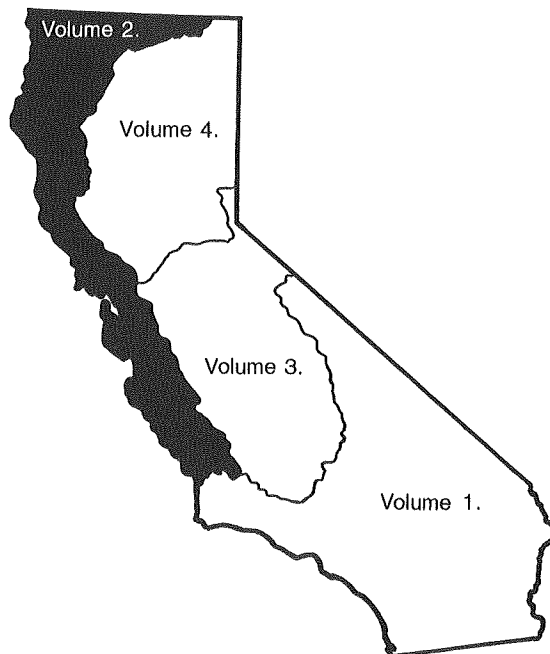


Water Resources Data California Water Year 1996

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



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-96-2
Prepared in cooperation with the California Department of
Water Resources and with other agencies

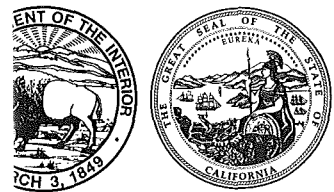
CALENDAR FOR WATER YEAR 1996

1995

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1996

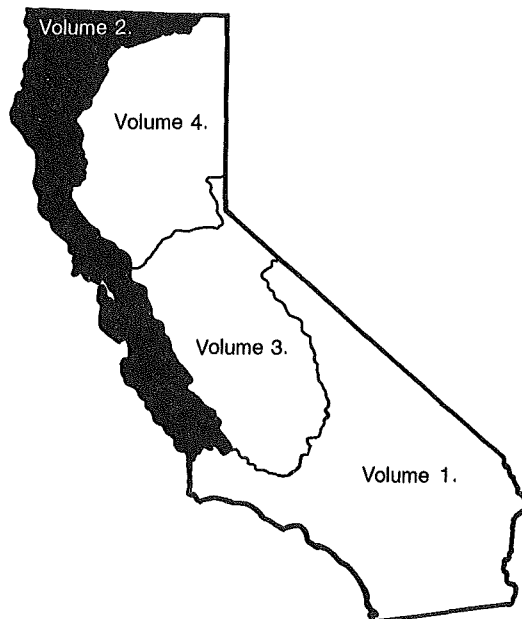
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Water Resources Data California Water Year 1996

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

by L.A. Freeman, M.D. Webster, and M.F. Friebe



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-96-2
Prepared in cooperation with the California Department of
Water Resources and with other agencies

U.S. DEPARTMENT OF THE INTERIOR

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U.S. GEOLOGICAL SURVEY

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1997

PREFACE

This volume of the annual hydrologic data report of California is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by Federal, State, and local agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for California are contained in four volumes:

- Volume 1. Southern Great Basin from Mexican Border to Mono Lake Basin and Pacific Slope Basins from the Tijuana River to Santa Maria River
- Volume 2. Pacific Slope Basins from Arroyo Grande to Oregon State Line except Central Valley
- Volume 3. Southern Central Valley Basins and The Great Basin from Walker River to Truckee River
- Volume 4. Northern Central Valley Basins and The Great Basin from Honey Lake Basin to Oregon State Line

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines, the individuals contributing significantly to the collection, processing, and tabulation of the data are given on page V.

This report was prepared in cooperation with the California Department of Water Resources and with other agencies, under the general supervision of Michael V. Shulters, District Chief, California.

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

[Letters after station name designate type of data: (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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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 Carpofo Creek near San Simeon	34.6	1978
11142800	Rat Creek near Lucia	.82	1961-63
11143300	Arroyo del Rey at Del Rey Oaks	13.8	1967-78
11143500	Salinas River near Pozo	70.3	1943-83
11144000	Toro Creek near Pozo	9.56	1961-69, 1972-83
11144200	Salsipuedes Creek near Pozo	5.91	1970-83
11144600	Salinas River below Salinas Dam, near Pozo	112	1974-86
11145000	Salinas River above Pilitas Creek, near Santa Margarita	114	1942-75
11145500	Salinas River near Santa Margarita	149	1922, 1932-49
11147000	Jack Creek near Templeton	25.3	1950-78
11147040	Santa Rita Creek Tributary near Templeton	2.95	1967-72
11147070	Santa Rita Creek near Templeton	18.2	1962-94
11147600	Huerhuero Creek near Creston	101	1959-72
11147700	Cholame Creek Tributary near Cholame	9.26	1959-65
11147800	Cholame Creek near Shandon	227	1959-72
11148000	Estrella Creek near Paso Robles	787	1940-41
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	1970-94
11162600	Purissima Creek near Half Moon Bay	4.83	1959-69
11162720	Colma Creek at South San Francisco	10.8	1964-96
11162722	Spruce Branch at South San Francisco	.70	1965-69
11162900	Sharon Creek near Menlo Park	.38	1959-69
11162940	San Francisquito Creek below Ladera Dam site, near Stanford University	28.5	1962-70
11162950	San Francisquito Creek Tributary near Stanford University	.24	1959-64
11163000	Los Trancos Canal near Stanford University	--	1931-41
11163200	Los Trancos Creek Tributary near Stanford University	.42	1959-66
11163500	Los Trancos Creek at Stanford University	7.46	1931-41
11164000	Lagunita Canal at Stanford University	--	1931-41
11165500	San Francisquito Creek at Palo Alto	40.8	1931-41
11166500	Stevens Creek near Cupertino	18.1	1931-59
11166575	Permanente Creek near Monte Vista	3.86	1984-87
11166578	West Fork Permanente Creek near Monte Vista	2.98	1984-87
11167000	Alamitos Creek near Edenvale	34.5	1930-58
11167660	Ross Creek at San Jose	5.70	1962-70
11167700	Ross Creek below Jarvis Road, at San Jose	7.71	1972-74
11168500	Los Gatos Creek below Los Gatos	42.6	1945-53
11169800	Coyote Creek near Gilroy	109	1961-82
11170000	Coyote Creek near Madrone	196	1903-12, 1917-87
11170500	Coyote Creek at Coyote	204	1917-23
11171500	Coyote Creek near Edenvale	229	1917-62
11172000	Coyote Creek at San Jose	238	1917
11172100	Upper Penitencia Creek at San Jose	21.5	1962-87
11172500	Laguna Creek at Irvington	12.5	1917-19
11173000	Alameda Creek near Sunol	37.5	1912-30
11173500	Calaveras Creek near Sunol	98.7	1898-1908, 1911-30
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
11181390	Wildcat Creek at Vale Road, at Richmond	7.79	1976-96
11181400	Wildcat Creek at Richmond	8.67	1964-75
11182030	Rheem Creek at San Pablo	1.49	1961-90
11182100	Pinole Creek at Pinole	10.0	1939-70, 1972-77
11182400	Arroyo del Hambre at Martinez	15.1	1965-82
11182800	San Ramon Creek near Walnut Creek	47.9	1973-92
11183000	San Ramon Creek at Walnut Creek	50.8	1953-73
11183500	Walnut Creek at Walnut Creek	79.2	1953-68
11183600	Walnut Creek at Concord	85.2	1968-92
11183700	Little Pine Creek near Alamo	1.22	1975-89
11184000	Galindo Creek at Concord	7.74	1955-58
11184500	Pine Creek at Concord	28.3	1953-60
11455900	Napa River at Calistoga	21.9	1976-83
11455950	Sulphur Creek near St. Helena	4.50	1966-67
11456500	Conn Creek near Oakville	55.4	1930-59, 1971-75
11457000	Dry Creek near Napa	17.4	1951-66
11457500	Dry Creek near Yountville	18.7	1941

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
11464500	Dry Creek near Cloverdale	87.8	1941-80
11464860	Warm Springs Creek near Asti	12.2	1973-83
11465050	Dutcher Creek near Asti	2.24	1973
11465150	Pena Creek near Geyserville	22.3	1979-90
11465800	Santa Rosa Creek near Santa Rosa	12.5	1959-70
11466200	Santa Rosa Creek at Santa Rosa	56.6	1940-41
11467200	Austin Creek near Cazadero	63.1	1959-66
11467500	South Fork Gualala River near Annapolis	161	1951-71, 1991-94
11467510	South Fork Gualala River near the Sea Ranch	161	1991-92
11467600	Garcia River near Point Arena	98.5	1962-83
11467800	Rancheria Creek near Boonville	65.6	1959-68
11467850	Soda Creek Tributary near Boonville	1.53	1965-68
11468010	Albion River near Comptche	14.4	1961-69
11468070	South Fork Big River near Comptche	36.2	1960-71
11468150	Warner Creek near Fort Bragg	.61	1969
11468540	Pudding Creek near Fort Bragg	12.5	1964-71
11468850	Dunn Creek near Rockport	1.88	1961-64
11468990	Honeydew Creek near Honeydew	14.9	1973-77
11469500	North Fork Mattole River at Petrolia	37.6	1951-57
11469800	Cold Creek Tributary near Elk Creek	.81	1970
11471800	Tomki Creek near Willits	43.4	1963-70
11472000	Eel River at Hearst	466	1911-13
11472150	Eel River near Dos Rios	528	1967-94
11472200	Outlet Creek near Longvale	161	1957-94
11472500	Eel River above Dos Rios	705	1951-65
11472800	Middle Fork Eel River above Black Butte River, near Covelo	204	1968-70
11472900	Black Butte River near Covelo	162	1959-75
11473000	Middle Fork Eel River below Black Butte River, near Covelo	367	1952-67
11473100	Williams Creek near Covelo	30.4	1962-69
11473500	Middle Fork Eel River near Covelo	406	1912-18, 1920-22
11473530	Mill Creek below Alder Creek, near Covelo	17.1	1962-65
11473600	Short Creek near Covelo	15.2	1959-69
11473700	Mill Creek near Covelo	95.6	1956-71
11473800	Elk Creek near Hearst	84.1	1964-73
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	Tennile Creek near Laytonville	50.3	1958-74
11475940	East Branch South Fork Eel River near Garberville	74.3	1966-72
11476000	South Fork Eel River at Garberville	468	1912-13, 1940
11476700	Larabee Creek near Holmes	84.1	1960-65
11477475	Mill Creek below Sulphur Creek, at Dinsmore	3.11	1990-95
11477500	Van Duzen River near Dinsmore	85.2	1954-58, 1964-74
11477700	Little Van Duzen River near Bridgeville	36.2	1958-67
11478000	Van Duzen River at Bridgeville	202	1912-13, 1940-51
11478400	Van Duzen River Tributary near Bridgeville	.71	1969
11479000	Yager Creek near Carlotta	127	1954-55, 1957-60, 1966-72
11479500	Yager Creek at Carlotta	134	1912-13

DISCONTINUED GAGING STATIONS--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
11479700	Elk River near Falk	44.2	1958-67
11480000	Jacoby Creek near Freshwater	5.80	1955-64
11480500	Mad River near Forest Glen	143	1953-94
11480750	Mad River near Kneeland	351	1966-74
11480800	North Fork Mad River near Korbel	40.4	1958-64, 1973-74
11481200	Little River near Trinidad	40.5	1956-94
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	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
11528500	Hayvord Creek near Hyampom	378	1953-74
11529500	South Fork Trinity River near China Flat	932	1912-13
11529800	Willow Creek near Willow Creek	40.9	1959-74
11530020	Supply Creek at Hoopa	15.8	1981-87
11530150	Mareep Creek near Weitchpec	3.56	1967-69
11530500	Klamath River near Klamath	12,000	1910-26, 1950-94
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
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,B	1967-69, 1977-95
11152500	Salinas River near Spreckels	4,156	C,T,S	1950-51, 1967-79
11153470	Llagas Creek above Chesbro Reservoir, near Morgan Hill	9.63	T	1972-78
11153555	Llagas Creek at San Martin	28.2	WQ,S	1980-87, 1989-91
11153900	Uvas Creek above Uvas Reservoir, near Morgan Hill	21	T,S	1966-76
11154700	Clear Creek near Idria	14.1	T	1993-96
11159000	Pajaro River at Chittenden	1,186	B,C,T, WQ,S	1952-92
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
11176400	Arroyo Valle below Lang Canal, near Livermore	130	S	1963, 1965
11176500	Arroyo Valle near Livermore	147	S	1966-67

DISCONTINUED WATER-QUALITY STATIONS--Continued

Station No.	Station name	Drainage area (mi ²)	Type of record	Period of record
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 Castro Reservoir, near Castro Valley	18.0	T,S	1981-94
11180940	Cull Creek Tributary No. 4 above Cull Creek Reservoir, near Castro Valley	.45	S	1981, 1986, 1989, 1992
11180965	Cull Creek below Cull Creek Dam, near Castro Valley	6.37	T,S	1979
11181040	San Lorenzo Creek at San Lorenzo	44.6	T,S	1989-93
11181330	Temescal Creek above Lake Temescal, at Oakland	1.74	WQ,S	1979-81
11181390	Wildcat Creek at Vale Road, at Richmond	7.79	S	1978-80
11456000	Napa River near St. Helena	81.4	S	1961-62
11458000	Napa River near Napa	218	WQ,C,S,T	1971, 1973-93
11460000	Corte Madera Creek at Ross	18.1	S	1978-80
11460015	Corte Madera Creek at College Avenue, at Kentfield	18.2	S	1988-89
11460110	Gerbode Valley Creek near Sausalito	3.29	WQ,S	1986-88
11460120	Rodeo Lagoon at Ft. Cronkhite, near Sausalito	4.07	WQ	1986-88
11460130	Tennessee Valley Creek near Tamalpais Valley	1.91	WQ,S	1986-88
11460140	Redwood Creek below Muir Woods, near Mill Valley	4.11	WQ,S	1986-88
11460152	Redwood Creek at Muir Beach, near Tamalpais Valley	7.29	WQ,S	1986-88
11460154	Green Gulch at Muir Beach, near Tamalpais Valley	1.51	WQ,S	1986-88
11460156	Webb Creek near Stinson Beach	1.12	WQ,S	1986-88
11460158	Table Rock Creek at Stinson Beach	1.34	WQ,S	1986-88
11460170	Pine Creek at Bolinas	7.83	T,S	1967, 1969-70
11460600	Lagunitas Creek near Point Reyes	81.7	T,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, 1995-96
11463000	Russian River near Cloverdale	503	T,S	1964-68, 1995-96
11463160	Big Sulphur Creek near Middletown	2.89	T,S	1978-79
11463200	Big Sulphur Creek near Cloverdale	85.5	S	1967-68
11464000	Russian River near Healdsburg	793	WQ	1951-66, 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	303	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	WQ,T,S	1968-96
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,S	1952-95
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

DISCONTINUED WATER-QUALITY STATIONS--Continued

Station No.	Station name	Drainage area (mi ²)	Type of record	Period of record
11482120	Redwood Creek above Panther Creek, near Orick	150	S	1988-89
11482125	Panther Creek near Orick	6.07	T,S	1979-91
11482130	Coyote Creek near Orick	7.78	T,S	1980
11482200	Redwood Creek at South Park Boundary, near Orick	185	T	1974-81
11482468	Little Lost Man Creek at Site No. 2, near Orick	3.46	WQ,S	1974-76, 1978-82, 1985-89
11482500	Redwood Creek at Orick	277	WQ,T	1959-92
11516600	Cottonwood Creek at Hornbrook	89.8	T	1965-71
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	WQ,B,C, T,S	1951-95 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 1996
VOLUME 2--PACIFIC SLOPE BASINS FROM ARROYO GRANDE
TO OREGON STATE LINE EXCEPT CENTRAL VALLEY

By L.A. Freeman, M.D. Webster, and M.F. Friebe

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 107 streamflow-gaging stations, gage-height records for 7 stations, 1 low-flow partial-record streamflow station, and 7 miscellaneous measurement stations; (2) stage and contents records for 6 lakes and reservoirs; (3) precipitation records for 1 station; and (4) water-quality records for 21 streamflow-gaging stations. Records included for stream stages are only a small fraction of those obtained during the water year.

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

Prior to introduction of this series and for several water years concurrent with it, water-resources data for California were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 10 and 11." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." These Water-Supply Papers may be consulted in public libraries of 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-96-2." 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.

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) 278-3100.

COOPERATION

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

Alameda County Flood Control and Water Conservation District, Robert Hale, Acting Water Resources Manager
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, Pamela J. Nicolai, General Manager.
 Mendocino County Water Agency, Dennis Slota, Hydrologist.
 Monterey County Water Resources Agency, Michael D. Armstrong, General Manager.
 Monterey Peninsula Water Management District, Darby Fuerst, General Manager.
 San Benito County Water District, John Gregg, District Manager.
 San Francisco Water Department, John Mullane, General Manager.
 San Luis Obispo County Engineering Department, Timothy P. Nanson, County Engineer.
 San Mateo County Department of Public Works, Robert Frame, Senior Civil Engineer.
 Santa Clara Valley Water District, Stanley M. Williams, General Manager.
 Santa Cruz, city of, Water Department, Terry Tompkins, Deputy Director/Operations.
 Santa Cruz County Flood Control and Water Conservation District, Planning Department, Mark Deming, Program Manager.
 Scotts Valley Water District, Jon Sansing, General Manager.
 Sonoma County Permit and Resource Management Department, Chris Thomes, Administrative Assistant.
 Sonoma County Water Agency, Randy D. Poole, General Manager.
 Soquel Creek Water District, Laura D. Brown, General Manager.

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

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

SPECIAL NETWORKS AND PROGRAMS

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

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

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives: (1) provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites; (2) provide the mechanism to evaluate the effectiveness of the significant reduction on SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred; and (3) provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

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

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

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

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

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

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

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

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 1996 water year that began October 1, 1995, and ended September 30, 1996. 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. 1). 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.

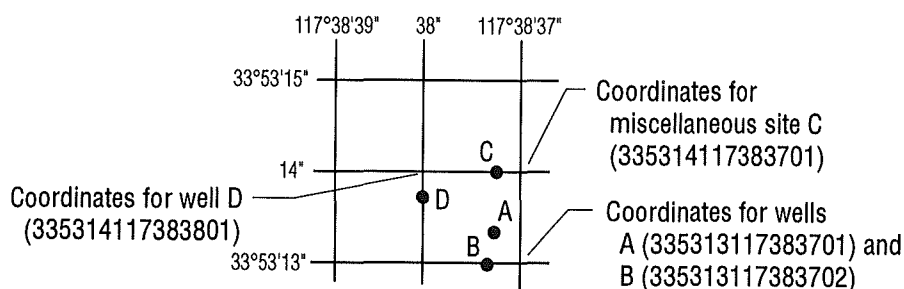


Figure 1. System for numbering miscellaneous sites (latitude and longitude).

Records of Stage and Water Discharge

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

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record and partial-record stations for which data are given in this report are shown, by county, in figures 2 through 18.

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

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

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

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

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

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

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

Data Presentation

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

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

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments 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 currently in 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 (IN.) indicates the depth to which the drainage area would be covered if all the runoff for a given period were distributed on it uniformly.

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

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

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

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

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

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

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

Other Records Available

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

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

Records of Surface-Water Quality

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

Classification of Records

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

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

Arrangement of Records

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

Onsite Measurements and Sample Collection

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

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

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

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

Historical and current (1996) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter (ng/L). If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter ($\mu\text{g/L}$) and could reflect contamination introduced during some phase of the procedure.

Water Temperature

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

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

Sediment

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

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

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

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of suspended sediment, bed material, and bedload 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 or BL 84 bedload samplers 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 bedload samplers are designed to collect time-weighted samples for the sediment moving within 0.25 ft of the streambed. Sediment moving in this portion of the flow cannot be sampled with standard suspended-sediment samplers. Calibration of the bedload samplers has not been completed, and a trap efficiency of 1.0 has been assumed applicable to these devices. Error sources in the theoretical methods, based on analysis of bed-material characteristics, channel geometry, and associated hydraulic factors, are also undefined. In consequence, figures of 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 include 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 20192

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. 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.)

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 combination of simple solids (that is, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

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

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 (ft^3/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 in 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 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

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.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives: (1) provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites; (2) provide the mechanism to evaluate the effectiveness of the significant reduction on SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred; and (3) provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

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

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

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 (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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 [$\text{mg C}/(\text{m}^2/\text{time})$ for periphyton and macrophytes and $\text{mg C}/(\text{m}^3/\text{time})$ 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 (fluvial) 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 and form 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.)

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.

Turbidity of a water sample is a measurement of 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, 1996, is called the "1996 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. 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 measurement 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, Revised by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 34 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, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. Levels at 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-A21. Stream-gaging cableways, by C. Russell Wagner: USGS--TWRI Book 3, Chapter A21. 1995. 56 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 R.L. Cooley and R.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, by M.J. Fishman and L.C. Friedman, editors: 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, by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe, editors: 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.
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- 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.
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- 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.
- 6-A6. A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction, by Eric D. Swain and Eliezer J. Wexler. 1995. 125 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. 90 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 STATION (PARTIAL RECORD)
- ◆ GAGING AND WATER-QUALITY (TEMPERATURE, SEDIMENT) STATION

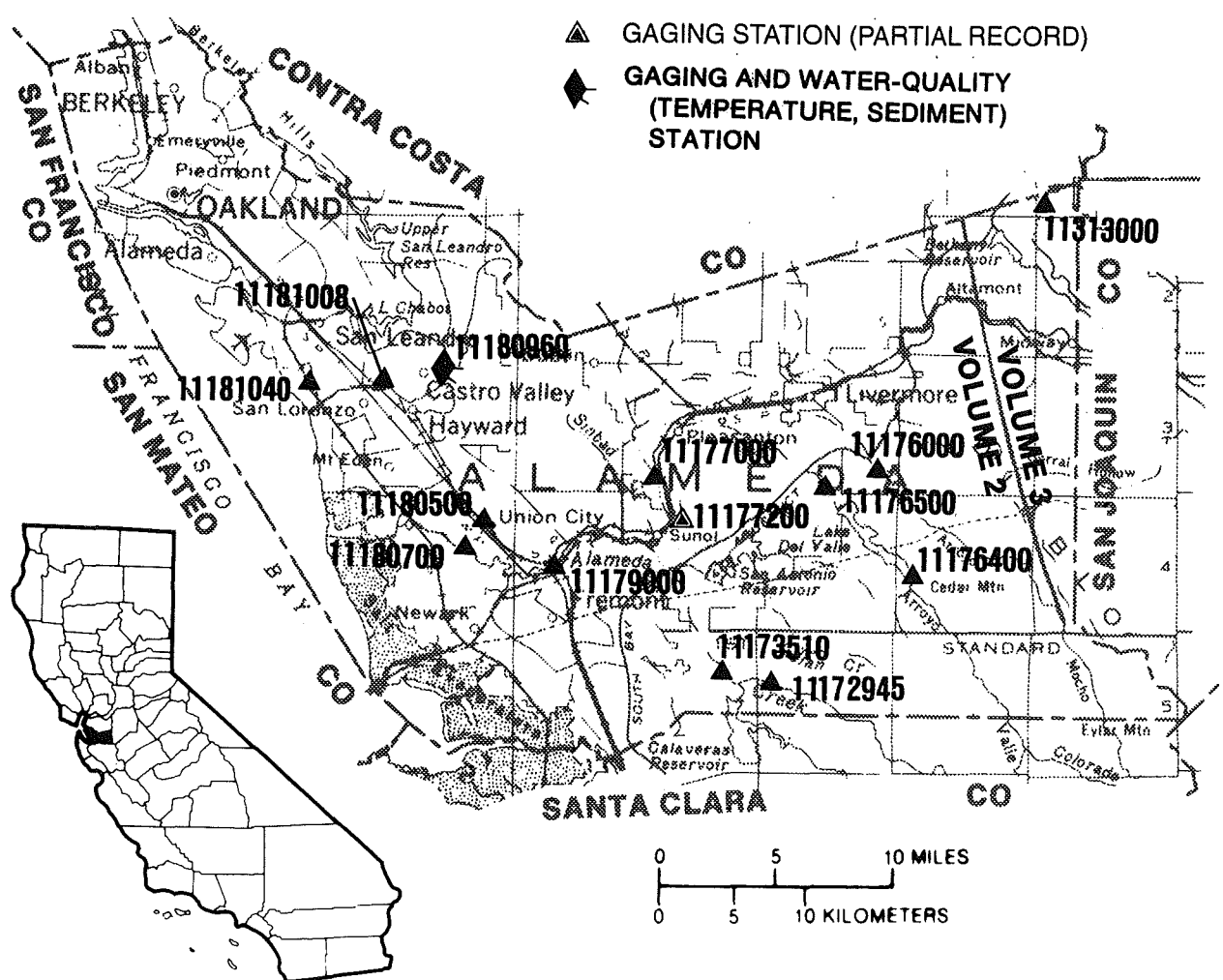


Figure 2. Location of discharge and water-quality stations in Alameda County.
(NOTE: Record for station 11313000 published in volume 3.)

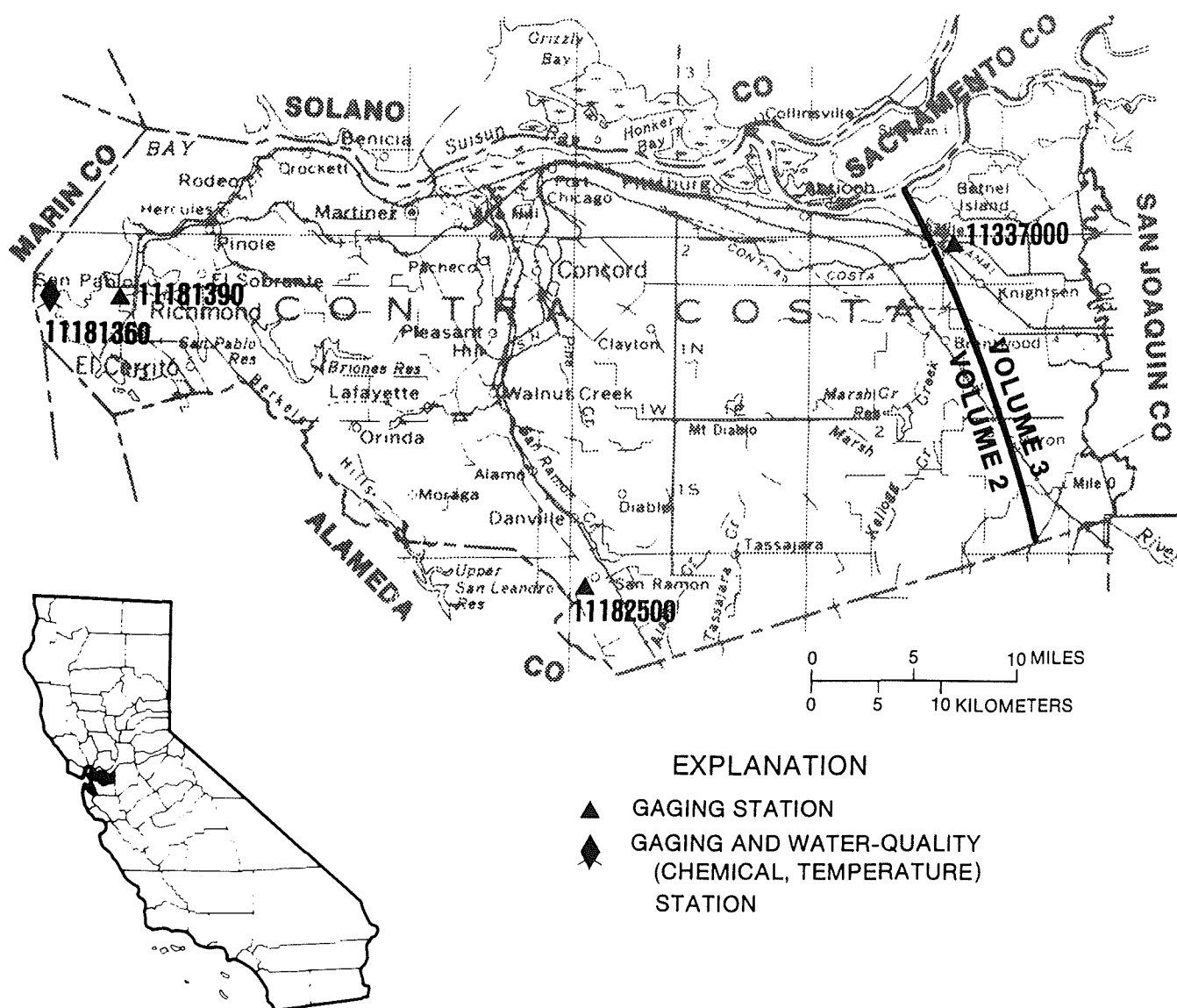


Figure 3. Location of discharge and water-quality stations in Contra Costa County.
 (NOTE: Record for station 11337000 published in volume 3.)

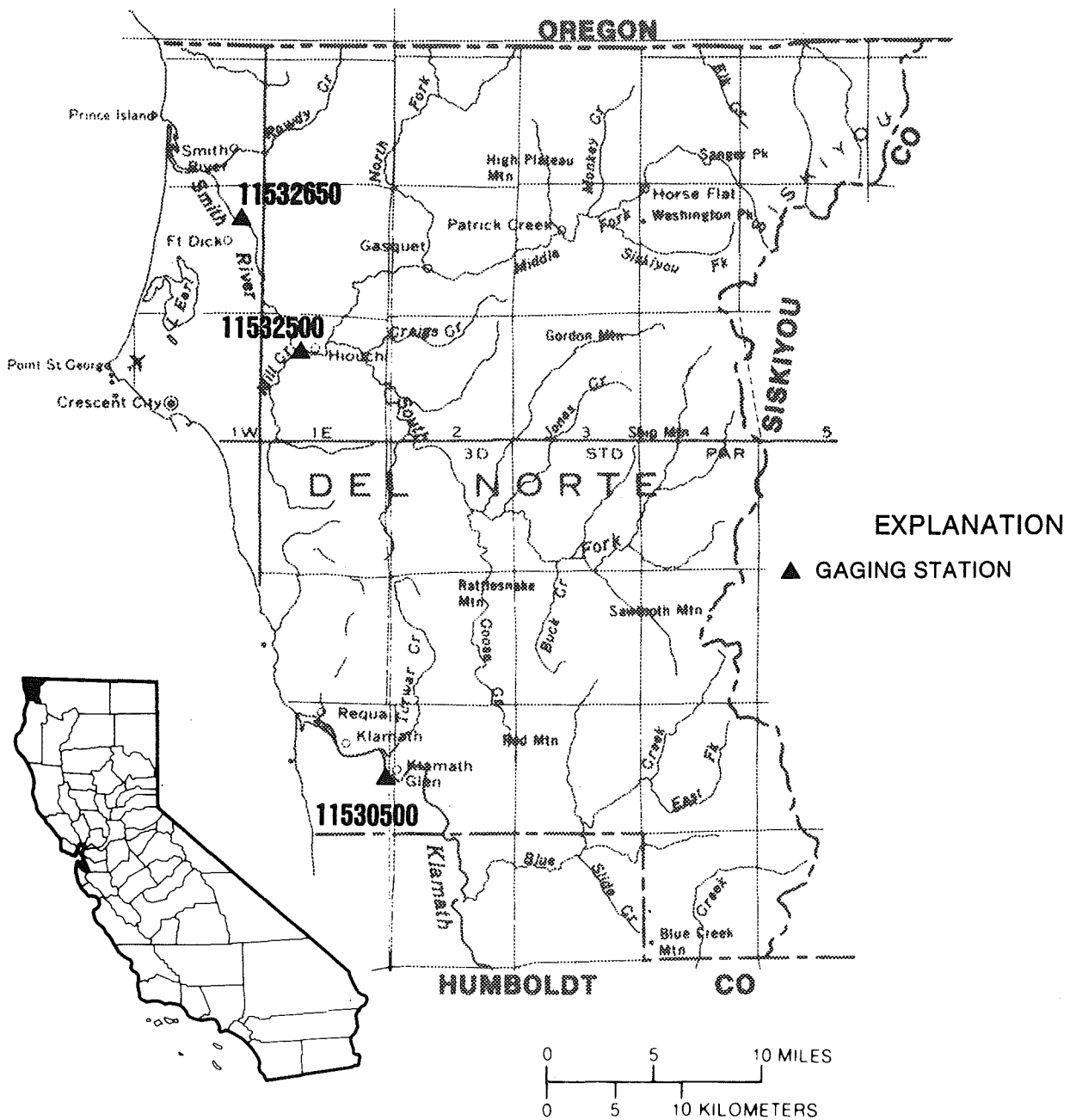
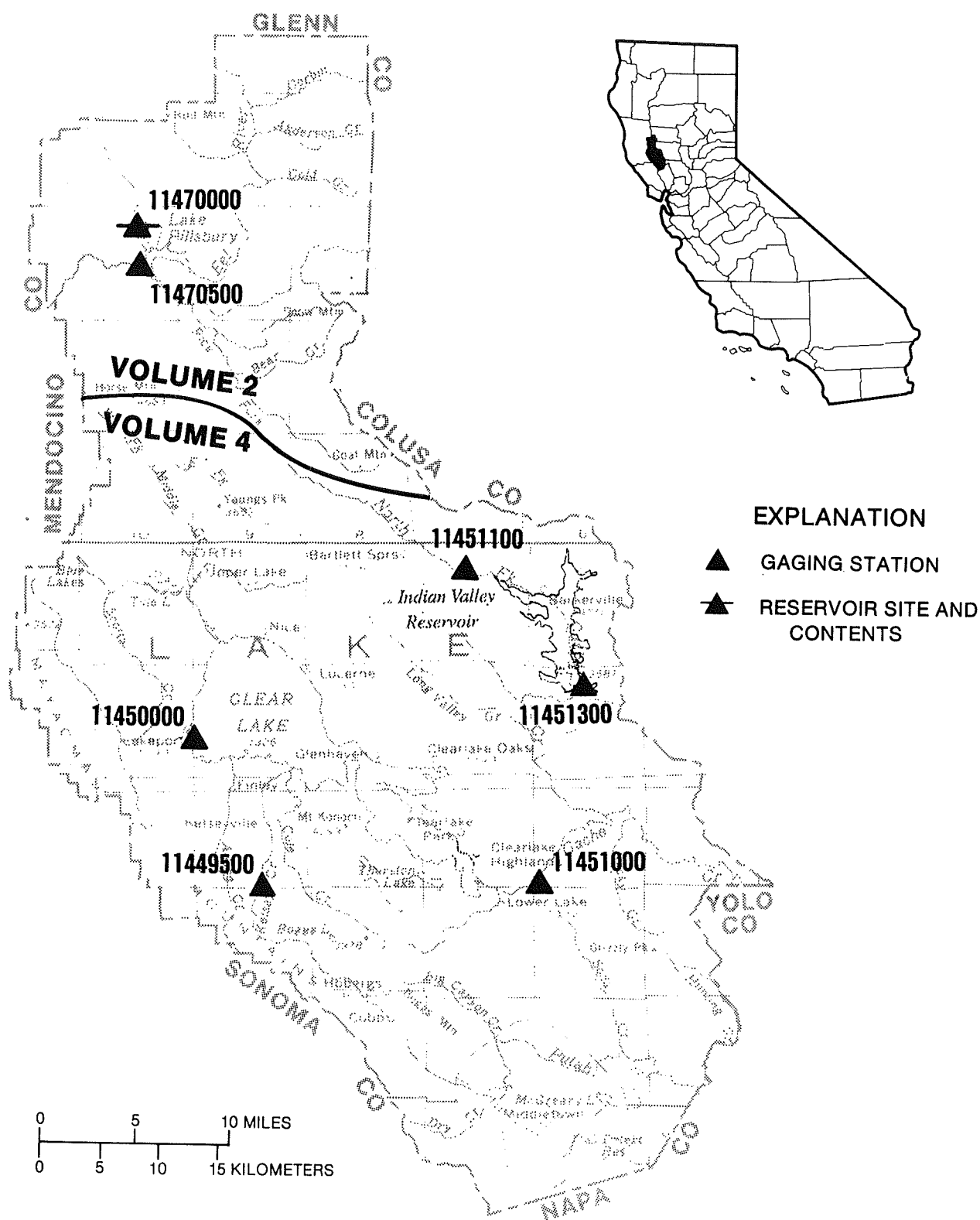


Figure 4. Location of discharge and water-quality stations in Del Norte County.





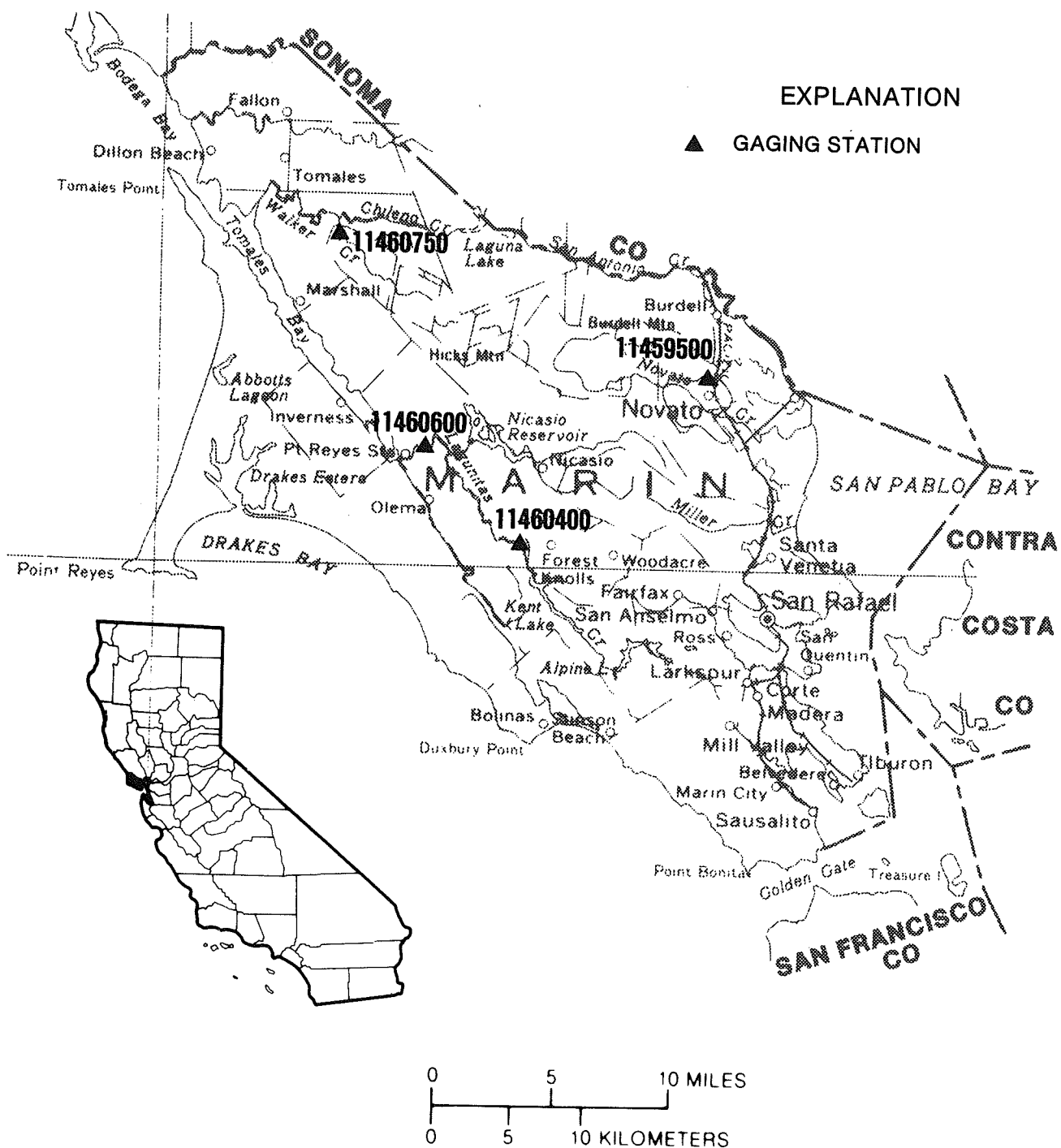


Figure 7. Location of discharge stations in Marin County.

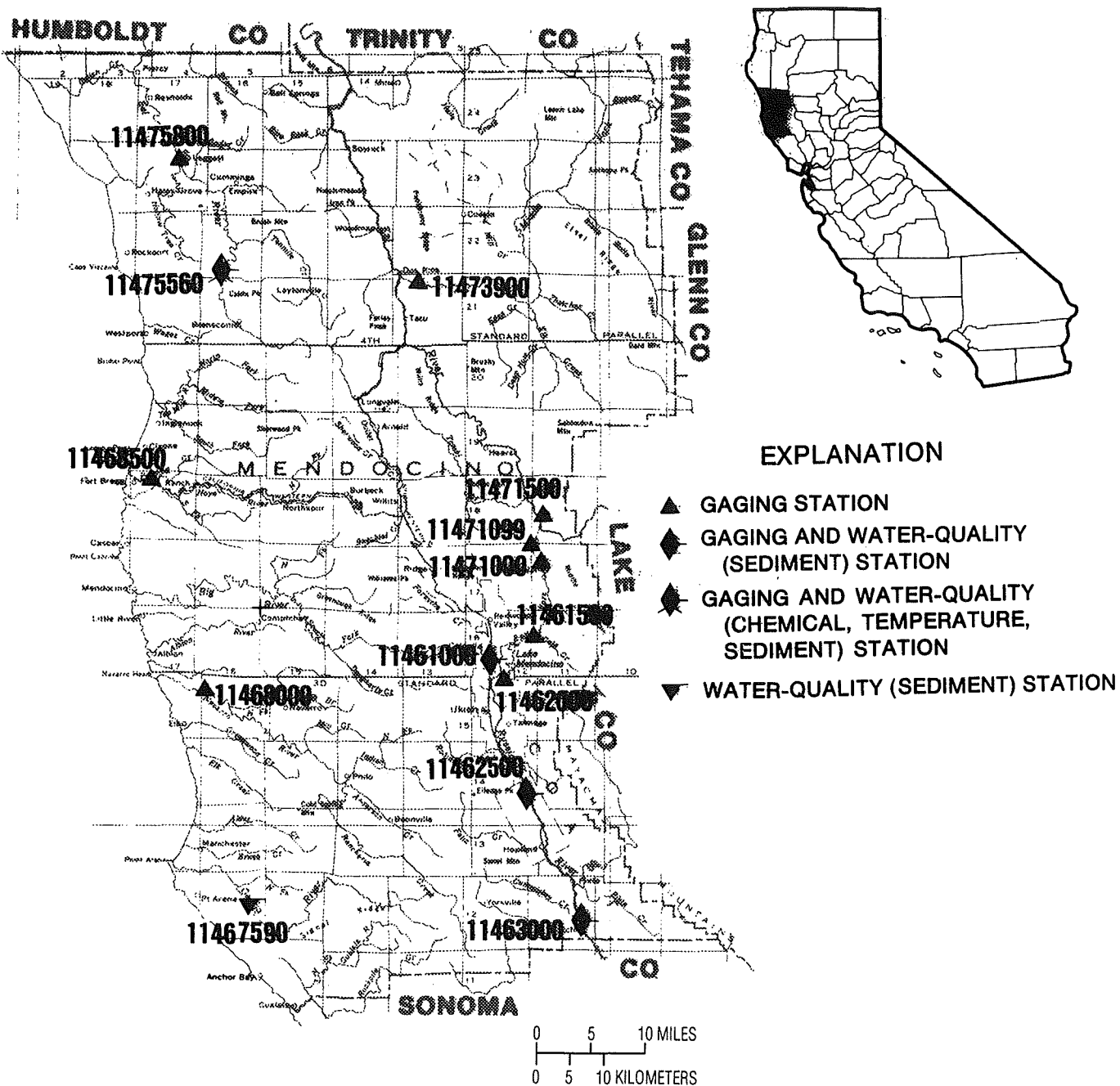


Figure 8. Location of discharge and water-quality stations in Mendocino County.

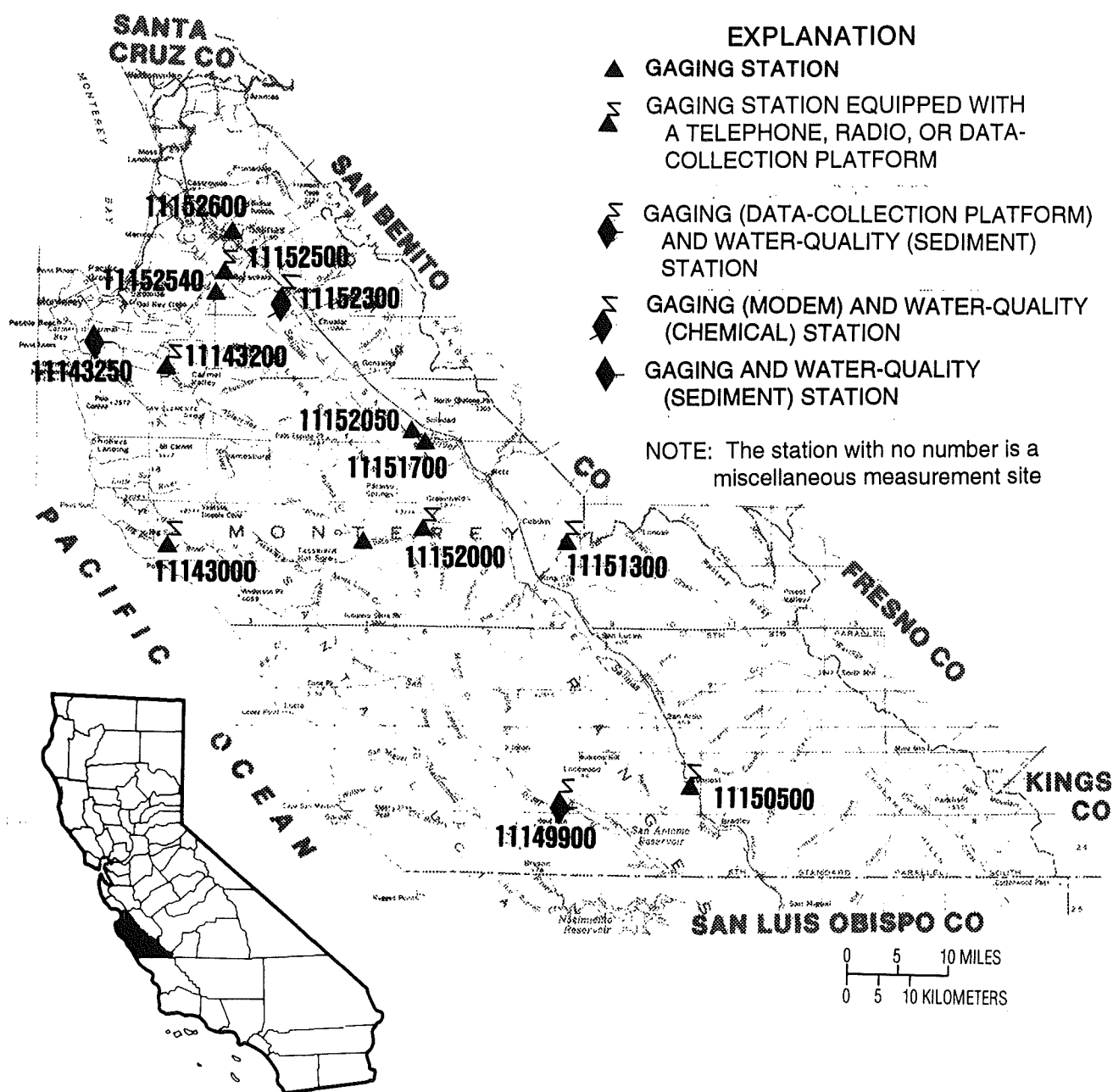
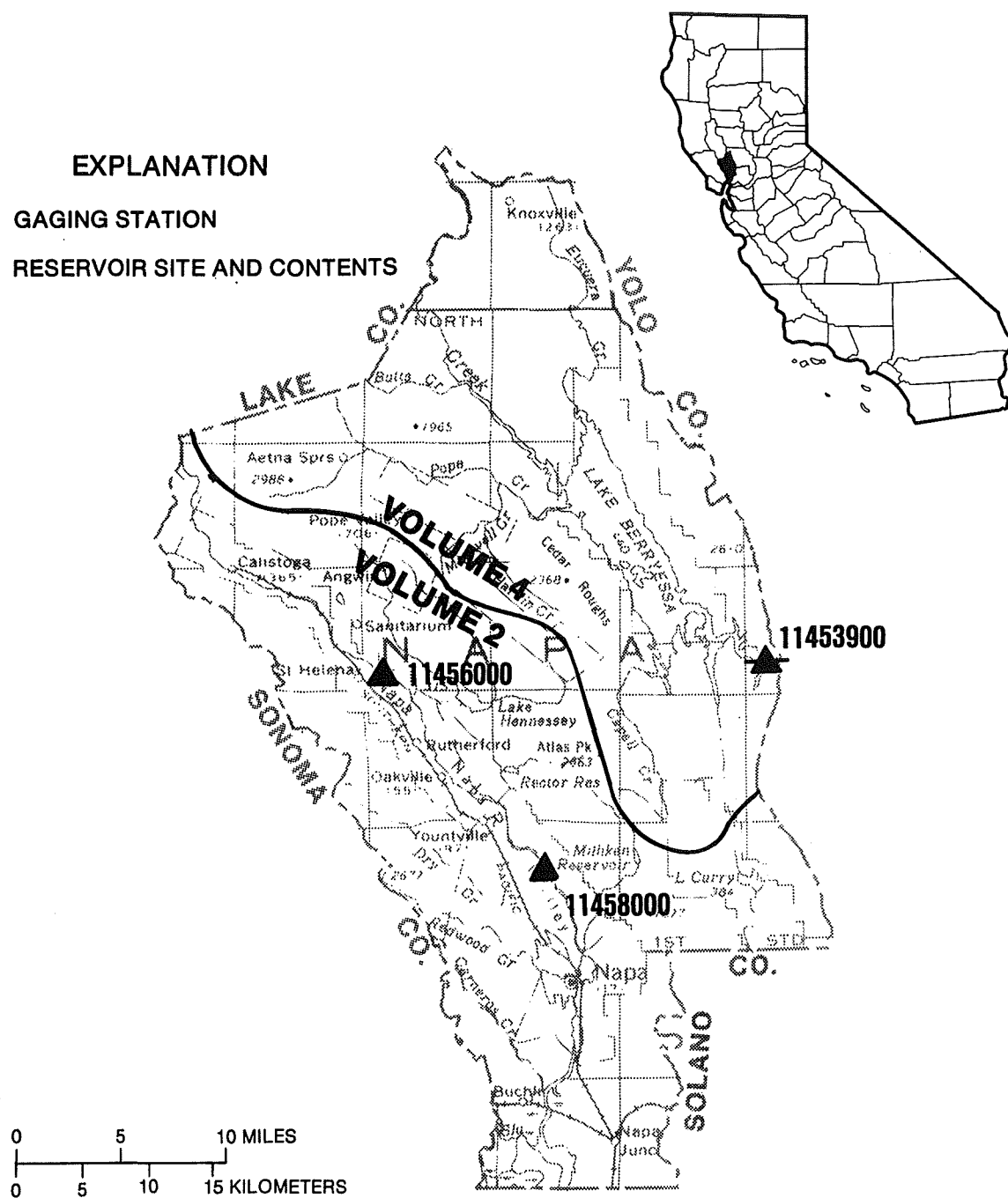


Figure 9. Location of discharge and water-quality stations in Monterey County.



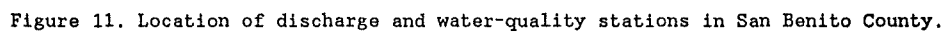


Figure 11. Location of discharge and water-quality stations in San Benito County.

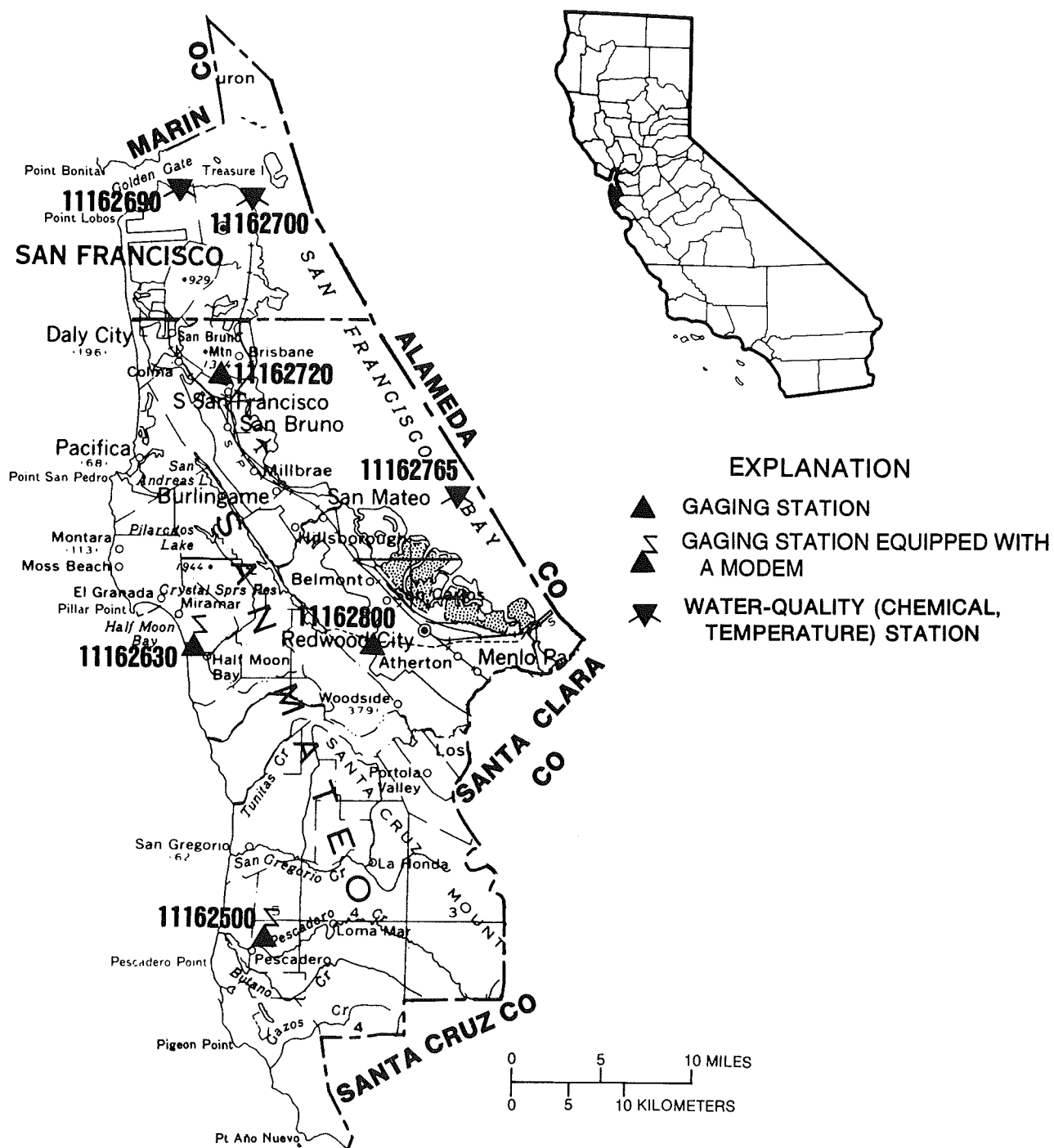


Figure 12. Location of discharge and water-quality stations in San Francisco and San Mateo Counties.

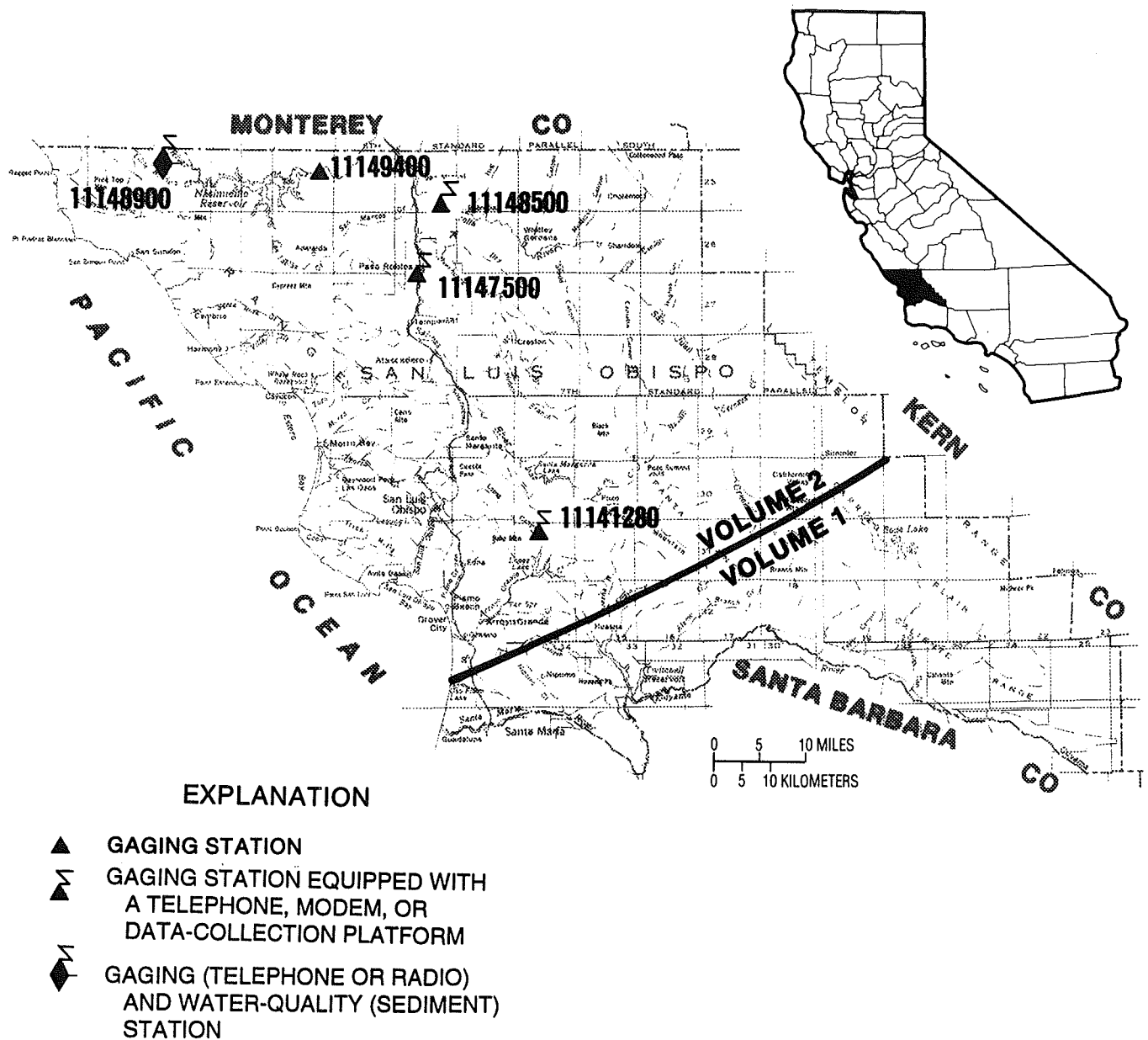


Figure 13. Location of discharge and water-quality stations in San Luis Obispo County.

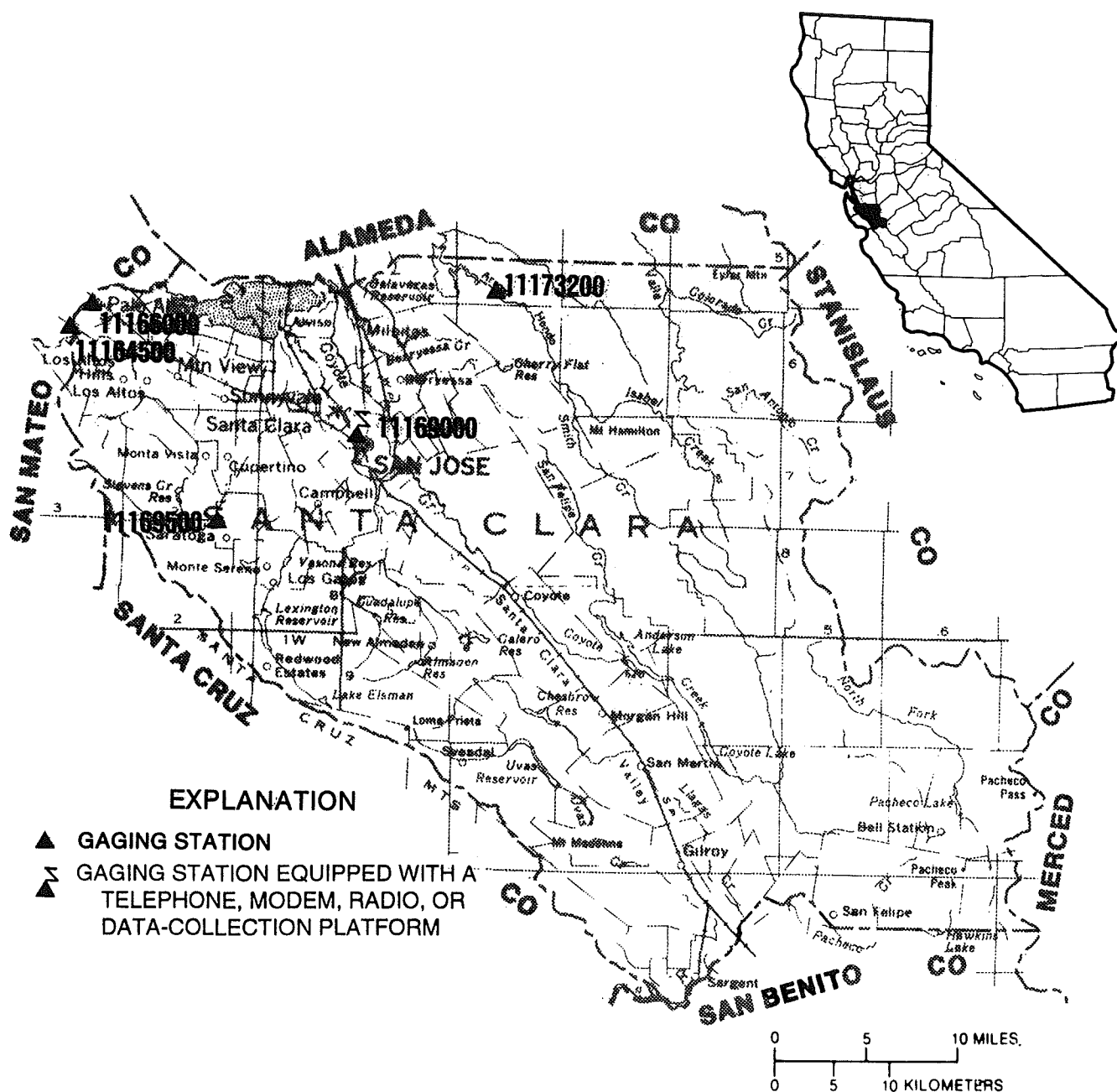


Figure 14. Location of discharge stations in Santa Clara County.

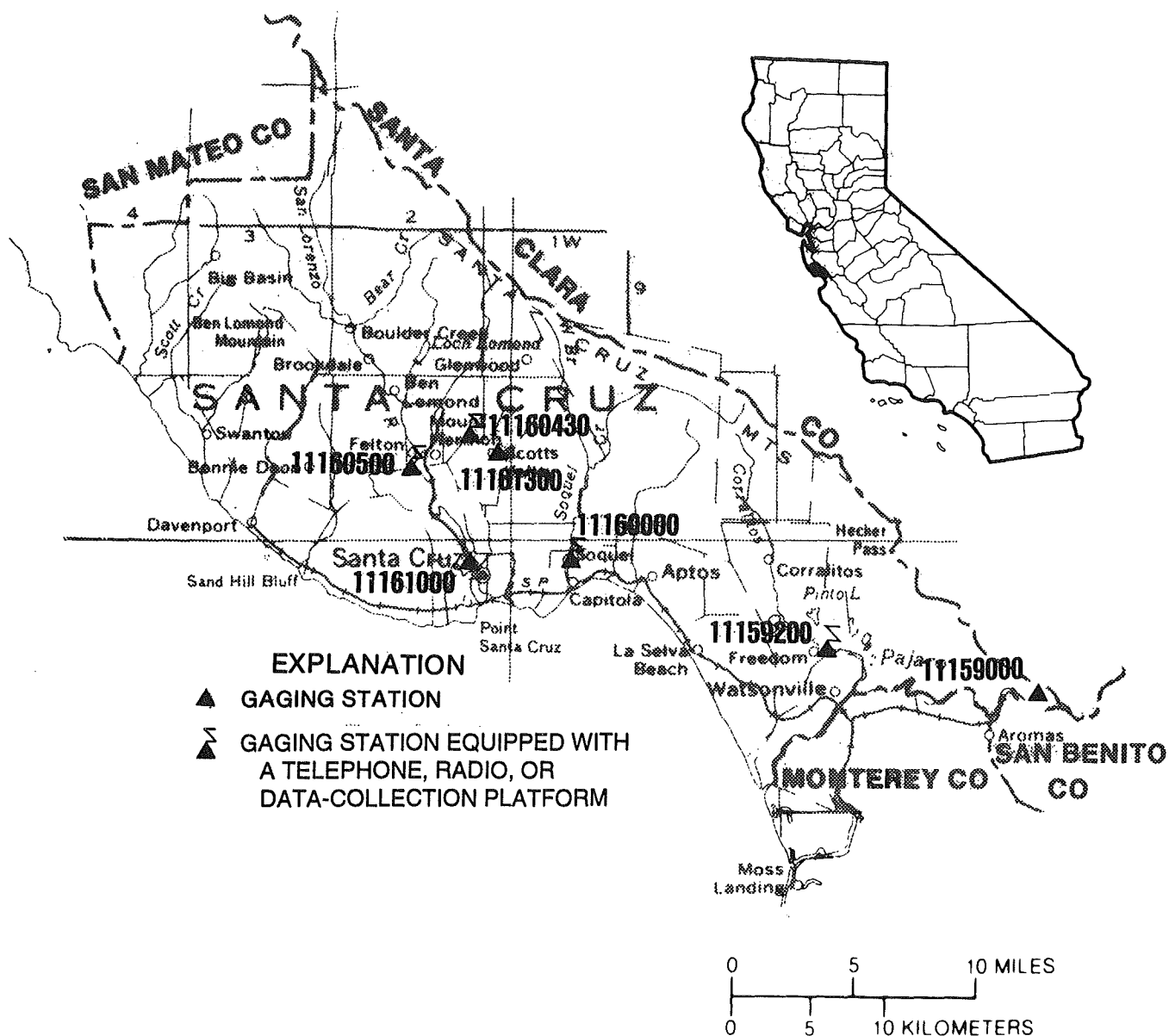


Figure 15. Location of discharge stations in Santa Cruz County.

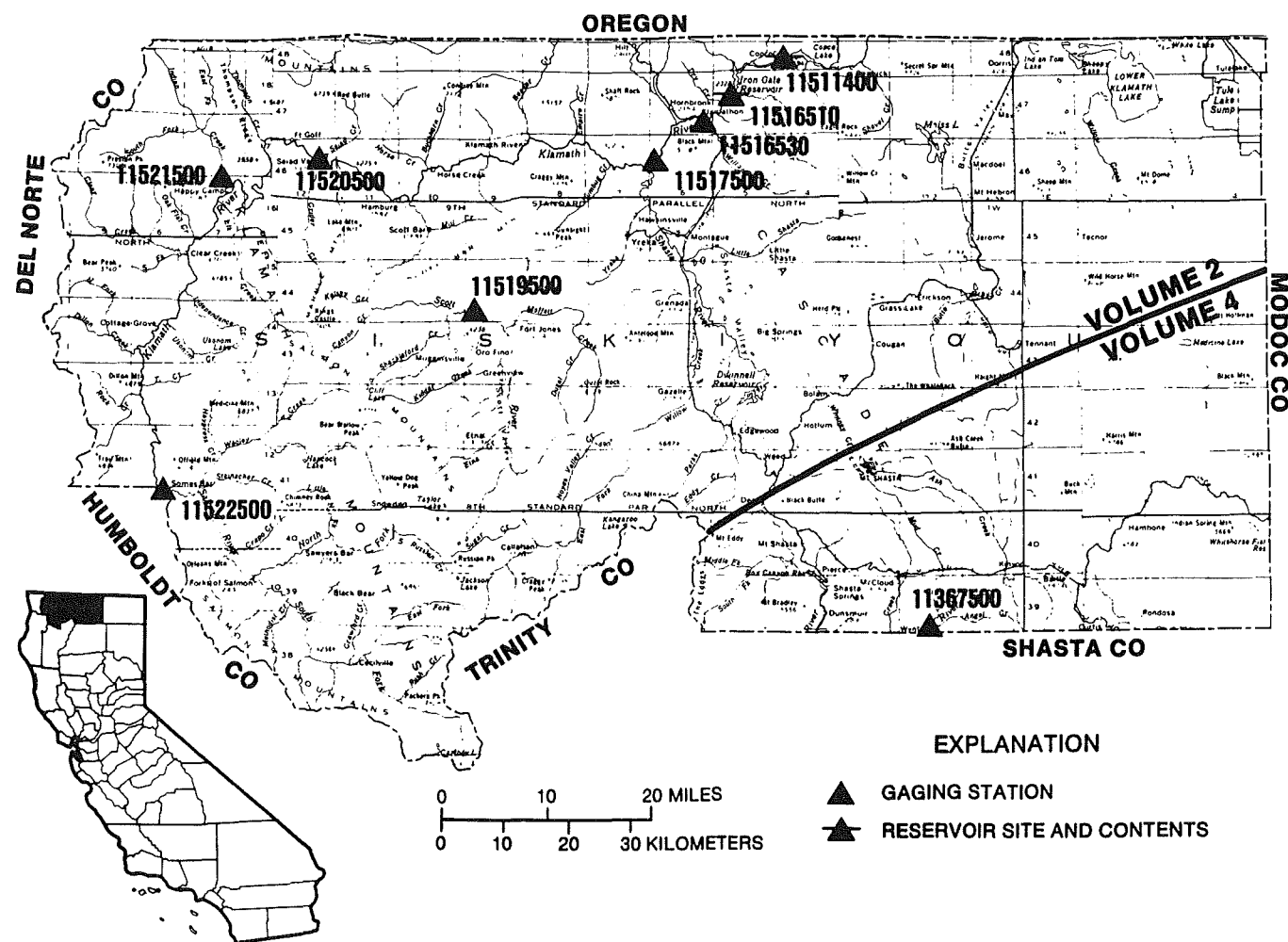


Figure 16. Location of discharge stations in Siskiyou County.
(NOTE: Records for station 11367500 published in volume 4.)

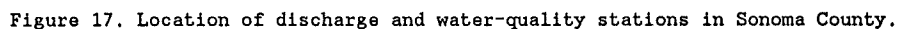
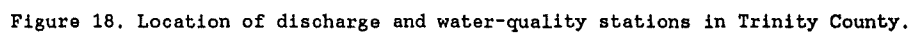


Figure 17. Location of discharge and water-quality stations in Sonoma County.



GAGING STATION AND WATER-QUALITY RECORDS

Remark Codes

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

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
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).
ND	Not detected.
&	Biological organism estimated as dominant.
*	Instantaneous streamflow at the time of cross-sectional measurements.
**	Partial sampled width.
1	Laboratory value.
2	Laboratory fixed-end point titration.
A	Samples collected by another agency.
N	Suspended-sediment concentration value determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

Dissolved Trace-Element Concentrations

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

Change in National Trends Network procedures

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

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 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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 31	2145	125	5.76	Feb. 19	2145	632	7.12
Feb. 5	1145	151	5.88				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.7	4.2	5.4	56	36	e16	9.0	6.0	3.9	e4.0	3.7
2	4.0	4.4	4.2	5.4	30	35	e18	8.9	6.0	3.9	e3.9	3.7
3	4.0	4.2	4.2	5.4	33	34	e15	8.8	5.8	3.9	e3.9	3.6
4	4.0	4.2	4.2	5.4	33	38	e13	8.7	5.7	3.7	e3.9	3.6
5	4.0	4.2	4.2	5.4	95	39	e13	8.6	5.7	3.8	e3.9	3.6
6	4.0	4.2	4.2	5.4	43	36	e12	8.5	5.8	3.9	4.0	3.6
7	4.0	4.2	4.2	5.4	28	37	e12	8.4	5.9	3.8	4.0	3.4
8	4.1	4.2	4.2	5.4	22	36	e11	8.3	5.9	3.7	4.0	3.3
9	4.0	4.1	4.2	5.4	20	34	e11	8.3	5.6	3.5	4.0	3.5
10	3.9	4.1	4.2	4.9	18	32	e11	8.4	5.6	3.3	3.9	3.6
11	4.0	4.2	4.2	4.9	17	30	e11	8.3	5.2	3.5	4.0	3.5
12	4.1	4.2	9.9	5.1	16	39	e10	8.2	5.2	4.2	3.8	3.3
13	4.1	4.1	11	4.9	15	35	e10	8.0	5.4	3.3	3.8	3.2
14	4.1	4.1	8.8	4.9	15	34	e10	7.8	5.2	4.5	3.8	3.2
15	4.1	4.2	6.9	4.9	15	31	e10	8.1	5.4	4.7	3.5	3.3
16	4.1	4.0	6.4	14	15	29	e10	13	5.4	4.0	3.5	3.3
17	4.1	4.0	6.0	12	15	28	e10	8.1	5.2	3.6	3.6	3.4
18	4.1	4.2	6.0	7.5	14	27	e10	7.4	5.0	e4.0	3.7	3.3
19	4.1	4.1	5.8	10	102	28	e10	7.3	4.8	e3.9	3.6	3.3
20	4.1	4.2	5.7	8.2	200	30	e10	7.1	4.8	e3.9	3.7	3.3
21	4.2	4.2	5.6	8.7	103	28	e10	6.7	4.9	e4.0	3.7	3.1
22	4.1	4.2	5.6	8.7	73	e23	e9.8	6.7	4.8	e3.9	3.6	3.2
23	4.1	4.2	5.8	7.8	41	e23	e9.8	6.7	4.5	e3.9	3.7	3.3
24	4.1	4.2	5.7	6.8	33	e22	10	6.7	4.5	e3.9	3.6	3.4
25	4.1	4.2	5.7	15	33	e22	9.9	6.2	4.6	e4.0	3.6	3.4
26	4.1	4.1	5.7	10	30	e21	9.9	6.3	4.8	e4.0	3.8	3.4
27	4.1	4.2	5.7	14	33	e20	9.7	6.3	4.7	e4.0	3.8	3.4
28	4.1	4.1	5.7	14	33	e19	9.6	6.3	4.4	e4.0	3.7	3.3
29	4.2	4.1	5.4	8.1	36	e18	9.4	6.2	4.3	e3.9	3.6	3.2
30	4.2	4.2	5.4	5.2	---	e17	9.1	6.4	4.1	e3.9	3.6	3.2
31	4.2	---	5.4	35	---	e17	---	6.1	---	e3.9	3.5	---
TOTAL	126.5	125.5	174.4	263.2	1217	898	330.2	239.8	155.2	120.4	116.7	101.6
MEAN	4.08	4.18	5.63	8.49	42.0	29.0	11.0	7.74	5.17	3.88	3.76	3.39
MAX	4.2	4.7	11	35	200	39	18	13	6.0	4.7	4.0	3.7
MIN	3.9	4.0	4.2	4.9	14	17	9.1	6.1	4.1	3.3	3.5	3.1
AC-FT	251	249	346	522	2410	1780	655	476	308	239	231	202

e Estimated.

PACIFIC SLOPE BASINS IN CALIFORNIA

ARROYO GRANDE BASIN--Continued

11141280 LOPEZ CREEK NEAR ARROYO GRANDE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.87	4.12	6.50	20.1	26.9	27.9	13.1	6.95	4.57	3.32	2.84	2.64
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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1967 - 1996

ANNUAL TOTAL	7415.7		3868.5									
ANNUAL MEAN	20.3		10.6							10.1		
HIGHEST ANNUAL MEAN										37.3		1983
LOWEST ANNUAL MEAN										1.89		1977
HIGHEST DAILY MEAN	594	Mar 10				200	Feb 20			1360	Jan 25	1969
LOWEST DAILY MEAN	3.2	Jan 1				3.1	Sep 21			.30	Aug 1	1977
ANNUAL SEVEN-DAY MINIMUM	4.0	Oct 4				3.3	Sep 16			.34	Jul 28	1977
INSTANTANEOUS PEAK FLOW						632	Feb 19			2830	Jan 25	1969
INSTANTANEOUS PEAK STAGE						7.12	Feb 19			9.62	Mar 1	1983
ANNUAL RUNOFF (AC-FT)	14710					7670				7280		
10 PERCENT EXCEEDS	46					28				16		
50 PERCENT EXCEEDS	8.3					5.1				3.7		
90 PERCENT EXCEEDS	4.1					3.6				1.5		

BIG SUR RIVER BASIN

43

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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 4	1900	2,720	8.83	Feb. 19	1645	3,000	9.07

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	e18	18	35	588	541	249	87	67	40	27	18
2	18	e18	18	34	357	481	231	85	65	39	27	16
3	19	e18	18	34	305	435	199	84	64	39	27	17
4	18	e18	18	33	1130	514	186	82	62	38	28	18
5	19	e18	19	33	1520	544	165	81	60	37	e27	18
6	19	e17	19	32	799	479	157	79	59	37	e27	19
7	19	e17	19	32	525	432	150	78	59	38	e26	18
8	20	e17	18	32	393	395	145	77	57	38	e26	17
9	20	e17	18	31	319	362	141	76	55	37	e26	17
10	19	e17	18	31	270	337	136	74	54	36	e25	18
11	19	e17	38	31	233	314	130	72	53	35	e25	18
12	19	17	324	31	205	487	125	70	54	35	e24	18
13	19	17	131	30	183	413	121	68	53	34	e24	19
14	19	17	98	30	166	373	118	68	51	34	e23	19
15	19	17	68	30	162	342	118	77	51	33	e23	19
16	20	17	58	254	213	320	150	244	50	34	e23	19
17	20	17	49	157	188	299	135	130	49	34	e23	18
18	19	18	47	112	171	280	153	114	48	33	e22	18
19	19	18	43	146	1380	263	132	101	47	32	e22	18
20	20	18	40	106	1450	247	124	94	46	32	e22	18
21	19	18	38	167	1220	235	119	97	46	31	e22	18
22	18	19	48	135	975	224	114	95	46	31	e21	18
23	18	19	57	109	739	213	110	87	45	31	21	19
24	19	18	46	97	597	203	106	82	44	30	21	19
25	19	18	42	345	511	194	103	80	44	30	21	19
26	19	17	40	204	434	185	99	78	46	29	21	19
27	19	18	38	256	406	179	96	76	46	30	21	19
28	19	18	37	251	411	191	94	74	45	31	21	18
29	e18	18	37	200	572	168	92	72	43	29	21	16
30	e18	18	39	175	---	160	90	71	41	29	20	16
31	e18	---	36	931	---	153	---	68	---	28	19	---
TOTAL	586	529	1537	4124	16422	9963	4088	2721	1550	1044	726	541
MEAN	18.9	17.6	49.6	133	566	321	136	87.8	51.7	33.7	23.4	18.0
MAX	20	19	324	931	1520	544	249	244	67	40	28	19
MIN	18	17	18	30	162	153	90	68	41	28	19	16
AC-FT	1160	1050	3050	8180	32570	19760	8110	5400	3070	2070	1440	1070

e Estimated.

BIG SUR RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.4	45.1	98.7	229	262	227	145	66.2	35.9	23.0	17.0	15.0
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1950 - 1996			
ANNUAL TOTAL	67751				43831							
ANNUAL MEAN	186				120				97.9			
HIGHEST ANNUAL MEAN									319			
LOWEST ANNUAL MEAN									10.0			
HIGHEST DAILY MEAN	4150				1520				4150			
LOWEST DAILY MEAN	17				16				2.6			
ANNUAL SEVEN-DAY MINIMUM	17				17				2.9			
INSTANTANEOUS PEAK FLOW					3000				10700			
INSTANTANEOUS PEAK STAGE					9.07				14.30			
INSTANTANEOUS LOW FLOW									2.6			
ANNUAL RUNOFF (AC-FT)	134400				86940				70890			
10 PERCENT EXCEEDS	479				319				218			
50 PERCENT EXCEEDS	58				39				28			
90 PERCENT EXCEEDS	18				18				9.3			

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 above sea level (based on Monterey County benchmark). Prior to June 1981, at site 150 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. 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. There is diversion from San Clemente Reservoir for municipal supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s, Mar. 10, 1995. gage height, 12.90 ft; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 23, 1955, reached a stage of 11.7 ft from floodmarks, discharge, 6,930 ft³/s, from slope-area measurement of peak flow.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 5	0215	1,310	5.42	Feb. 19	1930	3,110	7.17

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	7.2	e9.9	27	519	512	231	73	49	15	9.0	8.1
2	8.8	7.2	9.7	25	339	468	285	64	46	15	8.7	8.3
3	8.9	8.6	9.5	25	288	428	226	59	42	15	9.3	8.2
4	9.7	8.7	9.7	25	489	479	199	58	41	16	9.7	8.2
5	9.2	8.6	9.7	23	1010	691	183	58	41	15	9.9	8.3
6	8.9	8.4	9.8	22	535	566	172	57	42	13	10	8.8
7	9.3	8.2	9.7	22	381	499	161	54	36	12	9.5	9.1
8	9.4	e8.4	9.8	21	314	445	154	52	32	12	8.4	9.3
9	8.9	e8.6	9.8	20	276	401	141	50	27	12	8.6	9.3
10	8.5	e8.6	10	20	249	366	144	50	24	11	8.8	9.3
11	8.5	e8.7	10	19	227	340	139	48	23	11	8.4	10
12	8.5	e8.7	37	19	209	503	135	45	19	10	7.6	12
13	8.3	e8.4	49	19	195	491	129	42	19	9.6	7.1	12
14	8.3	e9.0	57	19	183	415	118	42	18	11	7.2	12
15	8.2	e9.2	66	19	174	375	116	46	18	14	6.7	11
16	8.2	e8.5	61	57	182	347	133	199	17	13	6.6	11
17	8.4	e8.6	52	120	168	324	126	131	15	13	6.8	11
18	8.0	e8.8	47	76	160	303	136	107	14	13	7.1	10
19	7.7	e9.0	44	85	1100	283	123	91	14	13	7.5	8.9
20	7.9	e9.1	41	75	1690	267	118	81	15	13	7.4	8.6
21	8.0	e9.0	37	100	1400	251	112	75	16	13	7.5	7.6
22	7.7	e9.1	37	105	1150	241	108	79	16	14	7.3	7.9
23	6.9	e9.2	44	86	858	231	104	71	15	13	8.1	8.0
24	7.1	e9.2	40	76	723	225	100	65	15	13	8.2	8.0
25	6.6	e9.0	37	132	617	216	96	62	15	12	8.0	8.2
26	6.7	e8.8	32	125	522	206	94	60	15	12	7.3	8.2
27	6.7	e8.8	25	137	506	199	92	58	15	12	8.1	7.9
28	6.8	e8.8	25	162	461	204	85	57	15	11	8.2	8.0
29	6.8	e9.0	24	131	519	187	76	53	15	10	8.2	8.1
30	6.6	e9.6	27	112	---	178	75	52	15	9.5	7.7	8.0
31	6.8	---	29	512	---	171	---	51	---	8.9	7.9	---
TOTAL	249.9	261.0	918.6	2416	15444	10812	4111	2090	704	385.0	250.8	273.3
MEAN	8.06	8.70	29.6	77.9	533	349	137	67.4	23.5	12.4	8.09	9.11
MAX	9.7	9.6	66	512	1690	691	285	199	49	16	10	12
MIN	6.6	7.2	9.5	19	160	171	75	42	14	8.9	6.6	7.6
AC-FT	496	518	1820	4790	30630	21450	8150	4150	1400	764	497	542

e Estimated.

CARMEL RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.22	13.6	53.9	188	291	279	164	54.9	17.9	5.72	1.85	1.77
MAX	23.3	135	480	868	1206	1855	1071	410	129	50.9	13.4	10.6
(WY)	1984	1984	1984	1995	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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1957 - 1996

ANNUAL TOTAL	79253.9		37915.6									
ANNUAL MEAN	217		104							88.5		
HIGHEST ANNUAL MEAN										442		1983
LOWEST ANNUAL MEAN										.050		1977
HIGHEST DAILY MEAN	6500	Mar 10				1690	Feb 20			6500	Mar 10	1995
LOWEST DAILY MEAN	4.2	Jan 2				6.6	Oct 25			.00	Aug 1	1957
ANNUAL SEVEN-DAY MINIMUM	6.7	Oct 25				6.7	Oct 25			.00	Aug 1	1957
INSTANTANEOUS PEAK FLOW						3110	Feb 19			16000	Mar 10	1995
INSTANTANEOUS PEAK STAGE						7.17	Feb 19			12.90	Mar 10	1995
ANNUAL RUNOFF (AC-FT)	157200					75210				64080		
10 PERCENT EXCEEDS	525					306				208		
50 PERCENT EXCEEDS	53					19				5.2		
90 PERCENT EXCEEDS	8.5					8.0				.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 good. Low flow regulated by Los Padres Reservoir, usable capacity, 2,180 acre-ft, and San Clemente Reservoir, usable capacity, 796 acre-ft. There are diversions from San Clemente Reservoir for municipal supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s, Mar. 10, 1995, gage height, 20.85 ft; no flow for many days most years.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 5	0245	1,480	7.56	Feb. 19	2315	3,360	10.67

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	5.9	5.2	27	614	525	201	72	37	8.5	.86	.00
2	3.1	6.2	5.3	25	338	475	303	66	34	7.6	.76	.00
3	2.6	5.9	5.6	24	247	433	226	59	32	7.1	.07	.00
4	2.5	6.5	6.5	24	325	451	206	57	30	7.4	.00	.00
5	1.4	5.1	7.2	22	1290	710	172	55	28	7.6	.00	.00
6	1.6	3.8	7.5	22	764	577	163	57	28	7.4	.00	.00
7	2.4	3.5	7.3	22	525	499	157	57	24	7.2	.00	.00
8	3.7	4.6	8.3	21	398	440	156	50	23	7.8	.00	.00
9	4.4	5.5	7.4	19	322	393	146	45	21	7.7	.00	.00
10	4.2	5.8	6.9	19	278	354	137	45	18	7.6	.00	.00
11	3.2	5.7	8.8	18	247	327	131	45	16	7.8	.00	.00
12	2.6	5.6	15	18	225	499	128	42	15	6.9	.00	.00
13	2.3	5.9	36	17	203	518	127	39	14	6.7	.00	.00
14	.85	5.2	36	16	189	420	114	37	13	6.2	.00	.00
15	1.1	5.6	57	16	180	368	113	43	13	7.5	.00	.00
16	1.6	7.0	57	21	193	335	131	174	13	8.9	.00	.00
17	2.9	6.1	51	129	177	314	131	134	12	6.9	.00	.00
18	3.2	7.2	44	88	168	290	133	89	11	5.6	.00	.00
19	3.6	7.3	39	86	975	275	130	71	11	5.5	.00	.00
20	4.4	7.2	37	84	1920	257	128	60	10	4.0	.00	.00
21	5.9	6.8	34	108	1470	248	122	55	11	3.0	.00	.00
22	6.3	7.0	32	133	1220	238	116	58	11	2.8	.00	.00
23	5.1	7.0	35	106	858	228	109	55	11	5.4	.00	.00
24	4.3	6.6	35	90	724	220	103	50	11	7.7	.00	.00
25	4.2	5.8	30	152	616	207	91	46	11	7.6	.00	.00
26	5.3	4.9	28	175	519	202	82	44	12	6.3	.00	.00
27	6.0	5.2	26	166	522	190	77	44	11	6.8	.00	.00
28	5.4	5.1	24	222	485	193	78	42	12	6.8	.00	.00
29	6.7	5.0	24	174	518	181	76	40	10	4.9	.00	.00
30	6.3	5.3	24	141	---	175	75	39	9.3	5.7	.00	.00
31	5.0	---	27	514	---	167	---	38	---	2.5	.00	---
TOTAL	114.65	174.3	767.0	2699	16510	10709	4062	1808	512.3	201.4	1.69	0.00
MEAN	3.70	5.81	24.7	87.1	569	345	135	58.3	17.1	6.50	.055	.000
MAX	6.7	7.3	57	514	1920	710	303	174	37	8.9	.86	.00
MIN	.85	3.5	5.2	16	168	167	75	37	9.3	2.5	.00	.00
AC-FT	227	346	1520	5350	32750	21240	8060	3590	1020	399	3.4	.00

CARMEL RIVER BASIN

11143250 CARMEL RIVER NEAR CARMEL, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.92	9.61	57.7	230	344	337	179	68.3	19.5	4.51	.73	.34
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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1962 - 1996

ANNUAL TOTAL	90494.46	37559.34	
ANNUAL MEAN	248	103	103
HIGHEST ANNUAL MEAN			508
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	7960	Mar 10	1920
LOWEST DAILY MEAN	.00	Jan 1	.00
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 14	.00
INSTANTANEOUS PEAK FLOW			3360
INSTANTANEOUS PEAK STAGE			10.67
ANNUAL RUNOFF (AC-FT)	179500		74500
10 PERCENT EXCEEDS	648		316
50 PERCENT EXCEEDS	52		15
90 PERCENT EXCEEDS	2.5		.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 at flows less than 48 ft³/s during current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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
FEB						
13...	0950	205	13.0	14	7.7	40
MAR						
07...	1630	488	13.5	66	87	20
MAY						
09...	0900	48	14.5	2	0.26	96
JUN						
21...	1150	11	17.0	2	0.06	94

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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									
13...	1015	1000	1150	0.250	0	1005	1020	30	3.0
13...	1030	1000	1150	0.250	0	1025	1040	30	3.0
MAR									
07...	1645	1000	1150	0.250	0	1640	1650	15	5.0
07...	1700	1000	1150	0.250	0	1655	1705	15	5.0

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									
13...	2	23	23	3.00	205	13.0	1.83	102	--
13...	2	23	23	3.00	205	13.0	1.12	102	--
MAR									
07...	2	17	17	2.50	488	13.5	5.36	547	2
07...	2	17	17	2.50	476	13.5	7.51	547	--

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								
13...	6	45	87	98	100	--	--	--
13...	8	43	84	97	99	100	--	--
MAR								
07...	10	50	84	93	96	98	99	100
07...	4	45	80	93	96	98	100	--

CARMEL RIVER BASIN

11143250 CARMEL RIVER NEAR CARMEL, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
(NOT PREVIOUSLY PUBLISHED)

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 .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM
JUN							
19...	1400	1	94	19.0	--	2	28
19...	1405	1	94	19.0	4	13	67
19...	1410	1	94	19.0	2	5	9
19...	1415	1	94	19.0	--	2	48
19...	1420	1	94	19.0	1	3	12

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
JUN						
19...	72	92	98	100	--	--
19...	94	98	99	100	--	--
19...	12	15	19	32	72	100
19...	86	92	93	94	100	--
19...	21	29	35	50	83	100

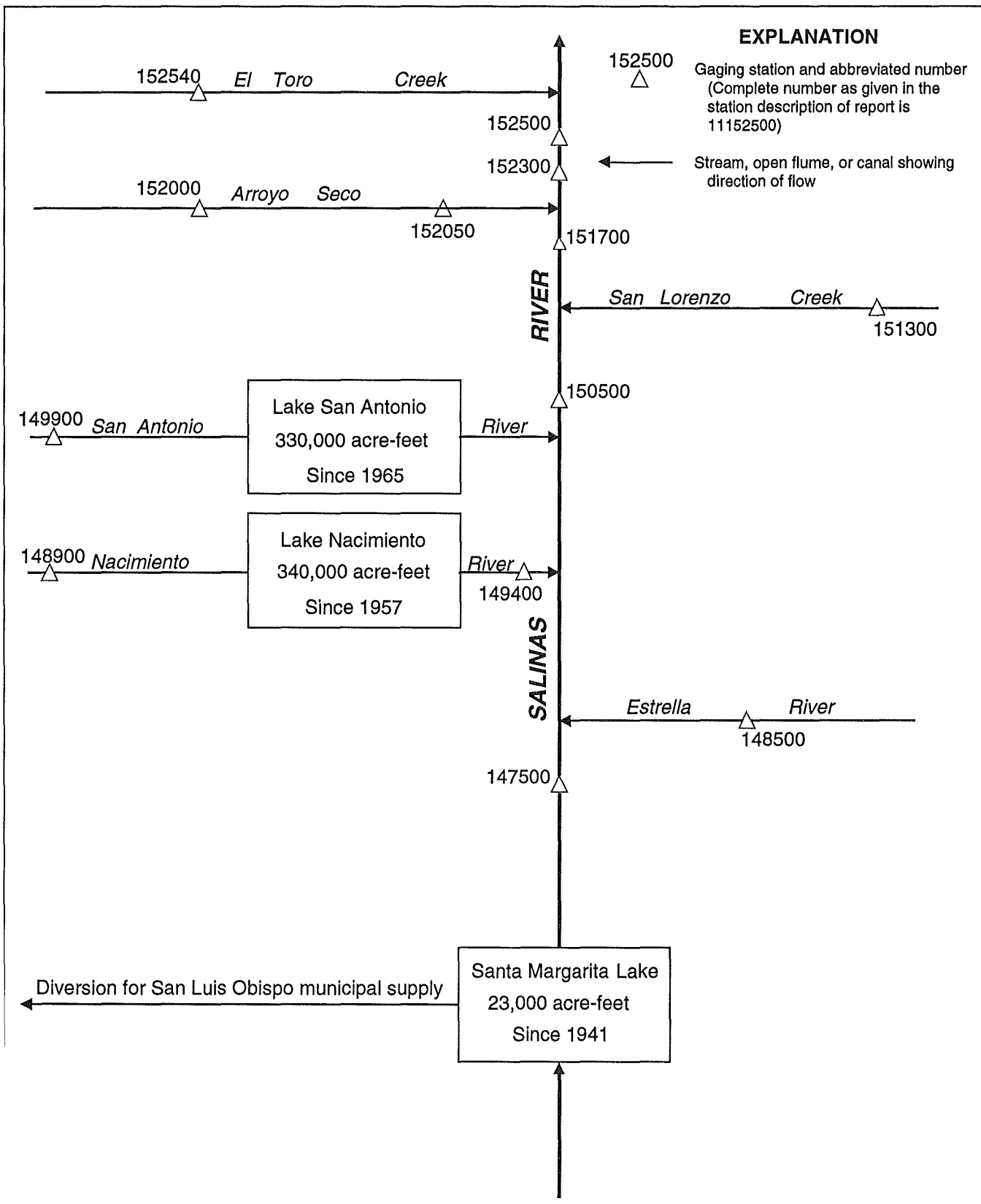


Figure 19. Diversions and storage in Salinas River basin.

11147500 SALINAS RIVER AT PASO ROBLES, CA

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

DRAINAGE AREA.--390 mi².

PERIOD OF RECORD.--October 1939 to September 1965, October 1969 to current year.

CHEMICAL DATA: Water years 1963-66.

