | | | | |
| ANNUAL MEAN | 53.0 | | | | 4.85 | | | | 28.7 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 269 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .000 | | | |
| HIGHEST DAILY MEAN | 1490 | | | | 208 | | | | 8860 | | | |
| LOWEST DAILY MEAN | .00 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .08 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 334 | | | | 13900 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 3.93 | | | | 11.97 | | | |
| ANNUAL RUNOFF (AC-FT) | 38350 | | | | 3510 | | | | 20780 | | | |
| 10 PERCENT EXCEEDS | 77 | | | | 14 | | | | 23 | | | |
| 50 PERCENT EXCEEDS | 8.3 | | | | .00 | | | | .55 | | | |
| 90 PERCENT EXCEEDS | .67 | | | | .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 fair except for estimated daily discharges, which are poor. Low flows regulated by Hernandez Reservoir, capacity, 18,500 acre-ft; Pacheco Lake, capacity, 6,140 acre-ft; Chesbro Reservoir, capacity, 8,090 acre-ft; Uvas Reservoir, capacity, 9,950 acre-ft; and San Felipe Lake. Many diversions upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,000 ft³/s, Dec. 24, 1955, gage height, 32.46 ft, from rating curve extended above 8,300 ft³/s on basis of slope-conveyance study; maximum gage height, 33.11 ft, Apr. 3, 1958; 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 1100 | *600 | *8.02 | | | | |

Minimum daily, 4.5 ft³/s, Oct. 22-23, Sept. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1 | 6.9 | 6.5 | 13 | 18 | 19 | 74 | 25 | 18 | 14 | 8.1 | 9.0 | 6.5 |
| 2 | 6.2 | 6.3 | 13 | 18 | 19 | 63 | 24 | 18 | 14 | 8.2 | 8.8 | 6.6 |
| 3 | 6.4 | 5.9 | 12 | 18 | 19 | 57 | 24 | 17 | 14 | 9.0 | 8.1 | 6.6 |
| 4 | 7.1 | 5.7 | 12 | 18 | 19 | 52 | 25 | 17 | 13 | 9.5 | 8.0 | 6.8 |
| 5 | 5.8 | 6.1 | 13 | 18 | 19 | 49 | 24 | 17 | 13 | 9.7 | 7.9 | 7.4 |
| 6 | 5.4 | 7.1 | 13 | 18 | 20 | 48 | 23 | 16 | 13 | 9.7 | 7.7 | 6.3 |
| 7 | 6.2 | 7.4 | 12 | 18 | 29 | 46 | 23 | 19 | 11 | 9.5 | 7.5 | 6.3 |
| 8 | 7.0 | 7.3 | 13 | 18 | 55 | 43 | 22 | 23 | 11 | 8.9 | 7.7 | 7.2 |
| 9 | 6.9 | 7.6 | 13 | 19 | 36 | 41 | 23 | 19 | 11 | 9.5 | 7.9 | 7.1 |
| 10 | 6.2 | 8.2 | 13 | 19 | 28 | 38 | 24 | 17 | 10 | 9.6 | 7.7 | 6.4 |
| 11 | 6.3 | 11 | 16 | 18 | 27 | 36 | 22 | 17 | 10 | 10 | 7.4 | 6.1 |
| 12 | 5.8 | 12 | 33 | 18 | 26 | 34 | 21 | 16 | 10 | 10 | 8.1 | 6.8 |
| 13 | 5.9 | 11 | 26 | 18 | 26 | 32 | 20 | 16 | 10 | 9.3 | 7.8 | 5.6 |
| 14 | 6.4 | 10 | 21 | 18 | 25 | 32 | 20 | 17 | 9.5 | 9.3 | 7.7 | 5.1 |
| 15 | 7.2 | 9.9 | 22 | 18 | 24 | 31 | 20 | 17 | 9.5 | 9.6 | 7.9 | 5.3 |
| 16 | e6.5 | 9.9 | 20 | 18 | 25 | 30 | 19 | 16 | 9.0 | 9.3 | 7.8 | 5.1 |
| 17 | e6.1 | 10 | 18 | 17 | 33 | 29 | 19 | 16 | 9.5 | 9.1 | 8.5 | 5.2 |
| 18 | e5.6 | 11 | 18 | 18 | 66 | 28 | 18 | 16 | 9.1 | 9.2 | 8.3 | 5.5 |
| 19 | e5.3 | 11 | 18 | 18 | 110 | 27 | 16 | 16 | 9.5 | 9.2 | 8.3 | 5.6 |
| 20 | e4.9 | 11 | 18 | 17 | 494 | 27 | 16 | 15 | 9.1 | 9.1 | 8.4 | 5.8 |
| 21 | e4.6 | 11 | 18 | 19 | 298 | 26 | 15 | 15 | 8.5 | 8.6 | 8.3 | 5.6 |
| 22 | e4.5 | 12 | 18 | 26 | 203 | 26 | 15 | 15 | 8.6 | 8.3 | 8.3 | 5.9 |
| 23 | 4.5 | 11 | 18 | 55 | 163 | 28 | 16 | 15 | 8.0 | 8.0 | 7.8 | 6.6 |
| 24 | 4.6 | 11 | 18 | 35 | 143 | 28 | 18 | 15 | 7.7 | 8.4 | 7.1 | 6.1 |
| 25 | 5.0 | 10 | 18 | 58 | 126 | 30 | 21 | 15 | 7.8 | 7.6 | 7.3 | 5.7 |
| 26 | 5.0 | 11 | 19 | 44 | 113 | 30 | 25 | 14 | 7.4 | e7.2 | 7.3 | 5.0 |
| 27 | 5.1 | 11 | 18 | 27 | 101 | 28 | 21 | 14 | 6.9 | e8.6 | 6.8 | 4.5 |
| 28 | 5.0 | 11 | 18 | 23 | 88 | 28 | 19 | 14 | 6.1 | 9.2 | 7.0 | 4.7 |
| 29 | 5.2 | 12 | 17 | 21 | --- | 28 | 19 | 14 | 6.7 | 9.3 | 7.3 | 5.0 |
| 30 | 6.3 | 13 | 18 | 21 | --- | 26 | 18 | 14 | 7.9 | 8.9 | 6.8 | 4.8 |
| 31 | 6.5 | --- | 18 | 20 | --- | 26 | --- | 14 | --- | 9.2 | 6.0 | --- |
| TOTAL | 180.4 | 287.9 | 535 | 709 | 2354 | 1121 | 615 | 502 | 294.8 | 279.1 | 240.5 | 177.2 |
| MEAN | 5.82 | 9.60 | 17.3 | 22.9 | 84.1 | 36.2 | 20.5 | 16.2 | 9.83 | 9.00 | 7.76 | 5.91 |
| MAX | 7.2 | 13 | 33 | 58 | 494 | 74 | 25 | 23 | 14 | 10 | 9.0 | 7.4 |
| MIN | 4.5 | 5.7 | 12 | 17 | 19 | 26 | 15 | 14 | 6.1 | 7.2 | 6.0 | 4.5 |
| AC-FT | 358 | 571 | 1060 | 1410 | 4670 | 2220 | 1220 | 996 | 585 | 554 | 477 | 351 |

e Estimated.

11159000 PAJARO RIVER AT CHITTENDEN, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 5.17 | 31.7 | 135 | 376 | 500 | 419 | 250 | 45.1 | 13.5 | 7.28 | 5.78 | 6.24 |
| MAX | 22.7 | 843 | 1990 | 2350 | 2641 | 4227 | 3165 | 646 | 92.9 | 26.2 | 22.1 | 93.3 |
| (WY) | 1984 | 1951 | 1956 | 1952 | 1969 | 1983 | 1958 | 1983 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1940 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 104006.3 | | | | 7295.9 | | | | | | | |
| ANNUAL MEAN | 285 | | | | 20.0 | | | | 148 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 905 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 1.06 | | | |
| HIGHEST DAILY MEAN | 5600 | | | | 494 | | | | 21700 | | | |
| LOWEST DAILY MEAN | 4.5 | | | | 4.5 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 4.7 | | | | 4.7 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 600 | | | | 24000 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 8.02 | | | | 33.11 | | | |
| ANNUAL RUNOFF (AC-FT) | 206300 | | | | 14470 | | | | 107100 | | | |
| 10 PERCENT EXCEEDS | 770 | | | | 30 | | | | 213 | | | |
| 50 PERCENT EXCEEDS | 18 | | | | 13 | | | | 10 | | | |
| 90 PERCENT EXCEEDS | 6.5 | | | | 6.1 | | | | 1.1 | | | |

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.--No estimated daily discharges. Records fair. 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2130 | *245 | *4.97 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|--------|-------|-------|------|------|------|------|------|
| 1 | .00 | .00 | .00 | .00 | .44 | 3.1 | .08 | .27 | .00 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | .00 | .37 | 2.5 | .21 | .10 | .00 | .00 | .00 | .00 |
| 3 | .00 | .00 | .00 | .00 | .29 | 2.0 | .07 | .04 | .00 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | .00 | .13 | 1.6 | .06 | .01 | .00 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | .00 | .05 | 1.4 | .04 | .00 | .00 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | .00 | .76 | 1.1 | .04 | .00 | .00 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | .00 | 25 | .83 | .03 | 3.7 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .00 | .00 | 13 | .64 | .22 | 2.0 | .00 | .00 | .00 | .00 |
| 9 | .00 | .00 | 21 | .00 | 7.1 | .45 | 2.2 | .88 | .00 | .00 | .00 | .00 |
| 10 | .00 | .00 | 5.2 | .00 | 5.4 | .38 | .52 | .39 | .00 | .00 | .00 | .00 |
| 11 | .00 | .40 | 20 | .00 | 4.7 | .34 | .14 | .18 | .00 | .00 | .00 | .00 |
| 12 | .00 | .00 | 9.1 | .00 | 3.4 | .28 | .00 | .04 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | 3.0 | .00 | 2.8 | .28 | .00 | .00 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | 13 | .00 | 2.3 | .32 | .03 | .02 | .00 | .00 | .00 | .00 |
| 15 | .00 | .00 | 6.1 | .00 | 2.0 | .30 | .00 | .01 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | 2.8 | .00 | 1.7 | .31 | .00 | .00 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | 1.7 | .00 | 13 | .27 | .00 | .38 | .00 | .00 | .00 | .00 |
| 18 | .00 | .00 | 1.2 | .00 | 18 | .25 | .01 | .08 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | .86 | .00 | 67 | .23 | .00 | .00 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | .61 | .00 | 67 | .18 | .00 | .00 | .00 | .00 | .00 | .00 |
| 21 | .00 | .00 | .47 | .00 | 23 | .19 | .00 | .00 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | .44 | .00 | 15 | .20 | .00 | .00 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | .31 | .26 | 11 | .22 | .37 | .00 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .15 | 16 | 8.3 | .43 | .09 | .00 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | .11 | 11 | 6.5 | .50 | 9.8 | .00 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | .05 | 5.9 | 5.9 | .23 | 5.8 | .00 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | .00 | 3.5 | 4.6 | .15 | 2.7 | .00 | .00 | .00 | .00 | .00 |
| 28 | .00 | .00 | .00 | 1.8 | 3.9 | .15 | 1.7 | .00 | .00 | .00 | .00 | .00 |
| 29 | .00 | 1.2 | .00 | 1.1 | --- | .15 | .89 | .00 | .00 | .00 | .00 | .00 |
| 30 | .00 | .06 | .00 | .82 | --- | .14 | .50 | .00 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | .00 | .61 | --- | .22 | --- | .00 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 1.66 | 86.10 | 40.99 | 312.64 | 19.34 | 25.50 | 8.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| MEAN | .000 | .055 | 2.78 | 1.32 | 11.2 | .62 | .85 | .26 | .000 | .000 | .000 | .000 |
| MAX | .00 | 1.2 | 21 | 16 | 67 | 3.1 | 9.8 | 3.7 | .00 | .00 | .00 | .00 |
| MIN | .00 | .00 | .00 | .00 | .05 | .14 | .00 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | 3.3 | 171 | 81 | 620 | 38 | 51 | 16 | .00 | .00 | .00 | .00 |

11159200 CORRALITOS CREEK AT FREEDOM, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .87 | 5.25 | 13.5 | 41.6 | 51.0 | 34.8 | 22.2 | 4.31 | .87 | .36 | .17 | .67 |
| MAX | 17.4 | 37.3 | 86.7 | 167 | 256 | 209 | 166 | 39.1 | 9.10 | 4.77 | 1.15 | 20.8 |
| (WY) | 1963 | 1984 | 1965 | 1982 | 1986 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1957 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 7677.38 | | | | 494.33 | | | | | | | |
| ANNUAL MEAN | 21.0 | | | | 1.35 | | | | 14.4 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 56.4 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .17 | | | |
| HIGHEST DAILY MEAN | 868 | | | | 67 | | | | 2290 | | | |
| LOWEST DAILY MEAN | .00 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .00 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 245 | | | | 5610 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 4.97 | | | | 16.66 | | | |
| ANNUAL RUNOFF (AC-FT) | 15230 | | | | 981 | | | | 10460 | | | |
| 10 PERCENT EXCEEDS | 54 | | | | 2.6 | | | | 28 | | | |
| 50 PERCENT EXCEEDS | .05 | | | | .00 | | | | .34 | | | |
| 90 PERCENT EXCEEDS | .00 | | | | .00 | | | | .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 fair 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, 1992-1994.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2045 | *900 | *6.26 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|--------|-------|-------|-------|------|-------|------|------|
| 1 | e1.6 | 2.0 | 9.9 | 3.9 | 6.5 | 31 | 6.9 | 7.8 | 4.2 | 1.3 | .72 | .14 |
| 2 | e1.6 | 2.0 | 7.7 | 3.9 | 6.0 | 28 | 6.9 | 6.9 | 3.9 | 1.3 | .66 | .22 |
| 3 | e1.6 | 1.9 | 6.3 | 3.9 | 5.8 | 25 | 6.9 | 6.6 | 3.7 | 1.3 | .55 | .01 |
| 4 | e1.6 | 1.8 | 5.9 | 3.9 | 5.5 | 24 | 6.8 | 6.4 | 3.6 | 1.4 | .49 | .00 |
| 5 | e1.6 | 1.8 | 5.6 | 3.9 | 5.1 | 23 | 6.3 | 6.1 | 3.6 | 1.5 | .53 | .00 |
| 6 | e1.7 | 1.8 | 5.1 | 3.8 | 9.3 | 21 | 6.1 | 5.5 | 3.5 | 1.5 | .45 | .00 |
| 7 | e1.6 | 1.8 | 5.1 | 3.6 | 147 | 19 | 6.1 | 21 | 3.3 | 1.5 | .42 | .00 |
| 8 | e1.7 | 1.6 | 9.0 | 3.6 | 54 | 18 | 8.0 | 14 | 3.1 | 1.6 | .40 | .00 |
| 9 | e1.7 | 1.6 | 73 | 3.6 | 24 | 18 | 15 | 9.6 | 2.8 | 1.6 | .35 | .00 |
| 10 | e1.7 | 4.5 | 22 | 3.6 | 17 | 16 | 8.7 | 8.4 | 2.4 | 1.4 | .27 | .00 |
| 11 | e2.1 | 21 | e59 | 3.7 | 15 | 14 | 7.2 | 7.5 | 2.4 | 1.4 | .25 | .00 |
| 12 | e2.0 | 8.4 | e32 | 3.9 | 12 | 12 | 6.5 | 6.9 | 2.5 | 1.4 | .22 | .00 |
| 13 | e2.0 | 6.3 | e16 | 3.9 | 9.6 | 10 | 5.9 | 6.8 | 2.2 | 1.5 | .13 | .00 |
| 14 | e3.6 | 5.5 | e35 | 3.6 | 9.0 | 9.6 | 5.9 | 6.3 | 1.9 | 1.5 | .08 | .00 |
| 15 | 5.8 | e4.9 | e26 | 3.6 | 8.2 | 9.1 | 6.1 | 5.9 | 1.7 | 1.5 | .03 | .00 |
| 16 | 6.0 | e4.4 | e16 | 3.6 | 7.8 | 9.1 | 6.4 | 5.6 | 1.7 | 1.6 | .00 | .00 |
| 17 | 5.1 | e4.1 | e11 | 3.6 | 138 | 8.8 | 6.4 | 8.3 | 1.7 | 1.4 | .07 | .00 |
| 18 | 4.8 | e3.8 | e9.0 | 3.6 | 83 | 8.5 | 6.2 | 8.2 | 1.6 | 1.4 | .12 | .00 |
| 19 | 4.1 | e3.6 | e7.7 | 3.6 | 322 | 8.3 | 5.6 | 7.0 | 1.8 | 1.3 | .15 | .00 |
| 20 | 3.6 | e3.4 | e6.6 | 3.6 | 300 | 7.4 | 5.6 | 6.5 | 1.7 | 1.4 | .24 | .13 |
| 21 | 3.3 | e3.3 | e5.5 | 3.6 | 104 | 7.4 | 5.4 | 6.3 | 1.7 | 1.5 | .32 | .21 |
| 22 | 3.2 | e3.2 | e5.3 | 3.8 | 72 | 7.4 | 5.1 | 5.4 | 2.0 | 1.3 | .20 | .18 |
| 23 | 3.0 | e3.1 | 5.5 | 14 | 52 | 7.4 | 8.0 | 4.7 | 1.8 | .99 | .25 | .16 |
| 24 | 2.9 | e3.0 | 5.5 | 40 | 41 | 8.5 | 10 | 4.7 | 1.7 | .82 | .22 | .20 |
| 25 | 2.5 | e2.9 | 5.5 | 33 | 35 | 14 | 29 | 4.7 | 1.6 | .74 | .34 | .24 |
| 26 | 2.3 | e2.8 | 4.8 | 30 | 32 | 9.6 | 17 | 4.7 | 1.5 | .71 | .26 | .13 |
| 27 | 2.0 | e2.7 | 4.1 | 17 | 31 | 8.7 | 12 | 4.7 | 1.4 | .71 | .11 | .12 |
| 28 | 1.9 | e12 | 3.9 | 12 | 34 | 8.5 | 9.5 | 4.6 | 1.4 | .77 | .13 | .00 |
| 29 | 1.9 | 24 | 3.9 | 9.9 | --- | 7.8 | 8.8 | 4.3 | 1.3 | .77 | .18 | .00 |
| 30 | 1.8 | 14 | 3.9 | 8.5 | --- | 7.3 | 8.5 | 4.3 | 1.4 | .75 | .16 | .00 |
| 31 | 1.9 | --- | 3.9 | 8.0 | --- | 6.9 | --- | 4.3 | --- | .67 | .22 | --- |
| TOTAL | 82.2 | 157.2 | 419.7 | 254.2 | 1585.8 | 413.3 | 252.8 | 214.0 | 69.1 | 38.53 | 8.52 | 1.74 |
| MEAN | 2.65 | 5.24 | 13.5 | 8.20 | 56.6 | 13.3 | 8.43 | 6.90 | 2.30 | 1.24 | .27 | .058 |
| MAX | 6.0 | 24 | 73 | 40 | 322 | 31 | 29 | 21 | 4.2 | 1.6 | .72 | .24 |
| MIN | 1.6 | 1.6 | 3.9 | 3.6 | 5.1 | 6.9 | 5.1 | 4.3 | 1.3 | .67 | .00 | .00 |
| AC-FT | 163 | 312 | 832 | 504 | 3150 | 820 | 501 | 424 | 137 | 76 | 17 | 3.5 |

e Estimated.

11160000 SOQUEL CREEK AT SOQUEL, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 6.63 | 16.8 | 59.2 | 110 | 116 | 92.1 | 55.1 | 18.3 | 8.61 | 4.85 | 3.05 | 3.06 |
| MAX | 111 | 78.5 | 625 | 437 | 596 | 577 | 324 | 95.9 | 28.8 | 15.3 | 10.5 | 22.4 |
| (WY) | 1963 | 1973 | 1956 | 1952 | 1986 | 1983 | 1982 | 1983 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1951 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 19540.0 | | | | 3497.09 | | | | | | | |
| ANNUAL MEAN | 53.5 | | | | 9.58 | | | | 40.8 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 169 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 2.89 | | | |
| HIGHEST DAILY MEAN | 1610 | | | | 322 | | | | 8800 | | | |
| LOWEST DAILY MEAN | 1.3 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 1.6 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 900 | | | | 15800 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 6.26 | | | | 22.33 | | | |
| ANNUAL RUNOFF (AC-FT) | 38760 | | | | 6940 | | | | 29560 | | | |
| 10 PERCENT EXCEEDS | 109 | | | | 18 | | | | 77 | | | |
| 50 PERCENT EXCEEDS | 7.7 | | | | 3.9 | | | | 7.1 | | | |
| 90 PERCENT EXCEEDS | 1.7 | | | | .18 | | | | 1.4 | | | |

11160430 BEAN CREEK NEAR SCOTTS VALLEY, CA

LOCATION.--Lat 37°03'19", long 122°02'25", in San Augustin 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, 1,190 ft³/s, Feb. 14, 1992, 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 1845 | *246 | *5.99 | | | | |

Minimum daily, 1.5 ft³/s, Sept. 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 2.0 | 2.2 | 2.2 | 2.6 | 2.8 | 7.8 | 2.7 | 2.7 | e1.9 | 1.8 | 2.0 | 2.1 |
| 2 | 2.0 | 2.2 | 2.2 | 2.6 | 2.6 | 6.7 | 2.7 | 2.7 | e1.9 | 1.9 | 2.1 | 2.2 |
| 3 | 2.0 | 2.2 | 2.2 | 2.4 | 2.5 | 5.9 | 2.7 | 2.6 | e1.9 | 1.9 | 2.1 | 2.2 |
| 4 | 2.1 | 2.2 | 2.2 | 2.4 | 2.4 | 5.4 | 2.6 | 2.5 | e1.8 | 2.1 | 2.0 | 2.2 |
| 5 | 2.1 | 2.2 | 2.2 | 2.4 | 2.4 | 5.4 | 2.6 | 2.5 | e1.8 | 2.1 | 2.1 | 2.0 |
| 6 | 2.0 | 2.2 | 2.2 | 2.4 | 10 | 5.2 | 2.6 | 2.5 | e1.8 | 2.1 | 2.1 | 2.1 |
| 7 | 2.1 | 2.1 | 2.2 | 2.4 | 64 | 4.8 | 2.5 | 7.6 | e1.7 | 2.2 | 2.0 | 2.0 |
| 8 | 2.0 | 2.1 | 5.5 | 2.4 | 29 | 4.3 | 5.6 | 3.1 | e1.7 | 2.1 | 2.0 | 2.0 |
| 9 | 2.1 | 2.2 | 10 | 2.4 | 17 | 4.1 | 3.9 | 2.8 | 1.7 | 1.9 | 2.0 | 2.0 |
| 10 | 2.1 | 3.8 | 2.8 | 2.4 | e16 | 3.8 | 2.9 | 2.7 | 1.7 | 2.1 | 2.0 | 1.9 |
| 11 | 2.2 | 2.7 | 18 | 2.4 | e8.5 | 3.6 | 2.7 | 2.7 | 1.7 | 2.1 | 2.0 | 1.9 |
| 12 | 2.1 | 2.2 | 5.2 | 2.4 | e5.2 | 3.3 | 2.7 | 2.6 | 1.7 | 2.1 | 2.0 | 2.0 |
| 13 | 2.1 | 2.2 | 5.1 | 2.4 | 3.3 | 3.1 | 2.7 | 2.5 | 1.8 | 2.1 | 2.0 | 2.0 |
| 14 | 2.2 | 2.2 | 18 | 2.4 | 2.8 | 3.1 | 2.7 | 2.5 | 1.8 | 2.1 | 2.0 | 1.9 |
| 15 | 3.3 | 2.3 | 6.8 | 2.4 | 2.7 | 3.0 | 2.6 | 2.6 | 1.8 | 2.1 | 2.0 | 1.9 |
| 16 | 2.0 | 2.2 | 5.2 | 2.4 | 3.8 | 2.9 | 2.5 | 2.6 | 1.7 | 2.0 | 2.0 | 1.7 |
| 17 | 2.1 | 2.1 | 4.3 | 2.4 | 52 | 2.8 | 2.5 | 10 | 1.7 | 2.0 | 2.0 | 1.8 |
| 18 | 2.1 | 2.2 | 3.7 | 2.4 | 44 | 2.9 | 2.4 | 3.0 | 1.7 | 2.0 | 2.0 | 1.8 |
| 19 | 2.1 | 2.2 | 4.2 | 2.4 | 97 | 2.9 | 2.4 | 2.6 | 1.8 | 2.1 | 2.0 | 1.8 |
| 20 | 2.1 | 2.2 | 3.3 | 2.4 | 72 | 2.8 | 2.4 | 2.5 | 1.8 | 2.1 | 2.0 | 1.8 |
| 21 | 2.1 | 2.2 | 2.9 | 2.4 | 40 | 2.9 | 2.4 | 2.3 | 1.7 | 2.1 | 2.0 | 1.8 |
| 22 | 2.1 | 2.2 | 2.9 | 2.6 | e29 | 2.9 | 2.4 | 2.3 | 1.8 | 2.1 | 2.0 | 1.6 |
| 23 | 2.2 | 2.2 | 2.8 | 5.7 | e22 | 2.9 | 6.1 | 2.2 | 1.8 | 2.0 | 2.0 | 1.7 |
| 24 | 2.2 | 2.2 | 2.7 | 23 | e17 | 5.0 | 3.3 | 2.1 | 1.8 | 2.0 | 2.0 | 1.8 |
| 25 | 2.2 | 2.2 | 2.7 | 11 | e14 | 3.8 | 10 | 2.1 | 1.8 | 2.0 | 2.0 | 1.8 |
| 26 | 2.1 | 2.2 | 2.8 | 6.4 | 13 | 3.1 | 3.5 | 2.1 | 1.9 | 2.0 | 2.0 | 1.8 |
| 27 | 2.1 | 2.3 | 2.7 | e5.2 | 10 | 2.9 | 3.0 | 2.1 | 1.9 | 2.0 | 2.1 | 1.7 |
| 28 | 2.2 | 5.8 | 2.7 | e4.0 | 8.9 | 2.8 | 2.9 | 2.0 | 1.9 | 2.0 | 2.0 | 1.5 |
| 29 | 2.2 | 3.0 | 2.6 | e3.3 | --- | 2.7 | 2.8 | 2.0 | 1.8 | 2.0 | 2.1 | 1.5 |
| 30 | 2.2 | 2.2 | 2.6 | 2.8 | --- | 2.7 | 2.7 | 2.0 | 1.8 | 2.0 | 2.1 | 1.5 |
| 31 | 2.2 | --- | 2.6 | 2.7 | --- | 2.7 | --- | e1.9 | --- | 2.0 | 2.1 | --- |
| TOTAL | 66.6 | 72.4 | 137.5 | 117.5 | 593.9 | 118.2 | 95.5 | 88.4 | 53.6 | 63.1 | 62.8 | 56.0 |
| MEAN | 2.15 | 2.41 | 4.44 | 3.79 | 21.2 | 3.81 | 3.18 | 2.85 | 1.79 | 2.04 | 2.03 | 1.87 |
| MAX | 3.3 | 5.8 | 18 | 23 | 97 | 7.8 | 10 | 10 | 1.9 | 2.2 | 2.1 | 2.2 |
| MIN | 2.0 | 2.1 | 2.2 | 2.4 | 2.4 | 2.7 | 2.4 | 1.9 | 1.7 | 1.8 | 2.0 | 1.5 |
| AC-FT | 132 | 144 | 273 | 233 | 1180 | 234 | 189 | 175 | 106 | 125 | 125 | 111 |

e Estimated.

11160430 BEAN CREEK NEAR SCOTTS VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.34 | 2.54 | 5.18 | 18.6 | 22.8 | 15.4 | 4.38 | 2.81 | 2.27 | 2.04 | 1.98 | 1.95 |
| MAX | 2.98 | 4.10 | 12.1 | 80.1 | 52.1 | 32.0 | 7.91 | 3.88 | 3.01 | 2.33 | 2.28 | 2.26 |
| (WY) | 1990 | 1990 | 1993 | 1993 | 1993 | 1991 | 1993 | 1993 | 1993 | 1993 | 1993 | 1993 |
| MIN | 1.96 | 1.96 | 2.16 | 2.11 | 2.42 | 3.81 | 2.62 | 2.33 | 1.79 | 1.71 | 1.84 | 1.76 |
| (WY) | 1991 | 1993 | 1991 | 1991 | 1991 | 1994 | 1990 | 1989 | 1994 | 1991 | 1989 | 1990 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1989 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 5577.0 | | | | 1525.5 | | | | | | | |
| ANNUAL MEAN | 15.3 | | | | 4.18 | | | | 7.07 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 15.9 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 3.00 | | | |
| HIGHEST DAILY MEAN | 276 | | | | 97 | | | | 276 | | | |
| LOWEST DAILY MEAN | 2.0 | | | | 1.5 | | | | .94 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 2.0 | | | | 1.7 | | | | 1.0 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 246 | | | | 1190 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 5.99 | | | | 9.29 | | | |
| ANNUAL RUNOFF (AC-FT) | 11060 | | | | 3030 | | | | 5120 | | | |
| 10 PERCENT EXCEEDS | 42 | | | | 5.4 | | | | 10 | | | |
| 50 PERCENT EXCEEDS | 2.9 | | | | 2.2 | | | | 2.3 | | | |
| 90 PERCENT EXCEEDS | 2.2 | | | | 1.8 | | | | 1.8 | | | |

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 1906-7, 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.--No estimated daily discharges. Records good. Low flow partially regulated by Loch Lomond Reservoir since 1961, capacity, 8,820 acre-ft, and by a 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2145 | *2,290 | *9.04 | | | | |

(a) 9.38 ft gage height, from crest-stage gage.

Minimum daily, 8.8 ft³/s, Aug. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|-------|------|------|------|------|-------|-------|------|
| 1 | 14 | 16 | 28 | 25 | 31 | 73 | 34 | 31 | 21 | 13 | 12 | 10 |
| 2 | 15 | 15 | 22 | 25 | 27 | 67 | 33 | 29 | 21 | 13 | 12 | 10 |
| 3 | 15 | 15 | 21 | 25 | 25 | 60 | 33 | 28 | 20 | 13 | 12 | 11 |
| 4 | 15 | 16 | 19 | 25 | 25 | 55 | 33 | 27 | 21 | 14 | 12 | 11 |
| 5 | 15 | 15 | 19 | 25 | 24 | 52 | 32 | 27 | 20 | 14 | 12 | 11 |
| 6 | 16 | 16 | 19 | 24 | 81 | 50 | 31 | 26 | 20 | 14 | 12 | 18 |
| 7 | 16 | 16 | 19 | 24 | 551 | 47 | 30 | 75 | 20 | 14 | 11 | 12 |
| 8 | 16 | 16 | 60 | 24 | 257 | 44 | 43 | 49 | 20 | 13 | 11 | 11 |
| 9 | 17 | 16 | 213 | 24 | 122 | 46 | 53 | 35 | 20 | 12 | 10 | 11 |
| 10 | 18 | 32 | 60 | 24 | 93 | 41 | 35 | 32 | 18 | 12 | 9.9 | 11 |
| 11 | 18 | 43 | 255 | 23 | 84 | 39 | 31 | 30 | 18 | 13 | 9.6 | 11 |
| 12 | 18 | 22 | 109 | 23 | 61 | 39 | 29 | 27 | 18 | 13 | 9.4 | 11 |
| 13 | 19 | 16 | 57 | 23 | 54 | 38 | 27 | 27 | 18 | 13 | 9.4 | 11 |
| 14 | 20 | 15 | 194 | 23 | 49 | 40 | 27 | 26 | 18 | 13 | 9.4 | 11 |
| 15 | 27 | 14 | 83 | 23 | 45 | 40 | 27 | 25 | 17 | 13 | 9.2 | 12 |
| 16 | 22 | 14 | 52 | 23 | 43 | 41 | 27 | 25 | 17 | 13 | 8.8 | 11 |
| 17 | 19 | 14 | 43 | 23 | 465 | 39 | 26 | 63 | 15 | 13 | 8.9 | 11 |
| 18 | 20 | 14 | 37 | 22 | 325 | 38 | 26 | 35 | 16 | 13 | 9.3 | 11 |
| 19 | 17 | 14 | 34 | 22 | 755 | 37 | 28 | 31 | 17 | 13 | 9.7 | 11 |
| 20 | 16 | 14 | 32 | 22 | 830 | 37 | 38 | 29 | 17 | 13 | 11 | 11 |
| 21 | 15 | 15 | 30 | 22 | 366 | 38 | 29 | 28 | 16 | 13 | 11 | 11 |
| 22 | 15 | 14 | 29 | 22 | 233 | 38 | 26 | 25 | 17 | 13 | 11 | 11 |
| 23 | 15 | 14 | 28 | 45 | 184 | 38 | 45 | 25 | 16 | 13 | 11 | 11 |
| 24 | 15 | 14 | 27 | 184 | 151 | 54 | 47 | 24 | 16 | 9.8 | 12 | 12 |
| 25 | 15 | 15 | 27 | 131 | 126 | 61 | 100 | 24 | 16 | 11 | 12 | 12 |
| 26 | 14 | 15 | 27 | 94 | 109 | 43 | 59 | 23 | 15 | 12 | 12 | 12 |
| 27 | 14 | 15 | 26 | 62 | 96 | 39 | 44 | 23 | 14 | 12 | 11 | 12 |
| 28 | 14 | 58 | 26 | 41 | 84 | 37 | 38 | 23 | 14 | 11 | 11 | 11 |
| 29 | 14 | 116 | 26 | 32 | --- | 37 | 35 | 21 | 14 | 11 | 12 | 11 |
| 30 | 15 | 67 | 25 | 30 | --- | 36 | 32 | 22 | 14 | 11 | 11 | 11 |
| 31 | 16 | --- | 25 | 30 | --- | 35 | --- | 22 | --- | 12 | 11 | --- |
| TOTAL | 515 | 696 | 1672 | 1165 | 5296 | 1379 | 1098 | 937 | 524 | 390.8 | 333.6 | 341 |
| MEAN | 16.6 | 23.2 | 53.9 | 37.6 | 189 | 44.5 | 36.6 | 30.2 | 17.5 | 12.6 | 10.8 | 11.4 |
| MAX | 27 | 116 | 255 | 184 | 830 | 73 | 100 | 75 | 21 | 14 | 12 | 18 |
| MIN | 14 | 14 | 19 | 22 | 24 | 35 | 26 | 21 | 14 | 9.8 | 8.8 | 10 |
| AC-FT | 1020 | 1380 | 3320 | 2310 | 10500 | 2740 | 2180 | 1860 | 1040 | 775 | 662 | 676 |

SAN LORENZO RIVER BASIN

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11160500 SAN LORENZO RIVER AT BIG TREES, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 23.3 | 54.4 | 151 | 301 | 386 | 290 | 176 | 69.5 | 39.3 | 25.9 | 19.6 | 17.8 |
| MAX | 176 | 461 | 1319 | 1242 | 1532 | 1483 | 1005 | 322 | 112 | 65.8 | 44.0 | 52.1 |
| (WY) | 1963 | 1951 | 1956 | 1952 | 1986 | 1983 | 1958 | 1983 | 1983 | 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 1993 CALENDAR YEAR | FOR 1994 WATER YEAR | WATER YEARS 1937 - 1994 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 55207 | 14347.4 | |
| ANNUAL MEAN | 151 | 39.3 | 128 |
| HIGHEST ANNUAL MEAN | | | 391 |
| LOWEST ANNUAL MEAN | | | 13.2 |
| HIGHEST DAILY MEAN | 3540 | Jan 13 | 17000 |
| LOWEST DAILY MEAN | 13 | Sep 27 | 5.6 |
| ANNUAL SEVEN-DAY MINIMUM | 14 | Sep 24 | 5.8 |
| INSTANTANEOUS PEAK FLOW | | 2290 | 30400 |
| INSTANTANEOUS PEAK STAGE | | 9.04 | 28.85 |
| ANNUAL RUNOFF (AC-FT) | 109500 | 28460 | 92900 |
| 10 PERCENT EXCEEDS | 317 | 60 | 264 |
| 50 PERCENT EXCEEDS | 36 | 22 | 32 |
| 90 PERCENT EXCEEDS | 15 | 11 | 13 |

SAN LORENZO RIVER BASIN

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 except for estimated daily discharges, which are poor. Low flow partially regulated by Loch Lomond Reservoir since 1961, capacity, 8,820 acre-ft, and by a 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 and maximum (*), from rating curve extended above 2,500 ft³/s by comparison to station at Big Trees:

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2330 | *2,830 | *9.69 | | | | |

Minimum daily, 0.34 ft³/s, Sept. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|------|-------|------|------|------|-------|-------|-------|-------|
| 1 | 6.4 | 6.7 | 30 | 16 | e25 | 72 | 35 | 23 | 15 | 6.4 | 4.0 | .90 |
| 2 | 6.4 | 6.1 | 17 | 16 | 24 | 69 | 35 | 23 | 14 | 5.5 | 3.7 | 1.3 |
| 3 | 6.4 | 5.8 | 13 | e16 | 20 | 63 | 34 | 22 | 13 | 5.5 | 3.6 | .52 |
| 4 | 6.4 | 5.9 | 12 | e15 | 20 | 58 | 34 | 22 | 13 | 6.1 | 3.1 | 1.0 |
| 5 | 6.6 | 6.1 | 11 | e15 | 18 | 53 | 33 | 20 | 13 | 6.4 | 2.6 | .71 |
| 6 | 7.0 | 5.7 | 11 | e15 | 61 | 49 | 32 | 20 | 12 | 6.0 | 2.6 | .95 |
| 7 | 7.0 | 5.7 | 11 | e15 | 773 | 46 | 31 | 57 | 13 | 6.0 | 2.5 | 7.6 |
| 8 | 7.5 | 6.0 | 24 | e15 | 349 | 43 | 30 | 52 | 12 | 5.3 | 2.2 | 1.1 |
| 9 | 7.4 | 6.0 | 287 | e15 | 176 | 47 | 54 | 31 | 12 | 5.1 | 2.3 | 1.1 |
| 10 | 7.6 | 10 | 109 | e15 | 127 | 40 | 32 | 26 | 11 | 4.7 | 2.1 | 1.0 |
| 11 | 6.8 | 50 | 342 | e14 | 122 | 38 | 26 | 23 | 11 | 4.8 | 1.8 | 2.3 |
| 12 | 7.6 | 16 | 174 | e14 | 93 | 36 | 24 | 22 | 11 | 4.7 | 1.7 | 1.9 |
| 13 | 7.9 | 7.9 | 74 | e14 | 82 | 35 | 22 | 21 | 10 | 4.7 | 1.0 | .68 |
| 14 | 11 | 7.8 | 251 | e14 | 76 | 35 | 21 | 20 | 10 | 4.8 | .94 | 1.2 |
| 15 | 21 | 7.8 | 121 | e14 | 71 | 36 | 21 | 19 | 10 | 4.9 | 1.2 | 1.0 |
| 16 | 18 | 7.8 | 69 | e14 | 67 | 36 | 21 | 18 | 9.7 | 4.8 | .61 | 2.3 |
| 17 | 15 | 7.8 | 46 | e14 | 464 | 34 | 21 | 60 | 8.3 | 4.7 | .59 | .44 |
| 18 | 10 | 7.2 | 32 | e13 | 314 | 32 | 21 | 42 | 8.9 | 4.9 | .84 | .34 |
| 19 | 8.4 | 6.4 | 27 | e13 | 815 | 31 | 20 | 27 | 10 | 4.6 | .89 | .98 |
| 20 | 7.7 | 6.4 | 24 | e13 | 1180 | 31 | 29 | 25 | 9.2 | 4.9 | .84 | .88 |
| 21 | 7.7 | 6.4 | 22 | e13 | 366 | 32 | 22 | 24 | 8.7 | 5.0 | 1.2 | 1.1 |
| 22 | 7.7 | 7.4 | 20 | e13 | 225 | 32 | 20 | 22 | 9.1 | 5.1 | 1.0 | 1.3 |
| 23 | 7.7 | 6.1 | 20 | e20 | 171 | 31 | 32 | 21 | 8.2 | 4.8 | 1.2 | 1.1 |
| 24 | 7.5 | 6.2 | 20 | e245 | 140 | 39 | 45 | 20 | 7.9 | 3.7 | .83 | .93 |
| 25 | 8.0 | 6.2 | 20 | e168 | 118 | 54 | 87 | 18 | 7.9 | 2.8 | 1.1 | 1.5 |
| 26 | 8.0 | 6.4 | 20 | e110 | 97 | 35 | 61 | 17 | 7.3 | 3.8 | 2.5 | 1.7 |
| 27 | 8.0 | 6.7 | 18 | e74 | 88 | 32 | 40 | 17 | 6.7 | 3.9 | 1.0 | 1.6 |
| 28 | 6.4 | 24 | 17 | e46 | 79 | 38 | 31 | 15 | 7.8 | 3.9 | .94 | 2.1 |
| 29 | 6.2 | 114 | 17 | e32 | --- | 37 | 27 | 15 | 6.4 | 3.5 | .67 | .73 |
| 30 | 6.0 | 84 | 17 | e27 | --- | 36 | 25 | 15 | 6.6 | 3.8 | .44 | .95 |
| 31 | 6.4 | --- | 16 | e26 | --- | 35 | --- | 15 | --- | 3.8 | .84 | --- |
| TOTAL | 261.7 | 456.5 | 1892 | 1064 | 6161 | 1285 | 966 | 772 | 302.7 | 148.9 | 50.83 | 41.21 |
| MEAN | 8.44 | 15.2 | 61.0 | 34.3 | 220 | 41.5 | 32.2 | 24.9 | 10.1 | 4.80 | 1.64 | 1.37 |
| MAX | 21 | 114 | 342 | 245 | 1180 | 72 | 87 | 60 | 15 | 6.4 | 4.0 | 7.6 |
| MIN | 6.0 | 5.7 | 11 | 13 | 18 | 31 | 20 | 15 | 6.4 | 2.8 | .44 | .34 |
| AC-FT | 519 | 905 | 3750 | 2110 | 12220 | 2550 | 1920 | 1530 | 600 | 295 | 101 | 82 |

e Estimated.

11161000 SAN LORENZO RIVER AT SANTA CRUZ, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.0 | 20.7 | 164 | 213 | 289 | 170 | 128 | 52.6 | 25.4 | 12.6 | 7.25 | 8.26 |
| MAX | 28.9 | 38.8 | 1366 | 822 | 1254 | 728 | 1017 | 138 | 70.0 | 45.0 | 30.0 | 40.4 |
| (WY) | 1990 | 1955 | 1956 | 1956 | 1958 | 1958 | 1958 | 1958 | 1958 | 1958 | 1958 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1953 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 58327.5 | | | | 13401.84 | | | | | | | |
| ANNUAL MEAN | 160 | | | | 36.7 | | | | 91.0 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 293 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 21.5 | | | |
| HIGHEST DAILY MEAN | 3820 | | | | Jan 13 | | | | 17400 | | | |
| LOWEST DAILY MEAN | 5.7 | | | | Nov 6 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 5.9 | | | | Nov 3 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 2830 | | | | Feb 19 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 9.69 | | | | Feb 19 | | | |
| ANNUAL RUNOFF (AC-FT) | 115700 | | | | 26580 | | | | 65960 | | | |
| 10 PERCENT EXCEEDS | 303 | | | | 70 | | | | 179 | | | |
| 50 PERCENT EXCEEDS | 30 | | | | 13 | | | | 20 | | | |
| 90 PERCENT EXCEEDS | 7.3 | | | | 1.2 | | | | 2.0 | | | |

11161300 CARBONERA CREEK AT SCOTTS VALLEY, CA

LOCATION.--Lat 37°03'02", long 122°00'45" in San Augustin 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.--No estimated daily discharges. Records fair. No regulation or diversion upstream from station. Low flows affected by return flow from urban irrigation and by periodic flushing of upstream county well.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,090 ft³/s, Feb. 14, 1992, gage height, 10.05 ft, from rating curve extended above 330 ft³/s on basis of slope-area measurement at gage-height 9.48 ft; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 7 | 0230 | *467 | *7.36 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|--------|-------|-------|-------|------|------|------|------|
| 1 | .01 | .25 | .59 | .21 | .91 | 1.7 | .39 | .52 | .24 | .01 | .10 | .01 |
| 2 | .02 | .06 | .62 | .22 | .80 | 1.6 | .40 | .50 | .19 | .01 | .00 | .01 |
| 3 | .03 | .05 | .53 | .23 | .69 | 1.4 | .41 | .55 | .15 | .03 | .00 | .00 |
| 4 | .05 | .08 | .50 | .44 | .61 | 1.2 | .38 | .43 | .13 | .01 | .00 | .00 |
| 5 | .07 | .35 | .54 | .21 | .52 | 1.2 | .39 | .40 | .14 | .04 | .00 | .00 |
| 6 | .08 | .37 | .62 | .18 | 17 | .99 | .41 | .40 | .16 | .04 | .00 | .00 |
| 7 | .03 | .40 | .70 | .17 | 75 | .90 | .36 | 7.3 | .13 | .03 | .00 | .00 |
| 8 | .13 | .37 | 13 | .20 | 13 | .83 | 4.9 | 1.1 | .14 | .02 | .00 | .00 |
| 9 | .07 | .40 | 13 | .23 | 5.0 | .76 | 1.8 | .72 | .09 | .01 | .04 | .00 |
| 10 | .20 | 5.1 | 2.3 | .21 | 5.7 | .76 | .74 | .65 | .04 | .02 | .00 | .00 |
| 11 | .24 | 2.7 | 30 | .24 | 3.2 | .73 | .59 | .58 | .05 | .01 | .00 | .00 |
| 12 | .07 | .78 | 2.1 | .24 | 2.0 | .64 | .58 | .50 | .07 | .01 | .00 | .00 |
| 13 | .05 | .60 | 5.8 | .24 | 1.7 | .64 | .49 | .49 | .04 | .04 | .00 | .01 |
| 14 | .79 | .49 | 17 | .30 | 1.4 | .64 | .42 | .45 | .04 | .02 | .00 | .01 |
| 15 | 3.8 | .70 | 2.3 | .30 | 1.4 | .64 | .42 | .44 | .04 | .11 | .00 | .00 |
| 16 | .41 | .70 | 1.3 | .30 | 2.9 | .82 | .46 | .54 | .03 | .26 | .00 | .00 |
| 17 | .37 | .40 | .93 | .30 | 44 | .61 | .39 | 7.0 | .05 | .03 | .00 | .00 |
| 18 | .16 | .25 | .64 | .31 | 13 | .58 | .37 | 1.3 | .05 | .01 | .00 | .00 |
| 19 | .15 | .29 | .55 | .27 | 79 | .52 | .33 | .82 | .05 | .05 | .01 | .02 |
| 20 | .13 | .22 | .51 | .29 | 21 | .57 | .34 | .61 | .28 | .03 | .00 | .02 |
| 21 | .09 | .30 | .40 | .24 | 9.9 | .57 | .32 | .50 | .90 | .06 | .00 | .04 |
| 22 | .09 | .34 | .41 | 1.1 | 6.2 | .70 | .33 | .45 | .54 | .06 | .00 | .02 |
| 23 | .07 | .26 | .29 | 8.1 | 4.4 | .51 | 4.9 | .39 | .07 | .05 | .00 | .30 |
| 24 | .12 | .29 | .20 | 32 | 3.5 | 4.3 | 1.4 | .37 | .03 | .13 | .00 | .08 |
| 25 | .06 | .29 | .25 | 17 | 2.9 | 1.2 | 9.6 | .40 | .13 | .00 | .00 | .08 |
| 26 | .05 | .40 | .42 | 5.3 | 3.7 | .72 | 1.9 | .37 | .09 | .00 | .00 | .08 |
| 27 | .24 | .45 | .38 | 4.7 | 2.4 | .62 | 1.0 | .36 | .30 | .00 | .00 | .08 |
| 28 | .27 | 13 | .30 | 2.1 | 2.0 | .58 | .96 | .32 | .14 | .01 | .00 | .04 |
| 29 | .08 | 4.9 | .24 | 1.6 | --- | .51 | .92 | .25 | .15 | .00 | .00 | .03 |
| 30 | .07 | 1.1 | .24 | 1.4 | --- | .45 | .70 | .20 | .03 | .00 | .00 | .02 |
| 31 | .24 | --- | .23 | 1.1 | --- | .41 | --- | .21 | --- | .01 | .00 | --- |
| TOTAL | 8.24 | 35.89 | 96.89 | 79.73 | 323.83 | 28.30 | 36.60 | 29.12 | 4.49 | 1.11 | 0.15 | 0.85 |
| MEAN | .27 | 1.20 | 3.13 | 2.57 | 11.6 | .91 | 1.22 | .94 | .15 | .036 | .005 | .028 |
| MAX | 3.8 | 13 | 30 | 32 | 79 | 4.3 | 9.6 | 7.3 | .90 | .26 | .10 | .30 |
| MIN | .01 | .05 | .20 | .17 | .52 | .41 | .32 | .20 | .03 | .00 | .00 | .00 |
| AC-FT | 16 | 71 | 192 | 158 | 642 | 56 | 73 | 58 | 8.9 | 2.2 | .3 | 1.7 |

11161300 CARBONERA CREEK AT SCOTTS VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .65 | 1.51 | 4.53 | 8.24 | 15.9 | 10.1 | 1.15 | .73 | .17 | .049 | .12 | .16 |
| MAX | 3.01 | 4.86 | 10.9 | 40.3 | 63.9 | 32.0 | 1.89 | 3.22 | .37 | .21 | .91 | .68 |
| (WY) | 1990 | 1989 | 1989 | 1993 | 1986 | 1986 | 1986 | 1990 | 1993 | 1989 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1985 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 2160.85 | | | | 645.20 | | | | | | | |
| ANNUAL MEAN | 5.92 | | | | 1.77 | | | | 3.57 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 10.1 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 1.33 | | | |
| HIGHEST DAILY MEAN | 172 Jan 20 | | | | 79 Feb 19 | | | | 352 Feb 17 1986 | | | |
| LOWEST DAILY MEAN | .00 Sep 29 | | | | .00 Jul 25 | | | | .00 Jun 28 1985 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .01 Sep 26 | | | | .00 Aug 2 | | | | .00 Jun 28 1985 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 467 Feb 7 | | | | 1090 Feb 14 1992 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 7.36 Feb 7 | | | | 10.05 Feb 14 1992 | | | |
| ANNUAL RUNOFF (AC-FT) | 4290 | | | | 1280 | | | | 2590 | | | |
| 10 PERCENT EXCEEDS | 12 | | | | 2.9 | | | | 4.7 | | | |
| 50 PERCENT EXCEEDS | .49 | | | | .30 | | | | .25 | | | |
| 90 PERCENT EXCEEDS | .05 | | | | .00 | | | | .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 except for estimated daily discharges and for discharges above 20 ft³/s, which are poor. Minor regulation from swimming pools in San Mateo County Memorial Park and Portola State Park during summer months. Small diversions upstream from station by pumping.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,420 ft³/s, Dec. 23, 1955, gage height, 21.27 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2315 | *991 | *7.21 | | | | |

Minimum daily, 0.41 ft³/s, Sept. 16-18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|--------|-------|-------|-------|------|-------|-------|-------|
| 1 | e2.6 | 2.6 | 7.5 | 5.4 | 9.6 | 36 | 6.8 | 9.3 | 4.5 | 1.7 | 1.0 | .76 |
| 2 | e2.6 | 2.6 | 4.4 | 5.4 | 8.4 | 32 | 6.7 | 8.7 | 4.2 | 1.7 | 1.0 | .77 |
| 3 | e2.5 | 2.6 | 3.5 | 5.4 | 7.5 | 28 | 6.4 | 8.7 | 4.2 | 1.5 | 1.0 | .75 |
| 4 | e2.5 | 2.6 | 3.2 | 5.4 | 7.0 | 25 | 6.4 | 8.6 | 4.2 | 1.5 | 1.0 | .90 |
| 5 | e2.5 | 2.6 | 3.0 | 5.4 | 6.4 | 23 | 6.3 | 8.3 | 4.0 | 1.6 | 1.0 | .91 |
| 6 | e2.5 | 2.6 | 3.0 | 5.4 | 12 | 21 | 6.1 | 8.3 | 4.0 | 1.5 | 1.0 | .98 |
| 7 | e2.9 | 2.6 | 3.0 | 5.2 | 143 | 19 | 6.1 | 17 | 4.0 | 1.5 | 1.2 | .91 |
| 8 | e2.7 | 2.6 | 4.2 | 5.1 | 141 | 17 | 6.4 | 21 | 3.6 | 1.3 | 1.3 | .83 |
| 9 | e2.6 | 2.6 | 41 | 5.1 | 71 | 16 | 10 | 12 | 3.5 | 1.3 | 1.2 | .85 |
| 10 | e2.6 | 3.0 | 21 | 5.1 | 45 | 15 | 8.1 | 9.9 | 3.5 | 1.2 | 1.1 | .81 |
| 11 | e2.5 | 14 | 60 | 4.7 | 49 | 14 | 6.2 | 8.5 | 3.2 | 1.1 | 1.0 | .81 |
| 12 | e2.5 | 6.6 | 58 | 4.2 | 34 | 13 | 6.0 | 7.8 | 3.1 | 1.1 | 1.0 | .81 |
| 13 | e2.5 | 4.2 | 28 | 4.2 | 26 | 12 | 5.7 | 7.5 | 3.0 | 1.1 | 1.0 | .75 |
| 14 | e4.5 | 3.2 | 54 | 4.2 | 20 | 11 | 5.8 | 7.1 | 3.1 | .91 | 1.1 | .55 |
| 15 | e5.6 | 2.6 | 48 | 4.1 | 17 | 11 | 6.1 | 6.5 | 3.2 | .91 | 1.1 | .44 |
| 16 | e5.0 | 2.6 | 29 | 4.0 | 14 | 11 | 6.1 | 6.4 | 3.1 | 1.2 | 1.0 | .41 |
| 17 | e4.2 | 2.6 | 19 | 4.0 | 235 | 11 | 6.1 | 6.4 | 2.8 | 1.4 | 1.0 | .41 |
| 18 | e3.5 | 2.6 | 15 | 4.0 | 199 | 10 | 6.1 | 6.4 | 2.8 | 1.4 | .88 | .41 |
| 19 | e3.2 | 2.4 | 12 | 3.8 | 285 | 9.7 | 5.9 | 5.8 | 2.8 | 1.3 | .83 | .46 |
| 20 | 3.2 | 2.4 | 10 | 3.7 | 426 | 9.2 | 5.8 | 5.8 | 3.0 | 1.3 | .81 | .52 |
| 21 | 3.0 | 2.4 | 8.5 | 3.7 | 159 | 8.7 | 5.8 | 5.8 | 3.0 | 1.4 | .81 | .48 |
| 22 | 2.6 | 2.4 | 7.9 | 3.7 | 113 | 8.5 | 5.8 | 5.8 | 2.3 | 1.4 | .91 | .48 |
| 23 | 2.6 | 2.6 | 7.6 | 5.0 | 86 | 8.3 | 7.9 | 5.8 | 1.8 | 1.4 | .85 | .51 |
| 24 | 2.6 | 2.6 | 6.9 | 38 | 69 | 8.8 | 12 | 5.4 | 1.8 | 1.3 | .81 | .55 |
| 25 | 2.6 | 2.6 | 6.8 | 51 | 58 | 12 | 17 | 5.3 | 2.2 | 1.5 | .81 | .55 |
| 26 | 2.6 | 2.9 | 6.4 | 64 | 52 | 9.5 | 27 | 5.1 | 2.2 | 1.5 | .83 | .55 |
| 27 | 2.6 | 3.0 | 6.4 | 42 | 47 | 8.1 | 17 | 4.9 | 2.0 | 1.1 | .89 | .55 |
| 28 | 2.5 | 5.6 | 6.1 | 28 | 41 | 7.5 | 12 | 4.8 | 1.8 | 1.0 | .81 | .55 |
| 29 | 2.4 | 27 | 5.8 | 19 | --- | 7.5 | 10 | 4.7 | 1.8 | .99 | .77 | .55 |
| 30 | 2.3 | 23 | 5.4 | 14 | --- | 7.5 | 9.9 | 4.5 | 1.8 | .92 | .72 | .55 |
| 31 | 2.3 | --- | 5.4 | 12 | --- | 7.1 | --- | 4.5 | --- | 1.0 | .78 | --- |
| TOTAL | 90.8 | 143.7 | 500.0 | 374.2 | 2380.9 | 437.4 | 253.5 | 236.6 | 90.5 | 40.03 | 29.51 | 19.36 |
| MEAN | 2.93 | 4.79 | 16.1 | 12.1 | 85.0 | 14.1 | 8.45 | 7.63 | 3.02 | 1.29 | .95 | .65 |
| MAX | 5.6 | 27 | 60 | 64 | 426 | 36 | 27 | 21 | 4.5 | 1.7 | 1.3 | .98 |
| MIN | 2.3 | 2.4 | 3.0 | 3.7 | 6.4 | 7.1 | 5.7 | 4.5 | 1.8 | .91 | .72 | .41 |
| AC-FT | 180 | 285 | 992 | 742 | 4720 | 868 | 503 | 469 | 180 | 79 | 59 | 38 |

e Estimated.

11162500 PESCADERO CREEK NEAR PESCADERO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 5.67 | 13.6 | 58.2 | 110 | 115 | 89.3 | 55.2 | 17.5 | 8.17 | 4.59 | 3.20 | 2.48 |
| MAX | 92.8 | 85.9 | 469 | 418 | 476 | 540 | 398 | 93.8 | 28.1 | 14.8 | 10.5 | 7.79 |
| (WY) | 1963 | 1984 | 1956 | 1952 | 1983 | 1983 | 1958 | 1983 | 1983 | 1983 | 1969 | 1983 |
| 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1951 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 18970.9 | | | | 4596.50 | | | | | | | |
| ANNUAL MEAN | 52.0 | | | | 12.6 | | | | 39.9 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 164 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 1.72 | | | |
| HIGHEST DAILY MEAN | 2460 | | | | 426 | | | | 5560 | | | |
| LOWEST DAILY MEAN | 2.0 | | | | .41 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 2.5 | | | | .45 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 991 | | | | 9420 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 7.21 | | | | 21.27 | | | |
| ANNUAL RUNOFF (AC-FT) | 37630 | | | | 9120 | | | | 28920 | | | |
| 10 PERCENT EXCEEDS | 94 | | | | 25 | | | | 82 | | | |
| 50 PERCENT EXCEEDS | 7.5 | | | | 4.2 | | | | 6.5 | | | |
| 90 PERCENT EXCEEDS | 2.6 | | | | .85 | | | | 1.3 | | | |

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 through September 1994 (discontinued).
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.--No estimated daily discharges. Records fair except for daily discharges less than 2.0 ft³/s, which are poor. No regulation or diversion upstream from station. Low flows 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 FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*), from rating curve extended above 640 ft³/s on basis of slope-area measurement at gage height 17.48 ft:

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2345 | *923 | *9.31 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|--------|-------|-------|-------|-------|-------|------|------|
| 1 | .75 | 1.2 | 5.7 | 3.8 | 6.8 | 27 | 6.7 | 5.7 | 3.2 | .76 | .57 | .00 |
| 2 | 1.1 | 1.7 | 3.7 | 3.8 | 6.5 | 25 | 6.6 | 5.9 | 3.3 | 1.0 | .70 | .00 |
| 3 | 1.6 | 1.6 | 3.1 | 3.8 | 6.1 | 22 | 6.7 | 6.4 | 3.7 | .91 | .86 | .00 |
| 4 | 1.7 | 1.6 | 2.9 | 3.8 | 5.7 | 20 | 6.9 | 5.9 | 2.9 | 1.0 | .53 | .01 |
| 5 | 1.9 | 1.5 | 2.7 | 4.1 | 5.5 | 19 | 6.0 | 6.5 | 2.7 | .90 | .26 | .01 |
| 6 | 1.7 | 1.8 | 2.6 | 4.0 | 12 | 18 | 4.9 | 6.5 | 3.1 | .26 | .12 | .00 |
| 7 | 2.0 | 1.8 | 2.6 | 3.8 | 154 | 16 | 4.5 | 21 | 2.3 | .48 | .05 | .00 |
| 8 | 2.2 | 1.8 | 3.2 | 3.7 | 134 | 15 | 5.5 | 16 | 1.4 | .23 | .19 | .00 |
| 9 | 2.0 | 1.9 | 24 | 3.9 | 45 | 14 | 16 | 12 | 2.0 | .23 | .05 | .00 |
| 10 | 1.9 | 2.1 | 11 | 3.9 | 38 | 13 | 8.8 | 9.9 | 1.6 | .24 | .03 | .00 |
| 11 | 1.9 | 7.2 | 28 | 3.8 | 42 | 13 | 7.5 | 8.3 | 1.7 | .40 | .00 | .00 |
| 12 | 2.0 | 4.0 | 24 | 3.6 | 27 | 12 | 6.5 | 7.9 | 2.2 | .64 | .00 | .00 |
| 13 | 2.0 | 2.1 | 12 | 3.6 | 21 | 11 | 5.7 | 7.2 | 1.7 | .62 | .00 | .00 |
| 14 | 2.1 | 2.5 | 35 | 3.6 | 17 | 11 | 5.6 | 7.0 | 1.6 | .55 | .00 | .00 |
| 15 | 3.5 | 2.1 | 20 | 3.6 | 14 | 10 | 5.3 | 6.8 | 1.1 | .11 | .00 | .00 |
| 16 | 4.5 | 1.9 | 12 | 3.6 | 12 | 10 | 5.1 | 6.5 | 1.1 | .31 | .00 | .00 |
| 17 | 3.5 | 1.9 | 9.0 | 3.5 | 185 | 10 | 5.3 | 7.6 | 1.1 | .27 | .00 | .00 |
| 18 | 3.1 | 1.9 | 7.6 | 3.5 | 115 | 9.3 | 5.2 | 8.3 | 1.7 | .10 | .00 | .00 |
| 19 | 2.7 | 1.6 | 6.6 | 3.5 | 294 | 8.8 | 5.1 | 7.3 | 2.0 | .20 | .00 | .00 |
| 20 | 2.4 | 1.0 | 5.9 | 3.5 | 364 | 8.8 | 4.9 | 6.9 | 1.8 | .00 | .00 | .00 |
| 21 | 2.1 | 1.4 | 5.4 | 3.5 | 116 | 8.8 | 4.6 | 6.1 | 1.3 | .08 | .00 | .00 |
| 22 | 1.9 | 1.9 | 5.0 | 3.6 | 76 | 8.7 | 4.1 | 5.5 | 1.1 | .29 | .01 | .00 |
| 23 | 1.9 | 2.0 | 4.5 | 4.9 | 53 | 8.8 | 5.3 | 5.5 | .86 | .24 | .00 | .00 |
| 24 | 1.9 | 2.0 | 4.3 | 29 | 42 | 8.8 | 8.3 | 5.3 | .54 | .41 | .00 | .00 |
| 25 | 1.8 | 2.0 | 4.3 | 32 | 35 | 11 | 13 | 4.8 | .36 | .21 | .00 | .01 |
| 26 | 1.5 | 1.8 | 4.2 | 30 | 36 | 9.1 | 22 | 4.7 | .94 | .08 | .00 | .05 |
| 27 | 1.2 | 1.7 | 4.4 | 20 | 39 | 8.7 | 12 | 4.7 | .68 | .00 | .00 | .14 |
| 28 | .86 | 2.9 | 4.4 | 14 | 31 | 8.1 | 9.6 | 4.6 | 1.2 | .12 | .00 | .17 |
| 29 | .48 | 14 | 4.1 | 11 | --- | 7.8 | 8.3 | 3.9 | 1.1 | .62 | .00 | .17 |
| 30 | .39 | 15 | 4.1 | 8.9 | --- | 7.6 | 7.1 | 3.3 | 1.3 | .08 | .00 | .12 |
| 31 | .81 | --- | 3.8 | 7.9 | --- | 7.2 | --- | 3.0 | --- | .68 | .00 | --- |
| TOTAL | 59.39 | 87.9 | 270.1 | 239.2 | 1932.6 | 387.5 | 223.1 | 221.0 | 51.58 | 12.02 | 3.37 | 0.68 |
| MEAN | 1.92 | 2.93 | 8.71 | 7.72 | 69.0 | 12.5 | 7.44 | 7.13 | 1.72 | .39 | .11 | .023 |
| MAX | 4.5 | 15 | 35 | 32 | 364 | 27 | 22 | 21 | 3.7 | 1.0 | .86 | .17 |
| MIN | .39 | 1.0 | 2.6 | 3.5 | 5.5 | 7.2 | 4.1 | 3.0 | .36 | .00 | .00 | .00 |
| AC-FT | 118 | 174 | 536 | 474 | 3830 | 769 | 443 | 438 | 102 | 24 | 6.7 | 1.3 |

11162570 SAN GREGORIO CREEK AT SAN GREGORIO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, 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 | 12.4 | 5.88 | 2.94 | 1.53 | 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 | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1970 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 18707.86 | | | | 3488.44 | | | | | | | |
| ANNUAL MEAN | 51.3 | | | | 9.56 | | | | 35.8 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 111 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 1.16 | | | |
| HIGHEST DAILY MEAN | 2220 | | | | 364 | | | | 4120 | | | |
| LOWEST DAILY MEAN | .39 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .76 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 923 | | | | 7910 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 9.31 | | | | 21.28 | | | |
| INSTANTANEOUS LOW FLOW | | | | | | | | | .00 | | | |
| ANNUAL RUNOFF (AC-FT) | 37110 | | | | 6920 | | | | 25920 | | | |
| 10 PERCENT EXCEEDS | 110 | | | | 17 | | | | 69 | | | |
| 50 PERCENT EXCEEDS | 7.0 | | | | 3.3 | | | | 4.6 | | | |
| 90 PERCENT EXCEEDS | 1.4 | | | | .00 | | | | .18 | | | |

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 estimated daily discharges, 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0015 | *129 | *2.72 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|--------|-------|------|-------|------|------|------|------|
| 1 | .06 | .29 | 3.0 | 1.1 | 1.2 | 8.3 | 1.5 | 1.9 | .81 | e.00 | e.50 | e.00 |
| 2 | .11 | .25 | 2.0 | 1.3 | 1.3 | 7.8 | 1.3 | 1.7 | .68 | e.00 | e.75 | e.00 |
| 3 | .40 | .27 | 1.2 | 1.2 | 1.0 | 6.9 | 1.4 | 1.6 | .68 | e.00 | e.40 | e.00 |
| 4 | .50 | .58 | .92 | 1.3 | .81 | 6.2 | 1.5 | 1.5 | .77 | e.00 | e.55 | e.00 |
| 5 | .55 | .47 | .82 | 1.3 | .71 | 6.5 | 1.4 | 1.6 | .93 | e.00 | e.70 | e.00 |
| 6 | .43 | .47 | .83 | 1.2 | 11 | 6.0 | 1.7 | 1.9 | 1.4 | e.00 | e.35 | e.00 |
| 7 | .53 | .68 | .85 | .88 | 25 | 5.4 | 1.7 | 7.5 | .61 | e.00 | e.30 | e.00 |
| 8 | .38 | .47 | 3.5 | .98 | 20 | 5.0 | 3.8 | 5.5 | .69 | e.00 | e.70 | e.00 |
| 9 | .26 | .56 | 4.5 | 1.2 | 8.6 | 4.5 | 5.9 | 3.6 | e.45 | e.00 | e.35 | e.00 |
| 10 | .36 | 3.2 | 1.9 | .94 | 7.9 | 4.1 | 3.2 | 2.5 | e.23 | e.00 | e.25 | e.00 |
| 11 | .43 | 3.7 | 10 | .69 | 6.8 | 3.8 | 2.1 | 1.9 | e.19 | e.00 | e.10 | e.00 |
| 12 | .43 | 2.7 | 4.5 | .70 | 5.8 | 3.5 | 1.7 | 2.0 | e.28 | e.00 | e.00 | e.00 |
| 13 | .42 | .62 | 3.4 | .65 | 5.3 | 3.4 | 1.8 | 2.0 | e.35 | e.00 | e.00 | e.00 |
| 14 | .31 | .55 | 17 | .77 | 4.8 | 3.2 | 1.8 | 1.9 | e.40 | e.00 | e.00 | e.00 |
| 15 | .99 | .58 | 6.2 | .76 | 4.2 | 2.6 | 1.5 | 2.4 | e.27 | e.00 | e.00 | e.00 |
| 16 | .87 | .26 | 3.4 | .73 | 4.4 | 2.3 | 1.5 | 2.2 | e.15 | e.00 | e.00 | e.00 |
| 17 | .77 | .38 | 1.9 | .87 | 12 | 2.3 | 1.7 | 7.1 | e.18 | e.00 | e.00 | e.00 |
| 18 | .71 | .46 | 1.7 | .53 | 12 | 2.0 | 1.4 | 4.7 | e.20 | e.00 | e.00 | e.00 |
| 19 | .66 | .52 | 1.4 | .59 | 39 | 2.1 | 1.4 | 3.3 | e.40 | e.20 | e.00 | e.00 |
| 20 | .53 | .43 | 1.2 | .46 | 60 | 2.5 | 1.3 | 2.8 | e.20 | e.35 | e.00 | e.00 |
| 21 | .32 | .68 | 1.3 | .69 | 40 | 2.3 | 1.3 | 1.6 | e.05 | e.00 | e.00 | e.00 |
| 22 | .47 | .74 | 1.3 | .98 | 21 | 2.4 | 1.1 | 2.0 | e.00 | e.00 | e.00 | e.00 |
| 23 | .46 | .74 | 1.2 | 3.5 | 14 | 2.4 | 1.8 | 2.0 | e.00 | e.00 | e.00 | e.00 |
| 24 | .64 | .49 | 1.1 | 16 | 11 | 3.4 | 1.8 | 1.9 | e.00 | e.00 | e.00 | e.00 |
| 25 | .55 | .43 | 1.3 | 14 | 9.7 | 3.1 | 5.3 | 1.7 | e.00 | e.00 | e.35 | e.00 |
| 26 | .37 | .44 | 1.4 | 9.4 | 11 | 2.4 | 3.9 | 1.6 | e.00 | e.00 | e.67 | e.00 |
| 27 | .24 | .27 | .96 | 6.6 | 11 | 2.1 | 2.8 | 1.7 | e.00 | e.00 | e.20 | e.00 |
| 28 | .00 | 1.2 | .80 | 3.8 | 9.0 | 1.7 | 2.3 | 1.7 | e.00 | e.00 | e.00 | e.00 |
| 29 | .39 | 5.0 | .73 | 2.5 | --- | 1.5 | 2.1 | 1.6 | e.00 | e.00 | e.00 | e.00 |
| 30 | .33 | 4.4 | 1.1 | 1.9 | --- | 1.5 | 1.9 | 1.4 | e.00 | e.00 | e.00 | e.00 |
| 31 | .20 | --- | 1.2 | 1.6 | --- | 1.5 | --- | .88 | --- | e.24 | e.00 | --- |
| TOTAL | 13.67 | 31.83 | 82.61 | 79.12 | 358.52 | 112.7 | 63.9 | 77.68 | 9.92 | 0.79 | 6.17 | 0.00 |
| MEAN | .44 | 1.06 | 2.66 | 2.55 | 12.8 | 3.64 | 2.13 | 2.51 | .33 | .025 | .20 | .000 |
| MAX | .99 | 5.0 | .17 | .16 | .60 | 8.3 | 5.9 | 7.5 | 1.4 | .35 | .75 | .00 |
| MIN | .00 | .25 | .73 | .46 | .71 | 1.5 | 1.1 | .88 | .00 | .00 | .00 | .00 |
| AC-FT | 27 | 63 | 164 | 157 | 711 | 224 | 127 | 154 | 20 | 1.6 | 12 | .00 |

e Estimated.

11162630 PILARCITOS CREEK AT HALF MOON BAY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.20 | 5.62 | 15.6 | 39.2 | 40.8 | 36.7 | 18.7 | 5.36 | 1.88 | .84 | .51 | .31 |
| MAX | 4.44 | 32.5 | 92.1 | 164 | 234 | 278 | 127 | 37.2 | 8.22 | 3.21 | 2.01 | 1.26 |
| (WY) | 1983 | 1983 | 1971 | 1982 | 1983 | 1983 | 1982 | 1983 | 1967 | 1967 | 1982 | 1983 |
| 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1966 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 5660.04 | | | | 836.91 | | | | | | | |
| ANNUAL MEAN | 15.5 | | | | 2.29 | | | | 13.8 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 73.9 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .51 | | | |
| HIGHEST DAILY MEAN | 605 | | | | 60 | | | | 2150 | | | |
| LOWEST DAILY MEAN | .00 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .11 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 129 | | | | 4750 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 2.72 | | | | 13.08 | | | |
| ANNUAL RUNOFF (AC-FT) | 11230 | | | | 1660 | | | | 9990 | | | |
| 10 PERCENT EXCEEDS | 35 | | | | 5.4 | | | | 27 | | | |
| 50 PERCENT EXCEEDS | 1.5 | | | | .77 | | | | 1.7 | | | |
| 90 PERCENT EXCEEDS | .26 | | | | .00 | | | | .00 | | | |

11162690 SAN FRANCISCO BAY AT PRESIDIO MILITARY RESERVATION, CA

WATER-QUALITY RECORDS

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 DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1990 to current year.

WATER TEMPERATURE: October 1990 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1990.

REMARKS.--Interruptions in record were due to malfunction of the sensing and/or recording instruments. The probe is set at 4.0 ft below Mean Lower Low Water (MLLW). Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 50,900 microsiemens, May 26, June 30, and July 1, 1991; minimum recorded, 20,600 microsiemens, Mar. 31, 1993.

WATER TEMPERATURE: Maximum recorded, 18.5°C, several days in July 1992, June 12, August 11, 26, 27, 1993; minimum recorded 8.0°C, several days during December 1990 and January 1991.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 50,100 microsiemens, Aug. 14, 16, 17, 19; minimum recorded, 40,000 microsiemens, Mar. 20.

WATER TEMPERATURE: Maximum recorded, 17.0°C, Sept. 10, 11, 28-30; minimum recorded, 10.0°C, several days during December.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|-----|----------|-------|----------|-------|---------|-------|----------|-------|-------|-------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | --- | --- | --- | --- | 47300 | 45200 | --- | --- | 46500 | 44200 | 44800 | 41000 |
| 2 | --- | --- | --- | --- | 47200 | 45200 | --- | --- | 46900 | 44300 | 45200 | 40900 |
| 3 | --- | --- | 48100 | 46700 | 47100 | 45200 | --- | --- | 47100 | 44200 | 45400 | 41200 |
| 4 | --- | --- | 48100 | 46500 | 47100 | 45400 | --- | --- | 47300 | 44500 | 45400 | 41200 |
| 5 | --- | --- | 48200 | 46200 | 47000 | 45300 | --- | --- | 47000 | 44600 | 45500 | 41000 |
| 6 | --- | --- | 48100 | 45900 | 46800 | 45400 | --- | --- | 46700 | 44200 | 45600 | 41000 |
| 7 | --- | --- | 47900 | 46300 | 46900 | 45700 | --- | --- | 46900 | 44300 | 45400 | 40800 |
| 8 | --- | --- | 47800 | 46300 | 46900 | 45700 | --- | --- | 46900 | 44000 | 45600 | 41500 |
| 9 | --- | --- | 47500 | 46200 | 47000 | 45200 | --- | --- | 46600 | 43900 | 45200 | 41600 |
| 10 | --- | --- | 47500 | 46100 | 47100 | 45400 | --- | --- | 46400 | 44000 | 45200 | 41700 |
| 11 | --- | --- | 47400 | 46100 | 47100 | 45300 | --- | --- | 46700 | 43700 | 44900 | 41700 |
| 12 | --- | --- | 47700 | 45900 | 47200 | 45100 | --- | --- | 46700 | 43500 | 45500 | 41400 |
| 13 | --- | --- | 47600 | 45900 | 47100 | 44700 | --- | --- | 46500 | 43500 | 45800 | 41800 |
| 14 | --- | --- | 47600 | 45500 | 47100 | 45000 | --- | --- | 46300 | 43800 | 45700 | 42100 |
| 15 | --- | --- | 47700 | 45300 | 47200 | 44500 | --- | --- | 46500 | 42600 | 45900 | 42300 |
| 16 | --- | --- | 47600 | 45800 | 46900 | 44800 | --- | --- | 46800 | 42600 | 46100 | 41500 |
| 17 | --- | --- | 47400 | 45800 | 46900 | 44600 | --- | --- | 47200 | 43700 | 45800 | 41900 |
| 18 | --- | --- | 47300 | 45700 | 46900 | 44500 | --- | --- | 46500 | 42100 | 46300 | 41100 |
| 19 | --- | --- | 47100 | 45800 | 46500 | 43900 | --- | --- | 46700 | 43200 | 46500 | 40600 |
| 20 | --- | --- | 46800 | 45300 | 46300 | 43600 | --- | --- | 46700 | 41700 | 46800 | 40000 |
| 21 | --- | --- | 46700 | 45400 | 46700 | 43400 | --- | --- | 46500 | 41300 | 47600 | 40200 |
| 22 | --- | --- | 46700 | 45400 | 46200 | 42500 | --- | --- | 45800 | 41100 | --- | --- |
| 23 | --- | --- | 46800 | 45100 | 46600 | 43200 | --- | --- | 46300 | 41600 | 47600 | 43900 |
| 24 | --- | --- | 46900 | 45300 | 46400 | 42100 | --- | --- | 46100 | 41600 | 47400 | 44200 |
| 25 | --- | --- | 46900 | 45100 | 46800 | 43900 | 47100 | 44800 | 45600 | 41700 | 46800 | 44100 |
| 26 | --- | --- | 47200 | 45600 | 47100 | 44100 | 46800 | 44300 | 45000 | 41800 | 46400 | 44400 |
| 27 | --- | --- | 47400 | 45700 | 47300 | 44200 | 47100 | 44600 | 44600 | 41700 | --- | --- |
| 28 | --- | --- | 47300 | 45400 | 47100 | 44400 | 47100 | 44500 | 44600 | 41600 | 46400 | 44200 |
| 29 | --- | --- | 47200 | 45500 | --- | --- | 46900 | 42000 | --- | --- | 46400 | 43700 |
| 30 | --- | --- | 47400 | 45200 | --- | --- | 46500 | 44500 | --- | --- | 46400 | 44300 |
| 31 | --- | --- | --- | --- | --- | --- | 46400 | 44500 | --- | --- | 47000 | 44300 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | 47300 | 41100 | --- | --- |

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

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-----------|-------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 47100 | 44200 | 47200 | 44800 | 48400 | 46400 | 49400 | 48300 | 49900 | 48600 | --- | --- |
| 2 | 47200 | 44300 | 47300 | 44500 | 48400 | 46700 | 49500 | 48200 | 49800 | 48600 | --- | --- |
| 3 | 47000 | 44000 | 47500 | 45200 | 48700 | 46800 | 49600 | 48300 | 49700 | 48600 | 49700 | 48500 |
| 4 | 47300 | 44200 | 47200 | 45100 | 48500 | 46700 | 49600 | 48300 | 49700 | 48500 | 49700 | 48500 |
| 5 | 47200 | 44100 | 47300 | 45500 | 48500 | 46700 | 49600 | 48400 | 49800 | 48300 | 49700 | 48500 |
| 6 | 47100 | 44100 | 47300 | 45100 | 48700 | 47000 | 49700 | 48100 | 50000 | 48500 | 49500 | 48500 |
| 7 | 46900 | 44700 | 46900 | 44500 | 48800 | 46900 | 49800 | 48100 | 50000 | 48400 | 49500 | 48600 |
| 8 | 47300 | 44700 | 46800 | 44600 | 49000 | 46900 | 49900 | 48200 | 49800 | 48500 | 49400 | 48500 |
| 9 | 47000 | 44600 | 46900 | 44500 | 49400 | 46800 | 49800 | 48200 | 49900 | 47900 | 49400 | 48500 |
| 10 | 47200 | 44100 | 46800 | 44800 | 49400 | 46800 | 49700 | 48100 | 49800 | 48800 | 49400 | 48400 |
| 11 | 47300 | 44400 | 46900 | 44500 | 49200 | 47200 | 49700 | 48300 | 49800 | 48800 | 49600 | 48400 |
| 12 | 47200 | 44500 | 47000 | 44600 | 49400 | 47400 | 49700 | 48300 | 49900 | 48900 | 49700 | 48300 |
| 13 | 47200 | 44600 | 47400 | 44600 | 49100 | 47300 | 49700 | 48300 | 50000 | 48700 | 49700 | 48500 |
| 14 | 47400 | 44500 | 47900 | 45000 | 49100 | 47200 | 49600 | 48400 | 50100 | 48700 | 49500 | 48400 |
| 15 | 47600 | 44400 | 47900 | 45000 | 49200 | 47400 | 49600 | 48600 | 50000 | 48700 | 49500 | 48300 |
| 16 | 47400 | 44800 | 47800 | 44800 | 49400 | 47500 | 49800 | 48600 | 50100 | 48700 | 49500 | 48400 |
| 17 | 47200 | 43600 | 47600 | 44800 | 49400 | 47800 | 49800 | 48400 | 50100 | 48700 | 49300 | 48300 |
| 18 | 47100 | 43400 | 47700 | 44100 | 49400 | 47700 | 49800 | 48500 | 50000 | 48600 | 49300 | 48300 |
| 19 | 46700 | 42900 | 47500 | 44700 | 49300 | 47700 | 49800 | 48500 | 50100 | 48700 | 49200 | 48300 |
| 20 | 46600 | 43500 | 47400 | 45300 | 49400 | 47700 | 49900 | 48400 | 50000 | 48600 | 49300 | 48400 |
| 21 | 47300 | 44500 | 47500 | 45200 | 49300 | 47500 | 49900 | 48400 | 49900 | 48800 | 49300 | 48400 |
| 22 | 46900 | 44700 | 47600 | 45100 | 49300 | 47500 | 49900 | 48400 | 49800 | 48800 | 49300 | 48300 |
| 23 | 46900 | 44700 | 47700 | 45200 | 49400 | 47500 | 49900 | 48500 | 49600 | 48700 | 49300 | 48400 |
| 24 | 47100 | 44800 | 48000 | 45400 | 49400 | 46300 | 49700 | 48100 | 49600 | 48700 | 49400 | 48400 |
| 25 | 47400 | 44800 | 47900 | 45500 | 49400 | 47400 | 49700 | 47200 | 49600 | 48900 | 49400 | 48300 |
| 26 | 47200 | 44600 | 48000 | 45500 | 49400 | 47400 | 49500 | 48000 | 49600 | 48800 | 49400 | 48000 |
| 27 | 47200 | 44600 | 48400 | 45500 | 49500 | 47600 | 49600 | 48200 | 49700 | 48800 | 49500 | 48200 |
| 28 | 47400 | 44800 | 48300 | 45600 | 49400 | 47700 | 49400 | 48300 | 49600 | 48800 | 49500 | 47900 |
| 29 | 47300 | 45000 | 48300 | 45900 | 49200 | 48000 | 49500 | 48600 | 49700 | 48500 | 49500 | 47300 |
| 30 | 47200 | 45000 | 48200 | 45700 | 49300 | 47900 | 49600 | 48400 | 49800 | 48700 | 49500 | 47900 |
| 31 | --- | --- | 48300 | 46300 | --- | --- | 49900 | 48800 | 49800 | 48700 | --- | --- |
| MONTH | 47600 | 42900 | 48400 | 44100 | 49500 | 46300 | 49900 | 47200 | 50100 | 47900 | --- | --- |

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|------|------|------|------|------|------|------|--------|------|-----------|------|------|
| APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | | |
| 1 | 14.0 | 13.0 | 14.0 | 12.5 | 14.5 | 12.5 | 15.0 | 13.0 | 16.0 | 15.0 | 16.5 | 15.0 |
| 2 | 14.0 | 13.0 | 14.5 | 12.5 | 14.5 | 12.5 | 14.5 | 13.0 | 16.0 | 15.0 | 16.5 | 15.0 |
| 3 | 14.5 | 13.0 | 14.0 | 12.0 | 14.5 | 12.5 | 14.5 | 13.0 | 16.0 | 15.0 | 16.5 | 15.0 |
| 4 | 14.0 | 13.0 | 13.5 | 12.0 | 14.0 | 12.5 | 14.5 | 13.0 | 16.5 | 15.0 | 16.5 | 15.0 |
| 5 | 14.0 | 13.0 | 13.5 | 12.0 | 14.5 | 12.5 | 14.5 | 13.0 | 16.5 | 14.5 | 16.5 | 15.0 |
| 6 | 14.0 | 13.0 | 13.5 | 12.5 | 14.5 | 12.5 | 15.0 | 13.0 | 16.5 | 14.5 | 16.5 | 15.0 |
| 7 | 13.5 | 12.5 | 14.0 | 12.5 | 15.0 | 13.0 | 15.0 | 13.0 | 16.5 | 14.5 | 16.5 | 15.5 |
| 8 | 13.5 | 12.5 | 14.0 | 12.5 | 15.0 | 12.5 | 15.0 | 13.0 | 16.5 | 14.5 | 16.5 | 15.5 |
| 9 | 13.5 | 12.5 | 14.0 | 13.0 | 15.5 | 12.5 | 15.0 | 13.0 | 16.5 | 15.0 | 16.5 | 15.5 |
| 10 | 13.5 | 12.5 | 14.0 | 13.0 | 15.5 | 12.5 | 15.0 | 13.0 | 16.5 | 15.0 | 17.0 | 15.5 |
| 11 | 13.5 | 12.5 | 14.5 | 13.0 | 15.0 | 12.5 | 15.0 | 13.5 | 16.5 | 15.0 | 17.0 | 15.0 |
| 12 | 14.0 | 12.5 | 15.0 | 13.0 | 15.0 | 12.5 | 15.0 | 13.5 | 16.5 | 15.0 | 16.5 | 15.0 |
| 13 | 14.0 | 12.5 | 15.0 | 12.5 | 15.0 | 13.0 | 15.0 | 13.5 | 16.5 | 14.5 | 16.5 | 15.0 |
| 14 | 14.0 | 12.5 | 15.0 | 12.0 | 15.5 | 13.0 | 15.0 | 13.5 | 16.5 | 14.5 | 16.5 | 15.0 |
| 15 | 14.5 | 12.0 | 15.0 | 12.0 | 15.5 | 13.0 | 15.0 | 14.0 | 16.5 | 14.5 | 16.5 | 15.0 |
| 16 | 14.0 | 12.5 | 15.0 | 12.5 | 15.5 | 12.5 | 15.0 | 14.0 | 16.5 | 14.5 | 16.0 | 15.0 |
| 17 | 15.0 | 12.5 | 15.0 | 12.5 | 15.0 | 13.0 | 15.0 | 14.0 | 16.5 | 14.5 | 16.0 | 15.0 |
| 18 | 15.0 | 13.0 | 15.5 | 12.5 | 15.0 | 13.0 | 15.0 | 14.0 | 16.5 | 14.5 | 16.5 | 15.5 |
| 19 | 15.5 | 13.0 | 15.0 | 12.5 | 14.5 | 13.0 | 15.5 | 14.0 | 16.5 | 14.0 | 16.0 | 15.5 |
| 20 | 15.0 | 13.0 | 14.5 | 13.0 | 14.5 | 13.0 | 15.5 | 14.0 | 16.5 | 14.5 | 16.0 | 15.5 |
| 21 | 14.5 | 13.0 | 14.0 | 13.0 | 15.0 | 13.0 | 15.5 | 14.0 | 16.5 | 15.0 | 16.5 | 15.5 |
| 22 | 14.5 | 13.0 | 14.0 | 12.5 | 15.0 | 13.0 | 16.0 | 14.5 | 16.5 | 15.0 | 16.5 | 15.5 |
| 23 | 14.0 | 13.0 | 14.5 | 12.5 | 15.5 | 13.0 | 16.0 | 14.5 | 16.5 | 15.5 | 16.5 | 15.5 |
| 24 | 14.0 | 12.5 | 14.5 | 12.5 | 15.5 | 13.0 | 16.5 | 15.0 | 16.5 | 15.5 | 16.5 | 15.5 |
| 25 | 13.5 | 12.5 | 14.5 | 12.5 | 15.5 | 13.0 | 16.5 | 15.0 | 16.0 | 15.5 | 16.5 | 15.5 |
| 26 | 14.0 | 12.5 | 14.5 | 12.5 | 15.5 | 13.0 | 16.5 | 15.5 | 16.0 | 15.5 | 16.5 | 15.5 |
| 27 | 14.0 | 12.5 | 14.5 | 12.0 | 15.5 | 13.0 | 16.5 | 15.5 | 16.0 | 15.0 | 16.5 | 15.5 |
| 28 | 14.0 | 12.5 | 15.0 | 12.0 | 15.0 | 13.0 | 16.5 | 15.5 | 16.5 | 15.5 | 17.0 | 15.5 |
| 29 | 14.0 | 12.5 | 15.0 | 12.5 | 14.5 | 13.5 | 16.5 | 15.5 | 16.5 | 15.5 | 17.0 | 16.0 |
| 30 | 14.0 | 12.0 | 14.5 | 12.5 | 15.0 | 13.0 | 16.0 | 15.5 | 16.5 | 15.0 | 17.0 | 15.5 |
| 31 | --- | --- | 14.5 | 12.5 | --- | --- | 16.0 | 15.0 | 16.5 | 15.0 | --- | --- |
| MONTH | 15.5 | 12.0 | 15.5 | 12.0 | 15.5 | 12.5 | 16.5 | 13.0 | 16.5 | 14.0 | 17.0 | 15.0 |

WATER-QUALITY RECORDS

[illegible]

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

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(UPPER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-----------|-------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 46500 | 42200 | 48000 | 45500 | 48200 | 45400 | 48800 | 47400 | 49700 | 48300 | 49000 | 47900 |
| 2 | 46400 | 42500 | 48000 | 45600 | 48300 | 45700 | 48700 | 47300 | 49600 | 48100 | 49000 | 48100 |
| 3 | 46300 | 42800 | 48100 | 45300 | 48300 | 45800 | 48800 | 47300 | 49600 | 48600 | 48900 | 48300 |
| 4 | 46300 | 43100 | 47500 | 44700 | 48000 | 45700 | 48800 | 47600 | 49600 | 48500 | 49000 | 48300 |
| 5 | 46700 | 42900 | 48300 | 44800 | 48000 | 45800 | 49100 | 47600 | 49800 | 48500 | 49200 | 48400 |
| 6 | 46800 | 41500 | 47900 | 44900 | 47800 | 45700 | 49000 | 47700 | 49600 | 48200 | 48900 | 48400 |
| 7 | 46800 | 43200 | 48100 | 45600 | 47900 | 45900 | 49100 | 47700 | 49400 | 48600 | 49100 | 48400 |
| 8 | 47100 | 44200 | 48200 | 45000 | 48400 | 45900 | 49000 | 47600 | 49400 | 48500 | 49000 | 48400 |
| 9 | 47100 | 43900 | 48400 | 46000 | 48600 | 45800 | 49000 | 47600 | 49300 | 48500 | 48900 | 48400 |
| 10 | 46800 | 44000 | 48600 | 45500 | 48600 | 45900 | 49000 | 47400 | 49300 | 48700 | 48900 | 48400 |
| 11 | 47300 | 44200 | 48600 | 46200 | 48600 | 46800 | 48900 | 47700 | 49400 | 48700 | 49000 | 48500 |
| 12 | 46900 | 43400 | 48500 | 45200 | 48600 | 46800 | 49100 | 47600 | 49300 | 48600 | 49100 | 48400 |
| 13 | 47000 | 43800 | 48100 | 45400 | 48600 | 46900 | 49100 | 48000 | 49300 | 48500 | 49000 | 48400 |
| 14 | 46900 | 43600 | 48400 | 45600 | 48400 | 47000 | 49300 | 48300 | 49300 | 48500 | 49100 | 48400 |
| 15 | 46600 | 44300 | 48300 | 46100 | 48500 | 47100 | 49300 | 48400 | 49300 | 48500 | 49100 | 48200 |
| 16 | 46800 | 44300 | 48000 | 45900 | 48600 | 47200 | 49500 | 48500 | 49400 | 48400 | 48900 | 48300 |
| 17 | 46700 | 42600 | 47700 | 44000 | 48700 | 47000 | 49500 | 48400 | 49600 | 48400 | 48700 | 48200 |
| 18 | 46600 | 43800 | 47600 | 44300 | 48900 | 46700 | 49500 | 48300 | 49200 | 48400 | 48700 | 48300 |
| 19 | 46500 | 43900 | --- | --- | 48800 | 47000 | 49600 | 48300 | 49300 | 48300 | 48900 | 48200 |
| 20 | 47100 | 44300 | 48300 | 44600 | 48700 | 46800 | 49600 | 48200 | 49100 | 48200 | 48700 | 48200 |
| 21 | 47500 | 44400 | 48400 | 45900 | 48800 | 47000 | 49700 | 48300 | 49100 | 47900 | 48700 | 48200 |
| 22 | 47700 | 45100 | 48600 | 45900 | 48900 | 47000 | 49800 | 48500 | 49200 | 48500 | 48600 | 48300 |
| 23 | 47800 | 45300 | 48800 | 45700 | 48900 | 47000 | 49700 | 48600 | 49100 | 48500 | 48700 | 47200 |
| 24 | 48100 | 45100 | 48900 | 45800 | 48800 | 47100 | 49700 | 48700 | 49100 | 48400 | 48700 | 48100 |
| 25 | --- | --- | 48900 | 46000 | 48700 | 47000 | 49600 | 48500 | 48900 | 48200 | 48800 | 47900 |
| 26 | 48300 | 44600 | 48900 | 46100 | 48600 | 47200 | 49600 | 48800 | 48800 | 48300 | 48600 | 46600 |
| 27 | 48100 | 44800 | 48900 | 46000 | 48800 | 47100 | 49500 | 48800 | 48800 | 48000 | 48600 | 46300 |
| 28 | 48300 | 45200 | 48800 | 46400 | 48500 | 47500 | 49500 | 48800 | 48700 | 47500 | 48500 | 46200 |
| 29 | 48300 | 45200 | 48500 | 46500 | 48700 | 47100 | 49600 | 48500 | 49000 | 46900 | 48400 | 46000 |
| 30 | 47900 | 45500 | 48300 | 46700 | 48700 | 47000 | 49500 | 48600 | 49000 | 47400 | 48200 | 46200 |
| 31 | --- | --- | 48400 | 46800 | --- | --- | 49600 | 48400 | 49100 | 47900 | --- | --- |
| MONTH | --- | --- | --- | --- | 48900 | 45400 | 49800 | 47300 | 49800 | 46900 | 49200 | 46000 |

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

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(LOWER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|-------|----------|-------|----------|-------|---------|-----|----------|-----|-------|-------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 47800 | 45800 | 47900 | 45400 | 46800 | 42800 | --- | --- | --- | --- | --- | --- |
| 2 | 47600 | 46000 | 48000 | 45200 | 46600 | 42900 | --- | --- | --- | --- | --- | --- |
| 3 | 47800 | 45200 | 48000 | 46200 | 46600 | 44300 | --- | --- | --- | --- | --- | --- |
| 4 | 47700 | 45100 | 48100 | 46300 | 46600 | 44300 | --- | --- | --- | --- | --- | --- |
| 5 | 47800 | 45100 | 48000 | 45500 | 46200 | 43800 | --- | --- | --- | --- | --- | --- |
| 6 | 47700 | 45000 | 47900 | 45400 | 46200 | 43500 | --- | --- | --- | --- | --- | --- |
| 7 | 47700 | 44900 | 47900 | 45000 | 46400 | 43400 | --- | --- | --- | --- | --- | --- |
| 8 | 47800 | 45000 | 47600 | 45100 | 46500 | 44700 | --- | --- | --- | --- | --- | --- |
| 9 | 47300 | 44400 | 47600 | 46000 | 46800 | 43800 | --- | --- | --- | --- | --- | --- |
| 10 | 47600 | 45500 | 47500 | 46100 | 46800 | 44500 | --- | --- | --- | --- | 45000 | 40500 |
| 11 | 47600 | 46100 | 47700 | 46000 | 46900 | 44200 | --- | --- | --- | --- | 45200 | 40600 |
| 12 | 47600 | 46100 | 47800 | 43400 | 46600 | 43200 | --- | --- | --- | --- | 45200 | 40100 |
| 13 | 47800 | 46200 | 47700 | 45700 | 46900 | 44100 | --- | --- | --- | --- | 45600 | 39200 |
| 14 | 47700 | 46400 | 47800 | 44900 | 47100 | 42600 | --- | --- | --- | --- | 45900 | 39700 |
| 15 | 48000 | 46400 | 47900 | 45300 | 46700 | 42400 | --- | --- | --- | --- | 45500 | 40700 |
| 16 | 48000 | 46400 | 47700 | 45300 | 46500 | 41900 | --- | --- | --- | --- | 45700 | 40800 |
| 17 | 48300 | 46300 | 47300 | 44500 | 45800 | 41600 | --- | --- | --- | --- | 44500 | 40900 |
| 18 | 48200 | 46300 | 47100 | 44500 | 45500 | 41500 | --- | --- | --- | --- | 44800 | 40100 |
| 19 | 48300 | 46400 | 46800 | 44500 | 45400 | 41400 | --- | --- | --- | --- | 45400 | 39800 |
| 20 | 48100 | 45100 | 46600 | 43800 | 44100 | 39700 | --- | --- | --- | --- | 45900 | 39200 |
| 21 | 48200 | 46500 | 46500 | 43700 | 44500 | 39200 | --- | --- | --- | --- | 45800 | 39800 |
| 22 | 48300 | 45400 | --- | --- | 43800 | 38500 | --- | --- | --- | --- | 45300 | 42300 |
| 23 | 47800 | 44900 | --- | --- | --- | --- | --- | --- | --- | --- | 46800 | 42600 |
| 24 | 47900 | 45100 | --- | --- | --- | --- | --- | --- | --- | --- | 47100 | 43000 |
| 25 | 47800 | 45200 | 46500 | 43800 | --- | --- | --- | --- | --- | --- | 47200 | 43400 |
| 26 | 48100 | 45500 | 46800 | 44600 | --- | --- | --- | --- | --- | --- | 47400 | 44000 |
| 27 | 48100 | 46100 | 46900 | 44900 | --- | --- | --- | --- | --- | --- | 47100 | 44000 |
| 28 | 48000 | 46600 | 47200 | 44800 | --- | --- | --- | --- | --- | --- | 47000 | 44100 |
| 29 | 48200 | 46600 | 47300 | 44600 | --- | --- | --- | --- | --- | --- | 47100 | 44200 |
| 30 | 48200 | 46400 | 46900 | 42800 | --- | --- | --- | --- | --- | --- | 47100 | 44200 |
| 31 | 48100 | 46300 | --- | --- | --- | --- | --- | --- | --- | --- | 47000 | 43500 |
| MONTH | 48300 | 44400 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-----------|-------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 47500 | 43200 | 48100 | 45600 | 48500 | 45600 | 49000 | 47300 | 49600 | 48200 | 48900 | 47700 |
| 2 | 47200 | 43300 | 48000 | 45800 | 48400 | 45800 | 48900 | 47300 | 49500 | 48200 | 48800 | 47700 |
| 3 | 47000 | 43700 | 48300 | 45300 | 48300 | 45800 | 48900 | 47400 | 49700 | 48400 | 49000 | 48100 |
| 4 | 47100 | 43800 | 48200 | 44800 | 48300 | 45800 | 48900 | 47600 | 49500 | 48400 | 49100 | 48100 |
| 5 | 47200 | 43300 | 48400 | 44900 | 48100 | 45900 | 49100 | 47600 | 49500 | 48300 | 49000 | 48100 |
| 6 | 47200 | 41900 | 48300 | 45100 | 47900 | 45900 | 49000 | 47800 | 49400 | 48100 | 48800 | 48100 |
| 7 | 47200 | 43600 | 48200 | 45600 | 48000 | 45900 | 49100 | 47700 | 49300 | 48400 | 48800 | 48100 |
| 8 | 47800 | 44600 | 48300 | 45100 | 48600 | 46000 | 49000 | 47600 | 49500 | 48400 | 48900 | 48200 |
| 9 | 47500 | 44200 | 48400 | 46000 | 48800 | 45900 | 49000 | 47600 | 49500 | 48500 | 48900 | 48200 |
| 10 | 47500 | 44200 | 48600 | 45600 | 48700 | 46100 | 49000 | 47500 | 49500 | 48600 | 49000 | 48100 |
| 11 | 47600 | 44400 | 48600 | 46100 | 48700 | 46700 | 49000 | 47700 | 49700 | 48600 | 49000 | 48300 |
| 12 | 47300 | 43600 | 48500 | 45100 | 48700 | 46700 | 49000 | 47700 | 49700 | 48700 | 49100 | 48400 |
| 13 | 47200 | 44000 | 48400 | 45500 | 48500 | 46900 | 49100 | 48100 | 49800 | 48700 | 49000 | 48200 |
| 14 | 47200 | 43800 | 48600 | 45500 | 48700 | 47000 | 49400 | 48300 | 49800 | 48600 | 49000 | 48200 |
| 15 | 47500 | 44500 | 48700 | 46200 | 48700 | 47100 | 49600 | 48300 | 49600 | 48500 | 49000 | 48200 |
| 16 | 47200 | 44400 | 48500 | 45800 | 48700 | 47100 | 49800 | 48500 | 49500 | 48400 | 48900 | 48200 |
| 17 | 47200 | 42900 | 48500 | 44100 | 48900 | 46900 | 49800 | 48500 | 49200 | 48400 | 48700 | 48000 |
| 18 | 46800 | 43900 | 48400 | 44300 | 48900 | 46800 | 49700 | 48400 | 49200 | 48400 | 48800 | 48100 |
| 19 | 47100 | 44000 | --- | --- | 48800 | 46900 | 49700 | 48500 | 49200 | 48200 | 48900 | 48100 |
| 20 | 47300 | 44600 | 48600 | 44600 | 48800 | 46800 | 49800 | 48300 | 49300 | 48200 | 48800 | 48000 |
| 21 | 47700 | 44600 | 48600 | 45800 | 48900 | 46900 | 49700 | 48500 | 49100 | 48100 | 48700 | 48200 |
| 22 | 47900 | 45100 | 48700 | 45900 | 48800 | 47000 | 49600 | 48300 | 49200 | 48400 | 48700 | 48200 |
| 23 | 47900 | 45300 | 48900 | 45600 | 48700 | 46900 | 49600 | 48500 | 49200 | 48400 | 48900 | 47400 |
| 24 | 48100 | 45100 | 49000 | 45700 | 48600 | 46900 | 49600 | 48600 | 49200 | 48300 | 48800 | 48100 |
| 25 | --- | --- | 48900 | 45900 | 48500 | 46900 | 49800 | 48600 | 48900 | 48300 | 48900 | 48000 |
| 26 | 48400 | 44600 | 48900 | 46000 | 48600 | 47000 | 49700 | 48700 | 49000 | 48300 | 48800 | 46600 |
| 27 | 48400 | 44800 | 48900 | 46100 | 48500 | 47200 | 49500 | 48600 | 48800 | 47900 | 48800 | 46200 |
| 28 | 48500 | 45200 | 48800 | 46300 | 48500 | 47000 | 49500 | 48600 | 48900 | 47300 | 48700 | 46100 |
| 29 | 48300 | 45300 | 48500 | 46600 | 48500 | 46900 | 49600 | 48400 | 49100 | 47000 | 48400 | 46100 |
| 30 | 48200 | 45600 | 48500 | 46800 | 48900 | 47100 | 49500 | 48400 | 48900 | 47200 | 48200 | 46100 |
| 31 | --- | --- | 48600 | 46800 | --- | --- | 49400 | 48400 | 49000 | 47700 | --- | --- |
| MONTH | --- | --- | --- | --- | 48900 | 45600 | 49800 | 47300 | 49800 | 47000 | 49100 | 46100 |

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA--Continued
 WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
 (UPPER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|---------|------|----------|------|----------|------|---------|------|----------|------|-------|------|------|
| OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | | |
| 1 | 17.5 | 15.5 | 17.5 | 15.5 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 12.5 | 12.0 |
| 2 | 17.5 | 15.5 | 17.5 | 15.5 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 13.0 | 12.0 |
| 3 | 17.0 | 15.5 | 17.0 | 15.5 | 12.5 | 12.5 | 11.0 | 10.5 | 11.5 | 11.0 | 13.0 | 12.5 |
| 4 | 17.5 | 15.0 | 17.0 | 15.5 | 12.5 | 12.5 | 11.0 | 10.5 | 11.5 | 11.0 | 13.0 | 12.5 |
| 5 | 17.0 | 15.0 | 17.0 | 15.5 | 12.5 | 12.0 | 11.0 | 10.0 | 11.5 | 11.0 | 13.5 | 12.5 |
| 6 | 17.0 | 15.0 | 17.0 | 15.5 | 12.5 | 12.0 | 11.0 | 10.0 | 11.5 | 11.0 | 13.5 | 12.5 |
| 7 | 17.0 | 15.5 | 16.5 | 15.5 | 12.5 | 12.0 | 11.0 | 10.0 | 11.5 | 11.0 | 13.5 | 13.0 |
| 8 | 16.5 | 15.5 | 16.5 | 15.5 | 12.5 | 12.5 | 11.0 | 10.0 | 11.5 | 11.0 | 13.5 | 13.0 |
| 9 | 16.5 | 15.5 | 16.5 | 15.0 | 12.5 | 12.5 | 11.0 | 10.5 | 11.5 | 11.0 | --- | --- |
| 10 | 16.5 | 15.0 | 16.0 | 15.0 | 12.5 | 12.5 | 11.0 | 10.5 | 11.5 | 11.5 | 13.5 | 13.0 |
| 11 | 16.5 | 15.0 | 16.0 | 15.0 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 13.5 | 13.0 |
| 12 | 16.5 | 15.0 | 16.0 | 15.0 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.5 |
| 13 | 17.0 | 15.0 | 16.0 | 14.5 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.5 |
| 14 | 17.0 | 15.0 | 15.5 | 14.5 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.5 | 13.5 |
| 15 | 17.0 | 15.0 | 15.0 | 14.0 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.5 |
| 16 | 17.0 | 15.0 | 15.0 | 14.0 | 12.5 | 11.5 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.5 |
| 17 | 17.0 | 15.5 | 14.5 | 14.0 | 12.0 | 11.5 | 11.5 | 10.5 | 11.5 | 11.5 | 14.5 | 13.5 |
| 18 | 17.0 | 15.5 | 14.5 | 14.0 | 12.0 | 11.5 | 11.5 | 10.5 | 11.5 | 11.0 | 14.5 | 13.5 |
| 19 | 17.0 | 15.5 | 14.5 | 14.0 | 12.0 | 11.0 | 11.5 | 10.5 | 11.5 | 11.0 | 14.5 | 13.5 |
| 20 | 17.0 | 15.5 | 14.5 | 13.5 | 11.5 | 11.0 | 11.0 | 10.5 | 11.5 | 10.5 | 14.0 | 13.5 |
| 21 | 17.0 | 15.5 | 14.0 | 13.5 | 11.0 | 10.5 | 11.5 | 11.0 | 11.5 | 11.0 | 14.5 | 13.5 |
| 22 | 16.5 | 15.5 | --- | --- | 11.0 | 10.0 | 11.5 | 11.0 | 11.5 | 10.5 | 14.0 | 13.0 |
| 23 | 16.5 | 15.5 | --- | --- | 10.5 | 9.5 | 11.5 | 11.0 | 11.5 | 11.0 | 13.5 | 13.0 |
| 24 | 16.5 | 15.5 | --- | --- | 10.5 | 9.5 | 11.5 | 11.0 | 11.5 | 11.0 | 13.0 | 12.5 |
| 25 | 16.5 | 15.5 | 13.5 | 12.5 | 10.5 | 9.5 | 11.5 | 11.0 | 12.0 | 11.5 | 13.0 | 12.0 |
| 26 | 16.5 | 15.5 | 13.5 | 12.5 | 10.5 | 9.5 | 11.5 | 11.0 | 12.0 | 11.5 | 13.0 | 12.0 |
| 27 | 17.0 | 15.5 | 13.0 | 12.5 | 11.0 | 9.5 | 11.5 | 11.5 | 12.0 | 11.5 | 13.0 | 12.5 |
| 28 | 17.0 | 15.5 | 13.0 | 12.5 | 11.0 | 10.0 | 11.5 | 11.0 | 12.0 | 12.0 | 13.5 | 12.5 |
| 29 | 17.0 | 15.5 | 13.0 | 12.5 | 11.0 | 10.0 | 11.5 | 11.5 | --- | --- | 13.5 | 12.5 |
| 30 | 17.0 | 15.5 | 12.5 | 12.0 | 11.0 | 10.0 | 11.5 | 11.5 | --- | --- | 13.5 | 13.0 |
| 31 | 17.0 | 15.5 | --- | --- | 11.0 | 10.0 | 11.5 | 11.0 | --- | --- | 14.0 | 13.0 |
| MONTH | 17.5 | 15.0 | --- | --- | 12.5 | 9.5 | 11.5 | 10.0 | 12.0 | 10.5 | --- | --- |

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

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(LOWER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|---------|------|----------|------|----------|------|---------|------|----------|------|-------|------|------|
| OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | | |
| 1 | 17.5 | 15.5 | 17.5 | 15.5 | 12.5 | 12.0 | 11.0 | 10.0 | 11.5 | 11.0 | 12.5 | 12.0 |
| 2 | 17.5 | 15.5 | 17.5 | 15.5 | 12.5 | 12.0 | 11.0 | 10.0 | 11.5 | 11.0 | 13.0 | 12.0 |
| 3 | 17.0 | 15.0 | 17.0 | 15.5 | 12.5 | 12.5 | 11.0 | 10.0 | 11.5 | 10.5 | 13.0 | 12.5 |
| 4 | 17.5 | 15.0 | 17.0 | 15.5 | 12.5 | 12.5 | 11.0 | 10.0 | 11.5 | 10.5 | 13.0 | 12.5 |
| 5 | 17.0 | 15.0 | 17.0 | 15.5 | 12.5 | 12.0 | 11.0 | 10.0 | 11.5 | 11.0 | 13.0 | 12.5 |
| 6 | 17.0 | 15.0 | 17.0 | 15.5 | 12.5 | 12.0 | 11.0 | 10.0 | 11.5 | 11.0 | 13.5 | 12.5 |
| 7 | 17.5 | 15.0 | 16.5 | 15.5 | 12.5 | 12.0 | 11.0 | 10.0 | 11.5 | 11.0 | 13.5 | 13.0 |
| 8 | 17.0 | 15.0 | 16.5 | 15.5 | 12.5 | 12.5 | 11.0 | 10.0 | 11.5 | 11.0 | 13.5 | 13.0 |
| 9 | 16.5 | 15.5 | 16.5 | 15.0 | 12.5 | 12.5 | 11.0 | 10.5 | 11.5 | 11.0 | --- | --- |
| 10 | 16.5 | 15.0 | 16.5 | 15.0 | 12.5 | 12.5 | 11.0 | 10.5 | 11.5 | 11.5 | 13.5 | 13.0 |
| 11 | 16.5 | 15.0 | 16.0 | 15.0 | 12.5 | 12.5 | 11.0 | 10.5 | 11.5 | 11.0 | 13.5 | 13.0 |
| 12 | 16.5 | 15.0 | 16.0 | 15.0 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.0 |
| 13 | 17.0 | 15.0 | 16.0 | 14.5 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.0 |
| 14 | 17.0 | 15.0 | 15.5 | 14.5 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.0 |
| 15 | 17.0 | 15.0 | 15.5 | 14.0 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.5 |
| 16 | 17.0 | 15.0 | 15.0 | 14.0 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.5 |
| 17 | 17.0 | 15.0 | 15.0 | 14.0 | 12.5 | 11.5 | 11.0 | 10.5 | 12.0 | 11.5 | 14.5 | 13.5 |
| 18 | 17.0 | 15.5 | 14.5 | 14.0 | 12.0 | 11.5 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.5 |
| 19 | 17.0 | 15.5 | 14.5 | 14.0 | 12.0 | 11.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.5 |
| 20 | 17.0 | 15.5 | 14.5 | 14.0 | 11.5 | 11.0 | 11.0 | 10.5 | 11.5 | 11.0 | 14.0 | 13.5 |
| 21 | 17.0 | 15.5 | 14.0 | 13.5 | 11.5 | 10.5 | 11.0 | 11.0 | 11.5 | 11.0 | 14.0 | 13.0 |
| 22 | 16.5 | 15.5 | --- | --- | 11.0 | 10.0 | 11.0 | 11.0 | 11.5 | 10.5 | 14.0 | 13.0 |
| 23 | 16.5 | 15.5 | --- | --- | 11.0 | 9.5 | 11.5 | 11.0 | 11.5 | 11.0 | 13.5 | 12.5 |
| 24 | 16.5 | 15.5 | --- | --- | 10.5 | 9.5 | 11.5 | 11.0 | 11.5 | 11.0 | 13.0 | 12.5 |
| 25 | 16.5 | 15.5 | 13.5 | 13.0 | 10.5 | 9.5 | 11.5 | 11.0 | 11.5 | 11.5 | 13.0 | 12.0 |
| 26 | 16.5 | 15.5 | 13.5 | 13.0 | 10.5 | 9.5 | 11.5 | 11.0 | 12.0 | 11.5 | 13.0 | 12.0 |
| 27 | 17.0 | 15.5 | 13.0 | 12.5 | 11.0 | 9.5 | 11.5 | 11.0 | 12.0 | 11.5 | 13.0 | 12.5 |
| 28 | 17.0 | 15.5 | 13.0 | 12.5 | 11.0 | 10.0 | 11.5 | 11.0 | 12.0 | 11.5 | 13.5 | 12.5 |
| 29 | 17.0 | 15.5 | 13.0 | 12.5 | 11.0 | 10.0 | 11.5 | 11.0 | --- | --- | 13.5 | 12.5 |
| 30 | 17.5 | 15.5 | 13.0 | 12.0 | 11.0 | 10.0 | 11.5 | 11.0 | --- | --- | 13.5 | 13.0 |
| 31 | 17.0 | 15.5 | --- | --- | 11.0 | 10.0 | 11.5 | 11.0 | --- | --- | 14.0 | 13.0 |
| MONTH | 17.5 | 15.0 | --- | --- | 12.5 | 9.5 | 11.5 | 10.0 | 12.0 | 10.5 | --- | --- |

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

11162720 COLMA CREEK AT SOUTH SAN FRANCISCO, CA

LOCATION.--Lat 37°39'14", long 122°25'31", in Buri Buri Grant, San Mateo County, Hydrologic Unit 18050004, on left bank in Orange Memorial Park, 1.0 mi southwest of South San Francisco Post Office.

DRAINAGE AREA.--10.8 mi².

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 12.53 ft above sea level. Recording rain gages at Skyline College, elevation 700 ft at site 2.9 mi southwest of gaging station, and on San Bruno Mountain, elevation 930 ft at site 2.7 mi northwest of gaging station.

REMARKS.--Records poor. Low flow affected by return flow from urban irrigation. Channel lowered in 1986.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,560 ft³/s, Dec. 8, 1987, gage height, 7.53 ft, from rating curve extended above 1,200 ft³/s on basis of step-backwater computation; no flow Oct. 5, 26, 1963, and many days in August 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|---------|------|-----------------------------------|---------------------|
| Nov. 29 | 1555 | 1,030 | 3.71 | Dec. 14 | 0335 | 1,020 | 3.69 |
| Dec. 8 | 1800 | 1,080 | 3.78 | Jan. 24 | 0330 | *2,710 | *6.20 |
| Dec. 11 | 0640 | 2,710 | 6.19 | | | | |

Minimum daily, 0.77 ft³/s, Sept. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|
| 1 | 2.9 | 2.2 | 3.4 | 3.9 | 9.2 | 2.4 | 1.5 | e1.4 | e1.1 | e1.4 | e1.5 | e1.1 |
| 2 | 1.9 | 2.0 | 3.4 | 4.0 | 3.6 | 2.4 | 1.5 | e1.4 | e1.1 | e1.5 | e3.3 | e.95 |
| 3 | 1.0 | 2.3 | 3.6 | 4.1 | 3.9 | 2.2 | 1.4 | e1.3 | e1.5 | e1.1 | e1.8 | e.86 |
| 4 | 3.6 | 2.4 | 4.3 | 8.2 | 3.4 | 2.0 | 1.3 | e3.3 | e1.1 | e1.1 | e1.2 | e.83 |
| 5 | 4.5 | 2.3 | 3.4 | 4.2 | 4.5 | 7.8 | 2.3 | e10 | e1.9 | e.99 | e1.1 | e.99 |
| 6 | 1.8 | 2.3 | 3.5 | 4.3 | 153 | 1.7 | 1.6 | e81 | e8.4 | e1.4 | e.98 | e1.1 |
| 7 | 1.9 | 2.5 | 4.1 | 4.8 | 54 | 1.5 | 1.7 | e93 | e4.3 | e.95 | e1.1 | e.85 |
| 8 | 1.7 | 2.6 | 58 | 6.8 | 16 | 1.5 | 26 | e6.2 | e1.5 | e1.5 | e.98 | e.93 |
| 9 | 1.8 | 2.8 | 13 | 4.5 | 5.3 | 1.7 | 1.9 | e2.1 | e1.4 | e.98 | e1.0 | e1.1 |
| 10 | 2.0 | 13 | 4.7 | 4.7 | 24 | 2.0 | 1.7 | e1.5 | e2.0 | e1.1 | e.96 | e.91 |
| 11 | 2.3 | 3.0 | 101 | 4.1 | 3.9 | 1.6 | 1.3 | e1.5 | e1.7 | e.98 | e1.3 | e.87 |
| 12 | 2.7 | 2.6 | 3.7 | 4.3 | 3.9 | 1.4 | 1.3 | e1.4 | e1.5 | e1.5 | e1.3 | e.94 |
| 13 | 2.6 | 2.7 | 36 | 4.7 | 3.8 | 1.3 | 1.3 | e1.2 | e1.1 | e.94 | e1.1 | .79 |
| 14 | 12 | 2.9 | 33 | 5.2 | 4.2 | 1.2 | 1.4 | e1.4 | e.98 | e.95 | e1.3 | .77 |
| 15 | 37 | 3.0 | 3.8 | 4.8 | 4.3 | 1.4 | 1.6 | e2.3 | e1.4 | e1.1 | e.98 | 1.1 |
| 16 | 1.6 | 3.2 | 3.9 | 4.9 | 13 | 1.9 | 1.5 | e9.1 | e1.1 | e.98 | e1.0 | 2.8 |
| 17 | 2.2 | 3.5 | 3.7 | 4.9 | 70 | 1.3 | 1.4 | e5.3 | e.96 | e1.9 | e1.4 | 1.9 |
| 18 | 2.4 | 3.1 | 4.1 | 4.9 | 34 | 1.3 | 1.5 | e2.5 | e1.2 | e.98 | e1.2 | 1.1 |
| 19 | 1.1 | 6.0 | 3.7 | 5.3 | 107 | 1.3 | 1.4 | e1.4 | e.95 | e.99 | e1.1 | 1.9 |
| 20 | 1.0 | 5.5 | 3.7 | 5.0 | 18 | 1.3 | 1.6 | e1.5 | e1.1 | e1.5 | e.98 | 1.9 |
| 21 | .96 | 6.5 | 3.7 | 5.5 | 39 | 1.5 | 1.4 | e1.4 | e1.3 | e.98 | e1.2 | 3.4 |
| 22 | 1.1 | 5.2 | 3.8 | 11 | 6.1 | 1.3 | 1.6 | e1.9 | e1.1 | e1.5 | e1.1 | 2.3 |
| 23 | 1.2 | 3.2 | 3.9 | 33 | 4.8 | 1.3 | 30 | e1.5 | e1.1 | e1.0 | e1.3 | 8.4 |
| 24 | 1.1 | 3.2 | 3.7 | 149 | 3.9 | 15 | 2.2 | e1.2 | e.99 | e1.1 | e1.0 | 1.5 |
| 25 | 1.3 | 3.6 | 3.6 | 35 | 3.6 | 4.3 | 47 | e1.3 | e1.1 | e.98 | e1.1 | e.91 |
| 26 | 1.3 | 3.4 | 5.3 | 42 | 19 | 1.5 | 1.6 | e1.2 | e2.6 | e1.1 | e1.3 | e1.1 |
| 27 | 1.5 | 3.7 | 3.6 | 18 | 8.7 | 1.3 | 1.3 | e1.4 | e2.1 | e1.2 | e1.5 | e.99 |
| 28 | 1.5 | 47 | 3.7 | 11 | 2.9 | 1.3 | 1.2 | e2.3 | e1.4 | e1.1 | e1.9 | e.86 |
| 29 | 1.6 | 75 | 3.8 | 11 | --- | 1.5 | 1.3 | e1.5 | e1.9 | e.99 | e1.3 | e.95 |
| 30 | 1.8 | 3.3 | 3.6 | 12 | --- | 1.3 | 1.0 | e1.4 | e3.8 | e1.0 | e.98 | e1.1 |
| 31 | 2.0 | --- | 3.7 | 14 | --- | 1.4 | --- | e1.4 | --- | e1.1 | e1.0 | --- |
| TOTAL | 103.36 | 224.0 | 340.4 | 439.1 | 627.0 | 70.9 | 143.8 | 245.3 | 53.68 | 35.89 | 39.26 | 45.20 |
| MEAN | 3.33 | 7.47 | 11.0 | 14.2 | 22.4 | 2.29 | 4.79 | 7.91 | 1.79 | 1.16 | 1.27 | 1.51 |
| MAX | 37 | 75 | 101 | 149 | 153 | 15 | 47 | 93 | 8.4 | 1.9 | 3.3 | 8.4 |
| MIN | .96 | 2.0 | 3.4 | 3.9 | 2.9 | 1.2 | 1.0 | 1.2 | .95 | .94 | .96 | .77 |
| AC-FT | 205 | 444 | 675 | 871 | 1240 | 141 | 285 | 487 | 106 | 71 | 78 | 90 |
| a | 0.38 | 1.32 | 1.89 | 1.73 | 3.46 | 0.32 | 0.82 | 1.33 | 0.08 | 0.04 | 0.07 | 0.18 |
| b | 0.70 | 1.45 | 2.77 | 2.88 | 5.66 | 0.45 | 1.59 | 1.35 | 0.09 | 0 | 0 | 0.06 |

e Estimated.

a Precipitation, in inches, at San Bruno Mountain gage.

b Precipitation, in inches, at Skyline College gage.