SEDIMENT DATA: June 1990.

REVISED RECORDS.--WSP 981: 1942.

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,400 ft³/s, Mar. 10, 1995, gage height, 22.99 ft; no flow for many days in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, reached a stage of 23.8 ft from floodmarks, discharge, 28,000 ft³/s.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 31	2300	3,200	9.14	Mar. 5	0415	1,400	7.00
Feb. 5	1130	5,990	11.21	Mar. 12	2130	2,910	8.70
Feb. 20	0130	7,010	11.92				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	1490	730	124	23	1.2	.00	.00	.00
2	.00	.00	.00	.14	542	581	139	e8.5	.52	.00	.00	.00
3	.00	.00	.00	.28	437	506	134	12	.21	.00	.00	.00
4	.00	.00	.00	.21	579	533	122	9.7	e.10	.00	.00	.00
5	.00	.00	.00	.07	4140	1070	112	8.9	e.00	.00	.00	.00
6	.00	.00	.00	.00	1670	748	97	8.5	e.00	.00	.00	.00
7	.00	.00	.00	.00	854	622	95	7.7	e.00	.00	.00	.00
8	.00	.00	.00	.01	586	532	88	5.6	e.00	.00	.00	.00
9	.00	.00	.00	.00	430	457	82	4.2	e.00	.00	.00	.00
10	.00	.00	.00	.00	322	364	76	4.8	e.00	.00	.00	.00
11	.00	.00	.00	.00	262	303	73	3.8	e.00	.00	.00	.00
12	.00	.00	13	.00	225	870	70	2.8	e.00	.00	.00	.00
13	.00	.00	3.2	.00	206	1440	64	1.7	e.00	.00	.00	.00
14	.00	.00	1.9	.00	194	987	62	.98	e.00	.00	.00	.00
15	.00	.00	.12	.00	179	788	60	.64	e.00	.00	.00	.00
16	.00	.00	.00	3.0	178	657	77	9.1	e.00	.00	.00	.00
17	.00	.00	.00	2.9	172	552	82	15	e.00	.00	.00	.00
18	.00	.00	.00	1.0	150	471	e87	8.8	e.00	.00	.00	.00
19	.00	.00	.00	3.4	368	420	e86	5.2	e.00	.00	.00	.00
20	.00	.00	.00	1.3	4080	362	e84	3.4	e.00	.00	.00	.00
21	.00	.00	.00	8.7	2710	303	e78	2.3	.00	.00	.00	.00
22	.00	.00	.79	5.0	2220	284	e70	1.3	.00	.00	.00	.00
23	.00	.00	3.0	1.8	1340	258	e63	.63	.00	.00	.00	.00
24	.00	.00	.00	1.4	948	235	e55	.38	.00	.00	.00	.00
25	.00	.00	.00	105	745	218	53	e.00	.00	.00	.00	.00
26	.00	.00	.00	192	582	194	48	e.00	.00	.00	.00	.00
27	.00	.00	.00	114	578	169	40	e.30	.00	.00	.00	.00
28	.00	.00	.00	346	702	152	35	e.20	.00	.00	.00	.00
29	.00	.00	.00	178	683	144	31	e.50	.00	.00	.00	.00
30	.00	.00	.00	119	---	140	25	1.2	.00	.00	.00	.00
31	.00	---	.00	950	---	128	---	1.3	---	.00	.00	---
TOTAL	0.00	0.00	22.01	2033.21	27572	15218	2312	152.43	2.03	0.00	0.00	0.00
MEAN	.000	.000	.71	65.6	951	491	77.1	4.92	.068	.000	.000	.000
MAX	.00	.00	13	950	4140	1440	139	23	1.2	.00	.00	.00
MIN	.00	.00	.00	.00	150	128	25	.00	.00	.00	.00	.00
AC-FT	.00	.00	44	4030	54690	30180	4590	302	4.0	.00	.00	.00

e Estimated.

11147500 SALINAS RIVER AT PASO ROBLES, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.65	4.99	45.1	220	371	380	160	22.6	2.54	.26	.059	.95
MAX	117	86.0	581	1409	2026	2410	1980	247	30.5	4.84	1.91	44.0
(WY)	1943	1983	1983	1983	1980	1985	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1940 - 1996			
ANNUAL TOTAL	135643.36				47311.68							
ANNUAL MEAN	372				129				99.5			
HIGHEST ANNUAL MEAN									526			
LOWEST ANNUAL MEAN									.000			
HIGHEST DAILY MEAN	19600 Mar 10				4140 Feb 5				19600 Mar 10 1995			
LOWEST DAILY MEAN	.00 Jan 1				.00 Oct 1				.00 Nov 1 1939			
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 28				.00 Oct 1				.00 Nov 1 1939			
INSTANTANEOUS PEAK FLOW					7010 Feb 20				28400 Mar 10 1995			
INSTANTANEOUS PEAK STAGE					11.92 Feb 20				22.99 Mar 10 1995			
ANNUAL RUNOFF (AC-FT)	269000				93840				72090			
10 PERCENT EXCEEDS	815				423				152			
50 PERCENT EXCEEDS	2.4				.00				.00			
90 PERCENT EXCEEDS	.00				.00				.00			

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.--Records poor. No regulation; pumpage from wells along river for irrigation upstream from station. See schematic diagram of Salinas River basin.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 21	0530	1,030	3.20	Mar. 5	1445	417	2.66

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	9.1	90	2.6	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	4.1	49	2.3	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	6.8	29	1.6	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	8.0	22	2.0	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	12	136	2.1	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	117	69	1.8	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	28	26	1.5	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	7.6	16	.91	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	4.6	9.9	.89	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	2.6	7.3	.64	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	1.6	5.5	.57	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	1.2	13	.42	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	1.3	85	.34	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	1.2	59	.31	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	1.3	34	.25	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	2.0	15	2.0	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	1.6	11	2.6	.00	.04	.00	.00	.00
18	.00	.00	.00	.00	1.5	7.0	2.6	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	3.4	5.3	1.8	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	49	4.7	.83	.00	.01	.00	.00	.00
21	.00	.00	.00	.00	429	3.9	.45	.00	.21	.00	.00	.00
22	.00	.00	.00	.00	224	2.9	.23	.00	1.6	.00	.00	.00
23	.00	.00	.00	.00	73	2.4	.09	.00	2.9	.00	.00	.00
24	.00	.00	.00	.00	22	2.4	.01	.00	5.2	.00	.00	.00
25	.00	.00	.00	.35	12	2.1	.00	.00	4.1	.00	.00	.00
26	.00	.00	.00	.58	8.4	2.1	.00	.00	1.9	.00	.00	.00
27	.00	.00	.00	2.1	9.9	2.1	.00	.00	.33	.00	.00	.00
28	.00	.00	.00	2.3	10	2.1	.00	.00	.06	.00	.00	.00
29	.00	.00	.00	2.2	11	1.8	.00	.00	.02	.00	.00	.00
30	.00	.00	.00	2.2	---	1.9	.00	.00	.00	.00	.00	.00
31	.00	---	.00	8.0	---	2.0	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	17.73	1063.2	719.4	28.84	0.00	16.37	0.00	0.00	0.00
MEAN	.000	.000	.000	.57	36.7	23.2	.96	.000	.55	.000	.000	.000
MAX	.00	.00	.00	8.0	429	136	2.6	.00	5.2	.00	.00	.00
MIN	.00	.00	.00	.00	1.2	1.8	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	35	2110	1430	57	.00	32	.00	.00	.00

11148500 ESTRELLA RIVER NEAR ESTRELLA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.038	1.10	12.1	45.7	125	91.5	29.8	1.77	.18	.000	.000	.24
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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1955 - 1996
ANNUAL TOTAL	34294.57	1845.54	
ANNUAL MEAN	94.0	5.04	25.1
HIGHEST ANNUAL MEAN			256
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	8740	429	18500
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		1030	32500
INSTANTANEOUS PEAK STAGE		3.20	10.90
ANNUAL RUNOFF (AC-FT)	68020	3660	18180
10 PERCENT EXCEEDS	83	5.4	6.9
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

SALINAS RIVER BASIN

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 fair. No storage or diversion upstream from station. See schematic diagram of Salinas River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,600 ft³/s, Jan. 14, 1993, gage height, 32.14 ft, from rating curve extended above 7,900 ft³/s on basis of slope-area measurement at 32.00 ft gage height, maximum gage height, 35.15 ft, Mar. 10, 1995; no flow for many days in each year.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 19	2030	13,700	21.14

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	.00	14	1610	1590	177	53	29	6.0	.00	e.00
2	.00	e.00	.00	14	655	845	222	50	27	5.2	.00	e.00
3	.00	e.00	.00	13	639	610	150	48	24	4.4	.00	e.00
4	.00	e.00	.00	13	2170	1130	129	46	22	3.8	.00	e.00
5	.00	e.00	.00	13	3830	1540	117	44	20	3.0	.00	e.00
6	.00	e.00	.00	13	1200	814	110	43	19	2.5	.00	e.00
7	.00	e.00	.00	13	697	607	104	41	17	2.1	.00	e.00
8	.00	e.00	.00	12	501	493	97	41	16	1.8	.00	e.00
9	.00	.00	.00	12	386	413	92	39	15	1.5	.00	e.00
10	.00	.00	.00	12	312	352	90	38	14	1.2	.00	e.00
11	e.00	.00	.00	12	261	308	87	37	13	1.0	.00	e.00
12	e.00	.00	382	12	225	1080	82	36	12	.84	.00	e.00
13	e.00	.00	241	12	196	800	79	33	12	.72	e.00	e.00
14	e.00	.00	101	11	173	556	76	31	12	.54	e.00	e.00
15	e.00	.00	52	12	159	442	73	30	11	.38	e.00	e.00
16	e.00	.00	41	661	183	377	94	165	10	.26	e.00	e.00
17	e.00	.00	31	470	156	329	97	96	10	.20	e.00	e.00
18	e.00	.00	26	168	140	292	150	68	9.9	.17	e.00	e.00
19	e.00	.00	22	275	3840	260	114	58	9.3	.13	e.00	e.00
20	e.00	.00	20	176	4330	234	98	51	8.5	.12	e.00	e.00
21	e.00	.00	17	274	4000	212	89	46	8.0	.09	e.00	e.00
22	e.00	.00	19	241	1940	192	83	44	7.5	.06	e.00	e.00
23	e.00	.00	48	158	1040	179	78	43	7.5	.05	e.00	e.00
24	e.00	.00	33	123	718	166	74	39	7.0	.03	e.00	e.00
25	e.00	.00	24	783	577	156	77	36	6.4	.02	e.00	e.00
26	e.00	.00	20	389	468	147	70	34	6.3	.01	e.00	e.00
27	e.00	.00	18	460	524	139	65	34	7.2	.00	e.00	e.00
28	e.00	.00	17	536	505	143	60	33	7.6	.00	e.00	e.00
29	e.00	.00	16	329	2870	131	58	31	7.5	.00	e.00	e.00
30	e.00	.00	16	243	---	122	55	30	6.9	.00	e.00	e.00
31	e.00	---	15	4270	---	115	---	30	---	.00	e.00	---
TOTAL	0.00	0.00	1159.00	9744	34305	14774	2947	1448	382.6	36.12	0.00	0.00
MEAN	.000	.000	37.4	314	1183	477	98.2	46.7	12.8	1.17	.000	.000
MAX	.00	.00	382	4270	4330	1590	222	165	29	6.0	.00	.00
MIN	.00	.00	.00	11	140	115	55	30	6.3	.00	.00	.00
AC-FT	.00	.00	2300	19330	68040	29300	5850	2870	759	72	.00	.00

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.55	54.8	158	551	677	549	166	43.2	10.1	1.96	.16	.044
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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1971 - 1996	
ANNUAL TOTAL	126462.90		64795.72			
ANNUAL MEAN	346		177		182	
HIGHEST ANNUAL MEAN					623	
LOWEST ANNUAL MEAN					5.74	
HIGHEST DAILY MEAN	24400	Mar 10	4330	Feb 20	24400	Mar 10 1995
LOWEST DAILY MEAN	.00	Aug 7	.00	Oct 1	.00	Sep 16 1971
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 7	.00	Oct 1	.00	Sep 16 1971
INSTANTANEOUS PEAK FLOW			13700	Feb 19	57600	Jan 14 1993
INSTANTANEOUS PEAK STAGE			21.14	Feb 19	35.15	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	250800		128500		131800	
10 PERCENT EXCEEDS	686		447		310	
50 PERCENT EXCEEDS	22		12		6.0	
90 PERCENT EXCEEDS	.00		.00		.00	

SALINAS RIVER BASIN

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 191 ft³/s during current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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
FEB						
16...	1245	191	9.5	4	2.1	76
APR						
23...	1215	77	19.0	2	0.42	65

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.--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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	452	352	208	21	371	4100	34	28	400	365	387	387
2	451	352	161	21	1090	4030	30	31	398	365	387	387
3	450	352	160	21	2110	3160	28	36	399	365	387	387
4	450	352	162	20	2100	690	28	44	399	365	387	387
5	449	352	165	20	2180	353	28	44	397	365	387	380
6	449	351	165	20	2190	182	29	51	396	366	387	387
7	449	351	165	21	2150	55	29	51	396	369	387	387
8	451	350	165	20	2130	36	28	59	396	368	387	387
9	451	338	165	21	2090	35	28	52	396	367	385	387
10	449	284	165	21	2050	35	28	117	396	366	313	373
11	449	283	152	21	2040	35	28	168	396	366	383	365
12	449	281	79	21	2020	38	28	168	392	366	385	354
13	449	272	23	22	1190	34	28	168	396	365	385	344
14	450	280	22	22	369	34	28	168	395	366	387	343
15	449	280	26	21	534	34	27	168	393	365	387	343
16	449	280	22	21	731	34	27	167	391	365	387	343
17	449	285	22	21	731	34	27	166	392	365	387	343
18	449	288	22	21	511	34	28	167	370	314	387	342
19	449	288	21	21	468	34	27	168	392	373	387	343
20	438	269	21	21	1610	34	26	168	392	342	381	337
21	405	222	21	21	2180	33	26	166	392	348	381	327
22	405	222	23	21	2210	36	26	168	392	365	381	327
23	404	223	23	20	2950	34	26	167	391	365	387	327
24	405	222	21	20	4450	34	27	166	321	365	387	328
25	405	222	21	20	4350	33	26	165	339	365	387	330
26	405	222	21	20	4230	33	26	165	275	370	387	329
27	405	222	20	21	4150	33	26	166	389	387	387	328
28	405	210	20	21	3500	34	27	306	383	387	387	312
29	405	220	20	20	2500	33	27	398	367	387	387	330
30	405	220	21	20	---	33	27	399	365	387	387	330
31	379	---	21	163	---	33	---	400	---	387	387	---
TOTAL	13409	8445	2323	785	59185	13390	828	4855	11496	11361	11895	10574
MEAN	433	281	74.9	25.3	2041	432	27.6	157	383	366	384	352
MAX	452	352	208	163	4450	4100	34	400	400	387	387	387
MIN	379	210	20	20	369	33	26	28	275	314	313	312
AC-FT	26600	16750	4610	1560	117400	26560	1640	9630	22800	22530	23590	20970

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	242	116	111	214	480	301	156	213	299	381	398	367
MAX	501	618	1629	1868	2787	3016	1501	1067	581	662	802	684
(WY)	1983	1983	1983	1980	1983	1969	1958	1983	1969	1958	1967	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	1.16	2.44	.000	.000
(WY)	1958	1958	1958	1962	1962	1961	1961	1961	1990	1990	1961	1961

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1958 - 1996	
ANNUAL TOTAL	103450.79		148546			
ANNUAL MEAN	283		406		272	
HIGHEST ANNUAL MEAN					1038	
LOWEST ANNUAL MEAN					3.43	
HIGHEST DAILY MEAN	5090	Mar 12	4450	Feb 24	6770	Feb 26 1969
LOWEST DAILY MEAN	.54	Jan 17	20	Dec 27	.00	Oct 1 1957
ANNUAL SEVEN-DAY MINIMUM	.84	Jan 14	20	Jan 23	.00	Oct 1 1957
INSTANTANEOUS PEAK FLOW			4560	Feb 23	7340	Feb 25 1969
INSTANTANEOUS PEAK STAGE			9.22	Feb 23	10.92	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	205200		294600		197100	
10 PERCENT EXCEEDS	504		450		510	
50 PERCENT EXCEEDS	36		338		125	
90 PERCENT EXCEEDS	21		21		1.4	

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA

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

DRAINAGE AREA.--217 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year.

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,600 ft³/s, Mar. 10, 1995, gage height, 14.25 ft, current datum, from rating curve extended above 8,000 ft³/s, on basis of contracted-opening measurement at gage height 12.6 ft; no flow for many days in each year.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 31	2300	2,070	8.36	Feb. 19	2330	10,800	12.17
Feb. 5	0200	4,280	9.83	Mar. 5	0215	1,630	8.22

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	1.3	e9.7	1080	898	142	64	34	8.1	.00	.00
2	.00	.00	1.3	e9.7	491	626	213	60	32	7.3	.00	.00
3	.00	.00	1.3	e9.7	369	520	176	59	30	6.2	.00	.00
4	.00	.00	1.4	9.6	1050	501	153	56	29	5.7	.00	.00
5	.00	.00	1.5	9.0	2440	1030	141	55	27	5.0	.00	.00
6	.00	.00	1.5	8.5	994	644	133	53	26	4.3	.00	.00
7	.00	.00	1.5	8.1	657	540	127	51	24	3.4	.00	.00
8	.00	.00	1.5	8.0	502	476	123	49	22	3.0	.00	.00
9	.00	.00	1.5	8.0	406	425	118	47	22	2.6	.00	.00
10	.00	.00	1.5	8.0	334	382	113	46	20	2.1	.00	.00
11	.00	.00	1.6	8.0	288	349	111	44	19	1.7	.00	.00
12	.00	.00	4.6	8.0	247	524	107	42	18	1.6	.00	.00
13	.00	.00	199	7.4	216	583	103	40	18	1.4	.00	.00
14	.00	.00	70	7.4	190	440	100	38	17	1.1	.00	.00
15	.00	.00	38	6.9	172	387	99	37	16	.97	.00	.00
16	.00	.00	24	8.6	187	350	100	95	15	.70	.00	.00
17	.00	.00	18	122	193	322	105	126	14	.69	.00	.00
18	.00	.00	15	95	168	295	113	94	14	.60	.00	.00
19	.00	.00	13	81	1550	271	119	78	13	.30	.00	.00
20	.00	.00	11	79	3510	251	109	65	12	.13	.00	.00
21	.00	.05	9.7	75	1860	235	103	56	11	.00	.00	.00
22	.00	.21	9.1	116	1330	219	e96	51	11	.00	.00	.00
23	.00	.43	9.7	81	946	205	e90	47	10	.00	.00	.00
24	.00	.66	13	66	744	193	e85	43	9.8	.00	.00	.00
25	.00	.83	13	70	621	182	82	41	8.8	.00	.00	.00
26	.00	.93	12	117	533	172	79	38	8.7	.00	.00	.00
27	.00	.93	11	94	476	166	75	38	8.8	.00	.00	.00
28	.00	1.0	9.7	192	470	164	72	38	9.6	.00	.00	.00
29	.00	1.1	9.7	142	886	157	69	36	9.4	.00	.00	.00
30	.00	1.2	e9.7	109	---	147	66	35	8.9	.00	.00	.00
31	.00	---	e9.7	807	---	142	---	35	---	.00	.00	---
TOTAL	0.00	7.34	524.8	2380.6	22910	11796	3322	1657	518.0	56.89	0.00	0.00
MEAN	.000	.24	16.9	76.8	790	381	111	53.5	17.3	1.84	.000	.000
MAX	.00	1.2	199	807	3510	1030	213	126	34	8.1	.00	.00
MIN	.00	.00	1.3	6.9	168	142	66	35	8.7	.00	.00	.00
AC-FT	.00	15	1040	4720	45440	23400	6590	3290	1030	113	.00	.00

e Estimated.

SALINAS RIVER BASIN

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.38	14.7	75.0	286	372	359	129	42.4	12.6	2.85	.23	.062
MAX	11.7	108	573	1515	1807	1856	637	167	51.9	22.9	6.83	1.91
(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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1966 - 1996

ANNUAL TOTAL	87501.87	43172.63		
ANNUAL MEAN	240	118	107	
HIGHEST ANNUAL MEAN			455	1983
LOWEST ANNUAL MEAN			.005	1977
HIGHEST DAILY MEAN	14000	Mar 10	3510	Feb 20
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 19	.00	Oct 1
INSTANTANEOUS PEAK FLOW			10800	Feb 19
INSTANTANEOUS PEAK STAGE			12.17	Feb 19
ANNUAL RUNOFF (AC-FT)	173600		85630	
10 PERCENT EXCEEDS	566		349	
50 PERCENT EXCEEDS	20		9.5	
90 PERCENT EXCEEDS	.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 1995 TO SEPTEMBER 1996

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						
25...	1110	56	12.0	4	0.60	54
FEB						
20...	1220	2310	11.0	914	5700	28
APR						
24...	1230	85	21.5	7	1.6	43
JUN						
06...	1030	26	26.0	2	0.14	86

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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									
25...	1130	1000	1150	0.250	0	1125	1135	30	3.0
25...	1140	1000	1150	0.250	0	1135	1145	30	3.0
APR									
24...	1200	1000	1150	0.250	0	1155	1205	18	2.5
24...	1215	1000	1150	0.250	0	1210	1220	18	2.5
JUN									
06...	1045	1000	1150	0.250	0	1040	1050	30	1.0
06...	1100	1000	1150	0.250	0	1055	1105	30	1.0

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	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
JAN										
25...	2	18	18	1.50	56	12.0	0.66	40	--	
25...	2	18	18	1.50	56	12.0	0.81	40	--	
APR										
24...	2	25	25	2.50	83	21.5	1.80	106	--	
24...	2	25	25	2.50	83	21.5	1.60	106	1	
JUN										
06...	2	26	26	0.50	26	26.0	0.80	18	1	
06...	2	26	26	0.50	26	26.0	0.60	18	--	

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
JAN								
25...	6	44	82	94	97	99	100	--
25...	8	44	77	89	95	99	100	--
APR								
24...	9	40	74	92	100	--	--	--
24...	11	47	77	90	96	99	100	--
JUN								
06...	14	55	81	89	93	96	96	100
06...	8	50	81	90	95	97	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 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, 120,000 ft³/s, Mar. 11, 1995, gage height, 23.44 ft, from rating curve extended above 50,000 ft³/s; no flow at times in 1951, 1954-55, 1957.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	433	358	265	e49	1490	5260	e190	73	418	427	513	649
2	411	353	250	e48	1250	5630	e185	74	425	450	519	657
3	428	362	191	e46	2440	5160	e190	73	427	468	513	652
4	417	377	193	e45	2620	1980	e185	71	438	463	485	651
5	410	372	197	45	4340	1740	e172	76	454	458	473	634
6	397	364	206	45	4590	e1950	163	103	481	441	508	632
7	407	361	210	44	3120	e1400	159	105	493	454	528	664
8	416	367	205	45	2700	e1050	154	89	482	477	536	669
9	468	374	200	44	2450	e800	149	107	465	490	537	e630
10	435	344	201	44	2280	e650	142	106	448	454	531	e585
11	420	319	197	43	2240	e550	136	215	492	418	451	553
12	441	302	190	43	2130	e500	130	284	520	416	514	e530
13	441	296	146	42	1900	e1100	125	285	534	431	547	509
14	429	285	116	42	691	e1570	122	218	534	451	571	497
15	419	289	79	42	569	e1250	121	203	532	492	562	488
16	402	297	71	44	834	e1000	125	210	532	475	558	472
17	403	315	65	43	827	e800	128	205	523	461	564	473
18	406	325	60	41	743	e700	137	205	463	459	565	489
19	460	326	56	41	506	e600	138	199	487	451	567	503
20	458	321	56	40	3590	528	134	194	478	491	567	507
21	425	265	52	43	5830	449	119	193	489	479	525	491
22	432	243	56	42	5740	387	111	196	506	496	606	494
23	414	230	e59	41	4340	360	108	197	507	477	608	489
24	410	232	e54	40	5940	316	105	199	456	464	616	477
25	411	227	e51	41	5510	e295	102	201	454	448	616	457
26	405	242	e51	41	5250	e280	98	202	347	462	626	458
27	404	247	e50	78	4990	e255	91	195	456	483	631	468
28	397	238	e49	111	5040	e235	83	217	465	482	623	454
29	397	261	e50	225	3190	e215	79	405	442	466	604	473
30	386	266	e51	196	---	e207	75	430	416	479	588	534
31	372	---	e50	205	---	e205	---	422	---	492	638	---
TOTAL	12954	9158	3727	1939	87140	37422	3956	5952	14164	14355	17290	16239
MEAN	418	305	120	62.5	3005	1207	132	192	472	463	558	541
MAX	468	377	265	225	5940	5630	190	430	534	496	638	669
MIN	372	227	49	40	506	205	75	71	347	416	451	454
AC-FT	25690	18160	7390	3850	172800	74230	7850	11810	28090	28470	34290	32210

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 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	285	160	204	614	1340	1055	487	314	391	467	501	441
MAX	632	559	2152	4641	8425	7044	5642	1792	845	683	770	743
(WY)	1970	1983	1983	1969	1969	1995	1958	1983	1994	1994	1991	1969
MIN	3.00	5.00	7.58	9.26	10.6	16.3	12.1	4.50	2.98	.84	.37	1.47
(WY)	1962	1962	1991	1991	1991	1990	1990	1961	1990	1990	1990	1990

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1958 - 1996

ANNUAL TOTAL	378692	224296	
ANNUAL MEAN	1038	613	
HIGHEST ANNUAL MEAN			517
LOWEST ANNUAL MEAN			1997
HIGHEST DAILY MEAN	63900	Mar 11	9.39
LOWEST DAILY MEAN	39	Aug 30	63900
ANNUAL SEVEN-DAY MINIMUM	40	Aug 30	.07
INSTANTANEOUS PEAK FLOW			.09
INSTANTANEOUS PEAK STAGE			120000
ANNUAL RUNOFF (AC-FT)	751100	444900	23.44
10 PERCENT EXCEEDS	1310	829	374600
50 PERCENT EXCEEDS	358	418	660
90 PERCENT EXCEEDS	50	56	306
			20

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. No regulation; small diversions upstream from station by ranchers and sand-processing plant. See schematic diagram of Salinas River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s, Jan. 25, 1969, gage height, 15.33 ft, in gage well, 16.2 ft, from floodmarks, from rating curve extended above 7,100 ft³/s on basis of slope-area measurement of peak flow; no flow for many days in 1961 and 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 31	2045	555	4.67	Mar. 1	0015	452	4.61
Feb. 5	0215	1,140	6.14	Mar. 5	0130	853	5.60
Feb. 21	1630	1,100	6.09	Mar. 12	1945	563	4.90

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.5	1.3	1.5	257	166	9.0	3.4	2.5	1.7	1.2	.88
2	2.0	2.6	1.2	1.3	61	40	17	3.5	2.9	1.5	1.2	.95
3	2.0	2.4	1.3	1.4	36	26	11	3.3	2.9	1.6	1.2	.93
4	1.9	2.6	1.3	1.5	89	33	7.8	3.4	2.4	1.6	1.3	1.5
5	1.9	2.2	1.2	1.5	460	307	7.1	3.3	2.4	1.7	1.3	1.3
6	2.0	2.0	1.2	1.5	54	61	6.7	3.4	2.4	1.8	1.4	1.0
7	1.8	2.2	1.1	1.5	19	39	6.6	3.4	2.2	1.9	1.5	.93
8	2.1	2.2	1.1	1.3	11	31	6.1	3.5	2.3	1.8	1.4	.91
9	2.4	2.2	1.0	1.3	9.8	28	5.8	3.4	2.2	1.8	1.2	.86
10	2.1	2.3	1.1	1.3	8.3	26	5.5	3.9	2.0	1.7	1.3	.84
11	2.0	2.3	1.2	1.3	7.0	22	5.6	3.5	2.1	1.8	1.3	.80
12	2.0	2.3	5.9	1.3	6.3	154	5.6	3.4	2.1	1.7	1.2	.90
13	2.0	2.3	30	1.3	6.1	138	5.7	3.2	2.0	1.7	1.1	1.0
14	2.0	2.3	14	1.3	6.5	35	5.5	3.4	2.1	1.7	1.1	1.0
15	2.2	2.0	7.0	1.3	7.3	22	5.4	3.2	2.0	1.7	1.1	1.1
16	2.3	2.0	5.7	2.1	7.7	17	6.0	5.3	2.0	1.8	1.1	1.0
17	2.3	2.0	3.8	3.9	7.5	15	6.8	8.5	2.4	1.8	1.0	1.1
18	2.3	1.9	3.0	3.9	6.4	14	9.2	5.3	2.2	1.8	1.1	1.0
19	2.1	2.0	2.5	2.6	9.9	12	8.7	3.9	2.2	1.7	1.2	1.0
20	2.3	1.9	3.6	2.5	227	11	7.1	3.2	2.0	1.6	1.2	1.0
21	2.1	1.7	2.8	8.5	342	10	6.4	2.7	2.0	1.5	1.4	1.0
22	2.0	1.8	2.7	16	220	9.7	5.5	2.9	2.1	1.5	1.2	.97
23	1.9	1.8	4.3	7.7	50	9.0	4.5	3.0	2.1	1.5	.93	1.0
24	2.0	1.8	5.3	4.6	25	9.0	4.1	3.0	2.0	1.5	.86	.99
25	2.0	1.7	3.4	3.3	21	9.1	4.4	2.8	1.9	1.4	.91	1.2
26	2.0	1.4	2.2	9.6	16	9.0	4.2	2.4	2.0	1.4	.84	1.2
27	2.0	1.3	2.0	7.6	16	8.4	3.7	2.2	2.2	1.5	.88	1.3
28	2.0	1.4	1.8	12	20	10	3.8	2.1	2.0	1.5	.81	1.2
29	2.0	1.4	1.8	9.8	161	11	3.8	2.2	1.9	1.4	.80	1.2
30	2.0	1.3	1.9	5.9	---	8.3	3.7	2.3	1.8	1.3	.79	1.2
31	2.2	---	1.9	164	---	7.6	---	2.6	---	1.3	.84	---
TOTAL	63.8	59.8	118.6	284.6	2167.8	1298.1	192.3	105.6	65.3	50.2	34.66	31.26
MEAN	2.06	1.99	3.83	9.18	74.8	41.9	6.41	3.41	2.18	1.62	1.12	1.04
MAX	2.4	2.6	30	164	460	307	17	8.5	2.9	1.9	1.5	1.5
MIN	1.8	1.3	1.0	1.3	6.1	7.6	3.7	2.1	1.8	1.3	.79	.80
AC-FT	127	119	235	565	4300	2570	381	209	130	100	69	62

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.69	3.87	9.26	40.2	48.8	45.8	14.9	4.39	1.88	.91	.64	1.16
MAX	20.0	34.7	62.6	401	409	422	113	63.6	31.9	15.0	7.26	17.9
(WY)	1977	1966	1967	1969	1969	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1959 - 1996			
ANNUAL TOTAL	19207.9				4472.02							
ANNUAL MEAN	52.6				12.2				14.3			
HIGHEST ANNUAL MEAN									80.8			
LOWEST ANNUAL MEAN									.66			
HIGHEST DAILY MEAN	5860				460				5860			
LOWEST DAILY MEAN	1.0				.79				.00			
ANNUAL SEVEN-DAY MINIMUM	1.1				.83				.00			
INSTANTANEOUS PEAK FLOW					1140				11500			
INSTANTANEOUS PEAK STAGE					6.14				15.33			
ANNUAL RUNOFF (AC-FT)	38100				8870				10360			
10 PERCENT EXCEEDS	50				16				16			
50 PERCENT EXCEEDS	3.7				2.1				1.2			
90 PERCENT EXCEEDS	1.3				1.1				.10			

SALINAS RIVER BASIN

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 150.61 ft above sea level.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 106,000 ft³/s, Feb. 25, 1969, gage height, 23.31 ft; maximum gage height, 26.49 ft, Mar. 11, 1995; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	271	182	59	257	5210	313	56	119	213	155	218
2	245	272	183	59	609	6440	310	47	138	214	158	241
3	242	265	183	56	894	6220	297	41	154	207	161	248
4	237	263	183	55	1920	5170	282	40	158	199	169	243
5	224	259	182	53	3310	2930	263	39	168	190	180	241
6	213	263	179	52	6290	2350	247	39	176	191	193	244
7	212	263	174	50	4490	1990	235	37	176	191	190	239
8	216	254	164	49	3200	1550	229	34	181	203	190	242
9	229	251	161	48	2790	1260	214	35	196	203	183	259
10	236	249	164	48	2580	1080	191	33	210	187	169	268
11	240	244	177	48	2450	943	175	31	224	186	175	270
12	247	227	187	48	2390	911	168	30	233	178	180	267
13	248	227	192	48	2340	1130	152	30	251	171	170	249
14	242	227	169	48	2080	1500	151	28	261	165	168	234
15	240	224	144	48	1260	1500	149	39	275	175	167	218
16	254	223	124	48	1050	1310	141	48	283	190	168	227
17	254	226	113	49	1150	1170	133	47	286	184	165	236
18	241	229	104	49	1150	1040	124	46	291	175	169	225
19	238	233	94	49	1170	944	117	47	285	175	185	225
20	231	238	87	49	1170	846	115	54	257	160	195	228
21	239	235	81	60	5030	753	111	59	257	159	200	233
22	256	224	82	59	7220	659	110	59	255	159	196	232
23	254	205	78	55	5710	596	105	55	257	160	184	241
24	248	201	71	53	5450	556	94	53	266	169	192	250
25	245	189	69	51	6770	524	88	49	265	171	203	241
26	244	183	65	49	6390	487	83	42	224	164	234	240
27	251	185	63	52	6200	438	77	43	204	154	244	247
28	251	183	61	54	6030	414	72	47	167	156	244	254
29	255	182	61	56	5720	380	69	49	190	176	239	261
30	260	176	62	71	---	352	66	49	202	174	234	266
31	265	---	59	134	---	327	---	88	---	163	215	---
TOTAL	7500	6871	3898	1707	97070	50980	4881	1394	6609	5562	5875	7287
MEAN	242	229	126	55.1	3347	1645	163	45.0	220	179	190	243
MAX	265	272	192	134	7220	6440	313	88	291	214	244	270
MIN	212	176	59	48	257	327	66	28	119	154	155	218
AC-FT	14880	13630	7730	3390	192500	101100	9680	2760	13110	11030	11650	14450

SALINAS RIVER BASIN

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11151700 SALINAS RIVER AT SOLEDAD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	179	121	135	734	1390	1255	288	128	138	147	155	195
MAX	488	336	876	5099	9295	8695	1834	661	456	390	327	478
(WY)	1970	1970	1984	1969	1969	1995	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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1969 - 1996
ANNUAL TOTAL	407599.8	199634	
ANNUAL MEAN	1117	545	400
HIGHEST ANNUAL MEAN			1981
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	64400	Mar 11	7220
LOWEST DAILY MEAN	6.3	Aug 31	28
ANNUAL SEVEN-DAY MINIMUM	6.4	Aug 30	32
INSTANTANEOUS PEAK FLOW			8510
INSTANTANEOUS PEAK STAGE			13.52
ANNUAL RUNOFF (AC-FT)	808500	396000	290100
10 PERCENT EXCEEDS	1650	1160	480
50 PERCENT EXCEEDS	229	202	127
90 PERCENT EXCEEDS	30	49	.00

SALINAS RIVER BASIN

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 those in September, which are poor. No regulation or large diversion upstream from station. Low flows affected by upstream gravel mining and irrigation during summer months. See schematic diagram of Salinas River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,300 ft³/s, Apr. 3, 1958, gage height, 16.40 ft, datum then in use, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement at gage height 16.30 ft, maximum gage height, 16.44 ft, Mar. 10, 1995; no flow at times during several years.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 31	1045	3,060	5.34	Feb. 19	1915	10,700	9.99
Feb. 4	2215	5,050	6.85				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	16	38	1150	886	305	115	67	31	8.1	2.9
2	13	16	16	35	622	765	386	113	66	28	7.1	2.5
3	12	16	16	34	492	671	272	111	63	27	6.8	1.5
4	11	16	18	33	1350	813	244	109	59	25	6.3	2.9
5	11	16	18	32	2260	1030	229	109	56	22	6.4	3.4
6	10	15	18	32	1080	834	216	107	54	22	5.7	3.6
7	10	15	19	32	752	738	207	105	54	22	6.2	3.7
8	11	15	19	32	585	669	199	104	53	21	7.5	3.4
9	10	15	20	32	474	610	194	103	50	20	6.7	3.2
10	9.9	15	20	32	403	559	194	100	47	19	5.9	3.1
11	9.5	16	21	31	351	513	184	99	46	18	5.4	3.6
12	10	15	480	31	314	845	176	98	46	16	6.2	3.8
13	10	15	308	30	279	789	173	95	46	15	5.7	3.3
14	11	15	212	29	252	653	167	92	45	14	4.6	3.6
15	11	15	113	29	235	579	162	94	43	13	3.9	3.7
16	11	16	108	248	301	518	188	380	42	12	2.7	4.7
17	11	16	85	318	259	472	184	155	42	12	3.4	4.7
18	11	16	65	115	235	434	233	121	39	13	3.3	5.2
19	11	16	59	214	3090	404	191	107	37	14	3.5	4.5
20	11	17	53	133	3100	377	176	96	36	12	4.7	4.4
21	10	16	48	235	1960	350	165	90	35	12	4.2	4.3
22	10	17	51	205	1550	329	160	93	35	13	4.9	4.1
23	9.4	17	85	148	1170	313	151	86	34	13	4.1	4.1
24	9.1	16	67	123	983	297	145	82	31	11	4.6	4.5
25	9.5	17	56	436	828	283	141	80	32	11	4.0	4.0
26	10	16	52	267	692	272	134	77	34	11	4.8	3.7
27	11	15	47	335	660	257	128	76	39	11	5.0	4.1
28	11	16	45	431	632	266	124	75	39	11	4.9	4.0
29	11	16	43	282	896	247	121	70	34	12	4.9	4.3
30	12	16	43	216	---	236	119	70	32	9.5	3.6	3.7
31	12	---	42	1860	---	226	---	69	---	8.5	2.8	---
TOTAL	331.4	473	2263	6048	26955	16235	5668	3281	1336	499.0	157.9	112.5
MEAN	10.7	15.8	73.0	195	929	524	189	106	44.5	16.1	5.09	3.75
MAX	13	17	480	1860	3100	1030	386	380	67	31	8.1	5.2
MIN	9.1	15	16	29	235	226	119	69	31	8.5	2.7	1.5
AC-FT	657	938	4490	12000	53470	32200	11240	6510	2650	990	313	223

SALINAS RIVER BASIN

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11152000 ARROYO SECO NEAR SOLEDAD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	9.19	53.7	164	387	566	456	254	92.8	38.7	14.4	5.72	4.71
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1902 - 1996			
ANNUAL TOTAL	144611.2				63359.8							
ANNUAL MEAN	396				173				168			
HIGHEST ANNUAL MEAN									709			
LOWEST ANNUAL MEAN									6.97			
HIGHEST DAILY MEAN	15800				3100				16500			
LOWEST DAILY MEAN	9.1				1.5				.00			
ANNUAL SEVEN-DAY MINIMUM	9.9				2.8				.00			
INSTANTANEOUS PEAK FLOW					10700				28300			
INSTANTANEOUS PEAK STAGE					9.99				16.44			
INSTANTANEOUS LOW FLOW									.00			
ANNUAL RUNOFF (AC-FT)	286800				125700				122000			
10 PERCENT EXCEEDS	950				484				358			
50 PERCENT EXCEEDS	67				34				28			
90 PERCENT EXCEEDS	11				4.5				.00			

SALINAS RIVER BASIN

11152050 ARROYO SECO BELOW RELIZ CREEK, NEAR SOLEDAD, CA

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

DRAINAGE AREA.--304 mi².

PERIOD OF RECORD.--October 1994 to current year.

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,000 ft³/s, Mar. 10, 1995, gage height, 9.62 ft, rating affected by backwater from Salinas River. Discharge estimated by routing peak. No flow for many days.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 31	1800	2,590	4.63	Feb. 19	2100	10,200	6.08
Feb. 4	2400	4,810	5.32				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	1140	909	110	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	488	868	300	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	292	531	155	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	846	640	121	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	2230	1460	99	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	936	977	83	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	514	804	74	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	323	693	e64	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	246	593	e59	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	180	510	e52	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	148	451	e47	.00	.00	.00	.00	.00
12	.00	.00	91	.00	116	882	e43	.00	.00	.00	.00	.00
13	.00	.00	131	.00	94	852	e38	.00	.00	.00	.00	.00
14	.00	.00	21	.00	73	614	e35	.00	.00	.00	.00	.00
15	.00	.00	.99	.00	53	511	e32	.00	.00	.00	.00	.00
16	.00	.00	.00	e8.8	79	428	43	104	.00	.00	.00	.00
17	.00	.00	.00	164	70	357	53	65	.00	.00	.00	.00
18	.00	.00	.00	e5.4	47	319	84	13	.00	.00	.00	.00
19	.00	.00	.00	e18	2450	286	74	.00	.00	.00	.00	.00
20	.00	.00	.00	5.8	4740	253	60	.00	.00	.00	.00	.00
21	.00	.00	.00	e25	3300	227	52	.00	.00	.00	.00	.00
22	.00	.00	.00	33	2440	204	44	.00	.00	.00	.00	.00
23	.00	.00	.00	12	1680	184	35	.00	.00	.00	.00	.00
24	.00	.00	.00	e3.4	1240	168	28	.00	.00	.00	.00	.00
25	.00	.00	.00	126	954	163	22	.00	.00	.00	.00	.00
26	.00	.00	.00	74	705	150	e7.0	.00	.00	.00	.00	.00
27	.00	.00	.00	50	594	137	e4.4	.00	.00	.00	.00	.00
28	.00	.00	.00	172	537	135	e2.5	.00	.00	.00	.00	.00
29	.00	.00	.00	61	856	115	e1.5	.00	.00	.00	.00	.00
30	.00	.00	.00	33	---	111	e.00	.00	.00	.00	.00	.00
31	.00	---	.00	1350	---	101	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	243.99	2141.40	27371	14433	1822.40	182.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	7.87	69.1	944	466	60.7	5.87	.000	.000	.000	.000
MAX	.00	.00	131	1350	4740	1460	300	104	.00	.00	.00	.00
MIN	.00	.00	.00	.00	47	101	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	484	4250	54290	28630	3610	361	.00	.00	.00	.00

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.000	3.94	860	567	1205	189	58.2	.82	.000	.000	.000
MAX	.000	.000	7.87	1651	944	1944	317	111	1.65	.000	.000	.000
(WY)	1995	1995	1996	1995	1996	1995	1995	1995	1995	1995	1995	1995
MIN	.000	.000	.000	69.1	178	466	60.7	5.87	.000	.000	.000	.000
(WY)	1995	1995	1995	1996	1995	1996	1996	1996	1996	1995	1995	1995

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1995 - 1996
ANNUAL TOTAL	129634.49	46193.79	
ANNUAL MEAN	355	126	240
HIGHEST ANNUAL MEAN			354
LOWEST ANNUAL MEAN			126
HIGHEST DAILY MEAN	17000 Mar 10	4740 Feb 20	17000 Mar 10 1995
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Oct 1 1994
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 10	.00 Oct 1	.00 Oct 1 1994
INSTANTANEOUS PEAK FLOW		10200 Feb 19	31000 Mar 10 1995
INSTANTANEOUS PEAK STAGE		6.08 Feb 19	9.62 Mar 10 1995
ANNUAL RUNOFF (AC-FT)	257100	91630	174000
10 PERCENT EXCEEDS	790	320	589
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

SALINAS RIVER BASIN

11152300 SALINAS RIVER NEAR CHUALAR, CA

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

DRAINAGE AREA.--4,042 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

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

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

REMARKS.--Records 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, 92,000 ft³/s, estimated, Mar. 11, 1985, gage height, 19.70 ft, from rating curve extended above 18,000 ft³/s; peak flow includes an estimate of 8,800 ft³/s bypassing the gage; no flow at times during most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	153	104	e8.3	1500	4260	466	e10	.00	68	11	70
2	98	151	104	e7.8	633	5330	489	e8.0	.00	72	3.9	79
3	108	148	106	e6.5	645	5280	444	2.9	.00	65	1.5	89
4	103	140	106	e7.4	795	4870	392	1.6	16	53	11	92
5	97	140	87	6.6	4790	3620	359	.18	37	52	27	94
6	88	141	86	5.3	5460	2800	332	.00	44	52	34	95
7	86	144	85	4.7	4860	2340	322	.00	48	52	37	94
8	93	141	83	4.3	3500	1860	361	.00	52	56	38	83
9	102	139	78	4.1	2950	1630	369	.00	63	58	39	90
10	114	142	77	2.8	2760	1350	355	.00	78	54	36	97
11	114	142	86	.77	2770	1180	334	.00	89	46	33	98
12	115	136	108	.00	2630	1200	282	.00	97	43	38	100
13	128	118	240	.00	2540	1880	247	.00	104	38	28	94
14	126	125	95	.00	2470	1670	e200	.00	113	35	21	85
15	118	115	63	.00	1500	1880	e170	.00	118	34	16	78
16	124	110	44	.00	1090	1670	e145	.00	124	39	14	77
17	136	110	35	32	1050	1470	e139	.00	135	41	18	85
18	135	109	32	40	1020	1230	e119	.00	141	38	25	84
19	129	113	29	14	1360	1130	e100	.00	142	35	33	82
20	123	121	25	18	4850	1010	e82	.00	125	32	44	79
21	129	121	e20	14	5460	936	e61	.00	112	22	52	76
22	156	116	e18	24	6720	851	e48	.00	110	24	56	75
23	155	114	e19	25	5420	788	e40	.00	107	26	53	77
24	137	108	e16	15	4290	737	e35	.00	113	26	52	81
25	119	98	e16	10	5460	667	e29	.00	124	27	55	87
26	117	95	e15	64	4620	606	e25	.00	115	25	63	90
27	118	102	e12	49	4050	546	e21	.00	94	19	78	95
28	121	108	e11	75	4060	525	e18	.00	74	10	80	98
29	123	97	e9.1	99	4340	497	e15	.00	60	16	79	98
30	130	96	e10	66	---	480	e13	.00	67	24	75	106
31	134	---	e9.8	218	---	454	---	.00	---	20	71	---
TOTAL	3664	3693	1828.9	821.57	93593	54747	6012	22.68	2502.00	1202	1222.4	2628
MEAN	118	123	59.0	26.5	3227	1766	200	.73	83.4	38.8	39.4	87.6
MAX	156	153	240	218	6720	5330	489	10	142	72	80	106
MIN	86	95	9.1	.00	633	454	13	.00	.00	10	1.5	70
AC-FT	7270	7330	3630	1630	185600	108600	11920	45	4960	2380	2420	5210

e Estimated.

11152300 SALINAS RIVER NEAR CHUALAR, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	61.7	74.2	277	930	1657	1825	459	184	64.4	54.8	55.8	81.1
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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1977 - 1996
ANNUAL TOTAL	452019.00	171936.55	
ANNUAL MEAN	1238	470	471
HIGHEST ANNUAL MEAN			2796
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	68000	Mar 12	68000
LOWEST DAILY MEAN	.00	Jun 21	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 21	.00
INSTANTANEOUS PEAK FLOW		7870	92000
INSTANTANEOUS PEAK STAGE		9.46	19.70
ANNUAL RUNOFF (AC-FT)	896600	341000	341500
10 PERCENT EXCEEDS	2480	1390	765
50 PERCENT EXCEEDS	121	86	39
90 PERCENT EXCEEDS	.00	1.3	.00

SALINAS RIVER BASIN

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 May 1995 (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 1994 TO SEPTEMBER 1995 (NOT PREVIOUSLY PUBLISHED)

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 (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												
21...	1200	41	568	8.2	11.0	11	767	10.7	97	230	79	55
JAN												
25...	1420	9220	556	8.2	12.5	5100	755	10.4	99	170	80	37
MAR												
24...	1100	e16000	456	8.0	11.5	190	765	10.6	97	150	51	35
MAY												
15...	1035	e290	892	8.4	17.0	17	759	9.1	95	340	150	85
JUL												
11...	1000	33	722	8.4	18.0	16	761	9.9	105	250	110	59
SEP												
20...	1240	193	310	17.9	21.0	72	760	8.8	99	120	0	29

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO PERCENT	SODIUM AD- SORP- TION RATIO (MG/L AS K)	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												
21...	22	32	23	0.9	2.8	182	0	149	110	25	0.30	16
JAN												
25...	18	50	39	2	3.0	105	0	86	150	17	0.40	14
MAR												
24...	14	31	31	1	2.1	115	0	94	91	21	0.30	17
MAY												
15...	32	57	26	1	3.2	224	4	190	180	52	0.30	23
JUL												
11...	26	45	28	1	2.8	166	4	144	150	42	0.10	19
SEP												
20...	12	13	19	0.5	1.5	--	0	2105	39	9.7	<0.10	16

DATE	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										
21...	370	357	0.50	<0.010	1.00	<0.015	0.30	0.130	0.090	0.090
JAN										
25...	357	343	0.49	<0.010	0.420	0.020	12	10.0	0.070	0.080
MAR										
24...	297	271	0.40	<0.010	0.540	0.020	0.30	0.180	0.120	0.120
MAY										
15...	588	561	0.80	0.020	3.20	0.020	0.30	0.130	0.080	0.090
JUL										
11...	476	435	0.65	0.040	1.30	<0.015	0.50	0.050	0.020	<0.010
SEP										
20...	191	184	0.26	<0.010	0.110	<0.015	0.60	0.280	0.050	0.060

e Estimated.

11152300 SALINAS RIVER NEAR CHUALAR, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995 (NOT PREVIOUSLY PUBLISHED)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPERATURE 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
MAR 24...	1100	e16000	11.5	11700	505000	27	34	38
MAY 15...	1035	e290	17.0	123	96	--	--	--

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
MAR 24...	48	58	67	78	93	98	100
MAY 15...	--	--	84	--	--	--	--

e Estimated.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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	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...	1030	94	529	8.0	14.5	25	763	12.2	120	200	71	48
MAR 21...	1140	876	616	8.3	17.0	47	759	9.9	103	240	81	58
APR 18...	1146	124	922	8.4	17.0	1.6	768	11.0	113	360	160	88
JUL 24...	1045	24	467	8.6	16.5	9.3	760	11.1	114	170	39	40
AUG 22...	1000	54	394	8.3	16.5	15	759	9.6	99	--	--	--
SEP 06...	1000	95	387	8.3	15.0	24	758	10.2	102	--	--	--

DATE	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)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)
NOV 30...	20	30	24	0.9	1.8	160	0	130	86	25	0.20	18
MAR 21...	24	36	24	1	2.4	198	0	162	110	31	0.30	22
APR 18...	34	60	26	1	3.2	221	12	201	200	54	0.20	19
JUL 24...	17	24	23	0.8	1.8	150	5	132	76	20	0.20	17
AUG 22...	--	--	--	--	--	146	0	120	57	15	0.20	15
SEP 06...	--	--	--	--	--	147	1	122	54	13	0.20	16

SALINAS RIVER BASIN

11152300 SALINAS RIVER NEAR CHUALAR, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996--Continued

DATE	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 30...	327	314	0.44	0.010	1.30	<0.015	0.30	0.150	0.060	0.060
MAR 21...	399	386	0.54	<0.010	1.10	<0.015	<0.20	0.230	0.110	0.100
APR 18...	603	598	0.82	0.030	4.30	<0.015	0.30	0.070	0.070	0.060
JUL 24...	296	277	0.40	0.020	0.500	0.030	0.60	0.060	<0.010	0.020
AUG 22...	244	--	--	<0.010	0.210	<0.015	0.70	0.140	0.030	0.030
SEP 06...	244	--	--	0.010	0.450	<0.015	0.30	0.050	0.030	0.050

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.--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, 95,000 ft³/s, Mar. 12, 1995, gage height, 30.29 ft, from rating extended above 30,000 ft³/s, peak includes estimate of 9,800 ft³/s bypassing gage; no flow at times in 1929-40, many days in 1990-96.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e30	88	43	e9.4	1710	3720	371	e.70	e.00	.00	.00	.00
2	e30	92	41	e7.5	1150	4280	387	e.50	e.00	.00	.00	.00
3	e28	104	44	e6.3	1060	4320	491	e.30	e.00	.00	.00	.00
4	e27	110	49	e5.4	1190	4380	385	e.20	e.00	.00	.00	.00
5	e26	99	43	e4.8	3930	3600	338	e.15	e.00	.00	.00	.00
6	e27	87	e25	e4.4	4450	2830	296	e.13	e.00	.00	.00	.00
7	e28	93	e24	e4.0	4480	2270	277	e.11	e.00	.00	.00	.00
8	e30	104	e23	e3.0	3270	1680	251	e.07	e.00	.00	.00	.00
9	e33	110	e22	e1.5	2770	1350	228	e.04	e.00	.00	.00	.00
10	e34	100	e22	e.60	2530	1210	201	e.03	e.00	.00	.00	.00
11	e35	101	e23	e.25	2340	1060	180	e.02	e.00	.00	.00	.00
12	e36	110	37	e.00	2210	1110	159	e.02	e.00	.00	.00	.00
13	36	111	63	e.00	2120	1480	147	e.00	e.00	.00	.00	.00
14	40	101	314	e.00	2130	1460	136	e.00	e.00	.00	.00	.00
15	40	74	125	e.00	1760	1610	119	e.00	e.00	.00	.00	.00
16	41	74	57	e.00	1260	1390	109	e.00	e.00	.00	.00	.00
17	48	75	28	e.00	1130	1250	104	e.00	e.00	.00	.00	.00
18	56	67	e25	e.00	1100	1140	108	e.00	e.00	.00	.00	.00
19	58	68	e24	e.00	1130	1050	102	e.00	8.3	.00	.00	.00
20	57	78	e22	e.00	4840	1030	103	e.00	24	.00	.00	.00
21	53	85	e20	e.00	4460	994	78	e.00	27	.00	.00	.00
22	57	92	e18	e.00	6800	843	61	e.00	26	.00	.00	.00
23	68	87	e16	e.00	5390	767	52	e.00	28	.00	.00	.00
24	71	70	e15	e.00	3990	724	37	e.00	28	.00	.00	.00
25	65	72	e13	e.00	4730	679	27	e.00	35	.00	.00	.00
26	59	62	e13	e.00	4570	608	18	e.00	45	.00	.00	.00
27	63	45	e12	e.00	4300	549	6.1	e.00	37	.00	.00	.00
28	66	56	e11	e3.0	4120	517	3.0	e.00	14	.00	.00	.00
29	68	56	e11	74	4160	470	.55	e.00	2.5	.00	.00	.00
30	70	39	e11	64	---	420	1.3	e.00	.10	.00	.00	.00
31	78	---	e11	64	---	386	---	e.00	---	.00	.00	---
TOTAL	1458	2510	1205	252.15	89080	49177	4775.95	2.27	274.90	0.00	0.00	0.00
MEAN	47.0	83.7	38.9	8.13	3072	1586	159	.073	9.16	.000	.000	.000
MAX	78	111	314	74	6800	4380	491	.70	45	.00	.00	.00
MIN	26	39	11	.00	1060	386	.55	.00	.00	.00	.00	.00
AC-FT	2890	4980	2390	500	176700	97540	9470	4.5	545	.00	.00	.00

e Estimated.

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 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	27.0	34.2	212	856	1316	1294	501	119	32.6	19.0	20.4	31.2
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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1942 - 1996

ANNUAL TOTAL	427179.05	148735.27	
ANNUAL MEAN	1170	406	367
HIGHEST ANNUAL MEAN			2997
LOWEST ANNUAL MEAN			.81
HIGHEST DAILY MEAN	64000	Mar 12	6800
LOWEST DAILY MEAN	.00	Jan 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 14	.00
INSTANTANEOUS PEAK FLOW			7590
INSTANTANEOUS PEAK STAGE			15.59
ANNUAL RUNOFF (AC-FT)	847300	295000	266000
10 PERCENT EXCEEDS	2440	1250	570
50 PERCENT EXCEEDS	58	13	3.1
90 PERCENT EXCEEDS	.00	.00	.50

SALINAS RIVER BASIN

81

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.--Records good except for estimated periods which are poor. No regulation or diversion upstream from station except for small stock ponds. Low flow at times affected by irrigation runoff from upstream golf course. See schematic diagram of Salinas River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 644 ft³/s, Mar. 10, 1995, gage height, 7.08 ft, from rating curve extended above 240 ft³/s on basis of slope-area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 31	1645	24	1.87	Mar. 4	2145	29	1.94
Feb. 22	0500	137	3.12	Mar. 12	0845	93	2.70
Feb. 27	1115	131	3.06				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.12	.15	e.15	.35	11	2.2	.26	.18	.08	.17	.02
2	.06	.11	.14	e.15	.21	8.3	2.9	.24	.18	.08	.14	.03
3	.06	.11	.14	e.15	.78	6.4	.51	.22	.13	.11	.15	.03
4	.05	.11	.17	e.16	2.2	9.2	.34	.23	.10	.11	.13	.08
5	.05	.11	.16	e.15	5.9	22	.28	.21	.13	.10	.17	.09
6	.07	.10	e.15	e.15	1.9	10	.25	.25	.13	.08	.13	.09
7	.07	.09	e.16	e.16	.85	7.1	.26	.24	.14	.08	.15	.11
8	.07	.09	e.15	e.17	.32	5.5	.25	.23	.11	.10	.15	.09
9	.09	.09	e.13	e.16	.21	4.4	.23	.27	.07	.10	.15	.07
10	.09	.09	e.16	e.15	.18	3.2	.25	.27	.08	.09	.15	.10
11	.09	.09	e.14	e.17	.18	2.6	.23	.24	.09	.10	.14	.10
12	.09	.09	e.13	e.16	.18	43	.21	.20	.11	.12	.12	.08
13	.09	.09	e1.5	e.16	.19	20	.22	.21	.12	.14	.10	.11
14	.09	.09	e.12	e.15	.18	8.9	.21	.22	.11	.14	.09	.08
15	.09	.09	e.13	e.30	.47	6.3	.23	.33	.10	.15	.08	.05
16	.09	.07	e.14	e1.3	.21	5.0	.26	1.2	.09	.17	.14	.07
17	.09	.07	e.15	e.40	.18	4.1	.30	.49	.14	.15	.09	.05
18	.09	.08	e.14	e.21	.19	3.1	.28	.36	.15	.15	.10	.05
19	.09	.09	e.13	e.33	12	2.3	.32	.25	.11	.13	.14	.04
20	.11	.10	e.14	e.15	25	1.7	.32	.26	.12	.12	.13	.05
21	.11	.10	e.15	e2.0	55	1.4	.29	.39	.14	.12	.11	.05
22	.10	.10	e.16	e.50	78	1.0	.29	.36	.11	.17	.11	.06
23	.08	.09	e.15	e.17	29	.92	.32	.24	.09	.20	.17	.05
24	.06	.10	e.14	e.14	38	.63	.30	.23	.10	.20	.17	.05
25	.09	.11	e.14	e4.0	27	.49	.26	.21	.14	.17	.14	.06
26	.09	.10	e.15	e.50	15	.38	.26	.21	.15	.18	.15	.07
27	.09	.13	e.15	e.92	40	.74	.27	.21	.11	.15	.12	.07
28	.09	.12	e.15	e.70	22	2.2	.24	.22	.10	.16	.10	.08
29	.09	.12	e.14	e.62	17	.58	.27	.24	.07	.15	.06	.07
30	.09	.14	e.14	e.54	---	.33	.34	.21	.06	.17	.04	.08
31	.09	---	e.14	e3.5	---	.29	---	.20	---	.16	.03	---
TOTAL	2.56	2.99	5.84	18.47	372.68	193.06	12.89	8.90	3.46	4.13	3.82	2.03
MEAN	.083	.10	.19	.60	12.9	6.23	.43	.29	.12	.13	.12	.068
MAX	.11	.14	1.5	4.0	78	43	2.9	1.2	.18	.20	.17	.11
MIN	.05	.07	.12	.14	.18	.29	.21	.20	.06	.08	.03	.02
AC-FT	5.1	5.9	12	37	739	383	26	18	6.9	8.2	7.6	4.0

e Estimated.

11152540 EL TORO CREEK NEAR SPRECKELS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.11	.24	.63	4.37	7.19	6.73	2.17	.34	.11	.073	.050	.047
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1962 - 1996			
ANNUAL TOTAL	1987.22				630.83							
ANNUAL MEAN	5.44				1.72				1.81			
HIGHEST ANNUAL MEAN									11.3			
LOWEST ANNUAL MEAN									.034			
HIGHEST DAILY MEAN	310				78				390			
LOWEST DAILY MEAN	.05				.02				.00			
ANNUAL SEVEN-DAY MINIMUM	.06				.04				.00			
INSTANTANEOUS PEAK FLOW					137				664			
INSTANTANEOUS PEAK STAGE					3.12				7.08			
ANNUAL RUNOFF (AC-FT)	3940				1250				1310			
10 PERCENT EXCEEDS	10				2.2				1.2			
50 PERCENT EXCEEDS	.15				.15				.10			
90 PERCENT EXCEEDS	.08				.08				.00			

11152600 GABILAN CREEK NEAR SALINAS, CA

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

DRAINAGE AREA.--36.7 mi².

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

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

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

REMARKS.--Records fair except discharges greater than 200 ft³/s or less than 1 ft³/s, which are poor. Natural flow of stream affected by small diversions, storage reservoirs, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 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 or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	1500	73	2.69	Feb. 21	1545	374	3.50
Jan. 25	0915	104	2.81	Mar. 04	1745	90	2.76
Feb. 4	1830	142	2.92	Mar. 12	0830	206	3.07

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	12	25	15	.12	.04	.00	.00	.00
2	.00	.00	.00	.00	6.0	21	18	.28	.28	.00	.00	.00
3	.00	.00	.00	.00	6.0	18	12	.16	.13	.00	.00	.00
4	.00	.00	.00	.00	33	37	9.3	.10	.00	.00	.00	.00
5	.00	.00	.00	.00	56	51	7.9	.22	.21	.00	.00	.00
6	.00	.00	.00	.00	19	29	7.5	.28	.18	.00	.00	.00
7	.00	.00	.00	.00	11	22	6.7	.19	.07	.00	.00	.00
8	.00	.00	.00	.00	7.1	18	6.0	.10	.24	.01	.00	.00
9	.00	.00	.00	.00	4.9	15	5.9	.21	.31	.00	.00	.00
10	.00	.00	.00	.00	3.8	13	5.5	.07	.26	.00	.00	.00
11	.00	.00	.00	.00	1.5	12	4.7	.32	.00	.00	.00	.00
12	.00	.00	.03	.00	.01	91	4.6	.22	.08	.00	.00	.00
13	.00	.00	9.0	.00	.00	43	4.7	.16	.15	.00	.00	.00
14	.00	.00	.21	.00	.00	27	3.6	.28	.01	.00	.00	.00
15	.00	.00	.00	.00	1.1	22	2.5	1.3	.13	.00	.00	.00
16	.00	.00	.00	5.2	2.2	19	3.5	5.4	.22	.00	.00	.00
17	.00	.00	.00	.01	.35	16	3.6	1.5	.26	.00	.00	.00
18	.00	.00	.00	.00	.01	14	3.7	.98	.14	.00	.00	.00
19	.00	.00	.00	.17	158	12	2.9	.83	.08	.00	.00	.00
20	.00	.00	.00	.00	189	10	2.6	.44	.00	.00	.00	.00
21	.00	.00	.00	12	223	9.3	2.3	1.4	.03	.00	.00	.00
22	.00	.00	.00	1.1	212	8.2	1.7	1.4	.00	.00	.00	.00
23	.00	.00	.00	.06	86	7.9	1.0	.89	.08	.00	.00	.00
24	.00	.00	.00	.06	66	6.9	.96	.71	.00	.00	.00	.00
25	.00	.00	.00	33	57	6.3	.25	.37	.09	.00	.00	.00
26	.00	.00	.00	11	41	5.9	.11	.25	.40	.00	.00	.00
27	.00	.00	.00	18	47	6.2	.28	.49	.22	.00	.00	.00
28	.00	.00	.00	13	35	7.5	.17	.18	.04	.00	.00	.00
29	.00	.00	.00	5.9	30	6.0	.24	.62	.00	.00	.00	.00
30	.00	.00	.00	3.9	---	4.6	.04	.73	.00	.00	.00	.00
31	.00	---	.00	24	---	5.4	---	.46	---	.00	.00	---
TOTAL	0.00	0.00	9.24	127.40	1307.97	589.2	137.25	20.66	3.65	0.01	0.00	0.00
MEAN	.000	.000	.30	4.11	45.1	19.0	4.57	.67	.12	.000	.000	.000
MAX	.00	.00	9.0	33	223	91	18	5.4	.40	.01	.00	.00
MIN	.00	.00	.00	.00	.00	4.6	.04	.07	.00	.00	.00	.00
AC-FT	.00	.00	18	253	2590	1170	272	41	7.2	.02	.00	.00

TEMBLADERO SLOUGH BASIN

11152600 GABILAN CREEK NEAR SALINAS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.037	.47	2.14	7.12	12.3	15.0	7.90	2.03	.80	.26	.12	.029
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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1971 - 1996

ANNUAL TOTAL	2296.00	2195.38	
ANNUAL MEAN	6.29	6.00	3.97
HIGHEST ANNUAL MEAN			29.7
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	377	Mar 10	377
LOWEST DAILY MEAN	.00	Jan 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 19	.00
INSTANTANEOUS PEAK FLOW			898
INSTANTANEOUS PEAK STAGE			11.13
ANNUAL RUNOFF (AC-FT)	4550	4350	2880
10 PERCENT EXCEEDS	15	13	7.1
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

11154700 CLEAR CREEK NEAR IDRIA, CA

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

DRAINAGE AREA.--14.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1993 to current year.

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

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

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 31	1915	36	2.10	Mar. 4	1845	44	2.01
Feb. 4	1930	38	2.13	Mar. 12	1015	38	1.94
Feb. 19	2145	41	1.98	May 16	0400	39	1.95

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.5	1.2	1.3	10	15	10	3.8	e2.6	e1.5	e1.1	1.0
2	1.4	1.3	1.2	1.3	5.4	13	8.1	3.8	e2.8	e1.4	e1.0	.97
3	1.4	1.3	1.2	1.3	4.2	11	6.8	3.7	e2.7	e1.4	e1.0	.98
4	1.3	1.3	1.2	1.3	14	19	6.3	3.7	e2.7	e1.4	e1.0	1.0
5	1.3	1.3	1.2	1.3	17	18	6.0	3.6	e2.6	e1.3	e1.1	1.0
6	1.3	1.3	1.2	1.2	10	14	5.9	3.6	e2.6	e1.3	e1.0	1.0
7	1.3	1.3	1.2	1.2	7.3	13	5.7	3.5	e2.5	e1.4	e1.0	1.0
8	1.3	1.3	1.2	1.2	6.0	11	5.6	3.5	e2.4	e1.8	e.99	1.0
9	1.3	1.3	1.2	1.2	5.1	11	5.6	3.4	e2.3	e1.7	e.95	1.0
10	1.3	1.3	1.2	1.2	4.4	10	5.4	3.3	e2.3	e1.7	e1.0	1.1
11	1.3	1.2	1.6	1.2	4.0	11	5.3	3.3	e2.3	e1.7	e.97	1.1
12	1.3	1.2	9.5	1.2	3.6	22	5.2	3.3	e2.3	e1.7	e1.0	1.1
13	1.3	1.3	3.8	1.2	3.3	16	5.1	3.3	e2.2	e1.6	e1.0	1.3
14	1.2	1.2	2.3	1.2	3.1	13	5.0	3.3	e2.1	e1.6	e1.0	1.4
15	1.2	1.3	1.9	1.1	3.3	12	4.9	3.7	e2.1	e1.5	e1.0	1.3
16	1.3	1.3	1.7	1.6	3.5	11	6.0	13	e2.0	e1.5	e1.0	1.3
17	1.3	1.3	1.6	1.4	2.9	10	5.6	4.5	e2.0	e1.5	e1.0	1.3
18	1.2	1.2	2.3	1.3	2.8	10	6.3	3.7	e2.0	e1.5	e1.1	1.2
19	1.2	1.3	1.9	1.5	13	9.7	5.1	3.4	e2.0	e1.4	e1.1	1.2
20	1.2	1.2	1.6	1.3	19	9.5	4.9	3.2	e1.9	e1.4	e1.1	1.2
21	1.2	1.2	1.5	2.9	27	9.1	4.8	3.1	e1.9	e1.4	e1.1	1.2
22	1.2	1.2	1.7	1.8	19	8.9	4.6	3.0	e1.9	e1.3	.95	1.2
23	1.2	1.2	1.9	1.4	14	8.5	4.4	2.9	e1.8	e1.3	.98	1.2
24	1.2	1.2	1.6	1.5	12	8.3	4.4	2.9	e1.8	e1.2	.95	1.3
25	1.2	1.2	1.4	2.6	11	8.1	4.2	2.8	e1.9	e1.2	.95	1.4
26	1.2	1.2	1.4	1.8	9.6	7.7	4.0	2.7	e2.2	e1.2	.96	1.3
27	1.2	1.2	1.4	2.3	9.7	7.7	4.0	2.8	e2.0	e1.2	.96	1.3
28	1.3	1.2	1.4	2.2	9.6	8.0	4.0	2.7	e1.8	e1.2	1.1	1.3
29	1.2	1.2	1.4	1.9	18	7.3	4.0	2.6	e1.7	e1.2	1.1	1.3
30	1.2	1.2	1.4	1.9	---	7.0	3.9	2.6	e1.6	e1.2	1.0	1.3
31	1.3	---	1.4	20	---	6.8	---	e2.5	---	e1.1	1.0	---
TOTAL	39.2	37.7	56.7	65.8	271.8	346.6	161.1	111.2	65.0	43.8	31.46	35.25
MEAN	1.26	1.26	1.83	2.12	9.37	11.2	5.37	3.59	2.17	1.41	1.01	1.17
MAX	1.4	1.5	9.5	20	27	22	10	13	2.8	1.8	1.1	1.4
MIN	1.2	1.2	1.2	1.1	2.8	6.8	3.9	2.5	1.6	1.1	.95	.97
AC-FT	78	75	112	131	539	687	320	221	129	87	62	70

e Estimated.

PAJARO RIVER BASIN

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.85	.89	1.17	9.31	7.42	20.8	8.86	5.15	3.48	1.93	1.13	.92
MAX	1.26	1.26	1.83	24.6	9.96	49.4	19.9	10.7	7.66	4.10	2.26	1.47
(WY)	1996	1996	1996	1995	1995	1995	1995	1995	1995	1995	1995	1995
MIN	.23	.36	.43	1.25	2.87	1.79	1.35	1.11	.62	.27	.10	.11
(WY)	1995	1995	1995	1994	1994	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1994 - 1996			
ANNUAL TOTAL	4103.81				1265.61							
ANNUAL MEAN	11.2				3.46				5.16			
HIGHEST ANNUAL MEAN									11.0			
LOWEST ANNUAL MEAN									1.06			
HIGHEST DAILY MEAN	464				27				464			
LOWEST DAILY MEAN	.45				.95				.07			
ANNUAL SEVEN-DAY MINIMUM	1.2				.98				.08			
INSTANTANEOUS PEAK FLOW					44				1100			
INSTANTANEOUS PEAK STAGE					2.13				6.75			
ANNUAL RUNOFF (AC-FT)	8140				2510				3740			
10 PERCENT EXCEEDS	25				9.6				12			
50 PERCENT EXCEEDS	4.8				1.5				1.4			
90 PERCENT EXCEEDS	1.2				1.1				.26			

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to current year.

CHEMICAL DATA: November 1993 to June 1996.

WATER TEMPERATURE: October 1993 to September 1996 (discontinued).

SEDIMENT DATA: November 1993 to June 1996.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1993 to September 1996 (discontinued).

REMARKS.--Zero bedload discharge observed for flows less than 9.2 ft³/s during current year. Interruption of record due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 35.5°C, Aug. 13-15, 1994; minimum recorded, 0.0°C, several days during water year 1994, and January 23, 1996.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 31.5°C, Aug. 23, 30, 31; Minimum recorded, 0.0°C, Jan. 23.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV										
28...	1125	1.2	1080	9.2	7.5	0.10	--	670	20	2.5
JAN										
30...	1115	1.6	1060	9.1	7.5	0.40	693	670	52	2.6
FEB										
14...	1100	3.5	1030	9.0	8.5	0.20	698	620	0	2.4
MAR										
12...	1115	35	583	8.9	8.5	630	--	--	--	--
20...	1245	9.6	991	8.7	19.0	0.60	762	620	1	2.8
APR										
17...	1410	5.0	1030	8.9	13.5	0.30	779	620	0	2.8
MAY										
30...	1145	3.0	1060	8.9	15.0	0.20	694	620	0	2.7
JUN										
26...	1105	2.2	1060	8.9	15.0	0.20	690	670	1	2.6

DATE	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										
28...	160	10	3	0.2	1.1	640	72	645	6.8	22
JAN										
30...	160	11	3	0.2	1.1	549	98	614	6.0	22
FEB										
14...	150	8.7	3	0.2	1.0	654	68	650	7.1	20
MAR										
12...	--	--	--	--	--	--	--	--	--	--
20...	150	7.4	3	0.1	1.0	639	60	624	6.9	16
APR										
17...	150	8.3	3	0.1	1.0	626	90	663	6.9	18
MAY										
30...	150	8.4	3	0.1	1.0	656	76	666	6.5	18
JUN										
26...	160	9.4	3	0.2	1.1	652	78	664	6.3	20

PAJARO RIVER BASIN

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	FLUORIDE, 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)	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)
NOV 28...	0.20	2.6	624	592	0.85	<10	60	<3.0	<3.0	15
JAN 30...	<0.10	3.0	644	574	0.88	<10	59	<9.0	19	<12
FEB 14...	<0.10	3.6	636	582	0.86	<10	59	<3.0	<3.0	15
MAR 12...	--	--	328	--	--	--	--	--	--	--
MAR 20...	<0.10	4.5	575	563	0.78	<10	67	<3.0	<3.0	12
APR 17...	<0.10	4.0	589	589	0.80	20	68	<3.0	<3.0	11
MAY 30...	<0.10	3.5	606	589	0.82	20	67	<3.0	<3.0	15
JUN 26...	<0.10	2.9	620	601	0.84	21	75	7.0	<6.0	19

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOVERED FROM MATERIAL (UG/L AS HG)	MOLYBDENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRONTIUM, DIS- SOLVED (UG/L AS SR)	VANADIUM, DIS- SOLVED (UG/L AS V)
NOV 28...	<1.0	--	--	--	<10	1.0	<1	<1.0	44	<6
JAN 30...	<3.0	--	--	--	<30	2.0	<1	<1.0	45	<18
FEB 14...	<1.0	--	--	--	<10	2.0	<1	<1.0	40	<6
MAR 12...	--	<0.1	0.20	5.0	--	--	--	--	--	--
MAR 20...	<1.0	--	--	--	10	2.0	<1	<1.0	46	<6
APR 17...	<1.0	--	--	--	<10	2.0	<1	<1.0	47	<6
MAY 30...	<1.0	--	--	--	20	2.0	<1	<1.0	44	<6
JUN 26...	<2.0	--	--	--	<20	1.0	<1	<1.0	47	<12

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	TEMPERATURE WATER (DEG C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 28...	1210	1.2	7.5	2	0.01	--
JAN 30...	1135	1.6	7.5	4	0.02	81
FEB 14...	1145	3.2	9.0	3	0.03	96
MAR 12...	1225	30	8.5	1890	153	79
MAR 20...	1355	9.2	19.0	6	0.15	74
APR 17...	1340	5.1	13.5	1	0.01	82
MAY 30...	1140	3.0	15.0	2	0.02	96
JUN 26...	1045	2.2	15.0	1	0.01	52

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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								
30...	1144	1	3.0	15.0	1	4	12	23
30...	1147	1	3.0	15.0	--	1	5	12
30...	1150	1	2.9	15.0	--	1	4	12
30...	1153	1	2.8	15.0	--	1	10	26
30...	1156	1	2.8	15.0	9	17	27	35

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							
30...	33	38	45	53	66	86	100
30...	24	33	44	56	76	91	100
30...	34	57	76	90	98	100	--
30...	55	74	86	92	97	100	--
30...	43	48	56	58	64	87	100

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)
MAR									
12...	1252	1000	1150	0.250	0	1245	1300	15	0.6
12...	1307	1000	1150	0.250	0	1300	1315	15	0.6

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)
MAR								
12...	2	19	19	0.30	30	8.5	2.84	31
12...	2	19	19	0.30	30	8.5	2.64	31

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
MAR								
12...	2	4	13	30	59	82	96	100
12...	--	2	10	31	62	81	93	100

11154700 CLEAR CREEK NEAR IDRIA, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995 (NOT PREVIOUSLY PUBLISHED)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.5	10.5	18.0	5.0	10.5	2.0	11.0	3.0	15.5	8.0	12.5	9.0
2	28.0	11.5	16.0	4.5	11.0	2.5	7.5	1.5	15.5	7.5	13.0	9.5
3	23.0	11.5	13.5	2.0	13.5	4.0	8.0	6.0	15.0	7.5	12.0	8.5
4	17.5	11.5	13.0	2.0	11.5	7.5	7.5	5.0	15.0	7.0	13.0	8.5
5	15.5	10.5	14.5	7.5	12.5	6.0	8.5	6.0	15.0	6.5	12.5	8.0
6	22.0	8.5	14.5	8.0	10.5	5.0	8.0	5.0	14.0	6.5	15.0	4.5
7	24.0	8.5	12.5	9.0	9.0	1.0	8.0	5.5	12.0	7.5	14.0	3.5
8	25.0	9.5	15.5	5.5	7.5	.0	9.5	7.0	14.0	8.5	11.5	8.0
9	24.0	9.0	14.5	6.0	6.0	.0	11.0	9.0	15.0	7.5	11.5	8.5
10	24.5	9.5	14.0	5.5	7.5	.0	10.5	7.5	14.0	5.5	10.0	9.5
11	24.0	8.0	12.0	3.0	8.0	1.0	9.0	7.5	14.0	5.0	12.0	9.0
12	21.5	8.0	11.0	3.0	10.0	4.5	11.0	8.5	13.5	8.0	13.5	9.0
13	21.0	7.0	11.0	2.0	8.5	3.0	11.5	8.5	9.0	7.5	15.5	9.5
14	21.0	8.5	11.5	.5	6.5	2.0	11.0	8.0	11.5	4.5	14.5	10.0
15	19.5	7.5	11.5	2.0	8.5	2.0	8.0	6.0	11.5	2.5	17.0	9.0
16	19.5	5.5	9.5	3.5	9.0	1.0	8.5	4.5	12.0	3.0	16.0	8.0
17	20.0	5.0	8.5	3.5	10.0	1.5	9.0	3.0	14.0	4.5	16.0	7.5
18	20.5	6.0	7.5	1.0	10.0	1.5	10.0	3.5	15.5	5.5	15.5	8.5
19	20.5	6.0	8.5	.0	9.0	1.5	9.5	3.0	17.0	6.0	16.0	8.5
20	20.5	6.5	10.0	.0	10.5	1.5	6.5	4.5	17.0	6.0	12.5	9.5
21	21.5	6.0	11.0	2.0	10.0	1.5	8.0	5.0	16.0	6.0	12.0	7.5
22	21.0	6.0	10.5	.5	11.0	2.0	8.0	6.0	17.5	6.0	9.5	7.0
23	20.5	7.0	10.0	.0	10.5	2.0	8.5	7.0	18.0	6.0	11.0	6.0
24	21.0	8.0	8.5	.5	7.5	4.0	8.0	6.5	17.0	6.5	13.5	6.5
25	20.0	7.5	11.0	3.0	8.0	2.5	10.0	7.5	17.5	6.5	14.0	6.0
26	21.0	7.0	7.5	1.5	8.5	1.5	10.0	7.5	16.0	6.5	15.0	5.5
27	22.0	7.5	7.5	.0	9.0	1.5	10.5	8.0	16.0	8.0	15.5	6.0
28	22.0	7.5	10.5	2.0	10.5	2.5	13.0	8.0	11.5	10.0	16.0	6.0
29	19.5	6.5	9.5	.5	8.5	1.5	13.0	7.0	---	---	15.5	6.0
30	18.5	4.5	10.5	1.5	7.5	.0	12.5	8.0	---	---	17.0	6.5
31	20.0	5.0	---	---	8.0	.0	15.5	7.5	---	---	17.5	7.5
MONTH	28.0	4.5	18.0	.0	13.5	.0	15.5	1.5	18.0	2.5	17.5	3.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17.5	9.0	18.5	12.0	27.5	12.5	---	---	31.0	18.5	29.0	15.5
2	18.0	8.0	19.0	9.0	28.0	10.0	---	---	31.5	18.0	28.5	15.5
3	19.0	7.0	19.0	8.5	30.0	8.5	---	---	30.0	17.5	28.5	16.0
4	19.5	7.5	20.0	10.0	30.0	11.5	---	---	29.5	16.5	28.0	14.5
5	19.0	9.0	14.5	9.0	26.0	10.0	---	---	29.5	16.0	27.0	14.0
6	17.5	9.0	15.5	7.5	26.5	8.0	---	---	30.0	16.5	27.5	12.5
7	17.5	9.0	17.0	9.5	17.0	9.0	---	---	29.5	16.0	27.5	14.5
8	16.5	7.5	18.0	9.0	28.5	6.5	---	---	29.5	17.0	27.5	14.5
9	16.5	6.5	19.0	9.5	29.0	7.5	---	---	29.5	16.5	26.5	13.5
10	17.5	6.5	22.0	10.0	32.5	10.0	---	---	28.5	15.0	26.5	13.0
11	20.0	8.0	21.5	10.5	33.0	11.0	---	---	29.0	15.5	27.5	13.5
12	18.5	9.5	17.5	7.5	34.0	11.5	---	---	29.5	16.0	27.5	14.5
13	14.0	7.5	16.0	9.5	33.5	11.0	---	---	30.0	16.0	27.5	14.0
14	15.5	6.5	16.5	7.5	27.0	11.5	29.0	14.0	30.0	16.5	28.5	14.5
15	13.5	5.5	18.0	9.5	---	---	29.5	16.0	29.0	16.5	28.0	15.0
16	12.5	6.5	20.5	8.0	---	---	29.0	17.0	29.5	15.5	27.0	14.5
17	14.0	8.0	24.5	8.5	---	---	26.0	18.5	27.5	15.5	27.0	14.0
18	12.0	8.0	25.5	10.0	---	---	28.5	16.5	28.0	13.5	27.5	14.0
19	16.5	6.0	26.0	11.0	---	---	29.5	16.5	29.0	13.5	27.5	14.5
20	15.0	8.0	26.5	11.5	---	---	28.5	15.5	30.0	16.5	27.5	15.0
21	17.5	5.5	22.0	11.0	---	---	29.0	15.5	30.0	17.0	27.0	14.0
22	20.0	6.5	24.5	11.0	---	---	28.5	16.0	29.5	18.5	26.5	14.0
23	21.0	7.5	26.5	10.0	---	---	29.5	15.0	27.0	18.0	26.5	14.0
24	22.0	8.5	22.5	10.5	---	---	29.0	15.5	28.5	16.5	26.5	15.0
25	21.5	8.0	25.5	10.0	---	---	29.5	15.5	28.0	14.0	25.0	14.5
26	21.0	7.0	28.0	9.5	---	---	30.5	16.5	28.5	14.0	25.0	13.0
27	18.5	9.5	27.0	11.0	---	---	29.5	17.5	28.0	14.5	26.0	13.0
28	18.5	11.0	30.0	10.0	---	---	30.0	18.0	28.0	14.5	23.5	13.0
29	15.0	11.5	30.0	11.5	---	---	30.0	17.0	28.0	14.5	23.0	11.0
30	18.5	12.0	29.5	12.0	---	---	30.0	16.0	28.5	14.5	23.5	11.0
31	---	---	29.5	12.5	---	---	31.0	17.0	29.0	15.5	---	---
MONTH	22.0	5.5	30.0	7.5	---	---	---	---	31.5	13.5	29.0	11.0

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	23.5	11.5	18.5	11.0	13.0	5.0	10.5	4.5	12.0	7.5	13.5	6.5
2	24.5	11.0	17.0	8.0	12.5	5.5	12.0	4.0	12.5	5.5	15.5	5.0
3	24.5	12.0	16.5	8.5	11.5	3.5	11.0	3.0	13.0	7.5	15.0	5.0
4	22.0	12.5	17.0	8.0	13.0	6.5	10.0	2.5	13.0	10.0	10.5	8.0
5	22.0	10.0	16.0	7.5	14.0	7.0	10.5	2.5	15.0	9.0	12.0	6.5
6	22.5	10.5	16.0	7.0	13.5	6.5	11.5	3.0	14.0	7.0	14.5	4.0
7	22.5	10.5	16.5	7.0	13.5	7.0	12.0	2.5	14.5	6.5	16.5	6.0
8	22.5	10.5	17.5	8.0	12.5	5.0	12.0	3.5	15.0	6.0	16.0	5.5
9	22.0	10.5	17.0	8.0	12.0	4.0	11.0	4.0	14.0	8.5	15.0	6.5
10	22.5	10.5	15.5	6.5	11.0	4.0	11.5	4.0	15.0	9.0	16.0	8.0
11	22.0	11.0	16.0	7.0	10.0	8.0	11.5	2.5	15.5	6.5	15.5	9.0
12	21.5	11.0	16.5	7.5	10.0	8.5	11.5	2.0	15.5	7.0	12.0	8.5
13	21.5	10.0	17.0	8.5	10.5	8.0	12.0	3.0	16.5	7.5	15.0	7.5
14	22.0	10.5	17.0	8.0	10.5	5.0	11.5	2.5	16.5	7.0	16.0	5.5
15	21.0	10.5	17.0	8.5	9.0	4.5	10.5	4.0	11.5	7.0	18.5	6.0
16	20.5	10.0	16.5	8.0	9.0	3.5	11.0	6.0	17.0	10.0	19.0	6.0
17	21.0	10.0	16.5	8.0	9.0	2.0	10.0	3.5	16.0	9.5	19.5	7.5
18	22.0	10.5	16.5	8.0	9.0	3.5	10.0	5.0	13.5	7.0	20.5	8.0
19	22.0	10.5	16.0	8.0	9.5	4.0	11.0	3.5	11.0	9.0	20.5	8.0
20	22.0	11.5	15.5	8.0	9.0	3.0	10.5	1.5	10.5	8.5	22.0	9.5
21	21.0	11.0	14.0	8.5	8.0	1.5	9.0	4.5	10.5	6.0	21.0	8.5
22	18.0	8.0	14.5	7.0	6.5	3.0	9.0	1.5	9.0	4.5	18.0	7.0
23	17.5	7.5	15.0	6.5	8.0	3.5	8.0	.0	12.5	3.0	16.5	5.0
24	17.5	7.0	15.0	7.0	7.5	2.5	11.0	4.5	11.0	4.5	17.5	4.5
25	17.5	7.0	14.5	7.0	9.5	3.5	10.0	3.5	11.0	3.5	17.5	4.0
26	18.0	7.5	12.5	6.5	9.0	1.5	7.5	1.0	7.0	1.5	18.5	5.0
27	20.5	10.0	11.0	5.0	9.0	1.5	10.0	6.0	8.0	1.0	17.0	7.0
28	19.5	10.0	12.5	4.5	8.0	3.5	10.5	3.0	10.0	2.5	17.5	7.0
29	19.0	9.0	14.0	6.0	9.5	4.5	9.0	3.5	8.5	5.5	17.0	4.5
30	19.0	9.0	13.5	5.5	14.5	8.5	10.5	5.0	---	---	19.5	5.5
31	17.5	10.0	---	---	13.0	7.0	9.5	7.5	---	---	20.0	6.5
MONTH	24.5	7.0	18.5	4.5	14.5	1.5	12.0	.0	17.0	1.0	22.0	4.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.5	9.0	27.5	12.0	---	---	---	---	---	---	31.0	15.5
2	18.0	7.0	26.5	11.0	---	---	---	---	---	---	29.0	14.0
3	19.5	6.5	25.5	10.0	---	---	---	---	---	---	29.0	13.0
4	20.5	7.5	25.0	8.5	---	---	---	---	---	---	29.0	14.0
5	22.0	7.5	25.5	9.0	---	---	---	---	---	---	28.0	12.5
6	22.0	7.0	25.5	9.5	---	---	---	---	---	---	28.0	11.5
7	23.5	8.5	24.5	10.0	---	---	---	---	---	---	28.5	12.5
8	21.0	8.0	24.0	10.0	---	---	---	---	---	---	29.0	13.5
9	19.0	8.5	25.5	9.5	---	---	---	---	---	---	29.5	14.5
10	21.5	10.0	26.5	9.0	---	---	---	---	---	---	29.5	14.5
11	21.0	7.0	25.5	10.5	---	---	---	---	---	---	28.0	13.0
12	19.5	7.0	29.0	11.0	---	---	---	---	---	---	27.0	12.5
13	20.5	7.0	28.5	13.0	---	---	---	---	---	---	27.0	15.5
14	22.5	7.5	24.0	13.5	---	---	---	---	---	---	27.0	12.5
15	20.0	10.5	21.5	15.5	---	---	---	---	---	---	25.5	13.5
16	17.0	11.0	17.5	13.5	---	---	---	---	---	---	24.5	11.0
17	15.5	9.5	23.0	11.5	---	---	---	---	---	---	25.0	11.5
18	18.5	7.5	25.5	13.5	---	---	---	---	---	---	26.0	12.0
19	18.0	6.0	25.0	10.5	---	---	---	---	---	---	26.5	11.5
20	19.5	7.0	26.5	10.0	---	---	---	---	---	---	27.0	12.5
21	19.5	6.5	25.5	11.0	---	---	---	---	---	---	27.0	13.0
22	23.5	8.0	26.0	13.0	---	---	---	---	---	---	26.5	14.0
23	24.5	9.0	24.5	9.5	---	---	---	---	31.5	16.5	26.5	12.5
24	24.5	10.0	26.5	9.5	---	---	---	---	31.0	16.0	26.5	12.5
25	24.5	10.5	28.0	10.0	---	---	---	---	30.5	16.0	26.5	12.5
26	26.0	12.0	29.0	11.0	---	---	---	---	30.0	15.5	26.0	12.0
27	23.5	10.5	23.5	12.0	---	---	---	---	30.5	15.0	26.5	12.5
28	24.0	9.5	27.5	11.0	---	---	---	---	30.5	15.0	26.5	13.5
29	26.5	10.0	26.0	9.5	---	---	---	---	30.5	15.0	27.0	14.0
30	26.5	10.5	26.5	7.0	---	---	---	---	31.5	16.5	26.0	14.0
31	---	---	---	---	---	---	---	---	31.5	17.0	---	---
MONTH	26.5	6.0	---	---	---	---	---	---	---	---	31.0	11.0

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 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, 9,660 ft³/s, Mar. 10, 1995, gage height, 14.55 ft, from flood marks, from rating curve extended above 2,100 ft³/s on basis of slope-area measurement at gage height 12.94 ft; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of February 1938 reached a stage of about 9.0 ft, from floodmarks at former site 0.9 mi downstream, referenced to datum used at that site.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 31	2245	744	7.13

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	60	13	e6.9	222	e9.0	e13	e6.0	31	24	13	24
2	54	60	11	e6.8	32	e8.0	24	e6.0	28	22	14	24
3	54	56	e11	5.9	19	e8.0	e16	e6.0	29	22	15	25
4	52	57	e10	5.5	43	e25	e14	e6.0	30	23	16	24
5	53	56	e10	5.3	213	46	11	e6.0	32	24	16	24
6	53	57	e10	5.0	54	e23	9.8	e6.0	32	24	19	24
7	53	59	e10	4.6	17	27	9.3	e6.0	33	23	23	23
8	53	59	e11	4.2	e9.0	21	8.9	e6.0	33	23	24	24
9	54	58	e12	3.8	e8.0	17	8.4	e7.0	34	23	24	24
10	52	59	e14	3.5	e7.5	14	8.5	e9.0	33	23	23	23
11	53	59	e16	3.7	e7.0	13	8.8	e18	32	22	22	22
12	53	60	22	4.0	e7.0	107	9.2	43	32	e22	21	23
13	54	61	41	3.6	e7.0	165	10	49	31	e22	23	22
14	54	61	32	3.1	e7.0	62	9.8	51	31	e22	21	23
15	52	61	20	e3.0	e9.0	42	9.1	51	30	e22	22	23
16	53	62	13	18	e8.0	30	9.6	62	31	e22	21	24
17	54	62	e10	18	e7.0	26	9.4	e52	31	e22	20	24
18	54	60	e9.0	12	e7.0	e20	12	e45	33	e21	20	24
19	53	59	e8.5	16	80	e17	10	e40	28	e21	21	e23
20	51	59	e8.0	11	101	e14	9.6	e37	25	e21	21	e21
21	52	59	e7.7	19	59	e13	8.9	36	26	e21	21	19
22	52	59	e8.0	16	e100	e12	8.4	35	27	e21	21	19
23	53	49	e7.5	12	e60	e11	e7.5	34	26	e21	20	20
24	52	43	e7.0	11	28	e11	e7.0	33	25	e21	19	22
25	51	37	e7.0	13	32	e11	e6.5	32	26	e21	19	21
26	51	30	e7.0	11	e10	e11	e6.2	30	28	18	21	22
27	54	28	e7.0	13	66	e11	e6.0	30	33	17	23	24
28	57	25	e7.0	11	37	e12	e6.0	31	30	18	23	24
29	56	19	e7.0	e8.5	28	e12	e6.0	30	29	15	22	23
30	57	15	e7.0	e9.0	---	e11	e6.0	31	26	14	23	22
31	58	---	e7.0	229	---	e11	---	30	---	13	23	---
TOTAL	1654	1549	370.7	496.4	1284.5	820.0	288.9	864.0	895	648	634	684
MEAN	53.4	51.6	12.0	16.0	44.3	26.5	9.63	27.9	29.8	20.9	20.5	22.8
MAX	58	62	41	229	222	165	24	62	34	24	24	25
MIN	51	15	7.0	3.0	7.0	8.0	6.0	6.0	25	13	13	19
AC-FT	3280	3070	735	985	2550	1630	573	1710	1780	1290	1260	1360

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.44	5.70	15.6	31.7	58.3	77.4	42.5	21.4	19.7	14.8	13.7	10.7
MAX	53.4	51.6	181	238	471	655	532	130	88.5	79.2	71.0	67.2
(WY)	1996	1996	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 1995 CALENDAR YEAR			FOR 1996 WATER YEAR			WATER YEARS 1940 - 1996		
ANNUAL TOTAL	38911.00			10188.5					
ANNUAL MEAN	107			27.8			26.3		
HIGHEST ANNUAL MEAN							126		
LOWEST ANNUAL MEAN							.15		
HIGHEST DAILY MEAN	5000			Mar 10			5000		
LOWEST DAILY MEAN	.14			Jan 2			.00		
ANNUAL SEVEN-DAY MINIMUM	7.0			Dec 24			.00		
INSTANTANEOUS PEAK FLOW				744			9660		
INSTANTANEOUS PEAK STAGE				7.13			14.55		
ANNUAL RUNOFF (AC-FT)	77180			20210			19080		
10 PERCENT EXCEEDS	140			56			56		
50 PERCENT EXCEEDS	43			22			3.4		
90 PERCENT EXCEEDS	12			7.0			.17		

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

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

DRAINAGE AREA.--607 mi².