11162720 COLMA CREEK AT SOUTH SAN FRANCISCO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.70 | 10.5 | 12.2 | 19.5 | 15.9 | 13.2 | 5.80 | 2.56 | 2.18 | 2.13 | 2.10 | 2.02 |
| MAX | 19.3 | 29.0 | 28.5 | 49.5 | 47.9 | 51.3 | 21.0 | 7.91 | 10.0 | 9.81 | 8.68 | 7.81 |
| (WY) | 1973 | 1974 | 1984 | 1993 | 1983 | 1983 | 1967 | 1994 | 1989 | 1989 | 1989 | 1989 |
| MIN | .28 | 1.14 | .93 | 1.47 | .71 | 1.50 | .13 | .35 | .40 | .12 | .060 | .11 |
| (WY) | 1967 | 1976 | 1976 | 1976 | 1964 | 1966 | 1964 | 1964 | 1964 | 1964 | 1985 | 1964 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1964 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 3874.06 | | | | 2367.89 | | | | | | | |
| ANNUAL MEAN | 10.6 | | | | 6.49 | | | | 7.70 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 17.7 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 2.33 | | | |
| HIGHEST DAILY MEAN | 235 Jan 13 | | | | 153 Feb 6 | | | | 820 Jan 4 1982 | | | |
| LOWEST DAILY MEAN | .96 Oct 21 | | | | .77 Sep 14 | | | | .00 Oct 5 1963 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 1.1 Oct 19 | | | | .90 Sep 8 | | | | .00 Aug 11 1985 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 2710 Jan 24 | | | | 3560 Dec 8 1987 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 6.20 Jan 24 | | | | 7.53 Dec 8 1987 | | | |
| ANNUAL RUNOFF (AC-FT) | 7680 | | | | 4700 | | | | 5580 | | | |
| 10 PERCENT EXCEEDS | 18 | | | | 11 | | | | 13 | | | |
| 50 PERCENT EXCEEDS | 3.4 | | | | 1.8 | | | | 1.8 | | | |
| 90 PERCENT EXCEEDS | 1.9 | | | | .99 | | | | .59 | | | |

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

WATER-QUALITY RECORDS

LOCATION.--Lat 37°35'04", long 122°14'59", unsurveyed, T.4 S., R.4 W., in San Mateo County, Hydrologic Unit 18050004, on Pier 20 directly under San Mateo Bridge.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1989 to current year.

WATER TEMPERATURE: October 1989 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1989.

REMARKS.--Interruptions in record were due to malfunction of the sensing and/or recording instruments. Upper probe is set at 5.5 ft below Mean Lower Low Water (MLLW). Lower probe is set at 45.5 ft below MLLW. Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 50,200 microsiemens, Sept. 5, 1990; minimum recorded, 27,400 microsiemens, Mar. 3, 1993.

(Lower probe) Maximum recorded, 50,300 microsiemens, Oct. 31, Nov. 4, 9, 1990; minimum recorded, 28,700 microsiemens, Mar. 5, 1993.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 23.5°C, Aug. 1, 2, 28, 1993; 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; minimum recorded, 6.5°C, Dec. 30, 1990, to Jan. 2, 1991.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 49,200 microsiemens, Sept. 22-24; minimum recorded, 39,400 microsiemens, Mar. 26, 28.

(Lower probe) Maximum recorded, 48,900 microsiemens, Sept. 25; minimum recorded, 39,700 microsiemens, Mar. 27.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 22.5°C, Aug. 17; minimum recorded, 9.5°C, several days in December and January.

(Lower probe) Maximum recorded, 22.0°C, Aug. 17-20; minimum recorded, 9.5°C, several days in December and January.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(UPPER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|-------|----------|-------|----------|-------|---------|-------|----------|-------|-------|-------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 45000 | 44000 | 45800 | 44900 | 44900 | 43400 | 43900 | 43400 | 43300 | 42800 | 42000 | 40800 |
| 2 | 45000 | 44100 | 45800 | 45100 | 44800 | 43600 | 43800 | 43400 | 43400 | 42200 | 41600 | 40700 |
| 3 | 45000 | 44100 | --- | --- | 44700 | 43600 | 44000 | 43300 | 43400 | 42800 | 41500 | 40500 |
| 4 | 44800 | 43900 | 45600 | 44900 | 44700 | 43700 | 43900 | 43300 | 43500 | 42700 | 41400 | 40200 |
| 5 | 44900 | 44000 | 45600 | 44700 | 44700 | 43700 | 44000 | 43200 | 43600 | 42800 | 41300 | 40300 |
| 6 | 44800 | 43800 | 45600 | 44900 | 44700 | 44000 | --- | --- | 43400 | 42700 | 41300 | 40100 |
| 7 | 44900 | 44000 | 45600 | 44900 | 44700 | 43800 | --- | --- | 43600 | 42600 | 41300 | 40000 |
| 8 | 44900 | 44400 | 45500 | 44700 | 44400 | 43800 | 43900 | 43200 | 43700 | 42200 | 41400 | 40100 |
| 9 | 44900 | 44200 | 45500 | 44800 | 44500 | 43300 | 43800 | 43100 | 43700 | 42200 | 41200 | 40100 |
| 10 | 45200 | 44200 | 45400 | 44600 | 44400 | 43500 | 43800 | 43200 | 43500 | 42200 | 41100 | 40100 |
| 11 | 45200 | 44400 | 45600 | 44600 | --- | --- | 43700 | 43200 | 43500 | 42000 | 40900 | 40100 |
| 12 | 45200 | 44200 | 45300 | 44400 | 44500 | 43200 | 43700 | 43100 | 43300 | 42200 | 40900 | 40000 |
| 13 | 45100 | 44000 | 45400 | 44200 | 44400 | 43500 | 43600 | 43100 | 43300 | 42400 | 41000 | 39800 |
| 14 | 45000 | 44000 | 45300 | 44200 | 44200 | 43500 | 43600 | 42800 | 43300 | 42400 | 40700 | 39800 |
| 15 | 45700 | 44300 | 45300 | 44200 | 44300 | 43300 | 43400 | 42700 | 43200 | 42600 | 40700 | 40100 |
| 16 | 45500 | 44700 | 45400 | 44400 | 44200 | 43300 | 43500 | 42600 | 43200 | 42400 | 40700 | 40200 |
| 17 | 45900 | 44900 | 45200 | 44300 | 44400 | 43300 | 43400 | 42600 | 43200 | 41900 | 40700 | 40200 |
| 18 | 45900 | 45000 | 45200 | 44200 | 44400 | 43400 | 43400 | 42800 | 43200 | 42500 | 40600 | 40000 |
| 19 | 45900 | 45100 | 45100 | 44100 | 44300 | 43300 | 43500 | 42900 | 43100 | 42300 | 40600 | 40000 |
| 20 | 45800 | 45000 | 45100 | 44100 | --- | --- | 43400 | 42800 | 43000 | 41100 | 40600 | 39900 |
| 21 | 45800 | 45100 | 44900 | 44000 | 44400 | 43700 | 43500 | 42700 | 42700 | 41200 | 40300 | 39800 |
| 22 | 45800 | 45000 | 44900 | 43900 | 44400 | 43500 | 43600 | 42700 | 42700 | 40600 | 40300 | 39600 |
| 23 | 45900 | 44900 | 44900 | 44100 | 44400 | 43300 | 43600 | 42800 | 42500 | 40900 | 40300 | 39500 |
| 24 | 45900 | 44900 | 44900 | 43800 | 44300 | 43300 | 43700 | 42700 | 42200 | 40800 | 40000 | 39500 |
| 25 | 45900 | 45000 | 45000 | 44100 | 44300 | 43500 | --- | --- | 41900 | 40700 | 40300 | 39600 |
| 26 | 45900 | 44900 | 44900 | 43900 | 44200 | 43500 | 43500 | 42300 | 42100 | 40700 | 40300 | 39400 |
| 27 | 45900 | 45000 | 45100 | 44100 | 44500 | 43100 | 43500 | 42300 | 42000 | 40800 | 40200 | 39600 |
| 28 | 45900 | 45100 | 44900 | 43600 | 44200 | 43600 | 43600 | 42300 | 42000 | 40500 | 40300 | 39400 |
| 29 | 46100 | 45000 | 45100 | 43900 | 44100 | 43300 | 43500 | 42300 | --- | --- | 40300 | 39500 |
| 30 | 45800 | 45200 | 44900 | 43700 | 44100 | 43400 | 43400 | 42300 | --- | --- | 40600 | 39800 |
| 31 | 45800 | 45100 | --- | --- | 44000 | 43400 | 43300 | 42400 | --- | --- | 40800 | 39700 |
| MONTH | 46100 | 43800 | --- | --- | --- | --- | --- | --- | 43700 | 40500 | 42000 | 39400 |

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(UPPER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-----------|-------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 40800 | 40300 | 42000 | 40800 | --- | --- | --- | --- | 47300 | 46800 | 48400 | 47600 |
| 2 | 40700 | 40200 | 42000 | 40800 | 44700 | 43400 | 46400 | 45800 | 47400 | 46700 | 48500 | 47600 |
| 3 | 40600 | 40100 | 42000 | 40500 | 45100 | 43400 | 46600 | 46000 | 47300 | 46700 | 48600 | 47800 |
| 4 | 41000 | 40100 | 42100 | 40600 | 45000 | 43700 | 46700 | 46100 | 47500 | 46700 | 48600 | 47900 |
| 5 | 41100 | 40100 | 42200 | 41000 | 45200 | 43900 | 46800 | 46200 | 47500 | 46700 | 48500 | 47900 |
| 6 | 40900 | 40200 | 42200 | 40900 | 45100 | 44100 | 46800 | 46200 | 47600 | 46600 | 48600 | 47900 |
| 7 | 41100 | 40100 | 42600 | 40800 | 45400 | 44100 | 47000 | 46100 | 47500 | 46500 | 48500 | 48000 |
| 8 | 41300 | 40300 | 42500 | 41100 | 45700 | 44800 | 46800 | 46100 | 47300 | 46600 | 48500 | 47800 |
| 9 | 41400 | 40200 | 42500 | 41000 | 45900 | 45000 | 46800 | 46200 | 47600 | 46600 | 48400 | 47800 |
| 10 | 41400 | 40300 | 42700 | 41000 | 46000 | 45000 | 47400 | 46500 | 47800 | 46800 | 48500 | 47600 |
| 11 | 41500 | 40200 | 42600 | 41200 | 46000 | 45100 | 47200 | 46400 | 47800 | 47300 | 48500 | 47700 |
| 12 | 41500 | 40300 | 42800 | 41100 | 46100 | 45100 | 47000 | 46400 | 47800 | 47300 | 48500 | 47700 |
| 13 | 41500 | 40500 | 43000 | 41200 | 45800 | 45100 | 46900 | 46300 | 48000 | 47300 | 48500 | 47800 |
| 14 | 41600 | 40600 | 42900 | 41000 | 45900 | 44900 | 47000 | 46400 | 48400 | 47500 | 48300 | 47700 |
| 15 | 41800 | 40700 | 42600 | 40900 | 45800 | 44600 | 47000 | 46400 | 48000 | 47500 | 48500 | 47600 |
| 16 | 41600 | 40700 | 42200 | 40800 | 45500 | 44100 | 46800 | 46300 | 48000 | 47600 | 48400 | 47600 |
| 17 | 41700 | 40900 | 42100 | 40900 | 44400 | 43500 | 46800 | 46300 | 48200 | 47500 | 48400 | 47700 |
| 18 | 41800 | 40800 | 42200 | 40600 | 44100 | 43500 | 46900 | 46200 | 48000 | 47400 | 48600 | 47900 |
| 19 | 41700 | 40900 | 42000 | 41000 | 44200 | 43400 | 47100 | 46300 | 48000 | 47300 | 48900 | 48000 |
| 20 | 41600 | 40900 | 42300 | 41000 | 44400 | 43400 | 47300 | 46700 | 48300 | 47400 | --- | --- |
| 21 | 41700 | 41100 | 42400 | 40500 | 44400 | 43500 | 47500 | 46900 | 48300 | 47800 | 48900 | 48200 |
| 22 | 41700 | 41100 | 42600 | 40500 | 44500 | 43600 | 47600 | 46900 | 48300 | 47600 | 49200 | 48300 |
| 23 | 42100 | 41100 | 42700 | 40600 | 44600 | 43800 | 47700 | 47000 | 48200 | 47500 | 49200 | 48400 |
| 24 | 42000 | 40800 | 42600 | 40600 | 44700 | 43900 | 47800 | 47100 | 48400 | 47500 | 49200 | 48500 |
| 25 | 41800 | 40700 | 43000 | 40700 | 45000 | 44100 | 47700 | 47100 | 48400 | 47800 | 49000 | 48400 |
| 26 | 42200 | 40700 | 43200 | 41300 | 45100 | 44000 | 47700 | 46900 | 48400 | 47900 | 49000 | 48400 |
| 27 | 42000 | 40800 | 43300 | 41300 | 45200 | 44100 | 47500 | 46900 | 48400 | 47800 | 49000 | 48400 |
| 28 | 42000 | 40700 | 43800 | 41700 | 45400 | 44200 | 47400 | 46900 | 48200 | 47300 | 49000 | 48500 |
| 29 | 42400 | 40600 | 43700 | 42100 | 45600 | 44700 | 47500 | 47000 | 48100 | 47800 | 49100 | 48500 |
| 30 | 41900 | 40700 | 44000 | 42100 | --- | --- | 47600 | 47000 | 48300 | 48000 | 49000 | 48400 |
| 31 | --- | --- | 44100 | 42900 | --- | --- | 47400 | 46800 | --- | --- | --- | --- |
| MONTH | 42400 | 40100 | 44100 | 40500 | --- | --- | --- | --- | --- | --- | --- | --- |

SAN FRANCISCO BAY

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

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(LOWER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|---------|-------|----------|-------|----------|-------|---------|-------|----------|-------|-------|-------|-------|
| OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | | |
| 1 | 45300 | 44600 | 45600 | 44700 | 44400 | 43100 | 43700 | 43100 | 43300 | 42700 | 41700 | 40900 |
| 2 | 45300 | 44600 | 45700 | 44700 | 44500 | 43300 | 43700 | 43200 | 43300 | 42800 | 41900 | 40900 |
| 3 | 45200 | 43900 | --- | --- | 44500 | 43500 | 43600 | 43300 | 43300 | 42700 | 41800 | 41000 |
| 4 | 45100 | 44500 | 45700 | 44700 | 44500 | 43500 | 43600 | 43300 | 43400 | 42700 | 41800 | 41000 |
| 5 | 45200 | 44400 | 45700 | 44600 | 44400 | 43500 | 43600 | 43300 | 43400 | 42600 | 41900 | 40900 |
| 6 | 45100 | 44400 | 45700 | 44900 | 44400 | 43700 | --- | --- | 43400 | 42600 | 41800 | 40900 |
| 7 | 45100 | 44500 | 45600 | 44900 | 44400 | 43700 | --- | --- | 43400 | 42700 | 41900 | 41000 |
| 8 | 45300 | 44600 | 45600 | 44400 | 44500 | 43900 | 43500 | 42900 | 43300 | 42200 | 41800 | 41100 |
| 9 | 45100 | 44300 | 45600 | 44600 | 44400 | 43700 | 43500 | 42800 | 43200 | 42200 | 41800 | 41000 |
| 10 | 45200 | 44500 | 45600 | 44800 | 44400 | 43700 | 43500 | 42800 | 43100 | 41900 | 41700 | 41000 |
| 11 | 45200 | 44000 | 45500 | 44200 | --- | --- | 43400 | 42800 | 42900 | 41700 | 41700 | 40900 |
| 12 | 45200 | 44500 | 45200 | 43700 | 44200 | 42900 | 43500 | 42900 | 42900 | 42100 | 41700 | 41100 |
| 13 | 45400 | 44400 | 45300 | 43600 | 44200 | 43100 | 43500 | 43000 | 42900 | 42200 | 41800 | 41200 |
| 14 | 45500 | 44600 | 45100 | 43200 | 44100 | 43000 | 43400 | 42600 | 42900 | 42200 | 41800 | 41200 |
| 15 | 45500 | 44300 | 45200 | 43500 | 44000 | 43000 | 43400 | 43000 | 42900 | 42200 | 41800 | 41100 |
| 16 | 45400 | 44200 | 45100 | 43500 | 44100 | 43000 | 43500 | 43000 | 43100 | 42300 | 41700 | 41200 |
| 17 | 45500 | 44200 | 45100 | 43700 | 43900 | 43000 | 43600 | 43100 | 42900 | 42400 | 41600 | 40800 |
| 18 | 45500 | 44300 | 45000 | 43800 | 44100 | 43300 | 43500 | 43200 | 42600 | 42100 | 41600 | 40800 |
| 19 | 45400 | 44500 | 45100 | 43800 | 44000 | 43200 | 43500 | 43200 | 42400 | 41900 | 41400 | 40400 |
| 20 | 45500 | 44600 | 45000 | 44100 | --- | --- | 43500 | 43200 | 42200 | 41500 | 41300 | 40500 |
| 21 | 45400 | 44500 | 44900 | 44100 | 43800 | 43400 | 43500 | 43100 | 41900 | 41100 | 41200 | 40600 |
| 22 | 45500 | 44500 | 44900 | 44200 | 43800 | 43200 | 43600 | 43100 | 41800 | 40800 | 40800 | 40500 |
| 23 | 45400 | 44600 | 44600 | 43600 | 43900 | 43200 | 43700 | 43100 | 41800 | 40700 | 40500 | 40300 |
| 24 | 45400 | 44700 | 44500 | 43200 | 43900 | 43000 | 43600 | 43100 | 41900 | 40800 | 40500 | 40000 |
| 25 | 45500 | 44800 | 44600 | 43700 | 44000 | 43000 | --- | --- | 41800 | 40800 | 40400 | 40000 |
| 26 | 45500 | 44900 | 44800 | 43700 | 43900 | 43000 | 43500 | 42700 | 41800 | 40900 | 40500 | 39800 |
| 27 | 45700 | 44900 | 44600 | 43500 | 43900 | 43000 | 43400 | 42600 | 41700 | 40900 | 40600 | 39700 |
| 28 | 45600 | 44900 | 44600 | 43600 | 43900 | 43100 | 43400 | 42500 | 41700 | 40800 | 40700 | 39900 |
| 29 | 45800 | 45000 | 44600 | 43500 | 43900 | 43100 | 43400 | 42700 | --- | --- | 40900 | 40000 |
| 30 | 45700 | 44700 | 44500 | 43200 | 43900 | 43200 | 43300 | 42800 | --- | --- | 41000 | 40000 |
| 31 | 45600 | 44500 | --- | --- | 43800 | 43100 | 43300 | 42800 | --- | --- | 41500 | 40400 |
| MONTH | 45800 | 43900 | --- | --- | --- | --- | --- | --- | 43400 | 40700 | 41900 | 39700 |

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-----------|-------|-------|
| APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | | |
| 1 | 41700 | 40600 | 43100 | 41500 | --- | --- | --- | --- | 47000 | 46700 | 47900 | 47700 |
| 2 | 41500 | 40700 | 43600 | 41500 | 44700 | 42900 | 46000 | 45600 | 47000 | 46700 | 47900 | 47700 |
| 3 | 41500 | 40700 | 43700 | 41700 | 44600 | 42700 | 46500 | 45700 | 47200 | 46700 | 48000 | 47700 |
| 4 | 42100 | 40900 | 43700 | 42000 | 44600 | 42800 | 46600 | 45600 | 47400 | 46700 | 48100 | 47700 |
| 5 | 41900 | 40800 | 44000 | 42200 | 44600 | 42900 | 46800 | 45800 | 47500 | 46700 | 48000 | 47800 |
| 6 | 42100 | 40900 | 44000 | 42200 | 45600 | 43100 | 46700 | 46000 | 47500 | 46900 | 48000 | 47700 |
| 7 | 42200 | 40800 | 43900 | 42200 | 44800 | 43000 | 46900 | 45900 | 47600 | 46700 | 48000 | 47700 |
| 8 | 42100 | 40800 | 43800 | 42200 | 44900 | 43200 | 47000 | 45900 | 47500 | 46700 | 48000 | 47600 |
| 9 | 42100 | 40800 | 43900 | 41900 | 45100 | 43400 | 47000 | 46000 | 47900 | 46900 | 48100 | 47600 |
| 10 | 42000 | 40700 | 44000 | 41900 | 45300 | 43700 | 47000 | 46000 | 47900 | 46900 | 48300 | 47900 |
| 11 | 42400 | 40700 | 44000 | 41800 | 45300 | 43700 | 47000 | 46100 | 47500 | 47000 | 48400 | 47700 |
| 12 | 42200 | 41000 | 44100 | 41600 | 45300 | 43600 | 47000 | 46200 | 47500 | 47100 | 48500 | 48000 |
| 13 | 42200 | 41000 | 44300 | 41700 | 45200 | 43600 | 46800 | 46200 | 47600 | 47100 | 48400 | 48000 |
| 14 | 42200 | 40900 | 44200 | 41600 | 44800 | 43600 | 46900 | 46200 | 47700 | 47100 | 48300 | 47800 |
| 15 | 42500 | 41200 | 44300 | 41800 | 44900 | 43300 | 46700 | 46000 | 47600 | 47200 | 48400 | 47900 |
| 16 | 42300 | 41100 | 44000 | 41900 | 44300 | 43100 | 46500 | 45900 | 47500 | 47100 | 48700 | 48100 |
| 17 | 42500 | 41100 | 43900 | 42200 | 43600 | 42600 | 46400 | 45600 | 47600 | 47100 | 48600 | 48100 |
| 18 | 43000 | 41000 | 43700 | 42200 | 43500 | 42300 | 46700 | 45600 | 47500 | 47100 | 48600 | 48100 |
| 19 | 42700 | 41100 | 44100 | 42300 | 43400 | 42200 | 46900 | 45800 | 47600 | 47000 | 48700 | 48100 |
| 20 | 42300 | 40900 | 43900 | 42300 | 43700 | 41800 | 47100 | 46100 | 47600 | 47100 | 48800 | 48000 |
| 21 | 42800 | 41300 | 44000 | 41600 | 43800 | 41900 | 47200 | 46600 | 47700 | 47200 | 48800 | 48500 |
| 22 | 42800 | 41300 | 43800 | 41300 | 44100 | 42200 | 47200 | 46700 | 47800 | 47300 | 48800 | 48400 |
| 23 | 42900 | 41200 | 43700 | 41100 | 44500 | 42600 | 47300 | 46700 | 47700 | 47300 | 48700 | 48500 |
| 24 | 42800 | 41000 | 43600 | 40900 | 44500 | 42600 | 47300 | 46800 | 47700 | 47300 | 48800 | 48500 |
| 25 | 42800 | 41000 | 43600 | 40900 | 44500 | 42700 | 47400 | 46800 | 47700 | 47400 | 48900 | 48500 |
| 26 | 43000 | 40800 | 43600 | 40900 | 45200 | 43500 | 47400 | 46800 | 47700 | 47400 | 48800 | 48400 |
| 27 | 43100 | 41200 | 43600 | 41300 | 45300 | 44000 | 47400 | 46800 | 47800 | 47400 | 48700 | 48400 |
| 28 | 43200 | 41300 | 43700 | 41500 | 45500 | 44400 | 47300 | 46800 | 47800 | 46700 | 48700 | 48400 |
| 29 | 43200 | 41300 | 43300 | 41600 | 46000 | 44500 | 47300 | 46700 | 47800 | 47500 | 48700 | 48300 |
| 30 | 43200 | 41500 | 43200 | 41600 | 45900 | 44600 | 47300 | 46600 | 47800 | 47500 | 48700 | 48100 |
| 31 | --- | --- | 43300 | 41900 | --- | --- | 47200 | 46700 | 47900 | 47600 | --- | --- |
| MONTH | 43200 | 40600 | 44300 | 40900 | --- | --- | --- | --- | 47900 | 46700 | 48900 | 47600 |

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(UPPER PROBE)

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

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(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 | 18.5 | 18.0 | 12.5 | 12.0 | 10.0 | 9.5 | --- | --- | 12.0 | 11.5 |
| 2 | 20.0 | 18.5 | 18.5 | 18.0 | 12.5 | 12.5 | 10.0 | 10.0 | --- | --- | 12.5 | 12.0 |
| 3 | 19.5 | 18.5 | 18.5 | 18.0 | 12.5 | 12.5 | 10.0 | 10.0 | --- | --- | 13.0 | 12.5 |
| 4 | 19.0 | 18.5 | 18.0 | 17.5 | 12.5 | 12.5 | 10.0 | 10.0 | --- | --- | 13.0 | 12.5 |
| 5 | 19.0 | 18.0 | 18.0 | 17.5 | 12.5 | 12.0 | 10.0 | 10.0 | --- | --- | 13.5 | 13.0 |
| 6 | 18.5 | 18.0 | 18.0 | 17.5 | 12.5 | 12.0 | 10.0 | 10.0 | --- | --- | 13.5 | 13.0 |
| 7 | 18.5 | 18.0 | 18.0 | 17.5 | 12.0 | 12.0 | 10.0 | 10.0 | --- | --- | 14.0 | 13.5 |
| 8 | 18.5 | 18.0 | 17.5 | 17.0 | 12.5 | 12.0 | 10.0 | 10.0 | --- | --- | 14.0 | 13.5 |
| 9 | 18.5 | 18.0 | 17.5 | 17.0 | 12.5 | 12.0 | 10.0 | 10.0 | --- | --- | 14.5 | 14.0 |
| 10 | 18.5 | 18.0 | 17.5 | 17.0 | 12.5 | 12.5 | 10.0 | 10.0 | --- | --- | 14.5 | 14.0 |
| 11 | 18.5 | 18.0 | 17.0 | 16.0 | 12.5 | 12.5 | 10.0 | 9.5 | --- | --- | 14.5 | 14.0 |
| 12 | 18.5 | 18.0 | 16.5 | 15.5 | 12.5 | 12.0 | 10.0 | 9.5 | --- | --- | 15.0 | 14.0 |
| 13 | 19.0 | 18.0 | 16.0 | 15.5 | 12.0 | 12.0 | 10.0 | 9.5 | --- | --- | 14.5 | 14.0 |
| 14 | 19.0 | 18.0 | 15.5 | 14.5 | 12.0 | 12.0 | 10.0 | 9.5 | --- | --- | 15.0 | 14.5 |
| 15 | 19.0 | 18.0 | 15.0 | 14.0 | 12.0 | 11.5 | 10.0 | 9.5 | --- | --- | 15.0 | 14.5 |
| 16 | 18.5 | 18.0 | 14.5 | 14.0 | 12.0 | 11.5 | 10.0 | 10.0 | --- | --- | 15.0 | 15.0 |
| 17 | 18.5 | 18.0 | 14.5 | 14.0 | 11.5 | 11.5 | 10.0 | 10.0 | 11.5 | 11.0 | 15.0 | 14.5 |
| 18 | 18.5 | 18.0 | 14.5 | 14.0 | 11.5 | 11.0 | 10.0 | 10.0 | 11.0 | 11.0 | 15.0 | 15.0 |
| 19 | 18.0 | 17.5 | 14.5 | 14.0 | 11.5 | 11.0 | 10.5 | 10.0 | 11.0 | 10.5 | 15.0 | 14.5 |
| 20 | 18.0 | 17.5 | 14.5 | 14.0 | 11.0 | 11.0 | 10.5 | 10.0 | 11.0 | 10.5 | 15.0 | 14.5 |
| 21 | 18.0 | 18.0 | 14.0 | 14.0 | 11.0 | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 15.0 | 14.5 |
| 22 | 18.0 | 17.5 | 14.0 | 14.0 | 10.5 | 10.0 | 10.5 | 10.5 | 11.0 | 10.5 | 15.0 | 14.0 |
| 23 | 18.0 | 18.0 | 14.0 | 13.0 | 10.5 | 10.0 | 11.0 | 10.5 | 11.0 | 10.5 | 14.5 | 13.5 |
| 24 | 18.0 | 18.0 | 13.5 | 13.0 | 10.5 | 9.5 | 11.0 | 11.0 | 11.0 | 11.0 | 14.0 | 13.5 |
| 25 | 18.5 | 18.0 | 13.5 | 12.5 | 10.0 | 9.5 | --- | --- | 11.5 | 11.0 | 14.0 | 13.5 |
| 26 | 18.5 | 18.0 | 13.0 | 12.0 | 10.0 | 9.5 | --- | --- | 11.5 | 11.0 | 14.0 | 13.5 |
| 27 | 18.5 | 18.0 | 13.0 | 12.0 | 10.0 | 9.5 | --- | --- | 11.5 | 11.0 | 14.5 | 13.5 |
| 28 | 18.5 | 18.0 | 12.5 | 12.0 | 10.0 | 9.5 | --- | --- | 12.0 | 11.5 | 14.5 | 13.5 |
| 29 | 18.5 | 18.0 | 12.5 | 12.0 | 10.0 | 9.5 | --- | --- | --- | --- | 14.5 | 14.0 |
| 30 | 19.0 | 18.0 | 12.5 | 12.5 | 10.0 | 9.5 | --- | --- | --- | --- | 15.0 | 14.0 |
| 31 | 19.0 | 18.0 | --- | --- | 10.0 | 9.5 | --- | --- | --- | --- | 15.0 | 14.5 |
| MONTH | 20.0 | 17.5 | 18.5 | 12.0 | 12.5 | 9.5 | --- | --- | --- | --- | 15.0 | 11.5 |
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 15.0 | 14.5 | 16.0 | 15.5 | 19.0 | 18.0 | --- | --- | 20.5 | 20.0 | 21.0 | 20.0 |
| 2 | 15.0 | 14.5 | 16.0 | 15.5 | 18.5 | 18.0 | 20.0 | 19.0 | 20.5 | 20.0 | 21.0 | 19.5 |
| 3 | 15.0 | 15.0 | 16.0 | 15.5 | 19.0 | 18.0 | 20.0 | 19.0 | 20.5 | 19.5 | 20.5 | 19.5 |
| 4 | 15.5 | 14.5 | 16.0 | 16.0 | 19.0 | 18.0 | 20.0 | 18.5 | 21.0 | 19.0 | 20.5 | 19.5 |
| 5 | 15.5 | 15.0 | 16.5 | 16.0 | 19.5 | 18.5 | 20.0 | 18.5 | 21.0 | 19.0 | 21.0 | 19.5 |
| 6 | 15.5 | 15.0 | 16.5 | 16.0 | 19.5 | 18.5 | 20.5 | 18.5 | 21.0 | 19.0 | 21.0 | 20.0 |
| 7 | 15.5 | 14.5 | 16.5 | 16.0 | 19.5 | 18.0 | --- | --- | 21.5 | 19.5 | 21.0 | 19.5 |
| 8 | 15.0 | 14.5 | 17.0 | 16.0 | 19.0 | 18.0 | --- | --- | 21.5 | 20.0 | 20.5 | 19.5 |
| 9 | 15.0 | 14.0 | 17.0 | 16.5 | 19.5 | 18.5 | --- | --- | 21.0 | 20.0 | 20.5 | 19.5 |
| 10 | 15.0 | 14.5 | 17.5 | 16.5 | 19.5 | 18.5 | --- | --- | 21.0 | 20.0 | 20.0 | 19.5 |
| 11 | 15.0 | 14.5 | 17.5 | 17.0 | 20.0 | 19.5 | --- | --- | 21.0 | 20.0 | 20.0 | 19.0 |
| 12 | 15.5 | 14.5 | 17.5 | 16.5 | 20.5 | 20.0 | --- | --- | 21.0 | 20.0 | 20.0 | 19.0 |
| 13 | 15.5 | 15.0 | 17.5 | 16.5 | 20.5 | 19.5 | --- | --- | 21.5 | 20.0 | 19.5 | 19.0 |
| 14 | 16.0 | 15.5 | 17.5 | 16.5 | 20.5 | 19.0 | --- | --- | 21.5 | 20.0 | 19.5 | 19.0 |
| 15 | 16.5 | 15.5 | 17.5 | 16.5 | 19.5 | 18.5 | --- | --- | 21.5 | 20.0 | 20.0 | 19.0 |
| 16 | 16.5 | 16.0 | 17.5 | 16.5 | 19.0 | 18.0 | --- | --- | 21.5 | 20.0 | 20.0 | 19.5 |
| 17 | 17.0 | 16.0 | 17.0 | 16.5 | 18.5 | 18.0 | --- | --- | 22.0 | 20.0 | 20.5 | 19.5 |
| 18 | 18.0 | 16.5 | 17.0 | 16.5 | 18.5 | 18.0 | --- | --- | 22.0 | 20.5 | 20.5 | 19.5 |
| 19 | 18.0 | 17.0 | 17.0 | 17.0 | 19.0 | 18.0 | --- | --- | 22.0 | 20.5 | 20.5 | 19.5 |
| 20 | 17.5 | 16.5 | 17.0 | 16.5 | 19.5 | 18.0 | --- | --- | 22.0 | 20.0 | --- | --- |
| 21 | 17.5 | 16.5 | 17.0 | 16.5 | 19.5 | 18.5 | 21.0 | 20.0 | 21.5 | 20.5 | 20.5 | 19.5 |
| 22 | 17.5 | 16.5 | 17.0 | 16.5 | 19.5 | 18.5 | 21.0 | 20.0 | 21.5 | 20.0 | 20.5 | 19.5 |
| 23 | 17.0 | 15.5 | 17.5 | 17.0 | 19.5 | 18.5 | 21.0 | 20.0 | 21.5 | 20.0 | 20.5 | 19.5 |
| 24 | 16.5 | 15.0 | 18.0 | 17.0 | 19.5 | 18.5 | 21.0 | 20.0 | 21.5 | 20.5 | 20.5 | 19.5 |
| 25 | 15.5 | 15.0 | 18.0 | 17.0 | 19.5 | 18.0 | 21.0 | 20.0 | 21.0 | 20.5 | 20.5 | 20.0 |
| 26 | 15.5 | 15.0 | 18.0 | 17.0 | 19.5 | 18.0 | 21.0 | 20.5 | 21.0 | 20.5 | 20.5 | 20.0 |
| 27 | 15.5 | 15.0 | 17.5 | 17.0 | 19.5 | 18.5 | 21.0 | 20.5 | 21.0 | 20.5 | 20.5 | 20.0 |
| 28 | 16.0 | 15.5 | 18.0 | 17.0 | 20.0 | 19.0 | 21.0 | 20.5 | 21.0 | 20.0 | 20.5 | 20.0 |
| 29 | 16.0 | 15.5 | 18.0 | 17.5 | 20.0 | 19.0 | 21.0 | 20.5 | 21.0 | 20.5 | 20.5 | 19.5 |
| 30 | 16.0 | 15.5 | 18.5 | 17.5 | 19.5 | 19.0 | 20.5 | 20.5 | 21.0 | 20.5 | 20.5 | 19.5 |
| 31 | --- | --- | 18.5 | 18.0 | --- | --- | 20.5 | 20.0 | --- | --- | --- | --- |
| MONTH | 18.0 | 14.0 | 18.5 | 15.5 | 20.5 | 18.0 | --- | --- | --- | --- | --- | --- |

11162800 REDWOOD CREEK AT REDWOOD CITY, CA

LOCATION.--Lat 37°26'58", long 122°13'57", in Pulgas Grant, San Mateo County, Hydrologic Unit 18050004, at Menlo Country Club, on right bank 200 ft upstream from Alameda de Las Pulgas Bridge and 2.5 mi south of Redwood City Old Post Office.

DRAINAGE AREA.--1.82 mi².

PERIOD OF RECORD.--September 1959 to current year.

REVISED RECORDS.--WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 83.92 ft above sea level.

REMARKS.--Records fair. Low flow at times affected by return flow from urban irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 644 ft³/s, Jan. 31, 1963, gage height, 9.36 ft, from rating curve extended above 180 ft³/s on basis of slope-area measurement of peak flow and computation of peak flow through culvert; maximum gage height, 11.55 ft, Nov. 29, 1970 (backwater from culvert trash racks); no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 130 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2015 | *101 | *3.79 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|--------|-------|-------|-------|------|------|------|------|
| 1 | .00 | .03 | .05 | .19 | .41 | .65 | .23 | .18 | .13 | e.04 | e.00 | e.00 |
| 2 | .00 | .02 | .04 | .21 | .39 | .60 | .22 | .17 | .11 | e.03 | e.00 | e.01 |
| 3 | .00 | .02 | .02 | .19 | .39 | .57 | .20 | .15 | .11 | e.03 | e.01 | e.01 |
| 4 | .01 | .03 | .03 | .23 | .39 | .50 | .22 | .16 | .12 | e.02 | e.00 | e.00 |
| 5 | .00 | .03 | .03 | .20 | .39 | .50 | .19 | .15 | .09 | e.03 | e.01 | e.01 |
| 6 | .00 | .03 | .03 | .19 | 2.2 | .48 | .18 | .63 | .11 | e.03 | e.01 | e.01 |
| 7 | .01 | .03 | .03 | .18 | 10 | .44 | .18 | 3.9 | .07 | e.03 | e.00 | e.02 |
| 8 | .01 | .04 | 2.0 | .20 | 3.7 | .40 | 1.2 | .39 | .07 | e.03 | e.00 | e.01 |
| 9 | .01 | .04 | 2.6 | .18 | 1.1 | .39 | .80 | .26 | .05 | e.02 | e.00 | e.01 |
| 10 | .03 | .73 | .32 | .19 | 2.4 | .39 | .40 | .22 | .05 | e.03 | e.01 | e.02 |
| 11 | .02 | .17 | 5.4 | .19 | 1.1 | .37 | .37 | .18 | .08 | e.02 | e.01 | e.01 |
| 12 | .02 | .08 | .60 | .19 | .78 | .33 | .34 | .16 | .05 | e.03 | e.00 | e.01 |
| 13 | .03 | .08 | .78 | .20 | .63 | .32 | .30 | .15 | .05 | e.02 | e.00 | e.01 |
| 14 | .03 | .08 | 6.4 | .20 | .56 | .31 | .31 | .14 | .06 | e.01 | e.01 | .02 |
| 15 | .90 | .08 | .59 | .20 | .50 | .29 | .29 | .13 | .11 | e.02 | e.02 | .02 |
| 16 | .15 | .08 | .39 | .20 | .53 | .30 | .31 | .13 | .15 | e.01 | e.01 | .02 |
| 17 | .12 | .09 | .34 | .19 | 17 | .29 | .31 | 2.3 | .06 | e.01 | e.01 | .02 |
| 18 | .02 | .09 | .28 | .20 | 12 | .28 | .28 | .30 | .04 | e.01 | e.00 | .02 |
| 19 | .02 | .09 | .23 | .19 | 24 | .24 | .18 | .25 | .04 | e.01 | e.01 | .02 |
| 20 | .02 | .10 | .23 | .18 | 9.5 | .23 | .10 | .22 | .05 | e.01 | e.00 | .02 |
| 21 | .02 | .11 | .25 | .16 | 5.9 | .24 | .10 | .17 | .03 | e.01 | e.00 | .02 |
| 22 | .02 | .12 | .21 | .15 | 2.4 | .29 | .10 | .15 | .03 | e.00 | e.01 | .02 |
| 23 | .02 | .11 | .21 | 1.6 | 1.5 | .23 | .64 | .14 | .03 | e.01 | e.00 | .02 |
| 24 | .02 | .11 | .22 | 10 | 1.2 | .95 | .20 | .12 | .03 | e.00 | e.00 | .02 |
| 25 | .02 | .12 | .22 | 5.1 | 1.1 | .52 | 4.5 | .12 | .03 | e.01 | e.01 | .02 |
| 26 | .02 | .12 | .27 | 1.2 | 1.2 | .29 | .65 | .13 | .03 | e.00 | e.01 | .03 |
| 27 | .02 | .13 | .34 | 1.5 | .98 | .28 | .32 | .12 | .03 | e.00 | e.00 | .03 |
| 28 | .02 | 1.2 | .20 | .63 | .81 | .29 | .23 | .12 | .03 | e.01 | e.01 | .02 |
| 29 | .03 | 1.8 | .19 | .49 | --- | .26 | .21 | .11 | .03 | e.00 | e.00 | .02 |
| 30 | .02 | .25 | .20 | .46 | --- | .25 | .19 | .13 | .03 | e.01 | e.00 | .03 |
| 31 | .03 | --- | .19 | .42 | --- | .24 | --- | .12 | --- | e.00 | e.01 | --- |
| TOTAL | 1.64 | 6.01 | 22.89 | 25.61 | 103.06 | 11.72 | 13.75 | 11.60 | 1.90 | 0.49 | 0.16 | 0.50 |
| MEAN | .053 | .20 | .74 | .83 | 3.68 | .38 | .46 | .37 | .063 | .016 | .005 | .017 |
| MAX | .90 | 1.8 | 6.4 | 10 | 24 | .95 | 4.5 | 3.9 | .15 | .04 | .02 | .03 |
| MIN | .00 | .02 | .02 | .15 | .39 | .23 | .10 | .11 | .03 | .00 | .00 | .00 |
| AC-FT | 3.3 | 12 | 45 | 51 | 204 | 23 | 27 | 23 | 3.8 | 1.0 | .3 | 1.0 |

, e Estimated.

REDWOOD CREEK BASIN

11162800 REDWOOD CREEK AT REDWOOD CITY, CA --Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .22 | .79 | 1.65 | 3.62 | 3.43 | 2.46 | .92 | .23 | .085 | .040 | .030 | .037 |
| MAX | 2.93 | 4.84 | 7.44 | 13.0 | 13.9 | 11.5 | 4.80 | 1.26 | .32 | .15 | .10 | .17 |
| (WY) | 1963 | 1974 | 1971 | 1967 | 1986 | 1983 | 1982 | 1983 | 1983 | 1983 | 1983 | 1982 |
| MIN | .000 | .003 | .052 | .065 | .11 | .18 | .015 | .003 | .000 | .000 | .000 | .000 |
| (WY) | 1960 | 1960 | 1960 | 1991 | 1977 | 1988 | 1977 | 1962 | 1961 | 1961 | 1961 | 1961 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | FOR 1994 WATER YEAR | WATER YEARS 1960 - 1994 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 597.92 | 199.33 | |
| ANNUAL MEAN | 1.64 | .55 | 1.12 |
| HIGHEST ANNUAL MEAN | | | 3.67 1983 |
| LOWEST ANNUAL MEAN | | | .096 1961 |
| HIGHEST DAILY MEAN | 97 Jan 13 | 24 Feb 19 | 211 Jan 21 1967 |
| LOWEST DAILY MEAN | .00 Jun 17 | .00 Oct 1 | .00 Oct 1 1959 |
| ANNUAL SEVEN-DAY MINIMUM | .00 Jun 19 | .00 Oct 1 | .00 Oct 1 1959 |
| INSTANTANEOUS PEAK FLOW | | 101 Feb 19 | 644 Jan 31 1963 |
| INSTANTANEOUS PEAK STAGE | | 3.79 Feb 19 | 11.55 Nov 29 1970 |
| ANNUAL RUNOFF (AC-FT) | 1190 | 395 | 808 |
| 10 PERCENT EXCEEDS | 2.6 | .79 | 1.5 |
| 50 PERCENT EXCEEDS | .11 | .12 | .10 |
| 90 PERCENT EXCEEDS | .00 | .01 | .00 |

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.

REMARKS.--Records fair. 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, 5,560 ft³/s, Dec. 22, 1955, gage height, 13.60 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2245 | *824 | *4.24 | | | | |

Minimum daily, 0.03 ft³/s, Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|--------|--------|-------|-------|--------|-------|------|------|------|
| 1 | .34 | .42 | 1.2 | 1.0 | 2.7 | 10 | e4.7 | e2.6 | e.92 | e.20 | .15 | .14 |
| 2 | .40 | .34 | .70 | 1.0 | 2.0 | 8.9 | e4.3 | e2.5 | e.91 | e.19 | .15 | .18 |
| 3 | .34 | .37 | .57 | 1.0 | 2.1 | 8.1 | e3.7 | e2.4 | e.88 | e.20 | .15 | .15 |
| 4 | .37 | .39 | .56 | 1.1 | 2.0 | 7.3 | e4.2 | e2.3 | e.85 | e.20 | .15 | .14 |
| 5 | .38 | .39 | .62 | 1.1 | 1.6 | 7.1 | e3.4 | e2.2 | e.86 | e.19 | .16 | .11 |
| 6 | .24 | .39 | .66 | 1.0 | 3.7 | 6.6 | e3.0 | 3.1 | e.81 | e.19 | .15 | .08 |
| 7 | .21 | .37 | .72 | 1.2 | 53 | 6.2 | e2.9 | 21 | e.77 | e.18 | .19 | .06 |
| 8 | .16 | .44 | 1.5 | 1.1 | 49 | 6.0 | e3.3 | 8.0 | e.73 | .19 | .19 | .06 |
| 9 | .13 | .50 | 16 | 1.1 | 18 | 5.7 | e7.6 | 3.4 | e.69 | .19 | .19 | .09 |
| 10 | .22 | 2.3 | 2.6 | 1.1 | 18 | 5.3 | e5.9 | 3.1 | e.68 | .17 | .19 | .11 |
| 11 | .39 | 1.5 | 18 | 1.1 | 19 | 5.3 | e4.6 | 2.8 | e.65 | .15 | .15 | .11 |
| 12 | .72 | .70 | 4.3 | 1.0 | 10 | 4.7 | e4.3 | 2.6 | e.63 | .19 | .15 | .08 |
| 13 | .70 | .60 | 2.2 | 1.1 | 7.8 | 4.6 | e3.9 | 2.4 | e.63 | .19 | .14 | .07 |
| 14 | .63 | .47 | 23 | 1.0 | 6.9 | 4.3 | e3.6 | 2.3 | e.56 | .19 | .13 | .05 |
| 15 | .92 | .51 | 3.5 | 1.0 | 6.1 | 4.2 | e3.3 | e2.9 | e.50 | .19 | .13 | .04 |
| 16 | .52 | .64 | 2.0 | 1.0 | 5.5 | e4.0 | e3.1 | e2.3 | e.45 | .16 | .08 | .06 |
| 17 | .39 | .77 | 1.5 | 1.0 | 104 | e3.8 | e2.9 | e1.1 | e.39 | .15 | .08 | .06 |
| 18 | .32 | .88 | 1.3 | 1.1 | 99 | e3.7 | e2.8 | e2.9 | e.36 | .15 | .09 | .08 |
| 19 | .44 | .92 | 1.2 | 1.7 | 217 | e3.5 | e2.6 | e2.4 | e.33 | .15 | .11 | .11 |
| 20 | .42 | 1.1 | 1.1 | .95 | 262 | e3.1 | e3.1 | e2.1 | e.29 | .16 | .11 | .09 |
| 21 | .33 | 1.2 | 1.0 | .94 | 69 | e3.0 | e2.1 | e2.2 | e.27 | .18 | .15 | .05 |
| 22 | .38 | 1.3 | .96 | .94 | 40 | e3.3 | e2.0 | e1.9 | e.25 | .15 | .15 | .05 |
| 23 | .34 | 1.3 | .97 | 3.1 | 25 | e3.1 | e9.8 | e1.8 | e.23 | .15 | .18 | .09 |
| 24 | .39 | 1.3 | 1.1 | 35 | 18 | e13 | e2.6 | e1.6 | e.24 | .15 | .18 | .07 |
| 25 | .48 | 1.4 | 1.2 | 29 | 14 | e8.4 | e34 | e1.1 | e.23 | .19 | .13 | .05 |
| 26 | .44 | 1.3 | 1.2 | 16 | 13 | e6.2 | e4.2 | e1.0 | e.22 | .18 | .11 | .04 |
| 27 | .86 | 1.3 | 2.1 | 11 | 12 | e5.8 | e2.9 | e2.3 | e.21 | .19 | .11 | .06 |
| 28 | .99 | 4.5 | 1.9 | 27 | 10 | e5.3 | e2.7 | e1.3 | e.20 | .15 | .15 | .06 |
| 29 | .70 | 6.0 | 1.1 | 12 | --- | e5.3 | e2.7 | e.98 | e.21 | .14 | .17 | .03 |
| 30 | .31 | 3.2 | 1.0 | 5.5 | --- | e4.9 | e2.7 | e2.2 | e.20 | .15 | .15 | .04 |
| 31 | .36 | --- | 1.0 | 5.3 | --- | e5.7 | --- | e1.1 | --- | .15 | .12 | --- |
| TOTAL | 13.82 | 36.80 | 96.76 | 167.43 | 1090.4 | 176.4 | 142.9 | 101.78 | 15.15 | 5.36 | 4.44 | 2.41 |
| MEAN | .45 | 1.23 | 3.12 | 5.40 | 38.9 | 5.69 | 4.76 | 3.28 | .50 | .17 | .14 | .080 |
| MAX | .99 | 6.0 | 23 | 35 | 262 | 13 | 34 | 21 | .92 | .20 | .19 | .18 |
| MIN | .13 | .34 | .56 | .94 | 1.6 | 3.0 | 2.0 | .98 | .20 | .14 | .08 | .03 |
| AC-FT | 27 | 73 | 192 | 332 | 2160 | 350 | 283 | 202 | 30 | 11 | 8.8 | 4.8 |
| a | 0.30 | 1.41 | 1.81 | 1.78 | 3.87 | 0.33 | 0.39 | 0.24 | 0 | 0 | 0 | 0 |

e Estimated.

a Precipitation, in inches.

SAN FRANCISQUITO CREEK BASIN

11164500 SAN FRANCISQUITO CREEK AT STANFORD UNIVERSITY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .95 | 5.83 | 23.5 | 53.5 | 68.1 | 49.6 | 25.2 | 2.95 | .70 | .33 | .21 | .28 |
| MAX | 28.2 | 91.9 | 220 | 250 | 409 | 315 | 232 | 39.5 | 8.22 | 3.30 | 1.61 | 2.11 |
| (WY) | 1963 | 1951 | 1956 | 1952 | 1986 | 1983 | 1958 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1931 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 11597.29 | | | | 1853.65 | | | | | | | |
| ANNUAL MEAN | 31.8 | | | | 5.08 | | | | 19.0 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 83.4 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .000 | | | |
| HIGHEST DAILY MEAN | 1620 | | | | 262 | | | | 2650 | | | |
| LOWEST DAILY MEAN | .12 | | | | .03 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .15 | | | | .05 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 824 | | | | 5560 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 4.24 | | | | 13.60 | | | |
| ANNUAL RUNOFF (AC-FT) | 23000 | | | | 3680 | | | | 13780 | | | |
| 10 PERCENT EXCEEDS | 58 | | | | 8.0 | | | | 30 | | | |
| 50 PERCENT EXCEEDS | 1.9 | | | | 1.0 | | | | .36 | | | |
| 90 PERCENT EXCEEDS | .25 | | | | .13 | | | | .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 fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,500 ft³/s, Jan. 24, 1983, gage height, 6.51 ft, datum then in use; maximum gage height, 9.88 ft, Dec. 23, 1955, site and datum then in use (backwater from culvert); no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Nov. 28 | 1615 | *210 | *4.30 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|--------|-------|-------|-------|------|------|------|------|
| 1 | .14 | .21 | .16 | .29 | 1.1 | .97 | .36 | .13 | .00 | e.02 | e.02 | e.00 |
| 2 | .17 | .19 | .12 | .28 | 1.2 | .85 | .23 | .11 | .00 | e.03 | e.12 | e.00 |
| 3 | .17 | .22 | .12 | .27 | 1.1 | .75 | .24 | .01 | .00 | e.12 | e.09 | e.00 |
| 4 | .14 | .21 | .14 | .33 | .51 | .72 | .19 | .01 | .00 | e.05 | e.03 | e.01 |
| 5 | .13 | .22 | .13 | .27 | .34 | .75 | .18 | .01 | .00 | e.03 | e.01 | e.01 |
| 6 | .16 | .21 | .13 | .26 | 2.5 | .69 | .19 | 2.4 | .02 | e.00 | e.00 | e.04 |
| 7 | .22 | .20 | .24 | .24 | 17 | .63 | .24 | 17 | .00 | e.00 | e.00 | e.02 |
| 8 | .10 | .20 | 4.5 | .21 | 4.1 | .57 | 7.0 | .76 | .00 | e.01 | e.01 | e.00 |
| 9 | .10 | .19 | 11 | .19 | 1.5 | .49 | 1.9 | .15 | .04 | e.00 | e.00 | e.01 |
| 10 | .11 | 3.8 | .52 | .20 | 2.7 | .49 | .51 | .02 | .00 | e.00 | e.01 | e.00 |
| 11 | .11 | 1.1 | 23 | .24 | 1.6 | .48 | .34 | .00 | .01 | e.01 | e.00 | e.00 |
| 12 | .10 | .24 | 1.2 | .26 | .81 | .37 | .25 | .00 | .00 | e.02 | e.01 | e.02 |
| 13 | .11 | .20 | .92 | .26 | .62 | .34 | .20 | .02 | .00 | e.00 | e.00 | e.01 |
| 14 | .13 | .17 | 8.9 | .26 | .57 | .32 | .15 | .00 | .00 | e.00 | e.00 | e.00 |
| 15 | .63 | .16 | .99 | .25 | .53 | .38 | .13 | .00 | .00 | e.01 | e.02 | e.01 |
| 16 | .77 | .18 | .59 | .28 | .96 | .33 | .16 | .01 | .01 | e.00 | e.03 | e.00 |
| 17 | .28 | .18 | .47 | .23 | 28 | .32 | .07 | 1.7 | .01 | e.00 | e.01 | e.01 |
| 18 | .24 | .19 | .67 | .29 | 15 | .34 | .07 | .26 | .01 | e.02 | e.01 | e.01 |
| 19 | .21 | .16 | .69 | .23 | 32 | .32 | .08 | .06 | .00 | e.00 | e.00 | e.01 |
| 20 | .22 | .21 | .82 | .26 | 17 | .43 | .05 | .00 | .01 | e.01 | e.00 | e.01 |
| 21 | .24 | .21 | .27 | .22 | 6.3 | .28 | .04 | .00 | .01 | e.00 | e.00 | e.02 |
| 22 | .28 | .22 | .26 | .26 | 2.8 | .38 | .04 | .00 | .00 | e.00 | e.02 | e.05 |
| 23 | .22 | .21 | .25 | 3.3 | 2.2 | .37 | 2.2 | .00 | e.00 | e.00 | e.03 | e.03 |
| 24 | .20 | .20 | .20 | 24 | 1.8 | 4.1 | .57 | .00 | e.00 | e.00 | e.01 | e.02 |
| 25 | .22 | .21 | .20 | 14 | 1.5 | 1.5 | 7.8 | .00 | e.00 | e.01 | e.01 | e.01 |
| 26 | .22 | .19 | .44 | 2.2 | 2.7 | .43 | 1.6 | .00 | e.00 | e.00 | e.03 | e.01 |
| 27 | .20 | .22 | .48 | 2.4 | 1.5 | .30 | .46 | .00 | e.01 | e.02 | e.01 | e.04 |
| 28 | .22 | 18 | .24 | .91 | 1.1 | .28 | .30 | .00 | e.00 | e.01 | e.00 | e.01 |
| 29 | .21 | 7.9 | .24 | 1.3 | --- | .36 | .16 | .00 | e.00 | e.00 | e.01 | e.02 |
| 30 | .19 | .86 | .28 | 1.3 | --- | .39 | .14 | .00 | e.00 | e.00 | e.01 | e.01 |
| 31 | .20 | --- | .26 | 1.3 | --- | .52 | --- | .00 | --- | e.00 | e.01 | --- |
| TOTAL | 6.64 | 36.66 | 58.43 | 56.29 | 149.04 | 19.45 | 25.85 | 22.65 | 0.13 | 0.37 | 0.51 | 0.39 |
| MEAN | .21 | 1.22 | 1.88 | 1.82 | 5.32 | .63 | .86 | .73 | .004 | .012 | .016 | .013 |
| MAX | .77 | .18 | .23 | .24 | .32 | 4.1 | 7.8 | .17 | .04 | .12 | .12 | .05 |
| MIN | .10 | .16 | .12 | .19 | .34 | .28 | .04 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | 13 | 73 | 116 | 112 | 296 | 39 | 51 | 45 | .3 | .7 | 1.0 | .8 |

e Estimated.

MATADERO CREEK BASIN

11166000 MATADERO CREEK AT PALO ALTO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .43 | 1.50 | 3.40 | 7.25 | 7.20 | 4.74 | 2.07 | .41 | .20 | .14 | .13 | .16 |
| MAX | 2.95 | 9.82 | 24.3 | 32.3 | 38.2 | 37.8 | 25.2 | 4.39 | 1.90 | .66 | .70 | .66 |
| (WY) | 1973 | 1973 | 1956 | 1983 | 1973 | 1983 | 1958 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1953 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 1505.62 | | | | 376.41 | | | | | | | |
| ANNUAL MEAN | 4.12 | | | | 1.03 | | | | 2.31 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 10.9 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .062 | | | |
| HIGHEST DAILY MEAN | 182 | | | | 32 | | | | 335 | | | |
| LOWEST DAILY MEAN | .07 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .10 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 210 | | | | 1500 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 4.30 | | | | 9.88 | | | |
| ANNUAL RUNOFF (AC-FT) | 2990 | | | | 747 | | | | 1670 | | | |
| 10 PERCENT EXCEEDS | 6.2 | | | | 1.5 | | | | 2.6 | | | |
| 50 PERCENT EXCEEDS | .25 | | | | .18 | | | | .13 | | | |
| 90 PERCENT EXCEEDS | .13 | | | | .00 | | | | .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, one 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.--No estimated daily discharges. Records good. Flow regulated by Lexington Reservoir 12 mi upstream and by Calero, Almaden, and Guadalupe Reservoirs, and Lake Elman (combined usable capacity, about 42,000 acre-ft), with water released during summer for percolation in spreading basins on tributaries. Transbasin diversions from San Luis Reservoir (part of San Felipe Project), from the South Bay Aqueduct, and from Hetchy Aqueduct during the current year amounted to 94,900 acre-ft, 70,070 acre-ft, and 56,300 acre-ft, respectively. Upstream diversions by San Jose Water Works for urban use amounted to 6,110 acre-ft during the current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,150 ft³/s, Apr. 2, 1958, gage height, 16.55 ft; no flow several days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,510 ft³/s, Dec. 11, gage height, 4.13 ft; minimum daily, 0.80 ft³/s, Nov. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|--------|-------|-------|--------|-------|-------|-------|-------|------|------|------|
| 1 | 1.7 | 1.4 | 12 | 6.6 | 7.1 | 6.4 | 5.6 | 4.4 | 5.1 | 3.4 | 2.4 | 2.1 |
| 2 | 1.6 | 1.1 | 12 | 6.6 | 5.2 | 5.8 | 5.6 | 4.4 | 6.4 | 3.4 | 2.4 | 2.4 |
| 3 | 2.4 | .80 | 7.5 | 8.7 | 3.5 | 5.6 | 4.8 | 2.9 | 3.9 | 3.1 | 2.2 | 1.7 |
| 4 | 3.6 | .91 | 6.7 | 9.8 | 3.5 | 5.1 | 5.2 | 3.2 | 3.0 | 3.3 | 2.1 | 1.5 |
| 5 | 3.0 | 1.2 | 6.1 | 10 | 3.3 | 5.2 | 4.4 | 2.8 | 3.5 | 3.8 | 3.5 | 1.4 |
| 6 | 3.3 | 1.2 | 5.7 | 7.5 | 25 | 5.4 | 4.2 | 19 | 4.1 | 3.5 | 4.0 | 1.4 |
| 7 | 1.9 | 2.0 | 5.5 | 6.8 | 321 | 4.9 | 4.3 | 255 | 2.8 | 2.9 | 3.5 | 3.3 |
| 8 | 2.2 | 2.0 | 5.5 | 6.6 | 69 | 4.9 | 9.9 | 24 | 2.8 | 3.9 | 3.5 | 2.8 |
| 9 | 3.6 | 1.8 | 52 | 6.3 | 15 | 4.8 | 32 | 16 | 6.1 | 2.6 | 7.9 | 1.4 |
| 10 | 4.4 | 118 | 19 | 6.6 | 18 | 4.5 | 8.3 | 12 | 6.3 | 2.2 | 6.6 | 1.3 |
| 11 | 3.0 | 70 | 330 | 6.9 | 15 | 4.5 | 5.2 | 9.1 | 6.0 | 2.8 | 4.9 | 1.3 |
| 12 | 2.9 | 7.0 | 32 | 7.7 | 9.5 | 4.1 | 4.6 | 9.0 | 5.3 | 2.7 | 3.1 | 1.5 |
| 13 | 2.5 | 2.5 | 19 | 5.9 | 8.2 | 3.8 | 4.5 | 8.2 | 5.4 | 2.7 | 2.5 | 1.9 |
| 14 | 2.5 | 1.5 | 127 | 5.6 | 9.8 | 4.0 | 4.7 | 4.9 | 6.0 | 2.9 | 2.3 | 1.4 |
| 15 | 13 | 2.8 | 21 | 6.3 | 9.1 | 7.5 | 4.2 | 4.4 | 4.5 | 3.0 | 2.1 | 1.9 |
| 16 | 100 | 2.1 | 11 | 6.8 | 12 | 4.9 | 3.7 | 5.8 | 4.9 | 2.7 | 2.2 | 2.9 |
| 17 | 33 | 1.9 | 10 | 7.7 | 532 | 5.1 | 3.7 | 26 | 3.8 | 3.4 | 2.3 | 4.8 |
| 18 | 7.3 | 1.4 | 8.8 | 8.0 | 114 | 4.6 | 3.6 | 17 | 3.7 | 3.3 | 2.4 | 5.4 |
| 19 | 5.3 | 3.9 | 8.7 | 6.5 | 447 | 3.5 | 3.5 | 5.6 | 3.9 | 2.9 | 2.7 | 3.9 |
| 20 | 4.2 | 1.6 | 8.5 | 6.1 | 336 | 3.4 | 3.3 | 4.1 | 3.8 | 2.2 | 2.4 | 1.8 |
| 21 | 3.1 | 5.9 | 8.3 | 6.5 | 63 | 3.8 | 3.3 | 3.9 | 3.1 | 2.1 | 2.6 | 2.0 |
| 22 | 2.2 | 8.6 | 13 | 10 | 33 | 4.6 | 2.8 | 3.8 | 5.1 | 2.1 | 3.1 | 10 |
| 23 | 1.8 | 7.0 | 9.0 | 22 | 21 | 4.3 | 54 | 3.6 | 4.6 | 2.2 | 3.5 | 5.0 |
| 24 | 1.8 | 7.1 | 8.5 | 263 | 16 | 110 | 22 | 3.4 | 4.4 | 3.0 | 2.5 | 2.5 |
| 25 | 1.8 | 6.2 | 7.1 | 104 | 12 | 57 | 92 | 3.3 | 5.2 | 2.6 | 3.2 | 2.1 |
| 26 | 1.6 | 6.8 | 6.8 | 29 | 16 | 9.2 | 45 | 3.6 | 5.1 | 2.7 | 2.8 | 2.6 |
| 27 | 1.6 | 6.6 | 9.0 | 15 | 9.6 | 7.4 | 13 | 3.5 | 5.3 | 2.5 | 2.5 | 2.0 |
| 28 | 1.5 | 42 | 7.8 | 9.8 | 6.8 | 7.5 | 5.1 | 2.8 | 4.5 | 2.3 | 2.4 | 2.1 |
| 29 | 2.6 | 79 | 9.3 | 8.5 | --- | 6.3 | 4.1 | 3.3 | 3.9 | 2.1 | 2.9 | 2.1 |
| 30 | 1.4 | 27 | 7.1 | 7.7 | --- | 5.1 | 4.2 | 3.8 | 3.5 | 2.1 | 3.0 | 2.3 |
| 31 | 1.3 | --- | 7.2 | 6.9 | --- | 4.2 | --- | 3.8 | --- | 2.3 | 2.3 | --- |
| TOTAL | 222.1 | 421.31 | 801.1 | 625.4 | 2140.6 | 317.4 | 370.8 | 476.6 | 136.0 | 86.7 | 95.8 | 78.8 |
| MEAN | 7.16 | 14.0 | 25.8 | 20.2 | 76.4 | 10.2 | 12.4 | 15.4 | 4.53 | 2.80 | 3.09 | 2.63 |
| MAX | 100 | 118 | 330 | 263 | 532 | 110 | 92 | 255 | 6.4 | 3.9 | 7.9 | 10 |
| MIN | 1.3 | .80 | 5.5 | 5.6 | 3.3 | 3.4 | 2.8 | 2.8 | 2.8 | 2.1 | 2.1 | 1.3 |
| AC-FT | 441 | 836 | 1590 | 1240 | 4250 | 630 | 735 | 945 | 270 | 172 | 190 | 156 |

GUADALUPE RIVER BASIN

11169000 GUADALUPE RIVER AT SAN JOSE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 5.83 | 14.1 | 38.3 | 84.5 | 144 | 119 | 64.7 | 8.18 | 2.64 | 2.47 | 2.27 | 2.68 |
| MAX | 129 | 123 | 311 | 683 | 1080 | 1165 | 847 | 219 | 23.5 | 23.4 | 22.3 | 31.0 |
| (WY) | 1963 | 1984 | 1932 | 1952 | 1938 | 1983 | 1982 | 1983 | 1984 | 1984 | 1984 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1930 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 28015.81 | | | | 5772.61 | | | | | | | |
| ANNUAL MEAN | 76.8 | | | | 15.8 | | | | 40.2 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 270 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .000 | | | |
| HIGHEST DAILY MEAN | 2380 | | | | 532 | | | | 6660 | | | |
| LOWEST DAILY MEAN | .80 | | | | .80 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 1.1 | | | | 1.1 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 1510 | | | | 9150 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 4.13 | | | | 16.55 | | | |
| ANNUAL RUNOFF (AC-FT) | 55570 | | | | 11450 | | | | 29120 | | | |
| 10 PERCENT EXCEEDS | 161 | | | | 20 | | | | 40 | | | |
| 50 PERCENT EXCEEDS | 4.2 | | | | 4.4 | | | | .37 | | | |
| 90 PERCENT EXCEEDS | 1.6 | | | | 2.0 | | | | .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.--No estimated daily discharges. 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, gage height, 6.40 ft, site and datum then in use, from rating curve extended above 510 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 110 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 1600 | *121 | *3.71 | | | | |

Minimum daily, 0.25 ft³/s, Mar. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | .66 | 1.0 | 1.8 | 1.6 | 2.0 | 3.1 | .85 | .59 | .38 | .65 | .62 | .51 |
| 2 | .77 | 1.0 | 1.3 | 1.6 | 1.9 | 2.0 | .48 | .53 | .43 | .66 | .57 | .46 |
| 3 | .91 | 1.0 | 1.1 | 1.6 | 1.5 | 1.1 | .44 | .52 | .42 | .66 | .57 | .48 |
| 4 | .95 | 1.0 | .91 | 1.5 | 1.7 | .97 | 1.8 | .52 | .30 | .65 | .47 | .47 |
| 5 | 1.0 | 1.0 | .91 | 1.5 | 1.7 | .99 | .50 | .52 | .33 | .65 | .40 | .46 |
| 6 | 1.1 | .97 | .81 | 1.4 | 4.3 | .71 | .57 | .68 | .35 | .69 | .34 | .47 |
| 7 | 1.1 | .89 | .81 | 1.3 | 26 | .41 | .46 | 1.7 | .33 | .78 | .35 | .53 |
| 8 | .99 | .81 | 5.5 | 1.3 | 16 | .42 | .65 | .69 | .32 | .84 | .34 | .48 |
| 9 | .81 | .96 | 14 | 1.3 | 9.1 | .33 | .59 | .62 | .43 | .60 | .29 | .45 |
| 10 | .81 | 3.1 | 4.5 | 1.2 | 6.8 | .42 | .43 | .68 | .39 | .54 | .31 | .42 |
| 11 | .79 | 2.6 | 19 | 1.2 | 5.0 | 1.1 | .44 | .61 | .51 | .51 | .33 | .43 |
| 12 | .94 | 1.3 | 7.2 | 1.2 | 4.7 | .41 | .41 | .63 | .53 | .47 | .28 | .43 |
| 13 | .91 | .99 | 4.1 | 1.1 | 4.0 | .61 | .32 | .55 | .48 | .47 | .33 | .43 |
| 14 | .91 | .87 | 14 | 1.2 | 2.7 | .33 | .31 | .56 | .57 | .51 | .30 | .41 |
| 15 | 1.5 | .81 | 5.8 | 1.3 | 2.7 | .71 | .31 | .56 | .66 | .58 | .28 | .36 |
| 16 | 1.3 | .84 | 4.2 | 1.3 | 2.7 | .73 | .35 | .56 | .61 | .60 | .26 | .32 |
| 17 | 1.3 | .81 | 3.1 | 1.3 | 34 | .32 | .35 | .74 | .59 | .57 | .28 | .30 |
| 18 | 1.2 | .81 | 2.7 | 1.2 | 24 | .44 | .31 | .51 | .62 | .57 | .68 | .34 |
| 19 | 1.1 | .81 | 2.5 | 1.4 | 54 | .46 | .36 | .58 | .62 | .61 | 1.1 | .32 |
| 20 | 1.1 | .81 | 2.2 | 1.4 | 52 | .42 | .49 | .70 | .59 | .61 | 1.2 | .27 |
| 21 | 1.1 | .81 | 1.9 | 1.2 | 33 | 1.1 | .35 | .52 | .47 | .63 | 1.2 | .27 |
| 22 | 1.1 | .81 | 1.8 | 1.2 | 24 | .51 | .37 | .49 | .45 | .61 | .80 | .27 |
| 23 | 1.1 | .81 | 1.9 | 2.0 | 17 | .25 | 1.2 | .64 | .99 | .57 | .39 | .35 |
| 24 | 1.1 | .81 | 1.8 | 14 | 11 | 1.8 | .31 | .61 | 1.6 | .54 | .32 | .35 |
| 25 | 1.0 | .81 | 1.7 | 7.3 | 9.5 | 1.4 | 2.2 | .55 | 1.4 | .60 | .30 | .36 |
| 26 | 1.1 | .81 | 1.7 | 6.7 | 6.6 | .31 | 2.6 | .48 | 1.5 | .53 | .31 | .36 |
| 27 | 1.0 | .81 | 1.6 | 4.4 | 5.0 | .35 | .53 | .84 | 1.3 | .57 | .32 | .31 |
| 28 | 1.0 | 5.3 | 1.7 | 3.1 | 3.9 | .43 | .54 | .53 | .73 | .65 | .35 | .29 |
| 29 | .89 | 7.2 | 1.6 | 2.6 | --- | .40 | .70 | .47 | .69 | .65 | .46 | .30 |
| 30 | .91 | 3.6 | 1.5 | 2.2 | --- | .59 | .57 | .86 | .63 | .59 | .43 | .31 |
| 31 | .91 | --- | 1.5 | 2.1 | --- | 1.7 | --- | .36 | --- | .63 | .43 | --- |
| TOTAL | 31.36 | 44.15 | 115.14 | 73.7 | 366.8 | 24.82 | 19.79 | 19.40 | 19.22 | 18.79 | 14.61 | 11.51 |
| MEAN | 1.01 | 1.47 | 3.71 | 2.38 | 13.1 | .80 | .66 | .63 | .64 | .61 | .47 | .38 |
| MAX | 1.5 | 7.2 | 19 | 14 | 54 | 3.1 | 2.6 | 1.7 | 1.6 | .84 | 1.2 | .53 |
| MIN | .66 | .81 | .81 | 1.1 | 1.5 | .25 | .31 | .36 | .30 | .47 | .26 | .27 |
| AC-FT | 62 | 88 | 228 | 146 | 728 | 49 | 39 | 38 | 38 | 37 | 29 | 23 |
| a | 0 | 0 | 0 | 0 | 69 | 196 | 138 | 191 | 57 | 0 | 0 | 0 |

a Diversion, in acre-feet, for municipal use, provided by San Jose Water Works.

GUADALUPE RIVER BASIN

11169500 SARATOGA CREEK AT SARATOGA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .88 | 2.75 | 9.21 | 20.7 | 29.2 | 22.1 | 13.8 | 3.71 | 1.26 | .53 | .33 | .34 |
| MAX | 17.5 | 25.5 | 83.2 | 87.8 | 135 | 114 | 131 | 35.7 | 6.97 | 2.95 | 1.60 | 1.54 |
| (WY) | 1963 | 1951 | 1956 | 1952 | 1986 | 1983 | 1982 | 1983 | 1941 | 1941 | 1941 | 1974 |
| 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 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1934 - 1994 | |
|-----------------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 4732.16 | | 759.29 | | | |
| ANNUAL MEAN | 13.0 | | 2.08 | | 8.62 | |
| ANNUAL MEAN ADJUSTED ^a | 13.7 | | 2.98 | | 9.86 | |
| HIGHEST ANNUAL MEAN | | | | | 32.5 | |
| LOWEST ANNUAL MEAN | | | | | .54 | |
| HIGHEST DAILY MEAN | 314 | Jan 13 | 54 | Feb 19 | 1260 | Feb 27 1940 |
| LOWEST DAILY MEAN | .53 | Sep 26 | .25 | Mar 23 | .00 | Oct 1 1933 |
| ANNUAL SEVEN-DAY MINIMUM | .58 | Sep 24 | .29 | Aug 11 | .00 | Oct 1 1933 |
| INSTANTANEOUS PEAK FLOW | | | 121 | Feb 19 | 2730 | Dec 22 1955 |
| INSTANTANEOUS PEAK STAGE | | | 3.71 | Feb 19 | 6.40 | Dec 22 1955 |
| ANNUAL RUNOFF (AC-FT) | 9390 | | 1510 | | 6250 | |
| 10 PERCENT EXCEEDS | 30 | | 3.3 | | 19 | |
| 50 PERCENT EXCEEDS | 2.9 | | .71 | | .80 | |
| 90 PERCENT EXCEEDS | .84 | | .33 | | .00 | |

^a Adjusted for upstream diversions by San Jose Water Works.

ALAMEDA CREEK BASIN

149

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 current year. Records for water year 1914 incomplete; yearly estimate and monthly discharge only for some months, published in WSP 1315-B.

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.--No estimated daily discharges. Records good. No regulation or diversion upstream from station.

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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0445 | *83 | *4.93 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|--------|-------|-------|-------|------|------|------|------|
| 1 | .05 | .10 | 1.6 | .77 | 1.0 | 2.3 | .46 | .41 | .26 | .07 | .01 | .00 |
| 2 | .05 | .10 | 1.1 | .77 | .92 | 2.0 | .45 | .36 | .22 | .06 | .01 | .00 |
| 3 | .05 | .10 | .98 | .77 | .86 | 1.7 | .46 | .32 | .20 | .05 | .01 | .00 |
| 4 | .05 | .10 | .91 | .75 | .83 | 1.6 | .43 | .32 | .20 | .05 | .01 | .00 |
| 5 | .06 | .10 | .87 | .81 | .77 | 1.5 | .39 | .32 | .20 | .05 | .01 | .00 |
| 6 | .07 | .10 | .84 | .84 | .80 | 1.3 | .38 | 2.1 | .20 | .05 | .01 | .00 |
| 7 | .05 | .11 | .84 | .73 | 4.0 | 1.2 | .39 | 7.2 | .20 | .04 | .01 | .00 |
| 8 | .05 | .13 | .86 | .69 | 15 | 1.0 | .40 | 7.1 | .20 | .04 | .00 | .00 |
| 9 | .05 | .13 | 1.9 | .71 | 6.1 | .92 | .79 | 2.6 | .20 | .04 | .00 | .00 |
| 10 | .05 | .20 | 1.9 | .71 | 3.4 | .92 | .83 | 1.6 | .19 | .04 | .00 | .00 |
| 11 | .06 | .21 | 3.5 | .65 | 3.3 | .92 | .59 | 1.2 | .17 | .03 | .00 | .00 |
| 12 | .07 | .20 | 4.7 | .65 | 2.4 | .91 | .46 | .94 | .17 | .03 | .00 | .00 |
| 13 | .07 | .22 | 2.5 | .60 | 1.8 | .84 | .41 | .73 | .17 | .03 | .00 | .00 |
| 14 | .08 | .29 | 2.4 | .59 | 1.5 | .84 | .38 | .60 | .17 | .02 | .00 | .00 |
| 15 | .10 | .38 | 2.8 | .59 | 1.3 | .84 | .32 | .53 | .17 | .02 | .00 | .00 |
| 16 | .10 | .45 | 2.1 | .59 | 1.0 | .84 | .32 | .51 | .17 | .02 | .00 | .00 |
| 17 | .10 | .43 | 1.7 | .59 | 4.2 | .78 | .32 | .74 | .17 | .02 | .00 | .00 |
| 18 | .10 | .42 | 1.8 | .59 | 29 | .77 | .28 | 1.2 | .17 | .02 | .00 | .00 |
| 19 | .10 | .45 | 1.5 | .59 | 20 | .75 | .28 | 1.1 | .18 | .02 | .00 | .00 |
| 20 | .10 | .47 | 1.2 | .54 | 65 | .71 | .25 | .79 | .20 | .02 | .00 | .00 |
| 21 | .11 | .49 | 1.1 | .47 | 38 | .69 | .24 | .65 | .24 | .02 | .00 | .00 |
| 22 | .13 | .53 | 1.1 | .47 | 16 | .65 | .24 | .55 | .28 | .02 | .00 | .00 |
| 23 | .13 | .58 | 1.0 | .96 | 7.7 | .65 | .25 | .46 | .28 | .02 | .00 | .00 |
| 24 | .13 | .59 | .98 | 2.1 | 5.1 | .65 | .33 | .42 | .20 | .02 | .00 | .00 |
| 25 | .13 | .59 | .92 | 4.7 | 3.7 | .65 | 1.1 | .34 | .18 | .02 | .00 | .00 |
| 26 | .13 | .65 | .93 | 2.7 | 3.4 | .65 | 1.5 | .32 | .16 | .02 | .00 | .00 |
| 27 | .13 | .67 | 1.1 | 2.3 | 3.4 | .64 | 1.1 | .32 | .13 | .01 | .00 | .00 |
| 28 | .13 | .72 | 1.0 | 1.7 | 2.8 | .59 | .74 | .32 | .10 | .01 | .00 | .00 |
| 29 | .13 | 1.2 | 1.0 | 1.3 | --- | .58 | .55 | .32 | .09 | .01 | .00 | .00 |
| 30 | .11 | 2.0 | .92 | 1.2 | --- | .51 | .45 | .30 | .07 | .01 | .00 | .00 |
| 31 | .10 | --- | .85 | 1.1 | --- | .49 | --- | .28 | --- | .01 | .00 | --- |
| TOTAL | 2.77 | 12.71 | 46.90 | 32.53 | 243.28 | 29.39 | 15.09 | 34.95 | 5.54 | 0.89 | 0.07 | 0.00 |
| MEAN | .089 | .42 | 1.51 | 1.05 | 8.69 | .95 | .50 | 1.13 | .18 | .029 | .002 | .000 |
| MAX | .13 | 2.0 | 4.7 | 4.7 | 65 | 2.3 | 1.5 | 7.2 | .28 | .07 | .01 | .00 |
| MIN | .05 | .10 | .84 | .47 | .77 | .49 | .24 | .28 | .07 | .01 | .00 | .00 |
| AC-FT | 5.5 | 25 | 93 | 65 | 483 | 58 | 30 | 69 | 11 | 1.8 | .1 | .00 |

ALAMEDA CREEK BASIN

11176000 ARROYO MOCHO NEAR LIVERMORE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .099 | .88 | 3.66 | 12.6 | 21.1 | 12.6 | 4.73 | 1.49 | .52 | .18 | .085 | .074 |
| MAX | 1.55 | 11.6 | 33.2 | 122 | 100 | 155 | 41.8 | 21.5 | 6.96 | 4.04 | 2.57 | 2.47 |
| (WY) | 1984 | 1984 | 1984 | 1983 | 1915 | 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 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1913 - 1994

| | | | |
|--------------------------|---------|--------|------|
| ANNUAL TOTAL | 3176.62 | 424.12 | |
| ANNUAL MEAN | 8.70 | 1.16 | 4.83 |
| HIGHEST ANNUAL MEAN | | | 38.8 |
| LOWEST ANNUAL MEAN | | | .035 |
| HIGHEST DAILY MEAN | 206 | Jan 13 | 1510 |
| LOWEST DAILY MEAN | .05 | Sep 7 | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .05 | Sep 7 | .00 |
| INSTANTANEOUS PEAK FLOW | | | 83 |
| INSTANTANEOUS PEAK STAGE | | | 4.93 |
| ANNUAL RUNOFF (AC-FT) | 6300 | 841 | 3500 |
| 10 PERCENT EXCEEDS | 27 | 1.9 | 6.0 |
| 50 PERCENT EXCEEDS | 1.2 | .32 | .20 |
| 90 PERCENT EXCEEDS | .07 | .00 | .00 |

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."

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.--No estimated daily discharges. Records fair. No regulation or diversion upstream from station.

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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 2315 | *166 | *1.51 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|--------|-------|-------|-------|-------|--------|------|------|------|------|
| 1 | .00 | .00 | .34 | 1.9 | 1.6 | 20 | 2.5 | 4.6 | .71 | .00 | .00 | .00 |
| 2 | .00 | .00 | .16 | 1.9 | 1.5 | 17 | 2.5 | 3.7 | .52 | .00 | .00 | .00 |
| 3 | .00 | .00 | .09 | 1.9 | 1.5 | 13 | 2.5 | 3.1 | .44 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | 2.2 | 1.5 | 12 | 2.5 | 3.1 | .30 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | 2.5 | 1.5 | 10 | 2.5 | 3.0 | .24 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | 2.2 | 1.5 | 10 | 2.5 | 5.3 | .22 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | 1.9 | 8.6 | 9.1 | 2.5 | 29 | .20 | .00 | .00 | .00 |
| 8 | .00 | .00 | .03 | 1.9 | 44 | 8.8 | 2.7 | 29 | .18 | .00 | .00 | .00 |
| 9 | .00 | .00 | 1.8 | 1.9 | 24 | 7.0 | 5.1 | 13 | .12 | .00 | .00 | .00 |
| 10 | .00 | .00 | 1.6 | 1.9 | 11 | 6.6 | 4.2 | 8.4 | .06 | .00 | .00 | .00 |
| 11 | .00 | .00 | 19 | 1.9 | 20 | 6.6 | 3.1 | 5.7 | .00 | .00 | .00 | .00 |
| 12 | .00 | .00 | 35 | 1.5 | 8.5 | 6.5 | 2.9 | 4.4 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | 16 | 1.5 | 5.2 | 5.6 | 2.5 | 3.6 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | 21 | 1.5 | 4.0 | 5.5 | 2.5 | 2.9 | .00 | .00 | .00 | .00 |
| 15 | .00 | .00 | 30 | 1.5 | 3.3 | 4.6 | 2.5 | 2.5 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | 14 | 1.5 | 3.1 | 4.6 | 2.5 | 2.5 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | 7.1 | 1.5 | 22 | 4.6 | 2.3 | 3.4 | .00 | .00 | .00 | .00 |
| 18 | .00 | .00 | 4.7 | 1.5 | 71 | 4.6 | 1.8 | 4.3 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | 3.5 | 1.5 | 62 | 4.5 | 1.9 | 3.7 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | 3.1 | 1.5 | 129 | 3.8 | 1.9 | 3.1 | .00 | .00 | .00 | .00 |
| 21 | .00 | .00 | 2.7 | 1.5 | 129 | 3.8 | 1.7 | 3.1 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | 2.5 | 1.5 | 109 | 3.8 | 1.5 | 2.5 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | 2.5 | 3.7 | 69 | 3.8 | 1.8 | 2.3 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | 2.1 | 16 | 51 | 3.8 | 4.2 | 1.9 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | 1.9 | 27 | 42 | 4.3 | 9.9 | 1.8 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | 2.0 | 14 | 37 | 5.0 | 21 | 1.5 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | 2.5 | 6.6 | 34 | 3.7 | 13 | 1.4 | .00 | .00 | .00 | .00 |
| 28 | .00 | .03 | 2.2 | 3.8 | 27 | 3.1 | 17 | 1.0 | .00 | .00 | .00 | .00 |
| 29 | .00 | .62 | 1.9 | 2.6 | --- | 2.8 | 11 | 1.0 | .00 | .00 | .00 | .00 |
| 30 | .00 | .93 | 1.9 | 2.0 | --- | 2.8 | 6.4 | .74 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | 1.9 | 1.9 | --- | 2.5 | --- | .74 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 1.58 | 181.52 | 116.2 | 922.8 | 203.8 | 141.0 | 156.28 | 2.99 | 0.00 | 0.00 | 0.00 |
| MEAN | .000 | .053 | 5.86 | 3.75 | 33.0 | 6.57 | 4.70 | 5.04 | .10 | .000 | .000 | .000 |
| MAX | .00 | .93 | 35 | 27 | 129 | 20 | 21 | 29 | .71 | .00 | .00 | .00 |
| MIN | .00 | .00 | .00 | 1.5 | 1.5 | 2.5 | 1.5 | .74 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | 3.1 | 360 | 230 | 1830 | 404 | 280 | 310 | 5.9 | .00 | .00 | .00 |

11176400 ARROYO VALLE BELOW LANG CANYON, NEAR LIVERMORE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .24 | 7.68 | 30.8 | 98.1 | 129 | 90.7 | 38.8 | 8.30 | 2.25 | .57 | .19 | .12 |
| MAX | 3.12 | 79.2 | 216 | 492 | 779 | 625 | 322 | 71.5 | 17.3 | 7.43 | 3.67 | 2.00 |
| (WY) | 1984 | 1983 | 1984 | 1983 | 1986 | 1983 | 1982 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1964 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 26401.47 | | | | 1726.17 | | | | | | | |
| ANNUAL MEAN | 72.3 | | | | 4.73 | | | | 33.4 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 174 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .24 | | | |
| HIGHEST DAILY MEAN | 2680 | | | | 129 | | | | 4860 | | | |
| LOWEST DAILY MEAN | .00 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .00 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 166 | | | | 8790 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 1.51 | | | | 7.36 | | | |
| ANNUAL RUNOFF (AC-FT) | 52370 | | | | 3420 | | | | 24180 | | | |
| 10 PERCENT EXCEEDS | 212 | | | | 10 | | | | 47 | | | |
| 50 PERCENT EXCEEDS | 2.5 | | | | .22 | | | | 1.2 | | | |
| 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.

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.--No estimated daily discharges. Records fair. 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 for downstream percolation or returned to the South Bay Aqueduct.

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, 2,850 ft³/s, Mar. 3, 1983, gage height, 8.89 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 57 ft³/s, Oct. 2, gage height, 3.32 ft; minimum daily, 0.11 ft³/s, July 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|---------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 34 | 44 | 32 | .47 | .42 | .73 | .29 | .22 | .28 | .19 | .15 | .22 |
| 2 | 56 | 37 | 33 | .44 | .38 | .52 | .29 | .24 | .27 | .22 | .16 | .25 |
| 3 | 57 | 31 | 19 | .42 | .36 | .52 | .29 | .22 | .32 | .25 | .17 | .23 |
| 4 | 51 | 31 | .45 | .43 | .36 | .52 | .28 | .23 | .33 | .26 | .18 | .22 |
| 5 | 46 | 31 | .29 | .41 | .36 | .52 | .26 | .23 | .38 | .31 | .18 | .22 |
| 6 | 45 | 31 | .26 | .36 | .36 | .52 | .28 | .38 | .35 | .33 | .16 | .21 |
| 7 | 46 | 31 | .23 | .36 | .50 | .52 | .29 | .67 | .37 | .24 | .15 | .22 |
| 8 | 46 | 31 | .32 | .40 | .80 | .46 | .30 | .43 | .37 | .20 | .16 | .25 |
| 9 | 46 | 31 | 1.1 | .39 | .73 | .43 | .39 | .35 | .30 | .20 | .15 | .27 |
| 10 | 46 | 32 | .60 | .37 | .70 | .43 | .31 | .29 | .24 | .20 | .15 | .29 |
| 11 | 46 | 31 | 1.4 | .43 | .54 | .42 | .25 | .23 | .25 | .21 | .16 | .27 |
| 12 | 46 | 31 | .77 | .32 | .52 | .36 | .25 | .19 | .29 | .21 | .16 | .26 |
| 13 | 46 | 31 | .52 | .41 | .52 | .35 | .28 | .19 | .32 | .18 | .15 | .23 |
| 14 | 46 | 31 | .67 | .37 | .50 | .29 | .31 | .23 | .32 | .17 | .16 | .22 |
| 15 | 33 | 31 | .60 | .31 | .43 | .28 | .29 | .24 | .28 | .17 | .15 | .22 |
| 16 | 18 | 31 | .50 | .31 | .43 | .24 | .29 | .24 | .31 | .22 | .17 | .23 |
| 17 | 18 | 31 | .44 | .29 | 1.1 | .21 | .29 | .24 | .34 | .19 | .19 | .24 |
| 18 | 18 | 32 | .42 | .29 | 1.6 | .25 | .24 | .24 | .34 | .19 | .21 | .26 |
| 19 | 18 | 32 | .36 | .29 | 1.3 | .29 | .24 | .22 | .25 | .23 | .21 | .22 |
| 20 | 18 | 33 | .37 | .31 | 1.5 | .29 | .24 | .22 | .26 | .26 | .23 | .24 |
| 21 | 18 | 33 | .36 | .29 | 1.4 | .28 | .24 | .22 | .25 | .27 | .25 | .25 |
| 22 | 17 | 34 | .36 | .26 | 1.3 | .24 | .24 | .22 | .25 | .23 | .32 | .26 |
| 23 | 8.3 | 33 | .36 | .33 | 1.2 | .24 | .25 | .20 | .29 | .20 | .28 | .29 |
| 24 | .46 | 32 | .36 | .52 | 1.2 | .26 | .28 | .16 | .35 | .20 | .23 | .31 |
| 25 | .40 | 32 | .36 | .64 | 1.2 | .29 | .24 | .16 | .40 | .15 | .17 | .27 |
| 26 | 7.5 | 33 | .37 | .60 | 1.2 | .29 | .24 | .16 | .36 | .11 | .17 | .26 |
| 27 | 35 | 33 | .37 | .52 | 1.4 | .29 | .23 | .16 | .28 | .13 | .17 | .26 |
| 28 | 51 | 34 | .36 | .49 | 1.2 | .27 | .19 | .20 | .28 | .16 | .18 | .28 |
| 29 | 49 | 35 | .36 | .43 | --- | .27 | .19 | .22 | .21 | .14 | .19 | .28 |
| 30 | 44 | 34 | .39 | .43 | --- | .24 | .19 | .23 | .17 | .15 | .19 | .28 |
| 31 | 44 | --- | .48 | .43 | --- | .24 | --- | .26 | --- | .14 | .22 | --- |
| TOTAL | 1054.66 | 977 | 97.43 | 12.32 | 23.51 | 11.06 | 7.95 | 7.69 | 9.01 | 6.31 | 5.77 | 7.51 |
| MEAN | 34.0 | 32.6 | 3.14 | .40 | .84 | .36 | .26 | .25 | .30 | .20 | .19 | .25 |
| MAX | 57 | 44 | 33 | .64 | 1.6 | .73 | .39 | .67 | .40 | .33 | .32 | .31 |
| MIN | .40 | 31 | .23 | .26 | .36 | .21 | .19 | .16 | .17 | .11 | .15 | .21 |
| AC-FT | 2090 | 1940 | 193 | 24 | 47 | 22 | 16 | 15 | 18 | 13 | 11 | 15 |

ALAMEDA CREEK BASIN

11176500 ARROYO VALLE NEAR LIVERMORE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1968, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .016 | 2.63 | 18.0 | 87.6 | 146 | 51.4 | 47.2 | 7.37 | 1.83 | .32 | .089 | .021 |
| MAX | .15 | 69.2 | 125 | 851 | 522 | 280 | 620 | 57.8 | 9.47 | 2.28 | .83 | .24 |
| (WY) | 1967 | 1927 | 1965 | 1914 | 1915 | 1958 | 1958 | 1915 | 1967 | 1967 | 1958 | 1958 |
| MIN | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .094 | .000 | .000 | .000 | .000 |
| (WY) | 1914 | 1914 | 1918 | 1918 | 1920 | 1924 | 1924 | 1924 | 1918 | 1914 | 1913 | 1913 |

SUMMARY STATISTICS

WATER YEARS 1912 - 1968

| | | |
|--------------------------|-------|-------------|
| ANNUAL MEAN | 29.6 | |
| HIGHEST ANNUAL MEAN | 118 | 1914 |
| LOWEST ANNUAL MEAN | .008 | 1924 |
| HIGHEST DAILY MEAN | 5930 | Jan 25 1914 |
| LOWEST DAILY MEAN | .00 | Sep 22 1912 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Sep 22 1912 |
| INSTANTANEOUS PEAK FLOW | 12200 | Apr 2 1958 |
| INSTANTANEOUS PEAK STAGE | 10.91 | Apr 2 1958 |
| ANNUAL RUNOFF (AC-FT) | 21460 | |
| 10 PERCENT EXCEEDS | 35 | |
| 50 PERCENT EXCEEDS | .20 | |
| 90 PERCENT EXCEEDS | .00 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 10.1 | 9.33 | 8.66 | 31.3 | 82.0 | 59.1 | 22.3 | 6.36 | 9.55 | 15.1 | 13.6 | 10.6 |
| MAX | 43.2 | 39.4 | 35.9 | 440 | 549 | 653 | 334 | 30.8 | 51.7 | 46.0 | 54.3 | 48.1 |
| (WY) | 1971 | 1981 | 1981 | 1983 | 1986 | 1983 | 1982 | 1970 | 1980 | 1980 | 1981 | 1981 |
| MIN | .17 | .30 | .36 | .35 | .30 | .36 | .22 | .23 | .15 | .079 | .11 | .16 |
| (WY) | 1987 | 1987 | 1989 | 1990 | 1991 | 1994 | 1990 | 1990 | 1990 | 1985 | 1989 | 1984 |

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1970 - 1994

| | | | |
|--------------------------|----------|---------|-------|
| ANNUAL TOTAL | 14414.58 | 2220.22 | |
| ANNUAL MEAN | 39.5 | 6.08 | |
| HIGHEST ANNUAL MEAN | | | 22.8 |
| LOWEST ANNUAL MEAN | | | 131 |
| HIGHEST DAILY MEAN | 1180 | Feb 20 | .44 |
| LOWEST DAILY MEAN | .07 | Jun 19 | 2370 |
| ANNUAL SEVEN-DAY MINIMUM | .08 | Jun 17 | .00 |
| INSTANTANEOUS PEAK FLOW | | | .05 |
| INSTANTANEOUS PEAK STAGE | | | 2850 |
| ANNUAL RUNOFF (AC-FT) | 28590 | 4400 | 8.89 |
| 10 PERCENT EXCEEDS | 51 | 32 | 16550 |
| 50 PERCENT EXCEEDS | 6.5 | .30 | 35 |
| 90 PERCENT EXCEEDS | .36 | .19 | 1.6 |
| | | | .24 |

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.

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.--No estimated daily discharges. Records fair. Flow partly regulated by Del Valle Reservoir 15 mi upstream, beginning in September 1968, capacity, 77,100 acre-ft. Water imported from Sacramento-San Joaquin Delta (see REMARKS for station 11176500).

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,010 ft³/s, Feb. 20, gage height, 7.47 ft; minimum daily, 7.0 ft³/s, Oct. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|------|------|------|------|------|------|------|-------|------|-------|-------|
| 1 | 15 | 39 | 43 | 19 | 19 | 36 | 17 | 15 | 11 | 14 | 15 | 9.8 |
| 2 | 29 | 37 | 35 | 21 | 21 | 33 | 19 | 15 | 11 | 15 | 12 | 9.3 |
| 3 | 49 | 32 | 32 | 19 | 20 | 27 | 21 | 14 | 11 | 17 | 11 | 8.0 |
| 4 | 51 | 28 | 30 | 20 | 19 | 26 | 22 | 13 | 11 | 19 | 11 | 9.0 |
| 5 | 50 | 28 | 20 | 22 | 19 | 25 | 21 | 12 | 10 | 19 | 11 | 13 |
| 6 | 54 | 30 | 15 | 24 | 54 | 27 | 19 | 60 | 11 | 14 | 10 | 19 |
| 7 | 46 | 33 | 12 | 22 | 239 | 31 | 19 | 277 | 12 | 13 | 10 | 14 |
| 8 | 40 | 32 | 24 | 19 | 188 | 26 | 27 | 70 | 11 | 13 | 11 | 12 |
| 9 | 41 | 29 | 176 | 20 | 50 | 27 | 74 | 29 | 11 | 14 | 10 | 10 |
| 10 | 43 | 87 | 36 | 20 | 68 | 25 | 26 | 20 | 11 | 16 | 10 | 11 |
| 11 | 42 | 226 | 193 | 18 | 48 | 24 | 18 | 18 | 11 | 14 | 10 | 16 |
| 12 | 41 | 50 | 83 | 20 | 26 | 25 | 15 | 14 | 10 | 13 | 9.3 | 19 |
| 13 | 39 | 36 | 28 | 23 | 20 | 28 | 15 | 12 | 10 | 11 | 12 | 12 |
| 14 | 39 | 36 | 148 | 22 | 19 | 29 | 15 | 12 | 9.6 | 12 | 15 | 13 |
| 15 | 95 | 32 | 74 | 23 | 18 | 24 | 16 | 16 | 10 | 12 | 17 | 12 |
| 16 | 52 | 28 | 28 | 21 | 20 | 22 | 14 | 15 | 10 | 11 | 15 | 12 |
| 17 | 29 | 27 | 21 | 14 | 235 | 22 | 13 | 44 | 10 | 11 | 10 | 12 |
| 18 | 22 | 29 | 18 | 14 | 285 | 22 | 13 | 63 | 10 | 12 | 8.6 | 17 |
| 19 | 13 | 29 | 19 | 16 | 271 | 22 | 13 | 25 | 12 | 11 | 8.6 | 15 |
| 20 | 11 | 29 | 18 | 15 | 430 | 23 | 13 | 17 | 13 | 11 | 11 | 13 |
| 21 | 9.5 | 30 | 17 | 16 | 140 | 24 | 13 | 15 | 11 | 11 | 14 | 11 |
| 22 | 9.5 | 38 | 16 | 21 | 82 | 22 | 14 | 16 | 13 | 10 | 15 | 10 |
| 23 | 14 | 31 | 16 | 70 | 59 | 20 | 39 | 16 | 12 | 11 | 12 | 10 |
| 24 | 16 | 29 | 21 | 205 | 51 | 21 | 48 | 15 | 12 | 18 | 18 | 10 |
| 25 | 13 | 30 | 22 | 75 | 45 | 37 | 142 | 13 | 11 | 28 | 19 | 11 |
| 26 | 7.0 | 31 | 21 | 46 | 59 | 28 | 89 | 12 | 13 | 25 | 17 | 13 |
| 27 | 7.1 | 31 | 24 | 27 | 60 | 26 | 27 | 11 | 15 | 15 | 12 | 11 |
| 28 | 13 | 96 | 21 | 23 | 39 | 26 | 18 | 12 | 12 | 13 | 14 | 12 |
| 29 | 34 | 159 | 19 | 20 | --- | 24 | 17 | 11 | 12 | 12 | 22 | 15 |
| 30 | 39 | 111 | 16 | 19 | --- | 22 | 15 | 14 | 12 | 12 | 16 | 14 |
| 31 | 39 | --- | 13 | 19 | --- | 19 | --- | 14 | --- | 13 | 14 | --- |
| TOTAL | 1002.1 | 1483 | 1259 | 933 | 2604 | 793 | 832 | 910 | 338.6 | 440 | 400.5 | 373.1 |
| MEAN | 32.3 | 49.4 | 40.6 | 30.1 | 93.0 | 25.6 | 27.7 | 29.4 | 11.3 | 14.2 | 12.9 | 12.4 |
| MAX | 95 | 226 | 193 | 205 | 430 | 37 | 142 | 277 | 15 | 28 | 22 | 19 |
| MIN | 7.0 | 27 | 12 | 14 | 18 | 19 | 13 | 11 | 9.6 | 10 | 8.6 | 8.0 |
| AC-FT | 1990 | 2940 | 2500 | 1850 | 5170 | 1570 | 1650 | 1800 | 672 | 873 | 794 | 740 |

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1930, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.43 | 1.96 | 15.9 | 174 | 234 | 59.5 | 18.5 | 8.67 | 3.52 | 2.06 | 1.36 | 1.19 |
| MAX | 9.90 | 13.4 | 105 | 1349 | 728 | 207 | 59.8 | 74.0 | 13.9 | 13.1 | 8.76 | 6.98 |
| (WY) | 1917 | 1927 | 1914 | 1914 | 1915 | 1919 | 1926 | 1915 | 1916 | 1916 | 1916 | 1916 |
| MIN | .000 | .000 | .000 | .000 | .84 | .53 | .000 | .000 | .000 | .000 | .000 | .000 |
| (WY) | 1914 | 1914 | 1919 | 1925 | 1924 | 1924 | 1929 | 1924 | 1918 | 1913 | 1913 | 1913 |

SUMMARY STATISTICS

WATER YEARS 1912 - 1930

| | | |
|--------------------------|-------|-------------|
| ANNUAL MEAN | 42.5 | |
| HIGHEST ANNUAL MEAN | 180 | 1914 |
| LOWEST ANNUAL MEAN | .69 | 1913 |
| HIGHEST DAILY MEAN | 9810 | Jan 25 1914 |
| LOWEST DAILY MEAN | .00 | Jun 30 1913 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jun 30 1913 |
| ANNUAL RUNOFF (AC-FT) | 30800 | |
| 10 PERCENT EXCEEDS | 33 | |
| 50 PERCENT EXCEEDS | .90 | |
| 90 PERCENT EXCEEDS | .00 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 20.2 | 31.3 | 50.6 | 152 | 184 | 159 | 65.9 | 22.1 | 16.5 | 18.4 | 17.3 | 15.0 |
| MAX | 42.3 | 92.3 | 156 | 867 | 925 | 1510 | 517 | 116 | 43.0 | 40.6 | 43.5 | 41.1 |
| (WY) | 1971 | 1983 | 1983 | 1983 | 1983 | 1983 | 1982 | 1983 | 1983 | 1975 | 1981 | 1981 |
| MIN | 3.34 | 2.59 | 6.46 | 6.07 | 12.7 | 9.39 | 6.49 | 4.05 | 2.88 | 1.80 | 2.31 | 2.28 |
| (WY) | 1991 | 1993 | 1990 | 1991 | 1977 | 1988 | 1990 | 1992 | 1991 | 1992 | 1991 | 1991 |

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1970 - 1994

| | | | |
|--------------------------|---------|---------|-------|
| ANNUAL TOTAL | 35456.2 | 11368.3 | |
| ANNUAL MEAN | 97.1 | 31.1 | 62.2 |
| HIGHEST ANNUAL MEAN | | | 339 |
| LOWEST ANNUAL MEAN | | | 11.6 |
| HIGHEST DAILY MEAN | 3450 | Jan 13 | 5270 |
| LOWEST DAILY MEAN | 3.0 | Sep 10 | .33 |
| ANNUAL SEVEN-DAY MINIMUM | 4.9 | Sep 4 | 1.1 |
| INSTANTANEOUS PEAK FLOW | | | 1010 |
| INSTANTANEOUS PEAK STAGE | | | 7.47 |
| ANNUAL RUNOFF (AC-FT) | 70330 | 22550 | 45030 |
| 10 PERCENT EXCEEDS | 178 | 51 | 70 |
| 50 PERCENT EXCEEDS | 28 | 19 | 17 |
| 90 PERCENT EXCEEDS | 11 | 11 | 4.0 |

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.

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 Sunol Glen" 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.--No estimated daily discharges. 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.

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 1963-94), 0.63 ft³/s, Oct. 7-10, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,320 ft³/s, Feb. 20, gage height, 5.29 ft; minimum daily, 7.2 ft³/s, Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | 13 | 49 | 67 | 43 | 87 | 47 | 20 | 26 | 15 | 22 | 34 | 8.6 |
| 2 | 18 | 41 | 54 | 41 | 89 | 44 | 19 | 25 | 12 | 25 | 30 | 7.2 |
| 3 | 45 | 38 | 47 | 38 | 88 | 37 | 28 | 24 | 12 | 29 | 28 | 8.3 |
| 4 | 51 | 33 | 48 | 36 | 47 | 33 | 28 | 22 | 12 | 30 | 26 | 9.4 |
| 5 | 49 | 33 | 40 | 38 | 34 | 39 | 25 | 22 | 15 | 29 | 26 | 11 |
| 6 | 53 | 35 | 31 | 37 | 51 | 42 | 28 | 52 | 16 | 26 | 26 | 14 |
| 7 | 45 | 41 | 28 | 36 | 220 | 42 | 26 | 302 | 19 | 26 | 26 | 13 |
| 8 | 41 | 41 | 26 | 38 | 260 | 39 | 22 | 109 | 30 | 25 | 16 | 11 |
| 9 | 42 | 35 | 207 | 39 | 78 | 30 | 91 | 48 | 29 | 27 | 12 | 9.6 |
| 10 | 45 | 39 | 75 | 37 | 94 | 32 | 49 | 38 | 28 | 29 | 20 | 7.9 |
| 11 | 46 | 285 | 197 | 32 | 115 | 36 | 31 | 32 | 29 | 29 | 25 | 10 |
| 12 | 43 | 73 | 136 | 29 | 53 | 39 | 25 | 28 | 30 | 26 | 21 | 13 |
| 13 | 39 | 47 | 5 | 34 | 45 | 43 | 29 | 26 | 30 | 25 | 19 | 13 |
| 14 | 39 | 45 | 143 | 34 | 42 | 43 | 29 | 24 | 29 | 24 | 24 | 9.8 |
| 15 | 91 | 42 | 138 | 40 | 37 | 37 | 26 | 27 | 28 | 22 | 26 | 24 |
| 16 | 63 | 37 | 98 | 37 | 39 | 29 | 22 | 27 | 28 | 24 | 27 | 23 |
| 17 | 37 | 37 | 87 | 32 | 234 | 28 | 27 | 42 | 28 | 24 | 24 | 24 |
| 18 | 29 | 38 | 91 | 23 | 375 | 34 | 26 | 76 | 28 | 26 | 23 | 26 |
| 19 | 23 | 40 | 91 | 22 | 292 | 33 | 21 | 40 | 29 | 25 | 19 | 28 |
| 20 | 19 | 39 | 87 | 22 | 651 | 34 | 19 | 28 | 30 | 26 | 22 | 26 |
| 21 | 16 | 46 | 84 | 21 | 198 | 34 | 17 | 25 | 29 | 25 | 25 | 24 |
| 22 | 14 | 53 | 83 | 34 | 114 | 34 | 16 | 27 | 28 | 25 | 29 | 22 |
| 23 | 13 | 44 | 82 | 75 | 75 | 26 | 24 | 26 | 27 | 25 | 27 | 22 |
| 24 | 24 | 42 | 90 | 215 | 62 | 30 | 77 | 23 | 26 | 32 | 24 | 21 |
| 25 | 23 | 42 | 93 | 101 | 53 | 38 | 144 | 20 | 26 | 38 | 23 | 24 |
| 26 | 19 | 44 | 92 | 101 | 62 | 35 | 126 | 16 | 28 | 37 | 22 | 25 |
| 27 | 16 | 48 | 95 | 93 | 79 | 34 | 52 | 14 | 30 | 29 | 19 | 24 |
| 28 | 13 | 81 | 89 | 88 | 54 | 33 | 31 | 14 | 27 | 29 | 19 | 23 |
| 29 | 36 | 199 | 89 | 89 | --- | 26 | 26 | 14 | 26 | 27 | 15 | 24 |
| 30 | 47 | 174 | 89 | 87 | --- | 24 | 23 | 15 | 23 | 29 | 13 | 24 |
| 31 | 51 | --- | 83 | 88 | --- | 23 | --- | 16 | --- | 31 | 10 | --- |
| TOTAL | 1103 | 1841 | 2711 | 1680 | 3628 | 1078 | 1127 | 1228 | 747 | 846 | 700 | 529.8 |
| MEAN | 35.6 | 61.4 | 87.5 | 54.2 | 130 | 34.8 | 37.6 | 39.6 | 24.9 | 27.3 | 22.6 | 17.7 |
| MAX | 91 | 285 | 207 | 215 | 651 | 47 | 144 | 302 | 30 | 38 | 34 | 28 |
| MIN | 13 | 33 | 26 | 21 | 34 | 23 | 16 | 14 | 12 | 22 | 10 | 7.2 |
| AC-FT | 2190 | 3650 | 5380 | 3330 | 7200 | 2140 | 2240 | 2440 | 1480 | 1680 | 1390 | 1050 |

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 |
| LOWEST ANNUAL MEAN | .90 |
| HIGHEST DAILY MEAN | 23900 |
| LOWEST DAILY MEAN | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .00 |
| INSTANTANEOUS PEAK FLOW | 29000 |
| INSTANTANEOUS PEAK STAGE | 14.9 |
| 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 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 28.5 | 56.2 | 100 | 216 | 357 | 307 | 138 | 54.8 | 45.8 | 41.9 | 40.8 | 32.7 |
| MAX | 78.6 | 247 | 434 | 1335 | 1928 | 2725 | 1163 | 318 | 154 | 62.9 | 65.9 | 62.1 |
| (WY) | 1992 | 1984 | 1984 | 1983 | 1983 | 1983 | 1982 | 1983 | 1973 | 1981 | 1972 | 1981 |
| MIN | 9.91 | 23.1 | 20.1 | 28.4 | 28.9 | 32.5 | 18.3 | 18.6 | 16.3 | 20.6 | 16.8 | 2.51 |
| (WY) | 1979 | 1970 | 1979 | 1985 | 1977 | 1977 | 1991 | 1971 | 1978 | 1974 | 1974 | 1984 |

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1970 - 1994

| | | | |
|--------------------------|---------|---------|-------|
| ANNUAL TOTAL | 59686.9 | 17218.8 | |
| ANNUAL MEAN | 164 | 47.2 | 117 |
| HIGHEST ANNUAL MEAN | | | 621 |
| LOWEST ANNUAL MEAN | | | 31.5 |
| HIGHEST DAILY MEAN | 4660 | Jan 13 | 651 |
| LOWEST DAILY MEAN | 5.1 | Sep 11 | 7.2 |
| ANNUAL SEVEN-DAY MINIMUM | 6.7 | Sep 5 | 9.6 |
| INSTANTANEOUS PEAK FLOW | | | 1320 |
| INSTANTANEOUS PEAK STAGE | | | 5.29 |
| ANNUAL RUNOFF (AC-FT) | 118400 | 34150 | 84820 |
| 10 PERCENT EXCEEDS | 297 | 89 | 152 |
| 50 PERCENT EXCEEDS | 43 | 30 | 41 |
| 90 PERCENT EXCEEDS | 17 | 16 | 16 |

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, from topographic map. Prior to Apr. 1, 1959, at site 1.4 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft³/s, Jan. 26, 1983, gage height, 5.14 ft, from rating curve extended above 600 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 5.27 ft, Oct. 13, 1962, from high-water marks past gage; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0015 | *66 | *2.44 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|--------|------|------|------|------|------|------|------|
| 1 | .00 | .00 | .00 | .00 | .00 | 1.7 | .00 | .00 | .00 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | .00 | .00 | 1.3 | .00 | .00 | .00 | .00 | .00 | .00 |
| 3 | .00 | .00 | .00 | .00 | .00 | .98 | .00 | .00 | .00 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | .00 | .00 | .76 | .00 | .00 | .00 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | .00 | .00 | .60 | .00 | .00 | .00 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | .00 | .00 | .52 | .00 | .01 | .00 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | .00 | .23 | .37 | .00 | 1.1 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .05 | .00 | 1.5 | .20 | .21 | .26 | .00 | .00 | .00 | .00 |
| 9 | .00 | .00 | .04 | .00 | .31 | .14 | .29 | .02 | .00 | .00 | .00 | .00 |
| 10 | .00 | .14 | .00 | .00 | 1.0 | .04 | .03 | .00 | .00 | .00 | .00 | .00 |
| 11 | .00 | .00 | .18 | .00 | 1.1 | .04 | .00 | .00 | .00 | .00 | .00 | .00 |
| 12 | .00 | .00 | .00 | .00 | .38 | .02 | .00 | .00 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | .00 | .00 | .26 | .05 | .00 | .00 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | .10 | .00 | .17 | .01 | .00 | .00 | .00 | .00 | .00 | .00 |
| 15 | .09 | .00 | .00 | .00 | .01 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | .00 | .00 | .01 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | .00 | .00 | 1.2 | .00 | .00 | .01 | .00 | .00 | .00 | .00 |
| 18 | .00 | .00 | .00 | .00 | 8.2 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | .00 | .00 | 17 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | .00 | .00 | 30 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 21 | .00 | .00 | .00 | .00 | 17 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | .00 | .00 | 9.1 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | .00 | .04 | 5.4 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .00 | .17 | 3.7 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | .00 | .01 | 2.7 | .00 | .18 | .00 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | .00 | .00 | 3.2 | .00 | .04 | .00 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | .00 | .02 | 3.8 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 28 | .00 | .12 | .00 | .00 | 2.2 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 29 | .00 | .07 | .00 | .00 | --- | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 30 | .00 | .00 | .00 | .00 | --- | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | .00 | .00 | --- | .00 | --- | .00 | --- | .00 | .00 | --- |
| TOTAL | 0.09 | 0.33 | 0.37 | 0.24 | 108.47 | 6.73 | 0.75 | 1.40 | 0.00 | 0.00 | 0.00 | 0.00 |
| MEAN | .003 | .011 | .012 | .008 | 3.87 | .22 | .025 | .045 | .000 | .000 | .000 | .000 |
| MAX | .09 | .14 | .18 | .17 | 30 | 1.7 | .29 | 1.1 | .00 | .00 | .00 | .00 |
| MIN | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | .2 | .7 | .7 | .5 | 215 | 13 | 1.5 | 2.8 | .00 | .00 | .00 | .00 |

11180500 DRY CREEK AT UNION CITY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .17 | .64 | 2.31 | 6.77 | 8.19 | 5.95 | 2.79 | .54 | .16 | .030 | .014 | .004 |
| MAX | 6.31 | 11.3 | 21.0 | 31.7 | 36.8 | 58.2 | 20.1 | 6.45 | 2.87 | .82 | .51 | .10 |
| (WY) | 1963 | 1984 | 1974 | 1973 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1917 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 1498.76 | | | | 118.38 | | | | | | | |
| ANNUAL MEAN | 4.11 | | | | .32 | | | | 2.27 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 13.0 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .002 | | | |
| HIGHEST DAILY MEAN | 230 | | | | 30 | | | | 335 | | | |
| LOWEST DAILY MEAN | .00 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .00 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 66 | | | | 1330 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 2.44 | | | | 5.27 | | | |
| ANNUAL RUNOFF (AC-FT) | 2970 | | | | 235 | | | | 1650 | | | |
| 10 PERCENT EXCEEDS | 6.6 | | | | .14 | | | | 3.7 | | | |
| 50 PERCENT EXCEEDS | .00 | | | | .00 | | | | .00 | | | |
| 90 PERCENT EXCEEDS | .00 | | | | .00 | | | | .00 | | | |

11180700 PATTERSON CREEK AT UNION CITY, CA

LOCATION.--Lat 37°55'09", long 122°02'50", in Potrero de los Cerritos Grant, Alameda County, Hydrologic Unit 18050004, on right bank 0.1 mi downstream from effluence from Alameda Creek, 0.2 mi upstream from bridge on Interstate 880 (Nimitz Freeway), and 2.0 mi southwest of Decoto District in Union City.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4.13 ft above sea level. Prior to Oct. 26, 1966, at site 0.2 mi downstream at same datum.

REMARKS.--Records poor. This stream is a distributary of Alameda Creek. Diversion by Alameda County Water District to percolation ponds between station 11179000 and this station; additional percolation to ground water by placing check dams in channel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,100 ft³/s, Feb. 19, 1986, gage height, 18.44 ft; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,910 ft³/s, Feb. 20, gage height, 10.87 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|---------|------|-------|-------|------|-------|------|------|
| 1 | .00 | .00 | 1.6 | .05 | 334 | 2.2 | 3.6 | 7.8 | e8.0 | e.95 | e.69 | .02 |
| 2 | .00 | .00 | .96 | .05 | 143 | 2.2 | 3.9 | 7.4 | e6.2 | e.88 | e.63 | .01 |
| 3 | .00 | .00 | .77 | .06 | 109 | 2.2 | 4.8 | 7.7 | e4.9 | e1.2 | e.59 | .02 |
| 4 | .00 | .00 | .47 | .07 | 42 | 2.2 | 4.9 | 8.3 | e3.3 | e1.5 | e.56 | .02 |
| 5 | .00 | .00 | .10 | .10 | 3.1 | 2.2 | 5.2 | 8.4 | e3.9 | e1.7 | e.51 | .01 |
| 6 | .00 | .00 | .06 | .10 | 1.5 | 2.2 | 5.0 | 12 | e5.0 | e1.6 | e.50 | .01 |
| 7 | .00 | .00 | .03 | .10 | 13 | 2.2 | 5.4 | 54 | e7.0 | e1.5 | e.48 | .02 |
| 8 | .00 | .00 | .14 | .09 | 19 | 2.2 | 7.7 | 116 | e6.0 | e1.3 | e.45 | .03 |
| 9 | .00 | .00 | 11 | .09 | 3.4 | 2.0 | 28 | 21 | e4.7 | e1.0 | e.43 | .04 |
| 10 | .00 | .23 | 1.7 | .09 | 4.4 | 1.9 | 9.5 | 10 | e4.4 | e1.3 | e.41 | .08 |
| 11 | .00 | 12 | 19 | .08 | 2.9 | 2.1 | 4.9 | 8.4 | e3.9 | e1.3 | .41 | .11 |
| 12 | .00 | .82 | 37 | .07 | .88 | 2.3 | 3.3 | 7.9 | e3.5 | e1.0 | .30 | .11 |
| 13 | .00 | .30 | 7.7 | .07 | .65 | 2.4 | 4.2 | 8.2 | e3.5 | e.95 | .23 | .09 |
| 14 | .00 | .09 | 17 | .08 | .65 | 2.4 | 4.4 | 8.0 | e3.5 | e.87 | .17 | .13 |
| 15 | .04 | .02 | 1.0 | .09 | .65 | 2.4 | 4.1 | 8.1 | e2.8 | e.80 | .11 | .15 |
| 16 | .08 | .00 | .23 | .10 | .65 | 2.4 | 4.0 | 8.6 | e2.8 | e.72 | .12 | .10 |
| 17 | .00 | .00 | .12 | .12 | 9.7 | 2.5 | 5.1 | 11 | e2.4 | e.70 | .12 | .09 |
| 18 | .00 | .00 | .07 | .14 | 577 | 3.0 | 4.4 | 15 | e2.5 | e.68 | .10 | .20 |
| 19 | .00 | .00 | .04 | .14 | 690 | 3.0 | 4.0 | 11 | e2.3 | e.65 | .08 | .33 |
| 20 | .00 | .02 | .03 | .14 | 1730 | 3.0 | 5.1 | 11 | e2.1 | e.59 | .06 | .43 |
| 21 | .00 | .06 | .01 | .14 | 343 | 3.0 | 5.7 | 10 | e2.3 | e.57 | .05 | .52 |
| 22 | .00 | .11 | .00 | .14 | 176 | 3.2 | 5.8 | 10 | e2.0 | e.55 | .03 | .59 |
| 23 | .00 | .00 | .01 | 5.7 | 90 | 4.1 | 6.4 | e10 | e1.8 | e.52 | .02 | e.52 |
| 24 | .00 | .00 | .01 | 23 | 7.7 | 4.4 | 11 | e10 | e1.8 | e1.1 | .02 | e.45 |
| 25 | .00 | .00 | .01 | 5.9 | 3.1 | 4.4 | 16 | e9.0 | e1.9 | e.92 | .02 | e.55 |
| 26 | .00 | .00 | .02 | 3.9 | 4.5 | 4.2 | 14 | e9.0 | e1.8 | e.77 | .02 | e.57 |
| 27 | .00 | .00 | .05 | 3.9 | 6.2 | 4.0 | 8.4 | e7.0 | e1.6 | e.67 | .02 | e.50 |
| 28 | .00 | 5.3 | .05 | .86 | 2.4 | 4.0 | 7.4 | e7.0 | e1.5 | e.60 | .02 | e.45 |
| 29 | .00 | 17 | .05 | .38 | --- | 4.8 | 7.1 | e7.0 | e1.4 | e.55 | .02 | e.41 |
| 30 | .00 | 11 | .05 | .31 | --- | 4.2 | 8.4 | e7.8 | e1.0 | e.58 | .01 | e.40 |
| 31 | .00 | --- | .05 | 5.4 | --- | 3.6 | --- | e8.9 | --- | e.72 | .02 | --- |
| TOTAL | 0.12 | 46.95 | 99.33 | 51.46 | 4318.38 | 90.9 | 211.7 | 445.5 | 99.8 | 28.74 | 7.20 | 6.96 |
| MEAN | .004 | 1.56 | 3.20 | 1.66 | 154 | 2.93 | 7.06 | 14.4 | 3.33 | .93 | .23 | .23 |
| MAX | .08 | 17 | 37 | 23 | 1730 | 4.8 | 28 | 116 | 8.0 | 1.7 | .69 | .59 |
| MIN | .00 | .00 | .00 | .05 | .65 | 1.9 | 3.3 | 7.0 | 1.0 | .52 | .01 | .01 |
| AC-FT | .2 | 93 | 197 | 102 | 8570 | 180 | 420 | 884 | 198 | 57 | 14 | 14 |

e Estimated.

11180700 PATTERSON CREEK AT UNION CITY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 6.89 | 33.1 | 73.3 | 188 | 295 | 237 | 113 | 21.2 | 7.00 | 1.01 | .44 | 1.27 |
| MAX | 53.0 | 404 | 557 | 1711 | 2150 | 3007 | 1091 | 312 | 120 | 9.14 | 8.73 | 19.1 |
| (WY) | 1963 | 1984 | 1984 | 1983 | 1983 | 1983 | 1982 | 1983 | 1973 | 1973 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1959 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 34084.98 | | | | 5407.04 | | | | | | | |
| ANNUAL MEAN | 93.4 | | | | 14.8 | | | | 80.3 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 703 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .000 | | | |
| HIGHEST DAILY MEAN | 4800 | | | | 1730 | | | | 11700 | | | |
| LOWEST DAILY MEAN | .00 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .00 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 2910 | | | | 22100 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 10.87 | | | | 18.44 | | | |
| ANNUAL RUNOFF (AC-FT) | 67610 | | | | 10720 | | | | 58170 | | | |
| 10 PERCENT EXCEEDS | 244 | | | | 10 | | | | 113 | | | |
| 50 PERCENT EXCEEDS | .11 | | | | .82 | | | | .00 | | | |
| 90 PERCENT EXCEEDS | .00 | | | | .00 | | | | .00 | | | |

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA

LOCATION.--Lat 37°41'42", long 122°02'38", in San Lorenzo Grant, Alameda County, Hydrologic Unit 18050004, on left bank, 250 ft south of Interstate Highway 580, 0.4 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 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 260 ft above sea level, from topographic map.

REMARKS.--Records poor. Some regulation of low flow by ponds upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,590 ft³/s, Jan. 13, 1993, gage height, 8.73 ft; maximum gage height, 9.50 ft, Jan. 24, 1983; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 275 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2230 | *162 | *2.70 | | | | |
| Minimum daily, 0.03 ft ³ /s, Aug. 7. | | | | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|------|------|------|
| 1 | .13 | .84 | .52 | 1.0 | .43 | 3.1 | e.82 | .94 | 1.1 | .18 | .06 | .09 |
| 2 | .83 | .83 | .38 | 1.0 | .43 | 2.8 | .73 | .90 | 1.1 | .17 | .07 | .08 |
| 3 | .25 | .85 | .30 | 1.1 | .43 | 2.5 | .73 | 2.4 | 1.3 | .13 | .07 | .05 |
| 4 | .17 | .96 | .37 | 1.3 | .42 | 2.2 | .80 | 2.2 | 1.1 | .14 | .08 | .04 |
| 5 | .49 | 1.0 | .23 | 1.1 | .32 | 2.3 | .82 | 1.0 | .94 | .11 | .06 | .05 |
| 6 | .31 | .99 | .21 | 1.1 | 3.8 | e1.9 | 1.1 | 5.0 | 1.7 | .11 | .06 | .04 |
| 7 | .28 | 1.1 | .22 | 1.1 | 14 | e1.5 | 1.1 | 16 | .86 | .11 | .03 | .05 |
| 8 | .17 | 1.2 | 8.6 | 1.1 | 3.3 | 1.9 | 4.7 | 1.9 | .78 | .11 | .06 | .05 |
| 9 | .13 | 1.3 | 8.3 | 1.2 | 1.0 | 1.9 | 1.8 | 1.4 | .78 | .12 | .05 | .05 |
| 10 | .12 | 7.0 | .67 | 1.2 | 3.2 | 1.9 | .96 | 1.3 | .71 | .14 | .05 | .04 |
| 11 | .13 | 1.3 | 11 | 1.1 | e1.0 | 1.9 | .96 | 1.1 | .54 | .11 | .05 | .05 |
| 12 | .15 | .43 | 1.3 | 1.2 | e.94 | 1.7 | .95 | 1.2 | .57 | .13 | .07 | .06 |
| 13 | .14 | .41 | 1.1 | 1.2 | e.92 | 1.6 | .95 | 1.1 | .78 | .13 | .05 | .06 |
| 14 | .88 | .33 | 8.7 | 1.2 | e.83 | 1.6 | .92 | 1.1 | .70 | .09 | .04 | .07 |
| 15 | 5.0 | .62 | .97 | 1.2 | e.73 | 1.5 | .82 | 1.5 | .54 | .07 | .04 | .06 |
| 16 | .52 | .77 | .73 | 1.2 | e.71 | 1.5 | .74 | 1.2 | .43 | .09 | .04 | .10 |
| 17 | .56 | .84 | .64 | 1.0 | e10 | 1.4 | .73 | 2.7 | .45 | .08 | .05 | .07 |
| 18 | .35 | .83 | .64 | 1.0 | e17 | 1.4 | .74 | 1.4 | .27 | e.08 | .04 | .12 |
| 19 | .26 | .78 | .62 | 1.0 | e41 | 1.4 | .77 | 1.3 | .38 | e.08 | .06 | .08 |
| 20 | .20 | .95 | .64 | 1.1 | e53 | 1.3 | .83 | 1.3 | .25 | e.08 | .05 | .10 |
| 21 | .21 | .87 | .71 | 1.1 | e20 | 1.3 | e.69 | 1.3 | .28 | e.08 | .04 | .16 |
| 22 | .27 | 1.1 | .71 | 1.2 | e5.4 | 1.5 | e.39 | 1.3 | .22 | .08 | .06 | .13 |
| 23 | .16 | .76 | .76 | 2.9 | e4.5 | 1.2 | e5.3 | .91 | .26 | .07 | .06 | .18 |
| 24 | .13 | .76 | .77 | 14 | 3.7 | 1.4 | 2.0 | 1.3 | .41 | .10 | .07 | .14 |
| 25 | .17 | .88 | .81 | 3.5 | 3.2 | 1.6 | 17 | 1.2 | .39 | .06 | .05 | .09 |
| 26 | .17 | .99 | .85 | 1.3 | 5.9 | 1.1 | 2.2 | 1.1 | .21 | .06 | .06 | .08 |
| 27 | .15 | 1.1 | .93 | 1.5 | 5.3 | 1.1 | 1.3 | 1.2 | .24 | .05 | .06 | .06 |
| 28 | .18 | 7.8 | .84 | .63 | 3.8 | 1.0 | 1.1 | .99 | .18 | .05 | .05 | .06 |
| 29 | .37 | 3.9 | .83 | .54 | --- | 1.0 | 1.1 | .82 | .19 | .06 | .07 | .08 |
| 30 | .50 | .92 | .86 | .54 | --- | e.78 | 1.1 | .89 | .20 | .05 | .07 | .07 |
| 31 | .79 | --- | .95 | .47 | --- | e.47 | --- | 1.1 | --- | .05 | .06 | --- |
| TOTAL | 14.17 | 42.41 | 55.16 | 50.08 | 205.26 | 49.75 | 54.15 | 59.05 | 17.86 | 2.97 | 1.73 | 2.36 |
| MEAN | .46 | 1.41 | 1.78 | 1.62 | 7.33 | 1.60 | 1.80 | 1.90 | .60 | .096 | .056 | .079 |
| MAX | 5.0 | 7.8 | 11 | 14 | 53 | 3.1 | 17 | 16 | 1.7 | .18 | .08 | .18 |
| MIN | .12 | .33 | .21 | .47 | .32 | .47 | .39 | .82 | .18 | .05 | .03 | .04 |
| AC-FT | 28 | 84 | 109 | 99 | 407 | 99 | 107 | 117 | 35 | 5.9 | 3.4 | 4.7 |

e Estimated.

SAN LORENZO CREEK BASIN

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .92 | 3.41 | 6.73 | 14.8 | 21.7 | 17.4 | 6.86 | 2.57 | 1.14 | .41 | .18 | .19 |
| MAX | 2.20 | 16.6 | 30.1 | 79.3 | 81.5 | 90.7 | 42.3 | 13.0 | 3.89 | 2.05 | .69 | .53 |
| (WY) | 1992 | 1984 | 1984 | 1993 | 1986 | 1983 | 1982 | 1983 | 1983 | 1983 | 1983 | 1986 |
| MIN | .072 | .12 | .65 | .16 | .65 | .47 | .70 | .19 | .13 | .023 | .001 | .000 |
| (WY) | 1989 | 1993 | 1990 | 1991 | 1989 | 1990 | 1990 | 1991 | 1990 | 1989 | 1988 | 1988 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1981 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 4621.51 | | 554.95 | | | |
| ANNUAL MEAN | 12.7 | | 1.52 | | 6.28 | |
| HIGHEST ANNUAL MEAN | | | | | 22.8 | 1983 |
| LOWEST ANNUAL MEAN | | | | | .70 | 1989 |
| HIGHEST DAILY MEAN | 669 | Jan 13 | 53 | Feb 20 | 669 | Jan 13 1993 |
| LOWEST DAILY MEAN | .05 | Aug 2 | .03 | Aug 7 | .00 | Aug 28 1981 |
| ANNUAL SEVEN-DAY MINIMUM | .08 | Aug 25 | .05 | Aug 13 | .00 | Sep 6 1981 |
| INSTANTANEOUS PEAK FLOW | | | 162 | Feb 19 | 1590 | Jan 13 1993 |
| INSTANTANEOUS PEAK STAGE | | | 2.70 | Feb 19 | 9.50 | Jan 24 1983 |
| ANNUAL RUNOFF (AC-FT) | 9170 | | 1100 | | 4550 | |
| 10 PERCENT EXCEEDS | 22 | | 2.4 | | 11 | |
| 50 PERCENT EXCEEDS | 1.8 | | .77 | | .66 | |
| 90 PERCENT EXCEEDS | .12 | | .06 | | .03 | |

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1980 to September 1994 (storm season only) (discontinued).

WATER TEMPERATURE: December 1980 to September 1994 (discontinued).

SEDIMENT DATA: December 1980 to September 1994 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: December 1980 to September 1994 (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: December 1980 to September 1994 (discontinued).

REMARKS.--Sediment samples were collected on most days where water temperature is published. Zero-bedload discharge observed for flows less than 4.4 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 10,000 mg/L, Jan. 4, 1982; minimum daily mean, 0 mg/L, Feb. 26, 1989.

SEDIMENT LOAD (storm season only): Maximum daily, 19,800 tons, Jan. 4, 1982; minimum daily, 0 ton several days in most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 1,140 mg/L, Feb. 7; minimum daily mean, 6 mg/L, Nov. 24, 25.

SEDIMENT LOAD (storm season only): Maximum daily, 100 tons, Jan. 24; minimum daily, 0.01 tons several days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. FALL DIAM. % FINER THAN .002 MM | SED. SUSP. FALL DIAM. % FINER THAN .004 MM |
|-------|------|--|--------------------------------------|---|---|--|--|
| OCT | | | | | | | |
| 07... | 1115 | 0.34 | 14.0 | 152 | 0.14 | -- | -- |
| NOV | | | | | | | |
| 28... | 1400 | 2.7 | 10.0 | 295 | 2.2 | -- | -- |
| 28... | 1405 | 3.5 | 10.0 | 590 | 5.6 | -- | -- |
| 28... | 1425 | 8.4 | 10.0 | 293 | 6.6 | -- | -- |
| 28... | 1435 | 10 | 10.0 | 269 | 7.3 | -- | -- |
| DEC | | | | | | | |
| 08... | 1555 | 4.3 | 10.5 | 106 | 1.2 | -- | -- |
| 11... | 1535 | 11 | 11.5 | 333 | 9.9 | -- | -- |
| 15... | 1525 | 0.92 | 8.5 | 40 | 0.10 | -- | -- |
| 27... | 1255 | 0.92 | 7.0 | 64 | 0.16 | -- | -- |
| JAN | | | | | | | |
| 09... | 1615 | 1.2 | 8.5 | 26 | 0.08 | -- | -- |
| 24... | 1145 | 7.7 | 9.5 | 428 | 8.9 | -- | -- |
| 25... | 1605 | 6.8 | 10.0 | 209 | 3.8 | -- | -- |
| FEB | | | | | | | |
| 06... | 1615 | 8.2 | 10.0 | 100 | 2.2 | -- | -- |
| 07... | 1735 | 13 | 11.0 | 443 | 16 | -- | -- |
| 10... | 1005 | 4.7 | 9.0 | 76 | 0.96 | -- | -- |
| 19... | 1645 | 58 | 8.0 | 1260 | 197 | 44 | 59 |
| 21... | 1350 | 25 | 9.5 | 167 | 11 | -- | -- |
| 26... | 1730 | 11 | 12.0 | 88 | 2.6 | -- | -- |
| MAR | | | | | | | |
| 22... | 1220 | 1.9 | 9.0 | 58 | 0.30 | -- | -- |
| APR | | | | | | | |
| 08... | 1850 | 12 | 12.0 | 375 | 12 | -- | -- |
| 22... | 1655 | 0.71 | 14.0 | 27 | 0.05 | -- | -- |
| 25... | 1250 | 14 | 11.5 | 468 | 18 | -- | -- |

SAN LORENZO CREEK BASIN

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | SED. SUSP. FALL DIAM. % FINER THAN .008 MM | SED. SUSP. FALL DIAM. % FINER THAN .016 MM | SED. SUSP. FALL DIAM. % FINER THAN .031 MM | SED. SUSP. FALL DIAM. % FINER THAN .062 MM | SED. SUSP. FALL DIAM. % FINER THAN .125 MM | SED. SUSP. FALL DIAM. % FINER THAN .250 MM |
|-------|--|--|--|--|--|--|
| OCT | | | | | | |
| 07... | -- | -- | -- | 48 | -- | -- |
| NOV | | | | | | |
| 28... | -- | -- | -- | 98 | -- | -- |
| 28... | -- | -- | -- | 100 | -- | -- |
| 28... | -- | -- | -- | 99 | 100 | -- |
| 28... | -- | -- | -- | 99 | 100 | -- |
| DEC | | | | | | |
| 08... | -- | -- | -- | 40 | -- | -- |
| 11... | -- | -- | -- | 100 | -- | -- |
| 15... | -- | -- | -- | 98 | -- | -- |
| 27... | -- | -- | -- | 44 | -- | -- |
| JAN | | | | | | |
| 09... | -- | -- | -- | 46 | -- | -- |
| 24... | -- | -- | -- | 99 | 100 | -- |
| 25... | -- | -- | -- | 100 | -- | -- |
| FEB | | | | | | |
| 06... | -- | -- | -- | 98 | 99 | 100 |
| 07... | -- | -- | -- | 100 | -- | -- |
| 10... | -- | -- | -- | 69 | -- | -- |
| 19... | 73 | 85 | 94 | 98 | 100 | -- |
| 21... | -- | -- | -- | 98 | 99 | 100 |
| 26... | -- | -- | -- | 96 | 99 | 100 |
| MAR | | | | | | |
| 22... | -- | -- | -- | 97 | 99 | 100 |
| APR | | | | | | |
| 08... | -- | -- | -- | 97 | 100 | -- |
| 22... | -- | -- | -- | 38 | -- | -- |
| 25... | -- | -- | -- | 100 | -- | -- |

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | NUMBER OF SAM- PLING POINTS (COUNT) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM | BED MAT. SIEVE DIAM. % FINER THAN .125 MM | BED MAT. SIEVE DIAM. % FINER THAN .250 MM | BED MAT. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--|--|--------------------------------------|---|---|---|---|
| MAY | | | | | | | | |
| 03... | 1055 | 1 | 0.92 | 12.0 | 19 | 57 | 89 | 96 |
| 03... | 1100 | 1 | 0.92 | 12.0 | 1 | 2 | 3 | 7 |
| 03... | 1105 | 1 | 0.92 | 12.0 | -- | 1 | 2 | 11 |
| 03... | 1110 | 1 | 0.92 | 12.0 | 19 | 34 | 50 | 63 |
| 03... | 1115 | 1 | 0.92 | 12.0 | 18 | 38 | 56 | 64 |
| 03... | 1120 | 1 | 0.92 | 12.0 | 7 | 26 | 74 | 96 |

| DATE | BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM |
|-------|---|---|---|---|---|---|---|
| MAY | | | | | | | |
| 03... | 99 | 100 | -- | -- | -- | -- | -- |
| 03... | 10 | 18 | 30 | 48 | 72 | 91 | 100 |
| 03... | 36 | 56 | 68 | 75 | 82 | 88 | 100 |
| 03... | 72 | 83 | 90 | 90 | 91 | 94 | 100 |
| 03... | 74 | 89 | 98 | 100 | -- | -- | -- |
| 03... | 99 | 100 | -- | -- | -- | -- | -- |

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
INSTANTANEOUS VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 1 | --- | 13.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | --- | --- | 8.0 | 9.5 | 7.5 | 13.0 | --- | --- | --- | --- | --- | --- |
| 3 | --- | 12.0 | --- | --- | --- | --- | 13.0 | 12.0 | --- | --- | --- | --- |
| 4 | --- | 12.0 | --- | 9.5 | 8.0 | 13.5 | --- | --- | --- | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | --- | 11.5 | 8.0 | --- | 10.0 | --- | 12.0 | --- | --- | --- | --- | --- |
| 7 | 14.0 | --- | --- | 6.0 | 10.5 | 12.5 | --- | --- | --- | --- | --- | --- |
| 8 | --- | 9.5 | 10.5 | 6.5 | --- | --- | 12.0 | --- | --- | --- | --- | --- |
| 9 | --- | --- | 12.0 | 8.5 | 9.0 | --- | 12.0 | --- | --- | --- | --- | --- |
| 10 | --- | 12.5 | 12.0 | --- | 10.0 | 12.0 | --- | --- | --- | --- | --- | --- |
| 11 | --- | --- | 11.5 | 6.5 | --- | --- | 13.0 | --- | --- | --- | --- | --- |
| 12 | --- | 10.0 | 9.0 | --- | --- | --- | 13.5 | --- | --- | --- | --- | --- |
| 13 | --- | --- | --- | 8.0 | 7.0 | 12.5 | --- | --- | --- | --- | --- | --- |
| 14 | --- | --- | 10.5 | --- | --- | --- | 14.0 | --- | --- | --- | --- | --- |
| 15 | --- | 9.0 | 8.5 | --- | 9.0 | --- | 12.0 | --- | --- | --- | --- | --- |
| 16 | 15.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | --- | 8.5 | --- | --- | 10.5 | 11.5 | --- | --- | --- | --- | --- | --- |
| 18 | --- | --- | 7.0 | --- | --- | 12.0 | 14.0 | --- | --- | --- | --- | --- |
| 19 | 14.0 | --- | --- | 8.0 | 8.0 | --- | --- | --- | --- | --- | --- | --- |
| 20 | 14.0 | 8.0 | --- | 8.0 | --- | --- | 14.5 | --- | --- | --- | --- | --- |
| 21 | --- | --- | 5.0 | 8.5 | 9.5 | 11.5 | --- | --- | --- | --- | --- | - |
| 22 | --- | 10.0 | --- | --- | --- | 9.0 | 14.0 | --- | --- | --- | --- | - |
| 23 | 13.5 | --- | --- | 11.5 | 9.0 | 10.0 | --- | --- | --- | --- | --- | - |
| 24 | --- | 6.5 | 5.5 | 10.0 | --- | 10.0 | --- | --- | --- | --- | --- | - |
| 25 | 13.0 | --- | --- | 10.0 | --- | 11.0 | 11.5 | --- | --- | --- | --- | - |
| 26 | --- | 7.5 | 6.0 | 9.5 | 12.0 | --- | --- | --- | --- | --- | --- | - |
| 27 | 14.0 | --- | 7.0 | 9.0 | --- | --- | --- | --- | --- | --- | --- | - |
| 28 | --- | 10.0 | --- | --- | 12.5 | 14.0 | --- | --- | --- | --- | --- | - |
| 29 | 14.0 | 13.0 | 8.0 | --- | --- | --- | 12.0 | --- | --- | --- | --- | - |
| 30 | --- | 10.5 | --- | 7.0 | --- | 13.0 | --- | --- | --- | --- | --- | - |
| 31 | --- | --- | 8.0 | 7.5 | --- | 13.0 | --- | --- | --- | --- | --- | --- |

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN- TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN- TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN- TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | |
| 1 | .13 | 116 | .11 | .84 | 46 | .10 | .52 | 53 | .08 |
| 2 | .83 | 476 | 3.8 | .83 | 36 | .08 | .38 | 50 | .05 |
| 3 | .25 | 176 | .46 | .85 | 30 | .07 | .30 | 60 | .05 |
| 4 | .17 | 87 | .19 | .96 | 15 | .04 | .37 | 53 | .08 |
| 5 | .49 | 423 | 2.1 | 1.0 | 18 | .05 | .23 | 28 | .02 |
| 6 | .31 | 174 | .50 | .99 | 27 | .07 | .21 | 25 | .02 |
| 7 | .28 | 132 | .22 | 1.1 | 37 | .11 | .22 | 22 | .01 |
| 8 | .17 | 69 | .03 | 1.2 | 45 | .15 | 8.6 | 229 | 18 |
| 9 | .13 | 46 | .02 | 1.3 | 44 | .15 | 8.3 | 254 | 11 |
| 10 | .12 | 38 | .01 | 7.0 | 355 | 21 | .67 | 19 | .04 |
| 11 | .13 | 33 | .01 | 1.3 | 169 | .94 | 11 | 408 | 36 |
| 12 | .15 | 33 | .01 | .43 | 37 | .04 | 1.3 | 58 | .16 |
| 13 | .14 | 34 | .01 | .41 | 29 | .03 | 1.1 | 40 | .47 |
| 14 | .88 | 455 | 3.0 | .33 | 26 | .02 | 8.7 | 302 | 13 |
| 15 | 5.0 | 942 | 39 | .62 | 36 | .06 | .97 | 69 | .19 |
| 16 | .52 | 44 | .05 | .77 | 28 | .06 | .73 | 39 | .08 |
| 17 | .56 | 28 | .03 | .84 | 17 | .04 | .64 | 39 | .07 |
| 18 | .35 | 27 | .02 | .83 | 13 | .03 | .64 | 38 | .06 |
| 19 | .26 | 24 | .01 | .78 | 11 | .02 | .62 | 31 | .05 |
| 20 | .20 | 61 | .02 | .95 | 9 | .02 | .64 | 24 | .04 |
| 21 | .21 | 57 | .02 | .87 | 7 | .02 | .71 | 19 | .04 |
| 22 | .27 | 34 | .02 | 1.1 | 29 | .10 | .71 | 23 | .04 |
| 23 | .16 | 23 | .01 | .76 | 12 | .02 | .76 | 31 | .06 |
| 24 | .13 | 29 | .01 | .76 | 6 | .01 | .77 | 42 | .08 |
| 25 | .17 | 39 | .02 | .88 | 6 | .02 | .81 | 56 | .11 |
| 26 | .17 | 29 | .01 | .99 | 9 | .02 | .85 | 71 | .14 |
| 27 | .15 | 20 | .01 | 1.1 | 12 | .03 | .93 | 63 | .14 |
| 28 | .18 | 25 | .01 | 7.8 | 899 | 62 | .84 | 44 | .09 |
| 29 | .37 | 36 | .04 | 3.9 | 467 | 13 | .83 | 31 | .06 |
| 30 | .50 | 56 | .08 | .92 | 109 | .54 | .86 | 39 | .08 |
| 31 | .79 | 78 | .17 | --- | --- | --- | .95 | 54 | .12 |
| TOTAL | 14.17 | --- | 50.00 | 42.41 | --- | 98.84 | 55.16 | --- | 80.43 |

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| 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 | 1.0 | 47 | .12 | .43 | 24 | .03 | 3.1 | 44 | .29 |
| 2 | 1.0 | 38 | .10 | .43 | 23 | .02 | 2.8 | 41 | .26 |
| 3 | 1.1 | 30 | .08 | .43 | 26 | .02 | 2.5 | 36 | .21 |
| 4 | 1.3 | 38 | .13 | .42 | 30 | .03 | 2.2 | 32 | .16 |
| 5 | 1.1 | 28 | .08 | .32 | 29 | .03 | 2.3 | 30 | .16 |
| 6 | 1.1 | 27 | .06 | 3.8 | 104 | 1.2 | e1.9 | 30 | .15 |
| 7 | 1.1 | 32 | .07 | 14 | 1140 | 91 | e1.5 | 29 | .13 |
| 8 | 1.1 | 23 | .06 | 3.3 | 671 | 9.9 | 1.9 | 31 | .12 |
| 9 | 1.2 | 24 | .07 | 1.0 | 112 | .29 | 1.9 | 33 | .12 |
| 10 | 1.2 | 20 | .05 | 3.2 | 156 | 2.2 | 1.9 | 35 | .13 |
| 11 | 1.1 | 15 | .04 | e1.0 | 18 | .03 | 1.9 | 31 | .11 |
| 12 | 1.2 | 19 | .05 | e.94 | 18 | .03 | 1.7 | 26 | .09 |
| 13 | 1.2 | 28 | .08 | e.92 | 22 | .04 | 1.6 | 22 | .07 |
| 14 | 1.2 | 25 | .07 | e.83 | 21 | .04 | 1.6 | 22 | .07 |
| 15 | 1.2 | 19 | .05 | e.73 | 19 | .03 | 1.5 | 23 | .07 |
| 16 | 1.2 | 18 | .05 | e.71 | 18 | .03 | 1.5 | 24 | .08 |
| 17 | 1.0 | 24 | .06 | e10 | 303 | 9.7 | 1.4 | 25 | .08 |
| 18 | 1.0 | 32 | .07 | e17 | 200 | 10 | 1.4 | 18 | .06 |
| 19 | 1.0 | 38 | .08 | e41 | 420 | 48 | 1.4 | 19 | .07 |
| 20 | 1.1 | 21 | .05 | e53 | 295 | 20 | 1.3 | 25 | .08 |
| 21 | 1.1 | 26 | .06 | e20 | 133 | 3.4 | 1.3 | 30 | .10 |
| 22 | 1.2 | 20 | .05 | e5.4 | 67 | .88 | 1.5 | 41 | .20 |
| 23 | 2.9 | 91 | 1.5 | e4.5 | 36 | .41 | 1.2 | 30 | .09 |
| 24 | 14 | 837 | 100 | 3.7 | 25 | .25 | 1.4 | 18 | .09 |
| 25 | 3.5 | 354 | 4.2 | 3.2 | 19 | .17 | 1.6 | 23 | .10 |
| 26 | 1.3 | 99 | .72 | 5.9 | 38 | .69 | 1.1 | 19 | .05 |
| 27 | 1.5 | 107 | .63 | 5.3 | 35 | .38 | 1.1 | 20 | .05 |
| 28 | .63 | 24 | .04 | 3.8 | 43 | .35 | 1.0 | 20 | .05 |
| 29 | .54 | 20 | .03 | --- | --- | --- | 1.0 | 17 | .04 |
| 30 | .54 | 17 | .02 | --- | --- | --- | e.78 | 15 | .04 |
| 31 | .47 | 24 | .03 | --- | --- | --- | e.47 | 15 | .04 |
| TOTAL | 50.08 | --- | 108.70 | 205.26 | --- | 199.15 | 49.75 | --- | 3.36 |

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN- TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|--------|----------------------------|--------------------------------------|-------------------------------------|
| APRIL | | | |
| 1 | e.82 | 16 | .05 |
| 2 | .73 | 17 | .03 |
| 3 | .73 | 18 | .04 |
| 4 | .80 | 18 | .05 |
| 5 | .82 | 19 | .04 |
| 6 | 1.1 | 20 | .06 |
| 7 | 1.1 | 19 | .06 |
| 8 | 4.7 | 124 | 5.2 |
| 9 | 1.8 | 37 | .26 |
| 10 | .96 | 12 | .03 |
| 11 | .96 | 16 | .04 |
| 12 | .95 | 22 | .05 |
| 13 | .95 | 21 | .05 |
| 14 | .92 | 21 | .05 |
| 15 | .82 | 29 | .06 |
| 16 | .74 | 27 | .05 |
| 17 | .73 | 25 | .04 |
| 18 | .74 | 22 | .04 |
| 19 | .77 | 19 | .03 |
| 20 | .83 | 17 | .03 |
| 21 | e.69 | 19 | .03 |
| 22 | e.39 | 26 | .04 |
| 23 | e5.3 | 316 | 23 |
| 24 | 2.0 | 78 | .45 |
| 25 | 17 | 654 | 78 |
| 26 | 2.2 | 30 | .20 |
| 27 | 1.3 | 20 | .06 |
| 28 | 1.1 | 19 | .05 |
| 29 | 1.1 | 27 | .07 |
| 30 | 1.1 | 24 | .06 |
| 31 | --- | --- | --- |
| TOTAL | 54.15 | --- | 108.22 |
| PERIOD | 470.98 | | 684.70 |

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| MONTH | WATER DISCHARGE CFS-DAYS | SUSPENDED SEDIMENT DISCHARGE TONS | BEDLOAD DISCHARGE TONS | TOTAL SEDIMENT DISCHARGE TONS |
|---------------|--------------------------------|--|------------------------------|--|
| OCTOBER 1993 | 14.17 | 50.00 | 0 | 50 |
| NOVEMBER | 42.41 | 98.84 | 0 | 99 |
| DECEMBER | 55.16 | 80.43 | 1 | 81 |
| JANUARY 1994 | 50.08 | 108.70 | 1 | 110 |
| FEBRUARY | 205.26 | 199.15 | 4 | 203 |
| MARCH | 49.75 | 3.36 | 0 | 3 |
| APRIL | 54.15 | 108.22 | 1 | 109 |
| PERIOD | 470.98 | 648.70 | 7 | 655 |

SAN LORENZO CREEK BASIN

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 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 150 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2215 | *50 | *1.98 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|--------|-------|-------|------|------|------|------|------|
| 1 | .00 | .00 | .04 | .00 | .16 | 1.3 | .36 | .32 | .08 | .03 | .00 | .00 |
| 2 | .00 | .00 | .00 | .00 | .16 | 1.2 | .30 | .18 | .07 | .03 | .00 | .00 |
| 3 | .00 | .00 | .00 | .00 | .16 | 1.5 | .31 | .19 | .08 | .04 | .00 | .00 |
| 4 | .00 | .00 | .00 | .00 | .16 | 1.6 | .45 | .19 | .08 | .04 | .00 | .00 |
| 5 | .00 | .00 | .00 | .00 | .17 | 1.2 | .42 | .19 | .08 | .04 | .00 | .00 |
| 6 | .00 | .00 | .00 | .00 | 1.2 | .90 | .29 | .62 | .07 | .03 | .00 | .00 |
| 7 | .00 | .00 | .00 | .00 | 10 | .79 | .35 | 3.0 | .07 | .03 | .00 | .00 |
| 8 | .00 | .00 | .15 | .00 | 5.5 | .63 | .85 | .47 | .06 | .03 | .00 | .00 |
| 9 | .00 | .00 | .48 | .00 | 1.5 | .56 | 1.8 | .30 | .06 | .02 | .00 | .00 |
| 10 | .00 | .13 | .10 | .00 | 4.5 | .61 | e.50 | .25 | .06 | .02 | .00 | .00 |
| 11 | .00 | .04 | 1.8 | .00 | 2.7 | .55 | e.17 | .23 | .05 | .02 | .00 | .00 |
| 12 | .00 | .04 | .28 | .00 | 1.0 | .51 | .14 | .22 | .06 | .02 | .00 | .00 |
| 13 | .00 | .03 | .09 | .00 | .70 | .36 | .67 | .19 | .06 | .01 | .00 | .00 |
| 14 | .00 | .00 | 4.8 | .00 | .59 | .48 | .21 | .18 | .05 | .01 | .00 | .00 |
| 15 | .09 | .00 | 1.5 | .00 | .55 | .50 | .21 | .18 | .05 | .00 | .00 | .00 |
| 16 | .04 | .00 | e.11 | .00 | .49 | .81 | .14 | .17 | .05 | .00 | .00 | .00 |
| 17 | .03 | .00 | e.06 | .00 | 6.5 | .76 | e.13 | .24 | .04 | .00 | .00 | .00 |
| 18 | .03 | .00 | e.00 | .00 | 19 | .51 | e.09 | .22 | .04 | .00 | .00 | .00 |
| 19 | .03 | .00 | .00 | .00 | 17 | .72 | e.09 | .20 | .04 | .00 | .00 | .00 |
| 20 | .03 | .00 | .00 | .00 | 16 | .70 | e.09 | .19 | .04 | .00 | .00 | .00 |
| 21 | .02 | .00 | .00 | .00 | 7.8 | e.80 | .09 | .18 | .04 | .00 | .00 | .00 |
| 22 | .01 | .00 | .00 | .00 | 4.4 | e.98 | .07 | .17 | .04 | .00 | .00 | .00 |
| 23 | .01 | .00 | .00 | .24 | 3.0 | e.84 | .27 | .14 | .04 | .00 | .00 | .00 |
| 24 | .00 | .00 | .00 | 3.8 | 2.9 | e.88 | .57 | .14 | .04 | .00 | .00 | .00 |
| 25 | .00 | .00 | .00 | 1.4 | 2.6 | .75 | 2.5 | .15 | .04 | .00 | .00 | .00 |
| 26 | .00 | .00 | .00 | .50 | 2.4 | .47 | e1.0 | .15 | .04 | .00 | .00 | .00 |
| 27 | .00 | .00 | .00 | .29 | 2.2 | .40 | .20 | .15 | .03 | .00 | .00 | .00 |
| 28 | .00 | .09 | .00 | .24 | 2.0 | .40 | .15 | .12 | .03 | .00 | .00 | .00 |
| 29 | .00 | .14 | .00 | .17 | --- | .44 | e.12 | .11 | .03 | .00 | .00 | .00 |
| 30 | .00 | .05 | .00 | .16 | --- | .45 | e.83 | .10 | .03 | .00 | .00 | .00 |
| 31 | .00 | --- | .00 | .16 | --- | .36 | --- | .08 | --- | .00 | .00 | --- |
| TOTAL | 0.29 | 0.52 | 9.41 | 6.96 | 115.34 | 22.96 | 13.37 | 9.22 | 1.55 | 0.37 | 0.00 | 0.00 |
| MEAN | .009 | .017 | .30 | .22 | 4.12 | .74 | .45 | .30 | .052 | .012 | .000 | .000 |
| MAX | .09 | .14 | 4.8 | 3.8 | 19 | 1.6 | 2.5 | 3.0 | .08 | .04 | .00 | .00 |
| MIN | .00 | .00 | .00 | .00 | .16 | .36 | .07 | .08 | .03 | .00 | .00 | .00 |
| AC-FT | .6 | 1.0 | 19 | 14 | 229 | 46 | 27 | 18 | 3.1 | .7 | .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 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .054 | .95 | 2.53 | 7.27 | 11.2 | 8.27 | 2.59 | .69 | .20 | .052 | .011 | .005 |
| MAX | .45 | 6.00 | 14.0 | 35.5 | 39.7 | 54.3 | 16.8 | 3.56 | .95 | .25 | .12 | .079 |
| (WY) | 1983 | 1984 | 1984 | 1982 | 1982 | 1983 | 1982 | 1983 | 1983 | 1982 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1979 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 1595.96 | | | | 179.99 | | | | | | | |
| ANNUAL MEAN | 4.37 | | | | .49 | | | | 2.77 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 10.3 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .054 | | | |
| HIGHEST DAILY MEAN | 315 | | | | 19 | | | | 445 | | | |
| LOWEST DAILY MEAN | .00 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .00 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 50 | | | | 1690 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 1.98 | | | | 8.71 | | | |
| ANNUAL RUNOFF (AC-FT) | 3170 | | | | 357 | | | | 2010 | | | |
| 10 PERCENT EXCEEDS | 10 | | | | .86 | | | | 4.5 | | | |
| 50 PERCENT EXCEEDS | .09 | | | | .03 | | | | .07 | | | |
| 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.--

WATER TEMPERATURE: October 1978 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1978 to current year.

REMARKS.--Zero bedload discharge observed at flows less than 0.84 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, Jan. 13, 1993; minimum daily mean, no flow many days during most years.

SEDIMENT LOAD: Maximum daily, 26,400 tons, Feb. 17, 1986; minimum daily, 0 tons many days during most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 1,190 mg/L, Feb. 20; minimum daily mean, no flow on many days.

SEDIMENT LOAD (storm season only): Maximum daily, 79 tons, Feb. 19; minimum daily, 0 tons on many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDED (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) | SED. SUSP. FALL DIAM. % FINER THAN .002 MM | SED. SUSP. FALL DIAM. % FINER THAN .004 MM | SED. SUSP. FALL DIAM. % FINER THAN .008 MM |
|-------|------|--|--------------------------------------|--|--|--|--|--|
| DEC | | | | | | | | |
| 14... | 0925 | 9.7 | 9.0 | 604 | 16 | -- | -- | -- |
| 16... | 1055 | 0.09 | 5.0 | 10 | 0.00 | -- | -- | -- |
| JAN | | | | | | | | |
| 25... | 2055 | 1.8 | 8.0 | 110 | 0.53 | -- | -- | -- |
| FEB | | | | | | | | |
| 07... | 1755 | 6.6 | 10.0 | 140 | 2.5 | -- | -- | -- |
| 17... | 2050 | 12 | 8.5 | 828 | 27 | -- | -- | -- |
| 19... | 2205 | 40 | 7.0 | 4570 | 494 | 39 | 47 | 53 |
| MAR | | | | | | | | |
| 08... | 1440 | 0.49 | 13.5 | 18 | 0.02 | -- | -- | -- |
| 20... | 1545 | 0.40 | 12.0 | 9 | 0.01 | -- | -- | -- |
| 22... | 1535 | 0.34 | 9.5 | 8 | 0.01 | -- | -- | -- |
| APR | | | | | | | | |
| 23... | 1420 | 0.59 | 11.5 | 104 | 0.17 | -- | -- | -- |
| 23... | 1445 | 0.40 | 11.0 | 70 | 0.08 | -- | -- | -- |

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | SED. SUSP. FALL DIAM. % FINER THAN .016 MM | SED. SUSP. FALL DIAM. % FINER THAN .031 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM | SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM |
|-------|--|--|---|---|---|---|---|
| DEC | | | | | | | |
| 14... | -- | -- | 98 | 99 | 100 | -- | -- |
| 16... | -- | -- | 88 | -- | -- | -- | -- |
| JAN | | | | | | | |
| 25... | -- | -- | 99 | 99 | 100 | -- | -- |
| FEB | | | | | | | |
| 07... | -- | -- | 98 | 99 | 100 | -- | -- |
| 17... | -- | -- | 100 | -- | -- | -- | -- |
| 19... | 65 | 74 | 81 | 90 | 97 | 99 | 100 |
| MAR | | | | | | | |
| 08... | -- | -- | 44 | -- | -- | -- | -- |
| 20... | -- | -- | 35 | -- | -- | -- | -- |
| 22... | -- | -- | 40 | -- | -- | -- | -- |
| APR | | | | | | | |
| 23... | -- | -- | 100 | -- | -- | -- | -- |
| 23... | -- | -- | 84 | -- | -- | -- | -- |

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | TEMPER- ATURE WATER (DEG C) | NUMBER OF SAM- PLING POINTS (COUNT) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | BED MAT. SIEVE DIAM. % FINER THAN .062 MM | BED MAT. SIEVE DIAM. % FINER THAN .125 MM | BED MAT. SIEVE DIAM. % FINER THAN .250 MM | BED MAT. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--------------------------------------|--|--|---|---|---|---|
| MAY | | | | | | | | |
| 02... | 1515 | 14.5 | 1 | 0.19 | 6 | 20 | 48 | 60 |
| 02... | 1520 | 14.5 | 1 | 0.19 | 6 | 24 | 64 | 81 |
| 02... | 1525 | 14.5 | 1 | 0.19 | 1 | 2 | 9 | 22 |
| 02... | 1530 | 14.5 | 1 | 0.19 | -- | 1 | 3 | 13 |
| 02... | 1535 | 14.5 | 1 | 0.19 | 5 | 10 | 18 | 24 |

| DATE | BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM |
|-------|---|---|---|---|---|---|---|
| MAY | | | | | | | |
| 02... | 66 | 69 | 72 | 73 | 78 | 83 | 100 |
| 02... | 91 | 96 | 99 | 99 | 100 | -- | -- |
| 02... | 32 | 40 | 47 | 55 | 67 | 89 | 100 |
| 02... | 24 | 37 | 55 | 75 | 93 | 100 | -- |
| 02... | 29 | 35 | 41 | 47 | 54 | 59 | 100 |

SAN LORENZO CREEK BASIN

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
INSTANTANEOUS VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-----|-----|------|-----|------|------|------|------|-----|-----|-----|-----|
| 1 | --- | --- | --- | --- | 7.0 | --- | --- | --- | --- | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | 13.5 | --- | 14.5 | --- | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | 12.0 | --- | --- | --- | --- | --- |
| 4 | --- | --- | --- | --- | 6.0 | --- | --- | --- | --- | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | 13.0 | --- | --- | --- | --- | --- | --- |
| 6 | --- | --- | --- | --- | 9.0 | --- | 11.5 | --- | --- | --- | --- | --- |
| 7 | --- | --- | --- | --- | 10.0 | --- | --- | --- | --- | --- | --- | --- |
| 8 | --- | --- | --- | --- | 9.0 | 12.5 | 11.0 | --- | --- | --- | --- | --- |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | --- | --- | --- | --- | --- | 12.0 | 10.0 | --- | --- | --- | --- | --- |
| 11 | --- | --- | --- | --- | 7.5 | --- | 13.5 | --- | --- | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | 13.0 | --- | --- | --- | --- | --- | --- |
| 14 | --- | --- | 10.0 | --- | 7.5 | --- | 14.5 | --- | --- | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | --- | --- | 5.0 | --- | 10.0 | 12.0 | --- | --- | --- | --- | --- | --- |
| 17 | --- | --- | --- | --- | 8.5 | --- | 15.5 | --- | --- | --- | --- | --- |
| 18 | --- | --- | --- | --- | 6.5 | 12.0 | --- | --- | --- | --- | --- | --- |
| 19 | --- | --- | --- | --- | 7.0 | --- | 14.0 | --- | --- | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | 12.0 | --- | --- | --- | --- | --- | --- |
| 21 | --- | --- | --- | --- | 8.5 | --- | --- | --- | --- | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | 9.5 | --- | --- | --- | --- | --- | --- |
| 23 | --- | --- | --- | --- | 9.0 | 10.0 | 11.0 | --- | --- | --- | --- | --- |
| 24 | --- | --- | --- | 9.0 | --- | --- | 11.0 | --- | --- | --- | --- | --- |
| 25 | --- | --- | --- | 8.0 | --- | 11.0 | 11.0 | --- | --- | --- | --- | --- |
| 26 | --- | --- | --- | 8.5 | 11.0 | --- | 12.5 | --- | --- | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | 13.5 | --- | --- | --- | --- | --- | --- |
| 28 | --- | --- | --- | --- | 13.0 | --- | 12.0 | --- | --- | --- | --- | --- |
| 29 | --- | --- | --- | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | 13.0 | 11.5 | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| 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 | .00 | 0 | .00 | .00 | 0 | .00 | .04 | 0 | .00 |
| 2 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 3 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 4 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 5 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 6 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 7 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 8 | .00 | 0 | .00 | .00 | 0 | .00 | .15 | 2 | .00 |
| 9 | .00 | 0 | .00 | .00 | 0 | .00 | .48 | 6 | .01 |
| 10 | .00 | 0 | .00 | .13 | 13 | .02 | .10 | 2 | .00 |
| 11 | .00 | 0 | .00 | .04 | 28 | .00 | 1.8 | 41 | .43 |
| 12 | .00 | 0 | .00 | .04 | 8 | .00 | .28 | 10 | .01 |
| 13 | .00 | 0 | .00 | .03 | 2 | .00 | .09 | 4 | .00 |
| 14 | .00 | 0 | .00 | .00 | 0 | .00 | 4.8 | 190 | 3.7 |
| 15 | .09 | 3 | .00 | .00 | 0 | .00 | 1.5 | 22 | .13 |
| 16 | .04 | 1 | .00 | .00 | 0 | .00 | e.11 | 10 | .00 |
| 17 | .03 | 0 | .00 | .00 | 0 | .00 | e.06 | 10 | .00 |
| 18 | .03 | 0 | .00 | .00 | 0 | .00 | e.00 | 0 | .00 |
| 19 | .03 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 20 | .03 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 21 | .02 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 22 | .01 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 23 | .01 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 24 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 25 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 26 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 27 | .00 | 0 | .00 | .00 | 0 | .00 | .00 | 0 | .00 |
| 28 | .00 | 0 | .00 | .09 | 1 | .00 | .00 | 0 | .00 |
| 29 | .00 | 0 | .00 | .14 | 3 | .00 | .00 | 0 | .00 |
| 30 | .00 | 0 | .00 | .05 | 2 | .00 | .00 | 0 | .00 |
| 31 | .00 | 0 | .00 | --- | --- | --- | .00 | 0 | .00 |
| TOTAL | 0.29 | --- | 0.00 | 0.52 | --- | 0.02 | 9.41 | --- | 4.28 |

e Estimated

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| 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 | .00 | 0 | .00 | .16 | 24 | .01 | 1.3 | 19 | .06 |
| 2 | .00 | 0 | .00 | .16 | 21 | .01 | 1.2 | 22 | .07 |
| 3 | .00 | 0 | .00 | .16 | 17 | .01 | 1.5 | 23 | .09 |
| 4 | .00 | 0 | .00 | .16 | 13 | .01 | 1.6 | 23 | .10 |
| 5 | .00 | 0 | .00 | .17 | 11 | .00 | 1.2 | 23 | .08 |
| 6 | .00 | 0 | .00 | 1.2 | 42 | .27 | .90 | 21 | .05 |
| 7 | .00 | 0 | .00 | 10 | 565 | 22 | .79 | 20 | .04 |
| 8 | .00 | 0 | .00 | 5.5 | 43 | .70 | .63 | 16 | .03 |
| 9 | .00 | 0 | .00 | 1.5 | 13 | .06 | .56 | 14 | .02 |
| 10 | .00 | 0 | .00 | 4.5 | 57 | 1.2 | .61 | 16 | .03 |
| 11 | .00 | 0 | .00 | 2.7 | 40 | .31 | .55 | 17 | .02 |
| 12 | .00 | 0 | .00 | 1.0 | 27 | .08 | .51 | 16 | .02 |
| 13 | .00 | 0 | .00 | .70 | 20 | .04 | .36 | 15 | .02 |
| 14 | .00 | 0 | .00 | .59 | 15 | .02 | .48 | 16 | .02 |
| 15 | .00 | 0 | .00 | .55 | 12 | .02 | .50 | 11 | .02 |
| 16 | .00 | 0 | .00 | .49 | 10 | .01 | .81 | 10 | .03 |
| 17 | .00 | 0 | .00 | 6.5 | 540 | 15 | .76 | 21 | .04 |
| 18 | .00 | 0 | .00 | 19 | 807 | 47 | .51 | 16 | .02 |
| 19 | .00 | 0 | .00 | 17 | 817 | 79 | .72 | 12 | .02 |
| 20 | .00 | 0 | .00 | 16 | 1190 | 72 | .70 | 9 | .02 |
| 21 | .00 | 0 | .00 | 7.8 | 186 | 3.8 | e.80 | 10 | .02 |
| 22 | .00 | 0 | .00 | 4.4 | 62 | .78 | e.98 | 17 | .04 |
| 23 | .24 | 10 | .01 | 3.0 | 21 | .17 | e.84 | 8 | .02 |
| 24 | 3.8 | 174 | 2.7 | 2.9 | 17 | .13 | e.88 | 8 | .02 |
| 25 | 1.4 | 64 | .29 | 2.6 | 19 | .13 | .75 | 9 | .02 |
| 26 | .50 | 26 | .05 | 2.4 | 21 | .14 | .47 | 8 | .01 |
| 27 | .29 | 20 | .02 | 2.2 | 20 | .11 | .40 | 6 | .01 |
| 28 | .24 | 10 | .01 | 2.0 | 18 | .09 | .40 | 6 | .01 |
| 29 | .17 | 12 | .01 | --- | --- | --- | .44 | 7 | .01 |
| 30 | .16 | 27 | .01 | --- | --- | --- | .45 | 7 | .01 |
| 31 | .16 | 26 | .01 | --- | --- | --- | .36 | 6 | .01 |
| TOTAL | 6.96 | --- | 3.11 | 115.34 | --- | 243.10 | 22.96 | --- | .98 |

e Estimated

SAN LORENZO CREEK BASIN

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued
 SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN- TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|--------|----------------------------|--------------------------------------|-------------------------------------|
| APRIL | | | |
| 1 | .36 | 6 | .01 |
| 2 | .30 | 6 | .00 |
| 3 | .31 | 7 | .01 |
| 4 | .45 | 13 | .02 |
| 5 | .42 | 16 | .02 |
| 6 | .29 | 11 | .01 |
| 7 | .35 | 8 | .01 |
| 8 | .85 | 17 | .07 |
| 9 | 1.8 | 63 | .40 |
| 10 | e.50 | 17 | .02 |
| 11 | e.17 | 16 | .01 |
| 12 | .14 | 16 | .01 |
| 13 | .67 | 50 | .14 |
| 14 | .21 | 23 | .01 |
| 15 | .21 | 15 | .01 |
| 16 | .14 | 13 | .00 |
| 17 | e.13 | 12 | .00 |
| 18 | e.09 | 11 | .00 |
| 19 | e.09 | 9 | .00 |
| 20 | e.09 | 9 | .00 |
| 21 | .09 | 9 | .00 |
| 22 | .07 | 8 | .00 |
| 23 | .27 | 19 | .02 |
| 24 | .57 | 8 | .01 |
| 25 | 2.5 | 46 | .35 |
| 26 | e1.0 | 32 | .11 |
| 27 | .20 | 22 | .01 |
| 28 | .15 | 17 | .01 |
| 29 | e.12 | 20 | .01 |
| 30 | e.83 | 26 | .06 |
| 31 | --- | --- | --- |
| TOTAL | 13.37 | --- | 1.33 |
| PERIOD | 168.85 | | 252.82 |

e Estimated

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| MONTH | WATER DISCHARGE CFS-DAYS | SUSPENDED SEDIMENT DISCHARGE TONS | BEDLOAD DISCHARGE TONS | TOTAL SEDIMENT DISCHARGE TONS |
|---------------|--------------------------------|--|------------------------------|--|
| OCTOBER 1993 | 0.29 | 0.00 | 0 | 0 |
| NOVEMBER | 0.52 | 0.02 | 0 | 0 |
| DECEMBER | 9.41 | 4.28 | 4 | 8 |
| JANUARY 1994 | 6.96 | 3.11 | 1 | 4 |
| FEBRUARY | 115.34 | 243.10 | 131 | 374 |
| MARCH | 22.96 | 0.98 | 0 | 1 |
| APRIL | 13.37 | 1.33 | 0 | 1 |
| PERIOD | 168.85 | 252.82 | 136 | 388 |

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.--No estimated daily discharges. Records good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s, Jan. 23, 1983, gage height, 8.51 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Oct. 15 | 0420 | *557 | *5.51 | | | | |

Minimum daily, 0.17 ft³/s, Sept. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|-------|--------|-------|-------|-------|-------|------|------|------|
| 1 | .33 | 1.6 | .71 | .40 | .57 | 1.0 | .54 | .63 | .52 | .90 | .32 | .21 |
| 2 | .28 | .72 | .58 | .40 | .57 | 1.3 | .65 | .58 | .53 | .30 | .26 | .21 |
| 3 | .29 | .31 | .46 | .46 | .53 | 1.1 | .50 | .58 | .51 | .31 | .27 | .21 |
| 4 | .31 | .39 | 1.0 | 1.4 | .50 | .89 | .49 | .68 | .56 | .29 | .25 | .25 |
| 5 | .30 | .28 | .42 | .56 | .48 | 1.2 | .53 | .64 | .51 | .29 | .26 | .20 |
| 6 | .28 | .26 | .44 | .47 | 19 | .76 | .51 | 21 | 2.2 | .29 | .25 | .20 |
| 7 | .29 | .28 | .43 | .40 | 37 | .71 | .51 | 32 | .45 | .28 | .24 | .20 |
| 8 | .29 | .26 | 23 | .46 | 8.0 | .77 | 13 | 1.8 | .47 | .28 | .39 | .39 |
| 9 | .27 | .33 | 14 | .42 | 1.4 | .68 | 1.2 | 1.1 | .50 | .27 | .25 | .22 |
| 10 | .28 | 27 | .81 | .40 | 8.1 | .70 | .68 | .88 | .45 | .24 | .24 | .20 |
| 11 | .29 | .93 | 30 | .44 | 1.3 | .67 | .63 | .77 | .44 | .26 | .25 | .22 |
| 12 | .26 | .55 | 1.1 | .38 | .94 | .59 | .63 | .68 | .42 | .24 | .26 | .20 |
| 13 | .28 | .42 | 7.1 | .38 | .86 | .64 | .61 | .77 | 1.0 | .25 | .24 | .19 |
| 14 | .95 | .36 | 30 | .40 | .78 | .75 | .82 | .66 | .42 | .24 | .55 | .21 |
| 15 | 20 | .59 | 1.3 | .38 | .73 | .58 | .60 | 1.4 | .38 | .24 | .34 | .20 |
| 16 | .47 | .58 | .81 | .37 | 1.1 | .67 | .59 | .56 | .42 | .23 | .29 | .22 |
| 17 | .39 | .60 | .66 | .36 | 26 | .59 | .56 | 4.2 | .35 | .22 | .44 | .20 |
| 18 | .37 | .88 | .58 | .47 | 19 | .58 | .57 | .62 | .37 | .22 | .24 | .19 |
| 19 | .35 | .39 | .52 | .44 | 62 | .57 | .55 | .60 | .34 | .26 | .24 | .20 |
| 20 | .34 | .35 | .51 | .50 | 16 | .55 | .56 | .52 | .34 | .25 | .22 | .21 |
| 21 | .75 | .35 | .50 | .48 | 14 | .53 | .54 | .54 | .33 | .25 | .22 | .19 |
| 22 | .76 | 1.4 | .54 | .41 | 3.0 | .67 | .56 | .54 | .33 | .24 | .25 | .20 |
| 23 | .33 | .61 | .50 | 7.5 | 1.9 | .56 | 10 | .54 | .33 | .23 | .22 | .33 |
| 24 | .35 | .59 | .42 | 34 | 1.6 | 2.7 | .79 | .54 | .33 | .23 | .25 | .19 |
| 25 | .33 | .40 | .43 | 13 | 1.4 | 1.6 | 26 | .54 | .32 | .26 | .23 | .18 |
| 26 | .50 | .40 | .45 | 8.7 | 7.0 | .58 | 1.3 | .51 | .31 | .25 | .25 | .18 |
| 27 | .42 | .39 | .57 | 3.6 | 1.8 | .54 | .85 | .52 | .33 | .29 | .22 | .17 |
| 28 | .35 | 18 | .50 | .91 | 1.3 | .58 | .72 | .51 | .30 | .29 | .22 | .18 |
| 29 | .31 | 22 | .41 | .71 | --- | .53 | .65 | .56 | .82 | .27 | .24 | .33 |
| 30 | .32 | 1.1 | .49 | .64 | --- | .51 | .65 | .57 | 1.9 | .25 | .22 | .19 |
| 31 | .35 | --- | .41 | .60 | --- | .51 | --- | .52 | --- | .30 | .22 | --- |
| TOTAL | 31.39 | 82.32 | 119.65 | 80.04 | 236.86 | 24.61 | 66.79 | 76.56 | 16.48 | 8.72 | 8.34 | 6.47 |
| MEAN | 1.01 | 2.74 | 3.86 | 2.58 | 8.46 | .79 | 2.23 | 2.47 | .55 | .28 | .27 | .22 |
| MAX | 20 | 27 | 30 | 34 | 62 | 2.7 | 26 | 32 | 2.2 | .90 | .55 | .39 |
| MIN | .26 | .26 | .41 | .36 | .48 | .51 | .49 | .51 | .30 | .22 | .22 | .17 |
| AC-FT | 62 | 163 | 237 | 159 | 470 | 49 | 132 | 152 | 33 | 17 | 17 | 13 |

11181008 CASTRO VALLEY CREEK AT HAYWARD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.73 | 4.60 | 5.02 | 8.06 | 9.44 | 7.34 | 2.75 | .96 | .52 | .37 | .35 | .54 |
| MAX | 4.97 | 19.0 | 12.8 | 24.6 | 25.5 | 34.6 | 12.3 | 3.23 | .78 | 1.15 | 1.50 | 1.62 |
| (WY) | 1976 | 1974 | 1984 | 1982 | 1986 | 1983 | 1974 | 1990 | 1974 | 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 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1972 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 1411.51 | | 758.23 | | | |
| ANNUAL MEAN | 3.87 | | 2.08 | | | |
| HIGHEST ANNUAL MEAN | | | | | 3.68 | |
| LOWEST ANNUAL MEAN | | | | | 8.76 | 1983 |
| HIGHEST DAILY MEAN | 163 | Jan 13 | 62 | Feb 19 | 1.51 | 1972 |
| LOWEST DAILY MEAN | .24 | Sep 27 | .17 | Sep 27 | 322 | Jan 4 1982 |
| ANNUAL SEVEN-DAY MINIMUM | .27 | Sep 23 | .20 | Sep 12 | .00 | Oct 11 1977 |
| INSTANTANEOUS PEAK FLOW | | | 557 | Oct 15 | .00 | Oct 11 1977 |
| INSTANTANEOUS PEAK STAGE | | | 5.51 | Oct 15 | 1350 | Jan 23 1983 |
| INSTANTANEOUS LOW FLOW | | | | | 8.51 | Jan 23 1983 |
| ANNUAL RUNOFF (AC-FT) | 2800 | | 1500 | | .08 | Oct 7 1992 |
| 10 PERCENT EXCEEDS | 10 | | 1.8 | | 6.0 | |
| 50 PERCENT EXCEEDS | .59 | | .50 | | .46 | |
| 90 PERCENT EXCEEDS | .30 | | .23 | | .18 | |

SAN LORENZO CREEK BASIN

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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.--No estimated daily discharges. Records good. Flow partly regulated by Cull Creek Reservoir beginning in October 1962 (capacity, 310 acre-ft) and Don Castro Reservoir (capacity, 380 acre-ft) 7 mi upstream beginning in January 1965. A few very small diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft³/s, Jan. 13, 1993, gage height, 9.19 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 850 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Jan. 24 | 0600 | *825 | *5.24 | | | | |

Minimum daily, 0.32 ft³/s, Aug. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | .89 | 4.1 | 3.7 | .80 | 2.6 | 14 | 6.5 | 2.8 | 11 | 3.4 | .39 | .37 |
| 2 | .77 | 3.2 | 2.4 | .76 | 2.7 | 13 | 7.9 | 2.6 | 12 | 1.6 | .32 | .36 |
| 3 | .93 | 1.7 | 1.9 | .80 | 2.7 | 11 | 7.7 | 2.5 | 11 | 1.7 | .37 | .38 |
| 4 | 1.1 | 2.0 | 2.9 | 1.4 | 2.5 | 10 | 8.6 | 2.5 | 11 | 1.7 | .35 | .42 |
| 5 | 1.1 | 1.8 | 1.9 | 2.1 | 2.4 | 12 | 9.8 | 2.8 | 11 | 1.7 | .37 | .38 |
| 6 | 1.2 | 1.8 | 1.7 | .96 | 37 | 9.9 | 10 | 35 | 14 | 1.8 | .37 | .40 |
| 7 | 1.1 | 2.0 | 1.6 | .78 | 89 | 8.6 | 12 | 79 | 6.3 | 1.7 | .36 | .38 |
| 8 | 1.0 | 1.8 | 36 | .81 | 34 | 8.6 | 33 | 13 | 5.2 | 1.7 | .49 | .50 |
| 9 | .87 | 2.2 | 46 | .87 | 11 | 8.5 | 22 | 5.5 | 4.5 | 1.8 | .40 | .42 |
| 10 | .84 | 52 | 7.1 | .82 | 22 | 8.7 | 6.6 | 4.4 | 3.5 | 1.7 | .45 | .38 |
| 11 | .89 | 15 | 62 | .78 | 16 | 8.3 | 5.1 | 3.9 | 2.8 | 1.8 | .49 | .41 |
| 12 | .87 | 3.6 | 13 | .73 | 6.7 | 6.8 | 4.7 | 3.9 | 2.7 | 1.6 | .53 | .42 |
| 13 | 1.0 | 1.9 | 8.1 | .71 | 5.7 | 5.7 | 4.6 | 4.3 | 3.7 | 1.6 | .57 | .44 |
| 14 | 3.3 | 1.4 | 70 | .78 | 5.0 | 6.0 | 5.1 | 4.1 | 2.0 | 1.4 | .85 | .50 |
| 15 | 41 | 1.6 | 9.7 | .82 | 4.6 | 5.5 | 4.1 | 7.6 | 1.8 | 1.3 | .79 | .47 |
| 16 | 4.2 | 1.6 | 2.8 | .76 | 4.4 | 5.2 | 3.8 | 5.0 | 1.9 | 1.2 | .55 | .51 |
| 17 | 2.3 | 1.6 | 1.8 | .67 | 42 | 4.9 | 3.8 | 21 | 1.6 | 1.1 | .77 | .47 |
| 18 | 1.7 | 2.1 | 1.4 | .74 | 63 | 4.8 | 3.8 | 9.1 | 1.6 | .95 | .47 | .54 |
| 19 | 1.4 | 1.3 | 1.2 | .74 | 123 | 4.8 | 3.7 | 6.8 | 1.6 | .92 | .57 | .53 |
| 20 | 1.2 | 1.2 | 1.1 | .78 | 95 | 4.6 | 3.7 | 6.0 | 1.6 | .67 | .54 | .54 |
| 21 | 1.8 | 1.5 | 1.0 | .87 | 44 | 4.2 | 3.6 | 5.9 | 1.7 | .55 | .56 | .57 |
| 22 | 2.0 | 4.1 | 1.0 | .76 | 24 | 5.3 | 3.7 | 6.1 | 1.7 | .47 | .59 | .61 |
| 23 | 1.3 | 1.8 | .96 | 16 | 19 | 5.0 | 25 | 6.1 | 1.7 | .41 | .49 | .85 |
| 24 | 1.4 | 1.4 | .82 | 92 | 17 | 6.0 | 11 | 6.0 | 1.8 | .35 | .47 | .53 |
| 25 | 1.4 | 1.2 | .78 | 36 | 16 | 14 | 64 | 7.8 | 1.7 | .36 | .47 | .51 |
| 26 | 1.9 | 1.2 | .85 | 22 | 26 | 5.0 | 16 | 8.8 | 1.8 | .34 | .46 | .43 |
| 27 | 2.0 | 1.3 | 1.1 | 24 | 22 | 4.5 | 4.5 | 9.1 | 1.9 | .35 | .43 | .37 |
| 28 | 1.5 | 35 | .90 | 5.5 | 17 | 4.9 | 3.4 | 9.6 | 1.9 | .51 | .40 | .50 |
| 29 | 1.4 | 42 | .80 | 4.9 | --- | 5.0 | 2.9 | 10 | 3.0 | .51 | .43 | .46 |
| 30 | 1.5 | 13 | .83 | 3.3 | --- | 5.7 | 2.9 | 11 | 6.6 | .33 | .37 | .48 |
| 31 | 1.8 | --- | .80 | 3.1 | --- | 6.1 | --- | 11 | --- | .36 | .39 | --- |
| TOTAL | 85.66 | 206.4 | 286.14 | 226.04 | 756.3 | 228.6 | 303.5 | 313.2 | 134.6 | 35.88 | 15.06 | 14.13 |
| MEAN | 2.76 | 6.88 | 9.23 | 7.29 | 27.0 | 7.31 | 10.1 | 10.1 | 4.49 | 1.16 | .49 | .47 |
| MAX | 41 | 52 | 70 | 92 | 123 | 14 | 64 | 79 | 14 | 3.4 | .85 | .85 |
| MIN | .77 | 1.2 | .78 | .67 | 2.4 | 4.2 | 2.9 | 2.5 | 1.6 | .33 | .32 | .36 |
| AC-FT | 170 | 409 | 568 | 448 | 1500 | 449 | 602 | 621 | 267 | 71 | 30 | 28 |

SAN LORENZO CREEK BASIN

11181040 SAN LORENZO CREEK AT SAN LORENZO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 5.75 | 7.95 | 22.5 | 56.8 | 47.2 | 36.1 | 19.7 | 6.78 | 3.51 | 1.50 | 1.25 | 1.76 |
| MAX | 30.2 | 38.1 | 106 | 201 | 183 | 92.7 | 108 | 23.4 | 17.0 | 3.52 | 3.25 | 4.58 |
| (WY) | 1992 | 1974 | 1971 | 1993 | 1969 | 1975 | 1974 | 1993 | 1993 | 1993 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1968 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 12700.60 | | | | 2603.51 | | | | | | | |
| ANNUAL MEAN | 34.8 | | | | 7.13 | | | | 17.5 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 40.9 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 2.38 | | | |
| HIGHEST DAILY MEAN | 1970 Jan 13 | | | | 123 Feb 19 | | | | 2400 Jan 21 1970 | | | |
| LOWEST DAILY MEAN | .25 Sep 1 | | | | .32 Aug 2 | | | | .01 Jun 12 1977 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .34 Aug 30 | | | | .36 Jul 30 | | | | .01 Jun 10 1977 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 825 Jan 24 | | | | 5300 Jan 13 1993 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 5.24 Jan 24 | | | | 9.19 Jan 13 1993 | | | |
| ANNUAL RUNOFF (AC-FT) | 25190 | | | | 5160 | | | | 12640 | | | |
| 10 PERCENT EXCEEDS | 57 | | | | 16 | | | | 38 | | | |
| 50 PERCENT EXCEEDS | 9.1 | | | | 1.9 | | | | 2.2 | | | |
| 90 PERCENT EXCEEDS | .77 | | | | .46 | | | | .53 | | | |

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 Port of Richmond Pier on west side of Point San Pablo.

GAGE-HEIGHT RECORDS

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1989 to current year (gage height only).

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level.

REMARKS.--Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 15.30 ft, Dec. 11, 1993; minimum gage height recorded, 5.11 ft, Dec. 30, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 15.30 ft, Dec. 11; minimum gage height recorded, 5.58 ft, June 23.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|------|----------|------|----------|------|---------|------|----------|------|-------|------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 13.05 | 7.93 | 13.73 | 7.29 | 13.35 | 6.20 | 13.30 | 6.75 | 13.32 | 8.03 | 13.64 | 7.29 |
| 2 | 13.19 | 7.76 | 13.59 | 7.18 | 13.16 | 6.39 | 12.75 | 7.18 | 13.53 | 7.96 | 13.65 | 7.32 |
| 3 | 13.16 | 7.66 | 13.48 | 7.44 | 12.99 | 6.81 | 12.95 | 7.97 | 13.81 | 7.82 | 13.74 | 7.43 |
| 4 | 13.23 | 7.71 | 13.41 | 7.52 | 12.61 | 7.11 | 13.34 | 8.44 | 13.98 | 7.60 | 13.49 | 7.26 |
| 5 | 13.15 | 7.76 | 13.08 | 7.68 | 12.65 | 7.56 | 13.55 | 8.09 | 13.97 | 7.25 | 13.49 | 7.39 |
| 6 | 13.02 | 7.78 | 12.79 | 7.93 | 12.91 | 8.04 | 13.54 | 7.34 | 14.32 | 7.44 | 13.44 | 7.24 |
| 7 | 12.90 | 7.86 | 12.80 | 8.10 | 13.39 | 8.19 | 13.77 | 6.76 | 14.80 | 7.59 | 13.41 | 7.29 |
| 8 | 12.90 | 7.97 | 13.15 | 8.10 | 14.05 | 8.29 | 14.19 | 6.60 | 14.22 | 6.96 | 13.44 | 7.24 |
| 9 | 13.02 | 7.97 | 13.37 | 8.21 | 14.09 | 7.25 | 14.28 | 6.31 | 13.76 | 6.70 | 13.30 | 7.34 |
| 10 | 13.14 | 7.88 | 13.87 | 8.10 | 14.46 | 6.94 | 14.29 | 6.14 | 13.80 | 6.93 | 13.24 | 7.48 |
| 11 | 12.99 | 7.86 | 14.24 | 7.21 | 15.30 | 6.78 | 14.00 | 6.06 | 13.05 | 6.98 | 12.86 | 7.50 |
| 12 | 13.12 | 7.70 | 14.34 | 6.60 | 14.54 | 5.97 | 13.88 | 6.06 | 12.64 | 7.33 | 12.68 | 7.69 |
| 13 | 13.55 | 7.77 | 14.52 | 6.19 | 14.57 | 6.52 | 13.67 | 6.67 | 12.57 | 7.83 | 12.70 | 7.77 |
| 14 | 14.02 | 7.28 | 14.06 | 5.70 | 14.66 | 6.36 | 13.47 | 7.12 | 12.72 | 8.43 | 12.91 | 7.94 |
| 15 | 14.38 | 6.88 | 14.23 | 5.91 | 14.05 | 6.32 | 12.90 | 7.49 | 12.86 | 8.54 | 13.11 | 8.06 |
| 16 | 14.62 | 6.75 | 13.95 | 6.23 | 13.64 | 6.52 | 12.86 | 7.99 | 13.13 | 8.95 | 13.15 | 8.10 |
| 17 | 14.50 | 6.65 | 13.62 | 6.56 | 13.03 | 7.06 | 12.84 | 8.57 | 14.22 | 9.31 | 12.88 | 7.91 |
| 18 | 14.17 | 6.73 | 12.88 | 6.72 | 12.80 | 7.21 | 13.02 | 9.25 | 13.46 | 8.74 | 13.03 | 8.27 |
| 19 | 13.89 | 6.91 | 12.26 | 7.27 | 12.90 | 8.09 | 13.26 | 9.14 | 13.21 | 8.64 | 12.80 | 8.17 |
| 20 | 13.47 | 7.25 | 12.39 | 7.74 | 12.80 | 8.70 | 13.31 | 8.63 | 13.33 | 7.87 | 12.46 | 7.90 |
| 21 | 13.00 | 7.54 | 12.81 | 8.06 | 12.98 | 8.80 | 13.31 | 8.11 | 13.35 | 7.33 | 12.33 | 7.58 |
| 22 | 12.75 | 7.67 | 12.98 | 8.52 | 12.92 | 7.96 | 13.52 | 7.97 | 13.12 | 6.75 | 12.63 | 7.31 |
| 23 | 12.74 | 7.85 | 12.83 | 8.22 | 13.26 | 7.74 | 14.20 | 7.60 | 13.33 | 6.63 | 12.91 | 7.48 |
| 24 | 12.87 | 8.11 | 12.91 | 7.80 | 13.24 | 7.25 | 14.39 | 7.41 | 13.50 | 6.73 | 13.58 | 7.84 |
| 25 | 13.12 | 8.47 | 13.26 | 7.49 | 13.51 | 7.07 | 14.37 | 7.02 | 13.76 | 6.96 | 13.42 | 7.54 |
| 26 | 13.21 | 8.59 | 13.33 | 7.14 | 14.09 | 7.05 | 14.03 | 6.60 | 13.58 | 7.22 | 13.55 | 7.71 |
| 27 | 13.44 | 8.29 | 13.62 | 6.97 | 14.06 | 6.70 | 14.08 | 6.56 | 13.33 | 7.51 | 13.80 | 7.27 |
| 28 | 13.71 | 8.12 | 14.06 | 7.10 | 14.02 | 6.44 | 13.82 | 6.49 | 13.50 | 7.54 | 13.88 | 6.85 |
| 29 | 13.94 | 7.90 | 14.21 | 7.04 | 14.02 | 6.34 | 13.31 | 6.70 | --- | --- | 13.93 | 6.56 |
| 30 | 13.86 | 7.49 | 13.58 | 6.24 | 13.97 | 6.52 | 12.92 | 7.26 | --- | --- | 13.85 | 6.28 |
| 31 | 13.79 | 7.44 | --- | --- | 13.67 | 6.62 | 13.23 | 7.67 | --- | --- | 13.58 | 6.24 |
| MONTH | 14.62 | 6.65 | 14.52 | 5.70 | 15.30 | 5.97 | 14.39 | 6.06 | 14.80 | 6.63 | 13.93 | 6.24 |

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|------|-------|------|-------|------|-------|------|--------|------|-----------|------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 13.38 | 6.53 | 12.85 | 6.65 | 12.88 | 8.01 | 13.17 | 8.65 | 13.19 | 8.01 | 13.31 | 7.65 |
| 2 | 13.09 | 6.85 | 12.35 | 6.96 | 13.01 | 8.53 | 13.30 | 8.40 | 13.28 | 7.59 | 13.31 | 7.36 |
| 3 | 12.75 | 7.02 | 12.51 | 7.41 | 13.06 | 8.22 | 13.57 | 8.10 | 13.52 | 7.33 | 13.32 | 7.16 |
| 4 | 12.52 | 7.29 | 12.88 | 7.97 | 13.15 | 7.71 | 13.80 | 7.84 | 13.55 | 7.08 | 13.37 | 7.06 |
| 5 | 12.43 | 7.35 | 13.01 | 8.36 | 13.41 | 7.41 | 13.75 | 7.52 | 13.75 | 6.82 | 13.29 | 7.22 |
| 6 | 12.56 | 7.55 | 13.21 | 8.09 | 13.29 | 7.08 | 13.83 | 7.06 | 13.84 | 6.82 | 13.29 | 7.44 |
| 7 | 12.61 | 7.64 | 13.28 | 7.80 | 13.26 | 6.73 | 13.92 | 6.81 | 13.73 | 6.90 | 13.46 | 7.75 |
| 8 | 13.00 | 7.96 | 13.30 | 7.43 | 13.37 | 6.39 | 13.94 | 6.87 | 13.73 | 7.11 | 13.56 | 7.45 |
| 9 | 12.74 | 7.72 | 13.26 | 7.07 | 13.66 | 6.37 | 13.88 | 6.77 | 13.44 | 7.12 | 13.59 | 7.35 |
| 10 | 12.78 | 7.16 | 13.27 | 6.81 | 13.65 | 6.66 | 13.77 | 6.87 | 13.08 | 7.36 | 13.48 | 7.30 |
| 11 | 12.88 | 7.01 | 13.28 | 6.68 | 13.66 | 6.77 | 13.51 | 6.89 | 13.37 | 7.85 | 13.47 | 7.31 |
| 12 | 12.94 | 7.00 | 13.28 | 6.59 | 13.53 | 6.91 | 13.18 | 7.15 | 13.54 | 7.91 | 13.47 | 7.38 |
| 13 | 12.95 | 7.03 | 13.07 | 6.54 | 13.18 | 6.89 | 13.15 | 7.53 | 13.52 | 7.68 | 13.33 | 7.30 |
| 14 | 12.97 | 7.05 | 13.14 | 6.81 | 12.72 | 7.06 | 13.45 | 8.02 | 13.69 | 7.63 | 13.20 | 7.17 |
| 15 | 12.97 | 7.20 | 13.01 | 6.89 | 12.64 | 7.37 | 13.66 | 8.52 | 13.92 | 7.41 | 13.37 | 7.10 |
| 16 | 12.83 | 7.32 | 12.61 | 7.14 | 12.92 | 7.64 | 13.92 | 8.37 | 14.02 | 7.25 | 13.49 | 7.35 |
| 17 | 12.51 | 7.39 | 12.42 | 7.36 | 13.23 | 8.09 | 14.09 | 7.90 | 14.18 | 7.07 | 13.29 | 7.54 |
| 18 | 12.30 | 7.48 | 12.68 | 7.65 | 13.76 | 7.82 | 14.29 | 7.38 | 14.08 | 7.02 | 13.23 | 7.68 |
| 19 | 11.97 | 7.32 | 12.89 | 7.82 | 14.09 | 7.36 | 14.30 | 6.93 | 13.95 | 6.92 | 13.27 | 8.07 |
| 20 | 12.22 | 7.22 | 13.21 | 8.07 | 14.17 | 6.80 | 14.30 | 6.50 | 13.74 | 6.95 | 13.39 | 8.32 |
| 21 | 12.53 | 7.32 | 13.67 | 7.66 | 14.32 | 6.22 | 14.30 | 6.39 | 13.67 | 7.20 | 13.46 | 8.21 |
| 22 | 13.09 | 7.41 | 14.02 | 6.99 | 14.28 | 5.93 | 14.14 | 6.27 | 13.48 | 7.47 | 13.35 | 8.15 |
| 23 | 13.62 | 7.56 | 14.20 | 6.27 | 14.08 | 5.58 | 14.13 | 6.36 | 13.10 | 7.78 | 13.26 | 8.19 |
| 24 | 14.01 | 6.96 | 14.39 | 5.95 | 14.05 | 5.63 | 13.76 | 6.53 | 13.06 | 8.24 | 13.27 | 8.33 |
| 25 | 14.30 | 6.55 | 14.47 | 5.72 | 13.93 | 5.87 | 13.39 | 6.94 | 13.03 | 8.62 | 13.10 | 8.36 |
| 26 | 14.26 | 6.01 | 14.51 | 5.70 | 13.45 | 6.13 | 12.96 | 7.46 | 12.99 | 8.64 | 12.99 | 8.31 |
| 27 | 14.21 | 5.79 | 14.32 | 5.88 | 13.09 | 6.76 | 12.95 | 7.96 | 13.00 | 8.53 | 12.85 | 8.23 |
| 28 | 14.12 | 5.79 | 13.86 | 6.06 | 12.84 | 7.28 | 13.01 | 8.42 | 12.81 | 8.33 | 12.62 | 8.22 |
| 29 | 13.78 | 5.92 | 13.22 | 6.36 | 12.97 | 7.79 | 13.08 | 8.74 | 12.86 | 8.32 | 12.63 | 8.01 |
| 30 | 13.29 | 6.21 | 13.06 | 7.01 | 13.06 | 8.45 | 13.12 | 8.66 | 12.99 | 8.11 | 12.95 | 7.88 |
| 31 | --- | --- | 12.83 | 7.67 | --- | --- | 13.22 | 8.51 | 13.06 | 7.91 | --- | --- |
| MONTH | 14.30 | 5.79 | 14.51 | 5.70 | 14.32 | 5.58 | 14.30 | 6.27 | 14.18 | 6.82 | 13.59 | 7.06 |

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1989 to current year.

WATER TEMPERATURE: October 1989 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1989.

REMARKS.--Interruptions in record were due to malfunction of the sensing and/or recording instruments. Upper probe is set about 4.0 ft below Mean Lower Low Water (MLLW). Lower probe is set about 25.0 ft below MLLW. Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 50,900 microsiemens, Aug. 25, 28, 1992; minimum recorded, 5,130 microsiemens, Mar. 30, 1993.

(Lower probe) Maximum recorded, 50,100 microsiemens, July 23, 1990; minimum recorded 3,040 microsiemens, March 30, 1993.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 24.0°C, July 31, 1993; minimum recorded, 4.5°C, Dec. 23, 1990.

(Lower probe) Maximum recorded, 22.0°C, July 18-19, 1992, July 31, 1993, and Aug. 1, 16, 1993; minimum recorded 5.0°C, Dec. 21, 23, 1990.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 49,000 microsiemens, July 18-20; minimum recorded, 25,700 microsiemens, Feb. 21.

(Lower probe) Maximum recorded, 48,600 microsiemens, July 20, 22, 23, Aug. 17, 18; minimum recorded, 26,100 microsiemens, Feb. 21, 27.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 21.5°C, Aug. 6; minimum recorded, 7.0°C, Dec. 24-26.

(Lower probe) Maximum recorded, 20.5°C, August 12-14, 16; minimum recorded, 7.0°C, Dec. 24-25.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(UPPER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|-------|----------|-------|----------|-------|---------|-------|----------|-------|-------|-------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 43600 | 34300 | 45700 | 37900 | 44900 | 35600 | 43600 | 33000 | 44200 | 32400 | 41900 | 28000 |
| 2 | 44100 | 35100 | 45400 | 37600 | 44800 | 35400 | 43700 | 33600 | 44400 | 32700 | 42000 | 27200 |
| 3 | 43300 | 34700 | 45700 | 37800 | 44300 | 35500 | 43900 | 32000 | 44800 | 33100 | 42400 | 28100 |
| 4 | 43200 | 35800 | 45900 | 37600 | 44700 | 35500 | 44100 | 33900 | 44600 | 33000 | 41300 | 27600 |
| 5 | 43800 | 35300 | 45200 | 37100 | 44100 | 35600 | 44300 | 35400 | 44600 | 32400 | 40200 | 28300 |
| 6 | 43600 | 34600 | 44900 | 35700 | 44200 | 36300 | 44600 | 34700 | 45300 | 31800 | 40200 | 28300 |
| 7 | 43300 | 34200 | 44900 | 35700 | 44500 | 35200 | 44900 | 34100 | 44400 | 32600 | 40700 | 29100 |
| 8 | 43300 | 33900 | 45000 | 35600 | 44800 | 35600 | 45500 | 34100 | 44200 | 34200 | 41700 | 28600 |
| 9 | 42900 | 33500 | 44800 | 37900 | 45000 | 35300 | 45300 | 34900 | 43900 | 32500 | 42400 | 28800 |
| 10 | 42900 | 34600 | 45100 | 38200 | 45200 | 35300 | 45200 | 34900 | 44100 | 32300 | 41900 | 28400 |
| 11 | 42600 | 35400 | 45300 | 38200 | 45800 | 36100 | 45100 | 34700 | 42500 | 30800 | 41700 | 29700 |
| 12 | 43400 | 35000 | --- | --- | 45100 | 37100 | 45200 | 34600 | 42400 | 27400 | 41300 | 27700 |
| 13 | 43600 | 35900 | --- | --- | 44900 | 34800 | 45000 | 34200 | 42300 | 27000 | 41700 | 28200 |
| 14 | 43900 | 35700 | --- | --- | 45100 | 34500 | 44600 | 34400 | 42300 | 28000 | 41900 | 28500 |
| 15 | 43900 | 35300 | --- | --- | 44800 | 33600 | 44400 | 34500 | 42300 | 29200 | 42000 | 30000 |
| 16 | 44400 | 35700 | --- | --- | 44400 | 32100 | 44100 | 33600 | 42000 | 29200 | 42000 | 28400 |
| 17 | 44500 | 36200 | 45500 | 36400 | 43900 | 30900 | 44000 | 34300 | 42900 | 28500 | 40700 | 30200 |
| 18 | 44600 | 35400 | 44600 | 35800 | 43600 | 29500 | 44400 | 35000 | 40600 | 29900 | 40400 | 29800 |
| 19 | 44400 | 35700 | 44100 | 34400 | 43500 | 29600 | 44800 | 34400 | 41100 | 27600 | 41100 | 30700 |
| 20 | 44200 | 35200 | 44200 | 34200 | 43300 | 29600 | 45000 | 33800 | 41500 | 26200 | 42300 | 29900 |
| 21 | --- | --- | 44400 | 34100 | 43500 | 30900 | 43800 | 34800 | 40100 | 25700 | 42500 | 29300 |
| 22 | --- | --- | 44300 | 33900 | 42400 | 30200 | 44700 | 35000 | 39300 | 27300 | 43000 | 30700 |
| 23 | 43800 | 34500 | 44600 | 36400 | 43500 | 31200 | 44600 | 35500 | 41500 | 26900 | 43200 | 29000 |
| 24 | 43800 | 34800 | 44800 | 36600 | 43200 | 30100 | 44600 | 35600 | 42100 | 26900 | 43900 | 31200 |
| 25 | 44400 | 35000 | 45000 | 36500 | 43600 | 32500 | 44600 | 34400 | 42000 | 27700 | 44100 | 33300 |
| 26 | 44500 | 37100 | 44900 | 35700 | 44300 | 33000 | 44900 | 34400 | 41800 | 27400 | 44000 | 33200 |
| 27 | 44900 | 37000 | 45300 | 36600 | 44400 | 34900 | 45000 | 35900 | 41800 | 26300 | 44100 | 33800 |
| 28 | 45200 | 37400 | 45500 | 36000 | 44400 | 34700 | 45100 | 31800 | 41800 | 27100 | 44300 | 33200 |
| 29 | 45500 | 37600 | 45500 | 35700 | 44500 | 34800 | 44400 | 31900 | --- | --- | 44600 | 32900 |
| 30 | 45600 | 37700 | 44700 | 36600 | 44700 | 34700 | 43700 | 32300 | --- | --- | 44100 | 33200 |
| 31 | 45600 | 38600 | --- | --- | 44800 | 34300 | 44000 | 31100 | --- | --- | 44600 | 35000 |
| MONTH | --- | --- | --- | --- | 45800 | 29500 | 45500 | 31100 | 45300 | 25700 | 44600 | 27200 |

SAN FRANCISCO BAY

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(UPPER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-----------|-------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 44100 | 32600 | 45400 | 34700 | 47800 | 36200 | 48300 | 40900 | 47500 | 40400 | 47700 | 41000 |
| 2 | 44200 | 32600 | 45000 | 34200 | 47900 | 39600 | 48200 | 41000 | 47000 | 39600 | 47800 | 39500 |
| 3 | 43700 | 31500 | 46000 | 33600 | 47800 | 37400 | 48700 | 40300 | 47300 | 40100 | 48000 | 41800 |
| 4 | 43500 | 30300 | 46100 | 33700 | 48100 | 39800 | 48400 | 40400 | 47600 | 40300 | 48000 | 39200 |
| 5 | 43700 | 31300 | 46700 | 36800 | 48500 | 39900 | 48500 | 40800 | 47700 | 39900 | 47900 | 40000 |
| 6 | 43900 | 32500 | 46500 | 35100 | 47800 | 40200 | 48500 | 41500 | 47700 | 39200 | 48100 | 41300 |
| 7 | 43800 | 33200 | 46200 | 35400 | 47900 | 40600 | 48300 | 40400 | 47900 | 39400 | 48200 | 41600 |
| 8 | 44400 | 34700 | 45600 | 35900 | 47000 | 38000 | 48800 | 39900 | 47500 | 39500 | 48000 | 41600 |
| 9 | 44100 | 34500 | 46000 | 37100 | 47000 | 38000 | 48500 | 40200 | 47800 | 39600 | 47900 | 42000 |
| 10 | 44200 | 35400 | 45900 | 35500 | 47400 | 38100 | 48400 | 40300 | 47500 | 40100 | 48000 | 42600 |
| 11 | 44000 | 33300 | 46200 | 36100 | 47600 | 38900 | 48300 | 40700 | 47600 | 40500 | 47900 | 41700 |
| 12 | 44700 | 33500 | 45400 | 35700 | 47600 | 38700 | 48000 | 39900 | 47800 | 41900 | 48300 | 40900 |
| 13 | 44000 | 33100 | --- | --- | 47300 | 39600 | 47900 | 40300 | 47900 | 40900 | 48200 | 41300 |
| 14 | 44400 | 34200 | --- | --- | 46400 | 38800 | 47900 | 40100 | 47900 | 40300 | 48000 | 40700 |
| 15 | 44200 | 33700 | --- | --- | 46500 | 39300 | 48200 | 40700 | 47900 | 40000 | 48000 | 40300 |
| 16 | 43900 | 35000 | --- | --- | 47100 | 37300 | 48300 | 40300 | 48200 | 40800 | 48300 | 41000 |
| 17 | 44500 | 34700 | --- | --- | 47500 | 37700 | 48300 | 40000 | 48600 | 41000 | 48100 | 41000 |
| 18 | 43600 | 32400 | --- | --- | 47800 | 38500 | 49000 | 40000 | 48500 | 41700 | 48200 | 42800 |
| 19 | 44300 | 33800 | --- | --- | 48200 | 38300 | 49000 | 41100 | 48000 | 40800 | 48200 | 42200 |
| 20 | 44400 | 32800 | --- | --- | 48100 | 39100 | 49000 | 41200 | 48400 | 40500 | 48700 | 41800 |
| 21 | 45100 | 34400 | --- | --- | 48000 | 38800 | 48900 | 40800 | 48000 | 40200 | 48400 | 42000 |
| 22 | 45300 | 36700 | --- | --- | 48100 | 39400 | 48900 | 40300 | 47800 | 41100 | 48400 | 41300 |
| 23 | 45500 | 35800 | 46700 | 35400 | 48100 | 38500 | 48800 | 41100 | 47700 | 40900 | 48000 | 41400 |
| 24 | 45800 | 37600 | 46700 | 35100 | 48100 | 40000 | 48300 | 40900 | 47500 | 41000 | 47700 | 40800 |
| 25 | 46100 | 36600 | 47000 | 35500 | 47800 | 39300 | 48000 | 40400 | 47600 | 40700 | 48000 | 39100 |
| 26 | 46600 | 36700 | 47200 | 36300 | 47600 | 39400 | 47400 | 39900 | 47500 | 41000 | 47500 | 39200 |
| 27 | 46600 | 36100 | 47500 | 36200 | 47100 | 38500 | 47400 | 39500 | 46600 | 41300 | 47100 | 39200 |
| 28 | 47000 | 35500 | 47500 | 36900 | 48000 | 39200 | 47400 | 39100 | 46200 | 40900 | 47000 | 39000 |
| 29 | 46300 | 36000 | 47000 | 37200 | 47800 | 40400 | 47600 | 41100 | 47400 | 42000 | 46800 | 38200 |
| 30 | 46200 | 37200 | 47100 | 36400 | 48000 | 41200 | 47500 | 40900 | 47400 | 40800 | 47200 | 38400 |
| 31 | --- | --- | 47600 | 40200 | --- | --- | 47400 | 38100 | 47600 | 41300 | --- | --- |
| MONTH | 47000 | 30300 | --- | --- | 48500 | 36200 | 49000 | 38100 | 48600 | 39200 | 48700 | 38200 |

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(LOWER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-----------|-------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 44100 | 32600 | 45600 | 35200 | 46500 | 37300 | --- | --- | 48100 | 41000 | 47700 | 41000 |
| 2 | 44000 | 32900 | 45600 | 34600 | 46600 | 39100 | --- | --- | 47700 | 39900 | 47800 | 39600 |
| 3 | 43600 | 31700 | 46100 | 34400 | 46700 | 35800 | 48000 | 40000 | 47900 | 40600 | 48000 | 42400 |
| 4 | 43600 | 31500 | 46200 | 35200 | 46400 | 39400 | 47900 | 40200 | 48300 | 41100 | 48000 | 39500 |
| 5 | 43700 | 31100 | 46600 | 37800 | 46900 | 38300 | 48000 | 40600 | 48300 | 40600 | 47900 | 40200 |
| 6 | 43900 | 33300 | 46500 | 37900 | 46200 | 39500 | 47900 | 41000 | 48400 | 40000 | 47900 | 41600 |
| 7 | 43900 | 35100 | 46300 | 35600 | 46800 | 39400 | 47900 | 40100 | --- | --- | 48000 | 41600 |
| 8 | 44300 | 35700 | 45700 | 36000 | 47000 | 38000 | 48200 | 39200 | --- | --- | 48100 | 42400 |
| 9 | 44500 | 35200 | 45900 | 37900 | 47300 | 38300 | 48100 | 39900 | 48200 | 40100 | 47900 | 42200 |
| 10 | 44400 | 36300 | 46000 | 35800 | 47600 | 38500 | 47900 | 39400 | 48100 | 41100 | 48100 | 42800 |
| 11 | 44400 | 34300 | 46200 | 36300 | 47600 | 38100 | 47800 | 39600 | 48100 | 42300 | 48100 | 42300 |
| 12 | 44700 | 33400 | 45800 | 36100 | 47400 | 37600 | 47700 | 40000 | 48300 | 42300 | 48100 | 40900 |
| 13 | 44500 | 33600 | 45700 | 36000 | 47200 | 40300 | 47600 | 39700 | 48400 | 42100 | 48100 | 41100 |
| 14 | 44400 | 34300 | 46200 | 35100 | 46600 | 40000 | 47600 | 39900 | 48400 | 41000 | 48200 | 40700 |
| 15 | 44900 | 34000 | 45500 | 36700 | 46600 | 40100 | 48000 | 40500 | 48400 | 40800 | 48100 | 40100 |
| 16 | 44600 | 35200 | 46400 | 37000 | 46900 | 40500 | 48200 | 40900 | 48500 | 41400 | 48000 | 41100 |
| 17 | 44700 | 35300 | 45600 | 34000 | 47300 | 39800 | 48300 | 40400 | 48600 | 41400 | 48100 | 40900 |
| 18 | 44600 | 35900 | 45600 | 35000 | 47600 | 39200 | 48500 | 39400 | 48600 | 42200 | 47900 | 43000 |
| 19 | 44900 | 35600 | 45600 | 35200 | 47800 | 38500 | 48500 | 40000 | 48200 | 41200 | 47900 | 42100 |
| 20 | 44500 | 34000 | 45700 | 36500 | 47800 | 38900 | 48600 | 40300 | 48500 | 40800 | 48400 | 42400 |
| 21 | 45100 | 35200 | 46000 | 34600 | 47600 | 37300 | 48500 | 39800 | 48100 | 40500 | 48100 | 41700 |
| 22 | 45300 | 36700 | 46300 | 36300 | 47800 | 39200 | 48600 | 40200 | 48000 | 41400 | 48100 | 41300 |
| 23 | 45500 | 37000 | 46400 | 35600 | 47800 | 39400 | 48600 | 41000 | 47800 | 41000 | 47800 | 41200 |
| 24 | 45800 | 36300 | 46700 | 35500 | 47600 | 38200 | 48000 | 41200 | 47600 | 42000 | 47500 | 41100 |
| 25 | 46100 | 36200 | 47000 | 35600 | 47700 | 38600 | 47900 | 40800 | 47700 | 41400 | 47800 | 39600 |
| 26 | 46600 | 36500 | 47000 | 36400 | 47600 | 40200 | 47800 | 40700 | 47600 | 41300 | 47300 | 38800 |
| 27 | 46500 | 36200 | 47100 | 34500 | 47400 | 38900 | 47700 | 40300 | 47200 | 41800 | 47500 | 38800 |
| 28 | 46800 | 35600 | 46900 | 35400 | 47400 | 40300 | 47800 | 40400 | 47300 | 41200 | 47200 | 38900 |
| 29 | 46500 | 36100 | 46500 | 36500 | --- | --- | 48300 | 40800 | 47500 | 42500 | 47200 | 38500 |
| 30 | 46200 | 37100 | 46200 | 36100 | --- | --- | 47800 | 41200 | 47400 | 40700 | 47000 | 38200 |
| 31 | --- | --- | 46600 | 39400 | --- | --- | 47800 | 39700 | 47700 | 41600 | --- | --- |
| MONTH | 46800 | 31100 | 47100 | 34000 | --- | --- | --- | --- | --- | --- | 48400 | 38200 |

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(UPPER PROBE)

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

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
(LOWER PROBE)

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|---------|------|----------|------|----------|------|---------|------|----------|------|-----------|------|------|
| OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | | |
| 1 | 19.0 | 16.5 | 17.5 | 16.0 | 12.5 | 11.0 | 10.0 | 8.5 | 11.5 | 10.0 | 13.5 | 12.0 |
| 2 | 19.0 | 16.5 | 17.0 | 16.0 | 12.5 | 11.5 | 10.0 | 9.0 | 11.5 | 10.0 | 13.5 | 12.0 |
| 3 | 18.5 | 16.5 | 17.0 | 16.0 | 12.5 | 11.5 | 10.0 | 8.5 | 11.0 | 10.0 | 14.0 | 12.5 |
| 4 | 18.0 | 16.5 | 17.0 | 16.0 | 12.5 | 11.5 | 10.0 | 9.0 | 11.5 | 10.0 | 14.0 | 12.5 |
| 5 | 18.0 | 16.5 | 17.0 | 16.0 | 12.0 | 11.0 | 10.0 | 9.0 | 11.0 | 10.5 | 14.0 | 13.0 |
| 6 | 18.0 | 16.0 | 17.0 | 16.0 | 12.0 | 11.0 | 10.5 | 8.5 | 11.5 | 10.0 | 14.5 | 12.5 |
| 7 | 18.0 | 16.0 | 16.5 | 16.0 | 12.0 | 11.0 | 10.5 | 9.0 | 11.5 | 10.5 | 15.0 | 13.0 |
| 8 | 18.0 | 16.0 | 17.0 | 16.0 | 12.0 | 11.5 | 10.5 | 9.0 | 11.5 | 10.5 | 15.0 | 13.0 |
| 9 | 18.0 | 16.0 | 16.5 | 15.5 | 12.5 | 12.0 | 10.5 | 9.0 | 11.5 | 10.5 | 14.5 | 13.5 |
| 10 | 17.5 | 16.0 | 16.0 | 15.5 | 12.5 | 12.0 | 10.5 | 9.0 | 11.5 | 11.0 | 14.5 | 13.5 |
| 11 | 18.0 | 16.0 | 16.0 | 15.0 | 12.5 | 11.5 | 10.5 | 9.0 | 11.5 | 9.5 | 15.5 | 13.5 |
| 12 | 18.0 | 15.5 | 15.5 | 14.0 | 12.0 | 11.0 | 10.5 | 9.0 | 11.5 | 10.0 | 15.5 | 13.5 |
| 13 | 18.5 | 16.0 | 15.0 | 14.5 | 12.0 | 11.0 | 10.5 | 9.0 | 11.5 | 10.0 | 15.5 | 14.0 |
| 14 | 18.0 | 16.0 | 15.0 | 12.5 | 12.0 | 11.5 | 10.5 | 9.5 | 11.5 | 10.0 | 15.5 | 14.0 |
| 15 | 18.0 | 16.0 | 14.5 | 13.0 | 12.0 | 11.0 | 10.5 | 9.5 | 11.5 | 10.5 | 15.0 | 14.0 |
| 16 | 17.5 | 16.0 | 14.5 | 13.0 | 12.0 | 10.5 | 10.5 | 9.5 | 12.0 | 11.0 | 15.0 | 14.0 |
| 17 | 17.5 | 16.0 | 14.0 | 13.5 | 11.5 | 9.5 | 11.0 | 9.5 | 11.5 | 11.0 | 14.5 | 13.5 |
| 18 | 17.5 | 16.0 | 14.0 | 13.5 | 11.5 | 9.5 | 11.0 | 10.0 | 11.5 | 10.5 | 15.0 | 14.0 |
| 19 | 17.5 | 15.5 | 14.0 | 13.0 | 11.0 | 10.0 | 11.0 | 9.5 | 11.5 | 10.5 | 14.5 | 13.5 |
| 20 | 17.5 | 16.0 | 14.0 | 13.0 | 11.0 | 9.0 | 11.0 | 10.0 | 11.0 | 10.0 | 15.0 | 13.5 |
| 21 | 17.5 | 16.0 | 13.5 | 12.5 | 11.0 | 8.5 | 11.0 | 10.5 | 11.0 | 10.5 | 15.0 | 13.5 |
| 22 | 17.5 | 16.0 | 13.5 | 12.5 | 10.5 | 7.5 | 11.0 | 10.5 | 11.5 | 10.5 | 14.0 | 13.5 |
| 23 | 17.5 | 16.0 | 13.5 | 11.5 | 10.5 | 8.0 | 11.5 | 11.0 | 12.0 | 11.0 | 14.0 | 13.0 |
| 24 | 17.5 | 16.0 | 13.5 | 11.5 | 10.5 | 7.0 | 11.5 | 11.0 | 12.5 | 11.0 | 13.5 | 13.0 |
| 25 | 18.0 | 16.0 | 13.0 | 11.0 | 10.0 | 7.0 | 11.5 | 10.5 | 12.0 | 11.5 | 13.5 | 12.5 |
| 26 | 18.0 | 16.0 | 13.0 | 11.0 | 10.0 | 7.5 | 11.5 | 10.5 | 12.0 | 11.5 | 14.5 | 12.5 |
| 27 | 18.0 | 16.0 | 12.5 | 10.5 | 10.0 | 7.5 | 11.5 | 10.5 | 12.0 | 11.5 | 15.5 | 13.0 |
| 28 | 17.5 | 16.0 | 12.5 | 10.5 | 10.0 | 8.0 | 11.5 | 10.5 | 13.0 | 11.5 | 15.0 | 13.0 |
| 29 | 18.0 | 16.0 | 12.5 | 11.0 | 10.0 | 8.0 | 11.5 | 10.0 | --- | --- | 14.5 | 13.0 |
| 30 | 17.5 | 16.0 | 12.5 | 11.0 | 10.0 | 8.5 | 11.5 | 10.0 | --- | --- | 15.5 | 13.5 |
| 31 | 17.5 | 15.5 | --- | --- | 10.0 | 8.5 | 11.5 | 10.0 | --- | --- | 15.0 | 13.0 |
| MONTH | 19.0 | 15.5 | 17.5 | 10.5 | 12.5 | 7.0 | 11.5 | 8.5 | 13.0 | 9.5 | 15.5 | 12.0 |
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | | |
| 1 | 15.0 | 13.5 | 16.0 | 14.0 | 18.5 | 15.0 | 18.0 | 15.5 | 18.0 | 17.0 | 19.0 | 17.5 |
| 2 | 15.5 | 13.5 | 16.5 | 14.0 | 18.0 | 15.0 | 17.5 | 15.5 | 18.5 | 17.0 | 19.0 | 17.5 |
| 3 | 15.5 | 13.5 | 17.5 | 14.0 | 17.5 | 15.0 | 18.0 | 15.0 | 18.5 | 17.0 | 19.0 | 17.0 |
| 4 | 16.5 | 13.5 | 17.0 | 14.0 | 18.0 | 15.0 | 18.0 | 15.0 | 19.0 | 17.0 | 20.0 | 17.0 |
| 5 | 16.0 | 13.5 | 17.0 | 14.0 | 18.0 | 15.0 | 17.5 | 15.0 | 19.0 | 17.0 | 19.5 | 17.0 |
| 6 | 15.5 | 13.5 | 16.0 | 13.5 | 18.5 | 15.0 | 17.5 | 15.0 | 20.0 | 17.0 | 20.0 | 17.0 |
| 7 | 15.5 | 13.5 | 16.0 | 13.5 | 18.0 | 15.0 | 18.0 | 15.5 | 19.5 | 16.5 | 19.5 | 16.5 |
| 8 | 14.5 | 13.5 | 17.0 | 14.0 | 18.0 | 15.0 | 18.0 | 15.0 | 19.5 | 17.0 | 20.0 | 16.5 |
| 9 | 15.5 | 13.5 | 16.5 | 14.0 | 18.5 | 15.5 | 18.5 | 15.0 | 19.5 | 17.0 | 19.5 | 17.0 |
| 10 | 16.0 | 13.5 | 17.0 | 14.5 | 19.5 | 15.0 | 18.0 | 15.0 | 20.0 | 17.0 | 19.0 | 17.0 |
| 11 | 16.0 | 13.5 | 17.0 | 14.5 | 19.0 | 15.0 | 18.0 | 15.5 | 20.0 | 17.0 | 19.0 | 16.5 |
| 12 | 16.5 | 13.5 | 17.0 | 15.0 | 19.5 | 15.5 | 18.0 | 15.5 | 20.5 | 17.0 | 19.0 | 16.5 |
| 13 | 16.0 | 14.0 | 17.5 | 15.0 | 18.5 | 15.5 | 18.0 | 15.5 | 20.5 | 17.0 | 18.5 | 16.5 |
| 14 | 16.0 | 14.0 | 17.0 | 15.0 | 19.0 | 16.0 | 17.5 | 15.5 | 20.5 | 17.0 | 18.5 | 16.5 |
| 15 | 16.0 | 14.0 | 17.0 | 15.0 | 18.5 | 16.0 | 17.5 | 15.5 | 20.0 | 17.0 | 19.0 | 16.5 |
| 16 | 16.0 | 14.0 | 17.0 | 14.5 | 19.0 | 15.5 | 18.0 | 15.5 | 20.5 | 16.5 | 19.5 | 16.5 |
| 17 | 16.5 | 14.0 | 17.0 | 14.5 | 18.5 | 15.5 | 18.0 | 15.5 | 20.0 | 16.5 | 19.0 | 16.5 |
| 18 | 17.5 | 14.0 | 17.0 | 14.5 | 18.0 | 15.0 | 18.5 | 15.5 | 19.5 | 16.0 | 18.5 | 16.5 |
| 19 | 17.5 | 14.0 | 16.0 | 14.5 | 18.5 | 15.0 | 18.0 | 15.5 | 19.5 | 16.0 | 19.5 | 16.5 |
| 20 | 18.0 | 14.5 | 17.0 | 14.5 | 18.5 | 15.0 | 18.0 | 15.5 | 19.0 | 16.5 | 19.0 | 16.5 |
| 21 | 17.5 | 14.5 | 17.5 | 14.5 | 18.5 | 15.0 | 18.0 | 15.5 | 19.5 | 16.5 | 19.0 | 16.5 |
| 22 | 17.0 | 14.5 | 17.5 | 14.5 | 18.0 | 15.0 | 19.0 | 15.5 | 19.5 | 16.5 | 19.0 | 16.5 |
| 23 | 16.0 | 14.5 | 17.5 | 14.5 | 18.5 | 15.0 | 19.0 | 15.5 | 19.5 | 16.5 | 18.5 | 17.0 |
| 24 | 15.5 | 13.5 | 17.5 | 14.5 | 18.5 | 15.0 | 19.0 | 16.0 | 19.5 | 17.0 | 19.0 | 17.0 |
| 25 | 15.0 | 13.5 | 17.0 | 14.5 | 18.5 | 15.0 | 19.5 | 16.5 | 19.0 | 16.5 | 19.0 | 17.0 |
| 26 | 16.0 | 13.0 | 17.5 | 14.5 | 19.5 | 15.0 | 19.5 | 17.0 | 19.0 | 17.0 | 19.0 | 17.0 |
| 27 | 16.0 | 13.5 | 17.0 | 14.0 | 19.0 | 15.5 | 19.5 | 17.0 | 19.0 | 17.0 | 19.0 | 17.0 |
| 28 | 16.0 | 13.5 | 17.0 | 14.0 | 18.5 | 15.5 | 19.0 | 17.0 | 19.5 | 17.5 | 19.0 | 17.0 |
| 29 | 16.0 | 13.5 | 17.5 | 14.5 | 18.5 | 15.5 | 19.0 | 16.5 | 19.5 | 17.0 | 19.0 | 17.5 |
| 30 | 15.5 | 13.5 | 18.5 | 15.0 | 18.0 | 15.5 | 18.5 | 17.0 | 19.0 | 17.5 | 18.5 | 17.5 |
| 31 | --- | --- | 17.0 | 14.5 | --- | --- | 18.5 | 17.0 | 19.0 | 17.5 | --- | --- |
| MONTH | 18.0 | 13.0 | 18.5 | 13.5 | 19.5 | 15.0 | 19.5 | 15.0 | 20.5 | 16.0 | 20.0 | 16.5 |

WILDCAT CREEK BASIN

11181390 WILDCAT CREEK AT VALE ROAD, AT RICHMOND, CA

LOCATION.--Lat 37°57'12", long 122°20'14", in San Pablo Grant, Contra Costa County, Hydrologic Unit 18050002, on left bank at upstream side of Vale Road Bridge at Richmond, 3.6 mi upstream from mouth.

DRAINAGE AREA.--7.79 mi².

PERIOD OF RECORD.--October 1975 to current year.

REVISED RECORDS.--WDR CA-81-2: 1979-80(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 65.56 ft above sea level.

REMARKS.--Records good. Minor storage in Lake Anza and Jewel Lake 5 mi upstream. No diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,050 ft³/s, Jan. 4, 1982, gage height, 14.68 ft recorded, 15.80 ft from floodmarks, from rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow; no flow at times in 1979, 1987-94.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|---------|------|-----------------------------------|---------------------|
| Nov. 29 | 1630 | *309 | *5.56 | Jan. 25 | 0645 | 270 | 5.35 |
| Dec. 11 | 0645 | 220 | 5.09 | Feb. 19 | 2100 | 304 | 5.52 |

No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|--------|-------|-------|-------|-------|-------|------|------|------|------|
| 1 | .01 | .02 | 2.2 | 2.5 | 5.6 | 1.8 | e.08 | .03 | .01 | .00 | .01 | .01 |
| 2 | .01 | .02 | 1.1 | 2.3 | 4.9 | 1.4 | e.06 | .02 | .01 | .00 | .01 | .01 |
| 3 | .01 | .03 | .83 | 2.3 | 4.5 | 1.4 | e.06 | .01 | .01 | .00 | .01 | .01 |
| 4 | .01 | .02 | .82 | 2.8 | 4.5 | 1.2 | .04 | .01 | .01 | .00 | .01 | .01 |
| 5 | .01 | .03 | .74 | 2.5 | 4.7 | 1.1 | .04 | e.01 | .01 | .00 | .00 | .01 |
| 6 | .01 | .03 | .81 | 2.4 | 58 | 1.1 | .04 | e9.0 | .01 | .00 | .01 | .01 |
| 7 | .00 | .03 | .85 | 2.5 | 113 | .85 | e.03 | e5.0 | .01 | .00 | .01 | .01 |
| 8 | .01 | .03 | 20 | 2.5 | 26 | .84 | 2.1 | 1.3 | .01 | .00 | .01 | .01 |
| 9 | .01 | .03 | 20 | 2.5 | 12 | .75 | .74 | e.5 | .02 | .00 | .00 | .01 |
| 10 | .01 | 9.1 | 7.0 | 2.5 | 15 | .85 | .18 | e.4 | .02 | .00 | .01 | .01 |
| 11 | .01 | .08 | 32 | 2.6 | 11 | 1.4 | .09 | .21 | .00 | .00 | .01 | .01 |
| 12 | .02 | .05 | 11 | 2.4 | 8.4 | 1.3 | .07 | .18 | .01 | .01 | .00 | .02 |
| 13 | .01 | .06 | 14 | 2.3 | 6.8 | .85 | .05 | .13 | .01 | .00 | .00 | .02 |
| 14 | .09 | .07 | 21 | 2.3 | 6.1 | .96 | .04 | .08 | .01 | .00 | .01 | .02 |
| 15 | 3.3 | .09 | 4.5 | 2.4 | 5.6 | 1.0 | .04 | .07 | .01 | .00 | .01 | .02 |
| 16 | .05 | .07 | 8.4 | 2.3 | 6.0 | .61 | .03 | .05 | .01 | .01 | .01 | .03 |
| 17 | .03 | .09 | 6.5 | 2.4 | 28 | .32 | .03 | .37 | .00 | .01 | .01 | .02 |
| 18 | .04 | .08 | 5.9 | 2.3 | 87 | .25 | e.03 | .15 | .01 | .01 | .01 | .01 |
| 19 | .06 | .07 | 5.5 | 2.5 | 109 | .25 | e.02 | .10 | .01 | .00 | .00 | .01 |
| 20 | .05 | .06 | 5.3 | 2.7 | 133 | .26 | e.02 | .08 | .00 | .00 | .00 | .02 |
| 21 | .04 | .09 | 5.3 | 2.3 | 87 | .24 | .01 | .07 | .01 | .01 | .00 | .02 |
| 22 | .06 | .10 | 5.3 | 2.6 | 31 | .23 | .01 | .04 | .00 | .01 | .00 | .02 |
| 23 | .04 | .05 | 5.3 | 14 | 6.7 | .24 | .93 | .02 | .00 | .01 | .00 | .02 |
| 24 | .04 | .06 | 4.9 | 82 | 3.5 | .31 | .39 | .01 | .00 | .01 | .00 | .03 |
| 25 | .04 | .05 | 3.2 | 90 | 2.5 | .35 | 9.9 | .01 | .02 | .01 | .00 | .03 |
| 26 | .08 | .07 | 3.0 | 25 | 2.1 | .15 | .41 | .01 | .00 | .01 | .00 | .03 |
| 27 | .11 | .07 | 2.5 | 13 | 2.9 | .13 | .18 | .01 | .00 | .01 | .01 | .03 |
| 28 | .10 | 5.9 | 2.4 | 9.7 | 2.4 | .11 | .10 | .01 | .00 | .01 | .00 | .03 |
| 29 | .12 | 28 | 2.3 | 7.6 | --- | .08 | .08 | .01 | .00 | .00 | .00 | .03 |
| 30 | .06 | 5.0 | 2.5 | 6.5 | --- | .10 | .06 | .01 | .00 | .01 | .01 | .02 |
| 31 | .02 | --- | 2.6 | 5.8 | --- | .08 | --- | .01 | --- | .01 | .01 | --- |
| TOTAL | 4.46 | 47.45 | 207.75 | 307.5 | 787.2 | 20.51 | 15.86 | 17.91 | 0.22 | 0.14 | 0.17 | 0.54 |
| MEAN | .14 | 1.58 | 6.70 | 9.92 | 28.1 | .66 | .53 | .58 | .007 | .005 | .005 | .018 |
| MAX | 3.3 | 26 | 32 | 90 | 133 | 1.8 | 9.9 | 9.0 | .02 | .01 | .01 | .03 |
| MIN | .00 | .02 | .74 | 2.3 | 2.1 | .08 | .01 | .01 | .00 | .00 | .00 | .01 |
| AC-FT | 8.8 | 94 | 412 | 610 | 1560 | 41 | 31 | 36 | .4 | .3 | .3 | 1.1 |

e Estimated.

11181390 WILDCAT CREEK AT VALE ROAD, AT RICHMOND, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .49 | 2.30 | 5.69 | 13.4 | 17.8 | 12.1 | 4.20 | .80 | .32 | .17 | .12 | .18 |
| MAX | 2.20 | 8.89 | 27.8 | 72.1 | 77.8 | 63.4 | 36.1 | 4.68 | 1.52 | .83 | .47 | .88 |
| (WY) | 1987 | 1982 | 1982 | 1993 | 1986 | 1983 | 1982 | 1983 | 1983 | 1983 | 1983 | 1986 |
| MIN | .005 | .071 | .14 | .064 | .60 | .28 | .14 | .022 | .004 | .001 | .004 | .000 |
| (WY) | 1989 | 1993 | 1990 | 1991 | 1989 | 1988 | 1990 | 1992 | 1987 | 1989 | 1987 | 1988 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1976 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 3836.52 | | 1409.71 | | | |
| ANNUAL MEAN | 10.5 | | 3.86 | | 4.74 | |
| HIGHEST ANNUAL MEAN | | | | | 15.3 | |
| LOWEST ANNUAL MEAN | | | | | .43 | |
| HIGHEST DAILY MEAN | 590 | Jan 13 | 133 | Feb 20 | 1010 | Jan 4 1982 |
| LOWEST DAILY MEAN | .00 | Jul 4 | .00 | Oct 7 | .00 | Aug 31 1979 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Sep 5 | .00 | Jun 26 | .00 | Jun 11 1987 |
| INSTANTANEOUS PEAK FLOW | | | 309 | Nov 29 | 2050 | Jan 4 1982 |
| INSTANTANEOUS PEAK STAGE | | | 5.56 | Nov 29 | 15.80 | Jan 4 1982 |
| ANNUAL RUNOFF (AC-FT) | 7610 | | 2800 | | 3430 | |
| 10 PERCENT EXCEEDS | 20 | | 6.3 | | 7.3 | |
| 50 PERCENT EXCEEDS | .41 | | .05 | | .25 | |
| 90 PERCENT EXCEEDS | .00 | | .00 | | .01 | |

PACHECO CREEK BASIN

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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 19 | 2245 | *45 | *2.59 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|-------|-------|-------|------|------|------|------|------|
| 1 | .02 | .03 | .21 | .19 | .19 | .70 | .43 | .28 | .11 | .01 | .00 | .01 |
| 2 | .03 | .02 | .14 | .19 | .20 | .69 | .42 | .26 | .09 | .01 | .00 | .01 |
| 3 | .06 | .02 | .13 | .19 | .23 | .62 | .42 | .25 | .09 | .01 | .00 | .00 |
| 4 | .09 | .02 | .13 | .22 | .20 | .62 | .41 | .25 | .09 | .01 | .00 | .00 |
| 5 | .17 | .02 | .13 | .23 | .20 | .62 | .39 | .23 | .09 | .01 | .00 | .00 |
| 6 | .18 | .03 | .13 | .19 | .69 | .61 | .42 | .66 | .13 | .01 | .00 | .00 |
| 7 | .13 | .03 | .13 | .19 | 3.1 | .55 | .42 | 2.4 | .11 | .01 | .00 | .00 |
| 8 | .11 | .06 | 1.0 | .21 | 1.2 | .55 | .62 | .51 | .09 | .01 | .00 | .00 |
| 9 | .07 | .06 | 1.7 | .23 | .45 | .55 | 1.3 | .37 | .07 | .01 | .00 | .00 |
| 10 | .05 | .47 | .36 | .21 | 2.5 | .55 | .46 | .32 | .04 | .01 | .00 | .00 |
| 11 | .09 | .61 | 1.8 | .19 | .91 | .54 | .40 | .29 | .02 | .01 | .00 | .00 |
| 12 | .13 | .16 | .56 | .19 | .48 | .48 | .36 | .28 | .03 | .01 | .00 | .00 |
| 13 | .12 | .10 | .30 | .20 | .42 | .48 | .35 | .22 | .05 | .01 | .00 | .00 |
| 14 | .15 | .11 | 3.2 | .20 | .36 | .48 | .33 | .19 | .06 | .01 | .00 | .00 |
| 15 | .43 | .07 | .59 | .19 | .36 | .48 | .31 | .21 | .04 | .01 | .00 | .00 |
| 16 | .24 | .08 | .33 | .21 | .38 | .52 | .30 | .21 | .03 | .01 | .00 | .00 |
| 17 | .18 | .11 | .28 | .21 | 3.7 | .52 | .31 | .32 | .05 | .01 | .00 | .00 |
| 18 | .14 | .12 | .26 | .19 | 9.0 | .48 | .28 | .26 | .04 | .01 | .00 | .00 |
| 19 | .11 | .10 | .23 | .19 | 11 | .50 | .28 | .23 | .02 | .01 | .00 | .00 |
| 20 | .06 | .10 | .23 | .19 | 15 | .44 | .26 | .22 | .02 | .01 | .00 | .00 |
| 21 | .07 | .13 | .23 | .19 | 3.9 | .44 | .25 | .19 | .01 | .01 | .00 | .00 |
| 22 | .09 | .22 | .20 | .19 | 2.6 | .46 | .25 | .18 | .01 | .01 | .00 | .00 |
| 23 | .07 | .18 | .19 | .68 | 1.7 | .48 | .44 | .16 | .01 | .00 | .00 | .00 |
| 24 | .04 | .16 | .19 | 2.2 | 1.3 | .51 | .49 | .16 | .01 | .00 | .00 | .00 |
| 25 | .03 | .16 | .20 | .54 | 1.0 | .57 | 1.8 | .16 | .01 | .00 | .00 | .00 |
| 26 | .02 | .17 | .21 | .45 | .96 | .48 | .79 | .16 | .01 | .00 | .00 | .00 |
| 27 | .02 | .18 | .19 | .31 | .96 | .48 | .39 | .17 | .01 | .00 | .00 | .00 |
| 28 | .02 | .54 | .19 | .26 | .79 | .47 | .33 | .14 | .01 | .00 | .01 | .00 |
| 29 | .02 | 2.5 | .19 | .23 | --- | .47 | .29 | .12 | .01 | .00 | .01 | .00 |
| 30 | .02 | .79 | .19 | .23 | --- | .44 | .30 | .11 | .01 | .01 | .01 | .00 |
| 31 | .02 | --- | .19 | .20 | --- | .42 | --- | .12 | --- | .01 | .00 | --- |
| TOTAL | 2.98 | 7.35 | 14.01 | 9.49 | 63.78 | 16.20 | 13.80 | 9.63 | 1.37 | 0.24 | 0.03 | 0.02 |
| MEAN | .096 | .24 | .45 | .31 | 2.28 | .52 | .46 | .31 | .046 | .008 | .001 | .001 |
| MAX | .43 | 2.5 | 3.2 | 2.2 | 15 | .70 | 1.8 | 2.4 | .13 | .01 | .01 | .01 |
| MIN | .02 | .02 | .13 | .19 | .19 | .42 | .25 | .11 | .01 | .00 | .00 | .00 |
| AC-FT | 5.9 | 15 | 28 | 19 | 127 | 32 | 27 | 19 | 2.7 | .5 | .06 | .04 |

11182500 SAN RAMON CREEK AT SAN RAMON, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .53 | .62 | 3.30 | 8.19 | 8.93 | 7.19 | 4.78 | 1.28 | .50 | .19 | .073 | .049 |
| MAX | 17.0 | 5.49 | 27.2 | 30.8 | 45.4 | 60.6 | 44.9 | 4.92 | 1.99 | .83 | .40 | .33 |
| (WY) | 1963 | 1984 | 1956 | 1956 | 1986 | 1983 | 1958 | 1967 | 1967 | 1958 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1953 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 1602.19 | | | | 138.90 | | | | | | | |
| ANNUAL MEAN | 4.39 | | | | .38 | | | | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 2.94 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 12.4 | | | |
| HIGHEST DAILY MEAN | 227 | | | | 15 | | | | .029 | | | |
| LOWEST DAILY MEAN | .01 | | | | .00 | | | | 411 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .02 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 45 | | | | 1600 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 2.59 | | | | 16.98 | | | |
| ANNUAL RUNOFF (AC-FT) | 3180 | | | | 276 | | | | 2130 | | | |
| 10 PERCENT EXCEEDS | 11 | | | | .61 | | | | 5.7 | | | |
| 50 PERCENT EXCEEDS | .60 | | | | .16 | | | | .25 | | | |
| 90 PERCENT EXCEEDS | .03 | | | | .00 | | | | .00 | | | |

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 current year. Monthly discharge only for some periods, published in WSP 1315-B.