PERIOD OF RECORD.--October 1970 to current year.

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

REMARKS.--Records poor. 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, 16,700 ft³/s, Mar. 10, 1995, gage height, 13.30 ft, from rating curve extended above 3,800 ft³/s on basis of slope-area measurement of peak flow; no flow for many days in most years.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 4	1445	630	4.80	Feb. 21	2100	883	4.72
Feb. 1	0015	1,930	6.23	Mar. 13	0030	988	4.31
Feb. 5	1400	639	4.22				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	13	e.00	e5.0	672	8.1	e25	10	10	5.4	5.0	8.3
2	6.7	11	e.00	e5.0	80	5.0	e21	10	10	5.0	2.7	9.1
3	8.0	7.1	e.00	e5.0	20	e5.0	e19	11	12	4.9	2.0	10
4	49	8.5	e3.0	e5.0	19	7.4	e17	12	12	4.8	2.4	11
5	4.4	e10	8.4	e5.0	466	194	e15	10	11	5.0	3.8	12
6	e1.5	e8.5	11	e5.0	190	253	e14	10	11	5.9	8.3	9.0
7	e.00	e8.0	e11	e5.0	46	171	e13	11	10	8.0	4.2	9.8
8	e.00	e7.5	e6.0	e5.0	19	127	e13	11	8.9	8.3	9.4	11
9	e.00	e7.0	12	e5.0	8.3	e70	e14	12	9.4	8.1	11	11
10	e.00	6.5	12	e5.0	e5.0	e20	e14	5.5	9.4	8.5	8.9	11
11	e.00	6.4	e10	e5.0	e5.0	e50	e14	.00	9.0	6.8	2.9	11
12	e.00	6.4	e26	e5.0	e5.0	e180	14	.00	11	10	7.9	10
13	e.00	6.2	14	e5.0	e5.0	403	15	.00	12	13	11	9.2
14	e5.8	6.1	27	e5.0	e5.0	133	13	.00	11	11	11	9.8
15	11	5.9	41	e5.0	e5.0	e40	14	12	12	10	10	10
16	6.0	5.3	30	e24	e5.0	e30	15	19	12	8.5	8.8	11
17	16	e1.0	22	20	e5.0	e25	11	8.3	12	9.0	11	11
18	18	e.00	20	28	e5.0	e22	11	3.2	11	9.0	13	10
19	18	e.00	16	21	72	e20	13	6.5	11	8.7	14	10
20	18	e.00	12	15	393	e18	13	5.8	10	9.2	14	10
21	18	e.00	9.5	38	349	e18	13	5.9	9.0	9.3	12	10
22	17	e.00	8.6	40	671	e18	12	1.5	8.5	11	11	10
23	18	e.00	10	39	192	e17	11	4.4	8.1	11	10	12
24	18	e.00	10	8.2	58	e17	12	5.4	8.0	14	11	14
25	13	e.00	7.0	81	34	e17	11	6.5	8.6	8.7	11	13
26	12	e.00	e5.0	134	15	e17	13	7.2	8.2	6.6	10	12
27	9.9	e.00	e5.0	95	6.1	e18	11	7.3	8.0	6.9	9.3	12
28	9.2	e.00	e5.0	119	17	e18	11	7.8	7.5	7.3	8.4	12
29	11	e.00	e5.0	81	7.3	e17	11	9.1	6.9	7.7	8.0	11
30	12	e.00	e5.0	34	---	e18	12	9.5	6.2	7.1	6.5	10
31	14	---	e5.0	369	---	e19	---	9.3	---	6.7	8.4	---
TOTAL	321.40	124.40	356.50	1221.2	3379.7	1975.5	415	231.20	293.7	255.4	266.9	320.2
MEAN	10.4	4.15	11.5	39.4	117	63.7	13.8	7.46	9.79	8.24	8.61	10.7
MAX	49	13	41	369	672	403	25	19	12	14	14	14
MIN	.00	.00	.00	5.0	5.0	5.0	11	.00	6.2	4.8	2.0	8.3
AC-FT	637	247	707	2420	6700	3920	823	459	583	507	529	635

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.59	5.11	15.0	56.1	101	147	33.6	10.7	5.91	5.04	5.75	4.94
MAX	10.4	38.2	154	335	613	1545	373	184	18.1	18.0	19.5	16.3
(WY)	1996	1984	1984	1983	1978	1983	1983	1983	1983	1980	1995	1973
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1973	1975	1977	1977	1977	1977	1977	1976	1972	1972	1972	1972

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1971 - 1996			
ANNUAL TOTAL	47360.76				9161.10							
ANNUAL MEAN	130				25.0				32.4			
HIGHEST ANNUAL MEAN									269			
LOWEST ANNUAL MEAN									.000			
HIGHEST DAILY MEAN	8030				672				8860			
LOWEST DAILY MEAN	.00				.00				.00			
ANNUAL SEVEN-DAY MINIMUM	.00				.00				.00			
INSTANTANEOUS PEAK FLOW					1930				16700			
INSTANTANEOUS PEAK STAGE					6.23				13.30			
ANNUAL RUNOFF (AC-FT)	93940				18170				23490			
10 PERCENT EXCEEDS	137				29				25			
50 PERCENT EXCEEDS	10				10				1.0			
90 PERCENT EXCEEDS	.00				3.6				.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. 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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	0815	518	8.01	Feb. 20	1600	8,430	24.76
Jan. 17	0100	841	9.88	Mar. 5	1245	2,230	14.77
Feb. 1	0630	2,850	15.90	Mar. 13	0500	2,580	15.68
Feb. 5	1030	5,180	21.80				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	6.3	12	40	2070	1040	226	92	52	15	12	9.9
2	6.1	6.4	13	40	1100	891	286	88	45	14	12	10
3	5.9	6.5	13	42	808	795	255	86	44	15	12	9.6
4	6.3	6.6	14	42	1170	802	231	82	39	16	14	9.6
5	6.6	6.7	14	41	4500	1830	212	81	32	15	12	9.2
6	5.8	7.0	15	39	3070	1590	195	79	31	15	11	8.7
7	6.0	7.2	15	39	1980	1270	188	77	27	15	9.9	7.3
8	6.5	7.5	15	39	1640	1130	178	75	24	15	9.5	6.6
9	6.5	7.3	15	40	1310	916	171	70	24	16	9.3	6.8
10	6.2	7.3	15	39	909	716	159	67	21	15	10	6.7
11	6.1	7.5	17	38	693	622	150	62	20	15	9.8	6.7
12	6.2	8.0	78	38	551	1090	143	61	20	15	8.2	7.3
13	5.7	8.4	422	38	442	1980	139	57	21	14	8.6	7.2
14	5.6	9.3	150	38	400	1130	136	57	18	15	8.4	7.6
15	6.3	9.5	99	38	422	841	132	62	18	16	8.9	7.8
16	6.8	9.4	121	226	311	718	142	201	18	16	8.5	7.1
17	6.3	10	83	452	273	622	142	181	16	16	8.2	7.0
18	5.4	10	67	155	254	538	142	130	17	16	9.7	7.7
19	4.9	10	64	382	2480	478	140	122	17	13	8.5	7.9
20	5.0	11	56	188	7830	425	183	117	16	13	8.7	8.6
21	5.0	11	50	284	7670	383	196	114	17	13	8.4	8.8
22	5.2	11	48	280	6880	352	197	123	15	13	8.8	7.7
23	5.7	11	45	191	4070	332	153	115	15	12	8.9	7.3
24	5.3	11	44	168	2600	318	121	106	15	13	8.7	6.6
25	5.2	11	42	750	2180	290	118	91	15	12	8.1	7.0
26	6.2	12	41	466	1780	270	111	78	15	13	8.3	6.9
27	6.4	11	40	493	1550	260	108	79	18	14	8.8	6.9
28	6.2	12	38	858	1380	261	107	75	19	14	8.9	6.9
29	5.9	12	38	587	1130	240	97	78	16	13	8.8	6.8
30	6.0	12	43	605	---	224	93	70	16	12	9.0	6.5
31	5.9	---	42	931	---	215	---	60	---	14	9.0	---
TOTAL	184.0	275.9	1769	7607	61453	22569	4851	2836	681	443	294.9	230.7
MEAN	5.94	9.20	57.1	245	2119	728	162	91.5	22.7	14.3	9.51	7.69
MAX	6.8	12	422	931	7830	1980	286	201	52	16	14	10
MIN	4.9	6.3	12	38	254	215	93	57	15	12	8.1	6.5
AC-FT	365	547	3510	15090	121900	44770	9620	5630	1350	879	585	458

PAJARO RIVER BASIN

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11159000 PAJARO RIVER AT CHITTENDEN, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.15	30.8	132	383	524	466	249	48.2	14.1	7.58	5.97	6.30
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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1940 - 1996
ANNUAL TOTAL	139805.5	103194.5	
ANNUAL MEAN	383	282	154
HIGHEST ANNUAL MEAN			905
LOWEST ANNUAL MEAN			1.06
HIGHEST DAILY MEAN	19400	Mar 11	7830
LOWEST DAILY MEAN	4.9	Oct 19	4.9
ANNUAL SEVEN-DAY MINIMUM	5.2	Oct 19	5.2
INSTANTANEOUS PEAK FLOW			8430
INSTANTANEOUS PEAK STAGE			24.76
INSTANTANEOUS LOW FLOW			33.11
ANNUAL RUNOFF (AC-FT)	277300	204700	111700
10 PERCENT EXCEEDS	759	763	226
50 PERCENT EXCEEDS	38	20	11
90 PERCENT EXCEEDS	6.8	6.7	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.--Records fair except for estimated discharges and those less than 1 ft³/s, which are poor. No regulation; Watsonville Water Works can divert up to 8.0 ft³/s upstream from station for municipal supply, domestic use, and irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,610 ft³/s, Jan. 4, 1982, gage height, 16.66 ft, from rating curve extended above 1,400 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 25	0215	759	6.95	Feb. 4	1530	665	6.61
Jan. 27	1215	684	6.68	Feb. 19	1530	2,000	10.43

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.58	88	85	34	5.7	7.3	.84	.15	.00
2	.00	.00	.00	.47	56	74	27	5.4	6.4	.55	.15	.00
3	.00	.00	.00	.41	49	64	21	5.0	5.4	.55	.15	.00
4	.00	.00	.00	.40	283	105	19	4.5	4.8	.48	.15	.00
5	.00	.00	.00	.36	266	112	17	e4.6	4.1	.43	.15	.00
6	.00	.00	.00	.32	133	84	16	e4.2	3.9	.41	.15	.00
7	.00	.00	.00	.31	92	70	16	e4.0	3.9	.42	.15	.00
8	.00	.00	.00	.31	68	60	16	e3.6	3.5	.42	.14	.00
9	.00	.00	.00	.37	52	52	15	e3.3	3.3	.41	.12	.00
10	.00	.00	.00	.29	39	48	15	e3.1	2.8	.34	.12	.00
11	.00	.00	43	.27	32	50	e14	e2.9	2.7	.30	.12	.00
12	.00	.00	116	.27	26	184	e13	e2.7	3.0	.27	.12	.00
13	.00	.00	40	.25	22	123	e12	e2.5	3.5	.27	.10	.00
14	.00	.00	9.9	.24	19	88	e11	e2.3	3.6	.27	.09	.00
15	.00	.00	16	.25	19	73	e15	15	3.8	.27	.08	.00
16	.00	.00	8.3	151	19	63	25	86	2.6	.27	.07	.00
17	.00	.00	4.4	58	19	55	17	25	2.7	.27	.07	.00
18	.00	.00	4.2	71	25	48	20	42	2.5	.27	.07	.00
19	.00	.00	2.2	75	888	41	16	25	2.2	.27	.07	.00
20	.00	.00	1.3	28	482	35	15	19	1.9	.25	.07	.00
21	.00	.00	1.1	65	329	33	14	19	2.0	.24	.07	.00
22	.00	.00	1.1	30	200	32	14	17	1.8	.21	.08	.00
23	.00	.00	1.1	19	138	30	12	14	1.9	.21	.09	.00
24	.00	.00	.80	101	112	28	e11	12	1.6	.21	.09	.00
25	.00	.00	.71	298	90	26	e10	11	e1.6	.21	.09	.00
26	.00	.00	.64	77	75	24	e9.2	10	e1.5	.20	.09	.00
27	.00	.00	.58	252	80	23	e8.4	9.8	e1.4	.18	.09	.00
28	.00	.00	.47	138	92	24	e7.8	9.1	e1.2	.18	.07	.00
29	.00	.00	.91	75	110	21	e7.2	9.1	e1.1	.18	.03	.00
30	.00	.00	1.4	62	---	20	e6.6	8.6	e1.0	.17	.00	.00
31	.00	---	.74	165	---	20	---	8.1	---	.15	.00	---
TOTAL	0.00	0.00	254.85	1670.10	3903	1795	454.2	393.5	89.0	9.70	2.99	0.00
MEAN	.000	.000	8.22	53.9	135	57.9	15.1	12.7	2.97	.31	.096	.000
MAX	.00	.00	116	298	888	184	34	86	7.3	.84	.15	.00
MIN	.00	.00	.00	.24	19	20	6.6	2.3	1.0	.15	.00	.00
AC-FT	.00	.00	505	3310	7740	3560	901	781	177	19	5.9	.00

e Estimated.

11159200 CORRALITOS CREEK AT FREEDOM, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.83	5.03	13.0	44.5	52.5	37.9	22.3	5.16	1.01	.37	.17	.63
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1957 - 1996			
ANNUAL TOTAL	11762.79				8572.34							
ANNUAL MEAN	32.2				23.4				15.1			
HIGHEST ANNUAL MEAN									56.4			
LOWEST ANNUAL MEAN									.17			
HIGHEST DAILY MEAN	1190 Mar 10				888 Feb 19				2290 Jan 4 1982			
LOWEST DAILY MEAN	.00 Sep 7				.00 Oct 1				.00 Jun 12 1957			
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 7				.00 Oct 1				.00 Jun 12 1957			
INSTANTANEOUS PEAK FLOW					2000 Feb 19				5610 Jan 4 1982			
INSTANTANEOUS PEAK STAGE					10.43 Feb 19				16.66 Jan 4 1982			
ANNUAL RUNOFF (AC-FT)	23330				17000				10940			
10 PERCENT EXCEEDS	79				72				31			
50 PERCENT EXCEEDS	2.1				.82				.36			
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. No regulation; many diversions upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s, Dec. 23, 1955, gage height, 22.33 ft, from rating curve extended above 2,900 ft³/s on basis of slope-area measurement of peak flow; no flow at times in 1977, 1988, 1992-1995.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 24	2215	1,510	7.75	Feb. 19	1800	3,330	11.03
Jan. 27	1015	1,660	8.07	Mar. 12	1515	1,150	6.57

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	5.3	3.1	8.3	152	282	97	e26	27	12	7.3	3.3
2	3.6	4.9	3.4	7.8	89	240	64	e26	26	12	7.1	3.3
3	3.0	4.4	3.6	7.2	74	217	52	e25	24	12	6.7	3.4
4	3.0	4.4	3.7	6.8	572	343	47	e25	23	13	6.8	3.5
5	2.4	4.2	3.9	6.4	428	399	44	e24	23	12	6.9	3.4
6	2.6	3.6	3.5	6.4	221	287	42	e23	22	12	6.9	3.4
7	2.7	3.5	3.4	6.4	155	243	40	e23	22	11	7.1	3.3
8	3.0	3.3	3.4	6.4	113	218	39	e23	21	11	7.2	3.4
9	3.1	3.4	3.5	6.4	87	195	38	e22	20	11	6.8	3.3
10	3.1	3.4	3.6	6.4	72	181	37	e22	19	11	6.4	3.2
11	3.1	3.3	91	6.5	63	198	35	e21	19	11	6.4	3.1
12	3.1	3.4	281	6.3	55	591	34	e21	19	9.8	6.3	3.2
13	3.0	3.8	57	5.7	50	270	32	e20	19	9.6	6.0	3.4
14	2.9	3.4	26	5.6	45	178	31	e20	18	9.2	5.9	3.4
15	3.2	3.1	38	5.6	44	141	35	e53	18	9.2	5.6	3.7
16	3.1	3.3	27	247	58	122	82	313	18	9.5	5.6	3.7
17	3.1	3.4	18	85	63	106	56	89	17	9.8	5.6	3.5
18	3.4	3.5	17	85	72	93	70	124	17	9.6	5.6	3.4
19	3.4	3.7	13	175	1640	86	49	71	19	9.2	5.2	3.1
20	3.4	3.4	12	49	897	77	45	57	18	8.5	5.0	3.4
21	3.5	3.4	10	121	847	70	42	53	18	8.6	4.4	3.7
22	3.6	3.4	12	58	530	65	39	49	17	8.6	4.4	4.1
23	3.3	3.4	11	37	364	60	36	43	17	8.5	4.4	4.1
24	2.9	3.4	9.3	408	299	59	34	40	17	8.8	4.3	3.8
25	2.9	3.4	8.7	423	267	53	33	37	17	8.3	4.1	4.2
26	3.0	3.4	8.3	105	231	51	32	35	17	8.3	3.9	4.4
27	3.1	3.0	7.9	512	236	51	31	34	17	8.3	3.6	4.4
28	3.9	2.9	8.8	212	276	53	29	32	17	8.2	3.6	4.4
29	3.8	3.0	9.7	122	367	50	28	31	15	7.8	3.4	4.3
30	3.7	3.1	10	108	---	47	27	29	14	7.8	3.3	4.1
31	3.7	---	8.5	398	---	46	---	28	---	7.7	3.3	---
TOTAL	99.2	107.1	719.3	3243.2	8367	5072	1300	1439	575	303.3	169.1	108.9
MEAN	3.20	3.57	23.2	105	289	164	43.3	46.4	19.2	9.78	5.45	3.63
MAX	3.9	5.3	281	512	1640	591	97	313	27	13	7.3	4.4
MIN	2.4	2.9	3.1	5.6	44	46	27	20	14	7.7	3.3	3.1
AC-FT	197	212	1430	6430	16600	10060	2580	2850	1140	602	335	216

e Estimated.

SOQUEL CREEK BASIN

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11160000 SOQUEL CREEK AT SOQUEL, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.43	16.3	57.4	116	119	98.2	55.0	19.9	9.08	5.09	3.16	3.11
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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1951 - 1996
ANNUAL TOTAL	28513.2	21503.1	
ANNUAL MEAN	78.1	58.8	42.0
HIGHEST ANNUAL MEAN			169 1983
LOWEST ANNUAL MEAN			2.89 1977
HIGHEST DAILY MEAN	2350 Mar 10	1640 Feb 19	8800 Dec 23 1955
LOWEST DAILY MEAN	2.4 Oct 5	2.4 Oct 5	.00 Jul 30 1977
ANNUAL SEVEN-DAY MINIMUM	2.8 Oct 3	2.8 Oct 3	.00 Aug 15 1992
INSTANTANEOUS PEAK FLOW		3330 Feb 19	15800 Dec 23 1955
INSTANTANEOUS PEAK STAGE		11.03 Feb 19	22.33 Dec 23 1955
INSTANTANEOUS LOW FLOW			.00 Jul 30 1977
ANNUAL RUNOFF (AC-FT)	56560	42650	30440
10 PERCENT EXCEEDS	189	176	80
50 PERCENT EXCEEDS	16	12	7.4
90 PERCENT EXCEEDS	3.4	3.3	1.5

SAN LORENZO RIVER BASIN

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 estimated period in January and February, which is poor. No regulation; small diversions upstream from station for domestic use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s, Mar. 10, 1995, gage height, 9.77 ft, from rating curve extended above 310 ft³/s on basis of slope-area measurement at gage height 9.29 ft; minimum daily, 0.94 ft³/s, Jan. 31, 1992.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 11	2130	220	5.88	Mar. 12	0515	350	6.41
Feb. 19	1530	566	7.20				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1.8	2.2	2.8	e74	46	38	5.9	e5.4	3.4	2.5	2.7
2	2.3	1.9	2.0	2.7	e50	39	21	5.9	e5.9	3.2	2.5	2.6
3	2.2	2.4	1.6	2.6	e70	36	16	5.7	e5.6	3.5	2.4	2.5
4	2.2	2.2	1.8	2.6	e125	52	15	5.3	e5.4	3.5	2.8	2.4
5	2.2	1.9	1.8	2.6	e80	49	15	5.5	e5.3	3.2	2.6	2.4
6	2.2	1.9	1.8	2.6	e54	39	13	5.3	e5.2	3.1	2.6	2.4
7	2.2	1.9	1.8	2.6	e42	35	13	5.3	e5.1	3.3	2.5	2.4
8	2.2	2.0	1.8	2.6	e33	32	13	5.3	e4.9	3.3	2.6	2.3
9	1.9	2.0	1.8	2.6	e25	30	13	5.3	e4.8	3.1	2.4	2.5
10	2.0	2.1	1.8	2.5	e23	30	12	5.3	e4.7	3.1	2.5	2.2
11	1.9	2.1	56	2.4	e20	33	9.5	5.3	e5.0	3.1	2.5	2.2
12	2.0	2.1	57	2.4	e19	164	7.9	5.2	5.0	2.9	2.3	2.2
13	1.9	2.2	14	2.4	20	66	7.6	5.0	5.0	2.9	2.4	2.2
14	1.8	2.1	5.6	2.4	16	47	6.9	5.0	4.7	2.8	2.3	2.3
15	1.8	2.2	12	2.6	17	47	8.3	18	4.6	2.9	2.3	2.3
16	1.8	2.1	5.5	63	25	40	22	55	4.6	3.1	2.3	2.1
17	1.9	2.1	4.3	27	23	35	11	26	4.4	3.1	2.7	2.2
18	1.7	1.9	5.1	48	31	32	14	24	4.2	3.1	2.8	2.1
19	1.7	2.1	3.8	53	332	31	8.5	17	4.2	2.8	2.9	2.1
20	1.8	2.0	3.5	39	176	31	8.3	14	4.2	2.8	2.8	2.0
21	1.8	2.0	3.2	54	165	30	8.0	15	4.2	2.8	2.9	2.1
22	1.8	1.9	3.7	38	92	27	7.6	12	4.0	2.7	2.8	2.3
23	1.9	1.9	3.2	32	65	24	7.5	11	3.9	2.8	2.7	2.2
24	1.9	2.1	3.1	e85	57	24	7.1	9.9	3.8	2.7	2.8	2.1
25	1.9	2.0	3.1	e60	47	22	6.7	8.6	3.9	2.6	2.7	2.1
26	1.9	2.1	2.9	e50	38	20	6.5	8.6	4.2	2.7	2.6	2.0
27	1.9	2.2	2.7	e115	40	20	6.5	e6.5	4.0	2.8	2.5	1.9
28	1.9	2.2	2.7	e90	36	19	6.4	e6.2	3.7	2.7	2.4	1.9
29	1.9	2.2	3.4	e45	51	17	6.2	e6.0	3.5	2.6	2.2	2.0
30	1.9	2.2	3.2	e72	---	17	6.1	e5.8	3.7	2.6	2.4	2.0
31	2.1	---	2.9	e96	---	16	---	e5.6	---	2.5	2.5	---
TOTAL	60.9	61.8	219.3	1005.4	1846	1150	341.6	324.5	137.1	91.7	79.2	66.7
MEAN	1.96	2.06	7.07	32.4	63.7	37.1	11.4	10.5	4.57	2.96	2.55	2.22
MAX	2.3	2.4	57	115	332	164	38	55	5.9	3.5	2.9	2.7
MIN	1.7	1.8	1.6	2.4	16	16	6.1	5.0	3.5	2.5	2.2	1.9
AC-FT	121	123	435	1990	3660	2280	678	644	272	182	157	132

e Estimated.

SAN LORENZO RIVER BASIN

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11160430 BEAN CREEK NEAR SCOTTS VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.40	2.83	5.41	32.1	26.8	25.2	6.11	4.90	2.82	2.26	2.08	2.00
MAX	3.14	5.02	12.1	99.7	63.7	71.8	11.4	11.9	4.57	2.96	2.55	2.26
(WY)	1995	1995	1993	1995	1996	1995	1996	1995	1996	1996	1996	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1989 - 1996			
ANNUAL TOTAL	7078.8				5384.2							
ANNUAL MEAN	19.4				14.7				9.94			
HIGHEST ANNUAL MEAN									19.5			
LOWEST ANNUAL MEAN									3.00			
HIGHEST DAILY MEAN	714				332				714			
LOWEST DAILY MEAN	1.6				1.6				.94			
ANNUAL SEVEN-DAY MINIMUM	1.8				1.8				1.0			
INSTANTANEOUS PEAK FLOW					566				1350			
INSTANTANEOUS PEAK STAGE					7.20				9.77			
ANNUAL RUNOFF (AC-FT)	14040				10680				7200			
10 PERCENT EXCEEDS	44				43				18			
50 PERCENT EXCEEDS	3.6				3.3				2.5			
90 PERCENT EXCEEDS	2.0				1.9				1.8			

SAN LORENZO RIVER BASIN

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.--Records good. Low flow partially regulated by Loch Lomond Reservoir since 1961, capacity, 8,820 acre-ft, and by an inflatable fiber dam located 500 ft upstream from gage. Many small diversions upstream from station for domestic supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,400 ft³/s, Dec. 23, 1955, gage height, 22.55 ft, site and datum then in use, from rating curve extended above 11,000 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 28.85 ft, Jan. 5, 1982; minimum daily discharge, 5.6 ft³/s, July 27, 28, 1977.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1230	2,130	8.75	Feb. 4	0830	4,410	11.83
Jan. 16	1315	1,940	8.41	Feb. 19	1645	5,790	13.32
Jan. 27	1145	3,600	10.85	Mar. 12	0615	2,770	9.71
Jan. 31	1000	3,000	10.05				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	24	19	44	615	581	379	87	87	48	29	23
2	21	21	19	40	426	500	249	85	82	47	29	23
3	21	21	19	38	399	452	191	83	80	46	29	23
4	20	21	20	37	2830	607	175	82	77	45	29	23
5	20	20	21	36	1840	637	163	80	75	45	30	24
6	19	20	22	35	823	516	155	79	74	44	30	23
7	20	20	22	34	609	444	151	78	73	44	30	23
8	20	19	22	34	486	394	145	77	70	44	29	23
9	20	19	21	33	403	356	144	76	69	44	28	23
10	22	20	22	33	340	343	139	73	67	41	27	22
11	20	20	421	32	291	373	135	73	67	41	28	23
12	20	20	992	31	252	1380	129	71	68	40	27	23
13	19	19	191	31	223	764	127	70	67	40	26	23
14	20	19	88	31	202	582	123	80	66	40	26	23
15	20	19	128	31	199	500	131	136	65	39	25	24
16	20	19	82	754	307	439	174	526	64	40	25	23
17	20	19	60	272	255	392	160	256	62	39	25	23
18	20	19	66	525	277	340	183	283	61	38	25	22
19	19	19	58	485	3040	336	137	191	59	37	27	22
20	19	19	48	225	2020	298	130	157	57	36	27	22
21	19	19	43	452	2840	258	124	158	58	35	26	22
22	19	20	52	245	1320	249	119	150	58	35	25	22
23	19	20	48	176	822	232	114	131	57	34	24	22
24	18	20	41	389	690	217	111	121	54	34	25	28
25	18	19	40	1090	603	204	107	112	54	33	25	23
26	19	19	38	392	514	192	103	108	56	33	24	22
27	19	19	36	1280	530	185	99	106	57	32	24	23
28	19	18	36	600	534	189	96	101	54	33	24	22
29	19	19	44	387	709	173	92	91	52	32	23	22
30	19	19	64	355	---	166	90	94	50	31	23	22
31	22	---	50	1540	---	161	---	91	---	31	23	---
TOTAL	611	589	2833	9687	24399	12460	4375	3906	1940	1201	817	686
MEAN	19.7	19.6	91.4	312	841	402	146	126	64.7	38.7	26.4	22.9
MAX	22	24	992	1540	3040	1380	379	526	87	48	30	28
MIN	18	18	19	31	199	161	90	70	50	31	23	22
AC-FT	1210	1170	5620	19210	48400	24710	8680	7750	3850	2380	1620	1360

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	23.1	53.7	149	312	391	305	177	72.5	40.4	26.5	19.9	18.0
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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1937 - 1996	
ANNUAL TOTAL	90443		63504		131	
ANNUAL MEAN	248		174		391	
HIGHEST ANNUAL MEAN					13.2	
LOWEST ANNUAL MEAN					17000	
HIGHEST DAILY MEAN	8520	Mar 10	3040	Feb 19	Dec 23	1955
LOWEST DAILY MEAN	18	Oct 24	18	Oct 24	Jul 27	1977
ANNUAL SEVEN-DAY MINIMUM	19	Oct 19	19	Oct 19	Jul 26	1977
INSTANTANEOUS PEAK FLOW			5790	Feb 19	30400	Dec 23 1955
INSTANTANEOUS PEAK STAGE			13.32	Feb 19	28.85	Jan 5 1982
INSTANTANEOUS LOW FLOW					5.6	Jul 27 1977
ANNUAL RUNOFF (AC-FT)	179400		126000		94860	
10 PERCENT EXCEEDS	519		452		271	
50 PERCENT EXCEEDS	62		46		33	
90 PERCENT EXCEEDS	20		20		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. Low flow partially regulated by Loch Lomond Reservoir since 1961, capacity, 8,820 acre-ft, and by an inflatable fiber dam located 6.8 mi upstream from gage. Water is diverted 50 ft upstream from station by city of Santa Cruz for municipal supply; many small diversions upstream from station for domestic supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,400 ft³/s, Dec. 23, 1955, gage height, 23.10 ft, site and datum then in use, from rating curve extended above 4,500 ft³/s on basis of slope-area measurement of peak flow; no flow for several days in 1955 and many days in 1960.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1400	2,200	9.08	Feb. 4	1015	4,590	11.35
Jan. 16	1515	2,020	8.84	Feb. 19	1730	6,150	12.46
Jan. 27	1315	3,470	10.41	Mar. 12	0800	2,900	9.67
Jan. 31	1030	3,240	10.19				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	22	13	50	722	603	383	89	91	44	26	18
2	15	15	13	47	435	504	282	86	87	43	26	18
3	16	15	13	45	379	447	219	84	84	43	25	18
4	14	15	14	43	2890	617	201	85	80	42	25	18
5	14	14	15	42	2200	684	186	84	77	41	26	18
6	14	15	16	41	1020	534	169	82	76	41	26	18
7	14	14	14	39	681	454	163	81	73	41	26	17
8	14	14	13	38	514	397	156	79	69	41	25	18
9	14	14	13	38	417	355	153	79	69	40	25	17
10	16	14	13	e37	345	342	151	77	64	40	26	17
11	14	14	349	e35	297	371	140	75	63	38	27	16
12	14	14	1160	e34	261	1560	134	74	63	37	24	16
13	14	14	259	34	233	934	132	73	62	36	22	16
14	13	13	133	34	212	641	127	72	61	36	21	19
15	14	13	137	34	202	531	134	118	61	36	21	17
16	14	13	104	779	295	460	190	589	60	36	21	17
17	14	14	79	337	252	410	156	268	58	36	21	16
18	14	14	78	506	251	362	220	303	57	34	21	15
19	15	14	73	628	3220	354	156	214	56	33	22	15
20	14	14	60	241	e2200	320	146	175	54	32	21	15
21	14	14	56	476	e3000	291	138	164	54	33	21	15
22	14	15	58	265	1480	280	129	161	53	31	20	15
23	13	14	58	191	935	266	119	132	52	31	20	15
24	13	14	52	351	733	253	113	124	51	30	20	16
25	13	14	50	1320	621	240	109	112	50	30	20	19
26	13	13	47	426	516	227	105	108	51	29	20	17
27	13	13	44	1350	534	217	102	105	52	29	19	16
28	13	14	44	735	532	221	97	103	50	28	19	16
29	14	13	49	408	755	204	94	96	48	28	18	19
30	14	13	63	348	---	195	93	94	46	27	18	17
31	16	---	56	1790	---	188	---	93	---	27	17	---
TOTAL	436	426	3146	10742	26132	13462	4697	4079	1872	1093	689	504
MEAN	14.1	14.2	101	347	901	434	157	132	62.4	35.3	22.2	16.8
MAX	16	22	1160	1790	3220	1560	383	589	91	44	27	19
MIN	13	13	13	34	202	188	93	72	46	27	17	15
AC-FT	865	845	6240	21310	51830	26700	9320	8090	3710	2170	1370	1000

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.6	22.2	153	275	322	235	135	64.7	30.2	15.8	9.14	9.26
MAX	28.9	52.9	1366	1132	1254	999	1017	179	70.0	45.0	30.0	40.4
(WY)	1990	1995	1956	1995	1958	1995	1958	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1953 - 1996			
ANNUAL TOTAL	92817				67278							
ANNUAL MEAN	254				184				106			
HIGHEST ANNUAL MEAN									293			
LOWEST ANNUAL MEAN									21.5			
HIGHEST DAILY MEAN	8600				Mar 10				17400			
LOWEST DAILY MEAN	13				Oct 14				.00			
ANNUAL SEVEN-DAY MINIMUM	13				Oct 22				.00			
INSTANTANEOUS PEAK FLOW					6150				30400			
INSTANTANEOUS PEAK STAGE					12.46				23.10			
ANNUAL RUNOFF (AC-FT)	184100				133400				76750			
10 PERCENT EXCEEDS	584				465				221			
50 PERCENT EXCEEDS	61				49				22			
90 PERCENT EXCEEDS	14				14				2.3			

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.--Records poor. No regulation or diversion upstream from station. Low flows affected by return flow from urban irrigation and by periodic flushing of upstream county well.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,090 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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 11	2030	517	7.61	Jan. 27	0915	621	8.10

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.62	.30	.64	11	10	20	1.9	e.70	.27	.19	.20
2	.18	.26	.56	.63	6.2	8.0	6.5	1.3	e1.4	.26	.18	.21
3	.11	.24	.58	.75	10	8.2	5.2	.63	e1.2	.25	.18	.31
4	.40	.24	.47	.52	94	35	4.8	1.0	e.98	.22	.20	.21
5	.08	.21	.62	.50	32	14	3.6	.57	e.84	.25	.22	.16
6	.07	.26	.48	.47	16	8.9	4.1	.67	e.84	.20	.18	.19
7	.31	.21	.36	.48	11	7.2	3.5	.68	e.73	.23	.21	.12
8	.33	.23	.40	.52	8.4	6.0	3.3	.63	.51	.25	.18	.29
9	.24	.28	.36	.52	7.0	5.1	3.4	.70	.44	.26	.16	.18
10	.16	.23	.41	.51	6.0	5.6	3.4	.48	.44	.28	.13	.18
11	.14	.22	100	.51	5.3	19	2.5	.44	.46	.24	.14	.23
12	.28	.23	41	.46	4.9	102	2.7	.46	.53	.26	.15	.23
13	.38	.28	6.3	.46	4.3	20	.92	.43	.48	.24	.11	.24
14	.11	.28	2.1	.46	4.0	11	1.1	.51	.53	.25	.13	.21
15	.24	.36	11	.44	7.9	8.4	5.7	27	.47	.39	.16	.23
16	.19	.34	2.5	91	15	7.1	6.9	40	.46	.38	.17	.19
17	.15	.32	1.6	9.6	13	6.1	8.3	24	.43	.35	.16	.17
18	.12	.32	3.6	40	27	5.5	2.7	13	.36	.27	.19	.18
19	.13	.29	1.3	9.5	209	4.9	2.4	6.7	.32	.29	.22	.17
20	.16	.32	1.1	12	38	3.5	4.3	4.0	.30	.25	.15	.20
21	.18	.28	.86	18	35	2.8	1.9	4.4	.32	.24	.15	.18
22	.10	.29	1.7	7.0	16	2.9	1.7	1.4	.33	.25	.16	.32
23	.10	.27	.80	3.2	9.5	4.1	2.1	1.5	.31	.27	.21	.34
24	.12	.27	.77	57	8.3	4.5	1.9	2.5	.28	.26	.19	.37
25	.12	.29	.68	30	6.6	4.0	3.0	2.0	.30	.25	.21	.31
26	.13	.43	.52	8.1	4.7	4.1	.35	1.9	.41	.28	.23	.31
27	.11	.32	.50	85	11	2.7	.17	e1.7	.50	.27	.18	.44
28	.11	.26	.48	11	12	2.6	.14	e1.7	.33	.24	.32	.30
29	.13	.34	2.0	6.1	18	2.4	.38	e1.5	.29	.23	.15	.29
30	.21	.39	.95	19	---	2.2	1.0	e1.4	.28	.17	.15	.33
31	1.5	---	.78	75	---	2.4	---	e1.2	---	.22	.11	---
TOTAL	6.75	8.88	185.08	489.37	651.1	330.2	107.96	146.30	15.77	8.07	5.47	7.29
MEAN	.22	.30	5.97	15.8	22.5	10.7	3.60	4.72	.53	.26	.18	.24
MAX	1.5	.62	100	91	209	102	20	40	1.4	.39	.32	.44
MIN	.07	.21	.30	.44	4.0	2.2	.14	.43	.28	.17	.11	.12
AC-FT	13	18	367	971	1290	655	214	290	31	16	11	14

e Estimated.

11161300 CARBONERA CREEK AT SCOTTS VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.62	1.63	4.58	11.9	15.5	11.7	1.56	1.33	.27	.096	.14	.18
MAX	3.01	4.86	10.9	41.0	63.9	32.0	3.70	4.72	.93	.39	.91	.68
(WY)	1990	1989	1989	1995	1986	1986	1995	1996	1995	1995	1989	1989
MIN	.039	.002	.51	.35	.95	.25	.41	.098	.002	.005	.000	.000
(WY)	1987	1987	1987	1991	1988	1988	1987	1987	1987	1990	1985	1992

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1985 - 1996			
ANNUAL TOTAL	2780.81				1962.24							
ANNUAL MEAN	7.62				5.36				4.12			
HIGHEST ANNUAL MEAN									10.1			
LOWEST ANNUAL MEAN									1.33			
HIGHEST DAILY MEAN	301				209				352			
LOWEST DAILY MEAN	.07				.07				.00			
ANNUAL SEVEN-DAY MINIMUM	.11				.11				.00			
INSTANTANEOUS PEAK FLOW					621				1090			
INSTANTANEOUS PEAK STAGE					8.10				10.05			
ANNUAL RUNOFF (AC-FT)	5520				3890				2980			
10 PERCENT EXCEEDS	15				11				6.2			
50 PERCENT EXCEEDS	.78				.46				.33			
90 PERCENT EXCEEDS	.19				.17				.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, which are poor. 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, or maximum;

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1300	927	7.38	Feb. 19	1800	1,360	7.45
Feb. 4	1400	3,180	11.50				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	4.1	4.1	37	154	218	86	24	e19	11	6.0	4.3
2	4.6	4.2	4.3	29	103	177	86	23	e18	10	5.9	4.4
3	4.4	4.3	4.5	24	89	155	65	22	e18	9.8	6.0	4.4
4	4.3	4.3	5.5	20	1230	190	58	22	e17	9.7	5.9	4.3
5	4.2	4.3	6.3	18	797	238	54	21	e17	9.6	6.1	4.3
6	4.3	4.3	5.6	16	352	180	50	21	e16	9.4	5.8	4.3
7	4.1	4.3	5.3	15	262	152	48	e20	15	9.3	5.9	4.1
8	4.1	4.2	5.3	14	223	135	46	e19	15	9.2	5.8	4.1
9	4.2	4.1	5.3	14	201	121	44	e19	15	9.1	5.7	4.0
10	4.4	4.1	5.3	13	189	110	42	e18	14	9.0	5.6	3.9
11	4.3	4.1	24	12	166	107	40	e18	12	8.6	5.4	4.0
12	4.2	4.1	352	11	148	243	38	e17	13	8.4	5.3	3.9
13	4.1	4.1	76	11	136	221	37	e17	14	8.3	5.2	4.3
14	4.1	4.1	46	11	123	157	35	e16	14	8.1	5.1	4.4
15	4.2	4.1	42	11	121	132	36	23	14	8.1	5.0	4.6
16	4.1	4.1	37	e135	119	119	41	55	13	8.0	4.9	4.6
17	4.3	4.1	26	e84	117	108	38	43	13	8.1	4.8	4.5
18	4.3	4.1	24	e105	117	99	44	49	13	8.0	4.8	4.1
19	4.3	4.1	22	e100	641	92	37	39	13	7.8	5.0	3.9
20	4.2	4.1	18	e96	732	85	35	32	12	7.4	4.9	3.8
21	4.1	4.1	16	e173	815	80	34	30	13	7.2	5.1	3.8
22	4.1	4.1	20	e112	e510	76	32	31	13	6.9	5.1	3.7
23	4.2	4.1	23	e65	e350	71	31	28	12	6.8	5.0	3.7
24	4.1	4.1	17	e103	258	68	30	26	12	6.8	4.9	3.8
25	4.0	4.1	15	e190	229	64	29	24	12	6.8	4.9	3.9
26	3.9	4.1	14	e152	189	61	28	23	12	6.6	4.9	3.9
27	3.9	4.1	13	e360	188	59	27	23	12	6.5	4.9	3.9
28	3.9	4.1	13	e260	175	65	26	22	12	6.4	4.9	3.8
29	3.9	4.1	15	e180	276	57	25	21	11	6.4	4.8	3.8
30	3.9	4.1	73	95	---	53	24	21	11	6.2	4.7	3.8
31	4.0	---	50	258	---	50	---	e19	---	6.0	4.5	---
TOTAL	130.4	124.2	987.5	2724	9010	3743	1246	786	415	249.5	162.8	122.3
MEAN	4.21	4.14	31.9	87.9	311	121	41.5	25.4	13.8	8.05	5.25	4.08
MAX	5.7	4.3	352	360	1230	243	86	55	19	11	6.1	4.6
MIN	3.9	4.1	4.1	11	89	50	24	16	11	6.0	4.5	3.7
AC-FT	259	246	1960	5400	17870	7420	2470	1560	823	495	323	243

e Estimated.

11162500 PESCADERO CREEK NEAR PESCADERO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.53	13.3	56.5	115	119	96.2	55.1	18.6	8.59	4.86	3.34	2.57
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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1951 - 1996	
ANNUAL TOTAL	30802.1		19700.7			
ANNUAL MEAN	84.4		53.8		41.2	
HIGHEST ANNUAL MEAN					164	
LOWEST ANNUAL MEAN					1.72	
HIGHEST DAILY MEAN	2070	Mar 10	1230	Feb 4	5560	Dec 23 1955
LOWEST DAILY MEAN	3.9	Oct 26	3.7	Sep 22	.00	Sep 9 1961
ANNUAL SEVEN-DAY MINIMUM	3.9	Oct 25	3.8	Sep 19	.00	Aug 17 1977
INSTANTANEOUS PEAK FLOW			3180	Feb 4	9420	Dec 23 1955
INSTANTANEOUS PEAK STAGE			11.50	Feb 4	21.27	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	61100		39080		29840	
10 PERCENT EXCEEDS	194		153		85	
50 PERCENT EXCEEDS	19		13		6.7	
90 PERCENT EXCEEDS	4.1		4.1		1.3	

PILARCITOS CREEK BASIN

11162630 PILARCITOS CREEK AT HALF MOON BAY, CA

LOCATION.--Lat 37°28'00", long 122°25'59", on north boundary of Miramontes Grant, San Mateo County, Hydrologic Unit 18050006, on left bank 50 ft downstream from State Highway 1, 0.3 mi northwest of town of Half Moon Bay, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--27.1 mi².

PERIOD OF RECORD.--July 1966 to current year.

SEDIMENT DATA: June 1990.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 31.51 ft above sea level. Prior to Nov. 17, 1983, at site 800 ft downstream at different datum.

REMARKS.--Records fair except for discharges less than 1 ft³/s, which are poor. Flow slightly regulated by storage in Pilarcitos Lake 10 mi upstream, capacity, 3,100 acre-ft. Water is diverted to city of San Francisco water system; small diversions for irrigation upstream from station by pumping.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s, Jan. 4, 1982, gage height, 13.08 ft, site and datum then in use, from rating curve extended above 1,000 ft³/s on basis of contracted-opening measurement of peak flow; no flow at times in most years.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0930	244	3.88	Feb. 4	1115	596	6.05
Dec. 29	1900	220	3.71	Feb. 21	0645	967	7.99
Jan. 21	0230	337	4.49	Feb. 28	2400	244	3.97
Jan. 27	0930	961	7.96	Mar. 4	1500	762	6.95
Jan. 31	1000	1,000	8.16	Mar. 12	1115	613	6.15

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	2.7	.46	27	141	66	57	2.5	6.0	2.1	.51	.76
2	.27	2.5	.48	19	76	57	43	2.1	5.8	1.7	.51	.88
3	.13	1.4	.38	14	72	57	28	2.0	5.1	2.0	.82	.50
4	.18	.27	6.6	13	285	217	26	2.3	4.0	1.8	1.0	.41
5	.21	.20	.97	9.2	168	133	24	2.3	3.8	1.7	1.0	.37
6	.26	.23	.66	7.8	105	75	23	2.5	3.8	1.8	1.1	.45
7	.19	.34	.61	7.2	76	58	22	1.7	2.5	2.4	1.0	.41
8	.35	.35	.87	7.3	59	48	21	.99	3.2	2.7	1.3	.56
9	.35	.34	1.5	7.2	47	45	19	1.3	3.4	2.1	.99	.47
10	.17	.34	1.4	6.9	38	42	17	.93	3.6	2.5	.66	.40
11	.15	.31	69	6.8	32	41	16	.83	3.6	2.7	1.0	.35
12	.26	.35	97	6.5	27	404	15	.67	3.7	1.8	1.1	.56
13	.24	.30	64	6.2	23	198	14	.57	4.2	2.9	.70	.33
14	.20	.27	73	6.2	21	115	13	1.1	3.5	2.9	.67	.38
15	.30	.19	68	12	23	88	15	18	3.7	2.3	.59	.53
16	.25	.22	33	141	22	75	21	23	4.2	1.8	.74	.61
17	.25	.32	22	63	20	65	20	12	4.1	2.3	.89	.49
18	.24	.37	16	107	21	60	20	16	3.4	1.9	1.1	.26
19	.26	.37	12	106	103	52	16	14	2.1	1.5	.86	.31
20	.24	.38	9.8	67	166	47	16	13	1.7	1.3	.73	.28
21	.34	.27	8.5	171	436	42	16	13	2.6	1.1	.91	.43
22	.30	.26	13	80	169	38	15	13	2.0	.82	.95	.50
23	.27	.29	9.2	50	94	35	15	12	2.0	.79	1.0	.44
24	.28	.29	5.3	77	77	33	14	10	2.1	1.3	1.1	.44
25	.27	.30	4.2	167	62	32	14	9.2	2.8	1.0	1.2	.28
26	1.2	.35	3.5	106	58	29	13	9.3	4.2	.84	1.0	.43
27	2.3	.35	2.9	310	69	29	8.4	9.7	3.6	1.0	.80	.48
28	.33	.25	2.3	125	67	31	7.4	9.1	2.8	1.1	.70	.48
29	.23	.23	71	69	104	26	4.5	8.7	2.5	1.1	.56	.46
30	.88	.26	108	54	---	24	3.4	8.1	2.9	.77	.55	.38
31	2.5	---	46	390	---	23	---	7.0	---	.46	.68	---
TOTAL	13.74	14.60	751.63	2239.3	2661	2285	556.7	226.89	102.9	52.48	26.72	13.63
MEAN	.44	.49	24.2	72.2	91.8	73.7	18.6	7.32	3.43	1.69	.86	.45
MAX	2.5	2.7	108	390	436	404	57	23	6.0	2.9	1.3	.88
MIN	.13	.19	.38	6.2	20	23	3.4	.57	1.7	.46	.51	.26
AC-FT	27	29	1490	4440	5280	4530	1100	450	204	104	53	27

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.13	5.46	15.6	42.5	41.8	39.5	18.7	5.76	2.05	.89	.53	.33
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1966 - 1996			
ANNUAL TOTAL	8439.61				8944.59							
ANNUAL MEAN	23.1				24.4				14.4			
HIGHEST ANNUAL MEAN									73.9			
LOWEST ANNUAL MEAN									.51			
HIGHEST DAILY MEAN	568				436				2150			
LOWEST DAILY MEAN	.13				.13				.00			
ANNUAL SEVEN-DAY MINIMUM	.22				.22				.00			
INSTANTANEOUS PEAK FLOW					1000				4750			
INSTANTANEOUS PEAK STAGE					8.16				13.08			
ANNUAL RUNOFF (AC-FT)	16740				17740				10440			
10 PERCENT EXCEEDS	64				71				29			
50 PERCENT EXCEEDS	5.8				2.7				1.8			
90 PERCENT EXCEEDS	.30				.30				.00			

SAN FRANCISCO BAY

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).

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 50,900 microsiemens, May 26, June 30, and July 1, 1991; minimum recorded, 9,670 microsiemens, Mar. 24, 1995.

WATER TEMPERATURE: Maximum recorded, 18.5°C, several days in July 1992, June 12, Aug. 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, 49,600 microsiemens, Dec. 12; minimum recorded, 10,600 microsiemens, Feb. 28.

WATER TEMPERATURE: Maximum recorded, 17.5°C, Oct. 2, July 21; minimum recorded, 10.5°C, Jan. 29, 30.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	48200	42800	47800	45800	48200	46000	47300	40900	46000	34800	41600	18100
2	48600	42000	47700	46000	48200	45600	47600	40700	45300	34600	42000	19600
3	48100	42300	47800	46000	48100	46200	47500	41900	45100	34300	41400	24200
4	48200	42100	47800	46100	47900	46000	47300	41900	46700	36200	42200	29700
5	48000	43100	47900	46200	48000	45900	47500	41100	45900	31300	40300	25300
6	47500	44100	48000	46100	47800	45900	47200	41700	44500	29200	39900	21800
7	47300	44800	48300	46200	47800	45800	46700	40200	43900	26800	39200	21000
8	47200	44300	48300	46200	47800	45700	46900	41900	42500	24500	39300	21400
9	47400	44200	48200	46200	47900	45500	47200	42500	43900	23300	39100	22500
10	47900	44400	48400	44400	48000	46000	46900	41400	42600	20900	39700	22800
11	48100	44400	48500	45700	48000	45800	47000	40900	41400	18500	39600	22500
12	48600	44300	48500	45400	49600	45000	46900	40900	42800	19000	38200	21100
13	48200	43000	48600	44500	48300	41900	46800	41300	41800	19000	39100	19500
14	48600	43000	48500	44500	47400	41600	47500	41000	42600	24500	42100	22300
15	47800	42300	48700	43600	47800	40700	47700	41700	43400	28500	43300	27500
16	47700	42000	48400	44300	47200	39100	46900	43800	42800	31300	44600	30500
17	48200	41200	48200	41600	47700	39200	46800	42600	42300	32900	43900	30500
18	48600	41100	47900	45500	47200	41800	46900	43200	43000	33000	43800	32600
19	48800	40600	48100	42500	47100	41700	46700	42400	44100	33200	44200	31900
20	48100	40900	48100	45700	46600	42100	46300	42800	44700	31400	44200	31600
21	47900	44800	47800	45800	46400	41500	45900	42200	45500	27400	44500	32400
22	47800	44400	47900	45500	46500	41000	45600	41900	43500	22100	44900	30000
23	47900	44900	47900	45500	46900	41300	45800	41700	42300	19500	44200	29900
24	47800	43900	48000	45600	46400	40900	45700	42400	41700	16100	45700	27800
25	47700	45200	47900	45700	47000	41300	44800	36300	39800	11300	45400	27000
26	47700	45400	48100	45700	47100	41500	46200	36300	33800	11900	44500	25100
27	47900	45600	48200	45100	47100	41200	46100	32800	33800	11900	47200	25400
28	48000	45500	48500	45900	46500	41500	45500	32200	38400	10600	47000	28000
29	48000	45600	48200	46100	47100	40700	46000	32200	39300	17900	46600	28800
30	48000	45700	48000	46000	46400	40500	45800	30900	---	---	47200	29200
31	47800	45800	---	---	46400	41300	45900	33300	---	---	46400	32400
MONTH	48800	40600	48700	41600	49600	39100	47700	30900	46700	10600	47200	18100

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

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	46600	36100	47500	40100	47300	39000	48000	44500	48600	46200	48700	47200
2	45600	37300	47800	40800	47400	38600	48100	44500	48400	46400	48800	47100
3	45000	37700	48000	41300	47500	39400	48100	44800	48400	46600	49000	47200
4	45600	35600	---	---	47400	39700	47900	44800	48500	46800	49000	47200
5	46900	36400	48100	42200	47800	39700	47800	44800	48500	47000	48900	46400
6	46800	37400	48000	42600	48000	40700	47900	45000	48400	46800	49200	46100
7	47400	37000	47800	42800	48000	41600	48000	45500	48400	46600	49200	46200
8	46900	35700	48100	42400	48000	40000	48300	46100	48500	46500	49300	46000
9	46300	37900	48900	42500	48500	41600	48600	45600	48500	46200	49300	46400
10	46100	36600	48600	41300	48400	41600	48500	45600	48500	46100	49100	46700
11	47200	36100	48400	41200	48000	41900	48500	45300	48600	46100	49100	46800
12	47000	36400	48600	43200	48200	42000	48400	45500	48600	46200	49000	46800
13	47200	37700	48300	43600	48200	42200	48300	45600	48500	46300	48700	46800
14	47000	38100	48000	43100	47900	42400	48200	45600	48600	46200	48800	46800
15	46500	39600	47800	42700	48000	41000	48300	45500	48500	46300	48700	47000
16	45800	40200	47800	43300	48000	42300	48100	45600	48500	46300	49100	46600
17	45500	39400	48000	43200	47900	42600	48100	45700	48500	46500	48900	46500
18	45900	37000	48600	39900	47900	42200	48100	45400	48500	46700	49200	46400
19	45800	37800	48200	39400	48100	42700	48300	45100	48300	46900	49400	46200
20	46000	35800	47000	37700	48300	42200	48400	44900	48500	46500	49300	46200
21	46100	38500	46800	35700	48300	42200	48300	44500	48900	46400	49500	45900
22	45900	35500	47000	33900	49200	42700	48400	45500	48900	46500	49300	46600
23	45300	34200	47000	31600	49100	41600	48100	45400	48800	46400	49300	46600
24	45500	33100	47800	31900	48300	42300	48100	45800	48700	46400	49200	47100
25	45100	31800	48400	27800	48700	43500	48100	45200	48800	46300	49000	47100
26	46700	29500	47700	35600	48600	44600	48100	45300	48600	46400	48800	47200
27	47300	32000	47100	32200	48500	44900	48200	45400	48700	46200	48700	47300
28	47900	32900	47500	35700	48200	44500	48200	45300	48300	46100	48600	47200
29	47400	35600	47400	36600	48100	44500	48300	45500	48200	46200	48600	47200
30	47700	38300	48000	36900	48200	44400	48500	45800	48500	46400	48800	47300
31	---	---	47400	39100	---	---	48500	45900	48600	46600	---	---
MONTH	47900	29500	---	---	49200	38600	48600	44500	48900	46100	49500	45900

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

WATER-QUALITY RECORDS

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	48300	45000	48800	46100	---	---	---	---	---	---
2	---	---	48400	45900	48400	46000	---	---	45300	33900	---	---
3	---	---	48400	45800	48500	46000	---	---	45200	34000	---	---
4	---	---	48100	45800	49100	46100	---	---	46500	35900	---	---
5	---	---	48100	46000	48500	45900	---	---	45500	29700	---	---
6	---	---	48400	46100	48200	45800	---	---	44900	28900	---	---
7	---	---	48700	46000	48100	45800	---	---	45100	25700	---	---
8	---	---	48600	46100	48000	45300	---	---	44000	24800	---	---
9	---	---	48500	46100	47900	44600	---	---	44100	24200	---	---
10	---	---	48600	45600	48200	44400	---	---	44000	20900	---	---
11	---	---	48800	45100	48100	44600	46800	39200	44600	18400	---	---
12	---	---	48700	44200	---	---	47100	39800	44900	18500	---	---
13	---	---	48800	43400	---	---	48100	39400	43500	19500	---	---
14	---	---	48700	43700	---	---	47300	39100	44200	23800	---	---
15	---	---	48600	43700	---	---	46900	39100	44600	27900	---	---
16	---	---	48400	43300	---	---	47200	43000	44000	32000	---	---
17	---	---	48300	43800	---	---	47000	41700	43300	34500	---	---
18	48600	39700	48200	45000	---	---	47300	42300	42700	34100	---	---
19	48600	40300	48400	45300	---	---	47100	40500	43800	34200	---	---
20	48100	41100	48400	45400	---	---	46600	41800	---	---	---	---
21	48200	44400	48600	45800	---	---	46600	40900	---	---	---	---
22	48600	44400	48500	45700	---	---	45500	39100	---	---	---	---
23	48400	44800	49100	45700	---	---	46000	39900	---	---	47500	30900
24	48300	45000	48700	45600	---	---	45900	42500	---	---	47300	23600
25	48300	45100	48600	45700	---	---	46900	35200	---	---	47300	23200
26	48300	45300	48800	45900	---	---	45800	35700	---	---	47900	20000
27	48400	45400	48600	45600	---	---	46500	32400	---	---	48900	22600
28	48500	45400	48800	45900	---	---	45300	32400	---	---	47700	26300
29	48400	45700	48600	45600	---	---	45800	29000	---	---	47800	26400
30	48300	45600	48500	45400	---	---	46000	29400	---	---	47500	27900
31	48200	45300	---	---	---	---	46600	32400	---	---	46400	30400
MONTH	---	---	49100	43300	---	---	---	---	---	---	---	---

374906122281801 SAN FRANCISCO BAY AT GOLDEN GATE BRIDGE, CA--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	46200	35300	46300	39600	46000	38400	46800	43300	48300	46200	48500	46900
2	44900	33900	46400	40500	46600	38500	46900	43600	48600	46400	48700	47000
3	44800	33500	46400	41200	46200	38900	46800	43800	48400	46500	48600	46900
4	44800	33300	46500	41400	46100	39000	46800	44000	48900	46700	48400	46800
5	45200	31200	46500	39400	46200	39900	47500	44400	48600	46900	48300	45700
6	46100	35200	46600	41600	46700	40700	47000	44600	48500	46900	48300	44400
7	46200	34600	46400	41100	46300	40000	47600	44900	48600	46800	48300	45100
8	46900	31700	46500	40300	46500	39200	47700	45400	48500	46600	48100	44400
9	46200	31800	46400	39900	46900	40700	47900	45400	48500	46200	48100	45100
10	45700	32100	46600	39100	46600	40500	48100	45100	48600	46400	48100	45600
11	46300	33000	46700	39000	46900	40600	47900	45100	48700	46500	48100	45900
12	46700	32900	46800	40900	46800	42100	47900	45300	48700	46700	48000	46000
13	48800	34900	47000	42400	46700	42000	47900	45400	48500	46800	48100	46100
14	47400	35800	46900	42500	46500	41300	47800	45500	48600	46600	48100	46200
15	46900	39100	46800	42600	46500	41700	47800	45500	48500	46800	48000	46200
16	46700	40700	47000	42700	46500	41500	47900	45700	48600	46600	47900	46000
17	47600	39000	47400	42500	46600	41300	48000	45800	48900	47000	48300	45800
18	47000	39300	47500	41200	46900	41000	47800	45100	48600	47000	48500	45300
19	47900	37800	47300	40500	46900	40200	48100	44800	48600	47000	48300	45000
20	46600	36100	46700	37500	47000	40000	48100	44000	49000	46900	48400	44800
21	48700	34500	46900	34400	46300	36700	48200	44600	49000	46900	48300	45100
22	46300	30800	46600	32200	47100	41000	48200	45300	48900	46200	48500	46000
23	46500	31300	46600	27100	47300	40500	48200	45400	48600	46200	48500	46100
24	45200	32400	47100	30700	46700	41500	48000	45200	48600	46500	48300	46400
25	45500	27100	47900	26000	46700	42200	48000	45100	48700	46500	48400	46600
26	46400	28900	46700	35300	46800	43100	48100	45700	48600	46600	48500	46600
27	46200	30500	47000	32000	46600	43100	48100	45800	48400	46400	48300	46900
28	46500	32300	47000	34700	46500	42900	48200	45800	48300	46400	48100	46900
29	46200	35200	46700	33800	46500	41100	48300	45700	48600	46400	48500	46900
30	46300	37400	46400	35200	46900	43000	48300	45800	48500	46600	48300	46900
31	---	---	46000	37300	---	---	48300	46100	48500	46700	---	---
MONTH	48800	27100	47900	26000	47300	36700	48300	43300	49000	46200	48700	44400

374906122281801 SAN FRANCISCO BAY AT GOLDEN GATE BRIDGE, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

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

WATER-QUALITY RECORDS

LOCATION.--Lat 37°47'27", long 122°23'05", in SE 1/4 NW 1/4 sec.2, T.2 S., R.5 W., in San Miguel Grant, San Francisco County, Hydrologic Unit 18050002, at end of Pier 24 and directly under the west end of the San Francisco-Oakland Bay Bridge.

PERIOD OF 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 9.0 ft below Mean Lower Low Water (MLLW). Lower probe is set at 39.0 ft below MLLW.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 50,700 microsiemens, Aug. 13, 1991; minimum recorded, 6,010 microsiemens, Mar. 24, 1995.

(Lower probe) Maximum recorded, 50,300 microsiemens, Sept. 6, 9-12, 1991; minimum recorded, 3,040 microsiemens, Mar. 18, 1995.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 20.5°C, July 23, 1992; minimum recorded, 7.5°C, Dec. 26, 30, 1990, Jan. 1-3, 1991.

(Lower probe) Maximum recorded, 20.0°C, on several days in July 1992; minimum recorded, 7.5°C, Jan. 2, 3, 1991.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 48,100 microsiemens, July 13, Sept. 2; minimum recorded, 10,100 microsiemens, Feb. 25.

(Lower probe) Maximum recorded, 48,500 microsiemens, July 24; minimum recorded, 10,200 microsiemens, Feb. 25.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 19.5°C, July 30, 31; minimum recorded, 10.5°C, Jan. 29-31, Feb. 1.

(Lower probe) Maximum recorded, 19.5°C, July 30, 31; minimum recorded, 10.5°C, Jan. 28-31, June 1.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(UPPER PROBE)

[illegible]

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

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	41300	32100	42900	36100	43400	33100	47500	43400	46900	44200	47900	46100
2	39400	29600	43000	37900	43300	33000	47200	43400	46700	44500	48100	46200
3	38300	30500	43600	38400	43900	36000	47300	42400	46900	44900	47600	45600
4	38400	29400	44200	38400	43800	35700	46700	42600	47200	44900	47900	44300
5	40000	28700	44400	37500	---	---	46600	43300	47100	45300	47700	44600
6	41400	27700	44400	38500	44600	36900	46900	43000	47200	45100	46800	42300
7	41900	29200	44200	39200	44900	38000	47300	43200	47100	44200	46800	42500
8	42100	30300	44100	37200	44700	38500	47300	43400	47100	43400	47300	42500
9	41000	30100	44300	36600	44400	36300	47900	44000	47100	43400	46900	42900
10	39900	29000	43600	36000	44400	35700	48000	43700	47000	43300	46500	43400
11	40700	29600	43400	35500	46000	36100	47800	43300	46900	44500	47100	44100
12	40400	29000	43700	36300	46100	38400	47700	43100	46800	44800	47100	44500
13	41900	30100	44200	35500	45900	37700	48100	43300	46900	44300	47100	44900
14	42200	31000	43400	37900	45700	38600	47800	43800	46700	44700	47100	44100
15	42000	31700	44800	38800	45900	38800	47500	43700	46400	43200	47100	44900
16	42900	34800	44400	39600	46200	40100	47700	44500	46200	43200	46900	43600
17	41900	34700	---	---	45900	39800	47500	44900	45900	43400	46300	43500
18	42100	33800	43900	35700	46300	39100	47300	43600	45800	43100	---	---
19	40600	30300	44100	32000	46200	38900	47000	43400	45700	43100	47000	43700
20	41000	28500	42400	27700	46500	42100	46700	42400	44600	41400	47000	43500
21	40800	27600	41700	27200	46600	39900	46400	43200	44800	41600	47200	43700
22	40600	26500	41000	25900	47000	41400	46100	43000	44900	41300	47800	44100
23	39500	28400	40300	23600	46800	42000	46200	42700	45500	41700	48000	45600
24	40400	28900	38700	22500	47200	41900	46200	42400	45700	41900	48000	45700
25	39700	27000	39100	25200	47200	42300	47000	42200	46300	41400	48000	45900
26	42300	28200	42300	33300	47200	41300	47000	42700	46600	42800	48000	46200
27	41300	28400	41600	30500	47300	42300	47000	43000	46900	44700	47900	46300
28	42000	31700	43100	29900	47100	42300	47000	42400	47300	44300	48000	46400
29	44200	34100	44100	30800	48000	42600	47000	43500	47600	45700	47900	46400
30	43100	34400	44200	31500	47900	42500	47000	43700	47600	45600	47800	46300
31	---	---	42000	33100	---	---	47000	44100	47700	45900	---	---
MONTH	44200	26500	---	---	---	---	48100	42200	47700	41300	---	---

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

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	46000	38700	---	---	47600	43500	44100	37800	43300	28800	38700	12600
2	45400	36600	---	---	47300	43900	43700	38300	42300	27500	39700	14500
3	45700	36500	---	---	47200	44600	43000	37300	41900	25500	38400	17000
4	44800	39200	---	---	---	---	---	---	43500	28200	39200	23200
5	45600	39300	---	---	---	---	---	---	41900	23900	37500	17600
6	45800	40100	---	---	---	---	---	---	41300	20700	36900	16100
7	45600	41000	---	---	---	---	---	---	41000	18900	37500	16600
8	46200	40800	---	---	---	---	---	---	40800	18800	37400	17500
9	46300	41400	---	---	---	---	---	---	40400	19800	39100	17900
10	45500	40700	---	---	---	---	---	---	41900	18900	39300	20000
11	45900	40900	---	---	---	---	---	---	43000	19200	38300	19200
12	45600	40800	---	---	---	---	---	---	---	---	37700	17900
13	46000	39900	---	---	---	---	43600	37800	---	---	39000	15700
14	46300	39400	---	---	---	---	44500	37100	---	---	42700	17700
15	46100	38800	---	---	---	---	45300	38800	---	---	40900	19400
16	46100	39700	---	---	---	---	46600	41400	---	---	40400	22100
17	45300	38700	---	---	---	---	44900	40000	---	---	41100	23400
18	45700	39400	---	---	---	---	46600	41500	---	---	40900	24000
19	46200	39100	---	---	---	---	46500	39600	---	---	40100	24100
20	45800	40400	---	---	---	---	46300	40100	---	---	40500	24100
21	46400	42400	---	---	---	---	46300	38700	---	---	42300	21600
22	47300	43200	---	---	---	---	45600	37400	---	---	41300	24300
23	47700	43700	---	---	---	---	45200	37600	---	---	40600	20300
24	47600	43600	---	---	---	---	44700	38800	40700	13200	42800	21200
25	---	---	---	---	---	---	44700	32800	41900	10200	42500	23200
26	47400	43800	---	---	---	---	44100	32800	43100	11600	44100	21900
27	47500	43300	47300	44700	---	---	46700	34700	44100	11400	45800	24600
28	47900	44300	46900	44600	---	---	42800	29300	43900	12100	46000	26500
29	47100	44400	47200	43700	---	---	43500	26700	40700	11800	44300	27500
30	46800	44500	47400	43100	---	---	43900	27700	---	---	43800	26700
31	---	---	---	---	---	---	44000	26000	---	---	44100	29500
MONTH	---	---	---	---	---	---	---	---	---	---	46000	12600

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	42900	32500	45300	36900	46600	34100	46800	42300	47500	44900	48100	46000
2	41500	30900	46600	38600	44700	34000	47300	42500	47500	45100	48200	46100
3	42500	31400	46500	39000	46300	36100	47500	42600	47400	45300	48000	45900
4	42500	30900	46500	39000	44600	35800	47200	42800	47300	45200	48100	44400
5	43400	29900	45900	38100	---	---	47200	43500	47200	45000	47900	44500
6	44200	29300	45600	39100	45400	37100	47400	43000	47500	45200	47800	42800
7	43800	30600	45100	39800	45600	37700	47600	43600	47500	44400	47600	43000
8	43700	31000	45100	37700	46300	38200	47700	43700	47400	43700	47500	42900
9	42800	30200	45400	37300	47000	36600	48200	44000	47400	43600	47400	42700
10	41600	29600	46100	36800	47000	36000	48200	43700	47200	43600	47400	43600
11	43300	30200	46000	36100	47300	36600	48200	43300	47400	44700	47200	44400
12	43800	29800	45700	37700	46600	38200	48200	43000	47200	45100	47400	44600
13	43900	30900	45200	36400	45400	37200	48300	43600	47400	44800	47400	45000
14	45000	31900	45000	38900	45400	38100	48300	43900	47200	45000	47500	44300
15	44000	33000	46100	39200	45500	38000	48100	43900	47200	43800	47400	45000
16	43700	35900	45900	39900	45500	39300	48000	44800	47000	44000	47200	44200
17	43300	35400	---	---	45700	38800	48000	45100	46900	44300	47600	43900
18	43200	34300	45000	36600	45800	37900	47900	44100	46900	43900	---	---
19	43100	32100	44900	32800	46200	37600	48000	44000	46400	43900	47400	43500
20	42200	29500	44300	28400	46100	40300	48100	43100	46300	42100	47000	43300
21	41900	29200	44200	28400	45300	38600	47700	43600	46500	42400	47400	43200
22	42200	27900	43700	26200	46400	39700	47500	43400	45700	41500	47600	43900
23	42000	28900	44400	24300	46600	40600	48000	43300	46000	41800	47600	45200
24	41900	29800	46300	23300	46400	40500	48500	43000	46100	42200	47800	45200
25	43000	27900	46300	25500	46100	40300	48100	43000	46500	42700	47600	45400
26	45200	28900	44500	34000	46000	39900	48100	43900	46800	43000	47700	45700
27	45700	29700	45000	31800	46600	40600	48100	44200	47100	44800	47800	45900
28	45700	33100	45500	30800	46600	40600	48100	43600	47400	44400	47900	46000
29	45700	36300	45700	32000	47100	41000	48100	44600	47700	45400	47800	46000
30	45800	35200	45800	31800	47000	41300	48000	44600	47900	45800	47700	46000
31	---	---	45900	33600	---	---	48000	44900	48000	45900	---	---
MONTH	45800	27900	---	---	---	---	48500	42300	48000	41500	---	---

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(UPPER PROBE)

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

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

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(LOWER PROBE)

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

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 September 1994. October 1994 to September 1996 high flow only (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 12.53 ft above sea level.

REMARKS.--Records poor. Low flow affected by return flow from urban irrigation. Channel lowered in 1986. No flow computed below 10 ft³/s.

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 1995 WATER YEAR (NOT PREVIOUSLY PUBLISHED).--

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 9	unknown	unknown	unknown	Mar. 22	unknown	unknown	unknown
Mar. 9	unknown	unknown	unknown				

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 11	unknown	unknown	unknown	Feb. 4	0750	1,600	4.54
Jan. 16	0705	1,590	4.54	Feb. 21	0440	1,130	3.86
Jan. 27	0650	1,320	4.13	Apr. 1	1200	1,360	4.19
Jan. 31	0520	2,640	6.09	Apr. 16	0515	1,020	3.69

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES (NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	e16	---	---	---	e20	---	---	---	---
2	---	---	---	e52	---	e105	---	---	---	---	---	---
3	---	---	e34	e31	---	e45	---	---	---	---	---	---
4	e15	e11	e19	e57	---	---	---	---	---	---	---	---
5	---	e108	---	e16	---	---	---	---	---	---	---	---
6	---	e80	---	e30	---	---	---	---	---	---	---	---
7	---	e12	---	e19	---	---	e35	---	---	---	---	---
8	---	---	---	e32	e35	e43	---	---	---	---	---	---
9	---	e89	---	e122	---	e101	---	---	---	---	---	---
10	---	e11	---	e70	---	e63	---	---	---	---	---	---
11	---	---	e42	e23	---	e15	---	---	---	---	---	---
12	---	---	e38	e43	---	---	e15	---	---	---	---	---
13	---	---	e15	e21	---	e18	e12	e15	---	---	---	---
14	---	---	e38	e25	---	e29	---	e30	e12	---	---	---
15	---	e59	---	e26	---	---	e32	---	e29	---	---	---
16	---	---	---	e11	---	---	---	---	e33	---	---	---
17	---	---	---	---	---	---	e10	---	---	---	---	---
18	---	---	---	---	---	e17	---	---	e12	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	e63	---	e38	---	---	---	---	---	---
21	---	---	---	e24	---	e25	---	---	---	---	---	---
22	---	---	---	e48	---	e97	---	---	---	---	---	---
23	---	---	---	e29	---	e17	---	---	---	---	---	---
24	---	e28	e38	e37	---	---	---	---	---	---	---	---
25	---	e55	---	e11	---	---	---	---	---	---	---	---
26	---	e12	---	e39	---	---	---	---	---	---	---	---
27	---	e26	e36	e91	---	---	e19	---	---	---	---	---
28	---	---	e11	e11	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	e14	---	---	---	---	---
30	---	---	---	e22	---	---	e30	---	---	---	---	---
31	---	---	e38	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

COLMA CREEK BASIN

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	22	---	88	---	---	---	---	---
2	---	---	---	---	11	---	---	---	---	---	---	---
3	---	---	---	---	35	---	---	---	---	---	---	---
4	---	---	---	---	183	56	---	---	---	---	---	---
5	---	---	---	---	23	10	---	---	---	---	---	---
6	---	---	---	---	14	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	e13	---	---	15	---	---	---	---	---	---
11	---	---	e216	---	---	13	---	---	---	---	---	10
12	---	---	e130	---	---	85	---	---	---	---	---	12
13	---	---	e42	---	---	---	---	---	---	---	---	11
14	---	---	---	---	---	---	---	---	---	---	---	11
15	---	---	e58	10	30	---	---	93	---	---	---	---
16	---	---	---	120	---	---	44	34	---	---	---	---
17	---	---	---	---	---	---	20	17	---	---	---	---
18	---	---	e12	47	21	---	---	---	---	---	---	---
19	---	---	---	22	54	---	---	---	---	---	---	---
20	---	---	---	20	28	---	---	---	---	---	---	---
21	---	---	---	22	90	---	---	---	---	---	---	---
22	---	---	e19	---	17	---	---	---	---	---	---	---
23	---	---	---	---	13	---	---	---	---	---	---	---
24	---	---	---	42	11	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	83	23	---	---	---	---	---	---	---
28	---	---	---	---	24	---	---	---	---	---	---	---
29	---	---	e60	---	35	---	---	---	---	---	---	---
30	---	---	e18	66	---	---	---	---	---	---	---	---
31	---	---	---	312	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

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

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

PERIOD OF 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, 11,500 microsiemens, Mar. 17, 1996.

(Lower probe) Maximum recorded, 50,300 microsiemens, Oct. 31, Nov. 4, 9, 1990; minimum recorded, 16,000 microsiemens, Apr. 2, 4, 1995.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 23.5°C, Aug. 1, 2, 28, 1993, Aug. 8, 1995; minimum recorded, 6.5°C, on several days in December 1990 and January 1991.

(Lower probe) Maximum recorded, 23.0°C, on several days in August 1990, July 16, 17, 1992, Aug. 2-6, 1993, July 16, 31, and several days in August 1995; minimum recorded, 6.5°C, Dec. 30, 1990, to Jan. 2, 1991.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 45,100 microsiemens, Sept. 11, 12; minimum recorded, 11,500 microsiemens, Mar. 17.

(Lower probe) Maximum recorded, 46,000 microsiemens, Sept. 9, 13; minimum recorded, 20,700 microsiemens, Mar. 23.

WATER TEMPERATURE: (Upper probe) Maximum recorded, 21.5°C, Sept. 22; minimum recorded, 10.0°C, Jan. 26, 29, Feb. 1.

(Lower probe) Maximum recorded, 22.0°C, July 27; minimum recorded, 11.5°C, Dec. 28, 29.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	41700	40800	41800	40900	---	---	---	---	38700	31000	26800	22500
2	41400	40600	42100	41200	---	---	---	---	37700	30900	26400	21700
3	41800	40500	42300	41200	---	---	---	---	37400	34000	26000	21700
4	42000	41100	42800	41600	---	---	---	---	37000	33700	25700	23600
5	42200	41300	42700	41400	---	---	---	---	36800	30900	25300	23100
6	42100	41200	42900	41400	---	---	---	---	36500	30300	25000	22200
7	42100	41400	42800	41200	---	---	---	---	36200	31200	24900	22300
8	42200	41500	42600	41400	---	---	---	---	35500	32500	24800	21700
9	42300	41600	---	---	---	---	---	---	34600	31300	24700	22200
10	42300	41600	42700	41500	---	---	---	---	33200	30000	24600	22200
11	42300	41600	42800	41600	---	---	---	---	32000	28000	24500	21700
12	42400	41900	---	---	---	---	---	---	30900	25900	24300	23100
13	---	---	---	---	---	---	---	---	29500	25200	23900	20100
14	42500	41700	---	---	---	---	---	---	30000	22900	23900	15800
15	42600	41800	---	---	---	---	---	---	29900	26700	23800	17500
16	42500	41700	---	---	---	---	---	---	29200	27100	23600	16200
17	42300	41700	---	---	---	---	---	---	29200	26200	23800	11500
18	42500	41800	---	---	---	---	---	---	29100	27300	24000	16800
19	42400	41600	---	---	---	---	---	---	29000	26400	24000	18300
20	42200	41300	---	---	---	---	---	---	29100	26100	24200	18600
21	42200	41200	---	---	---	---	---	---	29100	26500	24500	18900
22	42200	41300	---	---	---	---	---	---	29100	25900	23900	19500
23	42300	41400	---	---	---	---	---	---	28900	25500	23800	16400
24	42400	41400	---	---	---	---	---	---	28500	25200	23600	18600
25	42300	41100	---	---	---	---	---	---	27800	24700	23500	19800
26	42000	41100	---	---	---	---	---	---	26700	22500	23600	17000
27	42400	41200	---	---	---	---	41500	38300	24800	21100	24500	19700
28	42100	41100	---	---	---	---	41200	35400	28000	21500	26000	20100
29	41800	41000	---	---	---	---	41300	31900	30800	23200	26400	19600
30	41900	41000	---	---	---	---	40700	33800	---	---	27200	17100
31	41900	41200	---	---	---	---	39600	35000	---	---	28100	16700
MONTH	---	---	---	---	---	---	---	---	38700	21100	28100	11500

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 1995 TO SEPTEMBER 1996
(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	30900	24700	34800	28300	35400	34400	39300	37100	41700	40400	44700	43800
2	30900	26200	35300	30000	35600	34200	39100	37400	41700	40200	44700	43800
3	30600	25800	35500	23400	35700	34000	39000	37400	41900	40600	44800	43700
4	31000	26600	35800	27500	35700	34500	39200	37400	41900	40900	44800	43600
5	31400	26500	36300	29500	35900	34500	39400	37700	42100	41100	44500	43400
6	31200	26800	36500	30500	35900	34400	39600	38200	42500	41200	44500	43300
7	32000	27300	36300	26800	36200	35200	39400	38300	---	---	44100	43200
8	31600	26900	36600	28400	36300	35000	39400	38200	42300	41200	44200	43200
9	31800	26800	36100	30000	36400	34800	39600	38300	42700	41400	44500	43400
10	31400	26600	36300	29300	37200	35500	39700	38400	---	---	44800	43600
11	31300	26300	37000	28300	37700	35700	39800	38400	42900	41500	45100	43800
12	31300	22600	37400	33300	37200	35700	39900	38500	42800	41600	45100	43900
13	32500	19200	37300	33900	37300	35400	39900	38600	42900	41700	44500	43700
14	32700	20700	37600	34100	37300	35100	40100	38700	42900	41800	44400	43400
15	33200	24400	37400	34100	36900	34800	40000	38600	43000	41800	44700	43400
16	32800	29100	37400	34400	37000	35000	40200	38500	43300	42300	44600	43300
17	33300	29100	37700	33700	37400	34900	---	---	43600	42400	44300	43500
18	33100	29600	38100	34100	37200	34200	40600	38900	43800	42700	---	---
19	33400	28500	38100	34300	37600	35100	40800	39000	43400	42400	44600	43700
20	33600	28500	38100	33600	37300	35800	40900	39100	43600	42500	44400	43300
21	33600	27900	37600	32600	37600	35800	40800	39400	43500	42600	44600	43800
22	34100	28900	37500	35100	38200	36000	41000	39800	43900	42600	44800	43700
23	33900	29600	37700	31900	38200	36000	41100	40000	44300	43300	44700	43700
24	33700	30300	37100	33800	37800	36100	41100	39900	44600	43800	44800	43600
25	34100	25400	36200	33500	38100	36400	41000	39900	44600	43800	44500	43500
26	34000	28700	35700	34400	38500	36700	---	---	44900	43700	44700	43400
27	34100	28500	35500	34000	39000	37000	41200	39700	44900	43700	44400	43500
28	34000	24700	35400	34200	39100	37200	41700	39700	44800	43700	44400	43500
29	34000	22200	35500	34300	39300	36900	41500	39800	44800	43800	44400	43400
30	34800	26600	---	---	39200	36900	41900	40000	44900	43700	44600	43600
31	---	---	35400	34200	---	---	41800	40200	44700	43700	---	---
MONTH	34800	19200	---	---	39300	34000	---	---	---	---	---	---

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

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	42200	41100	42100	41100	42800	41700	40400	39500	37500	35700	33400	26500
2	42100	41100	42200	41000	42700	41500	40500	39600	36600	35400	31800	26200
3	42000	41000	42300	41300	42700	41300	40500	39600	35800	35100	28800	25000
4	42100	40800	42600	41400	42900	41400	40700	39900	35700	35200	26600	24500
5	42300	41200	42700	41400	42700	41400	40900	40100	35600	34800	25100	24400
6	42300	41300	42700	41200	42600	41300	41000	40400	35500	34500	24700	24300
7	42200	41300	42700	41300	42500	41000	41100	40400	35300	34300	24600	24300
8	42400	41500	42800	41400	42300	40900	41200	40200	34800	34000	24500	23900
9	42400	41500	---	---	42100	40800	40900	40200	34200	33400	24400	23700
10	42400	41600	42800	41400	41900	40900	40900	40000	33700	33100	24400	23400
11	42400	41400	42800	41600	41800	41000	40800	40000	33300	32300	24300	23400
12	42300	41400	42800	41700	42100	41000	40700	40400	32800	31500	24200	23400
13	---	---	43000	41800	41900	40500	40600	40400	32300	30500	24200	22800
14	42200	41300	42800	41700	41800	40800	40600	40200	31300	28900	24100	22600
15	42200	41400	42800	41800	41700	40600	40600	40000	30100	28500	23800	22000
16	42200	41300	42800	41700	41400	40400	40600	39800	29100	28400	23800	21700
17	42100	41300	42700	41800	41400	39700	40300	38700	29100	28400	24200	21700
18	42300	41300	42700	41600	41500	39800	40300	39000	28900	28500	24400	21600
19	42300	41500	42900	41400	41300	39700	40200	38100	29200	28500	24500	21700
20	42200	41400	43000	41400	41300	39600	40100	38100	29600	28200	24800	21400
21	42200	41400	43000	41100	41000	39400	40200	38200	29900	27900	25200	21500
22	42500	41400	43000	41200	40900	39200	39900	38000	29400	27500	24600	21200
23	42600	41400	43100	41300	40700	39300	39900	38100	29300	27300	24400	20700
24	42600	41200	43000	41300	40500	39300	40000	38600	28600	27000	24700	21500
25	42400	40900	43000	41400	40500	39300	39900	38000	27900	26800	24900	21600
26	42300	40900	42800	41300	40600	39500	39500	38200	27500	26200	28000	21800
27	42000	40800	42700	41400	40500	39900	40200	38700	27100	25000	33200	26900
28	41900	40800	42800	41500	40500	40000	39800	38100	32700	24200	35000	28100
29	42000	41000	42700	41700	40400	39900	39500	38100	33900	27400	32800	29100
30	42000	41100	42800	41700	40400	40000	39100	37800	---	---	34700	29300
31	42000	41100	---	---	40500	39800	38300	37000	---	---	34100	29500
MONTH	---	---	---	---	42900	39200	41200	37000	37500	24200	35000	20700
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	33100	30100	35300	32400	35700	34700	41200	38100	43700	41400	45000	43700
2	32600	28800	35400	32400	36000	34700	41200	38400	43400	41600	44900	43800
3	31700	28400	35200	32200	36100	34800	41400	38500	43400	41800	45000	43800
4	31600	27900	35300	32300	36100	34800	41300	38700	43400	41800	45500	43800
5	32000	28300	35800	32300	36400	34900	41100	38800	43400	41500	45100	43800
6	32200	28500	36100	32400	36400	35100	41300	38200	43200	41600	45200	44000
7	32700	28600	35900	32400	36300	35100	41500	39700	---	---	45200	44000
8	32400	28700	36100	32300	36500	35200	41600	39800	43500	41500	45300	44000
9	32800	29100	36200	33000	37000	35200	41700	39700	43900	41600	46000	43900
10	32100	28600	37100	32800	37500	35100	41700	39700	---	---	45600	44100
11	31800	28200	37600	33700	38000	35100	42000	39400	44300	42000	45800	44100
12	32300	28500	37900	34500	37800	35200	42100	39500	44300	42100	45800	44300
13	32900	29000	38500	34500	37700	35200	41800	39500	44200	42300	46000	44500
14	32900	29400	38400	34600	37600	35300	41800	39300	44300	42400	45900	44500
15	33500	30100	38500	35000	37600	35300	41500	39100	44300	42500	45700	44200
16	33700	30300	38600	35400	37800	35300	41300	38800	44600	43000	45300	43800
17	33900	30700	38700	35800	37900	35500	---	---	44900	43400	45200	43500
18	33800	30500	39000	36200	38100	35400	41400	39000	45200	43500	---	---
19	33700	30400	38800	36000	38700	36300	41600	39300	45100	43700	45100	44000
20	34300	30800	38300	35700	38400	36100	42200	39900	45100	43500	45200	44000
21	33700	30800	38400	34900	38600	36100	42500	40400	44900	43100	45200	43900
22	35100	31400	38300	35700	39600	36500	42600	40500	44900	43200	45100	44000
23	34200	31200	37800	35100	39400	36800	42700	40600	44800	43100	45100	44000
24	34500	31700	37300	35500	39000	36600	42800	40600	44700	42800	45200	44000
25	34500	31700	38000	35300	39600	36800	42900	40600	45000	42600	45100	43900
26	34400	32400	35600	34900	39900	37000	---	---	44700	42500	45200	44000
27	33900	32300	35500	34800	40300	37500	42800	40000	44600	42400	45200	44100
28	34100	32200	35300	34700	40700	37500	43600	40200	44800	42200	45100	44100
29	34400	32300	35200	34800	41000	37700	43800	40400	45000	43200	45100	44100
30	34900	32400	---	---	41200	37800	43500	40700	45200	43500	45100	44100
31	---	---	35400	34700	---	---	43800	41200	45100	43400	---	---
MONTH	35100	27900	---	---	41200	34700	---	---	---	---	---	---

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(UPPER PROBE)

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

11162765 SAN FRANCISCO BAY AT SAN MATEO BRIDGE, NEAR FOSTER CITY, CA--Continued
(LOWER PROBE)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

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

REDWOOD CREEK BASIN

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 good except for estimated daily discharges, which are 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, or maximum.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 16	1045	146	4.44	Feb. 4	1045	176	4.83
Jan. 27	0815	212	5.27	Feb. 21	0515	186	4.96
Jan. 31	0830	212	5.27				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.06	.08	.28	5.4	3.9	8.1	.37	.14	.08	e.05	.02
2	.05	.05	.06	.26	3.1	2.6	1.9	.33	.15	.07	e.04	.02
3	.05	.05	.06	.25	6.0	2.8	.90	.31	.15	.05	e.03	.02
4	.05	.05	.11	.25	46	17	.77	.29	.12	.05	e.04	.02
5	.05	.05	.05	.23	11	7.2	.70	.29	.12	.05	e.03	.02
6	.05	.05	.05	.22	4.6	3.3	.70	.28	.11	.05	e.03	.02
7	.05	.05	.05	.22	3.2	2.5	.68	.24	.11	.06	e.04	.02
8	.05	.05	.06	.22	2.7	2.1	.63	.26	.09	.06	e.03	.02
9	.04	.05	.05	.23	2.4	1.9	.61	.26	.08	.06	e.03	.02
10	.04	.06	.04	.22	2.0	1.7	.62	.24	.08	.05	e.04	.02
11	.05	.06	20	.24	1.8	1.8	.58	.24	.11	.05	e.03	.02
12	.05	.06	29	.22	1.7	40	.57	.22	.10	e.06	e.03	.02
13	.06	.07	5.6	.22	1.6	9.7	.56	.21	.10	e.06	e.04	.03
14	.06	.08	1.3	.22	1.5	3.7	.56	.22	.11	e.05	e.03	.03
15	.11	.09	9.9	.24	4.0	2.6	.61	2.0	.08	e.05	e.03	.03
16	.05	.09	1.1	35	2.1	2.2	2.3	2.0	.08	e.05	e.04	.02
17	.04	.09	.51	3.0	1.4	1.9	1.2	1.3	.10	e.04	e.04	.02
18	.04	.09	.44	20	4.5	1.7	.88	.67	.11	e.04	e.05	.02
19	.04	.09	.33	5.5	28	1.5	.61	.33	.09	e.05	e.03	.02
20	.05	.10	.27	6.2	21	1.4	.61	.31	.09	e.05	e.02	.02
21	.05	.10	.24	9.9	40	1.3	.57	.41	.10	e.05	e.02	.02
22	.04	.11	2.8	2.9	11	1.2	.58	.33	.12	e.06	e.03	.02
23	.04	.11	.72	1.8	5.2	1.1	.56	.28	.08	e.05	e.03	.02
24	.05	.09	.43	17	5.3	1.0	.56	.26	.06	e.05	e.04	.02
25	.05	.07	.34	12	3.7	.98	.54	.25	.08	e.04	e.04	.02
26	.05	.07	.29	2.7	2.9	.95	.50	.21	.07	e.05	e.04	.02
27	.05	.07	.32	26	3.7	.90	.48	.22	.07	e.07	.04	.02
28	.05	.07	.28	4.5	3.0	.97	.42	.20	.07	e.06	.04	.02
29	.05	.06	.70	2.3	8.7	.86	.40	.16	.06	e.05	.04	.02
30	.05	.07	.36	4.2	---	.79	.39	.15	.06	e.05	.03	.02
31	.05	---	.29	43	---	.71	---	.14	---	e.04	.03	---
TOTAL	1.56	2.16	75.83	199.52	237.5	122.26	29.09	12.98	2.89	1.65	1.08	0.63
MEAN	.050	.072	2.45	6.44	8.19	3.94	.97	.42	.096	.053	.035	.021
MAX	.11	.11	.29	.43	.46	.40	8.1	2.0	.15	.08	.05	.03
MIN	.04	.05	.04	.22	1.4	.71	.39	.14	.06	.04	.02	.02
AC-FT	3.1	4.3	150	396	471	243	58	26	5.7	3.3	2.1	1.2

e Estimated.

11162800 REDWOOD CREEK AT REDWOOD CITY, CA --Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.22	.80	1.65	3.81	3.49	2.67	.93	.24	.092	.041	.031	.037
MAX	2.93	4.84	7.44	13.0	13.9	11.5	4.90	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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1960 - 1996	
ANNUAL TOTAL	690.02		687.15			
ANNUAL MEAN	1.89		1.88		1.16	
HIGHEST ANNUAL MEAN					3.67	
LOWEST ANNUAL MEAN					.096	
HIGHEST DAILY MEAN	69	Mar 22	46	Feb 4	211	Jan 21 1967
LOWEST DAILY MEAN	.04	Aug 28	.02	Aug 20	.00	Oct 1 1959
ANNUAL SEVEN-DAY MINIMUM	.04	Sep 3	.02	Sep 1	.00	Oct 1 1959
INSTANTANEOUS PEAK FLOW			212	Jan 27	644	Jan 31 1963
INSTANTANEOUS PEAK STAGE			5.27	Jan 27	11.55	Nov 29 1970
ANNUAL RUNOFF (AC-FT)	1370		1360		839	
10 PERCENT EXCEEDS	3.6		3.7		1.7	
50 PERCENT EXCEEDS	.26		.11		.10	
90 PERCENT EXCEEDS	.05		.03		.00	

SAN FRANCISQUITO CREEK BASIN

11164500 SAN FRANCISQUITO CREEK AT STANFORD UNIVERSITY, CA

LOCATION.--Lat 37°25'24", long 122°11'18", in San Francisquito Grant, Santa Clara County, Hydrologic Unit 18050003, at golf course on right bank 1.1 mi downstream from Los Trancos Creek, 1.1 mi west of Stanford University Post Office, and 5 mi downstream from Searsville Lake.

DRAINAGE AREA.--37.4 mi².

PERIOD OF RECORD.--October 1930 to September 1941, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 115.75 ft above sea level. Recording rain gage (station 372724122101201) at 345 Middlefield Road in Menlo Park, 2.5 mi northeast of gage (discontinued Sept. 30, 1995).

REMARKS.--Records good. Flow slightly regulated by Searsville Lake, capacity, 952 acre-ft. Diversions of about 800 acre-ft each year upstream from station to Los Trancos and Lagunita Canals for irrigation on Stanford University Campus downstream from station. Low flow affected by wastewater from Stanford Linear Accelerator.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 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 or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 16	1330	1,180	5.03	Feb. 4	1230	1,520	5.72
Jan. 25	0145	1,460	5.59	Feb. 21	0900	1,270	5.21
Jan. 27	1015	1,060	4.77	Mar. 4	1645	745	4.05
Jan. 31	1030	1,090	4.84	Mar. 12	1700	975	4.58

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	1.1	.69	7.7	141	131	67	6.7	4.2	1.8	.67	.45
2	.39	1.0	.75	5.9	84	100	52	6.4	4.2	1.7	.69	.40
3	.38	1.1	.76	4.8	96	89	33	5.9	3.7	1.6	.58	.39
4	.40	1.1	.79	4.1	761	227	27	5.7	3.1	1.5	.51	.39
5	.36	.92	.74	3.8	438	191	23	5.6	2.7	1.5	.50	.39
6	.40	.95	.65	3.7	173	107	20	5.6	2.3	1.4	.57	.39
7	.46	.90	.73	3.6	112	85	20	5.6	2.2	1.4	.54	.39
8	.56	.66	.80	3.4	87	74	17	5.6	2.2	1.4	.57	.37
9	.61	.53	.66	3.4	69	64	12	5.5	1.9	1.4	.53	.39
10	.53	.57	.66	3.4	55	58	12	5.3	1.8	1.4	.49	.39
11	.48	.53	.46	3.3	48	55	12	5.1	1.7	1.4	.48	.41
12	.57	.56	178	3.3	44	627	12	4.9	1.7	1.4	.51	.44
13	.50	.54	51	3.8	39	284	12	4.7	1.7	1.4	.44	.46
14	.51	.54	26	3.1	34	133	11	4.8	1.6	1.4	.43	.44
15	.48	.58	91	2.9	39	96	11	8.7	2.3	1.4	.40	.39
16	.56	.56	33	416	44	80	24	32	3.1	1.4	.39	.38
17	.56	.62	13	100	35	69	19	15	3.0	1.4	.40	.33
18	.52	.66	8.2	272	35	61	20	21	2.8	1.2	.39	.33
19	.40	.66	6.4	176	483	55	14	12	2.8	1.2	.38	.32
20	.49	.61	5.1	56	413	50	12	9.4	2.6	1.2	.38	.33
21	.54	.54	4.4	217	700	43	12	8.1	2.6	1.1	.40	.33
22	.51	.62	14	72	348	40	11	9.9	2.6	.92	.45	.33
23	.46	.64	13	38	176	36	11	7.8	2.4	.84	.47	.40
24	.49	.58	7.3	129	168	34	9.9	6.9	2.2	.84	.50	.40
25	.64	.61	5.5	523	141	32	9.4	5.9	2.3	.84	.51	.35
26	.89	.64	4.6	86	99	30	8.5	5.3	2.7	.84	.49	.39
27	.89	.66	4.2	419	125	29	7.8	5.0	2.9	.85	.51	.39
28	.94	.68	3.9	155	101	31	7.1	5.3	2.6	.87	.46	.39
29	1.1	.66	4.6	72	213	28	6.5	5.0	2.5	.73	.45	.39
30	1.1	.66	12	56	---	25	6.3	4.6	2.2	.71	.46	.47
31	1.1	---	11	474	---	24	---	4.4	---	.73	.45	---
TOTAL	18.23	20.98	549.43	3321.2	5301	2988	519.5	243.7	76.6	37.87	15.00	11.62
MEAN	.59	.70	17.7	107	183	96.4	17.3	7.86	2.55	1.22	.48	.39
MAX	1.1	1.1	178	523	761	627	67	32	4.2	1.9	.69	.47
MIN	.36	.53	.65	2.9	34	24	6.3	4.4	1.6	.71	.38	.32
AC-FT	36	42	1090	6590	10510	5930	1030	483	152	75	30	23

SAN FRANCISQUITO CREEK BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.93	5.77	23.1	56.6	69.4	53.7	25.1	3.41	.90	.39	.23	.29
MAX	28.2	91.9	220	250	409	315	232	39.5	10.4	3.30	1.61	2.11
(WY)	1963	1951	1956	1952	1986	1983	1958	1983	1995	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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1931 - 1996
ANNUAL TOTAL	16285.68	13103.13	
ANNUAL MEAN	44.6	35.8	19.8
HIGHEST ANNUAL MEAN			83.4
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	1110	Mar 10	2650
LOWEST DAILY MEAN	.36	Oct 5	.00
ANNUAL SEVEN-DAY MINIMUM	.40	Sep 30	.00
INSTANTANEOUS PEAK FLOW		1520	5560
INSTANTANEOUS PEAK STAGE		5.72	13.60
ANNUAL RUNOFF (AC-FT)	32300	25990	14310
10 PERCENT EXCEEDS	83	96	32
50 PERCENT EXCEEDS	8.5	2.7	.40
90 PERCENT EXCEEDS	.58	.40	.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 except for estimated daily discharges, which are poor. 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 or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0830	277	4.55	Feb. 4	unknown	550	5.46
Jan. 16	1000	232	4.40	Feb. 21	unknown	e440	unknown
Jan. 27	0845	341	4.78	Mar. 12	unknown	e340	unknown
Jan. 31	0830	394	4.97				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.24	.15	.64	e16	e11	e18	.91	.62	.37	.60	.06
2	.04	.24	.15	.57	e4.7	e4.8	e4.7	.68	1.1	.28	.07	.09
3	.03	.20	.15	.59	e30	e9.2	e2.6	.95	.74	.05	.06	.16
4	.04	.19	.15	.60	e132	e31	2.5	.72	.70	.07	.07	.04
5	.06	.19	.15	.53	e32	e13	2.2	.78	.40	.06	.08	.49
6	.07	.19	.15	.48	e15	e5.4	2.1	.91	.28	.10	.05	.10
7	.07	.21	.18	.61	e6.8	e3.9	2.2	.71	.37	.14	.15	.07
8	.04	.22	.12	.60	e5.1	e3.4	2.1	.96	.37	.14	.12	.04
9	.09	.23	.22	.49	e4.3	e2.7	2.0	.83	.33	.09	.17	.05
10	.04	.24	.41	.54	e3.6	e2.3	2.1	.91	.23	.14	.12	.05
11	.14	.26	.24	.56	e3.4	e3.1	2.2	.82	.28	.28	.04	.08
12	.09	.29	.59	.50	e3.1	e88	2.2	1.0	.30	.41	.03	.05
13	.10	.29	4.2	.47	e2.6	e21	2.3	1.1	.28	.36	.02	.07
14	.11	.29	2.3	.53	e3.8	e4.6	2.3	.87	.27	.38	.02	.11
15	.12	.31	.23	.56	e8.6	e3.4	2.1	6.4	.30	.29	.06	.06
16	.13	.31	2.6	.51	e3.6	e3.2	2.6	7.4	.30	.10	.10	.08
17	.13	.31	1.6	4.0	e2.5	e2.7	2.5	1.5	.32	.07	.10	.04
18	.13	.31	2.5	.27	e3.7	e2.4	1.8	1.4	.26	.12	.11	.07
19	.13	.31	1.5	7.0	e62	e2.2	1.3	1.1	.23	.08	.10	.08
20	.11	.32	1.2	6.7	e22	e2.1	1.3	1.3	.21	.08	.04	.07
21	.11	.28	.85	.15	e78	e2.1	1.3	1.2	.30	.05	.09	.11
22	.11	.23	.11	3.9	e11	e2.0	1.4	1.1	.41	.07	.06	.09
23	.15	.22	2.4	2.1	e8.1	e2.0	1.1	.91	.36	.03	.08	.07
24	.15	.17	1.5	.11	e13	e2.0	1.1	.74	.26	.04	.08	.14
25	.15	.15	.94	.25	e4.6	e1.9	1.1	.75	.27	.05	.07	.09
26	.17	.17	.71	4.6	e3.8	e1.9	.88	.55	.27	.05	.07	.24
27	.22	.15	.53	.77	e10	e1.8	.99	.60	.29	.05	.07	.25
28	.21	.15	1.6	8.5	e8.8	e2.1	.92	.53	.26	.07	.04	.16
29	.22	.13	2.9	4.1	e23	e2.0	.80	.51	.18	.15	.07	.17
30	.23	.14	.94	4.0	---	e2.0	.87	.60	.28	.14	.04	.23
31	.24	---	.66	e120	---	e1.8	---	.57	---	.03	.05	---
TOTAL	3.66	6.94	147.76	379.17	525.1	241.0	71.56	39.31	10.77	4.34	2.83	3.41
MEAN	.12	.23	4.77	12.2	18.1	7.77	2.39	1.27	.36	.14	.091	.11
MAX	.24	.32	.59	120	132	.88	.18	7.4	1.1	.41	.60	.49
MIN	.03	.13	.12	.47	2.5	1.8	.80	.51	.18	.03	.02	.04
AC-FT	7.3	14	293	752	1040	478	142	78	21	8.6	5.6	6.8

e Estimated.

MATADERO CREEK BASIN

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11166000 MATADERO CREEK AT PALO ALTO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.41	1.48	3.39	7.93	7.34	5.54	2.09	.50	.23	.15	.14	.15
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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1953 - 1996
ANNUAL TOTAL	2568.59	1435.85	
ANNUAL MEAN	7.04	3.92	2.46
HIGHEST ANNUAL MEAN			10.9
LOWEST ANNUAL MEAN			.062
HIGHEST DAILY MEAN	363	132	363
LOWEST DAILY MEAN	.02	.02	.00
ANNUAL SEVEN-DAY MINIMUM	.04	.05	.00
INSTANTANEOUS PEAK FLOW		550	1500
INSTANTANEOUS PEAK STAGE		5.46	9.88
ANNUAL RUNOFF (AC-FT)	5090	2850	1780
10 PERCENT EXCEEDS	11	6.9	3.0
50 PERCENT EXCEEDS	1.1	.39	.13
90 PERCENT EXCEEDS	.06	.07	.00

GUADALUPE RIVER BASIN

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.--Records good. Flow regulated by Lexington Reservoir 12 mi upstream and by Calero, Almaden, and Guadalupe Reservoirs, and Lake Elsmar (combined usable capacity, about 42,000 acre-ft), with water released during summer for percolation in spreading basins on tributaries. Diversions into the above impoundments come from San Luis Reservoir (part of the San Felipe Project), from the South Bay Aqueduct, and from the Hetch Hetchy Aqueduct. There are also upstream diversions by the San Jose Water Works for urban use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft³/s, Mar. 10, 1995, gage height, 17.4 ft, from rating curve extended above 2,500 ft³/s on basis of slope-area measurement of peak flow; no flow several days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	17	7.8	18	150	312	261	20	25	13	11	8.6
2	9.8	11	9.2	17	84	325	180	21	25	12	11	8.8
3	9.7	11	8.4	16	84	345	154	21	24	13	11	8.6
4	7.8	12	12	14	695	567	110	21	21	15	11	9.1
5	7.3	11	12	12	404	759	52	21	19	15	11	7.9
6	8.0	11	12	11	174	673	38	22	15	14	9.7	9.2
7	8.8	11	8.3	10	120	622	35	22	16	14	9.9	14
8	12	9.7	7.5	11	89	461	35	22	16	14	12	6.5
9	16	11	14	12	75	216	30	25	16	13	12	8.3
10	16	7.8	12	10	69	194	29	23	17	14	14	9.5
11	26	7.7	410	9.8	69	221	30	22	19	14	16	8.2
12	17	7.2	1440	8.2	60	969	29	21	17	13	13	8.6
13	13	6.8	116	8.3	57	570	29	20	17	13	15	9.6
14	7.8	6.6	41	8.3	57	630	29	19	16	12	15	9.1
15	8.7	8.1	221	11	95	439	29	90	14	13	14	10
16	7.8	7.8	45	183	72	223	42	791	14	11	15	8.5
17	8.9	8.9	30	27	49	200	72	107	14	11	14	8.7
18	7.5	12	187	100	51	195	62	185	14	11	15	8.9
19	12	14	29	109	1690	209	27	92	14	11	14	8.0
20	12	9.0	24	21	1990	185	28	39	14	11	13	7.7
21	5.9	8.2	16	400	2110	169	24	30	14	11	12	8.2
22	5.8	8.1	160	47	1150	178	24	26	15	12	12	7.2
23	9.2	7.7	21	24	852	137	23	23	14	13	13	7.1
24	15	7.9	14	35	791	144	27	22	14	11	12	7.6
25	16	8.6	14	78	708	134	23	29	14	12	13	9.7
26	17	8.4	13	27	628	133	22	34	13	12	12	10
27	14	8.4	11	684	560	165	21	32	12	11	9.7	8.6
28	10	8.7	14	125	269	178	21	30	13	11	9.7	6.9
29	11	8.2	58	48	331	152	20	29	13	11	9.9	12
30	11	7.4	81	40	---	150	20	27	13	12	9.1	7.9
31	11	---	26	490	---	150	---	25	---	11	8.8	---
TOTAL	348.7	282.2	3074.2	2614.6	13533	10005	1526	1911	482	384	377.8	263.0
MEAN	11.2	9.41	99.2	84.3	467	323	50.9	61.6	16.1	12.4	12.2	8.77
MAX	26	17	1440	684	2110	969	261	791	25	15	16	14
MIN	5.8	6.6	7.5	8.2	49	133	20	19	12	11	8.8	6.5
AC-FT	692	560	6100	5190	26840	19840	3030	3790	956	762	749	522

11169000 GUADALUPE RIVER AT SAN JOSE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.96	14.2	38.9	90.7	149	137	65.3	10.0	3.17	2.80	2.53	2.88
MAX	129	123	311	683	1080	1165	847	219	24.6	23.4	22.3	31.0
(WY)	1963	1984	1932	1952	1938	1983	1982	1983	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1930 - 1996			
ANNUAL TOTAL	64268.1				34801.5							
ANNUAL MEAN	176				95.1				43.0			
HIGHEST ANNUAL MEAN									270			
LOWEST ANNUAL MEAN									.000			
HIGHEST DAILY MEAN	7870				Mar 10				7870			
LOWEST DAILY MEAN	5.6				Jan 2				.00			
ANNUAL SEVEN-DAY MINIMUM	7.1				Aug 8				.00			
INSTANTANEOUS PEAK FLOW									11000			
INSTANTANEOUS PEAK STAGE									17.40			
ANNUAL RUNOFF (AC-FT)	127500				69030				31120			
10 PERCENT EXCEEDS	371				211				47			
50 PERCENT EXCEEDS	18				15				.45			
90 PERCENT EXCEEDS	8.1				8.3				.00			

11169500 SARATOGA CREEK AT SARATOGA, CA

LOCATION.--Lat 37°15'16", long 122°02'18", in Quito Grant, Santa Clara County, Hydrologic Unit 18050003, on right bank on upstream side of private road bridge, 0.5 mi southwest of Saratoga, and 0.7 mi downstream from diversion dam.

DRAINAGE AREA.--9.22 mi².

PERIOD OF RECORD.--October 1933 to current year. Prior to October 1951, published as Campbell Creek at Saratoga. CHEMICAL DATA: Water years 1972 to December 1972.

REVISED RECORDS.--WSP 1445: 1940, 1952(M). WSP 1929: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 500 ft above sea level, from topographic map. Prior to Dec. 6, 1968, at site 40 ft downstream at different datum.

REMARKS.--Records poor. 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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0845	450	4.70	Jan. 27	0945	184	3.90
Jan. 16	1200	117	3.59	Feb. 2	1130	371	4.49
Jan. 18	1830	131	3.66	Feb. 21	0615	539	4.92

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.2	.49	.39	35	27	28	1.1	1.2	2.3	.50	.44
2	1.3	1.3	.43	.23	23	25	20	.87	1.2	1.9	.47	.55
3	1.3	1.3	.41	.24	20	21	13	1.4	.97	.93	.43	.53
4	1.4	1.2	.46	.28	201	38	14	1.5	.84	.72	.54	.53
5	1.3	1.2	.73	.64	158	47	11	.69	1.8	.80	.46	.42
6	1.3	1.2	.64	.57	77	36	9.7	.96	1.1	.85	.40	.41
7	1.2	1.2	.56	.43	49	33	9.0	.58	1.3	.90	.42	.34
8	1.2	1.2	.44	.37	36	31	7.3	5.0	1.3	.89	.36	.41
9	1.3	1.1	.35	.70	28	28	5.6	6.6	1.3	.74	.33	.54
10	1.3	1.1	.52	.79	23	26	5.2	3.5	1.7	.70	1.1	.38
11	1.3	1.2	26	.28	17	27	4.8	1.2	1.8	.93	.61	.60
12	1.3	1.2	127	.26	11	74	4.3	.54	1.1	.85	.62	.55
13	1.4	1.2	13	.27	6.1	54	4.0	1.2	.79	.80	1.0	.57
14	1.3	1.3	.50	.27	4.0	40	3.5	.91	.96	.80	.49	.67
15	1.2	1.3	2.3	.27	5.2	35	3.8	5.9	.64	.68	.46	.63
16	1.2	1.3	.18	38	4.4	32	7.8	40	1.2	.56	.51	.58
17	1.2	1.5	.15	15	3.3	28	8.0	14	.72	.82	.46	.46
18	1.2	1.6	3.3	33	5.3	26	11	21	.83	.59	.50	.37
19	1.2	1.6	.23	36	146	24	5.7	7.1	1.2	.44	.50	.37
20	1.2	1.5	.53	15	154	22	5.7	6.7	1.8	.65	.49	.69
21	1.2	1.0	.43	33	296	20	5.0	4.3	1.5	.82	.48	.53
22	1.2	.28	.69	15	121	18	3.5	3.6	1.4	.84	.49	.51
23	1.2	.44	.37	3.1	65	17	3.1	3.0	.86	.69	.55	.55
24	1.1	.25	.30	26	65	15	4.0	2.0	.94	.49	.48	.60
25	1.2	.24	.25	77	53	15	3.1	2.1	.83	.67	.68	.61
26	1.2	.42	.27	27	41	14	6.3	1.7	1.3	.44	.59	.55
27	1.1	.89	.28	72	37	14	6.2	1.2	.56	.41	.66	.61
28	1.1	1.0	.22	55	30	19	4.2	1.1	.60	.46	.56	.67
29	1.1	.24	.30	29	34	11	2.6	1.3	.62	.38	.37	.60
30	1.1	.32	.45	21	---	11	2.5	2.3	.68	.40	.34	.87
31	1.2	---	.30	59	---	8.4	---	1.1	---	.48	.42	---
TOTAL	38.1	30.78	182.08	560.09	1748.3	836.4	221.9	144.45	33.04	23.93	16.27	16.14
MEAN	1.23	1.03	5.87	18.1	60.3	27.0	7.40	4.66	1.10	.77	.52	.54
MAX	1.4	1.6	127	77	296	74	28	40	1.8	2.3	1.1	.87
MIN	1.1	.24	.15	.23	3.3	8.4	2.5	.54	.56	.38	.33	.34
AC-FT	76	61	361	1110	3470	1660	440	287	66	47	32	32

11169500 SARATOGA CREEK AT SARATOGA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.88	2.71	9.03	21.6	29.4	23.6	13.8	3.87	1.28	.54	.35	.35
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1934 - 1996			
ANNUAL TOTAL	7775.66				3851.48							
ANNUAL MEAN	21.3				10.5				8.85			
HIGHEST ANNUAL MEAN									32.5			
LOWEST ANNUAL MEAN									.54			
HIGHEST DAILY MEAN	648 Mar 10				296 Feb 21				1260 Feb 27 1940			
LOWEST DAILY MEAN	.15 Dec 17				.15 Dec 17				.00 Oct 1 1933			
ANNUAL SEVEN-DAY MINIMUM	.28 Dec 23				.28 Dec 23				.00 Oct 1 1933			
INSTANTANEOUS PEAK FLOW					539 Feb 21				2730 Dec 22 1955			
INSTANTANEOUS PEAK STAGE					4.92 Feb 21				6.40 Dec 22 1955			
ANNUAL RUNOFF (AC-FT)	15420				7640				6410			
10 PERCENT EXCEEDS	57				30				19			
50 PERCENT EXCEEDS	1.9				1.2				.81			
90 PERCENT EXCEEDS	.61				.40				.00			

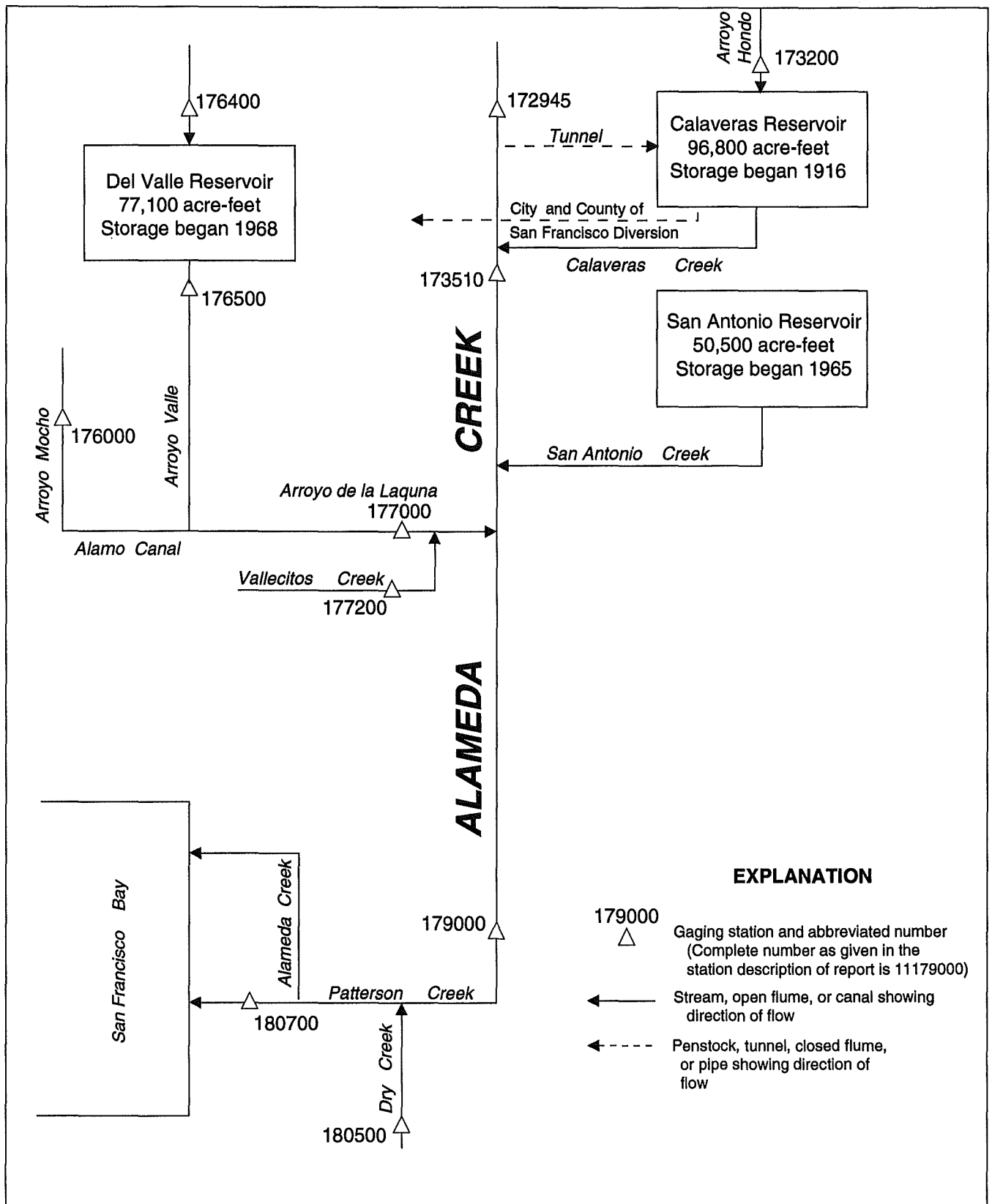


Figure 20. Diversions and storage in Alameda Creek basin.

11172945 ALAMEDA CREEK ABOVE DIVERSION DAM, NEAR SUNOL, CA

LOCATION.--Lat 37°29'51", long 121°46'21", in SE 1/4 NE 1/4 sec.17, T.5 S., R.2 E., Alameda County, Hydrologic Unit 18050004, on right bank 700 ft upstream from diversion dam, and 9.3 mi southeast of Sunol.

DRAINAGE AREA.--33.3 mi²

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 930 ft above sea level, from topographic map.

REMARKS.--Records fair. No regulation or diversion upstream from gage. See schematic diagram of Alameda Creek basin.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 16	1445	1,770	6.10	Jan. 27	1045	1,720	6.03
Jan. 24	2345	2,140	6.59	Feb. 19	1500	1,510	5.72

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.17	.29	14	212	106	e34	7.7	4.6	1.9	.82	.25
2	.11	.17	.35	9.6	139	94	e49	7.9	4.3	1.8	.72	.28
3	.11	.17	.31	7.6	114	89	e36	7.7	4.0	1.7	.74	.27
4	.08	.14	.42	6.2	562	392	e31	7.4	3.8	1.6	.71	.28
5	.10	.13	.35	5.3	518	463	e27	7.2	3.5	1.9	.72	.26
6	.12	.14	.37	4.5	254	238	e26	7.1	3.3	1.5	.75	.23
7	.13	.13	.38	4.0	168	168	e24	6.9	3.2	1.5	.73	.18
8	.14	.12	.39	3.5	145	135	e23	6.7	3.0	1.5	.71	.17
9	.13	.13	.40	3.2	111	114	e22	6.6	2.8	1.4	.70	.16
10	.12	.16	.39	2.9	94	100	e21	6.2	2.7	1.3	.62	.16
11	.12	.14	2.3	2.9	84	91	e20	5.9	2.7	1.2	.59	.17
12	.11	.13	83	2.8	74	354	e19	5.6	2.7	1.2	.56	.22
13	.10	.12	26	2.7	67	243	e18	5.4	2.6	1.1	.51	.28
14	.10	.12	33	2.5	62	164	e17	5.3	2.5	1.1	.49	.32
15	.10	.13	36	2.5	62	134	e17	7.4	2.5	1.1	.47	.30
16	.12	.13	24	457	103	116	e16	34	2.5	1.2	.45	.32
17	.13	.14	10	175	68	104	e15	16	2.4	1.2	.49	.27
18	.13	.14	7.3	193	61	94	e18	11	2.3	1.2	.50	.23
19	.11	.16	21	297	848	88	e16	9.1	2.2	1.1	.47	.18
20	.11	.17	10	114	733	79	e14	8.0	2.2	1.0	.47	.17
21	.12	.19	6.2	242	863	e72	e13	7.7	2.2	.96	.46	.17
22	.11	.21	30	169	545	e67	e12	8.2	e2.2	.93	.40	.18
23	.12	.21	28	113	302	e61	e12	7.3	e2.1	.91	.36	.20
24	.12	.21	13	375	268	e57	e11	6.7	e2.2	.89	.36	.23
25	.13	.21	8.5	792	206	e53	10	6.1	2.1	.83	.40	.24
26	.14	.23	6.2	201	158	e49	9.5	5.7	2.3	.82	.43	.22
27	.14	.23	4.8	568	147	e45	8.9	5.4	2.3	.87	.41	.19
28	.12	.23	4.0	376	146	e50	8.3	5.4	2.3	.89	.37	.19
29	.12	.26	3.7	193	132	e43	7.8	5.3	2.2	.83	.30	.18
30	.12	.27	38	127	---	e38	7.6	5.1	2.0	.79	.26	.22
31	.14	---	25	414	---	e36	---	4.9	---	.72	.27	---
TOTAL	3.70	5.09	423.65	4880.2	7246	3937	563.1	246.9	81.7	36.94	16.24	6.72
MEAN	.12	.17	13.7	157	250	127	18.8	7.96	2.72	1.19	.52	.22
MAX	.15	.27	83	792	863	463	49	34	4.6	1.9	.82	.32
MIN	.08	.12	.29	2.5	61	36	7.6	4.9	2.0	.72	.26	.16
AC-FT	7.3	10	840	9680	14370	7810	1120	490	162	73	32	13

e Estimated.

11172945 ALAMEDA CREEK ABOVE DIVERSION DAM, NEAR SUNOL, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.064	.53	10.2	197	135	169	19.3	17.6	6.25	1.96	.53	.29
MAX	.12	.89	13.7	236	250	211	19.8	27.3	9.79	2.72	.54	.36
(WY)	1996	1995	1996	1995	1996	1995	1995	1995	1995	1995	1995	1995
MIN	.009	.17	6.76	157	16.7	127	18.8	7.96	2.72	1.19	.52	.22
(WY)	1995	1996	1995	1996	1995	1996	1996	1996	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1995 - 1996			
ANNUAL TOTAL	16601.20				17447.24							
ANNUAL MEAN	45.5				47.7				46.3			
HIGHEST ANNUAL MEAN									47.7			
LOWEST ANNUAL MEAN									44.9			
HIGHEST DAILY MEAN	1200				863				1200			
LOWEST DAILY MEAN	.08				.08				.00			
ANNUAL SEVEN-DAY MINIMUM	.11				.11				.00			
INSTANTANEOUS PEAK FLOW					2140				3390			
INSTANTANEOUS PEAK STAGE					6.59				7.96			
ANNUAL RUNOFF (AC-FT)	32930				34610				33550			
10 PERCENT EXCEEDS	98				141				122			
50 PERCENT EXCEEDS	8.2				2.5				3.6			
90 PERCENT EXCEEDS	.14				.14				.13			

11173200 ARROYO HONDO NEAR SAN JOSE, CA

LOCATION.--Lat 37°27'42", long 121°46'06", in NE 1/4 NE 1/4 sec.32, T.5 S., R.2 E., Santa Clara County, Hydrologic Unit 18050004, on right bank 150 ft upstream from road bridge, 3.5 mi southeast of Calaveras Dam, 3.5 mi northeast of city limits of San Jose.

DRAINAGE AREA.--77.1 mi².

PERIOD OF RECORD.--October 1968 to September 1981, October 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 783.86 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station. See schematic diagram of Alameda Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,020 ft³/s, Mar. 22, 1995, gage height, 14.84 ft; minimum daily, 0.11 ft³/s, July 28-30, 1972.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 16	1630	1,390	9.45	Feb. 4	2330	1,020	8.85
Jan. 25	0230	5,750	13.90	Feb. 19	1745	5,630	13.81
Jan. 31	1215	1,070	8.93	Mar. 4	2115	1,480	9.58

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.0	2.3	31	282	265	49	18	15	6.3	2.1	1.5
2	2.2	2.1	2.3	23	145	221	61	17	14	5.7	2.0	1.5
3	2.2	2.1	2.3	18	102	192	48	17	14	5.4	1.9	1.5
4	2.1	2.1	2.6	16	404	482	43	16	13	5.2	1.9	1.5
5	2.3	2.1	3.1	14	652	738	40	16	12	4.7	1.8	1.5
6	2.3	2.1	3.9	12	285	391	38	14	12	4.6	1.8	1.3
7	2.3	2.1	3.4	11	166	267	e35	15	12	4.4	1.9	1.3
8	2.2	2.1	3.0	11	109	203	e34	15	11	4.3	1.9	1.3
9	2.1	2.1	3.0	10	77	162	e32	15	11	4.2	1.9	1.3
10	2.1	2.0	2.7	9,7	57	133	e31	15	10	3.9	1.8	1.4
11	2.1	1.9	6.9	9.4	42	118	e30	14	9.9	3.7	1.8	1.5
12	2.2	1.9	120	9.1	36	454	e29	14	10	3.5	1.8	1.6
13	2.2	1.9	79	8.8	e32	399	e28	13	9.9	3.3	1.7	1.6
14	2.3	1.9	64	8.6	e31	245	e27	13	9.6	3.3	1.7	1.6
15	2.4	1.9	42	8.6	36	183	e26	16	9.3	3.2	1.6	1.6
16	2.5	1.9	63	332	47	149	e32	111	9.3	3.1	1.5	1.6
17	2.5	2.1	28	228	36	126	e37	57	9.2	3.1	1.6	1.7
18	2.4	2.2	22	115	e31	111	e35	34	8.8	3.1	1.5	1.8
19	2.2	2.3	62	305	2290	95	e34	26	8.4	3.1	1.5	1.8
20	2.3	2.3	32	134	1820	82	e31	22	7.9	2.9	1.4	1.8
21	2.2	2.3	21	282	1940	74	e29	20	7.9	2.9	1.4	1.8
22	2.3	2.3	24	179	956	70	e27	21	8.0	2.7	1.3	1.8
23	2.4	2.3	57	114	507	65	e26	20	7.8	2.7	1.3	1.8
24	2.2	2.3	31	239	393	60	e25	18	7.7	2.6	1.4	1.8
25	2.3	2.3	22	1900	327	56	e24	17	7.8	2.6	1.5	1.7
26	2.2	2.3	17	289	263	53	22	16	8.2	2.5	1.6	1.8
27	2.0	2.3	14	738	233	50	21	16	8.3	2.4	1.5	1.8
28	1.9	2.3	12	448	251	57	19	16	8.0	2.3	1.5	1.8
29	1.9	2.3	12	202	285	50	19	16	7.5	2.2	1.4	1.8
30	1.9	2.3	55	120	---	46	18	16	6.9	2.2	1.4	1.8
31	1.9	---	50	567	---	44	---	15	---	2.0	1.5	---
TOTAL	68.2	64.1	862.5	6392.2	11835	5641	950	669	294.4	108.1	50.9	48.6
MEAN	2.20	2.14	27.8	206	408	182	31.7	21.6	9.81	3.49	1.64	1.62
MAX	2.5	2.3	120	1900	2290	738	61	111	15	6.3	2.1	1.8
MIN	1.9	1.9	2.3	8.6	31	44	18	13	6.9	2.0	1.3	1.3
AC-FT	135	127	1710	12680	23470	11190	1880	1330	584	214	101	96

e Estimated.

ALAMEDA CREEK BASIN

11173200 ARROYO HONDO NEAR SAN JOSE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.45	11.1	39.7	173	190	153	47.0	14.1	6.01	2.52	1.24	1.01
MAX	3.73	69.4	182	464	533	523	178	31.9	16.3	7.89	3.38	2.36
(WY)	1974	1973	1974	1995	1980	1995	1974	1995	1995	1995	1995	1995
MIN	.24	.67	1.42	3.35	2.98	5.58	2.93	1.67	.74	.33	.18	.25
(WY)	1978	1978	1977	1976	1977	1977	1977	1976	1976	1977	1972	1977

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1969 - 1996

ANNUAL TOTAL	37519.7	28984.0	
ANNUAL MEAN	103	73.7	52.7
HIGHEST ANNUAL MEAN			101
LOWEST ANNUAL MEAN			2.12
HIGHEST DAILY MEAN	3580	Jan 10	3580
LOWEST DAILY MEAN	1.9	Oct 28	.11
ANNUAL SEVEN-DAY MINIMUM	1.9	Nov 10	.13
INSTANTANEOUS PEAK FLOW			7020
INSTANTANEOUS PEAK STAGE			13.90
ANNUAL RUNOFF (AC-FT)	74420	53520	38200
10 PERCENT EXCEEDS	223	195	107
50 PERCENT EXCEEDS	15	9.3	3.9
90 PERCENT EXCEEDS	2.2	1.7	.60

ALAMEDA CREEK BASIN

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11173510 ALAMEDA CREEK BELOW CALAVERAS CREEK, NEAR SUNOL, CA

LOCATION.--Lat 37°30'13", long 121°49'25", in NE 1/4 NE 1/4 sec.13, T.5 S., R.1 E., Alameda County, Hydrologic Unit 18050004, on right bank 0.2 mi downstream from Calaveras Creek, 1.1 mi downstream from Calaveras Dam, and 7.3 mi southeast of Sunol.

DRAINAGE AREA.--135 mi²

PERIOD OF RECORD.--October 1995 to September 1996 (low-flow records only).

GAGE.--Water-stage recorder. Elevation of gage is 430 ft above sea level, from topographic map.

REMARKS.--Records poor. No records computed above 200 ft³/s. Flow regulated by Calaveras Reservoir, capacity 100,000 acre-ft, 1.1 mi upstream from gage and by diversion dam on Alameda Creek, 2.9 mi upstream. Flow is diverted out of basin from Calaveras Reservoir by city and county of San Francisco for domestic use. See schematic diagram of Alameda Creek basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.36	.45	e3.0	2.6	3.8	---	e12	e5.3	e3.4	1.9	1.3	2.9
2	e.34	.45	e1.5	1.6	4.0	---	e15	5.2	e3.3	1.8	1.3	.80
3	e.34	.45	e1.2	1.5	3.9	---	e13	5.3	e3.2	1.7	1.1	.79
4	e.34	.44	e.80	1.5	4.7	---	e12	4.9	e3.2	1.7	.99	.74
5	e.33	.46	e.77	1.5	4.4	---	e10	5.0	e3.1	1.6	1.1	.71
6	e.33	.47	e.62	1.5	3.7	e100	e9.8	4.9	e3.0	1.5	1.1	.71
7	e.33	.47	e.53	2.4	3.7	e80	e8.0	4.9	e3.0	1.5	1.1	.69
8	e.34	.46	e.48	3.3	3.6	e60	e8.5	4.9	e2.9	1.5	1.1	.70
9	e.34	.49	e.45	3.3	3.9	e49	e8.2	4.6	e2.9	1.4	2.5	.72
10	e.34	.53	e.45	3.3	4.1	e38	e7.8	4.2	e2.8	1.4	4.4	.73
11	e.35	.52	e.50	3.2	2.9	e30	e7.5	3.8	e2.7	1.4	2.3	.75
12	e.35	.52	e2.3	2.5	4.1	e85	e7.1	3.6	e2.7	1.3	2.4	.78
13	.34	.53	2.0	2.0	4.0	e115	e7.0	3.4	e2.6	1.3	2.4	.82
14	.34	.60	1.6	1.9	4.0	e68	e6.8	3.1	e2.6	1.3	2.6	.73
15	.33	.63	4.6	2.0	3.3	e53	e6.5	4.9	e2.6	1.2	2.7	.68
16	.32	.65	2.6	4.0	4.1	e45	e7.0	23	e2.5	1.4	2.6	.63
17	.33	.64	1.8	3.4	4.3	e35	e8.5	14	e2.5	1.6	2.6	.61
18	.17	.70	1.5	3.8	3.7	e28	e9.1	10	e2.5	1.5	2.7	.59
19	.33	.76	1.5	3.7	4.4	e24	e8.8	e7.0	e2.4	1.5	2.7	.60
20	.33	.82	1.4	3.7	3.8	e22	e8.1	e5.0	e2.4	1.2	2.7	.64
21	.33	.98	1.3	3.6	3.4	e19	e7.6	e4.7	e2.5	1.4	2.6	.64
22	.32	.99	3.6	3.2	---	e17	e7.1	e4.5	e2.6	.96	2.6	.64
23	.34	.69	2.7	3.2	---	e16	e7.0	e4.3	e2.7	.99	2.5	.65
24	.34	.48	1.9	4.4	---	e15	e6.8	e4.1	e2.9	.98	2.6	.69
25	.34	1.9	1.7	3.4	---	e14	e6.5	e4.0	e2.8	1.0	3.2	.68
26	.35	4.6	1.7	3.3	---	e14	e6.2	e4.0	2.6	.97	4.1	.69
27	.36	5.2	1.7	4.0	---	e13	e6.0	e3.9	2.6	.98	3.9	.70
28	.37	4.9	1.8	3.3	---	e12	e5.8	e3.8	2.4	.98	3.7	.69
29	.39	5.0	1.9	3.2	---	e12	e5.6	e3.7	2.3	.97	3.6	.68
30	.40	e3.6	2.0	3.4	---	e11	e5.5	e3.6	2.1	.99	3.6	.67
31	.41	---	2.7	4.2	---	e11	---	e3.4	---	1.1	3.6	---
TOTAL	10.53	39.38	52.60	91.9	---	---	244.8	171.0	81.8	41.02	77.69	23.05
MEAN	.34	1.31	1.70	2.96	---	---	8.16	5.52	2.73	1.32	2.51	.77
MAX	.41	5.2	4.6	4.4	---	---	15	23	3.4	1.9	4.4	2.9
MIN	.17	.44	.45	1.5	---	---	5.5	3.1	2.1	.96	.99	.59
AC-FT	21	78	104	182	---	---	486	339	162	81	154	46

e Estimated.

ALAMEDA CREEK BASIN

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.--Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station. See schematic diagram of Alameda Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 2,250 ft³/s, Jan. 24, 1983, gage height, 8.80 ft, from rating curve extended above 600 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 10.44 ft, Feb. 19, 1986, from floodmarks; no flow for parts of most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 23, 1955, reached a discharge of 1,880 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s, or maximum.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1915	98	4.78	Feb. 4	1615	346	5.61
Jan. 16	1700	227	5.27	Feb. 19	1745	685	6.54
Jan. 27	1400	248	5.33	Mar. 4	2345	120	4.65
Jan. 31	1145	356	5.64	Mar. 12	1800	319	5.48

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.17	.24	3.0	44	27	12	4.4	2.7	e.55	.18	.33
2	.13	.17	.24	2.3	17	24	14	4.2	2.6	.54	.18	.33
3	.13	.18	.26	1.7	11	23	10	4.2	2.4	.55	.18	.33
4	.11	.18	.30	1.6	117	38	8.9	4.2	2.3	.56	.21	.33
5	.13	.17	.32	1.4	101	67	8.3	4.1	2.2	.50	.22	.33
6	.13	.17	.39	1.2	64	39	7.6	4.1	2.2	.49	.24	.33
7	.11	.19	.50	1.2	36	28	7.5	4.3	2.0	.46	.27	.33
8	.11	.20	.53	1.2	25	24	6.8	4.3	1.8	.47	.25	.28
9	.11	.20	.55	1.2	17	23	6.8	4.3	1.6	.46	.22	.27
10	.13	.20	.53	1.2	13	21	6.4	4.2	1.6	.46	.22	.27
11	.12	.21	2.5	1.1	10	19	6.2	4.1	1.6	.41	.22	.27
12	.13	.21	37	1.1	8.4	101	5.9	4.1	1.6	.35	.25	.27
13	.13	.21	18	1.2	7.4	88	5.8	4.0	1.6	.34	.23	.27
14	.13	.20	8.7	1.1	6.7	42	5.7	4.2	1.4	.33	e.24	.27
15	.13	.22	11	1.3	6.8	30	5.8	5.7	1.3	.33	e.25	.27
16	.13	.20	10	40	15	24	7.1	21	1.4	.35	e.23	.27
17	.13	.20	4.5	20	8.8	22	7.3	9.9	1.4	.35	e.20	.27
18	.15	.20	6.0	3.1	7.0	20	8.6	5.8	1.3	.34	e.22	.27
19	.14	.20	12	25	183	18	7.2	4.9	1.2	.32	e.25	.27
20	.13	.22	5.5	7.8	252	16	6.3	4.3	1.1	.30	e.24	.27
21	.13	.24	3.1	21	245	14	5.9	4.1	1.1	.27	e.26	.27
22	.13	.24	7.1	12	109	13	5.6	4.1	1.1	.27	e.25	.27
23	.13	.24	10	5.6	67	12	5.5	3.9	1.0	.27	e.27	e.27
24	.13	.24	5.5	2.9	58	11	5.3	3.6	.97	.24	e.27	e.25
25	.13	.24	3.3	68	43	11	5.1	3.4	1.0	.25	e.28	e.20
26	.13	.24	2.3	14	37	10	4.8	3.2	e1.0	.19	e.30	e.24
27	.13	.24	1.8	70	34	10	4.5	3.1	e.95	.18	e.30	e.24
28	.17	.26	1.8	49	34	11	4.4	3.1	e.80	.18	e.32	e.24
29	.17	.28	1.7	17	32	10	4.4	3.1	e.70	.18	e.33	e.25
30	.17	.24	4.1	8.7	---	8.9	4.4	3.0	e.60	.18	.33	e.23
31	.17	---	4.7	132	---	9.0	---	2.8	---	.18	.33	---
TOTAL	4.13	6.36	164.46	517.9	1609.1	813.9	204.1	147.7	44.52	10.85	7.74	8.29
MEAN	.13	.21	5.31	16.7	55.5	26.3	6.80	4.76	1.48	.35	.25	.28
MAX	.17	.28	37	132	252	101	14	21	2.7	.56	.33	.33
MIN	.11	.17	.24	1.1	6.7	8.9	4.4	2.8	.60	.18	.18	.20
AC-FT	8.2	13	326	1030	3190	1610	405	293	88	22	15	16

e Estimated.

11176000 ARROYO MOCHO NEAR LIVERMORE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.098	.85	3.62	13.3	21.4	14.6	4.81	1.60	.60	.20	.091	.079
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	1981	1991	1924	1924	1920	1913	1913	1913	1913

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1913 - 1996			
ANNUAL TOTAL	4948.62				3539.05							
ANNUAL MEAN	13.6				9.67				5.10			
HIGHEST ANNUAL MEAN									38.8			
LOWEST ANNUAL MEAN									.035			
HIGHEST DAILY MEAN	850				252				1510			
LOWEST DAILY MEAN	.10				.11				.00			
ANNUAL SEVEN-DAY MINIMUM	.10				.12				.00			
INSTANTANEOUS PEAK FLOW					685				2250			
INSTANTANEOUS PEAK STAGE					6.54				10.44			
ANNUAL RUNOFF (AC-FT)	9820				7020				3690			
10 PERCENT EXCEEDS	23				23				6.5			
50 PERCENT EXCEEDS	1.2				1.2				.22			
90 PERCENT EXCEEDS	.13				.18				.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.--Records good except for period of estimated discharges, which are fair. No regulation or diversion upstream from station. See schematic diagram of Alameda Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,790 ft³/s, Feb. 17, 1986, gage height, 7.36 ft, from rating curve extended above 1,000 ft³/s on basis of slope-area measurements at gage heights 4.13, 5.40, and 7.36 ft; no flow at times in most years.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 16	1515	1,370	2.81	Feb. 19	2115	4,110	4.58
Jan. 25	0215	1,720	3.09	Mar. 4	2200	987	2.46
Jan. 31	1415	1,570	2.97	Mar. 12	2345	956	2.43
Feb. 4	2245	1,390	2.82				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.25	13	555	190	52	15	9.5	3.7	.50	e.00
2	.00	.00	.30	11	262	164	65	13	8.5	3.1	.35	e.00
3	.00	.00	.30	9.7	184	148	48	12	8.2	2.9	.16	e.00
4	.00	.00	.44	9.0	650	338	41	13	7.4	2.5	e.19	e.00
5	.00	.00	.63	8.5	886	678	37	12	7.3	2.5	e.26	e.00
6	.00	.00	.50	7.9	394	376	35	12	7.3	2.3	e.80	e.00
7	.00	.00	.67	7.3	252	263	34	12	6.7	2.0	e1.1	e.00
8	.00	.00	.76	7.3	189	204	32	11	6.3	2.0	e1.1	e.00
9	.00	.00	.58	6.4	146	168	32	11	5.4	2.2	e.65	e.00
10	.00	.00	.63	6.3	116	138	32	11	5.4	2.0	e.00	e.00
11	.00	.00	9.4	6.3	96	121	30	9.7	5.4	1.8	e.00	e.00
12	.00	.00	100	6.1	82	489	30	9.7	5.4	1.6	e.00	e.00
13	.00	.00	45	5.4	70	609	27	9.4	5.4	1.5	e.00	e.00
14	.00	.00	29	5.4	63	327	27	8.8	4.6	1.3	e.00	e.00
15	.00	.00	23	5.4	64	232	27	11	5.1	1.3	e.00	e.00
16	.00	.00	21	397	112	187	32	44	5.4	1.4	e.00	e.00
17	.00	.00	11	250	87	158	35	35	5.4	1.5	e.00	e.00
18	.00	.00	11	131	69	134	37	23	5.4	1.4	e.00	e.00
19	.00	.08	27	257	1670	117	34	18	4.6	1.3	e.00	e.00
20	.00	.15	17	131	1730	102	32	15	4.5	1.2	e.00	e.00
21	.00	.15	16	192	1600	93	29	14	4.6	.98	e.00	e.00
22	.00	.15	23	172	933	86	26	14	4.6	.95	e.00	e.00
23	.00	.15	38	112	509	79	25	13	4.4	.96	e.00	e.00
24	.00	.15	28	141	379	71	25	12	3.8	.95	e.00	e.00
25	.00	.15	19	932	307	66	23	12	3.8	.90	e.00	e.00
26	.00	.15	15	252	239	60	21	12	4.4	.90	e.00	e.00
27	.00	.15	12	654	211	57	20	11	4.6	1.0	e.00	e.00
28	.00	.15	11	502	212	60	18	11	4.6	1.0	e.00	e.00
29	.00	.15	11	217	202	52	16	11	4.5	.82	e.00	e.00
30	.00	.15	17	143	---	45	15	9.7	3.8	.72	e.00	e.00
31	.00	---	16	922	---	42	---	9.7	---	.51	e.00	---
TOTAL	0.00	1.73	504.46	5520.0	12269	5854	937	435.0	166.3	49.19	5.11	0.00
MEAN	.000	.058	16.3	178	423	189	31.2	14.0	5.54	1.59	.16	.000
MAX	.00	.15	100	932	1730	678	65	44	9.5	3.7	1.1	.00
MIN	.00	.00	.25	5.4	63	42	15	8.8	3.8	.51	.00	.00
AC-FT	.00	3.4	1000	10950	24340	11610	1860	863	330	98	10	.00

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.23	7.26	29.5	109	135	108	38.9	8.94	2.61	.64	.18	.11
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1964 - 1996			
ANNUAL TOTAL	33399.35				25741.79							
ANNUAL MEAN	91.5				70.3				36.2			
HIGHEST ANNUAL MEAN									174			
LOWEST ANNUAL MEAN									.24			
HIGHEST DAILY MEAN	3760				1730				4860			
LOWEST DAILY MEAN	.00				.00				.00			
ANNUAL SEVEN-DAY MINIMUM	.00				.00				.00			
INSTANTANEOUS PEAK FLOW					4110				8790			
INSTANTANEOUS PEAK STAGE					4.58				7.36			
ANNUAL RUNOFF (AC-FT)	66250				51060				26250			
10 PERCENT EXCEEDS	156				191				52			
50 PERCENT EXCEEDS	9.5				5.4				1.2			
90 PERCENT EXCEEDS	.00				.00				.00			

ALAMEDA CREEK BASIN

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.--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. See schematic diagram of Alameda Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft³/s, Apr. 2, 1958, gage height, 10.91 ft; no flow at times. Maximum discharge since construction of Del Valle Dam in 1968, 2,850 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.32	.59	.52	.62	57	1.9	1.2	.88	.73	3.2	.75
2	.17	.32	.74	.45	.54	57	1.5	1.3	.90	.74	3.2	.88
3	.15	.31	.88	.39	.59	57	1.4	1.4	.82	.74	3.1	.88
4	.15	.28	.85	.43	1.2	193	1.4	1.4	.86	.74	3.0	.89
5	.18	.37	.64	.43	688	628	1.4	1.4	.88	.74	3.1	1.0
6	.22	.29	.36	.43	1180	838	1.4	1.4	.88	.73	3.0	.96
7	.14	.24	.43	.43	626	589	1.4	1.4	.88	.74	2.7	.88
8	.14	.22	.43	.43	1.3	345	1.4	1.4	.88	.74	2.4	.90
9	.14	.48	.43	.40	.93	221	1.4	1.4	.88	.74	1.9	.93
10	.20	.63	.47	.40	.85	55	1.4	1.4	.82	.74	1.9	.93
11	.34	.65	.83	.43	.74	55	1.4	1.4	.84	.74	2.0	1.0
12	.32	.77	1.5	.43	.74	53	1.4	1.3	.88	.74	2.1	1.0
13	.07	.60	.62	.43	25	348	1.4	1.2	.88	.74	2.1	1.1
14	.07	.48	.46	.43	55	450	1.4	1.1	.88	.74	2.2	1.2
15	.08	.50	.58	.43	56	231	1.4	.91	.88	.77	2.3	1.2
16	.09	.73	.45	.71	55	55	1.4	.99	.88	.81	2.2	1.2
17	.12	.78	.43	.46	55	54	1.5	.88	.79	1.6	2.6	1.2
18	.15	.71	.48	.47	55	55	1.5	.88	.77	1.1	2.7	1.2
19	.14	.72	.45	.53	328	55	1.4	.88	.78	1.1	2.7	1.1
20	.15	.74	.43	.44	537	55	1.4	.88	.83	1.0	2.8	1.0
21	.16	.53	.43	.62	441	31	1.4	.88	.89	.99	2.7	1.0
22	.15	.29	.67	.49	1430	1.8	1.3	.88	.90	.97	2.5	1.1
23	.16	.29	.55	.43	1960	1.7	1.2	.88	.89	1.0	2.8	1.2
24	.18	.31	.52	.63	1900	1.7	1.2	.88	.97	1.0	2.1	1.2
25	.42	.39	.54	.98	1340	1.7	1.2	.87	.92	2.3	2.2	1.2
26	.22	.47	.58	.52	764	1.7	1.2	.94	.74	3.7	2.1	1.2
27	.19	.45	.48	1.3	315	1.7	1.2	.88	.74	6.0	.89	1.2
28	.18	.52	.36	.58	58	1.7	1.2	.88	.74	5.1	.81	1.2
29	.20	.45	.43	.50	58	1.7	1.2	.88	.74	5.3	.76	1.2
30	.22	.51	.55	.46	---	1.7	1.2	.88	.74	3.6	.75	1.2
31	.26	---	.59	1.0	---	1.5	---	.88	---	3.2	.74	---
TOTAL	5.53	14.35	17.75	16.58	11933.51	4498.9	41.1	33.85	25.36	49.88	69.55	31.90
MEAN	.18	.48	.57	.53	412	145	1.37	1.09	.85	1.61	2.24	1.06
MAX	.42	.78	1.5	1.3	1960	838	1.9	1.4	.97	6.0	3.2	1.2
MIN	.07	.22	.36	.39	.54	1.5	1.2	.87	.74	.73	.74	.75
AC-FT	11	28	35	33	23670	8920	82	67	50	99	138	63

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
LOWEST ANNUAL MEAN	.008
HIGHEST DAILY MEAN	5930
LOWEST DAILY MEAN	.00
ANNUAL SEVEN-DAY MINIMUM	.00
INSTANTANEOUS PEAK FLOW	12200
INSTANTANEOUS PEAK STAGE	10.91
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 - 1996, BY WATER YEAR (WY)

MEAN	9.37	8.73	8.06	34.9	91.7	76.1	20.8	5.97	8.91	14.1	12.7	9.88
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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1970 - 1996

ANNUAL TOTAL	18666.46	16738.26	
ANNUAL MEAN	51.1	45.7	24.7
HIGHEST ANNUAL MEAN			131
LOWEST ANNUAL MEAN			.44
HIGHEST DAILY MEAN	1870	1960	2370
LOWEST DAILY MEAN	.07	.07	.00
ANNUAL SEVEN-DAY MINIMUM	.10	.10	.05
INSTANTANEOUS PEAK FLOW		2050	2850
INSTANTANEOUS PEAK STAGE		7.94	8.89
ANNUAL RUNOFF (AC-FT)	37020	33200	17920
10 PERCENT EXCEEDS	4.6	55	34
50 PERCENT EXCEEDS	1.0	.88	1.4
90 PERCENT EXCEEDS	.18	.32	.24

ALAMEDA CREEK BASIN

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.--Records fair. Flow partly regulated by Del Valle Reservoir 15 mi upstream, beginning in September 1968, capacity, 77,100 acre-ft. Water imported from Sacramento-San Joaquin Delta (see REMARKS for station 11176500). See schematic diagram of Alameda Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s, Jan. 5, 1982, gage height, 22.61 ft, present datum; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	9.2	17	29	398	204	400	39	28	25	14	26
2	15	12	17	29	201	173	249	37	31	18	13	28
3	13	13	18	29	191	193	160	38	30	15	14	28
4	13	14	22	31	1230	1250	150	38	26	16	17	25
5	14	16	20	28	783	1720	145	39	23	21	19	13
6	14	16	19	27	1070	1030	141	39	23	21	e18	11
7	14	15	17	26	791	894	141	38	24	23	e22	22
8	16	16	16	24	189	596	140	37	26	23	20	26
9	17	20	16	27	122	575	136	36	28	18	17	26
10	19	20	19	28	104	375	140	37	28	15	21	22
11	20	18	637	27	91	333	136	37	27	15	25	20
12	19	18	1190	25	78	1100	134	37	24	16	27	21
13	16	18	271	27	75	654	133	37	23	17	25	24
14	15	17	122	29	84	706	130	35	22	21	22	23
15	14	16	357	30	191	535	132	139	25	22	23	24
16	15	17	109	1200	363	318	230	288	28	22	23	26
17	15	15	49	296	129	266	218	72	28	22	24	25
18	15	15	63	228	116	250	291	54	26	21	25	21
19	15	16	63	263	1380	235	166	43	24	17	25	19
20	16	16	35	107	1750	228	e144	40	22	18	25	20
21	15	16	30	387	2440	219	e86	48	22	20	25	24
22	16	15	236	117	1470	182	e59	48	23	21	21	24
23	16	14	93	68	2000	162	e46	40	26	17	19	24
24	15	14	46	505	2020	154	47	32	25	14	20	24
25	16	14	32	1070	1590	148	46	35	30	15	23	23
26	15	13	27	203	790	143	43	38	23	17	26	25
27	21	13	30	1290	e317	141	42	38	20	18	26	24
28	16	14	32	463	e285	178	42	37	18	20	24	23
29	18	15	44	179	235	141	41	29	19	20	25	24
30	18	15	71	145	---	135	40	27	25	18	24	25
31	10	---	35	1470	---	135	---	25	---	16	24	---
TOTAL	486	460.2	3753	8407	20483	13373	4008	1557	747	582	676	690
MEAN	15.7	15.3	121	271	706	431	134	50.2	24.9	18.8	21.8	23.0
MAX	21	20	1190	1470	2440	1720	400	288	31	25	27	28
MIN	10	9.2	16	24	75	135	40	25	18	14	13	11
AC-FT	964	913	7440	16680	40630	26530	7950	3090	1480	1150	1340	1370

e Estimated.

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
LOWEST ANNUAL MEAN	.69
HIGHEST DAILY MEAN	9810
LOWEST DAILY MEAN	.00
ANNUAL SEVEN-DAY MINIMUM	.00
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 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	20.0	32.4	53.0	170	201	206	68.7	24.2	17.6	18.6	17.3	15.4
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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1970 - 1996

ANNUAL TOTAL	55167.2	55222.2	
ANNUAL MEAN	151	151	69.8
HIGHEST ANNUAL MEAN			339
LOWEST ANNUAL MEAN			11.6
HIGHEST DAILY MEAN	2920	Mar 23	2440
LOWEST DAILY MEAN	7.4	Sep 14	9.2
ANNUAL SEVEN-DAY MINIMUM	9.7	Aug 16	13
INSTANTANEOUS PEAK FLOW			3960
INSTANTANEOUS PEAK STAGE			14.00
ANNUAL RUNOFF (AC-FT)	109400	109500	50560
10 PERCENT EXCEEDS	265	340	85
50 PERCENT EXCEEDS	24	26	18
90 PERCENT EXCEEDS	13	15	4.3

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.--Records good. Flow regulated since 1916 by Calaveras Reservoir, although dam not completed until 1925, usable capacity, 96,800 acre-ft, most of which is diverted for San Francisco water supply; since February 1965 by San Antonio Reservoir, capacity, 51,000 acre-ft; and since September 1968 by Del Valle Reservoir, 23 mi upstream, capacity, 77,100 acre-ft. Natural flow of stream affected by water imported from Delta-Mendota Canal beginning in 1962. Other diversions from ground-water basin for irrigation of 9,000 acres upstream from station. See schematic diagram of Alameda Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,000 ft³/s, Dec. 23, 1955, gage height, 14.9 ft; minimum (water years 1892-1962), no flow at times; minimum daily (water years 1963-96), 0.63 ft³/s, Oct. 7-10, 1984.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	8.6	18	37	1530	659	373	60	37	31	21	51
2	15	7.6	18	33	920	567	275	54	42	23	21	55
3	13	13	19	33	690	549	140	54	44	22	22	57
4	12	15	22	36	2260	1710	125	57	35	20	26	52
5	11	16	22	32	2480	3200	116	56	32	29	26	38
6	12	17	21	33	2430	2080	107	57	29	30	27	32
7	14	16	20	34	1980	1680	105	55	31	32	26	42
8	16	17	20	32	855	1080	105	51	35	34	26	47
9	16	21	17	33	559	899	114	46	36	32	23	48
10	16	23	22	32	423	578	238	49	38	25	21	44
11	18	19	531	31	337	464	342	52	33	22	29	39
12	18	19	1390	29	278	1790	248	52	30	21	29	39
13	16	20	253	30	235	1850	107	49	27	20	27	44
14	16	17	112	32	215	1710	105	44	27	25	25	45
15	14	16	368	32	276	1360	112	119	30	28	39	46
16	15	18	129	1590	701	1040	187	378	33	27	41	41
17	14	18	62	505	296	854	147	126	34	26	45	31
18	15	22	61	262	253	672	309	84	30	26	50	27
19	13	29	72	358	2640	449	127	65	28	24	51	21
20	15	26	45	147	5160	396	107	59	28	22	48	21
21	16	16	36	504	6340	350	92	56	27	27	50	28
22	17	18	213	207	4450	278	87	70	27	26	33	30
23	17	16	111	121	3880	263	87	58	30	24	25	29
24	15	16	56	521	3370	248	92	50	31	20	26	27
25	16	16	40	2320	2900	227	75	49	33	19	33	24
26	15	15	33	317	1900	210	66	49	32	24	34	25
27	17	15	33	1860	1670	196	64	48	24	26	48	26
28	17	15	36	886	980	224	62	48	22	27	47	27
29	18	15	39	534	708	202	63	39	21	26	46	27
30	18	16	82	603	---	164	66	36	28	24	46	29
31	14	---	48	2550	---	146	---	36	---	22	47	---
TOTAL	474	516.2	3949	13774	50716	26095	4243	2106	934	784	1058	1092
MEAN	15.3	17.2	127	444	1749	842	141	67.9	31.1	25.3	34.1	36.4
MAX	18	29	1390	2550	6340	3200	373	378	44	34	51	57
MIN	11	7.6	17	29	215	146	62	36	21	19	21	21
AC-FT	940	1020	7830	27320	100600	51760	8420	4180	1850	1560	2100	2170

11179000 ALAMEDA CREEK NEAR NILES, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1961, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.61	21.0	101	185	322	213	156	18.9	8.19	5.46	3.26	3.14
MAX	36.5	581	1469	2578	2431	1439	2323	95.5	46.1	50.1	47.5	48.9
(WY)	1936	1951	1956	1952	1938	1938	1958	1941	1938	1935	1935	1935
MIN	.000	.000	.000	.22	.71	.17	1.08	.11	.000	.000	.000	.000
(WY)	1925	1926	1931	1949	1948	1931	1929	1934	1931	1929	1925	1925

SUMMARY STATISTICS

WATER YEARS 1925 - 1961

ANNUAL MEAN	85.4	
HIGHEST ANNUAL MEAN	401	1952
LOWEST ANNUAL MEAN	.90	1961
HIGHEST DAILY MEAN	23900	Dec 23 1955
LOWEST DAILY MEAN	.00	Oct 1 1924
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1 1924
INSTANTANEOUS PEAK FLOW	29000	Dec 23 1955
INSTANTANEOUS PEAK STAGE	14.9	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	61830	
10 PERCENT EXCEEDS	91	
50 PERCENT EXCEEDS	2.7	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	27.7	55.5	99.2	248	401	390	138	58.2	45.5	40.9	39.6	32.1
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	17.2	20.1	28.4	28.9	32.5	18.3	18.6	16.3	20.6	15.8	2.51
(WY)	1979	1996	1979	1985	1977	1977	1991	1971	1978	1974	1995	1984

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1970 - 1996

ANNUAL TOTAL	107393.0	105741.2	
ANNUAL MEAN	294	289	130
HIGHEST ANNUAL MEAN			621
LOWEST ANNUAL MEAN			31.5
HIGHEST DAILY MEAN	9430	Mar 23	9430
LOWEST DAILY MEAN	6.1	Sep 14	7.6
ANNUAL SEVEN-DAY MINIMUM	9.8	Sep 9	13
INSTANTANEOUS PEAK FLOW			8840
INSTANTANEOUS PEAK STAGE			10.56
ANNUAL RUNOFF (AC-FT)	213000	209700	94140
10 PERCENT EXCEEDS	493	703	166
50 PERCENT EXCEEDS	42	37	41
90 PERCENT EXCEEDS	14	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.--Records good. No regulation or diversion upstream from station. See schematic diagram of Alameda Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft³/s, Jan. 9, 1995, gage height, 5.32 ft, from rating curve extended above 600 ft³/s on basis of slope-area measurement of peak flow; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 16	1130	177	2.96	Feb. 4	1200	200	3.04
Jan. 27	0845	441	3.67	Feb. 21	0730	301	3.34
Jan. 31	1000	203	3.05	Mar. 4	1500	340	3.44

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	1.9	30	15	8.4	1.5	.36	.00	.00	.00
2	.00	.00	.00	1.3	19	13	5.6	1.4	.30	.00	.00	.00
3	.00	.00	.00	.85	17	13	4.1	1.4	.26	.00	.00	.00
4	.00	.00	.00	.59	68	55	3.8	1.4	.25	.00	.00	.00
5	.00	.00	.00	.42	52	55	3.5	1.4	.24	.00	.00	.00
6	.00	.00	.00	.28	27	27	3.3	1.4	.21	.00	.00	.00
7	.00	.00	.00	.20	20	20	3.2	1.4	.20	.00	.00	.00
8	.00	.00	.00	.16	15	16	3.0	1.3	.20	.00	.00	.00
9	.00	.00	.00	.12	12	14	3.0	1.4	.17	.00	.00	.00
10	.00	.00	.00	.27	9.5	12	2.8	1.3	.16	.00	.00	.00
11	.00	.00	.63	.19	7.8	11	2.7	1.3	.16	.00	.00	.00
12	.00	.00	1.9	.05	6.6	49	2.6	1.3	.14	.00	.00	.00
13	.00	.00	.07	.03	5.8	25	2.5	1.2	.14	.00	.00	.00
14	.00	.00	.00	.00	5.3	17	2.4	1.2	.15	.00	.00	.00
15	.00	.00	2.5	.04	5.5	14	2.8	2.9	.14	.00	.00	.00
16	.00	.00	1.1	42	7.0	13	2.8	3.2	.15	.00	.00	.00
17	.00	.00	.09	17	5.2	11	4.6	.84	.14	.00	.00	.00
18	.00	.00	.01	22	4.9	9.5	5.0	.59	.12	.00	.00	.00
19	.00	.00	.00	26	53	8.3	2.8	.49	.08	.00	.00	.00
20	.00	.00	.00	12	49	7.6	2.7	.45	.10	.00	.00	.00
21	.00	.00	.00	37	101	6.8	2.4	.46	.06	.00	.00	.00
22	.00	.00	.37	14	42	6.4	2.2	.48	.05	.00	.00	.00
23	.00	.00	.24	8.5	24	5.9	2.1	.47	.03	.00	.00	.00
24	.00	.00	.03	57	25	5.6	2.1	.38	e.06	.00	.00	.00
25	.00	.00	.00	52	19	5.3	2.0	.34	e.12	.00	.00	.00
26	.00	.00	.00	20	19	5.0	1.9	.32	e.10	.00	.00	.00
27	.00	.00	.00	94	22	4.8	1.7	.38	e.07	.00	.00	.00
28	.00	.00	.00	39	18	5.8	1.7	.40	e.05	.00	.00	.00
29	.00	.00	1.0	21	19	4.6	1.5	.40	e.03	.00	.00	.00
30	.00	.00	6.3	16	---	4.3	1.5	.40	.00	.00	.00	.00
31	.00	---	3.0	85	---	4.1	---	.37	---	.00	.00	---
TOTAL	0.00	0.00	17.24	568.90	708.6	464.0	90.7	31.77	4.24	0.00	0.00	0.00
MEAN	.000	.000	.56	18.4	24.4	15.0	3.02	1.02	.14	.000	.000	.000
MAX	.00	.00	6.3	94	101	55	8.4	3.2	.36	.00	.00	.00
MIN	.00	.00	.00	.00	4.9	4.1	1.5	.32	.00	.00	.00	.00
AC-FT	.00	.00	34	1130	1410	920	180	63	8.4	.00	.00	.00

e Estimated.

11180500 DRY CREEK AT UNION CITY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.17	.61	2.21	7.48	8.53	6.62	2.85	.58	.16	.029	.013	.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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1917 - 1996	
ANNUAL TOTAL	1829.18		1885.45			
ANNUAL MEAN	5.01		5.15		2.41	
HIGHEST ANNUAL MEAN					13.0	
LOWEST ANNUAL MEAN					.002	
HIGHEST DAILY MEAN	140	Jan 9	101	Feb 21	335	Jan 21 1970
LOWEST DAILY MEAN	.00	Jul 9	.00	Oct 1	.00	Oct 1 1916
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 16	.00	Oct 1	.00	Oct 1 1916
INSTANTANEOUS PEAK FLOW			441	Jan 27	1680	Jan 9 1995
INSTANTANEOUS PEAK STAGE			3.67	Jan 27	5.32	Jan 9 1995
ANNUAL RUNOFF (AC-FT)	3630		3740		1750	
10 PERCENT EXCEEDS	11		17		4.0	
50 PERCENT EXCEEDS	.19		.06		.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 good. This stream is a distributary of Alameda Creek. Diversion by Alameda County Water District to percolation ponds between station 11179000 and this station; additional percolation to ground water by placing check dams in channel. See schematic diagram of Alameda Creek basin.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.48	1170	393	261	26	.06	.00	.00	.00
2	.00	.00	.00	.28	684	342	286	26	2.1	.00	.00	.00
3	.00	.00	.00	.06	513	330	127	17	14	.00	.00	.00
4	.00	.00	.00	.00	1880	1190	108	20	9.9	.00	.00	.00
5	.00	.00	.00	.00	1920	2440	103	24	7.8	.00	.00	.00
6	.00	.00	.00	.74	1760	1280	94	23	5.3	.00	.00	.00
7	.00	.00	.00	3.8	1380	1000	92	113	.24	.00	.00	.00
8	.00	.00	.00	.89	609	628	92	29	4.1	.00	.00	.00
9	.00	.00	.00	2.0	399	530	97	.34	8.7	.00	.00	.00
10	.00	.00	.00	3.8	310	364	178	7.5	10	.00	.00	.00
11	.00	.00	863	2.5	255	297	323	27	7.1	.00	.00	.00
12	.00	.00	2580	100	211	1120	271	12	7.3	.00	.00	.00
13	.00	.00	516	11	127	1190	94	20	4.1	.00	.00	.00
14	.00	.00	188	10	200	1030	90	15	2.7	.00	.00	.00
15	.00	.00	456	11	168	790	95	134	.20	.00	.00	.00
16	.00	.00	257	1970	527	598	175	774	3.7	.00	.00	.00
17	.00	.00	54	770	237	507	150	219	7.8	.00	.00	.00
18	.00	.00	32	206	191	366	332	115	7.1	.00	.00	.00
19	.00	.00	58	491	2090	266	138	73	5.1	.00	.00	.00
20	.00	.00	23	164	4900	244	110	59	4.7	.00	.00	.00
21	.00	.00	.12	551	6000	260	69	50	.22	.00	.00	.00
22	.00	.00	241	240	3510	187	24	71	.15	.00	.00	.00
23	.00	.00	189	107	2810	176	132	55	2.3	.00	.00	.00
24	.00	.00	35	427	2310	166	81	44	5.2	.00	.00	.00
25	.00	.00	.16	2700	1910	156	54	36	1.0	.00	.00	.00
26	.00	.00	.00	324	1090	149	1.0	37	11	.00	.00	.00
27	.00	.00	.00	1730	966	144	20	29	2.8	.00	.00	.00
28	.00	.00	.00	832	568	173	20	.55	.47	.00	.00	.00
29	.00	.00	3.3	432	414	153	20	.86	.17	.00	.00	.00
30	.00	.00	7.3	483	---	127	27	2.9	.05	.00	.00	.00
31	.00	---	3.8	2300	---	113	---	.14	---	.00	.00	---
TOTAL	0.00	0.00	5506.68	13873.55	39109	16709	3664.0	2060.29	135.36	0.00	0.00	0.00
MEAN	.0000	.0000	178	448	1349	539	122	66.5	4.51	.0000	.0000	.0000
MAX	.00	.00	2580	2700	6000	2440	332	774	14	.00	.00	.00
MIN	.00	.00	.00	.00	127	113	1.0	.14	.05	.00	.00	.00
AC-FT	.00	.00	10920	27520	77570	33140	7270	4090	268	.00	.00	.00

11180700 PATTERSON CREEK AT UNION CITY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.55	34.0	74.2	213	317	280	113	25.7	8.37	1.67	.47	1.20
MAX	53.0	404	557	1711	2150	3007	1091	312	120	27.1	8.73	19.1
(WY)	1963	1984	1984	1983	1983	1983	1982	1983	1973	1995	1970	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1959	1959	1959	1959	1961	1960	1959	1959	1959	1959	1959	1959

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1959 - 1996	
ANNUAL TOTAL	93168.73		81057.88			
ANNUAL MEAN	255		221		88.5	
HIGHEST ANNUAL MEAN					703	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	8300	Mar 23	6000	Feb 21	11700	Feb 19 1986
LOWEST DAILY MEAN	.00	Aug 5	.00	Oct 1	.00	Oct 1 1958
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 5	.00	Oct 1	.00	Oct 1 1958
INSTANTANEOUS PEAK FLOW			9610	Feb 21	22100	Feb 19 1986
INSTANTANEOUS PEAK STAGE			15.67	Feb 21	18.44	Feb 19 1986
ANNUAL RUNOFF (AC-FT)	184800		160800		64080	
10 PERCENT EXCEEDS	486		556		129	
50 PERCENT EXCEEDS	32		.51		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA

LOCATION.--Lat 37°42'55", long 122°03'12", in San Lorenzo (Castro) Grant, Alameda County, Hydrologic Unit 18050004, on left bank 0.9 mi upstream from Cull Creek Dam and 1.1 mi northeast of Castro Valley Post Office.

DRAINAGE AREA.--5.79 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

REVISED RECORDS.--WDR CA-80-2: 1979(P).

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

REMARKS.--Records fair except for estimated daily discharges, which are poor. No storage or diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,690 ft³/s, Jan. 5, 1982, gage height, 8.71 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 24	2200	311	3.77	Feb. 21	0515	391	4.14
Feb. 4	1100	330	3.86				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.49	16	8.7	7.7	e1.2	e.86	.10	.00	.00
2	.00	.00	.00	.40	e11	e5.2	4.8	e1.1	e.81	.08	.00	.00
3	.00	.00	.00	.32	e10	e4.9	4.2	e1.1	e.77	.08	.00	.00
4	.00	.00	.01	.35	74	42	3.9	e1.1	e.73	.08	.00	.00
5	.00	.00	.01	.26	32	25	3.7	e1.0	e.71	.07	.00	.00
6	.00	.00	.01	.26	18	16	3.8	e1.0	e.63	.06	.00	.00
7	.00	.00	.01	.26	15	13	3.6	e.98	e.60	.05	.00	.00
8	.00	.00	.01	.26	12	12	3.4	e.98	e.58	.06	.00	.00
9	.00	.00	.01	.26	8.9	11	3.3	e.96	e.50	.06	.00	.00
10	.00	.00	.01	.20	6.5	10	3.3	e.93	e.46	.05	.00	.00
11	.00	.00	4.7	.20	6.0	10	3.2	e.86	e.44	.04	.00	.00
12	.00	.00	11	.20	5.5	83	3.0	e.81	e.40	.03	.00	.00
13	.00	.00	2.7	.21	5.7	25	2.8	e.77	.37	.03	.00	.00
14	.00	.00	.91	.20	5.2	16	3.0	e.73	.36	.03	.00	.00
15	.00	.00	5.6	.20	6.0	13	3.1	e2.0	.36	.04	.00	.00
16	.00	.00	1.1	36	4.7	12	3.3	e3.7	.39	.05	.00	.00
17	.00	.00	.29	6.6	4.3	11	3.6	e1.8	.38	.05	.00	.00
18	.00	.00	.33	19	4.8	9.4	3.8	e1.5	.30	.04	.00	.00
19	.00	.00	.21	10	77	8.7	2.7	e1.2	.26	.03	.00	.00
20	.00	.00	.13	4.1	67	8.2	2.4	e1.1	.26	.02	.00	.00
21	.00	.00	.09	19	116	7.7	2.2	e.98	.28	.01	.00	.00
22	.00	.00	1.0	3.6	41	7.4	2.2	e1.2	.24	.01	.00	.00
23	.00	.00	.33	2.2	24	6.9	2.1	e1.0	.20	.01	.00	.00
24	.00	.00	.19	63	21	6.5	1.9	e.98	.19	.01	.00	.00
25	.00	.00	.13	49	16	6.1	1.5	e.93	.23	.01	.00	.00
26	.00	.00	.12	12	13	5.8	1.5	e.93	.25	.01	.00	.00
27	.00	.00	.12	28	14	5.8	1.3	e.86	.24	.01	.00	.00
28	.00	.00	.10	11	12	6.0	1.1	e1.1	.18	.00	.00	.00
29	.00	.00	1.3	6.4	13	5.1	1.1	e1.1	.16	.00	.00	.00
30	.00	.00	1.6	8.0	---	4.8	1.2	e.98	.13	.00	.00	.00
31	.00	---	.70	47	---	4.7	---	e.93	---	.00	.00	---
TOTAL	0.00	0.00	32.72	328.97	659.6	410.9	88.7	35.81	12.27	1.12	0.00	0.00
MEAN	.000	.000	1.06	10.6	22.7	13.3	2.96	1.16	.41	.036	.000	.000
MAX	.00	.00	11	63	116	83	7.7	3.7	.86	.10	.00	.00
MIN	.00	.00	.00	.20	4.3	4.7	1.1	.73	.13	.00	.00	.00
AC-FT	.00	.00	65	653	1310	815	176	71	24	2.2	.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 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.048	.86	2.32	8.04	11.4	9.53	2.86	.79	.25	.061	.011	.005
MAX	.45	6.00	14.0	35.5	39.7	54.3	16.8	3.56	.95	.25	.12	.078
(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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1979 - 1996			
ANNUAL TOTAL	1813.94				1570.09							
ANNUAL MEAN	4.97				4.29							
HIGHEST ANNUAL MEAN									2.98			
LOWEST ANNUAL MEAN									10.3			
HIGHEST DAILY MEAN	172				116				.054			
LOWEST DAILY MEAN	.00				.00				445			
ANNUAL SEVEN-DAY MINIMUM	.00				.00				.00			
INSTANTANEOUS PEAK FLOW					391				1690			
INSTANTANEOUS PEAK STAGE					4.14				8.71			
ANNUAL RUNOFF (AC-FT)	3600				3110				2160			
10 PERCENT EXCEEDS	12				11				5.3			
50 PERCENT EXCEEDS	.50				.23				.09			
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 2.24 ft³/s. Sediment samples were collected on most days where a water temperature is published.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 24,400 mg/L, Mar. 13, 1993; minimum daily mean, no flow many days during most years.

SEDIMENT LOAD: Maximum daily, 26,400 tons, Feb. 17, 1986; minimum daily, 0 ton many days during most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 5,380 mg/L, Mar. 12; minimum daily mean, no flow on many days.

SEDIMENT LOAD (storm season only): Maximum daily, 2,570 tons, Feb. 21; minimum daily, 0 ton on many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
DEC									
12...	0000	17	13.0	1300	60	65	76	86	93
20...	2000	0.12	7.5	10	0.00	--	--	--	--
JAN									
03...	1015	0.31	7.0	38	0.03	--	--	--	--
18...	1645	126	10.5	9580	3260	28	32	36	47
18...	1655	145	10.5	9650	3780	--	--	--	--
24...	2255	198	11.0	12600	6740	26	32	36	49
FEB									
19...	1545	95	13.5	8240	2110	21	26	32	42
21...	1230	101	11.0	4340	1180	23	25	30	39
21...	1415	85	11.5	3460	794	25	27	34	44
23...	0915	24	8.0	390	25	--	--	--	--
MAR									
04...	1555	167	11.0	14300	6450	26	30	32	41
12...	2215	43	11.0	1700	197	30	34	42	52
24...	1445	6.7	12.5	40	0.72	--	--	--	--
30...	1445	4.8	13.5	26	0.34	--	--	--	--
APR									
17...	1000	2.5	10.0	25	0.17	--	--	--	--
17...	2030	5.1	12.0	464	6.4	--	--	--	--
29...	2115	1.2	15.5	24	0.08	--	--	--	--

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	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	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 4.00 MM
DEC								
12...	93	98	99	100	--	--	--	--
20...	--	97	--	--	--	--	--	--
JAN								
03...	--	34	--	--	--	--	--	--
18...	61	72	83	93	98	99	100	--
18...	--	73	--	--	--	--	--	--
24...	60	69	82	94	99	100	--	--
FEB								
19...	50	60	75	90	98	100	--	--
21...	47	60	72	85	92	95	98	100
21...	56	66	80	93	99	100	--	--
23...	--	84	--	--	--	--	--	--
MAR								
04...	51	62	75	92	99	100	--	--
12...	65	77	87	96	99	100	--	--
24...	--	57	--	--	--	--	--	--
30...	--	36	--	--	--	--	--	--
APR								
17...	--	44	--	--	--	--	--	--
17...	--	98	99	100	--	--	--	--
29...	--	40	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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
FEB							
21...	1505	1	73	11.0	8	20	43
21...	1510	1	74	11.0	--	1	5
21...	1515	1	75	11.0	--	2	6
21...	1520	1	73	11.0	--	1	4
21...	1525	1	70	11.0	--	4	8
21...	1530	1	68	11.0	3	5	9
APR							
17...	1030	1	2.2	10.0	5	10	34
17...	1035	1	2.2	10.0	1	2	8
17...	1040	1	2.2	10.0	1	2	8
17...	1045	1	2.2	10.0	9	19	42

SAN LORENZO CREEK BASIN

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	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
FEB							
21...	62	78	87	93	95	100	--
21...	12	17	20	23	30	43	100
21...	12	19	27	38	50	75	100
21...	8	15	25	37	47	53	100
21...	14	30	47	64	76	87	100
21...	14	23	34	50	64	92	100
APR							
17...	44	55	58	62	74	87	100
17...	15	23	34	50	67	81	100
17...	18	30	39	48	56	66	100
17...	59	68	70	74	81	89	100

PARTICLE SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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									
21...	1245	1000	1120	0.250	0	1240	1250	10	1.0
21...	1300	1000	1120	0.250	0	1255	1305	10	1.0
23...	0940	1000	1120	0.250	0	0930	0950	30	0.7
23...	1005	1000	1120	0.250	0	0955	1010	30	0.7

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 T/D/FT	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM
FEB									
21...	2	18	18	0.50	99	11.0	8.08	167	1
21...	2	18	18	0.50	99	11.0	11.6	167	1
23...	2	19	19	0.40	24	8.0	0.53	7.8	--
23...	2	19	19	0.40	24	8.0	0.64	7.8	--

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	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM
FEB									
21...	7	16	22	30	43	66	84	96	100
21...	6	14	20	30	43	64	89	100	--
23...	2	12	24	38	63	87	99	100	--
23...	4	17	41	64	79	91	100	--	--

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WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	9.5	11.0	12.0	---	---	---	---	---	---
2	---	---	---	---	11.0	13.0	---	---	---	---	---	---
3	---	---	---	7.0	12.0	---	---	---	---	---	---	---
4	---	---	---	9.0	13.0	11.0	---	---	---	---	---	---
5	---	---	---	---	14.0	10.5	---	---	---	---	---	---
6	---	---	---	---	13.0	9.5	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	9.5	11.5	11.5	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	12.5	7.5	---	13.0	---	---	---	---	---	---
12	---	---	12.5	---	14.0	11.0	14.0	---	13.0	---	---	---
13	---	---	11.5	---	---	12.5	---	---	---	---	---	---
14	---	---	10.0	8.0	---	14.0	---	---	---	---	---	---
15	---	---	10.0	---	12.5	12.5	12.5	---	---	---	---	---
16	---	---	8.0	12.0	14.5	---	14.0	---	---	---	---	---
17	---	---	---	9.5	---	15.5	10.0	---	---	---	---	---
18	---	---	8.0	10.5	13.0	---	13.0	---	---	---	---	---
19	---	---	---	8.5	13.5	15.0	---	---	---	---	---	---
20	---	---	7.5	9.5	13.0	---	11.5	---	---	---	---	---
21	---	---	---	9.5	11.0	---	---	---	---	---	---	---
22	---	---	8.0	8.0	10.5	---	12.5	---	---	---	---	---
23	---	---	7.0	8.0	8.0	---	---	---	---	---	---	---
24	---	---	---	11.0	8.5	12.5	13.5	---	---	---	---	---
25	---	---	---	9.5	8.0	---	---	---	---	---	---	---
26	---	---	---	---	9.0	---	12.5	---	---	---	---	---
27	---	---	8.5	---	---	---	---	---	---	---	---	---
28	---	---	---	---	10.0	12.5	---	---	---	---	---	---
29	---	---	10.5	9.5	11.0	---	15.5	---	---	---	---	---
30	---	---	11.5	10.0	---	13.5	---	---	---	---	---	---
31	---	---	---	11.0	---	---	---	---	---	---	---	---

SAN LORENZO CREEK BASIN

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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	---	---	.00	---	---	.00	0	.00
2	.00	---	---	.00	---	---	.00	0	.00
3	.00	---	---	.00	---	---	.00	0	.00
4	.00	---	---	.00	---	---	.01	0	.00
5	.00	---	---	.00	---	---	.01	0	.00
6	.00	---	---	.00	---	---	.01	0	.00
7	.00	---	---	.00	---	---	.01	0	.00
8	.00	---	---	.00	---	---	.01	0	.00
9	.00	---	---	.00	---	---	.01	0	.00
10	.00	---	---	.00	---	---	.01	0	.00
11	.00	---	---	.00	---	---	4.7	255	7.5
12	.00	---	---	.00	---	---	11	1100	61
13	.00	---	---	.00	---	---	2.7	155	2.0
14	.00	---	---	.00	---	---	.91	47	.19
15	.00	---	---	.00	---	---	5.6	192	5.2
16	.00	---	---	.00	---	---	1.1	22	.08
17	.00	---	---	.00	---	---	.29	4	.00
18	.00	---	---	.00	---	---	.33	5	.00
19	.00	---	---	.00	---	---	.21	3	.00
20	.00	---	---	.00	---	---	.13	7	.00
21	.00	---	---	.00	---	---	.09	4	.00
22	.00	---	---	.00	---	---	1.0	70	.19
23	.00	---	---	.00	---	---	.33	17	.02
24	.00	---	---	.00	---	---	.19	15	.01
25	.00	---	---	.00	---	---	.13	12	.00
26	.00	---	---	.00	---	---	.12	13	.00
27	.00	---	---	.00	---	---	.12	18	.01
28	.00	---	---	.00	---	---	.10	14	.00
29	.00	---	---	.00	---	---	1.3	90	.32
30	.00	---	---	.00	---	---	1.6	110	.48
31	.00	---	---	---	---	---	.70	39	.08
TOTAL	0.00	---	---	0.00	---	---	32.72	---	77.08

SAN LORENZO CREEK BASIN

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11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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	.49	33	.04	16	210	9.7	8.7	76	1.8
2	.40	39	.04	11	107	3.1	e5.2	79	1.1
3	.32	37	.03	10	107	3.0	e4.8	69	.92
4	.35	32	.03	74	4190	1690	42	2720	818
5	.26	29	.02	32	933	92	25	580	46
6	.26	28	.02	18	292	14	16	182	7.9
7	.26	26	.02	15	159	6.4	13	130	4.6
8	.26	25	.02	12	104	3.4	12	114	3.7
9	.26	24	.02	8.9	86	2.1	11	101	3.0
10	.20	24	.01	6.5	62	1.1	10	105	3.0
11	.20	23	.01	6.0	45	.72	10	117	3.3
12	.20	21	.01	5.5	32	.47	83	5380	1660
13	.21	19	.01	5.7	34	.54	25	544	39
14	.20	17	.01	5.2	32	.45	16	190	8.3
15	.20	17	.01	6.0	335	10	13	141	5.1
16	36	3230	675	4.7	179	2.6	12	125	3.9
17	6.6	120	3.0	4.3	83	.97	11	120	3.4
18	19	1300	262	4.8	124	2.1	9.4	123	3.1
19	10	241	7.9	77	5230	2010	8.7	127	3.0
20	4.1	228	52	67	2430	623	8.2	109	2.4
21	19	978	126	116	4950	2570	7.7	85	1.8
22	3.6	47	.52	41	964	118	7.4	67	1.3
23	2.2	19	.12	24	389	25	6.9	52	.98
24	63	3250	1310	21	448	26	6.5	41	.72
25	49	1740	466	16	235	11	6.1	32	.52
26	12	175	5.8	13	153	5.4	5.8	25	.39
27	28	1770	294	14	170	6.7	5.8	20	.31
28	11	318	9.7	12	119	3.8	6.0	28	.46
29	6.4	106	1.9	13	140	5.4	5.1	22	.30
30	8.0	232	9.7	---	---	---	4.8	24	.32
31	47	3580	656	---	---	---	4.7	19	.24
TOTAL	328.97	---	3879.94	659.6	---	7246.95	410.9	---	2628.86

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 1995 TO SEPTEMBER 1996

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			
1	7.7	46	1.4
2	4.8	24	.31
3	4.2	18	.20
4	3.9	17	.18
5	3.7	17	.17
6	3.8	16	.17
7	3.6	16	.16
8	3.4	16	.14
9	3.3	15	.14
10	3.3	15	.13
11	3.2	14	.12
12	3.0	14	.12
13	2.8	14	.11
14	3.0	14	.11
15	3.1	14	.12
16	3.3	17	.15
17	3.6	193	4.7
18	3.8	134	2.0
19	2.7	56	.45
20	2.4	45	.30
21	2.2	30	.18
22	2.2	27	.16
23	2.1	25	.14
24	1.9	23	.11
25	1.5	22	.09
26	1.5	21	.08
27	1.3	19	.07
28	1.1	18	.05
29	1.1	20	.06
30	1.2	19	.06
31	---	---	---
TOTAL	88.7	---	12.18
PERIOD	1520.89		13845.01

e Estimated

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1995	0.00	0.00	0	0
NOVEMBER	0.00	0.00	0	0
DECEMBER	32.72	77.08	27	104
JANUARY 1996	328.97	3879.94	580	4460
FEBRUARY	659.60	7246.95	574	7820
MARCH	410.90	2628.86	128	2760
APRIL	88.70	12.18	1	13
PERIOD	1520.89	13845.01	1310	15157

11181008 CASTRO VALLEY CREEK AT HAYWARD, CA

LOCATION.--Lat 37°40'48", long 122°04'46", in San Lorenzo (Castro) Grant, Alameda County, Hydrologic Unit 18050004, on left bank 500 ft east of Hayward City Hall, 700 ft upstream from mouth, and 700 ft downstream from small left-bank tributary.

DRAINAGE AREA.--5.51 mi².

PERIOD OF RECORD.--October 1971 to current year (seasonal records only, water years 1975-77).

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

REMARKS.--Records good. 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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0820	596	5.69	Feb. 4	0920	633	5.86
Jan. 16	0800	714	6.21	Feb. 20	0420	576	5.60
Jan. 27	0735	642	5.90	Mar. 4	1510	624	5.82

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.27	.92	.80	6.6	3.4	22	.65	.52	.43	.61	.34
2	.20	.24	.32	.71	3.7	2.6	1.6	.64	.51	.40	.35	.32
3	.18	.23	.22	.58	5.9	7.9	1.2	.62	.52	.40	.33	.33
4	.17	.23	4.7	.54	83	64	1.1	.58	.53	.39	.32	.33
5	.19	.22	.37	.50	15	15	1.1	.58	.48	.39	.38	.44
6	.19	.22	.32	.48	5.5	5.0	1.0	.60	.47	.40	.37	.31
7	.18	.23	.41	.48	3.8	3.8	1.0	.61	.44	.41	.36	.34
8	.18	.23	.28	.48	3.0	3.0	.94	.61	.43	.43	.36	.30
9	.22	.29	.28	.45	2.4	2.6	.85	.62	.43	.39	.40	.33
10	.21	.34	1.5	.44	1.9	3.2	.85	.58	.42	.39	.35	.32
11	.18	.20	114	.46	1.7	4.8	.85	.60	.42	.39	.36	.32
12	.18	.21	55	.40	1.6	86	.80	.65	.42	.35	.35	.36
13	.19	.22	23	.41	1.7	7.9	.77	.71	.41	.35	.35	.37
14	.18	.22	2.0	.41	1.5	4.5	.77	.60	.38	.37	.34	.32
15	.18	.23	36	.70	14	3.5	1.9	48	.41	.38	.36	.35
16	.19	.28	1.8	97	2.2	3.0	12	15	.38	.40	.44	.51
17	.18	.24	1.0	3.2	2.3	2.6	20	3.3	.37	.38	.34	.30
18	.20	.26	3.9	36	6.8	2.3	2.2	1.3	.38	.37	.34	.29
19	.21	.25	.89	17	62	2.1	2.5	.93	.40	.36	.31	.32
20	.51	.25	.72	19	41	1.9	1.1	.84	.38	.38	.34	.31
21	.26	.24	.66	22	91	1.7	.95	3.9	.37	.38	.36	.31
22	.24	.24	12	3.1	14	1.6	.85	.88	.35	.38	.37	.30
23	.32	.24	.94	3.3	7.6	1.5	.82	.78	.42	.37	.35	.31
24	.25	.24	.70	54	8.5	1.4	1.4	.73	.82	.37	.41	.30
25	.27	.23	.59	11	5.0	1.3	.76	.73	.47	.40	.33	.28
26	.26	.25	.56	3.4	3.5	1.4	.73	.65	.48	.36	.34	.30
27	.34	.22	.82	65	8.6	3.5	.72	.66	.45	.36	.34	.28
28	.26	.22	.51	6.2	4.1	1.8	.69	1.4	.50	.36	.44	.36
29	.25	.21	23	3.5	12	1.1	.66	.52	.45	.39	.33	.31
30	.26	.20	3.1	21	---	1.1	.67	.52	.42	.37	.32	.31
31	.48	---	1.1	77	---	1.0	---	.51	---	.35	.34	---
TOTAL	7.33	7.15	291.61	449.54	419.9	246.5	82.78	89.30	13.43	11.85	11.29	9.87
MEAN	.24	.24	9.41	14.5	14.5	7.95	2.76	2.88	.45	.38	.36	.33
MAX	.51	.34	114	97	91	86	22	48	.82	.43	.61	.51
MIN	.17	.20	.22	.40	1.5	1.0	.66	.51	.35	.35	.31	.28
AC-FT	15	14	578	892	833	489	164	177	27	24	22	20

SAN LORENZO CREEK BASIN

11181008 CASTRO VALLEY CREEK AT HAYWARD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.63	4.61	5.10	8.75	9.33	7.84	2.74	1.09	.57	.38	.35	.52
MAX	4.97	19.0	12.8	24.6	25.5	34.6	12.3	3.23	1.55	1.15	1.50	1.62
(WY)	1976	1974	1984	1982	1986	1983	1974	1990	1995	1974	1983	1983
MIN	.15	.24	.24	.39	1.06	.60	.20	.30	.28	.17	.14	.12
(WY)	1978	1993	1990	1991	1977	1988	1977	1992	1980	1991	1980	1980

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1972 - 1996

ANNUAL TOTAL	1760.58	1640.55	
ANNUAL MEAN	4.82	4.48	3.78
HIGHEST ANNUAL MEAN			8.76
LOWEST ANNUAL MEAN			1.51
HIGHEST DAILY MEAN	158	114	322
LOWEST DAILY MEAN	.17 Oct 4	.17 Oct 4	.00 Oct 11 1977
ANNUAL SEVEN-DAY MINIMUM	.18 Oct 11	.18 Oct 11	.00 Oct 11 1977
INSTANTANEOUS PEAK FLOW		714	1350
INSTANTANEOUS PEAK STAGE		6.21 Jan 16	8.51 Jan 23 1983
ANNUAL RUNOFF (AC-FT)	3490	3250	2740
10 PERCENT EXCEEDS	11	7.7	6.3
50 PERCENT EXCEEDS	.69	.47	.47
90 PERCENT EXCEEDS	.24	.24	.18

11181040 SAN LORENZO CREEK AT SAN LORENZO, CA

LOCATION.--Lat 37°41'03", long 122°08'20", in San Lorenzo (Soto) Grant, Alameda County, Hydrologic Unit 18050004, on left bank 400 ft downstream from Washington Avenue Bridge in San Lorenzo and 1.6 mi upstream from mouth.

DRAINAGE AREA.--44.6 mi².

PERIOD OF RECORD.--October 1967 to September 1978, October 1987 to current year.

WATER TEMPERATURE: Water years 1989-93 (storm season only).

SEDIMENT DATA: Water years 1989-93 (storm season only).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 6.13 ft above sea level (levels by Alameda County Flood Control and Water Conservation District).