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.--No estimated daily discharges. Records good above 10 ft³/s and fair below. 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0215 | *900 | *6.50 | | | | |

No flow Sept. 11-16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|--------|------|------|------|-------|-------|-------|------|------|
| 1 | .35 | .70 | 8.3 | 12 | 29 | 69 | 16 | 11 | 6.3 | .91 | .25 | .18 |
| 2 | .36 | .73 | 5.1 | 12 | 29 | 59 | 15 | 10 | 6.0 | 1.1 | .25 | .14 |
| 3 | .35 | .80 | 3.4 | 12 | 28 | 54 | 15 | 9.1 | 5.4 | .98 | .23 | .14 |
| 4 | .35 | .83 | 2.8 | 12 | 27 | 50 | 14 | 8.9 | 4.9 | .97 | .24 | .14 |
| 5 | .37 | .86 | 2.7 | 13 | 26 | 50 | 14 | 9.2 | 4.9 | .99 | .25 | .14 |
| 6 | .38 | .89 | 2.7 | 12 | 90 | 51 | 14 | 8.8 | 5.0 | .95 | .24 | .10 |
| 7 | .38 | .84 | 2.8 | 11 | 468 | 44 | 14 | 17 | 4.4 | .75 | .24 | .06 |
| 8 | .38 | .83 | 88 | 11 | 196 | 40 | 16 | 13 | 4.4 | .64 | .24 | .06 |
| 9 | .38 | .83 | 98 | 12 | 100 | 37 | 21 | 11 | 4.0 | .59 | .24 | .05 |
| 10 | .39 | .91 | 25 | 12 | 81 | 36 | 15 | 9.1 | 3.4 | .57 | .24 | .03 |
| 11 | .40 | 1.4 | 174 | 11 | 65 | 35 | 15 | 8.2 | 2.7 | .54 | .24 | .00 |
| 12 | .39 | 1.7 | 93 | 11 | 50 | 32 | 14 | 8.1 | 1.9 | .50 | .25 | .00 |
| 13 | .38 | 1.4 | 44 | 11 | 46 | 31 | 13 | 8.1 | 2.3 | .48 | .24 | .00 |
| 14 | .37 | 1.2 | 313 | 11 | 43 | 31 | 13 | 7.7 | 2.4 | .46 | .24 | .00 |
| 15 | .66 | 1.2 | 112 | 11 | 40 | 30 | 13 | 7.6 | 2.2 | .43 | .24 | .00 |
| 16 | .96 | 1.1 | 56 | 11 | 38 | 27 | 12 | 7.6 | 2.2 | .43 | .24 | .00 |
| 17 | .58 | 1.0 | 37 | 11 | 184 | 26 | 12 | 7.9 | 2.2 | .44 | .25 | .02 |
| 18 | .51 | 1.1 | 31 | 11 | 245 | 25 | 13 | 9.7 | 2.2 | .42 | .22 | .03 |
| 19 | .50 | 1.2 | 26 | 11 | 248 | 23 | 12 | 10 | 2.2 | .41 | .21 | .03 |
| 20 | .45 | 1.3 | 22 | 10 | 577 | 21 | 12 | 8.7 | 2.2 | .40 | .21 | .04 |
| 21 | .46 | 1.3 | 20 | 10 | 378 | 19 | 12 | 8.6 | 1.7 | .38 | .18 | .04 |
| 22 | .50 | 1.3 | 19 | 9.8 | 309 | 19 | 11 | 8.1 | 1.5 | .35 | .20 | .04 |
| 23 | .52 | 1.2 | 17 | 17 | 201 | 17 | 12 | 7.6 | 1.7 | .35 | .21 | .04 |
| 24 | .53 | 1.3 | 16 | 84 | 147 | 17 | 14 | 7.6 | 1.8 | .34 | .21 | .04 |
| 25 | .55 | 1.3 | 15 | 266 | 116 | 18 | 26 | 7.3 | 1.6 | .33 | .23 | .03 |
| 26 | .58 | 1.3 | 14 | 216 | 103 | 19 | 18 | 7.1 | 1.5 | .33 | .24 | .04 |
| 27 | .58 | 1.3 | 14 | 96 | 94 | 18 | 13 | 7.2 | 1.5 | .31 | .24 | .03 |
| 28 | .57 | 1.7 | 13 | 57 | 80 | 18 | 12 | 7.2 | 1.4 | .29 | .23 | .03 |
| 29 | .61 | 27 | 12 | 41 | --- | 18 | 11 | 7.2 | 1.2 | .29 | .24 | .04 |
| 30 | .65 | 33 | 12 | 36 | --- | 17 | 12 | 7.2 | .81 | .28 | .23 | .03 |
| 31 | .68 | --- | 12 | 33 | --- | 16 | --- | 6.8 | --- | .27 | .20 | --- |
| TOTAL | 15.12 | 91.52 | 1310.8 | 1093.8 | 4038 | 967 | 424 | 272.6 | 85.91 | 16.48 | 7.17 | 1.52 |
| MEAN | .49 | 3.05 | 42.3 | 35.3 | 144 | 31.2 | 14.1 | 8.79 | 2.86 | .53 | .23 | .051 |
| MAX | .96 | 33 | 313 | 266 | 577 | 69 | 26 | 17 | 6.3 | 1.1 | .25 | .18 |
| MIN | .35 | .70 | 2.7 | 9.8 | 26 | 16 | 11 | 6.8 | .81 | .27 | .18 | .00 |
| AC-FT | 30 | 182 | 2600 | 2170 | 8010 | 1920 | 841 | 541 | 170 | 33 | 14 | 3.0 |

11456000 NAPA RIVER NEAR ST. HELENA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 5.36 | 37.4 | 177 | 291 | 303 | 190 | 89.5 | 21.5 | 7.33 | 2.50 | 1.26 | .95 |
| MAX | 179 | 415 | 1088 | 1338 | 1798 | 1144 | 584 | 93.0 | 27.3 | 7.66 | 4.43 | 6.44 |
| (WY) | 1963 | 1974 | 1956 | 1970 | 1986 | 1983 | 1982 | 1983 | 1967 | 1941 | 1941 | 1982 |
| MIN | .000 | .10 | .24 | 2.17 | 4.34 | 7.45 | 1.81 | .89 | .081 | .000 | .000 | .000 |
| (WY) | 1978 | 1932 | 1940 | 1991 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1930 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 42743.09 | | | | 8323.92 | | | | | | | |
| ANNUAL MEAN | 117 | | | | 22.8 | | | | 92.9 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 270 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 1.90 | | | |
| HIGHEST DAILY MEAN | 4610 Jan 20 | | | | 577 Feb 20 | | | | 13700 Feb 17 1986 | | | |
| LOWEST DAILY MEAN | .35 Oct 1 | | | | .00 Sep 11 | | | | .00 Sep 23 1947 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .36 Sep 28 | | | | .00 Sep 11 | | | | .00 Sep 23 1947 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 900 Feb 20 | | | | 16900 Feb 17 1986 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 6.50 Feb 20 | | | | 18.52 Feb 17 1986 | | | |
| ANNUAL RUNOFF (AC-FT) | 84780 | | | | 16510 | | | | 67290 | | | |
| 10 PERCENT EXCEEDS | 243 | | | | 50 | | | | 180 | | | |
| 50 PERCENT EXCEEDS | 15 | | | | 5.0 | | | | 7.4 | | | |
| 90 PERCENT EXCEEDS | .44 | | | | .21 | | | | .40 | | | |

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 at 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.--No estimated daily discharges. 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; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,620 ft³/s, Feb. 20, gage height, 9.51 ft; no flow, Aug. 14-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|------|-------|------|------|------|-------|-------|-------|-------|
| 1 | 1.3 | 2.7 | 22 | 21 | 48 | 119 | 33 | 26 | 12 | 2.5 | 1.2 | .69 |
| 2 | 1.2 | 2.1 | 12 | 21 | 44 | 103 | 33 | 25 | 12 | 3.7 | 1.0 | .59 |
| 3 | 1.2 | 2.1 | 8.4 | 20 | 42 | 96 | 32 | 24 | 12 | 3.7 | .85 | .42 |
| 4 | 1.4 | 2.3 | 7.3 | 19 | 38 | 83 | 30 | 23 | 11 | 3.6 | .51 | .39 |
| 5 | 2.0 | 2.3 | 6.8 | 20 | 35 | 80 | 28 | 22 | 10 | 2.5 | .34 | .35 |
| 6 | 1.5 | 2.6 | 6.4 | 19 | 64 | 82 | 26 | 23 | 11 | 1.4 | .28 | .34 |
| 7 | 1.4 | 1.8 | 6.5 | 19 | 707 | 70 | 27 | 33 | 10 | 1.9 | .56 | .41 |
| 8 | 1.2 | 2.1 | 38 | 19 | 445 | 64 | 28 | 33 | 9.8 | 1.8 | .71 | .55 |
| 9 | 1.1 | 2.7 | 107 | 19 | 209 | 61 | 34 | 28 | 8.6 | 2.1 | .54 | .57 |
| 10 | 1.1 | 3.0 | 50 | 19 | 143 | 58 | 32 | 26 | 7.9 | 2.1 | .26 | .39 |
| 11 | 1.4 | 3.9 | 171 | 18 | 120 | 56 | 28 | 23 | 8.8 | 2.6 | .19 | .40 |
| 12 | 1.1 | 3.7 | 262 | 17 | 85 | 47 | 27 | 22 | 8.9 | 1.9 | .07 | .56 |
| 13 | 2.0 | 3.6 | 71 | 17 | 69 | 46 | 27 | 21 | 8.2 | 1.6 | .01 | .58 |
| 14 | .87 | 3.8 | 479 | 17 | 62 | 48 | 28 | 21 | 6.5 | 1.8 | .00 | .67 |
| 15 | 2.7 | 3.5 | 274 | 17 | 57 | 46 | 28 | 20 | 5.7 | 1.7 | .00 | .61 |
| 16 | 1.9 | 4.7 | 113 | 17 | 54 | 41 | 27 | 20 | 5.8 | 2.0 | .00 | .44 |
| 17 | 1.1 | 4.5 | 68 | 17 | 292 | 39 | 26 | 20 | 7.1 | 2.5 | .00 | .40 |
| 18 | .97 | 4.3 | 52 | 17 | 505 | 40 | 26 | 20 | 7.3 | 3.5 | .00 | .49 |
| 19 | 1.0 | 4.3 | 41 | 17 | 467 | 39 | 25 | 20 | 7.1 | 2.8 | .00 | .57 |
| 20 | 1.0 | 4.4 | 35 | 16 | 1290 | 35 | 24 | 20 | 7.0 | 2.3 | .00 | .65 |
| 21 | 1.0 | 4.4 | 31 | 16 | 683 | 32 | 23 | 19 | 7.0 | 1.3 | .00 | .62 |
| 22 | 1.9 | 5.2 | 30 | 16 | 628 | 32 | 22 | 18 | 6.1 | 1.2 | .00 | .61 |
| 23 | 2.2 | 5.4 | 28 | 21 | 408 | 30 | 22 | 17 | 6.4 | 1.6 | .13 | .54 |
| 24 | 2.1 | 4.8 | 26 | 100 | 314 | 29 | 28 | 16 | 6.2 | 1.5 | .35 | .45 |
| 25 | 2.0 | 4.8 | 25 | 263 | 253 | 31 | 36 | 16 | 6.1 | 1.7 | .50 | .59 |
| 26 | 2.1 | 5.1 | 24 | 456 | 208 | 33 | 39 | 15 | 5.8 | 1.4 | .64 | .56 |
| 27 | 2.5 | 5.2 | 24 | 190 | 180 | 32 | 31 | 14 | 5.6 | .88 | .49 | .52 |
| 28 | 2.6 | 5.7 | 23 | 111 | 150 | 33 | 29 | 14 | 4.7 | .43 | .45 | .45 |
| 29 | 2.6 | 18 | 19 | 74 | --- | 32 | 28 | 13 | 4.0 | .30 | .29 | .51 |
| 30 | 2.9 | 55 | 23 | 60 | --- | 31 | 27 | 14 | 3.3 | .79 | .46 | .42 |
| 31 | 3.2 | --- | 23 | 54 | --- | 32 | --- | 13 | --- | 1.1 | .63 | --- |
| TOTAL | 52.54 | 178.0 | 2106.4 | 1727 | 7600 | 1600 | 854 | 639 | 231.9 | 60.20 | 10.46 | 15.34 |
| MEAN | 1.69 | 5.93 | 67.9 | 55.7 | 271 | 51.6 | 28.5 | 20.6 | 7.73 | 1.94 | .34 | .51 |
| MAX | 3.2 | 55 | 479 | 456 | 1290 | 119 | 39 | 33 | 12 | 3.7 | 1.2 | .69 |
| MIN | .87 | 1.8 | 6.4 | 16 | 35 | 29 | 22 | 13 | 3.3 | .30 | .00 | .34 |
| AC-FT | 104 | 353 | 4180 | 3430 | 15070 | 3170 | 1690 | 1270 | 460 | 119 | 21 | 30 |

11458000 NAPA RIVER NEAR NAPA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.6 | 87.2 | 274 | 629 | 649 | 444 | 183 | 43.8 | 14.1 | 4.92 | 2.69 | 2.36 |
| MAX | 338 | 616 | 1474 | 2672 | 4089 | 2598 | 1341 | 226 | 55.6 | 19.4 | 9.43 | 10.7 |
| (WY) | 1963 | 1974 | 1984 | 1970 | 1986 | 1983 | 1982 | 1983 | 1967 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1960 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 99237.98 | | | | 15074.84 | | | | | | | |
| ANNUAL MEAN | 272 | | | | 41.3 | | | | 194 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 585 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | .72 | | | |
| HIGHEST DAILY MEAN | 7780 | | | | 1290 | | | | 26200 | | | |
| LOWEST DAILY MEAN | .43 | | | | .00 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 1.3 | | | | .00 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 1620 | | | | 37100 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 9.51 | | | | 30.20 | | | |
| ANNUAL RUNOFF (AC-FT) | 196800 | | | | 29900 | | | | 140300 | | | |
| 10 PERCENT EXCEEDS | 520 | | | | 72 | | | | 402 | | | |
| 50 PERCENT EXCEEDS | 26 | | | | 11 | | | | 13 | | | |
| 90 PERCENT EXCEEDS | 1.9 | | | | .50 | | | | .49 | | | |

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.--No estimated daily discharges. Records good. Flow regulated by Stafford Lake beginning Dec. 1, 1951, capacity, 4,500 acre-ft since Oct. 18, 1954; contents, 1,400 acre-ft, Sept. 30, 1994. Diversion from Stafford Lake for municipal water supply began Apr. 25, 1952, and amounted to 1,902 acre-ft for the current year. No diversion from Russian River into Stafford Lake during the current year.

COOPERATION.--Records of diversions and storage were provided by North Marin Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s, Jan. 4, 1982, gage height, 14.52 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 282 ft³/s, Feb. 17, gage height, 5.61 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|------|------|
| 1 | .03 | .06 | .99 | .56 | 1.9 | 4.9 | 1.1 | .46 | .46 | .32 | .19 | .10 |
| 2 | .03 | .05 | .64 | .56 | 1.7 | 4.1 | 1.0 | .45 | .45 | .27 | .44 | .04 |
| 3 | .01 | .04 | .54 | .50 | 1.6 | 3.8 | 1.0 | .44 | .39 | .28 | .30 | .02 |
| 4 | .17 | .05 | .55 | 1.0 | 1.5 | 3.5 | .97 | .44 | .36 | .28 | .13 | .00 |
| 5 | 1.2 | .04 | .55 | .64 | 1.3 | 3.3 | .95 | .45 | .42 | .29 | .09 | .00 |
| 6 | .88 | .00 | .82 | .50 | 77 | 3.0 | .93 | 9.7 | .44 | .27 | .05 | .00 |
| 7 | .87 | .00 | .73 | .48 | 82 | 2.9 | .92 | 7.8 | .81 | .27 | .03 | .00 |
| 8 | .38 | .00 | 11 | .77 | 14 | 2.6 | 2.0 | 1.5 | .85 | .30 | .02 | .01 |
| 9 | .22 | .00 | 2.3 | .67 | 7.2 | 2.5 | .84 | 1.1 | .84 | .20 | .01 | .00 |
| 10 | .24 | 2.1 | 1.5 | .49 | 8.2 | 2.4 | .61 | 1.1 | .80 | .17 | .00 | .00 |
| 11 | .39 | .35 | 24 | .47 | 5.5 | 2.3 | .59 | .99 | .78 | .17 | .01 | .05 |
| 12 | .40 | .11 | 2.4 | .44 | 4.2 | 3.2 | .56 | .90 | .84 | .18 | .05 | .08 |
| 13 | .25 | .08 | 5.3 | .45 | 3.5 | 3.5 | .56 | .77 | .92 | .17 | .00 | .07 |
| 14 | 1.8 | .03 | 8.0 | .44 | 4.7 | 3.0 | .57 | .53 | 1.0 | .17 | .00 | .03 |
| 15 | 2.0 | .03 | 2.4 | .43 | 2.6 | 2.3 | .55 | .70 | .85 | .18 | .00 | .02 |
| 16 | .30 | .03 | 1.7 | .40 | 2.7 | 1.9 | .54 | .82 | .80 | .17 | .00 | .00 |
| 17 | .15 | .03 | 1.4 | .40 | 55 | 1.9 | .54 | 1.9 | .88 | .17 | .00 | .00 |
| 18 | .10 | .03 | 1.2 | .41 | 29 | 1.8 | .53 | .70 | .81 | .17 | .00 | .00 |
| 19 | .08 | .04 | 1.1 | .38 | 52 | 1.7 | .49 | .65 | .99 | .19 | .00 | .00 |
| 20 | .06 | .03 | 1.0 | .39 | 49 | 1.6 | .50 | .72 | .94 | .19 | .00 | .00 |
| 21 | .07 | .04 | .91 | .38 | 39 | 1.5 | .51 | .61 | .93 | .22 | .00 | .00 |
| 22 | .06 | .05 | .82 | .40 | 18 | 1.5 | .51 | .56 | 1.1 | .20 | .00 | .00 |
| 23 | .06 | .03 | .75 | 4.6 | 13 | 1.5 | 1.4 | .49 | .35 | .17 | .00 | .07 |
| 24 | .05 | .03 | .77 | 17 | 10 | 1.6 | .58 | .56 | .29 | .17 | .00 | .04 |
| 25 | .05 | .03 | .67 | 12 | 8.4 | 2.4 | 3.5 | .51 | .27 | .16 | .01 | .01 |
| 26 | .05 | .05 | .69 | 7.0 | 7.4 | 1.3 | 1.0 | .51 | .25 | .22 | .05 | .23 |
| 27 | .03 | .18 | .73 | 5.6 | 6.4 | 1.2 | .71 | .49 | .26 | .27 | .05 | .15 |
| 28 | .08 | 3.6 | .61 | 3.3 | 5.7 | 1.1 | .57 | .47 | .27 | .17 | .02 | .04 |
| 29 | .03 | 31 | .54 | 2.5 | --- | 1.1 | .77 | .44 | .29 | .18 | .01 | .03 |
| 30 | .03 | 2.9 | .54 | 2.3 | --- | 1.1 | .51 | .44 | .43 | .16 | .01 | .02 |
| 31 | .04 | --- | .54 | 2.1 | --- | 1.0 | --- | .47 | --- | .16 | .04 | --- |
| TOTAL | 10.11 | 41.01 | 75.69 | 67.56 | 512.5 | 71.5 | 25.81 | 37.67 | 19.07 | 6.49 | 1.51 | 1.01 |
| MEAN | .33 | 1.37 | 2.44 | 2.18 | 18.3 | 2.31 | .86 | 1.22 | .64 | .21 | .049 | .034 |
| MAX | 2.0 | .31 | .24 | .17 | .82 | 4.9 | 3.5 | 9.7 | 1.1 | .32 | .44 | .23 |
| MIN | .01 | .00 | .54 | .38 | 1.3 | 1.0 | .49 | .44 | .25 | .16 | .00 | .00 |
| AC-FT | 20 | 81 | 150 | 134 | 1020 | 142 | 51 | 75 | 38 | 13 | 3.0 | 2.0 |

NOVATO CREEK BASIN

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11459500 NOVATO CREEK AT NOVATO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .75 | 3.20 | 15.3 | 44.5 | 41.4 | 24.0 | 9.42 | 1.40 | .70 | .61 | .36 | .29 |
| MAX | 9.07 | 17.2 | 117 | 189 | 239 | 207 | 81.3 | 12.9 | 7.73 | 8.61 | 8.53 | 5.40 |
| (WY) | 1963 | 1974 | 1956 | 1970 | 1986 | 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 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1947 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|------------|
| ANNUAL TOTAL | 6697.65 | | 869.93 | | 11.7 | |
| ANNUAL MEAN | 18.3 | | 2.38 | | 47.9 | |
| HIGHEST ANNUAL MEAN | | | | | .40 | |
| LOWEST ANNUAL MEAN | | | | | 1983 | |
| HIGHEST DAILY MEAN | 431 | Jan 20 | 82 | Feb 7 | 2850 | Jan 4 1982 |
| LOWEST DAILY MEAN | .00 | Sep 29 | .00 | Nov 6 | .00 | Oct 1 1946 |
| ANNUAL SEVEN-DAY MINIMUM | .01 | Sep 27 | .00 | Aug 13 | .00 | Oct 1 1946 |
| INSTANTANEOUS PEAK FLOW | | | 282 | Feb 17 | 5000 | Jan 4 1982 |
| INSTANTANEOUS PEAK STAGE | | | 5.61 | Feb 17 | 14.52 | Jan 4 1982 |
| ANNUAL RUNOFF (AC-FT) | 13280 | | 1730 | | 8480 | |
| 10 PERCENT EXCEEDS | 42 | | 3.5 | | 20 | |
| 50 PERCENT EXCEEDS | .99 | | .49 | | .54 | |
| 90 PERCENT EXCEEDS | .05 | | .01 | | .00 | |

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.--No estimated daily discharges. Records good. 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, 3,470 ft³/s, Feb. 18, 1986, gage height, 8.44 ft; minimum daily, 3.8 ft³/s, Oct. 16-18, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 399 ft³/s, Feb. 7, gage height, 4.47 ft; minimum daily, 4.4 ft³/s, Sept. 1, 6, 9, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 1 | 4.6 | 17 | 23 | 22 | 22 | 24 | 17 | 15 | 5.9 | 6.2 | 4.8 | 4.4 |
| 2 | 5.0 | 17 | 24 | 22 | 21 | 22 | 14 | 15 | 6.7 | 6.3 | 4.6 | 4.5 |
| 3 | 5.0 | 17 | 23 | 22 | 20 | 23 | 14 | 15 | 6.7 | 6.1 | 4.7 | 4.5 |
| 4 | 4.9 | 17 | 23 | 21 | 20 | 25 | 14 | 14 | 6.7 | 6.0 | 4.8 | 4.7 |
| 5 | 4.9 | 17 | 22 | 20 | 19 | 25 | 14 | 14 | 6.8 | 6.1 | 4.6 | 4.5 |
| 6 | 4.9 | 17 | 22 | 20 | 123 | 25 | 14 | 16 | 7.1 | 6.1 | 4.8 | 4.4 |
| 7 | 4.9 | 16 | 22 | 19 | 206 | 24 | 17 | 26 | 7.0 | 5.8 | 4.9 | 4.5 |
| 8 | 4.9 | 16 | 52 | 19 | 72 | 22 | 20 | 20 | 7.0 | 5.7 | 4.9 | 4.6 |
| 9 | 4.9 | 16 | 41 | 20 | 44 | 23 | 20 | 19 | 6.8 | 5.5 | 4.8 | 4.4 |
| 10 | 4.9 | 19 | 27 | 19 | 41 | 24 | 19 | 18 | 6.4 | 5.6 | 4.9 | 4.4 |
| 11 | 4.9 | 19 | 94 | 18 | 35 | 24 | 19 | 17 | 6.2 | 5.6 | 4.9 | 4.6 |
| 12 | 4.9 | 18 | 51 | 18 | 29 | 24 | 19 | 17 | 6.2 | 5.6 | 4.8 | 4.6 |
| 13 | 4.9 | 17 | 41 | 18 | 26 | 24 | 18 | 17 | 6.4 | 5.6 | 4.8 | 4.6 |
| 14 | 5.7 | 17 | 141 | 18 | 24 | 24 | 18 | 17 | 6.4 | 5.6 | 4.8 | 4.6 |
| 15 | 6.9 | 17 | 43 | 18 | 22 | 23 | 17 | 16 | 6.1 | 5.6 | 4.6 | 4.6 |
| 16 | 5.5 | 18 | 27 | 18 | 21 | 23 | 15 | 13 | 6.1 | 5.6 | 4.6 | 4.6 |
| 17 | 5.2 | 17 | 26 | 18 | 123 | 22 | 15 | 7.0 | 6.1 | 5.6 | 4.6 | 4.7 |
| 18 | 8.0 | 17 | 28 | 18 | 116 | 22 | 15 | 6.7 | 6.1 | 5.3 | 4.6 | 4.8 |
| 19 | 15 | 17 | 26 | 18 | 182 | 22 | 15 | 6.7 | 6.1 | 4.9 | 4.8 | 4.6 |
| 20 | 16 | 17 | 25 | 18 | 195 | 22 | 15 | 6.5 | 5.8 | 4.9 | 4.9 | 4.6 |
| 21 | 16 | 17 | 26 | 18 | 125 | 22 | 14 | 6.1 | 5.8 | 4.9 | 4.8 | 4.6 |
| 22 | 16 | 17 | 25 | 18 | 93 | 22 | 14 | 6.1 | 6.0 | 4.9 | 4.9 | 4.6 |
| 23 | 16 | 17 | 24 | 25 | 66 | 22 | 16 | 6.1 | 6.1 | 5.1 | 5.0 | 4.6 |
| 24 | 16 | 17 | 24 | 77 | 52 | 22 | 15 | 5.8 | 6.2 | 5.0 | 4.9 | 4.6 |
| 25 | 16 | 17 | 23 | 67 | 44 | 23 | 20 | 5.8 | 6.4 | 5.0 | 4.6 | 4.6 |
| 26 | 16 | 17 | 23 | 40 | 38 | 22 | 19 | 5.8 | 6.4 | 4.8 | 4.6 | 4.6 |
| 27 | 16 | 17 | 23 | 30 | 35 | 22 | 17 | 5.8 | 6.4 | 4.8 | 4.5 | 4.6 |
| 28 | 16 | 19 | 23 | 20 | 29 | 21 | 16 | 5.6 | 6.4 | 4.9 | 4.5 | 4.8 |
| 29 | 16 | 61 | 22 | 15 | --- | 21 | 15 | 5.5 | 6.4 | 4.9 | 4.6 | 4.9 |
| 30 | 17 | 34 | 22 | 12 | --- | 21 | 15 | 5.4 | 6.3 | 4.9 | 4.6 | 4.9 |
| 31 | 17 | --- | 22 | 17 | --- | 21 | --- | 5.6 | --- | 4.9 | 4.6 | --- |
| TOTAL | 303.9 | 576 | 1038 | 723 | 1843 | 706 | 490 | 359.5 | 191.0 | 167.8 | 146.8 | 138.0 |
| MEAN | 9.80 | 19.2 | 33.5 | 23.3 | 65.8 | 22.8 | 16.3 | 11.6 | 6.37 | 5.41 | 4.74 | 4.60 |
| MAX | 17 | 61 | 141 | 77 | 206 | 25 | 20 | 26 | 7.1 | 6.3 | 5.0 | 4.9 |
| MIN | 4.6 | 16 | 22 | 12 | 19 | 21 | 14 | 5.4 | 5.8 | 4.8 | 4.5 | 4.4 |
| AC-FT | 603 | 1140 | 2060 | 1430 | 3660 | 1400 | 972 | 713 | 379 | 333 | 291 | 274 |

11460400 LAGUNITAS CREEK AT SAMUEL P. TAYLOR STATE PARK, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 7.70 | 21.3 | 41.8 | 61.6 | 116 | 99.6 | 19.0 | 14.1 | 7.90 | 6.29 | 5.45 | 5.36 |
| MAX | 13.4 | 66.3 | 173 | 239 | 421 | 503 | 67.3 | 40.7 | 10.3 | 7.61 | 7.05 | 6.53 |
| (WY) | 1990 | 1985 | 1984 | 1993 | 1986 | 1983 | 1983 | 1983 | 1990 | 1991 | 1991 | 1991 |
| 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1983 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 17986.3 | | | | 6683.0 | | | | | | | |
| ANNUAL MEAN | 49.3 | | | | 18.3 | | | | 27.1 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 65.2 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 14.7 | | | |
| HIGHEST DAILY MEAN | 1240 | | | | 206 | | | | 2350 | | | |
| LOWEST DAILY MEAN | 4.4 | | | | 4.4 | | | | 3.8 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 4.5 | | | | 4.5 | | | | 4.0 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 399 | | | | 3470 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 4.47 | | | | 8.44 | | | |
| ANNUAL RUNOFF (AC-FT) | 35680 | | | | 13260 | | | | 19640 | | | |
| 10 PERCENT EXCEEDS | 101 | | | | 26 | | | | 48 | | | |
| 50 PERCENT EXCEEDS | 16 | | | | 16 | | | | 10 | | | |
| 90 PERCENT EXCEEDS | 4.8 | | | | 4.6 | | | | 4.9 | | | |

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 north-east of town of Point Reyes Station, and 2.5 mi downstream from Nicasio Dam.

DRAINAGE AREA.--81.7 mi².

PERIOD OF RECORD.--October 1974 to current year.

WATER TEMPERATURE: October 1989 to September 1990.

SEDIMENT DATA: October 1989 to September 1990.

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.--No estimated daily discharges. 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 859 ft³/s, Feb. 20, gage height, 6.32 ft; minimum daily, 4.4 ft³/s, Sept. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 1 | 4.9 | 16 | 24 | 22 | 28 | 70 | 20 | 15 | 6.3 | 7.0 | 4.9 | 4.4 |
| 2 | 4.9 | 16 | 24 | 22 | 26 | 61 | 15 | 15 | 7.2 | 7.0 | 4.9 | 4.8 |
| 3 | 5.4 | 16 | 23 | 22 | 25 | 54 | 15 | 15 | 7.6 | 6.8 | 4.9 | 4.6 |
| 4 | 5.2 | 16 | 22 | 21 | 24 | 52 | 15 | 15 | 7.6 | 6.7 | 5.1 | 4.7 |
| 5 | 5.2 | 16 | 22 | 20 | 23 | 41 | 14 | 15 | 7.6 | 6.6 | 5.0 | 4.7 |
| 6 | 5.2 | 16 | 22 | 19 | 150 | 34 | 14 | 15 | 7.8 | 6.7 | 4.9 | 4.5 |
| 7 | 5.1 | 16 | 22 | 19 | 352 | 29 | 17 | 27 | 7.6 | 6.7 | 4.8 | 4.5 |
| 8 | 4.9 | 16 | 37 | 19 | 126 | 26 | 19 | 21 | 7.5 | 6.7 | 4.8 | 4.6 |
| 9 | 4.9 | 16 | 66 | 20 | 74 | 26 | 22 | 18 | 7.3 | 6.4 | 4.8 | 4.7 |
| 10 | 4.9 | 18 | 28 | 19 | 63 | 26 | 19 | 17 | 7.2 | 6.1 | 4.7 | 4.5 |
| 11 | 4.9 | 21 | 115 | 19 | 55 | 26 | 19 | 16 | 6.7 | 6.1 | 4.8 | 4.5 |
| 12 | 4.9 | 18 | 74 | 19 | 44 | 26 | 19 | 16 | 6.7 | 6.1 | 4.8 | 4.5 |
| 13 | 4.9 | 17 | 45 | 19 | 38 | 25 | 18 | 15 | 6.8 | 6.1 | 4.8 | 4.5 |
| 14 | 5.8 | 17 | 187 | 19 | 34 | 25 | 18 | 15 | 7.0 | 6.1 | 4.7 | 4.5 |
| 15 | 8.5 | 17 | 68 | 19 | 31 | 24 | 18 | 15 | 6.9 | 6.0 | 4.6 | 4.6 |
| 16 | 6.6 | 17 | 38 | 19 | 29 | 24 | 15 | 15 | 6.7 | 5.9 | 4.6 | 4.6 |
| 17 | 5.7 | 17 | 32 | 19 | 178 | 24 | 15 | 9.3 | 6.7 | 5.9 | 4.5 | 4.7 |
| 18 | 5.5 | 17 | 33 | 19 | 185 | 23 | 15 | 8.4 | 6.7 | 5.9 | 4.5 | 4.7 |
| 19 | 12 | 17 | 29 | 18 | 277 | 23 | 15 | 8.1 | 6.7 | 5.4 | 4.5 | 4.7 |
| 20 | 16 | 17 | 27 | 18 | 730 | 23 | 15 | 7.9 | 6.4 | 5.2 | 4.6 | 4.7 |
| 21 | 16 | 17 | 28 | 18 | 581 | 22 | 15 | 7.7 | 6.1 | 5.2 | 4.7 | 4.7 |
| 22 | 16 | 17 | 26 | 18 | 421 | 22 | 15 | 7.5 | 6.3 | 5.2 | 4.6 | 4.7 |
| 23 | 16 | 17 | 25 | 26 | 269 | 22 | 16 | 7.3 | 6.4 | 5.2 | 4.6 | 4.7 |
| 24 | 16 | 17 | 25 | 102 | 190 | 22 | 16 | 7.3 | 6.4 | 4.9 | 4.6 | 4.7 |
| 25 | 16 | 17 | 24 | 107 | 145 | 24 | 21 | 7.0 | 6.4 | 5.0 | 4.6 | 4.7 |
| 26 | 16 | 17 | 24 | 71 | 118 | 22 | 20 | 6.9 | 6.4 | 4.8 | 4.7 | 4.8 |
| 27 | 16 | 17 | 23 | 52 | 100 | 22 | 17 | 6.7 | 6.4 | 4.8 | 4.7 | 4.9 |
| 28 | 16 | 19 | 23 | 34 | 85 | 21 | 16 | 6.7 | 6.1 | 4.9 | 4.6 | 4.9 |
| 29 | 16 | 60 | 23 | 25 | --- | 21 | 16 | 6.7 | 6.1 | 5.0 | 4.6 | 4.7 |
| 30 | 16 | 60 | 23 | 20 | --- | 21 | 15 | 6.4 | 6.6 | 4.9 | 4.6 | 4.7 |
| 31 | 16 | --- | 23 | 20 | --- | 21 | --- | 6.4 | --- | 4.9 | 4.7 | --- |
| TOTAL | 301.4 | 595 | 1205 | 884 | 4401 | 902 | 504 | 375.3 | 204.2 | 180.2 | 146.2 | 139.5 |
| MEAN | 9.72 | 19.8 | 38.9 | 28.5 | 157 | 29.1 | 16.8 | 12.1 | 6.81 | 5.81 | 4.72 | 4.65 |
| MAX | 16 | 60 | 187 | 107 | 730 | 70 | 22 | 27 | 7.8 | 7.0 | 5.1 | 4.9 |
| MIN | 4.9 | 16 | 22 | 18 | 23 | 21 | 14 | 6.4 | 6.1 | 4.8 | 4.5 | 4.4 |
| AC-FT | 598 | 1180 | 2390 | 1750 | 8730 | 1790 | 1000 | 744 | 405 | 357 | 290 | 277 |

11460600 LAGUNITAS CREEK NEAR POINT REYES STATION, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 6.78 | 37.5 | 92.2 | 200 | 273 | 203 | 59.1 | 14.9 | 6.56 | 5.09 | 4.36 | 4.10 |
| MAX | 19.2 | 177 | 542 | 991 | 1193 | 1109 | 531 | 86.4 | 14.1 | 8.68 | 6.95 | 6.34 |
| (WY) | 1984 | 1983 | 1984 | 1982 | 1986 | 1983 | 1982 | 1983 | 1983 | 1983 | 1991 | 1991 |
| 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1975 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 43007.9 | | | | 9837.8 | | | | | | | |
| ANNUAL MEAN | 118 | | | | 27.0 | | | | 74.6 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 269 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 2.54 | | | |
| HIGHEST DAILY MEAN | 4450 | | | | 730 | | | | 10700 | | | |
| LOWEST DAILY MEAN | 4.7 | | | | 4.4 | | | | .01 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 4.7 | | | | 4.5 | | | | .02 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 859 | | | | 22100 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 6.32 | | | | 26.96 | | | |
| ANNUAL RUNOFF (AC-FT) | 85310 | | | | 19510 | | | | 54040 | | | |
| 10 PERCENT EXCEEDS | 219 | | | | 39 | | | | 118 | | | |
| 50 PERCENT EXCEEDS | 16 | | | | 16 | | | | 8.1 | | | |
| 90 PERCENT EXCEEDS | 5.2 | | | | 4.7 | | | | 2.2 | | | |

11460750 WALKER CREEK NEAR MARSHALL, CA

LOCATION.--Lat 38°10'33", long 122°49'02", in Soulajule (Vasquez) Grant, Marin County, Hydrologic Unit 18050005, on right bank 0.8 mi downstream from Verde Canyon, 2.8 mi below confluence of Arroyo Sausal and Salmon Creek, and 4.0 mi east of Marshall.

DRAINAGE AREA.--31.1 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.--No estimated daily discharge. Records good. Flow affected by regulation and diversions and by Soulajule Reservoir on Arroyo Sausal; reservoir capacity, 10,570 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s, Feb. 17, 1986, gage height, 10.79 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 574 ft³/s, Feb. 7, gage height, 3.35 ft; minimum daily, 2.0 ft³/s, Aug. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|------|------|------|-------|-------|-------|-------|-------|-------|
| 1 | 4.0 | 4.6 | 4.1 | 12 | 16 | 20 | 11 | 9.4 | 7.8 | 7.9 | 4.3 | 5.1 |
| 2 | 4.0 | 5.1 | 3.8 | 12 | 16 | 20 | 10 | 8.3 | 7.8 | 7.9 | 4.3 | 5.1 |
| 3 | 4.1 | 5.2 | 3.8 | 12 | 15 | 19 | 10 | 7.5 | 7.8 | 7.9 | 4.3 | 5.1 |
| 4 | 4.1 | 4.3 | 3.9 | 12 | 15 | 18 | 10 | 7.5 | 7.8 | 7.9 | 4.3 | 5.1 |
| 5 | 4.0 | 4.5 | 3.9 | 12 | 14 | 18 | 10 | 7.5 | 7.8 | 7.8 | 4.2 | 5.1 |
| 6 | 4.0 | 4.8 | 3.9 | 12 | 107 | 17 | 10 | 7.9 | 7.9 | 7.8 | 4.2 | 5.2 |
| 7 | 4.0 | 4.2 | 4.0 | 12 | 205 | 16 | 9.9 | 9.7 | 7.8 | 7.8 | 4.3 | 5.2 |
| 8 | 4.0 | 4.2 | 6.9 | 12 | 57 | 16 | 10 | 8.2 | 7.8 | 7.8 | 4.3 | 5.2 |
| 9 | 4.0 | 4.0 | 7.1 | 13 | 28 | 15 | 10 | 7.8 | 7.7 | 7.8 | 4.3 | 5.1 |
| 10 | 4.2 | 4.7 | 5.6 | 13 | 28 | 15 | 10 | 7.7 | 7.7 | 7.8 | 4.3 | 5.2 |
| 11 | 4.2 | 4.3 | 24 | 12 | 23 | 15 | 9.9 | 7.6 | 7.7 | 6.7 | 4.3 | 5.2 |
| 12 | 4.2 | 3.9 | 12 | 12 | 18 | 14 | 9.8 | 7.7 | 7.8 | 4.6 | 4.2 | 5.1 |
| 13 | 4.3 | 3.9 | 11 | 13 | 16 | 14 | 9.8 | 7.6 | 7.8 | 4.5 | 4.3 | 5.1 |
| 14 | 4.9 | 3.9 | 32 | 12 | 15 | 14 | 9.7 | 7.6 | 7.7 | 4.5 | 4.4 | 5.1 |
| 15 | 7.5 | 3.9 | 17 | 12 | 17 | 14 | 9.7 | 7.6 | 7.7 | 4.5 | 4.4 | 5.1 |
| 16 | 4.6 | 4.0 | 16 | 12 | 16 | 14 | 9.6 | 7.6 | 7.8 | 4.5 | 4.4 | 5.1 |
| 17 | 4.4 | 3.9 | 15 | 12 | 52 | 14 | 9.6 | 8.4 | 7.8 | 4.5 | 4.4 | 5.1 |
| 18 | 4.7 | 3.9 | 15 | 12 | 55 | 14 | 9.5 | 8.1 | 7.9 | 4.4 | 4.4 | 5.1 |
| 19 | 4.4 | 4.0 | 14 | 12 | 145 | 13 | 9.5 | 8.1 | 7.9 | 4.5 | 4.5 | 5.1 |
| 20 | 4.3 | 4.0 | 15 | 12 | 153 | 13 | 9.5 | 8.0 | 8.0 | 4.6 | 4.4 | 5.1 |
| 21 | 4.3 | 4.1 | 14 | 12 | 99 | 13 | 9.4 | 8.0 | 8.0 | 4.4 | 4.5 | 5.1 |
| 22 | 4.3 | 4.1 | 14 | 12 | 62 | 13 | 9.3 | 8.0 | 7.9 | 4.5 | 4.5 | 5.2 |
| 23 | 4.3 | 4.1 | 13 | 14 | 43 | 13 | 9.8 | 7.9 | 7.9 | 4.4 | 4.5 | 5.1 |
| 24 | 4.4 | 4.1 | 13 | 27 | 33 | 13 | 9.4 | 7.9 | 7.9 | 4.4 | 4.5 | 5.1 |
| 25 | 4.3 | 4.1 | 13 | 54 | 29 | 14 | 12 | 7.9 | 7.9 | 4.4 | 4.6 | 5.2 |
| 26 | 4.3 | 4.0 | 13 | 40 | 27 | 13 | 11 | 7.8 | 7.9 | 4.4 | 4.6 | 5.2 |
| 27 | 4.3 | 4.0 | 12 | 31 | 24 | 13 | 9.7 | 7.8 | 7.9 | 4.5 | 4.6 | 5.2 |
| 28 | 4.4 | 5.1 | 12 | 18 | 22 | 13 | 9.5 | 7.8 | 7.9 | 4.4 | 4.5 | 5.1 |
| 29 | 4.4 | 14 | 12 | 14 | --- | 13 | 9.5 | 7.8 | 8.0 | 4.3 | 4.5 | 5.1 |
| 30 | 4.2 | 5.9 | 12 | 12 | --- | 13 | 9.4 | 7.8 | 8.0 | 4.3 | 3.5 | 5.1 |
| 31 | 4.0 | --- | 12 | 14 | --- | 12 | --- | 7.8 | --- | 4.4 | 2.0 | --- |
| TOTAL | 135.1 | 138.8 | 358.0 | 491 | 1350 | 456 | 296.5 | 246.3 | 235.3 | 174.1 | 132.8 | 153.9 |
| MEAN | 4.36 | 4.63 | 11.5 | 15.8 | 48.2 | 14.7 | 9.88 | 7.95 | 7.84 | 5.62 | 4.28 | 5.13 |
| MAX | 7.5 | 14 | 32 | 54 | 205 | 20 | 12 | 9.7 | 8.0 | 7.9 | 4.6 | 5.2 |
| MIN | 4.0 | 3.9 | 3.8 | 12 | 14 | 12 | 9.3 | 7.5 | 7.7 | 4.3 | 2.0 | 5.1 |
| AC-FT | 268 | 275 | 710 | 974 | 2680 | 904 | 588 | 489 | 467 | 345 | 263 | 305 |

11460750 WALKER CREEK NEAR MARSHALL, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.62 | 10.9 | 34.5 | 59.0 | 94.9 | 42.8 | 9.14 | 5.62 | 4.84 | 4.49 | 4.38 | 4.51 |
| MAX | 6.27 | 46.3 | 247 | 371 | 588 | 140 | 14.1 | 7.95 | 7.84 | 5.80 | 5.80 | 5.80 |
| (WY) | 1990 | 1984 | 1984 | 1993 | 1986 | 1986 | 1985 | 1994 | 1994 | 1984 | 1984 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1984 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 19016.0 | | | | 4167.8 | | | | | | | |
| ANNUAL MEAN | 52.1 | | | | 11.4 | | | | 22.9 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 67.5 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 7.41 | | | |
| HIGHEST DAILY MEAN | 2480 | | | | 205 | | | | 4940 | | | |
| LOWEST DAILY MEAN | 3.8 | | | | 2.0 | | | | .73 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 3.9 | | | | 3.9 | | | | .78 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 574 | | | | 7050 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 3.35 | | | | 10.79 | | | |
| ANNUAL RUNOFF (AC-FT) | 37720 | | | | 8270 | | | | 16630 | | | |
| 10 PERCENT EXCEEDS | 66 | | | | 16 | | | | 28 | | | |
| 50 PERCENT EXCEEDS | 5.0 | | | | 7.8 | | | | 5.6 | | | |
| 90 PERCENT EXCEEDS | 4.0 | | | | 4.2 | | | | 2.3 | | | |

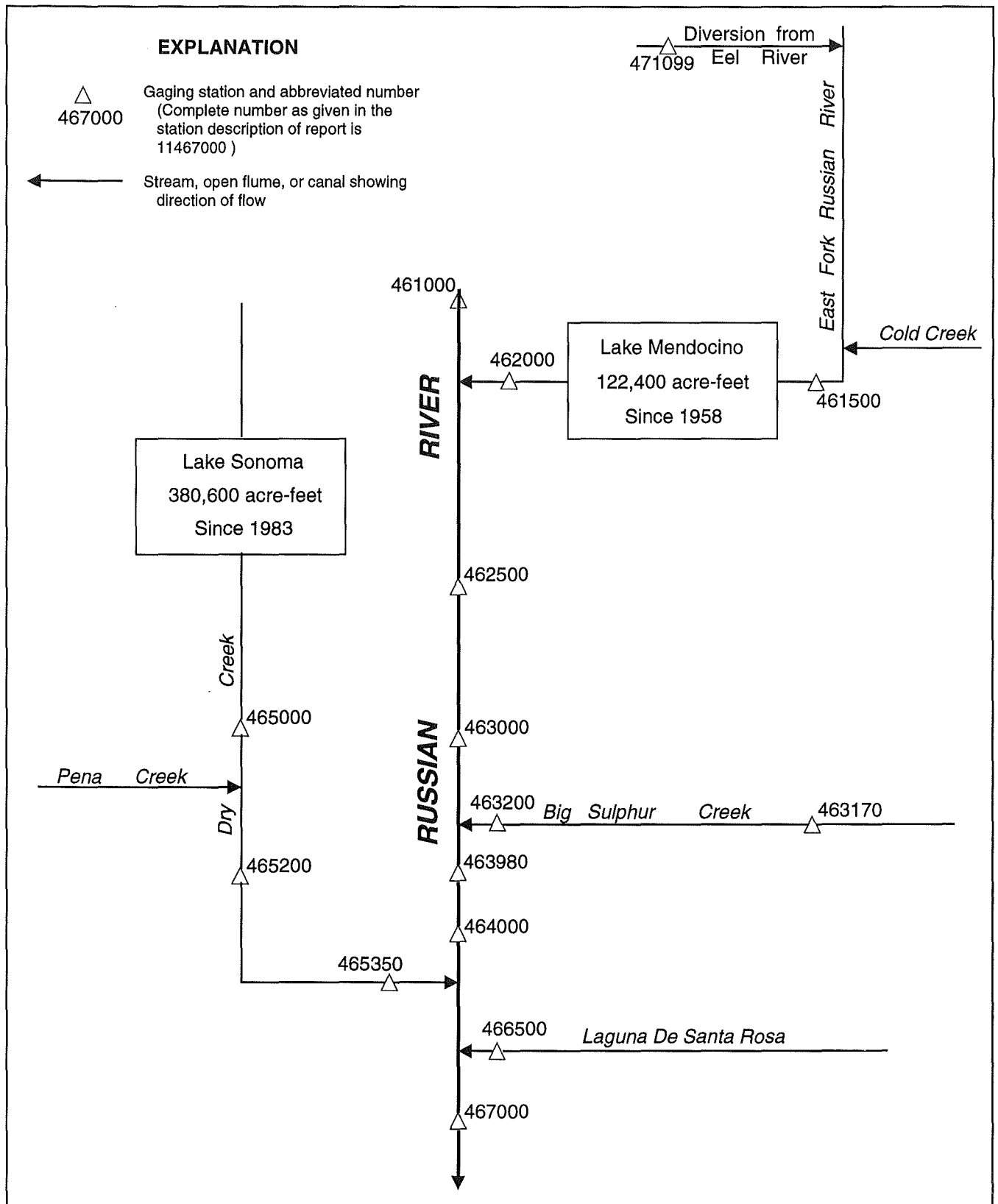


Figure 24. Diversions and storage in Russian River basin.

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 (REVISED) 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.

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 fair. 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 17 | 1900 | *2,930 | *10.66 | | | | |

Minimum daily, 0.02 ft³/s, July 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|--------|------|-------|------|------|-------|-------|------|------|------|
| 1 | 1.5 | 1.4 | 8.5 | 17 | 60 | 132 | 21 | 26 | 5.8 | e.62 | e.05 | .13 |
| 2 | 2.2 | 1.4 | 6.7 | 25 | 52 | 114 | 21 | 23 | 5.3 | e.57 | e.07 | .13 |
| 3 | 1.9 | 1.3 | 6.1 | 19 | 45 | 102 | 21 | 21 | 5.2 | e.53 | e.09 | .15 |
| 4 | 1.5 | 1.2 | 5.8 | 20 | 40 | 91 | 18 | 22 | 4.3 | e.49 | e.11 | .15 |
| 5 | 1.1 | 1.2 | 6.7 | 42 | 36 | 89 | 18 | 27 | 4.1 | e.46 | e.14 | .14 |
| 6 | 1.1 | 1.3 | 8.0 | 30 | 165 | 85 | 18 | 26 | 5.3 | e.44 | e.18 | .15 |
| 7 | 1.1 | 1.4 | 13 | 24 | 587 | 73 | 17 | 28 | 4.9 | e.40 | e.21 | .12 |
| 8 | 1.1 | 1.4 | 188 | 31 | 203 | 66 | 23 | 25 | 4.5 | e.36 | e.25 | .11 |
| 9 | 1.1 | 1.5 | 113 | 78 | 124 | 60 | 40 | 21 | 4.5 | e.33 | e.27 | .09 |
| 10 | 1.3 | 1.6 | 58 | 50 | 153 | 56 | 23 | 19 | 3.6 | e.30 | .19 | .09 |
| 11 | 1.4 | 8.9 | 506 | 37 | 151 | 53 | 21 | 18 | 3.3 | e.28 | .16 | .17 |
| 12 | 1.4 | 6.4 | 161 | 30 | 108 | 49 | 19 | 17 | 2.9 | e.25 | .14 | .15 |
| 13 | 1.5 | 4.8 | 92 | 26 | 92 | 45 | 19 | 16 | 3.2 | e.22 | .13 | .12 |
| 14 | 1.4 | 4.5 | 418 | 23 | 78 | 42 | 18 | 15 | 4.6 | e.20 | .16 | .09 |
| 15 | 1.4 | 3.9 | 142 | 21 | 69 | 39 | 17 | 17 | 3.4 | e.18 | .16 | .15 |
| 16 | 3.2 | 3.9 | 75 | 19 | 67 | 38 | 15 | 19 | 4.5 | e.16 | .12 | .15 |
| 17 | 2.9 | 6.1 | 53 | 17 | 2020 | 35 | 15 | 20 | 4.2 | e.14 | .08 | .12 |
| 18 | 2.3 | 6.3 | 39 | 16 | 1400 | 33 | 14 | 19 | 3.5 | e.13 | .06 | .12 |
| 19 | 1.8 | 6.3 | 30 | 15 | 1070 | 30 | 14 | 17 | 3.8 | e.11 | .05 | .13 |
| 20 | 1.5 | 6.1 | 23 | 15 | 968 | 27 | 13 | 16 | 2.8 | e.09 | .05 | .13 |
| 21 | 1.4 | 5.8 | 21 | 19 | e996 | 27 | 12 | 14 | 2.4 | e.08 | .06 | .11 |
| 22 | 1.3 | 5.1 | 19 | 140 | 633 | 27 | 11 | 13 | e1.6 | e.07 | .09 | .08 |
| 23 | 1.3 | 4.8 | 16 | 885 | 394 | 27 | 15 | 12 | e1.2 | e.06 | .14 | .12 |
| 24 | 1.3 | 5.4 | 14 | 1050 | 284 | 32 | 26 | 11 | e1.1 | e.05 | .12 | .15 |
| 25 | 1.4 | 5.7 | 13 | 891 | 215 | 30 | 131 | 11 | e1.4 | e.04 | .18 | .18 |
| 26 | 1.4 | 6.1 | 13 | 384 | 183 | 27 | 177 | 9.4 | e1.3 | e.03 | .23 | .21 |
| 27 | 1.5 | 6.2 | 12 | 269 | 187 | 25 | 69 | 9.4 | e.98 | e.03 | .17 | .18 |
| 28 | 1.5 | 8.8 | 11 | 159 | 158 | 23 | 45 | 8.5 | e.83 | e.03 | .18 | .22 |
| 29 | 1.5 | 17 | 11 | 110 | --- | 23 | 34 | 8.2 | e.78 | e.02 | .21 | .34 |
| 30 | 1.5 | 14 | 10 | 86 | --- | 22 | 29 | 8.0 | e.67 | e.03 | .16 | .45 |
| 31 | 1.5 | --- | 10 | 72 | --- | 20 | --- | 7.3 | --- | e.04 | .14 | --- |
| TOTAL | 48.3 | 149.8 | 2102.8 | 4620 | 10538 | 1542 | 934 | 523.8 | 95.96 | 6.74 | 4.35 | 4.63 |
| MEAN | 1.56 | 4.99 | 67.8 | 149 | 376 | 49.7 | 31.1 | 16.9 | 3.20 | .22 | .14 | .15 |
| MAX | 3.2 | 17 | 506 | 1050 | 2020 | 132 | 177 | 28 | 5.8 | .62 | .27 | .45 |
| MIN | 1.1 | 1.2 | 5.8 | 15 | 36 | 20 | 11 | 7.3 | .67 | .02 | .05 | .08 |
| AC-FT | 96 | 297 | 4170 | 9160 | 20900 | 3060 | 1850 | 1040 | 190 | 13 | 8.6 | 9.2 |

e Estimated.

RUSSIAN RIVER BASIN

11461000 RUSSIAN RIVER NEAR UKIAH, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 9.32 | 122 | 346 | 521 | 478 | 346 | 156 | 38.3 | 10.5 | 2.08 | .49 | .53 |
| MAX | 147 | 682 | 1663 | 1765 | 1975 | 1436 | 770 | 149 | 57.4 | 10.8 | 2.52 | 2.70 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1958 | 1983 | 1963 | 1983 | 1993 | 1983 | 1983 | 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 1993 CALENDAR YEAR | FOR 1994 WATER YEAR | WATER YEARS 1912 - 1994 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 58984.9 | 20570.38 | |
| ANNUAL MEAN | 162 | 56.4 | 168 |
| HIGHEST ANNUAL MEAN | | | 420 |
| LOWEST ANNUAL MEAN | | | 5.76 |
| HIGHEST DAILY MEAN | 9390 Jan 20 | 2020 Feb 17 | 13300 Dec 22 1964 |
| LOWEST DAILY MEAN | 1.1 Aug 24 | .02 Jul 29 | .00 Oct 1 1911 |
| ANNUAL SEVEN-DAY MINIMUM | 1.1 Sep 2 | .03 Jul 25 | .00 Oct 1 1911 |
| INSTANTANEOUS PEAK FLOW | | 2930 Feb 17 | 18900 Dec 21 1955 |
| INSTANTANEOUS PEAK STAGE | | 10.66 Feb 17 | 20.87 Jan 20 1993 |
| ANNUAL RUNOFF (AC-FT) | 117000 | 40800 | 121600 |
| 10 PERCENT EXCEEDS | 352 | 109 | 394 |
| 50 PERCENT EXCEEDS | 24 | 6.7 | 12 |
| 90 PERCENT EXCEEDS | 1.4 | .13 | .10 |

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 fair. Flow greatly affected by diversion from Eel River through Potter Valley Powerplant Intake and Tailrace (stations 11471000, 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|--------------------------------|------------------|------|------|--------------------------------|------------------|
| Feb. 17 | 0400 | *2,580 | *12.45 | | | | |
| Minimum daily, 9.4 ft ³ /s, Nov. 18-20. | | | | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|--------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 280 | e307 | 131 | 143 | e262 | 352 | 147 | 106 | 66 | 42 | 120 | e31 |
| 2 | 273 | e306 | 132 | 147 | e210 | 344 | 143 | 104 | 56 | 41 | 110 | e43 |
| 3 | 269 | e304 | 131 | 138 | e150 | 338 | 146 | 104 | 58 | 46 | e105 | e47 |
| 4 | 282 | e300 | 130 | 138 | e138 | 336 | 145 | 105 | 56 | 54 | e102 | e49 |
| 5 | 274 | e302 | 89 | 139 | 146 | 334 | 138 | 121 | 57 | 52 | e100 | e52 |
| 6 | 290 | e301 | 84 | 135 | 252 | 332 | 141 | 117 | 60 | 48 | e103 | e56 |
| 7 | 297 | e301 | 105 | 134 | 463 | 324 | 100 | 125 | 62 | 45 | e100 | e60 |
| 8 | e302 | e300 | 292 | 143 | 284 | 322 | 114 | 124 | 68 | 47 | e98 | 49 |
| 9 | e300 | e300 | 279 | 150 | 188 | 319 | 122 | 112 | 71 | 42 | e108 | 50 |
| 10 | e304 | e301 | 307 | 140 | 186 | 318 | 105 | 111 | 75 | 48 | e105 | 59 |
| 11 | e308 | e302 | 463 | 137 | 198 | 319 | 119 | 112 | 53 | 45 | e98 | 71 |
| 12 | e306 | e301 | 305 | 135 | 175 | 316 | 118 | 109 | 55 | 48 | e99 | 78 |
| 13 | e304 | e298 | 336 | 135 | 168 | 316 | 108 | 108 | 52 | 48 | e99 | 85 |
| 14 | e303 | e92 | 645 | 135 | 164 | 315 | 99 | 104 | 50 | 55 | e98 | 79 |
| 15 | e304 | e16 | 332 | 118 | 160 | 313 | 104 | 102 | 47 | 49 | e97 | 74 |
| 16 | e309 | 10 | 256 | 64 | 171 | 278 | 103 | 102 | 44 | 47 | e96 | 61 |
| 17 | e305 | 9.5 | 249 | 66 | 1630 | 307 | 95 | 103 | 50 | 51 | e98 | 65 |
| 18 | e302 | 9.4 | 232 | 65 | 932 | 274 | 102 | 105 | 51 | 52 | e96 | 73 |
| 19 | e303 | 9.4 | 223 | 62 | 821 | 181 | 97 | 115 | 49 | e50 | e94 | 77 |
| 20 | e303 | 9.4 | 217 | 64 | 827 | 147 | 83 | 131 | 57 | e47 | e90 | 68 |
| 21 | e302 | 72 | 199 | 74 | 881 | 142 | 85 | 131 | 48 | e49 | e93 | 77 |
| 22 | e300 | 304 | 162 | 146 | 570 | 126 | 80 | 136 | 43 | e50 | e99 | 60 |
| 23 | e298 | 309 | 136 | e1370 | 457 | 121 | 91 | 131 | 48 | e48 | e102 | 66 |
| 24 | e295 | 307 | 133 | e853 | 412 | 151 | 111 | 117 | 47 | e47 | e100 | 60 |
| 25 | e396 | 307 | 133 | e768 | 387 | 152 | 227 | 112 | 46 | e46 | e105 | 62 |
| 26 | e298 | 268 | 133 | 380 | 375 | 149 | 223 | 94 | 44 | e45 | e104 | 74 |
| 27 | e297 | 130 | 132 | 328 | 382 | 150 | 135 | 83 | 46 | e47 | e100 | 68 |
| 28 | e297 | 128 | 130 | 307 | 363 | 151 | 112 | 82 | 51 | e50 | e94 | 72 |
| 29 | e315 | 141 | 130 | 292 | --- | 150 | 109 | 70 | 46 | e64 | e96 | 83 |
| 30 | e310 | 148 | 132 | 286 | --- | 150 | 107 | 70 | 49 | 107 | e100 | 76 |
| 31 | e308 | --- | 131 | e278 | --- | 131 | --- | 73 | --- | 118 | e30 | --- |
| TOTAL | 9334 | 6192.7 | 6489 | 7470 | 11352 | 7658 | 3609 | 3319 | 1605 | 1628 | 3039 | 1925 |
| MEAN | 301 | 206 | 209 | 241 | 405 | 247 | 120 | 107 | 53.5 | 52.5 | 98.0 | 64.2 |
| MAX | 396 | 309 | 645 | 1370 | 1630 | 352 | 227 | 136 | 75 | 118 | 120 | 85 |
| MIN | 269 | 9.4 | 84 | 62 | 138 | 121 | 80 | 70 | 43 | 41 | 30 | 31 |
| AC-FT | 18510 | 12280 | 12870 | 14820 | 22520 | 15190 | 7160 | 6580 | 3180 | 3230 | 6030 | 3820 |

e Estimated.

11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 234 | 293 | 476 | 609 | 604 | 512 | 348 | 230 | 161 | 140 | 141 | 191 |
| MAX | 352 | 738 | 1476 | 1720 | 1755 | 1611 | 847 | 422 | 329 | 275 | 276 | 298 |
| (WY) | 1963 | 1982 | 1965 | 1970 | 1958 | 1983 | 1982 | 1983 | 1993 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1942 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 138109.7 | | | | 63620.7 | | | | | | | |
| ANNUAL MEAN | 378 | | | | 174 | | | | 327 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 586 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 76.8 | | | |
| HIGHEST DAILY MEAN | 6410 | | | | 1630 | | | | 12500 | | | |
| LOWEST DAILY MEAN | 9.4 | | | | 9.4 | | | | 1.7 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 19 | | | | 19 | | | | 3.2 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 2580 | | | | 18700 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 12.45 | | | | 22.89 | | | |
| ANNUAL RUNOFF (AC-FT) | 273900 | | | | 126200 | | | | 236800 | | | |
| 10 PERCENT EXCEEDS | 586 | | | | 315 | | | | 543 | | | |
| 50 PERCENT EXCEEDS | 307 | | | | 119 | | | | 256 | | | |
| 90 PERCENT EXCEEDS | 125 | | | | 48 | | | | 77 | | | |

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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1911 to September 1913, October 1951 to June 1956, October 1957 to current year.

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.--No estimated daily discharges. Records good. Flow affected by diversion from Eel River through Potter Valley Powerplant Intake (station 11471000) and since November 1958 by storage in Lake Mendocino, capacity, 122,400 acre-ft, 500 ft upstream. Diversions upstream from station for irrigation of about 8,000 acres and about 10 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 (water years 1959-94), 7,350 ft³/s, Jan. 24, 1970, gage height, 10.84 ft; minimum daily, 0.02 ft³/s, Apr. 17, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,040 ft³/s, Feb. 17, gage height, 3.34 ft; minimum daily, 42 ft³/s, Apr. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| 1 | 222 | 339 | 150 | 153 | 285 | 246 | 113 | 54 | 96 | 176 | 203 | 212 |
| 2 | 222 | 260 | 150 | 153 | 285 | 247 | 87 | 58 | 103 | 174 | 191 | 255 |
| 3 | 222 | 263 | 150 | 153 | 237 | 195 | 88 | 63 | 107 | 174 | 191 | 314 |
| 4 | 222 | 263 | 150 | 152 | 199 | 145 | 88 | 75 | 107 | 180 | 191 | 318 |
| 5 | 222 | 263 | 150 | 150 | 199 | 143 | 88 | 88 | 105 | 188 | 191 | 316 |
| 6 | 222 | 263 | 148 | 145 | 199 | 143 | 88 | 84 | 105 | 188 | 191 | 240 |
| 7 | 222 | 263 | 151 | 143 | 271 | 143 | 88 | 78 | 105 | 188 | 191 | 170 |
| 8 | 222 | 218 | 153 | 143 | 400 | 145 | 85 | 78 | 111 | 188 | 191 | 170 |
| 9 | 222 | 179 | 152 | 143 | 300 | 150 | 79 | 78 | 119 | 188 | 201 | 170 |
| 10 | 222 | 180 | 151 | 142 | 199 | 150 | 78 | 78 | 131 | 188 | 202 | 170 |
| 11 | 222 | 180 | 153 | 144 | 137 | 150 | 80 | 78 | 159 | 188 | 202 | 170 |
| 12 | 222 | 174 | 153 | 134 | 134 | 150 | 71 | 78 | 172 | 188 | 197 | 170 |
| 13 | 222 | 166 | 153 | 134 | 134 | 151 | 66 | 78 | 173 | 188 | 188 | 170 |
| 14 | 222 | 166 | 153 | 141 | 135 | 153 | 65 | 78 | 171 | 186 | 188 | 160 |
| 15 | 222 | 165 | 153 | 146 | 137 | 153 | 67 | 78 | 166 | 184 | 188 | 153 |
| 16 | 222 | 149 | 153 | 144 | 137 | 153 | 68 | 78 | 151 | 184 | 188 | 195 |
| 17 | 222 | 146 | 153 | 143 | 224 | 153 | 68 | 78 | 139 | 184 | 189 | 267 |
| 18 | 557 | 146 | 153 | 143 | 652 | 153 | 68 | 78 | 140 | 184 | 191 | 267 |
| 19 | 773 | 146 | 153 | 143 | 1020 | 153 | 68 | 78 | 140 | 184 | 192 | 284 |
| 20 | 760 | 146 | 153 | 143 | 1020 | 153 | 68 | 78 | 162 | 184 | 191 | 316 |
| 21 | 738 | 146 | 153 | 143 | 1020 | 154 | 68 | 78 | 178 | 185 | 191 | 312 |
| 22 | 731 | 146 | 155 | 143 | 1020 | 163 | 68 | 78 | 179 | 184 | 191 | 312 |
| 23 | 725 | 149 | 156 | 143 | 1010 | 177 | 69 | 78 | 180 | 184 | 191 | 305 |
| 24 | 725 | 150 | 159 | 144 | 1010 | 153 | 68 | 84 | 180 | 182 | 191 | 295 |
| 25 | 721 | 150 | 163 | 205 | 688 | 153 | 65 | 91 | 174 | 180 | 191 | 293 |
| 26 | 698 | 150 | 163 | 285 | 246 | 153 | 49 | 89 | 176 | 187 | 193 | 293 |
| 27 | 698 | 150 | 157 | 285 | 246 | 153 | 42 | 91 | 174 | 179 | 195 | 293 |
| 28 | 728 | 150 | 153 | 285 | 246 | 153 | 55 | 96 | 173 | 158 | 195 | 208 |
| 29 | 578 | 150 | 153 | 285 | --- | 173 | 55 | 96 | 175 | 189 | 177 | 153 |
| 30 | 394 | 150 | 153 | 285 | --- | 150 | 53 | 96 | 177 | 215 | 188 | 153 |
| 31 | 395 | --- | 153 | 285 | --- | 150 | --- | 96 | --- | 215 | 159 | --- |
| TOTAL | 12995 | 5566 | 4753 | 5380 | 11790 | 4961 | 2163 | 2487 | 4428 | 5744 | 5919 | 7104 |
| MEAN | 419 | 186 | 153 | 174 | 421 | 160 | 72.1 | 80.2 | 148 | 185 | 191 | 237 |
| MAX | 773 | 339 | 163 | 285 | 1020 | 247 | 113 | 96 | 180 | 215 | 203 | 318 |
| MIN | 222 | 146 | 148 | 134 | 134 | 143 | 42 | 54 | 96 | 158 | 159 | 153 |
| AC-FT | 25780 | 11040 | 9430 | 10670 | 23390 | 9840 | 4290 | 4930 | 8780 | 11390 | 11740 | 14090 |

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 |
| INSTANTANEOUS PEAK FLOW | 13300 | Dec 21 1955 |
| INSTANTANEOUS PEAK STAGE | 16.86 | Dec 21 1955 |
| ANNUAL RUNOFF (AC-FT) | 257700 | |
| 10 PERCENT EXCEEDS | 647 | |
| 50 PERCENT EXCEEDS | 286 | |
| 90 PERCENT EXCEEDS | 63 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 228 | 253 | 381 | 603 | 595 | 447 | 308 | 215 | 218 | 251 | 260 | 241 |
| MAX | 419 | 635 | 1175 | 1905 | 1934 | 1780 | 1026 | 419 | 339 | 336 | 388 | 416 |
| (WY) | 1994 | 1984 | 1965 | 1970 | 1986 | 1983 | 1982 | 1983 | 1993 | 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1960 - 1994

| | | | |
|--------------------------|--------|--------|--------|
| ANNUAL TOTAL | 141253 | 73290 | |
| ANNUAL MEAN | 387 | 201 | 332 |
| HIGHEST ANNUAL MEAN | | | 598 |
| LOWEST ANNUAL MEAN | | | 103 |
| HIGHEST DAILY MEAN | 3930 | Jan 24 | 6620 |
| LOWEST DAILY MEAN | 18 | Feb 18 | .02 |
| ANNUAL SEVEN-DAY MINIMUM | 146 | Nov 16 | .14 |
| INSTANTANEOUS PEAK FLOW | | | 7350 |
| INSTANTANEOUS PEAK STAGE | | | 10.84 |
| ANNUAL RUNOFF (AC-FT) | 280200 | 145400 | 240800 |
| 10 PERCENT EXCEEDS | 698 | 288 | 516 |
| 50 PERCENT EXCEEDS | 238 | 163 | 230 |
| 90 PERCENT EXCEEDS | 153 | 78 | 61 |

11462000 EAST FORK RUSSIAN RIVER NEAR UKIAH, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953-55, 1964-68, 1973 to September 1994 (discontinued).

CHEMICAL DATA: Water years 1953-55, 1973-82.

BIOLOGICAL DATA: Water year 1977-78.

WATER TEMPERATURE: Water years 1953-55, 1965-68, 1973 to September 1994 (discontinued).

SEDIMENT DATA: Water years 1953-55, 1964-68.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: December 1952 to March 1955, October 1964 to September 1968, October 1972 to September 1994 (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: December 1952 to March 1955, January 1964 to September 1968.

INSTRUMENTATION.--Water-temperature recorder since October 1972. Digital recorder set for 1-hour interval punches.

REMARKS.--Interruptions in record were due to malfunction of recording instrument. Water temperature is affected by regulation from Coyote Dam.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 23.5°C on several days in 1977; minimum recorded, 7.0°C, Jan. 14, 1973, many days in 1984, several days in 1989, Feb. 23, 25-28, 1990.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 23.0°C, Aug. 31; minimum recorded, 8.5°C, many days.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|------|----------|------|----------|------|---------|-----|----------|-----|-------|-----|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 20.5 | 20.0 | 18.0 | 18.0 | 12.0 | 12.0 | 9.5 | 9.0 | 9.0 | 8.5 | 8.5 | 8.5 |
| 2 | 20.5 | 20.0 | 18.0 | 17.5 | 12.5 | 12.0 | 9.5 | 9.0 | 9.0 | 8.5 | 8.5 | 8.5 |
| 3 | 20.5 | 20.0 | 18.0 | 17.5 | 12.0 | 12.0 | 9.5 | 9.0 | 9.0 | 8.5 | 8.5 | 8.5 |
| 4 | 20.0 | 19.5 | 17.5 | 17.0 | 12.0 | 12.0 | 9.5 | 9.0 | 9.0 | 8.5 | 8.5 | 8.5 |
| 5 | 20.5 | 20.0 | 17.5 | 17.0 | 12.0 | 12.0 | 9.5 | 9.0 | 8.5 | 8.5 | 8.5 | 8.5 |
| 6 | 20.5 | 20.0 | 17.0 | 17.0 | 12.0 | 12.0 | 9.5 | 9.0 | 8.5 | 8.5 | 9.0 | 8.5 |
| 7 | 20.5 | 20.0 | 17.0 | 17.0 | 12.0 | 12.0 | 9.5 | 9.0 | 8.5 | 8.5 | 8.5 | 8.5 |
| 8 | 20.5 | 20.0 | 17.0 | 16.5 | 12.0 | 12.0 | 9.5 | 9.0 | 8.5 | 8.5 | 8.5 | 8.5 |
| 9 | 20.5 | 20.0 | 16.5 | 16.0 | 12.0 | 12.0 | 9.5 | 9.0 | 8.5 | 8.5 | 8.5 | 8.5 |
| 10 | 20.0 | 20.0 | 16.5 | 16.0 | 12.0 | 12.0 | 9.5 | 9.0 | 9.0 | 8.5 | 8.5 | 8.5 |
| 11 | 20.0 | 20.0 | 16.0 | 16.0 | 12.0 | 11.5 | 9.5 | 9.0 | 9.0 | 8.5 | 9.0 | 8.5 |
| 12 | 20.0 | 19.5 | 16.0 | 16.0 | 12.0 | 11.5 | 9.5 | 9.0 | 8.5 | 8.5 | 9.0 | 8.5 |
| 13 | 20.0 | 19.5 | 16.0 | 15.5 | 11.5 | 11.5 | 9.5 | 9.0 | 9.0 | 8.5 | 9.0 | 8.5 |
| 14 | 20.0 | 19.5 | 15.5 | 15.5 | 11.5 | 11.0 | 9.0 | 8.5 | 9.0 | 8.5 | 9.0 | 8.5 |
| 15 | 19.5 | 19.5 | 15.5 | 15.0 | 11.0 | 10.5 | 9.0 | 9.0 | 8.5 | 8.5 | 9.0 | 8.5 |
| 16 | 19.5 | 19.5 | 15.5 | 15.0 | 11.0 | 10.5 | 9.0 | 9.0 | 8.5 | 8.5 | 9.0 | 8.5 |
| 17 | 19.5 | 19.0 | 15.5 | 15.5 | 10.5 | 10.5 | 9.0 | 9.0 | 9.0 | 8.5 | 9.0 | 8.5 |
| 18 | 19.5 | 19.0 | 15.5 | 15.0 | 10.5 | 10.5 | 9.0 | 9.0 | 9.0 | 8.5 | 9.0 | 8.5 |
| 19 | 19.5 | 19.0 | 15.5 | 15.0 | 10.5 | 10.0 | 9.0 | 8.5 | 9.0 | 9.0 | 9.0 | 8.5 |
| 20 | 19.0 | 19.0 | 15.0 | 15.0 | 10.5 | 10.0 | 9.0 | 9.0 | 9.0 | 8.5 | 9.0 | 8.5 |
| 21 | 19.0 | 19.0 | 15.0 | 14.5 | 10.0 | 9.5 | 9.0 | 8.5 | 9.0 | 8.5 | 9.0 | 8.5 |
| 22 | 19.0 | 19.0 | 15.0 | 14.5 | 10.0 | 9.5 | 9.0 | 8.5 | 9.0 | 8.5 | 9.0 | 8.5 |
| 23 | 19.0 | 19.0 | 14.5 | 13.0 | 10.0 | 9.5 | 9.0 | 8.5 | 8.5 | 8.5 | 9.0 | 8.5 |
| 24 | 19.0 | 19.0 | 13.5 | 13.0 | 9.5 | 9.0 | 9.0 | 9.0 | 8.5 | 8.5 | 9.0 | 8.5 |
| 25 | 19.0 | 18.5 | 13.0 | 12.5 | 9.5 | 9.5 | 9.5 | 9.0 | 8.5 | 8.5 | 9.0 | 8.5 |
| 26 | 19.0 | 18.5 | 12.5 | 12.0 | 9.5 | 9.5 | 9.5 | 9.0 | 8.5 | 8.5 | 9.5 | 9.0 |
| 27 | 18.5 | 18.5 | 12.0 | 12.0 | 9.5 | 9.0 | 9.5 | 9.0 | 9.0 | 8.5 | 9.5 | 9.0 |
| 28 | 18.5 | 18.5 | 12.0 | 12.0 | 9.5 | 9.0 | 9.5 | 9.0 | 8.5 | 8.5 | 9.5 | 8.5 |
| 29 | 18.5 | 18.0 | 12.0 | 12.0 | 9.5 | 9.0 | 9.5 | 8.5 | --- | --- | 9.5 | 9.0 |
| 30 | 18.0 | 18.0 | 12.5 | 12.0 | 9.0 | 9.0 | 9.0 | 9.0 | --- | --- | 9.5 | 9.0 |
| 31 | 18.0 | 18.0 | --- | --- | 9.5 | 9.0 | 9.0 | 9.0 | --- | --- | 9.5 | 9.0 |
| MONTH | 20.5 | 18.0 | 18.0 | 12.0 | 12.5 | 9.0 | 9.5 | 8.5 | 9.0 | 8.5 | 9.5 | 8.5 |

RUSSIAN RIVER BASIN

11462000 EAST FORK RUSSIAN RIVER NEAR UKIAH, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

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.

CHEMICAL DATA: Water years 1951-66.

WATER TEMPERATURE: Water years 1965-79.

SEDIMENT DATA: Water years 1989-93.

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, 129,600 acre-feet, 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,450 ft³/s, Feb. 17, gage height, 9.85 ft; minimum daily, 82 ft³/s, June 2, 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|-------|
| 1 | 196 | 385 | 180 | 204 | 441 | 568 | 193 | 119 | 86 | 147 | 198 | 136 |
| 2 | 201 | 291 | 176 | 212 | 424 | 533 | 152 | 112 | 82 | 148 | 174 | 176 |
| 3 | 207 | 283 | 172 | 209 | 393 | 480 | 149 | 106 | 93 | 150 | 159 | 191 |
| 4 | 208 | 280 | 172 | 208 | 330 | 394 | 145 | 109 | 82 | 160 | 165 | 259 |
| 5 | 208 | 279 | 172 | 229 | 317 | 375 | 138 | 137 | 85 | 166 | 165 | 266 |
| 6 | 207 | 269 | 172 | 225 | 458 | 373 | 135 | 140 | 92 | 158 | 166 | 275 |
| 7 | 207 | 269 | 180 | 211 | 1420 | 344 | 129 | 138 | 94 | 157 | 164 | 250 |
| 8 | 204 | 257 | 379 | 211 | 824 | 329 | 137 | 132 | 91 | 151 | 167 | 153 |
| 9 | 205 | 202 | 379 | 266 | 624 | 313 | 158 | 125 | 97 | 149 | 176 | 146 |
| 10 | 208 | 201 | 263 | 247 | 548 | 301 | 137 | 119 | 106 | 157 | 182 | 144 |
| 11 | 210 | 205 | 711 | 233 | 506 | 288 | 132 | 115 | 120 | 161 | 191 | 142 |
| 12 | 210 | 199 | 510 | 223 | 411 | 279 | 126 | 109 | 146 | 149 | 188 | 148 |
| 13 | 210 | 197 | 346 | 212 | 369 | 270 | 110 | 103 | 149 | 151 | 188 | 152 |
| 14 | 213 | 193 | 934 | 210 | 344 | 267 | 108 | 101 | 142 | 156 | 164 | 152 |
| 15 | 218 | 193 | 511 | 215 | 323 | 256 | 112 | 102 | 148 | 152 | 162 | 142 |
| 16 | 221 | 185 | 344 | 212 | 318 | 264 | 110 | 108 | 144 | e158 | 162 | 128 |
| 17 | 221 | 167 | 289 | 211 | 3330 | 252 | 108 | 116 | 117 | e160 | 161 | 131 |
| 18 | 354 | 168 | 262 | 208 | 3230 | 250 | 106 | 116 | 112 | e162 | 164 | 215 |
| 19 | 627 | 166 | 245 | 208 | 2820 | 245 | 101 | 113 | 117 | e163 | 162 | 227 |
| 20 | 644 | 166 | 232 | 205 | 3010 | 227 | 99 | 109 | 133 | 163 | 163 | 239 |
| 21 | 651 | 166 | 225 | 208 | 3040 | 237 | 96 | 103 | 156 | 164 | 162 | 275 |
| 22 | 649 | 166 | 221 | 250 | 2270 | 223 | 93 | 101 | 159 | 160 | 160 | 272 |
| 23 | 659 | 166 | 215 | 1470 | 1700 | 214 | 97 | 93 | 156 | 162 | 163 | 269 |
| 24 | 660 | 166 | 210 | 1930 | 1460 | 233 | 115 | 91 | 152 | 164 | 163 | 272 |
| 25 | 661 | 166 | 212 | 1750 | 1200 | 230 | 228 | 97 | 141 | 164 | 162 | 264 |
| 26 | 650 | 167 | 215 | 1050 | 707 | 223 | 385 | 92 | 146 | 168 | 162 | 265 |
| 27 | 616 | 168 | 213 | 793 | 664 | 221 | 192 | 93 | 157 | 163 | 162 | 265 |
| 28 | 682 | 176 | 205 | 626 | 617 | 221 | 159 | 93 | 154 | 152 | 160 | 258 |
| 29 | 635 | 200 | 202 | 545 | --- | 229 | 141 | 96 | 148 | 149 | 161 | 228 |
| 30 | 418 | 194 | 199 | 497 | --- | 218 | 129 | 95 | 146 | 187 | 155 | 138 |
| 31 | 406 | --- | 199 | 465 | --- | 206 | --- | 94 | --- | 196 | 160 | --- |
| TOTAL | 11866 | 6290 | 8945 | 13943 | 32098 | 9063 | 4220 | 3377 | 3751 | 4947 | 5191 | 6178 |
| MEAN | 383 | 210 | 289 | 450 | 1146 | 292 | 141 | 109 | 125 | 160 | 167 | 206 |
| MAX | 682 | 385 | 934 | 1930 | 3330 | 568 | 385 | 140 | 159 | 196 | 198 | 275 |
| MIN | 196 | 166 | 172 | 204 | 317 | 206 | 93 | 91 | 82 | 147 | 155 | 128 |
| AC-FT | 23540 | 12480 | 17740 | 27660 | 63670 | 17980 | 8370 | 6700 | 7440 | 9810 | 10300 | 12250 |

e Estimated.

RUSSIAN RIVER BASIN

11462500 RUSSIAN RIVER NEAR HOPLAND, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 234 | 439 | 1158 | 1721 | 1715 | 1240 | 709 | 315 | 213 | 197 | 206 | 207 |
| MAX | 555 | 1656 | 4849 | 5856 | 6799 | 5361 | 2572 | 820 | 452 | 326 | 369 | 383 |
| (WY) | 1958 | 1984 | 1965 | 1970 | 1958 | 1983 | 1982 | 1983 | 1993 | 1961 | 1961 | 1974 |
| MIN | 35.1 | 96.5 | 87.6 | 37.2 | 28.7 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1940 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 276096 | | | | 109869 | | | | | | | |
| ANNUAL MEAN | 756 | | | | 301 | | | | 692 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 1587 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 94.0 | | | |
| HIGHEST DAILY MEAN | 15500 | | | | 3330 | | | | 33800 | | | |
| LOWEST DAILY MEAN | 166 | | | | 82 | | | | 9.1 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 166 | | | | 88 | | | | 13 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 5450 | | | | 45000 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 9.85 | | | | 27.00 | | | |
| ANNUAL RUNOFF (AC-FT) | 547600 | | | | 217900 | | | | 501200 | | | |
| 10 PERCENT EXCEEDS | 1360 | | | | 546 | | | | 1510 | | | |
| 50 PERCENT EXCEEDS | 379 | | | | 193 | | | | 253 | | | |
| 90 PERCENT EXCEEDS | 195 | | | | 109 | | | | 135 | | | |

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 Cumisky 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.

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 good. 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,800 ft³/s, Feb. 18, gage height, 10.59 ft; minimum daily, 96 ft³/s, June 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|
| 1 | 187 | 409 | 192 | 220 | 543 | 844 | 241 | 162 | 105 | 136 | 184 | 130 |
| 2 | 187 | 328 | 186 | 231 | 510 | 761 | 205 | 152 | 97 | 120 | 169 | 153 |
| 3 | 187 | 292 | 181 | 230 | 481 | 693 | 192 | 143 | 105 | 120 | 138 | 191 |
| 4 | 195 | 289 | 181 | 226 | 398 | 566 | 184 | 139 | 99 | 123 | 136 | 216 |
| 5 | 200 | 282 | 181 | 241 | 371 | 526 | 176 | 159 | 96 | 144 | 148 | 238 |
| 6 | 199 | 277 | 181 | 246 | 703 | 515 | 176 | 167 | 104 | 141 | 151 | 251 |
| 7 | 198 | 275 | 190 | 232 | 2370 | 467 | 168 | 176 | 104 | 141 | 157 | 175 |
| 8 | 198 | 274 | 719 | 228 | 1330 | 435 | 174 | 167 | 100 | 137 | 164 | 142 |
| 9 | 196 | 225 | 558 | 259 | 958 | 413 | 197 | 148 | 101 | 127 | 163 | 130 |
| 10 | 194 | 209 | 406 | 270 | 752 | 392 | 173 | 143 | 105 | 137 | 173 | 124 |
| 11 | 194 | 214 | 1120 | 250 | 727 | 372 | 167 | 139 | 109 | 147 | 173 | 123 |
| 12 | 202 | 207 | 845 | 244 | 561 | 349 | 162 | 136 | 130 | 139 | 173 | 140 |
| 13 | 207 | 204 | 668 | 232 | 488 | 333 | 151 | 130 | 144 | 134 | 158 | 138 |
| 14 | 209 | 197 | 1790 | 225 | 444 | 329 | 144 | 126 | 126 | 137 | 156 | 131 |
| 15 | 213 | 196 | 885 | 229 | 409 | 315 | 143 | 118 | 139 | 134 | 154 | 115 |
| 16 | 218 | 196 | 510 | 227 | 408 | 327 | 140 | 128 | 141 | 138 | 148 | 114 |
| 17 | 218 | 178 | 397 | 224 | 4890 | 313 | 139 | 134 | 122 | 132 | 146 | 159 |
| 18 | 235 | 177 | 349 | 221 | 5070 | 304 | 139 | 135 | 112 | 133 | 143 | 204 |
| 19 | 554 | 177 | 316 | 219 | 4420 | 295 | 132 | 132 | 111 | 136 | 143 | 215 |
| 20 | 619 | 172 | 286 | 217 | 4840 | 267 | 127 | 126 | 117 | 138 | 142 | 243 |
| 21 | 643 | 173 | 274 | 219 | 4820 | 279 | 125 | 124 | 136 | 133 | 149 | 252 |
| 22 | 654 | 173 | 261 | 304 | 3640 | 260 | 120 | 121 | 141 | 132 | 152 | 254 |
| 23 | 661 | 173 | 250 | 1540 | 2640 | 226 | 128 | 120 | 138 | 133 | 155 | 262 |
| 24 | 666 | 173 | 244 | 3580 | 2220 | 279 | 142 | 109 | 137 | 137 | 148 | 255 |
| 25 | 673 | 173 | 244 | 3090 | 1940 | 275 | 276 | 115 | 125 | 147 | 146 | 253 |
| 26 | 683 | e173 | 246 | 1970 | 1260 | 265 | 541 | 114 | 127 | 150 | 144 | 251 |
| 27 | 628 | e173 | 244 | 1340 | 1090 | 262 | 295 | 116 | 140 | 150 | 148 | 247 |
| 28 | 686 | 173 | 232 | 986 | 968 | 259 | 224 | 112 | 140 | 133 | 149 | 250 |
| 29 | 705 | 187 | 226 | 783 | --- | 257 | 194 | 113 | 140 | 122 | 151 | 166 |
| 30 | 471 | 221 | 222 | 668 | --- | 266 | 175 | 117 | 132 | 155 | 140 | 134 |
| 31 | 418 | --- | 221 | 596 | --- | 244 | --- | 114 | --- | 174 | 142 | --- |
| TOTAL | 11698 | 6570 | 12805 | 19747 | 49251 | 11688 | 5550 | 4135 | 3623 | 4260 | 4743 | 5656 |
| MEAN | 377 | 219 | 413 | 637 | 1759 | 377 | 185 | 133 | 121 | 137 | 153 | 189 |
| MAX | 705 | 409 | 1790 | 3580 | 5070 | 844 | 541 | 176 | 144 | 174 | 184 | 262 |
| MIN | 187 | 172 | 181 | 217 | 371 | 226 | 120 | 109 | 96 | 120 | 136 | 114 |
| AC-FT | 23200 | 13030 | 25400 | 39170 | 97690 | 23180 | 11010 | 8200 | 7190 | 8450 | 9410 | 11220 |

e Estimated.

RUSSIAN RIVER BASIN

11463000 RUSSIAN RIVER NEAR CLOVERDALE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 253 | 607 | 1582 | 2503 | 2429 | 1724 | 909 | 368 | 233 | 211 | 220 | 216 |
| MAX | 659 | 2636 | 6398 | 8162 | 9387 | 7015 | 3708 | 1156 | 539 | 312 | 359 | 385 |
| (WY) | 1963 | 1984 | 1965 | 1970 | 1958 | 1983 | 1982 | 1983 | 1993 | 1961 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1951 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 380163 | | | | 139726 | | | | | | | |
| ANNUAL MEAN | 1042 | | | | 383 | | | | 932 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 2144 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 99.2 | | | |
| HIGHEST DAILY MEAN | 19400 | | | | 5070 | | | | 42800 | | | |
| LOWEST DAILY MEAN | 170 | | | | 96 | | | | 12 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 173 | | | | 101 | | | | 16 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 6800 | | | | 55200 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 10.59 | | | | 31.60 | | | |
| ANNUAL RUNOFF (AC-FT) | 754100 | | | | 277100 | | | | 675100 | | | |
| 10 PERCENT EXCEEDS | 2200 | | | | 677 | | | | 2170 | | | |
| 50 PERCENT EXCEEDS | 425 | | | | 192 | | | | 264 | | | |
| 90 PERCENT EXCEEDS | 187 | | | | 125 | | | | 153 | | | |

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.

GAGE.--Water-stage recorder. Elevation of gage is 1,430 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Diversion for industrial use 150 ft upstream from station when flows are above 10 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,700 ft³/s, Feb. 17, 1986, gage height, 8.98 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. See schematic diagram of Russian River basin.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 8 | 1230 | *1,480 | *6.56 | | | | |

Minimum daily, 0.70 ft³/s, Aug. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|--------|-------|------|------|-------|-------|-------|------|-------|-------|
| 1 | 1.6 | 1.9 | 4.1 | 7.9 | 12 | 19 | 11 | 10 | 4.7 | 2.7 | 1.3 | .80 |
| 2 | 1.7 | 1.7 | 3.1 | 8.1 | 13 | 16 | 10 | 9.5 | 4.7 | 2.4 | 1.2 | .82 |
| 3 | 1.6 | 1.7 | 2.8 | 7.1 | 13 | 16 | 9.6 | 8.7 | 4.7 | 2.5 | 1.2 | .82 |
| 4 | 1.5 | 1.7 | 2.3 | 8.0 | 13 | 16 | 9.1 | 8.5 | 4.7 | 2.2 | 1.2 | .82 |
| 5 | 1.5 | 1.6 | 2.2 | 8.2 | 12 | 16 | 9.0 | 8.5 | 4.7 | 2.1 | 1.2 | .82 |
| 6 | 1.6 | 1.5 | 2.1 | 6.8 | 70 | 16 | 8.7 | 8.5 | 4.5 | 2.0 | 1.4 | .82 |
| 7 | 1.6 | 1.5 | 26 | 6.3 | 192 | 16 | 8.2 | 10 | 4.3 | 2.2 | 1.5 | .81 |
| 8 | 1.5 | 1.5 | 679 | 6.3 | 69 | 16 | 13 | 10 | 4.3 | 2.2 | 1.3 | .82 |
| 9 | 1.5 | 1.4 | 61 | 6.6 | 40 | 17 | 13 | 9.5 | 4.3 | 2.2 | 1.2 | .75 |
| 10 | 1.5 | 1.9 | 67 | 6.4 | 33 | 17 | 10 | 8.5 | 4.2 | 1.9 | 1.1 | .72 |
| 11 | 1.5 | 2.0 | 258 | 5.8 | 22 | 17 | 9.3 | 8.1 | 3.9 | 1.7 | 1.1 | .82 |
| 12 | 1.5 | 1.6 | 65 | 5.5 | 17 | 19 | 8.5 | 7.1 | 3.9 | 1.5 | 1.1 | .81 |
| 13 | 1.4 | 1.4 | 168 | 5.1 | 17 | 18 | 8.5 | 7.0 | 3.9 | 1.8 | 1.0 | .79 |
| 14 | 1.7 | 1.5 | 257 | 5.0 | 17 | 17 | 8.2 | 7.1 | 3.6 | 1.6 | 1.0 | .81 |
| 15 | 2.3 | 1.7 | 77 | 5.0 | 17 | 16 | 7.7 | 7.1 | 3.6 | 1.5 | .93 | .82 |
| 16 | 2.2 | 1.7 | 36 | 4.7 | 17 | 16 | 7.5 | 7.0 | 3.6 | 1.4 | .91 | .82 |
| 17 | 1.9 | 1.7 | 20 | 4.6 | 241 | 16 | 7.5 | 6.6 | 3.6 | 1.6 | .82 | .82 |
| 18 | 1.7 | 1.7 | 18 | 4.3 | 116 | 17 | 7.3 | 6.6 | 3.6 | 1.7 | .82 | .82 |
| 19 | 1.6 | 1.7 | 18 | 4.2 | 100 | 16 | 6.6 | 6.4 | 3.6 | 1.5 | .81 | .82 |
| 20 | 1.4 | 1.7 | 18 | 3.9 | 104 | 15 | 6.6 | 6.2 | 3.6 | 1.5 | .82 | .82 |
| 21 | 1.3 | 1.7 | 17 | 4.5 | 170 | 15 | 6.6 | 6.2 | 3.2 | 1.5 | .82 | .86 |
| 22 | 1.4 | 1.7 | 16 | 5.4 | 123 | 14 | 6.4 | 6.2 | 3.1 | 1.5 | .82 | .91 |
| 23 | 1.3 | 1.7 | 16 | 37 | 89 | 14 | 10 | 5.8 | 3.1 | 1.5 | .82 | 1.0 |
| 24 | 1.3 | 1.7 | 14 | 169 | 68 | 13 | 10 | 5.6 | 2.9 | 1.5 | .71 | 1.0 |
| 25 | 1.5 | 1.7 | 13 | 135 | 51 | 13 | 24 | 5.4 | 2.9 | 1.6 | .79 | 1.0 |
| 26 | 1.8 | 1.7 | 12 | 71 | 46 | 12 | 12 | 5.2 | 2.9 | 1.8 | .70 | 1.0 |
| 27 | 2.0 | 1.7 | 11 | 38 | 37 | 12 | 12 | 5.0 | 2.9 | 1.7 | .74 | .89 |
| 28 | 2.1 | 4.5 | 10 | 30 | 27 | 11 | 12 | 5.0 | 2.9 | 1.5 | .82 | .82 |
| 29 | 2.1 | 28 | 9.2 | 13 | --- | 11 | 12 | 5.0 | 2.9 | 1.4 | .82 | .82 |
| 30 | 2.1 | 9.3 | 8.3 | 13 | --- | 11 | 11 | 5.0 | 2.9 | 1.5 | .81 | .82 |
| 31 | 2.0 | --- | 7.9 | 13 | --- | 11 | --- | 4.9 | --- | 1.5 | .82 | --- |
| TOTAL | 51.7 | 86.8 | 1919.0 | 648.7 | 1746 | 469 | 295.3 | 220.2 | 111.7 | 55.2 | 30.58 | 25.27 |
| MEAN | 1.67 | 2.89 | 61.9 | 20.9 | 62.4 | 15.1 | 9.84 | 7.10 | 3.72 | 1.78 | .99 | .84 |
| MAX | 2.3 | 28 | 679 | 169 | 241 | 19 | 24 | 10 | 4.7 | 2.7 | 1.5 | 1.0 |
| MIN | 1.3 | 1.4 | 2.1 | 3.9 | 12 | 11 | 6.4 | 4.9 | 2.9 | 1.4 | .70 | .72 |
| AC-FT | 103 | 172 | 3810 | 1290 | 3460 | 930 | 586 | 437 | 222 | 109 | 61 | 50 |

RUSSIAN RIVER BASIN

11463170 BIG SULPHUR CREEK AT GEYSERS RESORT, NEAR CLOVERDALE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 3.89 | 30.9 | 73.8 | 75.3 | 112 | 100 | 30.1 | 15.3 | 5.80 | 2.40 | 1.27 | 1.30 |
| MAX | 20.9 | 146 | 243 | 336 | 571 | 297 | 162 | 81.6 | 17.1 | 5.75 | 2.64 | 2.90 |
| (WY) | 1990 | 1984 | 1984 | 1993 | 1986 | 1983 | 1982 | 1990 | 1990 | 1993 | 1993 | 1985 |
| MIN | .74 | 1.22 | 1.81 | 2.52 | 7.34 | 8.57 | 8.44 | 4.79 | 2.62 | .86 | .70 | .65 |
| (WY) | 1989 | 1981 | 1991 | 1991 | 1989 | 1988 | 1990 | 1986 | 1987 | 1984 | 1988 | 1988 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1981 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 20459.7 | | | | 5659.45 | | | | | | | |
| ANNUAL MEAN | 56.1 | | | | 15.5 | | | | 37.3 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 86.8 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 15.5 | | | |
| HIGHEST DAILY MEAN | 1980 Jan 20 | | | | 679 Dec 8 | | | | 3920 Feb 17 1986 | | | |
| LOWEST DAILY MEAN | 1.3 Oct 21 | | | | .70 Aug 26 | | | | .08 Aug 31 1983 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 1.4 Oct 19 | | | | .77 Aug 24 | | | | .24 Oct 13 1983 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 1480 Dec 8 | | | | 5700 Feb 17 1986 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 6.56 Dec 8 | | | | 8.98 Feb 17 1986 | | | |
| ANNUAL RUNOFF (AC-FT) | 40580 | | | | 11230 | | | | 27060 | | | |
| 10 PERCENT EXCEEDS | 122 | | | | 21 | | | | 79 | | | |
| 50 PERCENT EXCEEDS | 11 | | | | 4.3 | | | | 5.5 | | | |
| 90 PERCENT EXCEEDS | 1.7 | | | | .82 | | | | .91 | | | |

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 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 good. Diversions for irrigation and geothermal recharge upstream from station. No flow computed above 200 ft³/s. 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-----|-----|-----|------|------|------|-------|------|-------|------|
| 1 | 4.9 | 5.9 | 24 | 23 | 70 | 139 | 43 | 33 | 14 | 5.4 | 1.9 | 1.8 |
| 2 | 5.1 | 6.0 | 16 | 25 | 64 | 125 | 43 | 32 | 13 | 5.1 | 2.0 | 1.9 |
| 3 | 5.2 | 6.0 | 13 | 23 | 58 | 117 | 41 | 30 | 13 | 5.2 | 1.9 | 2.0 |
| 4 | 5.2 | 6.0 | 12 | 26 | 54 | 110 | 40 | 30 | 12 | 5.0 | 1.9 | 2.3 |
| 5 | 5.5 | 5.8 | 11 | 31 | 49 | 106 | 37 | 33 | 12 | 5.0 | 1.7 | 1.8 |
| 6 | 6.3 | 5.7 | 10 | 24 | --- | 103 | 37 | 31 | 13 | 4.8 | 1.7 | 1.8 |
| 7 | 6.4 | 5.7 | 13 | 22 | --- | 96 | 36 | 51 | 13 | 4.6 | 1.7 | 1.6 |
| 8 | 5.7 | 5.7 | --- | 21 | --- | 92 | 39 | 47 | 13 | 4.0 | 1.7 | 1.5 |
| 9 | 5.7 | 5.7 | --- | 24 | 182 | 88 | 65 | 37 | 12 | 3.6 | 1.6 | 1.5 |
| 10 | 6.0 | 8.3 | --- | 22 | 154 | 85 | 43 | 31 | 11 | 3.2 | 1.6 | 1.5 |
| 11 | 6.7 | 16 | --- | 20 | 129 | 83 | 36 | 28 | 10 | 3.1 | 1.6 | 1.6 |
| 12 | 7.0 | 10 | --- | 19 | 105 | 79 | 34 | 25 | 9.6 | 3.0 | 1.7 | 1.7 |
| 13 | 7.0 | 8.8 | --- | 18 | 94 | 76 | 32 | 23 | 8.8 | 2.6 | 1.7 | 2.0 |
| 14 | 7.0 | 8.1 | --- | 17 | 87 | 73 | 31 | 22 | 8.9 | 2.2 | 1.5 | 1.9 |
| 15 | 10 | 7.2 | --- | 16 | 81 | 71 | 30 | 21 | 9.8 | 2.1 | 1.4 | 2.0 |
| 16 | 12 | 7.0 | 158 | 16 | 78 | 71 | 28 | 21 | 9.5 | 2.0 | 1.2 | 2.1 |
| 17 | 9.6 | 7.0 | 107 | 15 | --- | 70 | 28 | 24 | 9.5 | 2.1 | .90 | 2.1 |
| 18 | 8.4 | 7.0 | 82 | 15 | --- | 67 | 28 | 24 | 9.7 | 2.1 | .96 | 2.0 |
| 19 | 8.2 | 7.0 | 70 | 14 | --- | 66 | 26 | 23 | 8.9 | 2.0 | 1.1 | 1.9 |
| 20 | 7.6 | 7.0 | 62 | 14 | --- | 63 | 25 | 22 | 8.4 | 2.5 | 1.2 | 1.7 |
| 21 | 7.2 | 7.0 | 55 | 15 | --- | 60 | 24 | 22 | 8.2 | 2.8 | 1.3 | 1.5 |
| 22 | 7.0 | 7.1 | 47 | 24 | --- | 59 | 23 | 21 | 8.9 | 3.0 | 1.6 | 1.5 |
| 23 | 7.0 | 7.3 | 42 | --- | --- | 58 | 40 | 19 | 8.6 | 2.9 | 1.5 | 1.7 |
| 24 | 6.9 | 7.3 | 38 | --- | --- | 60 | 55 | 19 | 7.6 | 3.0 | 1.4 | 1.7 |
| 25 | 6.6 | 7.3 | 35 | --- | --- | 57 | 81 | 18 | 7.7 | 3.0 | 1.5 | 1.7 |
| 26 | 6.3 | 7.3 | 33 | --- | --- | 54 | 103 | 17 | 7.4 | 2.8 | 1.4 | 1.8 |
| 27 | 5.7 | 7.3 | 31 | --- | 182 | 52 | 54 | 17 | 6.9 | 2.6 | 1.5 | 2.0 |
| 28 | 5.5 | 12 | 28 | 159 | 157 | 50 | 44 | 17 | 6.2 | 2.3 | 1.6 | 2.1 |
| 29 | 5.6 | 81 | 27 | 112 | --- | 48 | 38 | 16 | 6.3 | 2.3 | 1.5 | 2.2 |
| 30 | 5.7 | 78 | 25 | 93 | --- | 47 | 35 | 15 | 5.8 | 2.1 | 1.3 | 2.1 |
| 31 | 5.7 | --- | 24 | 79 | --- | 45 | --- | 14 | --- | 1.9 | 1.6 | --- |
| TOTAL | 208.7 | 367.5 | --- | --- | --- | 2370 | 1219 | 783 | 292.7 | 98.3 | 47.16 | 55.0 |
| MEAN | 6.73 | 12.2 | --- | --- | --- | 76.5 | 40.6 | 25.3 | 9.76 | 3.17 | 1.52 | 1.83 |
| MAX | 12 | 81 | --- | --- | --- | 139 | 103 | 51 | 14 | 5.4 | 2.0 | 2.3 |
| MIN | 4.9 | 5.7 | --- | --- | --- | 45 | 23 | 14 | 5.8 | 1.9 | .90 | 1.5 |
| AC-FT | 414 | 729 | --- | --- | --- | 4700 | 2420 | 1550 | 581 | 195 | 94 | 109 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1972, BY WATER YEAR (WY)

| | 38.2 | 99.8 | 387 | 611 | 564 | 286 | 224 | 60.0 | 26.3 | 10.7 | 6.26 | 8.21 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 38.2 | 99.8 | 387 | 611 | 564 | 286 | 224 | 60.0 | 26.3 | 10.7 | 6.26 | 8.21 |
| MAX | 290 | 283 | 1228 | 1972 | 1962 | 747 | 726 | 175 | 67.0 | 22.0 | 11.9 | 51.4 |
| (WY) | 1963 | 1967 | 1965 | 1970 | 1958 | 1958 | 1958 | 1963 | 1967 | 1963 | 1967 | 1957 |
| MIN | 4.08 | 4.15 | 6.82 | 94.0 | 81.7 | 66.4 | 37.9 | 21.9 | 11.0 | 4.23 | 3.13 | 2.79 |
| (WY) | 1967 | 1960 | 1960 | 1962 | 1964 | 1964 | 1964 | 1959 | 1959 | 1959 | 1959 | 1970 |

SUMMARY STATISTICS

WATER YEARS 1957 - 1972

| | |
|--------------------------|--------|
| ANNUAL MEAN | 192 |
| HIGHEST ANNUAL MEAN | 376 |
| LOWEST ANNUAL MEAN | 53.1 |
| HIGHEST DAILY MEAN | 10400 |
| LOWEST DAILY MEAN | 1.8 |
| ANNUAL SEVEN-DAY MINIMUM | 2.0 |
| INSTANTANEOUS PEAK FLOW | 15700 |
| INSTANTANEOUS PEAK STAGE | 15.08 |
| ANNUAL RUNOFF (AC-FT) | 138800 |
| 10 PERCENT EXCEEDS | 395 |
| 50 PERCENT EXCEEDS | 33 |
| 90 PERCENT EXCEEDS | 4.2 |

RUSSIAN RIVER BASIN

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 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.--No estimated daily discharges. Records good. No records computed above 300 ft³/s. See schematic diagram of Russian River basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-----|-----|-------|------|------|------|------|
| 1 | 169 | --- | 279 | --- | --- | --- | --- | 257 | 129 | 115 | 134 | 125 |
| 2 | 165 | --- | 238 | --- | --- | --- | --- | 242 | 121 | 113 | 142 | 117 |
| 3 | 165 | --- | 221 | --- | --- | --- | --- | 229 | 112 | 101 | 135 | 130 |
| 4 | 172 | --- | 213 | --- | --- | --- | --- | 219 | 109 | 100 | 119 | 152 |
| 5 | 179 | 300 | 207 | --- | --- | --- | --- | 217 | 109 | 103 | 116 | 174 |
| 6 | 182 | 283 | 205 | --- | --- | --- | 289 | 218 | 107 | 114 | 119 | 193 |
| 7 | 184 | 276 | 206 | --- | --- | --- | 283 | 249 | 111 | 116 | 122 | 204 |
| 8 | 182 | 272 | --- | --- | --- | --- | 278 | 263 | 111 | 114 | 126 | 170 |
| 9 | 177 | 268 | --- | --- | --- | --- | --- | 239 | 106 | 109 | 127 | 146 |
| 10 | 179 | 248 | --- | --- | --- | --- | --- | 220 | 103 | 99 | 125 | 132 |
| 11 | 190 | 247 | --- | --- | --- | --- | 279 | 209 | 102 | 106 | 134 | 120 |
| 12 | 195 | 234 | --- | --- | --- | --- | 270 | 201 | 100 | 115 | 138 | 116 |
| 13 | 196 | 223 | --- | --- | --- | --- | 259 | 192 | 111 | 113 | 138 | 124 |
| 14 | 198 | 216 | --- | --- | --- | --- | 250 | 184 | 123 | 106 | 131 | 126 |
| 15 | 212 | 209 | --- | 294 | --- | --- | 242 | 175 | 118 | 107 | 127 | 120 |
| 16 | 212 | 206 | --- | 294 | --- | --- | 234 | 166 | 124 | 107 | 123 | 107 |
| 17 | 212 | 205 | --- | 287 | --- | --- | 230 | 173 | 126 | 107 | 118 | 100 |
| 18 | 212 | 197 | --- | 287 | --- | --- | 222 | 180 | 115 | 107 | 117 | 121 |
| 19 | 264 | 188 | --- | 285 | --- | --- | 217 | 180 | 102 | 106 | 118 | 155 |
| 20 | --- | 184 | --- | 282 | --- | --- | 209 | 177 | 100 | 107 | 117 | 169 |
| 21 | --- | 184 | --- | 280 | --- | --- | 202 | 168 | 104 | 109 | 117 | 189 |
| 22 | --- | 184 | --- | 287 | --- | --- | 194 | 163 | 110 | 109 | 120 | 202 |
| 23 | --- | 184 | --- | --- | --- | --- | 195 | 158 | 114 | 107 | 126 | 208 |
| 24 | --- | 180 | --- | --- | --- | --- | 241 | 152 | 117 | 108 | 129 | 218 |
| 25 | --- | 180 | --- | --- | --- | --- | 273 | 142 | 115 | 109 | 126 | 217 |
| 26 | --- | 180 | --- | --- | --- | --- | --- | 140 | 108 | 111 | 123 | 215 |
| 27 | --- | 180 | --- | --- | --- | --- | --- | 136 | 108 | 109 | 124 | 217 |
| 28 | --- | 190 | --- | --- | --- | --- | --- | 135 | 115 | 114 | 124 | 217 |
| 29 | --- | 254 | --- | --- | --- | --- | --- | 132 | 119 | 108 | 126 | 213 |
| 30 | --- | --- | --- | --- | --- | --- | 278 | 129 | 119 | 101 | 129 | 170 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 129 | --- | 115 | 124 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | 5774 | 3368 | 3365 | 3894 | 4867 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | 186 | 112 | 109 | 126 | 162 |
| MAX | --- | --- | --- | --- | --- | --- | --- | 263 | 129 | 116 | 142 | 218 |
| MIN | --- | --- | --- | --- | --- | --- | --- | 129 | 100 | 99 | 116 | 100 |
| AC-FT | --- | --- | --- | --- | --- | --- | --- | 11450 | 6680 | 6670 | 7720 | 9650 |

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 good. 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, 71,300 ft³/s, Dec. 23, 1964, gage height, 27.00 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,200 ft³/s, Feb. 20, gage height, 8.31 ft.; minimum daily, 80 ft³/s, July 4, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|--------|-------|-------|-------|------|------|------|------|
| 1 | 171 | 423 | 285 | 304 | 864 | 1330 | 339 | 271 | e131 | 111 | 135 | 125 |
| 2 | 170 | 397 | 234 | 306 | 802 | 1170 | 332 | 253 | e123 | 109 | 158 | 112 |
| 3 | 170 | 328 | 214 | 307 | 760 | 1070 | 303 | 237 | e112 | 91 | 151 | 133 |
| 4 | 175 | 297 | 204 | 308 | 705 | 965 | 291 | 225 | e109 | 80 | 117 | 167 |
| 5 | 179 | 282 | 197 | 316 | 615 | 855 | 280 | 224 | e109 | 84 | 96 | e174 |
| 6 | 180 | 273 | 193 | 317 | 1130 | 858 | 269 | 234 | e106 | 100 | 103 | e193 |
| 7 | 182 | 266 | 198 | 309 | 4730 | 773 | 263 | 272 | e109 | 107 | 113 | 212 |
| 8 | 178 | 263 | 1340 | 298 | 2990 | 719 | 260 | 287 | e109 | 105 | 116 | 174 |
| 9 | 174 | 261 | 2260 | 303 | 1860 | 680 | 290 | 257 | e105 | 96 | 120 | 136 |
| 10 | 179 | 235 | 827 | 332 | 1420 | 646 | 292 | 231 | 106 | 80 | 118 | 118 |
| 11 | 187 | 230 | 2170 | 326 | 1260 | 594 | 264 | 218 | 107 | 83 | 127 | 161 |
| 12 | 192 | 220 | 2360 | 311 | 1040 | 549 | 251 | 206 | 105 | 100 | 136 | 100 |
| 13 | 189 | 208 | 1250 | 300 | 890 | 523 | 239 | 195 | 118 | 101 | 146 | 107 |
| 14 | 196 | 199 | 4230 | 289 | 804 | 499 | 225 | 185 | 148 | 93 | 137 | 108 |
| 15 | 213 | 193 | 2490 | 282 | 749 | 485 | 215 | 177 | 142 | 88 | 124 | 103 |
| 16 | 210 | 190 | 1290 | 282 | 707 | 469 | 207 | 170 | 145 | 90 | 115 | 90 |
| 17 | 210 | 190 | 896 | 276 | 4460 | 467 | 209 | 180 | 144 | 91 | 102 | 82 |
| 18 | 206 | 182 | 719 | 272 | 7570 | 451 | 204 | 191 | 133 | 88 | 97 | 103 |
| 19 | 254 | 175 | 599 | 269 | 5770 | 442 | 197 | 187 | 105 | 86 | 102 | 145 |
| 20 | 487 | 169 | 526 | 265 | 8480 | 426 | 188 | 182 | 91 | 88 | 104 | 163 |
| 21 | 556 | 168 | 478 | 265 | 6710 | 401 | 181 | 172 | 99 | 93 | 106 | 187 |
| 22 | 581 | 168 | 444 | 280 | 6090 | 401 | 173 | 166 | 106 | 93 | 111 | 204 |
| 23 | 595 | 167 | 414 | 1610 | 4360 | 361 | 179 | 158 | 115 | 89 | 118 | 210 |
| 24 | 631 | 164 | 387 | 4990 | 3490 | 356 | 230 | e153 | 118 | 96 | 125 | 218 |
| 25 | 646 | 164 | 365 | 5220 | 2960 | 390 | 266 | e144 | 114 | 95 | 122 | 217 |
| 26 | 650 | 164 | 361 | 4370 | 2340 | 376 | 549 | e142 | 100 | 96 | 118 | 217 |
| 27 | 637 | 166 | 353 | 2610 | 1790 | 367 | 541 | e138 | 94 | 94 | 119 | 218 |
| 28 | 618 | 182 | 340 | 1820 | 1530 | 359 | 394 | e137 | 106 | 102 | 126 | 216 |
| 29 | 670 | 262 | 326 | 1370 | --- | 358 | 329 | e135 | 115 | 93 | 126 | 212 |
| 30 | 628 | 385 | 315 | 1110 | --- | 359 | 297 | e131 | 118 | 81 | 128 | 162 |
| 31 | 461 | --- | 307 | 967 | --- | 350 | --- | e132 | --- | 93 | 123 | --- |
| TOTAL | 10775 | 6971 | 26572 | 30584 | 76876 | 18049 | 8257 | 5990 | 3442 | 2896 | 3739 | 4767 |
| MEAN | 348 | 232 | 857 | 987 | 2746 | 582 | 275 | 193 | 115 | 93.4 | 121 | 159 |
| MAX | 670 | 423 | 4230 | 5220 | 8480 | 1330 | 549 | 287 | 148 | 111 | 158 | 218 |
| MIN | 170 | 164 | 193 | 265 | 615 | 350 | 173 | 131 | 91 | 80 | 96 | 82 |
| AC-FT | 21370 | 13830 | 52710 | 60660 | 152500 | 35800 | 16380 | 11880 | 6830 | 5740 | 7420 | 9460 |

e Estimated.

RUSSIAN RIVER BASIN

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|
| MEAN | 283 | 808 | 2452 | 3823 | 3836 | 2697 | 1458 | 530 | 257 | 184 | 185 | 191 |
| MAX | 1605 | 5293 | 8945 | 13670 | 14650 | 11810 | 6592 | 1638 | 672 | 300 | 331 | 360 |
| (WY) | 1958 | 1974 | 1956 | 1970 | 1986 | 1983 | 1982 | 1983 | 1993 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1940 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 606019 | | | | 198918 | | | | | | | |
| ANNUAL MEAN | 1660 | | | | 545 | | | | 1381 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 3277 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 101 | | | |
| HIGHEST DAILY MEAN | 30500 | | | | Jan 21 | | | | 8480 | | | |
| LOWEST DAILY MEAN | 133 | | | | Jul 26 | | | | Feb 20 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 157 | | | | Sep 9 | | | | 80 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | | | | | 89 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | | | | | 10200 | | | |
| ANNUAL RUNOFF (AC-FT) | 1202000 | | | | 8.31 | | | | Feb 20 | | | |
| 10 PERCENT EXCEEDS | 3960 | | | | 394600 | | | | 1001000 | | | |
| 50 PERCENT EXCEEDS | 556 | | | | 1090 | | | | 3280 | | | |
| 90 PERCENT EXCEEDS | 174 | | | | 213 | | | | 310 | | | |
| | | | | | 102 | | | | 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.--

WATER TEMPERATURE: October 1965 to current year.

INSTRUMENTATION.--Temperature recorder since October 1965 provides hourly recordings.

REMARKS.--Temperature during summer months affected by recreation dams above and below gage. Interruptions in record were due to malfunction of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 28.0°C, at times in some years; minimum recorded, 3.0°C, Dec. 23, 1990.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 26.5°C, Aug. 7; minimum recorded, 7.5°C, Dec. 23-25, Feb. 19, 20.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|------|----------|------|----------|------|---------|------|----------|------|-------|------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 22.5 | 18.0 | 17.5 | 15.0 | 11.5 | 9.5 | --- | --- | 9.5 | 8.5 | 14.0 | 12.0 |
| 2 | 21.5 | 18.0 | 17.0 | 14.5 | 12.0 | 10.0 | --- | --- | 9.5 | 8.0 | 14.5 | 12.5 |
| 3 | 20.5 | 18.0 | 16.5 | 13.5 | 12.0 | 10.0 | --- | --- | 10.5 | 8.5 | 14.5 | 13.0 |
| 4 | 20.5 | 17.5 | 17.0 | 14.0 | 12.0 | 10.0 | --- | --- | 10.0 | 8.5 | 14.5 | 13.5 |
| 5 | 20.0 | 17.5 | 17.0 | 14.0 | 11.5 | 9.5 | 11.5 | 10.0 | 9.5 | 9.0 | 14.5 | 14.0 |
| 6 | 20.5 | 17.0 | 16.5 | 13.5 | 11.0 | 9.5 | 10.5 | 9.0 | 10.0 | 9.5 | 15.0 | 13.0 |
| 7 | 21.0 | 16.5 | 16.0 | 13.0 | 12.0 | 11.0 | 9.5 | 8.5 | 10.5 | 9.5 | 15.0 | 13.0 |
| 8 | 20.5 | 16.5 | 15.5 | 12.5 | 12.5 | 12.0 | 10.0 | 9.0 | 11.0 | 9.0 | 15.0 | 13.0 |
| 9 | 20.0 | 17.5 | 15.5 | 14.0 | 12.5 | 11.5 | 11.0 | 9.5 | 10.5 | 9.0 | 15.0 | 14.0 |
| 10 | 19.0 | 17.5 | 15.0 | 14.0 | 13.0 | 12.5 | 10.5 | 9.0 | 10.5 | 9.5 | 15.0 | 13.5 |
| 11 | 18.5 | 17.5 | 15.5 | 13.5 | 13.0 | 11.0 | 10.0 | 8.5 | 10.5 | 9.0 | 15.0 | 12.5 |
| 12 | 20.5 | 17.5 | 14.5 | 12.0 | 11.0 | 10.0 | 10.0 | 8.5 | 10.0 | 8.5 | 16.0 | 13.0 |
| 13 | 20.0 | 17.5 | 14.5 | 11.5 | 10.5 | 9.5 | 10.5 | 8.5 | 10.0 | 8.5 | 16.0 | 13.0 |
| 14 | 19.5 | 17.5 | 13.5 | 11.0 | 10.5 | 10.0 | 10.0 | 8.5 | 10.5 | 8.5 | 16.0 | 13.5 |
| 15 | 19.5 | 17.5 | 13.0 | 10.0 | 10.0 | 8.5 | 10.5 | 8.5 | 11.5 | 10.0 | 15.5 | 13.0 |
| 16 | 20.0 | 17.5 | 12.5 | 9.5 | 9.5 | 8.5 | 11.0 | 8.5 | 11.0 | 10.5 | 16.0 | 13.5 |
| 17 | 19.0 | 16.0 | 13.0 | 11.0 | 9.5 | 8.5 | 11.0 | 9.0 | 10.5 | 9.0 | 15.5 | 12.5 |
| 18 | 19.0 | 15.0 | 13.5 | 11.0 | 9.0 | 8.0 | 11.0 | 9.0 | 9.5 | 8.0 | 15.5 | 13.5 |
| 19 | 19.0 | 15.0 | 13.0 | 10.0 | 9.0 | 8.0 | 11.0 | 9.0 | 8.5 | 7.5 | 15.5 | 12.5 |
| 20 | 18.5 | 16.0 | 12.5 | 10.0 | 8.5 | 8.0 | 11.0 | 9.0 | 9.0 | 7.5 | 15.5 | 12.5 |
| 21 | 19.0 | 17.5 | 11.5 | 10.0 | 8.5 | 8.0 | 11.5 | 10.5 | 9.5 | 8.5 | 15.0 | 12.5 |
| 22 | 19.0 | 17.0 | 12.0 | 10.0 | 8.5 | 8.0 | 12.0 | 11.0 | 10.0 | 8.5 | 13.5 | 11.5 |
| 23 | 19.0 | 17.0 | 11.0 | 9.0 | 8.5 | 7.5 | 12.0 | 11.0 | 10.5 | 8.5 | 12.5 | 10.5 |
| 24 | 19.0 | 17.0 | 10.0 | 8.5 | 8.5 | 7.5 | 11.0 | 10.0 | 11.5 | 9.0 | 13.0 | 11.0 |
| 25 | 19.0 | 17.0 | 10.0 | 8.0 | 8.5 | 7.5 | 10.0 | 9.5 | 11.0 | 9.5 | 14.5 | 12.0 |
| 26 | 19.0 | 17.0 | 10.0 | 8.0 | 8.5 | 8.0 | 10.0 | 9.0 | 11.5 | 10.0 | 16.5 | 12.0 |
| 27 | 18.5 | 17.0 | 10.5 | 9.0 | 9.5 | 8.0 | 10.0 | 8.5 | 13.5 | 11.0 | 17.5 | 14.0 |
| 28 | 18.0 | 16.5 | 11.0 | 10.0 | --- | --- | 9.5 | 8.0 | 13.5 | 11.5 | 17.0 | 14.5 |
| 29 | 18.0 | 16.5 | 12.0 | 11.0 | --- | --- | 9.5 | 8.0 | --- | --- | 16.0 | 13.5 |
| 30 | 18.0 | 16.5 | 12.0 | 10.5 | --- | --- | 10.0 | 8.0 | --- | --- | 17.5 | 13.5 |
| 31 | 18.0 | 16.0 | --- | --- | --- | --- | 10.0 | 8.5 | --- | --- | 17.5 | 13.0 |
| MONTH | 22.5 | 15.0 | 17.5 | 8.0 | --- | --- | --- | --- | 13.5 | 7.5 | 17.5 | 10.5 |

RUSSIAN RIVER BASIN

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to September 1942 (published as "Dry Creek near Healdsburg"), October 1981 to current year.