REMARKS.--Records good except for estimated discharges, which are fair. 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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 16	0820	1,650	5.81	Mar. 4	1530	1,830	5.90
Jan. 27	0800	1,670	5.82	Mar. 12	0645	1,670	5.82
Jan. 31	0840	1,900	5.94	Apr. 1	1415	973	5.35
Feb. 4	1220	1,710	5.84	May 15	1445	1,160	5.50
Feb. 21	0830	2,800	6.33				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.9	4.4	6.8	101	57	101	38	8.0	e3.4	2.6	2.9
2	1.4	2.4	6.4	6.2	65	50	43	39	7.8	e3.4	2.2	2.7
3	1.4	2.6	3.4	5.6	63	61	37	39	7.5	e3.3	2.2	2.6
4	1.1	2.6	4.7	5.6	491	428	37	40	7.4	e3.2	2.1	2.4
5	1.2	2.2	3.3	5.4	170	220	36	39	7.1	e3.1	2.2	2.6
6	1.5	2.0	2.0	5.1	91	97	36	37	6.8	e3.1	2.2	1.9
7	1.5	2.3	2.4	5.3	70	75	35	37	6.4	e3.2	2.3	1.7
8	1.8	2.2	1.6	5.0	58	65	35	36	6.0	e3.3	2.3	1.4
9	1.7	2.4	1.5	5.1	50	58	35	35	5.6	e3.4	2.3	1.3
10	1.6	2.6	3.7	4.9	45	54	35	35	5.2	e3.1	2.2	1.0
11	1.7	2.3	272	4.9	40	54	34	33	4.8	e3.1	2.0	1.2
12	1.7	2.3	188	4.7	38	491	33	32	e5.1	e3.0	1.8	1.2
13	1.5	2.5	53	4.8	36	117	36	32	e4.5	e2.9	1.8	1.3
14	1.3	2.5	19	4.7	35	77	33	31	e4.6	e2.9	1.7	1.3
15	1.2	2.9	37	6.0	59	66	35	159	e4.5	e2.9	1.7	1.5
16	1.4	3.3	18	431	47	61	62	88	e4.4	e3.0	1.7	1.9
17	1.4	3.6	8.9	40	35	56	75	36	e4.5	e3.1	1.5	1.2
18	1.6	3.7	16	137	39	53	45	32	e4.4	e3.0	1.5	1.3
19	1.7	4.0	8.1	87	556	50	35	20	e4.0	e2.5	1.5	1.2
20	2.4	4.2	6.2	55	390	48	31	17	e4.0	e2.4	1.6	1.1
21	2.2	4.1	5.6	151	948	47	30	24	e3.8	e2.3	1.7	1.2
22	2.0	4.3	32	38	245	45	29	22	e3.8	e2.3	1.7	1.1
23	1.8	4.4	11	32	123	44	29	14	e3.7	e2.4	1.6	1.2
24	1.7	4.5	6.4	256	117	43	31	11	e3.5	e2.3	1.8	1.3
25	1.6	4.5	5.4	286	86	42	32	9.8	e4.9	2.3	1.6	1.2
26	1.7	4.4	5.3	56	69	42	31	8.9	e4.0	2.1	1.8	1.3
27	2.0	4.1	5.6	404	82	43	32	9.1	e3.8	2.3	2.0	1.4
28	2.2	4.0	5.6	109	63	48	32	10	e3.7	2.5	2.4	1.5
29	2.1	3.8	43	61	78	40	34	8.5	e3.8	2.4	2.3	1.4
30	2.1	3.8	22	77	---	39	37	8.4	e3.6	2.1	2.5	1.5
31	2.6	---	8.8	471	---	39	---	8.1	---	2.2	2.9	---
TOTAL	52.7	97.4	810.3	2771.1	4290	2710	1166	988.8	151.2	86.5	61.7	46.8
MEAN	1.70	3.25	26.1	89.4	148	87.4	38.9	31.9	5.04	2.79	1.99	1.56
MAX	2.6	4.5	272	471	948	491	101	159	8.0	3.4	2.9	2.9
MIN	1.1	2.0	1.5	4.7	35	39	29	8.1	3.5	2.1	1.5	1.0
AC-FT	105	193	1610	5500	8510	5380	2310	1960	300	172	122	93

e Estimated.

SAN LORENZO CREEK BASIN

11181040 SAN LORENZO CREEK AT SAN LORENZO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.34	8.23	22.3	61.7	51.5	44.6	21.5	8.46	3.82	1.64	1.33	1.74
MAX	30.2	38.1	106	201	183	154	108	31.9	17.0	3.52	3.25	4.58
(WY)	1992	1974	1971	1993	1969	1985	1974	1996	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1968 - 1996			
ANNUAL TOTAL	12314.0				13232.5							
ANNUAL MEAN	33.7				36.2				19.2			
HIGHEST ANNUAL MEAN									40.9			
LOWEST ANNUAL MEAN									2.38			
HIGHEST DAILY MEAN	1090				948				2400			
LOWEST DAILY MEAN	1.1				1.0				.01			
ANNUAL SEVEN-DAY MINIMUM	1.3				1.2				.01			
INSTANTANEOUS PEAK FLOW					2800				5300			
INSTANTANEOUS PEAK STAGE					6.33				9.19			
ANNUAL RUNOFF (AC-FT)	24420				26250				13920			
10 PERCENT EXCEEDS	56				71				42			
50 PERCENT EXCEEDS	5.6				4.8				2.4			
90 PERCENT EXCEEDS	1.5				1.5				.55			

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA

LOCATION.--Lat 37°57'53", long 122°25'42", in NW 1/4 sec.3, T.1 N., R.5 W., Contra Costa County, Hydrologic Unit 18050002, on north end of Richmond Terminal No. 4 Pier on west side of Point San Pablo.

GAGE-HEIGHT RECORDS

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1989 to current year (gage height only).

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level.

REMARKS.--Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 15.30 ft, Dec. 11, 1993; minimum gage height recorded, 4.93 ft, June 13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 15.01 ft, Feb. 19; minimum gage height recorded, 5.70 ft, Jan. 19.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.58	7.71	13.17	7.83	13.64	8.18	13.57	7.02	13.97	7.60	13.16	8.12
2	13.47	7.66	13.26	7.96	13.56	7.55	13.85	7.13	13.92	7.24	13.32	8.14
3	13.48	7.73	13.46	7.99	13.59	7.21	13.89	7.03	13.93	7.10	13.73	8.19
4	13.51	7.66	13.64	7.59	13.74	6.94	13.93	6.97	14.50	7.63	14.25	8.61
5	13.58	7.88	13.64	7.34	13.83	6.82	13.69	6.81	13.67	7.46	13.86	8.11
6	13.72	8.04	13.62	6.89	13.66	6.74	13.53	6.63	13.23	7.76	13.28	8.31
7	13.88	8.16	13.55	6.80	13.70	6.71	13.49	6.94	13.07	8.24	13.29	8.56
8	13.88	7.87	13.54	6.88	13.52	6.74	13.27	7.20	13.18	8.88	13.41	8.53
9	13.88	7.70	13.59	7.14	13.31	6.96	12.92	7.43	13.54	9.39	13.63	8.51
10	13.89	7.69	13.29	7.11	13.39	7.58	12.49	7.65	13.55	9.41	13.72	8.41
11	13.75	7.58	12.97	7.34	13.55	9.00	12.54	8.00	13.51	9.08	13.60	8.35
12	13.32	7.71	12.64	7.61	14.38	8.68	12.90	8.66	13.58	8.81	13.92	8.29
13	13.13	7.90	12.34	7.99	13.48	8.35	13.05	8.97	13.91	8.36	13.69	8.23
14	13.04	8.32	12.33	8.21	12.86	8.68	13.31	8.39	13.98	7.72	13.43	7.82
15	12.52	8.35	12.54	8.33	13.22	8.72	13.64	7.70	14.36	6.96	13.51	7.33
16	12.23	8.39	12.71	8.44	13.11	8.64	14.58	7.68	14.62	6.66	13.84	7.23
17	12.29	8.40	12.86	8.41	13.53	7.89	14.05	6.39	14.94	6.93	13.92	7.27
18	12.45	8.36	13.09	8.05	14.02	7.27	14.63	6.61	14.86	7.24	13.88	7.55
19	12.72	8.37	13.52	7.60	14.25	6.76	14.50	5.70	15.01	7.87	13.78	7.91
20	12.83	8.13	13.95	7.13	14.62	6.21	14.43	6.05	14.70	8.11	13.85	7.74
21	13.22	8.15	14.19	6.45	14.67	5.78	14.35	6.13	14.82	8.44	14.05	7.83
22	13.44	7.61	14.21	6.14	14.81	5.91	13.47	5.88	14.33	8.66	13.84	7.64
23	13.76	7.13	14.35	5.99	14.59	6.05	13.18	6.64	13.70	8.53	13.46	7.72
24	13.91	6.72	14.21	5.97	14.29	6.32	13.20	7.68	13.74	8.94	13.24	8.11
25	13.97	6.44	14.07	6.17	13.80	6.71	13.30	7.82	13.60	9.20	12.79	8.12
26	13.95	6.51	13.35	6.09	13.34	7.31	13.10	8.33	13.34	8.90	12.43	8.28
27	14.00	6.73	12.90	6.70	13.52	7.95	14.04	8.70	13.31	8.93	12.31	8.39
28	13.93	7.06	12.74	7.32	13.45	8.46	13.30	8.14	13.30	8.76	12.34	8.36
29	13.57	7.31	13.02	7.62	13.51	8.49	13.34	7.99	13.34	8.31	12.27	8.21
30	13.12	7.52	13.29	7.85	13.61	8.10	13.64	7.58	---	---	12.45	8.03
31	13.02	7.54	---	---	13.53	7.52	13.99	7.73	---	---	13.19	8.18
MONTH	14.00	6.44	14.35	5.97	14.81	5.78	14.63	5.70	15.01	6.66	14.25	7.23

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.39	8.46	13.67	7.70	14.31	6.13	14.67	5.99	14.08	6.51	13.87	8.32
2	13.32	8.30	13.82	7.12	14.36	5.72	14.68	6.04	13.64	6.93	13.72	8.28
3	13.31	7.87	13.96	6.79	14.41	5.92	14.45	6.25	13.64	7.54	13.57	8.35
4	13.30	7.31	13.98	6.43	14.22	5.95	13.80	6.36	13.78	8.24	13.31	8.26
5	13.39	6.93	13.98	6.19	13.97	6.31	13.42	6.84	13.81	8.52	13.20	8.23
6	13.61	6.79	13.96	6.27	13.63	6.76	13.56	7.52	13.73	8.50	13.24	8.09
7	13.95	7.12	13.79	6.50	13.47	7.28	13.84	8.34	13.63	8.21	13.28	7.97
8	13.83	7.15	13.47	6.62	13.53	7.79	13.94	8.71	13.71	7.96	13.32	7.99
9	13.50	7.05	12.95	6.78	13.53	8.26	13.99	8.38	13.81	7.72	13.51	7.90
10	12.99	7.07	12.91	7.11	13.65	8.27	13.98	7.88	13.87	7.64	13.40	7.91
11	12.70	7.17	13.25	7.66	13.91	7.72	13.98	7.45	13.91	7.60	13.43	7.95
12	12.56	7.12	13.57	8.11	13.94	7.45	14.02	7.29	13.81	7.53	13.32	8.12
13	12.97	7.30	13.78	8.11	13.90	7.03	14.05	7.19	13.60	7.56	13.34	8.37
14	13.35	7.49	14.10	7.65	13.91	6.79	13.93	7.06	13.55	7.55	13.32	8.48
15	13.78	7.85	14.50	7.36	13.89	6.67	13.84	7.04	13.44	7.68	13.52	8.31
16	13.97	7.92	14.27	7.43	13.80	6.54	13.85	7.19	13.39	7.90	13.31	8.06
17	14.09	7.28	14.23	7.02	13.72	6.60	13.80	7.37	13.10	8.20	13.31	8.01
18	14.09	6.89	14.23	6.82	13.33	6.71	13.41	7.27	13.16	8.51	13.46	8.02
19	13.53	6.58	13.80	6.88	13.19	7.05	12.93	7.54	13.20	8.80	13.45	7.98
20	13.38	6.61	13.49	6.93	12.93	7.33	12.97	7.95	13.23	8.56	13.42	7.82
21	13.24	6.92	13.25	7.34	12.63	7.59	13.12	8.36	13.34	8.22	13.60	7.75
22	12.87	7.09	12.74	7.45	12.74	7.94	13.18	8.71	13.60	8.23	13.70	7.71
23	12.57	7.51	12.10	7.72	12.71	8.36	13.42	8.68	13.73	7.95	13.79	7.48
24	12.13	7.77	12.41	8.19	12.96	8.65	13.62	8.65	13.93	7.49	13.79	7.37
25	11.82	7.91	12.66	8.57	13.48	8.79	13.92	8.13	14.20	7.01	13.79	7.39
26	12.21	8.13	12.96	8.73	13.78	8.32	14.24	7.58	14.21	6.82	13.74	7.69
27	12.42	8.24	13.27	8.93	13.97	7.57	14.38	7.02	14.02	6.58	13.90	7.72
28	12.71	8.38	13.52	8.72	14.13	6.79	14.53	6.54	13.85	6.52	13.77	7.45
29	13.11	8.51	13.86	7.95	14.46	6.33	14.60	6.26	13.85	6.73	13.80	7.51
30	13.48	8.14	13.90	7.20	14.61	6.01	14.46	6.20	13.59	7.22	13.81	7.70
31	---	---	14.11	6.54	---	---	14.48	6.32	13.73	7.85	---	---
MONTH	14.09	6.58	14.50	6.19	14.61	5.72	14.68	5.99	14.21	6.51	13.90	7.37

WATER-QUALITY RECORDS

WATER TEMPERATURE: October 1989 to current year.

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

EXTREMES FOR PERIOD OF RECORD.--

(Lower probe) Maximum recorded, 22.5°C, July 30, 1995; minimum recorded 5.0°C, Dec. 21, 23, 1990.

EXTREMES FOR CURRENT YEAR.--

(Lower profile). Maximum recorded, 21.0°C, July 30, Aug. 28, Sept. 8; minimum recorded, 10.0°C, Jan. 22, 23, 26, 29, 30.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(UPPER PROBE)

[illegible]

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	37100	18700	42100	28300	42200	19400	46500	32000	46500	35600	46400	32900
2	34500	19500	42800	28100	43000	20900	46600	32800	45700	35700	46200	32400
3	37900	18700	43800	29300	42400	22700	46800	32900	45400	34600	45900	33600
4	38400	17300	44100	27100	42800	23100	45300	33100	46100	33500	44700	32600
5	37400	15100	44100	27200	42300	23500	45000	31900	47000	34500	44400	34100
6	37700	12800	43100	25500	42400	22600	45400	30400	47500	36000	44200	30800
7	37800	14600	41200	24000	43300	22300	45700	33200	46300	34700	43500	29400
8	37000	16600	40800	21500	42500	20700	45800	33300	45800	35300	45500	30100
9	34200	14200	41700	19500	43300	21700	46000	33300	46800	34200	46100	32200
10	36500	14100	41900	17800	42900	24500	46300	34100	46300	34100	45100	35200
11	36400	13000	42600	22200	44800	22800	46000	34600	45800	36200	44900	35100
12	36700	14500	43200	23500	44400	25200	46100	34400	46700	36100	45600	36000
13	40500	17500	43700	27000	43400	24800	45800	34400	46600	36300	44800	33500
14	40300	20100	43800	27100	42300	25800	45800	34700	46000	35700	44300	34500
15	39600	21300	43600	28000	42300	27200	46000	35200	45900	34600	45000	35000
16	41500	21600	---	---	43100	26700	46100	35100	45800	33000	45100	34500
17	41300	22900	---	---	42500	26300	45600	34900	45400	32700	45200	32600
18	40600	22300	---	---	42800	26000	45600	33300	45800	33300	45700	31100
19	40000	19000	---	---	42900	23600	45800	29800	---	---	44400	31900
20	40200	16400	---	---	42400	26100	45600	31100	---	---	44200	31900
21	36500	12300	---	---	44200	26400	46000	31100	---	---	45600	32900
22	35300	14100	---	---	43800	26000	45800	31200	---	---	46000	35200
23	35700	14800	38000	9520	41400	28300	46300	34500	---	---	46700	35700
24	36900	12800	39500	15200	41800	28700	46300	32200	---	---	46400	36800
25	37600	15200	38300	13500	43700	30000	46200	35200	---	---	46100	36600
26	35400	16400	34600	17100	44300	27000	46500	35700	---	---	46600	37600
27	38000	17800	36700	19100	45500	30300	46900	35500	---	---	47000	37700
28	40600	20900	37400	16400	46100	31700	47000	35500	45900	34200	47100	37400
29	39700	22800	39700	16500	46400	32800	47000	36000	46100	33500	46900	37900
30	40700	24600	38800	17600	46400	32200	46800	35400	45800	33200	46700	38500
31	---	---	42200	21300	---	---	46700	35500	46000	35100	---	---
MONTH	41500	12300	---	---	46400	19400	47000	29800	---	---	47100	29400

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	43700	26900	---	---	45800	35500	42200	25400	---	---	36000	4700
2	43700	25300	43600	34000	45600	36600	42600	25900	---	---	35600	7650
3	43600	24900	44000	35500	45800	35300	42800	27000	---	---	35500	8400
4	43100	29000	44400	35700	46000	36100	43000	27000	37400	13800	33600	7910
5	43200	27700	44700	35200	46000	35200	42500	27400	38000	10800	32100	6610
6	43000	29600	44800	34500	45900	35300	42800	27800	37600	9310	31300	4660
7	43100	29700	44800	34500	46000	35400	43000	27500	36400	8990	32800	6020
8	43000	30600	45000	35000	45500	35100	42900	27900	36800	10200	35000	7380
9	43100	30000	44600	35800	45400	34100	41700	28900	36000	9830	34900	8600
10	43300	29200	44700	34800	45100	33800	41900	27300	37900	11300	34400	8750
11	43200	29500	44400	34100	45000	34500	41900	28200	37400	7600	32000	5470
12	43200	26500	44300	32900	---	---	42900	30400	38700	9530	32300	9790
13	43500	27900	44100	32300	---	---	44100	30400	41800	11000	34600	9760
14	42900	27600	44300	33100	---	---	44100	30900	39500	12400	37300	10100
15	43200	30600	44500	30900	---	---	43800	29700	40700	14300	36700	10700
16	43200	31700	44500	32200	44200	27500	43800	31900	39200	14200	37400	11100
17	43100	27200	44400	32900	43600	25600	43800	31100	37700	14400	36200	11200
18	43300	27200	44600	33700	43600	26000	43900	29300	36500	13200	35500	10600
19	43300	28100	44600	34900	43300	25600	44300	30200	36100	10200	33900	8470
20	43000	31900	45100	34800	43400	25500	43700	28000	34500	7460	34000	11000
21	43100	32900	45300	35000	43400	23700	43500	28300	33900	4870	36300	9410
22	43400	33200	45400	34600	43200	23200	42700	26600	34500	3190	37400	9450
23	43500	32300	45400	34800	42900	23000	---	---	32500	3910	38500	9300
24	44000	32600	45200	34600	42600	23100	---	---	34300	4080	37700	8000
25	44100	32500	45500	34800	41700	23400	---	---	34700	5270	39000	11700
26	44300	32400	44600	35000	41900	23700	---	---	35300	5420	40200	14200
27	44400	32700	44000	34600	41500	23800	---	---	39100	4980	42500	13200
28	44300	33500	44600	32800	42000	26900	---	---	37600	3480	42800	19400
29	44300	33800	45500	33400	42300	25900	---	---	32400	5950	41100	16600
30	43600	33800	45500	36400	42300	26200	---	---	---	---	41000	16700
31	44000	34400	---	---	41600	27100	---	---	---	---	41900	18900
MONTH	44400	24900	---	---	---	---	---	---	---	---	42800	4660

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	40900	20900	42800	28700	41800	19900	45500	32000	46700	36200	46000	34400
2	39200	22200	42800	29400	42400	21700	45600	32700	45900	36400	45900	32900
3	38400	23300	43200	29300	42700	23400	45800	32800	45600	35200	45600	35900
4	38300	18900	43500	27800	42800	24500	44800	33400	45900	37700	45500	34100
5	38900	17500	43700	27900	42500	24600	44500	31800	46100	36000	45500	36800
6	39700	15400	43500	26300	41800	24000	44600	30900	46600	35700	44900	35600
7	41000	16400	43200	25400	42400	23000	45000	34400	45900	34100	45000	30600
8	41000	17800	42800	23100	42800	23700	45300	33800	45900	35100	45000	32100
9	40300	16000	42300	21300	42800	24000	45400	33500	46300	34100	45400	31900
10	39500	17200	42300	20800	43200	26700	45700	34100	45900	34500	44900	34800
11	40100	18900	43000	26700	43900	25100	45600	34700	46200	36100	44900	34600
12	40900	18500	43400	27300	43600	25700	45700	34200	46200	35600	45300	37000
13	40400	20800	43700	28200	43000	25300	45700	34500	46100	35200	45300	36700
14	40900	22600	43700	28500	43000	26200	45900	34900	45700	35600	45000	36900
15	40900	24300	43600	29500	42400	27700	45900	35500	45400	34800	45200	35800
16	41300	23400	43400	28200	42800	27300	45900	35300	45500	29400	45300	35500
17	41200	24000	43400	27400	42800	26400	45900	35100	45300	34800	45400	34400
18	40700	22900	42300	24400	43100	26100	45600	34300	45300	34800	45700	32300
19	40100	20400	42800	19200	43100	25100	45400	30700	---	---	45600	32100
20	40400	17700	42100	14700	42600	27600	45600	35200	---	---	45200	32100
21	41100	14800	39300	12400	43000	28800	45800	33400	---	---	46100	33100
22	40500	15800	39300	13100	43500	30400	46000	35100	---	---	46100	35100
23	38700	16500	42400	12000	44700	29000	46200	35400	---	---	46600	35400
24	39900	17600	43800	17300	45100	30500	46400	35900	---	---	45900	36500
25	41200	18800	43800	19200	44700	30700	46400	36000	---	---	45800	33700
26	43000	20400	42200	22000	43800	29200	46800	36200	---	---	45800	36200
27	41300	20700	40500	21400	44700	30200	47000	36100	---	---	45900	36600
28	44200	26300	41300	20800	44900	31800	47100	36000	45300	34300	46100	35900
29	43200	25900	41300	18900	45300	32400	47100	36400	45500	33600	46400	37600
30	43200	28100	43200	18500	45300	32200	47100	36300	45600	33900	46400	36600
31	---	---	43200	21200	---	---	47000	36200	45600	35600	---	---
MONTH	44200	14800	43800	12000	45300	19900	47100	30700	---	---	46600	30600

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	20.0	17.5	16.5	14.5	15.0	13.5	12.5	11.5	---	---	12.0	10.5
2	20.5	17.0	16.0	14.5	14.5	13.5	12.5	11.5	---	---	12.5	10.0
3	21.0	17.0	15.5	14.5	14.5	13.5	12.5	11.5	11.0	10.5	12.0	11.0
4	19.5	16.5	15.5	14.5	14.5	13.5	12.5	11.5	12.0	10.5	12.0	11.0
5	19.0	16.5	15.5	14.5	15.0	13.5	12.5	11.5	13.0	10.5	12.0	10.5
6	19.0	16.5	15.5	14.5	15.0	13.5	12.5	11.5	12.5	11.0	12.0	10.5
7	18.5	16.0	15.5	14.5	15.0	13.5	12.5	11.5	12.0	10.5	12.5	11.0
8	18.5	16.0	15.5	14.5	14.5	13.5	12.5	12.0	12.0	11.0	13.0	11.0
9	19.0	16.0	15.5	14.5	14.0	13.5	12.5	11.5	12.5	11.5	13.0	12.0
10	19.0	16.0	15.5	14.5	14.0	13.5	12.5	11.5	13.0	12.0	13.5	12.5
11	18.5	16.0	16.0	14.5	14.0	13.5	12.5	11.5	13.5	12.0	14.0	12.5
12	18.0	16.5	16.0	14.5	14.0	13.5	12.0	11.0	13.5	12.5	13.5	12.5
13	18.0	16.5	16.0	14.5	14.0	13.5	12.0	11.0	14.0	12.5	13.5	12.5
14	18.0	16.0	16.0	14.5	14.0	13.0	12.0	11.0	14.5	12.5	14.5	13.0
15	18.0	16.0	16.0	14.5	14.0	13.5	12.0	11.0	13.5	12.5	15.0	13.0
16	18.0	16.0	16.0	14.5	13.5	12.5	12.5	11.0	14.5	12.5	16.0	13.0
17	18.0	16.0	16.0	14.5	13.5	12.5	12.0	11.0	15.0	13.0	16.5	13.5
18	19.0	16.0	16.0	14.5	13.0	12.0	12.0	11.0	14.0	13.0	16.5	14.0
19	19.0	15.5	16.0	14.5	13.0	12.5	12.0	10.5	13.5	13.0	16.5	14.0
20	18.0	15.5	16.0	14.0	13.0	12.5	12.0	11.0	14.0	13.0	16.5	14.0
21	18.0	15.5	15.5	14.0	13.0	12.0	12.0	11.0	13.5	13.0	16.0	14.5
22	17.0	15.0	15.5	14.0	13.0	11.0	11.5	7.5	13.5	11.5	15.0	14.0
23	17.0	15.0	15.5	14.0	12.5	11.5	---	---	13.0	11.5	15.0	12.5
24	17.0	15.0	15.5	14.0	12.5	11.0	---	---	12.5	11.5	15.0	13.5
25	16.5	15.0	15.5	14.0	12.5	10.5	---	---	12.5	11.0	14.5	13.5
26	17.0	15.0	15.0	14.0	12.0	11.0	---	---	12.5	11.0	15.0	13.0
27	17.0	15.0	14.5	13.0	12.0	11.0	---	---	12.5	11.0	15.0	13.0
28	16.5	15.0	14.5	14.0	12.0	11.0	---	---	11.5	10.5	15.0	12.5
29	16.5	15.0	15.0	14.0	12.0	11.0	---	---	11.5	10.5	15.5	12.5
30	16.5	15.0	15.0	13.5	12.0	11.5	---	---	---	---	16.5	12.5
31	16.0	15.0	---	---	13.0	11.5	---	---	---	---	15.5	13.0
MONTH	21.0	15.0	16.5	13.0	15.0	10.5	---	---	---	---	16.5	10.0

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

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
(LOWER 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	16.5	14.5	15.0	13.5	12.5	11.5	11.0	10.5	12.5	11.0
2	19.5	16.5	16.0	14.5	14.5	13.5	12.0	11.5	11.5	10.5	12.5	11.0
3	20.0	16.5	15.5	14.5	14.5	13.5	12.0	11.5	11.5	10.5	12.0	11.0
4	19.5	16.5	16.0	14.5	14.5	13.0	12.5	11.5	12.0	11.0	12.0	11.0
5	19.0	16.5	15.5	14.0	14.5	13.0	12.0	11.5	13.0	11.0	12.5	11.0
6	18.5	16.5	15.5	14.0	14.5	13.0	12.0	11.5	12.5	11.0	12.0	10.5
7	18.5	16.0	15.5	14.0	15.0	13.5	12.5	12.0	12.0	11.0	12.5	11.0
8	18.5	16.0	16.0	14.0	14.5	13.5	12.0	11.5	12.0	11.5	12.5	11.5
9	18.5	16.0	15.5	14.5	14.0	13.5	12.0	11.5	12.5	11.5	13.0	12.0
10	19.0	16.0	15.5	14.5	14.0	13.0	12.5	11.5	13.0	12.0	13.0	12.5
11	18.5	16.0	15.5	14.5	14.0	13.5	12.0	11.5	13.0	12.0	13.5	12.5
12	18.0	16.0	16.0	14.5	14.0	13.5	12.0	11.0	13.5	12.0	13.0	12.5
13	18.0	16.0	16.0	14.5	14.0	13.5	12.0	11.0	14.0	12.0	13.5	12.5
14	18.0	16.0	15.5	14.5	14.0	13.0	12.0	11.0	14.5	12.0	14.0	13.0
15	17.5	15.5	15.5	14.5	14.0	13.0	11.5	11.0	13.5	12.5	15.0	13.0
16	18.0	15.5	16.0	14.5	13.5	12.5	12.0	11.5	14.5	12.5	15.5	13.0
17	18.0	15.5	16.0	14.0	13.5	12.0	12.0	11.0	14.5	13.0	16.0	13.5
18	18.0	15.0	16.0	14.0	13.0	12.0	12.0	11.0	14.0	13.0	16.5	13.5
19	18.0	15.0	16.0	14.0	13.0	12.0	12.0	11.0	13.5	13.0	16.0	14.0
20	17.5	15.5	15.5	14.0	13.0	12.5	12.0	11.0	13.5	13.0	16.0	14.0
21	17.5	15.0	15.5	14.0	13.0	12.0	12.0	11.0	13.5	13.0	15.5	14.0
22	17.0	15.0	15.5	14.0	12.5	11.0	12.0	10.0	13.0	11.5	15.0	13.5
23	17.0	15.0	15.5	14.0	12.5	11.0	11.5	10.0	13.0	11.5	15.0	12.0
24	16.5	14.5	15.0	14.0	12.5	10.5	11.5	10.5	13.0	11.5	14.0	13.0
25	16.5	15.0	15.0	14.0	12.0	10.5	11.5	10.5	13.0	11.0	14.0	12.5
26	17.0	15.0	15.0	14.0	12.0	11.0	11.5	10.0	13.0	11.0	14.5	12.5
27	17.5	15.0	14.5	13.0	12.0	11.0	11.5	10.5	13.0	11.0	14.5	12.0
28	16.5	15.0	14.5	13.5	12.0	11.0	11.5	10.5	12.5	10.5	14.5	12.0
29	16.5	15.0	14.5	13.5	12.0	11.0	11.5	10.0	12.5	10.5	15.0	12.0
30	16.5	15.0	14.5	13.5	12.0	11.5	11.5	10.0	---	---	16.0	12.0
31	16.0	15.0	---	---	13.0	11.5	11.5	10.5	---	---	15.5	12.0
MONTH	20.0	14.5	16.5	13.0	15.0	10.5	12.5	10.0	14.5	10.5	16.5	10.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	14.5	12.0	19.0	13.5	17.5	13.0	19.5	14.0	20.0	16.5	19.5	16.0
2	15.0	12.5	19.0	14.0	20.0	13.0	19.5	14.0	20.0	16.5	19.0	16.0
3	15.5	12.5	18.0	14.0	17.5	13.5	19.0	14.0	19.5	16.5	18.5	16.5
4	16.0	13.0	17.5	13.5	17.5	13.5	19.0	14.5	19.0	16.5	18.5	16.0
5	16.0	13.5	17.5	14.0	18.0	13.5	19.0	15.0	19.0	16.5	19.5	16.5
6	17.0	13.5	17.5	13.5	18.5	14.0	19.5	15.0	19.0	16.0	19.5	16.5
7	16.5	13.0	17.0	14.0	18.5	14.0	19.0	15.0	19.0	16.5	19.5	16.5
8	16.0	13.0	17.0	14.0	18.5	14.0	18.5	15.0	19.0	16.5	21.0	16.5
9	15.5	13.5	17.5	14.0	19.5	14.0	18.5	15.0	20.0	16.5	20.0	16.5
10	15.5	13.0	18.0	14.0	19.0	14.0	18.0	15.0	19.5	16.5	19.0	16.5
11	16.0	13.0	18.0	13.5	18.5	13.5	18.5	15.5	20.0	16.5	18.5	16.5
12	15.5	12.5	19.0	13.5	18.0	14.0	18.5	15.5	20.0	16.5	19.5	16.5
13	16.0	13.0	17.5	13.5	18.0	14.5	19.0	15.5	20.0	17.0	19.5	16.5
14	16.5	12.5	18.0	13.5	18.0	14.5	19.0	16.0	20.0	17.0	19.0	16.5
15	15.0	13.0	17.0	14.0	17.5	14.5	19.5	16.0	20.5	17.0	19.5	16.5
16	15.5	12.5	17.0	13.5	17.5	14.5	19.0	16.0	20.0	17.0	19.0	16.5
17	14.5	13.0	17.0	14.0	18.0	14.0	19.0	16.0	19.5	16.5	19.5	16.5
18	15.5	13.0	17.5	14.0	17.5	14.0	19.5	16.5	19.0	16.5	19.5	16.5
19	14.5	13.0	18.0	14.0	18.0	14.5	20.0	17.0	---	---	19.5	16.5
20	15.0	13.0	---	---	18.0	14.5	20.0	17.0	---	---	19.5	16.5
21	14.5	12.5	17.5	15.0	17.0	14.5	20.0	17.0	---	---	19.5	16.5
22	15.0	12.5	17.0	15.0	17.5	14.0	19.5	16.5	---	---	19.5	16.5
23	15.5	13.0	18.0	14.0	18.0	13.5	20.0	16.5	---	---	18.5	16.0
24	16.0	13.0	17.0	13.5	17.5	13.0	20.0	16.5	---	---	18.0	16.0
25	16.5	13.0	17.5	13.5	17.5	13.5	19.5	16.5	---	---	18.0	16.0
26	17.5	12.5	16.5	13.0	17.5	13.5	20.0	16.5	---	---	18.0	15.5
27	18.0	13.0	17.0	13.5	17.0	13.5	20.0	16.0	---	---	18.0	15.5
28	17.0	12.5	17.0	13.0	18.0	14.0	20.0	16.0	21.0	16.0	18.5	15.5
29	19.0	12.5	17.0	13.0	19.0	14.0	20.0	16.0	20.5	16.5	17.5	15.5
30	18.5	12.5	17.5	12.5	20.5	14.0	21.0	16.0	20.5	16.5	18.0	15.5
31	---	---	18.0	12.5	---	---	20.5	16.5	19.5	16.5	---	---
MONTH	19.0	12.0	---	---	20.5	13.0	21.0	14.0	---	---	21.0	15.5

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 June 10, 1996 (discontinued).

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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 27	0815	408	4.66	Feb. 4	1030	1,060	6.93
Jan. 31	0730	532	5.04	Feb. 21	0815	358	4.51

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.19	.08	.83	11	18	20	1.4	.94	---	---	---
2	.02	.11	.07	.49	4.6	14	6.7	1.3	.88	---	---	---
3	.02	.08	.07	.24	5.9	12	4.7	1.2	.82	---	---	---
4	.02	.08	.07	.17	257	38	4.1	1.2	.82	---	---	---
5	.02	.07	.05	.14	57	30	3.8	1.2	.85	---	---	---
6	.01	.06	.05	.14	22	16	3.6	1.3	.77	---	---	---
7	.02	.06	.04	.14	14	13	3.5	1.3	.75	---	---	---
8	.01	.07	.04	.13	10	11	3.1	1.2	.75	---	---	---
9	.01	.06	.04	.11	7.3	9.3	3.2	1.1	.72	---	---	---
10	.01	.06	.05	.10	5.9	11	3.2	1.1	---	---	---	---
11	.01	.06	24	.10	5.1	9.5	2.9	.99	---	---	---	---
12	.01	.07	39	.20	4.6	53	2.7	.94	---	---	---	---
13	.00	.08	16	.13	3.9	23	2.6	.91	---	---	---	---
14	.01	.07	7.0	.10	3.7	14	2.5	.89	---	---	---	---
15	.01	.07	12	.13	6.9	11	2.8	12	---	---	---	---
16	.01	.06	5.1	36	7.6	10	6.0	26	---	---	---	---
17	.01	.05	1.6	4.8	4.2	8.8	5.1	3.9	---	---	---	---
18	.01	.05	2.5	14	5.8	7.7	7.3	3.9	---	---	---	---
19	.01	.04	2.0	13	39	6.9	3.2	2.2	---	---	---	---
20	.00	.05	1.1	5.4	52	6.5	3.0	1.7	---	---	---	---
21	.01	.05	.75	25	100	6.0	2.7	2.9	---	---	---	---
22	.01	.06	3.1	4.5	32	5.5	2.5	2.6	---	---	---	---
23	.01	.06	1.4	2.1	21	4.3	2.5	1.6	---	---	---	---
24	.01	.06	1.4	17	22	4.0	2.8	1.3	---	---	---	---
25	.02	.07	.79	26	16	3.9	2.8	1.2	---	---	---	---
26	.01	.06	.38	7.7	12	3.7	2.3	1.2	---	---	---	---
27	.01	.07	.35	71	21	3.8	2.1	1.2	---	---	---	---
28	.01	.07	.32	9.9	32	3.7	1.9	1.2	---	---	---	---
29	.01	.06	2.5	3.8	28	3.3	1.8	1.1	---	---	---	---
30	.01	.08	3.5	7.4	---	3.2	1.6	1.0	---	---	---	---
31	.01	---	1.5	142	---	3.2	---	1.0	---	---	---	---
TOTAL	0.36	2.08	126.85	392.75	811.5	367.3	117.0	82.03	---	---	---	---
MEAN	.012	.069	4.09	12.7	28.0	11.8	3.90	2.65	---	---	---	---
MAX	.02	.19	39	142	257	53	20	26	---	---	---	---
MIN	.00	.04	.04	.10	3.7	3.2	1.6	.89	---	---	---	---
AC-FT	.7	4.1	252	779	1610	729	232	163	---	---	---	---

11181390 WILDCAT CREEK AT VALE ROAD, AT RICHMOND, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.44	2.29	5.44	15.5	17.7	13.8	4.16	1.01	.35	.17	.12	.17
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	.069	.14	.064	.60	.28	.14	.022	.004	.001	.004	.000
(WY)	1989	1996	1990	1991	1989	1988	1990	1992	1987	1989	1987	1988

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

a WATER YEARS 1976 - 1996

ANNUAL TOTAL	3741.45		
ANNUAL MEAN	10.3		
HIGHEST ANNUAL MEAN		5.03	
LOWEST ANNUAL MEAN		15.3	1982
HIGHEST DAILY MEAN		.43	1976
LOWEST DAILY MEAN	388	Jan 10	1010 Jan 4 1982
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 13	.00 Aug 31 1979
INSTANTANEOUS PEAK FLOW	.01	Oct 8	.00 Jun 11 1987
INSTANTANEOUS PEAK STAGE			2050 Jan 4 1982
ANNUAL RUNOFF (AC-FT)	7420		15.80 Jan 4 1982
10 PERCENT EXCEEDS	15		3640
50 PERCENT EXCEEDS	.70		8.1
90 PERCENT EXCEEDS	.02		.26
			.01

a 1996, partial year used in statistical computation.

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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 16	1000	233	3.94	Feb. 19	1815	301	4.36
Jan. 24	2145	286	4.27	Mar. 4	1415	227	3.90
Feb. 4	1015	346	4.64				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.13	.13	.41	17	13	9.7	2.1	1.2	.61	.22	.12
2	.05	.13	.13	.36	12	11	7.2	2.0	1.2	.55	.25	.13
3	.03	.13	.13	.29	11	12	6.3	1.8	1.1	.56	.23	.15
4	.03	.12	.19	.27	79	63	5.7	1.9	1.0	.55	.26	.16
5	.02	.10	.22	.28	37	30	5.4	1.8	.96	.53	.27	.18
6	.03	.10	.19	.31	19	18	5.2	1.8	.94	.48	.27	.17
7	.03	.10	.19	.31	15	15	5.2	1.8	.87	.48	.27	.13
8	.04	.08	.19	.31	12	14	5.5	1.7	.87	.51	.25	.10
9	.06	.07	.19	.31	11	13	4.9	1.7	.85	.50	.23	.09
10	.08	.09	.19	.31	9.3	12	4.9	1.6	.78	.45	.21	.08
11	.05	.10	5.3	.27	8.3	12	4.8	1.5	.84	.41	.17	.07
12	.06	.07	11	.27	7.3	72	4.6	1.5	.87	.41	.19	.15
13	.05	.07	1.8	.27	6.6	27	4.4	1.4	.84	.42	.13	.18
14	.03	.07	.79	.27	6.1	18	4.3	1.4	.82	.42	.13	.19
15	.04	.07	4.6	.27	9.5	15	4.3	3.3	.78	.45	.12	.19
16	.07	.09	1.5	46	7.7	14	5.9	4.4	.78	.47	.10	.23
17	.09	.10	.59	6.1	6.1	13	5.9	2.8	.86	.48	.10	.18
18	.09	.10	.43	18	6.3	12	5.0	3.6	.84	.47	.15	.16
19	.05	.10	.42	9.6	76	11	4.1	2.0	.77	.41	.16	.14
20	.05	.10	.35	5.6	43	10	4.0	1.8	.70	.39	.19	.15
21	.06	.10	.31	15	98	9.4	3.5	2.7	.76	.36	.22	.11
22	.07	.10	.54	5.0	45	8.9	3.3	2.2	.70	.35	.19	.11
23	.05	.10	.64	3.9	26	8.4	3.1	1.9	.70	.34	.16	.11
24	.05	.10	.39	63	24	7.8	2.9	1.8	.66	.32	.13	.33
25	.06	.12	.32	50	18	7.5	2.9	1.5	.70	.31	.15	.16
26	.09	.13	.31	13	15	7.0	2.7	1.4	.70	.30	.17	.13
27	.10	.13	.31	42	18	6.8	2.8	1.4	.77	.29	.19	.16
28	.10	.13	.31	14	14	7.1	2.8	1.4	.78	.26	.19	.13
29	.10	.10	.36	10	15	6.3	2.3	1.4	.70	.25	.16	.13
30	.11	.11	.82	11	---	5.8	2.1	1.3	.68	.23	.12	.13
31	.13	---	.56	61	---	5.7	---	1.3	---	.23	.10	---
TOTAL	1.92	3.04	33.40	377.71	672.2	485.7	135.7	60.2	25.02	12.79	5.68	4.45
MEAN	.062	.10	1.08	12.2	23.2	15.7	4.52	1.94	.83	.41	.18	.15
MAX	.13	.13	11	63	98	72	9.7	4.4	1.2	.61	.27	.33
MIN	.02	.07	.13	.27	6.1	5.7	2.1	1.3	.66	.23	.10	.07
AC-FT	3.8	6.0	66	749	1330	963	269	119	50	25	11	8.8

11182500 SAN RAMON CREEK AT SAN RAMON, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.51	.61	3.18	8.54	9.16	7.81	4.82	1.35	.52	.20	.080	.053
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1953 - 1996			
ANNUAL TOTAL	1975.85				1817.81							
ANNUAL MEAN	5.41				4.97				3.04			
HIGHEST ANNUAL MEAN									12.4			
LOWEST ANNUAL MEAN									.029			
HIGHEST DAILY MEAN	136 Mar 22				98 Feb 21				411 Oct 13 1962			
LOWEST DAILY MEAN	.02 Oct 5				.02 Oct 5				.00 Oct 1 1952			
ANNUAL SEVEN-DAY MINIMUM	.03 Oct 2				.03 Oct 2				.00 Oct 1 1952			
INSTANTANEOUS PEAK FLOW					346 Feb 4				1600 Oct 13 1962			
INSTANTANEOUS PEAK STAGE					4.64 Feb 4				16.98 Oct 13 1962			
ANNUAL RUNOFF (AC-FT)	3920				3610				2200			
10 PERCENT EXCEEDS	13				13				6.2			
50 PERCENT EXCEEDS	.75				.52				.27			
90 PERCENT EXCEEDS	.09				.09				.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 June 30, 1995. Stage only July 1, 1995 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

WATER TEMPERATURE.--Water years 1958-79.

SEDIMENT DATA.--Water years 1961-62.

REVISED RECORDS.--WSP 1929: Drainage area. WDR CA-78-2: 1977(M).

GAGE.--Water-stage recorder. Datum of gage is 170.12 ft above sea level. Prior to Nov. 22, 1958, at datum 3.00 ft higher. Nov. 22, 1958, to July 22, 1976, at datum 2.00 ft higher.

REMARKS.--Interruptions in record were due to malfunction of the recording instruments. Records good. 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.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.81	2.80	2.83	2.83	2.88	2.87	4.03	3.77	5.85	5.35	6.00	5.46
2	2.81	2.79	2.83	2.81	2.88	2.87	3.77	3.64	5.36	5.04	5.50	5.17
3	2.80	2.79	2.83	2.81	2.87	2.87	3.64	3.57	5.71	4.98	5.20	4.99
4	2.83	2.79	2.83	2.82	2.89	2.87	3.57	3.51	14.46	5.71	7.40	4.96
5	2.84	2.82	2.83	2.83	2.96	2.89	3.51	3.44	10.11	6.82	7.42	5.96
6	2.83	2.82	2.83	2.83	2.93	2.91	3.44	3.40	6.95	5.99	6.00	5.47
7	2.83	2.80	2.83	2.83	2.91	2.90	3.40	3.38	6.00	5.54	5.49	5.13
8	2.81	2.80	2.83	2.83	2.91	2.90	3.38	3.35	5.58	5.22	5.15	4.96
9	2.80	2.79	2.84	2.83	2.91	2.90	3.35	3.34	5.24	4.96	4.97	4.76
10	2.79	2.79	2.84	2.84	2.97	2.91	3.34	3.33	4.98	4.76	4.87	4.72
11	2.79	2.79	2.84	2.84	6.82	2.97	3.34	3.31	4.77	4.60	6.33	4.71
12	2.79	2.79	2.84	2.84	10.52	5.98	3.31	3.30	4.60	4.45	7.55	5.47
13	2.81	2.79	2.84	2.84	5.98	4.84	3.30	3.28	4.46	4.34	6.35	5.54
14	2.83	2.80	2.85	2.84	4.84	4.22	3.28	3.28	4.35	4.24	5.55	5.19
15	2.84	2.83	2.85	2.85	6.25	4.06	3.37	3.28	4.76	4.21	5.19	4.94
16	2.84	2.82	2.85	2.85	4.76	4.01	---	---	4.84	4.44	4.96	4.75
17	2.83	2.82	2.85	2.85	4.01	3.73	---	---	4.65	4.39	4.75	4.58
18	2.83	2.82	2.86	2.85	3.95	3.70	---	---	7.93	4.64	4.59	4.44
19	2.82	2.81	2.86	2.86	3.76	3.57	---	---	7.93	6.18	4.44	4.33
20	2.82	2.81	2.86	2.86	3.57	3.49	---	---	7.01	6.33	4.33	4.21
21	2.81	2.81	2.88	2.86	3.49	3.43	---	---	8.92	6.83	4.22	4.17
22	2.82	2.81	2.87	2.87	3.60	3.42	---	---	7.02	5.97	4.18	4.10
23	2.83	2.81	2.87	2.86	3.48	3.42	5.30	4.92	5.98	5.59	4.10	4.00
24	2.83	2.82	2.86	2.86	3.42	3.38	10.89	5.29	5.71	5.32	4.01	3.91
25	2.83	2.82	2.87	2.86	3.38	3.35	10.71	6.17	5.34	5.08	3.93	3.84
26	2.84	2.83	2.87	2.86	3.35	3.33	6.19	5.46	5.08	4.87	3.86	3.78
27	2.84	2.83	2.87	2.86	3.33	3.32	10.97	5.45	5.06	4.85	3.81	3.77
28	2.83	2.82	2.86	2.86	3.32	3.30	7.38	5.96	5.78	4.85	3.81	3.74
29	2.82	2.82	2.86	2.86	5.06	3.30	5.97	5.46	7.32	5.67	3.74	3.63
30	2.82	2.82	2.87	2.86	5.13	4.54	5.87	5.25	---	---	3.69	3.66
31	2.83	2.82	---	---	4.54	4.03	6.50	5.81	---	---	3.69	3.66
MONTH	2.84	2.79	2.88	2.81	10.52	2.87	---	---	14.46	4.21	7.55	3.63

11456000 NAPA RIVER NEAR ST. HELENA, CA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.13	3.67	3.36	3.32	3.43	3.39	3.09	3.05	2.95	2.91	2.84	2.80
2	5.68	4.58	3.35	3.32	3.40	3.35	3.09	3.07	2.95	2.93	2.80	2.78
3	4.58	4.28	3.34	3.32	3.38	3.33	3.09	3.07	2.94	2.92	2.85	2.80
4	4.29	4.12	3.32	3.30	3.36	3.29	3.08	3.07	2.93	2.90	2.81	2.80
5	4.12	3.99	3.31	3.30	3.32	3.29	3.07	3.03	2.93	2.90	2.82	2.81
6	4.00	3.92	3.31	3.28	---	---	3.03	3.01	2.94	2.93	2.84	2.81
7	3.93	3.85	3.31	3.27	---	---	3.04	3.01	2.95	2.93	2.84	2.79
8	3.86	3.80	3.29	3.28	---	---	3.06	3.04	2.94	2.92	2.80	2.78
9	3.81	3.75	3.28	3.27	---	---	3.07	3.05	2.93	2.91	2.82	2.80
10	3.77	3.70	3.27	3.26	3.26	3.00	3.06	3.04	2.92	2.90	2.83	2.80
11	3.72	3.67	3.26	3.24	3.24	3.20	3.04	3.01	2.91	2.88	2.81	2.79
12	3.68	3.64	3.25	3.24	3.22	3.18	3.03	3.00	2.90	2.88	2.82	2.80
13	3.65	3.60	3.24	3.22	3.23	3.18	3.02	2.99	2.89	2.76	2.81	2.80
14	3.62	3.58	3.25	3.21	3.22	3.17	3.02	3.01	2.87	2.84	2.81	2.80
15	3.61	3.58	4.05	3.21	3.20	3.15	3.02	3.01	2.90	2.87	2.82	2.80
16	3.79	3.60	4.26	3.75	3.18	3.15	3.02	3.01	2.88	2.84	2.82	2.80
17	4.13	3.59	5.83	3.80	3.19	3.15	3.01	3.00	2.87	2.85	2.81	2.78
18	4.15	3.66	5.82	4.43	3.17	3.15	3.00	2.99	2.86	2.85	2.80	2.78
19	3.88	3.62	4.45	4.04	3.16	3.14	2.99	2.98	2.88	2.85	2.80	2.78
20	3.82	3.65	4.05	3.82	3.16	3.14	2.98	2.96	2.89	2.85	2.80	2.79
21	3.65	3.61	4.84	3.78	3.16	3.14	2.96	2.90	2.87	2.83	2.81	2.79
22	3.62	3.56	4.81	4.14	3.16	3.15	2.96	2.90	2.86	2.83	2.80	2.78
23	3.57	3.52	4.14	3.91	3.16	3.13	2.97	2.96	2.86	2.84	2.82	2.79
24	3.66	3.52	3.91	3.76	3.14	3.11	2.97	2.96	2.87	---	2.82	2.81
25	3.57	3.49	3.77	3.66	3.15	3.11	2.98	2.96	---	---	2.82	2.81
26	3.50	3.44	3.67	3.62	3.16	3.13	2.98	2.96	---	---	2.82	2.81
27	3.44	3.38	3.63	3.57	3.15	3.13	2.96	2.91	2.87	2.85	2.83	2.80
28	3.42	3.39	3.57	3.54	3.14	3.12	2.91	2.88	2.87	2.84	2.80	2.78
29	3.39	3.34	3.54	3.50	3.12	3.08	2.93	2.88	2.85	2.83	2.82	2.80
30	3.37	3.35	3.51	3.45	3.09	3.07	2.93	2.90	2.84	2.83	2.82	2.81
31	---	---	3.48	3.42	---	---	2.92	2.90	2.85	2.83	---	---
MONTH	7.13	3.34	5.83	3.21	---	---	3.09	2.88	---	---	2.85	2.78

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.--Records good. Flow regulated by Lake Hennessey beginning in December 1945, 12.8 mi upstream, capacity 31,000 acre-ft; Rector Reservoir beginning in 1948, 12.4 mi upstream, capacity 4,400 acre-ft; Bell Canyon Reservoir beginning in 1959, 19.6 mi upstream, capacity 2,530 acre-ft. Diversions for irrigation upstream from station of about 10,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft³/s, Feb. 18, 1986, gage height, 30.20 ft, from floodmarks; maximum gage height, 30.50 ft, Mar. 9, 1995; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.6	2.1	101	1000	1070	639	84	73	24	7.1	4.4
2	1.4	2.5	2.6	53	730	858	814	81	70	20	7.1	4.4
3	1.4	2.6	2.3	39	612	768	411	78	68	22	7.2	4.1
4	1.7	2.1	2.6	34	7550	1010	391	77	66	22	7.0	3.9
5	1.7	2.3	2.9	29	5540	1440	264	73	63	22	6.6	3.8
6	1.7	2.4	3.5	23	1930	859	235	74	60	20	6.4	3.6
7	2.0	2.5	3.8	20	1160	650	270	72	57	18	8.0	3.3
8	2.2	2.3	3.7	20	849	545	249	70	56	19	8.0	3.2
9	3.2	2.4	4.0	18	672	473	182	67	54	18	7.2	3.2
10	2.1	2.6	4.2	15	547	428	217	66	50	16	6.6	3.3
11	1.4	2.4	98	15	454	520	202	64	48	15	6.1	3.2
12	1.5	2.4	3420	13	385	1410	152	57	45	14	6.1	3.3
13	1.8	2.6	753	11	331	1010	147	58	42	14	5.8	3.5
14	1.6	2.8	317	10	296	663	139	56	42	12	5.1	3.5
15	1.4	2.9	417	10	278	527	138	65	40	13	4.6	3.3
16	5.3	2.7	302	1220	369	451	143	181	39	12	4.8	3.5
17	1.7	2.2	179	810	330	391	142	143	37	12	4.8	3.3
18	1.4	2.3	152	1230	437	345	149	440	32	11	4.6	3.1
19	1.4	2.8	134	1480	2160	308	143	216	30	12	4.6	2.7
20	1.5	2.7	110	603	1990	280	147	153	29	12	4.6	2.4
21	1.8	2.6	96	1150	3360	261	138	145	29	9.5	4.6	1.7
22	1.7	3.8	96	610	1840	242	131	233	31	9.9	4.6	1.5
23	1.7	4.0	93	447	1070	225	125	154	32	9.0	4.4	1.3
24	1.8	3.3	82	967	828	196	124	125	29	9.4	4.2	1.5
25	1.7	2.7	75	2890	660	180	130	107	25	11	4.2	1.5
26	1.6	2.2	71	842	540	163	114	95	27	11	4.0	1.5
27	1.8	2.4	67	3540	512	158	104	88	27	10	4.2	1.3
28	2.2	3.0	63	2070	720	156	99	82	29	10	4.4	1.5
29	2.3	2.2	70	1070	1560	146	94	79	27	9.4	4.4	2.2
30	2.4	2.0	287	782	---	139	88	78	26	8.9	4.4	2.2
31	2.5	---	190	1450	---	137	---	76	---	8.5	4.4	---
TOTAL	59.5	78.3	7103.7	21572	38710	16009	6321	3437	1283	434.6	170.1	85.2
MEAN	1.92	2.61	229	696	1335	516	211	111	42.8	14.0	5.49	2.84
MAX	5.3	4.0	3420	3540	7550	1440	814	440	73	24	8.0	4.4
MIN	1.4	2.0	2.1	10	278	137	88	56	25	8.5	4.0	1.3
AC-FT	118	155	14090	42790	76780	31750	12540	6820	2540	862	337	169

11458000 NAPA RIVER NEAR NAPA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.9	83.0	268	697	660	503	185	49.0	15.6	5.40	2.77	2.36
MAX	338	616	1474	3083	4089	2598	1341	226	55.6	19.4	9.43	10.7
(WY)	1963	1974	1984	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1960 - 1996			
ANNUAL TOTAL	204714.0				95263.4							
ANNUAL MEAN	561				260				205			
HIGHEST ANNUAL MEAN									585			
LOWEST ANNUAL MEAN									.72			
HIGHEST DAILY MEAN	19100				7550				26200			
LOWEST DAILY MEAN	1.2				1.3				.00			
ANNUAL SEVEN-DAY MINIMUM	1.5				1.4				.00			
INSTANTANEOUS PEAK FLOW					11700				37100			
INSTANTANEOUS PEAK STAGE					22.50				30.50			
ANNUAL RUNOFF (AC-FT)	406100				189000				148600			
10 PERCENT EXCEEDS	1190				757				420			
50 PERCENT EXCEEDS	43				29				13			
90 PERCENT EXCEEDS	1.8				2.2				.56			

NOVATO CREEK BASIN

11459500 NOVATO CREEK AT NOVATO, CA

LOCATION.--Lat 38°06'28", long 122°34'44", in Novato Grant, Marin County, Hydrologic Unit 18050002, on left bank in Novato, 100 ft upstream from 7th Street Bridge, and 3.9 mi downstream from Novato Creek Dam.

DRAINAGE AREA.--17.6 mi².

PERIOD OF RECORD.--October 1946 to current year. Prior to October 1966, published as "near Novato."

GAGE.--Water-stage recorder. Datum of gage is 14.76 ft above sea level. Prior to Aug. 23, 1967, at site 0.6 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Stafford Lake beginning Dec. 1, 1951, capacity, 4,500 acre-ft since Oct. 18, 1954. Diversion from Stafford Lake for municipal water supply began Apr. 25, 1952.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s, Jan. 4, 1982, gage height, 14.52 ft from contracted opening and slope-area measurements of 3,800 ft³/s at the gage site, and slope-conveyance computations of 1,200 ft³/s of overflow about 1 mi upstream which entered the adjoining Warner Creek basin; no flow for many days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.59	.26	6.5	103	127	54	1.9	.99	1.0	.46	.28
2	.24	.26	.05	5.5	82	102	22	2.0	.97	.99	.48	.31
3	.16	.15	.04	4.9	86	83	17	1.9	.95	.98	.40	.30
4	.10	.12	.70	4.5	321	87	14	1.9	.94	1.0	.42	.31
5	.00	.08	.63	4.0	216	71	9.9	1.9	.82	1.0	.46	.28
6	.02	.04	.67	3.7	153	57	8.5	1.6	1.0	.95	.49	.27
7	.10	.00	.29	3.5	112	46	7.9	1.6	1.0	1.3	.50	.25
8	.20	.00	.13	3.1	86	38	7.2	1.5	.98	.68	.47	.23
9	.22	.00	.09	2.8	68	33	6.8	1.4	.93	.65	.42	.24
10	.55	.00	.96	2.7	54	30	6.4	1.3	.88	.59	.26	.25
11	.37	.00	120	2.2	44	38	5.7	.92	.95	.56	.22	.29
12	e .86	.00	150	2.1	36	63	6.3	1.4	1.1	.57	.22	.29
13	e .55	.00	23	2.1	30	43	6.0	1.3	1.2	.59	.22	.31
14	.76	.00	10	2.1	26	36	6.1	1.5	1.2	.62	.24	.24
15	.16	.00	23	4.4	27	32	4.3	18	1.1	.68	.26	.25
16	.18	.00	8.2	130	25	28	4.9	7.0	1.3	.70	.28	.39
17	.17	.02	6.2	23	25	25	4.9	5.3	1.1	.68	.26	.14
18	.13	.01	8.2	66	49	22	3.5	3.2	1.1	.66	.26	.06
19	.11	.00	5.6	42	83	21	6.9	2.2	1.1	.68	.29	.06
20	.12	.00	4.9	34	127	18	4.0	1.9	1.1	.61	.33	.06
21	.16	.00	4.3	32	200	14	3.3	2.1	1.1	.56	.29	.06
22	.07	.02	9.5	20	155	12	3.1	1.9	1.1	.56	.29	.05
23	.00	.05	5.0	20	118	9.9	2.8	1.6	1.0	.54	.32	.05
24	.01	.18	4.1	73	102	9.2	3.0	1.5	.99	.53	.29	.08
25	.10	.14	3.6	66	78	9.7	2.8	1.5	1.1	.53	.30	.08
26	.26	.00	3.3	27	61	6.9	2.5	1.4	1.2	.52	.34	.08
27	.32	.00	3.1	107	60	6.7	2.4	1.3	1.2	.54	.35	.10
28	.13	.00	2.8	38	127	7.1	2.3	1.3	1.1	.50	.30	.09
29	.14	.00	19	25	182	6.5	2.1	1.2	1.1	.46	.28	.10
30	.19	.44	15	45	---	5.8	2.0	1.2	1.0	.45	.28	.09
31	.97	---	8.1	184	---	5.6	---	1.1	---	.47	.24	---
TOTAL	7.63	2.10	440.72	986.1	2836	1093.4	232.6	75.82	31.60	21.15	10.22	5.59
MEAN	.25	.070	14.2	31.8	97.8	35.3	7.75	2.45	1.05	.68	.33	.19
MAX	.97	.59	150	184	321	127	54	18	1.3	1.3	.50	.39
MIN	.00	.00	.04	2.1	25	5.6	2.0	.92	.82	.45	.22	.05
AC-FT	15	4.2	874	1960	5630	2170	461	150	63	42	20	11

e Estimated.

11459500 NOVATO CREEK AT NOVATO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1986, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.73	3.20	15.1	47.6	42.5	26.9	9.38	1.45	.72	.62	.37	.29
MAX	9.07	17.2	117	210	239	207	81.3	12.9	7.73	8.61	8.53	5.40
(WY)	1963	1974	1956	1995	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 1995 CALENDAR YEAR			FOR 1996 WATER YEAR			WATER YEARS 1947 - 1996		
ANNUAL TOTAL	13407.66			5742.93					
ANNUAL MEAN	36.7			15.7			12.3		
HIGHEST ANNUAL MEAN							47.9		
LOWEST ANNUAL MEAN							.40		
HIGHEST DAILY MEAN	884	Mar	9	321	Feb	4	2850	Jan	4 1982
LOWEST DAILY MEAN	.00	Oct	5	.00	Oct	5	.00	Oct	1 1946
ANNUAL SEVEN-DAY MINIMUM	.00	Nov	7	.00	Nov	7	.00	Oct	1 1946
INSTANTANEOUS PEAK FLOW				565			5000		
INSTANTANEOUS PEAK STAGE				7.06			14.52		
ANNUAL RUNOFF (AC-FT)	26590			11390			8900		
10 PERCENT EXCEEDS	124			54			21		
50 PERCENT EXCEEDS	1.4			1.1			.58		
90 PERCENT EXCEEDS	.12			.08			.00		

LAGUNITAS CREEK BASIN

11460400 LAGUNITAS CREEK AT SAMUEL P. TAYLOR STATE PARK, CA

LOCATION.--Lat 38°01'37", long 122°44'07", Marin County, Hydrologic Unit 18050005, in Samuel P. Taylor State Park, on left bank 300 ft upstream from Deadman's Gulch, 0.9 mi downstream from park entrance, 2.1 mi northwest of Lagunitas, and 3.4 mi downstream from Kent Lake.

DRAINAGE AREA.--34.3 mi².

PERIOD OF RECORD.--December 1982 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 102.89 ft above sea level.

REMARKS.--Records good. Flow regulated by Kent Lake, capacity, 16,680 acre-ft, and Alpine Lake, capacity, 6,890 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	16	36	50	538	397	306	14	15	8.6	9.0	8.9
2	5.7	16	49	37	349	275	483	13	14	8.5	8.5	9.0
3	6.0	16	49	28	292	195	232	13	14	8.5	8.5	9.0
4	5.5	16	42	27	2000	205	150	13	13	8.5	8.3	9.0
5	5.6	16	35	29	1540	233	103	13	13	8.5	8.4	9.0
6	5.5	16	34	29	651	183	78	13	13	8.2	8.5	9.0
7	5.4	16	32	28	363	147	58	12	13	8.1	8.5	8.9
8	5.5	16	29	27	252	121	45	12	12	8.1	8.5	8.8
9	5.5	16	29	26	187	99	38	12	12	8.0	8.5	8.9
10	5.6	16	30	26	147	93	33	12	12	7.9	9.6	8.7
11	5.6	16	357	27	113	118	26	12	12	8.3	8.7	8.7
12	5.7	16	761	28	89	188	23	11	12	8.9	8.4	8.9
13	5.6	16	110	28	65	194	21	11	12	8.9	8.4	9.0
14	5.7	16	51	27	44	166	18	12	12	8.8	8.6	9.0
15	6.3	21	98	28	33	133	20	27	11	8.7	8.5	9.2
16	11	26	49	307	35	106	26	55	11	8.7	8.5	9.1
17	19	33	31	107	53	86	27	67	10	8.8	8.5	9.0
18	19	34	25	332	121	68	33	85	8.7	8.7	8.6	8.9
19	19	31	21	192	456	53	30	44	8.2	8.7	8.6	8.7
20	19	31	23	171	865	45	32	42	8.1	8.4	8.7	8.9
21	19	26	29	239	1030	38	29	61	8.1	8.5	8.8	9.0
22	19	20	39	105	688	32	25	75	8.1	8.4	8.7	8.8
23	19	21	37	78	371	27	21	70	7.9	8.4	8.6	8.5
24	19	21	34	157	230	23	21	61	7.7	8.5	8.5	8.7
25	19	21	32	252	181	23	19	48	7.7	8.5	8.5	8.7
26	19	21	27	106	143	26	18	38	7.8	8.2	8.5	8.7
27	19	21	23	546	131	27	17	32	8.0	8.3	8.7	8.9
28	16	20	22	626	219	28	17	25	8.1	8.5	9.1	9.0
29	16	20	59	395	534	28	16	21	8.9	8.6	9.1	9.1
30	16	20	118	297	---	28	15	16	8.7	8.6	9.0	9.0
31	16	---	69	738	---	28	---	15	---	8.9	8.9	---
TOTAL	368.9	611	2380	5093	11720	3413	1980	955	317.0	263.2	268.2	267.0
MEAN	11.9	20.4	76.8	164	404	110	66.0	30.8	10.6	8.49	8.65	8.90
MAX	19	34	761	738	2000	397	483	85	15	8.9	9.6	9.2
MIN	5.4	16	21	26	33	23	15	11	7.7	7.9	8.3	8.5
AC-FT	732	1210	4720	10100	23250	6770	3930	1890	629	522	532	530

11460400 LAGUNITAS CREEK AT SAMUEL P. TAYLOR STATE PARK, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.19	23.3	45.1	105	134	122	24.6	19.1	8.42	6.62	5.76	5.67
MAX	13.4	66.3	173	568	421	503	67.3	66.9	12.5	8.69	8.65	8.90
(WY)	1990	1985	1984	1995	1986	1983	1983	1995	1995	1995	1996	1996
MIN	4.34	4.74	6.84	14.5	11.2	13.6	8.39	7.43	6.30	4.92	4.44	4.29
(WY)	1987	1987	1987	1991	1989	1988	1987	1987	1987	1992	1984	1984

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1983 - 1996			
ANNUAL TOTAL	39988.9				27636.3							
ANNUAL MEAN	110				75.5				37.2			
HIGHEST ANNUAL MEAN									109			
LOWEST ANNUAL MEAN									14.7			
HIGHEST DAILY MEAN	1790				2000				2350			
LOWEST DAILY MEAN	5.4				5.4				3.8			
ANNUAL SEVEN-DAY MINIMUM	5.5				5.5				4.0			
INSTANTANEOUS PEAK FLOW					3020				3470			
INSTANTANEOUS PEAK STAGE					8.05				8.44			
ANNUAL RUNOFF (AC-FT)	79320				54820				26920			
10 PERCENT EXCEEDS	271				193				68			
50 PERCENT EXCEEDS	20				19				11			
90 PERCENT EXCEEDS	6.3				8.4				5.0			

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.--Records good. Flow regulated by Nicasio Reservoir, capacity, 22,450 acre-ft; Kent Lake, capacity, 16,680 acre-ft; and Alpine Lake, capacity, 8,890 acre-ft, all of which divert water for domestic and industrial use in Marin County.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,100 ft³/s, Jan. 4, 1982, gage height, 26.96 ft, from rating curve extended above 6,200 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.01 ft³/s, Sept. 26, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	17	30	90	935	806	361	24	19	11	9.4	8.9
2	5.5	17	51	67	603	554	609	21	18	10	9.0	8.9
3	5.3	17	51	49	490	417	331	20	18	10	8.8	9.1
4	5.5	17	48	49	3810	433	223	19	17	10	8.7	9.1
5	5.4	17	36	59	3190	492	159	19	17	10	8.8	8.9
6	5.5	17	35	62	1080	387	123	18	16	10	8.9	8.9
7	5.6	17	34	59	648	313	98	18	15	10	8.7	8.8
8	5.7	17	30	55	480	259	80	18	15	9.9	8.7	8.8
9	5.9	17	30	51	370	216	71	17	15	9.8	8.6	8.8
10	5.8	17	30	48	297	198	64	17	15	9.6	8.5	8.9
11	5.8	17	233	47	238	254	55	16	15	9.6	9.8	9.0
12	5.8	17	1410	46	193	391	46	16	14	10	8.6	9.0
13	5.7	17	210	44	150	381	42	16	14	10	8.4	8.9
14	5.8	17	98	42	116	313	37	16	14	10	8.4	9.0
15	5.9	19	147	51	98	257	38	28	14	11	8.4	9.3
16	7.0	26	89	877	113	212	56	126	13	11	8.5	9.2
17	19	31	56	540	139	175	53	94	13	10	8.6	8.9
18	19	36	45	899	228	146	81	183	11	10	8.5	8.7
19	19	31	36	867	833	118	66	93	11	10	8.6	8.7
20	20	31	33	469	1490	100	76	70	11	10	8.6	8.8
21	20	30	37	863	1970	87	61	81	11	9.9	8.6	8.8
22	20	21	55	436	1160	71	53	96	10	9.8	8.6	8.8
23	20	22	55	344	666	65	46	86	10	9.8	8.6	8.8
24	20	22	48	457	503	57	45	77	10	9.9	8.5	8.9
25	20	22	44	1000	407	50	42	61	10	9.8	8.5	8.8
26	20	22	39	457	317	52	36	47	10	9.7	8.6	8.8
27	20	22	31	1240	308	53	33	39	10	9.7	8.6	8.8
28	17	21	30	1050	504	53	29	32	10	9.6	9.0	8.7
29	17	20	110	640	1500	49	27	27	11	9.5	9.0	8.8
30	17	21	263	505	---	47	25	22	11	9.3	9.0	8.8
31	17	---	133	1430	---	45	---	20	---	9.4	8.9	---
TOTAL	376.6	635	3577	12893	22836	7051	3066	1437	398	308.3	270.4	266.6
MEAN	12.1	21.2	115	416	787	227	102	46.4	13.3	9.95	8.72	8.89
MAX	20	36	1410	1430	3810	806	609	183	19	11	9.8	9.3
MIN	5.3	17	30	42	98	45	25	16	10	9.3	8.4	8.7
AC-FT	747	1260	7090	25570	45300	13990	6080	2850	789	612	536	529

11460600 LAGUNITAS CREEK NEAR POINT REYES STATION, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.13	37.4	92.0	266	292	238	62.3	19.8	7.22	5.51	4.64	4.39
MAX	19.2	177	542	1427	1193	1109	531	91.4	14.4	9.95	8.72	8.89
(WY)	1984	1983	1984	1995	1986	1983	1982	1995	1995	1996	1996	1996
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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1975 - 1996	
ANNUAL TOTAL	89258.0		53114.9			
ANNUAL MEAN	245		145		85.4	
HIGHEST ANNUAL MEAN					269	
LOWEST ANNUAL MEAN					2.54	
HIGHEST DAILY MEAN	5920	Mar 9	3810	Feb 4	10700	Jan 4 1982
LOWEST DAILY MEAN	5.3	Oct 3	5.3	Oct 3	.01	Sep 26 1977
ANNUAL SEVEN-DAY MINIMUM	5.4	Sep 27	5.5	Oct 1	.02	Oct 14 1977
INSTANTANEOUS PEAK FLOW			5500	Feb 4	22100	Jan 4 1982
INSTANTANEOUS PEAK STAGE			17.06	Feb 4	26.96	Jan 4 1982
ANNUAL RUNOFF (AC-FT)	177000		105400		61890	
10 PERCENT EXCEEDS	516		434		139	
50 PERCENT EXCEEDS	22		21		9.0	
90 PERCENT EXCEEDS	5.9		8.7		2.4	

11460750 WALKER CREEK NEAR MARSHALL, CA

LOCATION.--Lat 38°10'33", long 122°49'02", in Soulañule (Vasquez) Grant, Marin County, Hydrologic Unit 18050005, on right bank 0.8 mi downstream from Verde Canyon, 2.8 mi below confluence of Arroyo Sausal and Salmon Creek, and 4.0 mi east of Marshall.

DRAINAGE AREA.--31.1 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 140 ft above sea level, from topographic map.

REMARKS.--Records good. Flow affected by regulation and diversions and by Soulañule 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	6.8	11	43	297	285	86	13	7.5	5.5	5.0	4.9
2	4.5	11	10	32	175	160	75	13	7.3	5.3	4.9	4.9
3	4.5	11	11	27	142	112	45	13	7.2	5.3	4.9	5.0
4	4.4	11	11	22	1080	122	32	13	7.1	5.3	4.9	5.0
5	4.5	11	10	20	589	111	27	13	7.0	5.4	5.0	4.8
6	4.6	11	10	18	260	81	23	13	7.0	5.2	5.0	4.8
7	4.6	11	9.5	17	151	65	21	9.8	6.9	5.0	5.0	4.8
8	4.6	11	9.6	16	105	55	18	7.0	6.8	5.0	4.9	4.8
9	4.6	11	9.6	15	80	50	17	6.9	6.3	5.1	4.8	4.7
10	4.6	11	9.8	15	63	58	15	6.8	6.2	5.0	4.7	4.8
11	4.6	11	50	14	51	96	13	6.7	6.2	5.0	4.7	4.8
12	4.6	11	320	13	42	170	15	6.6	6.3	5.1	4.7	4.8
13	4.6	11	67	13	35	128	16	6.5	6.3	5.1	4.8	4.7
14	4.6	11	37	13	31	90	16	6.6	6.3	5.2	4.5	4.8
15	4.8	11	45	15	31	70	16	12	6.2	5.3	4.6	4.9
16	4.8	11	29	162	42	59	17	17	6.0	5.2	4.7	4.8
17	4.8	10	23	72	46	51	19	15	5.9	5.2	4.7	4.8
18	4.8	11	23	321	110	43	19	18	5.8	5.1	4.7	4.8
19	4.8	10	20	467	333	36	19	13	5.8	5.1	4.7	4.8
20	4.8	10	18	244	429	31	18	11	5.8	5.2	4.7	4.8
21	4.9	11	17	292	741	27	17	12	5.8	5.2	4.7	4.8
22	4.8	11	22	200	517	24	16	12	5.8	5.2	4.7	4.8
23	4.9	11	19	146	218	21	16	10	5.8	5.3	4.7	4.8
24	4.9	11	17	237	162	18	16	9.7	5.8	5.3	4.8	4.8
25	5.0	11	16	399	117	18	16	9.1	5.8	5.3	4.7	5.0
26	5.0	11	15	216	86	18	15	8.8	5.8	5.2	4.8	5.0
27	5.0	10	15	408	103	18	14	8.7	5.8	5.2	5.0	5.0
28	5.0	10	14	305	170	18	14	8.5	5.7	5.2	5.0	5.1
29	5.0	10	149	208	604	17	14	8.3	5.6	5.2	5.0	5.2
30	4.9	10	173	172	---	17	14	8.0	5.6	5.0	4.9	5.1
31	5.1	---	68	435	---	17	---	7.7	---	4.9	4.9	---
TOTAL	147.1	318.8	1258.5	4577	6810	2086	679	323.7	187.4	160.6	149.1	146.1
MEAN	4.75	10.6	40.6	148	235	67.3	22.6	10.4	6.25	5.18	4.81	4.87
MAX	5.1	11	320	467	1080	285	86	18	7.5	5.5	5.0	5.2
MIN	4.4	6.8	9.5	13	31	17	13	6.5	5.6	4.9	4.5	4.7
AC-FT	292	632	2500	9080	13510	4140	1350	642	372	319	296	290

11460750 WALKER CREEK NEAR MARSHALL, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.71	10.6	34.1	105	103	70.2	11.2	6.99	5.05	4.58	4.45	4.55
MAX	6.27	46.3	247	572	588	374	22.6	18.6	7.84	5.80	5.80	5.80
(WY)	1990	1984	1984	1995	1986	1995	1996	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1984 - 1996			
ANNUAL TOTAL	34400.3				16843.3							
ANNUAL MEAN	94.2				46.0				30.1			
HIGHEST ANNUAL MEAN									92.6			
LOWEST ANNUAL MEAN									7.41			
HIGHEST DAILY MEAN	3810				1080				4940			
LOWEST DAILY MEAN	4.4				4.4				.73			
ANNUAL SEVEN-DAY MINIMUM	4.5				4.5				.78			
INSTANTANEOUS PEAK FLOW					1570				7050			
INSTANTANEOUS PEAK STAGE					5.17				10.86			
ANNUAL RUNOFF (AC-FT)	68230				33410				21790			
10 PERCENT EXCEEDS	181				132				36			
50 PERCENT EXCEEDS	11				10				5.8			
90 PERCENT EXCEEDS	4.8				4.8				2.6			

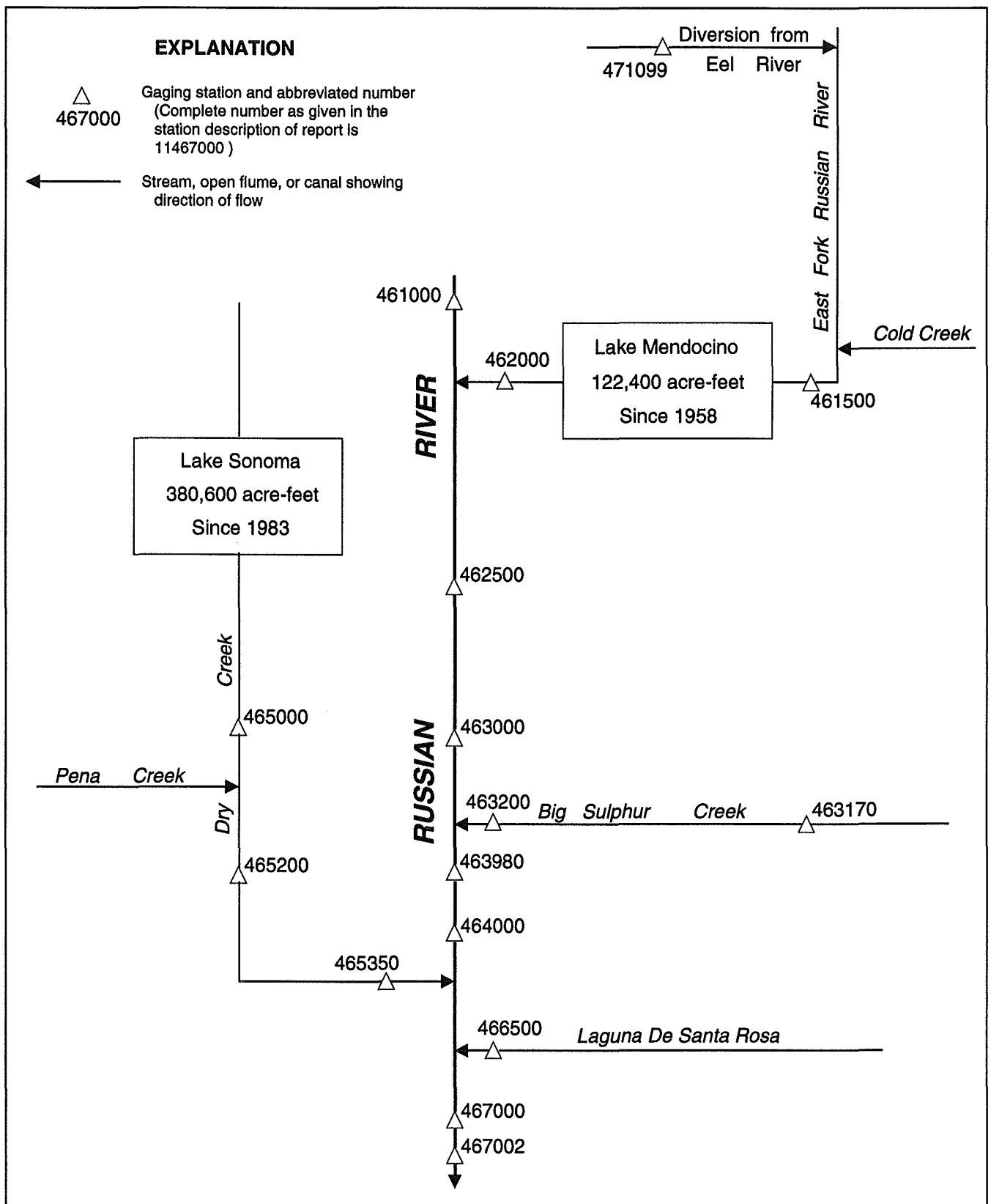


Figure 21. Diversions and storage in Russian River basin.

RUSSIAN RIVER BASIN

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11461000 RUSSIAN RIVER NEAR UKIAH, CA

LOCATION.--Lat 39°11'44", long 123°11'38", in Yokaya Grant, Mendocino County, Hydrologic Unit 18010110, on right bank 20 ft upstream from bridge on Lake Mendocino Drive, 0.4 mi upstream from East Fork, 0.6 mi downstream from York Creek, and 3.2 mi north of Ukiah.

DRAINAGE AREA.--100 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1911 to September 1913, October 1952 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

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 except for estimated daily discharges, which are poor. No regulation. Diversions upstream from station for irrigation of about 1,000 acres. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,900 ft³/s, Dec. 21, 1955, gage height, 19.0 ft, site and datum then in use; maximum gage height, 20.87 ft, Jan. 20, 1993; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 24	unknown	unknown	unknown				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.5	e3.7	e980	e780	894	e280	74	35	8.5	1.5	1.4
2	1.1	1.2	e5.2	e260	e610	574	e200	67	33	5.9	1.4	1.2
3	.30	1.6	e7.3	e151	e265	456	e175	61	27	5.7	1.4	.97
4	.36	1.3	e8.0	e115	e1350	921	e150	56	23	6.2	1.5	1.3
5	.52	1.7	e8.5	106	e1050	1100	e120	52	22	6.8	1.5	1.3
6	.35	1.7	e10	90	e920	604	e98	49	20	4.8	1.6	1.3
7	.28	2.2	e25	81	e1280	454	e82	45	20	5.7	.77	1.4
8	.27	2.3	e32	75	e710	367	e74	40	19	5.8	.65	.96
9	.74	e2.2	e41	75	e440	306	e72	37	19	5.5	.69	.79
10	.67	e2.4	e50	e74	e290	310	e70	35	18	3.8	.36	.81
11	1.0	e2.4	e100	e80	e250	477	65	32	18	3.6	.31	1.2
12	1.1	e2.5	e1650	e82	e210	578	64	29	17	3.8	.32	1.7
13	1.6	e2.5	e300	e101	e200	387	57	27	15	3.7	e.40	2.1
14	1.8	e2.5	e230	e190	e220	314	55	30	15	4.3	e.49	1.8
15	1.4	e2.5	e820	e600	e208	270	57	32	17	3.5	e.54	2.7
16	1.6	e2.7	e500	e2250	e217	239	127	56	17	2.5	e.59	2.5
17	1.4	e2.8	e170	e1180	e195	212	191	126	16	1.9	.63	2.1
18	1.5	e2.9	e140	e2010	e710	184	326	197	14	2.2	.61	1.9
19	1.5	e3.0	e110	e1490	e1010	158	322	118	13	2.3	.35	1.5
20	1.9	e3.1	e90	e1250	e1210	141	271	72	15	1.9	.41	e1.3
21	2.0	e3.2	e80	e1000	e1390	125	198	416	14	2.5	1.2	1.2
22	1.3	e3.2	e78	e700	e1220	113	170	330	11	2.0	1.3	.95
23	1.2	e3.3	e80	e1110	e1400	103	137	173	11	1.2	1.1	.85
24	1.1	e3.3	e102	e2010	e610	e94	273	118	11	1.3	1.2	.95
25	1.5	e3.2	e84	e2850	558	e84	195	91	14	1.4	1.6	.98
26	1.3	e4.0	e80	e1910	440	e78	148	74	14	1.5	1.8	e.85
27	1.2	e3.7	e78	e1150	392	e90	124	64	14	1.4	1.9	e.69
28	1.7	e3.6	e100	e1500	530	e88	107	55	11	2.3	1.9	.58
29	1.9	e3.8	e1000	e1080	e800	e82	94	50	9.8	1.9	1.5	.67
30	1.4	e3.6	e1650	e1210	---	e80	83	46	9.0	1.4	1.4	.82
31	1.5	---	e1050	e800	---	e78	---	40	---	1.3	1.5	---
TOTAL	36.59	79.9	8682.7	26560	19465	9961	4385	2692	511.8	106.6	32.42	38.77
MEAN	1.18	2.66	280	857	671	321	146	86.8	17.1	3.44	1.05	1.29
MAX	2.0	4.0	1650	2850	1400	1100	326	416	35	8.5	1.9	2.7
MIN	.27	1.2	3.7	74	195	78	55	27	9.0	1.2	.31	.58
AC-FT	73	158	17220	52680	38610	19760	8700	5340	1020	211	64	77

e Estimated.

RUSSIAN RIVER BASIN

11461000 RUSSIAN RIVER NEAR UKIAH, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.95	118	340	560	477	364	157	42.9	10.9	2.23	.54	.56
MAX	147	682	1663	1986	1975	1436	770	201	57.4	10.8	2.52	2.70
(WY)	1963	1974	1965	1995	1958	1983	1963	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1912 - 1996			
ANNUAL TOTAL	128576.59				72551.78							
ANNUAL MEAN	352				198				172			
HIGHEST ANNUAL MEAN									420			
LOWEST ANNUAL MEAN									5.76			
HIGHEST DAILY MEAN	9100				2850				13300			
LOWEST DAILY MEAN	.27				.27				.00			
ANNUAL SEVEN-DAY MINIMUM	.40				.40				.00			
INSTANTANEOUS PEAK FLOW									18900			
INSTANTANEOUS PEAK STAGE									20.87			
ANNUAL RUNOFF (AC-FT)	255000				143900				124900			
10 PERCENT EXCEEDS	954				710				407			
50 PERCENT EXCEEDS	28				20				13			
90 PERCENT EXCEEDS	1.3				1.1				.10			

11461000 RUSSIAN RIVER NEAR UKIAH, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-68, 1977-79, 1991-92, October 1994 to current year.

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, October 1994 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1964 to September 1968.

SUSPENDED-SEDIMENT DISCHARGE: January 1964 to September 1968.

REMARKS.--Zero-bedload discharge observed at flows less than 39 ft³/s.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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
DEC 12...	1415	1770	13.0	778	3720	30	36
DATE	TIME	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
DEC 12...	44	58	69	82	92	97	100

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

								TIME	HORI-
				BAG	TETHER			ON BED	ZONTAL
				MESH	LINE	START-	END-	FOR	WIDTH
				SIZE	USED IN	ING	ING	BED	OF
DATE	TIME	SAM- PLING METHOD, CODES	SAMPLER TYPE (CODE)	BEDLOAD SAMPLER (MM)	SAMPLING (YES=1) (CODE)	TIME (2400 HOURS)	TIME (2400 HOURS)	LOAD SAMPLE (SEC)	VER- TICAL (FEET)
DEC									
12...	1130	1000	1100	0.250	0	1105	1155	15	4.0
12...	1240	1000	1100	0.250	0	1220	1300	15	4.0
		COMPSTD SAMPLES IN X-SEC	VER- TICALS IN COM-	NUMBER OF SAM-	SAMPLE LOC- ATION, CROSS	DIS- CHARGE, INST. CUBIC	DISCH, BEDLOAD AV UNIT FOR COM	SEDI- MENT DIS- CHARGE,	SED. BEDLOAD SIEVE DIAM.
DATE	BEDLOAD MEASMT (NUM)	POSITE SAMPLE (NUM)	PLING POINTS (COUNT)	SECTION (FT FM L BANK)	FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	POSITE SAMPLE T/D/FT	BEDLOAD (TONS/ DAY)	% FINER THAN .250 MM
DEC									
12...	1	18	18	2.00	3350	13.0	21.9	1010	2
12...	1	18	18	2.00	2560	13.0	5.89	448	2
		SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.
DATE	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM	% FINER THAN 64.0 MM	
DEC									
12...	6	14	25	40	58	78	98	100	
12...	8	13	20	33	50	74	93	100	

11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CA

LOCATION.--Lat 39°14'48", long 123°07'45", in NW 1/4 NW 1/4 sec.18, T.16 N., R.11 W., Mendocino County, Hydrologic Unit 18010110, on left bank 0.1 mi downstream from Cold Creek and 3.9 mi east of Calpella.

DRAINAGE AREA.--92.2 mi².

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 787.87 ft above sea level. Prior to May 28, 1957, at site 1.3 mi downstream at different datum. May 28, 1957, to Apr. 5, 1966, at site 0.4 mi downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow greatly affected by diversion from Eel River through Potter Valley Powerplant Intake and Tailrace (stations 11471000, 11471099, respectively). Diversion for irrigation of about 8,000 acres upstream from station. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft³/s, Dec. 22, 1964, gage height, 20.21 ft, site then in use; maximum gage height, 22.89 ft, Jan. 20, 1993; minimum daily, 1.7 ft³/s, July 23, 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,300 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0815	4,830	15.97	Jan. 24	2045	7,640	19.76
Dec. 15	0330	4,760	15.87	Feb. 4	1145	5,090	16.36
Dec. 29	1715	4,200	15.02	Feb. 19	1715	4,240	15.07
Jan. 16	1100	7,880	20.08				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	23	25	414	523	758	623	354	314	156	136	125
2	107	17	81	379	488	631	444	353	314	153	133	126
3	99	15	84	359	463	586	400	351	314	151	132	129
4	91	15	87	335	2270	1370	390	347	e314	151	135	184
5	89	15	87	341	1090	1210	381	344	e326	151	132	429
6	92	42	87	336	672	745	378	341	e338	149	134	264
7	101	55	165	333	577	635	378	344	339	150	133	258
8	89	58	251	289	524	575	374	345	337	139	165	256
9	96	77	269	323	484	534	371	344	338	134	188	268
10	97	132	282	335	454	528	367	341	289	133	185	273
11	95	179	349	339	432	703	366	335	256	133	191	273
12	100	178	2120	341	417	818	365	334	258	132	195	272
13	95	178	481	341	309	584	351	323	256	130	197	270
14	101	179	443	341	392	519	356	322	256	131	276	275
15	100	159	1660	459	402	486	361	324	254	130	277	280
16	103	207	333	3470	511	466	409	354	255	130	229	285
17	98	290	274	730	439	449	517	358	190	131	117	280
18	103	287	297	2700	1030	409	504	281	150	129	114	287
19	106	276	259	1510	1790	413	496	317	149	130	119	287
20	95	272	251	1110	1500	406	436	315	149	129	118	287
21	91	253	269	1200	1990	398	416	319	149	127	119	274
22	91	172	360	737	1060	393	408	316	148	139	121	268
23	94	167	357	1230	760	377	397	316	148	145	125	269
24	94	167	348	3580	851	367	406	316	158	146	123	273
25	90	167	339	1540	668	368	375	314	164	145	115	270
26	74	167	336	618	587	302	364	314	163	145	124	270
27	61	169	333	2280	551	379	361	314	162	145	131	274
28	45	137	333	727	772	387	358	314	162	144	135	277
29	59	22	1710	487	1620	358	356	315	163	138	127	272
30	56	17	1070	509	---	366	355	315	163	136	134	271
31	51	---	491	593	---	369	---	314	---	135	128	---
TOTAL	2764	4092	13831	28286	23626	16889	12063	10194	6976	4317	4688	7826
MEAN	89.2	136	446	912	815	545	402	329	233	139	151	261
MAX	107	290	2120	3580	2270	1370	623	358	339	156	277	429
MIN	45	15	25	289	309	302	351	281	148	127	114	125
AC-FT	5480	8120	27430	56110	46860	33500	23930	20220	13840	8560	9300	15520

e Estimated.

11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	228	287	470	629	602	522	348	232	161	139	140	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 1995 CALENDAR YEAR			FOR 1996 WATER YEAR			WATER YEARS 1942 - 1996		
ANNUAL TOTAL	132178			135552					
ANNUAL MEAN	362			370			328		
HIGHEST ANNUAL MEAN							586		
LOWEST ANNUAL MEAN							76.8		
HIGHEST DAILY MEAN	6700			3580			12500		
LOWEST DAILY MEAN	15			15			1.7		
ANNUAL SEVEN-DAY MINIMUM	25			25			3.2		
INSTANTANEOUS PEAK FLOW				7880			18700		
INSTANTANEOUS PEAK STAGE				20.08			22.89		
ANNUAL RUNOFF (AC-FT)	262200			268900			237600		
10 PERCENT EXCEEDS	805			632			545		
50 PERCENT EXCEEDS	149			287			254		
90 PERCENT EXCEEDS	79			97			78		

11462000 EAST FORK RUSSIAN RIVER NEAR UKIAH, CA

LOCATION.--Lat 39°11'51", long 123°11'11", in Yokaya Grant, Mendocino County, Hydrologic Unit 18010110, on right bank of outlet channel, 500 ft downstream from Coyote Dam, 1,300 ft upstream from mouth, and 3.2 mi northeast of Ukiah.

DRAINAGE AREA.--105 mi².

PERIOD OF RECORD.--August 1911 to September 1913, October 1951 to June 1956, October 1957 to current year.

CHEMICAL DATA: Water years 1953-55, 1973-82.

BIOLOGICAL DATA: Water years 1977-78.

WATER TEMPERATURE: Water years 1953-55, 1965-68, 1973-1994.

SEDIMENT DATA: Water years 1953-55, 1964-68.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 614.41 ft above sea level. Prior to October 1951, nonrecording gage at site 0.5 mi upstream at different datum. October 1951 to June 1956, water-stage recorder at site 1.0 mi upstream at different datum.

REMARKS.--Records good. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	210	206	125	1930	246	259	350	303	205	263	285
2	225	210	206	125	875	246	259	364	303	229	266	285
3	221	212	206	125	140	249	259	345	303	250	267	285
4	217	214	188	128	142	250	259	298	303	250	267	290
5	214	214	173	128	143	1120	259	298	303	250	263	285
6	214	194	173	128	1610	1980	260	296	245	248	263	273
7	214	166	173	128	2510	1160	263	294	219	247	231	257
8	214	166	173	126	880	388	261	293	220	227	261	259
9	216	166	173	125	238	254	305	293	222	206	257	253
10	218	166	173	125	239	254	340	293	200	222	254	254
11	212	166	150	125	242	254	340	293	191	256	253	256
12	218	166	139	125	393	257	340	294	180	269	260	259
13	218	169	79	125	486	367	340	294	186	271	299	259
14	218	170	35	125	486	436	340	294	186	271	308	268
15	218	171	40	125	486	436	343	293	186	269	310	271
16	218	173	40	130	384	436	341	293	186	269	305	271
17	217	173	40	1760	325	436	341	296	184	260	268	271
18	214	173	40	1430	213	436	615	298	184	248	271	274
19	204	173	40	1380	491	436	729	298	196	253	288	278
20	199	175	40	1530	652	484	340	298	205	254	293	274
21	199	177	40	19	265	388	340	568	205	252	292	271
22	215	177	80	1780	1870	252	340	728	202	250	295	272
23	216	177	122	1290	2950	254	340	899	202	250	293	271
24	212	177	122	1170	2390	254	340	711	204	253	294	271
25	210	177	122	2000	947	254	780	298	206	254	298	273
26	210	177	124	1140	242	256	545	298	205	257	291	273
27	210	174	125	18	242	259	340	298	202	267	276	271
28	209	185	125	1720	244	259	340	298	202	267	276	271
29	209	206	126	2540	246	259	340	298	202	267	276	271
30	212	206	126	1100	---	259	354	299	204	267	279	271
31	212	---	125	1100	---	259	---	303	---	264	280	---
TOTAL	6635	5460	3724	21995	22261	13078	10852	11073	6539	7802	8597	8122
MEAN	214	182	120	710	768	422	362	357	218	252	277	271
MAX	232	214	206	2540	2950	1980	780	899	303	271	310	290
MIN	199	166	35	18	140	246	259	293	180	205	231	253
AC-FT	13160	10830	7390	43630	44150	25940	21520	21960	12970	15480	17050	16110

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
LOWEST ANNUAL MEAN	183
HIGHEST DAILY MEAN	7300
LOWEST DAILY MEAN	.00
ANNUAL SEVEN-DAY MINIMUM	1.4
INSTANTANEOUS PEAK FLOW	13300
INSTANTANEOUS PEAK STAGE	16.86
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 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	225	247	366	614	592	457	309	220	217	250	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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1960 - 1996

ANNUAL TOTAL	120763	126138	
ANNUAL MEAN	331	345	332
HIGHEST ANNUAL MEAN			598
LOWEST ANNUAL MEAN			103
HIGHEST DAILY MEAN	5330	Jan 20	2950
LOWEST DAILY MEAN	22	Jan 6	18
ANNUAL SEVEN-DAY MINIMUM	24	Jan 9	39
INSTANTANEOUS PEAK FLOW			3070
INSTANTANEOUS PEAK STAGE			5.75
ANNUAL RUNOFF (AC-FT)	239500	250200	240600
10 PERCENT EXCEEDS	517	486	516
50 PERCENT EXCEEDS	209	256	230
90 PERCENT EXCEEDS	109	129	63

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.