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.--No estimated daily discharges. 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, 4,220 ft³/s Jan. 23, 1993, gage height, 9.71 ft; minimum daily, 6.3 ft³/s July 10, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1937 reached a stage of 21.8 ft from floodmarks, discharge about 25,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 227 ft³/s, Sept. 1, gage height, 5.47 ft; minimum daily, 24 ft³/s, Sept. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 70 | 143 | 142 | 119 | 81 | 166 | 83 | 44 | 95 | 184 | 148 | 151 |
| 2 | 98 | 143 | 142 | 119 | 81 | 166 | 42 | 44 | 96 | 184 | 147 | 149 |
| 3 | 99 | 144 | 142 | 110 | 81 | 165 | 42 | 47 | 95 | 184 | 147 | 151 |
| 4 | 98 | 142 | 140 | 97 | 81 | 164 | 42 | 53 | 95 | 184 | 149 | 150 |
| 5 | 98 | 142 | 140 | 97 | 81 | 164 | 43 | 64 | 96 | 158 | 148 | 151 |
| 6 | 98 | 139 | 140 | 97 | 84 | 164 | 43 | 52 | 96 | 141 | 149 | 109 |
| 7 | 98 | 139 | 133 | 97 | 82 | 143 | 45 | 53 | 96 | 142 | 149 | 85 |
| 8 | 98 | 135 | 153 | 97 | 81 | 102 | 45 | 53 | 99 | 141 | 148 | 103 |
| 9 | 98 | 139 | 147 | 97 | 81 | 104 | 45 | 52 | 128 | 141 | 148 | 104 |
| 10 | 98 | 140 | 147 | 97 | 81 | 102 | 47 | 53 | 143 | 141 | 150 | 105 |
| 11 | 98 | 138 | 152 | 97 | 81 | 102 | 50 | 54 | 164 | 141 | 144 | 105 |
| 12 | 98 | 139 | 147 | 97 | 81 | 102 | 49 | 54 | 184 | 141 | 145 | 105 |
| 13 | 99 | 139 | 147 | 97 | 81 | 102 | 49 | 54 | 184 | 142 | 146 | 104 |
| 14 | 99 | 139 | 139 | 97 | 80 | 98 | 48 | 54 | 184 | 143 | 146 | 105 |
| 15 | 99 | 140 | 128 | 97 | 79 | 93 | 48 | 54 | 184 | 141 | 145 | 105 |
| 16 | 98 | 140 | 121 | 97 | 80 | 96 | 46 | 53 | 184 | 142 | 146 | 105 |
| 17 | 98 | 132 | 125 | 97 | 85 | 101 | 46 | 54 | 184 | 141 | 146 | 106 |
| 18 | 98 | 139 | 124 | 98 | 81 | 102 | 45 | 54 | 184 | 141 | 148 | 106 |
| 19 | 102 | 142 | 122 | 99 | 85 | 103 | 46 | 53 | 184 | 143 | 147 | 57 |
| 20 | 104 | 142 | 119 | 98 | 81 | 103 | 51 | 53 | 184 | 146 | 147 | 24 |
| 21 | 122 | 141 | 119 | 92 | 82 | 103 | 55 | 54 | 166 | 147 | 146 | 25 |
| 22 | 142 | 146 | 119 | 79 | 81 | 104 | 55 | 54 | 138 | 145 | 146 | 28 |
| 23 | 146 | 143 | 119 | 81 | 128 | 104 | 56 | 54 | 137 | 147 | 146 | 27 |
| 24 | 145 | 142 | 119 | 82 | 162 | 103 | 56 | 53 | 135 | 148 | 148 | 28 |
| 25 | 142 | 142 | 119 | 84 | 162 | 103 | 53 | 54 | 135 | 148 | 149 | 28 |
| 26 | 145 | 141 | 119 | 79 | 164 | 103 | 44 | 54 | 134 | 148 | 148 | 28 |
| 27 | 164 | 139 | 119 | 78 | 166 | 102 | 44 | 54 | 135 | 148 | 149 | 28 |
| 28 | 149 | 140 | 119 | 80 | 166 | 102 | 44 | 54 | 135 | 149 | 149 | 28 |
| 29 | 142 | 142 | 119 | 81 | --- | 102 | 44 | 54 | 135 | 148 | 149 | 29 |
| 30 | 142 | 137 | 119 | 81 | --- | 102 | 44 | 54 | 152 | 148 | 148 | 64 |
| 31 | 143 | --- | 119 | 81 | --- | 102 | --- | 76 | --- | 148 | 148 | --- |
| TOTAL | 3528 | 4209 | 4059 | 2899 | 2739 | 3572 | 1450 | 1667 | 4261 | 4645 | 4569 | 2493 |
| MEAN | 114 | 140 | 131 | 93.5 | 97.8 | 115 | 48.3 | 53.8 | 142 | 150 | 147 | 83.1 |
| MAX | 164 | 146 | 153 | 119 | 166 | 166 | 83 | 76 | 184 | 184 | 150 | 151 |
| MIN | 70 | 132 | 119 | 78 | 79 | 93 | 42 | 44 | 95 | 141 | 144 | 24 |
| AC-FT | 7000 | 8350 | 8050 | 5750 | 5430 | 7090 | 2880 | 3310 | 8450 | 9210 | 9060 | 4940 |

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 71.8 | 172 | 229 | 249 | 176 | 258 | 95.4 | 71.2 | 105 | 121 | 108 | 82.8 |
| MAX | 114 | 524 | 1501 | 1229 | 974 | 1089 | 263 | 161 | 196 | 274 | 169 | 122 |
| (WY) | 1994 | 1984 | 1984 | 1993 | 1993 | 1986 | 1984 | 1984 | 1987 | 1987 | 1987 | 1988 |
| 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1984 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 111809 | | | | 40091 | | | | | | | |
| ANNUAL MEAN | 306 | | | | 110 | | | | 145 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 302 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 46.0 | | | |
| HIGHEST DAILY MEAN | 3910 | | | | Feb 25 | | | | 3910 | | | |
| LOWEST DAILY MEAN | 26 | | | | May 24 | | | | 6.1 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 33 | | | | May 4 | | | | 6.3 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 227 | | | | 4220 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 5.47 | | | | 9.71 | | | |
| ANNUAL RUNOFF (AC-FT) | 221800 | | | | 79520 | | | | 105000 | | | |
| 10 PERCENT EXCEEDS | 515 | | | | 149 | | | | 178 | | | |
| 50 PERCENT EXCEEDS | 136 | | | | 105 | | | | 94 | | | |
| 90 PERCENT EXCEEDS | 87 | | | | 51 | | | | 34 | | | |

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: November 1981 to September 1994 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1981 to September 1994 (discontinued).

INSTRUMENTATION.--Temperature recorder.

REMARKS.--Water temperature is affected by regulation from Warm Springs Dam.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 27.0°C, several days in 1983; minimum recorded, 6.5°C, Jan. 20, 1982.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 16.0°C, Oct. 7; minimum recorded, 9.0°C, Feb. 19, 25, and Mar. 15.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|------|----------|------|----------|------|---------|------|----------|------|-------|------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 15.0 | 13.0 | 14.0 | 13.5 | 12.0 | 11.5 | 10.5 | 10.5 | 10.0 | 9.5 | 10.0 | 10.0 |
| 2 | 15.5 | 13.5 | 14.0 | 13.5 | 12.0 | 11.5 | 10.5 | 10.5 | 10.0 | 9.5 | 10.0 | 10.0 |
| 3 | 15.0 | 13.5 | 14.0 | 13.5 | 12.0 | 11.5 | 10.5 | 10.5 | 10.0 | 9.5 | 10.0 | 10.0 |
| 4 | 15.0 | 13.5 | 14.0 | 13.5 | 12.0 | 11.5 | 10.5 | 10.0 | 10.5 | 9.5 | 10.0 | 10.0 |
| 5 | 15.0 | 13.5 | 14.0 | 13.5 | 11.5 | 11.0 | 10.5 | 10.0 | 10.0 | 9.5 | 10.0 | 10.0 |
| 6 | 15.5 | 13.5 | 14.0 | 13.5 | 11.5 | 11.0 | 10.5 | 10.0 | 10.0 | 9.5 | 10.0 | 10.0 |
| 7 | 16.0 | 14.0 | 14.0 | 13.5 | 11.5 | 11.5 | 10.5 | 10.0 | 10.0 | 10.0 | 10.5 | 9.5 |
| 8 | 15.5 | 14.0 | 13.5 | 13.0 | 12.0 | 11.5 | 10.5 | 10.0 | 10.5 | 9.5 | 10.5 | 9.5 |
| 9 | 15.0 | 14.0 | 13.5 | 13.0 | 11.5 | 11.5 | 10.5 | 10.0 | 10.5 | 9.5 | 10.5 | 10.0 |
| 10 | 14.5 | 14.0 | 13.5 | 13.0 | 11.5 | 11.5 | 10.5 | 10.0 | 10.0 | 10.0 | 10.5 | 9.5 |
| 11 | 14.5 | 14.0 | 13.5 | 13.0 | 12.0 | 11.5 | 10.5 | 10.0 | 10.0 | 9.5 | 10.5 | 10.0 |
| 12 | 15.0 | 14.0 | 13.5 | 12.5 | 11.5 | 11.0 | 10.5 | 10.0 | 10.0 | 9.5 | 10.5 | 10.0 |
| 13 | 15.0 | 14.0 | 13.5 | 12.5 | 11.5 | 11.0 | 10.5 | 10.0 | 10.0 | 9.5 | 10.5 | 9.5 |
| 14 | 14.5 | 14.0 | 13.0 | 12.5 | 11.5 | 11.0 | 10.5 | 10.0 | 10.5 | 9.5 | 10.0 | 9.5 |
| 15 | 15.0 | 14.0 | 13.0 | 12.5 | 11.5 | 11.0 | 10.5 | 10.0 | 10.0 | 9.5 | 10.0 | 9.0 |
| 16 | 15.5 | 14.0 | 13.0 | 12.0 | 11.5 | 11.0 | 10.5 | 10.0 | 10.0 | 9.5 | 10.5 | 10.0 |
| 17 | 15.5 | 14.0 | 12.5 | 12.0 | 11.0 | 11.0 | 10.5 | 10.0 | 10.0 | 9.5 | 10.0 | 9.5 |
| 18 | 15.0 | 14.0 | 13.0 | 12.0 | 11.5 | 11.0 | 10.5 | 10.0 | 10.0 | 9.5 | 10.5 | 10.0 |
| 19 | 15.0 | 14.0 | 13.0 | 12.0 | 11.0 | 11.0 | 10.5 | 10.0 | 9.5 | 9.0 | 10.5 | 9.5 |
| 20 | 15.0 | 13.5 | 12.5 | 12.0 | 11.0 | 10.5 | 10.5 | 10.0 | 10.0 | 9.5 | 10.5 | 9.5 |
| 21 | 14.5 | 14.0 | 12.5 | 12.0 | 11.0 | 10.5 | 10.0 | 10.0 | 10.0 | 9.5 | 10.5 | 10.0 |
| 22 | 14.5 | 14.0 | 12.5 | 12.0 | 11.0 | 10.5 | 10.5 | 10.0 | 10.0 | 9.5 | 10.5 | 9.5 |
| 23 | 14.5 | 14.0 | 12.5 | 11.5 | 11.0 | 10.5 | 10.5 | 10.0 | 10.0 | 9.5 | 10.0 | 9.5 |
| 24 | 14.5 | 14.0 | 12.0 | 11.5 | 11.0 | 10.5 | 10.5 | 10.0 | 10.0 | 9.5 | 10.0 | 10.0 |
| 25 | 14.5 | 14.0 | 12.0 | 11.5 | 10.5 | 10.5 | 10.5 | 10.0 | 10.0 | 9.0 | 10.5 | 10.0 |
| 26 | 15.0 | 14.0 | 12.0 | 11.5 | 10.5 | 10.5 | 10.0 | 10.0 | 10.0 | 9.5 | 10.5 | 10.0 |
| 27 | 14.5 | 14.0 | 11.5 | 11.5 | 10.5 | 10.5 | 10.5 | 9.5 | 10.0 | 9.5 | 10.5 | 10.0 |
| 28 | 14.5 | 13.5 | 11.5 | 11.5 | 10.5 | 10.5 | 10.5 | 9.5 | 10.0 | 9.5 | 10.5 | 10.0 |
| 29 | 14.5 | 14.0 | 12.0 | 11.5 | 10.5 | 10.5 | 10.5 | 9.5 | --- | --- | 10.0 | 10.0 |
| 30 | 14.5 | 14.0 | 12.0 | 11.5 | 10.5 | 10.0 | 10.5 | 9.5 | --- | --- | 10.5 | 10.0 |
| 31 | 14.0 | 14.0 | --- | --- | 10.5 | 10.5 | 10.5 | 9.5 | --- | --- | 10.5 | 10.0 |
| MONTH | 16.0 | 13.0 | 14.0 | 11.5 | 12.0 | 10.0 | 10.5 | 9.5 | 10.5 | 9.0 | 10.5 | 9.0 |

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|-------|------|------|------|------|------|------|------|--------|------|-----------|------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 11.0 | 10.0 | 11.5 | 10.0 | 11.5 | 10.5 | 12.0 | 11.0 | 12.5 | 12.5 | 11.0 | 10.5 |
| 2 | 11.5 | 10.0 | 11.5 | 10.0 | 11.5 | 10.5 | 12.0 | 11.0 | 12.5 | 10.5 | 11.0 | 10.5 |
| 3 | 11.5 | 10.0 | 11.5 | 10.5 | 11.5 | 10.5 | 12.0 | 11.5 | 11.0 | 10.5 | 11.0 | 11.0 |
| 4 | 11.5 | 10.0 | 11.5 | 10.5 | 11.5 | 10.5 | 12.0 | 11.0 | 11.0 | 10.5 | 11.0 | 10.5 |
| 5 | 11.0 | 10.0 | 11.5 | 10.5 | 11.5 | 10.5 | 12.0 | 11.5 | 11.0 | 10.5 | 11.0 | 10.5 |
| 6 | 11.0 | 10.0 | 10.5 | 10.5 | 11.5 | 10.5 | 12.0 | 11.5 | 11.0 | 10.5 | 11.5 | 10.5 |
| 7 | 11.0 | 10.0 | 11.5 | 10.5 | 11.5 | 10.5 | 12.0 | 11.5 | 11.0 | 10.5 | 11.5 | 10.5 |
| 8 | 10.5 | 10.0 | 12.5 | 10.5 | 11.5 | 10.5 | 12.0 | 11.5 | 11.0 | 10.5 | 11.0 | 10.0 |
| 9 | 11.0 | 10.0 | 12.5 | 10.5 | 11.5 | 11.0 | 12.0 | 11.5 | 11.0 | 10.5 | 11.5 | 9.5 |
| 10 | 11.5 | 10.0 | 13.0 | 11.0 | 11.5 | 11.0 | 12.0 | 11.5 | 11.0 | 10.5 | 11.5 | 11.0 |
| 11 | 11.5 | 10.0 | 12.0 | 10.5 | 11.5 | 10.5 | 12.0 | 11.5 | 11.0 | 10.5 | 11.5 | 11.0 |
| 12 | 11.5 | 10.0 | 12.0 | 10.5 | 11.5 | 11.0 | 12.0 | 11.5 | 11.0 | 10.5 | 11.5 | 11.0 |
| 13 | 11.0 | 10.0 | 12.0 | 10.5 | 11.5 | 11.0 | 12.0 | 11.5 | 11.0 | 10.5 | 11.5 | 11.0 |
| 14 | 14.0 | 10.0 | 12.0 | 10.5 | 11.5 | 11.0 | 12.0 | 11.5 | 11.0 | 10.5 | 11.5 | 11.0 |
| 15 | 12.0 | 10.5 | 11.5 | 10.5 | 11.5 | 11.0 | 12.0 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 |
| 16 | 10.5 | 10.0 | 11.5 | 10.5 | 11.5 | 11.0 | 12.0 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 |
| 17 | 11.5 | 10.0 | 11.5 | 10.5 | 11.5 | 11.0 | 12.0 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 |
| 18 | 12.0 | 10.0 | 11.5 | 10.5 | 11.5 | 11.0 | 12.0 | 12.0 | 11.0 | 10.5 | 11.5 | 11.0 |
| 19 | 11.5 | 10.5 | 11.0 | 10.5 | 11.5 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 13.0 | 11.0 |
| 20 | 11.5 | 10.0 | 12.0 | 10.5 | 11.5 | 11.0 | 12.0 | 12.0 | 11.0 | 10.5 | 12.5 | 10.5 |
| 21 | 11.5 | 10.0 | 12.5 | 10.5 | 11.5 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 12.5 | 10.5 |
| 22 | 11.5 | 10.0 | 12.0 | 10.5 | 11.5 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 12.5 | 10.5 |
| 23 | 10.5 | 10.0 | 12.0 | 10.5 | 12.0 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 10.5 |
| 24 | 11.0 | 10.5 | 12.0 | 10.5 | 12.0 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 12.5 | 10.5 |
| 25 | 10.5 | 10.0 | 12.5 | 10.5 | 12.0 | 11.0 | 13.0 | 12.0 | 11.0 | 10.5 | 12.5 | 10.5 |
| 26 | 11.5 | 10.0 | 13.0 | 10.5 | 11.5 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 12.5 | 10.5 |
| 27 | 11.5 | 10.5 | 12.0 | 10.5 | 11.5 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 12.0 | 10.5 |
| 28 | 12.0 | 10.5 | 12.5 | 10.5 | 11.5 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 12.5 | 10.5 |
| 29 | 11.5 | 10.5 | 13.0 | 10.5 | 11.5 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 12.5 | 10.5 |
| 30 | 11.5 | 10.5 | 12.0 | 11.0 | 12.0 | 11.0 | 12.5 | 12.0 | 11.0 | 10.5 | 11.5 | 10.5 |
| 31 | --- | --- | 11.5 | 10.5 | --- | --- | 12.5 | 12.5 | 11.0 | 10.5 | --- | --- |
| MONTH | 14.0 | 10.0 | 13.0 | 10.0 | 12.0 | 10.5 | 13.0 | 11.0 | 12.5 | 10.5 | 13.0 | 9.5 |

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.--No estimated daily discharges. Records good. 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, 6,960 ft³/s, gage height, 13.49 ft, Jan. 20, 1993; minimum daily, 19 ft³/s, Oct. 18-25, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft³/s, Feb. 17, gage height, 7.59 ft; minimum daily, 32 ft³/s, Sept. 21-23, 26-28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|-------|------|------|------|------|------|------|------|
| 1 | 67 | 132 | 133 | 125 | 103 | 192 | 87 | 52 | 81 | 172 | 137 | 135 |
| 2 | 98 | 132 | 129 | 125 | 102 | 187 | 53 | 52 | 83 | 173 | 137 | 135 |
| 3 | 99 | 136 | 129 | 117 | 100 | 182 | 50 | 53 | 84 | 173 | 137 | 136 |
| 4 | 99 | 135 | 130 | 104 | 99 | 178 | 49 | 56 | 84 | 173 | 137 | 137 |
| 5 | 100 | 135 | 130 | 103 | 96 | 175 | 50 | 67 | 84 | 154 | 137 | 137 |
| 6 | 101 | 133 | 129 | 103 | 187 | 174 | 49 | 60 | 84 | 134 | 137 | 110 |
| 7 | 101 | 133 | 127 | 102 | 540 | 158 | 50 | 61 | 85 | 134 | 138 | 78 |
| 8 | 101 | 131 | 256 | 103 | 216 | 115 | 52 | 61 | 87 | 132 | 138 | 95 |
| 9 | 99 | 134 | 174 | 102 | 155 | 113 | 54 | 61 | 112 | 132 | 137 | 96 |
| 10 | 102 | 137 | 155 | 101 | 137 | 108 | 52 | 60 | 132 | 131 | 140 | 99 |
| 11 | 103 | 139 | 314 | 101 | 123 | 109 | 52 | 60 | 148 | 130 | 134 | 100 |
| 12 | 101 | 142 | 190 | 101 | 114 | 106 | 51 | 59 | 173 | 131 | 133 | 101 |
| 13 | 101 | 142 | 209 | 101 | 108 | 105 | 51 | 58 | 178 | 131 | 133 | 100 |
| 14 | 103 | 148 | 283 | 101 | 106 | 102 | 50 | 58 | 180 | 131 | 134 | 101 |
| 15 | 103 | 147 | 180 | 100 | 104 | 95 | 52 | 58 | 181 | 130 | 134 | 103 |
| 16 | 103 | 147 | 149 | 100 | 104 | 98 | 51 | 58 | 182 | 131 | 132 | 103 |
| 17 | 103 | 138 | 144 | 100 | 657 | 102 | 51 | 58 | 182 | 131 | 133 | 103 |
| 18 | 102 | 146 | 140 | 101 | 356 | 103 | 51 | 58 | 181 | 132 | 135 | 103 |
| 19 | 104 | 149 | 136 | 101 | 647 | 103 | 51 | 58 | 181 | 133 | 134 | 72 |
| 20 | 104 | 147 | 133 | 100 | 654 | 102 | 54 | 58 | 180 | 135 | 135 | 35 |
| 21 | 114 | 147 | 132 | 95 | 372 | 101 | 58 | 58 | 168 | 135 | 135 | 32 |
| 22 | 121 | 148 | 130 | 81 | 255 | 101 | 59 | 58 | 137 | 135 | 135 | 32 |
| 23 | 123 | 145 | 130 | 142 | 244 | 98 | 60 | 58 | 135 | 137 | 135 | 32 |
| 24 | 125 | 142 | 128 | 354 | 255 | 102 | 61 | 58 | 136 | 138 | 135 | 33 |
| 25 | 123 | 140 | 128 | 298 | 231 | 101 | 66 | 58 | 137 | 138 | 135 | 33 |
| 26 | 128 | 140 | 127 | 196 | 222 | 100 | 59 | 57 | 136 | 137 | 134 | 32 |
| 27 | 138 | 141 | 127 | 149 | 209 | 98 | 55 | 57 | 135 | 137 | 135 | 32 |
| 28 | 124 | 145 | 127 | 125 | 200 | 98 | 53 | 57 | 135 | 138 | 135 | 32 |
| 29 | 126 | 146 | 125 | 112 | --- | 97 | 53 | 57 | 135 | 138 | 135 | 33 |
| 30 | 129 | 146 | 125 | 106 | --- | 96 | 53 | 57 | 144 | 138 | 134 | 53 |
| 31 | 132 | --- | 125 | 105 | --- | 96 | --- | 67 | --- | 139 | 134 | --- |
| TOTAL | 3377 | 4223 | 4774 | 3854 | 6696 | 3695 | 1637 | 1808 | 4080 | 4333 | 4194 | 2423 |
| MEAN | 109 | 141 | 154 | 124 | 239 | 119 | 54.6 | 58.3 | 136 | 140 | 135 | 80.8 |
| MAX | 138 | 149 | 314 | 354 | 657 | 192 | 87 | 67 | 182 | 173 | 140 | 137 |
| MIN | 67 | 131 | 125 | 81 | 96 | 95 | 49 | 52 | 81 | 130 | 132 | 32 |
| AC-FT | 6700 | 8380 | 9470 | 7640 | 13280 | 7330 | 3250 | 3590 | 8090 | 8590 | 8320 | 4810 |

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1983, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 22.5 | 240 | 610 | 1178 | 959 | 666 | 345 | 80.3 | 23.3 | 6.01 | 1.70 | 1.35 |
| MAX | 323 | 1619 | 2035 | 3930 | 2038 | 3095 | 1499 | 369 | 76.0 | 20.9 | 8.91 | 8.61 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1983 | 1983 | 1982 | 1983 | 1983 | 1983 | 1983 | 1983 |
| MIN | .000 | .54 | 4.31 | 22.7 | 27.1 | 34.1 | 9.58 | 5.64 | .25 | .000 | .000 | .000 |
| (WY) | 1961 | 1981 | 1977 | 1976 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1972 | 1972 |

SUMMARY STATISTICS

WATER YEARS 1960 - 1983

| | | |
|--------------------------|--------|-------------|
| ANNUAL MEAN | 342 | |
| HIGHEST ANNUAL MEAN | 790 | 1983 |
| LOWEST ANNUAL MEAN | 8.81 | 1977 |
| HIGHEST DAILY MEAN | 19400 | Jan 16 1974 |
| LOWEST DAILY MEAN | .00 | Sep 17 1960 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Sep 17 1960 |
| INSTANTANEOUS PEAK FLOW | 32400 | Jan 31 1963 |
| INSTANTANEOUS PEAK STAGE | 20.50 | Jan 31 1963 |
| ANNUAL RUNOFF (AC-FT) | 247800 | |
| 10 PERCENT EXCEEDS | 868 | |
| 50 PERCENT EXCEEDS | 32 | |
| 90 PERCENT EXCEEDS | .08 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 83.0 | 143 | 139 | 349 | 368 | 432 | 86.1 | 79.9 | 123 | 142 | 122 | 91.4 |
| MAX | 109 | 459 | 232 | 1808 | 1338 | 1455 | 143 | 122 | 199 | 296 | 180 | 128 |
| (WY) | 1994 | 1987 | 1988 | 1993 | 1993 | 1986 | 1987 | 1993 | 1987 | 1987 | 1987 | 1988 |
| MIN | 42.2 | 60.4 | 88.2 | 83.0 | 85.4 | 86.0 | 38.5 | 36.6 | 93.5 | 96.9 | 96.1 | 44.1 |
| (WY) | 1991 | 1986 | 1991 | 1991 | 1991 | 1988 | 1990 | 1991 | 1989 | 1990 | 1990 | 1991 |

SUMMARY STATISTICS

FOR 1994 WATER YEAR

WATER YEARS 1986 - 1994

| | | |
|--------------------------|-------|--------|
| ANNUAL TOTAL | 45094 | |
| ANNUAL MEAN | 124 | 152 |
| HIGHEST ANNUAL MEAN | | 278 |
| LOWEST ANNUAL MEAN | | 90.5 |
| HIGHEST DAILY MEAN | 657 | Feb 17 |
| LOWEST DAILY MEAN | 32 | Sep 21 |
| ANNUAL SEVEN-DAY MINIMUM | 32 | Sep 21 |
| INSTANTANEOUS PEAK FLOW | 1580 | Feb 17 |
| INSTANTANEOUS PEAK STAGE | 7.59 | Feb 17 |
| ANNUAL RUNOFF (AC-FT) | 89440 | 110200 |
| 10 PERCENT EXCEEDS | 176 | 239 |
| 50 PERCENT EXCEEDS | 125 | 105 |
| 90 PERCENT EXCEEDS | 55 | 51 |

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, 1.7 mi south of Healdsburg, and 13.5 mi downstream from Warm Springs Dam.

DRAINAGE AREA.--217 mi².

PERIOD OF RECORD.--November 1980 to current year (low flow 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 6.9 | --- | --- | 130 | 120 | --- | 125 | 53 | 81 | 151 | 130 | 124 |
| 2 | 48 | 193 | --- | 130 | 113 | --- | 90 | 51 | 89 | 157 | 130 | 125 |
| 3 | 71 | --- | --- | 129 | 107 | --- | 75 | 54 | 92 | 158 | 129 | 125 |
| 4 | 78 | --- | --- | 111 | 103 | --- | 69 | 59 | 93 | 159 | 130 | 125 |
| 5 | 78 | --- | --- | 105 | 99 | --- | 65 | 71 | 93 | 154 | 130 | 125 |
| 6 | 81 | --- | --- | 101 | --- | --- | 64 | 66 | 93 | 134 | 130 | 119 |
| 7 | 85 | --- | --- | 99 | --- | 198 | 62 | 73 | 95 | 130 | 130 | 79 |
| 8 | 89 | --- | --- | 100 | --- | 176 | 68 | 67 | 92 | 127 | 129 | 85 |
| 9 | 90 | --- | --- | 100 | --- | 169 | 73 | 65 | 104 | 123 | 129 | 86 |
| 10 | 95 | --- | --- | 101 | --- | 163 | 66 | 64 | 127 | 125 | 130 | 90 |
| 11 | 99 | --- | --- | 99 | --- | 160 | 63 | 62 | 133 | 127 | 128 | 90 |
| 12 | 100 | --- | --- | 99 | --- | 157 | 59 | 62 | 155 | 125 | 125 | 90 |
| 13 | 102 | --- | --- | 99 | --- | 154 | 59 | 60 | 159 | 125 | 125 | 91 |
| 14 | 104 | --- | --- | 97 | --- | 150 | 58 | 60 | 161 | 125 | 125 | 90 |
| 15 | 116 | --- | --- | 97 | 189 | 144 | 55 | 60 | 163 | 124 | 125 | 91 |
| 16 | 107 | --- | --- | 97 | 184 | 140 | 55 | 60 | 166 | 124 | 124 | 89 |
| 17 | 103 | --- | 190 | 96 | --- | 141 | 55 | 66 | 166 | 125 | 123 | 90 |
| 18 | 102 | --- | 174 | 97 | --- | 143 | 53 | 63 | 164 | 125 | 124 | 90 |
| 19 | 101 | --- | 165 | 97 | --- | 143 | 53 | 61 | 164 | 124 | 125 | 84 |
| 20 | 112 | --- | 157 | 97 | --- | 140 | 52 | 61 | 166 | 126 | 125 | 46 |
| 21 | 114 | --- | 150 | 97 | --- | 140 | 59 | 60 | 165 | 127 | 125 | 37 |
| 22 | 160 | --- | 146 | 86 | --- | 137 | 61 | 60 | 140 | 125 | 126 | 33 |
| 23 | 178 | --- | 143 | --- | --- | 124 | 80 | 59 | 131 | 128 | 127 | 31 |
| 24 | 184 | --- | 139 | --- | --- | 135 | 75 | 58 | 130 | 129 | 127 | 29 |
| 25 | 182 | --- | 135 | --- | --- | 136 | 102 | 58 | 130 | 129 | 127 | 28 |
| 26 | 179 | --- | 135 | --- | --- | 133 | 86 | 56 | 129 | 127 | 126 | 29 |
| 27 | --- | --- | 133 | --- | --- | 132 | 69 | 57 | 129 | 127 | 127 | 28 |
| 28 | --- | --- | 131 | --- | --- | 129 | 61 | 57 | 128 | 129 | 126 | 28 |
| 29 | 187 | --- | 130 | 167 | --- | 125 | 57 | 56 | 129 | 128 | 126 | 28 |
| 30 | 195 | --- | 130 | 146 | --- | 125 | 55 | 55 | 130 | 128 | 125 | 29 |
| 31 | --- | --- | 130 | 129 | --- | 125 | --- | 56 | --- | 130 | 125 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | 2024 | 1870 | 3897 | 4075 | 3933 | 2234 |
| MEAN | --- | --- | --- | --- | --- | --- | 67.5 | 60.3 | 130 | 131 | 127 | 74.5 |
| MAX | --- | --- | --- | --- | --- | --- | 125 | 73 | 166 | 159 | 130 | 125 |
| MIN | --- | --- | --- | --- | --- | --- | 52 | 51 | 81 | 123 | 123 | 28 |
| AC-FT | --- | --- | --- | --- | --- | --- | 4010 | 3710 | 7730 | 8080 | 7800 | 4430 |

RUSSIAN RIVER BASIN

11466500 LAGUNA DE SANTA ROSA NEAR GRATON. CA

LOCATION.--Lat 38°27'10", long 122°50'03", in Molinos Grant, Sonoma County, Hydrologic Unit 18010110, on downstream side of left bank pier of highway bridge, 0.2 mi downstream from Santa Rosa Creek, and 2 mi northeast of Graton.

PERIOD OF RECORD.--February 1940 to September 1949 (contents only), October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to Dec. 31, 1958, at site 75 ft downstream at same datum.

REMARKS.--The laguna is a natural water channel and overflow basin connecting Santa Rosa Creek, Mark West Creek, and other smaller creeks with the Russian River. During floods, directions of flow may be either to or from the Russian River, and the laguna acts as a natural regulator of floods on the lower Russian River. Figures given represent only those days when the elevation was above 55.0 ft. Elevations may have exceeded 55.0 ft during a period of lost record on Jan. 23-29. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 74.6 ft, Feb. 18, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 57.1 ft. Feb. 20.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 2400 HOURS

[illegible]

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.

WATER-DISCHARGE RECORDS

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."

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.--No estimated daily discharges. Records good. 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 39,000 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,700 ft³/s, Feb. 20, gage height, 19.43 ft; minimum daily, 94 ft³/s, Sept. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|--------|-------|-------|-------|------|------|------|------|
| 1 | 146 | 462 | 716 | 509 | 1320 | 2050 | 488 | 361 | 151 | 156 | 142 | 138 |
| 2 | 155 | 446 | 588 | 507 | 1180 | 1800 | 460 | 319 | 168 | 168 | 162 | 141 |
| 3 | 168 | 396 | 504 | 502 | 1080 | 1630 | 406 | 285 | 155 | 168 | 166 | 139 |
| 4 | 154 | 387 | 450 | 484 | 993 | 1480 | 347 | 263 | 126 | 164 | 153 | 145 |
| 5 | 174 | 384 | 414 | 492 | 890 | 1330 | 334 | 269 | 110 | 128 | 150 | 167 |
| 6 | 173 | 343 | 388 | 487 | 1700 | 1300 | 310 | 287 | 105 | 135 | 151 | 272 |
| 7 | 169 | 341 | 371 | 476 | 6670 | 1200 | 304 | 369 | 118 | 144 | 148 | 260 |
| 8 | 174 | 363 | 1100 | 462 | 6200 | 1080 | 318 | 406 | 129 | 148 | 140 | 163 |
| 9 | 178 | 336 | 3040 | 460 | 3610 | 997 | 433 | 351 | 103 | 145 | 139 | 146 |
| 10 | 196 | 355 | 1290 | 468 | 2500 | 942 | 421 | 304 | 115 | 141 | 130 | 130 |
| 11 | 193 | 387 | 2420 | 477 | 1950 | 894 | 353 | 256 | 115 | 130 | 147 | 122 |
| 12 | 206 | 357 | 3880 | 466 | 1590 | 847 | 349 | 262 | 129 | 128 | 144 | 152 |
| 13 | 213 | 341 | 2130 | 459 | 1340 | 803 | 317 | 247 | 133 | 144 | 153 | 114 |
| 14 | 223 | 331 | 5210 | 443 | 1180 | 769 | 284 | 211 | 145 | 139 | 155 | 117 |
| 15 | 399 | 323 | 4590 | 439 | 1070 | 724 | 280 | 176 | 163 | 151 | 137 | 113 |
| 16 | 372 | 315 | 2450 | 432 | 993 | 678 | 271 | 164 | 167 | 150 | 125 | 124 |
| 17 | 335 | 311 | 1600 | 412 | 4280 | 619 | 266 | 194 | 185 | 146 | 115 | 98 |
| 18 | 320 | 302 | 1240 | 398 | 9350 | 640 | 235 | 236 | 194 | 137 | 118 | 94 |
| 19 | 307 | 299 | 1040 | 389 | 7490 | 638 | 256 | 222 | 166 | 127 | 134 | 114 |
| 20 | 456 | 297 | 895 | 388 | 13200 | 622 | 244 | 223 | 144 | 119 | 126 | 113 |
| 21 | 551 | 294 | 799 | 392 | 10000 | 558 | 229 | 208 | 171 | 104 | 125 | 103 |
| 22 | 596 | 293 | 735 | 407 | 9140 | 578 | 227 | 201 | 140 | 123 | 125 | 113 |
| 23 | 624 | 289 | 681 | 1170 | 6430 | 540 | 249 | 161 | 149 | 119 | 139 | 119 |
| 24 | 640 | 285 | 639 | 4620 | 5000 | 527 | 337 | 104 | 154 | 125 | 145 | 125 |
| 25 | 648 | 283 | 610 | 7130 | 4130 | 566 | 420 | 107 | 159 | 124 | 148 | 129 |
| 26 | 645 | 283 | 594 | 7300 | 3500 | 567 | 625 | 107 | 130 | 136 | 145 | 128 |
| 27 | 647 | 282 | 580 | 4790 | 2790 | 552 | 694 | 112 | 134 | 138 | 145 | 129 |
| 28 | 636 | 301 | 564 | 3310 | 2400 | 510 | 517 | 114 | 138 | 137 | 146 | 130 |
| 29 | 650 | 703 | 549 | 2350 | --- | 523 | 431 | 129 | 132 | 140 | 145 | 131 |
| 30 | 655 | 872 | 533 | 1790 | --- | 514 | 377 | 124 | 143 | 141 | 144 | 116 |
| 31 | 521 | --- | 517 | 1510 | --- | 490 | --- | 141 | --- | 145 | 142 | --- |
| TOTAL | 11524 | 10961 | 41117 | 43919 | 111976 | 26968 | 10782 | 6913 | 4271 | 4300 | 4384 | 4085 |
| MEAN | 372 | 365 | 1326 | 1417 | 3999 | 870 | 359 | 223 | 142 | 139 | 141 | 136 |
| MAX | 655 | 872 | 5210 | 7300 | 13200 | 2050 | 694 | 406 | 194 | 168 | 166 | 272 |
| MIN | 146 | 282 | 371 | 388 | 890 | 490 | 227 | 104 | 103 | 104 | 115 | 94 |
| AC-FT | 22860 | 21740 | 81560 | 87110 | 222100 | 53490 | 21390 | 13710 | 8470 | 8530 | 8700 | 8100 |

RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|-------|-------|-------|-------|-------|------|------|------|------|------|
| MEAN | 320 | 1233 | 4095 | 6483 | 6545 | 4409 | 2292 | 690 | 291 | 176 | 167 | 182 |
| MAX | 2515 | 9425 | 17410 | 25210 | 26020 | 23290 | 11700 | 2798 | 875 | 348 | 308 | 344 |
| (WY) | 1963 | 1974 | 1956 | 1970 | 1958 | 1983 | 1982 | 1983 | 1993 | 1987 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1940 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 1005503 | | | | 281200 | | | | | | | |
| ANNUAL MEAN | 2755 | | | | 770 | | | | 2221 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 5898 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 88.7 | | | |
| HIGHEST DAILY MEAN | 52600 | | | | 13200 | | | | 97700 | | | |
| LOWEST DAILY MEAN | 130 | | | | 94 | | | | .75 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 154 | | | | 108 | | | | 5.9 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 14700 | | | | 102000 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 19.43 | | | | 49.70 | | | |
| ANNUAL RUNOFF (AC-FT) | 1994000 | | | | 557800 | | | | 1609000 | | | |
| 10 PERCENT EXCEEDS | 7090 | | | | 1590 | | | | 5290 | | | |
| 50 PERCENT EXCEEDS | 640 | | | | 304 | | | | 350 | | | |
| 90 PERCENT EXCEEDS | 199 | | | | 125 | | | | 138 | | | |

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

CHEMICAL DATA: Water years 1951 to current year. Published as "at Guerneville" in 1961-65.

BIOLOGICAL DATA: Water years 1975-81.

SPECIFIC CONDUCTANCE: Water years 1974-81.

WATER TEMPERATURE: Water years 1964 to current year.

SEDIMENT DATA: Water years 1966 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1973 to September 1981.

WATER TEMPERATURE: January 1964 to September 1981.

SUSPENDED-SEDIMENT DISCHARGE: April to September 1967, October 1969 to September 1986.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH WATER WHOLE (STAND- ARD UNITS) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (NTU) | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, (PER- CENT SATUR- ATION) | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD- NESS TOTAL (MG/L AS CACO3) |
|--------------|------|--|---|--|--------------------------------------|------------------------------|--|-------------------------------------|--|--|--|---|
| NOV 18... | 1315 | 306 | 238 | 8.2 | 11.5 | 0.70 | 774 | 10.6 | 96 | K5 | K14 | 100 |
| FEB 01... | 1400 | 1300 | 300 | 8.0 | 9.0 | 6.3 | 772 | 10.2 | 87 | 72 | 79 | 110 |
| MAR 29... | 1400 | 524 | 295 | 8.3 | 16.0 | 2.0 | 772 | 10.8 | 108 | K6 | K3 | 120 |
| MAY 31... | 1600 | 163 | 311 | 8.3 | 22.5 | 1.0 | 766 | 8.8 | 101 | K19 | K8 | 130 |
| JUL 06... | 1415 | 125 | 238 | 8.3 | 22.5 | 1.1 | 765 | 8.1 | 92 | K10 | K5 | 97 |
| AUG 30... | 1215 | 145 | 235 | 8.1 | 20.5 | 1.1 | 763 | 8.2 | 91 | 18 | K4 | 100 |

| DATE | HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | SODIUM PERCENT | SODIUM AD- SORP- TION RATIO | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 | CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 | ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) |
|--------------|---|--|--|--|-------------------|---|---|---|--|---|---|---|
| NOV 18... | 0 | 22 | 12 | 9.2 | 16 | 0.4 | 3.0 | 145 | 0 | 119 | 12 | 6.9 |
| FEB 01... | 5 | 24 | 13 | 16 | 23 | 0.7 | 2.7 | 133 | 0 | 109 | 18 | 16 |
| MAR 29... | 2 | 25 | 15 | 12 | 17 | 0.5 | 1.4 | 143 | 3 | 123 | 17 | 9.3 |
| MAY 31... | 1 | 27 | 16 | 12 | 16 | 0.5 | 1.3 | 151 | 5 | 132 | 17 | 9.5 |
| JUL 06... | 0 | 19 | 12 | 9.1 | 17 | 0.4 | 1.1 | 125 | 0 | 103 | 12 | 6.6 |
| AUG 30... | 0 | 20 | 12 | 9.2 | 17 | 0.4 | 1.0 | 122 | 0 | 100 | 11 | 5.5 |

| DATE | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, DIS- SOLVED (TONS PER AC-FT) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHORUS TOTAL (MG/L AS P) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) |
|--------------|--|--|--|---|---|---|---|---|--|--|---|---|
| NOV 18... | 0.20 | 12 | 129 | 149 | 0.18 | <0.010 | 0.081 | 0.020 | <0.20 | 0.040 | 0.040 | 0.030 |
| FEB 01... | <0.10 | 16 | 178 | 180 | 0.24 | 0.060 | 1.60 | 0.260 | 0.70 | 0.400 | 0.280 | 0.310 |
| MAR 29... | 0.10 | 12 | 170 | 167 | 0.23 | 0.010 | 0.340 | 0.020 | <0.20 | 0.050 | 0.040 | 0.040 |
| MAY 31... | <0.10 | 15 | 179 | 178 | 0.24 | <0.010 | 0.130 | <0.010 | <0.20 | 0.050 | 0.040 | 0.050 |
| JUL 06... | 0.10 | 13 | 144 | 134 | 0.20 | <0.010 | <0.050 | <0.010 | <0.20 | 0.030 | 0.040 | 0.030 |
| AUG 30... | 0.10 | 12 | 132 | 131 | 0.18 | <0.010 | 0.053 | 0.010 | <0.20 | 0.020 | 0.020 | 0.010 |

RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | BARIUM, DIS- SOLVED (UG/L AS BA) | COBALT, DIS- SOLVED (UG/L AS CO) | IRON, DIS- SOLVED (UG/L AS FE) | LITHIUM DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) |
|--------------|---|--|--|--|--|--|---|--|---|--|--|--|
| NOV 18... | <10 | 60 | <3 | 11 | 5 | 6 | <10 | 1 | <1 | <1.0 | 200 | <6 |
| FEB 01... | 30 | 60 | <3 | 28 | 5 | 19 | <10 | 2 | <1 | <1.0 | 200 | <6 |
| MAR 29... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 31... | 10 | 83 | <3 | 10 | <4 | 18 | <10 | 1 | <1 | <1.0 | 250 | <6 |
| JUL 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 30... | <10 | 63 | <3 | 7 | <4 | 8 | <10 | <1 | <1 | <1.0 | 200 | <6 |

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH WATER WHOLE FIELD (STAND- ARD UNITS) | TEMPER- ATURE WATER (DEG C) | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|--------|------|--|---|---|---|--------------------------------------|--|--|---|
| MAR | | | | | | | | | |
| 29...* | 1600 | 1.50 | 25.0 | 287 | 8.3 | 16.0 | 772 | 11.5 | 86 |
| 29...* | 1615 | 2.00 | 41.0 | 291 | 8.3 | 16.0 | 772 | 11.6 | 82 |
| 29...* | 1630 | 2.20 | 52.0 | 291 | 8.3 | 16.0 | 772 | 11.5 | 90 |
| 29...* | 1645 | 2.10 | 64.0 | 292 | 8.3 | 16.0 | 772 | 11.6 | 89 |
| 29...* | 1700 | 2.40 | 76.0 | 292 | 8.3 | 16.0 | 772 | 11.7 | 93 |
| JUL | | | | | | | | | |
| 06...* | 1310 | 0.94 | 14.5 | 239 | 8.1 | 22.5 | 765 | 8.3 | 96 |
| 06...* | 1320 | 1.14 | 29.5 | 240 | 8.1 | 22.5 | 765 | 8.3 | 98 |
| 06...* | 1330 | 1.10 | 37.5 | 239 | 8.0 | 22.5 | 765 | 8.3 | 100 |
| 06...* | 1340 | 1.02 | 49.5 | 240 | 8.0 | 22.5 | 765 | 8.3 | 97 |
| 06...* | 1350 | 1.30 | 58.5 | 240 | 8.0 | 22.5 | 765 | 8.4 | 100 |

* Instantaneous discharge at the time of cross-sectional measurement: March 29, 521 ft³/s; July 6, 135 ft³/s.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|----------------|------|--|--------------------------------------|---|---|---|
| NOV 18... | 1315 | 306 | 11.5 | 4 | 3.3 | 84 |
| FEB 01...** | 1400 | 1300 | 9.0 | 18 | 63 | 77 |
| MAR 29... | 1400 | 524 | 16.0 | 9 | 13 | 92 |
| MAY 31... | 1600 | 163 | 22.5 | 8 | 3.5 | 98 |
| JUL 06... | 1415 | 125 | 22.5 | 6 | 2.0 | 98 |
| AUG 30... | 1215 | 145 | 20.5 | 5 | 2.0 | 100 |

** Partial width sampled.

11467500 SOUTH FORK GUALALA RIVER NEAR ANNAPOLIS, CA

LOCATION.--Lat 38°42'18", long 123°25'19", in German Grant, Sonoma County, Hydrologic Unit 18010109, on left bank 0.5 mi downstream from Wheatfield Fork of Gualala River, and 3.0 mi west of Annapolis.

DRAINAGE AREA.--161 mi².

PERIOD OF RECORD.--October 1950 to September 1971, June 1991 to June 1994 (since June 1991, flows below 1,000 ft³/s only) (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 70 ft above sea level, from topographic map. Prior to Aug. 30, 1962, at site 2,100 ft upstream at different datum. Aug. 31, 1962, to September 1971, at site 420 ft upstream at different datum.

REMARKS.--Records poor. No regulation or diversion upstream from station. Beginning June 1991, no records computed above 1,000 ft³/s.

EXTREMES FOR PERIOD OF RECORD (1951-71).--Maximum discharge, 55,000 ft³/s, Dec. 22, 1955, gage height, 24.57 ft, site and datum then in use, from rating extended above 13,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 0.4 ft³/s, Sept. 13, 1951.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-----|-----|------|------|------|------|-------|-----|-----|-----|
| 1 | e5.0 | e5.0 | 90 | 46 | 161 | e267 | e53 | 48 | 20 | --- | --- | --- |
| 2 | e4.9 | e4.9 | 47 | 55 | 153 | e240 | e51 | 46 | 19 | --- | --- | --- |
| 3 | e4.9 | e4.9 | 32 | 48 | 140 | e220 | e50 | 44 | 19 | --- | --- | --- |
| 4 | e4.8 | e4.8 | 26 | 47 | 136 | e200 | e49 | 43 | 17 | --- | --- | --- |
| 5 | e5.4 | 4.8 | 23 | 64 | 122 | e182 | e48 | 44 | 17 | --- | --- | --- |
| 6 | e5.2 | 5.0 | 21 | 60 | 285 | e167 | 47 | 43 | 17 | --- | --- | --- |
| 7 | e5.1 | 5.0 | 30 | 52 | --- | e155 | 47 | 52 | 17 | --- | --- | --- |
| 8 | e5.1 | 5.3 | --- | 49 | 622 | e145 | 55 | 59 | 16 | --- | --- | --- |
| 9 | e5.0 | 5.5 | 796 | 55 | 363 | e135 | 99 | 48 | 16 | --- | --- | --- |
| 10 | e5.0 | 9.4 | 402 | 55 | 319 | e126 | 67 | 45 | 14 | --- | --- | --- |
| 11 | e4.9 | 24 | --- | 51 | 292 | e119 | 56 | 42 | 13 | --- | --- | --- |
| 12 | e5.2 | 31 | 814 | 47 | 230 | e113 | 50 | 39 | 13 | --- | --- | --- |
| 13 | e5.1 | 22 | --- | 46 | 198 | e106 | 46 | 35 | 12 | --- | --- | --- |
| 14 | e5.0 | 14 | --- | 43 | 177 | e100 | 45 | 34 | 12 | --- | --- | --- |
| 15 | e4.9 | 12 | 769 | 42 | 158 | e98 | 45 | 33 | 11 | --- | --- | --- |
| 16 | e5.2 | 10 | 368 | 40 | 152 | e95 | 43 | 33 | 11 | --- | --- | --- |
| 17 | e5.1 | 9.8 | 269 | 37 | --- | e92 | 42 | 35 | 11 | --- | --- | --- |
| 18 | e5.1 | 9.0 | 178 | 36 | --- | e89 | 42 | 35 | 11 | --- | --- | --- |
| 19 | e5.0 | 9.0 | 138 | 36 | --- | e85 | 42 | 34 | 10 | --- | --- | --- |
| 20 | e5.1 | 9.0 | 122 | 35 | --- | e82 | 40 | 32 | 9.8 | --- | --- | --- |
| 21 | e5.0 | 9.0 | 104 | 38 | --- | e80 | 40 | 30 | 9.3 | --- | --- | --- |
| 22 | e4.9 | 9.0 | 89 | 104 | --- | e83 | 39 | 28 | 8.6 | --- | --- | --- |
| 23 | e5.0 | 9.1 | 83 | --- | --- | e88 | 42 | 28 | 7.9 | --- | --- | --- |
| 24 | e4.9 | 9.0 | 79 | --- | e775 | e88 | 57 | 26 | 7.0 | --- | --- | --- |
| 25 | e4.9 | 9.0 | 69 | --- | e530 | e83 | 126 | 26 | 6.0 | --- | --- | --- |
| 26 | e4.8 | 9.9 | 67 | --- | e420 | e78 | 217 | 24 | 6.0 | --- | --- | --- |
| 27 | e5.0 | 15 | 61 | 867 | e355 | e72 | 100 | 22 | 7.4 | --- | --- | --- |
| 28 | e5.0 | 21 | 55 | 517 | e310 | e67 | 73 | 22 | 6.6 | --- | --- | --- |
| 29 | e5.0 | 121 | 50 | 332 | --- | e62 | 59 | 22 | 5.7 | --- | --- | --- |
| 30 | e5.2 | 199 | 47 | 242 | --- | e58 | 52 | 20 | 5.6 | --- | --- | --- |
| 31 | e5.1 | --- | 45 | 184 | --- | e55 | --- | 20 | --- | --- | --- | --- |
| TOTAL | 155.8 | 615.4 | --- | --- | --- | 3630 | 1822 | 1092 | 355.9 | --- | --- | --- |
| MEAN | 5.03 | 20.5 | --- | --- | --- | 117 | 60.7 | 35.2 | 11.9 | --- | --- | --- |
| MAX | 5.4 | 199 | --- | --- | --- | 267 | 217 | 59 | 20 | --- | --- | --- |
| MIN | 4.8 | 4.8 | --- | --- | --- | 55 | 39 | 20 | 5.6 | --- | --- | --- |
| AC-FT | 309 | 1220 | --- | --- | --- | 7200 | 3610 | 2170 | 706 | --- | --- | --- |

e Estimated.

11467500 SOUTH FORK GUALALA RIVER NEAR ANNAPOLIS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1971, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 76.9 | 245 | 1026 | 1471 | 1158 | 626 | 410 | 117 | 37.1 | 13.4 | 7.16 | 10.4 |
| MAX | 736 | 879 | 3060 | 4152 | 4407 | 1188 | 1401 | 660 | 103 | 23.9 | 24.5 | 90.0 |
| (WY) | 1958 | 1964 | 1956 | 1970 | 1958 | 1960 | 1963 | 1957 | 1957 | 1957 | 1954 | 1957 |
| MIN | 1.02 | 8.08 | 13.3 | 260 | 132 | 83.2 | 55.8 | 31.6 | 14.0 | 2.85 | 1.72 | 1.68 |
| (WY) | 1967 | 1960 | 1960 | 1962 | 1971 | 1955 | 1964 | 1964 | 1970 | 1970 | 1970 | 1970 |

SUMMARY STATISTICS

WATER YEARS 1951 - 1971

| | | |
|--------------------------|--------|-------------|
| ANNUAL MEAN | 431 | |
| HIGHEST ANNUAL MEAN | 774 | 1958 |
| LOWEST ANNUAL MEAN | 190 | 1964 |
| HIGHEST DAILY MEAN | 25500 | Dec 22 1955 |
| LOWEST DAILY MEAN | .49 | Oct 2 1970 |
| ANNUAL SEVEN-DAY MINIMUM | .51 | Sep 30 1970 |
| INSTANTANEOUS PEAK FLOW | 55000 | Dec 22 1955 |
| INSTANTANEOUS PEAK STAGE | 24.57 | Dec 22 1955 |
| ANNUAL RUNOFF (AC-FT) | 311900 | |
| 10 PERCENT EXCEEDS | 1040 | |
| 50 PERCENT EXCEEDS | 57 | |
| 90 PERCENT EXCEEDS | 4.8 | |

11467590 GARCIA RIVER AT EUREKA HILL ROAD, NEAR POINT ARENA, CA

LOCATION.--Lat 38°54'12", long 123°36'28", in NW 1/4 SW 1/4, sec.14, T.12 N., R.16 W., Mendocino County, Hydrologic Unit 18010108, on upstream side of bridge, 1.9 mi upstream from North Fork Garcia River and 4.5 mi southeast of Point Arena.

DRAINAGE AREA.--83.2 mi².

PERIOD OF RECORD.--

SEDIMENT DATA: October 1992 to current year (storm season only).

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM | SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM |
|-------|------|--|--------------------------------------|--|---|---|---|---|---|---|
| FEB | | | | | | | | | | |
| 17... | 1125 | 2040 | 9.5 | 650 | 3580 | 84 | 91 | 97 | 99 | 100 |
| 17... | 1705 | 2040 | 9.5 | 371 | 2040 | 82 | 87 | 93 | 95 | 100 |
| 18... | 1055 | 1540 | 9.0 | 156 | 649 | 84 | 90 | 95 | 96 | 100 |

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | NUMBER OF SAM- PLING POINTS (COUNT) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM | BED MAT. SIEVE DIAM. % FINER THAN .125 MM | BED MAT. SIEVE DIAM. % FINER THAN .250 MM | BED MAT. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--|--|--------------------------------------|---|---|---|---|
| OCT | | | | | | | | |
| 20... | 1300 | 1 | 11 | 15.5 | 12 | 34 | 78 | 95 |
| 20... | 1305 | 1 | 11 | 15.5 | 7 | 23 | 41 | 44 |
| 20... | 1310 | 1 | 11 | 15.5 | -- | 2 | 6 | 12 |
| 20... | 1315 | 1 | 11 | 15.5 | 1 | 2 | 2 | 5 |
| 20... | 1325 | 1 | 11 | 15.5 | 1 | 2 | 5 | 9 |
| 20... | 1330 | 1 | 11 | 15.5 | 1 | 4 | 10 | 12 |
| 20... | 1335 | 1 | 11 | 15.5 | 1 | 3 | 7 | 8 |
| 20... | 1340 | 1 | 11 | 15.5 | 2 | 4 | 7 | 11 |
| 20... | 1345 | 1 | 11 | 15.5 | 6 | 13 | 22 | 28 |
| 20... | 1350 | 1 | 11 | 15.5 | 17 | 48 | 87 | 98 |

| DATE | BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 128 MM |
|-------|---|---|---|---|---|---|---|--|
| OCT | | | | | | | | |
| 20... | 98 | 99 | 100 | -- | -- | -- | -- | -- |
| 20... | 45 | 45 | 46 | 49 | 54 | 66 | 84 | 100 |
| 20... | 15 | 18 | 27 | 45 | 67 | 89 | 100 | -- |
| 20... | 7 | 10 | 18 | 34 | 55 | 79 | 82 | 100 |
| 20... | 12 | 15 | 22 | 30 | 44 | 65 | 87 | 100 |
| 20... | 13 | 17 | 26 | 40 | 66 | 92 | 100 | -- |
| 20... | 11 | 17 | 29 | 44 | 66 | 87 | 100 | -- |
| 20... | 15 | 20 | 30 | 45 | 61 | 79 | 100 | -- |
| 20... | 30 | 32 | 37 | 42 | 49 | 53 | 85 | 100 |
| 20... | 100 | -- | -- | -- | -- | -- | -- | -- |

GARCIA RIVER BASIN

11467590 GARCIA RIVER AT EUREKA HILL ROAD, NEAR POINT ARENA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | SAM- PLING METHOD, CODES | SAMPLER TYPE (CODE) | BAG MESH SIZE BEDLOAD SAMPLER (MM) | TETHER LINE USED IN SAMPLING (YES=1) (CODE) | START- ING TIME (2400 HOURS) | END- ING TIME (2400 HOURS) | TIME ON BED FOR BED LOAD SAMPLE (SEC) | HORI- ZONTAL WIDTH OF VER- TICAL (FEET) |
|-------|------|-----------------------------------|---------------------------|---|--|--|--|---|---|
| FEB | | | | | | | | | |
| 17... | 1505 | 1000 | 1100 | 0.250 | 0 | 1435 | 1535 | 30 | 5.0 |
| 17... | 1600 | 1000 | 1100 | 0.250 | 0 | 1545 | 1620 | 30 | 5.0 |
| 18... | 1140 | 1000 | 1100 | 0.250 | 0 | 1125 | 1155 | 30 | 2.5 |

| DATE | COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (NUM) | VER- TICALS IN COM- POSITE SAMPLE (NUM) | NUMBER OF SAM- PLING POINTS (COUNT) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT | SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) | SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM |
|-------|---|---|--|---|--|--------------------------------------|---|---|---|
| FEB | | | | | | | | | |
| 17... | 2 | 20 | 20 | 29.5 | 2040 | 9.5 | 2.68 | 281 | 2 |
| 17... | 2 | 20 | 20 | 29.5 | 2040 | 9.5 | 2.94 | 281 | 2 |
| 18... | 1 | 20 | 20 | 17.3 | 1350 | 9.5 | 1.13 | 56 | 1 |

| DATE | SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM |
|-------|---|---|---|---|---|---|---|---|
| FEB | | | | | | | | |
| 17... | 5 | 9 | 22 | 45 | 67 | 83 | 96 | 100 |
| 17... | 5 | 7 | 13 | 27 | 56 | 86 | 94 | 100 |
| 18... | 3 | 10 | 20 | 34 | 57 | 86 | 100 | -- |

11468000 NAVARRO RIVER NEAR NAVARRO, CA

LOCATION.--Lat 39°10'20", long 123°40'06", in SE 1/4 sec.7, T.15 N., R.16 W., Mendocino County, Hydrologic Unit 18010108, on right bank 2.9 mi downstream from North Fork, 5.2 mi upstream from mouth, and 6.8 mi west of Navarro.

DRAINAGE AREA.--303 mi².

PERIOD OF RECORD.--October 1950 to current year.

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, 1959, at site 0.2 mi upstream at datum 1.86 ft higher.

REMARKS.--Records good. No regulation or diversion upstream from station.

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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 17 | 1000 | *8,370 | *15.88 | | | | |

Minimum daily, 1.4 ft³/s, Aug. 31 to Sept. 3, 18, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|-------|------|------|------|------|-------|------|------|
| 1 | e9.4 | e11 | 56 | 52 | 185 | 360 | 78 | 88 | 26 | 10 | 4.1 | 1.4 |
| 2 | e9.5 | e11 | 37 | 59 | 160 | 317 | 75 | 81 | 26 | 10 | 3.9 | 1.4 |
| 3 | e9.5 | e11 | 28 | 57 | 143 | 284 | 73 | 75 | 26 | 10 | 4.3 | 1.4 |
| 4 | e9.6 | e11 | 26 | 55 | 129 | 257 | 71 | 73 | 24 | 9.7 | 4.2 | 1.5 |
| 5 | e9.6 | e11 | 25 | 60 | 118 | 236 | 67 | 81 | 24 | 9.3 | 3.9 | 1.7 |
| 6 | e9.6 | 10 | 23 | 60 | 154 | 222 | 65 | 76 | 25 | 9.1 | 3.6 | 2.0 |
| 7 | e9.7 | 10 | 26 | 56 | 768 | 205 | 64 | 76 | 27 | 8.6 | 3.5 | 2.7 |
| 8 | e9.9 | 10 | 353 | 56 | 529 | 189 | 69 | 77 | 26 | 8.2 | 3.4 | 2.4 |
| 9 | e10 | 10 | 550 | 63 | 369 | 176 | 89 | 70 | 24 | 7.8 | 3.2 | 2.1 |
| 10 | e11 | 11 | 180 | 67 | 316 | 166 | 84 | 64 | 23 | 7.2 | 3.0 | 2.0 |
| 11 | e12 | 18 | 728 | 63 | 328 | 159 | 72 | 60 | 21 | 6.4 | 2.9 | 1.8 |
| 12 | e12 | 24 | 563 | 59 | 266 | 151 | 66 | 56 | 20 | 6.3 | 2.9 | 1.7 |
| 13 | e12 | 18 | 249 | 56 | 224 | 142 | 63 | 54 | 19 | 6.0 | 2.8 | 1.6 |
| 14 | e12 | 15 | 882 | 53 | 195 | 133 | 60 | 51 | 19 | 5.5 | 2.6 | 1.6 |
| 15 | e12 | 14 | 556 | 51 | 174 | 128 | 58 | 51 | 18 | 5.3 | 2.5 | 1.5 |
| 16 | e12 | 13 | 301 | 49 | 161 | 127 | 55 | 53 | 16 | 5.1 | 2.5 | 1.5 |
| 17 | e12 | 13 | 194 | 47 | 5360 | 126 | 53 | 60 | 15 | 4.7 | 2.5 | 1.5 |
| 18 | e12 | 13 | 148 | 45 | 4710 | 120 | 52 | 58 | 15 | 4.6 | 2.3 | 1.4 |
| 19 | e12 | 13 | 122 | 43 | 2730 | 116 | 50 | 52 | 15 | 4.2 | 2.2 | 1.6 |
| 20 | e12 | 13 | 104 | 42 | 4230 | 111 | 48 | 48 | 16 | 4.3 | 2.1 | 1.5 |
| 21 | e12 | 13 | 91 | 44 | 3030 | 105 | 47 | 46 | 15 | 5.3 | 2.1 | 1.4 |
| 22 | 12 | 13 | 83 | 64 | 2140 | 104 | 45 | 43 | 15 | 5.3 | 1.9 | 1.7 |
| 23 | 12 | 13 | 76 | 1200 | 1320 | 106 | 51 | 41 | 14 | 5.2 | 2.0 | 2.2 |
| 24 | 11 | 13 | 71 | 2530 | 898 | 122 | 77 | 39 | 13 | 6.0 | 1.9 | 2.2 |
| 25 | e12 | 13 | 66 | 1790 | 679 | 119 | 112 | 36 | 13 | 5.8 | 1.8 | 2.0 |
| 26 | e12 | 14 | 62 | 1220 | 563 | 105 | 369 | 36 | 12 | 4.9 | 1.7 | 1.9 |
| 27 | e12 | 14 | 60 | 710 | 488 | 96 | 209 | 35 | 12 | 4.8 | 1.6 | 1.7 |
| 28 | e12 | 15 | 57 | 483 | 416 | 90 | 144 | 33 | 12 | 4.8 | 1.6 | 1.6 |
| 29 | e12 | 25 | e53 | 361 | --- | 87 | 115 | 30 | 12 | 4.6 | 1.5 | 1.5 |
| 30 | e12 | 50 | e51 | 278 | --- | 84 | 98 | 29 | 11 | 4.4 | 1.5 | 1.5 |
| 31 | e11 | --- | 51 | 224 | --- | 81 | --- | 28 | --- | 4.1 | 1.4 | --- |
| TOTAL | 347.8 | 443 | 5872 | 9997 | 30783 | 4824 | 2579 | 1700 | 554 | 197.5 | 81.4 | 52.0 |
| MEAN | 11.2 | 14.8 | 189 | 322 | 1099 | 156 | 86.0 | 54.8 | 18.5 | 6.37 | 2.63 | 1.73 |
| MAX | 12 | 50 | 882 | 2530 | 5360 | 360 | 369 | 88 | 27 | 10 | 4.3 | 2.7 |
| MIN | 9.4 | 10 | 23 | 42 | 118 | 81 | 45 | 28 | 11 | 4.1 | 1.4 | 1.4 |
| AC-FT | 690 | 879 | 11650 | 19830 | 61060 | 9570 | 5120 | 3370 | 1100 | 392 | 161 | 103 |

e Estimated.

NAVARRO RIVER BASIN

11468000 NAVARRO RIVER NEAR NAVARRO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 42.8 | 284 | 973 | 1568 | 1407 | 1008 | 492 | 128 | 49.4 | 19.8 | 10.9 | 10.3 |
| MAX | 367 | 2033 | 4396 | 5464 | 5522 | 4280 | 2517 | 499 | 199 | 46.7 | 26.8 | 32.6 |
| (WY) | 1958 | 1974 | 1965 | 1970 | 1958 | 1983 | 1982 | 1983 | 1993 | 1983 | 1983 | 1957 |
| MIN | 3.10 | 9.06 | 18.5 | 24.0 | 58.6 | 69.8 | 34.2 | 14.1 | 4.23 | .62 | .67 | 1.33 |
| (WY) | 1989 | 1991 | 1977 | 1991 | 1977 | 1988 | 1977 | 1977 | 1977 | 1977 | 1977 | 1991 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1951 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 224584.5 | | | | 57430.7 | | | | | | | |
| ANNUAL MEAN | 615 | | | | 157 | | | | 496 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 1310 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 25.0 | | | |
| HIGHEST DAILY MEAN | 29700 | | | | 5360 | | | | 45100 | | | |
| LOWEST DAILY MEAN | 9.3 | | | | 1.4 | | | | .23 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 9.5 | | | | 1.4 | | | | .28 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 8370 | | | | 64500 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 15.88 | | | | 40.60 | | | |
| ANNUAL RUNOFF (AC-FT) | 445500 | | | | 113900 | | | | 359200 | | | |
| 10 PERCENT EXCEEDS | 964 | | | | 271 | | | | 1180 | | | |
| 50 PERCENT EXCEEDS | 117 | | | | 26 | | | | 58 | | | |
| 90 PERCENT EXCEEDS | 12 | | | | 2.1 | | | | 7.6 | | | |

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 good. 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 17 | 2300 | *2,470 | *9.95 | | | | |

Minimum daily, 2.3 ft³/s, Sept. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|-------|-------|------|------|------|------|-------|-------|------|
| 1 | e9.0 | 7.0 | 19 | 19 | e107 | 155 | 32 | 59 | 22 | 11 | 5.9 | 2.7 |
| 2 | e9.0 | 6.9 | 15 | 27 | e87 | 134 | 32 | 53 | 21 | 11 | 5.6 | 2.7 |
| 3 | e8.8 | 6.7 | 13 | 23 | 72 | 119 | 31 | 48 | 21 | 11 | 5.5 | 2.8 |
| 4 | e8.6 | 6.7 | 14 | 24 | 65 | 107 | 30 | 50 | 20 | 10 | 5.4 | 2.8 |
| 5 | e9.0 | 6.7 | 14 | 38 | 59 | 99 | 29 | 67 | 20 | 10 | 5.1 | 2.8 |
| 6 | e8.8 | 6.8 | 14 | 38 | 73 | 94 | 29 | 60 | 22 | 9.7 | 5.1 | 2.7 |
| 7 | e8.6 | 7.0 | 27 | 35 | 263 | 85 | 29 | 61 | 20 | 9.5 | 5.2 | 2.7 |
| 8 | e8.5 | 6.9 | 196 | 34 | 252 | 78 | 32 | 56 | 19 | 9.2 | 4.9 | 2.7 |
| 9 | e8.4 | 6.8 | 131 | 41 | 184 | 72 | 42 | 52 | 18 | 8.7 | 4.7 | 2.7 |
| 10 | e8.4 | 8.0 | 55 | 41 | 194 | 68 | 36 | 49 | 18 | 8.6 | 4.5 | 2.7 |
| 11 | e9.2 | 11 | 128 | 38 | 242 | 65 | 32 | 46 | 17 | 8.2 | 4.5 | 2.6 |
| 12 | e9.5 | 12 | 161 | 34 | 213 | 60 | 29 | 43 | 17 | 7.8 | 4.4 | 2.7 |
| 13 | e9.2 | 11 | 86 | 31 | 177 | 56 | 28 | 40 | 16 | 7.7 | 4.3 | 2.6 |
| 14 | e9.0 | 9.6 | 183 | 28 | 145 | 53 | 27 | 38 | 16 | 7.5 | 4.2 | 2.6 |
| 15 | e9.8 | 9.1 | 175 | 25 | 122 | 51 | 26 | 39 | 15 | 7.4 | 4.0 | 2.6 |
| 16 | e11 | 8.8 | 98 | 23 | 113 | 53 | 25 | 49 | 14 | 7.4 | 3.9 | 2.6 |
| 17 | e9.8 | 8.6 | 64 | 22 | 1400 | 50 | 24 | 47 | 14 | 7.1 | 3.7 | 2.5 |
| 18 | e9.4 | 8.6 | 47 | 20 | 2020 | 48 | 24 | 43 | 14 | 7.0 | 3.7 | 2.5 |
| 19 | e9.1 | 8.4 | 37 | 19 | 1240 | 46 | 23 | 39 | 13 | 7.0 | 3.5 | 2.5 |
| 20 | e9.0 | 8.4 | 31 | 18 | 1240 | 44 | 23 | 36 | 13 | 6.9 | 3.5 | 2.4 |
| 21 | e8.9 | 8.4 | 26 | 28 | 1090 | 43 | 22 | 34 | 13 | 6.9 | 3.3 | 2.3 |
| 22 | e8.7 | 8.8 | 23 | 78 | 906 | 47 | 22 | 33 | 13 | 6.9 | 3.3 | 2.3 |
| 23 | e8.5 | 9.1 | 21 | 803 | 659 | 49 | 36 | 31 | 13 | 7.0 | 3.2 | 2.5 |
| 24 | 8.6 | 9.1 | 19 | 946 | 471 | 49 | 55 | 30 | 12 | 7.0 | 3.2 | 2.4 |
| 25 | 8.1 | 9.0 | 18 | 919 | 347 | 45 | 116 | 29 | 12 | 6.8 | 3.2 | 3.0 |
| 26 | 8.0 | 8.9 | 17 | 690 | 267 | 41 | 252 | 28 | 12 | 6.6 | 3.2 | 8.2 |
| 27 | 7.7 | 9.1 | 16 | 437 | 221 | 39 | 145 | 27 | 12 | 6.4 | 3.2 | 2.8 |
| 28 | 7.5 | 10 | 15 | 282 | 183 | 37 | 104 | 20 | 12 | 6.3 | 3.0 | 2.5 |
| 29 | 7.3 | 22 | 14 | 195 | --- | 35 | 81 | 24 | 12 | 6.2 | 2.9 | 2.5 |
| 30 | 7.3 | 27 | 15 | 145 | --- | 34 | 68 | 24 | 11 | 6.0 | 2.8 | 2.6 |
| 31 | 7.1 | --- | 16 | e125 | --- | 33 | --- | 23 | --- | 5.9 | 2.7 | --- |
| TOTAL | 269.8 | 286.4 | 1708 | 5226 | 12412 | 1989 | 1484 | 1278 | 472 | 244.7 | 125.6 | 84.0 |
| MEAN | 8.70 | 9.55 | 55.1 | 169 | 443 | 64.2 | 49.5 | 41.2 | 15.7 | 7.89 | 4.05 | 2.80 |
| MAX | 11 | 27 | 196 | 946 | 2020 | 155 | 252 | 67 | 22 | 11 | 5.9 | 8.2 |
| MIN | 7.1 | 6.7 | 13 | 18 | 59 | 33 | 22 | 20 | 11 | 5.9 | 2.7 | 2.3 |
| AC-FT | 535 | 568 | 3390 | 10370 | 24620 | 3950 | 2940 | 2530 | 936 | 485 | 249 | 167 |

e Estimated.

NOYO RIVER BASIN

11468500 NOYO RIVER NEAR FORT BRAGG, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 17.6 | 123 | 404 | 613 | 529 | 430 | 211 | 73.4 | 33.3 | 13.6 | 7.49 | 6.30 |
| MAX | 166 | 750 | 2293 | 1890 | 2113 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1952 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 101711.7 | | | | 25579.5 | | | | | | | |
| ANNUAL MEAN | 279 | | | | 70.1 | | | | 204 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 484 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 10.9 | | | |
| HIGHEST DAILY MEAN | 13600 | | | | 2020 | | | | 20500 | | | |
| LOWEST DAILY MEAN | 6.7 | | | | 2.3 | | | | .79 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 6.8 | | | | 2.4 | | | | 1.0 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 2470 | | | | 26600 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 9.95 | | | | 27.14 | | | |
| ANNUAL RUNOFF (AC-FT) | 201700 | | | | 50740 | | | | 147700 | | | |
| 10 PERCENT EXCEEDS | 629 | | | | 132 | | | | 509 | | | |
| 50 PERCENT EXCEEDS | 57 | | | | 18 | | | | 31 | | | |
| 90 PERCENT EXCEEDS | 9.0 | | | | 3.2 | | | | 5.1 | | | |

11469000 MATTOLE RIVER NEAR PETROLIA, CA

LOCATION.--Lat 40°18'42", long 124°15'48", in SE 1/4 NW 1/4 sec.11, T.2 S., R.2 W., Humboldt County, Hydrologic Unit 18010107, on right bank 0.2 mi upstream from Clear Creek, 1.5 mi southeast of Petrolia, and 1.7 mi upstream from North Fork.

DRAINAGE AREA.--240 mi².

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 40 ft above sea level, from topographic map. 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.

REMARKS.--Records good except for estimated daily discharges, which are fair. 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, 29.60 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|---------|------|--------------------------------|------------------|
| Dec. 8 | 0700 | *27,200 | *17.11 | Jan. 24 | 0245 | 17,400 | 13.90 |

Minimum daily, 22 ft³/s, Sept. 25-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|--------|--------|--------|-------|-------|-------|------|------|------|------|
| 1 | 40 | e40 | e160 | 784 | 1130 | 1510 | 601 | 444 | 166 | 92 | 39 | 25 |
| 2 | 39 | e40 | e130 | 958 | 995 | 1390 | 556 | 414 | 158 | 90 | 39 | 26 |
| 3 | 39 | e41 | 106 | 786 | 908 | 1290 | 521 | 387 | 155 | 87 | 38 | 26 |
| 4 | 39 | e43 | 117 | 875 | 832 | 1210 | 479 | 456 | 156 | 84 | 38 | 27 |
| 5 | 39 | e44 | 126 | 1110 | 765 | 1130 | 444 | 494 | 158 | 84 | 37 | 27 |
| 6 | 39 | e43 | 118 | 941 | 805 | 1070 | 416 | 435 | 165 | 82 | 35 | 27 |
| 7 | 39 | e43 | 5120 | 857 | 1440 | 998 | 399 | 436 | 170 | e78 | 34 | 27 |
| 8 | 39 | e43 | 19600 | 925 | 1540 | 940 | 474 | 397 | 156 | 76 | 33 | 27 |
| 9 | 39 | e44 | 3890 | 1270 | 1140 | 891 | 694 | 368 | 148 | 74 | 33 | 27 |
| 10 | 40 | e45 | 2320 | 1040 | 2060 | 856 | 514 | 338 | 142 | 70 | 33 | 28 |
| 11 | 87 | e46 | 7270 | 944 | 2350 | 826 | 446 | 310 | 135 | 65 | 33 | 29 |
| 12 | 114 | e58 | 4250 | 873 | 1750 | 777 | 412 | 292 | 130 | 61 | 33 | 29 |
| 13 | 106 | e85 | 3010 | 820 | 1460 | 743 | 387 | 275 | 130 | 59 | 32 | 29 |
| 14 | 75 | e92 | 5000 | 769 | 1280 | 716 | 369 | 264 | 133 | 55 | 31 | 27 |
| 15 | 64 | e80 | 2930 | 725 | 1160 | 689 | 348 | 287 | 132 | 53 | 30 | 27 |
| 16 | 64 | e70 | 2030 | 682 | 1220 | 726 | 330 | 358 | 127 | 54 | 30 | 26 |
| 17 | 82 | e66 | 1570 | 650 | 7510 | 691 | 319 | 306 | 123 | 54 | 29 | 25 |
| 18 | 70 | e58 | 1290 | 621 | 5540 | 656 | 309 | 279 | 121 | 51 | 28 | 24 |
| 19 | 60 | e57 | 1120 | 593 | 5180 | 648 | 299 | 271 | 117 | 51 | 28 | 24 |
| 20 | 56 | e54 | 1010 | 565 | 5380 | 618 | 285 | 262 | 116 | 49 | 27 | 24 |
| 21 | 53 | e55 | 915 | 810 | 4860 | 616 | 276 | 246 | 114 | 48 | 27 | 23 |
| 22 | 51 | e62 | 845 | 2100 | 3980 | 621 | 269 | 227 | 113 | 49 | 28 | 23 |
| 23 | e48 | e68 | 788 | 8990 | 3140 | 810 | 342 | 220 | 110 | 50 | 28 | 23 |
| 24 | e46 | e80 | 738 | 14600 | 2570 | 2880 | 527 | 212 | 108 | 50 | 28 | 23 |
| 25 | e46 | e85 | 694 | 9610 | 2200 | 1330 | 1050 | 201 | 107 | 49 | 27 | 22 |
| 26 | e46 | e81 | 663 | 5620 | 1950 | 992 | 1110 | 199 | 105 | 47 | 27 | 22 |
| 27 | e46 | e74 | 635 | e3400 | 1840 | 878 | 801 | 198 | 102 | 47 | 26 | 22 |
| 28 | e47 | e130 | 603 | 2540 | 1670 | 805 | 639 | 186 | 101 | 44 | 26 | 22 |
| 29 | e46 | e250 | 577 | 1920 | --- | 739 | 549 | 181 | 96 | 41 | 25 | 22 |
| 30 | e44 | e240 | 595 | 1550 | --- | 696 | 491 | 176 | 93 | 40 | 25 | 22 |
| 31 | e42 | --- | 618 | 1310 | --- | 647 | --- | 170 | --- | 40 | 25 | --- |
| TOTAL | 1685 | 2217 | 68838 | 69238 | 66655 | 29389 | 14656 | 9289 | 3887 | 1874 | 952 | 755 |
| MEAN | 54.4 | 73.9 | 2221 | 2233 | 2381 | 948 | 489 | 300 | 130 | 60.5 | 30.7 | 25.2 |
| MAX | 114 | 250 | 19600 | 14600 | 7510 | 2880 | 1110 | 494 | 170 | 92 | 39 | 29 |
| MIN | 39 | 40 | 106 | 565 | 765 | 616 | 269 | 170 | 93 | 40 | 25 | 22 |
| AC-FT | 3340 | 4400 | 136500 | 137300 | 132200 | 58290 | 29070 | 18420 | 7710 | 3720 | 1890 | 1500 |

e Estimated.

MATTOLE RIVER BASIN

11469000 MATTOLE RIVER NEAR PETROLIA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|-------|------|------|------|------|------|------|------|
| MEAN | 248 | 1482 | 2881 | 3460 | 3004 | 2229 | 1195 | 544 | 213 | 82.9 | 51.3 | 63.2 |
| 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 | 22.0 |
| (WY) | 1988 | 1960 | 1977 | 1977 | 1977 | 1988 | 1988 | 1970 | 1977 | 1977 | 1977 | 1970 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1912 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 485264 | | | | 269435 | | | | | | | |
| ANNUAL MEAN | 1329 | | | | 738 | | | | 1281 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 2642 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 157 | | | |
| HIGHEST DAILY MEAN | 31000 | | | | Jan 20 | | | | 55200 | | | |
| LOWEST DAILY MEAN | 39 | | | | Oct 2 | | | | 17 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 39 | | | | Oct 2 | | | | 17 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 27200 | | | | 90400 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 17.11 | | | | 29.60 | | | |
| ANNUAL RUNOFF (AC-FT) | 962500 | | | | 534400 | | | | 927900 | | | |
| 10 PERCENT EXCEEDS | 3240 | | | | 1540 | | | | 3240 | | | |
| 50 PERCENT EXCEEDS | 600 | | | | 158 | | | | 271 | | | |
| 90 PERCENT EXCEEDS | 46 | | | | 28 | | | | 36 | | | |

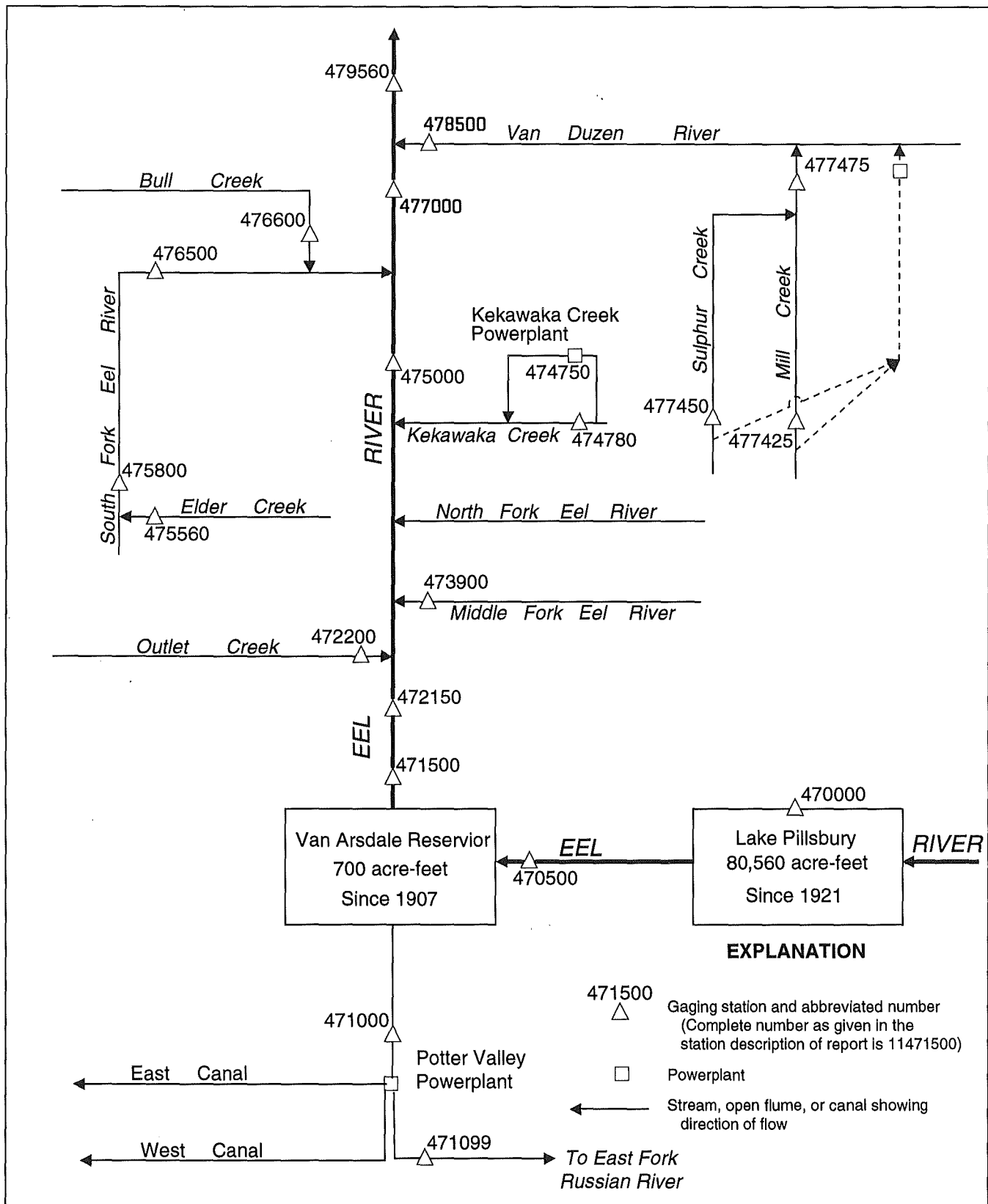


Figure 25. Diversions, and storage in Eel River basin.

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, 80,556 acre-ft between gage heights 1,822.4 ft, sill of outlet gate, and 1,910.0 ft, top of spillway gates; dead storage, 87 acre-ft. Water is released down Eel River to Van Arsdale Reservoir, most of which is diverted through tunnel to Potter Valley Powerplant (station 11477100); part is then used for irrigation and remainder flows into East Fork Russian River. Records given, including extremes, represent total contents at 2400 hours. See schematic diagram of Eel River basin.

COOPERATION.--Records collected by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 95,600 acre-ft, May 13, 16, 1925, gage height, 1,910.8 ft; maximum gage height, 1,911.84 ft, Dec. 22, 1964, from floodmarks; minimum contents, 10 acre-ft, Dec. 9, 10, 1931, gage height, 1,822.5 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 57,600 acre-ft, May 21, gage height, 1,899.01 ft; minimum, 16,400 acre-ft, Dec. 7, gage height, 1,868.54 ft.

Capacity table (elevation, in feet, and contents in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated April 1984)

| | | | | | | | | | |
|---------|-----|-------|-------|-------|--------|-------|--------|-------|--------|
| 1,822.4 | 87 | 1,835 | 1,371 | 1,855 | 7,831 | 1,875 | 22,451 | 1,895 | 50,179 |
| 1,824 | 153 | 1,840 | 2,463 | 1,860 | 10,456 | 1,880 | 28,071 | 1,900 | 59,469 |
| 1,827 | 333 | 1,845 | 3,391 | 1,865 | 13,701 | 1,885 | 34,474 | 1,905 | 69,675 |
| 1,830 | 626 | 1,850 | 5,710 | 1,870 | 17,664 | 1,890 | 41,811 | 1,910 | 80,643 |

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 2400 HOURS

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 45900 | 28600 | 17600 | 21300 | 27800 | 48700 | 54900 | 55500 | 57300 | 53600 | 46800 | 37200 |
| 2 | 45300 | 28000 | 17400 | 21100 | 27800 | 48800 | 54800 | 55600 | 57200 | 53500 | 46500 | 37000 |
| 3 | 44800 | 27500 | 17100 | 20900 | 27700 | 50800 | 54700 | 55600 | 57200 | 53300 | 46200 | 36800 |
| 4 | 44200 | 26900 | 16800 | 20800 | 27600 | 51600 | 54600 | 55800 | 57100 | 53100 | 45800 | 36600 |
| 5 | 43600 | 26300 | 16700 | 20600 | 27500 | 52800 | 54500 | 56000 | 57000 | 52900 | 45500 | 36400 |
| 6 | 43000 | 25800 | 16500 | 20400 | 27900 | 53700 | 54500 | 56100 | 57000 | 52700 | 45100 | 36200 |
| 7 | 42500 | 25200 | 16400 | 20100 | 29500 | 54400 | 54500 | 56400 | 56900 | 52400 | 44800 | 36000 |
| 8 | 41900 | 24600 | 20700 | 19900 | 30100 | 54800 | 54600 | 56600 | 56800 | 52200 | 44500 | 35700 |
| 9 | 41300 | 24100 | 21600 | 19700 | 30400 | 55200 | 54600 | 56600 | 56600 | 52100 | 44100 | 35500 |
| 10 | 40700 | 23600 | 21700 | 19400 | 30900 | 55500 | 54600 | 56700 | 56500 | 51900 | 43800 | 35400 |
| 11 | 40100 | 23100 | 22800 | 19200 | 31400 | 55700 | 54500 | 56800 | 56500 | 51700 | 43500 | 35100 |
| 12 | 39600 | 22500 | 23300 | 18900 | 31800 | 55700 | 54500 | 56800 | 56400 | 51500 | 43100 | 35000 |
| 13 | 39000 | 22200 | 23300 | 18700 | 32000 | 55700 | 54500 | 56900 | 56300 | 51300 | 42800 | 34800 |
| 14 | 38400 | 22100 | 25600 | 18300 | 32100 | 55700 | 54500 | 56900 | 56200 | 51100 | 42500 | 34600 |
| 15 | 37800 | 22000 | 25900 | 18100 | 32200 | 55600 | 54500 | 57000 | 56100 | 50900 | 42100 | 34400 |
| 16 | 37300 | 21900 | 25800 | 18000 | 32300 | 55600 | 54500 | 57100 | 55900 | 50700 | 41800 | 34200 |
| 17 | 36800 | 21800 | 25800 | 17700 | 35200 | 55400 | 54500 | 57100 | 55800 | 50500 | 41500 | 34000 |
| 18 | 36200 | 21700 | 25500 | 17500 | 36900 | 55500 | 54500 | 57200 | 55700 | 50300 | 41200 | 33800 |
| 19 | 35700 | 21600 | 25100 | 17300 | 38100 | 55600 | 54500 | 57400 | 55500 | 50100 | 40900 | 33600 |
| 20 | 35100 | 21300 | 24700 | 17100 | 39100 | 55600 | 54500 | 57500 | 55300 | 49900 | 40600 | 33400 |
| 21 | 34600 | 20900 | 24400 | 17000 | 40800 | 55700 | 54500 | 57600 | 55200 | 49700 | 40200 | 33200 |
| 22 | 34000 | 20300 | 24100 | 17600 | 41900 | 55700 | 54400 | 57500 | 55100 | 49500 | 39900 | 32900 |
| 23 | 33500 | 19700 | 23800 | 21600 | 42700 | 55800 | 54500 | 57500 | 55000 | 49300 | 39600 | 32800 |
| 24 | 33000 | 19100 | 23600 | 25300 | 43400 | 55700 | 54200 | 57500 | 54800 | 49100 | 39200 | 32600 |
| 25 | 32500 | 18500 | 23300 | 27000 | 44000 | 55600 | 54700 | 57500 | 54600 | 48800 | 38900 | 32400 |
| 26 | 31900 | 18100 | 23000 | 27600 | 44900 | 55600 | 54800 | 57500 | 54400 | 48600 | 38600 | 32200 |
| 27 | 31300 | 17900 | 22800 | 28100 | 46200 | 55500 | 55000 | 57500 | 54200 | 48400 | 38300 | 32000 |
| 28 | 30800 | 17800 | 22400 | 28200 | 47400 | 55400 | 55200 | 57500 | 54100 | 48100 | 38000 | 31800 |
| 29 | 30200 | 17800 | 22100 | 28300 | --- | 55300 | 55400 | 57400 | 54000 | 47800 | 37700 | 31600 |
| 30 | 29700 | 17800 | 21800 | 28200 | --- | 55100 | 55500 | 57400 | 53800 | 47500 | 37400 | 31400 |
| 31 | 29200 | --- | 21500 | 28100 | --- | 55000 | --- | 57400 | --- | 47100 | 37400 | --- |
| MAX | 45900 | 28600 | 25900 | 28300 | 47400 | 55800 | 55500 | 57600 | 57300 | 53600 | 46800 | 37200 |
| MIN | 29200 | 17800 | 16400 | 17000 | 27500 | 48700 | 54200 | 55500 | 53800 | 47100 | 37400 | 31400 |
| a | 1880.89 | 1870.17 | 1874.08 | 1880.03 | 1893.42 | 1897.66 | 1897.90 | 1898.82 | 1896.99 | 1893.25 | 1887.05 | 1882.69 |
| b | -17305 | -11400 | +3700 | +6600 | +19300 | +7600 | +500 | +1900 | -3600 | -6700 | -9700 | -6000 |

CAL YR 1993 MAX 80643 MIN 16400 b -47048

WTR YR 1994 MAX 57600 MIN 16400 b -15105

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.--No estimated daily discharges. 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 407 ft³/s, Mar. 17, gage height, 5.26 ft; minimum daily, 51 ft³/s, Aug. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 312 | 303 | 150 | 247 | 352 | 198 | 238 | 107 | 82 | 94 | 152 | 83 |
| 2 | 315 | 305 | 158 | 245 | 264 | 210 | 232 | 106 | 88 | 93 | 154 | 92 |
| 3 | 312 | 304 | 159 | 243 | 216 | 243 | 230 | 108 | 85 | 95 | 157 | 97 |
| 4 | 315 | 302 | 128 | 242 | 211 | 272 | 222 | 108 | 90 | 91 | 157 | 97 |
| 5 | 315 | 302 | 112 | 239 | 208 | 288 | 219 | 109 | 91 | 91 | 157 | 97 |
| 6 | 317 | 303 | 114 | 239 | 209 | 290 | 182 | 105 | 89 | 94 | 158 | 98 |
| 7 | 322 | 306 | 116 | 239 | 219 | 315 | 167 | 101 | 87 | 142 | 157 | 100 |
| 8 | 324 | 308 | 120 | 238 | 207 | 334 | 166 | 100 | 91 | 91 | 156 | 122 |
| 9 | 322 | 305 | 235 | 232 | 182 | 348 | 168 | 103 | 91 | 93 | 156 | 100 |
| 10 | 326 | 302 | 342 | 232 | 176 | 360 | 164 | 109 | 92 | 93 | 156 | 94 |
| 11 | 326 | 301 | 284 | 232 | 166 | 361 | 153 | 106 | 94 | 91 | 156 | 97 |
| 12 | 326 | 303 | 314 | 236 | 157 | 372 | 149 | 106 | 88 | 91 | 156 | 102 |
| 13 | 329 | 147 | 363 | 238 | 167 | 387 | 150 | 105 | 93 | 91 | 156 | 91 |
| 14 | 327 | 60 | 331 | 238 | 177 | 394 | 147 | 100 | 90 | 92 | 156 | 95 |
| 15 | 323 | 62 | 354 | 183 | 179 | 396 | 142 | 99 | 92 | 95 | 156 | 98 |
| 16 | 318 | 63 | 358 | 159 | 183 | 398 | 141 | 98 | 92 | 94 | 156 | 99 |
| 17 | 322 | 61 | 335 | 158 | 129 | 400 | 149 | 103 | 91 | 93 | 157 | 102 |
| 18 | 317 | 64 | 337 | 158 | 190 | 288 | 137 | 108 | 93 | 91 | 156 | 102 |
| 19 | 315 | 63 | 335 | 161 | 220 | 208 | 139 | 107 | 93 | 95 | 154 | 102 |
| 20 | 314 | 120 | 334 | 161 | 210 | 201 | 134 | 107 | 88 | 94 | 155 | 107 |
| 21 | 312 | 251 | 313 | 161 | 163 | 202 | 133 | 108 | 94 | 94 | 157 | 102 |
| 22 | 311 | 327 | 247 | 162 | 168 | 203 | 131 | 108 | 90 | 94 | 159 | 102 |
| 23 | 309 | 327 | 236 | 123 | 204 | 205 | 181 | 109 | 89 | 94 | 159 | 102 |
| 24 | 310 | 325 | 236 | 195 | 235 | 212 | 209 | 109 | 91 | 93 | 157 | 102 |
| 25 | 307 | 325 | 239 | 276 | 255 | 218 | 182 | 104 | 95 | 94 | 157 | 101 |
| 26 | 303 | 206 | 239 | 297 | 245 | 220 | 154 | 99 | 91 | 95 | 158 | 101 |
| 27 | 303 | 120 | 241 | 278 | 209 | 223 | 140 | 93 | 93 | 92 | 152 | 101 |
| 28 | 302 | 111 | 244 | 304 | 198 | 226 | 114 | 86 | 91 | 134 | 159 | 101 |
| 29 | 304 | 110 | 244 | 322 | --- | 230 | 100 | 84 | 91 | 154 | 164 | 100 |
| 30 | 305 | 141 | 245 | 340 | --- | 234 | 107 | 83 | 92 | 154 | 76 | 100 |
| 31 | 303 | --- | 245 | 345 | --- | 236 | --- | 86 | --- | 154 | 51 | --- |
| TOTAL | 9766 | 6527 | 7708 | 7123 | 5699 | 8672 | 4880 | 3164 | 2717 | 3156 | 4667 | 2987 |
| MEAN | 315 | 218 | 249 | 230 | 204 | 280 | 163 | 102 | 90.6 | 102 | 151 | 99.6 |
| MAX | 329 | 327 | 363 | 345 | 352 | 400 | 238 | 109 | 95 | 154 | 164 | 122 |
| MIN | 302 | 60 | 112 | 123 | 129 | 198 | 100 | 83 | 82 | 91 | 51 | 83 |
| AC-FT | 19370 | 12950 | 15290 | 14130 | 11300 | 17200 | 9680 | 6280 | 5390 | 6260 | 9260 | 5920 |

11470500 EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 223 | 282 | 738 | 1198 | 1377 | 1010 | 659 | 315 | 194 | 180 | 182 | 210 |
| MAX | 361 | 1851 | 4945 | 5684 | 6624 | 4536 | 3357 | 1184 | 438 | 329 | 334 | 335 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1986 | 1983 | 1982 | 1983 | 1993 | 1959 | 1959 | 1961 |
| MIN | 19.1 | 13.3 | 27.6 | 35.8 | 7.27 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1923 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 291958 | | | | 67066 | | | | | | | |
| ANNUAL MEAN | 800 | | | | 184 | | | | 543 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 1443 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 85.4 | | | |
| HIGHEST DAILY MEAN | 16000 | | | | 400 | | | | 45300 | | | |
| LOWEST DAILY MEAN | 45 | | | | 51 | | | | .10 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 70 | | | | 70 | | | | .43 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 407 | | | | 56300 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 5.26 | | | | 24.24 | | | |
| ANNUAL RUNOFF (AC-FT) | 579100 | | | | 133000 | | | | 393600 | | | |
| 10 PERCENT EXCEEDS | 1750 | | | | 322 | | | | 1060 | | | |
| 50 PERCENT EXCEEDS | 320 | | | | 157 | | | | 232 | | | |
| 90 PERCENT EXCEEDS | 139 | | | | 91 | | | | 88 | | | |

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.--No estimated daily discharges. 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|---------|-------|------|-------|-------|------|------|------|------|------|------|
| 1 | 309 | 307 | 124 | 124 | 259 | 313 | 126 | 92 | 94 | 89 | 156 | 38 |
| 2 | 310 | 307 | 127 | 138 | 257 | 313 | 127 | 91 | 88 | 94 | 151 | 89 |
| 3 | 306 | 307 | 127 | 129 | 127 | 313 | 127 | 91 | 94 | 95 | 153 | 91 |
| 4 | 306 | 290 | 127 | 126 | 127 | 313 | 126 | 91 | 92 | 94 | 154 | 95 |
| 5 | 265 | 307 | 86 | 126 | 127 | 313 | 124 | 91 | 92 | 92 | 156 | 92 |
| 6 | 303 | 306 | 80 | 126 | 127 | 313 | 126 | 104 | 91 | 94 | 160 | 94 |
| 7 | 306 | 306 | 88 | 127 | 150 | 310 | 91 | 91 | 92 | 94 | 154 | 97 |
| 8 | 306 | 304 | 98 | 127 | 239 | 307 | 91 | 103 | 91 | 92 | 156 | 92 |
| 9 | 306 | 306 | 275 | 129 | 148 | 309 | 89 | 98 | 92 | 88 | 156 | 91 |
| 10 | 307 | 304 | 306 | 126 | 129 | 309 | 92 | 98 | 95 | 97 | 156 | 94 |
| 11 | 307 | 306 | 313 | 126 | 130 | 309 | 94 | 101 | 95 | 91 | 153 | 95 |
| 12 | 307 | 306 | 280 | 126 | 130 | 309 | 89 | 100 | 95 | 91 | 153 | 89 |
| 13 | 306 | 303 | 292 | 126 | 129 | 309 | 89 | 100 | 86 | 91 | 153 | 91 |
| 14 | 306 | 53 | 277 | 126 | 130 | 309 | 91 | 97 | 89 | 91 | 156 | 85 |
| 15 | 306 | .00 | 307 | 126 | 129 | 307 | 91 | 94 | 92 | 91 | 153 | 94 |
| 16 | 309 | .00 | 236 | 51 | 132 | 206 | 89 | 94 | 92 | 92 | 151 | 92 |
| 17 | 304 | .00 | 242 | 54 | 132 | 304 | 89 | 94 | 94 | 94 | 151 | 91 |
| 18 | 304 | .00 | 224 | 56 | 133 | 306 | 88 | 100 | 92 | 94 | 154 | 94 |
| 19 | 306 | .00 | 216 | 48 | 310 | 159 | 89 | 104 | 94 | 86 | 156 | 95 |
| 20 | 304 | 4.5 | 212 | 56 | 313 | 127 | 91 | 126 | 94 | 92 | 156 | 95 |
| 21 | 304 | 1.5 | 206 | 56 | 312 | 129 | 91 | 126 | 92 | 95 | 156 | 95 |
| 22 | 306 | 316 | 163 | 65 | 312 | 127 | 92 | 130 | 94 | 95 | 148 | 95 |
| 23 | 304 | 316 | 127 | 82 | 313 | 126 | 92 | 132 | 92 | 94 | 154 | 97 |
| 24 | 304 | 316 | 126 | 162 | 313 | 127 | 91 | 126 | 88 | 94 | 156 | 95 |
| 25 | 306 | 316 | 124 | 250 | 313 | 126 | 91 | 115 | 92 | 92 | 156 | 97 |
| 26 | 304 | 316 | 124 | 248 | 313 | 127 | 153 | 107 | 95 | 91 | 156 | 97 |
| 27 | 304 | 118 | 124 | 257 | 313 | 127 | 103 | 109 | 91 | 92 | 153 | 97 |
| 28 | 304 | 119 | 124 | 257 | 313 | 126 | 91 | 103 | 89 | 94 | 147 | 97 |
| 29 | 309 | 118 | 123 | 260 | --- | 126 | 89 | 97 | 91 | 150 | 153 | 97 |
| 30 | 304 | 144 | 126 | 259 | --- | 126 | 91 | 94 | 94 | 153 | 159 | 97 |
| 31 | 307 | --- | 124 | 259 | --- | 126 | --- | 91 | --- | 151 | 38 | --- |
| TOTAL | 9439 | 6097.00 | 5528 | 4328 | 5860 | 7151 | 3003 | 3190 | 2762 | 3043 | 4664 | 2758 |
| MEAN | 304 | 203 | 178 | 140 | 209 | 231 | 100 | 103 | 92.1 | 98.2 | 150 | 91.9 |
| MAX | 310 | 316 | 313 | 260 | 313 | 313 | 153 | 132 | 95 | 153 | 160 | 97 |
| MIN | 265 | .00 | 80 | 48 | 127 | 126 | 88 | 91 | 86 | 86 | 38 | 38 |
| AC-FT | 18720 | 12090 | 10960 | 8580 | 11620 | 14180 | 5960 | 6330 | 5480 | 6040 | 9250 | 5470 |

11471000 POTTER VALLEY POWERHOUSE INTAKE NEAR POTTER VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 188 | 194 | 211 | 226 | 243 | 245 | 232 | 215 | 178 | 160 | 156 | 179 |
| MAX | 321 | 311 | 311 | 316 | 325 | 324 | 326 | 330 | 325 | 314 | 320 | 314 |
| (WY) | 1991 | 1963 | 1982 | 1982 | 1982 | 1993 | 1951 | 1982 | 1982 | 1953 | 1953 | 1967 |
| MIN | .000 | 9.70 | 3.10 | 15.4 | 11.7 | .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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1910 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 95061.00 | | | | 57823.00 | | | | | | | |
| ANNUAL MEAN | 260 | | | | 158 | | | | 202 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 305 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 84.0 | | | |
| HIGHEST DAILY MEAN | 327 | | | | Mar 18 | | | | 351 | | | |
| LOWEST DAILY MEAN | .00 | | | | Nov 15 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | .86 | | | | Nov 15 | | | | .00 | | | |
| ANNUAL RUNOFF (AC-FT) | 188600 | | | | 114700 | | | | 146700 | | | |
| 10 PERCENT EXCEEDS | 324 | | | | 307 | | | | 311 | | | |
| 50 PERCENT EXCEEDS | 307 | | | | 126 | | | | 215 | | | |
| 90 PERCENT EXCEEDS | 138 | | | | 89 | | | | 57 | | | |

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.--No estimated daily discharges. Flow represents inflow into the Russian River basin after passing through powerhouse. See schematic diagrams of Eel and Russian 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, 326 ft³/s, Mar. 16, 1993; no flow Apr. 4, 5, and July 18-20, 1990 and Nov. 15-19, 1993.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|---------|-------|------|-------|-------|------|------|------|------|------|------|
| 1 | 284 | 306 | 123 | 123 | 258 | 312 | 120 | 91 | 69 | 48 | 125 | 13 |
| 2 | 285 | 306 | 127 | 137 | 256 | 312 | 122 | 90 | 60 | 52 | 118 | 51 |
| 3 | 285 | 306 | 127 | 128 | 126 | 312 | 124 | 90 | 70 | 57 | 119 | 46 |
| 4 | 290 | 289 | 127 | 125 | 126 | 312 | 123 | 90 | 62 | 63 | 118 | 58 |
| 5 | 253 | 306 | 85 | 125 | 126 | 311 | 121 | 90 | 61 | 61 | 118 | 59 |
| 6 | 290 | 305 | 78 | 125 | 126 | 312 | 123 | 103 | 61 | 61 | 122 | 61 |
| 7 | 293 | 305 | 86 | 126 | 148 | 309 | 85 | 90 | 62 | 58 | 116 | 61 |
| 8 | 298 | 303 | 94 | 126 | 238 | 306 | 88 | 102 | 61 | 52 | 119 | 55 |
| 9 | 302 | 305 | 272 | 128 | 147 | 308 | 88 | 97 | 60 | 46 | 125 | 56 |
| 10 | 303 | 303 | 302 | 125 | 128 | 308 | 91 | 97 | 66 | 54 | 119 | 66 |
| 11 | 304 | 305 | 310 | 125 | 130 | 308 | 93 | 100 | 66 | 50 | 118 | 78 |
| 12 | 306 | 305 | 278 | 125 | 129 | 308 | 88 | 99 | 63 | 49 | 118 | 76 |
| 13 | 305 | 302 | 291 | 125 | 128 | 308 | 84 | 99 | 51 | 51 | 118 | 76 |
| 14 | 305 | 53 | 275 | 125 | 129 | 308 | 79 | 94 | 54 | 56 | 123 | 72 |
| 15 | 305 | .00 | 305 | 125 | 128 | 306 | 84 | 90 | 58 | 56 | 114 | 72 |
| 16 | 308 | .00 | 235 | 50 | 131 | 205 | 83 | 89 | 59 | 57 | 110 | 63 |
| 17 | 303 | .00 | 241 | 53 | 130 | 303 | 85 | 87 | 59 | 58 | 110 | 63 |
| 18 | 303 | .00 | 223 | 55 | 130 | 305 | 84 | 93 | 57 | 60 | 117 | 70 |
| 19 | 305 | .00 | 216 | 47 | 308 | 158 | 78 | 96 | 57 | 51 | 130 | 73 |
| 20 | 303 | 4.4 | 212 | 55 | 311 | 126 | 73 | 119 | 59 | 54 | 126 | 73 |
| 21 | 301 | 1.0 | 205 | 55 | 308 | 113 | 72 | 123 | 66 | 58 | 127 | 71 |
| 22 | 299 | 315 | 163 | 64 | 308 | 114 | 70 | 127 | 58 | 55 | 118 | 65 |
| 23 | 297 | 315 | 126 | 80 | 312 | 121 | 74 | 128 | 56 | 53 | 122 | 67 |
| 24 | 297 | 315 | 125 | 160 | 312 | 122 | 81 | 118 | 54 | 53 | 125 | 63 |
| 25 | 302 | 315 | 123 | 248 | 312 | 121 | 87 | 106 | 55 | 52 | 123 | 67 |
| 26 | 302 | 315 | 123 | 246 | 312 | 122 | 152 | 94 | 59 | 50 | 121 | 75 |
| 27 | 300 | 117 | 123 | 255 | 312 | 122 | 102 | 95 | 53 | 51 | 114 | 79 |
| 28 | 300 | 118 | 123 | 256 | 312 | 121 | 90 | 89 | 51 | 57 | 111 | 86 |
| 29 | 307 | 117 | 122 | 259 | --- | 120 | 88 | 81 | 49 | 112 | 121 | 92 |
| 30 | 303 | 143 | 125 | 258 | --- | 120 | 90 | 77 | 55 | 113 | 136 | 84 |
| 31 | 306 | --- | 123 | 258 | --- | 120 | --- | 70 | --- | 115 | 13 | --- |
| TOTAL | 9244 | 6074.40 | 5488 | 4292 | 5821 | 7053 | 2822 | 3014 | 1771 | 1863 | 3614 | 1991 |
| MEAN | 298 | 202 | 177 | 138 | 208 | 228 | 94.1 | 97.2 | 59.0 | 60.1 | 117 | 66.4 |
| MAX | 308 | 315 | 310 | 259 | 312 | 312 | 152 | 128 | 70 | 115 | 136 | 92 |
| MIN | 253 | .00 | 78 | 47 | 126 | 113 | 70 | 70 | 49 | 46 | 13 | 13 |
| AC-FT | 18340 | 12050 | 10890 | 8510 | 11550 | 13990 | 5600 | 5980 | 3510 | 3700 | 7170 | 3950 |

11471099 POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 206 | 173 | 180 | 204 | 229 | 262 | 202 | 177 | 143 | 104 | 99.8 | 143 |
| MAX | 311 | 245 | 292 | 291 | 300 | 323 | 320 | 316 | 291 | 160 | 117 | 282 |
| (WY) | 1991 | 1991 | 1989 | 1989 | 1990 | 1993 | 1993 | 1993 | 1993 | 1993 | 1994 | 1990 |
| MIN | 79.3 | 90.1 | 79.6 | 35.8 | 45.0 | 136 | 53.7 | 97.0 | 59.0 | 60.1 | 81.5 | 66.4 |
| (WY) | 1989 | 1988 | 1991 | 1991 | 1991 | 1988 | 1990 | 1988 | 1994 | 1994 | 1988 | 1994 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | FOR 1994 WATER YEAR | WATER YEARS 1988 - 1994 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 91504.40 | 53047.40 | |
| ANNUAL MEAN | 251 | 145 | 177 |
| HIGHEST ANNUAL MEAN | | | 236 |
| LOWEST ANNUAL MEAN | | | 141 |
| HIGHEST DAILY MEAN | 326 Mar 16 | 315 Nov 22 | 326 Mar 16 1993 |
| LOWEST DAILY MEAN | .00 Nov 15 | .00 Nov 15 | .00 Apr 4 1990 |
| ANNUAL SEVEN-DAY MINIMUM | .77 Nov 15 | .77 Nov 15 | .77 Nov 15 1993 |
| ANNUAL RUNOFF (AC-FT) | 181500 | 105200 | 128000 |
| 10 PERCENT EXCEEDS | 322 | 306 | 315 |
| 50 PERCENT EXCEEDS | 303 | 119 | 132 |
| 90 PERCENT EXCEEDS | 116 | 55 | 68 |

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.--No estimated daily discharges. 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 only flow 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 602 ft³/s, Feb. 17, gage height, 10.33 ft; minimum daily, 6.3 ft³/s, June 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 1 | 7.0 | 10 | 44 | 105 | 105 | 119 | 104 | 35 | 6.3 | 7.1 | 7.3 | 7.3 |
| 2 | 6.9 | 10 | 44 | 105 | 122 | 106 | 101 | 35 | 6.7 | 7.1 | 7.4 | 7.3 |
| 3 | 6.9 | 10 | 44 | 105 | 132 | 105 | 97 | 35 | 6.6 | 7.1 | 7.4 | 7.3 |
| 4 | 6.9 | 11 | 44 | 106 | 121 | 106 | 92 | 35 | 6.6 | 7.1 | 7.4 | 7.3 |
| 5 | 27 | 12 | 44 | 105 | 115 | 106 | 90 | 35 | 6.7 | 7.2 | 7.4 | 7.3 |
| 6 | 7.0 | 11 | 44 | 105 | 123 | 110 | 85 | 35 | 6.7 | 46 | 7.3 | 7.4 |
| 7 | 7.0 | 11 | 44 | 104 | 167 | 104 | 84 | 34 | 6.7 | 51 | 7.3 | 7.3 |
| 8 | 7.1 | 12 | 277 | 105 | 111 | 106 | 81 | 32 | 6.9 | 7.4 | 7.2 | 7.4 |
| 9 | 7.1 | 12 | 40 | 105 | 105 | 106 | 80 | 32 | 7.2 | 7.4 | 7.2 | 7.2 |
| 10 | 7.1 | 12 | 44 | 105 | 183 | 106 | 77 | 31 | 7.3 | 7.4 | 7.3 | 7.2 |
| 11 | 7.0 | 12 | 125 | 105 | 159 | 105 | 73 | 29 | 7.2 | 7.4 | 7.3 | 7.3 |
| 12 | 7.0 | 11 | 87 | 105 | 118 | 105 | 70 | 28 | 7.1 | 7.2 | 7.3 | 7.3 |
| 13 | 7.4 | 19 | 87 | 106 | 106 | 105 | 71 | 27 | 7.1 | 7.2 | 7.3 | 7.3 |
| 14 | 7.1 | 42 | 280 | 106 | 107 | 105 | 68 | 26 | 7.1 | 7.3 | 7.3 | 7.3 |
| 15 | 7.1 | 59 | 142 | 105 | 108 | 104 | 66 | 25 | 7.2 | 7.2 | 7.3 | 7.3 |
| 16 | 7.0 | 61 | 146 | 105 | 107 | 153 | 64 | 24 | 7.2 | 7.2 | 7.3 | 7.3 |
| 17 | 7.1 | 60 | 105 | 105 | 403 | 105 | 62 | 24 | 7.3 | 7.3 | 7.3 | 7.3 |
| 18 | 7.1 | 61 | 105 | 105 | 293 | 105 | 59 | 43 | 7.2 | 7.2 | 7.3 | 7.3 |
| 19 | 7.2 | 59 | 105 | 105 | 198 | 105 | 57 | 83 | 7.2 | 7.3 | 7.3 | 7.4 |
| 20 | 7.2 | 102 | 105 | 105 | 144 | 105 | 54 | 33 | 7.2 | 7.2 | 7.3 | 7.4 |
| 21 | 7.1 | 57 | 118 | 114 | 237 | 105 | 53 | 21 | 7.3 | 7.3 | 7.4 | 7.3 |
| 22 | 7.1 | 14 | 109 | 128 | 167 | 105 | 52 | 18 | 7.2 | 7.2 | 7.4 | 7.3 |
| 23 | 7.1 | 11 | 105 | 302 | 111 | 105 | 74 | 18 | 7.2 | 7.4 | 7.2 | 7.2 |
| 24 | 7.1 | 11 | 105 | 309 | 107 | 105 | 97 | 17 | 7.3 | 7.3 | 7.3 | 7.3 |
| 25 | 7.1 | 11 | 105 | 258 | 125 | 105 | 96 | 15 | 7.3 | 7.3 | 7.2 | 7.3 |
| 26 | 7.1 | 18 | 105 | 215 | 131 | 105 | 93 | 14 | 7.2 | 7.4 | 7.3 | 7.3 |
| 27 | 7.1 | 26 | 105 | 145 | 168 | 105 | 86 | 13 | 7.1 | 7.3 | 7.3 | 7.4 |
| 28 | 7.1 | 22 | 106 | 114 | 139 | 105 | 50 | 12 | 7.2 | 7.3 | 7.3 | 7.3 |
| 29 | 7.1 | 22 | 105 | 105 | --- | 105 | 38 | 11 | 7.2 | 7.2 | 7.3 | 7.2 |
| 30 | 7.1 | 26 | 105 | 105 | --- | 105 | 36 | 9.2 | 7.1 | 7.3 | 7.4 | 7.3 |
| 31 | 7.8 | --- | 105 | 105 | --- | 105 | --- | 9.1 | --- | 7.3 | 7.5 | --- |
| TOTAL | 240.0 | 815 | 3129 | 4002 | 4212 | 3326 | 2210 | 838.3 | 211.6 | 307.6 | 226.8 | 219.1 |
| MEAN | 7.74 | 27.2 | 101 | 129 | 150 | 107 | 73.7 | 27.0 | 7.05 | 9.92 | 7.32 | 7.30 |
| MAX | 27 | 102 | 280 | 309 | 403 | 153 | 104 | 83 | 7.3 | 51 | 7.5 | 7.4 |
| MIN | 6.9 | 10 | 40 | 104 | 105 | 104 | 36 | 9.1 | 6.3 | 7.1 | 7.2 | 7.2 |
| AC-FT | 476 | 1620 | 6210 | 7940 | 8350 | 6600 | 4380 | 1660 | 420 | 610 | 450 | 435 |

EEL RIVER BASIN

11471500 EEL RIVER AT VAN ARSDALE DAM, NEAR POTTER VALLEY, CA--Continued

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--|------------------------|------|------|------|---------------------|------|------|------|-------------------------|------|------|------|
| OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1994, BY WATER YEAR (WY) | | | | | | | | | | | | |
| MEAN | 12.0 | 133 | 703 | 1248 | 1452 | 988 | 551 | 148 | 21.2 | 4.98 | 5.49 | 5.18 |
| MAX | 153 | 2389 | 5249 | 6293 | 8904 | 5492 | 3863 | 1174 | 233 | 13.4 | 54.1 | 27.9 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1986 | 1983 | 1982 | 1983 | 1993 | 1990 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1923 - 1994 | | | |
| ANNUAL TOTAL | 229548.4 | | | | 19737.4 | | | | | | | |
| ANNUAL MEAN | 629 | | | | 54.1 | | | | 430 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 1546 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 3.46 | | | |
| HIGHEST DAILY MEAN | 16300 | | | | 403 | | | | 49500 | | | |
| LOWEST DAILY MEAN | 5.1 | | | | 6.3 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 6.5 | | | | 6.6 | | | | .16 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 602 | | | | 64100 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 10.33 | | | | 33.90 | | | |
| ANNUAL RUNOFF (AC-FT) | 455300 | | | | 39150 | | | | 311300 | | | |
| 10 PERCENT EXCEEDS | 1590 | | | | 111 | | | | 1030 | | | |
| 50 PERCENT EXCEEDS | 65 | | | | 24 | | | | 8.7 | | | |
| 90 PERCENT EXCEEDS | 6.7 | | | | 7.1 | | | | 2.0 | | | |

11472150 EEL RIVER NEAR DOS RIOS, CA

LOCATION.--Lat 39°37'30", long 123°20'25", in SW 1/4 SW 1/4 sec.32, T.21 N., R.13 W., Mendocino County, Hydrologic Unit 18010103, on left bank 1,100 ft upstream from Outlet Creek and 6.3 mi south of Dos Rios.

DRAINAGE AREA.--528 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,001.28 ft above sea level.

REMARKS.--No estimated daily discharge. Records fair except for summer months, which are poor. Flow partly regulated by Lake Pillsbury (station 11470000) 40 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, 70,100 ft³/s, Feb. 17, 1986, gage height, 35.54 ft, from rating curve extended above 26,000 ft³/s on basis of slope-area measurement at gage height 33.64 ft; no flow for many days in 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 45.52 ft, from information by local resident, discharge, 100,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,100 ft³/s, Feb. 17, gage height, 8.14 ft; minimum daily, 5.5 ft³/s, Aug. 18, 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|
| 1 | 14 | 17 | 52 | 192 | 293 | 652 | 205 | 141 | 43 | 18 | 6.6 | 6.1 |
| 2 | 14 | 17 | 85 | 205 | 275 | 579 | 202 | 132 | 39 | 18 | 6.1 | 13 |
| 3 | 14 | 18 | 80 | 197 | 279 | 519 | 193 | 123 | 37 | 15 | 6.7 | 12 |
| 4 | 14 | 19 | 86 | 197 | 265 | 477 | 185 | 125 | 33 | 15 | 6.6 | 9.1 |
| 5 | 13 | 21 | 82 | 212 | 249 | 475 | 174 | 215 | 32 | 14 | 6.3 | 8.0 |
| 6 | 22 | 30 | 77 | 209 | 286 | 457 | 169 | 194 | 34 | 13 | 6.1 | 6.9 |
| 7 | 34 | 24 | 107 | 198 | 820 | 395 | 164 | 205 | 40 | 12 | 6.1 | 6.3 |
| 8 | 19 | 23 | 1410 | 201 | 498 | 369 | 166 | 193 | 37 | 22 | 6.1 | 6.1 |
| 9 | 16 | 23 | 821 | 247 | 360 | 349 | 191 | 157 | 32 | 32 | 6.1 | 6.1 |
| 10 | 16 | 24 | 212 | 241 | 517 | 332 | 178 | 138 | 29 | 21 | 6.1 | 19 |
| 11 | 16 | 31 | 1280 | 219 | 613 | 321 | 164 | 125 | 30 | 14 | 15 | 18 |
| 12 | 17 | 32 | 682 | 209 | 421 | 301 | 146 | 115 | 29 | 11 | 15 | 9.6 |
| 13 | 17 | 29 | 368 | 203 | 355 | 289 | 138 | 98 | 28 | 9.1 | 7.8 | 7.2 |
| 14 | 17 | 27 | 1440 | 198 | 327 | 282 | 134 | 94 | 22 | 8.5 | 6.8 | 6.7 |
| 15 | 21 | 57 | 718 | 195 | 308 | 275 | 130 | 96 | 21 | 8.2 | 6.3 | 7.5 |
| 16 | 27 | 98 | 408 | 190 | 296 | 307 | 125 | 111 | 21 | 8.2 | 6.1 | 9.1 |
| 17 | 29 | 101 | 303 | 188 | 3440 | 274 | 121 | 114 | 21 | 8.2 | 5.8 | 6.7 |
| 18 | 22 | 101 | 246 | 185 | 2850 | 257 | 132 | 119 | 22 | 8.2 | 5.5 | 6.4 |
| 19 | 20 | 101 | 226 | 183 | 2000 | 250 | 119 | 176 | 22 | 8.4 | 5.5 | 6.4 |
| 20 | 19 | 100 | 212 | 181 | 1960 | 244 | 111 | 166 | 22 | 7.7 | 6.5 | 6.4 |
| 21 | 19 | 145 | 203 | 202 | 3030 | 239 | 106 | 125 | 21 | 7.4 | 6.2 | 6.9 |
| 22 | 19 | 102 | 206 | 556 | 1930 | 236 | 104 | 117 | 20 | 7.4 | 5.8 | 6.8 |
| 23 | 18 | 44 | 190 | 2370 | 1160 | 236 | 107 | 96 | 21 | 8.2 | 5.8 | 12 |
| 24 | 18 | 33 | 185 | 2950 | 898 | 231 | 174 | 84 | 20 | 8.1 | 5.8 | 8.9 |
| 25 | 18 | 29 | 183 | 2160 | 773 | 228 | 539 | 80 | 16 | 7.5 | 5.8 | 6.8 |
| 26 | 18 | 28 | 183 | 1300 | 729 | 224 | 750 | 73 | 19 | 7.4 | 6.2 | 6.7 |
| 27 | 18 | 26 | 182 | 782 | 840 | 216 | 354 | 75 | 20 | 7.4 | 6.2 | 6.7 |
| 28 | 18 | 48 | 179 | 532 | 763 | 210 | 263 | 65 | 20 | 7.3 | 5.8 | 6.7 |
| 29 | 18 | 61 | 178 | 409 | --- | 208 | 198 | 59 | 20 | 6.9 | 5.8 | 6.6 |
| 30 | 17 | 73 | 176 | 352 | --- | 205 | 154 | 59 | 20 | 6.7 | 6.0 | 6.5 |
| 31 | 17 | --- | 176 | 319 | --- | 205 | --- | 57 | --- | 6.7 | 6.1 | --- |
| TOTAL | 579 | 1482 | 10736 | 15982 | 26535 | 9842 | 5896 | 3727 | 791 | 352.5 | 208.6 | 251.2 |
| MEAN | 18.7 | 49.4 | 346 | 516 | 948 | 317 | 197 | 120 | 26.4 | 11.4 | 6.73 | 8.37 |
| MAX | 34 | 145 | 1440 | 2950 | 3440 | 652 | 750 | 215 | 43 | 32 | 15 | 19 |
| MIN | 13 | 17 | 52 | 181 | 249 | 205 | 104 | 57 | 16 | 6.7 | 5.5 | 6.1 |
| AC-FT | 1150 | 2940 | 21290 | 31700 | 52630 | 19520 | 11690 | 7390 | 1570 | 699 | 414 | 498 |

EEL RIVER BASIN

11472150 EEL RIVER NEAR DOS RIOS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|-------|-------|------|------|------|------|------|------|------|
| MEAN | 26.9 | 528 | 1421 | 2726 | 2374 | 1992 | 836 | 261 | 75.8 | 16.4 | 10.6 | 9.54 |
| MAX | 102 | 4033 | 4854 | 10530 | 11430 | 6998 | 5330 | 1423 | 666 | 65.5 | 57.3 | 22.0 |
| (WY) | 1980 | 1974 | 1982 | 1970 | 1986 | 1983 | 1982 | 1983 | 1993 | 1993 | 1980 | 1986 |
| MIN | 3.72 | 10.4 | 8.76 | 26.4 | 34.1 | 82.0 | 21.2 | 19.2 | 5.28 | .080 | .031 | 3.27 |
| (WY) | 1967 | 1979 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1970 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1967 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 430833 | | | | 76382.3 | | | | | | | |
| ANNUAL MEAN | 1180 | | | | 209 | | | | 850 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 2221 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 18.4 | | | |
| HIGHEST DAILY MEAN | 31200 | | | | 3440 | | | | 62900 | | | |
| LOWEST DAILY MEAN | 11 | | | | 5.5 | | | | .00 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 12 | | | | 5.9 | | | | .00 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 5100 | | | | 70100 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 8.14 | | | | 35.54 | | | |
| ANNUAL RUNOFF (AC-FT) | 854600 | | | | 151500 | | | | 616100 | | | |
| 10 PERCENT EXCEEDS | 3020 | | | | 464 | | | | 2160 | | | |
| 50 PERCENT EXCEEDS | 206 | | | | 75 | | | | 57 | | | |
| 90 PERCENT EXCEEDS | 14 | | | | 6.7 | | | | 6.5 | | | |

11472200 OUTLET CREEK NEAR LONGVALE, CA

LOCATION.--Lat 39°37'05", long 123°21'20", in NE 1/4 sec.1, T.20 N., R.14 W., Mendocino County, Hydrologic Unit 18010103, on right bank 0.2 mi downstream from Bloody Run Creek, 0.9 mi upstream from mouth, and 6.9 mi northeast of Longvale.