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 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	210	209	996	3380	2670	1120	550	379	190	243	224
2	193	208	209	718	2370	1910	914	539	371	185	240	230
3	188	206	215	579	1150	1590	699	535	361	215	237	230
4	188	208	232	490	4060	2460	632	468	347	214	237	236
5	187	210	201	428	3720	4110	596	445	339	224	239	239
6	187	208	192	384	3090	4160	571	441	317	227	234	233
7	185	173	202	355	4120	3050	556	435	263	229	216	205
8	185	170	200	334	2480	1690	540	421	245	230	233	205
9	188	170	197	312	1290	1300	544	412	243	194	222	205
10	192	172	201	303	1120	1210	578	409	238	184	224	192
11	189	172	238	286	980	1570	564	398	222	207	224	194
12	190	172	5340	274	1000	2070	556	398	210	235	229	202
13	197	172	1370	265	1080	1600	547	385	198	237	225	202
14	197	172	699	257	1030	1480	539	374	195	238	222	204
15	197	172	3640	365	1010	1340	535	392	192	246	215	202
16	199	172	982	6060	1060	1240	668	453	187	240	223	203
17	200	172	565	3790	905	1160	702	487	185	237	226	205
18	199	173	476	7170	1420	1090	1210	649	187	221	227	205
19	193	175	400	5380	3790	1020	1390	534	190	228	233	207
20	179	175	336	4430	4080	1000	895	459	199	227	252	208
21	172	176	297	3390	4600	924	750	826	198	223	249	204
22	188	177	342	3340	4290	690	719	1220	189	227	248	204
23	207	177	400	4050	4840	647	669	1110	194	227	245	207
24	202	177	361	7010	4850	607	796	1070	197	227	250	207
25	200	177	337	9550	2990	599	1020	500	197	224	250	207
26	204	177	323	4060	1630	559	1000	460	195	214	252	207
27	207	177	312	5610	1420	579	642	441	196	227	237	197
28	202	180	309	4340	1640	622	606	422	191	237	227	194
29	200	207	3570	4560	4300	556	580	409	194	240	227	201
30	204	208	5220	3220	---	552	571	399	191	244	227	207
31	208	---	1680	2690	---	543	---	387	---	242	227	---
TOTAL	6011	5495	29255	84996	73695	44598	21709	16428	7010	6940	7240	6266
MEAN	194	183	944	2742	2541	1439	724	530	234	224	234	209
MAX	208	210	5340	9550	4850	4160	1390	1220	379	246	252	239
MIN	172	170	192	257	905	543	535	374	185	184	215	192
AC-FT	11920	10900	58030	168600	146200	88460	43060	32580	13900	13770	14360	12430

11462500 RUSSIAN RIVER NEAR HOPLAND, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	231	429	1139	1803	1718	1290	711	325	213	198	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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1940 - 1996	
ANNUAL TOTAL	427319		309643			
ANNUAL MEAN	1171		846		702	
HIGHEST ANNUAL MEAN					1587	
LOWEST ANNUAL MEAN					94.0	
HIGHEST DAILY MEAN	21100		9550		33800	
LOWEST DAILY MEAN	170		170		9.1	
ANNUAL SEVEN-DAY MINIMUM	171		171		13	
INSTANTANEOUS PEAK FLOW			16500		45000	
INSTANTANEOUS PEAK STAGE			16.32		27.00	
ANNUAL RUNOFF (AC-FT)	847600		614200		508400	
10 PERCENT EXCEEDS	4730		2680		1540	
50 PERCENT EXCEEDS	238		249		252	
90 PERCENT EXCEEDS	187		188		136	

RUSSIAN RIVER BASIN

11462500 RUSSIAN RIVER NEAR HOPLAND, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to March 1979, October 1989 to April 1996 (discontinued).

CHEMICAL DATA: Water years 1951-66.

WATER TEMPERATURE: Water years 1965-79.

SEDIMENT DATA: Water years 1989-93, October 1994 to April 1996 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: September 1965 to March 1979.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
JAN 16...	1525	12100	--	1980	64700	27	34	46
FEB 22...	1215	3440	10.0	216	2010	--	--	--
DATE	TIME	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
JAN 16...		60	70	79	87	94	98	100
FEB 22...		--	--	61	76	91	100	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		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										
16...	1320	1000	1100	0.250	0	1300	1340	10	10.0	
16...	1415	1000	1100	0.250	0	1400	1435	10	10.0	
FEB										
22...	1345	1000	1100	0.250	0	1330	1400	15	6.0	
22...	1420	1000	1100	0.250	0	1410	1435	15	6.0	
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 .125 MM	
JAN										
16...	1	15	15	80.0	10800	--	0.61	89	2	
16...	1	15	15	80.0	11700	--	2.55	374	1	
FEB										
22...	2	22	22	95.0	4410	10.0	4.29	579	1	
22...	2	22	22	95.0	4720	10.0	4.62	579	1	
DATE	TIME	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	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM
JAN										
16...	15	26	31	33	33	35	53	100	--	--
16...	6	12	15	16	18	21	53	100	--	--
FEB										
22...	5	23	27	36	49	65	86	100	--	--
22...	6	32	39	42	45	51	64	90	100	100

RUSSIAN RIVER BASIN

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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.

WATER-DISCHARGE RECORDS

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 except for period of estimated record, which is fair. Diversions for irrigation of about 15,000 acres upstream from station. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations) and since November 1958 by storage in Lake Mendocino. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft³/s, Dec. 22, 1964, gage height, 31.60 ft, site and datum then in use; minimum daily, 12 ft³/s, Apr. 22, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	215	212	1440	4230	4160	1230	648	430	197	227	201
2	191	215	211	1040	3430	2710	1180	618	415	182	220	211
3	186	210	218	820	1600	2140	861	618	413	206	225	213
4	192	214	235	684	8840	3930	763	543	398	204	225	216
5	199	217	212	595	7840	5890	712	514	388	224	228	212
6	202	218	201	535	4040	5440	674	506	372	226	220	215
7	192	188	203	488	5170	4180	645	495	312	229	216	187
8	195	174	208	453	3390	2310	611	481	289	233	202	183
9	202	175	212	431	1720	1740	599	468	277	202	207	188
10	203	175	216	412	1400	1490	638	459	279	178	208	186
11	209	175	450	387	1190	2090	622	439	258	184	203	184
12	198	176	10700	361	1110	3210	619	433	248	214	215	187
13	205	173	2340	350	1160	2160	613	425	230	215	200	191
14	203	173	1110	337	1090	1850	600	406	218	214	204	189
15	202	175	e6400	390	1040	1610	600	436	213	228	184	186
16	207	175	e2100	6420	1180	1470	798	545	208	227	196	186
17	205	177	e1200	4940	1060	1350	870	678	208	223	201	185
18	208	177	e910	7570	2270	1240	1370	900	205	203	200	186
19	207	176	e720	7940	6380	1150	1500	710	205	208	212	186
20	197	171	e620	6080	7070	1100	1160	591	210	213	236	186
21	183	171	e540	4930	8240	1050	958	716	217	201	236	184
22	184	174	e580	3730	5870	849	906	1310	208	208	238	180
23	215	176	e660	4870	6110	788	841	1110	200	204	231	188
24	212	178	e570	8300	6160	715	925	1170	216	212	233	181
25	208	179	e495	13800	4110	690	1030	678	212	207	232	184
26	206	179	e475	5680	2170	622	1180	570	214	191	237	187
27	211	179	e450	8780	1850	641	807	532	205	203	230	180
28	205	180	e440	5790	2330	696	753	502	202	225	215	166
29	204	199	3050	5840	6810	619	710	481	201	234	210	172
30	200	210	8820	4520	---	599	671	464	201	236	211	186
31	209	---	2550	3680	---	587	---	444	---	223	211	---
TOTAL	6216	5574	47308	111593	108860	59076	25446	18890	7852	6554	6713	5686
MEAN	201	186	1526	3600	3754	1906	848	609	262	211	217	190
MAX	215	218	10700	13800	8840	5890	1500	1310	430	236	238	216
MIN	176	171	201	337	1040	587	599	406	200	178	184	166
AC-FT	12330	11060	93840	221300	215900	117200	50470	37470	15570	13000	13320	11280

e Estimated.

11463000 RUSSIAN RIVER NEAR CLOVERDALE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	249	587	1554	2657	2435	1839	912	386	234	212	220	215
MAX	658	2636	6398	8324	9387	7015	3708	1156	539	312	359	385
(WY)	1963	1984	1965	1995	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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1951 - 1996

ANNUAL TOTAL	652926	409768	
ANNUAL MEAN	1789	1120	953
HIGHEST ANNUAL MEAN			2144
LOWEST ANNUAL MEAN			99.2
HIGHEST DAILY MEAN	34700	Jan 9	13800
LOWEST DAILY MEAN	171	Nov 20	166
ANNUAL SEVEN-DAY MINIMUM	174	Nov 8	174
INSTANTANEOUS PEAK FLOW			18300
INSTANTANEOUS PEAK STAGE			15.75
ANNUAL RUNOFF (AC-FT)	1295000	812800	690100
10 PERCENT EXCEEDS	6220	3690	2240
50 PERCENT EXCEEDS	279	267	264
90 PERCENT EXCEEDS	186	184	153

11463000 RUSSIAN RIVER NEAR CLOVERDALE, CA--continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1964 to 1968, October 1994 to September 1996 (discontinued).

WATER TEMPERATURE: Water years 1964 to 1969.

SEDIMENT DATA: Water years 1964 to 1968, October 1994 to September 1996 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1963 to May 1969.

SEDIMENT DATA: November 1963 to September 1966, January 1967 to September 1968.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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
JAN 19...	1310	6260	10.0	499	8430	81	89	95	98	100
MAR 05...	1630	5280	10.0	270	3850	60	72	86	97	100

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 19...	1425	1000	1100	0.250	0	1350	1500	30	5.0
JAN 19...	1525	1000	1100	0.250	0	1510	1540	10	5.0
MAR 05...	1445	1000	1100	0.250	0	1430	1505	10	10.0
MAR 05...	1550	1000	1100	0.250	0	1535	1610	10	10.0

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
JAN 19...	2	36	36	20.0	6040	10.0	13.6	1980	--
JAN 19...	2	36	36	20.0	5880	10.0	7.86	1980	--
MAR 05...	2	17	17	10.0	5320	10.0	15.3	2530	1
MAR 05...	2	17	17	10.0	5260	10.0	14.5	2530	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
JAN 19...	1	3	10	25	45	70	93	100
JAN 19...	2	6	16	32	52	75	95	100
MAR 05...	3	6	13	28	48	68	89	100
MAR 05...	4	11	24	40	57	75	97	100

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.--Records good. Diversion for industrial use 150 ft upstream from station when flows are above 10 ft³/s. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,550 ft³/s, Jan. 8, 1995, gage height, 9.63 ft, from rating curve extended above 1,200 ft³/s on basis of culvert computation of peak flow; minimum daily, 0.08 ft³/s, Aug. 31, 1983.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0615	3,350	8.25	Feb. 4	1100	1,650	6.93
Dec. 15	0245	1,310	6.58	Feb. 20	2230	1,550	6.84
Jan. 20	2000	1,070	6.28	May 17	1815	1,370	6.64
Jan. 24	2000	1,190	6.44				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.5	1.7	23	87	212	199	14	11	6.6	2.9	1.8
2	1.4	1.5	1.8	13	61	140	62	13	10	6.8	2.9	1.8
3	1.3	1.5	1.7	7.8	68	104	35	13	9.2	6.6	2.9	1.8
4	1.4	1.5	2.1	7.9	1110	322	25	13	9.2	6.5	2.8	1.8
5	1.5	1.5	2.0	7.8	512	275	18	13	9.3	6.3	2.8	1.8
6	1.5	1.5	2.0	7.6	198	154	15	13	8.2	6.1	2.8	1.7
7	1.5	1.4	2.3	7.6	118	103	15	14	8.3	5.9	2.7	1.7
8	1.5	1.4	1.9	7.5	81	75	15	13	8.7	5.7	2.5	1.6
9	1.5	1.4	1.8	8.1	60	58	15	11	8.4	5.5	2.4	1.6
10	1.5	1.5	2.4	9.2	46	51	16	9.2	8.4	5.2	2.3	1.6
11	1.5	1.5	179	12	36	89	15	8.3	8.8	5.1	2.2	1.7
12	1.4	1.5	993	12	29	152	15	7.7	8.6	4.9	2.1	1.8
13	1.4	1.4	110	13	24	90	15	8.7	8.6	4.8	2.1	1.8
14	1.3	1.5	75	13	23	68	15	11	8.6	4.7	2.0	1.8
15	1.4	1.5	387	13	25	51	15	14	6.8	4.6	2.0	2.0
16	1.5	1.5	74	297	34	41	23	98	5.8	4.6	2.0	1.9
17	1.5	1.5	34	76	85	34	50	417	5.8	4.6	2.1	1.8
18	1.4	1.6	25	148	263	27	34	193	6.0	4.4	2.1	1.7
19	1.3	1.6	10	94	527	24	22	81	5.9	4.3	2.2	1.6
20	1.3	1.5	7.8	261	831	24	17	49	6.3	4.1	2.2	1.6
21	1.3	1.6	7.7	229	815	23	15	51	6.1	4.0	2.1	1.6
22	1.3	1.7	7.8	97	275	23	15	44	6.1	3.9	2.0	1.6
23	1.3	1.6	7.6	67	170	23	15	29	6.1	3.8	2.0	1.6
24	1.3	1.6	7.6	384	137	23	21	22	6.2	3.7	1.9	1.6
25	1.3	1.6	7.6	292	98	23	15	17	6.1	3.4	2.0	1.5
26	1.4	1.6	7.5	118	75	23	15	14	6.0	3.3	2.1	1.5
27	1.3	1.7	7.9	386	61	24	15	14	5.8	3.3	2.1	1.5
28	1.3	1.6	7.8	187	175	24	15	14	5.4	3.2	2.0	1.5
29	1.5	1.6	76	106	480	23	15	13	5.4	3.1	1.9	1.6
30	1.5	1.6	91	115	---	23	15	12	5.6	3.0	1.8	1.6
31	1.5	---	40	148	---	24	---	12	---	3.0	1.8	---
TOTAL	43.4	46.0	2183.0	3167.5	6504	2350	792	1255.9	220.7	145.0	69.7	50.5
MEAN	1.40	1.53	70.4	102	224	75.8	26.4	40.5	7.36	4.68	2.25	1.68
MAX	1.5	1.7	993	386	1110	322	199	417	11	6.8	2.9	2.0
MIN	1.3	1.4	1.7	7.5	23	23	15	7.7	5.4	3.0	1.8	1.5
AC-FT	86	91	4330	6280	12900	4660	1570	2490	438	288	138	100

11463170 BIG SULPHUR CREEK AT GEYSERS RESORT, NEAR CLOVERDALE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.56	27.8	70.6	112	114	115	32.1	18.9	5.96	2.72	1.39	1.34
MAX	20.9	146	243	639	571	358	162	81.6	17.1	5.75	2.64	2.90
(WY)	1990	1984	1984	1995	1986	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1981 - 1996			
ANNUAL TOTAL	37827.0				16827.7							
ANNUAL MEAN	104				46.0				41.8			
HIGHEST ANNUAL MEAN									101			
LOWEST ANNUAL MEAN									15.5			
HIGHEST DAILY MEAN	3750				1110				3920			
LOWEST DAILY MEAN	1.3				1.3				.08			
ANNUAL SEVEN-DAY MINIMUM	1.3				1.3				.24			
INSTANTANEOUS PEAK FLOW					3350				7550			
INSTANTANEOUS PEAK STAGE					8.25				9.63			
ANNUAL RUNOFF (AC-FT)	75030				33380				30310			
10 PERCENT EXCEEDS	241				111				87			
50 PERCENT EXCEEDS	7.5				7.6				5.8			
90 PERCENT EXCEEDS	1.5				1.5				.98			

11463200 BIG SULPHUR CREEK NEAR CLOVERDALE, CA

LOCATION.--Lat 38°49'34", long 122°59'45", in Rincon de Masalacon Grant, Sonoma County, Hydrologic Unit 18010110, on right bank 900 ft downstream from unnamed tributary, 1.0 mi upstream of Russian River and 1.8 mi northeast of Cloverdale.

DRAINAGE AREA.--85.5 mi².

PERIOD OF RECORD.--July 1957 to September 1972. October 1989 to current year (since October 1989, low flow records only).

REVISED RECORDS.--WSP 1929: 1958-60.

GAGE.--Water-stage recorder. Elevation of gage is 350 ft above sea level, from topographic map. Prior to September 1972, at site 0.8 mi upstream at different datum.

REMARKS.--Records fair including estimated daily discharges. No records computed above 200 ft³/s. Diversions for irrigation and geothermal recharge upstream from station. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (water years 1958-72), 15,700 ft³/s, Dec. 22, 1964, gage height, 15.08 ft, site and datum then in use, from rating curve extended above 5,700 ft³/s on basis of slope-area measurement at gage height 16.8 ft; minimum daily, 0.90 ft³/s, Aug. 17, 1994.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 16.8 ft from floodmarks, site and datum then in use, discharge, 20,000 ft³/s, by slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	5.9	7.4	164	---	---	---	92	71	27	10	5.0
2	5.9	6.3	8.6	131	---	---	---	88	66	26	10	5.0
3	5.6	6.3	8.6	110	---	---	---	84	62	26	9.5	5.0
4	5.3	6.2	11	99	---	---	---	84	58	26	9.3	5.2
5	4.6	5.6	12	93	---	---	178	81	57	25	9.3	5.2
6	4.4	5.6	12	91	---	---	162	79	54	24	9.8	5.2
7	4.8	5.8	13	90	---	---	154	78	51	24	9.9	5.1
8	5.1	5.7	11	89	---	---	147	77	49	23	9.7	5.0
9	5.2	5.7	9.7	88	---	---	141	76	47	23	8.9	5.0
10	5.4	5.7	11	87	---	---	135	71	45	22	8.0	5.0
11	5.5	5.7	48	87	---	---	130	69	45	21	7.8	5.0
12	5.4	5.7	---	87	---	---	126	66	44	20	7.2	5.1
13	5.5	5.7	---	86	---	---	121	63	44	19	7.0	5.4
14	5.2	5.7	---	85	---	---	118	65	43	19	6.7	5.6
15	5.0	5.9	---	89	---	---	117	73	41	18	6.4	6.0
16	5.1	6.0	---	---	---	---	153	---	38	18	6.2	6.4
17	5.5	6.2	---	---	---	---	192	---	38	18	6.1	5.8
18	5.5	6.4	---	---	---	---	---	---	36	18	e6.3	5.5
19	5.4	6.6	---	---	---	---	172	---	35	17	e5.8	5.2
20	5.2	6.6	e194	---	---	---	162	173	34	16	e5.6	5.2
21	5.0	6.8	e166	---	---	---	143	167	33	15	e5.3	5.1
22	4.9	7.0	e148	200	---	199	138	176	33	15	e5.1	5.0
23	4.7	7.2	e132	143	---	190	128	133	32	15	5.0	5.0
24	4.7	7.2	e120	---	---	183	146	117	30	15	5.0	5.0
25	4.7	7.2	e108	---	---	174	132	105	30	14	5.0	5.1
26	4.9	7.2	e98	172	---	166	119	94	31	13	5.0	5.0
27	5.1	7.2	e95	---	---	163	113	89	32	13	5.0	5.0
28	5.2	7.2	e92	---	---	164	107	85	31	12	5.2	5.0
29	5.2	7.1	---	126	---	152	101	82	30	12	5.1	5.0
30	5.2	7.2	---	147	---	146	98	78	28	11	5.0	5.0
31	5.5	---	---	---	---	145	---	75	---	11	5.0	---
TOTAL	161.0	190.6	---	---	---	---	---	---	1268	576	215.2	156.1
MEAN	5.19	6.35	---	---	---	---	---	---	42.3	18.6	6.94	5.20
MAX	6.3	7.2	---	---	---	---	---	---	71	27	10	6.4
MIN	4.4	5.6	---	---	---	---	---	---	28	11	5.0	5.0
AC-FT	319	378	---	---	---	---	---	---	2520	1140	427	310

e Estimated.

11463200 BIG SULPHUR CREEK NEAR CLOVERDALE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1972, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
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	1958
LOWEST ANNUAL MEAN	53.1	1972
HIGHEST DAILY MEAN	10400	Dec 22 1964
LOWEST DAILY MEAN	1.8	Oct 20 1964
ANNUAL SEVEN-DAY MINIMUM	2.0	Oct 15 1964
INSTANTANEOUS PEAK FLOW	15700	Dec 22 1964
INSTANTANEOUS PEAK STAGE	15.08	Dec 22 1964
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.--Record good except for estimated discharges, which are fair. No records computed above 300 ft³/s. See schematic diagram of Russian River basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	210	212	---	---	---	---	---	---	223	214	199
2	189	211	219	---	---	---	---	---	---	214	214	196
3	194	212	223	---	---	---	---	---	---	206	207	202
4	192	211	234	---	---	---	---	---	---	221	210	207
5	190	214	243	---	---	---	---	---	---	223	211	209
6	190	217	233	---	---	---	---	---	---	231	210	201
7	192	215	228	---	---	---	---	---	---	235	e215	196
8	188	195	227	---	---	---	---	---	---	237	e213	180
9	192	186	224	---	---	---	---	---	---	233	e205	178
10	195	186	225	---	---	---	---	---	---	206	e195	178
11	196	185	---	---	---	---	---	---	---	195	e192	173
12	197	185	---	---	---	---	---	---	---	198	e188	172
13	194	186	---	---	---	---	---	---	---	216	e188	176
14	197	184	---	---	---	---	---	---	289	220	e185	179
15	194	183	---	---	---	---	---	---	275	224	187	183
16	197	184	---	---	---	---	---	---	270	228	176	184
17	199	185	---	---	---	---	---	---	264	226	180	182
18	196	186	---	---	---	---	---	---	259	223	185	181
19	194	186	---	---	---	---	---	---	252	209	193	178
20	192	188	---	---	---	---	---	---	250	212	201	174
21	186	191	---	---	---	---	---	---	249	211	213	172
22	180	192	---	---	---	---	---	---	247	205	213	171
23	183	193	---	---	---	---	---	---	238	206	215	172
24	198	194	---	---	---	---	---	---	237	207	214	178
25	200	194	---	---	---	---	---	---	240	211	216	178
26	202	196	---	---	---	---	---	---	240	205	218	178
27	205	196	---	---	---	---	---	---	239	196	225	181
28	206	196	---	---	---	---	---	---	233	206	218	177
29	203	197	---	---	---	---	---	---	227	216	207	168
30	203	204	---	---	---	---	---	---	225	220	206	175
31	205	---	---	---	---	---	---	---	---	222	198	---
TOTAL	6037	5862	---	---	---	---	---	---	---	6685	6312	5478
MEAN	195	195	---	---	---	---	---	---	---	216	204	183
MAX	206	217	---	---	---	---	---	---	---	237	225	209
MIN	180	183	---	---	---	---	---	---	---	195	176	168
AC-FT	11970	11630	---	---	---	---	---	---	---	13260	12520	10870

e Estimated.

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA

LOCATION.--Lat 38°36'48", long 122°50'07", in Sotoyome Grant, Sonoma County, Hydrologic Unit 18010110, on left bank 2 mi east of Healdsburg and 3.5 mi upstream from Dry Creek.

DRAINAGE AREA.--793 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 981: 1942. WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 77.01 ft above sea level.

REMARKS.--Records 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, 73,000 ft³/s, Jan. 9, 1995, gage height, 26.23 ft; maximum gage height, 30.0 ft, Feb. 28, 1940; minimum daily discharge, 12 ft³/s, June 14, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1937 reached a stage of 30.8 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	193	196	2460	6200	8370	2910	888	604	231	204	166
2	156	195	205	1770	5500	5720	3040	798	582	220	193	165
3	167	197	208	1430	3390	4500	1760	781	556	202	186	188
4	163	197	221	1220	20900	5560	1420	776	537	211	181	206
5	160	197	233	1070	17700	9860	1250	713	501	223	184	203
6	160	201	225	953	8390	8070	1150	673	499	246	195	195
7	162	201	220	851	8030	6910	1080	647	487	250	189	192
8	160	178	217	785	6660	4640	1020	640	445	251	185	179
9	160	164	215	731	4110	3550	973	618	410	250	170	165
10	162	159	214	691	3290	3040	956	600	385	215	162	164
11	168	156	374	654	2800	3690	946	588	368	180	160	161
12	171	156	17600	622	2440	5900	937	571	350	163	156	160
13	162	159	6790	593	2330	4460	939	559	332	196	156	160
14	168	156	2590	572	2190	3580	939	542	354	216	145	162
15	168	156	7740	478	2060	3110	939	537	359	214	141	165
16	172	159	4180	5810	2350	2760	995	924	353	226	130	219
17	172	158	2000	8550	2350	2480	1120	1400	340	224	120	173
18	170	160	1470	7630	2990	2270	1990	2820	291	223	125	168
19	168	160	1230	11400	9800	2080	1820	1500	285	203	135	166
20	167	160	1020	7790	12900	1930	1910	1110	273	186	148	164
21	159	163	863	8880	16400	1840	1420	983	263	190	181	164
22	152	168	792	5530	10700	1630	1290	1650	281	181	193	161
23	149	168	805	6250	9280	1420	1200	1530	271	176	196	159
24	169	168	773	7670	8910	1290	1170	1490	260	172	197	163
25	172	171	711	18000	7290	1210	1300	1240	267	180	197	164
26	180	172	662	9310	4590	1130	1490	873	265	183	204	164
27	184	172	625	12200	3830	1070	1210	804	263	166	213	166
28	184	172	607	9680	4750	1110	1020	793	259	167	214	165
29	184	172	1260	8300	12200	1070	955	739	247	197	191	156
30	184	181	10500	6910	---	992	947	678	238	204	174	159
31	187	---	4600	7190	---	966	---	637	---	213	167	---
TOTAL	5198	5169	69346	155980	204330	106208	40096	29102	10925	6359	5392	5142
MEAN	168	172	2237	5032	7046	3426	1337	939	364	205	174	171
MAX	187	201	17600	18000	20900	9860	3040	2820	604	251	214	219
MIN	149	156	196	478	2060	966	937	537	238	163	120	156
AC-FT	10310	10250	137500	309400	405300	210700	79530	57720	21670	12610	10700	10200

RUSSIAN RIVER BASIN

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	277	787	2418	4031	3866	2840	1462	554	261	185	186	190
MAX	1605	5293	8945	14490	14650	11810	6592	1638	672	300	331	360
(WY)	1958	1974	1956	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1940 - 1996			
ANNUAL TOTAL	1036501				643247							
ANNUAL MEAN	2840				1758				1411			
HIGHEST ANNUAL MEAN									3277			
LOWEST ANNUAL MEAN									101			
HIGHEST DAILY MEAN	69300				20900				69300			
LOWEST DAILY MEAN	149				120				12			
ANNUAL SEVEN-DAY MINIMUM	157				135				21			
INSTANTANEOUS PEAK FLOW					28800				73000			
INSTANTANEOUS PEAK STAGE					15.08				30.00			
ANNUAL RUNOFF (AC-FT)	2056000				1276000				1022000			
10 PERCENT EXCEEDS	8900				5990				3340			
50 PERCENT EXCEEDS	401				371				310			
90 PERCENT EXCEEDS	168				161				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 due to equipment malfunction.

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, 27.5°C, July 1, 29, and Aug. 12; minimum recorded, 8.5°C, Jan. 23.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.5	17.5	17.0	14.5	15.0	12.5	12.5	11.0	11.5	10.0	12.5	10.0
2	22.0	17.0	16.0	14.0	13.5	11.5	12.0	10.5	11.5	10.5	13.5	11.0
3	22.0	17.0	16.5	13.0	13.0	11.5	12.0	11.0	12.0	11.0	13.5	12.0
4	20.5	17.0	16.0	12.5	14.0	13.0	12.0	10.5	13.0	12.0	13.0	11.5
5	20.0	15.5	15.5	12.5	15.5	14.0	12.0	11.0	13.5	12.5	11.5	10.5
6	19.5	15.0	15.5	12.5	15.5	14.5	11.5	10.5	13.0	12.5	11.0	9.5
7	19.5	15.0	16.0	13.0	15.5	14.5	11.5	11.0	12.5	12.0	13.0	11.0
8	19.5	15.5	16.5	13.5	15.0	13.5	11.5	11.0	12.5	12.0	13.5	11.5
9	20.0	15.0	17.0	15.0	14.0	13.5	11.5	11.5	13.5	12.0	14.5	12.5
10	20.5	16.0	16.0	13.0	14.0	13.0	12.0	11.0	14.0	13.0	14.5	13.0
11	20.0	16.5	15.5	13.0	14.0	13.5	12.0	11.0	14.5	12.0	14.5	13.0
12	19.0	15.5	16.0	13.0	14.5	13.5	12.0	11.0	14.5	12.5	13.5	12.0
13	18.5	14.5	16.5	14.0	13.5	12.5	11.5	10.5	14.5	12.5	13.5	11.0
14	19.0	14.5	16.5	14.0	12.5	11.5	---	10.5	14.5	---	14.5	11.5
15	19.0	16.5	16.5	14.5	12.5	11.5	12.0	11.0	14.0	12.5	15.0	12.0
16	19.5	15.0	17.0	15.0	11.5	10.5	12.5	11.5	14.0	13.0	15.5	13.0
17	19.5	15.0	17.0	15.0	11.5	10.0	11.5	10.5	14.0	13.5	16.0	13.0
18	20.0	16.0	17.0	15.0	12.0	11.5	10.5	10.0	15.0	13.5	16.5	13.5
19	20.0	16.0	16.0	14.0	12.0	11.0	10.5	9.5	13.5	12.5	16.5	14.5
20	19.5	16.5	15.0	12.5	12.0	11.0	10.5	9.5	12.5	11.5	16.0	13.0
21	19.0	15.0	15.0	14.0	11.5	11.0	10.5	10.0	13.0	11.0	16.0	13.0
22	17.0	13.5	15.5	13.5	11.5	11.0	10.0	9.0	11.5	10.0	15.0	13.0
23	17.0	13.0	15.0	12.5	11.0	10.5	10.0	8.5	10.5	9.5	14.5	11.5
24	16.5	12.0	14.5	12.5	11.0	10.5	10.5	9.0	10.5	9.5	14.5	12.0
25	17.0	13.0	15.0	12.0	11.0	9.5	10.5	9.5	10.5	9.0	14.5	12.5
26	18.0	13.5	14.0	12.5	11.0	10.0	9.5	9.0	10.5	9.0	14.5	12.0
27	18.5	15.5	13.0	11.0	11.0	10.5	10.5	9.0	10.5	9.0	14.5	13.0
28	18.0	15.0	13.5	11.0	11.5	10.5	10.5	9.5	10.5	9.5	15.0	13.0
29	17.0	15.0	14.0	11.5	11.5	11.0	9.5	9.0	10.0	9.0	14.5	12.0
30	16.0	15.0	14.0	11.5	12.0	11.0	11.0	10.0	---	---	15.5	12.5
31	16.0	15.0	---	---	13.0	12.0	11.5	10.0	---	---	15.0	13.0
MONTH	22.0	12.0	17.0	11.0	15.5	9.5	---	8.5	15.0	---	16.5	9.5

RUSSIAN RIVER BASIN

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.0	12.5	21.0	17.5	---	---	27.5	23.5	26.0	22.0	24.0	20.5
2	14.5	11.5	20.5	17.5	---	---	27.0	23.0	25.5	21.5	23.0	20.5
3	15.5	12.0	19.5	16.5	---	---	26.5	22.5	25.5	21.0	22.0	19.5
4	16.0	13.0	19.0	16.0	---	---	26.5	22.5	25.5	21.5	22.5	19.0
5	17.0	13.5	19.0	15.5	---	---	26.5	22.0	24.5	21.0	22.5	18.0
6	18.0	14.5	19.0	16.0	---	---	27.0	22.5	24.5	20.5	22.5	18.5
7	18.5	15.5	19.5	16.0	---	---	26.0	22.5	24.5	20.5	23.0	18.5
8	18.0	15.5	19.5	16.0	---	---	25.5	21.5	25.5	21.0	23.0	19.0
9	17.5	15.5	19.5	15.5	---	---	26.0	21.5	26.0	21.0	23.0	19.5
10	17.0	14.5	20.0	16.0	---	---	26.0	21.5	26.0	22.0	23.0	19.0
11	---	---	21.5	17.5	---	---	25.0	21.5	27.0	23.0	22.0	19.5
12	---	---	23.0	19.0	---	---	25.5	21.0	27.5	23.5	22.0	19.0
13	---	---	22.5	19.0	---	---	25.5	21.0	27.0	23.5	22.5	20.0
14	17.0	14.0	20.5	18.5	---	---	25.5	21.5	26.5	22.5	22.5	19.0
15	16.5	14.5	18.5	17.5	---	---	25.0	21.5	25.5	21.5	23.0	20.0
16	15.5	14.0	17.5	16.5	---	---	24.5	21.0	25.5	21.0	21.5	18.5
17	15.0	12.5	17.0	15.0	---	---	25.5	21.0	24.5	21.0	23.0	17.5
18	13.5	11.0	16.5	14.5	24.5	19.0	25.5	21.0	23.0	20.5	24.0	18.0
19	13.0	11.5	18.5	14.5	25.0	19.5	25.5	21.0	23.0	19.5	24.0	18.0
20	13.0	11.0	18.5	15.5	24.5	19.5	26.5	22.0	23.5	19.5	24.5	19.0
21	13.5	11.5	18.0	16.0	24.5	20.0	27.0	23.0	24.0	20.5	25.0	19.5
22	16.0	13.0	18.0	15.0	24.5	20.0	25.5	22.0	24.5	20.0	24.0	19.0
23	16.5	14.0	18.5	14.5	24.5	20.5	25.5	21.5	24.5	20.5	23.0	18.0
24	18.5	15.5	19.0	15.0	23.5	20.5	25.0	21.0	23.5	20.5	23.5	18.5
25	18.5	14.5	20.5	16.0	23.5	19.5	26.0	21.5	23.5	20.0	23.5	18.0
26	18.5	15.0	20.0	17.5	23.0	20.0	24.5	21.5	23.0	20.0	22.5	18.0
27	18.5	14.5	21.0	17.0	22.5	19.5	24.5	21.0	23.5	19.5	22.5	18.0
28	19.0	15.5	21.0	18.0	24.0	19.5	26.5	22.5	24.5	20.5	23.0	18.0
29	20.0	16.5	21.0	18.0	25.5	21.0	27.5	23.0	25.0	21.5	23.0	18.0
30	21.0	17.5	21.0	17.5	27.0	22.5	27.0	22.5	25.5	22.0	21.5	18.5
31	---	---	---	---	---	---	27.0	22.5	25.0	21.5	---	---
MONTH	---	---	---	---	---	---	27.5	21.0	27.5	19.5	25.0	17.5

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA

LOCATION.--Lat 38°43'11", long 122°59'58", in Tzabaco Grant, Sonoma County, Hydrologic Unit 18010110, on right bank of outlet channel, 500 ft downstream from Warm Springs Dam, 500 ft upstream from county road bridge, and 5.0 mi west of Geyserville.

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--October 1939 to September 1942 (published as "Dry Creek near Healdsburg"), October 1981 to current year.

WATER TEMPERATURE RECORD: Water years 1981-94.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 188.21 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Sept. 30, 1942, nonrecording gage at site 500 ft downstream at different datum.

REMARKS.--Records good. Flow affected by storage in Lake Sonoma, capacity, 380,600 acre-ft, beginning October 1983. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,500 ft³/s, Feb. 28, 1940, gage height, 16.9 ft, datum then in use; no flow Oct. 1 to Dec. 8, 1939. Maximum discharge since regulation by Lake Sonoma, 5,090 ft³/s Jan. 18, 1995, gage height, 10.16 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	117	117	143	2020	1620	186	191	130	101	99	122
2	95	117	117	143	2020	1030	185	192	129	101	99	122
3	96	117	117	143	1160	558	185	192	127	101	100	123
4	97	117	116	129	201	191	185	192	126	101	99	123
5	97	118	116	108	192	1050	185	192	125	101	99	123
6	97	118	116	108	1190	2040	185	193	112	101	98	123
7	97	118	116	108	2000	2030	185	147	100	101	98	122
8	97	118	116	108	2000	1610	184	109	100	101	99	123
9	96	117	116	132	2000	984	183	110	97	98	99	122
10	96	117	116	170	2000	985	183	103	95	95	99	122
11	97	117	123	126	2010	881	183	95	96	95	99	123
12	97	117	123	95	2010	751	183	96	94	95	98	122
13	97	117	116	88	2000	892	183	95	94	96	105	122
14	97	117	114	88	1800	1010	183	95	94	98	115	122
15	97	117	115	88	1070	1010	184	96	94	98	115	122
16	97	117	112	92	523	1010	186	96	94	98	123	122
17	97	117	112	88	192	1010	187	96	94	99	130	122
18	97	117	125	91	194	915	187	95	94	99	130	122
19	102	117	142	89	194	768	187	94	94	99	125	122
20	105	117	142	90	195	768	187	95	94	99	122	122
21	104	120	142	90	196	530	187	96	94	99	122	122
22	104	117	134	90	1280	186	187	160	93	99	125	122
23	104	117	145	90	2010	186	188	211	92	99	122	122
24	104	117	139	123	2000	185	188	226	92	99	122	122
25	104	117	141	172	2000	185	189	226	92	99	122	122
26	104	117	141	306	2000	185	189	225	92	100	122	122
27	104	117	137	193	2000	185	189	226	92	105	123	122
28	104	117	143	190	1990	185	189	227	92	102	122	122
29	104	117	146	996	1750	185	190	101	92	100	123	122
30	104	117	144	1230	---	185	191	111	97	99	122	123
31	107	---	143	988	---	185	---	195	---	99	122	---
TOTAL	3093	3517	3942	6695	40197	23495	5583	4578	3011	3077	3498	3667
MEAN	99.8	117	127	216	1386	758	186	148	100	99.3	113	122
MAX	107	120	146	1230	2020	2040	191	227	130	105	130	123
MIN	95	117	112	88	192	185	183	94	92	95	98	122
AC-FT	6130	6980	7820	13280	79730	46600	11070	9080	5970	6100	6940	7270

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	76.4	161	210	328	373	392	168	92.0	103	117	108	87.7
MAX	114	524	1501	1309	1516	1494	948	265	196	274	169	122
(WY)	1994	1984	1984	1995	1995	1995	1995	1995	1987	1987	1987	1996
MIN	7.70	50.8	49.8	49.3	73.3	25.0	23.0	26.1	25.1	27.0	42.0	39.0
(WY)	1984	1986	1986	1986	1988	1985	1985	1985	1985	1985	1985	1985

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1984 - 1996			
ANNUAL TOTAL	188755				104353							
ANNUAL MEAN	517				285				184			
HIGHEST ANNUAL MEAN									512			
LOWEST ANNUAL MEAN									46.0			
HIGHEST DAILY MEAN	4980				2040				4980			
LOWEST DAILY MEAN	25				88				6.1			
ANNUAL SEVEN-DAY MINIMUM	26				89				6.3			
INSTANTANEOUS PEAK FLOW					2060				5090			
INSTANTANEOUS PEAK STAGE					8.23				10.16			
ANNUAL RUNOFF (AC-FT)	374400				207000				133200			
10 PERCENT EXCEEDS	2080				936				190			
50 PERCENT EXCEEDS	116				122				97			
90 PERCENT EXCEEDS	90				95				38			

11465200 DRY CREEK NEAR GEYSERVILLE, CA

LOCATION.--Lat 38°41'55", long 122°57'25", in Tzabaco Grant, Sonoma County, Hydrologic Unit 18010110, on left bank pier of bridge 0.3 mi downstream from Pena Creek, 3.0 mi downstream from Warm Springs Dam, and 3 mi west of Geyserville.

DRAINAGE AREA.--162 mi².

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

CHEMICAL DATA: Water years 1971-81.

WATER TEMPERATURE: Water years 1964-86.

SEDIMENT DATA: Water years 1964-87.

TURBIDITY: Water years 1964-86.

REVISED RECORDS.--WDR CA-65-1: 1962(M), 1963(M).

GAGE.--Water-stage recorder. Datum of gage is 156.40 ft above sea level. Prior to Oct. 1, 1964, at datum 4.00 ft higher. Oct. 1, 1964, to Apr. 8, 1976, at datum 3.00 ft higher; Apr. 9, 1976, to Sept. 30, 1982, at datum 2.00 ft higher.

REMARKS.--Records good. Small diversions upstream from station for irrigation of about 1,200 acres. Flow affected by storage in Lake Sonoma, 3.0 mi upstream, capacity 380,600 acre-ft, beginning October 1983. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft³/s, Jan. 31, 1963, gage height, 20.50 ft, present datum; no flow at times. Maximum discharge since regulation by Lake Sonoma, 7,600 ft³/s, Jan. 8, 1995, gage height, 15.48 ft; minimum daily, 19 ft³/s, Oct. 18-25, 1984.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	118	119	184	2700	2340	314	192	121	91	90	113
2	99	118	118	175	2640	1600	268	191	118	92	90	113
3	99	118	117	169	1770	955	242	190	117	92	92	113
4	99	118	118	157	2340	442	234	187	115	92	92	113
5	99	119	117	136	1520	1320	230	187	116	92	93	112
6	99	119	118	134	1780	2510	227	187	106	92	90	114
7	100	119	118	132	2680	2490	227	149	90	92	90	114
8	100	119	118	130	2610	2110	220	103	89	91	90	115
9	99	120	117	130	2560	1330	217	102	88	89	90	115
10	99	120	119	129	2520	1290	215	97	85	87	90	114
11	99	120	205	129	2480	1210	211	88	84	87	90	114
12	100	120	1310	120	2460	1170	209	88	85	88	91	114
13	98	119	272	109	2440	1270	204	88	85	87	95	114
14	99	119	196	108	2270	1410	201	87	85	88	104	114
15	99	119	496	111	1440	1370	202	90	85	87	105	115
16	98	119	224	601	693	1350	217	99	86	86	110	114
17	99	119	174	295	261	1320	235	117	85	87	119	114
18	97	120	167	483	398	1190	250	119	85	87	120	116
19	99	119	173	391	848	907	233	100	85	87	116	115
20	102	119	164	341	1140	883	227	95	85	88	112	115
21	102	123	159	389	1450	661	221	107	85	88	112	115
22	101	119	157	282	1900	262	218	170	85	88	114	116
23	102	118	160	233	2630	246	216	225	86	89	112	115
24	102	119	154	580	2560	239	219	241	86	88	112	116
25	102	119	155	798	2500	236	213	240	86	89	112	115
26	101	119	154	645	2460	231	208	238	86	90	112	115
27	101	119	150	974	2450	232	203	239	86	94	113	115
28	101	119	153	596	2500	230	199	234	85	92	112	114
29	102	119	193	1310	2670	226	197	135	86	90	112	115
30	101	118	239	1940	---	224	195	104	89	90	112	115
31	104	---	200	1430	---	224	---	195	---	90	113	---
TOTAL	3102	3573	6434	13341	58670	31478	6672	4684	2755	2770	3205	3432
MEAN	100	119	208	430	2023	1015	222	151	91.8	89.4	103	114
MAX	104	123	1310	1940	2700	2510	314	241	121	94	120	116
MIN	97	118	117	108	261	224	195	87	84	86	90	112
AC-FT	6150	7090	12760	26460	116400	62440	13230	9290	5460	5490	6360	6810

RUSSIAN RIVER BASIN

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 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	86.9	137	142	521	643	637	203	110	119	133	120	95.5
MAX	109	459	232	2152	2023	2110	1115	341	199	296	180	128
(WY)	1994	1987	1988	1995	1996	1995	1995	1995	1987	1987	1987	1988
MIN	42.2	60.4	88.2	83.0	85.4	86.0	38.5	36.6	91.8	89.4	96.1	44.1
(WY)	1991	1986	1991	1991	1991	1988	1990	1991	1996	1996	1990	1991

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1986 - 1996

ANNUAL TOTAL	250219	140116	
ANNUAL MEAN	686	383	228
HIGHEST ANNUAL MEAN			676
LOWEST ANNUAL MEAN			90.5
HIGHEST DAILY MEAN	5330	Jan 22	5330
LOWEST DAILY MEAN	75	May 21	27
ANNUAL SEVEN-DAY MINIMUM	79	May 15	29
INSTANTANEOUS PEAK FLOW			7600
INSTANTANEOUS PEAK STAGE			10.56
ANNUAL RUNOFF (AC-FT)	496300	277900	15.48
10 PERCENT EXCEEDS	3030	1320	325
50 PERCENT EXCEEDS	119	119	106
90 PERCENT EXCEEDS	97	88	60

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 except for estimated daily discharges, which are poor. 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	104	114	---	---	---	---	---	160	92	78	105
2	86	108	114	---	---	---	---	---	143	92	76	106
3	86	110	115	e198	---	---	---	---	138	92	75	106
4	85	111	116	176	---	---	---	---	137	93	76	106
5	86	111	116	161	---	---	---	---	136	94	76	105
6	87	112	116	155	---	---	---	---	131	97	77	102
7	87	113	116	153	---	---	---	192	115	98	78	103
8	88	113	116	151	---	---	---	155	110	98	78	104
9	88	113	116	150	---	---	---	140	106	95	78	103
10	88	113	122	148	---	---	---	134	101	90	77	103
11	89	113	e198	146	---	---	---	124	99	89	76	102
12	88	113	---	144	---	---	---	119	98	89	77	103
13	87	114	---	138	---	---	---	115	96	88	77	102
14	87	114	---	136	---	---	---	114	96	89	87	103
15	85	114	---	140	---	---	---	125	94	89	91	105
16	85	114	---	---	---	---	---	157	94	88	93	106
17	85	113	e196	---	---	---	---	179	94	88	104	105
18	84	112	e190	---	---	---	---	---	93	86	107	102
19	84	112	e191	---	---	---	---	154	92	85	108	103
20	89	114	e188	---	---	---	---	137	91	84	106	104
21	93	115	e182	---	---	---	---	160	92	84	106	104
22	90	116	e184	---	---	---	---	186	93	83	105	104
23	91	114	e180	---	---	---	---	---	92	83	106	105
24	90	114	e176	---	---	---	---	---	91	83	104	106
25	89	114	e175	---	---	---	---	---	93	81	105	106
26	91	114	e172	---	---	---	---	---	93	81	106	106
27	91	114	e168	---	---	---	---	---	92	83	106	107
28	89	115	e188	---	---	---	---	---	91	87	105	107
29	92	114	---	---	---	---	---	196	91	84	103	108
30	93	114	---	---	---	---	---	111	89	81	104	108
31	93	---	---	---	---	---	---	191	---	78	103	---
TOTAL	2731	3385	---	---	---	---	---	---	3141	2724	2848	3139
MEAN	88.1	113	---	---	---	---	---	---	105	87.9	91.9	105
MAX	93	116	---	---	---	---	---	---	160	98	108	108
MIN	84	104	---	---	---	---	---	---	89	78	75	102
AC-FT	5420	6710	---	---	---	---	---	---	6230	5400	5650	6230

e Estimated.

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. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 74.6 ft, Feb. 18, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 64.6 ft, Feb. 4.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	56.3	56.3	55.9	---	---	---	---	---
2	---	---	---	---	55.7	55.7	56.1	---	---	---	---	---
3	---	---	---	---	56.0	55.2	55.1	---	---	---	---	---
4	---	---	---	---	64.4	56.1	---	---	---	---	---	---
5	---	---	---	---	61.4	56.4	---	---	---	---	---	---
6	---	---	---	---	58.3	55.8	---	---	---	---	---	---
7	---	---	---	---	56.6	55.3	---	---	---	---	---	---
8	---	---	---	---	55.9	---	---	---	---	---	---	---
9	---	---	---	---	55.5	---	---	---	---	---	---	---
10	---	---	---	---	55.2	---	---	---	---	---	---	---
11	---	---	e55.4	---	55.0	55.6	---	---	---	---	---	---
12	---	---	e58.2	---	---	56.9	---	---	---	---	---	---
13	---	---	e56.4	---	---	56.1	---	---	---	---	---	---
14	---	---	e55.3	---	---	55.4	---	---	---	---	---	---
15	---	---	e57.1	---	---	---	---	---	---	---	---	---
16	---	---	e55.4	58.5	---	---	---	---	---	---	---	---
17	---	---	---	57.4	---	---	---	55.3	---	---	---	---
18	---	---	---	59.1	56.0	---	---	---	---	---	---	---
19	---	---	---	58.0	57.0	---	---	---	---	---	---	---
20	---	---	---	57.0	57.5	---	---	---	---	---	---	---
21	---	---	---	56.8	58.6	---	---	---	---	---	---	---
22	---	---	---	56.2	57.2	---	---	---	---	---	---	---
23	---	---	---	55.8	56.2	---	---	---	---	---	---	---
24	---	---	---	57.7	55.8	---	---	---	---	---	---	---
25	---	---	---	58.2	55.4	---	---	---	---	---	---	---
26	---	---	---	56.6	55.0	---	---	---	---	---	---	---
27	---	---	---	60.4	55.2	---	---	---	---	---	---	---
28	---	---	---	58.2	56.3	---	---	---	---	---	---	---
29	---	---	e55.8	56.6	57.5	---	---	---	---	---	---	---
30	---	---	---	56.6	---	---	---	---	---	---	---	---
31	---	---	---	57.0	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated.

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA
(National Stream Quality Accounting Network Station)

LOCATION.--Lat 38°30'31", long 122°55'36", in NE 1/4 SE 1/4 sec.26, T.8 N., R.10 W., Sonoma County, Hydrologic Unit 18010110, on right bank at downstream side of Hacienda Bridge, 0.1 mi upstream from Hobson Creek, and 3.8 mi east of Guerneville.

DRAINAGE AREA.--1,338 mi².

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1954, published as "at Guerneville."

CHEMICAL DATA: Water years 1951-1995. Published as "at Guerneville" in 1961-65.

BIOLOGICAL DATA: Water years 1975-81.

SPECIFIC CONDUCTANCE: Water years 1973-81.

WATER TEMPERATURE: Water years 1964-81.

SEDIMENT DATA: Water years 1966-95.

REVISED RECORDS.--WSP 1395: Drainage area at former site. WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 20.14 ft above sea level. Prior to Oct. 1, 1954, nonrecording gage at bridge 5.3 mi downstream at datum 8.58 ft lower. Oct. 1, 1954, to Oct. 23, 1974, at site 0.7 mi downstream at datum 2.75 ft lower. Supplementary water-stage recorder 2.1 mi downstream used during periods of low flow, 1948-54.

REMARKS.--Records good except for estimated discharges, which are fair. Flow regulated by Lake Mendocino 77 mi upstream, beginning November 1958, and by Lake Sonoma 26 mi upstream, beginning October 1983. Many diversions upstream from station for irrigation of about 29,000 acres. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations), and by diversion for municipal use at Wohler Pumping Plant 4.0 mi upstream beginning in May 1959. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 102,000 ft³/s, Feb. 18, 1986, gage height, 48.56 ft, from rating curve extended above 57,000 ft³/s; maximum gage height, 49.7 ft, Dec. 23, 1955, site and datum then in use, from floodmarks; minimum daily discharge, 0.75 ft³/s, May 6, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	228	263	4080	11300	16400	3510	1070	818	254	193	197
2	159	240	274	2850	10200	10700	5820	1010	768	223	190	209
3	161	240	279	2150	7990	8100	3690	966	728	207	183	276
4	165	239	318	1740	29100	7450	2570	940	699	205	182	267
5	182	242	335	1450	43300	13300	2060	880	673	219	183	230
6	153	248	325	1260	21700	13000	1760	808	645	224	193	218
7	154	251	305	1110	14700	11600	1600	699	600	228	181	213
8	154	242	311	998	12500	9310	1480	674	541	240	172	203
9	187	219	310	916	9360	6680	1400	646	503	239	170	185
10	174	216	311	858	7560	5590	1340	634	455	215	175	184
11	161	217	1010	796	6650	6180	1310	609	448	185	173	174
12	169	218	20200	748	6010	9930	1260	582	433	182	159	172
13	178	221	20300	696	5620	9470	1210	561	377	191	169	178
14	180	218	7010	657	5360	7260	1160	543	334	205	153	179
15	173	218	8730	676	4590	6000	1130	557	366	211	141	184
16	158	221	8710	6070	4080	5270	1220	1350	359	213	156	193
17	181	221	3970	15100	3690	4760	1420	1730	349	214	149	237
18	178	224	2600	10600	4180	4350	2370	3700	331	212	177	211
19	173	227	2010	19100	11400	3800	2250	2640	313	200	172	167
20	175	229	1590	12200	17400	3460	e2350	1890	304	190	176	165
21	167	234	1320	13300	22800	3230	e2050	1660	294	192	188	167
22	159	244	1230	9410	19400	2560	e1700	2280	304	183	195	166
23	158	244	1200	7850	15100	2130	e1500	2270	295	172	199	163
24	164	246	1130	8830	13900	1890	1460	2040	279	176	201	167
25	171	246	1000	23500	12300	1720	1570	1840	289	180	202	171
26	174	248	906	17300	9380	1600	1650	1400	280	182	210	166
27	198	250	830	16700	7970	1500	1550	1160	282	171	219	174
28	203	250	777	19900	8820	1490	1280	1100	280	161	224	181
29	203	250	1250	12700	17700	1460	1190	1020	268	184	212	174
30	206	252	9660	11700	---	1350	1120	812	256	205	202	178
31	207	---	7930	12400	---	1310	---	859	---	214	195	---
TOTAL	5388	7043	106394	237645	364060	182850	55980	38930	12871	6277	5694	5749
MEAN	174	235	3432	7666	12550	5898	1866	1256	429	202	184	192
MAX	207	252	20300	23500	43300	16400	5820	3700	818	254	224	276
MIN	153	216	263	657	3690	1310	1120	543	256	161	141	163
AC-FT	10690	13970	211000	471400	722100	362700	111000	77220	25530	12450	11290	11400

e Estimated.

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	314	1202	4034	6833	6625	4679	2312	729	296	177	167	182
MAX	2515	9425	17410	25220	26020	23290	11700	2798	875	348	308	344
(WY)	1963	1974	1956	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1940 - 1996			
ANNUAL TOTAL	1825544				1028881							
ANNUAL MEAN	5001				2811				2278			
HIGHEST ANNUAL MEAN									5898			
LOWEST ANNUAL MEAN									88.7			
HIGHEST DAILY MEAN	88700				43300				97700			
LOWEST DAILY MEAN	151				141				.75			
ANNUAL SEVEN-DAY MINIMUM	161				157				5.9			
INSTANTANEOUS PEAK FLOW					49200				102000			
INSTANTANEOUS PEAK STAGE					35.21				49.70			
ANNUAL RUNOFF (AC-FT)	3621000				2041000				1650000			
10 PERCENT EXCEEDS	15900				9530				5480			
50 PERCENT EXCEEDS	454				451				353			
90 PERCENT EXCEEDS	179				173				139			

11467002 RUSSIAN RIVER AT JOHNSONS BEACH, AT GUERNEVILLE, CA

LOCATION.--Lat 38°30'03", long 122°59'36", in NE 1/4 NW 1/4 sec.32, T.8 N., R.10 W., Sonoma County, Hydrologic Unit 18010110, on downstream side of Highway 116 bridge, 0.1 mi upstream from Pocket Creek in Guerneville.

DRAINAGE AREA.--1353 mi².

PERIOD OF RECORD.--December 1939 to September 1954 published as "at Guerneville" (station 11467000).
Oct. 13, 1995, to September 1996, stage only above 6.00 ft.

GAGE.--Water-stage recorder. Datum of gage is 8.67 ft above sea level.

REMARKS.--Records good. Flow regulated by Lake Mendocino, 82 mi upstream, and by Lake Sonoma, 31 mi upstream. Many diversions upstream from station for irrigation of about 29,000 acres. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations 11461500 and 11462000) and by diversion for municipal use. See schematic diagram of Russian River basin.

EXTREMES FOR PERIOD OUTSIDE OF RECORD.--Maximum elevation, 48.8 ft, Feb. 18, 1986.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 46.87 ft, Feb. 28, 1940.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	10.27	8.65	15.03	12.72	18.61	10.97
2	---	---	---	---	---	---	8.65	7.82	14.96	13.76	16.34	13.31
3	---	---	---	---	---	---	7.82	7.30	13.76	12.03	13.31	11.67
4	---	---	---	---	---	---	7.30	6.93	20.25	12.20	13.19	11.32
5	---	---	---	---	---	---	6.94	6.60	19.17	16.39	16.68	13.19
6	---	---	---	---	---	---	6.60	6.37	16.39	13.52	16.18	15.64
7	---	---	---	---	---	---	6.37	6.19	15.15	13.14	15.64	14.43
8	---	---	---	---	---	---	6.19	6.04	14.82	14.09	14.43	12.41
9	---	---	---	---	---	---	6.05	---	14.20	12.44	12.41	10.86
10	---	---	---	---	---	---	---	---	12.44	11.63	10.87	10.40
11	---	---	---	---	7.33	---	---	---	11.63	11.09	11.76	10.39
12	---	---	---	---	25.64	7.33	---	---	11.09	10.66	14.85	11.76
13	---	---	---	---	25.63	14.69	---	---	10.67	10.42	14.78	12.50
14	---	---	---	---	14.69	10.13	---	---	10.46	10.17	12.50	11.35
15	---	---	---	---	15.93	10.00	---	---	10.17	9.41	11.35	10.58
16	---	---	---	---	15.97	10.40	15.99	---	9.41	9.29	10.58	10.11
17	---	---	---	---	10.40	8.40	18.66	14.70	9.33	8.90	10.12	9.74
18	---	---	---	---	8.40	7.60	17.88	12.92	10.28	9.00	9.75	9.43
19	---	---	---	---	7.60	7.12	20.68	17.88	14.89	10.28	9.43	8.98
20	---	---	---	---	7.12	6.71	18.22	15.04	16.10	14.84	8.98	8.74
21	---	---	---	---	6.71	6.41	17.01	15.09	15.74	8.32	8.74	8.47
22	---	---	---	---	6.51	6.36	15.64	12.40	10.62	7.41	8.47	7.80
23	---	---	---	---	6.41	6.35	12.71	12.01	9.61	6.74	7.80	7.50
24	---	---	---	---	6.36	6.19	16.04	12.62	10.13	7.05	7.50	7.26
25	---	---	---	---	6.19	6.02	22.04	13.07	9.89	6.99	7.26	7.10
26	---	---	---	---	6.03	---	17.74	12.69	10.22	6.82	7.10	6.94
27	---	---	---	---	---	---	20.20	13.42	9.66	7.01	6.94	6.86
28	---	---	---	---	---	---	17.58	11.80	9.97	8.94	6.89	6.86
29	---	---	---	---	8.05	---	15.24	11.33	12.11	9.95	6.89	6.75
30	---	---	---	---	16.39	8.05	14.93	13.59	---	---	6.76	6.64
31	---	---	---	---	16.01	10.27	15.82	14.87	---	---	6.65	6.60
MONTH	---	---	---	---	---	---	---	---	20.25	6.74	18.61	6.60

RUSSIAN RIVER BASIN

11467002 RUSSIAN RIVER AT JOHNSONS BEACH, AT GUERNEVILLE, CA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.27	6.62	6.49	6.40	---	---	8.46	8.33	8.54	8.40	8.57	8.52
2	11.41	9.96	6.40	6.29	---	---	8.47	8.34	8.42	8.40	8.61	8.54
3	9.96	8.56	6.31	6.24	---	---	8.43	8.31	8.41	8.35	8.62	8.00
4	8.56	7.83	6.31	6.22	7.64	---	8.45	8.39	8.45	8.36	8.11	7.88
5	7.83	7.45	6.22	6.13	7.63	7.59	8.48	8.40	8.47	8.44	8.61	7.84
6	7.45	7.22	6.13	---	8.07	7.58	8.51	8.44	8.53	8.44	8.62	8.59
7	7.22	7.09	---	---	8.05	---	8.52	8.45	8.52	8.43	8.61	8.58
8	7.09	6.93	---	---	---	---	8.54	8.51	8.46	8.42	8.59	8.54
9	6.93	6.83	---	---	---	---	8.54	8.52	8.46	8.41	8.56	8.51
10	6.83	6.78	---	---	---	---	8.53	8.42	8.47	8.41	8.56	8.52
11	6.79	6.71	---	---	---	---	8.44	8.36	8.49	8.41	8.56	8.51
12	6.72	6.63	---	---	---	---	8.39	8.37	8.43	8.37	8.54	8.50
13	6.63	6.56	---	---	---	---	8.43	8.37	8.49	8.37	8.55	8.52
14	6.56	6.50	---	---	8.52	---	8.46	8.42	8.49	8.36	8.55	8.52
15	6.51	6.47	---	---	8.37	8.34	8.47	8.44	8.39	8.31	8.58	8.51
16	6.84	6.51	7.18	---	8.37	8.33	8.48	8.45	8.44	8.33	8.57	8.54
17	7.19	6.84	7.38	7.01	8.35	8.29	8.49	8.45	8.42	8.35	8.71	8.56
18	8.36	7.19	9.77	7.38	8.34	8.27	8.48	8.46	8.50	8.42	8.67	8.52
19	8.26	7.79	8.91	7.67	8.31	8.21	8.46	8.41	8.48	8.45	8.53	8.48
20	8.30	7.89	7.67	6.95	8.30	8.22	8.43	8.38	8.49	8.45	8.51	8.49
21	7.89	7.43	7.31	6.80	8.36	8.21	8.44	8.38	8.52	8.48	8.53	8.49
22	7.43	7.27	8.15	7.29	8.38	8.35	8.41	8.37	8.54	8.51	8.52	8.48
23	7.27	7.10	8.11	7.54	8.37	8.34	8.38	8.33	8.57	8.51	8.51	8.48
24	7.11	7.04	7.54	7.45	8.36	8.28	8.38	8.36	8.57	8.54	8.52	8.50
25	7.31	7.11	7.45	6.87	8.41	8.33	8.40	8.37	8.57	8.55	8.53	8.50
26	7.50	7.09	6.87	6.47	8.40	8.35	8.41	8.37	8.59	8.56	8.53	8.46
27	7.51	6.93	6.47	---	8.40	8.37	8.40	8.35	8.62	8.57	8.54	8.46
28	6.93	6.74	6.41	---	8.40	8.37	8.37	8.30	8.62	8.59	8.55	8.53
29	6.74	6.60	6.35	---	8.38	8.34	8.41	8.36	8.60	8.56	8.54	8.52
30	6.60	6.49	---	---	8.36	8.33	8.52	8.41	8.59	8.54	8.53	8.51
31	---	---	---	---	---	---	8.54	8.43	8.58	8.53	---	---
MONTH	11.41	6.47	---	---	---	---	8.54	8.30	8.62	8.31	8.71	7.84

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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (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
JAN 16...	1350	2060	838	4660	65	80	94	99	100

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 16...	1430	1000	1100	0.250	0	1405	1455	30	7.0
16...	1530	1000	1100	0.250	0	1505	1555	45	6.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (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	DISCH, BEDLOAD AV UNIT FOR COM 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
JAN 16...	2	20	20	80.0	2140	0.72	296	1	7
16...	2	22	22	80.0	2190	3.78	296	--	4

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
JAN 16...	31	37	43	56	72	90	100	--
16...	21	37	49	62	77	92	97	100

NAVARRO RIVER BASIN

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 2.79 ft above sea level. Prior to Jan. 9, 1995, at datum 2.00 ft higher. Prior to Oct. 1, 1969, at site 0.2 mi upstream at datum 1.86 ft higher.

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, 64,500 ft³/s, Dec. 22, 1955, gage height, 40.60 ft, site and datum then in use, from rating curve extended above 19,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.23 ft³/s, July 13, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1937 reached a stage of 38.2 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s, or maximum.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1230	11,600	22.61	Jan. 25	0200	16,200	25.57
Jan. 18	2145	7,940	18.69	Feb. 21	0815	7,360	19.94

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8.4	12	18	1290	1390	3570	571	258	135	43	16	9.4
2	e8.2	11	19	873	1120	2300	698	242	128	41	16	9.6
3	e8.2	12	28	656	925	1680	468	231	125	37	16	10
4	e8.1	12	30	528	3030	2090	386	221	121	34	16	9.9
5	e8.2	12	43	436	4650	3630	340	209	115	35	16	10
6	e8.4	12	39	363	2670	2570	303	194	106	34	17	10
7	e8.6	12	37	309	1770	1870	282	184	98	34	17	9.2
8	e8.8	12	36	272	1320	1420	263	177	91	33	16	8.4
9	e8.8	12	30	248	1060	1130	249	169	89	32	15	7.5
10	e8.6	12	28	224	875	957	234	161	86	32	14	5.9
11	e8.6	12	58	195	737	1190	218	151	83	30	14	6.3
12	e8.8	12	5340	170	626	1790	206	144	81	28	12	8.1
13	e9.0	12	1690	154	540	1430	187	138	76	26	11	8.0
14	e9.2	12	884	145	470	1140	177	136	75	25	13	8.0
15	e9.4	12	3470	184	430	937	171	138	73	25	13	9.1
16	e9.6	12	1350	3100	461	805	304	165	71	24	12	9.2
17	e9.6	13	731	3100	480	699	331	192	70	24	12	11
18	e9.8	13	538	3340	1140	614	694	425	66	24	12	11
19	e9.7	13	428	4670	5000	548	529	309	64	23	12	10
20	9.8	13	328	2670	5320	495	565	230	58	23	13	9.6
21	9.8	15	262	3940	6080	454	482	250	56	21	13	9.3
22	9.6	15	281	2630	3990	419	447	497	58	22	12	8.7
23	9.0	15	333	2100	2570	391	399	372	57	21	12	8.4
24	9.2	16	260	5030	2570	358	448	292	56	21	12	7.6
25	9.5	15	222	9140	2160	331	460	248	54	19	12	7.7
26	9.7	16	192	3310	1710	308	400	225	53	19	12	7.2
27	10	15	170	5150	1380	299	360	196	53	18	11	6.9
28	11	15	162	4020	1480	311	327	177	52	18	11	6.1
29	11	15	1210	2540	4540	284	302	165	48	18	12	5.5
30	11	15	5220	1760	---	259	279	156	45	17	11	6.0
31	11	---	2420	1910	---	242	---	144	---	17	10	---
TOTAL	288.6	395	25857	64457	60494	34521	11080	6796	2343	818	411	253.6
MEAN	9.31	13.2	834	2079	2086	1114	369	219	78.1	26.4	13.3	8.45
MAX	11	16	5340	9140	6080	3630	698	497	135	43	17	11
MIN	8.1	11	18	145	430	242	171	136	45	17	10	5.5
AC-FT	572	783	51290	127900	120000	68470	21980	13480	4650	1620	815	503

e Estimated.

11468000 NAVARRO RIVER NEAR NAVARRO, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	41.2	273	952	1686	1406	1081	492	137	50.9	20.4	11.2	10.3
MAX	367	2033	4396	6496	5522	4280	2517	499	199	46.7	26.8	32.6
(WY)	1958	1974	1965	1995	1958	1983	1982	1983	1993	1983	1983	1957
MIN	2.95	9.06	18.5	24.0	58.6	69.8	34.2	14.1	4.23	.62	.67	1.33
(WY)	1995	1991	1977	1991	1977	1988	1977	1977	1977	1977	1977	1991

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1951 - 1996			
ANNUAL TOTAL	416873.9				207714.2							
ANNUAL MEAN	1142				568				510			
HIGHEST ANNUAL MEAN									1310			
LOWEST ANNUAL MEAN									25.0			
HIGHEST DAILY MEAN	40100				9140				45100			
LOWEST DAILY MEAN	8.1				5.5				.23			
ANNUAL SEVEN-DAY MINIMUM	8.3				6.7				.28			
INSTANTANEOUS PEAK FLOW					16200				64500			
INSTANTANEOUS PEAK STAGE					25.57				40.60			
ANNUAL RUNOFF (AC-FT)	826900				412000				369600			
10 PERCENT EXCEEDS	2680				1810				1200			
50 PERCENT EXCEEDS	97				82				59			
90 PERCENT EXCEEDS	9.6				9.4				7.7			

NOYO RIVER BASIN

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 except for estimated daily discharges, which are poor. 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, 0.78 ft³/s, Sept. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft³/s, or maximum.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	unknown	4,960	16.20	Jan. 24	2400	8,520	20.90
Dec. 30	unknown	6,260	18.10	Feb. 21	0745	2,610	11.70
Jan. 16	2015	2,700	11.89				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	6.8	e9.9	788	566	1150	291	177	104	28	20	7.9
2	6.2	7.0	e9.5	512	473	869	333	163	97	25	20	7.9
3	6.2	6.8	e9.1	369	408	680	278	151	90	25	20	7.5
4	6.1	6.6	e15	286	532	692	238	141	85	25	20	7.5
5	5.8	6.6	21	229	880	1120	210	133	80	25	20	7.5
6	5.8	6.6	21	189	780	985	196	125	76	29	20	7.5
7	5.5	6.6	e14	163	631	770	183	119	71	28	19	7.4
8	5.4	6.6	23	148	528	605	171	113	68	28	19	7.7
9	5.1	6.6	21	136	452	493	162	106	64	27	19	7.2
10	5.1	6.6	19	126	392	441	153	101	60	27	18	7.4
11	5.1	6.6	24	111	342	560	144	96	58	25	16	8.1
12	5.1	7.0	e2100	103	305	741	139	91	56	25	14	8.1
13	5.1	7.2	e950	96	277	717	131	88	54	25	14	8.0
14	5.3	7.4	e540	90	255	585	125	93	52	24	13	7.9
15	5.5	7.4	e1310	183	242	474	123	91	50	24	12	15
16	5.5	7.5	e375	1410	249	397	160	93	49	24	12	18
17	5.5	7.8	e292	1590	271	339	204	123	46	23	11	12
18	5.5	8.0	e241	1500	608	297	313	197	44	23	9.5	9.5
19	5.5	8.6	e207	2040	1680	265	337	192	42	22	9.6	7.9
20	5.5	8.7	e192	1510	2060	241	375	167	41	21	9.0	7.5
21	5.5	8.7	e144	1960	2350	222	343	234	41	21	8.5	7.9
22	5.5	9.3	e178	1270	1690	207	300	403	38	21	7.9	7.8
23	5.5	9.3	e194	1120	1190	197	255	321	36	18	7.7	7.8
24	5.5	9.3	e147	3470	1230	185	369	256	e35	17	7.3	7.8
25	5.5	e8.1	e120	4590	1130	175	370	213	e34	17	8.2	7.3
26	5.5	e8.5	e106	1690	887	166	328	184	e34	18	8.6	7.1
27	5.5	e8.7	e97	2060	718	166	282	158	e33	19	8.4	7.1
28	5.5	e9.1	e94	1870	705	188	245	146	e32	19	8.1	6.9
29	e5.7	e9.1	e456	1220	1190	170	214	133	31	19	8.0	6.6
30	e5.9	e9.5	e2340	903	---	159	193	123	30	20	8.3	6.6
31	e6.2	---	e1260	715	---	153	---	113	---	20	8.3	---
TOTAL	172.8	232.6	11529.5	32447	23021	14409	7165	4844	1631	712	404.4	250.4
MEAN	5.57	7.75	372	1047	794	465	239	156	54.4	23.0	13.0	8.35
MAX	6.2	9.5	2340	4590	2350	1150	375	403	104	29	20	18
MIN	5.1	6.6	9.1	90	242	153	123	88	30	17	7.3	6.6
AC-FT	343	461	22870	64360	45660	28580	14210	9610	3240	1410	802	497

e Estimated.

11468500 NOYO RIVER NEAR FORT BRAGG, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.0	119	396	648	531	451	213	78.0	34.1	14.0	7.71	6.38
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1952 - 1996			
ANNUAL TOTAL	136035.1				96818.7							
ANNUAL MEAN	373				265				208			
HIGHEST ANNUAL MEAN									484			
LOWEST ANNUAL MEAN									10.9			
HIGHEST DAILY MEAN	9290				4590				20500			
LOWEST DAILY MEAN	5.1				5.1				.79			
ANNUAL SEVEN-DAY MINIMUM	5.2				5.2				1.0			
INSTANTANEOUS PEAK FLOW					8520				26600			
INSTANTANEOUS PEAK STAGE					20.90				27.14			
ANNUAL RUNOFF (AC-FT)	269800				192000				151000			
10 PERCENT EXCEEDS	1090				773				518			
50 PERCENT EXCEEDS	53				57				32			
90 PERCENT EXCEEDS	6.6				6.6				5.2			

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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	unknown	32,300	18.45	Dec. 30	unknown	22,000	15.51

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	e33	e140	e3700	2800	5570	2470	1470	746	161	58	40
2	33	e34	e255	e2400	2330	4780	1760	1330	691	153	58	42
3	32	e34	e203	1800	2030	3630	1380	1220	632	146	57	39
4	32	e34	e430	1550	3600	4110	1180	1100	586	139	57	39
5	e31	e33	e670	1360	5110	4740	1050	1010	547	136	56	41
6	e31	e34	e805	1190	4700	3790	968	924	513	133	56	40
7	e30	e34	e560	1070	3740	3230	899	850	480	127	56	40
8	e30	e35	e330	996	3050	2580	847	778	452	121	56	39
9	e30	e37	241	1450	2580	2190	823	717	423	115	54	38
10	e32	e40	455	1600	2180	2070	747	652	402	112	52	39
11	e34	e41	2700	1240	1870	3790	701	620	385	111	51	39
12	e33	e41	e20400	1100	1660	3300	717	589	367	106	50	40
13	e32	e40	e9350	1000	1490	2580	655	565	350	104	50	45
14	e32	e40	e8630	940	1360	2180	614	591	335	100	48	42
15	e31	e43	e16200	2680	1250	1870	594	693	319	97	47	84
16	e31	e44	e4950	e6810	1600	1660	1190	700	308	96	e47	114
17	e31	e47	e2890	e5170	e3150	1510	1320	2000	293	92	e48	72
18	e30	e48	1620	e5000	e6200	1380	1800	2510	272	92	e47	55
19	e30	e51	1220	e5650	e10700	1260	1990	1760	258	90	e45	48
20	e30	e52	977	e5390	e8940	1160	2040	1420	249	86	45	45
21	e29	e50	808	e5190	e5920	1080	1860	1960	237	84	e44	43
22	e28	e48	787	e4840	4390	1020	1800	2510	228	78	e45	41
23	e28	e48	703	e4990	4060	985	1730	1950	217	76	e45	40
24	e29	e49	612	e6090	4130	908	7800	1640	222	74	43	39
25	e30	e67	543	e9250	3660	858	4570	1430	219	72	e43	38
26	e30	e85	492	e5130	3100	814	3170	1280	205	71	e42	38
27	e31	e93	498	e5710	2560	845	2530	1140	196	68	e41	37
28	e31	e84	534	e8730	3610	1090	2130	1030	193	67	40	37
29	e32	e72	e3160	e5380	e6670	889	1850	949	178	65	39	36
30	e33	e68	e14600	e4000	---	797	1640	866	170	62	40	35
31	e33	---	e5850	3570	---	805	---	802	---	60	39	---
TOTAL	963	1459	101613	114976	108440	67471	52825	37056	10673	3094	1499	1365
MEAN	31.1	48.6	3278	3709	3739	2176	1761	1195	356	99.8	48.4	45.5
MAX	34	93	20400	9250	10700	5570	7800	2510	746	161	58	114
MIN	28	33	140	940	1250	797	594	565	170	60	39	35
AC-FT	1910	2890	201500	228100	215100	133800	104800	73500	21170	6140	2970	2710

e Estimated.

11469000 MATTOLE RIVER NEAR PETROLIA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	239	1430	2856	3575	3003	2292	1217	560	216	83.6	51.2	62.3
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1912 - 1996			
ANNUAL TOTAL	683714				501434				1292			
ANNUAL MEAN	1873				1370				2642			
HIGHEST ANNUAL MEAN									157			
LOWEST ANNUAL MEAN									55200			
HIGHEST DAILY MEAN	45300				20400				Dec 22			
LOWEST DAILY MEAN	28				28				Sep 5			
ANNUAL SEVEN-DAY MINIMUM	29				29				Sep 5			
INSTANTANEOUS PEAK FLOW					32300				Dec 22			
INSTANTANEOUS PEAK STAGE					18.45				Dec 22			
ANNUAL RUNOFF (AC-FT)	1356000				994600				936100			
10 PERCENT EXCEEDS	5000				4070				3280			
50 PERCENT EXCEEDS	278				467				275			
90 PERCENT EXCEEDS	34				34				36			

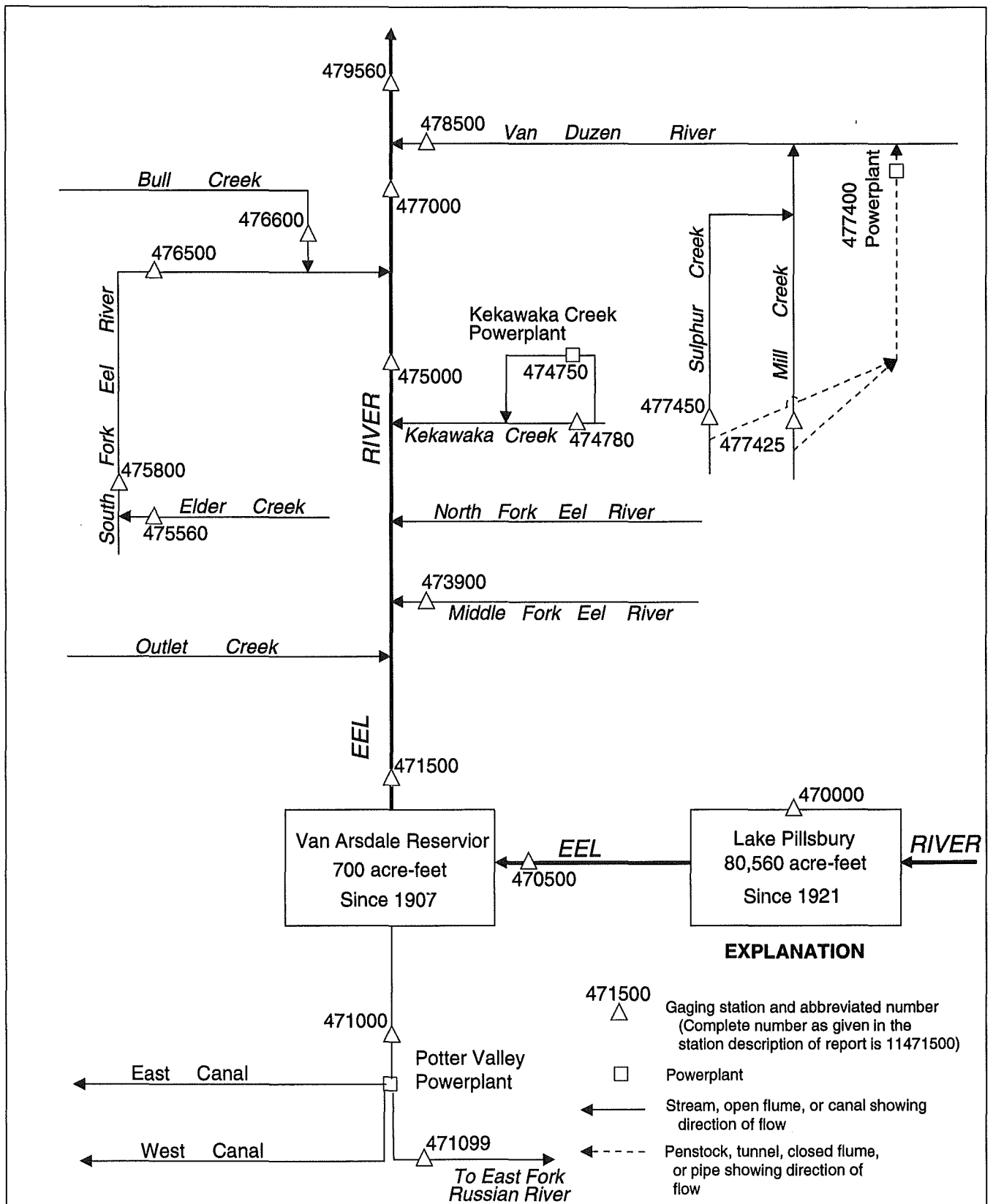


Figure 22. Diversions and storage in Eel River basin.

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.

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 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61700	55100	46500	60700	62000	62100	74400	77800	79100	77500	70000	58800
2	61400	54900	44400	60200	61100	61800	75900	78200	79300	77400	69700	58600
3	61200	54900	44200	60000	61000	61900	76200	78500	79200	77300	69300	58200
4	60900	54800	43800	59700	65900	65000	76500	78700	79300	77100	69000	57600
5	60700	54700	43600	59500	64000	64100	77000	78900	79400	77000	68700	57000
6	60400	54500	43200	59300	62900	62800	77600	79100	79300	76600	68300	56400
7	60200	54400	42600	59000	62500	62500	78400	79000	79200	76500	67900	55800
8	59900	54200	42000	58800	62000	62000	79100	79200	79300	76400	67500	55200
9	59600	54000	41300	58600	61600	61900	79300	79000	79200	76100	67300	54500
10	59500	53700	40900	58400	61300	61900	79100	79100	79100	75900	67000	53900
11	59200	53300	41600	58000	61000	63000	78900	78900	79000	75700	66700	53300
12	58900	53000	50400	57600	60800	62800	78800	78900	78800	75500	66400	52700
13	58600	52600	61500	57100	60700	62200	78500	78900	78700	75300	65800	52100
14	58400	52300	59200	56700	60500	62300	78100	78900	78600	75000	65100	51400
15	58200	51900	57200	57000	60500	64700	78000	79000	78500	74800	64500	50800
16	57900	51300	57000	64700	60800	66700	78100	79700	78600	74500	64100	50100
17	57700	50800	56700	62500	61300	68400	77400	78900	78400	74300	63900	49500
18	57400	50300	56600	64900	64100	70500	77200	78200	78400	74100	63500	48900
19	57200	49800	58500	63200	66200	72100	77400	78300	78500	73800	63200	48200
20	57000	49300	59600	63900	65700	71700	77200	79300	78500	73400	62900	47500
21	56800	48700	59200	63100	60100	70200	77100	79500	78400	73200	62500	47000
22	56500	48200	59100	62000	61400	69500	76900	78800	78200	73000	62200	46300
23	56300	47900	58800	62100	62200	68700	76700	79300	78300	72700	61800	45700
24	56100	47600	58400	66900	62600	68300	77400	79300	78200	72300	61600	45000
25	55900	47600	57900	64200	62000	68400	77500	79500	78100	72300	61300	44400
26	55700	47600	57500	62800	61600	68400	77600	79500	78200	71900	60900	43800
27	55600	46500	57000	65600	61400	68900	77400	79600	78200	71500	60500	43100
28	55500	46500	56800	63600	61700	69800	77100	79500	78000	71200	60200	42500
29	55300	46500	59200	62500	62400	70400	77200	79500	77800	70800	59900	41900
30	55300	45600	62000	62600	---	70600	77400	79100	77700	70600	59600	41300
31	55200	---	61300	62600	---	71200	---	79100	---	70300	59200	---
MAX	61800	55100	62000	66900	66200	72100	79300	79700	79400	77500	70000	58800
MIN	55200	45600	40900	56700	60100	61800	74400	77800	77700	70300	59200	41300
a	1897.76	1892.90	1900.92	1901.56	1901.49	1905.70	1908.55	1909.30	1908.70	1905.30	1899.88	1889.66
b	-6700	-9600	+15700	+1300	-200	+8800	+6200	+1700	-1400	-7400	-11100	-17900

CAL YR 1995 TOTAL 23815500 MEAN 65248 MAX 78300 MIN 34500

WTR YR 1996 TOTAL 23674800 MEAN 64685 MAX 79700 MIN 40900

a Elevation in feet, at end of month.

b Change in contents, in acre-feet.

11470500 EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CA

LOCATION.--Lat 39°24'29", long 122°58'29", in SE 1/4 sec.15, T.18 N., R.10 W., Lake County, Hydrologic Unit 18010103, Mendocino National Forest, on left bank 0.4 mi upstream from Soda Creek, 0.7 mi downstream from Scott Dam, and 9.7 mi northeast of town of Potter Valley.

DRAINAGE AREA.--290 mi².

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1929, published as "South Eel River at Hullville," and October 1929 to September 1953, "at Hullville."

REVISED RECORDS.--WSP 1315-B: 1923(M), 1938(M). WSP 1395: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,740 ft above sea level, from topographic map. Prior to Dec. 15, 1930, at datum 3.00 ft higher.

REMARKS.--Flow regulated by Lake Pillsbury (station 11470000) 0.7 mi upstream. No diversion upstream from station. See schematic diagram of Eel River basin.

COOPERATION.--Records collected by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,300 ft³/s, Dec. 22, 1964, gage height, 24.24 ft, from floodmarks, from rating curve extended above 37,000 ft³/s; minimum daily, 0.1 ft³/s, Sept. 8, 1924.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	64	367	1270	2340	2290	450	403	337	150	159	162
2	127	63	290	969	1920	2040	662	363	312	150	161	162
3	128	63	339	764	1590	1980	939	349	298	150	166	162
4	127	62	206	622	3900	2930	794	353	284	149	176	339
5	128	61	205	523	5190	4480	541	356	284	149	183	334
6	128	61	273	464	3820	2040	371	358	283	149	183	307
7	128	73	385	440	2860	2550	349	361	268	149	177	321
8	127	86	414	435	2320	2190	351	363	249	148	160	353
9	127	105	424	435	2320	2040	557	365	248	148	153	351
10	127	196	427	435	1600	2000	707	366	248	150	153	349
11	127	188	430	435	1400	2580	704	369	248	162	156	351
12	127	180	486	432	1260	2980	700	372	247	162	160	352
13	127	186	1490	432	1140	2580	693	373	246	162	311	365
14	127	186	1360	432	1050	1940	685	375	210	162	396	374
15	127	225	3690	435	987	450	681	376	177	162	381	375
16	127	353	2300	2040	1150	476	941	458	148	162	193	373
17	127	325	1300	3390	1380	552	1370	2670	141	162	154	371
18	125	300	942	2840	2040	324	1140	2540	135	165	159	370
19	122	292	718	3930	4880	410	1010	1410	125	172	164	366
20	122	314	556	2710	5910	1320	1020	552	129	173	163	361
21	122	337	466	3430	6760	1690	1010	1650	136	162	163	351
22	122	270	440	2380	4400	1380	999	1790	137	154	157	355
23	123	181	437	1780	3160	1300	983	994	138	154	152	357
24	102	160	437	3610	2800	1020	950	886	138	154	152	356
25	91	160	437	5820	2320	709	930	811	138	154	151	355
26	92	163	435	3210	1930	715	940	691	138	161	151	354
27	77	170	435	4460	1620	589	922	652	152	178	151	360
28	64	174	435	4370	1520	462	894	649	194	185	151	365
29	64	174	448	2950	2210	463	683	647	155	185	152	362
30	64	175	1660	2430	---	470	441	642	146	183	162	358
31	64	---	1730	2720	---	450	---	515	---	168	162	---
TOTAL	3516	5347	23962	60593	75777	47400	23417	23059	6089	4974	5612	10071
MEAN	113	178	773	1955	2613	1529	781	744	203	160	181	336
MAX	128	353	3690	5820	6760	4480	1370	2670	337	185	396	375
MIN	64	61	205	432	987	324	349	349	125	148	151	162
AC-FT	6970	10610	47530	120200	150300	94020	46450	45740	12080	9870	11130	19980

11470500 EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	220	278	730	1258	1393	1055	670	332	196	179	181	211
MAX	361	1851	4945	5684	6624	4536	3357	1184	438	329	334	336
(WY)	1963	1974	1965	1970	1986	1983	1982	1983	1993	1959	1959	1996
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1923 - 1996			
ANNUAL TOTAL	430940				289817							
ANNUAL MEAN	1181				792				555			
HIGHEST ANNUAL MEAN									1443			
LOWEST ANNUAL MEAN									85.4			
HIGHEST DAILY MEAN	24700				6760				45300			
LOWEST DAILY MEAN	49				61				.10			
ANNUAL SEVEN-DAY MINIMUM	63				63				.43			
INSTANTANEOUS PEAK FLOW					7920				56300			
INSTANTANEOUS PEAK STAGE					11.73				24.24			
ANNUAL RUNOFF (AC-FT)	854800				574900				401700			
10 PERCENT EXCEEDS	3010				2320				1100			
50 PERCENT EXCEEDS	314				360				233			
90 PERCENT EXCEEDS	113				127				89			

11471000 POTTER VALLEY POWERHOUSE INTAKE NEAR POTTER VALLEY, CA

LOCATION.--Lat 39°22'00", long 123°07'35", in SW 1/4 SW 1/4 sec.31, T.18 N., R.11 W., Mendocino County, Hydrologic Unit 18010103, in penstock of powerhouse of Pacific Gas & Electric Co., 1.5 mi southwest of Van Arsdale Dam, and 3.2 mi northwest of town of Potter Valley.

PERIOD OF RECORD.--December 1909 to current year. Prior to October 1922, monthly discharge only, published in WSP 1315-B. Prior to October 1931, published as Snow Mountain Water and Power Co.'s Tailrace near Potter Valley. October 1931 to September 1984, published as Potter Valley Powerhouse Tailrace near Potter Valley.

REVISED RECORDS.--WSP 1395: 1950. WDR CA-89-2: 1988.

GAGE.--Acoustic flowmeter in penstock of powerplant. Elevation of gage is 1,440 ft above sea level, from topographic map. Prior to Dec. 11, 1985, water-stage recorder and Parshall flume. See WSP 1929 for history of changes prior to Apr. 12, 1950.

REMARKS.--Water is diverted from Eel River above Van Arsdale Dam. After passing through powerhouse, part is used for irrigation in Potter Valley and remainder flows into East Fork Russian River. See schematic diagram of Eel River basin.

COOPERATION.--Records collected by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD (1922 TO CURRENT YEAR).--Maximum daily discharge, 351 ft³/s, Oct. 31, 1982; no flow at times in several years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	6.1	4.5	301	327	325	324	324	325	162	174	159
2	124	1.0	88	299	324	327	325	324	327	162	172	159
3	124	1.0	88	301	327	325	325	325	328	160	172	159
4	123	1.0	88	301	324	327	325	325	328	160	171	265
5	118	2.0	86	304	322	324	325	325	327	163	172	337
6	123	53	88	304	322	324	325	324	327	163	169	294
7	123	59	151	306	322	325	325	324	312	163	175	309
8	123	59	210	304	325	328	328	324	290	163	163	317
9	123	79	248	301	321	330	327	324	284	162	160	322
10	123	118	247	309	324	330	328	324	283	162	160	320
11	124	177	290	321	322	324	327	325	275	162	159	319
12	123	180	104	327	324	324	330	324	275	162	159	319
13	124	178	215	328	265	328	327	53	277	165	241	323
14	121	178	304	328	324	324	325	319	182	166	331	326
15	103	178	269	328	325	325	327	319	154	165	336	325
16	123	178	130	328	324	325	325	321	153	166	245	325
17	123	278	165	324	325	324	325	325	157	165	160	327
18	121	272	165	324	325	325	327	56	156	168	159	328
19	121	272	165	324	325	316	325	327	156	174	158	328
20	116	253	163	324	327	316	331	327	148	174	158	328
21	112	278	204	324	272	319	325	327	154	175	158	321
22	112	165	298	324	325	321	327	327	165	169	158	322
23	106	168	299	322	325	319	327	325	159	169	157	326
24	110	168	299	124	327	322	325	325	162	153	156	325
25	89	168	301	121	327	322	325	327	160	162	156	324
26	89	166	301	123	325	245	325	325	162	176	156	323
27	64	169	299	124	327	319	325	327	162	181	156	324
28	57	171	299	123	325	324	325	325	153	182	156	327
29	59	3.0	299	121	327	324	325	325	166	182	161	328
30	61	2.0	299	123	---	324	327	327	162	188	160	327
31	57	---	298	124	---	324	---	327	---	180	159	---
TOTAL	3343	3981.1	6464.5	8239	9304	9959	9782	9526	6669	5204	5527	9136
MEAN	108	133	209	266	321	321	326	307	222	168	178	305
MAX	124	278	304	328	327	330	331	327	328	188	336	337
MIN	57	1.0	4.5	121	265	245	324	53	148	153	156	159
AC-FT	6630	7900	12820	16340	18450	19750	19400	18890	13230	10320	10960	18120

11471000 POTTER VALLEY POWERHOUSE INTAKE NEAR POTTER VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	186	192	209	225	242	244	232	214	177	159	155	179
MAX	321	311	311	316	325	324	326	330	325	314	320	314
(WY)	1981	1963	1982	1982	1982	1993	1996	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1910 - 1996			
ANNUAL TOTAL	40309.30				87134.6							
ANNUAL MEAN	110				238							
HIGHEST ANNUAL MEAN									202			
LOWEST ANNUAL MEAN									305			
HIGHEST DAILY MEAN	304				337				84.0			
LOWEST DAILY MEAN	.00				1.0				351			
ANNUAL SEVEN-DAY MINIMUM	.00				17				.00			
ANNUAL RUNOFF (AC-FT)	79950				172800				146000			
10 PERCENT EXCEEDS	165				327				312			
50 PERCENT EXCEEDS	113				298				215			
90 PERCENT EXCEEDS	5.5				121				57			

EEL RIVER BASIN

11471099 POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CA

LOCATION.--Lat 39°21'42", long 123°07'38", in SW 1/4 NW 1/4 sec.6, T.17 N., R.11 W., Mendocino County, Hydrologic Unit 18010103, 100 ft downstream from powerhouse of Pacific Gas and Electric Co., 1.8 mi southwest of Van Arsdale Dam, and 2.9 mi northwest of town of Potter Valley.