DRAINAGE AREA.--161 mi².

PERIOD OF RECORD.--October 1956 to September 1994 (discontinued).

REVISED RECORDS.--WSP 1929: 1958(M), 1960(M), 1963(M).

GAGE.--Water-stage recorder. Datum of gage is 1,018.14 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, 77,900 ft³/s, Dec. 22, 1964, gage height, 30.6 ft, from floodmarks, from rating curve extended above 17,000 ft³/s on basis of slope-area measurement of peak flow; no flow at times during several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 17 | 1500 | *4,080 | *7.80 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|------|------|------|-------|-------|------|------|
| 1 | 1.6 | 3.7 | 22 | e120 | 170 | 356 | 38 | 88 | 16 | 2.3 | .00 | .00 |
| 2 | 1.5 | 3.5 | 17 | e150 | 146 | 298 | 37 | 74 | 15 | 2.0 | .00 | .00 |
| 3 | 1.5 | 3.4 | 13 | e110 | 128 | 255 | 34 | 65 | 14 | 2.0 | .00 | .00 |
| 4 | 1.5 | 3.4 | 12 | e100 | 110 | 229 | 32 | 69 | 14 | 1.6 | .00 | .00 |
| 5 | 1.6 | 3.4 | 12 | e140 | 97 | 222 | 29 | 217 | 13 | 1.4 | .00 | .00 |
| 6 | 1.7 | 3.6 | 11 | e120 | 205 | 213 | 29 | 173 | 13 | 1.3 | .00 | .00 |
| 7 | 2.6 | 3.7 | 12 | e102 | 660 | 185 | 29 | 188 | 14 | 1.1 | .00 | .00 |
| 8 | 2.8 | 3.7 | 768 | e94 | 574 | 165 | 31 | 159 | 14 | .98 | .00 | .00 |
| 9 | 2.8 | 3.7 | e700 | e115 | 312 | 145 | 73 | 119 | 12 | .86 | .00 | .00 |
| 10 | 3.0 | 3.9 | e600 | e100 | 690 | 133 | 64 | 95 | 11 | .74 | .00 | .00 |
| 11 | 3.1 | 5.2 | e650 | e92 | 572 | 124 | 46 | 77 | 9.4 | .69 | .00 | .00 |
| 12 | 3.1 | 6.5 | e592 | e88 | 376 | 110 | 37 | 64 | 8.5 | .66 | .00 | .00 |
| 13 | 3.1 | 7.0 | e490 | e83 | 285 | 99 | 32 | 54 | 7.3 | .57 | .00 | .00 |
| 14 | 3.1 | 7.6 | e670 | 79 | 232 | 91 | 30 | 47 | 6.5 | .49 | .00 | .00 |
| 15 | 6.0 | 6.4 | e500 | 69 | 198 | 84 | 28 | 49 | 6.0 | .39 | .00 | .00 |
| 16 | 9.1 | 5.8 | e400 | 59 | 179 | 81 | 26 | 97 | 5.8 | .32 | .00 | .00 |
| 17 | 9.7 | 5.4 | e310 | 51 | 2910 | 88 | 24 | 79 | 5.8 | .27 | .00 | .00 |
| 18 | 12 | 5.3 | e225 | 46 | 2620 | 77 | 23 | 72 | 5.6 | .23 | .00 | .00 |
| 19 | 9.9 | 5.3 | e190 | 41 | 2060 | 71 | 22 | 62 | 5.6 | .21 | .00 | .00 |
| 20 | 9.3 | 5.0 | e174 | 38 | 2030 | 65 | 21 | 52 | 5.0 | .18 | .00 | .00 |
| 21 | 8.2 | 4.9 | e163 | 106 | 2840 | 61 | 20 | 46 | 4.9 | .16 | .00 | .00 |
| 22 | 6.2 | 4.9 | e152 | 933 | 1690 | 60 | 19 | 41 | 4.4 | .15 | .00 | .00 |
| 23 | 5.4 | 4.9 | e142 | 2340 | 1070 | 69 | 23 | 36 | 4.1 | .11 | .00 | .00 |
| 24 | 5.3 | 5.1 | e140 | 2450 | 720 | 74 | 87 | 32 | 3.6 | .09 | .00 | .00 |
| 25 | 4.9 | 5.3 | e135 | 2160 | 534 | 69 | 630 | 28 | 3.6 | .06 | .00 | .00 |
| 26 | 4.2 | 5.3 | e128 | 1280 | 471 | 58 | 735 | 26 | 3.4 | .05 | .00 | .00 |
| 27 | 4.1 | 6.2 | e120 | 826 | 542 | 53 | 405 | 24 | 3.3 | .03 | .00 | .00 |
| 28 | 3.8 | 5.7 | e116 | 505 | 447 | 48 | 231 | 22 | 2.8 | .01 | .00 | .00 |
| 29 | 3.7 | 6.5 | e113 | 339 | --- | 44 | 148 | 21 | 2.8 | .01 | .00 | .00 |
| 30 | 3.7 | 16 | e110 | 255 | --- | 42 | 110 | 19 | 2.5 | .00 | .00 | .00 |
| 31 | 3.7 | --- | e115 | 207 | --- | 40 | --- | 18 | --- | .00 | .00 | --- |
| TOTAL | 142.2 | 160.3 | 7802 | 13198 | 22868 | 3709 | 3093 | 2213 | 236.9 | 18.96 | 0.00 | 0.00 |
| MEAN | 4.59 | 5.34 | 252 | 426 | 817 | 120 | 103 | 71.4 | 7.90 | .61 | .000 | .000 |
| MAX | 12 | 16 | 768 | 2450 | 2910 | 356 | 735 | 217 | 16 | 2.3 | .00 | .00 |
| MIN | 1.5 | 3.4 | 11 | 38 | 97 | 40 | 19 | 18 | 2.5 | .00 | .00 | .00 |
| AC-FT | 282 | 318 | 15480 | 26180 | 45360 | 7360 | 6130 | 4390 | 470 | 38 | .00 | .00 |

* e Estimated.

11472200 OUTLET CREEK NEAR LONGVALE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 41.5 | 336 | 821 | 1134 | 1097 | 800 | 372 | 94.1 | 26.9 | 3.87 | 1.39 | 1.97 |
| MAX | 555 | 1913 | 5390 | 3786 | 3948 | 2359 | 1741 | 463 | 273 | 13.1 | 4.11 | 10.6 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1986 | 1975 | 1963 | 1990 | 1993 | 1993 | 1983 | 1957 |
| MIN | .000 | 1.50 | 4.03 | 6.78 | 21.5 | 38.4 | 18.5 | 12.0 | 2.23 | .048 | .000 | .000 |
| (WY) | 1989 | 1991 | 1977 | 1991 | 1991 | 1988 | 1977 | 1977 | 1977 | 1977 | 1977 | 1988 |

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1957 - 1994

| | | | | | | | | | | | | |
|--------------------------|----------|--------|----------|--------|--------|--|--|--|--|--------|--------|------|
| ANNUAL TOTAL | 158828.2 | | 53441.36 | | | | | | | | | |
| ANNUAL MEAN | 435 | | 146 | | | | | | | 391 | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | | 808 | | 1983 |
| LOWEST ANNUAL MEAN | | | | | | | | | | 22.0 | | 1977 |
| HIGHEST DAILY MEAN | 15000 | Jan 20 | | 2910 | Feb 17 | | | | | 52500 | Dec 22 | 1964 |
| LOWEST DAILY MEAN | 1.3 | Sep 8 | | .00 | Jul 30 | | | | | .00 | Aug 15 | 1959 |
| ANNUAL SEVEN-DAY MINIMUM | 1.5 | Sep 6 | | .00 | Jul 30 | | | | | .00 | Jul 15 | 1977 |
| INSTANTANEOUS PEAK FLOW | | | | 4080 | Feb 17 | | | | | 77900 | Dec 22 | 1964 |
| INSTANTANEOUS PEAK STAGE | | | | 7.60 | Feb 17 | | | | | 30.60 | Dec 22 | 1964 |
| ANNUAL RUNOFF (AC-FT) | 315000 | | | 106000 | | | | | | 283300 | | |
| 10 PERCENT EXCEEDS | 1060 | | | 364 | | | | | | 1010 | | |
| 50 PERCENT EXCEEDS | 77 | | | 14 | | | | | | 28 | | |
| 90 PERCENT EXCEEDS | 1.8 | | | .00 | | | | | | .91 | | |

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, 1.7 mi southeast of Dos Rios, and 1.9 mi upstream from mouth.

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, 93,100 ft³/s, Feb. 17, 1986, gage height, 27.41 ft, from rating curve extended above 52,000 ft³/s; minimum daily, 0.39 ft³/s, Sept. 1, 1994.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 25,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Jan. 23 | 0815 | *7,220 | *12.00 | | | | |

Minimum daily, 0.39 ft³/s, Sept. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|--------|-------|-------|------|------|--------|-------|
| 1 | e33 | 36 | 137 | 356 | 808 | 2780 | 666 | 600 | 272 | 51 | 12 | .39 |
| 2 | e32 | 36 | 87 | 829 | 748 | 2890 | 670 | 564 | 254 | 49 | 11 | .44 |
| 3 | e32 | 36 | 78 | 588 | 700 | 2790 | 695 | 527 | 237 | 49 | 9.8 | .48 |
| 4 | e32 | 35 | 73 | 503 | 654 | 2630 | 677 | 531 | 211 | 48 | 9.1 | .44 |
| 5 | e32 | 35 | 67 | 791 | 599 | 3490 | 642 | 860 | 196 | 45 | 8.8 | .43 |
| 6 | e32 | 35 | 67 | 586 | 606 | 3420 | 625 | 725 | 200 | 43 | 8.0 | .44 |
| 7 | e34 | 35 | 71 | 470 | 1030 | 2760 | 637 | 907 | 206 | 40 | 8.0 | .50 |
| 8 | e36 | 35 | 2520 | 424 | 1060 | 2410 | 617 | 898 | 186 | 39 | 7.7 | .56 |
| 9 | e37 | 35 | 2150 | 549 | 781 | 2290 | 686 | 762 | 171 | 38 | 6.8 | .69 |
| 10 | e37 | 42 | 988 | 486 | 1480 | 2210 | 663 | 706 | 157 | 35 | 6.7 | .70 |
| 11 | e38 | 50 | 1650 | 421 | 1490 | 2100 | 611 | 650 | 147 | 34 | 6.4 | .77 |
| 12 | e39 | 52 | 1250 | 390 | 997 | 1810 | 583 | 596 | 137 | 32 | 6.0 | .69 |
| 13 | e40 | 54 | 827 | 368 | 849 | 1640 | 576 | 538 | 118 | 30 | 5.3 | .64 |
| 14 | e40 | 53 | 2120 | 350 | 764 | 1620 | 571 | 488 | 107 | 28 | 4.5 | .89 |
| 15 | e42 | 51 | 1140 | 340 | 713 | 1590 | 571 | 470 | 103 | 26 | 3.4 | 1.5 |
| 16 | e47 | 47 | 728 | 334 | 688 | 1460 | 586 | 611 | 101 | 24 | 3.3 | 2.3 |
| 17 | e60 | 39 | 569 | 321 | 3520 | 1440 | 612 | 628 | 99 | 23 | 2.8 | 3.1 |
| 18 | e54 | 38 | 476 | 316 | 3070 | 1280 | 622 | 594 | 95 | 21 | 2.3 | 3.2 |
| 19 | e52 | 38 | 411 | 313 | 2270 | 1160 | 627 | 729 | 90 | 19 | 2.0 | 2.6 |
| 20 | e49 | 38 | 381 | 305 | 2250 | 1040 | 583 | 821 | 85 | 18 | 1.8 | 2.0 |
| 21 | 46 | 37 | 362 | 327 | 3180 | 948 | 547 | 725 | 81 | 18 | 1.4 | 1.4 |
| 22 | 44 | 36 | 347 | 1470 | 2380 | 915 | 514 | 630 | 77 | 18 | 1.2 | .94 |
| 23 | 43 | 37 | 337 | 5670 | 1840 | 852 | 475 | 562 | 74 | 17 | 1.1 | .91 |
| 24 | 42 | 37 | 331 | 4920 | 1740 | 806 | 527 | 509 | 70 | 16 | .86 | .81 |
| 25 | 41 | 37 | 322 | 3120 | 1740 | 758 | 772 | 473 | 67 | 16 | .85 | .70 |
| 26 | 40 | 37 | 319 | 2130 | 1770 | 705 | 968 | 448 | 66 | 16 | .77 | .71 |
| 27 | 39 | 36 | 317 | 1600 | 2480 | 679 | 927 | 425 | 62 | 15 | .79 | .58 |
| 28 | 38 | 39 | 309 | 1280 | 2550 | 688 | 829 | 396 | 59 | 14 | .42 | .59 |
| 29 | 37 | 46 | 296 | 1070 | --- | 705 | 733 | 357 | 55 | 13 | .42 | .84 |
| 30 | 37 | 145 | 292 | 950 | --- | 707 | 649 | 318 | 54 | 13 | .41 | 1.1 |
| 31 | 36 | --- | 317 | 879 | --- | 682 | --- | 291 | --- | 12 | .40 | --- |
| TOTAL | 1241 | 1307 | 19339 | 32456 | 42757 | 51255 | 19461 | 18339 | 3837 | 860 | 134.32 | 31.34 |
| MEAN | 40.0 | 43.6 | 624 | 1047 | 1527 | 1653 | 649 | 592 | 128 | 27.7 | 4.33 | 1.04 |
| MAX | 60 | 145 | 2520 | 5670 | 3520 | 3490 | 968 | 907 | 272 | 51 | 12 | 3.2 |
| MIN | 32 | 35 | 67 | 305 | 599 | 679 | 475 | 291 | 54 | 12 | .40 | .39 |
| AC-FT | 2460 | 2590 | 38360 | 64380 | 84810 | 101700 | 38600 | 36380 | 7610 | 1710 | 266 | 62 |

e Estimated.

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|-------|-------|------|------|------|------|------|------|------|
| MEAN | 109 | 1249 | 2402 | 3869 | 3380 | 3297 | 1986 | 1165 | 377 | 74.9 | 23.9 | 24.0 |
| MAX | 475 | 6823 | 7270 | 13540 | 12870 | 8622 | 6632 | 3852 | 1744 | 262 | 62.3 | 172 |
| (WY) | 1980 | 1974 | 1984 | 1970 | 1986 | 1983 | 1982 | 1983 | 1993 | 1993 | 1993 | 1986 |
| MIN | 10.2 | 28.5 | 30.5 | 94.3 | 172 | 384 | 333 | 241 | 82.5 | 13.2 | 4.33 | 1.04 |
| (WY) | 1991 | 1991 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1994 | 1994 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1966 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 650923 | | | | 191017.66 | | | | | | | |
| ANNUAL MEAN | 1783 | | | | 523 | | | | 1489 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 3351 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 121 | | | |
| HIGHEST DAILY MEAN | 24200 | | | | 5670 | | | | 74000 | | | |
| LOWEST DAILY MEAN | 30 | | | | .39 | | | | .39 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 31 | | | | .42 | | | | .42 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 7220 | | | | 93100 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 12.00 | | | | 27.41 | | | |
| ANNUAL RUNOFF (AC-FT) | 1291000 | | | | 378900 | | | | 1079000 | | | |
| 10 PERCENT EXCEEDS | 4160 | | | | 1530 | | | | 3670 | | | |
| 50 PERCENT EXCEEDS | 752 | | | | 186 | | | | 330 | | | |
| 90 PERCENT EXCEEDS | 35 | | | | 1.7 | | | | 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.--No estimated daily discharge. Water is diverted from creek upstream from gage to Kekawaka Creek Powerplant (station 11474750). See station 11474781 for records of combined discharge of creek and 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 (estimated), 1,800 ft³/s, Jan. 20, 1993, gage height, 8.34 ft; no flow, Sept. 3-13, 1992.

Combined flow: Maximum discharge (estimated), 1,800 ft³/s, Jan. 20, 1993; no flow, Sept. 3-13, 1992.

EXTREMES FOR CURRENT YEAR.--Creek only, maximum discharge, 409 ft³/s, Jan. 22, gage height, 4.40 ft; minimum daily, .06 ft³/s, Sept. 30.

Combined flow: Maximum discharge, 481 ft³/s, Jan. 22; minimum daily, .06 ft³/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|--------|-------|-------|-------|------|-------|------|------|
| 1 | .66 | 1.3 | 2.3 | 5.2 | 3.2 | 38 | 3.4 | 3.3 | 4.3 | 1.3 | .20 | .08 |
| 2 | .71 | 1.2 | 2.8 | 3.2 | 3.2 | 14 | 3.4 | 3.3 | 4.1 | 1.2 | .18 | .09 |
| 3 | .73 | 1.1 | 2.6 | 6.9 | 3.2 | 3.9 | 3.3 | 3.3 | 3.9 | 1.2 | .17 | .09 |
| 4 | .85 | 1.2 | 3.1 | 6.6 | 3.2 | 3.5 | 3.3 | 3.3 | 3.7 | 1.1 | .16 | .09 |
| 5 | 1.1 | 1.3 | 2.8 | 4.0 | 3.1 | 3.5 | 3.3 | 3.4 | 3.8 | 1.1 | .17 | .09 |
| 6 | 1.3 | 1.3 | 2.8 | 3.2 | 4.2 | 3.4 | 3.3 | 3.4 | 4.5 | 1.0 | .17 | .08 |
| 7 | 1.2 | 1.3 | 3.6 | 3.2 | 24 | 7.6 | 3.3 | 3.4 | 3.9 | .82 | .18 | .08 |
| 8 | 1.1 | 1.3 | 44 | 3.3 | 3.5 | 6.9 | 3.3 | 3.4 | 3.6 | .68 | .19 | .09 |
| 9 | 1.0 | 1.3 | 3.3 | 3.3 | 3.2 | 3.4 | 3.4 | 3.4 | 3.3 | .59 | .18 | .11 |
| 10 | 1.2 | 1.4 | 3.6 | 3.3 | 120 | 3.4 | 3.3 | 3.5 | 3.1 | .54 | .17 | .12 |
| 11 | 1.2 | 1.9 | 34 | 3.2 | 47 | 3.4 | 3.3 | 3.5 | 2.8 | .51 | .16 | .12 |
| 12 | 1.2 | 1.7 | 3.6 | 3.2 | 6.0 | 3.4 | 3.3 | 3.5 | 2.7 | .46 | .15 | .14 |
| 13 | 1.3 | 1.6 | 27 | 3.2 | 3.9 | 3.4 | 3.3 | 3.4 | 2.7 | .45 | .14 | .25 |
| 14 | 1.3 | 1.5 | 96 | 3.2 | 3.6 | 3.4 | 3.3 | 3.4 | 2.6 | .44 | .13 | .24 |
| 15 | 2.1 | 1.4 | 5.6 | 3.2 | 3.4 | 3.4 | 3.3 | 3.4 | 2.5 | .43 | .12 | .20 |
| 16 | 2.7 | 1.4 | 3.3 | 5.8 | 13 | 3.4 | 4.8 | 3.4 | 2.4 | .42 | .11 | .18 |
| 17 | 1.9 | 1.4 | 3.2 | 7.0 | 238 | 3.4 | 6.4 | 3.3 | 2.4 | .32 | .11 | .14 |
| 18 | 1.6 | 1.4 | 3.2 | 6.5 | 162 | 3.4 | 6.3 | 3.3 | 2.4 | .28 | .10 | .12 |
| 19 | 1.5 | 1.4 | 3.2 | 6.0 | 90 | 3.4 | 6.1 | 3.3 | 2.3 | .23 | .10 | .12 |
| 20 | 1.4 | 1.4 | 3.2 | 5.6 | 70 | 3.3 | 5.9 | 3.3 | 2.1 | .20 | .10 | .11 |
| 21 | 1.4 | 1.4 | 3.4 | 14 | 125 | 3.4 | 5.7 | 3.3 | 2.1 | .23 | .10 | .09 |
| 22 | 1.4 | 1.6 | 7.1 | 127 | 81 | 3.4 | 5.5 | 3.3 | 2.0 | .24 | .10 | .09 |
| 23 | 1.4 | 1.7 | 6.3 | 206 | 49 | 3.4 | 7.2 | 3.3 | 1.9 | .30 | .10 | .08 |
| 24 | 1.4 | 1.5 | 5.7 | 204 | 42 | 3.4 | 7.5 | 3.3 | 1.8 | .28 | .10 | .07 |
| 25 | 1.3 | 1.5 | 5.3 | 129 | 37 | 3.4 | 5.1 | 3.3 | 1.9 | .25 | .10 | .07 |
| 26 | 1.2 | 1.5 | 5.1 | 55 | 58 | 3.3 | 3.5 | 3.3 | 1.8 | .24 | .10 | .07 |
| 27 | 1.1 | 1.5 | 4.7 | 10 | 94 | 3.3 | 3.3 | 4.5 | 1.6 | .22 | .10 | .07 |
| 28 | 1.2 | 1.8 | 4.4 | 3.6 | 60 | 3.4 | 3.2 | 5.4 | 1.4 | .19 | .09 | .07 |
| 29 | 1.2 | 3.2 | 4.2 | 3.5 | --- | 3.4 | 3.3 | 5.0 | 1.3 | .19 | .09 | .07 |
| 30 | 1.1 | 2.8 | 4.5 | 3.4 | --- | 3.4 | 3.3 | 4.7 | 1.3 | .18 | .08 | .06 |
| 31 | 1.2 | --- | 4.6 | 3.4 | --- | 3.4 | --- | 4.4 | --- | .20 | .08 | --- |
| TOTAL | 39.95 | 46.3 | 308.5 | 848.0 | 1353.7 | 158.7 | 126.9 | 111.3 | 80.2 | 15.79 | 4.03 | 3.28 |
| MEAN | 1.29 | 1.54 | 9.95 | 27.4 | 48.3 | 5.12 | 4.23 | 3.59 | 2.67 | .51 | .13 | .11 |
| MAX | 2.7 | 3.2 | 96 | 206 | 238 | 38 | 7.5 | 5.4 | 4.5 | 1.3 | .20 | .25 |
| MIN | .66 | 1.1 | 2.3 | 3.2 | 3.1 | 3.3 | 3.2 | 3.3 | 1.3 | .18 | .08 | .06 |
| AC-FT | 79 | 92 | 612 | 1680 | 2690 | 315 | 252 | 221 | 159 | 31 | 8.0 | 6.5 |

11474780 KEKAWAKA CREEK BELOW KEKAWAKA CREEK POWERHOUSE DIVERSION, NEAR ZENIA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .88 | 2.01 | 15.6 | 46.8 | 34.0 | 21.0 | 6.02 | 10.9 | 6.15 | 1.82 | .60 | .37 |
| MAX | 1.29 | 2.91 | 44.0 | 147 | 53.9 | 45.2 | 11.8 | 21.1 | 14.2 | 4.09 | 1.88 | 1.00 |
| (WY) | 1994 | 1993 | 1993 | 1993 | 1993 | 1991 | 1993 | 1990 | 1993 | 1993 | 1993 | 1993 |
| MIN | .68 | 1.31 | 3.48 | 5.08 | 8.02 | 5.12 | 3.36 | 3.59 | 1.90 | .51 | .036 | .008 |
| (WY) | 1992 | 1991 | 1991 | 1991 | 1991 | 1994 | 1991 | 1994 | 1992 | 1994 | 1992 | 1992 |

SUMMARY STATISTICS

| | FOR 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1990 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 9027.92 | | 3096.65 | | | |
| ANNUAL MEAN | 24.7 | | 8.48 | | 12.5 | |
| HIGHEST ANNUAL MEAN | | | | | 27.7 | |
| LOWEST ANNUAL MEAN | | | | | 6.47 | |
| HIGHEST DAILY MEAN | 1150 | Jan 20 | 238 | Feb 17 | 1150 | Jan 20 1993 |
| LOWEST DAILY MEAN | .66 | Sep 30 | .06 | Sep 30 | .00 | Sep 3 1992 |
| ANNUAL SEVEN-DAY MINIMUM | .70 | Sep 27 | .07 | Sep 24 | .00 | Sep 3 1992 |
| INSTANTANEOUS PEAK FLOW | | | 409 | Jan 22 | 1800 | Jan 20 1993 |
| INSTANTANEOUS PEAK STAGE | | | 4.40 | Jan 22 | 8.34 | Jan 20 1993 |
| ANNUAL RUNOFF (AC-FT) | 17910 | | 6140 | | 9070 | |
| 10 PERCENT EXCEEDS | 55 | | 6.7 | | 13 | |
| 50 PERCENT EXCEEDS | 3.3 | | 3.2 | | 3.1 | |
| 90 PERCENT EXCEEDS | 1.2 | | .12 | | .17 | |

11474781 KEKAWAKA CREEK BELOW KEKAWAKA CREEK POWERHOUSE DIVERSION, NEAR ZENIA, CA--Continued.

KEKAWAKA CREEK AND KEKAWAKA CREEK POWERHOUSE,
COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|--------|------|-------|-------|-------|------|-------|------|------|
| 1 | .66 | 1.3 | 2.3 | 11 | 24 | 110 | 8.3 | 11 | 4.3 | 1.3 | .20 | .08 |
| 2 | .71 | 1.2 | 2.8 | 9.3 | 21 | 86 | 8.1 | 11 | 4.1 | 1.2 | .18 | .08 |
| 3 | .73 | 1.1 | 2.6 | 7.3 | 18 | 69 | 7.7 | 9.8 | 3.9 | 1.2 | .17 | .09 |
| 4 | .85 | 1.2 | 3.1 | 16 | 16 | 58 | 7.5 | 11 | 3.7 | 1.1 | .16 | .09 |
| 5 | 1.1 | 1.3 | 2.8 | 17 | 14 | 58 | 7.3 | 16 | 3.8 | 1.1 | .17 | .09 |
| 6 | 1.3 | 1.3 | 2.8 | 12 | 21 | 47 | 7.5 | 13 | 4.5 | 1.0 | .17 | .08 |
| 7 | 1.2 | 1.3 | 3.6 | 9.7 | 86 | 39 | 7.6 | 14 | 3.9 | .82 | .18 | .08 |
| 8 | 1.1 | 1.3 | 77 | 21 | 55 | 33 | 9.4 | 12 | 3.6 | .68 | .19 | .09 |
| 9 | 1.0 | 1.3 | 21 | 35 | 35 | 28 | 15 | 11 | 3.3 | .59 | .18 | .11 |
| 10 | 1.2 | 1.4 | 13 | 20 | 186 | 25 | 11 | 9.6 | 3.1 | .54 | .17 | .12 |
| 11 | 1.2 | 1.9 | 87 | 15 | 119 | 23 | 9.2 | 8.8 | 2.8 | .51 | .16 | .12 |
| 12 | 1.2 | 1.7 | 44 | 12 | 73 | 20 | 8.3 | 8.3 | 2.7 | .46 | .15 | .14 |
| 13 | 1.3 | 1.6 | 61 | 10 | 55 | 18 | 7.8 | 7.8 | 2.7 | .45 | .14 | .25 |
| 14 | 1.3 | 1.5 | 168 | 9.3 | 43 | 16 | 7.5 | 7.5 | 2.6 | .44 | .13 | .24 |
| 15 | 2.1 | 1.4 | 55 | 8.3 | 35 | 15 | 7.1 | 9.7 | 2.5 | .43 | .12 | .20 |
| 16 | 2.7 | 1.4 | 28 | 7.6 | 34 | 16 | 6.7 | 13 | 2.4 | .42 | .11 | .18 |
| 17 | 1.9 | 1.4 | 18 | 7.0 | 256 | 14 | 6.4 | 12 | 2.4 | .32 | .11 | .14 |
| 18 | 1.6 | 1.4 | 13 | 6.5 | 167 | 13 | 6.3 | 10 | 2.4 | .28 | .10 | .12 |
| 19 | 1.5 | 1.4 | 10 | 6.0 | 145 | 13 | 6.1 | 8.9 | 2.3 | .23 | .10 | .12 |
| 20 | 1.4 | 1.4 | 8.8 | 5.6 | 142 | 12 | 5.9 | 8.2 | 2.1 | .20 | .10 | .11 |
| 21 | 1.4 | 1.4 | 7.8 | 44 | 181 | 13 | 5.7 | 7.7 | 2.1 | .23 | .10 | .09 |
| 22 | 1.4 | 1.6 | 7.1 | 199 | 153 | 14 | 5.5 | 7.3 | 2.0 | .24 | .10 | .09 |
| 23 | 1.4 | 1.7 | 6.3 | 278 | 121 | 14 | 7.2 | 6.8 | 1.9 | .30 | .10 | .08 |
| 24 | 1.4 | 1.5 | 5.7 | 276 | 114 | 15 | 12 | 6.5 | 1.8 | .28 | .10 | .07 |
| 25 | 1.3 | 1.5 | 5.3 | 196 | 109 | 13 | 43 | 6.2 | 1.9 | .25 | .10 | .07 |
| 26 | 1.2 | 1.5 | 5.1 | 127 | 130 | 11 | 44 | 6.2 | 1.8 | .24 | .10 | .07 |
| 27 | 1.1 | 1.5 | 4.7 | 80 | 166 | 10 | 28 | 5.9 | 1.6 | .22 | .10 | .07 |
| 28 | 1.2 | 1.8 | 4.4 | 57 | 132 | 9.8 | 19 | 5.4 | 1.4 | .19 | .09 | .07 |
| 29 | 1.2 | 3.2 | 4.2 | 42 | --- | 9.3 | 14 | 5.0 | 1.3 | .19 | .09 | .07 |
| 30 | 1.1 | 2.8 | 4.5 | 34 | --- | 9.0 | 13 | 4.7 | 1.3 | .18 | .08 | .06 |
| 31 | 1.1 | --- | 4.6 | 28 | --- | 8.6 | --- | 4.4 | --- | .20 | .08 | --- |
| TOTAL | 39.85 | 46.3 | 683.5 | 1606.6 | 2651 | 839.7 | 352.1 | 278.7 | 80.2 | 15.79 | 4.03 | 3.27 |
| MEAN | 1.29 | 1.54 | 22.0 | 51.8 | 94.7 | 27.1 | 11.7 | 8.99 | 2.67 | .51 | .13 | .11 |
| MAX | 2.7 | 3.2 | 168 | 278 | 256 | 110 | 44 | 16 | 4.5 | 1.3 | .20 | .25 |
| MIN | .66 | 1.1 | 2.3 | 5.6 | 14 | 8.6 | 5.5 | 4.4 | 1.3 | .18 | .08 | .06 |
| AC-FT | 79 | 92 | 1360 | 3190 | 5260 | 1670 | 698 | 553 | 159 | 31 | 8.0 | 6.5 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) |
|------|------|------|------|------|------|
| 1990 | .88 | 1.29 | 1994 | .68 | 1992 |
| 1991 | 2.09 | 3.12 | 1993 | 1.31 | 1991 |
| 1992 | 27.2 | 73.7 | 1993 | 3.48 | 1991 |
| 1993 | 69.9 | 202 | 1993 | 6.26 | 1991 |
| 1994 | 75.4 | 108 | 1993 | 17.1 | 1991 |
| 1995 | 62.7 | 98.5 | 1991 | 27.1 | 1994 |
| 1996 | 27.1 | 69.2 | 1993 | 7.49 | 1990 |
| 1997 | 22.6 | 50.5 | 1993 | 5.78 | 1992 |
| 1998 | 16.0 | 45.8 | 1993 | 1.90 | 1992 |
| 1999 | 2.03 | 5.16 | 1993 | .51 | 1994 |
| 2000 | .60 | 1.88 | 1993 | .036 | 1992 |
| 2001 | .37 | 1.00 | 1993 | .008 | 1992 |

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1990 - 1994

| | | | |
|--------------------------|----------|---------|-------|
| ANNUAL TOTAL | 18130.62 | 6601.04 | 25.7 |
| ANNUAL MEAN | 49.7 | 18.1 | 54.1 |
| HIGHEST ANNUAL MEAN | | | 14.0 |
| LOWEST ANNUAL MEAN | | | 1160 |
| HIGHEST DAILY MEAN | 1160 | 278 | 1160 |
| LOWEST DAILY MEAN | .66 | .06 | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .70 | .07 | .00 |
| INSTANTANEOUS PEAK FLOW | | 481 | 1800 |
| ANNUAL RUNOFF (AC-FT) | 35960 | 13090 | 18630 |
| 10 PERCENT EXCEEDS | 130 | 45 | 73 |
| 50 PERCENT EXCEEDS | 13 | 3.6 | 4.4 |
| 90 PERCENT EXCEEDS | 1.2 | .12 | .17 |

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.--No estimated daily discharges. Records fair. Flow slightly regulated by Lake Pillsbury (station 11470000) 99 mi upstream and by diversion through Potter Valley Powerhouse Intake (station 11471000). See schematic diagram of Eel River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 561,000 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 18 | 0045 | *25,000 | *19.44 | | | | |

Minimum daily, 8.1 ft³/s, Aug. 26, Aug. 30 to Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|--------|--------|--------|--------|-------|-------|-------|------|-------|-------|
| 1 | 53 | 71 | 377 | 897 | 2290 | 7340 | 1290 | 1380 | 503 | 114 | 25 | 8.1 |
| 2 | 49 | 70 | 414 | 1600 | 2060 | 6750 | 1250 | 1280 | 471 | 108 | 23 | 8.1 |
| 3 | 47 | 67 | 313 | 1690 | 1900 | 6010 | 1250 | 1190 | 444 | 100 | 23 | 8.1 |
| 4 | 47 | 66 | 309 | 1470 | 1780 | 5180 | 1250 | 1140 | 411 | 93 | 22 | 8.1 |
| 5 | 47 | 65 | 296 | 1860 | 1650 | 5440 | 1210 | 1470 | 392 | 88 | 21 | 8.1 |
| 6 | 47 | 64 | 290 | 1950 | 1690 | 6690 | 1160 | 1840 | 381 | 84 | 20 | 8.1 |
| 7 | 54 | 66 | 362 | 1490 | 4390 | 4870 | 1150 | 1710 | 383 | 81 | 19 | 8.1 |
| 8 | 65 | 67 | 6550 | 1420 | 5420 | 3970 | 1170 | 2010 | 394 | 77 | 17 | 9.8 |
| 9 | 62 | 75 | 9020 | 2050 | 3470 | 3560 | 1380 | 1700 | 366 | 75 | 16 | 15 |
| 10 | 62 | 73 | 2730 | 2000 | 6530 | 3360 | 1470 | 1500 | 333 | 70 | 16 | 15 |
| 11 | 61 | 75 | 4490 | 1600 | 8830 | 3170 | 1330 | 1380 | 308 | 68 | 15 | 13 |
| 12 | 61 | 95 | 6510 | 1350 | 4950 | 2850 | 1180 | 1250 | 288 | 69 | 15 | 12 |
| 13 | 61 | 123 | 3200 | 1190 | 3600 | 2470 | 1100 | 1130 | 266 | 65 | 14 | 11 |
| 14 | 64 | 130 | 8380 | 1070 | 2940 | 2340 | 1070 | 1000 | 249 | 59 | 14 | 11 |
| 15 | 76 | 132 | 6340 | 989 | 2530 | 2330 | 1050 | 945 | 236 | 54 | 13 | 11 |
| 16 | 100 | 130 | 3120 | 927 | 2310 | 2260 | 1040 | 1090 | 229 | 49 | 13 | 20 |
| 17 | 191 | 144 | 2130 | 873 | 14400 | 2230 | 1050 | 1400 | 226 | 46 | 19 | 20 |
| 18 | 165 | 182 | 1620 | 826 | 20300 | 2050 | 1070 | 1350 | 224 | 44 | 17 | 17 |
| 19 | 163 | 176 | 1320 | 794 | 13700 | 1900 | 1080 | 1290 | 218 | 43 | 14 | 15 |
| 20 | 142 | 170 | 1130 | 764 | 12600 | 1790 | 1060 | 1490 | 213 | 41 | 12 | 13 |
| 21 | 120 | 168 | 1010 | 1020 | 17300 | 1680 | 986 | 1500 | 203 | 39 | 11 | 13 |
| 22 | 107 | 170 | 927 | 4600 | 15500 | 1650 | 934 | 1300 | 191 | 37 | 9.7 | 15 |
| 23 | 99 | 224 | 878 | 20900 | 9670 | 1600 | 902 | 1140 | 179 | 35 | 9.3 | 14 |
| 24 | 91 | 176 | 819 | 22400 | 7580 | 1580 | 1040 | 986 | 167 | 34 | 8.9 | 13 |
| 25 | 87 | 127 | 782 | 18000 | 6740 | 1520 | 1790 | 876 | 157 | 32 | 8.6 | 13 |
| 26 | 84 | 101 | 751 | 12600 | 6190 | 1440 | 4490 | 803 | 151 | 31 | 8.1 | 13 |
| 27 | 81 | 95 | 733 | 7920 | 8070 | 1360 | 2910 | 749 | 146 | 31 | 8.3 | 13 |
| 28 | 78 | 97 | 720 | 5390 | 8240 | 1300 | 2250 | 708 | 142 | 31 | 8.9 | 13 |
| 29 | 76 | 118 | 692 | 3840 | --- | 1320 | 1830 | 646 | 134 | 30 | 8.5 | 16 |
| 30 | 75 | 189 | 670 | 3020 | --- | 1350 | 1570 | 586 | 123 | 28 | 8.1 | 16 |
| 31 | 73 | --- | 675 | 2590 | --- | 1330 | --- | 543 | --- | 26 | 8.1 | --- |
| TOTAL | 2588 | 3506 | 67558 | 129090 | 196630 | 92690 | 42312 | 37382 | 8128 | 1782 | 445.5 | 378.5 |
| MEAN | 83.5 | 117 | 2179 | 4164 | 7022 | 2990 | 1410 | 1206 | 271 | 57.5 | 14.4 | 12.6 |
| MAX | 191 | 224 | 9020 | 22400 | 20300 | 7340 | 4490 | 2010 | 503 | 114 | 25 | 20 |
| MIN | 47 | 64 | 290 | 764 | 1650 | 1300 | 902 | 543 | 123 | 26 | 8.1 | 8.1 |
| AC-FT | 5130 | 6950 | 134000 | 256000 | 390000 | 183900 | 83930 | 74150 | 16120 | 3530 | 884 | 751 |

11475000 EEL RIVER AT FORT SEWARD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| MEAN | 413 | 3091 | 8656 | 11780 | 12080 | 9211 | 5124 | 2149 | 655 | 137 | 52.5 | 55.6 |
| MAX | 4938 | 18740 | 56050 | 37660 | 47700 | 30620 | 23040 | 7449 | 4194 | 482 | 199 | 359 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1986 | 1983 | 1982 | 1983 | 1993 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1955 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 2012398 | | | | 582490.0 | | | | 4417 | | | |
| ANNUAL MEAN | 5513 | | | | 1596 | | | | 10350 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 260 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 434000 | | | |
| HIGHEST DAILY MEAN | 119000 | | | | 22400 | | | | Dec 22 1964 | | | |
| LOWEST DAILY MEAN | 47 | | | | 8.1 | | | | 1.2 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 49 | | | | 8.1 | | | | 1.4 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 25000 | | | | 561000 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 19.44 | | | | 82.60 | | | |
| ANNUAL RUNOFF (AC-FT) | 3992000 | | | | 1155000 | | | | 3200000 | | | |
| 10 PERCENT EXCEEDS | 13700 | | | | 4490 | | | | 11100 | | | |
| 50 PERCENT EXCEEDS | 1470 | | | | 383 | | | | 686 | | | |
| 90 PERCENT EXCEEDS | 62 | | | | 14 | | | | 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. Rain gage: lat 39°43'50", long 123°38'07", in NW 1/4 NW 1/4 sec.28, T.22 N., R.16 W., elevation, 1,440 ft at site 0.5 mi east of gaging station.

DRAINAGE AREA.--6.50 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and one recording and storage-type precipitation gage. Datum of gage is 1,391.08 ft above sea level.

REMARKS.--Records fair. No regulation; small diversion upstream from station for domestic use. See schematic diagram of Eel River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,280 ft³/s, Mar. 29, 1974, gage height, 9.77 ft, from rating curve extended above 660 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 8 | 1245 | *187 | *5.57 | | | | |

Minimum daily, 0.68 ft³/s, Sept. 21-24, 26, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1 | 1.2 | 1.2 | e3.2 | e9.5 | e15 | 47 | 7.8 | 9.7 | 5.0 | 2.6 | 1.2 | .80 |
| 2 | 1.2 | 1.2 | 2.1 | e7.6 | e13 | 44 | 7.5 | 9.0 | 4.8 | 2.5 | 1.2 | .82 |
| 3 | 1.2 | 1.2 | 2.0 | e6.5 | e12 | 39 | 7.3 | 8.5 | 4.7 | 2.5 | 1.2 | .82 |
| 4 | 1.2 | 1.2 | 2.7 | e9.5 | e11 | 35 | 7.0 | 10 | 4.6 | 2.4 | 1.1 | .84 |
| 5 | 1.2 | 1.2 | 2.3 | e10 | e11 | 32 | 6.8 | 9.7 | 4.7 | 2.3 | 1.1 | .82 |
| 6 | 1.2 | 1.2 | 2.4 | e8.6 | e13 | 29 | 6.8 | 9.0 | 5.2 | 2.3 | 1.1 | .79 |
| 7 | 1.2 | 1.2 | 14 | e7.6 | e17 | 26 | 6.7 | 9.0 | 4.5 | 2.2 | 1.1 | .77 |
| 8 | 1.2 | 1.2 | 103 | e11 | e16 | 23 | 8.2 | 8.5 | 4.3 | 2.1 | 1.0 | .78 |
| 9 | 1.2 | e1.3 | 36 | e9.8 | e24 | 22 | 8.3 | 8.1 | 4.1 | 2.1 | 1.1 | .81 |
| 10 | 1.3 | e1.4 | 20 | e8.8 | e33 | 20 | 7.3 | 7.7 | 4.0 | 2.0 | 1.0 | .82 |
| 11 | 1.3 | e1.6 | 35 | e7.7 | e28 | 19 | 6.9 | 7.5 | 3.8 | 1.9 | .99 | .84 |
| 12 | 1.3 | e1.5 | 30 | e6.5 | e22 | 18 | 6.5 | 7.2 | 3.8 | 1.8 | .98 | .84 |
| 13 | 1.2 | e1.4 | 28 | e5.7 | e18 | 16 | 6.3 | 7.0 | 3.9 | 1.8 | .97 | .84 |
| 14 | 1.2 | e1.3 | e40 | e5.3 | e16 | 15 | 6.1 | 6.8 | 3.8 | 1.8 | .94 | .80 |
| 15 | 1.3 | e1.3 | e20 | e4.9 | e14 | 15 | 5.9 | 8.0 | 3.7 | 1.7 | .93 | .78 |
| 16 | 1.2 | e1.3 | e13 | e4.6 | e28 | 15 | 5.7 | 8.2 | 3.7 | 1.6 | .93 | .74 |
| 17 | 1.2 | e1.2 | e8.5 | e4.4 | e98 | 13 | 5.6 | 7.6 | 3.7 | 1.6 | .92 | .73 |
| 18 | 1.2 | e1.2 | e7.2 | e4.2 | e79 | 13 | 5.4 | 7.6 | 3.5 | 1.5 | .91 | .73 |
| 19 | 1.2 | e1.2 | e6.7 | e4.0 | 74 | 12 | 5.3 | 7.3 | 3.4 | 1.5 | .88 | .70 |
| 20 | 1.2 | e1.2 | e6.0 | e8.0 | 65 | 12 | 5.2 | 7.0 | 3.4 | 1.5 | .90 | .69 |
| 21 | 1.2 | e1.2 | e5.2 | e11 | 82 | 11 | 5.0 | 6.8 | 3.2 | 1.5 | .91 | .68 |
| 22 | 1.2 | e1.2 | e4.8 | e23 | 80 | 11 | 4.9 | 6.6 | 3.1 | 1.5 | .86 | .68 |
| 23 | 1.2 | e1.2 | e4.4 | e47 | 65 | 11 | 7.1 | 6.4 | 3.0 | 1.5 | .83 | .68 |
| 24 | 1.2 | e1.2 | e4.0 | e65 | 54 | 11 | 7.2 | 6.1 | 3.0 | 1.5 | .82 | .68 |
| 25 | 1.2 | e1.2 | e3.8 | e62 | 47 | 10 | 18 | 5.9 | 2.9 | 1.5 | .81 | .69 |
| 26 | 1.2 | e1.2 | e3.6 | e46 | 46 | 9.8 | 19 | 5.9 | 2.8 | 1.4 | .80 | .68 |
| 27 | 1.2 | e1.3 | e3.5 | e28 | 50 | 9.3 | 15 | 5.8 | 2.7 | 1.3 | .79 | .68 |
| 28 | 1.2 | e1.9 | e3.3 | e24 | 50 | 8.9 | 13 | 5.6 | 2.6 | 1.3 | .78 | .71 |
| 29 | 1.2 | e4.0 | e3.1 | e21 | --- | 8.6 | 11 | 5.4 | 2.7 | 1.3 | .81 | .73 |
| 30 | 1.2 | e4.3 | e3.0 | e19 | --- | 8.4 | 10 | 5.3 | 2.6 | 1.3 | .80 | .74 |
| 31 | 1.2 | --- | e5.0 | e18 | --- | 8.1 | --- | 5.1 | --- | 1.3 | .79 | --- |
| TOTAL | 37.6 | 44.2 | 425.8 | 508.2 | 1081 | 572.1 | 242.8 | 228.3 | 111.2 | 55.1 | 29.45 | 22.71 |
| MEAN | 1.21 | 1.47 | 13.7 | 16.4 | 38.6 | 18.5 | 8.09 | 7.36 | 3.71 | 1.78 | .95 | .76 |
| MAX | 1.3 | 4.3 | 103 | 65 | 98 | 47 | 19 | 10 | 5.2 | 2.6 | 1.2 | .84 |
| MIN | 1.2 | 1.2 | 2.0 | 4.0 | 11 | 8.1 | 4.9 | 5.1 | 2.6 | 1.3 | .78 | .68 |
| AC-FT | 75 | 88 | 845 | 1010 | 2140 | 1130 | 482 | 453 | 221 | 109 | 58 | 45 |
| a | 0.97 | 1.88 | 12.79 | 10.30 | 14.13 | 1.60 | 4.33 | 2.23 | 0.41 | 0 | 0 | 0 |

e Estimated.

a Precipitation, in inches.

11475560 ELDER CREEK NEAR BRANSCOMB, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.37 | 21.4 | 46.5 | 61.9 | 55.5 | 52.3 | 24.3 | 10.5 | 5.62 | 2.29 | 1.30 | 1.13 |
| MAX | 8.72 | 132 | 135 | 210 | 173 | 147 | 91.9 | 25.1 | 31.6 | 5.84 | 2.49 | 2.36 |
| (WY) | 1980 | 1974 | 1971 | 1970 | 1986 | 1983 | 1982 | 1990 | 1993 | 1993 | 1990 | 1986 |
| MIN | .57 | 1.16 | 1.04 | 2.32 | 3.40 | 5.45 | 3.01 | 2.13 | 1.35 | .67 | .48 | .51 |
| (WY) | 1988 | 1979 | 1977 | 1977 | 1977 | 1988 | 1977 | 1977 | 1977 | 1977 | 1977 | 1988 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1968 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 10101.8 | | | | 3358.46 | | | | | | | |
| ANNUAL MEAN | 27.7 | | | | 9.20 | | | | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 23.6 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 54.4 | | | |
| HIGHEST DAILY MEAN | 700 | | | | 103 | | | | 2.12 | | | |
| LOWEST DAILY MEAN | 1.2 | | | | .68 | | | | 1470 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 1.2 | | | | .68 | | | | .27 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 187 | | | | .27 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 5.57 | | | | 2280 | | | |
| ANNUAL RUNOFF (AC-FT) | 20040 | | | | 6660 | | | | 9.77 | | | |
| 10 PERCENT EXCEEDS | 68 | | | | 23 | | | | 17130 | | | |
| 50 PERCENT EXCEEDS | 13 | | | | 3.9 | | | | 63 | | | |
| 90 PERCENT EXCEEDS | 1.2 | | | | .84 | | | | 5.0 | | | |
| | | | | | | | | | .94 | | | |

11475560 ELDER CREEK NEAR BRANSCOMB, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

CHEMICAL DATA: Water years 1968 to current year.

WATER TEMPERATURE: Water years 1968-79.

SEDIMENT DATA: Water years 1969 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1967 to September 1979.

SUSPENDED-SEDIMENT DISCHARGE: October 1973 to September 1975.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| | | DIS- CHARGE, INST. CUBIC FEET PER SECOND | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH WATER WHOLE FIELD (STAND- ARD UNITS) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (NTU) | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, DIS- SOLVED SATUR- ATION) | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | |
|--------------|--------|---|---|--|---|--|---|--|--|--|---|
| DEC 14... | 1210 | 40 | 88 | 7.6 | 7.5 | 1.3 | 721 | 10.8 | 95 | 24 | |
| MAR 10... | 1225 | 20 | 109 | 7.7 | 9.5 | 0.20 | 728 | 10.4 | 95 | K6 | |
| JUN 26... | 1415 | 2.9 | 137 | 8.2 | 15.0 | 0.30 | 728 | 9.2 | 96 | K1 | |
| SEP 14... | 1445 | 0.84 | 149 | 8.1 | 11.5 | 0.10 | 731 | 10.0 | 96 | 17 | |
| DATE | | STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) | HARD- NESS TOTAL (MG/L AS CACO3) | HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | SODIUM PERCENT | SODIUM AD- SORP- TION RATIO | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 |
| DEC 14... | 20 | | 35 | 0 | 9.0 | 2.9 | 5.4 | 25 | 0.4 | 0.50 | 50 |
| MAR 10... | K3 | | 39 | 0 | 10 | 3.4 | 6.1 | 25 | 0.4 | 0.50 | 62 |
| JUN 26... | 20 | | 56 | 0 | 15 | 4.4 | 7.4 | 22 | 0.4 | 0.70 | 81 |
| SEP 14... | 18 | | 61 | 0 | 16 | 5.0 | 8.9 | 24 | 0.5 | 0.60 | 86 |
| DATE | | CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 | ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) | SOLIDS, DIS- SOLVED (TONS PER AC-FT) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) |
| DEC 14... | 0 | | 41 | 2.0 | 2.0 | 0.10 | 12 | 55 | 59 | 0.08 | 0.020 |
| MAR 10... | 0 | | 52 | 2.4 | 2.2 | <0.10 | 14 | 64 | 69 | 0.09 | <0.010 |
| JUN 26... | 0 | | 66 | 3.1 | 2.6 | 0.10 | 13 | 84 | 86 | 0.11 | <0.010 |
| SEP 14... | 0 | | 70 | 2.6 | 3.3 | 0.10 | 14 | 99 | 93 | 0.13 | <0.010 |
| DATE | | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHORUS TOTAL (MG/L AS P) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | BARIUM, DIS- SOLVED (UG/L AS BA) | COBALT, DIS- SOLVED (UG/L AS CO) | IRON, DIS- SOLVED (UG/L AS FE) |
| DEC 14... | 0.063 | 0.020 | <0.20 | <0.010 | 0.020 | 0.020 | 30 | 10 | <3 | 28 | |
| MAR 10... | <0.050 | <0.010 | <0.20 | 0.020 | 0.020 | 0.010 | <10 | 11 | <3 | 4 | |
| JUN 26... | <0.050 | 0.010 | <0.20 | 0.010 | 0.020 | 0.020 | <10 | 17 | <3 | 5 | |
| SEP 14... | <0.050 | 0.010 | <0.20 | 0.020 | 0.020 | 0.020 | <10 | 20 | <3 | 3 | |

11475560 ELDER CREEK NEAR BRANSCOMB, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | LITHIUM DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) | RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) | URANIUM NATURAL DIS- SOLVED (UG/L AS U) |
|--------------|--|--|---|--|---|--|--|--|---|--|
| DEC 14... | <4 | 1 | <10 | <1 | <1 | <1.0 | 89 | <6 | -- | -- |
| MAR 10... | <4 | 1 | <10 | <1 | <1 | <1.0 | 100 | <6 | 0.04 | 0.02 |
| JUN 26... | <4 | <1 | <10 | <1 | <1 | <1.0 | 150 | <6 | -- | -- |
| SEP 14... | <4 | <1 | <10 | <1 | <1 | <1.0 | 170 | <6 | 0.03 | 0.02 |

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH WATER WHOLE FIELD (STAND- ARD UNITS) | TEMPER- ATURE WATER (DEG C) | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) | SEDI- MENT, SUS- PENDED (MG/L) | |
|--------|------|--|---|---|---|--------------------------------------|--|--|--|---|
| MAR | | | | | | | | | | |
| 10...* | 1130 | 0.95 | 7.50 | 108 | 7.8 | 9.5 | 729 | 10.7 | 98 | 1 |
| 10...* | 1145 | 1.45 | 14.5 | 108 | 7.8 | 9.5 | 729 | 10.7 | 98 | 3 |
| 10...* | 1200 | 1.30 | 18.3 | 108 | 7.8 | 9.5 | 729 | 10.7 | 98 | 2 |
| SEP | | | | | | | | | | |
| 14...* | 1300 | 0.19 | 3.30 | 149 | 8.1 | 11.0 | 731 | 9.9 | 94 | 2 |
| 14...* | 1325 | 0.70 | 9.30 | 149 | 8.1 | 11.0 | 731 | 10.0 | 95 | 2 |
| 14...* | 1350 | 0.85 | 11.8 | 149 | 8.1 | 11.0 | 731 | 9.9 | 94 | 2 |

* Instantaneous streamflow at the time of cross-sectional measurement: Mar. 10, 20 ft³/s;
Sept. 14, 0.84 ft³/s.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|--------------|------|--|--------------------------------------|---|---|---|
| DEC 14... | 1210 | 40 | 7.5 | 2 | 0.22 | -- |
| MAR 10... | 1150 | 20 | 9.5 | 2 | 0.11 | 71 |
| 10... | 1225 | 20 | 9.5 | 3 | 0.16 | 60 |
| JUN 26... | 1415 | 2.9 | 15.0 | 2 | 0.02 | 73 |
| SEP 14... | 1330 | 0.84 | 11.0 | 2 | 0.00 | 88 |
| 14... | 1445 | 0.84 | 11.5 | 1 | 0.00 | -- |

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 current year.

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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 8 | 1430 | *9,850 | *10.51 | | | | |

Minimum daily, 12 ft³/s, Sept. 24-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 1 | 28 | 33 | 89 | 293 | e550 | 1010 | 184 | 236 | 117 | 51 | 21 | 16 |
| 2 | 28 | 33 | 71 | 394 | e465 | 884 | 178 | 218 | 115 | 50 | 22 | 16 |
| 3 | 25 | 33 | 60 | 257 | e410 | 772 | 174 | 206 | 112 | 47 | 22 | 16 |
| 4 | 25 | 33 | 62 | 298 | e365 | 689 | 165 | 224 | 109 | 46 | 23 | 16 |
| 5 | 25 | 33 | 64 | 460 | e325 | 692 | 161 | 333 | 109 | 44 | 23 | 16 |
| 6 | 26 | 33 | 64 | 348 | e308 | 628 | 160 | 290 | 116 | 44 | 22 | 16 |
| 7 | 26 | 33 | 142 | 293 | e410 | 550 | 160 | 284 | 115 | 43 | 22 | 15 |
| 8 | 26 | 33 | 5860 | 304 | e720 | 499 | 185 | 270 | 107 | 40 | 21 | 15 |
| 9 | 27 | 32 | 1220 | 473 | 740 | 451 | 277 | 241 | 102 | 38 | 21 | 15 |
| 10 | 28 | 33 | 479 | 363 | 1820 | 423 | 223 | 226 | 99 | 37 | 20 | 15 |
| 11 | 29 | 41 | 1580 | 314 | 1730 | 395 | 193 | 210 | 95 | 34 | 20 | 15 |
| 12 | 32 | 46 | 1060 | 281 | 1230 | e355 | 177 | 195 | 89 | 32 | 20 | 15 |
| 13 | 33 | 46 | 676 | 252 | 970 | e333 | 167 | 185 | 85 | 30 | 19 | 15 |
| 14 | 34 | 43 | 1920 | 232 | 797 | e316 | 160 | 176 | 84 | 30 | 18 | 15 |
| 15 | 63 | 40 | 1120 | 217 | 679 | 305 | 153 | 205 | 84 | 28 | 18 | 15 |
| 16 | 78 | 37 | 657 | 200 | 616 | 308 | 147 | 266 | 82 | 28 | 18 | 15 |
| 17 | 70 | 36 | 469 | 186 | 4970 | 295 | 145 | 229 | 80 | 28 | 18 | 15 |
| 18 | 55 | 36 | 368 | 173 | 4300 | 278 | 140 | 226 | 80 | 27 | 18 | 15 |
| 19 | 48 | 36 | 304 | 163 | 3240 | 272 | 136 | 208 | 77 | 25 | 16 | 15 |
| 20 | 44 | 36 | 259 | 157 | 2920 | 258 | 134 | 191 | 76 | 24 | 16 | 14 |
| 21 | 41 | 36 | 229 | 531 | 4580 | 254 | 130 | 179 | 73 | 24 | 16 | 14 |
| 22 | 41 | 36 | 203 | 1380 | 3370 | 253 | 127 | 171 | 69 | 24 | 17 | 14 |
| 23 | 41 | 36 | 187 | 2610 | 2510 | 259 | 142 | 163 | 69 | 24 | 16 | 13 |
| 24 | 38 | 36 | 172 | 4430 | 1990 | 277 | 223 | 157 | 67 | 24 | 16 | 12 |
| 25 | 37 | 36 | 157 | 4250 | 1550 | 251 | e490 | 148 | 64 | 24 | 16 | 12 |
| 26 | 37 | 36 | 152 | 2700 | 1360 | 233 | e705 | 144 | 63 | 24 | 16 | 12 |
| 27 | 37 | 36 | 146 | 1850 | 1350 | 220 | 471 | 139 | 61 | 24 | 16 | 12 |
| 28 | 37 | 37 | 139 | 1300 | 1170 | 209 | 354 | 132 | 60 | 23 | 16 | 12 |
| 29 | 35 | 74 | 133 | 1120 | --- | 199 | 291 | 128 | 57 | 22 | 16 | 12 |
| 30 | 34 | 118 | 131 | e835 | --- | 196 | 260 | 124 | 54 | 21 | 16 | 12 |
| 31 | 34 | --- | 134 | e660 | --- | 192 | --- | 120 | --- | 21 | 16 | --- |
| TOTAL | 1162 | 1207 | 18307 | 27324 | 45445 | 12256 | 6612 | 6224 | 2570 | 981 | 575 | 430 |
| MEAN | 37.5 | 40.2 | 591 | 881 | 1623 | 395 | 220 | 201 | 85.7 | 31.6 | 18.5 | 14.3 |
| MAX | 78 | 118 | 5860 | 4430 | 4970 | 1010 | 705 | 333 | 117 | 51 | 23 | 16 |
| MIN | 25 | 32 | 60 | 157 | 308 | 192 | 127 | 120 | 54 | 21 | 16 | 12 |
| AC-FT | 2300 | 2390 | 36310 | 54200 | 90140 | 24310 | 13110 | 12350 | 5100 | 1950 | 1140 | 853 |

e Estimated.

11475800 SOUTH FORK EEL RIVER AT LEGGETT, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 73.1 | 784 | 1654 | 2228 | 2030 | 1739 | 776 | 277 | 128 | 49.6 | 29.5 | 30.1 |
| 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 | 15.3 | 40.2 | 32.9 | 98.1 | 137 | 147 | 78.4 | 59.5 | 26.7 | 9.96 | 9.67 | 10.7 |
| (WY) | 1988 | 1994 | 1977 | 1977 | 1977 | 1988 | 1977 | 1977 | 1977 | 1977 | 1977 | 1992 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1966 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 260641 | | | | 123093 | | | | | | | |
| ANNUAL MEAN | 714 | | | | 337 | | | | 812 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 1778 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 69.5 | | | |
| HIGHEST DAILY MEAN | 21600 | | | | 5860 | | | | 49800 | | | |
| LOWEST DAILY MEAN | 25 | | | | 12 | | | | 7.3 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 26 | | | | 12 | | | | 7.5 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 9850 | | | | 72700 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 10.51 | | | | 27.40 | | | |
| ANNUAL RUNOFF (AC-FT) | 517000 | | | | 244200 | | | | 588000 | | | |
| 10 PERCENT EXCEEDS | 1630 | | | | 728 | | | | 2040 | | | |
| 50 PERCENT EXCEEDS | 284 | | | | 109 | | | | 139 | | | |
| 90 PERCENT EXCEEDS | 36 | | | | 16 | | | | 23 | | | |

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CA

LOCATION.--Lat 40°10'55", long 123°46'30", in NW 1/4 sec.30, T.3 S., R.4 E., Humboldt County, Hydrologic Unit 18010106, on right bank 0.5 mi upstream from Rocky Glen Creek, 4.3 mi southeast of Miranda, and 20 mi upstream from mouth.

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 fair except for winter months, which are poor. 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Jan. 24 | 1115 | *11,900 | *13.98 | | | | |
| Minimum daily, 22 ft ³ /s, Aug. 21, Sept. 23-30. | | | | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|--------|--------|-------|-------|-------|------|------|------|------|
| 1 | 48 | 56 | 174 | 529 | 1190 | 1790 | 383 | 508 | 217 | 95 | 39 | 23 |
| 2 | 48 | 56 | 133 | 881 | 1090 | 1580 | 369 | 469 | 207 | 92 | 39 | 23 |
| 3 | 47 | 54 | 108 | 665 | 997 | 1420 | 359 | 437 | 199 | 89 | 28 | 23 |
| 4 | 46 | 52 | 106 | 650 | 918 | 1290 | 347 | 434 | 193 | 85 | 25 | 23 |
| 5 | 46 | 52 | 108 | 933 | 855 | 1240 | 333 | 538 | 189 | 83 | 24 | 23 |
| 6 | 47 | 52 | 113 | 873 | 968 | 1170 | 332 | 563 | 207 | 81 | 24 | 23 |
| 7 | 49 | 52 | 355 | 774 | 2180 | 1050 | 335 | 527 | 207 | 74 | 24 | 23 |
| 8 | 48 | 52 | 7960 | 892 | 2130 | 957 | 361 | 503 | 193 | 50 | 25 | 23 |
| 9 | 50 | 51 | 3140 | 1140 | 1560 | 881 | 569 | 462 | 180 | 61 | 26 | 23 |
| 10 | 53 | 53 | 1200 | 1010 | 3630 | 817 | 518 | 425 | 169 | 64 | 27 | 24 |
| 11 | 58 | 72 | 2920 | 889 | 4010 | 781 | 437 | 406 | 162 | 63 | 29 | 24 |
| 12 | 63 | 81 | 2890 | 813 | 2610 | 726 | 395 | 375 | 154 | 62 | 30 | 25 |
| 13 | 64 | 77 | 1870 | 736 | 1980 | 676 | 366 | 370 | 147 | 59 | 27 | 25 |
| 14 | 64 | 72 | 4620 | 649 | 1660 | 640 | 346 | 355 | 141 | 57 | 26 | 26 |
| 15 | 73 | 67 | 2930 | 626 | 1450 | 612 | 332 | 386 | 137 | 56 | 26 | 143 |
| 16 | 105 | 63 | e1920 | 579 | 1340 | 614 | 320 | 494 | 133 | 51 | 26 | 106 |
| 17 | 117 | 60 | e1270 | 449 | 7330 | 595 | 310 | 451 | 131 | 49 | 26 | 38 |
| 18 | 102 | 58 | 918 | 421 | 8920 | 556 | 301 | 394 | 130 | 49 | 26 | 27 |
| 19 | 88 | 57 | 787 | 398 | 6420 | 547 | 293 | 383 | 127 | 49 | 25 | 25 |
| 20 | 77 | 57 | 708 | 372 | 5870 | 515 | 283 | 353 | 124 | 49 | 23 | 38 |
| 21 | 72 | 57 | 595 | 706 | 8080 | 509 | 276 | 330 | 121 | 49 | 22 | 24 |
| 22 | 68 | 57 | 534 | 2750 | 6940 | 504 | 265 | 316 | 118 | 48 | 23 | 23 |
| 23 | 66 | e56 | 487 | 8700 | 4850 | 519 | 279 | 301 | 115 | 48 | 23 | 22 |
| 24 | 65 | e56 | 444 | 10600 | 3610 | 625 | 403 | 287 | 112 | 48 | 25 | 22 |
| 25 | 63 | e55 | 425 | 8970 | 2930 | 551 | e895 | 275 | 110 | 48 | 25 | 22 |
| 26 | 63 | e55 | 395 | 5960 | 2790 | 497 | e1890 | 268 | 108 | 47 | 25 | 22 |
| 27 | 62 | 56 | 369 | 3830 | 2660 | 463 | 1060 | 260 | 106 | 47 | 24 | 22 |
| 28 | 58 | 66 | 342 | 2530 | 2080 | 439 | 783 | 251 | 103 | 46 | 23 | 22 |
| 29 | 56 | 113 | 318 | 1900 | --- | 419 | 646 | 240 | 100 | 43 | 24 | 22 |
| 30 | 61 | 188 | 313 | 1510 | --- | 413 | 568 | 231 | 97 | 41 | 24 | 22 |
| 31 | 60 | --- | 319 | 1310 | --- | 397 | --- | 224 | --- | 40 | 23 | --- |
| TOTAL | 1987 | 1953 | 38771 | 63045 | 91048 | 23793 | 14354 | 11816 | 4437 | 1823 | 806 | 931 |
| MEAN | 64.1 | 65.1 | 1251 | 2034 | 3252 | 768 | 478 | 381 | 148 | 58.8 | 26.0 | 31.0 |
| MAX | 117 | 188 | 7960 | 10600 | 8920 | 1790 | 1890 | 563 | 217 | 95 | 39 | 143 |
| MIN | 46 | 51 | 106 | 372 | 855 | 397 | 265 | 224 | 97 | 40 | 22 | 22 |
| AC-FT | 3940 | 3870 | 76900 | 125000 | 180600 | 47190 | 28470 | 23440 | 8800 | 3620 | 1600 | 1850 |

e Estimated

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| MEAN | 281 | 1534 | 4094 | 5193 | 4728 | 3539 | 1842 | 682 | 305 | 113 | 61.7 | 61.6 |
| MAX | 3332 | 10130 | 17260 | 17530 | 16640 | 13000 | 8425 | 2370 | 1754 | 276 | 131 | 221 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1986 | 1983 | 1982 | 1990 | 1993 | 1993 | 1983 | 1986 |
| MIN | 20.0 | 25.0 | 74.6 | 207 | 284 | 304 | 176 | 122 | 52.7 | 20.4 | 18.0 | 29.1 |
| (WY) | 1940 | 1940 | 1977 | 1977 | 1977 | 1988 | 1977 | 1977 | 1977 | 1977 | 1977 | 1949 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1940 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 882107 | | 254764 | | | |
| ANNUAL MEAN | 2417 | | 698 | | | |
| HIGHEST ANNUAL MEAN | | | | | 1858 | |
| LOWEST ANNUAL MEAN | | | | | 4393 | 1983 |
| HIGHEST DAILY MEAN | 61200 | Jan 20 | 10600 | Jan 24 | 156 | 1977 |
| LOWEST DAILY MEAN | 45 | Aug 29 | 22 | Aug 21 | 161000 | Dec 22 1964 |
| ANNUAL SEVEN-DAY MINIMUM | 47 | Sep 30 | 22 | Sep 23 | 10 | Aug 30 1964 |
| INSTANTANEOUS PEAK FLOW | | | 11900 | Jan 24 | 14 | Jul 30 1977 |
| INSTANTANEOUS PEAK STAGE | | | 13.98 | Jan 24 | 199000 | Dec 22 1964 |
| ANNUAL RUNOFF (AC-FT) | 1750000 | | 505300 | | 46.00 | Dec 22 1964 |
| 10 PERCENT EXCEEDS | 6520 | | 1710 | | 1346000 | |
| 50 PERCENT EXCEEDS | 770 | | 193 | | 4840 | |
| 90 PERCENT EXCEEDS | 56 | | 25 | | 337 | |
| | | | | | 46 | |

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, 6,520 ft³/s, Dec. 22, 1964, gage height, 20.6 ft, from floodmarks, site and datum then in use, from rating curve extended above 2,100 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.25 ft³/s, Sept. 27, 1994.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Jan. 23 | 2400 | *1,110 | *6.10 | | | | |

Minimum daily, 0.25 ft³/s, Sept. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|--------|------|-------|------|------|------|-------|-------|-------|-------|
| 1 | 1.1 | 1.4 | 9.4 | 55 | 146 | 144 | 54 | 44 | 18 | 8.0 | 2.7 | 1.1 |
| 2 | 1.1 | 1.4 | 10 | 47 | 129 | 129 | 52 | 42 | 17 | 7.7 | 2.5 | 1.1 |
| 3 | 1.1 | 1.4 | 7.7 | 41 | 116 | 116 | 50 | 40 | 17 | 7.5 | 2.4 | .99 |
| 4 | 1.4 | 1.3 | 11 | 53 | 105 | 107 | 47 | 41 | 17 | 7.1 | 2.3 | 1.1 |
| 5 | 1.7 | 1.3 | 8.8 | 54 | 96 | 100 | 45 | 42 | 17 | 6.9 | 2.3 | 1.0 |
| 6 | 1.9 | 1.3 | 9.0 | 51 | 98 | 92 | 45 | 38 | 19 | 6.6 | 2.1 | .87 |
| 7 | 2.0 | 1.4 | 158 | 47 | 142 | 86 | 42 | 42 | 17 | 5.7 | 2.0 | .85 |
| 8 | 1.7 | 1.4 | 504 | 61 | 135 | 81 | 51 | 36 | 15 | 5.0 | 2.1 | .89 |
| 9 | 1.7 | 1.4 | 148 | 65 | 116 | 76 | 49 | 34 | 14 | 4.7 | 1.8 | 1.2 |
| 10 | 2.7 | 1.6 | 115 | 61 | 173 | 72 | 42 | 32 | 14 | 4.7 | 1.8 | 1.4 |
| 11 | 6.0 | 3.0 | 331 | 58 | 170 | 67 | 39 | 31 | 13 | 4.4 | 1.8 | 1.4 |
| 12 | 5.6 | 3.7 | 213 | 55 | 154 | 63 | 37 | 30 | 13 | 4.2 | 1.8 | 1.3 |
| 13 | 4.6 | 2.9 | 239 | 53 | 141 | 60 | 35 | 29 | 13 | 4.0 | 1.8 | 1.3 |
| 14 | 4.1 | 2.5 | 329 | 50 | 130 | 57 | 34 | 28 | 13 | 3.8 | 1.6 | 1.1 |
| 15 | 5.2 | 2.4 | 222 | 47 | 121 | 55 | 33 | 33 | 13 | 3.8 | e1.6 | .99 |
| 16 | 6.2 | 2.2 | 165 | 44 | 146 | 58 | 31 | 33 | 12 | 3.9 | e1.5 | .87 |
| 17 | 3.9 | 2.2 | 133 | 41 | 529 | 52 | 30 | 31 | 12 | 3.5 | e1.5 | .71 |
| 18 | 3.3 | 2.1 | 111 | 40 | 442 | 50 | 29 | 28 | 12 | 3.4 | e1.4 | .67 |
| 19 | 3.0 | 2.1 | 96 | 37 | 449 | 48 | 28 | 28 | 12 | 3.2 | e1.4 | .66 |
| 20 | 2.7 | 2.1 | 85 | 35 | 454 | 45 | 27 | 27 | 11 | 3.0 | e1.4 | .56 |
| 21 | 2.5 | 2.1 | 77 | 61 | 451 | 45 | 27 | 26 | 11 | 3.3 | e1.3 | .42 |
| 22 | 2.3 | 2.9 | 69 | 121 | 389 | 45 | 26 | 25 | 11 | 3.5 | e1.3 | .31 |
| 23 | 2.4 | 3.8 | 64 | 488 | 328 | 78 | 36 | 24 | 10 | 3.4 | e1.2 | .28 |
| 24 | 2.3 | 3.2 | 58 | 804 | 278 | 138 | 46 | 23 | 10 | 3.2 | e1.2 | .29 |
| 25 | 2.1 | 2.9 | 55 | 663 | 233 | 90 | 82 | 22 | 9.7 | 3.1 | e1.1 | .27 |
| 26 | 2.0 | 2.8 | 51 | 487 | 203 | 79 | 74 | 22 | 9.4 | 3.0 | e1.1 | .27 |
| 27 | 1.6 | 2.6 | 46 | 364 | 187 | 72 | 61 | 21 | 9.2 | 3.0 | 1.1 | .25 |
| 28 | 1.5 | 8.8 | 43 | 291 | 162 | 64 | 55 | 20 | 8.6 | 3.0 | 1.0 | .35 |
| 29 | 1.4 | 27 | 40 | 235 | --- | 63 | 50 | 19 | 8.4 | 2.9 | 1.0 | .72 |
| 30 | 1.3 | 13 | 44 | 196 | --- | 60 | 47 | 19 | 8.3 | 2.7 | 1.0 | .87 |
| 31 | 1.2 | --- | 39 | 169 | --- | 58 | --- | 18 | --- | 2.6 | .95 | --- |
| TOTAL | 81.6 | 108.2 | 3490.9 | 4874 | 6223 | 2350 | 1304 | 928 | 384.6 | 134.8 | 50.05 | 24.09 |
| MEAN | 2.63 | 3.61 | 113 | 157 | 222 | 75.8 | 43.5 | 29.9 | 12.8 | 4.35 | 1.61 | .80 |
| MAX | 6.2 | 27 | 504 | 804 | 529 | 144 | 82 | 44 | 19 | 8.0 | 2.7 | 1.4 |
| MIN | 1.1 | 1.3 | 7.7 | 35 | 96 | 45 | 26 | 18 | 8.3 | 2.6 | .95 | .25 |
| AC-FT | 162 | 215 | 6920 | 9670 | 12340 | 4660 | 2590 | 1840 | 763 | 267 | 99 | 48 |

e Estimated.

11476600 BULL CREEK NEAR WEOTT, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 14.4 | 120 | 256 | 302 | 287 | 231 | 117 | 40.4 | 16.9 | 6.54 | 3.52 | 3.12 |
| MAX | 160 | 683 | 705 | 901 | 1056 | 717 | 526 | 137 | 88.0 | 14.5 | 10.0 | 12.8 |
| (WY) | 1963 | 1974 | 1978 | 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 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1961 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 39286.3 | | 19953.24 | | | |
| ANNUAL MEAN | 108 | | 54.7 | | 116 | |
| HIGHEST ANNUAL MEAN | | | | | 287 | |
| LOWEST ANNUAL MEAN | | | | | 9.72 | |
| HIGHEST DAILY MEAN | 1880 | Jan 20 | 804 | Jan 24 | 4900 | Jan 16 1974 |
| LOWEST DAILY MEAN | 1.1 | Sep 27 | .25 | Sep 27 | .25 | Sep 27 1994 |
| ANNUAL SEVEN-DAY MINIMUM | 1.2 | Sep 27 | .29 | Sep 22 | .29 | Sep 22 1984 |
| INSTANTANEOUS PEAK FLOW | | | 1110 | Jan 23 | 6520 | Dec 22 1964 |
| INSTANTANEOUS PEAK STAGE | | | 6.10 | Jan 23 | 20.60 | Dec 22 1964 |
| ANNUAL RUNOFF (AC-FT) | 77920 | | 39580 | | 83920 | |
| 10 PERCENT EXCEEDS | 279 | | 143 | | 300 | |
| 50 PERCENT EXCEEDS | 51 | | 17 | | 22 | |
| 90 PERCENT EXCEEDS | 2.1 | | 1.2 | | 2.1 | |

11477000 EEL RIVER AT SCOTIA, CA
(National Stream Quality Accounting Network Station)

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.

WATER-DISCHARGE RECORDS

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.

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.--No estimated daily discharges. Records good. Low flow slightly regulated by Lake Pillsbury (station 11470000) 138 mi upstream since December 1921 and by diversion through Potter Valley Powerhouse Intake (station 11471000). See schematic diagram of Eel River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 752,000 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Jan. 24 | 0715 | *48,500 | *21.87 | | | | |

Minimum daily, 54 ft³/s, Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|------|
| 1 | 136 | 171 | 485 | 1470 | 5060 | 10700 | 2190 | 2520 | 999 | 317 | 105 | 57 |
| 2 | 133 | 168 | 670 | 2570 | 4510 | 9690 | 2110 | 2260 | 950 | 307 | 103 | 58 |
| 3 | 131 | 160 | 658 | 3160 | 4120 | 8760 | 2040 | 2100 | 911 | 289 | 101 | 59 |
| 4 | 131 | 157 | 554 | 2830 | 3800 | 7820 | 2010 | 1980 | 882 | 274 | 100 | 59 |
| 5 | 133 | 152 | 534 | 3320 | 3540 | 7230 | 1980 | 2030 | 838 | 261 | 94 | 60 |
| 6 | 134 | 151 | 513 | 3750 | 3460 | 8340 | 1910 | 2750 | 826 | 258 | 87 | 59 |
| 7 | 133 | 151 | 1140 | 3250 | 5990 | 7290 | 1860 | 2780 | 831 | 248 | 83 | 58 |
| 8 | 131 | 149 | 14000 | 2930 | 9470 | 6130 | 1890 | 2840 | 820 | 235 | 79 | 57 |
| 9 | 132 | 149 | 19800 | 3860 | 7210 | 5510 | 2190 | 2800 | 797 | 221 | 76 | 58 |
| 10 | 138 | 147 | 6530 | 4130 | 8570 | 5190 | 2550 | 2430 | 742 | 202 | 76 | 58 |
| 11 | 158 | 159 | 7120 | 3610 | 16100 | 4970 | 2340 | 2190 | 694 | 194 | 76 | 57 |
| 12 | 210 | 168 | 14100 | 3210 | 10800 | 4710 | 2040 | 2020 | 657 | 189 | 74 | 58 |
| 13 | 202 | 185 | 7140 | 2930 | 8120 | 4260 | 1850 | 1850 | 617 | 184 | 74 | 61 |
| 14 | 191 | 206 | 14300 | 2720 | 6730 | 3980 | 1760 | 1710 | 575 | 179 | 74 | 61 |
| 15 | 214 | 216 | 14500 | 2550 | 5670 | 3840 | 1710 | 1660 | 545 | 174 | 72 | 61 |
| 16 | 231 | 216 | 7350 | 2420 | 5450 | 3820 | 1660 | 1910 | 524 | 166 | 70 | 70 |
| 17 | 267 | 212 | 5030 | 2290 | 19200 | 3680 | 1610 | 2150 | 511 | 156 | 65 | 149 |
| 18 | 314 | 206 | 3940 | 2200 | 40600 | 3600 | 1590 | 2220 | 499 | 147 | 64 | 114 |
| 19 | 316 | 235 | 3280 | 2120 | 27300 | 3350 | 1580 | 2040 | 491 | 139 | 62 | 79 |
| 20 | 300 | 242 | 2800 | 2050 | 24300 | 3160 | 1580 | 2040 | 479 | 135 | 65 | 66 |
| 21 | 275 | 245 | 2450 | 2250 | 27200 | 3000 | 1510 | 2190 | 470 | 133 | 67 | 58 |
| 22 | 253 | 251 | 2180 | 6050 | 29800 | 2910 | 1440 | 2030 | 457 | 131 | 67 | 54 |
| 23 | 235 | 262 | 1990 | 30200 | 19700 | 3050 | 1450 | 1810 | 433 | 128 | 63 | 59 |
| 24 | 222 | 283 | 1830 | 45900 | 14900 | 3710 | 1710 | 1630 | 411 | 124 | 62 | 61 |
| 25 | 211 | 282 | 1700 | 36800 | 12600 | 3200 | 2510 | 1490 | 396 | 120 | 61 | 59 |
| 26 | 204 | 255 | 1600 | 26400 | 11100 | 2870 | 5840 | 1390 | 379 | 116 | 60 | 57 |
| 27 | 194 | 223 | 1520 | 16800 | 11600 | 2660 | 5520 | 1320 | 371 | 116 | 58 | 56 |
| 28 | 189 | 244 | 1450 | 11900 | 12300 | 2500 | 4080 | 1260 | 362 | 115 | 58 | 58 |
| 29 | 186 | 330 | 1400 | 8830 | --- | 2380 | 3330 | 1200 | 345 | 112 | 56 | 55 |
| 30 | 182 | 459 | 1360 | 6950 | --- | 2330 | 2850 | 1130 | 337 | 112 | 58 | 55 |
| 31 | 177 | --- | 1360 | 5790 | --- | 2270 | --- | 1060 | --- | 108 | 55 | --- |
| TOTAL | 6063 | 6434 | 143284 | 255240 | 359400 | 146910 | 68690 | 60790 | 18149 | 5590 | 2265 | 1931 |
| MEAN | 196 | 214 | 4622 | 8234 | 12840 | 4739 | 2290 | 1961 | 605 | 180 | 73.1 | 64.4 |
| MAX | 316 | 459 | 19800 | 45900 | 40600 | 10700 | 5840 | 2840 | 999 | 317 | 105 | 149 |
| MIN | 131 | 147 | 485 | 1470 | 3460 | 2270 | 1440 | 1060 | 337 | 108 | 55 | 54 |
| AC-FT | 12030 | 12760 | 284200 | 506300 | 712900 | 291400 | 136200 | 120600 | 36000 | 11090 | 4490 | 3830 |

11477000 EEL RIVER AT SCOTIA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| MEAN | 700 | 5242 | 13720 | 18930 | 19460 | 13900 | 8804 | 3569 | 1249 | 334 | 149 | 144 |
| 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1911 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 3267151 | | | | 1074746 | | | | | | | |
| ANNUAL MEAN | 8951 | | | | 2945 | | | | 7127 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 17300 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 563 | | | |
| HIGHEST DAILY MEAN | 200000 | | | | Jan 21 | | | | 648000 | | | |
| LOWEST DAILY MEAN | 131 | | | | Oct 3 | | | | 12 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 132 | | | | Oct 3 | | | | 14 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 48500 | | | | 752000 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 21.87 | | | | 72.00 | | | |
| ANNUAL RUNOFF (AC-FT) | 6480000 | | | | 2132000 | | | | 5163000 | | | |
| 10 PERCENT EXCEEDS | 20100 | | | | 7250 | | | | 17400 | | | |
| 50 PERCENT EXCEEDS | 3090 | | | | 826 | | | | 1360 | | | |
| 90 PERCENT EXCEEDS | 170 | | | | 65 | | | | 102 | | | |

11477000 EEL RIVER AT SCOTIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952 to current year.

CHEMICAL DATA: Water years 1952-75, 1977, 1979 to current year.

BIOLOGICAL DATA: Water year 1979-81.

SPECIFIC CONDUCTANCE: Water years 1979-81.

WATER TEMPERATURE: Water years 1958-82.

SEDIMENT DATA: Water years 1955 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1979 to September 1981.

WATER TEMPERATURE: October 1957 to June 1982.

SUSPENDED-SEDIMENT DISCHARGE: October 1957 to September 1980.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH WATER WHOLE FIELD (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED SATUR-ATION | COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS TOTAL (MG/L AS CaCO3) |
|-------|------|--|---------------------------------|--|---------------------------------|-------------------|------------------------------------|--|---|--|--|------------------------------------|
| NOV | | | | | | | | | | | | |
| 02... | 1300 | 165 | 301 | 8.2 | 14.5 | 0.20 | 769 | 10.3 | 100 | K1 | K2 | 140 |
| JAN | | | | | | | | | | | | |
| 05... | 1120 | 3300 | 183 | 8.0 | 9.0 | 20 | 767 | 11.0 | 95 | 32 | 49 | 78 |
| 25... | 1410 | 35500 | 107 | 7.7 | 9.5 | 180 | 757 | 10.9 | 96 | -- | -- | 45 |
| FEB | | | | | | | | | | | | |
| 19... | 1245 | 26900 | 114 | 7.8 | 7.5 | 130 | 752 | 11.2 | 95 | -- | -- | 49 |
| MAR | | | | | | | | | | | | |
| 02... | 1255 | 9520 | 144 | 8.0 | 12.0 | 29 | 764 | 10.2 | 94 | K7 | K14 | 61 |
| MAY | | | | | | | | | | | | |
| 03... | 1115 | 2070 | 193 | 8.0 | 16.5 | 1.2 | 762 | 9.1 | 93 | K6 | K1 | 86 |
| JUL | | | | | | | | | | | | |
| 07... | 1110 | 249 | 287 | 8.2 | 21.5 | 0.50 | 762 | 8.2 | 93 | K2 | K2 | 120 |
| SEP | | | | | | | | | | | | |
| 02... | 1230 | 57 | 308 | 8.5 | 22.0 | 0.20 | 764 | 9.4 | 107 | 19 | 11 | 140 |
| DATE | | HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L) | CALCIUM DIS-SOLVED (MG/L AS Ca) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) | SODIUM, DIS-SOLVED (MG/L AS Na) | SODIUM PERCENT | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) | CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) | ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) |
| NOV | | | | | | | | | | | | |
| 02... | 10 | 38 | 10 | 8.9 | 12 | 0.3 | 1.4 | 154 | 0 | 127 | 21 | 7.9 |
| JAN | | | | | | | | | | | | |
| 05... | 2 | 21 | 6.2 | 6.6 | 15 | 0.3 | 0.80 | 93 | 0 | 76 | 14 | 4.3 |
| 25... | 0 | 12 | 3.6 | 4.1 | 16 | 0.3 | 0.60 | 58 | 0 | 48 | 5.8 | 2.2 |
| FEB | | | | | | | | | | | | |
| 19... | 0 | 13 | 4.1 | 4.5 | 16 | 0.3 | 0.70 | 62 | 0 | 51 | 6.9 | 2.3 |
| MAR | | | | | | | | | | | | |
| 02... | 0 | 16 | 5.2 | 4.7 | 14 | 0.3 | 0.40 | 77 | 0 | 63 | 8.6 | 2.4 |
| MAY | | | | | | | | | | | | |
| 03... | 0 | 23 | 6.8 | 5.9 | 13 | 0.3 | 0.80 | 106 | 0 | 87 | 12 | 3.1 |
| JUL | | | | | | | | | | | | |
| 07... | 0 | 33 | 9.2 | 8.6 | 13 | 0.3 | 1.2 | 153 | 0 | 126 | 16 | 5.6 |
| SEP | | | | | | | | | | | | |
| 02... | 0 | 36 | 11 | 9.7 | 13 | 0.4 | 1.4 | 164 | 1 | 136 | 17 | 7.2 |

11477000 EEL RIVER AT SCOTIA, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, DIS- SOLVED (TONS PER AC-FT) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHORUS TOTAL (MG/L AS P) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) |
|--------------|--|---|--|---|---|---|---|---|--|--|---|---|
| NOV 02... | 0.20 | 8.1 | 166 | 172 | 0.23 | <0.010 | <0.050 | 0.020 | <0.20 | 0.070 | <0.010 | <0.010 |
| JAN 05... | <0.10 | 8.8 | 110 | 108 | 0.15 | 0.020 | <0.050 | 0.020 | <0.20 | 0.030 | <0.010 | 0.010 |
| 25... | <0.10 | 11 | 73 | 68 | 0.10 | 0.020 | 0.071 | 0.010 | 0.40 | 0.330 | 0.020 | <0.010 |
| FEB 19... | <0.10 | 11 | 69 | 73 | 0.09 | 0.020 | <0.050 | <0.010 | 0.20 | 0.140 | 0.020 | 0.010 |
| MAR 02... | <0.10 | 11 | 90 | 86 | 0.12 | <0.010 | <0.050 | <0.010 | <0.20 | 0.060 | <0.010 | 0.010 |
| MAY 03... | <0.10 | 9.8 | 107 | 114 | 0.15 | <0.010 | <0.050 | 0.020 | <0.20 | <0.010 | <0.010 | <0.010 |
| JUL 07... | 0.20 | 12 | 151 | 161 | 0.21 | <0.010 | <0.050 | 0.020 | <0.20 | <0.010 | <0.010 | <0.010 |
| SEP 02... | 0.10 | 10 | 174 | 175 | 0.24 | <0.010 | <0.050 | 0.020 | <0.20 | <0.010 | <0.010 | <0.010 |

| DATE | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | BARIUM, DIS- SOLVED (UG/L AS BA) | COBALT, DIS- SOLVED (UG/L AS CO) | IRON, DIS- SOLVED (UG/L AS FE) | LITHIUM, DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) |
|--------------|---|--|--|--|---|--|---|--|---|--|--|--|
| NOV 02... | <10 | 80 | <3 | 4 | <4 | 5 | <10 | <1 | <1 | <1.0 | 420 | <6 |
| JAN 05... | 40 | 56 | <3 | 67 | <4 | 4 | <10 | 2 | <1 | <1.0 | 270 | <6 |
| 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 19... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 03... | 20 | 50 | <3 | 13 | <4 | 2 | <10 | <1 | <1 | <1.0 | 270 | <6 |
| JUL 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP 02... | <10 | 84 | <3 | 4 | <4 | 4 | <10 | <1 | <1 | <1.0 | 420 | <6 |

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH WATER WHOLE FIELD (STAND- ARD UNITS) | TEMPER- ATURE WATER (DEG C) | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) | OXYGEN, DIS- SOLVED (MG/L) | SED- IMENT, SUS- PENDE (MG/L) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|--------|------|--|---|---|---|--------------------------------------|--|--|-------------------------------------|---|---|
| MAR | | | | | | | | | | | |
| 01...* | 1445 | 9.80 | 63.0 | 141 | 8.0 | 12.0 | 765 | 10.2 | 94 | 62 | 94 |
| 01...* | 1510 | 7.30 | 117 | 141 | 8.0 | 12.0 | 765 | 10.3 | 95 | 60 | 99 |
| 01...* | 1535 | 7.80 | 192 | 141 | 8.0 | 12.0 | 766 | 10.3 | 95 | 88 | 69 |
| 01...* | 1600 | 5.50 | 266 | 141 | 8.0 | 12.0 | 766 | 10.3 | 95 | 92 | 67 |
| 01...* | 1625 | 4.00 | 373 | 141 | 7.9 | 12.5 | 765 | 10.3 | 96 | 64 | 91 |
| SEP | | | | | | | | | | | |
| 01...* | 1210 | 1.40 | 46.0 | 307 | 8.5 | 21.0 | 763 | 10.5 | 118 | 4 | 60 |
| 01...* | 1235 | 1.50 | 71.0 | 308 | 8.4 | 21.0 | 763 | 9.9 | 111 | 4 | 85 |
| 01...* | 1300 | 1.60 | 97.0 | 309 | 8.4 | 21.0 | 763 | 9.7 | 109 | 4 | 66 |
| 01...* | 1325 | 1.70 | 114 | 309 | 8.4 | 21.0 | 763 | 9.9 | 111 | 5 | 64 |
| 01...* | 1350 | 1.40 | 134 | 309 | 8.5 | 21.5 | 763 | 10.0 | 113 | 5 | 66 |

* Instantaneous streamflow at time of cross-sectional measurement: Mar.1, 10400 ft³/s; Sept. 1, 57 ft³/s.

EEL RIVER BASIN

11477000 EEL RIVER AT SCOTIA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|-------|------|--|--------------------------------------|---|---|---|
| NOV | | | | | | |
| 02... | 1300 | 165 | 14.5 | 3 | 1.3 | 60 |
| JAN | | | | | | |
| 05... | 1120 | 3300 | 9.0 | 42 | 374 | 88 |
| 25... | 1410 | 35500 | 9.5 | 863 | 82700 | 69 |
| FEB | | | | | | |
| 19... | 1245 | 26900 | 7.5 | 465 | 33800 | 75 |
| MAR | | | | | | |
| 01... | 1530 | 10400 | 12.0 | 73 | 2050 | 84 |
| 02... | 1255 | 9520 | 12.0 | 72 | 1850 | 78 |
| MAY | | | | | | |
| 03... | 1115 | 2070 | 16.5 | 4 | 22 | 86 |
| JUL | | | | | | |
| 07... | 1110 | 249 | 21.5 | 2 | 1.3 | 72 |
| SEP | | | | | | |
| 01... | 1305 | 57 | 21.0 | 4 | 0.62 | 68 |
| 02... | 1230 | 57 | 22.0 | 3 | 0.46 | 72 |

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 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.--No estimated daily discharges. The gage measures fishwater release only. Water diverted upstream to Mill and Sulphur Creek Powerplant. 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 0.51 ft³/s, Apr. 17, 1992; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-------|------|-------|------|------|------|------|------|------|
| 1 | .00 | .00 | .00 | .35 | .35 | .40 | .00 | .35 | .00 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | .35 | .31 | .40 | .00 | .33 | .00 | .00 | .00 | .00 |
| 3 | .00 | .00 | .00 | .33 | .31 | .40 | .00 | .31 | .00 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | .35 | .31 | .40 | .00 | .33 | .00 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | .33 | .31 | .40 | .00 | .31 | .00 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | .33 | .31 | .37 | .00 | .31 | .00 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | .33 | .33 | .35 | .00 | .31 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .46 | .35 | .33 | .35 | .35 | .31 | .00 | .00 | .00 | .00 |
| 9 | .00 | .00 | .40 | .33 | .31 | .35 | .33 | .31 | .00 | .00 | .00 | .00 |
| 10 | .00 | .00 | .35 | .33 | .35 | .35 | .33 | .31 | .00 | .00 | .00 | .00 |
| 11 | .00 | .00 | .33 | .31 | .33 | .35 | .33 | .35 | .00 | .00 | .00 | .00 |
| 12 | .00 | .00 | .33 | .31 | .33 | .35 | .33 | .37 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | .33 | .31 | .33 | .35 | .33 | .37 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | .33 | .31 | .33 | .35 | .33 | .37 | .00 | .00 | .00 | .00 |
| 15 | .00 | .00 | .33 | .31 | .33 | .35 | .37 | .33 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | .31 | .31 | .33 | .33 | .00 | .31 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | .31 | .31 | .35 | .33 | .00 | .31 | .00 | .00 | .00 | .00 |
| 18 | .00 | .00 | .33 | .35 | .33 | .33 | .00 | .31 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | .33 | .37 | .33 | .33 | .00 | .31 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | .31 | .37 | .33 | .33 | .00 | .31 | .00 | .00 | .00 | .00 |
| 21 | .00 | .00 | .31 | .35 | .33 | .33 | .00 | .31 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | .31 | .35 | .33 | .33 | .00 | .00 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | .31 | .35 | .33 | .33 | .00 | .00 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .31 | .35 | .33 | .33 | .00 | .00 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | .31 | .33 | .33 | .33 | .00 | .00 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | .31 | .33 | .33 | .33 | .37 | .00 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | .31 | .33 | .37 | .33 | .35 | .00 | .00 | .00 | .00 | .00 |
| 28 | .00 | .00 | .31 | .33 | .37 | .33 | .35 | .00 | .00 | .00 | .00 | .00 |
| 29 | .00 | .00 | .31 | .33 | --- | .33 | .35 | .00 | .00 | .00 | .00 | .00 |
| 30 | .00 | .00 | .31 | .31 | --- | .33 | .35 | .00 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | .31 | .31 | --- | .37 | --- | .00 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 0.00 | 7.86 | 10.31 | 9.26 | 10.84 | 4.47 | 6.83 | 0.00 | 0.00 | 0.00 | 0.00 |
| MEAN | .000 | .000 | .25 | .33 | .33 | .35 | .15 | .22 | .000 | .000 | .000 | .000 |
| MAX | .00 | .00 | .46 | .37 | .37 | .40 | .37 | .37 | .00 | .00 | .00 | .00 |
| MIN | .00 | .00 | .00 | .31 | .31 | .33 | .00 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | .00 | 16 | 20 | 18 | 22 | 8.9 | 14 | .00 | .00 | .00 | .00 |

CAL YR 1993 TOTAL 69.28 MEAN .19 MAX .49 MIN .00 AC-FT 137
WTR YR 1994 TOTAL 49.57 MEAN .14 MAX .46 MIN .00 AC-FT 98

11477475 MILL CREEK BELOW SULPHUR CREEK, AT DINSMORE, CA

LOCATION.--Lat 40°28'59", long 123°36'28", in SE 1/4 NE 1/4 sec.9, T.1 N., R.5 E., Humboldt County, Hydrologic Unit 18010105, on right bank 300 ft downstream of confluence of Mill and Sulphur Creeks and 0.6 mi south of Dinsmore.

DRAINAGE AREA.--3.11 mi².

PERIOD OF RECORD.--October 1990 to current year.

REVISED RECORDS.--WDR CA-94-1: 1991(M)

GAGE.--Water-stage recorder and V-notch weir. Elevation of gage is 2,550 ft above sea level, from topographic map.

REMARKS.--Record of creek only includes water retained in Mill and Sulphur Creeks for fishery enhancement plus any additional water not diverted for power development at Mill and Sulphur Creek Powerplant (station 11477400). Combined flow includes flow to powerplant and represents all flow from drainage area. See station 11477476 for records of combined discharge of creek and powerplant. 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 170 ft³/s (revised), Mar. 3, 1991, gage height, 2.02 ft; maximum gage height, 3.63 ft, Jan. 19, 1993, discharge not determined; no flow for many days.
Combined flow, maximum daily discharge, 63 ft³/s, Mar. 4, 1991; exceeded by maximum daily discharge for 1993 water year, discharge not determined; no flow for many days.

EXTREMES FOR CURRENT YEAR.--Creek only, maximum discharge, 84 ft³/s, Dec. 8, gage height, 1.51 ft; no flow for many days.
Combined flow, maximum daily discharge, 41 ft³/s, Jan. 23, Feb. 17; no flow for many days.

REVISIONS.--The maximum discharge for the water year 1991 has been revised to 170 ft³/s, Mar. 3, 1991, gage height, 2.02 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|--------|-------|-------|-------|------|------|-------|------|------|------|
| 1 | .00 | .00 | .61 | 3.5 | 5.1 | 21 | 3.1 | 2.9 | 1.6 | .28 | .00 | .00 |
| 2 | .00 | .00 | .87 | 5.7 | 4.9 | 19 | 2.9 | 2.5 | 1.5 | .28 | .00 | .00 |
| 3 | .00 | .00 | .53 | 4.9 | 4.6 | 15 | 2.7 | 2.4 | 1.3 | .28 | .00 | .00 |
| 4 | .00 | .00 | .87 | 7.5 | 4.2 | 12 | 2.5 | 2.9 | 1.3 | .24 | .00 | .00 |
| 5 | .00 | .00 | .69 | 8.2 | 3.9 | 12 | 2.5 | 2.7 | 1.3 | .16 | .00 | .00 |
| 6 | .00 | .00 | .78 | 6.5 | 4.6 | 8.2 | 3.1 | 2.7 | 1.5 | .16 | .00 | .00 |
| 7 | .00 | .00 | 9.2 | 5.1 | 16 | 5.7 | 3.3 | 3.5 | 1.5 | .16 | .00 | .00 |
| 8 | .00 | .00 | 32 | 7.8 | 12 | 4.2 | 3.9 | 2.9 | 1.1 | .16 | .00 | .00 |
| 9 | .00 | .00 | 6.8 | 7.5 | 9.2 | 4.4 | 3.7 | 2.5 | 1.1 | .12 | .00 | .00 |
| 10 | .00 | .00 | 3.7 | 6.5 | 21 | 3.5 | 3.5 | 2.4 | .97 | .10 | .00 | .00 |
| 11 | .00 | .00 | 11 | 6.0 | 13 | 3.3 | 2.9 | 2.7 | .97 | .07 | .00 | .00 |
| 12 | .00 | .00 | 7.2 | 5.4 | 10 | 2.9 | 2.4 | 2.9 | .78 | .05 | .00 | .00 |
| 13 | .00 | .00 | 7.8 | 4.6 | 8.5 | 2.7 | 2.2 | 2.7 | .78 | .05 | .00 | .00 |
| 14 | .00 | .00 | 15 | 4.4 | 7.5 | 3.5 | 2.2 | 2.5 | .78 | .05 | .00 | .00 |
| 15 | .00 | .01 | 10 | 4.2 | 6.5 | 3.1 | 2.4 | 3.3 | .78 | .04 | .00 | .00 |
| 16 | .00 | .01 | 6.8 | 3.9 | 7.2 | 3.1 | 2.9 | 4.9 | .78 | .04 | .00 | .00 |
| 17 | .00 | .01 | 5.1 | 3.5 | 29 | 2.5 | 2.7 | 5.1 | .78 | .04 | .00 | .00 |
| 18 | .00 | .02 | 4.2 | 2.5 | 14 | 2.5 | 2.5 | 3.9 | e.70 | .03 | .00 | .00 |
| 19 | .00 | .01 | 3.7 | 2.7 | 11 | 2.5 | 2.4 | 3.5 | .61 | .02 | .00 | .00 |
| 20 | .00 | .02 | 3.3 | 2.5 | 8.9 | 2.5 | 2.2 | 3.5 | .53 | .01 | .00 | .00 |
| 21 | .00 | .02 | 2.9 | 4.2 | 8.5 | 2.5 | 2.0 | 3.5 | .53 | .01 | .00 | .00 |
| 22 | .00 | .04 | 2.9 | 8.9 | 7.5 | 2.4 | 1.9 | 3.9 | .46 | .01 | .00 | .00 |
| 23 | .00 | .05 | 2.9 | 29 | 6.8 | 2.5 | 2.2 | 3.7 | .46 | .01 | .00 | .00 |
| 24 | .00 | .05 | 2.9 | 24 | 7.5 | 3.5 | 2.7 | 3.1 | .46 | .01 | .00 | .00 |
| 25 | .00 | .05 | 2.7 | 15 | 8.2 | 3.1 | 4.9 | 2.7 | .46 | .01 | .00 | .00 |
| 26 | .00 | .07 | 2.7 | 12 | 10 | 3.1 | 5.7 | 2.5 | .40 | .01 | .00 | .00 |
| 27 | .00 | .07 | 2.7 | 9.6 | 21 | 2.7 | 4.6 | 2.4 | .34 | .00 | .00 | .00 |
| 28 | .00 | .19 | 2.5 | 7.8 | 18 | 2.5 | 4.2 | 2.2 | .34 | .00 | .00 | .00 |
| 29 | .00 | 1.1 | 2.5 | 6.8 | --- | 2.4 | 3.7 | 2.0 | .34 | .00 | .00 | .00 |
| 30 | .00 | .61 | 2.9 | 6.2 | --- | 2.2 | 3.3 | 1.9 | .28 | .00 | .00 | .00 |
| 31 | .00 | --- | 3.3 | 5.4 | --- | 3.1 | --- | 1.7 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 2.33 | 161.05 | 231.8 | 288.6 | 163.6 | 91.2 | 92.0 | 24.73 | 2.40 | 0.00 | 0.00 |
| MEAN | .000 | .078 | 5.20 | 7.48 | 10.3 | 5.28 | 3.04 | 2.97 | .82 | .077 | .000 | .000 |
| MAX | .00 | 1.10 | 32.0 | 29.0 | 29.0 | 21.0 | 5.70 | 5.10 | 1.60 | .28 | .00 | .00 |
| MIN | .00 | .00 | .53 | 2.50 | 3.90 | 2.20 | 1.90 | 1.70 | .28 | .00 | .00 | .00 |
| AC-FT | .00 | 4.6 | 319 | 460 | 572 | 325 | 181 | 182 | 49 | 4.8 | .00 | .00 |

e Estimated.

EEL RIVER BASIN

11477475 MILL CREEK BELOW SULPHUR CREEK, AT DINSMORE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .045 | .73 | 3.05 | 5.65 | 9.06 | 8.61 | 5.18 | 2.39 | .77 | .22 | .015 | .000 |
| MAX | .13 | 1.39 | 5.20 | 7.48 | 12.6 | 13.0 | 6.83 | 2.97 | 1.21 | .43 | .057 | .001 |
| (WY) | 1993 | 1993 | 1994 | 1994 | 1992 | 1991 | 1991 | 1994 | 1991 | 1993 | 1993 | 1993 |
| MIN | .000 | .078 | 1.25 | 3.62 | 4.16 | 5.28 | 3.04 | 1.35 | .28 | .077 | .000 | .000 |
| (WY) | 1991 | 1994 | 1991 | 1991 | 1991 | 1994 | 1994 | 1992 | 1992 | 1994 | 1992 | 1991 |

SUMMARY STATISTICS

FOR 1994 WATER YEAR

WATER YEARS 1991 - 1994

| | | | |
|--------------------------|---------|-------|------|
| ANNUAL TOTAL | 1057.71 | | |
| ANNUAL MEAN | 2.90 | | |
| HIGHEST ANNUAL MEAN | | 2.92 | |
| LOWEST ANNUAL MEAN | | 3.08 | 1992 |
| HIGHEST DAILY MEAN | | 2.78 | 1991 |
| LOWEST DAILY MEAN | 32.0 | Dec 8 | |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Oct 1 | |
| INSTANTANEOUS PEAK FLOW | .00 | Oct 1 | 1990 |
| INSTANTANEOUS PEAK STAGE | 84 | Dec 8 | |
| ANNUAL RUNOFF (AC-FT) | 1.51 | Dec 8 | |
| 10 PERCENT EXCEEDS | 2100 | | |
| 50 PERCENT EXCEEDS | 7.8 | | |
| 90 PERCENT EXCEEDS | 1.3 | | |
| | .00 | | |

MILL CREEK AND MILL AND SULPHUR CREEK POWERPLANT
COMBINED DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|--------|-------|-------|-------|-------|-------|-------|------|------|------|
| 1 | .00 | .00 | .61 | 10 | 8.1 | 34 | 3.1 | 4.5 | 1.6 | .28 | .00 | .00 |
| 2 | .00 | .00 | .87 | 13 | 7.6 | 31 | 2.9 | 4.0 | 1.5 | .28 | .00 | .00 |
| 3 | .00 | .00 | .53 | 9.6 | 7.1 | 27 | 2.7 | 4.0 | 1.3 | .28 | .00 | .00 |
| 4 | .00 | .00 | .87 | 16 | 6.5 | 24 | 2.5 | 6.2 | 1.3 | .24 | .00 | .00 |
| 5 | .00 | .00 | .69 | 16 | 5.9 | 24 | 2.5 | 4.9 | 1.3 | .16 | .00 | .00 |
| 6 | .00 | .00 | .78 | 13 | 7.7 | 18 | 3.1 | 4.4 | 1.5 | .16 | .00 | .00 |
| 7 | .00 | .00 | 9.2 | 10 | 25 | 14 | 3.3 | 5.1 | 1.5 | .16 | .00 | .00 |
| 8 | .00 | .00 | 39 | 16 | 20 | 12 | 6.6 | 4.4 | 1.1 | .16 | .00 | .00 |
| 9 | .00 | .00 | 15 | 16 | 15 | 10 | 6.6 | 3.9 | 1.1 | .12 | .00 | .00 |
| 10 | .00 | .00 | 7.7 | 12 | 33 | 10 | 6.6 | 3.7 | .97 | .10 | .00 | .00 |
| 11 | .00 | .00 | 20 | 11 | 22 | 8.9 | 5.5 | 3.9 | .97 | .07 | .00 | .00 |
| 12 | .00 | .00 | 12 | 9.1 | 17 | 8.0 | 4.4 | 2.9 | .78 | .05 | .00 | .00 |
| 13 | .00 | .00 | 13 | 7.6 | 15 | 7.2 | 3.7 | 2.7 | .78 | .05 | .00 | .00 |
| 14 | .00 | .00 | 21 | 6.8 | 13 | 7.3 | 3.4 | 2.5 | .78 | .05 | .00 | .00 |
| 15 | .00 | .01 | 14 | 6.2 | 11 | 6.5 | 3.4 | 6.1 | .78 | .04 | .00 | .00 |
| 16 | .00 | .01 | 10 | 5.0 | 14 | 7.2 | 2.9 | 10 | .78 | .04 | .00 | .00 |
| 17 | .00 | .01 | 7.6 | 4.5 | 41 | 5.7 | 2.7 | 9.2 | .78 | .04 | .00 | .00 |
| 18 | .00 | .02 | 6.0 | 3.4 | 24 | 5.2 | 2.5 | 6.6 | e.70 | .03 | .00 | .00 |
| 19 | .00 | .01 | 5.1 | 2.7 | 19 | 5.0 | 2.4 | 5.7 | .61 | .02 | .00 | .00 |
| 20 | .00 | .02 | 4.5 | 2.5 | 16 | 4.9 | 2.2 | 5.2 | .53 | .01 | .00 | .00 |
| 21 | .00 | .02 | 4.0 | 8.0 | 14 | 4.7 | 2.0 | 4.7 | .53 | .01 | .00 | .00 |
| 22 | .00 | .04 | 4.2 | 19 | 13 | 4.5 | 1.9 | 3.9 | .46 | .01 | .00 | .00 |
| 23 | .00 | .05 | 4.5 | 41 | 12 | 4.5 | 2.2 | 3.7 | .46 | .01 | .00 | .00 |
| 24 | .00 | .05 | 4.5 | 35 | 12 | 5.7 | 2.7 | 3.1 | .46 | .01 | .00 | .00 |
| 25 | .00 | .05 | 4.3 | 25 | 13 | 6.0 | 4.9 | 2.7 | .46 | .01 | .00 | .00 |
| 26 | .00 | .07 | 4.5 | 20 | 16 | 5.7 | 7.3 | 2.5 | .40 | .01 | .00 | .00 |
| 27 | .00 | .07 | 4.3 | 16 | 34 | 5.0 | 8.9 | 2.4 | .34 | .00 | .00 | .00 |
| 28 | .00 | .19 | 3.8 | 13 | 31 | 4.6 | 8.2 | 2.2 | .34 | .00 | .00 | .00 |
| 29 | .00 | 1.1 | 4.0 | 11 | --- | 4.3 | 6.6 | 2.0 | .34 | .00 | .00 | .00 |
| 30 | .00 | .61 | 5.0 | 10 | --- | 3.8 | 5.2 | 1.9 | .28 | .00 | .00 | .00 |
| 31 | .00 | --- | 6.5 | 9.2 | --- | 3.1 | --- | 1.7 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 2.33 | 238.05 | 397.6 | 472.9 | 321.8 | 122.9 | 130.7 | 24.73 | 2.40 | 0.00 | 0.00 |
| MEAN | .000 | .078 | 7.68 | 12.8 | 16.9 | 10.4 | 4.10 | 4.22 | .82 | .077 | .000 | .000 |
| MAX | .00 | 1.10 | 39.0 | 41.0 | 41.0 | 34.0 | 8.90 | 10.0 | 1.60 | .28 | .00 | .00 |
| MIN | .00 | .00 | .53 | 2.50 | 5.90 | 3.10 | 1.90 | 1.70 | .28 | .00 | .00 | .00 |
| AC-FT | .00 | 4.6 | 472 | 789 | 938 | 638 | 244 | 259 | 49 | 4.8 | .00 | .00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .045 | .73 | 3.87 | 8.20 | 14.0 | 13.6 | 8.96 | 3.44 | .77 | .22 | .015 | .000 |
| MAX | .13 | 1.39 | 7.68 | 12.8 | 18.4 | 18.4 | 13.7 | 4.76 | 1.21 | .43 | .057 | .001 |
| (WY) | 1993 | 1993 | 1994 | 1994 | 1992 | 1991 | 1991 | 1991 | 1991 | 1993 | 1993 | 1993 |
| MIN | .000 | .078 | 1.25 | 4.65 | 6.60 | 10.4 | 4.10 | 1.35 | .28 | .077 | .000 | .000 |
| (WY) | 1991 | 1994 | 1991 | 1991 | 1991 | 1994 | 1994 | 1992 | 1992 | 1994 | 1992 | 1991 |

WATER YEARS 1991 - 1994

| | | | | | | | | | |
|--------------------------|---------|-----|----|--|--|------|-----|---|------|
| ANNUAL TOTAL | 1713.41 | | | | | | | | |
| ANNUAL MEAN | 4.69 | | | | | 4.41 | | | |
| HIGHEST ANNUAL MEAN | | | | | | 4.69 | | | 1994 |
| LOWEST ANNUAL MEAN | | | | | | 4.23 | | | 1991 |
| HIGHEST DAILY MEAN | 41.0 | Jan | 23 | | | 63.0 | Mar | 4 | 1991 |
| LOWEST DAILY MEAN | .00 | Oct | 1 | | | .00 | Oct | 1 | 1990 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Oct | 1 | | | .00 | Oct | 1 | 1990 |
| ANNUAL RUNOFF (AC-FT) | 3400 | | | | | 3200 | | | |
| 10 PERCENT EXCEEDS | 14 | | | | | 18 | | | |
| 50 PERCENT EXCEEDS | 1.3 | | | | | 1.1 | | | |
| 90 PERCENT EXCEEDS | .00 | | | | | .00 | | | |

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 fair. 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, 4.4 ft³/s, Sept. 28, 1992.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 8 | 1415 | *8,620 | *9.13 | | | | |

Minimum daily, 5.9 ft³/s, several days in August and September.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|
| 1 | 12 | 17 | 82 | 376 | 630 | 1610 | 234 | 256 | 119 | 34 | e9.8 | 5.9 |
| 2 | 12 | 17 | 98 | 700 | 554 | 1480 | 222 | 230 | 114 | 34 | e9.6 | 5.9 |
| 3 | 11 | 17 | 78 | 481 | 496 | 1250 | 216 | 210 | 109 | 32 | e9.2 | 5.9 |
| 4 | 11 | 17 | 74 | 651 | 444 | 1090 | 209 | 218 | 104 | 31 | e9.0 | 5.9 |
| 5 | 11 | 17 | 84 | 1060 | 400 | 1030 | 196 | 270 | 99 | 29 | e8.4 | 5.9 |
| 6 | 11 | 17 | 72 | 830 | 424 | 926 | 195 | 269 | 103 | 28 | e8.2 | 5.9 |
| 7 | 11 | 17 | 382 | 619 | 1140 | 790 | 206 | 342 | 113 | 26 | e7.8 | 5.9 |
| 8 | 11 | 17 | 6170 | 636 | 1210 | 691 | 215 | 303 | 101 | 25 | e7.5 | 5.9 |
| 9 | 11 | 17 | 1730 | 992 | 869 | 640 | 420 | 253 | 92 | 23 | e7.2 | 5.9 |
| 10 | 13 | 17 | 915 | 729 | 1870 | 593 | 408 | 221 | 85 | 22 | e7.0 | 5.9 |
| 11 | 19 | 17 | 2070 | 600 | 1690 | 576 | 309 | 198 | 79 | 20 | e7.0 | 5.9 |
| 12 | 25 | 18 | 1520 | 503 | 1280 | 498 | 262 | 182 | 73 | 20 | e6.9 | 6.4 |
| 13 | 25 | 19 | 1200 | 421 | 1080 | 444 | 236 | 170 | 70 | 19 | e6.8 | 7.3 |
| 14 | 22 | 19 | 2420 | 363 | 943 | 416 | 218 | 160 | 66 | 17 | e6.8 | 7.3 |
| 15 | 22 | 19 | 1440 | 322 | 824 | 394 | 203 | 182 | 63 | 17 | e6.8 | 7.3 |
| 16 | 28 | 19 | 945 | 288 | 739 | 389 | 194 | 575 | 62 | 17 | e6.8 | 7.3 |
| 17 | 32 | 19 | 699 | 257 | e2000 | 385 | 189 | 494 | 61 | 16 | 6.9 | 7.5 |
| 18 | 28 | 19 | 534 | 228 | e2500 | 346 | 180 | 374 | 59 | 15 | 6.9 | 7.6 |
| 19 | 26 | 19 | 424 | 210 | 1810 | 342 | 174 | 314 | 56 | 14 | 7.3 | 7.6 |
| 20 | 24 | 19 | 352 | 202 | 1690 | 310 | 167 | 272 | 54 | 13 | 7.3 | 7.6 |
| 21 | 23 | 19 | 303 | 303 | 1750 | 306 | 158 | 243 | 52 | 12 | 7.2 | 7.6 |
| 22 | 22 | 19 | 272 | 1400 | 1450 | 339 | 151 | 222 | 51 | 12 | 6.9 | 7.6 |
| 23 | 21 | 22 | 249 | 4740 | 1240 | 358 | 153 | 202 | 48 | e12 | 6.9 | 7.6 |
| 24 | 21 | 23 | 232 | 4830 | 1160 | 464 | 212 | 185 | 45 | e11 | 6.9 | 7.6 |
| 25 | 20 | 23 | 213 | e3100 | 1130 | 423 | 487 | 171 | 43 | e11 | 6.9 | 7.6 |
| 26 | 20 | 23 | 200 | e2100 | 1140 | 368 | 623 | 162 | 41 | e11 | 6.5 | 7.6 |
| 27 | 19 | 23 | 194 | 1420 | 2060 | 326 | 528 | 160 | 39 | e10 | 6.2 | 7.6 |
| 28 | 18 | 25 | 185 | 1160 | 1790 | 306 | 419 | 147 | 39 | e10 | 6.2 | 7.6 |
| 29 | 17 | 37 | 169 | 957 | --- | 286 | 336 | 138 | 37 | e10 | 6.1 | 7.6 |
| 30 | 17 | 76 | 169 | 833 | --- | 269 | 288 | 132 | 35 | e10 | 5.9 | 8.0 |
| 31 | 17 | --- | 226 | 732 | --- | 251 | --- | 125 | --- | e10 | 5.9 | --- |
| TOTAL | 580 | 647 | 23701 | 32043 | 34313 | 17896 | 8008 | 7380 | 2112 | 571 | 224.8 | 207.2 |
| MEAN | 18.7 | 21.6 | 765 | 1034 | 1225 | 577 | 267 | 238 | 70.4 | 18.4 | 7.25 | 6.91 |
| MAX | 32 | 76 | 6170 | 4830 | 2500 | 1610 | 623 | 575 | 119 | 34 | 9.8 | 8.0 |
| MIN | 11 | 17 | 72 | 202 | 400 | 251 | 151 | 125 | 35 | 10 | 5.9 | 5.9 |
| AC-FT | 1150 | 1280 | 47010 | 63560 | 68060 | 35500 | 15880 | 14640 | 4190 | 1130 | 446 | 411 |

e Estimated

11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CA--Continued

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--|------------------------|------|------|------|------|---------------------|------|------|------|-------------------------|------|------|
| OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY) | | | | | | | | | | | | |
| MEAN | 161 | 932 | 1813 | 2120 | 1991 | 1561 | 897 | 434 | 141 | 35.7 | 17.3 | 20.7 |
| MAX | 1464 | 5476 | 6046 | 5816 | 6232 | 4004 | 3255 | 1139 | 821 | 98.0 | 82.4 | 144 |
| (WY) | 1963 | 1974 | 1956 | 1970 | 1958 | 1975 | 1963 | 1953 | 1993 | 1953 | 1983 | 1986 |
| MIN | 7.20 | 16.8 | 18.8 | 103 | 156 | 172 | 131 | 109 | 40.4 | 12.2 | 5.89 | 5.72 |
| (WY) | 1988 | 1960 | 1977 | 1977 | 1977 | 1988 | 1977 | 1985 | 1987 | 1977 | 1977 | 1992 |
| SUMMARY STATISTICS | | | | | | | | | | | | |
| | FOR 1993 CALENDAR YEAR | | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1951 - 1994 | | |
| ANNUAL TOTAL | 343206 | | | | | 127683.0 | | | | | | |
| ANNUAL MEAN | 940 | | | | | 350 | | | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | | 839 | | |
| LOWEST ANNUAL MEAN | | | | | | | | | | 1610 | | |
| HIGHEST DAILY MEAN | | | | | | | | | | 95.7 | | |
| LOWEST DAILY MEAN | | | | | | | | | | 1610 | | |
| ANNUAL SEVEN-DAY MINIMUM | | | | | | | | | | 95.7 | | |
| INSTANTANEOUS PEAK FLOW | | | | | | | | | | 1974 | | |
| INSTANTANEOUS PEAK STAGE | | | | | | | | | | 1977 | | |
| ANNUAL RUNOFF (AC-FT) | | | | | | | | | | 33900 | | |
| 10 PERCENT EXCEEDS | | | | | | | | | | 4.4 | | |
| 50 PERCENT EXCEEDS | | | | | | | | | | 4.6 | | |
| 90 PERCENT EXCEEDS | | | | | | | | | | 24.00 | | |
| | | | | | | | | | | 607700 | | |
| | | | | | | | | | | 2100 | | |
| | | | | | | | | | | 175 | | |
| | | | | | | | | | | 12 | | |

EEL RIVER BASIN

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 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 0.56 ft. Gage out of service due to construction project Mar. 7-18 and June 20 to Sept. 30. See schematic diagram of Eel River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed gage height, 15.3 ft, Jan. 8, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 10.23 ft, Jan. 24.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-----|---------|-----|----------|-----|----------|------|---------|------|----------|------|-------|------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | 2.79 | 2.43 | 5.08 | 4.69 |
| 2 | --- | --- | --- | --- | --- | --- | 1.37 | .55 | 2.45 | 2.14 | 4.71 | 4.36 |
| 3 | --- | --- | --- | --- | --- | --- | 1.56 | 1.22 | 2.20 | 1.92 | 4.39 | 4.01 |
| 4 | --- | --- | --- | --- | --- | --- | 1.57 | 1.13 | 2.01 | 1.72 | 4.01 | 3.64 |
| 5 | --- | --- | --- | --- | --- | --- | 1.99 | 1.57 | 1.82 | 1.52 | 3.64 | 3.54 |
| 6 | --- | --- | --- | --- | --- | --- | 2.18 | 1.91 | 1.75 | 1.50 | 4.00 | 3.55 |
| 7 | --- | --- | --- | --- | .97 | --- | 1.91 | 1.42 | 4.19 | 1.58 | --- | --- |
| 8 | --- | --- | --- | --- | 8.36 | .97 | 1.54 | 1.28 | 4.72 | 4.12 | --- | --- |
| 9 | --- | --- | --- | --- | 8.34 | 5.42 | 2.52 | 1.54 | 4.12 | 3.15 | --- | --- |
| 10 | --- | --- | --- | --- | 5.42 | 2.92 | 2.44 | 1.96 | 6.19 | 3.05 | --- | --- |
| 11 | --- | --- | .86 | --- | 6.01 | 2.78 | 1.97 | 1.57 | 6.61 | 5.75 | --- | --- |
| 12 | --- | --- | 1.82 | --- | 6.68 | 5.14 | 1.58 | 1.27 | 5.75 | 4.40 | --- | --- |
| 13 | --- | --- | 1.12 | --- | 5.14 | 3.61 | 1.39 | 1.05 | 4.40 | 3.65 | --- | --- |
| 14 | .86 | --- | .86 | --- | 6.73 | 3.97 | 1.08 | .87 | 3.65 | 3.16 | --- | --- |
| 15 | 1.33 | --- | .74 | --- | 6.78 | 5.04 | .89 | .73 | 3.16 | 2.77 | --- | --- |
| 16 | 1.28 | --- | .69 | --- | 5.04 | 3.34 | .73 | .61 | 3.25 | 2.53 | --- | --- |
| 17 | 1.06 | --- | --- | --- | 3.34 | 2.42 | .61 | --- | 8.96 | 3.25 | --- | --- |
| 18 | .77 | --- | --- | --- | 2.42 | 1.81 | --- | --- | 8.91 | 8.55 | --- | --- |
| 19 | --- | --- | --- | --- | 1.81 | 1.40 | --- | --- | 8.59 | 7.96 | 1.53 | 1.35 |
| 20 | --- | --- | --- | --- | 1.40 | 1.09 | --- | --- | 7.98 | 7.59 | 1.35 | 1.20 |
| 21 | --- | --- | --- | --- | 1.09 | .86 | --- | --- | 8.47 | 7.53 | 1.20 | 1.14 |
| 22 | --- | --- | --- | --- | .86 | .70 | 4.13 | --- | 8.62 | 7.63 | 1.39 | 1.14 |
| 23 | --- | --- | --- | --- | .70 | --- | 10.01 | 4.13 | 7.63 | 6.35 | 1.79 | 1.01 |
| 24 | --- | --- | --- | --- | .58 | --- | 10.23 | 9.74 | 6.35 | 5.62 | 2.46 | 1.79 |
| 25 | --- | --- | --- | --- | .66 | --- | 9.74 | 9.00 | 5.62 | 5.14 | 1.89 | 1.51 |
| 26 | --- | --- | --- | --- | .87 | --- | 9.00 | 7.17 | 5.14 | 4.73 | 1.62 | 1.24 |
| 27 | --- | --- | --- | --- | .74 | --- | 7.17 | 5.82 | 5.50 | 4.73 | 1.62 | 1.05 |
| 28 | --- | --- | --- | --- | 1.14 | --- | 5.82 | 4.66 | 5.51 | 5.08 | 1.63 | .92 |
| 29 | --- | --- | .68 | --- | 1.19 | --- | 4.66 | 3.80 | --- | --- | 1.48 | .83 |
| 30 | --- | --- | --- | --- | 1.09 | --- | 3.80 | 3.21 | --- | --- | 1.39 | .79 |
| 31 | --- | --- | --- | --- | --- | --- | 3.21 | 2.79 | --- | --- | 1.30 | .72 |

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

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, near right bank on downstream end of pier 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 fair except for discharges below 10 ft³/s, which are poor. 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|--------------------------------|------------------|------|------|--------------------------------|------------------|
| Jan. 23 | 0445 | *1,030 | *5.23 | | | | |

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|---------|-------|-------|------|------|------|-------|-------|------|------|
| 1 | .00 | .00 | .00 | 55 | 135 | 542 | 37 | 44 | 30 | 8.3 | .06 | .00 |
| 2 | .00 | .00 | .00 | 92 | 128 | 444 | 35 | 42 | 29 | 7.1 | .01 | .00 |
| 3 | .00 | .00 | .00 | 74 | 124 | 326 | 35 | 40 | 28 | 6.7 | .00 | .00 |
| 4 | .00 | .00 | .00 | 82 | 118 | 246 | 33 | e39 | 28 | 6.0 | .00 | .00 |
| 5 | .00 | .00 | .00 | 101 | 115 | 217 | 33 | e51 | 26 | 6.0 | .00 | .00 |
| 6 | .00 | .00 | .00 | 92 | 113 | 188 | 33 | e55 | 26 | 4.5 | .00 | .00 |
| 7 | .00 | .00 | 7.6 | 78 | 139 | 147 | 33 | 58 | 26 | 3.7 | .00 | .00 |
| 8 | .00 | .00 | 323 | 99 | 151 | 122 | 33 | 60 | 26 | 3.4 | .00 | .00 |
| 9 | .00 | .00 | 148 | 133 | 140 | 107 | 42 | 55 | 24 | 3.7 | .00 | .00 |
| 10 | .00 | .00 | 102 | 114 | 498 | 96 | 46 | 48 | 22 | 2.5 | .00 | .00 |
| 11 | .00 | .00 | 139 | 95 | 412 | 89 | 42 | 45 | e19 | 1.5 | .00 | .00 |
| 12 | .00 | .00 | 137 | 78 | 257 | 80 | 39 | e42 | e19 | 1.3 | .00 | .00 |
| 13 | .00 | .00 | 118 | 66 | 202 | 72 | 37 | e42 | e16 | 1.3 | .00 | .00 |
| 14 | .00 | .00 | 242 | 60 | 176 | 70 | 35 | e41 | 15 | 1.3 | .00 | .00 |
| 15 | .00 | .00 | 175 | 52 | 161 | 65 | 34 | e39 | 15 | 1.3 | .00 | .00 |
| 16 | .00 | .00 | 120 | 47 | 152 | 64 | 33 | e49 | 14 | 1.1 | .00 | .00 |
| 17 | .00 | .00 | 92 | 43 | 631 | 62 | 32 | e54 | 14 | .94 | .00 | .00 |
| 18 | .00 | .00 | 71 | 39 | 535 | 58 | 31 | e56 | 14 | .90 | .00 | .00 |
| 19 | .00 | .00 | 60 | 36 | 407 | 56 | 30 | e58 | 14 | .56 | .00 | .00 |
| 20 | .00 | .00 | 49 | 34 | 356 | 52 | 30 | e56 | 13 | .40 | .00 | .00 |
| 21 | .00 | .00 | 42 | 81 | 372 | 52 | 30 | e55 | 13 | .39 | .00 | .00 |
| 22 | .00 | .00 | 39 | 297 | 354 | 50 | 28 | e50 | 13 | .39 | .00 | .00 |
| 23 | .00 | .00 | 35 | 841 | 335 | 50 | 28 | e46 | 13 | .34 | .00 | .00 |
| 24 | .00 | .00 | 33 | 726 | 337 | 48 | 31 | e45 | 12 | .33 | .00 | .00 |
| 25 | .00 | .00 | 31 | 503 | 358 | 46 | 43 | 41 | 11 | .33 | .00 | .00 |
| 26 | .00 | .00 | 30 | 352 | 385 | 45 | 65 | 40 | 11 | .29 | .00 | .00 |
| 27 | .00 | .00 | 27 | 247 | 652 | 41 | 64 | 39 | 11 | .24 | .00 | .00 |
| 28 | .00 | .00 | 26 | 194 | 601 | 40 | 58 | 37 | 10 | .22 | .00 | .00 |
| 29 | .00 | .00 | 25 | 167 | --- | 39 | 52 | 35 | 8.7 | .16 | .00 | .00 |
| 30 | .00 | .00 | 24 | 151 | --- | 38 | 47 | 33 | 8.6 | .10 | .00 | .00 |
| 31 | .00 | --- | 23 | 142 | --- | 37 | --- | 32 | --- | .06 | .00 | --- |
| TOTAL | 0.00 | 0.00 | 2118.60 | 5171 | 8344 | 3589 | 1149 | 1427 | 529.3 | 65.35 | 0.07 | 0.00 |
| MEAN | .000 | .000 | 68.3 | 167 | 298 | 116 | 38.3 | 46.0 | 17.6 | 2.11 | .002 | .000 |
| MAX | .00 | .00 | 323 | 841 | 652 | 542 | 65 | 60 | 30 | 8.3 | .06 | .00 |
| MIN | .00 | .00 | .00 | 34 | 113 | 37 | 28 | 32 | 8.6 | .06 | .00 | .00 |
| AC-FT | .00 | .00 | 4200 | 10260 | 16550 | 7120 | 2280 | 2830 | 1050 | 130 | .1 | .00 |

e Estimated.

11480390 MAD RIVER ABOVE RUTH RESERVOIR, NEAR FOREST GLEN, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 8.00 | 200 | 384 | 400 | 550 | 467 | 232 | 97.7 | 49.0 | 7.50 | 1.27 | 1.27 |
| MAX | 57.6 | 741 | 1198 | 1271 | 2136 | 1202 | 878 | 260 | 229 | 25.0 | 4.87 | 12.2 |
| (WY) | 1990 | 1985 | 1982 | 1993 | 1986 | 1989 | 1982 | 1990 | 1993 | 1993 | 1993 | 1986 |
| MIN | .000 | .000 | 8.08 | 28.5 | 85.3 | 38.6 | 32.0 | 20.4 | 5.31 | 1.27 | .000 | .000 |
| (WY) | 1988 | 1994 | 1991 | 1991 | 1991 | 1988 | 1988 | 1987 | 1987 | 1985 | 1984 | 1984 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1980 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 106312.52 | | 22393.32 | | | |
| ANNUAL MEAN | 291 | | 61.4 | | 198 | |
| HIGHEST ANNUAL MEAN | | | | | 414 | |
| LOWEST ANNUAL MEAN | | | | | 61.4 | |
| HIGHEST DAILY MEAN | 8110 | Jan 20 | 841 | Jan 23 | 9660 | Feb 17 1986 |
| LOWEST DAILY MEAN | .00 | Sep 8 | .00 | Oct 1 | .00 | Oct 8 1980 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Sep 8 | .00 | Oct 1 | .00 | Sep 11 1982 |
| INSTANTANEOUS PEAK FLOW | | | 1030 | Jan 23 | 15000 | Feb 17 1986 |
| INSTANTANEOUS PEAK STAGE | | | 5.23 | Jan 23 | 13.10 | Jan 20 1993 |
| ANNUAL RUNOFF (AC-FT) | 210900 | | 44420 | | 143500 | |
| 10 PERCENT EXCEEDS | 714 | | 151 | | 523 | |
| 50 PERCENT EXCEEDS | 71 | | 24 | | 28 | |
| 90 PERCENT EXCEEDS | .00 | | .00 | | .00 | |

MAD RIVER BASIN

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, 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 at elevation 2,654.0 ft, crest of spillway. Minimum pool capacity, 7,810 acre-ft at 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, 49,800 acre-ft, Feb. 28, elevation, 2,655.53 ft; minimum contents, 32,800 acre-ft, Sept. 30, elevation, 2,638.84 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Humboldt Bay Municipal Water District in 1977)

| | | | | | |
|-------|--------|-------|--------|-------|--------|
| 2,595 | 5,920 | 2,620 | 18,100 | 2,645 | 38,600 |
| 2,600 | 7,810 | 2,625 | 21,500 | 2,650 | 43,700 |
| 2,605 | 10,000 | 2,630 | 25,300 | 2,655 | 49,200 |
| 2,610 | 12,500 | 2,635 | 29,400 | 2,660 | 55,100 |
| 2,615 | 15,100 | 2,640 | 33,800 | 2,664 | 60,200 |

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 2400 HOURS

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 40400 | 36800 | 33500 | 38100 | 47900 | 49700 | 46400 | 45400 | 45700 | 43800 | 40600 | 36800 |
| 2 | 40200 | 36600 | 33400 | 38200 | 47600 | 49500 | 46300 | 45500 | 45700 | 43800 | 40500 | 36600 |
| 3 | 40100 | 36500 | 33300 | 38300 | 47400 | 49300 | 46200 | 45500 | 45600 | 43700 | 40300 | 36500 |
| 4 | 40000 | 36400 | 33200 | 38500 | 47100 | 49100 | 46100 | 45700 | 45600 | 43600 | 40200 | 36400 |
| 5 | 39900 | 36300 | 33100 | 38700 | 46800 | 48900 | 46100 | 45800 | 45600 | 43500 | 40100 | 36200 |
| 6 | 39800 | 36100 | 33000 | 38800 | 46600 | 48800 | 46100 | 45800 | 45600 | 43400 | 40000 | 36100 |
| 7 | 39600 | 36000 | 33400 | 38900 | 46600 | 48600 | 46000 | 45600 | 45500 | 43300 | 39900 | 36000 |
| 8 | 39500 | 35900 | 34800 | 39200 | 46500 | 48500 | 45900 | 45300 | 45500 | 43300 | 39800 | 35900 |
| 9 | 39400 | 35800 | 35200 | 39500 | 46400 | 48400 | 45900 | 45200 | 45400 | 43200 | 39600 | 35800 |
| 10 | 39300 | 35700 | 35300 | 39700 | 47400 | 48200 | 45900 | 45200 | 45400 | 43100 | 39500 | 35600 |
| 11 | 39200 | 35600 | 35800 | 39800 | 48200 | 48100 | 45800 | 45200 | 45300 | 43000 | 39400 | 35500 |
| 12 | 39100 | 35500 | 36100 | 39900 | 48400 | 47900 | 45800 | 45300 | 45300 | 42900 | 39300 | 35400 |
| 13 | 39000 | 35300 | 36600 | 40000 | 48400 | 47800 | 45800 | 45300 | 45200 | 42800 | 39200 | 35300 |
| 14 | 38900 | 35200 | 37400 | 40100 | 48300 | 47600 | 45800 | 45300 | 45100 | 42700 | 39100 | 35100 |
| 15 | 38800 | 35100 | 37800 | 40100 | 48200 | 47300 | 45800 | 45400 | 45000 | 42600 | 39000 | 35000 |
| 16 | 38600 | 35000 | 38100 | 40200 | 48200 | 47100 | 45800 | 45500 | 45000 | 42500 | 38800 | 34800 |
| 17 | 38500 | 34800 | 38200 | 40200 | 49500 | 47000 | 45800 | 45600 | 44900 | 42400 | 38700 | 34600 |
| 18 | 38400 | 34700 | 38300 | 40200 | 49600 | 46900 | 45800 | 45600 | 44800 | 42300 | 38600 | 34500 |
| 19 | 38300 | 34600 | 38300 | 40200 | 49400 | 46800 | 45800 | 45700 | 44800 | 42200 | 38400 | 34400 |
| 20 | 38200 | 34500 | 38300 | 40200 | 49300 | 46900 | 45800 | 45700 | 44700 | 42100 | 38300 | 34200 |
| 21 | 38100 | 34400 | 38300 | 40600 | 49200 | 46800 | 45800 | 45700 | 44600 | 41900 | 38200 | 34000 |
| 22 | 37900 | 34300 | 38300 | 42100 | 49100 | 46800 | 45700 | 45700 | 44600 | 41800 | 38000 | 33900 |
| 23 | 37800 | 34100 | 38200 | 44600 | 49000 | 46800 | 45800 | 45700 | 44500 | 41700 | 37900 | 33800 |
| 24 | 37700 | 34000 | 38300 | 46600 | 49000 | 46900 | 45800 | 45800 | 44400 | 41500 | 37800 | 33600 |
| 25 | 37600 | 34000 | 38200 | 47800 | 49000 | 46800 | 46000 | 45800 | 44300 | 41400 | 37700 | 33500 |
| 26 | 37500 | 33800 | 38200 | 48400 | 49100 | 46800 | 46100 | 45800 | 44200 | 41300 | 37500 | 33300 |
| 27 | 37400 | 33700 | 38100 | 48600 | 49700 | 46700 | 46000 | 45800 | 44200 | 41100 | 37400 | 33200 |
| 28 | 37200 | 33700 | 38100 | 48500 | 49800 | 46700 | 45700 | 45800 | 44100 | 41000 | 37300 | 33000 |
| 29 | 37100 | 33600 | 38000 | 48400 | --- | 46600 | 45500 | 45800 | 44000 | 40900 | 37100 | 32900 |
| 30 | 37000 | 33500 | 38000 | 48200 | --- | 46500 | 45400 | 45800 | 43900 | 40800 | 37000 | 32800 |
| 31 | 36900 | --- | 37900 | 48100 | --- | 46500 | --- | 45700 | --- | 40700 | 36900 | --- |
| MAX | 40400 | 36800 | 38300 | 48600 | 49800 | 49700 | 46400 | 45800 | 45700 | 43800 | 40600 | 36800 |
| MIN | 36900 | 33500 | 33000 | 38100 | 46400 | 46500 | 45400 | 45200 | 43900 | 40700 | 36900 | 32800 |
| a | 2643.26 | 2639.67 | 2644.36 | 2654.03 | 2655.52 | 2652.61 | 2651.65 | 2651.92 | 2650.24 | 2647.11 | 2643.27 | 2638.86 |
| b | -3600 | -3400 | +4400 | +10200 | +1700 | -3300 | -1100 | +300 | -1800 | -3200 | -3800 | -4100 |

CAL YR 1993 MAX 59000 MIN 33000 b -10000
WTR YR 1994 MAX 49800 MIN 32800 b -7700

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, 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.--No estimated daily discharges. Records good except for discharges below 10 ft³/s, which are poor. 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 780 ft³/s, Feb. 28, gage height, 6.39 ft; minimum daily, 9.5 ft³/s, May 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|-------|-------|------|--------|------|------|------|------|
| 1 | 60 | 64 | 58 | 61 | 236 | 769 | 88 | 77 | 41 | 43 | 54 | 63 |
| 2 | 60 | 65 | 57 | 61 | 236 | 714 | 89 | 30 | 41 | 43 | 55 | 62 |
| 3 | 60 | 64 | 57 | 55 | 236 | 612 | 89 | 9.5 | 41 | 43 | 55 | 62 |
| 4 | 63 | 65 | 57 | 47 | 235 | 507 | 89 | 9.7 | 41 | 43 | 54 | 62 |
| 5 | 65 | 63 | 57 | 47 | 235 | 442 | 70 | 9.8 | 42 | 43 | 54 | 62 |
| 6 | 66 | 63 | 57 | 47 | 236 | 396 | 89 | 79 | 41 | 43 | 54 | 63 |
| 7 | 65 | 62 | 58 | 46 | 236 | 348 | 89 | 238 | 41 | 43 | 54 | 62 |
| 8 | 65 | 62 | 62 | 44 | 236 | 307 | 90 | 238 | 42 | 43 | 54 | 63 |
| 9 | 65 | 62 | 60 | 44 | 236 | 273 | 91 | 165 | 43 | 44 | 54 | 63 |
| 10 | 66 | 62 | 59 | 44 | 237 | 247 | 91 | 41 | 44 | 44 | 54 | 62 |
| 11 | 66 | 62 | 60 | 44 | 237 | 229 | 91 | 40 | 43 | 44 | 60 | 61 |
| 12 | 70 | 61 | 61 | 44 | 262 | 223 | 61 | 40 | 42 | 45 | 55 | 61 |
| 13 | 66 | 61 | 60 | 44 | 283 | 224 | 43 | 40 | 42 | 44 | 58 | 67 |
| 14 | 66 | 61 | 61 | 45 | 273 | 225 | 43 | 40 | 42 | 44 | 57 | 74 |
| 15 | 65 | 61 | 61 | 45 | 256 | 223 | 43 | 40 | 42 | 44 | 55 | 74 |
| 16 | 65 | 61 | 61 | 45 | 246 | 222 | 43 | 47 | 42 | 44 | 55 | 74 |
| 17 | 65 | 61 | 61 | 45 | 420 | 178 | 43 | 52 | 44 | 44 | 58 | 74 |
| 18 | 66 | 61 | 61 | 46 | 699 | 125 | 43 | 56 | 44 | 51 | 63 | 74 |
| 19 | 66 | 60 | 61 | 45 | 658 | 112 | 44 | 59 | 42 | 62 | 63 | 74 |
| 20 | 66 | 59 | 60 | 45 | 574 | 97 | 43 | 59 | 42 | 61 | 63 | 74 |
| 21 | 66 | 61 | 59 | 47 | 547 | 89 | 43 | 59 | 42 | 62 | 62 | 75 |
| 22 | 65 | 61 | 59 | 48 | 512 | 89 | 43 | 59 | 42 | 62 | 63 | 74 |
| 23 | 65 | 61 | 59 | 93 | 470 | 89 | 43 | 57 | 43 | 62 | 62 | 73 |
| 24 | 65 | 58 | 59 | 194 | 447 | 88 | 42 | 47 | 43 | 61 | 62 | 73 |
| 25 | 65 | 57 | 59 | 235 | 446 | 88 | 43 | 41 | 43 | 61 | 68 | 73 |
| 26 | 65 | 58 | 59 | 247 | 459 | 88 | 43 | 41 | 43 | 58 | 63 | 72 |
| 27 | 65 | 58 | 60 | 310 | 619 | 89 | 166 | 41 | 42 | 54 | 63 | 72 |
| 28 | 65 | 58 | 60 | 319 | 764 | 88 | 235 | 41 | 44 | 54 | 63 | 72 |
| 29 | 64 | 58 | 60 | 293 | --- | 88 | 172 | 41 | 44 | 54 | 63 | 72 |
| 30 | 64 | 58 | 60 | 262 | --- | 88 | 77 | 41 | 44 | 54 | 63 | 72 |
| 31 | 64 | --- | 61 | 241 | --- | 88 | --- | 41 | --- | 54 | 63 | --- |
| TOTAL | 2009 | 1828 | 1844 | 3233 | 10531 | 7445 | 2279 | 1879.0 | 1272 | 1551 | 1824 | 2059 |
| MEAN | 64.8 | 60.9 | 59.5 | 104 | 376 | 240 | 76.0 | 60.6 | 42.4 | 50.0 | 58.8 | 68.6 |
| MAX | 70 | 65 | 62 | 319 | 764 | 769 | 235 | 238 | 44 | 62 | 68 | 75 |
| MIN | 60 | 57 | 57 | 44 | 235 | 88 | 42 | 9.5 | 41 | 43 | 54 | 61 |
| AC-FT | 3980 | 3630 | 3660 | 6410 | 20890 | 14770 | 4520 | 3730 | 2520 | 3080 | 3620 | 4080 |

11480410 MAD RIVER BELOW RUTH RESERVOIR, NEAR FOREST GLEN, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 90.8 | 173 | 420 | 432 | 719 | 633 | 342 | 132 | 95.4 | 68.2 | 84.2 | 90.0 |
| MAX | 118 | 607 | 1738 | 1577 | 2993 | 1616 | 1426 | 363 | 408 | 89.3 | 103 | 101 |
| (WY) | 1984 | 1985 | 1982 | 1993 | 1986 | 1989 | 1982 | 1983 | 1993 | 1987 | 1990 | 1986 |
| MIN | 64.4 | 24.5 | 8.35 | 8.02 | 7.61 | 24.4 | 28.0 | 47.8 | 38.2 | 42.5 | 45.1 | 57.0 |
| (WY) | 1982 | 1993 | 1987 | 1992 | 1991 | 1988 | 1988 | 1987 | 1991 | 1982 | 1993 | 1993 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1981 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|-------------|
| ANNUAL TOTAL | 149422 | | | | 37754.0 | | | | | | | |
| ANNUAL MEAN | 409 | | | | 103 | | | | 271 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 591 | | | 1983 |
| LOWEST ANNUAL MEAN | | | | | | | | | 101 | | | 1991 |
| HIGHEST DAILY MEAN | 8090 | | | | 769 | | | | 13400 | | | Feb 17 1986 |
| LOWEST DAILY MEAN | 42 | | | | 9.5 | | | | 5.6 | | | Mar 2 1991 |
| ANNUAL SEVEN-DAY MINIMUM | 43 | | | | 41 | | | | 6.0 | | | Feb 19 1991 |
| INSTANTANEOUS PEAK FLOW | | | | | 780 | | | | 17800 | | | Feb 17 1986 |
| INSTANTANEOUS PEAK STAGE | | | | | 6.39 | | | | 17.61 | | | Feb 17 1986 |
| ANNUAL RUNOFF (AC-FT) | 296400 | | | | 74890 | | | | 196200 | | | |
| 10 PERCENT EXCEEDS | 920 | | | | 237 | | | | 643 | | | |
| 50 PERCENT EXCEEDS | 66 | | | | 61 | | | | 92 | | | |
| 90 PERCENT EXCEEDS | 45 | | | | 43 | | | | 35 | | | |

11480500 MAD RIVER NEAR FOREST GLEN, CA

LOCATION.--Lat 40°27'30", long 123°30'35", in SW 1/4 sec.16, T.1 N., R.6 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, on right bank 0.7 mi downstream from Lamb Creek and 11.1 mi northwest of Forest Glen.

DRAINAGE AREA.--143 mi².

PERIOD OF RECORD.--June 1953 to September 1994 (discontinued).

REVISED RECORDS.--WSP 1395: 1954. WSP 1715: 1957(M), 1958(P). WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,408.18 ft above sea level. Prior to Dec. 22, 1955, water-stage recorder at site 0.7 mi upstream at different datum. Jan. 13 to June 18, 1956, nonrecording gage at former site at datum 4.17 ft lower than former datum.

REMARKS.--Records good. Flow regulated by Ruth Reservoir (station 11480400), 9 mi upstream, beginning in July 1961. No diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,200 ft³/s, Dec. 22, 1955, gage height, 24.5 ft, present datum, from floodmarks, from rating curve extended above 10,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.60 ft³/s, Sept. 15, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 922 ft³/s, Feb. 28, gage height, 5.73 ft; minimum daily, 23 ft³/s, May 3-5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 57 | 60 | 60 | 80 | 276 | 915 | 107 | 89 | 50 | 46 | 51 | 57 |
| 2 | 57 | 62 | 61 | 78 | 272 | 842 | 107 | 67 | 48 | 46 | 52 | 56 |
| 3 | 57 | 62 | 60 | 71 | 269 | 719 | 106 | 23 | 48 | 46 | 51 | 56 |
| 4 | 59 | 63 | 60 | 67 | 266 | 598 | 106 | 23 | 48 | 46 | 52 | 56 |
| 5 | 60 | 62 | 60 | 77 | 263 | 523 | 86 | 23 | 48 | 46 | 51 | 56 |
| 6 | 60 | 62 | 59 | 71 | 270 | 463 | 100 | 34 | 49 | 45 | 51 | 56 |
| 7 | 60 | 62 | 84 | 65 | 359 | 406 | 101 | 255 | 49 | 45 | 51 | 56 |
| 8 | 60 | 61 | 365 | 69 | 317 | 359 | 102 | 255 | 49 | 45 | 51 | 56 |
| 9 | 60 | 61 | 106 | 75 | 293 | 322 | 106 | 225 | 48 | 45 | 51 | 56 |
| 10 | 60 | 62 | 79 | 68 | 385 | 294 | 105 | 57 | 49 | 45 | 51 | 56 |
| 11 | 60 | 62 | 153 | 64 | 339 | 272 | 104 | 53 | 49 | 45 | 56 | 56 |
| 12 | 64 | 61 | 114 | 62 | 328 | 262 | 87 | 53 | 49 | 45 | 54 | 56 |
| 13 | 61 | 61 | 122 | 60 | 340 | 260 | 57 | 53 | 49 | 45 | 55 | 58 |
| 14 | 61 | 61 | 203 | 59 | 329 | 257 | 57 | 53 | 50 | 45 | 55 | 66 |
| 15 | 62 | 61 | 142 | 56 | 310 | 256 | 56 | e54 | 48 | 43 | 53 | 66 |
| 16 | 61 | 61 | 111 | 55 | 298 | 255 | 56 | e62 | 48 | 41 | 53 | 65 |
| 17 | 60 | 61 | 96 | 54 | 690 | 222 | 55 | e70 | 49 | 41 | 53 | 66 |
| 18 | 60 | 61 | 89 | 53 | 882 | 161 | 55 | e77 | 49 | 42 | 59 | 66 |
| 19 | 60 | 61 | 77 | 53 | 829 | 140 | 55 | e82 | 47 | 58 | 60 | 66 |
| 20 | 60 | 60 | 75 | 53 | 725 | 130 | 55 | e82 | 47 | 58 | 60 | 66 |
| 21 | 60 | 60 | 72 | 81 | 706 | 117 | 55 | e82 | 47 | 59 | 60 | 67 |
| 22 | 60 | 61 | 72 | 216 | 652 | 117 | 53 | e82 | 46 | 58 | 60 | 67 |
| 23 | 60 | 62 | 71 | 423 | 590 | 118 | 55 | e79 | 47 | 59 | 60 | 65 |
| 24 | 60 | 60 | 69 | 482 | 558 | 119 | 57 | e72 | 47 | 58 | 60 | 65 |
| 25 | 60 | 59 | 69 | 436 | 554 | 118 | 67 | e59 | 46 | 58 | 64 | 65 |
| 26 | 60 | 59 | 69 | 372 | 570 | 117 | 67 | 51 | 46 | 56 | 60 | 65 |
| 27 | 60 | 59 | 69 | 390 | 750 | 115 | 139 | 51 | 46 | 51 | 59 | 65 |
| 28 | 60 | 60 | 65 | 391 | 906 | 113 | 251 | 51 | 46 | 51 | 58 | 65 |
| 29 | 60 | 64 | 62 | 356 | --- | 108 | 223 | 52 | 46 | 52 | 58 | 66 |
| 30 | 60 | 61 | 64 | 318 | --- | 108 | 90 | 53 | 46 | 51 | 57 | 65 |
| 31 | 60 | --- | 65 | 289 | --- | 108 | --- | 55 | --- | 52 | 57 | --- |
| TOTAL | 1859 | 1832 | 2923 | 5044 | 13326 | 8914 | 2720 | 2377 | 1434 | 1523 | 1723 | 1847 |
| MEAN | 60.0 | 61.1 | 94.3 | 163 | 476 | 288 | 90.7 | 76.7 | 47.8 | 49.1 | 55.6 | 61.6 |
| MAX | 64 | 64 | 365 | 482 | 906 | 915 | 251 | 255 | 50 | 59 | 64 | 67 |
| MIN | 57 | 59 | 59 | 53 | 263 | 108 | 53 | 23 | 46 | 41 | 51 | 56 |
| AC-FT | 3690 | 3630 | 5800 | 10000 | 26430 | 17680 | 5400 | 4710 | 2840 | 3020 | 3420 | 3660 |

e Estimated.

11480500 MAD RIVER NEAR FOREST GLEN, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1960, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 34.4 | 155 | 563 | 1008 | 1296 | 709 | 443 | 208 | 58.7 | 11.1 | 4.19 | 4.74 |
| MAX | 168 | 455 | 2168 | 1885 | 3217 | 1073 | 1157 | 447 | 118 | 17.0 | 8.14 | 13.5 |
| (WY) | 1958 | 1958 | 1956 | 1954 | 1958 | 1957 | 1958 | 1957 | 1960 | 1960 | 1958 | 1958 |
| MIN | 2.18 | 2.33 | 7.35 | 155 | 285 | 253 | 175 | 54.0 | 20.6 | 4.92 | 2.12 | 1.64 |
| (WY) | 1956 | 1960 | 1960 | 1960 | 1955 | 1955 | 1959 | 1959 | 1959 | 1959 | 1959 | 1955 |

SUMMARY STATISTICS

WATER YEARS 1954 - 1960

| | | |
|--------------------------|--------|-------------|
| ANNUAL MEAN | 370 | |
| HIGHEST ANNUAL MEAN | 701 | 1958 |
| LOWEST ANNUAL MEAN | 165 | 1955 |
| HIGHEST DAILY MEAN | 14500 | Dec 22 1955 |
| LOWEST DAILY MEAN | 1.3 | Sep 15 1960 |
| ANNUAL SEVEN-DAY MINIMUM | 1.4 | Sep 5 1955 |
| INSTANTANEOUS PEAK FLOW | 39200 | Dec 22 1955 |
| INSTANTANEOUS PEAK STAGE | 24.50 | Dec 22 1955 |
| ANNUAL RUNOFF (AC-FT) | 268100 | |
| 10 PERCENT EXCEEDS | 960 | |
| 50 PERCENT EXCEEDS | 64 | |
| 90 PERCENT EXCEEDS | 2.2 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 113 | 238 | 601 | 943 | 812 | 764 | 436 | 150 | 81.5 | 68.9 | 86.7 | 95.2 |
| MAX | 620 | 1262 | 2672 | 3077 | 3447 | 2083 | 1808 | 450 | 467 | 89.2 | 114 | 220 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1986 | 1975 | 1963 | 1983 | 1993 | 1992 | 1974 | 1963 |
| MIN | 37.0 | 32.8 | 26.5 | 16.8 | 28.6 | 25.9 | 11.8 | 11.9 | 15.9 | 39.4 | 41.6 | 52.1 |
| (WY) | 1978 | 1993 | 1987 | 1991 | 1977 | 1977 | 1977 | 1977 | 1977 | 1963 | 1993 | 1993 |

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1963 - 1994

| | | | |
|--------------------------|--------|--------|--------|
| ANNUAL TOTAL | 178452 | 45522 | |
| ANNUAL MEAN | 489 | 125 | 364 |
| HIGHEST ANNUAL MEAN | | | 762 |
| LOWEST ANNUAL MEAN | | | 47.2 |
| HIGHEST DAILY MEAN | 10700 | Jan 20 | 915 |
| LOWEST DAILY MEAN | 41 | Aug 6 | 23 |
| ANNUAL SEVEN-DAY MINIMUM | 41 | Aug 6 | 43 |
| INSTANTANEOUS PEAK FLOW | | | 922 |
| INSTANTANEOUS PEAK STAGE | | | 5.73 |
| ANNUAL RUNOFF (AC-FT) | 354000 | 90290 | 263800 |
| 10 PERCENT EXCEEDS | 1110 | 317 | 847 |
| 50 PERCENT EXCEEDS | 111 | 61 | 99 |
| 90 PERCENT EXCEEDS | 43 | 48 | 46 |

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 fair. 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,840 ft³/s, Feb. 17, gage height, 11.57 ft; minimum daily, 24 ft³/s, Aug. 15, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|--------|-------|-------|-------|------|------|------|------|
| 1 | 39 | 43 | 112 | 352 | 962 | 3450 | 435 | 805 | 195 | 77 | 28 | 27 |
| 2 | 40 | 44 | 229 | 838 | 871 | 3130 | 411 | 709 | 182 | 76 | 29 | 31 |
| 3 | 41 | 42 | 187 | 596 | 796 | 2670 | 388 | 636 | 170 | 75 | 29 | 31 |
| 4 | 42 | 44 | 218 | 691 | 732 | 2280 | 365 | 588 | 183 | 75 | 52 | 30 |
| 5 | 41 | 45 | 213 | 1530 | 674 | 1990 | 346 | 658 | 174 | 73 | 73 | 30 |
| 6 | 43 | 46 | 145 | 1450 | 687 | 1700 | 349 | 584 | 219 | 64 | 73 | 25 |
| 7 | 44 | 45 | 278 | 994 | 1370 | 1440 | 390 | 563 | 231 | 54 | 74 | 27 |
| 8 | 44 | 44 | 4900 | 861 | 1730 | 1220 | 409 | 809 | 173 | 47 | 73 | 28 |
| 9 | 42 | 44 | 2540 | 1570 | 1260 | 1080 | 1030 | 755 | 153 | 42 | 74 | 38 |
| 10 | 46 | 44 | 1020 | 1180 | 2650 | 1010 | 1100 | 680 | 138 | 37 | 75 | 40 |
| 11 | 53 | 47 | 1930 | 951 | 3340 | 1120 | 825 | 439 | 127 | 34 | 75 | 36 |
| 12 | 56 | 52 | 2320 | 713 | 2230 | 921 | 681 | 381 | 123 | 31 | 69 | 28 |
| 13 | 55 | 50 | 1190 | 528 | 1750 | 821 | 630 | 357 | 122 | 37 | 37 | 26 |
| 14 | 53 | 48 | 2700 | 437 | 1560 | 771 | 535 | 323 | 121 | 53 | 27 | 29 |
| 15 | 55 | 47 | 2190 | 396 | 1390 | 717 | 476 | 374 | 113 | 62 | 24 | 48 |
| 16 | 68 | 47 | 1260 | 368 | 1260 | 724 | 445 | 1420 | 107 | 61 | 26 | 50 |
| 17 | 62 | 47 | 901 | 340 | 6010 | 700 | 424 | 1420 | 104 | 57 | 24 | 60 |
| 18 | 56 | 48 | 679 | 315 | 6050 | 636 | 376 | 999 | 104 | 29 | 25 | 58 |
| 19 | 52 | 47 | 540 | 292 | 4430 | 606 | 363 | 796 | 99 | 27 | 26 | 55 |
| 20 | 53 | 46 | 437 | 267 | 3840 | 529 | 339 | 679 | 95 | 27 | 39 | 54 |
| 21 | 51 | 46 | 370 | 237 | 4630 | 586 | 325 | 589 | 91 | 33 | 48 | 57 |
| 22 | 51 | 55 | 326 | 423 | 4100 | 721 | 304 | 508 | 91 | 43 | 44 | 53 |
| 23 | 50 | 62 | 298 | 2580 | 3020 | 799 | 336 | 444 | 90 | 51 | 33 | 57 |
| 24 | 50 | 63 | 279 | 5700 | 2490 | 857 | 636 | 398 | 83 | 51 | 39 | 59 |
| 25 | 49 | 60 | 263 | 4300 | 2340 | 778 | 1490 | 351 | 80 | 38 | 37 | 56 |
| 26 | 48 | 60 | 250 | 2790 | 2240 | 697 | 2200 | 300 | 80 | 42 | 33 | 52 |
| 27 | 45 | 56 | 239 | 2290 | 3280 | 641 | 1460 | 300 | 79 | 39 | 39 | 50 |
| 28 | 44 | 58 | 229 | 1840 | 3700 | 588 | 1330 | 276 | 78 | 41 | 37 | 53 |
| 29 | 44 | 80 | 205 | 1610 | --- | 536 | 1230 | 249 | 79 | 41 | 27 | 58 |
| 30 | 43 | 118 | 202 | 1270 | --- | 499 | 1050 | 230 | 78 | 47 | 27 | 59 |
| 31 | 47 | --- | 248 | 1110 | --- | 469 | --- | 214 | --- | 37 | 25 | --- |
| TOTAL | 1507 | 1578 | 26898 | 38819 | 69392 | 34686 | 20678 | 17834 | 3762 | 1501 | 1341 | 1305 |
| MEAN | 48.6 | 52.6 | 868 | 1252 | 2478 | 1119 | 689 | 575 | 125 | 48.4 | 43.3 | 43.5 |
| MAX | 68 | 118 | 4900 | 5700 | 6050 | 3450 | 2200 | 1420 | 231 | 77 | 75 | 60 |
| MIN | 39 | 42 | 112 | 237 | 674 | 469 | 304 | 214 | 78 | 27 | 24 | 25 |
| AC-FT | 2990 | 3130 | 53350 | 77000 | 137600 | 68800 | 41010 | 35370 | 7460 | 2980 | 2660 | 2590 |
| a | 2165 | 2163 | 1392 | 2627 | 2214 | 2089 | 1999 | 2700 | 2819 | 2436 | 2619 | 2769 |

a Diversion, in acre-feet, for municipal supply and industrial use; provided by Humboldt Bay Municipal Water District.

11481000 MAD RIVER NEAR ARCATA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1960, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 313 | 1081 | 2997 | 4588 | 4164 | 2438 | 1716 | 1167 | 358 | 97.2 | 40.3 | 39.3 |
| MAX | 2303 | 2903 | 9335 | 9175 | 9830 | 5054 | 3450 | 2669 | 1311 | 210 | 68.2 | 128 |
| (WY) | 1951 | 1954 | 1956 | 1953 | 1958 | 1957 | 1958 | 1953 | 1953 | 1953 | 1953 | 1912 |
| MIN | 22.0 | 32.0 | 136 | 852 | 1232 | 1028 | 489 | 277 | 104 | 36.6 | 19.2 | 18.2 |
| (WY) | 1953 | 1960 | 1960 | 1960 | 1955 | 1955 | 1951 | 1954 | 1959 | 1959 | 1959 | 1951 |

SUMMARY STATISTICS

WATER YEARS 1911 - 1960

| | | |
|--------------------------|---------|-------------|
| ANNUAL MEAN | 1573 | |
| HIGHEST ANNUAL MEAN | 2377 | 1958 |
| LOWEST ANNUAL MEAN | 943 | 1955 |
| HIGHEST DAILY MEAN | 63100 | Dec 22 1955 |
| LOWEST DAILY MEAN | 17 | Sep 8 1951 |
| ANNUAL SEVEN-DAY MINIMUM | 17 | Sep 4 1959 |
| INSTANTANEOUS PEAK FLOW | 77800 | Dec 22 1955 |
| INSTANTANEOUS PEAK STAGE | 27.30 | Dec 22 1955 |
| ANNUAL RUNOFF (AC-FT) | 1139000 | |
| 10 PERCENT EXCEEDS | 4010 | |
| 50 PERCENT EXCEEDS | 400 | |
| 90 PERCENT EXCEEDS | 31 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|-------|------|------|------|------|------|------|------|------|------|
| MEAN | 222 | 1355 | 2663 | 3176 | 2854 | 2786 | 1708 | 627 | 226 | 55.2 | 44.5 | 66.6 |
| MAX | 2255 | 6671 | 10400 | 8847 | 9796 | 7150 | 6253 | 1519 | 1721 | 152 | 123 | 392 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1986 | 1975 | 1963 | 1967 | 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1963 - 1994

| | | | |
|--------------------------|---------|--------|--------|
| ANNUAL TOTAL | 553395 | 219301 | |
| ANNUAL MEAN | 1516 | 601 | 1309 |
| HIGHEST ANNUAL MEAN | | | 2478 |
| LOWEST ANNUAL MEAN | | | 151 |
| HIGHEST DAILY MEAN | 18100 | Jan 22 | 58000 |
| LOWEST DAILY MEAN | 33 | Aug 30 | .10 |
| ANNUAL SEVEN-DAY MINIMUM | 36 | Aug 27 | .63 |
| INSTANTANEOUS PEAK FLOW | | | 81000 |
| INSTANTANEOUS PEAK STAGE | | | 30.70 |
| ANNUAL RUNOFF (AC-FT) | 1098000 | 435000 | 948200 |
| 10 PERCENT EXCEEDS | 3740 | 1650 | 3600 |
| 50 PERCENT EXCEEDS | 632 | 187 | 255 |
| 90 PERCENT EXCEEDS | 41 | 37 | 29 |

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.--No estimated daily discharges. Records good. 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 8 | 0315 | *2,330 | *6.62 | | | | |

Minimum daily, 2.4 ft³/s, Oct. 30 to Nov. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| 1 | 4.2 | 2.4 | 36 | 66 | 85 | 143 | 40 | 53 | 25 | 15 | 7.9 | 4.7 |
| 2 | 4.3 | 2.4 | 46 | 74 | 78 | 128 | 39 | 49 | 24 | 15 | 7.4 | 4.7 |
| 3 | 4.2 | 2.4 | 16 | 58 | 70 | 115 | 36 | 45 | 24 | 15 | 7.4 | 4.7 |
| 4 | 4.2 | 2.4 | 51 | 115 | 62 | 106 | 35 | 51 | 29 | 14 | 7.4 | 4.7 |
| 5 | 4.2 | 2.7 | 23 | 188 | 59 | 98 | 32 | 51 | 28 | 13 | 7.4 | 4.7 |
| 6 | 4.2 | 2.7 | 15 | 148 | 62 | 92 | 34 | 48 | 46 | 13 | 7.4 | 4.7 |
| 7 | 5.0 | 2.7 | 386 | 102 | 209 | 83 | 36 | 49 | 37 | 13 | 7.2 | 4.7 |
| 8 | 6.1 | 2.7 | 1490 | 123 | 184 | 76 | 45 | 46 | 29 | 12 | 6.6 | 5.0 |
| 9 | 4.7 | 2.7 | 267 | 169 | 115 | 72 | 79 | 42 | 26 | 12 | 6.2 | 6.3 |
| 10 | 4.7 | 2.5 | 109 | 133 | 360 | 70 | 66 | 39 | 24 | 11 | 6.2 | 6.8 |
| 11 | 11 | 2.5 | 485 | 108 | 322 | 72 | 52 | 35 | 23 | 11 | 6.2 | 6.7 |
| 12 | 11 | 3.3 | 320 | 89 | 196 | 62 | 45 | 33 | 23 | 11 | 6.2 | 5.3 |
| 13 | 7.1 | 3.8 | 194 | 76 | 146 | 59 | 40 | 33 | 23 | 11 | 6.2 | 4.7 |
| 14 | 5.8 | 3.8 | 434 | 66 | 125 | 55 | 38 | 31 | 23 | 10 | 6.2 | 4.7 |
| 15 | 4.7 | 3.4 | 277 | 58 | 109 | 51 | 34 | 40 | 22 | 10 | 6.1 | 4.2 |
| 16 | 5.2 | 3.1 | 153 | 52 | 98 | 54 | 32 | 102 | 21 | 10 | 5.2 | 4.2 |
| 17 | 5.8 | 3.0 | 103 | 47 | 653 | 51 | 30 | 89 | 20 | 10 | 5.2 | 3.8 |
| 18 | 5.4 | 3.0 | 79 | 44 | 784 | 49 | 30 | 64 | 19 | 9.7 | 5.2 | 3.8 |
| 19 | 4.7 | 3.0 | 63 | 44 | 598 | 52 | 30 | 54 | 19 | 9.0 | 5.2 | 3.8 |
| 20 | 4.2 | 3.0 | 53 | 44 | 467 | 49 | 29 | 48 | 18 | 8.6 | 5.2 | 3.8 |
| 21 | 4.2 | 3.0 | 46 | 44 | 627 | 79 | 28 | 47 | 18 | 8.6 | 5.2 | 3.8 |
| 22 | 4.2 | 6.9 | 42 | 46 | 454 | 90 | 26 | 43 | 18 | 8.6 | 5.2 | 3.8 |
| 23 | 4.2 | 8.9 | 36 | 549 | 297 | 94 | 33 | 39 | 18 | 8.6 | 4.7 | 3.8 |
| 24 | 4.2 | 6.4 | 32 | 1020 | 222 | 79 | 58 | 37 | 17 | 8.6 | 4.7 | 3.8 |
| 25 | 4.2 | 4.9 | 30 | 390 | 184 | 64 | 278 | 35 | 17 | 8.6 | 4.7 | 3.8 |
| 26 | 3.5 | 4.2 | 29 | 290 | 166 | 57 | 217 | 33 | 16 | 8.6 | 4.7 | 3.8 |
| 27 | 3.1 | 4.2 | 26 | 336 | 193 | 51 | 113 | 33 | 16 | 8.6 | 4.7 | 3.5 |
| 28 | 3.0 | 4.6 | 27 | 207 | 169 | 48 | 83 | 30 | 15 | 8.6 | 4.7 | 3.4 |
| 29 | 3.0 | 18 | 24 | 148 | --- | 44 | 67 | 25 | 15 | 8.6 | 4.7 | 3.4 |
| 30 | 2.4 | 20 | 25 | 115 | --- | 44 | 60 | 25 | 15 | 8.6 | 4.7 | 3.4 |
| 31 | 2.4 | --- | 31 | 98 | --- | 43 | --- | 25 | --- | 8.6 | 4.7 | --- |
| TOTAL | 149.1 | 138.6 | 4948 | 5047 | 7094 | 2230 | 1765 | 1374 | 668 | 327.9 | 180.7 | 132.5 |
| MEAN | 4.81 | 4.62 | 160 | 163 | 253 | 71.9 | 58.8 | 44.3 | 22.3 | 10.6 | 5.83 | 4.42 |
| MAX | 11 | 20 | 1490 | 1020 | 784 | 143 | 278 | 102 | 46 | 15 | 7.9 | 6.8 |
| MIN | 2.4 | 2.4 | 15 | 44 | 59 | 43 | 26 | 25 | 15 | 8.6 | 4.7 | 3.4 |
| AC-FT | 296 | 275 | 9810 | 10010 | 14070 | 4420 | 3500 | 2730 | 1320 | 650 | 358 | 263 |

LITTLE RIVER BASIN

11481200 LITTLE RIVER NEAR TRINIDAD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 29.1 | 165 | 303 | 320 | 285 | 260 | 137 | 73.6 | 32.8 | 12.8 | 8.16 | 7.92 |
| MAX | 202 | 849 | 1083 | 1145 | 816 | 819 | 521 | 271 | 167 | 31.4 | 23.3 | 28.4 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1986 | 1975 | 1963 | 1960 | 1993 | 1983 | 1983 | 1986 |
| MIN | 4.70 | 4.62 | 7.45 | 28.2 | 19.7 | 35.5 | 22.1 | 21.9 | 12.2 | 6.12 | 3.59 | 3.89 |
| (WY) | 1988 | 1994 | 1977 | 1977 | 1977 | 1988 | 1977 | 1987 | 1966 | 1959 | 1959 | 1987 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | FOR 1994 WATER YEAR | | WATER YEARS 1956 - 1994 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 57683.0 | | 24054.8 | | | |
| ANNUAL MEAN | 158 | | 65.9 | | | |
| HIGHEST ANNUAL MEAN | | | | | 136 | |
| LOWEST ANNUAL MEAN | | | | | 240 | 1974 |
| HIGHEST DAILY MEAN | 1650 | Mar 18 | 1490 | Dec 8 | 23.8 | 1977 |
| LOWEST DAILY MEAN | 2.4 | Oct 30 | 2.4 | Oct 30 | 7860 | Mar 18 1975 |
| ANNUAL SEVEN-DAY MINIMUM | 2.4 | Oct 30 | 2.4 | Oct 30 | 1.8 | Sep 25 1991 |
| INSTANTANEOUS PEAK FLOW | | | 2330 | Dec 8 | 1.9 | Sep 24 1991 |
| INSTANTANEOUS PEAK STAGE | | | 6.62 | Dec 8 | 9830 | Mar 18 1975 |
| ANNUAL RUNOFF (AC-FT) | 114400 | | 47710 | | 14.19 | Mar 18 1975 |
| 10 PERCENT EXCEEDS | 434 | | 150 | | 98230 | |
| 50 PERCENT EXCEEDS | 63 | | 25 | | 353 | |
| 90 PERCENT EXCEEDS | 4.2 | | 3.8 | | 34 | |
| | | | | | 5.8 | |

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, 1987, to Aug. 3, 1987, nonrecording gage at same site and datum.

REMARKS.--Records good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,500 ft³/s, Dec. 22, 1964, gage height, 24.0 ft, former site, from outside high-water marks; 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|------|------|--------------------------------|------------------|
| Dec. 8 | 1345 | *7,890 | *17.54 | | | | |

Minimum daily, 8.2 ft³/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 23 | 26 | 208 | 455 | 691 | 1700 | 421 | 464 | 217 | 97 | 35 | 15 |
| 2 | 22 | 25 | 349 | 643 | 630 | 1560 | 402 | 426 | 208 | 94 | 34 | 15 |
| 3 | 22 | 24 | 209 | 516 | 589 | 1430 | 388 | 395 | 197 | 90 | 34 | 15 |
| 4 | 22 | 24 | 315 | 677 | 548 | 1290 | 373 | 426 | 228 | 84 | 33 | 15 |
| 5 | 22 | 24 | 262 | 1310 | 509 | 1190 | 355 | 448 | 220 | 81 | 33 | 15 |
| 6 | 22 | 23 | 181 | 1180 | 511 | 1110 | 361 | 455 | 304 | 80 | 32 | 14 |
| 7 | 23 | 23 | 765 | 852 | 701 | 974 | 392 | 450 | 311 | 76 | 30 | 15 |
| 8 | 24 | 23 | 6400 | 1080 | 843 | 876 | 414 | 409 | 244 | 72 | 28 | 14 |
| 9 | 23 | 23 | 2250 | 1900 | 634 | 808 | 660 | 376 | 218 | 69 | 27 | 16 |
| 10 | 23 | 23 | 1010 | 1400 | 1280 | 773 | 693 | 349 | 200 | 65 | 26 | 17 |
| 11 | 40 | 23 | 2240 | 1120 | 1620 | 818 | 573 | 323 | 187 | 62 | 26 | 16 |
| 12 | 54 | 26 | 2310 | 912 | 1130 | 744 | 503 | 310 | 176 | 60 | 25 | 16 |
| 13 | 48 | 27 | 1430 | 756 | 911 | 675 | 460 | 296 | 172 | 60 | 25 | 16 |
| 14 | 41 | 26 | 2470 | 663 | 836 | 625 | 427 | 277 | 173 | 58 | 24 | 15 |
| 15 | 40 | 32 | 1770 | 593 | e829 | 597 | 399 | 338 | 163 | 56 | 23 | 13 |
| 16 | 46 | 29 | 1220 | 535 | e764 | 617 | 373 | 707 | 155 | 56 | 22 | 13 |
| 17 | 44 | 27 | 903 | 493 | e3280 | 585 | 356 | 684 | 150 | 54 | 21 | 13 |
| 18 | 45 | 32 | 719 | 452 | e3780 | 563 | 337 | 541 | 149 | 49 | 20 | 12 |
| 19 | 41 | 30 | 602 | 423 | 2900 | 575 | 325 | 470 | 146 | 46 | 19 | 12 |
| 20 | 38 | 28 | 522 | 398 | 2490 | 515 | 312 | 431 | 138 | 43 | 19 | 12 |
| 21 | 37 | 27 | 468 | 404 | 3320 | 603 | 301 | 397 | 133 | 39 | 19 | 11 |
| 22 | 36 | 45 | 423 | 442 | 2920 | 664 | 287 | 367 | 132 | 42 | 18 | 10 |
| 23 | 35 | 51 | 393 | 1870 | 2310 | 685 | 293 | 341 | 131 | 42 | 17 | 10 |
| 24 | 34 | 43 | 366 | 4720 | 1990 | 651 | 367 | 321 | 122 | 44 | 17 | 10 |
| 25 | 33 | 40 | 344 | 2540 | 1840 | 609 | 726 | 304 | 108 | 43 | 17 | 9.9 |
| 26 | 32 | 36 | 332 | 1730 | 1710 | 566 | 1030 | 291 | 112 | 41 | 16 | 9.6 |
| 27 | 30 | 33 | 315 | 1580 | 1980 | 534 | 709 | 279 | 110 | 40 | 16 | 9.3 |
| 28 | 28 | 39 | 303 | 1250 | 1920 | 513 | 602 | 261 | 105 | 39 | 15 | 8.6 |
| 29 | 28 | 220 | 291 | 1020 | --- | 484 | 541 | 247 | 100 | 38 | 15 | 8.6 |
| 30 | 27 | 187 | 298 | 869 | --- | 466 | 505 | 235 | 97 | 37 | 15 | 8.2 |
| 31 | 26 | --- | 329 | 774 | --- | 449 | --- | 226 | --- | 35 | 15 | --- |
| TOTAL | 1009 | 1239 | 29997 | 33557 | 43466 | 24249 | 13885 | 11844 | 5106 | 1792 | 716 | 384.2 |
| MEAN | 32.5 | 41.3 | 968 | 1082 | 1552 | 782 | 463 | 382 | 170 | 57.8 | 23.1 | 12.8 |
| MAX | 54 | 220 | 6400 | 4720 | 3780 | 1700 | 1030 | 707 | 311 | 97 | 35 | 17 |
| MIN | 22 | 23 | 181 | 398 | 509 | 449 | 287 | 226 | 97 | 35 | 15 | 8.2 |
| AC-FT | 2000 | 2460 | 59500 | 66560 | 86210 | 48100 | 27540 | 23490 | 10130 | 3550 | 1420 | 762 |

e Estimated.

REDWOOD CREEK BASIN

11482500 REDWOOD CREEK AT ORICK, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 165 | 1098 | 2075 | 2382 | 2162 | 1936 | 1202 | 621 | 257 | 85.8 | 42.2 | 39.9 |
| MAX | 1559 | 5219 | 8981 | 6041 | 6320 | 5565 | 4026 | 1732 | 1213 | 194 | 91.6 | 149 |
| (WY) | 1963 | 1974 | 1965 | 1956 | 1986 | 1975 | 1963 | 1912 | 1993 | 1993 | 1968 | 1986 |
| MIN | 2.91 | 35.3 | 42.1 | 180 | 190 | 297 | 251 | 188 | 77.3 | 35.7 | 9.89 | 4.44 |
| (WY) | 1988 | 1960 | 1977 | 1977 | 1977 | 1988 | 1988 | 1987 | 1987 | 1987 | 1992 | 1992 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1911 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 414683 | | | | 167244.2 | | | | | | | |
| ANNUAL MEAN | 1136 | | | | 458 | | | | 1001 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 1726 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 192 | | | |
| HIGHEST DAILY MEAN | 10100 | | | | 6400 | | | | 43200 | | | |
| LOWEST DAILY MEAN | 22 | | | | 8.2 | | | | 2.1 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 22 | | | | 9.2 | | | | 2.2 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 7890 | | | | 50500 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 17.54 | | | | 24.00 | | | |
| ANNUAL RUNOFF (AC-FT) | 822500 | | | | 331700 | | | | 724900 | | | |
| 10 PERCENT EXCEEDS | 2770 | | | | 1180 | | | | 2690 | | | |
| 50 PERCENT EXCEEDS | 682 | | | | 226 | | | | 300 | | | |
| 90 PERCENT EXCEEDS | 28 | | | | 17 | | | | 26 | | | |

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 to current year.

SEDIMENT DATA: Water years 1955-56, 1970 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1965 to September 1981, October 1981 to September 1992 (storm season only).

SUSPENDED-SEDIMENT DISCHARGE: March 1970 to September 1981, October 1981 to September 1992 (storm season only).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 9,610 mg/L, Mar. 18, 1975; minimum daily mean, 0 mg/L,

Nov. 10-12, 1986, Apr. 20, 29, 30, 1987, several days during 1989-90, many days during 1991.

SEDIMENT LOAD: Maximum daily, 1,070,000 tons, Mar. 18, 1975; minimum daily, 0 tons, Nov. 10-12, 1986,

Apr. 20, 29, 30, 1987, several days during 1989-90, many days during 1991.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| | | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDED (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) | SED. SUSP. FALL DIAM. % FINER THAN .002 MM | SED. SUSP. FALL DIAM. % FINER THAN .004 MM | SED. SUSP. FALL DIAM. % FINER THAN .008 MM | |
|--------------|------|--|--|--|--|--|--|--|--|
| JAN 24... | TIME | 5730 | 8.0 | 858 | 13300 | 21 | 27 | 40 | |
| DATE | TIME | SED. SUSP. FALL DIAM. % FINER THAN .016 MM | SED. SUSP. FALL DIAM. % FINER THAN .031 MM | SED. SUSP. FALL DIAM. % FINER THAN .062 MM | SED. SUSP. FALL DIAM. % FINER THAN .125 MM | SED. SUSP. FALL DIAM. % FINER THAN .250 MM | SED. SUSP. FALL DIAM. % FINER THAN .500 MM | SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM | SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM |
| JAN 24... | 54 | 65 | 73 | 80 | 90 | 94 | 97 | 100 | |

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | SAM- PLING METHOD, CODES | SAMPLER TYPE (CODE) | BAG MESH SIZE BEDLOAD SAMPLER (MM) | TETHER LINE USED IN SAMPLING (YES=1) (CODE) | START- ING TIME (2400 (HOURS) | END- ING TIME (2400 (HOURS) | TIME ON BED FOR BED LOAD SAMPLE (SEC) | HORI- ZONTAL WIDTH OF VER- TICAL (FEET) |
|--------------|------|---|---|---|---|---|---|---|---|
| JAN 24... | 1335 | 1000 | 1100 | 0.250 | 0 | 1320 | 1350 | 10 | 8.0 |
| JAN 24... | 1405 | 1000 | 1100 | 0.250 | 0 | 1355 | 1415 | 10 | 8.0 |
| DATE | TIME | COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (NUM) | VER- TICALS IN COM- POSITE SAMPLE (NUM) | NUMBER OF SAM- PLING POINTS (COUNT) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | DIS- CHARGE, INST. CUBIC FEET PER SECOND (DEG C) | DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT | SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) | SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM |
| JAN 24... | 2 | 21 | 21 | 4.0 | 5480 | 8.0 | 18.8 | 2630 | 1 |
| JAN 24... | 2 | 21 | 21 | 4.0 | 5300 | 8.0 | 12.5 | 2630 | 2 |
| DATE | TIME | SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM |
| JAN 24... | 3 | 6 | 19 | 38 | 60 | 82 | 98 | 100 | |
| JAN 24... | 5 | 9 | 16 | 30 | 51 | 75 | 94 | 100 | |

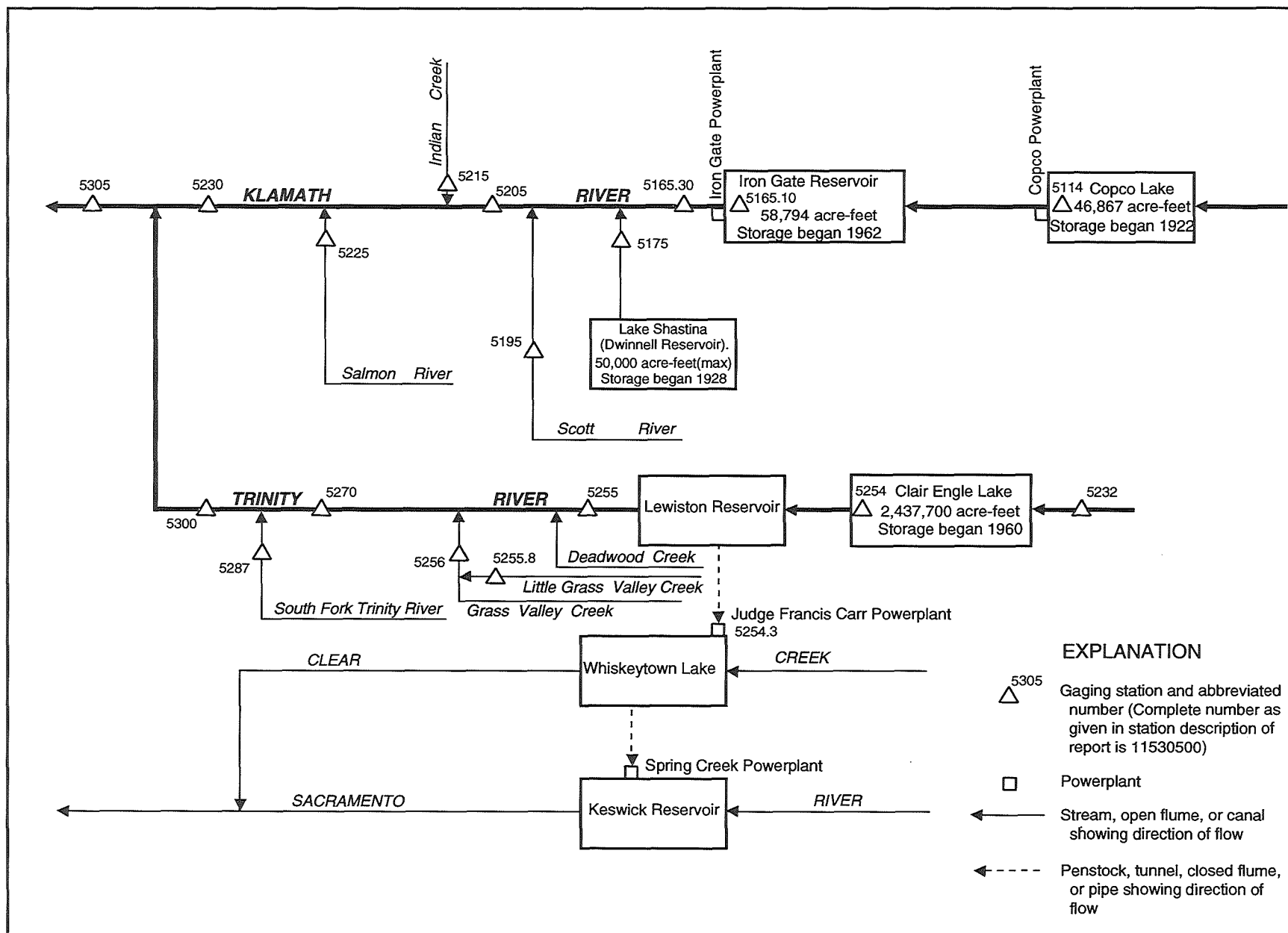


Figure 26. Diversions and storage in Klamath River and Trinity River basins.

RESERVOIRS IN KLAMATH RIVER BASIN, CA

11511400 COPCO LAKE NEAR COPCO.--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, 46,750 acre-ft, May 9, elevation, 2,607.38 ft; minimum, 41,453 acre-ft, Jan. 2, elevation, 2,601.88 ft.

11516510 IRON GATE RESERVOIR NEAR HORNBOOK.--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, 61,776 acre-ft, Mar. 3, 1972, elevation, 2,330.96 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, 59,645 acre-ft, Oct. 28, elevation, 2,328.86 ft; minimum, 54,258 acre-ft, Mar. 30, elevation, 2,323.18 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| Date | Elevation (feet) | Contents (acre-feet) | Change in contents (acre-feet) | Elevation (feet) | Contents (acre-feet) | Change in contents (acre-feet) |
|---------------------|---------------------|-------------------------|--------------------------------------|------------------------------|-------------------------|--------------------------------------|
| 11511400 COPCO LAKE | | | | 11516510 IRON GATE RESERVOIR | | |
| Sept. 30..... | 2,604.15 | 43,602 | -- | 2,324.48 | 55,448 | -- |
| Oct. 31..... | 2,604.05 | 43,506 | -96 | 2,327.71 | 58,512 | +3,064 |
| Nov. 30..... | 2,603.40 | 42,887 | -619 | 2,326.26 | 57,115 | -1,397 |
| Dec. 31..... | 2,602.05 | 41,612 | -1,275 | 2,325.04 | 55,966 | -1,149 |
| CAL YR 1993..... | -- | -- | -914 | -- | -- | +1,026 |
| Jan. 31..... | 2,604.05 | 43,506 | +1,894 | 2,323.80 | 54,822 | -1,144 |
| Feb. 29..... | 2,603.55 | 43,030 | -476 | 2,324.16 | 55,151 | +329 |
| Mar. 31..... | 2,605.30 | 44,710 | +1,680 | 2,323.74 | 54,767 | -384 |
| Apr. 30..... | 2,606.15 | 45,537 | +827 | 2,326.65 | 57,488 | +2,721 |
| May 31..... | 2,605.90 | 45,293 | -244 | 2,326.42 | 57,268 | -220 |
| June 30..... | 2,606.20 | 45,586 | +293 | 2,327.12 | 57,938 | +670 |
| July 31..... | 2,606.85 | 46,225 | +639 | 2,325.44 | 56,342 | -1,596 |
| Aug. 31..... | 2,604.30 | 43,746 | -2,479 | 2,326.10 | 56,962 | +620 |
| Sept. 30..... | 2,603.80 | 43,268 | -478 | 2,324.66 | 55,613 | -1,349 |
| WTR YR 1994..... | -- | -- | -334 | -- | -- | +165 |

KLAMATH RIVER BASIN

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).

PERIOD OF RECORD.--October 1960 to current year.

CHEMICAL DATA: Water years 1962-81.

WATER TEMPERATURE: Water years 1963-80.

GAGE.--Water-stage recorder. Datum of gage is 2,162.44 ft above sea level (levels by PacifiCorp, formerly Pacific Power & Light Co.).

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Upper Klamath Lake, capacity, 523,700 acre-ft; Iron Gate Reservoir (station 11516510), other smaller reservoirs, and diversions upstream from station. See schematic diagram of Klamath River and Trinity River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,150 ft³/s, Nov. 1, gage height, 4.39 ft; minimum daily, 541 ft³/s, May 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1370 | 1780 | 1390 | 1380 | 684 | 861 | 568 | 572 | 578 | 570 | 576 | 901 |
| 2 | 1380 | 1420 | 1390 | 1380 | 692 | 861 | 568 | 570 | 575 | 569 | 576 | 903 |
| 3 | 1370 | 1400 | 1390 | 1380 | 714 | 842 | 565 | 571 | 574 | 570 | 576 | 900 |
| 4 | 1370 | 1390 | 1390 | 1380 | 773 | 791 | 564 | 573 | 573 | 567 | 577 | 898 |
| 5 | 1370 | 1400 | 1390 | 1380 | 775 | 759 | 566 | 567 | 604 | 570 | 575 | 900 |
| 6 | 1380 | 1400 | 1390 | 1380 | 775 | 758 | 569 | 565 | 1180 | 572 | 576 | 893 |
| 7 | 1380 | 1410 | 1390 | 1380 | 764 | 737 | 568 | 541 | 1180 | 572 | 578 | 899 |
| 8 | 1380 | 1410 | 1390 | 1380 | 740 | 707 | 569 | 555 | 1030 | 572 | 578 | 896 |
| 9 | 1360 | 1410 | 1380 | 1380 | 702 | 707 | 569 | 1140 | 834 | 574 | 577 | 900 |
| 10 | 1370 | 1410 | 1380 | 1380 | 615 | 707 | 568 | 1190 | 630 | 575 | 577 | 905 |
| 11 | 1370 | 1400 | 1390 | 1380 | 576 | 669 | 568 | 1080 | 566 | 575 | 579 | 905 |
| 12 | 1360 | 1420 | 1390 | 1380 | 575 | 572 | 574 | 881 | 573 | 577 | 580 | 904 |
| 13 | 1360 | 1420 | 1390 | 1380 | 575 | 572 | 574 | 796 | 558 | 575 | 581 | 909 |
| 14 | 1370 | 1400 | 1390 | 1380 | 588 | 572 | 572 | 756 | 563 | 572 | 580 | 909 |
| 15 | 1370 | 1460 | 1390 | 1380 | 616 | 572 | 572 | 759 | 566 | 572 | 581 | 906 |
| 16 | 1380 | 1390 | 1390 | 1380 | 633 | 573 | 573 | 702 | 804 | 572 | 582 | 905 |
| 17 | 1380 | 1400 | 1390 | 1380 | 679 | 572 | 573 | 567 | 1180 | 571 | 578 | 905 |
| 18 | 1370 | 1400 | 1390 | 1310 | 703 | 572 | 576 | 562 | 1160 | 570 | 576 | 904 |
| 19 | 1370 | 1400 | 1390 | 956 | 756 | 572 | 576 | 569 | 947 | 567 | 576 | 904 |
| 20 | 1370 | 1400 | 1390 | 873 | 786 | 573 | 576 | 575 | 760 | 569 | 577 | 903 |
| 21 | 1370 | 1390 | 1390 | 873 | 787 | 573 | 576 | 587 | 586 | 574 | 577 | 905 |
| 22 | 1370 | 1390 | 1390 | 890 | 808 | 574 | 576 | 623 | 564 | 577 | 580 | 908 |
| 23 | 1380 | 1390 | 1390 | 901 | 849 | 575 | 576 | 1180 | 564 | 578 | 579 | 911 |
| 24 | 1380 | 1390 | 1380 | 906 | 851 | 576 | 576 | 1190 | 568 | 580 | 577 | 912 |
| 25 | 1380 | 1390 | 1380 | 881 | 851 | 574 | 576 | 1070 | 568 | 579 | 576 | 916 |
| 26 | 1370 | 1390 | 1380 | 700 | 851 | 574 | 575 | 857 | 569 | 577 | 758 | 917 |
| 27 | 1380 | 1390 | 1380 | 598 | 858 | 572 | 574 | 654 | 569 | 579 | 904 | 914 |
| 28 | 1380 | 1390 | 1380 | 612 | 861 | 572 | 571 | 571 | 566 | 578 | 905 | 912 |
| 29 | 1380 | 1390 | 1380 | 646 | --- | 570 | 571 | 572 | 564 | 576 | 905 | 916 |
| 30 | 1390 | 1390 | 1380 | 647 | --- | 567 | 572 | 571 | 567 | 576 | 904 | 918 |
| 31 | 1420 | --- | 1380 | 677 | --- | 568 | --- | 574 | --- | 578 | 900 | --- |
| TOTAL | 42630 | 42420 | 42990 | 34930 | 20437 | 19844 | 17151 | 22540 | 21120 | 17783 | 19721 | 27178 |
| MEAN | 1375 | 1414 | 1387 | 1127 | 730 | 640 | 572 | 727 | 704 | 574 | 636 | 906 |
| MAX | 1420 | 1780 | 1390 | 1380 | 861 | 861 | 576 | 1190 | 1180 | 580 | 905 | 918 |
| MIN | 1360 | 1390 | 1380 | 598 | 575 | 567 | 564 | 541 | 558 | 567 | 575 | 893 |
| AC-FT | 84560 | 84140 | 85270 | 69280 | 40540 | 39360 | 34020 | 44710 | 41890 | 35270 | 39120 | 53910 |

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| MEAN | 1695 | 2202 | 2829 | 2842 | 2923 | 3535 | 2951 | 1974 | 1035 | 750 | 965 | 1301 |
| MAX | 3353 | 5254 | 6735 | 9489 | 9150 | 10780 | 6922 | 4973 | 2591 | 1429 | 1208 | 2052 |
| (WY) | 1985 | 1985 | 1984 | 1965 | 1965 | 1972 | 1971 | 1971 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1961 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 746935 | | | | 328744 | | | | | | | |
| ANNUAL MEAN | 2046 | | | | 901 | | | | 2080 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 3657 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 641 | | | |
| HIGHEST DAILY MEAN | 10800 | | | | Mar 24 | | | | 25000 | | | |
| LOWEST DAILY MEAN | 672 | | | | Jul 29 | | | | 389 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 673 | | | | Jul 24 | | | | 390 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 2150 | | | | 29400 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 4.39 | | | | 13.63 | | | |
| INSTANTANEOUS LOW FLOW | | | | | | | | | 389 | | | |
| ANNUAL RUNOFF (AC-FT) | 1482000 | | | | 652100 | | | | 1507000 | | | |
| 10 PERCENT EXCEEDS | 5690 | | | | 1390 | | | | 3950 | | | |
| 50 PERCENT EXCEEDS | 1370 | | | | 775 | | | | 1400 | | | |
| 90 PERCENT EXCEEDS | 779 | | | | 569 | | | | 729 | | | |

KLAMATH RIVER BASIN

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.--No estimated daily discharges. Records good, except those for summer months, which are fair. Low flow completely regulated by Lake Shastina (formerly Lake Dwinnell) beginning in 1928; storage limited to 50,000 acre-ft. Small powerplant, 5.6 miles upstream, has operated intermittently since summer of 1987. Many diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,500 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|
| May 7 | 0730 | *218 | *3.58 |

Minimum daily, 9.6 ft³/s, July 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|------|------|------|------|------|-------|------|------|
| 1 | 124 | 158 | 166 | 178 | 168 | 174 | 120 | 56 | 55 | 24 | 17 | 16 |
| 2 | 119 | 157 | 171 | 185 | 166 | 173 | 51 | 53 | 66 | 34 | 17 | 18 |
| 3 | 107 | 157 | 170 | 179 | 165 | 153 | 49 | 42 | 60 | 33 | 15 | 20 |
| 4 | 106 | 159 | 174 | 178 | 165 | 149 | 43 | 51 | 34 | 16 | 14 | 27 |
| 5 | 108 | 158 | 169 | 179 | 166 | 151 | 38 | 76 | 26 | 23 | 13 | 26 |
| 6 | 121 | 158 | 164 | 175 | 167 | 147 | 35 | 154 | 25 | 25 | 13 | 20 |
| 7 | 145 | 160 | 168 | 173 | 174 | 144 | 40 | 194 | 25 | 21 | 12 | 14 |
| 8 | 132 | 160 | 188 | 179 | 189 | 144 | 58 | 175 | 27 | 18 | 12 | 17 |
| 9 | 124 | 160 | 179 | 182 | 183 | 142 | 59 | 128 | 22 | 16 | 14 | 19 |
| 10 | 131 | 160 | 174 | 176 | 188 | 144 | 45 | 92 | 35 | 14 | 15 | 14 |
| 11 | 138 | 159 | 173 | 174 | 199 | 151 | 48 | 81 | 25 | 12 | 14 | 13 |
| 12 | 142 | 160 | 189 | 174 | 194 | 148 | 41 | 69 | 22 | 13 | 12 | 26 |
| 13 | 141 | 158 | 184 | 173 | 191 | 150 | 30 | 69 | 30 | 11 | 15 | 26 |
| 14 | 141 | 157 | 180 | 174 | 187 | 149 | 27 | 55 | 23 | 9.6 | 16 | 28 |
| 15 | 147 | 158 | 176 | 171 | 182 | 151 | 33 | 47 | 24 | 15 | 12 | 31 |
| 16 | 150 | 157 | 169 | 172 | 175 | 152 | 47 | 56 | 24 | 14 | 11 | 27 |
| 17 | 158 | 159 | 169 | 174 | 177 | 157 | 46 | 59 | 24 | 16 | 12 | 30 |
| 18 | 166 | 160 | 169 | 172 | 195 | 155 | 44 | 54 | 23 | 15 | 12 | 28 |
| 19 | 162 | 158 | 173 | 168 | 202 | 152 | 41 | 52 | 24 | 14 | 11 | 29 |
| 20 | 162 | 161 | 170 | 167 | 183 | 147 | 31 | 74 | 26 | 16 | 11 | 31 |
| 21 | 161 | 172 | 168 | 168 | 178 | 144 | 27 | 86 | 21 | 15 | 14 | 31 |
| 22 | 163 | 173 | 165 | 167 | 176 | 137 | 44 | 99 | 30 | 16 | 13 | 35 |
| 23 | 162 | 167 | 164 | 168 | 174 | 135 | 46 | 89 | 25 | 16 | 16 | 32 |
| 24 | 160 | 161 | 163 | 172 | 174 | 129 | 77 | 88 | 20 | 16 | 20 | 46 |
| 25 | 164 | 159 | 163 | 180 | 174 | 123 | 79 | 88 | 27 | 14 | 14 | 43 |
| 26 | 160 | 157 | 166 | 184 | 176 | 118 | 89 | 52 | 25 | 13 | 15 | 35 |
| 27 | 159 | 159 | 168 | 175 | 179 | 119 | 74 | 57 | 31 | 12 | 17 | 45 |
| 28 | 160 | 161 | 167 | 172 | 175 | 118 | 60 | 58 | 32 | 12 | 14 | 53 |
| 29 | 160 | 165 | 168 | 171 | --- | 109 | 54 | 59 | 29 | 15 | 14 | 66 |
| 30 | 158 | 168 | 170 | 170 | --- | 118 | 60 | 56 | 28 | 16 | 14 | 54 |
| 31 | 158 | --- | 171 | 168 | --- | 134 | --- | 55 | --- | 19 | 17 | --- |
| TOTAL | 4489 | 4816 | 5308 | 5398 | 5022 | 4417 | 1536 | 2424 | 888 | 523.6 | 436 | 900 |
| MEAN | 145 | 161 | 171 | 174 | 179 | 142 | 51.2 | 78.2 | 29.6 | 16.9 | 14.1 | 30.0 |
| MAX | 166 | 173 | 189 | 185 | 202 | 174 | 120 | 194 | 66 | 34 | 20 | 66 |
| MIN | 106 | 157 | 163 | 167 | 165 | 109 | 27 | 42 | 20 | 9.6 | 11 | 13 |
| AC-FT | 8900 | 9550 | 10530 | 10710 | 9960 | 8760 | 3050 | 4810 | 1760 | 1040 | 865 | 1790 |

KLAMATH RIVER BASIN

311

11517500 SHASTA RIVER NEAR YREKA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 152 | 196 | 279 | 322 | 334 | 305 | 199 | 129 | 95.9 | 40.9 | 37.9 | 74.7 |
| MAX | 351 | 361 | 1223 | 1179 | 1002 | 946 | 753 | 363 | 296 | 136 | 111 | 182 |
| (WY) | 1963 | 1985 | 1965 | 1974 | 1958 | 1983 | 1974 | 1941 | 1958 | 1982 | 1941 | 1978 |
| MIN | 90.7 | 117 | 120 | 110 | 133 | 97.7 | 31.8 | 24.5 | 17.9 | 10.1 | 8.35 | 26.7 |
| (WY) | 1989 | 1937 | 1937 | 1937 | 1934 | 1977 | 1992 | 1992 | 1955 | 1960 | 1939 | 1981 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1934 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 54179 | | | | 36157.6 | | | | | | | |
| ANNUAL MEAN | 148 | | | | 99.1 | | | | 180 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 364 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 77.9 | | | |
| HIGHEST DAILY MEAN | 1080 | | | | 202 | | | | 10400 | | | |
| LOWEST DAILY MEAN | 20 | | | | 9.6 | | | | 1.5 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 27 | | | | 12 | | | | 5.5 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 218 | | | | 21500 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 3.58 | | | | 12.92 | | | |
| ANNUAL RUNOFF (AC-FT) | 107500 | | | | 71720 | | | | 130400 | | | |
| 10 PERCENT EXCEEDS | 251 | | | | 175 | | | | 336 | | | |
| 50 PERCENT EXCEEDS | 158 | | | | 118 | | | | 151 | | | |
| 90 PERCENT EXCEEDS | 38 | | | | 15 | | | | 24 | | | |

KLAMATH RIVER BASIN

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.--No estimated daily discharges. 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, 4.1 ft³/s, Sept. 20, 1994.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|
| May 8 | 1415 | *861 | *7.06 |

Minimum daily, 4.1 ft³/s, Sept. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|
| 1 | 50 | 72 | 93 | 123 | 230 | 271 | 270 | 287 | 260 | 20 | 7.7 | 4.5 |
| 2 | 50 | 72 | 98 | 134 | 216 | 314 | 252 | 288 | 244 | 19 | 7.5 | 4.3 |
| 3 | 49 | 72 | 105 | 144 | 208 | 391 | 252 | 285 | 231 | 19 | 7.3 | 4.3 |
| 4 | 48 | 72 | 109 | 163 | 202 | 439 | 269 | 305 | 216 | 18 | 6.9 | 4.6 |
| 5 | 49 | 72 | 109 | 214 | 196 | 458 | 261 | 386 | 196 | 16 | 7.1 | 4.5 |
| 6 | 53 | 72 | 108 | 214 | 192 | 448 | 251 | 555 | 190 | 16 | 6.8 | 4.4 |
| 7 | 55 | 72 | 112 | 190 | 199 | 411 | 234 | 728 | 191 | 15 | 6.6 | 4.5 |
| 8 | 55 | 72 | 180 | 188 | 207 | 378 | 228 | 829 | 187 | 15 | 6.4 | 4.4 |
| 9 | 55 | 72 | 227 | 199 | 203 | 361 | 225 | 799 | 170 | 14 | 6.6 | 4.5 |
| 10 | 55 | 72 | 197 | 193 | 205 | 363 | 211 | 787 | 150 | 14 | 6.6 | 4.3 |
| 11 | 55 | 72 | 281 | 181 | 221 | 385 | 202 | 756 | 135 | 14 | 6.7 | 4.4 |
| 12 | 55 | 72 | 354 | 171 | 214 | 372 | 196 | 707 | 120 | 14 | 6.6 | 4.3 |
| 13 | 56 | 74 | 266 | 163 | 207 | 357 | 195 | 607 | 116 | 14 | 6.4 | 4.4 |
| 14 | 59 | 74 | 222 | 158 | 202 | 359 | 192 | 523 | 108 | 13 | 6.2 | 4.5 |
| 15 | 61 | 74 | 194 | 154 | 198 | 380 | 198 | 469 | 102 | 13 | 6.5 | 4.6 |
| 16 | 62 | 74 | 177 | 151 | 195 | 402 | 217 | 461 | 94 | 12 | 6.3 | 4.4 |
| 17 | 62 | 74 | 163 | 148 | 245 | 416 | 331 | 434 | 83 | 12 | 5.7 | 4.2 |
| 18 | 62 | 78 | 155 | 147 | 357 | 397 | 453 | 397 | 80 | 12 | 5.5 | 4.2 |
| 19 | 63 | 78 | 148 | 145 | 310 | 369 | 533 | 368 | 78 | 11 | 5.2 | 4.2 |
| 20 | 65 | 78 | 138 | 143 | 275 | 353 | 597 | 355 | 75 | 11 | 5.1 | 4.1 |
| 21 | 69 | 78 | 130 | 145 | 263 | 333 | 576 | 354 | 65 | 11 | 4.7 | 4.4 |
| 22 | 70 | 80 | 128 | 188 | 254 | 319 | 520 | 387 | 57 | 11 | 4.5 | 5.0 |
| 23 | 70 | 80 | 126 | 476 | 244 | 313 | 454 | 379 | 50 | 11 | 4.9 | 5.3 |
| 24 | 70 | 80 | 123 | 723 | 237 | 300 | 420 | 357 | 45 | 10 | 4.5 | 6.1 |
| 25 | 70 | 80 | 122 | 564 | 232 | 289 | 399 | 343 | 38 | 9.7 | 4.5 | 5.3 |
| 26 | 70 | 79 | 122 | 431 | 237 | 272 | 376 | 372 | 33 | 9.6 | 4.8 | 5.9 |
| 27 | 70 | 78 | 118 | 361 | 245 | 261 | 343 | 369 | 29 | 9.6 | 4.8 | 5.8 |
| 28 | 70 | 78 | 118 | 318 | 260 | 252 | 309 | 342 | 26 | 9.1 | 4.8 | 6.4 |
| 29 | 71 | 82 | 118 | 283 | --- | 235 | 289 | 319 | 23 | 8.8 | 4.3 | 5.8 |
| 30 | 75 | 86 | 118 | 263 | --- | 247 | 289 | 294 | 21 | 8.3 | 4.5 | 4.9 |
| 31 | 73 | --- | 120 | 248 | --- | 271 | --- | 275 | --- | 8.0 | 4.4 | --- |
| TOTAL | 1897 | 2269 | 4779 | 7323 | 6454 | 10716 | 9542 | 14117 | 3413 | 398.1 | 180.4 | 142.5 |
| MEAN | 61.2 | 75.6 | 154 | 236 | 230 | 346 | 318 | 455 | 114 | 12.8 | 5.82 | 4.75 |
| MAX | 75 | 86 | 354 | 723 | 357 | 458 | 597 | 829 | 260 | 20 | 7.7 | 6.4 |
| MIN | 48 | 72 | 93 | 123 | 192 | 235 | 192 | 275 | 21 | 8.0 | 4.3 | 4.1 |
| AC-FT | 3760 | 4500 | 9480 | 14530 | 12800 | 21260 | 18930 | 28000 | 6770 | 790 | 358 | 283 |

11519500 SCOTT RIVER NEAR FORT JONES, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 115 | 336 | 805 | 1007 | 1114 | 997 | 1004 | 1126 | 700 | 180 | 65.0 | 55.9 |
| 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 | 17.6 | 38.1 | 62.2 | 80.9 | 99.0 | 83.3 | 55.1 | 121 | 78.0 | 12.8 | 5.82 | 4.75 |
| (WY) | 1978 | 1988 | 1960 | 1977 | 1977 | 1977 | 1977 | 1977 | 1992 | 1994 | 1994 | 1994 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1942 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 251416 | | | | 61231.0 | | | | 623 | | | |
| ANNUAL MEAN | 689 | | | | 168 | | | | 1496 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 74.9 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 1974 | | | |
| HIGHEST DAILY MEAN | 6200 | | | | Mar 18 | | | | 39500 | | | |
| LOWEST DAILY MEAN | 40 | | | | Aug 15 | | | | 4.1 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 41 | | | | Aug 13 | | | | 4.3 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 861 | | | | May 8 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 7.06 | | | | May 8 | | | |
| ANNUAL RUNOFF (AC-FT) | 498700 | | | | 121500 | | | | 451300 | | | |
| 10 PERCENT EXCEEDS | 1790 | | | | 382 | | | | 1500 | | | |
| 50 PERCENT EXCEEDS | 194 | | | | 120 | | | | 301 | | | |
| 90 PERCENT EXCEEDS | 49 | | | | 5.3 | | | | 47 | | | |

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).

PERIOD OF RECORD.--October 1912 to September 1925, July 1951 to current year. Monthly discharges only for some periods, published in WSP 1315-B.

CHEMICAL DATA: Water years 1959-66.

WATER TEMPERATURE: Water years 1964-79.

SEDIMENT DATA: Water years 1955-56.

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.--No estimated daily discharges. 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|
| Dec. 8 | 1415 | *2,970 | *4.53 |

Minimum daily, 595 ft³/s, Aug. 18, 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|-------|-------|-------|--------|-------|-------|-------|-------|
| 1 | 1690 | 2040 | 1880 | 1980 | 1430 | 1830 | 1370 | 1280 | 1100 | 700 | 633 | 976 |
| 2 | 1730 | 1970 | 1920 | 2030 | 1410 | 1920 | 1330 | 1260 | 1090 | 696 | 627 | 975 |
| 3 | 1710 | 1820 | 1890 | 2060 | 1400 | 2010 | 1280 | 1250 | 1070 | 695 | 621 | 982 |
| 4 | 1700 | 1790 | 1950 | 2160 | 1420 | 2050 | 1280 | 1290 | 1050 | 685 | 621 | 985 |
| 5 | 1710 | 1800 | 1910 | 2330 | 1440 | 1990 | 1270 | 1400 | 1020 | 658 | 617 | 989 |
| 6 | 1750 | 1810 | 1890 | 2230 | 1450 | 1920 | 1260 | 1810 | 1190 | 668 | 616 | 986 |
| 7 | 1760 | 1810 | 1980 | 2150 | 1450 | 1840 | 1240 | 2020 | 1600 | 676 | 614 | 968 |
| 8 | 1760 | 1810 | 2780 | 2190 | 1450 | 1740 | 1220 | 2150 | 1560 | 666 | 612 | 968 |
| 9 | 1740 | 1800 | 2460 | 2230 | 1420 | 1690 | 1230 | 2260 | 1360 | 662 | 612 | 973 |
| 10 | 1740 | 1800 | 2220 | 2200 | 1390 | 1680 | 1210 | 2650 | 1170 | 657 | 612 | 982 |
| 11 | 1760 | 1810 | 2280 | 2150 | 1320 | 1700 | 1170 | 2590 | 973 | 654 | 606 | 989 |
| 12 | 1770 | 1810 | 2350 | 2110 | 1290 | 1600 | 1170 | 2320 | 900 | 653 | 603 | 989 |
| 13 | 1770 | 1830 | 2250 | 2090 | 1270 | 1510 | 1170 | 2020 | 879 | 660 | 608 | 1010 |
| 14 | 1780 | 1810 | 2200 | 2070 | 1270 | 1510 | 1160 | 1790 | 862 | 652 | 608 | 1010 |
| 15 | 1800 | 1790 | 2120 | 2050 | 1280 | 1540 | 1170 | 1690 | 849 | 646 | 606 | 1010 |
| 16 | 1830 | 1860 | 2080 | 2030 | 1280 | 1560 | 1220 | 1650 | 850 | 646 | 605 | 1010 |
| 17 | 1800 | 1800 | 2030 | 2020 | 1390 | 1570 | 1300 | 1530 | 1210 | 641 | 601 | 1010 |
| 18 | 1800 | 1830 | 2010 | 2010 | 1510 | 1550 | 1480 | 1390 | 1430 | 639 | 595 | 1010 |
| 19 | 1800 | 1820 | 1990 | 1820 | 1580 | 1510 | 1620 | 1330 | 1360 | 640 | 595 | 1010 |
| 20 | 1790 | 1810 | 1970 | 1520 | 1580 | 1470 | 1710 | 1310 | 1160 | 635 | 596 | 998 |
| 21 | 1800 | 1820 | 1950 | 1510 | 1600 | 1430 | 1690 | 1320 | 959 | 639 | 599 | 996 |
| 22 | 1800 | 1840 | 1940 | 1610 | 1570 | 1400 | 1620 | 1360 | 794 | 639 | 602 | 1010 |
| 23 | 1800 | 1830 | 1930 | 2040 | 1580 | 1380 | 1530 | 1530 | 766 | 652 | 605 | 1020 |
| 24 | 1800 | 1810 | 1930 | 2460 | 1600 | 1360 | 1490 | 1910 | 759 | 643 | 605 | 1020 |
| 25 | 1800 | 1800 | 1920 | 2310 | 1630 | 1340 | 1490 | 1890 | 753 | 638 | 604 | 1030 |
| 26 | 1790 | 1800 | 1920 | 2010 | 1690 | 1320 | 1450 | 1710 | 744 | 634 | 597 | 1040 |
| 27 | 1770 | 1820 | 1920 | 1680 | 1750 | 1300 | 1390 | 1510 | 736 | 633 | 855 | 1030 |
| 28 | 1780 | 1820 | 1920 | 1540 | 1780 | 1290 | 1340 | 1280 | 727 | 627 | 971 | 1040 |
| 29 | 1790 | 1880 | 1910 | 1490 | --- | 1300 | 1290 | 1200 | 709 | 621 | 972 | 1060 |
| 30 | 1790 | 1920 | 1940 | 1470 | --- | 1350 | 1280 | 1160 | 705 | 627 | 975 | 1060 |
| 31 | 1790 | --- | 1960 | 1430 | --- | 1370 | --- | 1130 | --- | 629 | 975 | --- |
| TOTAL | 54900 | 54960 | 63400 | 60980 | 41230 | 49030 | 40430 | 50990 | 30335 | 20211 | 20568 | 30136 |
| MEAN | 1771 | 1832 | 2045 | 1967 | 1472 | 1582 | 1348 | 1645 | 1011 | 652 | 663 | 1005 |
| MAX | 1830 | 2040 | 2780 | 2460 | 1780 | 2050 | 1710 | 2650 | 1600 | 700 | 975 | 1060 |
| MIN | 1690 | 1790 | 1880 | 1430 | 1270 | 1290 | 1160 | 1130 | 705 | 621 | 595 | 968 |
| AC-FT | 108900 | 109000 | 125800 | 121000 | 81780 | 97250 | 80190 | 101100 | 60170 | 40090 | 40800 | 59770 |

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| MEAN | 2178 | 3141 | 4644 | 5550 | 5991 | 6338 | 5888 | 5024 | 3190 | 1668 | 1438 | 1685 |
| 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 | 1222 | 1455 | 1408 | 1466 | 1145 | 1132 | 1285 | 819 | 598 | 436 | 604 |
| (WY) | 1992 | 1992 | 1992 | 1992 | 1992 | 1977 | 1977 | 1992 | 1992 | 1992 | 1992 | 1992 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1913 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 1399340 | | | | 517170 | | | | | | | |
| ANNUAL MEAN | 3834 | | | | 1417 | | | | 3883 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 7434 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 1151 | | | |
| HIGHEST DAILY MEAN | 20400 | | | | Mar 18 | | | | 115000 | | | |
| LOWEST DAILY MEAN | 1140 | | | | Jul 31 | | | | 320 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 1190 | | | | Jul 26 | | | | 417 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | | | | | 165000 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | | | | | 33.75 | | | |
| INSTANTANEOUS LOW FLOW | | | | | | | | | 320 | | | |
| ANNUAL RUNOFF (AC-FT) | 2776000 | | | | 1026000 | | | | 2813000 | | | |
| 10 PERCENT EXCEEDS | 9400 | | | | 2020 | | | | 7930 | | | |
| 50 PERCENT EXCEEDS | 1940 | | | | 1450 | | | | 2700 | | | |
| 90 PERCENT EXCEEDS | 1410 | | | | 639 | | | | 1200 | | | |

KLAMATH RIVER BASIN

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.--No estimated daily discharges. 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 8 | 1315 | *1,850 | *7.43 | | | | |

Minimum daily, 28 ft³/s, Sept. 22-27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 1 | 52 | 52 | 128 | 195 | 250 | 563 | 280 | 232 | 124 | 68 | 41 | 30 |
| 2 | 52 | 52 | 168 | 259 | 235 | 662 | 280 | 223 | 99 | 66 | 41 | 31 |
| 3 | 52 | 52 | 99 | 311 | 223 | 714 | 289 | 220 | 102 | 64 | 41 | 31 |
| 4 | 51 | 51 | 133 | 552 | 214 | 741 | 274 | 276 | 101 | 63 | 41 | 32 |
| 5 | 51 | 51 | 105 | 638 | 204 | 646 | 259 | 288 | 106 | 62 | 41 | 31 |
| 6 | 52 | 51 | 89 | 469 | 201 | 563 | 261 | 377 | 115 | 62 | 41 | 30 |
| 7 | 52 | 51 | 224 | 360 | 196 | 490 | 255 | 346 | 128 | 61 | 40 | 30 |
| 8 | 51 | 50 | 1330 | 385 | 188 | 450 | 257 | 310 | 118 | 60 | 40 | 29 |
| 9 | 51 | 50 | 558 | 459 | 179 | 436 | 287 | 289 | 114 | 59 | 40 | 31 |
| 10 | 52 | 50 | 434 | 392 | 193 | 439 | 268 | 270 | 112 | 57 | 39 | 36 |
| 11 | 54 | 50 | 748 | 348 | 186 | 431 | 258 | 255 | 110 | 57 | 39 | 37 |
| 12 | 73 | 51 | 458 | 309 | 177 | 388 | 257 | 236 | 109 | 56 | 39 | 36 |
| 13 | 62 | 51 | 310 | 279 | 174 | 367 | 258 | 212 | 108 | 56 | 38 | 34 |
| 14 | 60 | 51 | 260 | 261 | 176 | 366 | 253 | 198 | 107 | 55 | 38 | 33 |
| 15 | 65 | 51 | 222 | 251 | 175 | 369 | 259 | 216 | 104 | 55 | 38 | 32 |
| 16 | 72 | 51 | 198 | 237 | 177 | 362 | 294 | 249 | 98 | 54 | 37 | 31 |
| 17 | 62 | 50 | 178 | 229 | 550 | 338 | 337 | 234 | 96 | 49 | 37 | 31 |
| 18 | 59 | 51 | 161 | 229 | 452 | 322 | 354 | 222 | 94 | 48 | 36 | 30 |
| 19 | 58 | 51 | 149 | 229 | 380 | 299 | 350 | 213 | 90 | 46 | 36 | 29 |
| 20 | 57 | 51 | 140 | 226 | 339 | 279 | 318 | 203 | 87 | 45 | 36 | 29 |
| 21 | 56 | 51 | 133 | 257 | 357 | 272 | 296 | 194 | 85 | 45 | 36 | 29 |
| 22 | 56 | 56 | 128 | 467 | 332 | 262 | 273 | 191 | 83 | 45 | 37 | 28 |
| 23 | 56 | 57 | 122 | 938 | 308 | 252 | 256 | 181 | 81 | 48 | 36 | 28 |
| 24 | 56 | 54 | 119 | 919 | 307 | 247 | 243 | 178 | 79 | 45 | 36 | 28 |
| 25 | 56 | 53 | 117 | 664 | 355 | 245 | 257 | 176 | 78 | 45 | 35 | 28 |
| 26 | 55 | 53 | 115 | 521 | 425 | 245 | 243 | 172 | 77 | 44 | 34 | 28 |
| 27 | 54 | 53 | 113 | 433 | 498 | 257 | 238 | 159 | 75 | 44 | 33 | 28 |
| 28 | 54 | 56 | 110 | 372 | 518 | 280 | 237 | 147 | 73 | 43 | 31 | 30 |
| 29 | 54 | 161 | 109 | 325 | --- | 304 | 239 | 142 | 71 | 43 | 31 | 39 |
| 30 | 54 | 127 | 125 | 293 | --- | 323 | 237 | 138 | 69 | 42 | 31 | 36 |
| 31 | 53 | --- | 154 | 270 | --- | 297 | --- | 135 | --- | 42 | 31 | --- |
| TOTAL | 1742 | 1739 | 7437 | 12077 | 7969 | 12209 | 8167 | 6882 | 2893 | 1629 | 1150 | 935 |
| MEAN | 56.2 | 58.0 | 240 | 390 | 285 | 394 | 272 | 222 | 96.4 | 52.5 | 37.1 | 31.2 |
| MAX | 73 | 161 | 1330 | 938 | 550 | 741 | 354 | 377 | 128 | 68 | 41 | 39 |
| MIN | 51 | 50 | 89 | 195 | 174 | 245 | 237 | 135 | 69 | 42 | 31 | 28 |
| AC-FT | 3460 | 3450 | 14750 | 23950 | 15810 | 24220 | 16200 | 13650 | 5740 | 3230 | 2280 | 1850 |

11521500 INDIAN CREEK NEAR HAPPY CAMP, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 82.7 | 324 | 592 | 679 | 791 | 752 | 649 | 542 | 257 | 98.8 | 59.5 | 51.7 |
| 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 | 201 | 152 | 71.8 | 36.5 | 26.3 | 27.9 |
| (WY) | 1992 | 1960 | 1977 | 1977 | 1977 | 1977 | 1977 | 1992 | 1992 | 1977 | 1977 | 1992 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | FOR 1994 WATER YEAR | | | WATER YEARS 1957 - 1994 | | |
|--------------------------|------------------------|--|--|---------------------|--|--|-------------------------|--|--|
| ANNUAL TOTAL | 170183 | | | 64829 | | | | | |
| ANNUAL MEAN | 466 | | | 178 | | | 405 | | |
| HIGHEST ANNUAL MEAN | | | | | | | 817 | | |
| LOWEST ANNUAL MEAN | | | | | | | 83.7 | | |
| HIGHEST DAILY MEAN | 4170 | | | Mar 17 | | | 30700 | | |
| LOWEST DAILY MEAN | 50 | | | Nov 8 | | | 21 | | |
| ANNUAL SEVEN-DAY MINIMUM | 50 | | | Nov 5 | | | 22 | | |
| INSTANTANEOUS PEAK FLOW | | | | | | | 1850 | | |
| INSTANTANEOUS PEAK STAGE | | | | | | | 7.43 | | |
| ANNUAL RUNOFF (AC-FT) | 337600 | | | 128600 | | | 293300 | | |
| 10 PERCENT EXCEEDS | 1150 | | | 374 | | | 930 | | |
| 50 PERCENT EXCEEDS | 202 | | | 114 | | | 201 | | |
| 90 PERCENT EXCEEDS | 53 | | | 36 | | | 46 | | |

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, 70 ft³/s, Aug. 25, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|
| Dec. 8 | 1445 | *3,210 | *5.13 |

Minimum daily, 92 ft³/s, Sept. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 1 | 204 | 204 | 337 | 569 | 807 | 1620 | 1020 | 1110 | 789 | 296 | e148 | 104 |
| 2 | 205 | 204 | 442 | 801 | 760 | 1850 | 1040 | 1090 | 722 | 288 | e146 | 104 |
| 3 | 204 | 204 | 333 | 745 | 720 | 1900 | 1120 | 1120 | 688 | 284 | 144 | 105 |
| 4 | 202 | 204 | 386 | 1170 | 685 | 1910 | 1090 | 1430 | 661 | 278 | 142 | 107 |
| 5 | 211 | 204 | 346 | 1750 | 651 | 1820 | 1020 | 1580 | 656 | 270 | 141 | 107 |
| 6 | 240 | 201 | 300 | 1220 | 645 | 1660 | 1030 | 1920 | 822 | 265 | 139 | 103 |
| 7 | 229 | 198 | 491 | 966 | 680 | 1460 | 993 | 2230 | 763 | 257 | 134 | 100 |
| 8 | 220 | 197 | 2440 | 1060 | 669 | 1360 | 957 | 2210 | 642 | 249 | 133 | 98 |
| 9 | 217 | 197 | 1410 | 1320 | 619 | 1340 | 1000 | 2150 | 584 | 244 | 132 | 102 |
| 10 | 219 | 197 | 799 | 1130 | 741 | 1390 | 938 | 2170 | 578 | 236 | 131 | 107 |
| 11 | 235 | 200 | 1190 | 977 | 753 | 1440 | 907 | 2000 | 593 | 231 | 128 | 111 |
| 12 | 279 | 211 | 1030 | 838 | 692 | 1280 | 922 | 1820 | 590 | 226 | 125 | 113 |
| 13 | 257 | 209 | 753 | 780 | 668 | 1220 | 972 | 1480 | 544 | 220 | 123 | 114 |
| 14 | 247 | 207 | 772 | 737 | 667 | 1270 | 993 | 1310 | 513 | e214 | 120 | 112 |
| 15 | 302 | 204 | 651 | 711 | 659 | 1320 | 1090 | 1330 | 478 | e209 | 117 | 110 |
| 16 | 346 | 201 | 559 | 674 | 655 | 1310 | 1310 | 1340 | 458 | e205 | 117 | 106 |
| 17 | 316 | 201 | 500 | 648 | 1190 | 1210 | 1620 | 1200 | 446 | e200 | 118 | 102 |
| 18 | 278 | 209 | 460 | 643 | 1360 | 1140 | 1780 | 1130 | 438 | e195 | 117 | 99 |
| 19 | 260 | 206 | 428 | 632 | 1200 | 1080 | 1980 | 1070 | 419 | e190 | 115 | 97 |
| 20 | 249 | 203 | 414 | 624 | 1090 | 991 | 1860 | 1130 | 402 | e188 | 114 | 96 |
| 21 | 241 | 200 | 401 | 677 | 1120 | 981 | 1750 | 1040 | 395 | e185 | 114 | 94 |
| 22 | 235 | 218 | 388 | 1490 | 1060 | 934 | 1480 | 1000 | 389 | e182 | 115 | 93 |
| 23 | 232 | 220 | 375 | 2950 | 998 | 889 | 1350 | 991 | 378 | e180 | 114 | 92 |
| 24 | 228 | 207 | 370 | 2650 | 967 | 866 | 1250 | 1050 | 363 | e176 | 111 | 94 |
| 25 | 224 | 201 | 363 | 2030 | 1000 | 859 | 1300 | 1140 | 349 | e173 | 108 | 95 |
| 26 | 220 | 201 | 360 | 1590 | 1060 | 831 | 1140 | 1190 | 340 | e167 | 107 | 96 |
| 27 | 217 | 208 | 364 | 1330 | 1360 | 835 | 1090 | 1090 | e329 | e163 | 105 | 94 |
| 28 | 214 | 219 | 353 | 1160 | 1480 | 890 | 1070 | 985 | e318 | e159 | 104 | 106 |
| 29 | 212 | 314 | 346 | 1030 | --- | 980 | 1100 | 883 | e308 | e157 | 104 | 126 |
| 30 | 210 | 393 | 362 | 934 | --- | 1130 | 1090 | 852 | 301 | e154 | 105 | 122 |
| 31 | 207 | --- | 420 | 867 | --- | 1080 | --- | 825 | --- | e150 | 104 | --- |
| TOTAL | 7360 | 6442 | 18143 | 34703 | 24956 | 38846 | 36262 | 41866 | 15256 | 6591 | 3775 | 3109 |
| MEAN | 237 | 215 | 585 | 1119 | 891 | 1253 | 1209 | 1351 | 509 | 213 | 122 | 104 |
| MAX | 346 | 393 | 2440 | 2950 | 1480 | 1910 | 1980 | 2230 | 822 | 296 | 148 | 126 |
| MIN | 202 | 197 | 300 | 569 | 619 | 831 | 907 | 825 | 301 | 150 | 104 | 92 |
| AC-FT | 14600 | 12780 | 35990 | 68830 | 49500 | 77050 | 71930 | 83040 | 30260 | 13070 | 7490 | 6170 |

e Estimated.

11522500 SALMON RIVER AT SOMES BAR, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|
| MEAN | 354 | 1120 | 2134 | 2798 | 2879 | 2860 | 2971 | 3099 | 1891 | 604 | 258 | 201 |
| MAX | 2297 | 5961 | 10480 | 11260 | 11190 | 9615 | 5741 | 6174 | 4354 | 1906 | 839 | 528 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1958 | 1972 | 1938 | 1938 | 1953 | 1953 | 1983 | 1983 |
| MIN | 117 | 130 | 175 | 190 | 255 | 448 | 710 | 786 | 402 | 146 | 81.6 | 83.1 |
| (WY) | 1988 | 1937 | 1937 | 1937 | 1977 | 1977 | 1977 | 1977 | 1992 | 1931 | 1931 | 1931 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1912 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 765571 | | | | 237309 | | | | | | | |
| ANNUAL MEAN | 2097 | | | | 650 | | | | 1758 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 3754 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 339 | | | |
| HIGHEST DAILY MEAN | 13000 | | | | Mar 17 | | | | 2950 | | | |
| LOWEST DAILY MEAN | 197 | | | | Nov 8 | | | | Jan 23 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 199 | | | | Nov 5 | | | | Sep 23 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | | | | | 92 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | | | | | 94 | | | |
| ANNUAL RUNOFF (AC-FT) | 1519000 | | | | 470700 | | | | Sep 21 | | | |
| 10 PERCENT EXCEEDS | 5120 | | | | 1360 | | | | Dec 8 | | | |
| 50 PERCENT EXCEEDS | 1070 | | | | 428 | | | | 133000 | | | |
| 90 PERCENT EXCEEDS | 213 | | | | 114 | | | | Dec 22 1964 | | | |
| | | | | | | | | | 5.13 | | | |
| | | | | | | | | | Dec 8 | | | |
| | | | | | | | | | 46.60 | | | |
| | | | | | | | | | 1274000 | | | |
| | | | | | | | | | 4140 | | | |
| | | | | | | | | | 1010 | | | |
| | | | | | | | | | 177 | | | |

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 fair. 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, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 8 | 1645 | *19,600 | *11.59 | | | | |

Minimum daily, 1,020 ft³/s, Aug. 9, 16, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 1 | 2240 | 2280 | 2940 | 3980 | 3970 | 6970 | e4200 | 3790 | 2440 | 1520 | 1080 | 1230 |
| 2 | 2240 | 2450 | 3480 | 4840 | 3840 | 7750 | e4250 | 3740 | 2370 | 1500 | 1070 | 1230 |
| 3 | 2250 | 2310 | 3010 | 5030 | 3720 | 8120 | e4400 | 3710 | 2310 | 1470 | 1060 | 1240 |
| 4 | 2250 | 2310 | 3150 | 6210 | 3620 | 8400 | e4150 | 4060 | 2280 | 1450 | 1050 | 1240 |
| 5 | 2250 | 2320 | 3110 | 8380 | 3580 | 7670 | e4050 | 4590 | 2260 | 1430 | 1060 | 1250 |
| 6 | 2280 | 2320 | 2960 | 6740 | 3540 | 6990 | e4000 | 5140 | 2380 | 1420 | 1070 | 1260 |
| 7 | 2300 | 2330 | 3950 | 5650 | 3590 | 6210 | e3900 | 5980 | 2560 | 1390 | 1070 | 1260 |
| 8 | 2300 | 2350 | 15200 | 5770 | 3560 | 5750 | e3850 | 6020 | 2590 | 1380 | 1060 | 1260 |
| 9 | 2280 | 2360 | 9350 | 7100 | 3430 | 5530 | e3650 | 5860 | 2460 | 1350 | 1020 | 1260 |
| 10 | 2270 | 2370 | 5800 | 6330 | 3600 | 5500 | e3500 | 6130 | 2300 | 1340 | 1030 | 1270 |
| 11 | 2320 | 2380 | 7170 | 5680 | 3590 | 5550 | e3450 | 5990 | 2170 | 1320 | 1040 | 1290 |
| 12 | 2440 | 2420 | 6500 | 5240 | 3400 | 5090 | e3450 | 5600 | 2070 | 1310 | 1050 | 1290 |
| 13 | 2370 | 2430 | 5180 | 4850 | 3340 | 4800 | e3500 | 4830 | 2010 | 1310 | 1060 | 1300 |
| 14 | 2330 | 2430 | 5020 | 4620 | 3360 | 4770 | e3700 | 4300 | 1970 | 1290 | 1070 | 1300 |
| 15 | 2360 | 2430 | 4510 | 4490 | 3350 | 4820 | e3950 | 4090 | 1910 | 1270 | 1050 | 1310 |
| 16 | 2450 | 2470 | 4110 | 4330 | 3350 | 4800 | e4250 | 4440 | 1880 | 1260 | 1020 | 1320 |
| 17 | 2400 | 2470 | 3860 | 4210 | 4910 | 4650 | e4800 | 4120 | 1860 | 1250 | 1020 | 1320 |
| 18 | 2350 | 2490 | 3690 | 4150 | 5650 | 4450 | e5450 | 3800 | 2060 | 1230 | 1030 | 1330 |
| 19 | 2340 | 2510 | 3570 | 4070 | 5120 | 4330 | e5350 | 3590 | 2100 | 1220 | 1040 | 1330 |
| 20 | 2320 | 2520 | 3500 | 3790 | 4840 | 4100 | e5000 | 3480 | 2010 | 1220 | 1040 | 1340 |
| 21 | 2300 | 2530 | 3430 | 3740 | 5140 | 4050 | e4800 | 3340 | 1890 | 1200 | 1050 | e1340 |
| 22 | 2300 | 2560 | 3380 | 5210 | 5080 | e4000 | e4550 | 3240 | 1790 | 1190 | 1060 | e1340 |
| 23 | 2300 | 2610 | 3330 | 9380 | 4780 | e3800 | e4350 | 3180 | 1710 | 1190 | 1070 | e1330 |
| 24 | 2300 | 2580 | 3310 | 10700 | 4700 | e3520 | e4350 | 3390 | 1660 | 1180 | 1080 | e1330 |
| 25 | 2300 | 2580 | 3270 | 8960 | 4870 | e3500 | e4200 | 3600 | 1650 | 1180 | 1070 | e1340 |
| 26 | 2300 | 2580 | 3270 | 7240 | 5340 | e3500 | e4050 | 3560 | 1620 | 1150 | 1080 | e1330 |
| 27 | 2290 | 2600 | 3260 | 6040 | 6280 | e3650 | e4000 | 3270 | 1610 | 1130 | 1070 | e1330 |
| 28 | 2280 | 2640 | 3220 | 5190 | 6740 | e3950 | e3950 | 2980 | 1600 | 1120 | 1170 | e1340 |
| 29 | 2280 | 2990 | 3210 | 4700 | --- | e4300 | 3880 | 2710 | 1560 | 1110 | 1210 | e1360 |
| 30 | 2280 | 3340 | 3270 | 4400 | --- | e4600 | 3830 | 2580 | 1540 | 1100 | 1220 | e1350 |
| 31 | 2280 | --- | 3690 | 4160 | --- | e4300 | --- | 2500 | --- | 1080 | 1220 | --- |
| TOTAL | 71550 | 74960 | 136700 | 175180 | 120290 | 159420 | 124810 | 127610 | 60620 | 39560 | 33290 | 39020 |
| MEAN | 2308 | 2499 | 4410 | 5651 | 4296 | 5143 | 4160 | 4116 | 2021 | 1276 | 1074 | 1301 |
| MAX | 2450 | 3340 | 15200 | 10700 | 6740 | 8400 | 5450 | 6130 | 2590 | 1520 | 1220 | 1360 |
| MIN | 2240 | 2280 | 2940 | 3740 | 3340 | 3500 | 3450 | 2500 | 1540 | 1080 | 1020 | 1230 |
| AC-FT | 141900 | 148700 | 271100 | 347500 | 238600 | 316200 | 247600 | 253100 | 120200 | 78470 | 66030 | 77400 |

e Estimated.

KLAMATH RIVER BASIN

321

11523000 KLAMATH RIVER AT ORLEANS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| MEAN | 3078 | 6115 | 10530 | 12870 | 13500 | 13460 | 12500 | 10790 | 6367 | 2768 | 2056 | 2225 |
| MAX | 9876 | 22080 | 48770 | 48870 | 53740 | 42600 | 26860 | 25320 | 16900 | 7226 | 3666 | 3807 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1928 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 3307150 | | | | 1163010 | | | | | | | |
| ANNUAL MEAN | 9061 | | | | 3186 | | | | 7995 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 17030 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 2520 | | | |
| HIGHEST DAILY MEAN | 55700 | | | | Mar 18 | | | | 240000 | | | |
| LOWEST DAILY MEAN | 2190 | | | | Sep 1 | | | | 320 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 2230 | | | | Aug 26 | | | | 453 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 19600 | | | | Dec 8 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 11.59 | | | | Dec 8 | | | |
| ANNUAL RUNOFF (AC-FT) | 6560000 | | | | 2307000 | | | | 5792000 | | | |
| 10 PERCENT EXCEEDS | 21700 | | | | 5540 | | | | 17500 | | | |
| 50 PERCENT EXCEEDS | 4410 | | | | 2640 | | | | 4820 | | | |
| 90 PERCENT EXCEEDS | 2270 | | | | 1190 | | | | 1870 | | | |

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).

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.--No estimated daily discharges. 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, 13.78 ft, Nov. 16, 1981, present site and 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 10 | 1600 | *1,480 | *6.99 | | | | |
| Minimum daily, 21 ft ³ /s, Sept. 21-28. | | | | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-------|-------|-------|-------|-------|------|------|------|------|
| 1 | 36 | 41 | 55 | 105 | 186 | 422 | 411 | 377 | 236 | 62 | 30 | 24 |
| 2 | 36 | 42 | 56 | 107 | 177 | 531 | 452 | 380 | 207 | 61 | 29 | 24 |
| 3 | 36 | 41 | 51 | 119 | 167 | 586 | 499 | 389 | 192 | 59 | 29 | 24 |
| 4 | 37 | 40 | 54 | 140 | 161 | 594 | 469 | 443 | 181 | 57 | 29 | 24 |
| 5 | 42 | 39 | 52 | 169 | 155 | 593 | 423 | 510 | 175 | 55 | 29 | 24 |
| 6 | 61 | 39 | 49 | 141 | 161 | 523 | 406 | 598 | 177 | 53 | 29 | 23 |
| 7 | 49 | 39 | 77 | 122 | 168 | 450 | 372 | 776 | 168 | 53 | 29 | 23 |
| 8 | 44 | 38 | 183 | 119 | 172 | 432 | 353 | 905 | 156 | 50 | 28 | 23 |
| 9 | 42 | 37 | 134 | 112 | 159 | 462 | 336 | 811 | 146 | 48 | 27 | 22 |
| 10 | 51 | 39 | 837 | 104 | 164 | 506 | 310 | 789 | 139 | 47 | 27 | 22 |
| 11 | 76 | 43 | 738 | 99 | 160 | 482 | 312 | 733 | 132 | 47 | 27 | 24 |
| 12 | 70 | 43 | 348 | 94 | 147 | 421 | 354 | 637 | 125 | 45 | 27 | 25 |
| 13 | 55 | 42 | 247 | 91 | 149 | 425 | 403 | 529 | 120 | 43 | 27 | 26 |
| 14 | 54 | 41 | 225 | 90 | 147 | 491 | 437 | 456 | 113 | 42 | 26 | 26 |
| 15 | 59 | 39 | 190 | 97 | 146 | 563 | 509 | 432 | 109 | 40 | 25 | 26 |
| 16 | 66 | 40 | 165 | 98 | 151 | 592 | 667 | 393 | 104 | 39 | 25 | 24 |
| 17 | 57 | 40 | 134 | 101 | 265 | 507 | 758 | 356 | 98 | 39 | 25 | 24 |
| 18 | 52 | 40 | 106 | 106 | 241 | 455 | 778 | 320 | 98 | 38 | 24 | 23 |
| 19 | 49 | 40 | 105 | 112 | 211 | 399 | 902 | 309 | 94 | 37 | 24 | 23 |
| 20 | 47 | 39 | 102 | 115 | 195 | 355 | 823 | 338 | 91 | 36 | 24 | 22 |
| 21 | 46 | 39 | 97 | 172 | 189 | 336 | 734 | 368 | 88 | 36 | 24 | 21 |
| 22 | 46 | 39 | 94 | 412 | 175 | 313 | 608 | 394 | 85 | 34 | 24 | 21 |
| 23 | 45 | 39 | 92 | 1080 | 168 | 290 | 559 | 340 | 81 | 34 | 24 | 21 |
| 24 | 43 | 36 | 89 | 784 | 170 | 275 | 472 | 330 | 79 | 34 | 24 | 21 |
| 25 | 43 | 38 | 88 | 512 | 188 | 259 | 450 | 335 | 78 | 34 | 24 | 21 |
| 26 | 42 | 39 | 88 | 370 | 208 | 254 | 398 | 333 | 74 | 33 | 24 | 21 |
| 27 | 42 | 40 | 87 | 300 | 263 | 278 | 390 | 330 | 72 | 32 | 23 | 21 |
| 28 | 41 | 47 | 86 | 255 | 312 | 325 | 372 | 286 | 69 | 32 | 23 | 21 |
| 29 | 40 | 76 | 86 | 228 | --- | 390 | 374 | 262 | 65 | 31 | 23 | 26 |
| 30 | 40 | 75 | 91 | 212 | --- | 437 | 374 | 242 | 63 | 31 | 23 | 28 |
| 31 | 40 | --- | 95 | 195 | --- | 409 | --- | 237 | --- | 30 | 24 | --- |
| TOTAL | 1487 | 1270 | 4901 | 6761 | 5155 | 13355 | 14705 | 13938 | 3615 | 1312 | 800 | 698 |
| MEAN | 48.0 | 42.3 | 158 | 218 | 184 | 431 | 490 | 450 | 120 | 42.3 | 25.8 | 23.3 |
| MAX | 76 | 76 | 837 | 1080 | 312 | 594 | 902 | 905 | 236 | 62 | 30 | 28 |
| MIN | 36 | 36 | 49 | 90 | 146 | 254 | 310 | 237 | 63 | 30 | 23 | 21 |
| AC-FT | 2950 | 2520 | 9720 | 13410 | 10220 | 26490 | 29170 | 27650 | 7170 | 2600 | 1590 | 1380 |

11523200 TRINITY RIVER ABOVE COFFEE CREEK, NEAR TRINITY CENTER, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 82.1 | 220 | 321 | 409 | 544 | 638 | 825 | 1035 | 462 | 119 | 53.4 | 44.4 |
| MAX | 447 | 1664 | 1726 | 1899 | 2248 | 1632 | 1500 | 2414 | 1989 | 778 | 205 | 134 |
| (WY) | 1963 | 1974 | 1965 | 1974 | 1958 | 1993 | 1966 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1958 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 205773 | | | | 67997 | | | | | | | |
| ANNUAL MEAN | 564 | | | | 186 | | | | 395 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 851 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 66.2 | | | |
| HIGHEST DAILY MEAN | 7190 | | | | May 31 | | | | 18900 | | | |
| LOWEST DAILY MEAN | 36 | | | | Sep 30 | | | | 16 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 36 | | | | Sep 27 | | | | 16 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 1480 | | | | Dec 10 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 6.99 | | | | Dec 10 | | | |
| ANNUAL RUNOFF (AC-FT) | 408200 | | | | 134900 | | | | 286200 | | | |
| 10 PERCENT EXCEEDS | 1620 | | | | 470 | | | | 1000 | | | |
| 50 PERCENT EXCEEDS | 155 | | | | 94 | | | | 167 | | | |
| 90 PERCENT EXCEEDS | 41 | | | | 24 | | | | 37 | | | |

11525400 CLAIR ENGLE 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, 9 mi north of Lewiston.

DRAINAGE AREA.--692 mi².