PERIOD OF RECORD.--October 1987 to current year. October 1931 to September 1984, record published for Potter Valley Powerhouse Intake (station 11471000) not equivalent because diversion for irrigation is included.

GAGE.--Discharge computed as difference between Potter Valley Powerhouse Intake (station 11471000) and the combined flows of Potter Valley Irrigation District East Canal (station 11471105) and Potter Valley Irrigation District West Canal (station 11471106). Elevation of tailrace is 1,020 ft above sea level, from topographic map.

REMARKS.--Flow represents inflow into the Russian River basin after passing through powerhouse. See schematic diagrams of 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, 330 ft³/s, Apr. 20, 1996; no flow Apr. 4, 5, and July 18-20, 1990; Nov. 15-19, 1993 and many days in 1995.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	5.8	1.9	294	325	320	320	323	323	143	143	138
2	98	.78	83	292	322	324	323	322	319	144	140	138
3	90	.72	83	294	325	323	323	323	319	134	140	138
4	92	.72	83	295	321	325	323	323	313	129	139	241
5	80	.2	81	297	320	322	323	323	306	131	140	313
6	88	48	83	297	321	323	323	317	306	131	139	267
7	95	54	146	299	321	323	323	318	289	131	145	282
8	90	54	207	300	324	326	326	323	267	132	133	294
9	97	74	245	295	320	328	325	322	263	131	131	303
10	104	113	243	302	323	328	326	312	265	130	131	301
11	103	172	283	313	321	322	325	309	256	129	132	303
12	104	175	97	319	323	322	328	310	252	130	136	303
13	98	173	211	320	263	326	325	36	250	127	221	307
14	101	173	296	320	320	322	323	300	151	138	317	310
15	86	173	266	319	323	323	325	299	128	138	311	309
16	104	173	129	317	322	323	323	311	129	139	215	309
17	105	273	164	318	323	322	323	324	133	139	127	315
18	104	267	164	321	323	323	325	55	128	147	128	316
19	106	267	164	322	323	313	324	326	125	150	127	316
20	103	248	162	322	326	314	330	326	125	149	127	314
21	98	273	202	322	268	317	324	326	126	152	127	307
22	99	161	290	323	322	319	326	326	139	144	127	298
23	97	164	291	321	322	317	326	324	138	137	133	310
24	101	164	292	124	324	319	324	324	144	123	129	311
25	76	163	294	121	324	321	324	326	138	135	128	310
26	75	161	294	122	323	241	324	324	136	147	133	305
27	50	164	292	124	325	311	323	326	139	151	135	306
28	46	168	292	123	323	316	323	324	128	149	135	309
29	53	2.8	291	121	323	319	323	324	142	146	137	310
30	55	1.8	292	123	---	317	325	326	137	162	139	306
31	53	---	291	122	---	317	---	326	---	153	136	---
TOTAL	2742	3867.82	6312.9	8102	9243	9866	9728	9378	6014	4321	4681	8589
MEAN	88.5	129	204	261	319	318	324	303	200	139	151	286
MAX	106	273	296	323	326	328	330	326	323	162	317	316
MIN	46	.20	1.9	121	263	241	320	36	125	123	127	138
AC-FT	5440	7670	12520	16070	18330	19570	19300	18600	11930	8570	9280	17040

11471099 POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	179	159	169	194	224	245	204	183	144	106	104	154
MAX	311	245	292	291	319	323	324	316	291	160	151	286
(WY)	1991	1991	1989	1989	1996	1993	1996	1993	1993	1993	1996	1996
MIN	79.3	90.1	60.5	35.8	45.0	51.4	53.7	97.0	59.0	60.1	81.5	66.4
(WY)	1989	1988	1995	1991	1991	1995	1990	1988	1994	1994	1988	1994

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1988 - 1996			
ANNUAL TOTAL	35878.52				82844.72							
ANNUAL MEAN	98.3				226				172			
HIGHEST ANNUAL MEAN									236			
LOWEST ANNUAL MEAN									82.8			
HIGHEST DAILY MEAN	296 Dec 14				330 Apr 20				330 Apr 20 1996			
LOWEST DAILY MEAN	.00 Jan 11				.20 Nov 5				.00 Apr 4 1990			
ANNUAL SEVEN-DAY MINIMUM	.00 Mar 10				16 Oct 31				.00 Mar 10 1995			
ANNUAL RUNOFF (AC-FT)	71170				164300				124500			
10 PERCENT EXCEEDS	163				324				317			
50 PERCENT EXCEEDS	93				286				126			
90 PERCENT EXCEEDS	3.5				97				69			

11471500 EEL RIVER AT VAN ARSDALE DAM, NEAR POTTER VALLEY, CA

LOCATION.--Lat 39°23'19", long 123°06'54", in NE 1/4 sec.30, T.18 N., R.11 W, Mendocino County, Hydrologic Unit 18010103, on left bank 1,000 ft downstream from Van Arsdale Dam and 4.6 mi north of town of Potter Valley.

DRAINAGE AREA.--349 mi².

PERIOD OF RECORD.--November 1909 to September 1922 (combined monthly discharge only, of Eel River at this station and Snow Mountain Water and Power Co.'s tailrace near Potter Valley), October 1922 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1929, published as South Eel River at Van Arsdale Dam, near Potter Valley.

REVISED RECORDS.--WSP 1315-B: 1913, 1920-23, 1925-27. WSP 1395: 1923(M), 1938.

GAGE.--Water-stage recorder. Elevation of gage is 1,400 ft above sea level, from topographic map. Nov. 18, 1909, to Mar. 3, 1927, recorder in reservoir 800 ft upstream from Van Arsdale Dam at different datum. Oct. 1, 1927, to Feb. 28, 1937, nonrecording gage at present site and datum.

REMARKS.--Flow regulated by Lake Pillsbury (station 11470000) 11 mi upstream. Low flows may be further regulated at Van Arsdale Dam by calibrated gates in dam and fish ladder. Water is diverted from Van Arsdale Reservoir through tunnel to Potter Valley Powerhouse Intake (station 11471000), after which part is used for irrigation and remainder flows into East Fork Russian River (see station 11471099). Records given represent 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	40	247	1190	2530	2560	398	142	78	10	9.3	8.2
2	9.3	58	172	736	1910	2220	409	99	45	10	8.5	8.2
3	9.3	60	151	514	1490	2090	630	79	32	10	8.2	8.2
4	11	60	113	370	4510	3480	542	75	13	10	8.2	8.2
5	9.5	41	112	254	7420	6060	297	71	9.6	10	8.2	8.1
6	9.2	13	119	191	4670	4030	146	67	11	10	8.2	8.1
7	9.2	22	138	159	3210	2900	108	64	10	10	8.1	7.8
8	9.2	23	112	189	2460	2350	100	60	10	10	8.1	7.3
9	9.3	11	106	148	1920	2060	195	58	10	10	8.0	6.7
10	9.0	31	107	130	1520	1950	351	54	10	10	8.1	6.2
11	9.4	23	171	116	1220	2750	343	51	10	10	8.1	6.7
12	9.6	14	2010	107	1000	3430	337	63	10	10	8.1	7.6
13	9.3	16	1510	100	966	2820	329	152	10	10	8.1	7.8
14	9.5	17	1310	97	745	2130	322	56	10	10	8.2	7.9
15	15	32	4950	161	674	422	318	56	10	10	8.2	7.9
16	9.3	83	3030	2890	855	320	554	99	10	10	8.0	7.2
17	16	30	1350	4500	1100	376	1080	1860	10	10	8.1	8.0
18	16	14	814	3930	1930	185	923	3380	10	8.9	8.1	8.1
19	14	14	578	5580	6100	226	737	1630	10	8.1	8.1	8.5
20	9.2	21	392	3650	7680	1080	733	316	9.7	8.2	8.2	8.7
21	9.4	81	262	4700	8600	1620	707	1520	10	11	8.0	8.5
22	10	106	155	3060	5840	1120	682	1970	10	8.3	8.3	8.5
23	12	36	143	2300	3880	996	650	769	10	8.4	8.3	8.6
24	24	12	139	6010	3360	766	698	606	9.5	8.1	8.2	8.6
25	33	11	140	8390	2640	382	627	541	9.6	8.1	8.2	8.6
26	29	12	135	4320	2030	436	619	406	14	6.3	8.2	8.6
27	9.8	12	136	6210	1630	331	597	343	11	5.3	8.2	8.6
28	9.9	77	141	6070	1470	210	556	331	10	5.1	8.1	8.7
29	9.2	165	511	3810	2400	190	438	331	10	5.1	8.2	8.6
30	9.7	161	2000	2920	---	184	171	309	10	5.1	8.1	8.1
31	9.1	---	2060	3100	---	175	---	240	---	8.3	8.1	---
TOTAL	376.6	1296	23314	75902	85760	49849	14597	15798	432.4	274.3	254.0	240.8
MEAN	12.1	43.2	752	2448	2957	1608	487	510	14.4	8.85	8.19	8.03
MAX	33	165	4950	8390	8600	6060	1080	3380	78	11	9.3	8.7
MIN	9.0	11	106	97	674	175	100	51	9.5	5.1	8.0	6.2
AC-FT	747	2570	46240	150600	170100	98880	28950	31340	858	544	504	478

11471500 EEL RIVER AT VAN ARSDALE DAM, NEAR POTTER VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.0	130	697	1321	1470	1043	562	167	23.5	5.13	5.56	5.30
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1923 - 1996			
ANNUAL TOTAL	450804.8				268094.1							
ANNUAL MEAN	1235				732				444			
HIGHEST ANNUAL MEAN									1546			
LOWEST ANNUAL MEAN									3.46			
HIGHEST DAILY MEAN	24700				8600				49500			
LOWEST DAILY MEAN	7.8				5.1				.00			
ANNUAL SEVEN-DAY MINIMUM	7.9				6.2				.16			
INSTANTANEOUS PEAK FLOW					10700				64100			
INSTANTANEOUS PEAK STAGE					18.07				33.90			
ANNUAL RUNOFF (AC-FT)	894200				531800				321800			
10 PERCENT EXCEEDS	3710				2580				1070			
50 PERCENT EXCEEDS	176				63				9.0			
90 PERCENT EXCEEDS	8.3				8.1				2.0			

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CA

LOCATION.--Lat 39°42'23", long 123°19'27", in NE 1/4 SE 1/4 sec.5, T.21 N., R.13 W., Mendocino County, Hydrologic Unit 18010104, on right bank 0.6 mi upstream from Eastman Creek, 1.7 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 poor including estimated daily discharges. 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, or maximum.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	unknown	e30,000	unknown				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e16	e17	e76	e3420	e4280	e4280	e2400	2340	1140	e185	e43	17
2	e16	e16	e114	e2720	e3100	e3600	e4840	2250	1080	e179	e43	16
3	e15	e16	e177	e2440	e2500	e3170	e3810	2110	1020	e171	43	15
4	e15	e16	e195	e1960	e3120	e3960	e2780	1930	962	e164	42	15
5	e14	e26	e297	e1600	e4830	e8720	e2520	1790	895	e158	42	14
6	e16	e29	e413	e1360	e3450	e5870	e2250	1680	835	e149	41	15
7	e15	e30	e357	e1200	e2300	e4520	e2140	1580	789	e145	40	15
8	e15	e30	e276	e1070	e2050	e3830	e2070	1490	737	e139	39	15
9	e17	e27	e200	e1360	e1820	e3690	e2080	1410	672	e134	37	15
10	e18	e20	e167	e1440	e1700	e3510	e1970	1360	580	e130	34	15
11	e18	e15	e630	e1200	e1540	e5460	e1910	1320	515	e126	32	14
12	e16	e15	e17300	e1020	e1450	e5720	e1850	1360	476	e122	31	14
13	e16	e16	e8400	e920	e1270	e4480	1790	1390	441	e118	29	14
14	e16	e15	e3820	e870	e1120	e3540	1700	1550	403	e111	27	16
15	e16	e15	e11400	e3700	e1060	e2830	1680	1560	381	e108	25	21
16	e17	e15	e5750	e8800	e1040	e2440	2170	1610	361	e105	24	26
17	e17	e15	e3220	e10700	e1840	e2510	2370	3240	339	e100	24	35
18	e17	e17	e2460	e7520	e2640	e2370	2460	4810	319	e95	23	31
19	e23	e45	e1660	e11500	e4630	e2250	2430	4140	299	e91	22	27
20	e18	e47	e1350	e7050	e12400	e2070	2610	3030	282	e87	22	25
21	e19	e30	e1120	e8480	e12100	e2190	2430	3620	268	e85	22	24
22	e18	e24	e981	e5620	e8230	e2140	2590	4610	258	e83	22	22
23	e17	e20	e906	e4580	e5450	e1900	2510	3290	247	e79	21	21
24	e17	e40	e819	e10600	e5270	e1680	2790	2610	237	e73	21	20
25	e18	e55	e868	e13000	e4160	e1470	2930	2180	237	e68	20	19
26	e19	e45	e802	e6480	e3360	e1240	3070	1910	e214	e64	19	19
27	e20	e39	e756	e9660	e2780	e1210	3110	1750	e209	e61	18	18
28	e21	e38	e908	e9940	e2830	e2100	2720	1590	e200	e59	18	18
29	e21	e37	e2260	e5520	e4850	e1900	2470	1450	e194	e53	18	17
30	e22	e38	e9920	e4530	---	e1460	2390	1330	e193	e48	18	16
31	e23	---	e5300	e4440	---	e1300	---	1220	---	e45	17	---
TOTAL	546	808	82902	154700	107170	97410	74840	67510	14783	3335	877	569
MEAN	17.6	26.9	2674	4990	3696	3142	2495	2178	493	108	28.3	19.0
MAX	23	55	17300	13000	12400	8720	4840	4810	1140	185	43	35
MIN	14	15	76	870	1040	1210	1680	1220	193	45	17	14
AC-FT	1080	1600	164400	306800	212600	193200	148400	133900	29320	6610	1740	1130

e Estimated.

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	103	1178	2361	4128	3371	3417	2064	1247	396	81.3	24.9	23.8
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	5.11	26.8	30.5	94.3	172	384	333	241	82.5	13.2	4.33	1.04
(WY)	1995	1996	1977	1977	1977	1977	1977	1977	1977	1977	1994	1994

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1966 - 1996			
ANNUAL TOTAL	953619				605450							
ANNUAL MEAN	2613				1654				1526			
HIGHEST ANNUAL MEAN									3351			
LOWEST ANNUAL MEAN									121			
HIGHEST DAILY MEAN	56000				17300				74000			
LOWEST DAILY MEAN	14				14				.39			
ANNUAL SEVEN-DAY MINIMUM	15				15				.42			
INSTANTANEOUS PEAK FLOW					30000				93100			
INSTANTANEOUS PEAK STAGE									27.41			
ANNUAL RUNOFF (AC-FT)	1892000				1201000				1105000			
10 PERCENT EXCEEDS	8660				4520				3740			
50 PERCENT EXCEEDS	802				547				341			
90 PERCENT EXCEEDS	18				17				15			

11474780 KEKAWAKA CREEK BELOW KEKAWAKA CREEK POWERHOUSE DIVERSION, NEAR ZENIA, CA

LOCATION.--Lat 40°06'37", long 123°27'59", in SW 1/4 SE 1/4 sec.14, T.4 S., R.6 E., Trinity County, Hydrologic Unit 18010105, on left bank approximately 200 ft downstream from diversion dam, 3.6 mi upstream from confluence with Eel River, and 6.7 mi south of Zenia.

DRAINAGE AREA.--20.7 mi².

PERIOD OF RECORD.--January 1990 to current year.

GAGE.--Water-stage recorder, and 120° V-notch weir. Elevation of gage is 1,480 ft above sea level, from topographic map.

REMARKS.--Water is diverted from creek upstream from gage to Kekawaka Creek Powerplant (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, 2,550 ft³/s, Dec. 12, 1995 gage height, 10.10 ft. Combined flow: Maximum discharge, 2,550 ft³/s, Dec. 12, 1995.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.3	5.4	71	101	104	21	3.4	3.2	3.0	.80	.60
2	1.2	1.3	3.8	14	67	83	12	3.2	3.2	2.6	.80	.60
3	1.1	1.3	3.1	3.9	32	73	5.8	3.2	3.2	2.4	.80	.50
4	1.1	1.3	6.5	3.8	82	153	4.0	3.1	3.3	2.3	.80	.50
5	1.0	1.3	6.3	3.6	138	280	3.3	3.1	3.2	2.2	.80	.50
6	.90	1.3	3.7	3.5	88	192	3.2	3.1	3.2	2.1	.80	.40
7	1.1	1.3	3.5	3.5	51	134	3.4	3.1	3.2	1.9	.80	.40
8	1.2	1.4	4.4	3.4	20	89	3.5	3.1	3.2	1.6	.80	.40
9	1.2	1.6	3.9	11	8.0	49	3.4	3.2	3.2	1.5	.80	.30
10	1.2	1.5	6.6	9.0	4.9	43	3.4	3.2	3.2	1.5	.80	.30
11	1.3	1.5	14	4.3	3.8	186	3.4	3.2	3.2	1.4	.80	.30
12	1.5	1.4	979	3.5	3.5	173	10	3.3	3.1	1.3	.80	.20
13	1.4	1.4	280	3.2	3.3	108	6.8	3.3	3.1	1.2	.80	.60
14	1.2	1.4	143	3.2	3.2	58	4.5	3.3	5.7	1.2	.70	.80
15	1.1	1.5	524	43	3.1	23	3.8	3.3	6.7	1.1	.70	1.6
16	1.2	1.6	156	321	3.2	11	7.5	3.3	6.4	1.0	.70	1.3
17	1.2	1.6	75	218	54	7.6	10	3.3	6.7	1.1	.70	.90
18	1.2	1.8	58	302	175	5.9	13	4.0	6.3	1.1	.70	.80
19	1.1	1.6	36	316	328	4.9	43	4.0	5.0	1.1	.70	.70
20	1.0	1.5	4.9	250	313	4.3	72	3.3	4.5	1.1	.70	.70
21	1.1	1.6	3.8	281	319	3.9	26	34	4.2	1.1	.70	.60
22	1.1	1.6	3.5	190	224	3.7	11	12	4.0	1.0	.70	.60
23	1.1	1.5	3.5	218	172	3.6	5.7	4.5	3.8	.90	.70	.50
24	1.1	1.5	3.5	632	200	3.5	73	3.5	3.8	.90	.70	.40
25	1.2	2.9	3.5	355	141	3.4	23	3.4	3.8	.90	.70	.30
26	1.3	3.3	3.4	217	96	3.3	7.9	3.4	4.6	.90	.70	.30
27	1.3	2.2	3.4	384	57	3.2	4.5	3.3	4.4	.90	.80	.20
28	1.3	1.9	3.3	256	75	5.8	3.4	3.2	4.0	.80	.80	.30
29	1.3	1.8	251	187	108	4.5	3.2	3.2	3.6	.80	.80	.20
30	1.2	1.9	501	157	---	3.8	3.4	3.2	3.3	.80	.70	.20
31	1.3	---	167	133	---	3.4	---	3.2	---	.80	.70	---
TOTAL	36.80	49.1	3264.0	4600.9	2874.0	1823.8	398.1	142.9	122.3	42.50	23.30	16.00
MEAN	1.19	1.64	105	148	99.1	58.8	13.3	4.61	4.08	1.37	.75	.53
MAX	1.5	3.3	979	632	328	280	73	34	6.7	3.0	.80	1.6
MIN	.90	1.3	3.1	3.2	3.1	3.2	3.2	3.1	3.1	.80	.70	.20
AC-FT	73	97	6470	9130	5700	3620	790	283	243	84	46	32

11474780 KEKAWAKA CREEK BELOW KEKAWAKA CREEK POWERHOUSE DIVERSION, NEAR ZENIA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.87	2.94	28.8	99.5	44.2	51.8	13.5	10.5	5.49	2.04	.76	.49
MAX	1.29	7.95	105	262	99.1	198	51.4	21.1	14.2	4.09	1.88	1.05
(WY)	1994	1995	1996	1995	1996	1995	1995	1990	1993	1993	1993	1995
MIN	.52	1.31	3.48	5.08	8.02	5.12	3.36	3.59	1.90	.51	.036	.008
(WY)	1995	1991	1991	1991	1991	1994	1991	1994	1992	1994	1992	1992

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1990 - 1996	
ANNUAL TOTAL	20970.90		13393.70			
ANNUAL MEAN	57.5		36.6		22.7	
HIGHEST ANNUAL MEAN					49.4	
LOWEST ANNUAL MEAN					6.47	
HIGHEST DAILY MEAN	1370	Jan 9	979	Dec 12	1370	Jan 9 1995
LOWEST DAILY MEAN	.70	Sep 21	.20	Sep 12	.00	Sep 3 1992
ANNUAL SEVEN-DAY MINIMUM	.80	Sep 18	.27	Sep 24	.00	Sep 3 1992
INSTANTANEOUS PEAK FLOW			2550	Dec 12	2550	Dec 12 1995
INSTANTANEOUS PEAK STAGE			10.10	Dec 12	10.10	Dec 12 1995
ANNUAL RUNOFF (AC-FT)	41600		26570		16430	
10 PERCENT EXCEEDS	149		139		36	
50 PERCENT EXCEEDS	3.5		3.2		3.2	
90 PERCENT EXCEEDS	1.2		.70		.30	

11474781 KEKAWAKA CREEK BELOW KEKAWAKA CREEK POWERHOUSE DIVERSION, NEAR ZENIA, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.3	5.4	145	176	179	92	29	12	3.0	.80	.60
2	1.2	1.3	3.8	85	142	158	69	26	11	2.6	.80	.60
3	1.1	1.3	3.1	61	104	148	50	23	10	2.4	.80	.50
4	1.1	1.3	6.5	49	157	228	41	21	10	2.3	.80	.50
5	1.0	1.3	10	40	213	355	35	24	9.4	2.2	.80	.50
6	.90	1.3	8.2	33	163	267	31	18	8.8	2.1	.80	.40
7	1.1	1.3	9.4	28	126	209	27	16	8.2	1.9	.80	.40
8	1.2	1.4	5.5	25	94	164	25	15	7.9	1.6	.80	.40
9	1.2	1.6	3.9	58	71	124	23	14	7.7	1.5	.80	.30
10	1.2	1.5	6.9	55	59	118	22	13	7.5	1.5	.80	.30
11	1.3	1.5	76	36	49	261	20	12	7.3	1.4	.80	.30
12	1.5	1.4	979	29	42	248	23	11	6.9	1.3	.80	.20
13	1.4	1.4	280	25	36	183	21	11	6.7	1.2	.80	.60
14	1.2	1.4	143	23	33	133	17	11	6.7	1.2	.70	.80
15	1.1	1.5	524	114	31	92	17	11	6.7	1.1	.70	1.6
16	1.2	1.6	156	395	35	71	65	12	6.4	1.0	.70	1.3
17	1.2	1.6	75	290	124	58	67	27	6.7	1.1	.70	.90
18	1.2	1.8	58	377	250	50	83	53	6.3	1.1	.70	.80
19	1.1	1.6	43	391	403	43	114	35	5.0	1.1	.70	.70
20	1.0	1.5	33	325	388	38	146	23	4.5	1.1	.70	.70
21	1.1	1.6	27	356	394	34	101	90	4.2	1.1	.70	.60
22	1.1	1.6	24	265	264	34	77	69	4.0	1.0	.70	.60
23	1.1	1.5	20	293	247	32	62	43	3.8	.90	.70	.50
24	1.1	1.5	17	708	275	28	148	32	3.8	.90	.70	.40
25	1.2	2.9	15	411	215	25	92	26	3.8	.90	.70	.30
26	1.3	3.3	13	281	170	23	65	23	4.6	.90	.70	.30
27	1.3	2.2	15	443	132	34	52	20	4.4	.90	.80	.20
28	1.3	1.9	22	331	129	60	43	18	4.0	.80	.80	.30
29	1.3	1.8	311	262	183	39	37	16	3.6	.80	.80	.20
30	1.2	1.9	549	229	---	31	32	15	3.3	.80	.70	.20
31	1.3	---	243	208	---	29	---	13	---	.80	.70	---
TOTAL	36.80	49.1	3685.7	6371	4705	3496	1697	770	195.2	42.50	23.30	16.00
MEAN	1.19	1.64	119	206	162	113	56.6	24.8	6.51	1.37	.75	.53
MAX	1.5	3.3	979	708	403	355	148	90	12	3.0	.80	1.6
MIN	.90	1.3	3.1	23	31	23	17	11	3.3	.80	.70	.20
AC-FT	73	97	7310	12640	9330	6930	3370	1530	387	84	46	32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1996, BY WATER YEAR (WY)

MEAN	.87	4.32	44.4	134	88.7	97.4	43.3	26.2	13.7	2.19	.76	.49
MAX	1.29	15.9	119	317	162	255	111	50.5	45.8	5.16	1.88	1.05
(WY)	1994	1995	1996	1995	1996	1995	1995	1993	1993	1993	1993	1995
MIN	.52	1.31	3.48	6.26	17.1	27.1	7.49	5.78	1.90	.51	.036	.008
(WY)	1995	1991	1991	1991	1991	1994	1990	1992	1992	1994	1992	1992

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1990 - 1996

ANNUAL TOTAL	28955.90	21087.60	
ANNUAL MEAN	79.3	57.6	39.0
HIGHEST ANNUAL MEAN			73.7
LOWEST ANNUAL MEAN			14.0
HIGHEST DAILY MEAN	1370	979	1370
LOWEST DAILY MEAN	.70	.20	.00
ANNUAL SEVEN-DAY MINIMUM	.80	.27	.00
INSTANTANEOUS PEAK FLOW		2550	2550
INSTANTANEOUS PEAK STAGE		10.10	10.10
ANNUAL RUNOFF (AC-FT)	57430	41830	28270
10 PERCENT EXCEEDS	219	208	102
50 PERCENT EXCEEDS	9.8	8.0	5.5
90 PERCENT EXCEEDS	1.2	.70	.30

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 Dobbys Creek, and 11.8 mi northeast of Garberville.

DRAINAGE AREA.--2,107 mi².

PERIOD OF RECORD.--September 1955 to current year. Prior to October 1965, published as "at Alderpoint."

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 217.26 ft above sea level. Prior to Dec. 22, 1964, at site 7.5 mi upstream at datum 46.55 ft higher. Feb. 2 to Sept. 30, 1965, at site 7.7 mi upstream at datum 49.42 ft higher.

REMARKS.--Records fair, including period of estimated daily discharge. Flow slightly regulated by Lake Pillsbury (station 11470000) 99 mi upstream and by diversion through Potter Valley Powerhouse Intake (station 11471000). See schematic diagram of Eel River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 561,000 ft³/s, Dec. 22, 1964, gage height, 82.6 ft, from floodmarks, present site and datum, 87.2 ft, from floodmarks, site and datum then in use, from rating curve extended above 110,000 ft³/s on basis of slope-area measurement at gage height 72.5 ft; minimum daily, 1.2 ft³/s, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 41,000 ft³/s or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1415	111,000	35.99	Jan. 25	0645	63,300	28.16
Dec. 30	1000	48,600	25.53	Feb. 20	0300	60,300	27.69
Jan. 16	2245	74,100	29.99				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	60	190	13400	16100	18800	7020	3710	2100	427	86	40
2	56	54	286	8870	13200	15300	12400	3460	1790	397	81	39
3	53	50	443	6100	10900	13700	7810	3130	1600	368	74	38
4	53	50	488	4890	e13000	16800	6270	2790	1480	344	72	37
5	53	87	849	4020	e21000	34900	5250	2490	1370	328	72	35
6	52	92	1180	3430	e15000	23700	4510	2280	1260	319	74	34
7	51	95	1020	2990	e10000	17600	4210	2100	1160	307	75	35
8	50	95	788	2680	e8210	14600	4100	1960	1080	292	77	35
9	50	84	572	2800	e7290	12800	3980	1830	1000	274	75	36
10	49	70	477	3610	e6810	12200	3780	1720	926	261	71	37
11	43	63	1800	2990	e6180	18600	3650	1640	875	251	66	37
12	36	67	69200	2560	e5820	21500	3350	1580	844	237	64	36
13	36	70	33600	2330	e5080	16900	3070	1610	804	221	60	39
14	36	65	15300	2160	e4490	13600	2820	1750	745	209	56	39
15	37	77	45800	7530	e3800	11000	2690	1980	711	197	53	49
16	39	76	23000	35200	e3480	8730	4120	1830	726	185	50	50
17	38	71	12900	42700	e6150	7750	6710	3560	698	176	48	61
18	39	74	8100	30400	e11500	7370	7810	12500	650	169	46	73
19	55	106	5910	45700	e24300	6970	7990	10700	608	165	45	96
20	43	107	4500	28200	51300	6400	9840	6680	581	164	50	89
21	42	95	3720	33800	52300	6730	7060	7210	551	163	49	82
22	41	83	3260	22800	35700	6580	6830	14800	526	155	46	76
23	40	79	3020	18500	23800	5800	5930	9380	508	145	47	70
24	42	104	2730	42000	22700	5070	10600	6580	490	136	46	67
25	45	165	2480	51800	18300	4380	10700	5130	475	127	46	62
26	49	132	2290	27100	15000	3610	7780	4230	502	121	46	57
27	51	115	2160	41900	12600	3520	6510	3560	525	117	44	54
28	55	106	2270	41200	12300	6250	5530	3120	532	111	42	52
29	56	101	7500	24100	20400	5630	4750	2780	498	103	41	48
30	60	102	39700	19800	---	4240	4230	2520	457	98	40	47
31	68	---	21200	19500	---	3690	---	2290	---	91	39	---
TOTAL	1477	2595	316733	595060	456710	354720	181300	130900	26072	6658	1781	1550
MEAN	47.6	86.5	10220	19200	15750	11440	6043	4223	869	215	57.5	51.7
MAX	68	165	69200	51800	52300	34900	12400	14800	2100	427	86	96
MIN	36	50	190	2160	3480	3520	2690	1580	457	91	39	34
AC-FT	2930	5150	628200	1180000	905900	703600	359600	259600	51710	13210	3530	3070

e Estimated.

EEL RIVER BASIN

11475000 EEL RIVER AT FORT SEWARD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	395	2962	8556	12720	12150	9789	5261	2303	677	143	54.0	55.8
MAX	4938	18740	56050	43180	47700	30660	23040	7449	4194	482	199	359
(WY)	1963	1974	1965	1995	1986	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1955 - 1996			
ANNUAL TOTAL	3467291				2075556							
ANNUAL MEAN	9499				5671				4558			
HIGHEST ANNUAL MEAN									10350			
LOWEST ANNUAL MEAN									260			
HIGHEST DAILY MEAN	224000				69200				434000			
LOWEST DAILY MEAN	36				34				1.2			
ANNUAL SEVEN-DAY MINIMUM	37				36				1.4			
INSTANTANEOUS PEAK FLOW					111000				561000			
INSTANTANEOUS PEAK STAGE					35.99				82.60			
ANNUAL RUNOFF (AC-FT)	6877000				4117000				3302000			
10 PERCENT EXCEEDS	24400				17800				11500			
50 PERCENT EXCEEDS	1470				1010				704			
90 PERCENT EXCEEDS	60				46				35			

EEL RIVER BASIN

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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 (discontinued April 1).

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 (discontinued April 1). 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, or maximum.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0500	586	6.45	Jan. 24	1900	443	6.08
Jan. 16	1515	457	6.12				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	.88	2.3	99	87	129	43	30	18	4.2	1.7	1.0
2	.90	.84	1.8	58	68	108	38	27	17	4.0	1.7	.99
3	.88	.83	2.2	40	57	95	33	24	15	3.9	1.7	.97
4	.86	.83	5.3	34	92	143	30	21	14	3.8	1.6	.97
5	.84	.83	5.6	29	134	212	28	19	13	3.7	1.6	.97
6	.82	.83	5.1	26	118	168	25	17	12	3.5	1.6	.97
7	.84	.85	3.4	22	91	128	23	16	11	3.4	1.6	.96
8	.83	.86	2.5	20	70	94	21	14	10	3.3	1.5	.94
9	.84	.97	2.0	20	56	71	19	13	9.9	3.2	1.5	.92
10	.85	.97	3.8	17	47	75	16	12	9.5	3.1	1.4	.90
11	.86	.99	27	15	40	132	15	11	8.9	3.0	1.3	.90
12	.88	.97	248	13	36	129	15	11	8.5	2.9	1.3	.94
13	.88	.96	96	12	33	104	13	10	8.0	2.8	1.3	1.0
14	.83	.94	90	12	30	78	12	11	7.6	2.7	1.3	.99
15	.79	.98	282	69	29	60	13	11	7.3	2.6	1.2	2.0
16	.82	1.0	144	269	29	49	21	11	7.1	2.6	1.2	1.4
17	.80	1.1	67	238	68	42	20	31	6.8	2.6	1.2	1.2
18	.81	1.2	41	217	169	37	27	53	6.4	2.5	1.2	1.1
19	.81	1.1	32	241	243	34	46	46	6.2	2.5	1.2	1.0
20	.79	1.0	27	233	262	31	53	37	6.0	2.4	1.2	1.0
21	.80	1.1	22	247	245	29	49	106	5.8	2.3	1.2	.98
22	.80	1.1	21	187	201	27	43	129	5.6	2.2	1.2	.96
23	.80	1.1	18	165	158	25	40	91	5.4	2.1	1.1	.95
24	.80	.99	15	361	154	23	127	64	5.4	2.1	1.1	.92
25	.82	1.2	14	311	127	21	104	49	5.2	2.0	1.1	.91
26	.83	1.2	12	218	91	18	76	40	5.0	2.0	1.1	.88
27	.83	1.1	12	310	67	22	57	34	4.9	1.9	1.1	.86
28	.81	1.0	13	267	75	23	45	29	4.8	1.8	1.1	.85
29	.80	.95	118	197	126	18	38	26	4.6	1.8	1.1	.84
30	.81	1.1	239	147	---	17	34	23	4.4	1.8	2.5	.82
31	.84	---	160	115	---	17	---	20	---	1.7	1.0	---
TOTAL	25.79	29.77	1732.0	4209	3003	2159	1124	1036	253.3	84.4	41.9	30.09
MEAN	.83	.99	55.9	136	104	69.6	37.5	33.4	8.44	2.72	1.35	1.00
MAX	.92	1.2	282	361	262	212	127	129	18	4.2	2.5	2.0
MIN	.79	.83	1.8	12	29	17	12	10	4.4	1.7	1.0	.82
AC-FT	51	59	3440	8350	5960	4280	2230	2050	502	167	83	60
a	0.10	1.95	20.64	6.17	15.65	8.24	---	---	---	---	---	---

a Precipitation, in inches.

EEL RIVER BASIN

11475560 ELDER CREEK NEAR BRANSCOMB, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.27	20.1	45.8	68.9	56.8	55.8	25.9	11.9	5.77	2.35	1.33	1.13
MAX	8.72	132	135	210	173	147	91.9	33.4	31.6	5.84	2.49	2.36
(WY)	1980	1974	1971	1970	1986	1983	1982	1996	1993	1993	1990	1986
MIN	.57	.99	1.04	2.32	3.40	5.45	3.01	2.13	1.35	.67	.48	.51
(WY)	1988	1996	1977	1977	1977	1988	1977	1977	1977	1977	1977	1988

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1968 - 1996	
ANNUAL TOTAL	16121.18		13728.25		24.7	
ANNUAL MEAN	44.2		37.5		54.4	
HIGHEST ANNUAL MEAN					2.12	
LOWEST ANNUAL MEAN					1470	
HIGHEST DAILY MEAN	789	Jan 9	361	Jan 24	1470	Jan 16 1974
LOWEST DAILY MEAN	.79	Oct 15	.79	Oct 15	.27	Sep 10 1981
ANNUAL SEVEN-DAY MINIMUM	.80	Oct 17	.80	Oct 17	.27	Sep 9 1981
INSTANTANEOUS PEAK FLOW			586	Dec 12	2280	Mar 29 1974
INSTANTANEOUS PEAK STAGE			6.45	Dec 12	9.77	Mar 29 1974
ANNUAL RUNOFF (AC-FT)	31980		27230		17910	
10 PERCENT EXCEEDS	129		127		66	
50 PERCENT EXCEEDS	7.9		9.2		5.1	
90 PERCENT EXCEEDS	.88		.86		.94	

11475560 ELDER CREEK NEAR BRANSCOMB, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to March 1996 (discontinued).

CHEMICAL DATA: Water years 1968 to March 1996 (discontinued).

WATER TEMPERATURE: Water years 1968-79.

SEDIMENT DATA: Water years 1969 to March 1996 (discontinued).

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 1995 TO SEPTEMBER 1996

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)	
JAN 24...	1540	387	67	7.8	9.5	6.7	725	12.2	112	K19	
MAR 18...	1515	38	93	7.8	11.5	0.30	741	10.4	98	K7	
DATE		STREP-TOCOCCI 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
JAN 24...	44		27	0	6.8	2.3	4.2	25	0.4	0.50	38
MAR 18...	K8		37	0	9.3	3.2	5.8	25	0.4	0.50	54
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)
JAN 24...	0		31	0.80	2.0	<0.10	14	44	50	0.06	<0.010
MAR 18...	0		44	2.0	2.1	0.10	16	64	66	0.09	<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)
JAN 24...	<0.050		<0.015	<0.20	0.030	0.020	0.020	40	9.0	<3.0	49
MAR 18...	<0.050		<0.015	<0.20	0.020	0.020	0.020	20	11	<3.0	9.0

EEL RIVER BASIN

11475560 ELDER CREEK NEAR BRANSCOMB, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)
JAN 24...	<4	1.0	<10	<1.0	<1	<1.0	69	<6	--	--
MAR 18...	<4	<1.0	<10	<1.0	<1	<1.0	94	<6	0.03	<0.01

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM % FINER THA .062 MM
JAN											
24...*	1450	3.00	11.0	68	7.8	10.0	725	12.3	114	20	95
24...*	1500	3.90	16.0	68	7.8	10.0	725	--	--	31	79
24...*	1510	5.00	20.0	68	7.7	10.0	725	12.2	114	28	76

* Instantaneous discharge at the time of cross-sectional measurement: Jan. 24, 369 ft³/s.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 .062 MM
JAN 24...	1405	354	9.5	26	25	83
MAR 18...	1435	37	11.5	4	0.40	78

EEL RIVER BASIN

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11475800 SOUTH FORK EEL RIVER AT LEGGETT, CA

LOCATION.--Lat 39°52'29", long 123°43'10", in NE 1/4 SE 1/4 sec.3, T.23 N., R.17 W., Mendocino County, Hydrologic Unit 18010106, on right bank near Standish Hickey State Park, 0.2 mi upstream from Rock Creek, and 0.7 mi northwest of Leggett.

DRAINAGE AREA.--248 mi².

PERIOD OF RECORD.--October 1965 to June 30, 1995. Stage only July 1, 1995 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.--Interruptions in record were due to malfunction of the recording instruments. 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. Maximum gage height since July 1, 1995, 13.41 ft, December 12, 1995; minimum gage height since July 1, 1995, 0.61 ft, Oct. 21-22 and 24-29, 1995.

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.--Maximum gage height, 13.41 ft, Dec. 12; minimum gage height, 0.61 ft, Oct. 21-22, 24-29.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	.65	.65	.63	.63	1.28	.84	5.75	4.90	5.42	4.97	6.66	5.60
2	.65	.65	.63	.63	1.25	1.10	4.91	4.39	4.98	4.63	5.79	5.01
3	.65	.64	.63	.63	1.53	.99	4.41	4.00	4.64	4.40	5.09	4.75
4	.64	.64	.63	.63	2.12	1.53	4.04	3.75	6.71	4.47	8.53	4.64
5	.64	.63	.63	.63	2.42	1.74	3.76	3.53	6.76	5.79	8.50	6.74
6	.63	.63	.64	.63	2.20	1.78	3.54	3.35	5.81	5.21	6.77	5.67
7	.63	.62	.64	.64	1.81	1.56	3.35	3.21	5.26	4.80	5.79	4.96
8	.63	.62	.64	.64	1.56	1.33	3.21	3.09	4.84	4.52	5.00	4.52
9	.62	.62	.67	.64	1.33	1.17	3.60	3.07	4.54	4.24	4.64	4.19
10	.62	.62	.67	.67	2.71	1.13	3.54	3.20	4.27	4.00	4.98	4.11
11	.62	.62	.67	.67	7.78	2.48	3.20	3.04	4.02	3.78	7.07	4.47
12	.63	.62	.67	.67	13.41	7.27	3.04	2.93	3.82	3.64	6.09	5.08
13	.63	.63	.67	.66	7.31	5.21	2.95	2.85	3.64	3.49	5.19	4.62
14	.63	.63	.66	.66	10.99	4.41	3.01	2.83	3.49	3.36	4.76	---
15	.63	.62	.66	.66	11.76	7.19	7.46	3.01	3.46	3.29	---	---
16	.63	.63	.67	.66	7.19	5.17	12.27	6.16	3.70	3.45	---	---
17	.64	.63	.70	.67	5.23	4.39	10.38	6.71	7.35	3.52	---	---
18	.63	.63	.74	.70	4.43	4.13	11.59	6.37	8.53	5.70	---	---
19	.63	.63	.73	.73	4.15	3.77	10.15	7.61	9.29	7.78	---	3.22
20	.63	.62	.74	.73	3.80	3.55	10.44	6.92	9.23	7.87	3.28	3.11
21	.62	.61	.73	.72	3.56	3.37	10.07	7.53	9.12	7.92	3.15	2.96
22	.62	.61	.73	.73	3.49	3.36	7.53	6.14	7.98	6.60	3.04	2.94
23	.62	.62	.73	.73	3.47	3.25	7.97	5.95	7.39	6.05	2.99	2.85
24	.62	.61	.73	.73	3.26	3.12	11.89	7.97	7.39	6.29	2.87	2.78
25	.61	.61	.83	.73	3.12	3.01	11.47	7.92	6.37	5.55	2.79	2.70
26	.61	.61	.87	.83	3.01	2.93	7.92	6.49	5.67	4.99	2.71	2.64
27	.61	.61	.84	.81	2.99	2.90	11.66	6.75	5.08	4.69	3.30	2.63
28	.61	.61	.81	.77	3.28	2.98	9.90	7.33	6.77	4.79	3.67	3.11
29	.63	.61	.77	.74	10.79	3.28	7.52	6.42	7.08	6.59	3.13	2.84
30	.63	.63	.84	.73	11.32	7.31	6.50	6.05	---	---	2.87	2.73
31	.63	.63	---	---	7.34	5.74	6.16	5.38	---	---	2.87	2.68
MONTH	.65	.61	.87	.63	13.41	.84	12.27	2.83	9.29	3.29	---	---

EEL RIVER BASIN

11475800 SOUTH FORK EEL RIVER AT LEGGETT, CA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.86	2.87	3.22	3.06	2.61	2.53	1.59	1.56	1.10	1.10	.98	.98
2	4.20	3.55	3.10	2.94	2.53	2.45	1.56	1.52	1.10	1.09	.99	.97
3	3.60	3.26	2.95	2.84	2.45	2.38	1.52	1.51	1.09	1.08	.97	.94
4	3.32	3.14	2.84	2.74	2.38	2.33	1.51	1.51	1.08	1.08	.96	.96
5	3.17	3.04	2.75	2.66	2.33	2.27	1.51	1.50	1.08	1.08	.96	.96
6	3.04	2.91	2.66	2.59	2.27	2.20	1.50	1.49	1.08	1.08	.96	.95
7	2.92	2.81	2.59	2.52	2.20	2.16	1.49	1.47	1.08	1.07	.96	.95
8	2.83	2.73	2.52	2.46	2.16	2.11	1.47	1.46	1.07	1.07	.95	.95
9	2.74	2.68	2.46	2.40	2.11	2.07	1.46	1.45	1.07	1.06	.95	.94
10	2.69	2.59	2.40	2.35	2.07	2.04	1.45	1.43	1.06	1.04	.94	.94
11	2.61	2.55	2.35	2.30	2.04	2.00	1.43	1.41	1.04	1.03	.94	.94
12	2.58	2.53	2.30	2.26	2.00	1.97	1.41	1.39	1.03	1.03	.94	.94
13	2.53	2.45	2.26	2.21	1.97	1.93	1.39	1.38	1.03	1.02	.96	.94
14	2.46	2.40	2.31	2.21	1.93	1.89	1.38	1.35	1.02	1.01	.95	.95
15	2.51	2.38	2.31	2.25	1.89	1.86	1.35	1.34	1.01	1.01	1.15	.95
16	3.57	2.51	2.39	2.30	1.86	1.85	1.34	1.32	1.01	1.00	1.21	1.12
17	3.65	3.11	4.27	2.39	1.85	1.80	1.32	1.31	1.00	1.00	1.19	1.08
18	4.22	3.64	4.38	3.84	1.80	1.78	1.31	1.30	1.00	1.00	1.08	1.03
19	5.85	3.51	3.97	3.21	1.79	1.77	1.30	1.29	1.00	1.00	1.03	1.01
20	5.03	4.21	3.22	2.95	1.77	1.75	1.29	1.27	1.01	1.00	1.01	1.00
21	4.45	3.99	8.08	2.93	1.76	1.73	1.27	1.25	1.01	1.00	1.00	.99
22	4.43	3.85	6.38	4.62	1.73	1.71	1.25	1.22	1.02	1.01	.99	.98
23	3.97	3.64	4.73	4.10	1.71	1.69	1.22	1.20	1.02	1.01	.98	.98
24	7.38	3.95	4.20	3.71	1.69	1.69	1.20	1.18	1.01	1.00	.98	.97
25	5.66	4.74	3.76	3.43	1.69	1.68	1.18	1.17	1.00	.99	.97	.96
26	4.78	4.32	3.46	3.23	1.69	1.67	1.17	1.16	1.00	1.00	.96	.96
27	4.33	3.88	3.25	3.06	1.67	1.66	1.16	1.16	1.01	1.00	.96	.95
28	3.95	3.61	3.08	2.91	1.66	1.64	1.16	1.14	1.01	1.00	.95	.95
29	3.64	3.39	2.93	2.80	1.64	1.62	1.14	1.13	1.01	1.00	.95	.95
30	3.42	3.21	2.81	2.69	1.62	1.59	1.13	1.11	1.00	.99	.95	.95
31	---	---	2.69	2.61	---	---	1.11	1.10	.99	.98	---	---
MONTH	7.38	2.38	8.08	2.21	2.61	1.59	1.59	1.10	1.10	.98	1.21	.94

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 good. Occasional storage and release for recreational use during summer months at Benbow Reservoir, capacity, 1,060 acre-ft, 16 mi upstream. No diversion upstream from station. See schematic diagram of Eel River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 199,000 ft³/s, Dec. 22, 1964, gage height, 46.0 ft, from floodmarks, from rating curve extended above 53,000 ft³/s on basis of slope-area measurement at gage height 42.7 ft; minimum observed, 9 ft³/s, Oct. 17, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1200	34,000	21.20	Jan. 27	1430	25,500	18.79
Dec. 30	0815	19,700	16.96	Feb. 20	0330	18,200	16.42
Jan. 16	1930	27,400	19.37				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	39	145	4110	3890	8170	2080	1480	911	235	82	51
2	41	40	270	2800	3220	5940	2210	1340	847	227	57	49
3	40	40	194	2170	2760	4800	1670	1230	798	215	74	48
4	40	40	420	1850	3950	5830	1450	1150	744	204	74	46
5	39	40	652	1590	5770	10300	1300	1070	705	201	74	44
6	38	41	836	1430	4420	7280	1200	1010	658	199	74	44
7	38	41	616	1250	3620	5570	1130	955	601	192	74	44
8	38	42	425	1180	3080	4320	1060	897	571	185	74	43
9	38	44	296	1270	2670	3470	1010	847	545	178	72	43
10	38	46	291	1500	2330	3210	971	793	519	175	70	43
11	39	47	1180	1250	2060	5590	929	748	497	171	68	42
12	43	46	19500	1130	1850	5620	895	710	481	164	66	59
13	43	46	8670	1050	1680	4340	852	677	456	158	65	171
14	43	45	4200	1080	1550	3520	803	682	439	153	60	145
15	41	45	12600	4910	1460	2930	776	695	419	146	59	85
16	41	49	4660	15400	1630	2540	1260	688	408	135	58	95
17	40	49	2810	13200	3650	2230	1690	1030	406	56	57	109
18	40	52	2170	11900	7130	1950	2170	2140	387	99	55	85
19	40	58	1760	15000	13500	1760	2480	1800	371	128	55	71
20	40	60	1500	10800	15400	1590	3200	1340	346	124	55	62
21	37	60	1320	14200	15100	1450	2390	2890	322	119	53	60
22	37	63	1320	8790	10300	1390	2310	4910	288	117	55	57
23	36	60	1220	7560	7350	1300	1960	2960	276	112	55	56
24	36	60	1100	18600	7810	1200	5490	2240	245	99	55	54
25	37	68	1020	18200	6130	1130	4710	1830	240	100	53	53
26	37	87	953	9650	4800	1080	3410	1570	254	102	53	52
27	37	97	956	18800	3980	1100	2670	1380	273	101	53	51
28	38	85	1010	13900	5440	1520	2180	1240	268	100	55	50
29	37	74	4570	8100	10300	1320	1860	1140	258	96	55	49
30	38	68	15500	6090	---	1120	1640	1050	247	93	54	49
31	38	---	6960	4990	---	1060	---	978	---	86	53	---
TOTAL	1209	1632	99124	223750	156830	104630	57756	43470	13780	4470	1917	1910
MEAN	39.0	54.4	3198	7218	5408	3375	1825	1402	459	144	61.8	63.7
MAX	43	97	19500	18800	15400	10300	5490	4910	911	235	82	171
MIN	36	39	145	1050	1460	1060	776	677	240	56	53	42
AC-FT	2400	3240	196600	443800	311100	207500	114600	86220	27330	8870	3800	3790

EEL RIVER BASIN

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	272	1489	4029	5363	4710	3629	1859	707	309	114	61.8	61.5
MAX	3332	10130	17260	17530	16640	13000	8425	2370	1754	276	131	221
(WY)	1963	1974	1965	1970	1986	1983	1982	1990	1993	1993	1983	1986
MIN	20.0	25.0	74.6	207	284	304	176	122	52.7	20.4	18.0	29.1
(WY)	1940	1940	1977	1977	1977	1988	1977	1977	1977	1977	1977	1949

SUMMARY STATISTICS	FOR 1985 CALENDAR YEAR		FOR 1986 WATER YEAR		WATER YEARS 1940 - 1996	
ANNUAL TOTAL	1004483		710478			
ANNUAL MEAN	2752		1841		1873	
HIGHEST ANNUAL MEAN					4393	
LOWEST ANNUAL MEAN					156	
HIGHEST DAILY MEAN	62900		Jan 9		19500	
LOWEST DAILY MEAN	36		Oct 23		Dec 12	
ANNUAL SEVEN-DAY MINIMUM	37		Oct 21		36	
INSTANTANEOUS PEAK FLOW					37	
INSTANTANEOUS PEAK STAGE					34000	
ANNUAL RUNOFF (AC-FT)	1992000		1409000		Dec 12	
10 PERCENT EXCEEDS	7340		5600		21.20	
50 PERCENT EXCEEDS	438		586		Dec 12	
90 PERCENT EXCEEDS	41		42		46.00	

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0400	3,370	9.13	Feb. 20	unknown	2,290	7.88
Dec. 30	unknown	unknown	unknown				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.2	33	e340	e280	576	198	125	50	14	4.4	2.0
2	1.8	2.2	12	e230	e238	492	165	114	47	14	4.4	1.9
3	1.6	2.3	8.4	e195	e202	419	154	101	44	14	4.4	1.8
4	1.7	2.4	18	e160	e326	481	146	95	41	13	4.4	1.7
5	1.6	2.4	28	e140	e651	539	141	88	38	13	4.4	1.8
6	1.4	2.4	23	e125	e498	464	134	81	37	12	4.4	1.8
7	1.5	2.4	21	e118	e395	404	130	75	34	12	4.1	1.7
8	1.5	2.4	14	e134	e300	348	125	69	34	11	3.6	1.6
9	1.5	2.7	11	e180	e248	305	119	63	32	11	3.4	1.5
10	1.6	3.1	72	e125	e205	277	118	61	30	11	3.2	1.5
11	1.9	3.1	200	133	e181	328	115	57	30	9.9	3.1	1.4
12	2.6	3.1	1300	128	e153	287	113	53	29	9.8	3.1	1.5
13	2.4	3.1	746	116	e138	262	108	48	27	9.4	3.0	2.1
14	2.1	3.1	625	137	e125	240	103	50	26	8.8	3.1	2.6
15	1.9	3.1	e834	202	e121	221	101	48	24	8.5	3.3	8.8
16	1.9	3.2	e302	378	e144	205	149	46	24	8.5	3.2	4.7
17	1.9	3.3	e224	329	e317	191	156	97	23	8.5	3.1	3.4
18	1.8	4.2	e188	447	e727	179	166	103	22	8.5	3.1	2.8
19	1.8	4.4	e154	505	e1090	169	198	84	21	8.3	3.1	2.5
20	1.8	4.2	e139	505	e1210	160	195	70	20	7.6	3.2	2.5
21	1.8	7.4	e125	546	e947	152	196	108	20	7.6	3.1	2.3
22	1.8	9.1	e113	452	e669	146	187	102	19	7.3	3.1	2.2
23	1.8	5.1	e104	470	e514	141	202	91	18	6.8	2.9	2.2
24	1.9	4.3	e99	622	e606	134	338	85	19	6.5	2.6	2.0
25	1.9	6.1	e92	554	e431	126	264	79	19	6.0	2.4	1.9
26	1.8	9.2	e88	478	e336	121	228	73	18	6.0	2.5	1.8
27	1.9	4.9	e94	650	e278	136	199	69	17	5.8	2.5	1.6
28	2.0	3.8	e103	603	e420	140	175	64	17	5.5	2.5	1.5
29	2.0	3.2	e370	e438	637	125	154	61	16	5.1	2.3	1.5
30	2.1	4.6	e1040	e379	---	118	138	57	15	4.8	2.0	1.5
31	2.1	---	e536	e322	---	116	---	54	---	4.4	2.0	---
TOTAL	57.2	117.0	7716.4	10141	12387	8002	4915	2371	811	278.6	99.9	68.1
MEAN	1.85	3.90	249	327	427	258	164	76.5	27.0	8.99	3.22	2.27
MAX	2.6	9.2	1300	650	1210	576	338	125	50	14	4.4	8.8
MIN	1.4	2.2	8.4	116	121	116	101	46	15	4.4	2.0	1.4
AC-FT	113	232	15310	20110	24570	15870	9750	4700	1610	553	198	135

e Estimated.

EEL RIVER BASIN

11476600 BULL CREEK NEAR WEOTT, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.7	114	252	319	289	242	121	42.3	17.5	6.70	3.54	3.06
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1961 - 1996			
ANNUAL TOTAL	69002.8				46964.2							
ANNUAL MEAN	189				128				118			
HIGHEST ANNUAL MEAN									287			
LOWEST ANNUAL MEAN									9.72			
HIGHEST DAILY MEAN	3700				1300				4900			
LOWEST DAILY MEAN	1.3				1.4				.25			
ANNUAL SEVEN-DAY MINIMUM	1.4				1.5				.29			
INSTANTANEOUS PEAK FLOW					3370				6520			
INSTANTANEOUS PEAK STAGE					9.13				20.60			
ANNUAL RUNOFF (AC-FT)	136900				93150				85440			
10 PERCENT EXCEEDS	544				408				308			
50 PERCENT EXCEEDS	29				32				23			
90 PERCENT EXCEEDS	1.9				1.9				2.1			

11477000 EEL RIVER AT SCOTIA, CA

LOCATION.--Lat 40°29'30", long 124°05'55", in SW 1/4 sec.5, T.1 N., R.1 E., Humboldt County, Hydrologic Unit 18010105, near center of span in left pier of A.S. Murphy Memorial Bridge on State Highway 283, 0.5 mi north of Scotia, and 6 mi upstream from Van Duzen River.

DRAINAGE AREA.--3,113 mi².

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods and yearly estimates for 1915-16, published in WSP 1315-B.

CHEMICAL DATA: Water years 1952-75, 1977, 1979-95.

BIOLOGICAL DATA: Water years 1979-81.

SPECIFIC CONDUCTANCE: Water years 1979-81.

WATER TEMPERATURE: Water years 1958-82.

SEDIMENT DATA: Water years 1955-95.

REVISED RECORDS.--WSP 931: 1938. WSP 1315-B: 1914-15(M), 1917(M), 1927-28(M), 1936(M), 1939(M). WSP 1345: Drainage area. WSP 1715: 1959.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 35.50 ft above sea level. Prior to Dec. 12, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Low flow slightly regulated by Lake Pillsbury (station 11470000) 138 mi upstream since December 1921 and by diversion through Potter Valley Powerhouse Intake (station 11471000). See schematic diagram of Eel River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 752,000 ft³/s, Dec. 23, 1964, gage height, 72.0 ft, from floodmarks, from rating curve extended above 220,000 ft³/s on basis of maximum flow at upstream stations; minimum observed, 10 ft³/s, Aug. 12-14, 1924.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 72,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	2030	155,000	37.09	Jan. 27	2200	100,000	30.76
Dec. 30	1400	81,800	28.36	Feb. 20	0900	95,100	30.14
Jan. 17	0415	107,000	31.66				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	138	352	22000	25000	39600	8370	6950	3900	845	249	132
2	133	147	693	14700	20200	27700	18000	6370	3560	798	237	130
3	129	139	888	11300	16900	22600	12200	5860	3200	747	224	123
4	126	134	1110	9240	18200	23300	9840	5340	2910	700	210	121
5	128	129	1750	7910	44700	54000	8570	4800	2710	663	210	119
6	126	132	2760	6870	38200	42400	7530	4380	2490	635	208	106
7	127	173	2990	6090	27200	28900	6930	4050	2300	616	208	63
8	124	185	2290	5460	21400	22700	6550	3790	2150	591	205	63
9	123	190	1760	5460	18000	19200	6310	3550	2010	568	203	62
10	123	186	1560	7030	15600	17600	6050	3350	1880	546	200	73
11	131	171	3130	6340	13500	24500	5760	3180	1770	525	193	110
12	136	158	81100	5300	12000	34600	5490	2990	1680	505	186	112
13	134	151	76000	4720	10800	26100	5060	2920	1600	484	177	116
14	137	155	27400	4340	9990	20300	4660	2940	1520	463	170	170
15	135	157	65500	7960	9170	16500	4370	3230	1420	438	169	242
16	131	156	46000	37000	9240	13400	5640	3320	1380	416	164	220
17	132	169	20100	77400	13500	11800	9990	3940	1340	404	156	180
18	131	168	13100	41200	34200	10900	11900	12900	1280	355	153	191
19	131	171	10300	78500	60300	10300	12400	17000	1200	331	150	186
20	128	176	8270	50300	85600	9640	16500	11100	1140	362	144	180
21	126	225	6840	59300	82700	9200	12500	8740	1080	360	142	181
22	129	228	5970	43300	63900	9510	11400	23000	1020	352	148	166
23	127	208	5540	30300	39900	8730	10400	16200	981	345	146	159
24	124	195	5030	61700	37600	7880	15800	11100	943	334	146	149
25	123	203	4450	87900	30500	7150	21900	8830	893	316	143	141
26	125	324	4030	51000	23500	6230	14600	7520	876	307	142	138
27	126	335	3770	63700	19200	5890	11900	6450	938	298	138	133
28	132	297	3770	79300	20700	7750	10100	5700	963	291	135	126
29	133	265	8150	44800	39200	9780	8800	5100	951	280	135	120
30	135	243	65100	31800	---	7270	7840	4620	897	270	134	117
31	136	---	40200	30100	---	6350	---	4240	---	262	131	---
TOTAL	4014	5708	519903	992320	860900	561780	297360	213460	50982	14407	5356	4129
MEAN	129	190	16770	32010	29690	18120	9912	6886	1699	465	173	138
MAX	137	335	81100	87900	85600	54000	21900	23000	3900	845	249	242
MIN	123	129	352	4340	9170	5890	4370	2920	876	262	131	62
AC-FT	7960	11320	1031000	1968000	1708000	1114000	589800	423400	101100	28580	10620	8190

EEL RIVER BASIN

11477000 EEL RIVER AT SCOTIA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	686	5140	13660	19630	19540	14340	8908	3687	1266	339	150	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1911 - 1996			
ANNUAL TOTAL	5337511				3530319							
ANNUAL MEAN	14620				9646				7237			
HIGHEST ANNUAL MEAN									17300			
LOWEST ANNUAL MEAN									563			
HIGHEST DAILY MEAN	284000				87900				648000			
LOWEST DAILY MEAN	123				62				12			
ANNUAL SEVEN-DAY MINIMUM	125				84				14			
INSTANTANEOUS PEAK FLOW					155000				752000			
INSTANTANEOUS PEAK STAGE					37.09				72.00			
ANNUAL RUNOFF (AC-FT)	10590000				7002000				5243000			
10 PERCENT EXCEEDS	39500				30200				17700			
50 PERCENT EXCEEDS	2660				2220				1380			
90 PERCENT EXCEEDS	134				131				103			

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.--Records of fishery release normally are computed only during periods of diversion to power house. Flow over spillway bypasses this station. See schematic diagram of Eel River basin.

COOPERATION.--Records provided by North Coast Hydroelectric, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	.46	.40	.38	.27	.40	---	---	---
2	---	---	---	---	.46	.40	.35	.27	---	---	---	---
3	---	---	---	.40	.46	.40	.35	.27	---	---	---	---
4	---	---	---	.40	.54	.40	.33	.27	---	---	---	---
5	---	---	---	.40	.54	.38	.33	.27	---	---	---	---
6	---	---	---	.40	.54	.42	.33	.29	---	---	---	---
7	---	---	---	.40	.51	.42	.33	.31	---	---	---	---
8	---	---	---	.35	.51	.42	.33	.31	---	---	---	---
9	---	---	---	.35	.49	.42	.33	.33	---	---	---	---
10	---	---	.44	.35	.49	.44	.33	---	---	---	---	---
11	---	---	.44	.33	.46	.44	.33	---	---	---	---	---
12	---	---	---	.33	.42	.42	.33	---	---	---	---	---
13	---	---	---	.33	.40	.42	.33	---	---	---	---	---
14	---	---	---	.33	.40	.38	.33	---	---	---	---	---
15	---	---	---	.35	.38	.42	.33	---	---	---	---	---
16	---	---	---	.40	.38	.40	.33	.42	---	---	---	---
17	---	---	.49	.38	.42	.40	.33	.42	---	---	---	---
18	---	---	.46	.38	.44	.40	.33	.44	---	---	---	---
19	---	---	.46	.38	.44	.40	.33	.44	---	---	---	---
20	---	---	.44	.38	.42	.40	.33	.42	---	---	---	---
21	---	---	.44	.35	.31	.40	.35	.42	---	---	---	---
22	---	---	.44	.35	.38	.40	.35	.40	---	---	---	---
23	---	---	.40	.35	.42	.42	.38	.40	---	---	---	---
24	---	---	.33	.40	.42	.38	.38	.40	---	---	---	---
25	---	---	.33	.38	.42	.35	.33	.38	---	---	---	---
26	---	---	---	.38	.40	.35	.33	.38	---	---	---	---
27	---	---	---	.42	.40	.35	.31	.38	---	---	---	---
28	---	---	---	.42	.40	.38	.29	.38	---	---	---	---
29	---	---	---	.46	.33	.35	.29	.38	---	---	---	---
30	---	---	---	.46	---	.33	.27	.38	---	---	---	---
31	---	---	.42	.49	---	.43	---	.38	---	---	---	---
TOTAL	---	---	---	---	12.64	12.32	9.97	---	---	---	---	---
MEAN	---	---	---	---	.44	.40	.33	---	---	---	---	---
MAX	---	---	---	---	.54	.44	.38	---	---	---	---	---
MIN	---	---	---	---	.31	.33	.27	---	---	---	---	---
AC-FT	---	---	---	---	25	24	20	---	---	---	---	---

11477450 SULPHUR CREEK BELOW DIVERSION DAM, NEAR DINSMORE, CA

LOCATION.--Lat 40°27'50", long 123°36'15", in NW 1/4 SW 1/4 sec.15, T.1 N., R.5 E., Humboldt County, Hydrologic Unit 18010105, on right bank 2 mi south-southeast of Dinsmore.

DRAINAGE AREA.--1.06 mi².

PERIOD OF RECORD.--October 1990 to current year.

GAGE.--Water-stage recorder and 90° V-notch weir. Elevation of gage is 3,660 ft above sea level, from topographic map.

REMARKS.--Records of fishery release normally are computed only during periods of diversion to power house. Flow over spillway bypasses this station. See Schematic diagram of Eel River basin.

COOPERATION.--Records provided by North Coast Hydroelectric, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	.38	.38	.38	.51	.49	.38	---	---	---
2	---	---	---	.40	.33	.44	.40	.46	---	---	---	---
3	---	---	---	.40	.33	.51	.33	.46	---	---	---	---
4	---	---	---	.40	.51	.42	.31	.46	---	---	---	---
5	---	---	---	.40	.63	---	.31	.46	---	---	---	---
6	---	---	---	.40	.54	---	.29	.49	---	---	---	---
7	---	---	---	.38	.44	---	.29	.44	---	---	---	---
8	---	---	---	.33	.40	---	.54	.44	---	---	---	---
9	---	---	---	.40	.40	---	.57	.46	---	---	---	---
10	---	---	.31	.33	.40	---	.54	---	---	---	---	---
11	---	---	.31	.29	.35	.38	.57	---	---	---	---	---
12	---	---	---	.29	.44	.35	.57	---	---	---	---	---
13	---	---	---	.27	.49	.33	.57	---	---	---	---	---
14	---	---	---	.27	.49	.29	.57	---	---	---	---	---
15	---	---	---	.35	.49	.49	.57	---	---	---	---	---
16	---	---	---	.54	.49	.63	.57	.44	---	---	---	---
17	---	---	.42	---	.43	.54	.49	.60	---	---	---	---
18	---	---	.42	---	---	.49	.46	.69	---	---	---	---
19	---	---	.35	---	1.15	.44	.46	.60	---	---	---	---
20	---	---	.33	---	.95	.44	.46	.54	---	---	---	---
21	---	---	.35	---	.63	.44	.54	.54	---	---	---	---
22	---	---	.38	.54	.42	.44	.57	.57	---	---	---	---
23	---	---	.38	.66	.29	.49	.57	.49	---	---	---	---
24	---	---	.38	.51	.26	.44	.57	.46	---	---	---	---
25	---	---	---	.46	.35	.46	.46	.46	---	---	---	---
26	---	---	---	.46	.38	.51	.44	.46	---	---	---	---
27	---	---	---	---	.44	.51	.40	.46	---	---	---	---
28	---	---	---	---	.44	.57	.38	.42	---	---	---	---
29	---	---	---	.51	.40	.44	.38	.40	---	---	---	---
30	---	---	---	.46	---	.44	.49	.38	---	---	---	---
31	---	---	.42	.38	---	.49	---	.38	---	---	---	---
TOTAL	---	---	---	---	---	---	14.18	---	---	---	---	---
MEAN	---	---	---	---	---	---	.47	---	---	---	---	---
MAX	---	---	---	---	---	---	.57	---	---	---	---	---
MIN	---	---	---	---	---	---	.29	---	---	---	---	---
AC-FT	---	---	---	---	---	---	28	---	---	---	---	---

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0730	36,500	18.06	Dec. 30	0015	20,000	12.57

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	12	242	2020	2040	2580	2670	753	348	81	16	11
2	16	12	289	1410	1670	2230	1730	698	319	76	16	11
3	15	12	115	e1240	1470	2520	1440	640	292	70	16	11
4	14	12	276	e980	3080	4240	1260	588	269	66	16	9.8
5	14	12	642	893	4100	5380	1110	543	251	66	16	9.8
6	13	12	650	807	2820	3000	1010	501	231	64	16	9.7
7	12	12	400	744	2150	2220	946	469	217	61	16	9.8
8	12	12	256	694	1840	1970	886	438	203	56	16	9.8
9	12	13	177	974	1670	1890	836	412	189	54	16	9.8
10	12	14	203	1060	1500	2040	839	385	179	52	15	9.8
11	13	14	1240	849	1350	3820	753	361	167	50	14	10
12	14	14	20300	765	1220	2950	774	341	160	47	13	10
13	15	14	8440	705	1120	2040	718	324	151	44	12	10
14	15	14	4370	666	1050	1700	649	328	142	42	12	10
15	14	14	10500	1710	978	1500	607	331	137	38	11	18
16	14	13	3550	4810	987	1380	1540	319	132	36	11	24
17	15	14	1800	3570	2310	1270	1580	914	126	35	11	23
18	15	15	1260	3820	4020	1230	1450	1990	118	32	11	18
19	15	17	1040	5550	7810	1180	1610	1400	114	31	11	16
20	15	19	910	4770	7930	1090	1580	952	108	30	11	16
21	15	19	802	5110	7730	993	1460	1370	106	29	11	17
22	14	20	740	2750	4040	941	1440	1510	102	28	11	17
23	13	20	687	2790	3020	939	1280	1040	99	25	12	16
24	13	20	631	7460	2920	857	4510	867	98	24	11	15
25	13	24	584	4930	2070	785	2120	733	98	22	11	14
26	13	61	548	2750	1690	728	1450	643	98	22	11	13
27	13	61	536	10000	1510	1000	1220	574	100	20	11	13
28	13	45	685	6160	2080	2390	1060	511	100	20	11	12
29	13	37	6340	3410	3490	1440	934	459	93	19	11	11
30	12	33	10700	2980	---	1200	825	419	86	18	11	11
31	12	---	3700	2790	---	1080	---	381	---	17	11	---
TOTAL	425	611	82593	89167	79665	58583	40287	21194	4833	1275	398	395.5
MEAN	13.7	20.4	2664	2876	2747	1890	1343	684	161	41.1	12.8	13.2
MAX	16	61	20300	10000	7930	5380	4510	1990	348	81	16	24
MIN	12	12	115	666	978	728	607	319	86	17	11	9.7
AC-FT	843	1210	163800	176900	158000	116200	79910	42040	9590	2530	789	784

e Estimated.

11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	155	900	1811	2234	1999	1643	935	447	142	36.3	17.2	20.4
MAX	1464	5476	6046	6608	6232	5015	3255	1139	821	98.0	82.4	144
(WY)	1963	1974	1956	1995	1958	1995	1963	1953	1993	1953	1983	1986
MIN	7.20	16.8	18.8	103	156	172	131	109	40.4	12.2	5.89	5.72
(WY)	1988	1960	1977	1977	1977	1988	1977	1985	1987	1977	1977	1992

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1951 - 1996			
ANNUAL TOTAL	587659				379426.5							
ANNUAL MEAN	1610				1037				857			
HIGHEST ANNUAL MEAN									1610			
LOWEST ANNUAL MEAN									95.7			
HIGHEST DAILY MEAN	29200				20300				33900			
LOWEST DAILY MEAN	11				9.7				4.4			
ANNUAL SEVEN-DAY MINIMUM	12				9.8				4.6			
INSTANTANEOUS PEAK FLOW					36500				48700			
INSTANTANEOUS PEAK STAGE					18.06				24.00			
ANNUAL RUNOFF (AC-FT)	1166000				752600				621000			
10 PERCENT EXCEEDS	4420				2850				2130			
50 PERCENT EXCEEDS	242				253				178			
90 PERCENT EXCEEDS	13				12				12			

11479560 EEL RIVER AT FERNBRIDGE, CA

LOCATION.--Lat 40°36'57", long 124°12'06", in SW 1/4 NE 1/4 sec.29, T.3 N., R.1 W, Humboldt County, Hydrologic Unit 18010105, on right bank downstream from bridge on county road 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. See schematic diagram of Eel River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 25.31 ft, Jan. 9, 1995.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.15	1.08	1.08	1.07	1.51	1.20	8.46	6.83	8.23	7.34	10.62	8.76
2	1.10	1.05	1.08	1.08	1.84	1.51	6.83	5.95	7.34	6.70	8.76	7.79
3	1.08	1.06	1.09	1.08	1.82	1.72	5.95	5.36	6.70	6.20	7.80	7.37
4	1.07	1.06	1.09	1.05	1.92	1.75	5.36	4.94	7.47	6.14	8.84	7.32
5	1.07	1.02	1.07	1.03	2.82	1.92	4.94	4.61	10.43	7.47	11.94	8.84
6	1.06	.99	1.07	1.03	3.00	2.82	4.61	4.30	10.26	8.42	11.22	8.98
7	1.07	1.04	1.10	1.06	2.99	2.88	4.30	4.03	8.42	7.47	8.98	7.81
8	1.07	1.02	1.14	1.10	2.88	2.42	4.03	3.84	7.47	6.87	7.81	7.11
9	1.06	1.00	1.14	1.14	2.42	2.17	4.67	3.80	6.87	6.43	7.13	6.73
10	1.06	1.04	1.14	1.14	2.20	2.02	4.79	4.54	6.43	6.03	6.75	6.54
11	1.08	1.05	1.14	1.13	3.55	2.20	4.54	4.15	6.03	5.67	8.93	6.72
12	1.09	1.07	1.13	1.08	17.50	3.55	4.15	3.84	5.67	5.37	9.28	8.41
13	1.09	1.06	1.12	1.08	17.11	10.18	3.84	3.65	5.37	5.15	8.41	7.38
14	1.09	1.04	1.11	1.08	10.18	7.70	3.65	3.51	5.15	4.98	7.38	6.67
15	1.08	1.07	1.11	1.11	13.99	8.67	6.31	3.51	4.98	4.77	6.67	6.15
16	1.08	1.06	1.11	1.09	13.27	8.28	12.69	6.31	4.91	4.76	6.15	5.58
17	1.08	1.05	1.11	1.10	8.28	6.51	14.11	10.13	7.00	4.91	5.58	5.31
18	1.10	1.02	1.11	1.10	6.51	5.63	11.46	8.53	9.42	7.00	5.31	5.16
19	1.10	1.04	1.11	1.10	5.63	5.09	13.62	11.46	13.18	9.35	5.21	5.02
20	1.08	1.04	1.11	1.10	5.09	4.61	11.89	10.01	14.00	13.01	5.04	4.85
21	1.07	1.01	1.15	1.11	4.61	4.23	12.05	10.69	13.79	12.96	4.89	4.72
22	1.07	1.04	1.17	1.15	4.23	3.99	11.11	8.93	13.47	10.65	4.93	4.84
23	1.06	1.03	1.51	1.17	3.99	3.81	9.05	8.54	10.65	9.24	4.84	4.65
24	1.06	1.00	1.35	1.16	3.81	3.60	13.61	9.05	9.57	9.20	4.65	4.44
25	1.05	1.01	1.30	1.11	3.60	3.41	14.04	12.31	9.20	8.04	4.44	4.27
26	1.04	1.01	1.28	1.19	3.41	3.26	12.47	9.49	8.04	7.21	4.27	4.02
27	1.04	1.04	1.35	1.28	3.26	3.18	14.63	9.46	7.21	6.66	4.28	3.96
28	1.06	1.04	1.35	1.32	3.29	3.17	14.59	11.59	8.06	6.65	5.13	4.28
29	1.07	1.03	1.32	1.29	10.19	3.29	11.59	9.19	10.62	8.06	5.45	4.80
30	1.07	.98	1.29	1.26	13.71	10.19	9.19	8.49	---	---	4.80	4.38
31	1.07	1.04	---	---	12.36	8.46	8.50	8.23	---	---	4.38	4.18
MONTH	1.15	.98	1.51	1.03	17.50	1.20	14.63	3.51	14.00	4.76	11.94	3.96

11479560 EEL RIVER AT FERNBRIDGE, CA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[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, on left bank on downstream side of Zenia Road Bridge, 500 ft downstream from unnamed creek, 0.4 mile downstream from Tompkins Creek, and 6.1 mi southwest of Forest Glen.

DRAINAGE AREA.--93.8 mi².

PERIOD OF RECORD.--June 1980 to current year. Discharge measurements only September to December 1971, July 1972, June to September 1977.

REVISED RECORDS.--WDR CA-80-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,700 ft above sea level, from topographic map. June 28 to Sept. 30, 1990, nonrecording gage 400 ft upstream at different datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s, Feb. 17, 1986, gage height, 11.39 ft in gage, 12.94 ft from crest-stage gage, from rating curve extended above 5,000 ft³/s, maximum gage height 13.10 ft, Jan. 20, 1993; no flow at times each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0700	7,470	10.32	Jan. 27	1730	4,710	8.48
Jan. 16	1530	4,040	7.99	Feb. 19	1845	3,940	7.91

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.81	462	858	607	567	207	127	20	2.1	.00
2	.00	.00	.36	347	681	636	497	183	118	18	2.1	.00
3	.00	.00	.20	289	567	787	388	165	108	16	1.8	.00
4	.00	.00	11	242	1120	1480	320	151	99	14	1.7	.00
5	.00	.00	96	210	1580	1880	271	138	90	13	1.6	.00
6	.00	.00	122	185	1100	1130	237	127	85	12	1.6	.00
7	.00	.00	88	165	887	878	212	117	79	12	1.5	.00
8	.00	.00	57	151	728	798	191	108	73	11	1.4	.00
9	.00	.00	40	214	628	746	170	102	68	10	1.4	.00
10	.00	.00	68	251	531	730	155	93	62	9.7	1.1	.00
11	.00	.00	321	205	456	1580	142	87	55	9.1	1.2	.00
12	.00	.00	4350	182	357	1300	135	81	52	8.6	1.1	.00
13	.00	.00	1770	164	282	903	124	75	48	7.7	1.0	.00
14	.00	.00	775	152	250	664	115	84	45	7.7	.81	.00
15	.00	.00	3190	628	226	517	111	81	42	6.8	.62	.00
16	.00	.00	854	2380	211	425	270	89	40	6.4	.59	.00
17	.00	.00	465	1410	450	359	291	271	38	5.4	.49	.00
18	.00	.00	327	1900	984	314	269	544	36	4.9	.47	.00
19	.00	.00	251	2250	2900	277	331	487	34	4.9	.42	.00
20	.00	.00	205	1780	2970	246	442	320	32	4.9	.37	.00
21	.00	.00	172	1690	2820	218	442	737	30	4.6	.36	.00
22	.00	.00	149	893	1520	202	464	728	28	4.5	.24	.00
23	.00	.00	130	700	1120	189	403	484	27	4.2	.17	.00
24	.00	.00	116	2570	1050	168	1220	368	26	3.9	.10	.00
25	.00	.00	103	2110	808	152	757	292	26	3.9	.07	.00
26	.00	.00	93	982	645	139	541	246	26	3.5	.04	.00
27	.00	.00	94	3830	547	190	418	218	28	3.1	.02	.00
28	.00	.00	125	2330	497	468	337	191	28	3.3	.00	.00
29	.00	.00	821	1180	577	303	277	177	25	3.3	.00	.00
30	.00	.00	1900	1170	---	249	237	155	22	2.9	.00	.00
31	.00	---	739	1110	---	224	---	139	---	2.3	.00	---
TOTAL	0.00	0.00	17433.37	32132	27350	18759	10334	7245	1597	241.6	24.37	0.00
MEAN	.000	.000	562	1037	943	605	344	234	53.2	7.79	.79	.000
MAX	.00	.00	4350	3830	2970	1880	1220	737	127	20	2.1	.00
MIN	.00	.00	.20	151	211	139	111	75	22	2.3	.00	.00
AC-FT	.00	.00	34580	63730	54250	37210	20500	14370	3170	479	48	.00

11480390 MAD RIVER ABOVE RUTH RESERVOIR, NEAR FOREST GLEN, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.00	178	383	533	569	527	274	119	49.0	7.71	1.24	1.12
MAX	57.6	741	1198	1887	2136	1299	878	301	229	25.0	4.87	12.2
(WY)	1990	1985	1982	1985	1986	1985	1982	1985	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1980 - 1996			
ANNUAL TOTAL	163517.18				115116.34							
ANNUAL MEAN	448				315				219			
HIGHEST ANNUAL MEAN									419			
LOWEST ANNUAL MEAN									61.4			
HIGHEST DAILY MEAN	7980				4350				9660			
LOWEST DAILY MEAN	.00				.00				.00			
ANNUAL SEVEN-DAY MINIMUM	.00				.00				.00			
INSTANTANEOUS PEAK FLOW					7470				15000			
INSTANTANEOUS PEAK STAGE					10.32				13.10			
ANNUAL RUNOFF (AC-FT)	324300				228300				158800			
10 PERCENT EXCEEDS	1070				889				580			
50 PERCENT EXCEEDS	55				74				30			
90 PERCENT EXCEEDS	.00				.00				.00			

11480400 RUTH RESERVOIR NEAR FOREST GLEN, CA

LOCATION.--Lat 40°22'08", long 123°25'56", in NW 1/4 NW 1/4 sec.19, T.1 S., R.7 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, near center of Robert W. Matthews Dam on Mad River, 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, 54,300 acre-ft, Jan. 27, elevation, 2,659.25 ft; minimum contents, 27,100 acre-ft, Dec. 4, elevation, 2632.20 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 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e36300	31700	27400	49800	50500	49700	49300	49200	47800	47200	44300	39500
2	e36200	31600	27300	49300	50100	49800	49300	49100	47700	47100	44200	39300
3	36100	31400	27200	49000	49900	50200	49200	48900	47700	47100	44000	39100
4	35900	31300	27100	48700	51000	51700	49000	48700	47700	47000	43900	39000
5	35800	31100	27200	48500	51400	51900	48800	48600	47700	46900	43800	38800
6	35600	31000	27300	48400	50900	51100	48700	48500	47800	46900	43700	38600
7	35500	30800	27300	48200	50400	50600	48500	48300	47800	46800	43600	38400
8	35300	30700	27300	48000	50000	50300	48500	48100	47800	46700	43500	38200
9	35200	30500	27300	48200	49800	50100	48300	47900	47800	46700	43300	38100
10	35000	30400	27500	48200	49500	50200	48200	47700	47700	46600	43100	37900
11	34900	30200	28600	48200	49300	51400	48100	47500	47700	46500	43000	37700
12	34700	30100	39700	48100	49100	51000	48000	47200	47700	46400	42900	37600
13	34600	29900	44300	48000	49000	50600	47900	47200	47700	46400	42700	37400
14	34400	29800	47000	48000	48800	50100	47700	47300	47700	46300	42600	37300
15	34300	29600	51900	49300	48700	49700	47800	47200	47700	46200	42400	37100
16	34100	29500	51000	52600	48600	49400	48300	47000	47600	46000	42200	37000
17	34000	29400	50200	51600	49300	49200	48500	47600	47600	45900	42000	36800
18	33800	29200	49500	52800	50800	49100	48600	48500	47500	45800	41900	36600
19	33700	29100	49000	52400	53400	48900	48800	48900	47500	45700	41700	36500
20	33500	28900	48700	52300	53300	48800	49000	48900	47400	45600	41500	36300
21	33400	28800	48400	51800	53000	48700	49200	49700	47400	45600	41300	36100
22	33200	28600	48200	50900	51700	48600	49200	49800	47400	45500	41200	36000
23	33100	28500	48000	50600	51200	48500	49300	49500	47300	45400	41000	35800
24	32900	28300	47700	52700	50800	48400	50500	49200	47300	45300	40900	35600
25	32800	28200	47500	52200	50300	48300	50200	49000	47300	45200	40700	35400
26	32600	28100	47200	51400	50000	48200	49700	48700	47300	45100	40500	35300
27	32500	27900	46900	54300	49700	48300	49400	48600	47300	44900	40300	35100
28	32300	27800	46800	52700	49600	48800	49200	48400	47300	44800	40200	35000
29	32200	27600	49000	51300	49700	48800	49200	48200	47300	44700	40000	34800
30	32000	27500	51100	51200	---	48700	49200	48200	47300	44600	39800	34600
31	31900	---	50500	50900	---	48700	---	48000	---	44500	39700	---
MAX	36300	31700	51900	54300	53400	51900	50500	49800	47800	47200	44300	39500
MIN	31900	27500	27100	48000	48600	48200	47700	47000	47300	44500	39700	34600
a	2637.80	2632.71	2656.13	2656.52	2655.47	2654.56	2655.03	2654.00	2653.32	2650.74	2646.13	2640.85
b	-4600	-4400	+23000	+400	-1200	-1000	+500	-1200	-700	-2800	-4800	-5100

CAL YR 1995 MAX 58100 MIN 27100 b +9300
WTR YR 1996 MAX 54300 MIN 27100 b -1900

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

11480410 MAD RIVER BELOW RUTH RESERVOIR, NEAR FOREST GLEN, CA

LOCATION.--Lat 40°22'16", long 123°26'06", in SW 1/4 SW 1/4 sec.18, T.1 S., R.7 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, on left bank 1,200 ft downstream from Robert W. Matthews Dam, and 5.8 mi west of Forest Glen.

DRAINAGE AREA.--121 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,560 ft above sea level, from topographic map.

REMARKS.--Records good. Flow regulated by Ruth Reservoir (station 11480400) 1,200 ft upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft³/s, Feb. 17, 1986, gage height, 17.61 ft, from floodmarks, from rating curve extended above 8,800 ft³/s; minimum daily, 5.6 ft³/s, Mar. 2, 1991.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	78	76	e1050	e1530	738	434	296	243	56	64	88
2	74	78	74	e745	1050	766	558	276	243	54	64	88
3	72	77	74	e570	853	872	524	301	164	54	64	88
4	74	77	74	e452	1100	1380	466	302	77	54	64	88
5	74	77	73	e371	1880	2530	415	253	81	54	64	88
6	74	77	73	296	1710	1970	369	222	83	54	63	88
7	73	77	73	259	1300	1400	334	241	98	54	64	88
8	74	77	73	237	1030	1130	299	258	94	55	64	88
9	74	75	73	233	847	1010	280	241	83	54	67	88
10	73	76	69	254	709	954	260	242	83	56	77	88
11	73	77	54	257	598	1430	248	242	82	57	77	88
12	74	77	46	246	506	1810	241	242	83	57	78	88
13	74	77	35	235	407	1400	238	139	83	56	77	88
14	74	77	33	231	414	1050	236	62	72	56	78	88
15	74	77	1450	347	368	821	149	174	64	57	84	84
16	78	77	2010	1710	341	670	183	238	64	56	88	88
17	79	76	1180	2860	415	563	290	240	65	56	87	88
18	78	75	782	2360	845	489	326	259	62	56	87	87
19	78	76	582	3550	2740	437	357	402	58	55	87	88
20	79	76	406	2720	4420	394	439	430	58	55	86	88
21	79	77	318	2870	4220	356	481	566	57	55	85	88
22	78	77	263	2010	2910	327	523	831	53	57	87	87
23	79	77	235	1400	1870	306	514	731	53	56	88	87
24	78	76	228	2280	1590	284	971	592	53	61	88	88
25	78	76	229	e3390	1210	264	1090	486	54	65	88	88
26	79	75	229	e2340	957	247	861	415	54	65	88	88
27	79	76	225	e4400	790	244	677	355	54	65	88	88
28	78	75	214	e3410	719	330	547	314	54	65	88	88
29	78	75	188	e2590	707	374	338	282	54	65	88	88
30	78	75	e1380	e1920	---	359	303	261	53	64	88	88
31	78	---	e1720	e1880	---	338	---	246	---	64	88	---
TOTAL	2358	2293	12539	47473	38036	25243	12951	10139	2479	1788	2448	2633
MEAN	76.1	76.4	404	1531	1312	814	432	327	82.6	57.7	79.0	87.8
MAX	79	78	2010	4400	4420	2530	1090	831	243	65	88	88
MIN	72	75	33	231	341	244	149	62	53	54	63	84
AC-FT	4680	4550	24870	94160	75440	50070	25690	20110	4920	3550	4860	5220

e Estimated.

11480410 MAD RIVER BELOW RUTH RESERVOIR, NEAR FOREST GLEN, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	88.4	160	397	629	762	729	379	164	92.0	66.1	81.9	88.5
MAX	118	607	1738	2490	2993	1990	1426	449	408	89.3	103	101
(WY)	1984	1985	1982	1995	1986	1995	1982	1995	1993	1987	1990	1986
MIN	64.4	24.5	8.35	8.02	7.61	24.4	28.0	47.8	38.2	42.5	45.1	57.0
(WY)	1982	1993	1987	1992	1991	1988	1988	1987	1991	1982	1993	1993

SUMMARY STATISTICS	FOR 1985 CALENDAR YEAR				FOR 1986 WATER YEAR				WATER YEARS 1981 - 1996			
ANNUAL TOTAL	224223				160380							
ANNUAL MEAN	614				438				301			
HIGHEST ANNUAL MEAN									591			
LOWEST ANNUAL MEAN									101			
HIGHEST DAILY MEAN	11300				Jan 9				4420			
LOWEST DAILY MEAN	33				Dec 14				Feb 20			
ANNUAL SEVEN-DAY MINIMUM	44				Jul 7				13400			
INSTANTANEOUS PEAK FLOW									5.6			
INSTANTANEOUS PEAK STAGE									6.0			
ANNUAL RUNOFF (AC-FT)	444700				318100				17800			
10 PERCENT EXCEEDS	1580				1320				17.61			
50 PERCENT EXCEEDS	77				88				218000			
90 PERCENT EXCEEDS	46				57				720			
									91			
									38			

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	55	821	5630	4490	4800	2670	1350	586	116	42	50
2	56	57	524	3850	3720	3990	2640	1090	548	111	42	49
3	54	58	264	2870	3080	4030	2290	981	516	106	41	49
4	55	59	483	2300	3680	5320	1850	937	463	101	41	47
5	55	59	1270	1930	5050	10600	1560	894	334	99	41	46
6	53	57	1560	1630	4570	7300	1380	808	305	95	39	45
7	52	57	864	1390	3880	5410	1240	737	293	91	41	46
8	52	62	553	1270	3300	4610	1120	687	285	86	33	49
9	53	74	381	2170	3020	4250	1090	677	285	85	33	49
10	52	71	310	2770	2590	4120	1140	630	256	88	34	49
11	61	67	697	1840	2260	5280	1010	595	248	87	33	47
12	65	63	10700	1520	2000	5160	1130	575	242	88	39	48
13	60	63	8340	1460	1780	4330	1120	557	234	86	39	48
14	59	63	4540	1440	1550	3660	982	553	228	82	40	46
15	57	63	11000	2020	1410	3020	906	394	217	76	38	78
16	55	64	6640	5680	1320	2530	1220	471	196	70	37	102
17	56	65	3900	7730	1980	2200	2000	672	184	68	44	87
18	57	69	2640	6380	3240	2030	2180	1520	176	64	44	80
19	55	69	1940	11700	6130	1830	2850	1820	168	61	44	73
20	53	65	1550	10500	10400	1640	3010	1330	157	61	43	68
21	52	65	1220	11400	13000	1510	2590	1720	153	60	46	64
22	54	65	1020	7730	9160	1430	2800	3010	148	57	46	64
23	54	65	863	8300	6780	1450	2640	2270	142	55	47	63
24	53	65	762	14700	7320	1310	6900	1740	149	54	47	61
25	53	78	681	11800	5170	1180	5180	1380	155	53	46	64
26	54	139	605	7690	3970	1050	3780	1140	143	53	46	62
27	57	132	576	14200	3260	1440	2870	987	137	57	48	62
28	55	106	620	13800	3730	4310	2250	860	139	54	47	60
29	56	95	9640	8550	6170	2760	1920	768	131	51	49	59
30	55	97	33500	6180	---	2120	1570	694	123	44	49	60
31	55	---	10900	5520	---	1840	---	635	---	43	50	---
TOTAL	1716	2167	119364	185950	128010	106510	65888	32482	7341	2302	1309	1775
MEAN	55.4	72.2	3850	5998	4414	3436	2196	1048	245	74.3	42.2	59.2
MAX	65	139	33500	14700	13000	10600	6900	3010	586	116	50	102
MIN	52	55	264	1270	1320	1050	906	394	123	43	33	45
AC-FT	3400	4300	236800	368800	253900	211300	130700	64430	14560	4570	2600	3520

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
LOWEST ANNUAL MEAN	943
HIGHEST DAILY MEAN	63100
LOWEST DAILY MEAN	17
ANNUAL SEVEN-DAY MINIMUM	17
INSTANTANEOUS PEAK FLOW	77800
INSTANTANEOUS PEAK STAGE	27.30
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 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	212	1301	2675	3425	2888	2899	1781	670	231	57.4	44.5	65.7
MAX	2255	6671	10400	8847	9796	7150	6253	1654	1721	152	123	392
(WY)	1963	1974	1965	1970	1986	1975	1963	1995	1993	1964	1983	1986
MIN	21.3	52.6	29.8	135	138	194	165	122	31.2	8.40	7.04	15.0
(WY)	1993	1994	1977	1977	1977	1988	1988	1968	1974	1977	1977	1992

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1963 - 1996

ANNUAL TOTAL	829565	654814	
ANNUAL MEAN	2273	1789	1348
HIGHEST ANNUAL MEAN			2478
LOWEST ANNUAL MEAN			151
HIGHEST DAILY MEAN	33500	Dec 30	33500
LOWEST DAILY MEAN	32	Sep 11	33
ANNUAL SEVEN-DAY MINIMUM	33	Sep 6	36
INSTANTANEOUS PEAK FLOW			54700
INSTANTANEOUS PEAK STAGE			24.17
ANNUAL RUNOFF (AC-FT)	1645000	1299000	976700
10 PERCENT EXCEEDS	6780	5290	3730
50 PERCENT EXCEEDS	524	428	265
90 PERCENT EXCEEDS	47	48	30

LITTLE RIVER BASIN

11481200 LITTLE RIVER NEAR TRINIDAD, CA

LOCATION.--Lat 41°00'40", long 124°04'50", in NE 1/4 sec.8, T.7 N., R.1 E., Humboldt County, Hydrologic Unit 18010102, on right bank 0.5 mi upstream from Coon Creek, 4.7 mi southeast of Trinidad, and 9.1 mi north of Arcata.

DRAINAGE AREA.--40.5 mi².

PERIOD OF RECORD.--October 1955 to current year. Prior to October 1971, published as "at Crannell."