PERIOD OF RECORD.--November 1960 to current year. Prior to October 1963 published as Trinity 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) 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) FOR CURRENT YEAR.--Maximum contents, 2,040,432 acre-ft, Apr. 5, elevation, 2,343.71 ft; minimum, 1,214,882 acre-ft, Sept. 30, elevation, 2,277.62 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated April 1962)

| | | | |
|-------|---------|-------|-----------|
| 2,100 | 162,231 | 2,250 | 955,140 |
| 2,140 | 292,859 | 2,310 | 1,583,586 |
| 2,190 | 529,611 | 2,380 | 2,616,989 |

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 2400 HOURS

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 1947223 | 1925082 | 1881482 | 1893467 | 1935421 | 1964666 | 2032221 | 1975584 | 1878978 | 1679881 | 1464910 | 1276980 |
| 2 | 1945652 | 1924375 | 1881343 | 1893886 | 1936274 | 1967533 | 2034716 | 1972557 | 1872589 | 1674181 | 1456520 | 1275485 |
| 3 | 1945084 | 1923813 | 1878978 | 1894026 | 1936842 | 1970832 | 2037207 | 1971693 | 1866783 | 1667989 | 1450151 | 1274527 |
| 4 | 1944227 | 1922966 | 1878978 | 1894725 | 1937410 | 1974430 | 2039551 | 1971406 | 1860978 | 1662193 | 1444052 | 1272074 |
| 5 | 1942802 | 1922400 | 1878561 | 1895564 | 1938117 | 1977745 | 2040432 | 1971837 | 1854777 | 1656284 | 1437607 | 1271220 |
| 6 | 1941665 | 1921835 | 1878839 | 1895981 | 1939680 | 1980775 | 2039115 | 1972990 | 1848452 | 1650646 | 1431543 | 1270158 |
| 7 | 1940674 | 1921270 | 1879674 | 1896400 | 1940816 | 1983225 | 2038821 | 1972702 | 1842691 | 1644762 | 1424795 | 1268252 |
| 8 | 1940106 | 1920846 | 1883983 | 1897519 | 1941665 | 1985530 | 2037647 | 1972557 | 1836670 | 1638387 | 1418534 | 1266241 |
| 9 | 1939396 | 1920284 | 1885649 | 1897659 | 1942518 | 1987701 | 2036033 | 1972269 | 1830788 | 1632023 | 1412292 | 1264862 |
| 10 | 1939396 | 1919718 | 1887739 | 1898078 | 1941807 | 1990742 | 2031784 | 1971693 | 1825067 | 1625681 | 1406067 | 1263699 |
| 11 | 1938685 | 1917033 | 1892071 | 1898078 | 1940674 | 1993493 | 2026957 | 1970117 | 1818800 | 1619097 | 1399525 | 1262851 |
| 12 | 1937126 | 1914496 | 1893886 | 1898078 | 1941100 | 1995809 | 2022138 | 1969256 | 1811743 | 1612283 | 1393567 | 1261897 |
| 13 | 1936842 | 1911547 | 1895841 | 1898358 | 1940390 | 1998274 | 2017757 | 1966245 | 1804148 | 1606239 | 1387408 | 1261051 |
| 14 | 1936558 | 1909160 | 1896680 | 1898638 | 1940390 | 2001026 | 2013533 | 1962085 | 1797125 | 1600466 | 1381256 | 1257154 |
| 15 | 1936416 | 1906770 | 1897519 | 1898638 | 1940390 | 2004079 | 2009898 | 1957352 | 1789973 | 1594697 | 1374912 | 1253791 |
| 16 | 1936274 | 1905086 | 1897939 | 1898778 | 1939680 | 2006987 | 2006550 | 1953214 | 1783385 | 1588829 | 1368802 | 1250740 |
| 17 | 1935705 | 1902418 | 1898078 | 1899197 | 1944084 | 2009752 | 2004516 | 1948651 | 1776266 | 1583337 | 1362834 | 1247496 |
| 18 | 1935421 | 1900453 | 1897799 | 1899197 | 1946509 | 2011932 | 2002481 | 1943656 | 1769574 | 1577376 | 1356767 | 1244886 |
| 19 | 1933578 | 1897799 | 1897939 | 1899474 | 1949076 | 2013966 | 2001462 | 1938543 | 1762888 | 1569560 | 1350051 | 1241648 |
| 20 | 1932157 | 1895425 | 1897239 | 1898753 | 1950647 | 2015861 | 2000010 | 1934430 | 1755963 | 1562885 | 1343471 | 1238624 |
| 21 | 1931589 | 1892767 | 1895981 | 1901434 | 1952357 | 2017318 | 1998419 | 1930029 | 1748777 | 1554994 | 1337246 | 1235514 |
| 22 | 1931305 | 1890253 | 1894306 | 1905508 | 1953500 | 2017465 | 1995664 | 1925647 | 1742543 | 1546756 | 1331717 | 1232505 |
| 23 | 1930882 | 1885927 | 1893467 | 1913933 | 1954642 | 2019218 | 1992333 | 1921270 | 1735654 | 1538560 | 1326416 | 1230532 |
| 24 | 1930598 | 1883566 | 1892348 | 1920987 | 1955785 | 2020680 | 1988857 | 1917316 | 1728127 | 1529894 | 1321359 | 1229704 |
| 25 | 1930314 | 1883148 | 1892211 | 1925223 | 1956781 | 2021846 | 1987556 | 1912953 | 1720222 | 1521379 | 1316204 | 1228668 |
| 26 | 1929887 | 1882731 | 1892348 | 1928046 | 1957782 | 2023161 | 1986976 | 1908738 | 1713255 | 1513509 | 1310199 | 1227946 |
| 27 | 1927905 | 1880369 | 1892211 | 1929887 | 1959788 | 2024619 | 1986396 | 1904524 | 1705399 | 1505421 | 1303447 | 1224340 |
| 28 | 1927343 | 1880787 | 1892211 | 1931447 | 1961941 | 2026519 | 1985819 | 1898918 | 1698334 | 1497231 | 1297171 | 1221350 |
| 29 | 1927061 | 1881482 | 1892211 | 1932583 | --- | 2027396 | 1984524 | 1894026 | 1691044 | 1489202 | 1291018 | 1217645 |
| 30 | 1926213 | 1881482 | 1892348 | 1933862 | --- | 2029585 | 1980342 | 1889414 | 1685579 | 1481198 | 1285002 | 1214882 |
| 31 | 1925930 | --- | 1892488 | 1934853 | --- | 2031197 | --- | 1884400 | --- | 1472975 | 1279219 | --- |
| MAX | 1947223 | 1925082 | 1898078 | 1934853 | 1961941 | 2031197 | 2040432 | 1975584 | 1878978 | 1679881 | 1464910 | 1276980 |
| MIN | 1925930 | 1880369 | 1878561 | 1893467 | 1935421 | 1964666 | 1980342 | 1884400 | 1685579 | 1472975 | 1279219 | 1214882 |
| a | 2335.77 | 2332.60 | 2333.39 | 2336.40 | 2338.30 | 2343.08 | 2339.58 | 2332.81 | 2318.02 | 2300.91 | 2283.77 | 2277.62 |
| b | -21721 | -44448 | +11006 | +42365 | +27088 | +69256 | -50855 | -95942 | -198821 | -212604 | -193756 | -64337 |
| c | 2311 | 781 | 252 | 664 | 922 | 2781 | 4245 | 5032 | 6962 | 7500 | 6553 | 4142 |

CAL YR 1993 b +1202917

WTR YR 1994 b -732769

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet, provided by U.S. Bureau of Reclamation; not reviewed by U.S. Geological Survey.

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.--No estimated daily discharges. 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|---------|----------|---------|------|---------|---------|----------|--------|--------|--------|--------|----------|
| 1 | .00 | .00 | .00 | .00 | .00 | .00 | 482 | 2366 | 3491 | 2500 | 3451 | 5 |
| 2 | 659 | .00 | .00 | .00 | .00 | .00 | .00 | 836 | 3491 | 2486 | 3429 | .00 |
| 3 | .00 | .00 | 694 | .00 | .00 | .00 | 34 | 372 | 3403 | 2507 | 2414 | .00 |
| 4 | .00 | .00 | .00 | .00 | .00 | 20 | .00 | 262 | 3478 | 2507 | 2476 | 665 |
| 5 | 526 | .00 | .00 | .00 | .00 | .00 | 746 | 313 | 3383 | 2507 | 2488 | .00 |
| 6 | 450 | .00 | .00 | .00 | .00 | 14 | 1653 | 315 | 3383 | 2435 | 2497 | 1 |
| 7 | .00 | .00 | 753 | .00 | .00 | .00 | 1252 | 2137 | 3340 | 2847 | 2491 | .00 |
| 8 | .00 | .00 | 26 | .00 | .00 | 50 | 1662 | 2297 | 3352 | 2825 | 2455 | 542 |
| 9 | .00 | .00 | 10 | .00 | 2 | 66 | 1663 | 2316 | 3333 | 2870 | 2498 | 23 |
| 10 | .00 | .00 | 1063 | .00 | 1363 | .00 | 2396 | 2169 | 3267 | 2834 | 2486 | .00 |
| 11 | 524 | 1062 | .00 | .00 | 905 | .00 | 2074 | 2280 | 3321 | 2855 | 2471 | .00 |
| 12 | 954 | 999 | .00 | .00 | .00 | 9 | 2018 | 1274 | 3296 | 2842 | 2598 | .00 |
| 13 | .00 | 930 | 2 | .00 | 816 | 50 | 2434 | 2401 | 3436 | 2435 | 2491 | .00 |
| 14 | .00 | 919 | .00 | .00 | 277 | .00 | 2256 | 2330 | 1923 | 2438 | 2432 | 1513 |
| 15 | .00 | 921 | .00 | .00 | 275 | .00 | 2158 | 2290 | 3380 | 2446 | 2421 | 1166 |
| 16 | .00 | 923 | .00 | .00 | 928 | .00 | 2164 | 2157 | 3382 | 2451 | 2415 | 1138 |
| 17 | .00 | 929 | .00 | .00 | .00 | .00 | 2229 | 2340 | 3394 | 2207 | 2415 | 986 |
| 18 | .00 | 939 | .00 | .00 | .00 | 21 | 2256 | 2294 | 3437 | 2595 | 2547 | 1012 |
| 19 | 670 | 930 | 11 | .00 | .00 | .00 | 2062 | 2225 | 3428 | 3504 | 2564 | 1055 |
| 20 | 673 | 947 | 414 | .00 | .00 | 21 | 2049 | 3481 | 3475 | 2910 | 2530 | 1076 |
| 21 | .00 | 952 | 752 | .00 | .00 | 2 | 1824 | 3420 | 3484 | 3302 | 2356 | 1027 |
| 22 | .00 | 988 | 806 | .00 | .00 | 646 | 2523 | 3413 | 3064 | 3454 | 2530 | 1031 |
| 23 | .00 | 2093 | 447 | .00 | .00 | .00 | 2178 | 3405 | 3459 | 3463 | 2021 | 492 |
| 24 | .00 | 1032 | 317 | .00 | .00 | 18 | 2171 | 3538 | 3361 | 3464 | 2298 | .00 |
| 25 | .00 | .00 | .00 | .00 | .00 | 22 | 931 | 3554 | 3452 | 3464 | 2693 | .00 |
| 26 | .00 | .00 | .00 | .00 | .00 | 13 | 396 | 3488 | 3499 | 3458 | 2179 | .00 |
| 27 | 678 | 698 | 10 | .00 | .00 | 33 | 281 | 3242 | 3500 | 3446 | 2727 | 1038 |
| 28 | .00 | .00 | .00 | .00 | .00 | .00 | 246 | 3260 | 3463 | 3446 | 2463 | 1072 |
| 29 | .00 | .00 | .00 | .00 | --- | 425 | 834 | 3257 | 3458 | 3445 | 2464 | 1071 |
| 30 | .00 | .00 | 12 | .00 | --- | .00 | 2261 | 3246 | 2401 | 3437 | 2443 | 952 |
| 31 | .00 | --- | .00 | .00 | --- | 456 | --- | 3340 | --- | 3438 | 2551 | --- |
| TOTAL | 5134.00 | 15262.00 | 5317.00 | 0.00 | 4566.00 | 1866.00 | 45233.00 | 73618 | 99534 | 90818 | 78304 | 15865.00 |
| MEAN | 166 | 509 | 172 | .000 | 163 | 60.2 | 1508 | 2375 | 3318 | 2930 | 2526 | 529 |
| MAX | 954 | 2090 | 1060 | .00 | 1360 | 646 | 2520 | 3550 | 3500 | 3500 | 3450 | 1510 |
| MIN | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 262 | 1920 | 2210 | 2020 | .00 |
| AC-FT | 10180 | 30270 | 10550 | .00 | 9060 | 3700 | 89720 | 146000 | 197400 | 180100 | 155300 | 31470 |

11525430 JUDGE FRANCIS CARR POWERPLANT NEAR FRENCH GULCH, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1415 | 908 | 736 | 632 | 820 | 887 | 1158 | 1325 | 1787 | 2291 | 2209 | 2126 |
| MAX | 3363 | 2158 | 2891 | 2755 | 3222 | 3111 | 3220 | 3512 | 3662 | 3589 | 3236 | 3504 |
| (WY) | 1988 | 1967 | 1979 | 1982 | 1974 | 1974 | 1970 | 1974 | 1969 | 1968 | 1977 | 1988 |
| MIN | 166 | 18.0 | .16 | .000 | .34 | .000 | .000 | .097 | .63 | 253 | 507 | 457 |
| (WY) | 1994 | 1992 | 1993 | 1986 | 1988 | 1988 | 1978 | 1991 | 1993 | 1978 | 1992 | 1992 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | FOR 1994 WATER YEAR | WATER YEARS 1963 - 1994 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 77883.00 | 435517.00 | |
| ANNUAL MEAN | 213 | 1193 | 1374 |
| HIGHEST ANNUAL MEAN | | | 2485 |
| LOWEST ANNUAL MEAN | | | 301 |
| HIGHEST DAILY MEAN | 2090 | Nov 23 | 3550 |
| LOWEST DAILY MEAN | .00 | Jan 1 | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jan 15 | .00 |
| ANNUAL RUNOFF (AC-FT) | 154500 | 863800 | 995200 |
| 10 PERCENT EXCEEDS | 933 | 3390 | 3150 |
| 50 PERCENT EXCEEDS | .00 | 670 | 1140 |
| 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.--No estimated daily discharges. Records good. Flow completely regulated by Clair Engle 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 Clair Engle 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,630 ft³/s, Apr. 10, gage height, 5.46 ft; minimum daily, 282 ft³/s, Oct. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 304 | 326 | 316 | 294 | 309 | 315 | 291 | 1580 | 346 | 364 | 468 | 444 |
| 2 | 304 | 327 | 314 | 293 | 308 | 326 | 290 | 1570 | 346 | 491 | 468 | 448 |
| 3 | 305 | 327 | 316 | 293 | 307 | 317 | 291 | 1570 | 348 | 485 | 468 | 454 |
| 4 | 310 | 324 | 318 | 293 | 307 | 307 | 294 | 1570 | 349 | 482 | 468 | 450 |
| 5 | 313 | 324 | 316 | 293 | 307 | 306 | 293 | 1570 | 348 | 482 | 469 | 451 |
| 6 | 313 | 325 | 316 | 293 | 307 | 306 | 293 | 1570 | 349 | 483 | 468 | 443 |
| 7 | 313 | 325 | 308 | 293 | 308 | 306 | 299 | 1580 | 347 | 487 | 469 | 440 |
| 8 | 295 | 325 | 297 | 294 | 308 | 307 | 306 | 1590 | 345 | 486 | 469 | 443 |
| 9 | 282 | 325 | 293 | 293 | 308 | 308 | 572 | 1590 | 345 | 485 | 469 | 445 |
| 10 | 292 | 324 | 291 | 295 | 308 | 308 | 1610 | 1610 | 346 | 484 | 469 | 446 |
| 11 | 314 | 324 | 293 | 300 | 307 | 308 | 1560 | 1600 | 345 | 483 | 472 | 443 |
| 12 | 299 | 323 | 291 | 303 | 307 | 308 | 1600 | 1580 | 345 | 484 | 471 | 444 |
| 13 | 300 | 326 | 292 | 307 | 308 | 307 | 1600 | 1590 | 345 | 475 | 466 | 442 |
| 14 | 308 | 327 | 292 | 307 | 305 | 307 | 1590 | 1590 | 344 | 483 | 469 | 441 |
| 15 | 310 | 328 | 293 | 306 | 306 | 304 | 1590 | 1590 | 345 | 480 | 472 | 438 |
| 16 | 310 | 328 | 292 | 307 | 307 | 306 | 1590 | 1590 | 345 | 472 | 469 | 444 |
| 17 | 310 | 326 | 292 | 308 | 311 | 306 | 1600 | 1600 | 345 | 475 | 470 | 445 |
| 18 | 311 | 325 | 292 | 307 | 308 | 307 | 1580 | 1590 | 345 | 461 | 467 | 447 |
| 19 | 311 | 325 | 293 | 308 | 308 | 307 | 1570 | 1480 | 345 | 455 | 465 | 448 |
| 20 | 311 | 327 | 292 | 308 | 309 | 306 | 1580 | 578 | 345 | 452 | 468 | 441 |
| 21 | 311 | 327 | 293 | 309 | 308 | 304 | 1590 | 304 | 346 | 470 | 469 | 432 |
| 22 | 311 | 324 | 293 | 309 | 307 | 304 | 1580 | 304 | 350 | 469 | 484 | 433 |
| 23 | 310 | 312 | 293 | 309 | 314 | 306 | 1570 | 304 | 351 | 471 | 493 | 434 |
| 24 | 308 | 316 | 294 | 309 | 316 | 300 | 1570 | 327 | 350 | 470 | 491 | 429 |
| 25 | 309 | 315 | 294 | 308 | 316 | 301 | 1580 | 349 | 353 | 472 | 484 | 428 |
| 26 | 309 | 315 | 294 | 307 | 316 | 300 | 1570 | 343 | 353 | 470 | 443 | 432 |
| 27 | 309 | 316 | 294 | 306 | 316 | 297 | 1560 | 344 | 353 | 470 | 444 | 438 |
| 28 | 315 | 318 | 294 | 308 | 315 | 298 | 1560 | 345 | 361 | 471 | 444 | 439 |
| 29 | 324 | 317 | 294 | 308 | --- | 296 | 1570 | 345 | 364 | 471 | 447 | 442 |
| 30 | 325 | 317 | 294 | 308 | --- | 291 | 1590 | 345 | 364 | 471 | 447 | 440 |
| 31 | 324 | --- | 293 | 308 | --- | 291 | --- | 345 | --- | 470 | 444 | --- |
| TOTAL | 9570 | 9688 | 9237 | 9384 | 8661 | 9460 | 36139 | 34243 | 10463 | 14624 | 14464 | 13244 |
| MEAN | 309 | 323 | 298 | 303 | 309 | 305 | 1205 | 1105 | 349 | 472 | 467 | 441 |
| MAX | 325 | 328 | 318 | 309 | 316 | 326 | 1610 | 1610 | 364 | 491 | 493 | 454 |
| MIN | 282 | 312 | 291 | 293 | 305 | 291 | 290 | 304 | 344 | 364 | 443 | 428 |
| AC-FT | 18980 | 19220 | 18320 | 18610 | 17180 | 18760 | 71680 | 67920 | 20750 | 29010 | 28690 | 26270 |

11525500 TRINITY RIVER AT LEWISTON, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1960, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|-------|------|------|------|------|------|------|------|
| MEAN | 302 | 742 | 1257 | 1572 | 2544 | 2653 | 3675 | 3932 | 2131 | 611 | 201 | 158 |
| MAX | 2174 | 3055 | 5319 | 5734 | 11670 | 6116 | 6986 | 9062 | 6311 | 2579 | 628 | 423 |
| (WY) | 1951 | 1921 | 1956 | 1956 | 1958 | 1941 | 1915 | 1958 | 1915 | 1941 | 1941 | 1912 |
| MIN | 92.3 | 121 | 147 | 169 | 331 | 519 | 725 | 442 | 115 | 42.7 | 41.0 | 41.1 |
| (WY) | 1918 | 1930 | 1937 | 1937 | 1933 | 1924 | 1924 | 1924 | 1924 | 1924 | 1924 | 1924 |

SUMMARY STATISTICS

WATER YEARS 1912 - 1960

| | | |
|--------------------------|---------|-------------|
| ANNUAL MEAN | 1641 | |
| HIGHEST ANNUAL MEAN | 3721 | 1958 |
| LOWEST ANNUAL MEAN | 367 | 1924 |
| HIGHEST DAILY MEAN | 38700 | Dec 22 1955 |
| LOWEST DAILY MEAN | 28 | Jul 30 1924 |
| ANNUAL SEVEN-DAY MINIMUM | 31 | Jul 26 1924 |
| INSTANTANEOUS PEAK FLOW | 71600 | Dec 22 1955 |
| INSTANTANEOUS PEAK STAGE | 27.3 | Dec 22 1955 |
| ANNUAL RUNOFF (AC-FT) | 1189000 | |
| 10 PERCENT EXCEEDS | 4310 | |
| 50 PERCENT EXCEEDS | 732 | |
| 90 PERCENT EXCEEDS | 132 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 272 | 294 | 356 | 483 | 411 | 568 | 669 | 651 | 610 | 340 | 293 | 285 |
| MAX | 424 | 849 | 2285 | 4038 | 1782 | 5489 | 5029 | 3937 | 4668 | 1096 | 577 | 531 |
| (WY) | 1993 | 1984 | 1984 | 1974 | 1983 | 1983 | 1963 | 1963 | 1983 | 1983 | 1982 | 1992 |
| 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1962 - 1994

| | | | |
|--------------------------|--------|--------|--------|
| ANNUAL TOTAL | 181073 | 179177 | |
| ANNUAL MEAN | 496 | 491 | 436 |
| HIGHEST ANNUAL MEAN | | | 1784 |
| LOWEST ANNUAL MEAN | | | 165 |
| HIGHEST DAILY MEAN | 3070 | Apr 16 | 1610 |
| LOWEST DAILY MEAN | 282 | Oct 9 | 282 |
| ANNUAL SEVEN-DAY MINIMUM | 291 | Jan 8 | 292 |
| INSTANTANEOUS PEAK FLOW | | | 1630 |
| INSTANTANEOUS PEAK STAGE | | | 5.46 |
| ANNUAL RUNOFF (AC-FT) | 359200 | 355400 | 315700 |
| 10 PERCENT EXCEEDS | 476 | 1560 | 555 |
| 50 PERCENT EXCEEDS | 323 | 326 | 292 |
| 90 PERCENT EXCEEDS | 293 | 294 | 154 |

11525580 LITTLE GRASS VALLEY CREEK NEAR LEWISTON, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 40°39'45", long 122°47'57", in NE 1/4 NW 1/4 sec.5, T.32 N., R.8 W., Trinity County, Hydrologic Unit 18010211, on left bank 0.2 mi upstream from the confluence with Grass Valley Creek, 0.9 mi west of Buckhorn Station, and 3.1 mi south of Lewiston on State Highway 299.

DRAINAGE AREA.--10.7 mi².

PERIOD OF RECORD.--

SEDIMENT DATA: Water years 1985 to current year.

REMARKS.--Zero bedload observed at flows less than 5.4 ft³/s. Record is collected for hydrologic and sediment-transport correlation studies with Grass Valley Creek at Fawn Lodge, near Lewiston (station 11525600).

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--|--------------------------------------|---|---|---|---|---|---|
| OCT | | | | | | | | | |
| 08... | 1100 | 2.3 | 9.0 | 2 | 0.01 | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 01... | 1200 | 2.6 | 7.0 | 2 | 0.01 | -- | -- | -- | -- |
| DEC | | | | | | | | | |
| 03... | 1315 | 2.7 | 5.5 | 4 | 0.03 | -- | -- | -- | -- |
| JAN | | | | | | | | | |
| 07... | 1115 | 2.7 | 2.5 | 1 | 0.01 | -- | -- | -- | -- |
| 24... | 1140 | 8.3 | 5.5 | 73 | 1.6 | 82 | 88 | 95 | 100 |
| FEB | | | | | | | | | |
| 07... | 1050 | 4.9 | 4.5 | 19 | 0.25 | 55 | -- | -- | -- |
| MAR | | | | | | | | | |
| 04... | 1345 | 5.4 | 8.0 | 8 | 0.12 | -- | -- | -- | -- |
| APR | | | | | | | | | |
| 06... | 1030 | 3.6 | 7.0 | 5 | 0.05 | -- | -- | -- | -- |
| MAY | | | | | | | | | |
| 04... | 1005 | 2.8 | 10.0 | 5 | 0.04 | -- | -- | -- | -- |
| JUN | | | | | | | | | |
| 06... | 1100 | 2.4 | 10.0 | 4 | 0.03 | -- | -- | -- | -- |
| JUL | | | | | | | | | |
| 06... | 1035 | 1.2 | 12.5 | 1 | 0.00 | -- | -- | -- | -- |
| AUG | | | | | | | | | |
| 01... | 1115 | 0.71 | 15.5 | 2 | 0.00 | -- | -- | -- | -- |
| 29... | 1140 | 0.72 | 12.0 | 4 | 0.01 | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 30... | 1055 | 0.99 | 10.5 | 2 | 0.01 | -- | -- | -- | -- |

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | NUMBER | DIS- | TEMPER- | BED | BED | BED |
|-------|---------|---------|---------|---------|---------|---------|---------|
| | | OF | CHARGE, | | MAT. | MAT. | MAT. |
| | | SAM- | INST. | | SIEVE | SIEVE | SIEVE |
| | | PLING | CUBIC | ATURE | DIAM. | DIAM. | DIAM. |
| | | POINTS | FEET | WATER | % FINER | % FINER | % FINER |
| | | (COUNT) | PER | (DEG C) | THAN | THAN | THAN |
| | | | SECOND | | .062 MM | .125 MM | .250 MM |
| SEP | | | | | | | |
| 23... | 0850 | 1 | 0.62 | 12.0 | 1 | 4 | 15 |
| 23... | 0855 | 1 | 0.62 | 12.0 | -- | 2 | 11 |
| 23... | 0900 | 1 | 0.62 | 12.0 | -- | 2 | 12 |
| DATE | BED | BED | BED | BED | BED | BED | BED |
| | MAT. | MAT. | MAT. | MAT. | MAT. | MAT. | MAT. |
| | SIEVE | SIEVE | SIEVE | SIEVE | SIEVE | SIEVE | SIEVE |
| | DIAM. | DIAM. | DIAM. | DIAM. | DIAM. | DIAM. | DIAM. |
| | % FINER | % FINER | % FINER | % FINER | % FINER | % FINER | % FINER |
| | THAN | THAN | THAN | THAN | THAN | THAN | THAN |
| | .500 MM | 1.00 MM | 2.00 MM | 4.00 MM | 8.00 MM | 16.0 MM | 32.0 MM |
| SEP | | | | | | | |
| 23... | 30 | 52 | 78 | 94 | 98 | 99 | 100 |
| 23... | 27 | 44 | 70 | 90 | 100 | -- | -- |
| 23... | 28 | 43 | 61 | 87 | 100 | -- | -- |

11525580 LITTLE GRASS VALLEY CREEK NEAR LEWISTON, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | SAM- PLING METHOD, CODES | SAMPLER TYPE (CODE) | BAG MESH SIZE BEDLOAD SAMPLER (MM) | TETHER LINE USED IN SAMPLING (YES=1) (CODE) | START- ING TIME (2400 HOURS) | END- ING TIME (2400 HOURS) | TIME ON BED FOR BED LOAD SAMPLE (SEC) | HORI- ZONTAL WIDTH OF VER- TICAL (FEET) | COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (NUM) | VER- TICALS IN COM- POSITE SAMPLE (NUM) | NUMBER OF SAM- PLING POINTS (COUNT) |
|-------|---|--|--------------------------------------|---|---|---|---|---|---|---|---|---|
| JAN | | | | | | | | | | | | |
| 24... | 1200 | 1000 | 1120 | 0.250 | 0 | 1150 | 1205 | 30 | 0.3 | 2 | 20 | 20 |
| 24... | 1220 | 1000 | 1120 | 0.250 | 0 | 1210 | 1230 | 30 | 0.3 | 2 | 20 | 20 |
| DATE | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT | SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) | SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM |
| JAN | | | | | | | | | | | | |
| 24... | 1.50 | 8.3 | 5.5 | 0.37 | 2.4 | -- | 5 | 20 | 44 | 70 | 94 | 100 |
| 24... | 1.50 | 8.3 | 5.5 | 0.44 | 2.4 | 1 | 4 | 20 | 41 | 65 | 92 | 100 |

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA

LOCATION.--Lat 40°40'35", long 122°49'46", in SW 1/4 NE 1/4 sec.36, T.33 N., R.9 W., Trinity County, Hydrologic Unit 18010211, on right bank 0.1 mi upstream from Phillips Gulch and 2.5 mi southwest of Lewiston.

DRAINAGE AREA.--30.8 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)

GAGE.--Water-stage recorder. Datum of gage is 2,049.73 ft above sea level (California State Highway Department Benchmark).

REMARKS.--No estimated daily discharges. 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, 4,140 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|
| Feb. 17 | 0515 | *124 | *5.59 |

Minimum daily, 3.8 ft³/s, July 29.

REVISIONS.--The date for a water year 1993 peak has been revised to Mar. 17, discharge, 227 ft³/s, gage-height, 6.00 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1 | 13 | 13 | 16 | 20 | 25 | 39 | 30 | 27 | 19 | 13 | 4.9 | 6.1 |
| 2 | 13 | 13 | 16 | 19 | 24 | 40 | 29 | 26 | 18 | 13 | 5.9 | 6.2 |
| 3 | 13 | 13 | 16 | 18 | 24 | 40 | 31 | 26 | 18 | 13 | 6.2 | 6.2 |
| 4 | 15 | 13 | 16 | 20 | 23 | 41 | 30 | 29 | 18 | 13 | 6.3 | 6.4 |
| 5 | 16 | 13 | 16 | 20 | 23 | 43 | 29 | 29 | 18 | 12 | 6.6 | 6.3 |
| 6 | 16 | 13 | 16 | 18 | 28 | 42 | 29 | 28 | 18 | 8.9 | 6.7 | 6.1 |
| 7 | 15 | 14 | 18 | 18 | 32 | 40 | 29 | 30 | 18 | 8.8 | 6.6 | 6.0 |
| 8 | 15 | 14 | 43 | 19 | 29 | 40 | 29 | 28 | 17 | 8.6 | 6.4 | 6.0 |
| 9 | 15 | 14 | 26 | 19 | 27 | 39 | 29 | 27 | 13 | 8.4 | 6.4 | 6.2 |
| 10 | 16 | 14 | 29 | 18 | 34 | 40 | 28 | 26 | 15 | 8.5 | 6.4 | 6.6 |
| 11 | 17 | 14 | 38 | 18 | 30 | 40 | 28 | 25 | 15 | 8.3 | 6.1 | 6.7 |
| 12 | 17 | 14 | 30 | 18 | 28 | 39 | 27 | 24 | 15 | 8.2 | 6.2 | 7.0 |
| 13 | 16 | 14 | 26 | 17 | 26 | 37 | 27 | 24 | 15 | 8.3 | 6.2 | 7.1 |
| 14 | 17 | 14 | 27 | 17 | 26 | 37 | 27 | 23 | 15 | 8.2 | 6.1 | 7.1 |
| 15 | 18 | 14 | 23 | 17 | 25 | 37 | 26 | 23 | 15 | 8.1 | 5.9 | 7.0 |
| 16 | 18 | 14 | 21 | 17 | 27 | 38 | 26 | 23 | 15 | 8.2 | 5.8 | 6.6 |
| 17 | 17 | 14 | 20 | 17 | 88 | 37 | 26 | 23 | 15 | 8.1 | 5.9 | 6.3 |
| 18 | 16 | 14 | 20 | 16 | 57 | 36 | 26 | 23 | 15 | 8.1 | 5.8 | 6.3 |
| 19 | 16 | 14 | 19 | 16 | 50 | 36 | 26 | 24 | 15 | 8.0 | 5.9 | 6.4 |
| 20 | 15 | 14 | 19 | 16 | 45 | 35 | 26 | 23 | 14 | 8.0 | 6.0 | 6.7 |
| 21 | 15 | 14 | 18 | 19 | 41 | 34 | 25 | 22 | 14 | 8.0 | 6.1 | 6.4 |
| 22 | 15 | 14 | 18 | 22 | 38 | 34 | 25 | 22 | 14 | 7.8 | 6.0 | 6.3 |
| 23 | 15 | 14 | 18 | 45 | 37 | 33 | 27 | 21 | 14 | 4.6 | 6.0 | 6.4 |
| 24 | 15 | 14 | 18 | 60 | 37 | 33 | 30 | 20 | 14 | 4.2 | 6.0 | 6.5 |
| 25 | 15 | 14 | 18 | 55 | 37 | 32 | 33 | 20 | 14 | 4.1 | 5.9 | 6.6 |
| 26 | 14 | 14 | 18 | 41 | 38 | 31 | 30 | 20 | 14 | 4.1 | 6.0 | 6.4 |
| 27 | 13 | 14 | 18 | 36 | 39 | 30 | 28 | 20 | 14 | 4.0 | 5.9 | 6.3 |
| 28 | 13 | 15 | 17 | 32 | 39 | 30 | 27 | 19 | 14 | 3.9 | 5.9 | 6.7 |
| 29 | 13 | 17 | 17 | 29 | --- | 30 | 27 | 19 | 14 | 3.8 | 6.1 | 7.0 |
| 30 | 13 | 16 | 17 | 28 | --- | 30 | 27 | 18 | 13 | 3.9 | 6.0 | 7.2 |
| 31 | 13 | --- | 17 | 26 | --- | 30 | --- | 19 | --- | 4.1 | 6.0 | --- |
| TOTAL | 468 | 420 | 649 | 751 | 977 | 1123 | 837 | 731 | 460 | 241.2 | 188.2 | 195.1 |
| MEAN | 15.1 | 14.0 | 20.9 | 24.2 | 34.9 | 36.2 | 27.9 | 23.6 | 15.3 | 7.78 | 6.07 | 6.50 |
| MAX | 18 | 17 | 43 | 60 | 88 | 43 | 33 | 30 | 19 | 13 | 6.7 | 7.2 |
| MIN | 13 | 13 | 16 | 16 | 23 | 30 | 25 | 18 | 13 | 3.8 | 4.9 | 6.0 |
| AC-FT | 928 | 833 | 1290 | 1490 | 1940 | 2230 | 1660 | 1450 | 912 | 478 | 373 | 387 |

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 12.6 | 23.9 | 40.1 | 56.8 | 82.1 | 98.8 | 63.4 | 46.8 | 29.0 | 15.6 | 10.8 | 10.7 |
| MAX | 18.8 | 70.4 | 220 | 259 | 263 | 531 | 186 | 174 | 99.8 | 39.6 | 22.3 | 23.0 |
| (WY) | 1990 | 1985 | 1984 | 1978 | 1986 | 1983 | 1983 | 1983 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1976 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 17733 | | | | 7040.5 | | | | | | | |
| ANNUAL MEAN | 48.6 | | | | 19.3 | | | | 41.8 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 136 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 10.2 | | | |
| HIGHEST DAILY MEAN | 327 | | | | 88 | | | | 2420 | | | |
| LOWEST DAILY MEAN | 11 | | | | 3.8 | | | | 3.8 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 11 | | | | 4.0 | | | | 4.0 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 124 | | | | 4140 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 5.59 | | | | 10.11 | | | |
| ANNUAL RUNOFF (AC-FT) | 35170 | | | | 13960 | | | | 30280 | | | |
| 10 PERCENT EXCEEDS | 105 | | | | 36 | | | | 89 | | | |
| 50 PERCENT EXCEEDS | 28 | | | | 17 | | | | 19 | | | |
| 90 PERCENT EXCEEDS | 13 | | | | 6.2 | | | | 8.6 | | | |

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.--

SUSPENDED-SEDIMENT DISCHARGE: November 1975 to current year.

REMARKS.--Sediment samples were collected on most days where a water temperature is published. Zero bedload observed at flows less than 41 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 most years.

SEDIMENT LOAD: Maximum daily, 65,200 tons, Mar. 2, 1983; minimum daily, 0 tons several days most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 76 mg/L, Feb. 17; minimum daily mean, 0 mg/L Nov. 30 to Dec. 5.

SEDIMENT LOAD: Maximum daily, 20 tons, Feb. 17; minimum daily, 0 ton, Nov. 30 to Dec. 5.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) | SED. SUSP. SIEVE DIAM. % FINER THAN (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM | SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM |
|-------|------|--|--------------------------------------|---|---|---|---|---|---|
| JAN | | | | | | | | | |
| 24... | 0940 | 66 | 5.0 | 31 | 5.5 | 70 | 81 | 89 | 100 |
| FEB | | | | | | | | | |
| 07... | 0940 | 32 | 4.0 | 6 | 0.52 | 74 | -- | -- | -- |
| MAR | | | | | | | | | |
| 04... | 1245 | 41 | 7.5 | 5 | 0.55 | 70 | -- | -- | -- |

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | NUMBER OF SAM- PLING POINTS (COUNT) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | BED MAT. SIEVE DIAM. % FINER THAN .125 MM | BED MAT. SIEVE DIAM. % FINER THAN .250 MM | BED MAT. SIEVE DIAM. % FINER THAN .500 MM | BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM |
|-------|------|--|--|--------------------------------------|---|---|---|---|
| SEP | | | | | | | | |
| 23... | 0815 | 1 | 6.6 | 12.0 | 1 | 3 | 8 | 25 |
| 23... | 0820 | 1 | 6.6 | 12.0 | 1 | 2 | 5 | 28 |
| 23... | 0825 | 1 | 6.6 | 12.0 | -- | 1 | 3 | 8 |
| 23... | 0830 | 1 | 6.6 | 12.0 | -- | 2 | 8 | 19 |
| 23... | 0835 | 1 | 6.6 | 12.0 | -- | -- | 1 | 3 |

| DATE | BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM | BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM | BED MAT. SIEVE DIAM. % FINER THAN 128 MM |
|-------|---|---|---|---|---|---|--|
| SEP | | | | | | | |
| 23... | 44 | 60 | 65 | 70 | 74 | 100 | -- |
| 23... | 58 | 76 | 77 | 77 | 77 | 100 | -- |
| 23... | 19 | 31 | 33 | 40 | 51 | 62 | 100 |
| 23... | 32 | 43 | 47 | 50 | 55 | 100 | -- |
| 23... | 7 | 12 | 15 | 24 | 58 | 100 | -- |

KLAMATH RIVER BASIN

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | SAM- PLING METHOD, CODES | SAMPLER TYPE (CODE) | BAG MESH SIZE BEDLOAD SAMPLER (MM) | TETHER LINE USED IN SAMPLING (YES=1) (CODE) | START- ING TIME (2400 HOURS) | END- ING TIME (2400 HOURS) | TIME ON BED FOR BED LOAD SAMPLE (SEC) | HORI- ZONTAL WIDTH OF VER- TICAL (FEET) |
|-------|------|-----------------------------------|---------------------------|---|--|--|--|---|---|
| JAN | | | | | | | | | |
| 24... | 0955 | 1000 | 1120 | 0.250 | 0 | 0945 | 1005 | 30 | 0.5 |
| 24... | 1015 | 1000 | 1120 | 0.250 | 0 | 1005 | 1025 | 30 | 0.5 |

| DATE | COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMT (NUM) | VER- TICALS IN COM- POSITE SAMPLE (NUM) | NUMBER OF SAM- PLING POINTS (COUNT) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT | SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) |
|-------|---|---|--|---|--|--------------------------------------|---|---|
| JAN | | | | | | | | |
| 24... | 2 | 24 | 24 | 13.0 | 66 | 5.0 | 0.22 | 2.4 |
| 24... | 2 | 24 | 24 | 13.0 | 66 | 5.0 | 0.18 | 2.4 |

| DATE | SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM | SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM |
|-------|---|---|---|---|---|---|---|---|
| JAN | | | | | | | | |
| 24... | -- | 2 | 10 | 34 | 62 | 90 | 100 | -- |
| 24... | 1 | 2 | 12 | 42 | 71 | 92 | 98 | 100 |

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY INSTANTANEOUS VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|-----|-----|-----|-----|------|------|------|------|------|------|------|
| 1 | --- | 7.0 | 4.5 | --- | --- | --- | --- | --- | --- | --- | 16.5 | --- |
| 2 | --- | --- | --- | 5.0 | 4.0 | --- | --- | 11.0 | --- | --- | --- | --- |
| 3 | --- | 8.0 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | 12.5 |
| 4 | 13.0 | --- | --- | 6.0 | --- | 7.5 | 10.0 | 10.5 | --- | --- | 17.0 | --- |
| 5 | --- | --- | --- | --- | --- | 7.5 | --- | --- | --- | 17.5 | --- | --- |
| 6 | 15.0 | --- | 4.0 | --- | 5.0 | --- | 7.5 | 12.0 | 10.0 | 15.5 | --- | --- |
| 7 | --- | --- | 6.0 | 2.5 | 4.0 | 5.0 | --- | 11.0 | --- | 18.5 | --- | 17.0 |
| 8 | 10.0 | --- | 6.5 | --- | 5.0 | --- | --- | --- | --- | --- | 14.5 | --- |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | --- | 7.0 | 8.5 | 4.5 | --- | --- | --- | --- | 17.0 | --- | --- | --- |
| 11 | 13.0 | --- | 7.5 | --- | --- | --- | --- | 11.5 | --- | --- | 17.5 | 14.0 |
| 12 | --- | 7.0 | --- | 5.0 | 2.5 | --- | --- | --- | --- | --- | --- | --- |
| 13 | 12.5 | --- | --- | --- | --- | 6.5 | --- | --- | --- | 19.0 | --- | --- |
| 14 | --- | --- | 5.0 | --- | --- | --- | --- | 10.5 | --- | --- | --- | --- |
| 15 | --- | --- | --- | --- | 4.0 | 10.0 | --- | --- | 14.0 | 20.0 | 14.0 | 14.5 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 11.0 | 5.0 | --- | 4.0 | 5.0 | --- | --- | 11.5 | --- | --- | --- | --- |
| 18 | --- | --- | 2.0 | --- | 4.0 | --- | --- | --- | --- | --- | 18.5 | --- |
| 19 | --- | --- | --- | --- | --- | 6.0 | --- | --- | --- | --- | --- | 15.5 |
| 20 | --- | --- | --- | --- | --- | --- | --- | 12.5 | 14.5 | --- | --- | --- |
| 21 | 11.0 | 4.0 | --- | --- | 4.5 | --- | --- | --- | --- | 21.5 | --- | --- |
| 22 | --- | --- | 2.0 | 6.5 | --- | 5.0 | --- | --- | --- | --- | 16.5 | --- |
| 23 | --- | --- | --- | 6.0 | --- | --- | --- | --- | --- | --- | --- | 12.0 |
| 24 | --- | --- | --- | 5.0 | 5.5 | 7.0 | --- | --- | 16.5 | --- | --- | --- |
| 25 | --- | --- | --- | 5.0 | --- | --- | 8.0 | 16.0 | --- | --- | --- | --- |
| 26 | 9.0 | --- | --- | --- | --- | --- | 8.5 | --- | --- | 20.0 | 14.5 | --- |
| 27 | --- | 4.0 | --- | 5.0 | --- | --- | --- | --- | 17.0 | --- | --- | 15.0 |
| 28 | --- | --- | 2.5 | --- | 7.0 | 10.5 | --- | 11.5 | --- | --- | --- | --- |
| 29 | 10.5 | 6.0 | --- | 3.0 | --- | --- | 11.0 | --- | --- | --- | 15.5 | --- |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | 18.0 | --- | --- | 11.0 |
| 31 | --- | --- | --- | --- | --- | 10.5 | --- | 15.0 | --- | 19.5 | 17.0 | --- |

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN- TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN- TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN- TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | |
| 1 | 13 | 1 | .05 | 13 | 1 | .04 | 16 | 0 | .00 |
| 2 | 13 | 2 | .07 | 13 | 2 | .06 | 16 | 0 | .00 |
| 3 | 13 | 3 | .10 | 13 | 3 | .10 | 16 | 0 | .00 |
| 4 | 15 | 4 | .15 | 13 | 3 | .11 | 16 | 0 | .00 |
| 5 | 16 | 3 | .12 | 13 | 3 | .11 | 16 | 0 | .00 |
| 6 | 16 | 2 | .09 | 13 | 3 | .11 | 16 | 1 | .04 |
| 7 | 15 | 3 | .12 | 14 | 3 | .11 | 18 | 2 | .11 |
| 8 | 15 | 3 | .13 | 14 | 3 | .11 | 43 | 17 | 2.1 |
| 9 | 15 | 3 | .12 | 14 | 3 | .11 | 26 | 2 | .15 |
| 10 | 16 | 3 | .13 | 14 | 3 | .11 | 29 | 3 | .21 |
| 11 | 17 | 3 | .13 | 14 | 3 | .11 | 38 | 12 | 1.3 |
| 12 | 17 | 2 | .11 | 14 | 3 | .11 | 30 | 5 | .44 |
| 13 | 16 | 2 | .09 | 14 | 3 | .11 | 26 | 3 | .20 |
| 14 | 17 | 2 | .09 | 14 | 3 | .10 | 27 | 2 | .16 |
| 15 | 18 | 2 | .10 | 14 | 2 | .09 | 23 | 2 | .11 |
| 16 | 18 | 2 | .10 | 14 | 2 | .08 | 21 | 1 | .08 |
| 17 | 17 | 2 | .09 | 14 | 2 | .08 | 20 | 1 | .07 |
| 18 | 16 | 2 | .10 | 14 | 2 | .08 | 20 | 1 | .05 |
| 19 | 16 | 3 | .12 | 14 | 2 | .09 | 19 | 1 | .05 |
| 20 | 15 | 3 | .14 | 14 | 3 | .10 | 19 | 1 | .05 |
| 21 | 15 | 4 | .16 | 14 | 3 | .11 | 18 | 1 | .05 |
| 22 | 15 | 3 | .14 | 14 | 3 | .11 | 18 | 1 | .05 |
| 23 | 15 | 3 | .12 | 14 | 3 | .11 | 18 | 1 | .05 |
| 24 | 15 | 3 | .10 | 14 | 3 | .11 | 18 | 1 | .05 |
| 25 | 15 | 2 | .09 | 14 | 3 | .11 | 18 | 1 | .05 |
| 26 | 14 | 2 | .08 | 14 | 3 | .11 | 18 | 1 | .05 |
| 27 | 13 | 2 | .07 | 14 | 3 | .11 | 18 | 1 | .05 |
| 28 | 13 | 2 | .07 | 15 | 2 | .07 | 17 | 1 | .05 |
| 29 | 13 | 2 | .07 | 17 | 1 | .03 | 17 | 1 | .05 |
| 30 | 13 | 2 | .06 | 16 | 0 | .00 | 17 | 1 | .06 |
| 31 | 13 | 1 | .04 | --- | --- | --- | 17 | 2 | .07 |
| TOTAL | 468 | --- | 3.15 | 420 | --- | 2.79 | 649 | --- | 5.70 |
| JANUARY | | | FEBRUARY | | | MARCH | | | |
| 1 | 20 | 2 | .10 | 25 | 3 | .23 | 39 | 5 | .52 |
| 2 | 19 | 2 | .10 | 24 | 4 | .24 | 40 | 5 | .54 |
| 3 | 18 | 2 | .10 | 24 | 3 | .16 | 40 | 5 | .54 |
| 4 | 20 | 2 | .11 | 23 | 2 | .13 | 41 | 5 | .54 |
| 5 | 20 | 2 | .11 | 23 | 2 | .12 | 43 | 4 | .44 |
| 6 | 18 | 2 | .10 | 28 | 4 | .31 | 42 | 3 | .31 |
| 7 | 18 | 2 | .09 | 32 | 5 | .42 | 40 | 2 | .23 |
| 8 | 19 | 2 | .10 | 29 | 2 | .18 | 40 | 2 | .24 |
| 9 | 19 | 2 | .10 | 27 | 2 | .14 | 39 | 3 | .27 |
| 10 | 18 | 2 | .09 | 34 | 5 | .51 | 40 | 3 | .31 |
| 11 | 18 | 1 | .07 | 30 | 3 | .23 | 40 | 3 | .35 |
| 12 | 18 | 1 | .05 | 28 | 2 | .15 | 39 | 4 | .38 |
| 13 | 17 | 1 | .05 | 26 | 2 | .14 | 37 | 4 | .40 |
| 14 | 17 | 1 | .05 | 26 | 3 | .18 | 37 | 4 | .40 |
| 15 | 17 | 1 | .05 | 25 | 4 | .24 | 37 | 4 | .40 |
| 16 | 17 | 1 | .05 | 27 | 4 | .31 | 38 | 4 | .43 |
| 17 | 17 | 1 | .05 | 88 | 76 | 20 | 37 | 4 | .45 |
| 18 | 16 | 1 | .04 | 57 | 17 | 2.9 | 36 | 5 | .47 |
| 19 | 16 | 1 | .04 | 50 | 9 | 1.2 | 36 | 5 | .48 |
| 20 | 16 | 1 | .04 | 45 | 7 | .81 | 35 | 5 | .43 |
| 21 | 19 | 4 | .19 | 41 | 5 | .57 | 34 | 4 | .39 |
| 22 | 22 | 4 | .21 | 38 | 5 | .48 | 34 | 4 | .32 |
| 23 | 45 | 17 | 2.0 | 37 | 4 | .43 | 33 | 2 | .17 |
| 24 | 60 | 24 | 4.0 | 37 | 4 | .40 | 33 | 1 | .10 |
| 25 | 55 | 7 | 1.1 | 37 | 4 | .42 | 32 | 1 | .11 |
| 26 | 41 | 6 | .66 | 38 | 4 | .46 | 31 | 2 | .14 |
| 27 | 36 | 5 | .49 | 39 | 5 | .50 | 30 | 2 | .18 |
| 28 | 32 | 3 | .29 | 39 | 5 | .52 | 30 | 3 | .23 |
| 29 | 29 | 2 | .17 | --- | --- | --- | 30 | 3 | .24 |
| 30 | 28 | 2 | .18 | --- | --- | --- | 30 | 3 | .24 |
| 31 | 26 | 3 | .20 | --- | --- | --- | 30 | 3 | .24 |
| TOTAL | 751 | --- | 10.98 | 977 | --- | 32.38 | 1123 | --- | 10.49 |

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| 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) |
|-------|----------------------------|---------------------------------|-------------------------------------|----------------------------|---------------------------------|-------------------------------------|----------------------------|---------------------------------|-------------------------------------|
| APRIL | | | MAY | | | JUNE | | | |
| 1 | 30 | 3 | .24 | 27 | 4 | .27 | 19 | 2 | .10 |
| 2 | 29 | 3 | .24 | 26 | 4 | .28 | 18 | 2 | .10 |
| 3 | 31 | 3 | .25 | 26 | 4 | .28 | 18 | 2 | .10 |
| 4 | 30 | 3 | .24 | 29 | 5 | .39 | 18 | 2 | .10 |
| 5 | 29 | 3 | .27 | 29 | 5 | .36 | 18 | 2 | .10 |
| 6 | 29 | 3 | .26 | 28 | 3 | .25 | 18 | 2 | .10 |
| 7 | 29 | 3 | .23 | 30 | 3 | .26 | 18 | 2 | .10 |
| 8 | 29 | 3 | .22 | 28 | 3 | .21 | 17 | 2 | .09 |
| 9 | 29 | 3 | .22 | 27 | 3 | .18 | 13 | 2 | .07 |
| 10 | 28 | 3 | .21 | 26 | 2 | .16 | 15 | 2 | .08 |
| 11 | 28 | 3 | .20 | 25 | 2 | .14 | 15 | 2 | .07 |
| 12 | 27 | 3 | .19 | 24 | 2 | .13 | 15 | 2 | .06 |
| 13 | 27 | 3 | .19 | 24 | 2 | .13 | 15 | 1 | .05 |
| 14 | 27 | 2 | .18 | 23 | 2 | .12 | 15 | 1 | .05 |
| 15 | 26 | 2 | .17 | 23 | 2 | .10 | 15 | 1 | .04 |
| 16 | 26 | 2 | .17 | 23 | 1 | .08 | 15 | 1 | .04 |
| 17 | 26 | 2 | .16 | 23 | 1 | .07 | 15 | 1 | .04 |
| 18 | 26 | 2 | .16 | 23 | 1 | .08 | 15 | 1 | .04 |
| 19 | 26 | 2 | .16 | 24 | 2 | .11 | 15 | 1 | .04 |
| 20 | 26 | 2 | .15 | 23 | 2 | .12 | 14 | 1 | .04 |
| 21 | 25 | 2 | .14 | 22 | 2 | .13 | 14 | 1 | .04 |
| 22 | 25 | 2 | .14 | 22 | 2 | .14 | 14 | 1 | .04 |
| 23 | 27 | 3 | .25 | 21 | 3 | .14 | 14 | 1 | .04 |
| 24 | 30 | 3 | .27 | 20 | 3 | .15 | 14 | 1 | .04 |
| 25 | 33 | 7 | .58 | 20 | 3 | .16 | 14 | 1 | .05 |
| 26 | 30 | 5 | .40 | 20 | 3 | .14 | 14 | 2 | .06 |
| 27 | 28 | 4 | .31 | 20 | 2 | .12 | 14 | 2 | .07 |
| 28 | 27 | 4 | .26 | 19 | 2 | .11 | 14 | 2 | .06 |
| 29 | 27 | 3 | .23 | 19 | 2 | .10 | 14 | 1 | .05 |
| 30 | 27 | 3 | .24 | 18 | 2 | .10 | 13 | 1 | .04 |
| 31 | --- | --- | --- | 19 | 2 | .10 | --- | --- | --- |
| TOTAL | 837 | --- | 6.93 | 731 | --- | 5.11 | 460 | --- | 1.90 |
| JULY | | | AUGUST | | | SEPTEMBER | | | |
| 1 | 13 | 1 | .04 | 4.9 | 2 | .03 | 6.1 | 3 | .04 |
| 2 | 13 | 1 | .05 | 5.9 | 2 | .03 | 6.2 | 2 | .04 |
| 3 | 13 | 1 | .05 | 6.2 | 2 | .03 | 6.2 | 2 | .03 |
| 4 | 13 | 2 | .06 | 6.3 | 2 | .03 | 6.4 | 2 | .04 |
| 5 | 12 | 2 | .06 | 6.6 | 2 | .04 | 6.3 | 2 | .04 |
| 6 | 8.9 | 1 | .02 | 6.7 | 2 | .04 | 6.1 | 3 | .05 |
| 7 | 8.8 | 1 | .03 | 6.6 | 2 | .03 | 6.0 | 3 | .05 |
| 8 | 8.6 | 4 | .09 | 6.4 | 2 | .03 | 6.0 | 3 | .05 |
| 9 | 8.4 | 3 | .08 | 6.4 | 2 | .03 | 6.2 | 3 | .05 |
| 10 | 8.5 | 3 | .07 | 6.4 | 1 | .02 | 6.6 | 3 | .05 |
| 11 | 8.3 | 3 | .06 | 6.1 | 1 | .02 | 6.7 | 3 | .05 |
| 12 | 8.2 | 2 | .05 | 6.2 | 1 | .02 | 7.0 | 3 | .05 |
| 13 | 8.3 | 2 | .05 | 6.2 | 1 | .02 | 7.1 | 2 | .05 |
| 14 | 8.2 | 2 | .04 | 6.1 | 1 | .02 | 7.1 | 2 | .04 |
| 15 | 8.1 | 2 | .04 | 5.9 | 1 | .02 | 7.0 | 2 | .04 |
| 16 | 8.2 | 2 | .05 | 5.8 | 2 | .03 | 6.6 | 2 | .04 |
| 17 | 8.1 | 2 | .05 | 5.9 | 3 | .05 | 6.3 | 2 | .04 |
| 18 | 8.1 | 2 | .05 | 5.8 | 5 | .08 | 6.3 | 3 | .05 |
| 19 | 8.0 | 3 | .06 | 5.9 | 5 | .08 | 6.4 | 3 | .05 |
| 20 | 8.0 | 3 | .06 | 6.0 | 4 | .06 | 6.7 | 3 | .05 |
| 21 | 8.0 | 3 | .06 | 6.1 | 3 | .05 | 6.4 | 3 | .05 |
| 22 | 7.8 | 3 | .06 | 6.0 | 2 | .03 | 6.3 | 3 | .05 |
| 23 | 4.6 | 3 | .04 | 6.0 | 2 | .03 | 6.4 | 3 | .05 |
| 24 | 4.2 | 3 | .03 | 6.0 | 2 | .04 | 6.5 | 3 | .05 |
| 25 | 4.1 | 3 | .03 | 5.9 | 3 | .04 | 6.6 | 3 | .05 |
| 26 | 4.1 | 3 | .03 | 6.0 | 3 | .05 | 6.4 | 3 | .05 |
| 27 | 4.0 | 3 | .03 | 5.9 | 3 | .05 | 6.3 | 3 | .05 |
| 28 | 3.9 | 3 | .03 | 5.9 | 4 | .06 | 6.7 | 3 | .05 |
| 29 | 3.8 | 3 | .03 | 6.1 | 4 | .06 | 7.0 | 2 | .04 |
| 30 | 3.9 | 3 | .03 | 6.0 | 4 | .06 | 7.2 | 1 | .03 |
| 31 | 4.1 | 3 | .03 | 6.0 | 3 | .05 | --- | --- | --- |
| TOTAL | 241.2 | --- | 1.46 | 188.2 | --- | 1.23 | 195.1 | --- | 1.37 |
| YEAR | 7040.5 | | 83.49 | | | | | | |

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| MONTH | WATER DISCHARGE CFS-DAYS | SUSPENDED SEDIMENT DISCHARGE TONS | BEDLOAD DISCHARGE TONS | TOTAL SEDIMENT DISCHARGE TONS |
|---------------|--------------------------------|--|------------------------------|--|
| OCTOBER 1993 | 468.00 | 3.15 | 0 | 3 |
| NOVEMBER | 420.00 | 2.79 | 0 | 3 |
| DECEMBER | 649.00 | 5.70 | 0 | 6 |
| JANUARY 1994 | 751.00 | 10.98 | 0 | 11 |
| FEBRUARY | 977.00 | 32.38 | 2 | 34 |
| MARCH | 1123.00 | 10.49 | 0 | 10 |
| APRIL | 837.00 | 6.93 | 0 | 7 |
| MAY | 731.00 | 5.11 | 0 | 5 |
| JUNE | 460.00 | 1.90 | 0 | 2 |
| JULY | 241.20 | 1.46 | 0 | 1 |
| AUGUST | 188.20 | 1.23 | 0 | 1 |
| SEPTEMBER ... | 195.10 | 1.37 | 0 | 1 |
| TOTAL | 7040.50 | 83.49 | 2 | 84 |

KLAMATH RIVER BASIN

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 good. Flow regulated since November 1960 by Clair Engle Lake (station 11525400), 64 mi upstream, and by transbasin diversion to Judge Francis Carr Powerplant (station 11525430) since April 1963. Small diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,500 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|
| Feb. 18 | 1315 | *3,050 | *7.00 |

Minimum daily, 417 ft³/s, Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|
| 1 | 419 | 468 | 517 | 663 | 1010 | 1770 | 910 | 2100 | 848 | 546 | 524 | 483 |
| 2 | 417 | 465 | 574 | 837 | 967 | 1960 | 923 | 2090 | 801 | 546 | 525 | 485 |
| 3 | 419 | 464 | 539 | 804 | 927 | 1960 | 964 | 2090 | 785 | 657 | 522 | 490 |
| 4 | 436 | 464 | 530 | 849 | 891 | 1870 | 960 | 2180 | 752 | 649 | 523 | 499 |
| 5 | 489 | 462 | 528 | 1160 | 856 | 1860 | 929 | 2360 | 745 | 639 | 522 | 497 |
| 6 | 487 | 461 | 511 | 996 | 865 | 1780 | 917 | 2310 | 782 | 630 | 522 | 496 |
| 7 | 472 | 461 | 573 | 888 | 922 | 1580 | 896 | 2550 | 741 | 615 | 520 | 486 |
| 8 | 463 | 461 | 1570 | 852 | 945 | 1470 | 876 | 2730 | 684 | 609 | 521 | 482 |
| 9 | 441 | 461 | 1390 | 880 | 908 | 1430 | 907 | 2740 | 669 | 604 | 520 | 486 |
| 10 | 431 | 461 | 1040 | 834 | 980 | 1420 | 1400 | 2840 | 699 | 599 | 521 | 490 |
| 11 | 451 | 463 | 1550 | 807 | 1090 | 1400 | 2000 | 2790 | 751 | 594 | 519 | 493 |
| 12 | 488 | 465 | 1320 | 783 | 1010 | 1300 | 2020 | 2650 | 766 | 592 | 521 | 493 |
| 13 | 484 | 464 | 976 | 759 | 972 | 1240 | 2090 | 2380 | 719 | 586 | 520 | 499 |
| 14 | 489 | 464 | 977 | 743 | 943 | 1240 | 2090 | 2260 | 687 | 571 | 514 | 495 |
| 15 | 526 | 465 | 903 | 734 | 918 | 1260 | 2080 | 2240 | 640 | 576 | 514 | 492 |
| 16 | 626 | 468 | 799 | 718 | 910 | 1240 | 2140 | 2220 | 614 | 571 | 514 | 486 |
| 17 | 584 | 465 | 730 | 707 | 1660 | 1190 | 2280 | 2120 | 596 | 561 | 517 | 492 |
| 18 | 533 | 461 | 682 | 709 | 2080 | 1130 | 2360 | 2050 | 590 | 558 | 517 | 488 |
| 19 | 509 | 461 | 649 | 706 | 1680 | 1080 | 2470 | 2040 | 584 | 543 | 510 | 495 |
| 20 | 495 | 464 | 628 | 702 | 1520 | 1030 | 2360 | 1830 | 583 | 533 | 510 | 490 |
| 21 | 486 | 466 | 614 | 759 | 1460 | 995 | 2290 | 1030 | 590 | 535 | 511 | 486 |
| 22 | 482 | 472 | 606 | 1640 | 1400 | 968 | 2150 | 852 | 592 | 550 | 513 | 476 |
| 23 | 476 | 476 | 596 | 2710 | 1320 | 941 | 2140 | 845 | 592 | 550 | 528 | 476 |
| 24 | 474 | 460 | 589 | 2650 | 1270 | 922 | e2210 | 876 | 581 | 543 | 535 | 476 |
| 25 | 467 | 463 | 586 | 2590 | 1300 | 896 | e2340 | 953 | 566 | 540 | 532 | 473 |
| 26 | 464 | 467 | 587 | 2130 | 1350 | 873 | e2400 | 1020 | 560 | 539 | 526 | 472 |
| 27 | 457 | 468 | 585 | 1670 | 1500 | 861 | e2280 | 974 | 553 | 539 | 488 | 478 |
| 28 | 455 | 472 | 572 | 1410 | 1620 | 880 | e2100 | 916 | 545 | 532 | 487 | 486 |
| 29 | 459 | 478 | 567 | 1250 | --- | 919 | e2120 | 878 | 549 | 525 | 487 | 493 |
| 30 | 468 | 513 | 575 | 1150 | --- | 980 | 2090 | 877 | 552 | 524 | 489 | 494 |
| 31 | 468 | --- | 616 | 1070 | --- | 957 | --- | 873 | --- | 524 | 491 | --- |
| TOTAL | 14815 | 14003 | 23479 | 35160 | 33274 | 39402 | 53692 | 56664 | 19716 | 17680 | 15963 | 14627 |
| MEAN | 478 | 467 | 757 | 1134 | 1188 | 1271 | 1790 | 1828 | 657 | 570 | 515 | 488 |
| MAX | 626 | 513 | 1570 | 2710 | 2080 | 1960 | 2470 | 2840 | 848 | 657 | 535 | 499 |
| MIN | 417 | 460 | 511 | 663 | 856 | 861 | 876 | 845 | 545 | 524 | 487 | 472 |
| AC-FT | 29390 | 27770 | 46570 | 69740 | 66000 | 78150 | 106500 | 112400 | 39110 | 35070 | 31660 | 29010 |

e Estimated.

11527000 TRINITY RIVER NEAR BURNT RANCH, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1960, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|
| MEAN | 499 | 1192 | 1654 | 2936 | 5702 | 5569 | 5831 | 5674 | 3161 | 878 | 305 | 241 |
| MAX | 2732 | 4893 | 6426 | 6192 | 24270 | 10110 | 10090 | 11840 | 7076 | 2362 | 835 | 497 |
| (WY) | 1958 | 1938 | 1938 | 1958 | 1958 | 1938 | 1938 | 1958 | 1958 | 1958 | 1958 | 1958 |
| MIN | 138 | 209 | 253 | 311 | 831 | 2487 | 3319 | 1955 | 808 | 273 | 123 | 111 |
| (WY) | 1933 | 1937 | 1937 | 1937 | 1937 | 1935 | 1932 | 1939 | 1934 | 1934 | 1939 | 1932 |

SUMMARY STATISTICS

WATER YEARS 1932 - 1960

| | | |
|--------------------------|---------|-------------|
| ANNUAL MEAN | 2784 | |
| HIGHEST ANNUAL MEAN | 6557 | 1958 |
| LOWEST ANNUAL MEAN | 1409 | 1939 |
| HIGHEST DAILY MEAN | 65600 | Feb 19 1958 |
| LOWEST DAILY MEAN | 93 | Sep 13 1939 |
| ANNUAL SEVEN-DAY MINIMUM | 95 | Oct 1 1931 |
| INSTANTANEOUS PEAK FLOW | 81500 | Feb 25 1958 |
| INSTANTANEOUS PEAK STAGE | 30.50 | Feb 25 1958 |
| ANNUAL RUNOFF (AC-FT) | 2017000 | |
| 10 PERCENT EXCEEDS | 7120 | |
| 50 PERCENT EXCEEDS | 1240 | |
| 90 PERCENT EXCEEDS | 198 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|
| MEAN | 472 | 1132 | 2146 | 2928 | 2798 | 3137 | 2349 | 1955 | 1407 | 671 | 436 | 404 |
| MAX | 804 | 3570 | 8745 | 10990 | 10190 | 13770 | 8146 | 6343 | 7006 | 1985 | 1087 | 734 |
| (WY) | 1980 | 1974 | 1965 | 1974 | 1983 | 1983 | 1974 | 1983 | 1983 | 1983 | 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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1964 - 1994

| | | | |
|--------------------------|---------|--------|---------|
| ANNUAL TOTAL | 667825 | 338475 | |
| ANNUAL MEAN | 1830 | 927 | 1648 |
| HIGHEST ANNUAL MEAN | | | 4816 |
| LOWEST ANNUAL MEAN | | | 372 |
| HIGHEST DAILY MEAN | 13700 | Mar 17 | 2840 |
| LOWEST DAILY MEAN | 417 | Oct 2 | 417 |
| ANNUAL SEVEN-DAY MINIMUM | 437 | Sep 28 | 448 |
| INSTANTANEOUS PEAK FLOW | | | 3050 |
| INSTANTANEOUS PEAK STAGE | | | 7.00 |
| ANNUAL RUNOFF (AC-FT) | 1325000 | 671400 | 1194000 |
| 10 PERCENT EXCEEDS | 3700 | 2090 | 3390 |
| 50 PERCENT EXCEEDS | 1270 | 628 | 927 |
| 90 PERCENT EXCEEDS | 467 | 468 | 337 |

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.

REMARKS.--Records good. No regulation or diversion upstream from station. See schematic diagram of Klamath River and Trinity River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,000 ft³/s, Feb. 17, 1986, gage height, 25.47 ft, from rating curve extended above 15,000 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 28.00 ft, Jan. 26, 1983; minimum daily, 14 ft³/s, Aug. 24, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 30.45 ft, 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Jan. 23 | 1000 | *6,160 | *8.42 | | | | |
| Minimum daily, 27 ft ³ /s, Sept. 25-30. | | | | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 1 | 83 | 89 | 175 | 399 | 802 | 2400 | 523 | 394 | 252 | 97 | 41 | 29 |
| 2 | 82 | 89 | 160 | 686 | 739 | 2490 | 515 | 378 | 242 | 94 | 41 | 29 |
| 3 | 79 | 89 | 143 | 646 | 685 | 2410 | 498 | 372 | 234 | 93 | 40 | 29 |
| 4 | 79 | 89 | 143 | 628 | 628 | 2230 | 488 | 378 | 226 | 87 | 39 | 29 |
| 5 | 79 | 89 | 147 | 732 | 581 | 2230 | 479 | 422 | 220 | 85 | 39 | 29 |
| 6 | 89 | 89 | 145 | 642 | 592 | 2170 | 486 | 415 | 225 | 80 | 39 | 29 |
| 7 | 96 | 89 | 211 | 542 | 804 | 1870 | 480 | 456 | 230 | 80 | 38 | 29 |
| 8 | 96 | 89 | 1560 | 532 | 974 | 1660 | 483 | 477 | 226 | 76 | 37 | 29 |
| 9 | 96 | 89 | 1300 | 641 | 894 | 1540 | 508 | 428 | 214 | 73 | 37 | 29 |
| 10 | 96 | 89 | 609 | 612 | 1170 | 1480 | 485 | 394 | 205 | 70 | 37 | 29 |
| 11 | 94 | 89 | 587 | 532 | 1560 | 1410 | 464 | 371 | 191 | 67 | 37 | 29 |
| 12 | 95 | 89 | 755 | 473 | 1290 | 1300 | 444 | 352 | 181 | 64 | 36 | 30 |
| 13 | 100 | 89 | 571 | 423 | 1140 | 1190 | 428 | 340 | 171 | 62 | 36 | 31 |
| 14 | 103 | 89 | 700 | 386 | 1040 | 1130 | 424 | 318 | 165 | 59 | 35 | 31 |
| 15 | 119 | 89 | 689 | 363 | 978 | 1090 | 405 | 368 | 165 | 57 | 34 | 31 |
| 16 | 137 | 89 | 547 | 338 | 942 | 1040 | 404 | 427 | 162 | 57 | 33 | 32 |
| 17 | 141 | 89 | 447 | 320 | 2840 | 991 | 406 | 397 | 162 | 55 | 32 | 32 |
| 18 | 129 | 89 | 377 | 301 | 3160 | 929 | 399 | 386 | 161 | 51 | 32 | 32 |
| 19 | 119 | 89 | 329 | 291 | 2440 | 885 | 399 | 376 | 159 | 50 | 32 | 31 |
| 20 | 113 | 89 | 294 | 276 | 2110 | 827 | 390 | 449 | 154 | 48 | 32 | 30 |
| 21 | 110 | 89 | 276 | 357 | 1990 | 796 | 375 | 461 | 143 | 46 | 32 | 29 |
| 22 | 105 | 89 | 254 | 1420 | 1830 | 759 | 370 | 410 | 137 | 47 | 32 | 29 |
| 23 | 103 | 89 | 244 | 5280 | 1690 | 737 | 382 | 375 | 131 | 48 | 32 | 29 |
| 24 | 103 | 89 | 232 | 4470 | 1650 | 726 | 447 | 346 | 127 | 48 | 32 | 28 |
| 25 | 103 | 89 | 221 | 3010 | 1670 | 693 | 516 | 324 | 122 | 47 | 32 | 27 |
| 26 | 99 | 89 | 217 | 2110 | 1750 | 654 | 536 | 307 | 120 | 46 | 31 | 27 |
| 27 | 98 | 92 | 216 | 1620 | 2120 | e614 | 497 | 301 | 116 | 45 | 31 | 27 |
| 28 | 94 | 100 | 216 | 1330 | 2380 | e578 | 475 | 291 | 112 | 44 | 31 | 27 |
| 29 | 91 | 138 | 216 | 1140 | --- | e573 | 440 | 279 | 104 | 43 | 31 | 27 |
| 30 | 91 | 189 | 228 | 1000 | --- | 562 | 411 | 265 | 101 | 42 | 30 | 27 |
| 31 | 90 | --- | 282 | 897 | --- | 546 | --- | 255 | --- | 40 | 29 | --- |
| TOTAL | 3112 | 2833 | 12491 | 32397 | 40449 | 38510 | 13557 | 11514 | 5158 | 1901 | 1070 | 876 |
| MEAN | 100 | 94.4 | 403 | 1045 | 1445 | 1242 | 452 | 371 | 172 | 61.3 | 34.5 | 29.2 |
| MAX | 141 | 189 | 1560 | 5280 | 3160 | 2490 | 536 | 477 | 252 | 97 | 41 | 32 |
| MIN | 79 | 89 | 143 | 276 | 581 | 546 | 370 | 255 | 101 | 40 | 29 | 27 |
| AC-FT | 6170 | 5620 | 24780 | 64260 | 80230 | 76380 | 26890 | 22840 | 10230 | 3770 | 2120 | 1740 |

e Estimated.

11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|-------|-------|------|------|------|------|------|------|------|
| MEAN | 129 | 785 | 1872 | 3256 | 3118 | 3170 | 1863 | 960 | 444 | 172 | 87.1 | 76.2 |
| MAX | 351 | 3475 | 6355 | 11740 | 12770 | 8744 | 4989 | 2701 | 1660 | 390 | 227 | 185 |
| (WY) | 1980 | 1974 | 1984 | 1970 | 1986 | 1983 | 1982 | 1983 | 1993 | 1983 | 1983 | 1983 |
| MIN | 27.4 | 72.9 | 86.8 | 144 | 218 | 365 | 224 | 199 | 91.1 | 33.0 | 17.9 | 22.8 |
| (WY) | 1988 | 1988 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1987 |

| SUMMARY STATISTICS | FOR 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1966 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 586776 | | | | 163868 | | | | | | | |
| ANNUAL MEAN | 1608 | | | | 449 | | | | 1320 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 3049 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 131 | | | |
| HIGHEST DAILY MEAN | 28400 | | | | 5280 | | | | 59200 | | | |
| LOWEST DAILY MEAN | 79 | | | | 27 | | | | 14 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 82 | | | | 27 | | | | 15 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 6160 | | | | 75000 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 8.42 | | | | 28.00 | | | |
| ANNUAL RUNOFF (AC-FT) | 1164000 | | | | 325000 | | | | 956400 | | | |
| 10 PERCENT EXCEEDS | 3790 | | | | 1180 | | | | 3350 | | | |
| 50 PERCENT EXCEEDS | 700 | | | | 216 | | | | 384 | | | |
| 90 PERCENT EXCEEDS | 89 | | | | 32 | | | | 64 | | | |

KLAMATH RIVER BASIN

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 (revised).

DRAINAGE AREA.--2,853 mi².

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.

SEDIMENT DATA: Water years 1960-79.

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 fair. Flow regulated since November 1960 by Clair Engle 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 and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Jan. 24 | 0830 | *13,300 | *20.50 | | | | |
| Minimum daily, 566 ft ³ /s, Sept. 26. | | | | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1 | 639 | 688 | 1000 | 1650 | 3000 | 6310 | 2300 | 3130 | 1460 | 802 | 670 | 593 |
| 2 | 635 | 688 | 1070 | 2380 | 2810 | 6660 | 2260 | 3070 | 1410 | 792 | 664 | 589 |
| 3 | 628 | 689 | 998 | 2300 | 2650 | 6530 | 2270 | 3020 | 1360 | 848 | 664 | 593 |
| 4 | 636 | 684 | 966 | 2400 | 2500 | 6120 | 2260 | 3100 | 1340 | 894 | 665 | 600 |
| 5 | 701 | 684 | 959 | 3350 | 2360 | 5950 | 2180 | 3290 | 1290 | 877 | 666 | 605 |
| 6 | 736 | 688 | 913 | 3110 | 2310 | 5860 | 2180 | 3240 | 1370 | 864 | 664 | 604 |
| 7 | 731 | 688 | 1150 | 2590 | 2570 | 5190 | 2180 | 3370 | 1370 | 848 | 664 | 595 |
| 8 | 713 | 688 | 4650 | 2470 | 2860 | 4670 | 2120 | 3580 | 1270 | 830 | 662 | 583 |
| 9 | 697 | 688 | 5210 | 3020 | 2780 | 4410 | 2320 | 3550 | 1200 | 820 | 660 | 584 |
| 10 | 668 | 687 | 2520 | 2780 | 3150 | 4300 | 2430 | 3540 | 1170 | 811 | 661 | 590 |
| 11 | 698 | 689 | 2980 | 2490 | 4130 | 4320 | 3210 | 3460 | 1200 | 797 | 658 | 599 |
| 12 | 766 | 710 | 3430 | 2240 | 3730 | 3990 | 3150 | 3330 | 1200 | 790 | 652 | 603 |
| 13 | 769 | 707 | 2580 | 2040 | 3390 | 3710 | 3160 | 3110 | 1150 | 779 | 653 | 606 |
| 14 | 744 | 707 | 2730 | 1910 | 3210 | 3610 | 3160 | 2990 | 1110 | 759 | 648 | 610 |
| 15 | 830 | 707 | 2540 | 1820 | 3090 | 3550 | 3160 | 3000 | 1060 | 752 | 645 | 609 |
| 16 | 916 | 707 | 2150 | 1730 | 2980 | 3470 | 3220 | 3280 | 1020 | 750 | 644 | 607 |
| 17 | 959 | 710 | 1840 | 1640 | 6080 | 3340 | 3370 | 3150 | 1000 | 739 | 642 | 602 |
| 18 | 861 | 715 | 1630 | 1590 | e8920 | 3160 | 3420 | 3030 | 994 | 726 | 633 | 600 |
| 19 | 806 | 708 | 1480 | 1550 | e6850 | 3030 | 3440 | 2940 | 976 | 713 | 627 | 599 |
| 20 | 774 | 702 | 1380 | 1510 | e5950 | 2870 | 3390 | 2860 | 958 | 694 | 625 | 596 |
| 21 | 755 | 702 | 1310 | 1530 | e5600 | 2780 | 3310 | 2290 | 947 | 693 | 626 | 596 |
| 22 | 739 | 720 | 1260 | 2690 | e5220 | 2700 | 3190 | 1830 | 938 | 699 | 631 | 580 |
| 23 | 729 | 741 | 1220 | 9790 | e4760 | 2610 | 3080 | 1730 | 917 | 705 | 634 | 571 |
| 24 | 724 | 721 | 1190 | 12500 | 4690 | 2590 | 3150 | 1690 | 902 | 702 | 646 | 574 |
| 25 | 718 | 712 | 1170 | 8950 | 4610 | 2530 | 3400 | 1710 | 877 | 698 | 643 | 572 |
| 26 | 710 | 710 | 1160 | 6530 | 4700 | 2480 | 3460 | 1760 | 864 | 694 | 639 | 566 |
| 27 | 702 | 712 | 1160 | 5250 | 5470 | 2410 | 3320 | 1730 | 850 | 689 | 621 | 571 |
| 28 | 694 | 728 | 1150 | 4400 | 6140 | 2380 | 3290 | 1630 | 831 | 685 | 592 | 578 |
| 29 | 687 | 827 | 1120 | 3830 | --- | 2370 | 3250 | 1560 | 816 | 680 | 595 | 598 |
| 30 | 688 | 992 | 1140 | 3460 | --- | 2400 | 3190 | 1520 | 817 | 676 | 595 | 604 |
| 31 | 688 | --- | 1300 | 3210 | --- | 2390 | --- | 1490 | --- | 676 | 593 | --- |
| TOTAL | 22741 | 21499 | 55356 | 106710 | 116510 | 118690 | 87820 | 82980 | 32667 | 23482 | 19882 | 17777 |
| MEAN | 734 | 717 | 1786 | 3442 | 4161 | 3829 | 2927 | 2677 | 1089 | 757 | 641 | 593 |
| MAX | 959 | 992 | 5210 | 12500 | 8920 | 6660 | 3460 | 3580 | 1460 | 894 | 670 | 610 |
| MIN | 628 | 684 | 913 | 1510 | 2310 | 2370 | 2120 | 1490 | 816 | 676 | 592 | 566 |
| AC-FT | 45110 | 42640 | 109800 | 211700 | 231100 | 235400 | 174200 | 164600 | 64790 | 46580 | 39440 | 35260 |

e Estimated.

11530000 TRINITY RIVER AT HOOPA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1960, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| MEAN | 926 | 2578 | 6468 | 9239 | 11830 | 10400 | 10170 | 8663 | 4755 | 1635 | 650 | 508 |
| MAX | 5405 | 9589 | 28060 | 30140 | 50380 | 26370 | 19320 | 16700 | 9875 | 4265 | 1365 | 1248 |
| (WY) | 1951 | 1938 | 1956 | 1956 | 1958 | 1938 | 1938 | 1938 | 1953 | 1941 | 1953 | 1912 |
| MIN | 260 | 373 | 531 | 647 | 2433 | 3815 | 4790 | 3000 | 1378 | 466 | 249 | 213 |
| (WY) | 1933 | 1940 | 1937 | 1937 | 1937 | 1955 | 1944 | 1934 | 1934 | 1918 | 1934 | 1934 |

SUMMARY STATISTICS

WATER YEARS 1912 - 1960

| | |
|--------------------------|---------|
| ANNUAL MEAN | 5618 |
| HIGHEST ANNUAL MEAN | 12270 |
| LOWEST ANNUAL MEAN | 2630 |
| HIGHEST DAILY MEAN | 158000 |
| LOWEST DAILY MEAN | 162 |
| ANNUAL SEVEN-DAY MINIMUM | 164 |
| INSTANTANEOUS PEAK FLOW | a190000 |
| INSTANTANEOUS PEAK STAGE | 36.90 |
| ANNUAL RUNOFF (AC-FT) | 4070000 |
| 10 PERCENT EXCEEDS | 12700 |
| 50 PERCENT EXCEEDS | 3070 |
| 90 PERCENT EXCEEDS | 442 |

a From rating curve extended above 56,000 ft³/s.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| MEAN | 834 | 3283 | 7078 | 9890 | 9037 | 9456 | 6317 | 4209 | 2519 | 1140 | 688 | 627 |
| MAX | 1805 | 12900 | 29710 | 32090 | 28810 | 32240 | 16040 | 12020 | 8999 | 3233 | 1681 | 1309 |
| (WY) | 1980 | 1974 | 1965 | 1970 | 1986 | 1983 | 1983 | 1983 | 1983 | 1983 | 1983 | 1983 |
| MIN | 472 | 679 | 529 | 745 | 891 | 1608 | 1325 | 1204 | 746 | 338 | 270 | 336 |
| (WY) | 1988 | 1991 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1969 |

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1964 - 1994

| | | | |
|--------------------------|---------|---------|---------|
| ANNUAL TOTAL | 1978124 | 706114 | |
| ANNUAL MEAN | 5420 | 1935 | 4573 |
| HIGHEST ANNUAL MEAN | | | 11350 |
| LOWEST ANNUAL MEAN | | | 786 |
| HIGHEST DAILY MEAN | 48000 | Jan 21 | 12500 |
| LOWEST DAILY MEAN | 628 | Oct 3 | 566 |
| ANNUAL SEVEN-DAY MINIMUM | 655 | Sep 29 | 573 |
| INSTANTANEOUS PEAK FLOW | | | 13300 |
| INSTANTANEOUS PEAK STAGE | | | 20.50 |
| ANNUAL RUNOFF (AC-FT) | 3924000 | 1401000 | 3313000 |
| 10 PERCENT EXCEEDS | 12200 | 3650 | 10400 |
| 50 PERCENT EXCEEDS | 2980 | 1160 | 2030 |
| 90 PERCENT EXCEEDS | 710 | 626 | 561 |

KLAMATH RIVER BASIN

11530500 KLAMATH RIVER NEAR KLAMATH, CA
(National Stream Quality Accounting Network Station)

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).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1910 to December 1926 (published as "near Requa"), October 1950 to current year.

Monthly discharge only for some periods, published in WSP 1315-B.

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 fair. Medium and low flows considerably regulated by reservoirs and powerplants upstream from station and by transbasin (from Trinity River) diversion to Judge Francis Carr Powerplant (station 11525430) since April 1963. Large diversions for irrigation upstream from station. 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 FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 8 | 1315 | *46,000 | *15.52 | | | | |

Minimum daily, 1,570 ft³/s, Aug. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 3250 | 3580 | 7510 | 7300 | 10200 | 20400 | 8390 | 8750 | 5550 | 2780 | e1730 | e1860 |
| 2 | 3270 | 3880 | 9630 | 10200 | 9660 | 21200 | 8140 | 8570 | 5350 | 2730 | e1700 | e1860 |
| 3 | 3300 | 4200 | 6540 | 10300 | 9200 | 21500 | 8070 | 8370 | 5120 | 2700 | e1690 | e1880 |
| 4 | 3300 | 3840 | 5520 | 11000 | 8740 | 21100 | 8010 | 8810 | 5090 | 2750 | e1670 | e1890 |
| 5 | 3310 | 3660 | 5560 | 16800 | 8390 | 19900 | 7780 | 9970 | 5000 | 2730 | e1690 | e1920 |
| 6 | 3450 | 3560 | 4740 | 16000 | 8240 | 18900 | 7660 | 10400 | 5450 | 2750 | e1710 | e1940 |
| 7 | 3540 | 3660 | 6540 | 13000 | 8480 | 17000 | 7820 | 11600 | 5760 | e2670 | e1710 | e1920 |
| 8 | 3530 | 3560 | 36000 | 12600 | 9090 | 15400 | 7760 | 12000 | 5830 | e2620 | e1680 | e1900 |
| 9 | 3520 | 3530 | 28100 | 17800 | 8740 | 14300 | 8870 | 11700 | 5490 | e2550 | e1610 | e1900 |
| 10 | 3470 | 3520 | 13800 | 16000 | 9550 | 13900 | 9200 | 11600 | 5090 | e2510 | e1630 | e1930 |
| 11 | 3510 | 3680 | 14700 | 13800 | 11600 | 13800 | 9030 | 11700 | 4760 | e2450 | e1640 | e1980 |
| 12 | 3860 | 5800 | 17300 | 12200 | 10800 | 13000 | 9030 | 11200 | 4530 | e2420 | e1650 | e1990 |
| 13 | 4040 | 6160 | 12900 | 10900 | 9990 | 12000 | 9000 | 10300 | 4370 | e2400 | e1670 | e2010 |
| 14 | 4340 | 5570 | 14300 | 10100 | 9820 | 11400 | 8920 | 9370 | 4190 | e2330 | e1680 | e2020 |
| 15 | 5190 | 5100 | 12600 | 9500 | 9580 | 11300 | 8810 | 9180 | 4030 | e2280 | e1640 | e2040 |
| 16 | 5550 | 4170 | 10400 | 8990 | 9340 | 11300 | 8950 | 11100 | 3850 | e2240 | e1580 | e2050 |
| 17 | 5500 | 4000 | 8960 | 8480 | 13800 | 10900 | 9510 | 10800 | 3770 | e2200 | e1570 | e2040 |
| 18 | 5020 | 3900 | 7890 | 8190 | 24400 | 10400 | 10100 | 9880 | 3860 | e2140 | e1580 | e2060 |
| 19 | 4440 | 3740 | 7160 | 7950 | 20700 | 10100 | 10500 | 9210 | 4240 | e2100 | e1580 | e2050 |
| 20 | 4070 | 3550 | 6650 | 7590 | 18100 | 9490 | 10600 | 8860 | 4200 | e2060 | e1580 | e2070 |
| 21 | 3860 | 3480 | 6280 | 7270 | 19400 | 9610 | 10300 | 8360 | 3920 | e2020 | e1600 | e2070 |
| 22 | 3770 | 3800 | 6000 | 8670 | 19400 | 9650 | 9900 | 7380 | 3680 | e2010 | e1630 | e2040 |
| 23 | 4210 | 4140 | 5760 | 19300 | 16900 | 9310 | 9330 | 7020 | 3450 | e2020 | e1650 | e2000 |
| 24 | 4660 | 3880 | 5610 | 37000 | 15600 | 9050 | 9290 | 6930 | 3280 | e2000 | e1690 | e2010 |
| 25 | 4300 | 3670 | 5460 | 30100 | 15200 | 8870 | 10200 | 7410 | 3180 | e1980 | e1670 | e2020 |
| 26 | 3900 | 3640 | 5380 | 21600 | 15700 | 8650 | 11000 | 7560 | 3110 | e1910 | e1680 | e2000 |
| 27 | 3690 | 3860 | 5300 | 17600 | 18300 | 8490 | 9730 | 7320 | 3070 | e1870 | e1630 | e2000 |
| 28 | 3560 | 4370 | 5280 | 14800 | 20500 | 8470 | 9410 | 6720 | 2990 | e1830 | e1750 | e2030 |
| 29 | 3510 | 4990 | 5230 | 13000 | --- | 8490 | 9200 | 6200 | 2900 | e1800 | e1830 | e2110 |
| 30 | 3500 | 7450 | 5240 | 11700 | --- | 8660 | 9030 | 5830 | 2820 | e1780 | e1850 | e2100 |
| 31 | 3500 | --- | 6190 | 10900 | --- | 8800 | --- | 5660 | --- | e1740 | e1840 | --- |
| TOTAL | 121920 | 125940 | 298530 | 420640 | 369420 | 395340 | 273540 | 279760 | 127930 | 70370 | 51810 | 59690 |
| MEAN | 3933 | 4198 | 9630 | 13570 | 13180 | 12750 | 9118 | 9025 | 4264 | 2270 | 1671 | 1990 |
| MAX | 5550 | 7450 | 36000 | 37000 | 24400 | 21500 | 11000 | 12000 | 5830 | 2780 | 1850 | 2110 |
| MIN | 3250 | 3480 | 4740 | 7270 | 8240 | 8470 | 7660 | 5660 | 2820 | 1740 | 1570 | 1860 |
| AC-FT | 241800 | 249800 | 592100 | 834300 | 732700 | 784200 | 542600 | 554900 | 253700 | 139600 | 102800 | 118400 |

e Estimated.

11530500 KLAMATH RIVER NEAR KLAMATH, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1962, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|------|------|
| MEAN | 4987 | 11130 | 19480 | 27730 | 37540 | 27340 | 27710 | 23170 | 13830 | 5921 | 3383 | 3339 |
| MAX | 18950 | 30460 | 72580 | 83550 | 123200 | 53280 | 48860 | 37250 | 29580 | 12370 | 5871 | 5107 |
| (WY) | 1951 | 1921 | 1956 | 1953 | 1958 | 1957 | 1952 | 1952 | 1953 | 1953 | 1953 | 1912 |
| MIN | 2700 | 3502 | 4138 | 7454 | 6263 | 6916 | 6270 | 3975 | 2106 | 1731 | 1567 | 1860 |
| (WY) | 1920 | 1960 | 1960 | 1924 | 1920 | 1924 | 1924 | 1924 | 1924 | 1924 | 1918 | 1918 |

SUMMARY STATISTICS

WATER YEARS 1911 - 1962

| | | |
|--------------------------|----------|-------------|
| ANNUAL MEAN | 17010 | |
| HIGHEST ANNUAL MEAN | 33360 | 1958 |
| LOWEST ANNUAL MEAN | 5156 | 1924 |
| HIGHEST DAILY MEAN | 378000 | Dec 22 1955 |
| LOWEST DAILY MEAN | 1340 | Jul 31 1924 |
| ANNUAL SEVEN-DAY MINIMUM | 1440 | Jul 30 1924 |
| INSTANTANEOUS PEAK FLOW | a425000 | Dec 22 1955 |
| INSTANTANEOUS PEAK STAGE | b49.7 | Dec 22 1955 |
| ANNUAL RUNOFF (AC-FT) | 12320000 | |
| 10 PERCENT EXCEEDS | 37300 | |
| 50 PERCENT EXCEEDS | 10200 | |
| 90 PERCENT EXCEEDS | 2860 | |

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.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|------|------|
| MEAN | 5013 | 14920 | 27270 | 32970 | 31700 | 32340 | 25470 | 18640 | 10590 | 4413 | 3013 | 3195 |
| MAX | 17830 | 55620 | 87770 | 97760 | 102700 | 82410 | 60400 | 40080 | 29570 | 12220 | 6599 | 5923 |
| (WY) | 1963 | 1974 | 1965 | 1970 | 1986 | 1983 | 1974 | 1983 | 1983 | 1983 | 1983 | 1983 |
| MIN | 2214 | 3236 | 3942 | 4212 | 4231 | 6954 | 5448 | 5638 | 3630 | 1782 | 1441 | 1977 |
| (WY) | 1992 | 1988 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1977 | 1991 |

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1963 - 1994

| | | | |
|--------------------------|----------|---------|----------|
| ANNUAL TOTAL | 7240430 | 2594890 | |
| ANNUAL MEAN | 19840 | 7109 | 17400 |
| HIGHEST ANNUAL MEAN | | | 36100 |
| LOWEST ANNUAL MEAN | | | 4036 |
| HIGHEST DAILY MEAN | 135000 | Mar 18 | 420000 |
| LOWEST DAILY MEAN | 3250 | Oct 1 | 1310 |
| ANNUAL SEVEN-DAY MINIMUM | 3330 | Sep 30 | 1370 |
| INSTANTANEOUS PEAK FLOW | | | 557000 |
| INSTANTANEOUS PEAK STAGE | | | 55.30 |
| ANNUAL RUNOFF (AC-FT) | 14360000 | 5147000 | 12600000 |
| 10 PERCENT EXCEEDS | 44900 | 13800 | 39200 |
| 50 PERCENT EXCEEDS | 12200 | 5520 | 9400 |
| 90 PERCENT EXCEEDS | 3690 | 1860 | 2790 |

11530500 KLAMATH RIVER NEAR KLAMATH, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

CHEMICAL DATA: Water years 1951 to current year.

BIOLOGICAL DATA: Water years 1975-81.

SPECIFIC CONDUCTANCE: Water years 1975-81.

WATER TEMPERATURE: Water years 1966-81.

SEDIMENT DATA: Water years 1955-56, 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1981.

WATER TEMPERATURE: November 1965 to September 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH WATER WHOLE FIELD (STAND- ARD UNITS) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (NTU) | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, (PER- CENT SATUR- ATION) | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) |
|-------|------|--|---|---|--------------------------------------|------------------------------|--|-------------------------------------|--|--|
| NOV | | | | | | | | | | |
| 08... | 1220 | 3560 | 193 | 8.7 | 10.5 | 0.90 | 763 | 13.0 | 116 | K2 |
| JAN | | | | | | | | | | |
| 20... | 1425 | 7560 | 151 | 7.9 | 7.0 | 1.0 | 762 | 11.9 | 98 | K1 |
| MAR | | | | | | | | | | |
| 22... | 1345 | 9590 | 140 | 8.0 | 8.5 | 1.2 | 761 | 11.4 | 98 | K2 |
| MAY | | | | | | | | | | |
| 05... | 1445 | 10100 | 134 | 8.0 | 14.0 | 1.2 | 760 | 9.7 | 94 | K5 |
| JUL | | | | | | | | | | |
| 14... | 1445 | 2330 | 191 | 8.6 | 21.0 | 0.40 | 762 | 9.4 | 106 | K2 |
| SEP | | | | | | | | | | |
| 21... | 1220 | 2070 | 199 | 8.2 | 20.0 | 0.40 | 761 | 7.6 | 84 | K4 |

| DATE | STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) | HARD- NESS TOTAL (MG/L AS CACO3) | HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | SODIUM PERCENT | SODIUM AD- SORP- TION RATIO | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 |
|-------|---|---|---|--|--|--|-------------------|---|---|---|
| NOV | | | | | | | | | | |
| 08... | K1 | 81 | 0 | 18 | 8.6 | 10 | 21 | 0.5 | 1.6 | 98 |
| JAN | | | | | | | | | | |
| 20... | K1 | 65 | 0 | 14 | 7.2 | 5.7 | 16 | 0.3 | 0.80 | 83 |
| MAR | | | | | | | | | | |
| 22... | K1 | 63 | 0 | 14 | 6.8 | 4.1 | 12 | 0.2 | 0.70 | 80 |
| MAY | | | | | | | | | | |
| 05... | K1 | 59 | 1 | 13 | 6.4 | 4.1 | 13 | 0.2 | 0.60 | 70 |
| JUL | | | | | | | | | | |
| 14... | K6 | 77 | 0 | 17 | 8.4 | 8.9 | 20 | 0.4 | 1.4 | 94 |
| SEP | | | | | | | | | | |
| 21... | K5 | 77 | 0 | 17 | 8.4 | 11 | 23 | 0.5 | 1.5 | 102 |

| DATE | CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 | ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, DIS- SOLVED (TONS PER AC-FT) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) |
|-------|--|---|---|---|--|---|--|---|---|---|
| NOV | | | | | | | | | | |
| 08... | 5 | 88 | 8.3 | 5.0 | 0.10 | 21 | 122 | 126 | 0.17 | <0.010 |
| JAN | | | | | | | | | | |
| 20... | 0 | 68 | 7.3 | 3.5 | <0.10 | 17 | 90 | 97 | 0.12 | 0.020 |
| MAR | | | | | | | | | | |
| 22... | 0 | 65 | 6.3 | 2.7 | <0.10 | 15 | 82 | 89 | 0.11 | <0.010 |
| MAY | | | | | | | | | | |
| 05... | 0 | 58 | 6.7 | 2.6 | <0.10 | 13 | 84 | 81 | 0.11 | <0.010 |
| JUL | | | | | | | | | | |
| 14... | 1 | 79 | 13 | 4.5 | <0.10 | 13 | 121 | 113 | 0.16 | <0.010 |
| SEP | | | | | | | | | | |
| 21... | 0 | 83 | 12 | 5.4 | 0.10 | 17 | 126 | 123 | 0.17 | <0.010 |

11530500 KLAMATH RIVER NEAR KLAMATH, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHORUS TOTAL (MG/L AS P) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | BARIUM, DIS- SOLVED (UG/L AS BA) | COBALT, DIS- SOLVED (UG/L AS CO) | IRON, DIS- SOLVED (UG/L AS FE) |
|--------------|---|---|--|--|---|---|---|--|--|--|
| NOV 08... | 0.079 | 0.020 | 0.20 | 0.030 | 0.020 | 0.030 | 10 | 15 | <3 | 12 |
| JAN 20... | 0.150 | 0.010 | <0.20 | 0.020 | 0.010 | 0.010 | 20 | 13 | <3 | 34 |
| MAR 22... | <0.050 | 0.010 | <0.20 | 0.020 | <0.010 | <0.010 | -- | -- | -- | -- |
| MAY 05... | <0.050 | 0.020 | <0.20 | <0.010 | 0.010 | 0.010 | <10 | 12 | <3 | 11 |
| JUL 14... | <0.050 | <0.010 | <0.20 | 0.020 | 0.030 | <0.010 | -- | -- | -- | -- |
| SEP 21... | <0.050 | 0.020 | 0.50 | 0.060 | 0.040 | 0.040 | <10 | 17 | <3 | 13 |

| DATE | LITHIUM DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) | RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) | URANIUM NATURAL DIS- SOLVED (UG/L AS U) |
|--------------|--|--|---|--|---|--|--|--|---|--|
| NOV 08... | 6 | 2 | <10 | 3 | <1 | <1.0 | 110 | <6 | -- | -- |
| JAN 20... | <4 | 2 | <10 | 2 | <1 | <1.0 | 91 | <6 | -- | -- |
| MAR 22... | -- | -- | -- | -- | -- | -- | -- | -- | <0.02 | 0.07 |
| MAY 05... | <4 | 1 | <10 | 3 | <1 | <1.0 | 75 | <6 | -- | -- |
| JUL 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP 21... | <4 | 2 | <10 | 3 | <1 | <1.0 | 120 | <6 | 0.03 | 0.09 |

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH WATER WHOLE FIELD (STAND- ARD UNITS) | TEMPER- ATURE WATER (DEG C) | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|--------|------|--|---|---|---|--------------------------------------|--|--|---|
| MAR | | | | | | | | | |
| 21...* | 1630 | 6.10 | 140 | 138 | 8.1 | 9.0 | 765 | 11.2 | 5 89 |
| 21...* | 1655 | 6.90 | 244 | 138 | 8.1 | 9.0 | 765 | 11.2 | 5 94 |
| 21...* | 1720 | 6.60 | 350 | 139 | 8.1 | 9.0 | 765 | 11.3 | 6 77 |
| 21...* | 1745 | 7.30 | 451 | 139 | 8.1 | 9.0 | 765 | 11.3 | 4 80 |
| 21...* | 1810 | 7.10 | 533 | 140 | 8.0 | 9.5 | 765 | 11.1 | 4 92 |
| SEP | | | | | | | | | |
| 21...* | 1010 | 10.7 | 140 | 193 | 8.2 | 20.0 | 762 | 7.6 | 6 83 |
| 21...* | 1045 | 12.5 | 235 | 202 | 8.1 | 20.0 | 762 | 7.4 | -- -- |
| 21...* | 1120 | 11.5 | 325 | 199 | 8.2 | 20.0 | 761 | 7.6 | 3 -- |
| 21...* | 1155 | 12.0 | 440 | 199 | 8.2 | 20.0 | 761 | 7.8 | 4 86 |
| 21...* | 1230 | 10.8 | 535 | 199 | 8.2 | 20.0 | 761 | 8.1 | 4 70 |

*Instantaneous streamflow at the time of cross-sectional measurement: Mar. 21, 9,720 ft³/s;
Sept. 21, 2,070 ft³/s.

KLAMATH RIVER BASIN

11530500 KLAMATH RIVER NEAR KLAMATH, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | TEMPER- ATURE WATER (DEG C) | SEDI- MENT, SUS- PENDE (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|-------|------|--|--------------------------------------|---|---|---|
| NOV | | | | | | |
| 08... | 1220 | 3560 | 10.5 | 4 | 38 | 72 |
| JAN | | | | | | |
| 20... | 1425 | 7560 | 7.0 | 4 | 82 | 91 |
| MAR | | | | | | |
| 21... | 1715 | 9760 | 9.0 | 4 | 105 | 87 |
| 22... | 1345 | 9590 | 8.5 | 4 | 104 | 90 |
| MAY | | | | | | |
| 05... | 1445 | 10100 | 14.0 | 8 | 218 | 81 |
| JUL | | | | | | |
| 14... | 1445 | 2330 | 21.0 | 2 | 13 | 75 |
| SEP | | | | | | |
| 21... | 1115 | 2070 | 20.0 | 5 | 28 | 81 |

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.--No estimated daily discharges. 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 FOR CURRENT YEAR.--Peak discharges greater than base discharge of 36,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Dec. 8 | 1215 | *37,000 | *19.50 | | | | |
| Minimum daily, 190 ft ³ /s, Sept. 27. | | | | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1 | 267 | 263 | 1060 | 2970 | 2080 | 6340 | 1900 | 1580 | 1110 | 582 | 328 | 233 |
| 2 | 267 | 262 | 1730 | 4150 | 1940 | 5640 | 1780 | 1480 | 1050 | 569 | 319 | 233 |
| 3 | 267 | 262 | 784 | 3970 | 1810 | 5180 | 1700 | 1420 | 1000 | 553 | 315 | 240 |
| 4 | 267 | 262 | 1340 | 4840 | 1700 | 5170 | 1600 | 1880 | 1030 | 536 | 310 | 256 |
| 5 | 267 | 261 | 1090 | 7580 | 1610 | 4400 | 1520 | 2280 | 1020 | 525 | 312 | 248 |
| 6 | 267 | 258 | 780 | 6240 | 1560 | 3790 | 1590 | 2290 | 1480 | 511 | 306 | 235 |
| 7 | 267 | 257 | 5320 | 4460 | 1520 | 3320 | 1730 | 2110 | 1610 | 500 | 297 | 225 |
| 8 | 267 | 254 | 27500 | 5110 | 1470 | 2990 | 2280 | 1910 | 1340 | 488 | 293 | 229 |
| 9 | 267 | 254 | 7870 | 8380 | 1370 | 2770 | 4750 | 1740 | 1190 | 474 | 291 | 270 |
| 10 | 267 | 254 | 4270 | 6460 | 1890 | 2600 | 4040 | 1610 | 1090 | 459 | 289 | 322 |
| 11 | 310 | 261 | 9840 | 5040 | 2020 | 2440 | 3240 | 1500 | 1020 | 448 | 286 | 283 |
| 12 | 419 | 279 | 7270 | 4140 | 1790 | 2220 | 2760 | 1410 | 962 | 439 | 283 | 258 |
| 13 | 417 | 269 | 4680 | 3510 | 1690 | 2070 | 2440 | 1330 | 953 | 430 | 279 | 244 |
| 14 | 384 | 261 | 6470 | 3080 | 2170 | 1980 | 2200 | 1260 | 946 | 422 | 275 | 235 |
| 15 | 359 | 256 | 5240 | 2730 | 2210 | 1880 | 2010 | 1880 | 888 | 411 | 271 | 231 |
| 16 | 348 | 254 | 3840 | 2430 | 2080 | 1950 | 1900 | 5170 | 857 | 404 | 289 | 229 |
| 17 | 343 | 261 | 3020 | 2210 | 5260 | 1800 | 1810 | 4170 | 829 | 397 | 265 | 221 |
| 18 | 339 | 290 | 2500 | 2030 | 6710 | 1820 | 1720 | 3190 | 819 | 388 | 263 | 217 |
| 19 | 335 | 277 | 2140 | 1890 | 5490 | 1910 | 1640 | 2680 | 783 | 380 | 261 | 213 |
| 20 | 325 | 262 | 1880 | 1760 | 4800 | 1750 | 1550 | 2360 | 754 | 374 | 260 | 207 |
| 21 | 311 | 258 | 1690 | 1780 | 7100 | 3000 | 1490 | 2120 | 733 | 372 | 260 | 201 |
| 22 | 296 | 328 | 1550 | 2040 | 5900 | 3340 | 1430 | 1920 | 722 | 380 | 259 | 197 |
| 23 | 290 | 413 | 1430 | 6130 | 4640 | 2990 | 1390 | 1760 | 712 | 372 | 257 | 196 |
| 24 | 290 | 314 | 1340 | 8890 | 5150 | 3180 | 1440 | 1630 | 684 | 369 | 251 | 196 |
| 25 | 287 | 283 | 1270 | 5890 | 5270 | 3140 | 2170 | 1530 | 667 | 367 | 247 | 196 |
| 26 | 282 | 274 | 1220 | 4370 | 5410 | 2930 | 2420 | 1440 | 656 | 355 | 244 | 195 |
| 27 | 275 | 271 | 1150 | 3630 | 7810 | 2760 | 2110 | 1360 | 638 | 346 | 242 | 190 |
| 28 | 272 | 291 | 1090 | 3140 | 7330 | 2620 | 1940 | 1280 | 617 | 338 | 239 | 193 |
| 29 | 271 | 682 | 1040 | 2760 | --- | 2390 | 1810 | 1230 | 601 | 340 | 239 | 210 |
| 30 | 267 | 909 | 1220 | 2480 | --- | 2250 | 1710 | 1180 | 590 | 339 | 239 | 224 |
| 31 | 267 | --- | 2280 | 2270 | --- | 2060 | --- | 1130 | --- | 333 | 234 | --- |
| TOTAL | 9357 | 9280 | 113904 | 126360 | 99780 | 92680 | 62070 | 59830 | 27351 | 13201 | 8483 | 6827 |
| MEAN | 302 | 309 | 3674 | 4076 | 3564 | 2990 | 2069 | 1930 | 912 | 426 | 274 | 228 |
| MAX | 419 | 909 | 27500 | 8890 | 7810 | 6340 | 4750 | 5170 | 1610 | 582 | 328 | 322 |
| MIN | 267 | 254 | 780 | 1760 | 1370 | 1750 | 1390 | 1130 | 590 | 333 | 234 | 190 |
| AC-FT | 18560 | 18410 | 225900 | 250600 | 197900 | 183800 | 123100 | 118700 | 54250 | 26180 | 16830 | 13540 |

SMITH RIVER BASIN

11532500 SMITH RIVER NEAR CRESCENT CITY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1994, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| MEAN | 1051 | 4640 | 7343 | 8331 | 7405 | 6513 | 4339 | 2739 | 1287 | 532 | 339 | 336 |
| MAX | 11770 | 23620 | 21470 | 21930 | 22680 | 15760 | 11960 | 7550 | 3876 | 1217 | 715 | 1471 |
| (WY) | 1951 | 1974 | 1982 | 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 1993 CALENDAR YEAR | | | | FOR 1994 WATER YEAR | | | | WATER YEARS 1932 - 1994 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 1423549 | | | | 629123 | | | | | | | |
| ANNUAL MEAN | 3900 | | | | 1724 | | | | 3722 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 7027 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 975 | | | |
| HIGHEST DAILY MEAN | 48800 | | | | 27500 | | | | 180000 | | | |
| LOWEST DAILY MEAN | 254 | | | | 190 | | | | 160 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 257 | | | | 195 | | | | 163 | | | |
| INSTANTANEOUS PEAK FLOW | | | | | 37000 | | | | 228000 | | | |
| INSTANTANEOUS PEAK STAGE | | | | | 19.50 | | | | 48.50 | | | |
| ANNUAL RUNOFF (AC-FT) | 2824000 | | | | 1248000 | | | | 2697000 | | | |
| 10 PERCENT EXCEEDS | 9000 | | | | 4530 | | | | 8710 | | | |
| 50 PERCENT EXCEEDS | 2010 | | | | 1090 | | | | 1560 | | | |
| 90 PERCENT EXCEEDS | 271 | | | | 254 | | | | 265 | | | |

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 only. Figures given represent only those days when the elevation was above 13.38 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 34.12 ft, Jan. 8, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 25.68 ft, Dec. 8.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-----|---------|-------|----------|-------|----------|-------|---------|-------|----------|-------|-------|-------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 13.41 | 13.40 | 13.43 | 13.40 | 16.08 | 14.01 | 16.95 | 15.39 | 15.58 | 15.43 | 18.17 | 17.84 |
| 2 | 13.41 | 13.40 | 13.41 | 13.40 | 16.41 | 14.73 | 16.97 | 16.65 | 15.43 | 15.33 | 17.85 | 17.45 |
| 3 | 13.40 | 13.40 | --- | --- | 14.73 | 14.22 | 16.92 | 16.44 | 15.33 | 15.23 | 17.51 | 17.34 |
| 4 | 13.40 | 13.40 | 13.41 | 13.39 | 15.36 | 14.23 | 18.28 | 16.40 | 15.23 | 15.14 | 17.55 | 17.18 |
| 5 | 13.41 | 13.40 | 13.41 | 13.39 | 15.18 | 14.52 | 18.65 | 18.28 | 15.14 | 15.06 | 17.19 | 16.81 |
| 6 | 13.43 | 13.41 | --- | --- | 14.52 | 14.29 | 18.62 | 17.47 | 15.07 | 15.05 | 16.81 | 16.44 |
| 7 | 13.45 | 13.43 | --- | --- | 21.03 | 14.29 | 17.47 | 16.72 | 15.06 | 14.99 | 16.45 | 16.19 |
| 8 | 13.44 | 13.42 | --- | --- | 25.68 | 21.03 | 18.91 | 16.56 | 15.00 | 14.92 | 16.20 | 16.02 |
| 9 | 13.42 | 13.41 | --- | --- | 21.12 | 17.53 | 19.14 | 18.63 | 14.92 | 14.86 | 16.02 | 15.88 |
| 10 | 13.46 | 13.42 | --- | --- | 17.53 | 16.66 | 18.63 | 17.67 | 15.58 | 14.87 | 15.88 | 15.79 |
| 11 | 13.75 | 13.46 | --- | --- | 20.96 | 16.66 | 17.67 | 17.09 | 15.56 | 15.29 | 15.79 | 15.64 |
| 12 | 13.92 | 13.75 | 13.44 | 13.40 | 19.99 | 17.69 | 17.09 | 16.63 | 15.29 | 15.17 | 15.64 | 15.48 |
| 13 | 13.91 | 13.69 | 13.44 | 13.41 | 17.69 | 17.03 | 16.63 | 16.29 | 15.19 | 15.11 | 15.49 | 15.41 |
| 14 | 13.69 | 13.60 | --- | --- | 18.47 | 17.23 | 16.29 | 16.04 | 15.59 | 15.19 | 15.41 | 15.33 |
| 15 | 13.65 | 13.57 | --- | --- | 18.13 | 17.09 | 16.04 | 15.81 | 15.57 | 15.48 | 15.33 | 15.28 |
| 16 | 13.91 | 13.65 | --- | --- | 17.09 | 16.44 | 15.81 | 15.63 | 15.52 | 15.40 | 15.42 | 15.29 |
| 17 | 13.85 | 13.64 | --- | --- | 16.44 | 15.97 | 15.63 | 15.48 | 18.73 | 15.52 | 15.31 | 15.18 |
| 18 | 13.64 | 13.55 | 13.46 | 13.40 | 15.97 | 15.66 | 15.48 | 15.36 | 18.74 | 18.12 | 15.43 | 15.16 |
| 19 | 13.55 | 13.53 | 13.46 | 13.42 | 15.66 | 15.42 | 15.36 | 15.26 | 18.12 | 17.45 | 15.47 | 15.25 |
| 20 | 13.53 | 13.51 | --- | --- | 15.42 | 15.25 | 15.26 | 15.16 | 17.57 | 17.26 | 15.25 | 15.18 |
| 21 | 13.51 | 13.50 | --- | --- | 15.25 | 15.10 | 15.30 | 15.15 | 18.82 | 17.57 | 16.45 | 15.22 |
| 22 | 13.50 | 13.48 | 13.63 | 13.42 | 15.10 | 14.98 | 15.76 | 15.30 | 18.52 | 17.56 | 16.45 | 16.28 |
| 23 | 13.48 | 13.48 | 13.77 | 13.63 | 14.98 | 14.87 | 19.08 | 15.76 | 17.56 | 17.07 | 16.28 | 16.08 |
| 24 | 13.48 | 13.48 | 13.64 | 13.49 | 14.87 | 14.79 | 20.06 | 18.80 | 17.57 | 17.09 | 16.29 | 16.17 |
| 25 | 13.48 | 13.47 | 13.49 | 13.45 | 14.79 | 14.74 | 18.80 | 17.50 | 17.59 | 17.41 | 16.26 | 16.11 |
| 26 | 13.47 | 13.45 | 13.45 | 13.43 | 14.74 | 14.68 | 17.50 | 16.91 | 17.68 | 17.46 | 16.11 | 15.96 |
| 27 | 13.45 | 13.45 | 13.43 | 13.43 | 14.69 | 14.62 | 16.91 | 16.45 | 19.01 | 17.68 | 15.97 | 15.88 |
| 28 | 13.45 | 13.44 | 13.48 | 13.43 | 14.62 | 14.56 | 16.45 | 16.14 | 18.94 | 18.16 | 15.88 | 15.77 |
| 29 | 13.44 | 13.43 | 14.92 | 13.48 | 14.56 | 14.51 | 16.15 | 15.90 | --- | --- | 15.77 | 15.62 |
| 30 | 13.44 | 13.43 | 15.03 | 14.17 | 15.08 | 14.50 | 15.90 | 15.72 | --- | --- | 15.62 | 15.54 |
| 31 | 13.43 | 13.41 | --- | --- | 15.68 | 15.08 | 15.73 | 15.58 | --- | --- | 15.54 | 15.38 |

SMITH RIVER BASIN

11532650 SMITH RIVER NEAR FORT DICK, CA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-----------|-------|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 15.38 | 15.27 | 15.11 | 15.02 | 14.64 | 14.59 | 14.01 | 13.97 | 13.55 | 13.53 | 13.39 | 13.39 |
| 2 | 15.27 | 15.19 | 15.02 | 14.93 | 14.59 | 14.54 | 13.98 | 13.95 | 13.54 | 13.53 | 13.39 | 13.39 |
| 3 | 15.19 | 15.11 | 14.94 | 14.89 | 14.54 | 14.49 | 13.99 | 13.93 | 13.55 | 13.51 | 13.39 | 13.39 |
| 4 | 15.11 | 15.03 | 15.56 | 14.94 | 14.57 | 14.49 | 13.96 | 13.89 | 13.55 | 13.51 | 13.43 | 13.39 |
| 5 | 15.03 | 14.98 | 15.65 | 15.52 | 14.58 | 14.49 | 13.98 | 13.88 | 13.54 | 13.51 | --- | --- |
| 6 | 15.14 | 14.98 | 15.66 | 15.52 | 15.14 | 14.58 | 13.90 | 13.87 | 13.55 | 13.51 | --- | --- |
| 7 | 15.21 | 15.13 | 15.58 | 15.40 | 15.16 | 14.94 | 13.89 | 13.83 | 13.54 | 13.49 | --- | --- |
| 8 | 16.57 | 15.15 | 15.40 | 15.26 | 14.94 | 14.75 | 13.85 | 13.81 | 13.51 | 13.48 | --- | --- |
| 9 | 17.31 | 16.57 | 15.26 | 15.14 | 14.75 | 14.64 | 13.82 | 13.78 | 13.51 | 13.47 | --- | --- |
| 10 | 17.06 | 16.46 | 15.14 | 15.03 | 14.64 | 14.55 | 13.80 | 13.75 | 13.49 | 13.48 | 13.55 | 13.47 |
| 11 | 16.47 | 16.07 | 15.03 | 14.95 | 14.55 | 14.49 | 13.78 | 13.73 | 13.50 | 13.46 | 13.52 | 13.44 |
| 12 | 16.07 | 15.81 | 14.95 | 14.87 | 14.49 | 14.44 | 13.78 | 13.72 | 13.49 | 13.46 | 13.44 | 13.41 |
| 13 | 15.81 | 15.63 | 14.87 | 14.80 | 14.47 | 14.44 | 13.74 | 13.70 | 13.49 | 13.45 | --- | --- |
| 14 | 15.63 | 15.46 | 14.80 | 14.75 | 14.47 | 14.40 | 13.73 | 13.69 | 13.52 | 13.44 | 13.39 | 13.39 |
| 15 | 15.46 | 15.35 | 15.98 | 14.74 | 14.40 | 14.36 | 13.72 | 13.68 | 13.46 | 13.43 | 13.39 | 13.39 |
| 16 | 15.35 | 15.27 | 17.82 | 15.98 | 14.36 | 14.33 | 13.74 | 13.66 | 13.44 | 13.42 | 13.39 | 13.39 |
| 17 | 15.27 | 15.20 | 17.33 | 16.51 | 14.34 | 14.30 | 13.70 | 13.65 | 13.44 | 13.41 | 13.39 | 13.39 |
| 18 | 15.20 | 15.13 | 16.51 | 16.04 | 14.32 | 14.29 | 13.67 | 13.64 | 13.43 | 13.41 | 13.39 | 13.39 |
| 19 | 15.13 | 15.06 | 16.04 | 15.79 | 14.29 | 14.23 | 13.65 | 13.63 | 13.43 | 13.40 | 13.39 | 13.39 |
| 20 | 15.06 | 14.98 | 15.79 | 15.58 | 14.24 | 14.19 | 13.65 | 13.63 | 13.42 | 13.40 | --- | --- |
| 21 | 15.00 | 14.96 | 15.58 | 15.41 | 14.21 | 14.17 | 13.65 | 13.61 | 13.43 | 13.40 | --- | --- |
| 22 | 14.96 | 14.87 | 15.41 | 15.27 | 14.19 | 14.15 | 13.65 | 13.62 | 13.43 | 13.39 | 13.39 | 13.39 |
| 23 | 14.93 | 14.85 | 15.27 | 15.16 | 14.24 | 14.16 | 13.66 | 13.62 | 13.43 | 13.40 | 13.39 | 13.39 |
| 24 | 14.99 | 14.87 | 15.16 | 15.07 | 14.18 | 14.13 | 13.65 | 13.61 | --- | --- | 13.39 | 13.39 |
| 25 | 16.02 | 14.87 | 15.07 | 14.98 | 14.18 | 14.11 | 13.63 | 13.60 | --- | --- | 13.39 | 13.39 |
| 26 | 15.96 | 15.59 | 14.98 | 14.90 | 14.12 | 14.07 | 13.62 | 13.59 | --- | --- | 13.39 | 13.39 |
| 27 | 15.59 | 15.42 | 14.90 | 14.82 | 14.09 | 14.05 | 13.60 | 13.57 | --- | --- | 13.39 | 13.39 |
| 28 | 15.42 | 15.31 | 14.82 | 14.76 | 14.07 | 14.02 | 13.58 | 13.56 | --- | --- | --- | --- |
| 29 | 15.31 | 15.24 | 14.76 | 14.72 | 14.04 | 14.01 | 13.62 | 13.55 | --- | --- | --- | --- |
| 30 | 15.24 | 15.11 | 14.72 | 14.66 | 14.04 | 13.98 | 13.58 | 13.55 | 13.39 | 13.39 | --- | --- |
| 31 | --- | --- | 14.66 | 14.64 | --- | --- | 13.56 | 13.53 | 13.39 | 13.39 | --- | --- |

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 1994

| 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 up- stream from mouth and 0.7 mi northeast of Lewiston. | 9.10 | a1965-75, 1976-94 | 02-03-94 09-15-94 | b2.30 b .22 |

a Published as a miscellaneous measurement.

b Base flow.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 1994

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured precipitation (water year) | Measurements | |
|---------------------------------------|---------------------|-----------------------------------|--|---|--------------|-----------------------------------|
| | | | | | Date | Discharge (ft ³ /s) |
| Salinas River basin | | | | | | |
| 11151870 | Salinas River | Lat 36°14'15", long 121°28'50", | 113 | 1962-93 | 10-01-93 | a5.10 |
| Arroyo Seco near Greenfield, CA | | in NE 1/4 SE 1/4 sec.36, T.19 S., | | | 11-03-93 | a9.05 |
| | | R.4 E., Monterey County, | | | 12-02-93 | 21.7 |
| | | Hydrologic Unit 18060005, on | | | 1-04-94 | a18.9 |
| | | right bank 0.6 mi downstream from | | | 2-01-94 | 31.4 |
| | | Rocky Creek and 14.5 mi southwest | | | 3-14-94 | 56.2 |
| | | of Greenfield. | | | 4-04-94 | 31.8 |
| | | | | | 5-04-94 | 23.2 |
| Alameda Creek Basin | | | | | | |
| 11177200 | Arroyo de la Laguna | Lat 37°35'42", long 121°52'51", | 7.48 | 1975-76, | 11-04-93 | 1.09 |
| Vallecitos Creek | | in Valle de San Jose Grant, | | 1977-94 | 1-05-94 | 1.73 |
| | | Alameda County, Hydrologic | | | 2-02-94 | 52.7 |
| | | Unit 18050004, on right bank at | | | 3-16-94 | 1.24 |
| | | culvert on Sunol Road, 700 ft | | | 5-05-94 | 1.64 |
| | | upstream from mouth, and 0.3 mi | | | 6-13-94 | 16.3 |
| | | east of Sunol. | | | 8-03-94 | 15.9 |

a No measurable precipitation had fallen for 10 days prior to discharge measurement.

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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.

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