REVISED RECORDS.--WSP 2129: 1956-60. WDR CA-78-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 17.62 ft above sea level.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,830 ft³/s, Mar. 18, 1975, gage height, 14.19 ft, from rating curve extended above 3,100 ft³/s on basis of slope-area measurement at gage height 14.08 ft; minimum daily, 1.8 ft³/s, Sept. 25-29, 1991.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 17-18, 1953, reached a stage of 15.7 ft, observed by an employee of Hammond Lumber Co.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	2230	8,850	13.39	Dec. 30	unknown	7,800	12.51

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	4.2	400	e700	289	550	290	110	53	22	10	8.0
2	6.6	4.2	80	e480	228	367	221	99	51	21	9.9	8.0
3	6.2	4.2	39	e340	195	291	170	91	49	21	9.9	8.0
4	5.9	4.2	91	e270	264	420	137	84	47	20	9.7	7.6
5	5.7	4.2	572	215	316	873	119	78	45	19	10	6.7
6	5.7	4.2	463	188	229	496	105	74	43	18	11	6.2
7	5.7	4.2	177	155	190	349	97	71	41	17	11	6.0
8	5.7	4.7	100	153	164	268	89	67	40	17	11	6.0
9	5.7	13	70	407	225	223	93	64	39	17	11	6.0
10	5.7	9.8	60	356	181	199	89	60	38	16	11	6.0
11	9.0	6.5	81	230	150	259	88	58	37	15	11	6.0
12	12	5.2	1480	186	127	224	125	54	36	15	10	6.0
13	7.9	5.2	1050	158	109	186	107	54	35	15	10	6.5
14	6.0	5.2	1870	144	95	158	92	67	34	15	10	6.7
15	5.7	5.2	2450	342	86	137	84	67	33	14	9.9	49
16	5.7	4.8	710	501	82	123	130	71	33	14	9.9	20
17	5.5	5.2	418	461	188	110	163	121	31	14	9.9	12
18	5.2	11	294	385	244	102	211	226	29	14	9.9	9.6
19	5.2	11	226	668	320	93	274	134	28	14	9.9	8.4
20	5.1	7.9	206	723	520	87	284	92	28	13	9.9	7.7
21	4.7	7.4	e180	e969	1230	82	235	186	27	12	8.7	7.3
22	4.7	7.6	e155	e688	729	84	210	204	26	e12	8.6	7.2
23	4.7	8.0	e140	e1080	636	95	271	139	26	e12	8.4	6.7
24	4.7	8.0	e120	e1790	737	79	e1410	106	32	e11	8.0	6.0
25	4.7	25	e110	e1080	467	73	453	88	30	e11	8.0	6.0
26	4.7	44	e98	e636	320	69	279	77	27	e11	8.0	6.0
27	4.7	20	e94	e1290	248	163	211	72	26	e11	8.0	6.0
28	4.6	16	e95	e948	562	319	172	69	25	e11	8.0	6.0
29	4.2	13	e920	579	1120	177	143	64	23	e10	8.0	6.0
30	4.2	28	e2400	485	---	133	124	60	23	e10	8.0	6.0
31	4.2	---	e1300	388	---	143	---	57	---	e10	8.0	---
TOTAL	177.6	301.1	16449	16995	10251	6932	6476	2864	1035	452	294.6	263.6
MEAN	5.73	10.0	531	548	353	224	216	92.4	34.5	14.6	9.50	8.79
MAX	12	44	2450	1790	1230	873	1410	226	53	22	11	49
MIN	4.2	4.2	39	144	82	69	84	54	23	10	8.0	6.0
AC-FT	352	597	32630	33710	20330	13750	12850	5680	2050	897	584	523

e Estimated

11481200 LITTLE RIVER NEAR TRINIDAD, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1996, BY WATER YEAR (WY)

MEAN	28.0	161	307	334	285	263	141	74.7	33.4	13.1	8.27	7.93
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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1956 - 1996

ANNUAL TOTAL	71029.9		62490.9									
ANNUAL MEAN	195		171							138		
HIGHEST ANNUAL MEAN										240		1974
LOWEST ANNUAL MEAN										23.8		1977
HIGHEST DAILY MEAN	2450	Dec 15	2450	Dec 15					7860	Mar 18	1975	
LOWEST DAILY MEAN	4.2	Oct 29	4.2	Oct 29					1.8	Sep 25	1991	
ANNUAL SEVEN-DAY MINIMUM	4.2	Oct 29	4.2	Oct 29					1.9	Sep 24	1991	
INSTANTANEOUS PEAK FLOW			8850	Dec 14					9830	Mar 18	1975	
INSTANTANEOUS PEAK STAGE			13.39	Dec 14					14.19	Mar 18	1975	
ANNUAL RUNOFF (AC-FT)	140900		124000						99640			
10 PERCENT EXCEEDS	588		464						359			
50 PERCENT EXCEEDS	55		52						34			
90 PERCENT EXCEEDS	5.7		5.7						5.8			

REDWOOD CREEK BASIN

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA

LOCATION.--Lat 40°54'22", long 123°48'51", in SE 1/4 NE 1/4 sec.15, T.6 N., R.3 E., Humboldt County, Hydrologic Unit 18010102, on right bank 400 ft upstream from Lupton Creek and 9.1 mi east of town of Blue Lake.

DRAINAGE AREA.--67.7 mi².

PERIOD OF RECORD.--Water years 1973 to current year.

SURFACE WATER: Water years 1953-58, 1972-93.

CHEMICAL DATA: Water years 1974-75.

WATER TEMPERATURE: Water years 1973-92.

SEDIMENT DATA: Water years 1973 to current year.

PERIOD OF DAILY RECORD.--

SURFACE WATER: June 1953 to September 1958, October 1972 to September 1993.

WATER TEMPERATURE: October 1972 to September 1981, October 1981 to September 1992.

SUSPENDED-SEDIMENT DISCHARGE: October 1972 to September 1981, October 1981 to September 1992.

REMARKS.--Periodic total load sampling above 1,000 ft³/s.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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
JAN						
17...	1230	848	7.0	659	1510	--
MAR						
05...	1100	1260	5.5	612	2080	--
05...	1445	1210	7.0	382	1250	--
APR						
24...	1045	1400	9.0	922	3480	--
24...	1425	1160	9.0	604	1890	62

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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										
17...	1140	1000	1100	0.250	0	1130	1150	15	3.0	
17...	1200	1000	1100	0.250	0	1155	1205	15	3.0	
MAR										
05...	1155	1000	1100	0.250	0	1140	1205	15	4.0	
05...	1230	1000	1100	0.250	0	1215	1240	15	4.0	
05...	1535	1000	1100	0.250	0	1520	1550	15	4.0	
05...	1620	1000	1100	0.250	0	1605	1640	15	4.0	
APR										
24...	1145	1000	1100	0.250	0	1130	1200	15	4.0	
24...	1215	1000	1100	0.250	0	1205	1230	15	4.0	
24...	1535	1000	1100	0.250	0	1515	1550	15	4.0	
24...	1610	1000	1100	0.250	0	1555	1625	15	4.0	
DATE	TIME	COMPSD 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
JAN										
17...	2	22	22	2.00	867	7.0	5.33	290	3	
17...	2	22	22	2.00	853	7.0	3.46	290	5	
MAR										
05...	2	20	20	3.00	1250	5.5	10.8	790	1	
05...	2	20	20	3.00	1230	5.5	8.96	790	2	
05...	2	20	20	3.00	1210	7.0	13.3	1320	1	
05...	2	20	20	3.00	1190	7.0	19.9	1320	2	
APR										
24...	2	20	20	2.00	1310	9.0	12.1	1150	--	
24...	2	20	20	2.00	1280	9.0	16.5	1150	2	
24...	2	20	20	2.00	1100	10.0	14.0	1200	1	
24...	2	20	20	2.00	1080	10.0	16.3	1200	1	

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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
JAN								
17...	8	14	20	27	39	52	77	100
17...	12	24	40	56	71	88	100	--
MAR								
05...	2	10	26	46	67	81	100	--
05...	8	24	40	53	63	87	100	--
05...	4	20	44	63	77	91	100	--
05...	4	15	36	56	74	87	96	100
APR								
24...	2	11	22	37	56	74	96	100
24...	5	16	29	40	54	70	90	100
24...	4	14	30	48	65	83	100	--
24...	3	14	34	53	66	83	100	--

REDWOOD CREEK BASIN

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, former site, from outside high-water marks, maximum gage height, 25.38 ft, Dec. 30, 1995; minimum daily, 2.1 ft³/s, Oct. 20-22, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 18, 1953, reached a stage of 23.95 ft, former site, from floodmarks, discharge, 50,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	0245	12,900	19.70	Jan. 24	0830	16,900	21.01
Dec. 30	0630	31,800	25.38	Apr. 24	0900	9,960	18.60

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	22	1180	5210	2870	4100	2060	1200	542	168	45	22
2	29	22	692	3160	2440	3240	1900	1090	515	160	44	22
3	28	21	386	2460	2100	2970	1550	987	488	150	44	22
4	27	21	658	2180	2420	3530	1290	907	456	140	41	21
5	25	21	1960	1880	2680	6760	1130	826	430	139	41	21
6	24	21	2620	1620	2280	4690	1020	753	401	131	40	21
7	24	21	1330	1440	2020	3690	944	676	377	127	40	20
8	23	26	954	1460	1820	3220	882	602	360	121	38	20
9	22	92	724	1960	1930	2690	846	560	340	112	37	20
10	28	59	609	2260	1700	2510	864	526	323	109	35	20
11	55	47	880	1660	1520	2960	791	491	314	105	34	19
12	58	42	8460	1450	1390	2960	850	457	299	95	32	19
13	44	40	7560	1290	1300	2430	794	432	283	93	31	20
14	38	34	4550	1180	1210	2090	716	483	271	88	28	22
15	32	31	10400	1790	1140	1810	662	510	264	84	28	84
16	30	31	5170	3250	1090	1610	1020	495	246	82	28	66
17	28	30	2980	3760	1530	1410	1410	583	237	82	28	40
18	27	63	2050	3410	1960	1260	1380	1160	223	79	28	27
19	26	61	1510	7000	2750	1150	1650	1330	222	77	28	22
20	25	46	1220	6770	3700	1040	1900	937	212	74	27	19
21	24	40	1040	8600	6840	950	1780	1520	205	71	26	18
22	24	40	913	5620	4870	921	1850	2280	200	69	26	16
23	23	41	801	6750	4200	959	1780	1600	195	65	26	15
24	23	41	690	15400	5250	833	7500	1240	212	62	25	15
25	23	168	605	10100	3760	759	4450	1020	207	58	25	15
26	23	292	541	5920	2920	701	3070	885	194	57	25	15
27	23	169	502	12300	2470	987	2380	795	195	55	25	14
28	23	109	519	9650	3100	2790	1860	714	186	53	24	14
29	23	85	5960	5670	5190	1810	1550	655	176	51	22	13
30	23	118	26700	4320	---	1390	1350	611	174	49	22	13
31	23	---	11500	3490	---	1310	---	574	---	46	22	---
TOTAL	881	1854	105664	143010	78450	69530	51229	26899	8747	2852	965	695
MEAN	28.4	61.8	3409	4613	2705	2243	1708	868	292	92.0	31.1	23.2
MAX	58	292	26700	15400	6840	6760	7500	2280	542	168	45	84
MIN	22	21	386	1180	1090	701	662	432	174	46	22	13
AC-FT	1750	3680	209600	283700	155600	137900	101600	53350	17350	5660	1910	1380

11482500 REDWOOD CREEK AT ORICK, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	158	1068	2094	2477	2159	1974	1231	633	260	87.0	42.2	39.3
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1911 - 1996			
ANNUAL TOTAL	495351				490776							
ANNUAL MEAN	1357				1341				1014			
HIGHEST ANNUAL MEAN									1726			
LOWEST ANNUAL MEAN									192			
HIGHEST DAILY MEAN	26700				Dec 30				43200			
LOWEST DAILY MEAN	19				Sep 22				2.1			
ANNUAL SEVEN-DAY MINIMUM	20				Sep 18				2.2			
INSTANTANEOUS PEAK FLOW					31800				Dec 30			
INSTANTANEOUS PEAK STAGE					25.38				Dec 30			
ANNUAL RUNOFF (AC-FT)	982500				973500				734700			
10 PERCENT EXCEEDS	4110				3500				2720			
50 PERCENT EXCEEDS	387				470				305			
90 PERCENT EXCEEDS	25				22				25			

REDWOOD CREEK BASIN

11482500 REDWOOD CREEK AT ORICK, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955-56, 1959 to September 1980, October 1981 to current year (storm season only).

CHEMICAL DATA: Water years 1959-66, 1973-81.

WATER TEMPERATURE: Water years 1966-92.

SEDIMENT DATA: Water years 1955-56, 1970 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1965 to September 1981, October 1981 to September 1992 (storm season only).

SUSPENDED-SEDIMENT DISCHARGE: March 1970 to September 1981, October 1981 to September 1992 (storm season only).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 9,610 mg/L, Mar. 18, 1975; minimum daily mean, 0 mg/L, Nov. 10-12, 1986, Apr. 20, 29, 30, 1987, several days during 1989-90, many days during 1991.

SEDIMENT LOAD: Maximum daily, 1,070,000 tons, Mar. 18, 1975; minimum daily, 0 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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
JAN					
19...	1350	7110	9.0	1080	20700
19...	1540	7030	9.0	795	15100
FEB					
21...	1250	7420	8.0	802	16100
21...	1515	7000	8.0	672	12700

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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									
19...	1440	1000	1100	0.250	0	1430	1450	10	10.0
19...	1505	1000	1100	0.250	0	1455	1515	10	10.0
19...	1625	1000	1100	0.250	0	1620	1635	15	10.0
19...	1650	1000	1100	0.250	0	1640	1700	15	10.0
FEB									
21...	1345	1000	1100	0.250	0	1330	1400	10	10.0
21...	1415	1000	1100	0.250	0	1405	1430	10	10.0
21...	1550	1000	1100	0.250	0	1540	1605	15	10.0
21...	1620	1000	1100	0.250	0	1610	1630	15	10.0

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
JAN									
19...	2	20	20	3.00	7040	9.0	4.09	2060	3
19...	2	20	20	3.00	7010	9.0	16.3	2060	2
19...	2	20	20	3.00	7010	9.0	4.08	810	4
19...	2	20	20	3.00	6910	9.0	3.90	810	4
FEB									
21...	2	22	22	5.00	7380	8.0	15.9	2600	1
21...	2	22	22	5.00	7220	8.0	7.66	2600	3
21...	2	21	21	5.00	6880	8.0	7.04	1650	2
21...	2	21	21	5.00	6770	8.0	8.28	1650	2

11482500 REDWOOD CREEK AT ORICK, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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
JAN								
19...	11	17	26	40	57	76	100	--
19...	4	6	13	29	50	69	90	100
19...	11	20	30	43	58	78	100	--
19...	13	21	31	45	57	69	90	100
FEB								
21...	3	5	14	33	59	86	100	--
21...	7	13	21	36	63	86	100	--
21...	5	8	17	34	54	78	98	100
21...	5	9	25	51	71	88	97	100

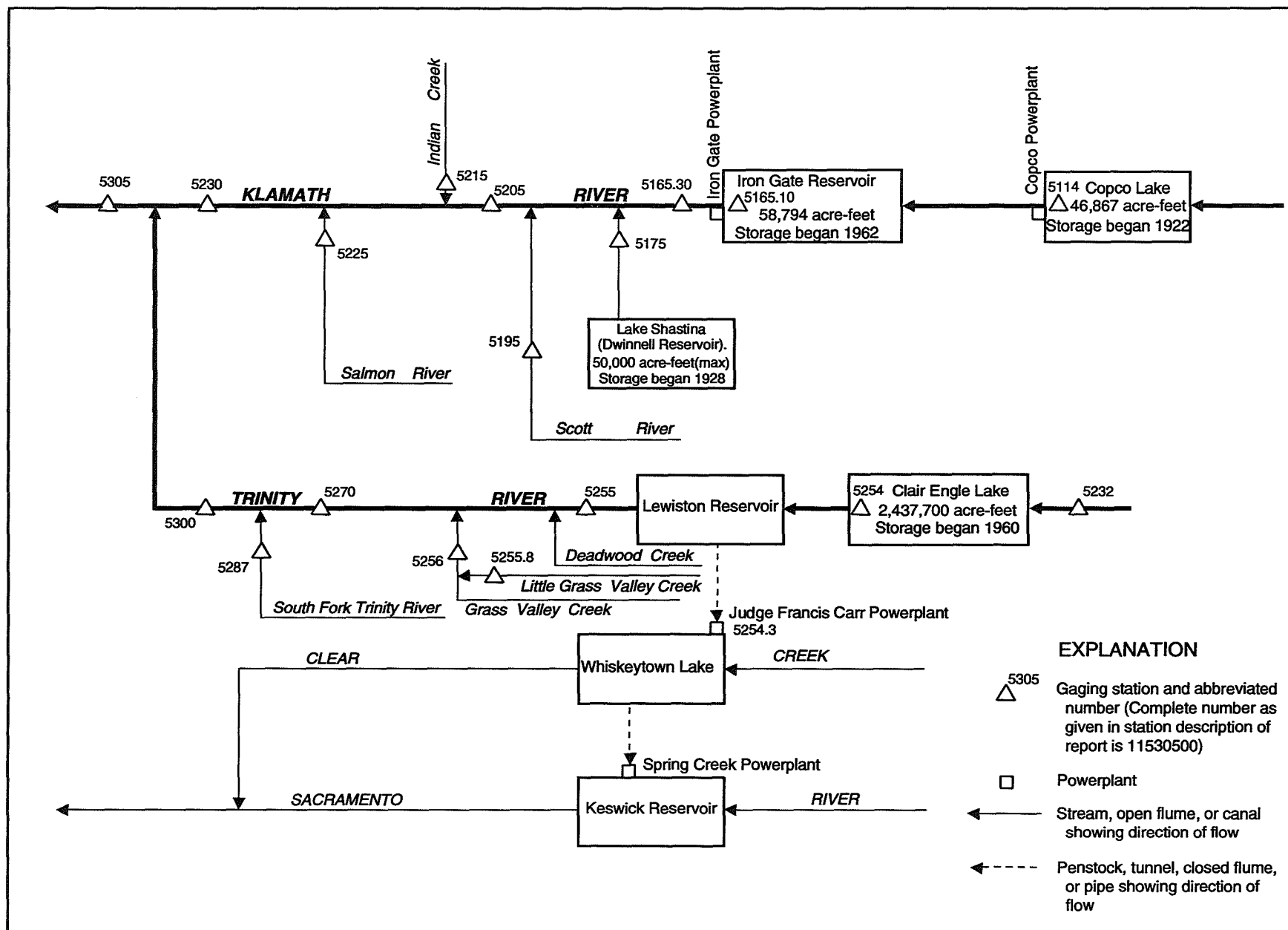


Figure 23. Diversions and storage in Klamath River and Trinity River basins.

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, 46,700 acre-ft, Aug. 9, elevation, 2,607.33 ft; minimum, 38,881 acre-ft, Feb. 28, elevation, 2,599.10 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, 61,074 acre-ft, Feb. 23, elevation, 2,330.28 ft; minimum, 54,992 acre-ft, Sept. 2, elevation, 2,323.99 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

11511400 COPCO LAKE

11516510 IRON GATE RESERVOIR

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	2,603.65	43,126	--	2,325.52	56,417	--
Oct. 31.....	2,604.00	43,458	+332	2,327.02	57,840	+1,423
Nov. 30.....	2,603.50	42,979	-479	2,325.44	56,334	-1,506
Dec. 31.....	2,603.58	43,055	+76	2,328.59	59,376	+3,042
CAL YR 1995.....	--	--	+1,723	--	--	+4,225
Jan. 31.....	2,600.40	40,074	-2,981	2,329.22	60,005	+629
Feb. 29.....	2,599.20	38,972	-1,102	2,329.60	60,389	+384
Mar. 31.....	2,605.15	44,562	+5,590	2,328.52	59,307	-1,082
Apr. 30.....	2,604.73	44,157	-405	2,328.72	59,505	+198
May 31.....	2,603.19	42,686	-1,471	2,328.19	58,982	-523
June 30.....	2,604.42	43,859	+1,173	2,325.40	56,297	-2,685
July 31.....	2,604.68	44,109	+250	2,325.30	56,204	-93
Aug. 31.....	2,604.10	43,554	-555	2,324.33	55,304	-900
Sept. 30.....	2,602.55	42,082	-1,472	2,325.83	56,702	+1,398
WTR YR 1996.....	--	--	-1,044	--	--	+285

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 PacificCorp, formerly Pacific Power & Light Co.).

REMARKS.--Records excellent. Flow regulated by Upper Klamath Lake, capacity, 523,700 acre-ft; Iron Gate Reservoir (station 11516510), other smaller reservoirs, and diversions upstream from station. See schematic diagram of Klamath River and Trinity River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft³/s, Dec. 22, 1964, gage height, 13.63 ft, from rating curve extended above 15,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 389 ft³/s, Aug. 25-28, 1992.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	1340	1350	3320	5480	7270	3100	3630	2030	1090	1060	1080
2	1350	1340	1340	3460	5330	6050	3090	3400	1780	1050	1070	1080
3	1350	1340	1340	3330	4830	6640	3060	2880	1740	1070	1070	1080
4	1350	1340	1360	3210	5620	7130	3040	2680	1690	1070	1060	1080
5	1350	1340	1360	3190	6440	7220	3030	2670	1570	1060	1060	1230
6	1350	1340	1350	3180	8750	7200	3010	2540	1410	1060	1060	1380
7	1350	1340	1350	3170	11300	6640	3000	2250	1420	1060	1060	1380
8	1360	1340	1340	3160	11300	6420	3000	1930	1420	1060	1060	1370
9	1350	1340	1350	3320	11000	6380	3010	1630	1430	1050	1060	1370
10	1350	1340	1350	3430	10700	6320	3010	1420	1410	1030	1060	1360
11	1350	1340	1350	3290	9270	6260	2850	1420	1410	1030	1060	1360
12	1350	1340	2430	3250	8260	6420	2830	1620	1440	1030	1060	1380
13	1350	1340	3170	3230	8380	6030	2810	1640	1440	1030	1050	1360
14	1350	1340	2030	3210	8350	5760	2790	1650	1440	1030	1040	1350
15	1350	1340	2160	3520	8260	6040	2700	1700	1440	1030	1040	1360
16	1340	1340	2300	4420	8940	5920	2870	1850	1440	1030	1050	1350
17	1340	1330	2200	4050	9400	5830	2870	3280	1450	1030	1060	1350
18	1340	1330	2110	3860	9420	5670	3080	4390	1490	1030	1060	1350
19	1340	1330	1840	4010	10400	5530	3280	5190	1540	1030	1050	1350
20	1340	1330	1390	4860	10500	5480	3370	4440	1540	1030	1080	1360
21	1340	1330	1350	4810	10800	4760	3380	4340	1540	1030	1070	1360
22	1340	1330	1350	4600	12000	4060	3360	4820	1540	1030	1070	1350
23	1340	1330	1350	4310	12000	3400	3350	4740	1540	1030	1080	1360
24	1340	1330	1350	4310	11200	3360	3920	5640	1540	1030	1080	1360
25	1340	1330	1350	4290	9970	3110	4140	6390	1540	1030	1080	1360
26	1340	1340	1350	4220	9060	2630	4100	6310	1550	1030	1080	1350
27	1340	1340	1330	4300	9230	2680	4800	5910	1560	1030	1080	1350
28	1340	1340	1340	4280	8360	2740	5050	3540	1540	1040	1080	1340
29	1340	1340	1370	4250	7350	2840	5000	3160	1540	1060	1080	1340
30	1340	1340	2240	4910	---	3080	4360	2380	1540	1060	1080	1340
31	1340	---	3300	5700	---	3050	---	2220	---	1070	1080	---
TOTAL	41700	40110	52150	120450	261900	161920	101260	101660	45960	32340	33030	39490
MEAN	1345	1337	1682	3885	9031	5223	3375	3279	1532	1043	1065	1316
MAX	1360	1340	3300	5700	12000	7270	5050	6390	2030	1090	1080	1380
MIN	1340	1330	1330	3160	4830	2630	2700	1420	1410	1030	1040	1080
AC-FT	82710	79560	103400	238900	519500	321200	200800	201600	91160	64150	65510	78330

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1664	2142	2744	2825	3047	3601	2970	2046	1050	758	970	1303
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 1995 CALENDAR YEAR					FOR 1996 WATER YEAR			WATER YEARS 1961 - 1996			
ANNUAL TOTAL	657718					1031970						
ANNUAL MEAN	1802					2820			2089			
HIGHEST ANNUAL MEAN									3657			
LOWEST ANNUAL MEAN									641			
HIGHEST DAILY MEAN	8740					Mar 17			25000			
LOWEST DAILY MEAN	729					Jul 17			389			
ANNUAL SEVEN-DAY MINIMUM	731					Jul 14			390			
INSTANTANEOUS PEAK FLOW						12600			Feb 22			
INSTANTANEOUS PEAK STAGE						10.06			Feb 22			
INSTANTANEOUS LOW FLOW									13.63			
ANNUAL RUNOFF (AC-FT)	1305000					2047000			1513000			
10 PERCENT EXCEEDS	4100					6310			4050			
50 PERCENT EXCEEDS	1340					1440			1390			
90 PERCENT EXCEEDS	766					1060			730			

11517500 SHASTA RIVER NEAR YREKA, CA

LOCATION.--Lat 41°49'23", long 122°35'40", in SE 1/4 NE 1/4 sec.24, T.46 N., R.7 W., Siskiyou County, Hydrologic Unit 18010207, on right bank 24 mi downstream from Lake Shastina, 0.5 mi upstream from mouth, and 7 mi north of Yreka.

DRAINAGE AREA.--793 mi².

PERIOD OF RECORD.--October 1933 to December 1941, December 1944 to current year.

CHEMICAL DATA: Water years 1959-79.

WATER TEMPERATURE: Water years 1965-79.

SEDIMENT DATA: Water years 1955-56, 1958-62.

REVISED RECORDS.--WSP 1929: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 2,000 ft above sea level, from topographic map. Prior to Nov. 2, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good. Low flow completely regulated by Lake Shastina (formerly Lake 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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	0445	2,680	7.76	Jan. 24	2045	1,170	6.11
Dec. 31	0315	638	5.04	Feb. 5	0330	1,350	6.35
Jan. 16	2245	1,350	6.35				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	152	177	372	516	449	328	144	136	102	58	43
2	95	159	182	303	478	457	337	148	127	94	48	41
3	116	160	178	276	450	428	315	149	122	87	42	46
4	118	160	197	266	708	445	289	153	107	79	33	44
5	142	162	196	253	1250	451	277	163	71	77	25	50
6	139	166	198	241	1110	422	268	157	66	76	24	40
7	137	163	194	232	1060	407	263	156	70	82	36	44
8	140	164	186	230	994	405	257	149	74	79	41	47
9	141	165	178	250	986	401	252	139	73	68	29	41
10	137	165	173	303	898	404	309	140	72	65	31	39
11	142	165	192	272	743	403	308	117	75	66	43	42
12	147	168	415	250	647	402	279	101	74	74	49	57
13	145	166	619	239	598	388	265	91	70	69	39	63
14	142	166	647	233	560	371	250	94	63	79	53	75
15	143	167	1750	331	529	356	235	118	59	96	40	92
16	147	167	741	710	508	348	192	121	56	90	35	84
17	146	171	487	969	512	341	188	158	97	82	38	82
18	148	166	380	594	532	338	186	269	114	88	37	96
19	149	163	322	859	566	333	174	273	97	90	35	103
20	145	163	288	767	604	327	178	215	99	80	27	107
21	138	163	261	808	599	323	178	209	94	72	24	108
22	140	164	241	547	544	314	187	275	97	70	24	103
23	146	164	228	494	503	309	173	221	91	70	27	115
24	147	165	218	859	497	306	274	211	73	58	30	117
25	149	166	212	826	479	298	303	201	77	51	25	116
26	152	166	207	594	461	293	235	161	94	49	23	109
27	152	165	207	674	447	336	202	198	113	56	27	107
28	161	165	214	894	427	391	169	200	123	53	32	108
29	166	165	243	619	420	354	162	171	115	53	40	107
30	157	165	453	571	---	329	140	151	107	76	38	115
31	153	---	551	573	---	315	---	149	---	65	33	---
TOTAL	4373	4926	10735	15409	18626	11445	7173	5202	2706	2296	1086	2341
MEAN	141	164	346	497	642	369	239	168	90.2	74.1	35.0	78.0
MAX	166	171	1750	969	1250	457	337	275	136	102	58	117
MIN	93	152	173	230	420	293	140	91	56	49	23	39
AC-FT	8670	9770	21290	30560	36940	22700	14230	10320	5370	4550	2150	4640

11517500 SHASTA RIVER NEAR YREKA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	151	195	278	324	337	309	201	131	96.9	43.2	38.1	74.6
MAX	351	361	1223	1179	1002	946	753	363	296	147	111	182
(WY)	1963	1985	1965	1974	1958	1983	1974	1941	1958	1995	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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1934 - 1996	
ANNUAL TOTAL	80727		86318			
ANNUAL MEAN	221		236		181	
HIGHEST ANNUAL MEAN					364	
LOWEST ANNUAL MEAN					77.9	
HIGHEST DAILY MEAN	1750	Dec 15	1750	Dec 15	10400	Dec 23 1964
LOWEST DAILY MEAN	35	Aug 7	23	Aug 26	1.5	Aug 24 1981
ANNUAL SEVEN-DAY MINIMUM	45	Aug 5	26	Aug 20	5.5	Aug 9 1939
INSTANTANEOUS PEAK FLOW			2680	Dec 15	21500	Dec 22 1964
INSTANTANEOUS PEAK STAGE			7.76	Dec 15	12.92	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	160100		171200		131300	
10 PERCENT EXCEEDS	416		530		340	
50 PERCENT EXCEEDS	167		163		152	
90 PERCENT EXCEEDS	59		47		25	

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.--Records fair. 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, or maximim:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	0045	6,180	12.61	Feb. 19	0715	3,890	10.79
Dec. 31	0445	4,650	11.44	Apr. 24	1730	4,320	11.17
Feb. 9	0915	4,900	11.65				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e52	83	135	2100	1180	1480	1410	1650	e1250	247	60	24
2	e52	84	193	1520	1180	1430	1570	1670	e1180	230	57	23
3	e52	84	162	1300	1160	1440	1370	1530	e1120	214	53	23
4	55	84	389	1140	1740	1580	1240	1360	e1050	205	51	23
5	57	84	574	1010	3410	1720	1170	1250	978	197	48	24
6	57	84	731	e888	3760	1560	1180	1170	921	188	45	24
7	61	84	441	e832	3990	1460	1320	1100	917	181	44	24
8	61	84	309	823	4200	1450	1570	1010	886	170	40	23
9	61	84	242	911	4770	1560	1780	932	796	162	36	23
10	63	84	219	983	4270	1720	1700	901	720	157	34	23
11	61	86	555	856	3480	1850	1480	891	655	153	32	23
12	61	86	3550	793	3000	1890	1320	e950	609	148	29	24
13	63	86	4010	747	2730	1730	1190	e1100	552	138	27	24
14	65	86	1850	698	2510	1570	1130	e1400	522	137	36	26
15	63	86	2500	989	2350	1480	1150	e1220	497	159	32	29
16	62	86	e1670	1680	2290	1440	1290	e1180	475	173	29	28
17	63	86	1190	2020	2890	1410	1250	e1400	465	163	29	29
18	65	86	965	1610	3430	1440	1170	e2000	435	144	28	28
19	72	84	829	1590	3680	1500	1090	e2700	398	140	26	29
20	70	84	720	1620	3420	1510	1050	e2250	353	137	24	30
21	70	83	649	1870	3400	1470	1020	1800	324	129	22	31
22	69	87	594	1470	2840	1420	1010	e2600	300	123	21	32
23	69	84	e540	1300	2400	1360	1150	e2450	290	115	20	34
24	71	86	e510	1920	2240	1270	3330	e2150	305	107	20	35
25	74	89	e490	1780	2040	1190	3100	e2000	286	97	21	34
26	74	90	e480	1370	1840	1110	2330	e1850	277	89	21	34
27	75	90	e480	1290	1690	1120	1920	e1680	279	87	21	34
28	79	93	e500	1340	1590	1390	1640	e1590	275	82	21	34
29	78	97	e600	1250	1540	1210	1490	e1470	265	76	25	34
30	80	99	3410	1210	---	1100	1530	e1380	259	75	24	33
31	81	---	3830	1180	---	1060	---	e1310	---	66	23	---
TOTAL	2036	2593	33317	40090	79020	44920	44950	47944	17639	4489	999	839
MEAN	65.7	86.4	1075	1293	2725	1449	1498	1547	588	145	32.2	28.0
MAX	81	99	4010	2100	4770	1890	3330	2700	1250	247	60	35
MIN	52	83	135	698	1160	1060	1010	891	259	66	20	23
AC-FT	4040	5140	66080	79520	156700	89100	89160	95100	34990	8900	1980	1660

e Estimated.

11519500 SCOTT RIVER NEAR FORT JONES, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	112	326	796	1025	1161	1029	1022	1146	710	186	64.9	55.2
MAX	941	1628	5003	4417	4793	2825	2217	2426	1801	769	269	228
(WY)	1963	1974	1965	1974	1958	1972	1952	1958	1975	1983	1983	1983
MIN	9.58	10.7	52.7	80.9	99.0	83.3	55.1	121	78.0	12.8	5.82	4.75
(WY)	1995	1995	1995	1977	1977	1977	1977	1977	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1942 - 1996			
ANNUAL TOTAL	381799				318836				633			
ANNUAL MEAN	1046				871				1496			
HIGHEST ANNUAL MEAN									1974			
LOWEST ANNUAL MEAN									1977			
HIGHEST DAILY MEAN	10900				Feb 1	4770	Feb 9	39500	Dec 23	1964		
LOWEST DAILY MEAN	38				Sep 3	20	Aug 23	4.1	Sep 20	1994		
ANNUAL SEVEN-DAY MINIMUM	40				Sep 2	21	Aug 22	4.3	Sep 15	1994		
INSTANTANEOUS PEAK FLOW						6180	Dec 13	54600	Dec 22	1964		
INSTANTANEOUS PEAK STAGE						12.61	Dec 13	25.34	Dec 22	1964		
ANNUAL RUNOFF (AC-FT)	757300				632400				458900			
10 PERCENT EXCEEDS	2310				2010				1530			
50 PERCENT EXCEEDS	755				531				304			
90 PERCENT EXCEEDS	53				29				46			

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA

LOCATION.--Lat 41°51'14", long 123°13'52", in SW 1/4 SW 1/4 sec.3, T.46 N., R.12 W., Siskiyou County, Hydrologic Unit 18010206, Klamath National Forest, on left bank 0.4 mi upstream from Bittenbender Creek, 1.4 mi downstream from Grider Creek, 2.2 mi west of Seiad Valley, and 55 mi downstream from Iron Gate Dam.

DRAINAGE AREA.--6,940 mi², approximately (not including Lost River, Butte Creek, or Lower Klamath Lake basins).

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.--Records fair. Low flow regulated considerably by reservoirs and powerplants upstream from station. Large diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 165,000 ft³/s, Dec. 23, 1964, gage height, 33.75 ft, from floodmarks, from rating curve extended above 49,000 ft³/s on basis of slope-area measurements at gage heights 20.1 and 29.2 ft; minimum daily, 320 ft³/s, Nov. 25, 1917.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	0530	13,300	10.14	Feb. 9	0945	24,800	13.76
Dec. 31	0700	11,600	9.46	Apr. 1	unknown	e21,000	unknown
Jan. 17	0200	12,100	9.68	Apr. 24	2245	11,500	9.43

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	1730	2070	7990	9080	e7700	e19000	7480	4630	2250	1390	1240
2	1600	1730	1930	6870	8690	e7400	e12000	7220	4250	1820	1360	1240
3	1610	1730	1880	6590	8350	e7300	e6600	6500	4220	1790	1350	1240
4	1630	1730	2210	6020	10000	e9300	6290	5850	4140	1750	1350	1240
5	1650	1730	e3000	5690	15700	e11800	6110	5690	3980	1740	1340	1240
6	1660	1730	e3350	5480	17400	e9400	6070	5460	3580	1710	1310	1510
7	1660	1730	e2590	5300	22300	e8200	6210	5120	3480	1680	1310	1570
8	1670	1740	2320	5420	23500	e9300	6520	4710	3450	1660	1320	1560
9	1670	1760	2220	5650	24300	e11500	6800	4310	3300	1630	1310	1560
10	1680	1760	2180	6140	22800	e13000	6780	3890	3170	1600	1290	1560
11	1700	1760	2950	5750	19800	e17500	6380	3780	3020	1560	1270	1550
12	1720	1760	8040	5480	17100	e15500	6000	4020	2950	1530	1290	1550
13	1720	1760	11300	5320	15900	e13000	5760	4450	2870	1530	1270	1580
14	1710	1760	6940	5190	15300	e11000	5590	5260	2790	1510	1250	1580
15	1700	1760	8850	5910	14600	e9000	5480	5590	2740	1560	1260	1700
16	1690	1760	6960	8140	14500	e9200	5670	5290	2680	1560	1250	1680
17	1690	1760	5440	10300	16000	e9500	5670	6680	2670	1550	1240	1640
18	1690	1760	4720	8200	17300	e10100	5580	9140	2660	1540	1260	1640
19	1690	1760	4190	8560	18800	e9900	5690	9110	2680	1540	1250	1640
20	1690	1760	3470	9370	19000	e9500	5830	8650	2630	1510	1250	1630
21	1690	1760	3050	11000	19400	e8900	5810	8080	2580	1490	1250	1630
22	1690	1760	2910	9110	18900	e8300	5840	9780	2530	1470	1240	1630
23	1710	1760	2800	8240	18600	e7700	6080	8930	2520	1450	1240	1630
24	1710	1760	2690	9160	e17500	e7200	10000	8620	2540	1420	1240	1630
25	1710	1780	2610	9470	e14000	e6900	10600	9530	2510	1400	1230	1630
26	1720	1860	2570	8250	e11000	e6800	8950	9420	2500	1380	1230	1630
27	1720	1860	2520	8200	e9300	e7300	8810	9500	2530	1380	1220	1620
28	1730	1860	2540	8830	e8200	e8600	8850	7770	2510	1390	1250	1620
29	1750	1860	3290	8130	e7900	e7400	8570	6200	2460	1400	1250	1590
30	1730	1870	8000	8010	---	e6900	8250	5530	2410	1440	1240	1590
31	1730	---	10800	9240	---	e10000	---	4780	---	1410	1240	---
TOTAL	52320	53100	130390	231010	455220	295100	221790	206340	90980	48650	39550	46350
MEAN	1688	1770	4206	7452	15700	9519	7393	6656	3033	1569	1276	1545
MAX	1750	1870	11300	11000	24300	17500	19000	9780	4630	2250	1390	1700
MIN	1600	1730	1880	5190	7900	6800	5480	3780	2410	1380	1220	1240
AC-FT	103800	105300	258600	458200	902900	585300	439900	409300	180500	96500	78450	91940

e Estimated.

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2151	3084	4580	5569	6160	6447	5932	5089	3199	1671	1434	1680
MAX	4490	7654	20280	21500	17980	19120	13940	10700	7980	3908	2778	3000
(WY)	1963	1985	1965	1965	1958	1972	1974	1956	1953	1913	1913	1925
MIN	1047	1200	1395	1408	1466	1145	1132	1285	819	598	436	604
(WY)	1992	1995	1995	1992	1992	1977	1977	1992	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1913 - 1996			
ANNUAL TOTAL	1536050				1870800				3904			
ANNUAL MEAN	4208				5111				7434			
HIGHEST ANNUAL MEAN									1151			
LOWEST ANNUAL MEAN									1151			
HIGHEST DAILY MEAN	25200				Feb 1	24300	Feb 9	115000	Dec 23	1964		
LOWEST DAILY MEAN	1270				Aug 25	1220	Aug 27	320	Nov 25	1917		
ANNUAL SEVEN-DAY MINIMUM	1280				Aug 24	1240	Aug 21	417	Aug 18	1992		
INSTANTANEOUS PEAK FLOW						24800	Feb 9	165000	Dec 23	1964		
INSTANTANEOUS PEAK STAGE						13.76	Feb 9	33.75	Dec 23	1964		
INSTANTANEOUS LOW FLOW								320	Nov 25	1917		
ANNUAL RUNOFF (AC-FT)	3047000					3711000		2829000				
10 PERCENT EXCEEDS	8880					10200		8000				
50 PERCENT EXCEEDS	2810					2790		2700				
90 PERCENT EXCEEDS	1440					1380		1210				

11521500 INDIAN CREEK NEAR HAPPY CAMP, CA

LOCATION.--Lat 41°50'07", long 123°22'55", in SW 1/4 SW 1/4 sec.26, T.17 N., R.7 E., Siskiyou County, Hydrologic Unit 18010209, on right bank 0.2 mi upstream from Slater Creek, 3.0 mi north of Happy Camp, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--120 mi².

PERIOD OF RECORD.--September 1911 to September 1921 (fragmentary), December 1956 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1635: 1957-58.

GAGE.--Water-stage recorder. Datum of gage is 1,198.37 ft above sea level. Prior to December 1956, nonrecording gages at sites 1.0 mi upstream at different datums. December 1956 to Sept. 20, 1969, water-stage recorder at site 0.8 mi upstream at different datum.

REMARKS.--Records excellent. Small diversions upstream and at station for irrigation. See schematic diagram of Klamath River and Trinity River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,000 ft³/s, Dec. 22, 1964, gage height, 24.3 ft, from floodmarks, present site and datum; 36.59 ft from floodmarks in gage well, from rating curve extended above 6,000 ft³/s on basis of slope-area measurement at gage height 29.0 ft, previous site and datum; minimum discharge observed, 20 ft³/s, Aug. 19 to Sept. 6, 1914.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 21, 1955, reached a stage of 29.0 ft, at 1956-69 site and datum, from floodmarks, discharge, 23,000 ft³/s on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft³/s or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	unknown	6,380	11.08	Feb. 9	0430	3 600	9.05
Dec. 30	1945	3,390	8.87	Apr. 24	0945	4,000	9.39

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	44	381	1020	559	773	2070	1050	497	169	82	56
2	46	44	190	790	537	747	1440	964	494	163	81	55
3	44	44	135	689	517	773	1130	854	480	158	81	54
4	44	44	582	601	1370	1040	974	765	449	153	80	56
5	44	44	763	529	1950	1220	902	708	417	148	79	57
6	44	44	528	470	2200	1010	940	670	401	143	78	57
7	44	44	278	451	2190	1040	1070	646	386	139	76	56
8	44	47	205	716	2670	1200	1100	618	358	135	74	55
9	44	63	192	852	3120	1380	1060	597	333	132	72	55
10	44	54	317	802	2160	1430	945	580	316	127	70	54
11	45	52	1120	645	1790	1790	835	583	303	124	68	54
12	49	57	e2200	560	1590	1630	792	665	292	120	67	54
13	48	60	e4100	496	1500	1360	717	722	282	118	66	56
14	47	54	e1900	453	1400	1180	680	984	272	118	64	58
15	46	52	e2500	827	1330	1100	690	930	260	117	64	97
16	46	52	982	1050	1330	1060	858	808	253	115	63	73
17	44	52	691	954	2120	1020	818	1150	243	112	62	65
18	44	62	573	804	2470	1070	774	1560	233	114	62	62
19	44	60	491	804	2440	1090	784	1230	224	110	62	60
20	44	54	431	979	2130	1000	764	940	216	106	62	59
21	44	53	382	1040	1920	918	812	1480	208	103	62	58
22	44	64	342	783	1540	893	890	1400	201	99	61	58
23	44	63	309	696	1330	813	1200	1050	204	96	60	57
24	44	56	282	759	1180	751	2370	882	210	95	59	57
25	44	80	259	663	1020	700	1930	800	204	92	58	56
26	44	140	243	588	914	654	1490	760	206	90	57	56
27	44	85	244	599	828	744	1270	704	200	88	57	54
28	44	84	269	566	805	810	1100	632	190	88	57	54
29	44	80	1130	545	793	710	1010	586	181	88	57	54
30	44	210	2840	545	---	654	1040	551	174	87	57	54
31	44	---	1720	557	---	926	---	518	---	85	56	---
TOTAL	1385	1942	26579	21833	45703	31486	32455	26387	8687	3632	2054	1751
MEAN	44.7	64.7	857	704	1576	1016	1082	851	290	117	66.3	58.4
MAX	49	210	4100	1050	3120	1790	2370	1560	497	169	82	97
MIN	44	44	135	451	517	654	680	518	174	85	56	54
AC-FT	2750	3850	52720	43310	90650	62450	64370	52340	17230	7200	4070	3470

e Estimated.

11521500 INDIAN CREEK NEAR HAPPY CAMP, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	80.5	311	589	702	822	779	669	555	260	100	59.8	51.9
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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1957 - 1996			
ANNUAL TOTAL	232894				203894							
ANNUAL MEAN	638				557				413			
HIGHEST ANNUAL MEAN									817			
LOWEST ANNUAL MEAN									83.7			
HIGHEST DAILY MEAN	6230				4100				30700			
LOWEST DAILY MEAN	44				44				21			
ANNUAL SEVEN-DAY MINIMUM	44				44				22			
INSTANTANEOUS PEAK FLOW					6380				39000			
INSTANTANEOUS PEAK STAGE					11.08				24.30			
ANNUAL RUNOFF (AC-FT)	461900				404400				299400			
10 PERCENT EXCEEDS	1570				1340				952			
50 PERCENT EXCEEDS	317				306				204			
90 PERCENT EXCEEDS	46				47				46			

KLAMATH RIVER BASIN

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 poor. 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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1130	18,800	12.67	Feb. 9	1300	10,200	9.09
Dec. 30	1015	19,300	12.88	Apr. 24	1115	14,400	10.94

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	194	e475	6440	3820	3240	4370	4660	2770	1030	416	236
2	223	192	e430	4750	3630	3190	4160	4430	2930	1020	398	231
3	216	191	e390	4060	3380	3330	3670	3960	3110	980	391	226
4	211	191	e900	3470	4960	3990	3390	3530	2980	923	386	224
5	209	191	e1080	3010	7850	4710	3250	3300	2690	864	378	230
6	207	191	2840	2690	7860	4340	3370	3130	2640	834	370	233
7	205	194	1780	2440	8030	4140	3750	3070	2650	815	361	229
8	205	205	1240	2570	8600	4330	4210	2940	2440	799	350	229
9	204	272	1010	3070	9780	4980	4450	2840	2160	790	339	226
10	204	244	988	3090	8510	5140	4040	2800	1980	765	329	222
11	226	223	2540	2710	7360	5630	3500	2880	1890	741	320	216
12	253	234	12800	2530	6660	5410	3260	3470	1820	709	316	216
13	236	246	8120	2340	6270	4780	2960	3800	1740	688	310	229
14	222	231	4890	2200	5800	4280	2820	5270	1680	730	302	247
15	214	224	7700	3620	5430	3990	2850	4490	1640	853	297	442
16	209	230	4860	5020	5390	3840	3270	3990	1620	840	293	403
17	207	233	3460	5600	6740	3740	3060	5770	1540	701	288	309
18	205	297	2870	4820	7550	3920	2870	6020	1380	657	287	283
19	200	270	2490	5560	7800	4020	2840	5020	1300	620	284	271
20	196	248	2220	5580	7460	3850	2780	4130	1250	592	280	263
21	195	237	1980	6300	7730	3630	2830	5850	1230	571	278	256
22	194	261	1790	4800	6470	3530	3010	6690	1190	556	275	253
23	195	265	1620	4200	5580	3280	3520	5010	1180	542	268	252
24	197	255	1480	5600	5120	3050	11100	4270	1230	530	260	248
25	197	416	1370	4930	4560	2860	7740	3950	1160	517	253	245
26	201	594	1280	4030	4130	2700	6130	3890	1160	504	246	240
27	207	416	1280	5130	3800	3140	5260	4040	1120	488	247	235
28	207	356	1410	5260	3590	3950	4560	3520	1070	479	248	233
29	199	391	5340	4260	3430	3320	4260	3240	1030	474	245	231
30	194	523	17700	3840	---	3040	4430	2980	1020	494	239	233
31	194	---	12100	3850	---	2990	---	2810	---	447	238	---
TOTAL	6462	8215	110433	127770	177290	120340	121710	125750	53600	21553	9492	7591
MEAN	208	274	3562	4122	6113	3882	4057	4056	1787	695	306	253
MAX	253	594	17700	6440	9780	5630	11100	6690	3110	1030	416	442
MIN	194	191	390	2200	3380	2700	2780	2800	1020	447	238	216
AC-FT	12820	16290	219000	253400	351700	238700	241400	249400	106300	42750	18830	15060

e Estimated.

KLAMATH RIVER BASIN

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11522500 SALMON RIVER AT SOMES BAR, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	349	1088	2137	2850	2962	2918	3005	3128	1907	615	260	202
MAX	2297	5961	10480	11260	11190	9615	5741	6174	4354	1906	839	528
(WY)	1963	1974	1965	1970	1958	1972	1938	1938	1953	1953	1983	1983
MIN	117	130	175	190	255	448	710	786	402	146	81.6	83.1
(WY)	1988	1937	1937	1937	1977	1977	1977	1977	1992	1931	1931	1931

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1912 - 1996
ANNUAL TOTAL	1055135	890206	
ANNUAL MEAN	2891	2432	1780
HIGHEST ANNUAL MEAN			3754
LOWEST ANNUAL MEAN			339
HIGHEST DAILY MEAN	26600	Feb 1	100000
LOWEST DAILY MEAN	191	Nov 3	70
ANNUAL SEVEN-DAY MINIMUM	192	Oct 31	73
INSTANTANEOUS PEAK FLOW		19300	133000
INSTANTANEOUS PEAK STAGE		12.88	46.60
ANNUAL RUNOFF (AC-FT)	2093000	1766000	1289000
10 PERCENT EXCEEDS	6460	5470	4200
50 PERCENT EXCEEDS	2340	1660	1020
90 PERCENT EXCEEDS	216	222	178

KLAMATH RIVER BASIN

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 or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1300	55,800	18.77	Feb. 9	1245	56,700	18.92
Dec. 30	2245	49,600	17.70	Apr. 24	1200	51,700	18.07

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2160	2160	6130	25000	19900	21000	22300	19300	10700	4330	2420	1900
2	2160	2160	5210	19000	18800	20200	20600	18000	10500	4040	2370	1890
3	2160	2160	4140	16400	17700	19600	17800	16500	10500	3750	2350	1880
4	2150	2160	8570	14400	24700	22600	16100	14700	10100	3610	2330	1870
5	2150	2160	10400	12800	39300	27000	15200	13700	9440	3520	2310	1880
6	2150	2160	11300	11700	43600	24900	15200	13100	8890	3420	2280	1900
7	2150	2160	6770	10900	46100	23500	16100	12600	8510	3350	2260	2060
8	2150	2170	5210	12100	50100	23600	17000	11900	8070	3270	2240	2070
9	2150	2280	4680	13500	54400	25400	17600	11300	7500	3220	2230	2070
10	2150	2260	4620	14600	48300	26300	16900	10700	7060	3150	2190	2060
11	2170	2230	11700	13000	41600	28800	15300	10300	6690	3070	2160	2060
12	2240	2230	41900	11800	35800	28500	14400	11200	6370	3040	2140	2050
13	2220	2260	36500	11000	33000	25600	13300	12300	6140	3000	2130	2100
14	2210	2250	22900	10500	31200	22800	12700	15800	5890	3000	2100	2140
15	2190	2240	31800	14700	29500	e22000	12600	16200	5730	3070	2070	2480
16	2180	2240	22100	20500	28500	e21500	14000	14600	5620	3080	2060	2450
17	2180	2220	15000	24900	34000	e22000	14200	18000	5440	2980	2040	2270
18	2180	2280	12100	21500	40400	e22100	13400	25200	5270	2960	2040	2230
19	2170	2300	10300	23500	42900	e22900	13600	22900	5140	2920	2030	2230
20	2160	2260	8990	25100	42000	e20100	13700	19700	5040	2880	2020	2220
21	2160	2240	7710	30400	43000	18700	13900	22400	4930	2830	2010	2220
22	2160	2250	7070	24100	38600	17600	14400	26900	4820	2780	2000	2230
23	2160	2270	6580	20600	35300	16200	16400	21900	4720	2730	1990	2220
24	2160	2260	6180	25200	33500	14700	43000	19100	4850	2690	1970	2230
25	2160	2350	5830	24200	30300	13900	34100	18700	4770	2630	1960	2230
26	2160	2840	5570	20200	27000	13000	26500	18600	4730	2580	1940	2230
27	2160	2510	5480	22100	24700	13300	23000	18500	4670	2530	1930	2220
28	2160	2400	5830	23200	23900	16100	21100	17000	4610	2520	1940	2220
29	2160	2410	15500	20400	22200	14400	19800	13800	4490	2520	1930	2220
30	2160	2730	44100	18900	---	13500	19600	12700	4400	2530	1920	2220
31	2160	---	38700	19700	---	13800	---	11300	---	2480	1900	---
TOTAL	67190	68600	428870	575900	1000300	635600	543800	508900	195590	94480	65260	64050
MEAN	2167	2287	13830	18580	34490	20500	18130	16420	6520	3048	2105	2135
MAX	2240	2840	44100	30400	54400	28800	43000	26900	10700	4330	2420	2480
MIN	2150	2160	4140	10500	17700	13000	12600	10300	4400	2480	1900	1870
AC-FT	133300	136100	850700	1142000	1984000	1261000	1079000	1009000	388000	187400	129400	127000

e Estimated.

11523000 KLAMATH RIVER AT ORLEANS, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3041	6006	10490	13100	13920	13740	12670	10950	6412	2792	2061	2222
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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1928 - 1996

ANNUAL TOTAL	4244980	4248540	
ANNUAL MEAN	11630	11610	8087
HIGHEST ANNUAL MEAN			17030
LOWEST ANNUAL MEAN			2520
HIGHEST DAILY MEAN	102000	Feb 1	240000
LOWEST DAILY MEAN	2070	Sep 1	320
ANNUAL SEVEN-DAY MINIMUM	2100	Sep 20	453
INSTANTANEOUS PEAK FLOW			307000
INSTANTANEOUS PEAK STAGE			76.50
ANNUAL RUNOFF (AC-FT)	8420000	8427000	5859000
10 PERCENT EXCEEDS	27200	25800	17700
50 PERCENT EXCEEDS	8340	6470	4840
90 PERCENT EXCEEDS	2160	2150	1880

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.--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, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0730	4,550	9.49	Apr. 24	0645	2,760	8.17
Feb. 5	0315	2,490	7.95	May 17	1800	3,130	8.46
Feb. 17	0445	4,490	9.45				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	39	121	461	208	458	1030	1250	530	133	63	39
2	45	41	76	435	207	449	816	1180	557	126	61	39
3	43	43	60	473	222	472	697	988	584	122	58	39
4	42	42	99	417	897	649	650	828	554	118	58	38
5	42	41	131	349	2150	701	668	767	505	115	58	39
6	42	41	132	305	1870	588	763	738	482	110	56	39
7	42	41	99	284	1550	548	952	729	471	106	56	39
8	42	41	83	272	1590	579	1260	702	422	107	53	39
9	42	45	80	366	1670	804	1280	690	370	119	53	39
10	42	45	105	373	1580	911	967	686	332	104	51	39
11	42	43	488	321	1470	1150	783	753	309	98	50	36
12	43	43	2970	306	1370	1010	688	939	287	95	49	35
13	44	43	965	286	1300	839	621	1020	270	92	48	39
14	43	43	501	264	1210	741	601	1150	257	90	48	44
15	42	42	421	352	1130	729	701	984	242	105	49	64
16	41	42	307	492	1940	753	838	1060	227	108	47	57
17	41	42	245	485	3880	779	691	1850	219	95	44	49
18	41	42	213	412	3210	900	607	1610	199	92	44	47
19	41	42	191	372	2720	965	567	1080	188	88	44	44
20	41	42	175	329	1930	932	524	837	182	84	44	43
21	41	42	165	303	1820	890	507	965	176	83	44	43
22	41	47	159	270	1200	856	511	871	164	79	44	42
23	41	46	149	253	928	730	698	737	157	76	43	39
24	41	44	139	253	774	654	2180	664	161	75	43	39
25	41	45	135	231	663	606	1520	663	160	73	41	39
26	41	53	131	209	587	557	1360	749	159	71	41	39
27	41	47	130	224	533	552	1150	869	164	68	42	38
28	41	44	132	201	507	515	966	706	158	68	42	38
29	40	44	180	192	484	470	970	630	148	69	42	38
30	39	48	438	191	---	450	1130	573	139	69	41	38
31	39	---	613	194	---	462	---	538	---	65	39	---
TOTAL	1293	1303	9833	9875	39600	21699	26696	27806	8773	2903	1496	1240
MEAN	41.7	43.4	317	319	1366	700	890	897	292	93.6	48.3	41.3
MAX	46	53	2970	492	3880	1150	2180	1850	584	133	63	64
MIN	39	39	60	191	207	449	507	538	139	65	39	35
AC-FT	2560	2580	19500	19590	78550	43040	52950	55150	17400	5760	2970	2460

11523200 TRINITY RIVER ABOVE COFFEE CREEK, NEAR TRINITY CENTER, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	79.6	211	314	424	580	666	834	1048	472	123	54.0	44.4
MAX	447	1664	1726	1899	2248	1641	1500	2414	1989	778	205	134
(WY)	1963	1974	1965	1974	1958	1995	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)	1982	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1994

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1958 - 1996			
ANNUAL TOTAL	257316				152517							
ANNUAL MEAN	705				417				403			
HIGHEST ANNUAL MEAN									851			
LOWEST ANNUAL MEAN									66.2			
HIGHEST DAILY MEAN	5430				3880				18900			
LOWEST DAILY MEAN	39				35				16			
ANNUAL SEVEN-DAY MINIMUM	40				38				16			
INSTANTANEOUS PEAK FLOW					4550				26500			
INSTANTANEOUS PEAK STAGE					9.49				13.78			
ANNUAL RUNOFF (AC-FT)	510400				302500				292000			
10 PERCENT EXCEEDS	1820				1010				1030			
50 PERCENT EXCEEDS	421				181				169			
90 PERCENT EXCEEDS	42				41				37			

KLAMATH RIVER BASIN

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, 2,417,233 acre-ft, June 7, elevation, 2,368.15 ft; minimum, 1,712,732 acre-ft, Sept. 30, elevation, 2,320.10 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated April 1962)

2,100	162,231	2,250	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 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1869686	1792536	1763288	1865814	1958356	2072264	2175337	2295357	2402392	2316699	2112299	1890533
2	1866506	1791725	1763155	1869824	1960936	2068714	2179132	2301452	2405324	2310568	2103922	1883287
3	1863050	1790915	1763955	1873281	1964666	2069306	2182178	2306006	2408745	2303176	2096174	1875504
4	1855603	1789973	1765293	1874947	1980198	2073592	2185072	2308993	2411844	2296452	2088726	1866783
5	1849828	1789169	1766897	1877034	2003060	2078042	2187970	2311984	2413797	2290353	2081604	1858766
6	1846665	1788900	1768103	1878978	2019218	2080712	2191474	2315286	2416253	2284426	2077003	1851202
7	1843239	1788630	1766629	1881065	2031344	2082346	2195285	2317959	2417233	2278511	2073592	1843239
8	1839543	1787958	1766629	1880926	2041753	2083089	2201247	2320803	2416089	2273068	2070045	1835848
9	1836670	1786612	1766897	1885096	2049395	2084719	2207974	2323178	2413797	2266392	2064283	1828746
10	1833249	1786343	1768103	1888019	2054840	2087835	2212725	2325867	2412007	2260191	2056903	1821388
11	1829291	1785808	1773322	1890393	2059257	2093792	2215639	2330455	2410376	2253688	2049248	1813641
12	1826430	1785539	1803608	1892627	2060736	2097517	2217943	2337275	2408586	2247350	2041899	1807537
13	1823297	1785000	1813505	1894446	2058520	2099303	2219782	2343006	2406629	2240861	2034275	1801313
14	1819618	1782716	1820296	1896680	2056608	2100794	2221165	2347304	2405161	2234086	2026957	1795912
15	1815134	1778278	1828609	1902277	2053812	2105865	2223618	2346507	2401250	2227308	2019365	1791725
16	1811472	1778278	1832290	1911687	2054545	2111251	2227462	2345870	2396377	2220397	2011495	1786746
17	1808623	1777472	1834889	1919294	2067238	2117083	2230391	2350648	2390706	2212264	2003206	1781370
18	1806318	1777204	1836533	1932015	2076706	2123086	2233624	2354650	2386332	2205069	1995378	1776002
19	1803202	1775466	1837626	1931305	2086650	2129693	2236240	2354490	2381799	2198649	1988422	1771048
20	1800096	1773858	1838585	1936131	2090958	2135558	2236857	2353529	2377127	2192843	1980631	1766495
21	1799018	1773322	1838722	1940248	2095279	2140983	2237782	2359294	2371815	2187207	1973134	1761824
22	1798207	1771583	1837900	1943228	2094239	2145355	2238090	2364895	2367306	2181114	1965958	1756493
23	1797396	1771316	1838722	1947651	2092748	2149125	2239936	2368914	2361854	2174577	1959074	1750500
24	1796990	1770512	1839269	1951218	2088726	2152301	2251677	2372618	2356249	2167290	1951932	1745461
25	1796182	1768237	1838722	1953643	2082792	2155023	2260346	2376003	2350648	2160926	1944513	1742145
26	1795642	1767969	1838311	1957210	2077300	2158805	2267478	2380348	2344121	2154270	1936274	1737502
27	1795101	1767701	1837900	1957067	2075075	2163951	2272912	2385845	2338231	2147766	1928046	1731428
28	1794831	1765159	1838859	1955499	2074184	2166378	2277113	2390544	2332827	2140530	1920846	1725354
29	1794560	1764623	1842828	1953500	2074036	2167442	2281934	2394918	2327292	2133297	1913511	1719304
30	1793749	1764355	1853129	1953928	---	2168657	2288166	2397184	2322070	2126690	1905648	1712732
31	1793073	---	1861389	1955924	---	2170173	---	2399623	---	2119782	1898078	---
MAX	1869686	1792536	1861389	1957210	2095279	2170173	2288166	2399623	2417233	2316699	2112299	1890533
MIN	1793073	1764355	1763155	1865814	1958356	2068714	2175337	2295357	2322070	2119782	1898078	1712732
a	2326.14	2324.00	2331.15	2337.88	2345.99	2352.40	2360.07	2367.07	2362.23	2349.06	2333.79	2320.10
b	-79516	-28718	+97034	+94535	+118112	+96137	+117993	+111457	-77553	-202288	-221704	-185346

CAL YR 1995 b +702913

WTR YR 1996 b -159857

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

11525430 JUDGE FRANCIS CARR POWERPLANT NEAR FRENCH GULCH, CA

LOCATION.--Lat 40°38'49", long 122°37'34", Shasta County, Hydrologic Unit 18010212, at powerplant 1.6 mi downstream from Mill Creek and 3.8 mi south of French Gulch.

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

GAGE.--Recorded powerplant output.

REMARKS.--Water is diverted from Trinity River at NW 1/4 SE 1/4 sec.8, T.33 N., R.8 W., through a tunnel to powerplant and then into Whiskeytown Lake (station 11371700). See schematic diagram of Klamath River and Trinity River basins.

COOPERATION.--Records were provided by U.S. Bureau of Reclamation, not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,000 ft³/s, Oct. 18, 1987; no flow for many days most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1265	0	1052	0	0	2972	1101	1291	743	3153	2987	3106
2	977	0	0	0	0	3057	1102	1254	837	3196	2972	2895
3	1391	0	0	0	0	1623	1130	1435	743	3225	3135	3048
4	3035	0	0	792	0	1604	1185	1632	450	3194	3212	3097
5	1730	0	0	0	674	1598	1187	1390	1134	3199	2555	3130
6	1076	0	0	0	1069	1600	1100	1123	882	3212	1673	3178
7	1378	10	648	0	1573	1597	1115	1234	1794	3175	1675	3175
8	1435	5	0	928	2052	2017	1203	1435	1710	2981	1644	3143
9	1417	381	0	7	3113	2038	1095	1405	2018	3207	3060	3180
10	1256	0	198	0	2834	2056	1210	1365	2084	3214	3057	3144
11	1325	0	508	0	2900	2072	953	589	2135	3164	3143	3154
12	1291	0	0	0	3132	2435	1640	432	1899	3160	3172	1799
13	1466	0	0	0	3257	2384	1575	629	1963	2980	3138	2565
14	1455	1008	0	0	3199	2388	1454	431	1675	3126	3139	2126
15	1681	1836	0	0	3184	567	1316	427	3010	3211	3103	1900
16	1523	0	0	0	3168	634	1348	267	2871	3123	3100	1898
17	1013	0	0	0	3176	465	943	395	2784	3000	3092	2410
18	1103	0	0	0	3186	580	606	149	2785	3081	3114	2168
19	1114	746	230	0	3202	474	1279	271	2845	2843	2621	2163
20	1157	503	1	0	3216	507	1488	551	2849	2846	3105	2019
21	0	0	460	0	1597	505	1912	181	2802	3125	3128	1724
22	0	763	633	0	492	996	1854	201	2690	3142	3172	2234
23	0	0	1	0	500	1059	1737	124	2774	3140	3178	2220
24	0	0	0	0	501	996	1708	0	2723	3179	3177	2103
25	0	749	501	98	523	925	1887	916	3056	2892	3178	1352
26	0	163	368	4	552	0	1832	721	3184	3047	3183	2055
27	0	17	438	2017	586	0	1697	610	3181	3025	2823	2418
28	9	1076	0	2097	1094	1304	1709	0	3163	3006	3196	2472
29	0	0	2	2051	1977	1087	1334	0	3228	3016	3120	2485
30	118	0	0	1181	---	1196	1265	871	3218	3100	3089	2483
31	0	---	0	0	---	1384	---	753	---	3039	3174	---
TOTAL	28215	7257	5040	9175	50757	42120	40965	22082	67230	96001	91115	74844
MEAN	910	242	163	296	1750	1359	1365	712	2241	3097	2939	2495
MAX	3035	1836	1052	2097	3257	3057	1912	1632	3228	3225	3212	3180
MIN	0	0	0	0	0	0	606	0	450	2843	1644	1352
AC-FT	55960	14390	10000	18200	100700	83550	81250	43800	133400	190400	180700	148500

KLAMATH RIVER BASIN

11525430 JUDGE FRANCIS CARR POWERPLANT NEAR FRENCH GULCH, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1363	862	701	604	824	875	1145	1311	1842	2338	2250	2145
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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1963 - 1996
ANNUAL TOTAL	453247	534801	
ANNUAL MEAN	1242	1461	1370
HIGHEST ANNUAL MEAN			2485
LOWEST ANNUAL MEAN			301
HIGHEST DAILY MEAN	3469 May 25	3257 Feb 13	4000 Oct 18 1987
LOWEST DAILY MEAN	0 Jan 1	0 Oct 21	0 May 6 1963
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 5	.00 Oct 21	.00 Oct 14 1969
ANNUAL RUNOFF (AC-FT)	899000	1061000	992600
10 PERCENT EXCEEDS	3140	3160	3150
50 PERCENT EXCEEDS	501	1310	1130
90 PERCENT EXCEEDS	.00	.00	.00

11525500 TRINITY RIVER AT LEWISTON, CA

LOCATION.--Lat 40°43'10", long 122°48'09", in SW 1/4 NW 1/4 sec.17, T.33 N., R.8 W., Trinity County, Hydrologic Unit 18010211, on right bank 400 ft upstream from Deadwood Creek, 0.8 mi downstream from Lewiston Diversion Dam, and 0.8 mi northeast of Lewiston.

DRAINAGE AREA.--719 mi².

PERIOD OF RECORD.--August 1911 to current year.

CHEMICAL DATA: Water years 1951-81.

WATER TEMPERATURE: Water years 1952-55, 1958-83.

SEDIMENT DATA: Water years 1955-61.

REVISED RECORDS.--WSP 331: 1911-12. WSP 1181: 1949. WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,815.95 ft above sea level. See WSP 1929 for history of changes prior to July 7, 1964.

REMARKS.--Records excellent. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	472	336	325	325	358	1220	309	337	770	490	484	484
2	472	337	323	323	359	1170	289	347	783	509	486	485
3	475	337	325	323	358	1170	289	348	784	535	486	484
4	471	333	326	335	359	1160	303	348	782	510	487	485
5	476	331	325	343	358	1170	306	348	657	485	487	486
6	480	325	324	346	379	1170	304	348	612	482	491	465
7	478	326	323	346	352	1160	302	349	613	483	493	445
8	477	327	325	346	350	1170	309	336	610	475	492	444
9	336	325	330	349	526	948	314	321	504	480	492	444
10	322	326	331	348	1340	777	314	328	463	475	491	441
11	327	324	339	348	1340	609	327	337	456	478	492	438
12	327	325	330	345	1580	589	326	462	457	475	492	431
13	319	324	323	345	3120	581	332	1270	456	487	490	441
14	336	326	325	348	3160	484	331	2590	459	493	488	444
15	336	328	332	348	3290	351	329	5150	454	493	487	443
16	337	327	325	349	3800	349	334	5170	457	491	488	442
17	338	325	325	346	4260	348	337	5170	450	491	490	439
18	338	324	325	343	4250	341	333	5180	445	494	491	440
19	337	325	322	346	4260	323	336	5110	441	492	486	441
20	337	324	324	348	4280	317	336	3640	437	480	487	441
21	337	328	323	347	5080	317	337	1910	441	474	490	438
22	337	326	322	345	6290	320	335	1740	442	491	489	441
23	336	327	323	345	6230	321	334	1550	454	490	489	442
24	336	325	323	347	6160	317	334	1260	463	488	484	441
25	336	324	327	346	6160	317	334	874	456	490	480	437
26	337	327	326	346	5770	317	337	773	458	492	480	454
27	337	327	326	346	3990	319	329	756	461	490	482	452
28	337	324	326	343	2770	319	346	769	460	491	482	452
29	337	324	334	342	2000	317	344	783	457	485	480	453
30	336	325	333	347	---	317	333	771	461	484	484	453
31	336	---	329	357	---	316	---	844	---	485	488	---
TOTAL	11493	9812	10119	10661	82529	18904	9723	49519	15643	15158	15108	13526
MEAN	371	327	326	344	2846	610	324	1597	521	489	487	451
MAX	480	337	339	357	6290	1220	346	5180	784	535	493	486
MIN	319	324	322	323	350	316	289	321	437	474	480	431
AC-FT	22800	19460	20070	21150	163700	37500	19290	98220	31030	30070	29970	26830

KLAMATH RIVER BASIN

11525500 TRINITY RIVER AT LEWISTON, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1960, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	302	742	1257	1572	2544	2653	3675	3932	2131	611	201	158
MAX	2174	3055	5319	5734	11670	6116	6986	9062	6311	2579	628	423
(WY)	1951	1921	1956	1956	1958	1941	1915	1958	1915	1941	1941	1912
MIN	92.3	121	147	169	331	519	725	442	115	42.7	41.0	41.1
(WY)	1918	1930	1937	1937	1933	1924	1924	1924	1924	1924	1924	1924

SUMMARY STATISTICS

WATER YEARS 1912 - 1960

ANNUAL MEAN	1641	
HIGHEST ANNUAL MEAN	3721	1958
LOWEST ANNUAL MEAN	367	1924
HIGHEST DAILY MEAN	38700	Dec 22 1955
LOWEST DAILY MEAN	28	Jul 30 1924
ANNUAL SEVEN-DAY MINIMUM	31	Jul 26 1924
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 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	276	296	354	475	479	636	688	759	605	349	306	296
MAX	424	849	2285	4038	2846	5489	5029	3937	4668	1086	577	531
(WY)	1993	1984	1984	1974	1996	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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1962 - 1996

ANNUAL TOTAL	364715	262195	
ANNUAL MEAN	999	716	460
HIGHEST ANNUAL MEAN			1784
LOWEST ANNUAL MEAN			165
HIGHEST DAILY MEAN	6890	Mar 25	6290 Feb 22
LOWEST DAILY MEAN	297	Jan 2	289 Apr 2
ANNUAL SEVEN-DAY MINIMUM	301	Jun 24	300 Apr 1
INSTANTANEOUS PEAK FLOW			6390 Feb 21
INSTANTANEOUS PEAK STAGE			7.56 Feb 21
ANNUAL RUNOFF (AC-FT)	723400	520100	333100
10 PERCENT EXCEEDS	3970	1170	574
50 PERCENT EXCEEDS	480	437	297
90 PERCENT EXCEEDS	306	324	155

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 12 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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	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
OCT									
05...	1055	3.1	7.5	1	0.01	--	--	--	--
NOV									
01...	1025	3.3	9.0	1	0.01	--	--	--	--
DEC									
04...	1050	5.7	7.0	8	0.12	--	--	--	--
12...	1225	20	9.0	200	11	63	73	86	98
JAN									
08...	1115	5.0	6.5	4	0.05	--	--	--	--
FEB									
07...	1310	28	6.0	107	8.1	46	57	72	90
APR									
05...	1025	12	7.0	14	0.45	--	--	--	--
MAY									
02...	1145	9.3	9.0	9	0.23	--	--	--	--
JUN									
06...	1100	6.9	12.5	5	0.09	--	--	--	--
JUL									
09...	1025	4.6	15.0	4	0.05	--	--	--	--
AUG									
15...	1200	2.5	17.0	2	0.01	--	--	--	--
SEP									
13...	1215	2.8	12.5	4	0.03	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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
MAY							
02...	1150	1	9.3	9.0	1	4	9
02...	1155	1	9.3	9.0	1	4	11
02...	1200	1	9.3	9.0	2	12	22

KLAMATH RIVER BASIN

11525580 LITTLE GRASS VALLEY CREEK NEAR LEWISTON, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM
MAY							
02...	15	22	32	37	42	54	100
02...	24	39	60	68	74	84	100
02...	34	47	60	65	68	91	100

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)
DEC									
12...	1250	1000	1120	0.250	0	1245	1255	30	0.5
12...	1300	1000	1120	0.250	0	1255	1305	30	0.5
FEB									
07...	1325	1000	1120	0.250	0	1320	1330	30	0.5
07...	1335	1000	1120	0.250	0	1330	1340	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)
DEC								
12...	2	13	13	1.00	18	9.0	0.72	3.9
12...	2	13	13	1.00	17	9.0	0.48	3.9
FEB								
07...	2	14	14	0.0	28	6.0	4.00	30
07...	2	14	14	0.0	27	6.0	4.40	30

DATE	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.
	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
	.125 MM	.250 MM	.500 MM	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM
DEC								
12...	1	7	28	52	76	96	99	100
12...	--	8	29	50	71	94	100	--
FEB								
07...	--	3	9	26	51	86	99	100
07...	--	1	7	22	46	84	99	100

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA

LOCATION.--Lat 40°40'35", long 122°49'46", in SW 1/4 NE 1/4 sec.36, T.33 N., R.9 W., Trinity County, Hydrologic Unit 18010211, on right bank 0.1 mi upstream from Phillips Gulch and 2.5 mi southwest of Lewiston.

DRAINAGE AREA.--30.8 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.--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 or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	0800	256	4.71				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	18	39	60	124	87	58	38	23	10	9.9
2	13	14	16	36	56	114	83	57	37	23	10	9.7
3	13	14	16	33	57	115	78	57	36	22	10	9.6
4	13	14	21	31	128	140	74	57	35	22	10	9.8
5	13	14	19	30	181	143	71	56	34	22	11	10
6	13	14	17	28	151	125	70	52	33	22	13	10
7	13	14	17	27	137	118	68	41	32	22	13	10
8	13	14	16	27	131	114	68	38	31	22	13	10
9	13	14	15	36	123	115	68	38	30	21	12	9.8
10	13	14	19	33	113	118	67	36	30	21	12	9.6
11	13	14	31	30	104	154	64	33	30	21	11	9.6
12	13	14	138	28	97	146	62	33	30	21	11	10
13	13	14	68	27	91	132	61	33	29	20	12	11
14	13	14	48	27	86	122	60	37	29	20	11	12
15	13	14	115	42	82	115	63	43	29	20	11	12
16	13	14	60	80	93	118	80	48	28	17	11	12
17	13	14	46	64	109	108	71	58	28	16	11	12
18	13	14	40	59	110	102	67	60	28	16	11	12
19	13	15	35	69	157	106	67	51	29	16	11	11
20	13	15	31	66	153	104	65	48	29	16	11	11
21	13	15	28	65	182	92	65	61	28	16	11	11
22	13	15	29	55	144	84	63	54	28	15	11	11
23	13	15	27	53	129	93	62	50	28	15	11	11
24	14	15	25	80	118	96	63	48	26	15	11	11
25	14	16	24	69	108	86	60	46	23	15	10	11
26	14	16	23	59	100	70	60	44	23	15	10	11
27	14	14	24	64	95	77	59	44	25	15	11	11
28	13	14	25	57	100	85	59	42	24	16	11	11
29	13	14	44	53	137	79	58	41	23	16	11	11
30	13	14	69	56	---	76	58	40	24	15	9.8	11
31	14	---	47	59	---	74	---	39	---	11	9.9	---
TOTAL	408	430	1151	1482	3332	3345	2001	1443	877	567	341.7	321.0
MEAN	13.2	14.3	37.1	47.8	115	108	66.7	46.5	29.2	18.3	11.0	10.7
MAX	14	16	138	80	182	154	87	61	38	23	13	12
MIN	13	14	15	27	56	70	58	33	23	11	9.8	9.6
AC-FT	809	853	2280	2940	6610	6630	3970	2860	1740	1120	678	637

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.4	22.8	38.7	69.5	86.4	106	66.7	48.5	30.0	16.3	11.1	10.8
MAX	18.8	70.4	220	332	263	531	186	174	99.8	39.6	22.3	23.0
(WY)	1990	1985	1984	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1976 - 1996			
ANNUAL TOTAL	33707				15698.7							
ANNUAL MEAN	92.3				42.9				44.2			
HIGHEST ANNUAL MEAN									136			
LOWEST ANNUAL MEAN									10.2			
HIGHEST DAILY MEAN	1650				182				2420			
LOWEST DAILY MEAN	12				9.6				3.8			
ANNUAL SEVEN-DAY MINIMUM	12				9.8				4.0			
INSTANTANEOUS PEAK FLOW					256				4140			
INSTANTANEOUS PEAK STAGE					4.71				10.11			
ANNUAL RUNOFF (AC-FT)	66860				31140				32060			
10 PERCENT EXCEEDS	236				107				95			
50 PERCENT EXCEEDS	43				28				20			
90 PERCENT EXCEEDS	13				11				8.7			

WATER-QUALITY RECORDS

SEDIMENT LOAD: Maximum daily, 189 tons, Feb. 5; minimum daily, 0 ton, several days during October and November.

DATE	TIME	NUMBER OF SAM- PLING POINTS (COUNT)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	BED	BED	BED
					MAT.	MAT.	MAT.
					SIEVE DIAM. % FINER THAN .250 MM	SIEVE DIAM. % FINER THAN .500 MM	SIEVE DIAM. % FINER THAN 1.00 MM
MAY							
02...	1005	1	58	8.0	1	1	3
02...	1010	1	58	8.0	--	1	4
02...	1015	1	58	8.0	--	--	--
02...	1020	1	58	8.0	--	1	1
02...	1025	1	58	8.0	--	1	3
DATE		BED	BED	BED	BED	BED	BED
		MAT.	MAT.	MAT.	MAT.	MAT.	MAT.
		SIEVE DIAM. % FINER THAN 2.00 MM	SIEVE DIAM. % FINER THAN 4.00 MM	SIEVE DIAM. % FINER THAN 8.00 MM	SIEVE DIAM. % FINER THAN 16.0 MM	SIEVE DIAM. % FINER THAN 32.0 MM	SIEVE DIAM. % FINER THAN 64.0 MM
MAY							
02...	4	6	9	13	55	100	--
02...	8	11	13	14	29	29	100
02...	--	--	--	2	12	41	100
02...	3	6	10	13	27	100	--
02...	6	13	18	22	24	100	--

KLAMATH RIVER BASIN

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)
DEC									
12...	1040	1000	1100	0.250	0	1035	1045	30	2.0
12...	1055	1000	1100	0.250	0	1050	1100	30	2.0
FEB									
07...	1115	1000	1120	0.250	0	1110	1125	30	1.0
07...	1140	1000	1120	0.250	0	1130	1145	30	1.0

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)
DEC								
12...	2	10	10	3.00	183	9.5	2.60	50
12...	2	10	10	3.00	177	9.5	2.30	50
FEB								
07...	2	20	20	4.00	136	6.0	1.10	25
07...	2	20	20	4.00	136	6.0	1.40	25
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

DEC								
12...	2	8	28	61	94	100	--	--
12...	2	10	36	70	96	100	--	--
FEB								
07...	1	4	18	50	88	99	99	100
07...	1	3	15	46	89	100	--	--

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	10.0	---	---	---	---	9.0	---	---	---	---	---
2	---	---	6.5	6.0	---	4.5	---	8.0	---	---	15.5	---
3	---	---	---	---	---	---	---	---	---	---	---	17.0
4	---	---	7.5	---	---	6.0	---	---	16.5	---	---	---
5	8.0	---	---	---	7.0	5.5	7.0	---	---	---	---	---
6	---	---	---	---	---	---	---	---	13.0	---	15.0	---
7	---	---	8.5	---	6.0	---	---	8.5	---	14.5	---	---
8	---	---	---	7.0	6.5	---	---	---	---	---	---	---
9	---	---	---	7.0	---	9.0	9.5	---	---	16.0	19.0	---
10	---	---	---	---	7.5	---	---	10.5	---	---	---	15.5
11	11.0	---	8.5	---	---	7.5	10.0	---	14.5	---	---	---
12	---	9.5	9.5	---	---	---	---	---	---	---	---	---
13	---	---	8.0	---	---	---	---	---	---	---	---	13.5
14	---	---	7.5	---	---	5.0	---	---	---	---	19.5	---
15	---	---	7.0	6.0	9.0	---	---	12.5	14.5	18.5	16.0	---
16	9.0	11.0	---	7.0	---	---	7.5	---	---	---	---	---
17	---	---	---	5.0	9.0	---	---	12.0	---	---	---	---
18	---	---	6.5	---	---	---	---	---	15.0	---	---	13.0
19	9.0	9.0	---	---	6.5	---	6.0	---	---	15.0	16.5	---
20	---	---	6.0	---	6.0	---	---	---	---	---	---	---
21	---	---	---	---	---	9.5	---	11.5	15.0	---	---	---
22	---	---	5.5	---	---	---	---	---	---	---	---	---
23	---	---	---	---	5.5	---	8.5	---	---	17.5	---	---
24	6.0	9.0	---	5.0	5.0	---	10.5	---	12.5	---	17.5	---
25	---	---	---	---	---	7.5	---	---	---	---	---	13.5
26	---	7.0	5.0	---	5.5	---	---	11.0	---	17.0	---	---
27	10.0	---	---	---	---	---	---	---	---	---	---	---
28	---	8.0	5.5	---	---	7.0	---	14.0	13.0	---	17.5	---
29	---	---	6.0	4.0	---	---	12.5	---	---	19.0	---	---
30	---	9.0	---	---	---	---	---	---	16.0	---	---	14.5
31	11.5	---	---	5.5	---	8.5	---	15.0	---	---	---	---

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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	.03	14	1	.04	18	4	.18
2	13	1	.03	14	1	.04	16	2	.09
3	13	1	.03	14	1	.04	16	1	.07
4	13	1	.03	14	1	.04	21	3	.15
5	13	1	.03	14	1	.04	19	1	.05
6	13	1	.04	14	1	.04	17	1	.05
7	13	1	.04	14	1	.04	17	1	.05
8	13	1	.05	14	1	.04	16	1	.04
9	13	2	.06	14	1	.04	15	1	.04
10	13	2	.06	14	0	.00	19	3	.19
11	13	2	.07	14	0	.00	31	7	.83
12	13	2	.06	14	0	.00	138	343	167
13	13	2	.05	14	0	.00	68	44	8.5
14	13	1	.05	14	0	.00	48	17	2.4
15	13	1	.04	14	1	.04	115	212	77
16	13	1	.03	14	1	.04	60	25	4.2
17	13	1	.03	14	1	.04	46	6	.73
18	13	1	.03	14	0	.00	40	2	.23
19	13	1	.03	15	0	.00	35	1	.13
20	13	1	.03	15	0	.00	31	1	.09
21	13	1	.03	15	0	.00	28	1	.11
22	13	0	.00	15	0	.00	29	2	.15
23	13	0	.00	15	0	.00	27	2	.12
24	14	0	.00	15	0	.00	25	1	.10
25	14	0	.00	16	2	.07	24	1	.08
26	14	1	.04	16	1	.06	23	1	.06
27	14	1	.04	14	1	.04	24	1	.06
28	13	1	.04	14	1	.04	25	3	.23
29	13	1	.05	14	2	.08	44	33	5.0
30	13	2	.06	14	3	.12	69	42	8.8
31	14	2	.07	---	---	---	47	6	.79
TOTAL	408	---	1.15	430	---	0.89	1151	---	277.52
JANUARY			FEBRUARY			MARCH			
1	39	4	.38	60	9	1.5	124	145	49
2	36	2	.21	56	8	1.2	114	107	33
3	33	2	.16	57	7	1.1	115	96	30
4	31	2	.13	128	76	32	140	219	87
5	30	1	.11	181	377	189	143	191	74
6	28	1	.10	151	135	56	125	135	46
7	27	1	.08	137	71	26	118	99	31
8	27	1	.07	131	88	31	114	72	22
9	36	6	.74	123	100	33	115	53	16
10	33	2	.22	113	108	33	118	38	12
11	30	1	.12	104	87	24	154	118	52
12	28	1	.08	97	67	18	146	51	20
13	27	1	.07	91	51	13	132	36	13
14	27	1	.08	86	40	9.2	122	28	9.3
15	42	9	1.0	82	32	7.1	115	25	7.7
16	80	61	16	93	56	14	118	23	7.3
17	64	11	2.0	109	95	28	108	18	5.3
18	59	5	.86	110	62	19	102	16	4.3
19	69	7	1.3	157	187	80	106	13	3.8
20	66	6	1.0	153	109	45	104	11	3.1
21	65	6	.98	182	182	90	92	9	2.3
22	55	3	.50	144	113	44	84	9	2.1
23	53	2	.34	129	90	31	93	9	2.4
24	80	34	7.6	118	142	45	96	10	2.5
25	69	15	2.8	108	132	38	86	10	2.3
26	59	7	1.1	100	110	30	70	9	1.6
27	64	7	1.2	95	89	23	77	11	2.3
28	57	6	.90	100	95	26	85	12	2.9
29	53	4	.64	137	173	64	79	8	1.8
30	56	6	.95	---	---	---	76	6	1.2
31	59	9	1.5	---	---	---	74	5	1.0
TOTAL	1482	---	43.22	3332	---	1052.1	3345	---	548.2

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	87	18	4.3	58	4	.61	38	3	.29
2	83	22	5.0	57	5	.74	37	3	.25
3	78	19	3.9	57	5	.85	36	2	.22
4	74	15	3.1	57	5	.78	35	2	.20
5	71	12	2.2	56	5	.71	34	3	.25
6	70	10	1.8	52	4	.60	33	5	.43
7	68	9	1.6	41	4	.43	32	5	.41
8	68	8	1.4	38	3	.33	31	4	.32
9	68	7	1.3	38	3	.26	30	3	.25
10	67	7	1.4	36	2	.20	30	3	.21
11	64	8	1.4	33	2	.18	30	2	.17
12	62	8	1.3	33	2	.18	30	2	.16
13	61	7	1.2	33	2	.18	29	2	.16
14	60	7	1.1	37	2	.23	29	2	.16
15	63	8	1.3	43	4	.45	29	2	.16
16	80	22	5.0	48	6	.74	28	2	.15
17	71	8	1.6	58	21	3.7	28	2	.15
18	67	6	1.1	60	17	2.8	28	2	.15
19	67	4	.77	51	13	1.8	29	2	.18
20	65	4	.74	48	10	1.3	29	3	.20
21	65	4	.78	61	15	2.5	28	3	.22
22	63	5	.80	54	9	1.3	28	3	.25
23	62	5	.83	50	8	1.1	28	4	.28
24	63	5	.85	48	7	.87	26	4	.28
25	60	5	.86	46	6	.71	23	4	.27
26	60	6	.91	44	4	.53	23	5	.31
27	59	6	.97	44	2	.27	25	5	.36
28	59	6	1.0	42	1	.13	24	6	.38
29	58	7	1.1	41	1	.15	23	5	.35
30	58	5	.84	40	2	.21	24	5	.32
31	---	---	---	39	3	.29	---	---	---
TOTAL	2001	---	50.45	1443	---	25.13	877	---	7.49
JULY			AUGUST			SEPTEMBER			
1	23	5	.29	10	3	.08	9.9	2	.05
2	23	4	.26	10	3	.08	9.7	2	.05
3	22	4	.24	10	3	.08	9.6	2	.05
4	22	4	.22	10	2	.07	9.8	2	.06
5	22	3	.21	11	2	.07	10	2	.06
6	22	3	.19	13	2	.07	10	2	.06
7	22	3	.17	13	2	.07	10	3	.07
8	22	2	.14	13	2	.07	10	3	.07
9	21	3	.16	12	2	.07	9.8	3	.07
10	21	3	.19	12	2	.06	9.6	3	.08
11	21	4	.20	11	2	.06	9.6	3	.08
12	21	4	.21	11	2	.06	10	3	.08
13	20	4	.23	12	2	.06	11	2	.06
14	20	5	.25	11	2	.06	12	1	.03
15	20	5	.26	11	3	.08	12	1	.03
16	17	5	.20	11	3	.09	12	1	.03
17	16	4	.18	11	3	.09	12	1	.03
18	16	3	.15	11	3	.09	12	1	.03
19	16	3	.13	11	3	.09	11	1	.03
20	16	3	.13	11	3	.08	11	1	.03
21	16	3	.13	11	3	.08	11	1	.03
22	15	3	.12	11	2	.07	11	1	.03
23	15	3	.13	11	2	.06	11	1	.03
24	15	4	.15	11	2	.06	11	1	.03
25	15	4	.17	10	2	.06	11	1	.03
26	15	5	.19	10	2	.06	11	1	.03
27	15	4	.17	11	2	.06	11	1	.03
28	16	4	.15	11	2	.06	11	1	.03
29	16	3	.13	11	2	.06	11	1	.03
30	15	3	.12	9.8	2	.05	11	1	.03
31	11	3	.09	9.9	2	.05	---	---	---
TOTAL	567	---	5.56	341.7	---	2.15	321.0	---	1.35
YEAR	15698.7		2015.21						

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1995	408.00	1.15	0	1
NOVEMBER	430.00	0.89	0	1
DECEMBER	1151.00	277.52	6	284
JANUARY 1996	1482.00	43.22	0	43
FEBRUARY	3332.00	1052.10	101	1150
MARCH	3345.00	548.20	52	600
APRIL	2001.00	50.45	0	50
MAY	1443.00	25.13	0	25
JUNE	877.00	7.49	0	7
JULY	567.00	5.56	0	6
AUGUST	341.70	2.15	0	2
SEPTEMBER ...	321.00	1.35	0	1
TOTAL	15698.70	2015.21	159	2170

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 excellent. Flow regulated since November 1960 by Clair Engle Lake (station 11525400), 64 mi upstream, and by transbasin diversion to Judge Francis Carr Powerplant (station 11525430) since April 1963. Small diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,500 ft³/s, Feb. 25, 1958, gage height, 30.50 ft, from rating curve extended above 40,000 ft³/s on basis of slope-area measurement at gage height 43.2 ft; minimum, 82 ft³/s, Aug. 31, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 43.2 ft, from floodmarks, discharge, 172,000 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft³/s or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1115	14,700	13.54	Feb. 20	0315	12,500	12.70
Dec. 30	0915	12,400	12.64				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	603	452	959	3980	3650	4730	2800	2510	2070	1100	697	593
2	598	454	930	3000	3560	4300	2930	2440	2100	1160	681	587
3	591	455	651	2540	3370	4390	2550	2230	2240	1150	675	585
4	588	455	1050	2180	5620	5090	2360	2020	2220	1110	672	583
5	584	450	1380	1900	10700	6160	2260	1880	2070	1010	665	588
6	588	448	1470	1700	9070	5520	2260	1790	1940	985	661	595
7	591	443	962	1560	8110	4970	2380	1750	1980	996	660	572
8	589	444	775	1460	7650	4740	2570	1690	1880	1010	652	555
9	583	447	683	1690	7690	4930	2730	1630	1660	1020	642	553
10	466	446	670	2230	7400	4880	2470	1600	1470	995	637	579
11	446	446	1300	1890	6900	5480	2180	1600	1410	970	630	551
12	451	447	9180	1750	6300	5590	2020	1860	1390	928	629	538
13	454	446	5430	1620	6850	4930	1880	2260	1360	913	626	545
14	446	446	3040	1510	7140	4390	1790	3840	1330	941	623	556
15	456	447	6110	2050	6830	3920	1760	5200	1330	1240	617	605
16	453	455	3710	4250	6840	3690	2110	6240	1330	1150	618	637
17	454	454	2340	5740	8580	3560	2040	7160	1280	931	616	597
18	454	457	1840	4200	9370	3650	1930	7360	1170	862	615	576
19	453	455	1540	4190	10700	3600	1890	6740	1120	824	617	569
20	452	454	1350	4450	11700	3370	1970	6110	1100	798	612	564
21	450	454	1240	4770	11700	3140	1950	4820	1100	768	614	557
22	450	467	1160	3950	11600	2940	2040	4970	1100	761	616	552
23	452	476	1100	3390	10600	2720	2090	4010	1070	774	611	553
24	454	470	1030	3720	9980	2520	4110	3440	1100	767	603	551
25	455	475	973	4330	9240	2360	3740	2890	1050	757	592	548
26	454	607	935	3730	8710	2220	3210	2560	1050	749	588	544
27	455	543	920	3660	7610	2310	2850	2550	1040	739	589	553
28	457	499	966	3480	5890	2980	2520	2350	1030	729	595	550
29	457	506	2490	3110	5530	2520	2370	2240	1000	743	592	550
30	454	498	10800	3090	---	2310	2410	2120	1030	752	586	550
31	453	---	6950	3330	---	2210	---	2050	---	726	588	---
TOTAL	15291	13996	73934	94450	228890	120120	72170	101910	43020	28358	19419	17036
MEAN	493	467	2385	3047	7893	3875	2406	3287	1434	915	626	568
MAX	603	607	10800	5740	11700	6160	4110	7360	2240	1240	697	637
MIN	446	443	651	1460	3370	2210	1760	1600	1000	726	586	538
AC-FT	30330	27760	146600	187300	454000	238300	143100	202100	85330	56250	38520	33790

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 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	471	1093	2116	3080	3026	3339	2415	2110	1426	699	454	417
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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1964 - 1996

ANNUAL TOTAL	1230311	828594	
ANNUAL MEAN	3371	2264	1715
HIGHEST ANNUAL MEAN			4816
LOWEST ANNUAL MEAN			372
HIGHEST DAILY MEAN	25800	Jan 9	11700
LOWEST DAILY MEAN	443	Nov 7	443
ANNUAL SEVEN-DAY MINIMUM	446	Nov 7	446
INSTANTANEOUS PEAK FLOW			14700
INSTANTANEOUS PEAK STAGE			13.54
ANNUAL RUNOFF (AC-FT)	2440000	1644000	1242000
10 PERCENT EXCEEDS	8980	5600	3580
50 PERCENT EXCEEDS	1560	1290	947
90 PERCENT EXCEEDS	455	455	341

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 or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1300	20,300	14.09	Feb. 5	0630	13,900	11.70
Dec. 30	0645	9,410	9.72	Feb. 20	0530	14,400	11.92
Jan. 16	2245	10,200	10.08	Mar. 11	1800	8,930	9.43

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	82	220	3190	6070	4120	2850	1680	1010	388	144	87
2	82	81	292	2520	5370	4110	2950	1600	956	369	139	86
3	81	82	247	2070	4760	4400	2660	1510	911	350	137	85
4	78	82	367	1780	7930	5970	2450	1440	873	337	137	84
5	76	82	511	1560	12300	7830	2270	1370	833	329	135	85
6	74	82	471	1430	9870	6020	2150	1300	795	319	134	86
7	74	82	403	1320	8560	5320	2070	1240	762	306	131	87
8	74	84	329	1220	7660	4980	2020	1190	733	292	126	86
9	74	87	270	1330	7060	5200	1970	1130	699	281	122	85
10	76	87	261	1540	6300	5480	1900	1080	675	271	117	84
11	78	87	635	1350	5610	7560	1810	1040	652	262	112	82
12	83	88	12000	1240	4980	7750	1740	1030	627	252	109	82
13	86	87	7080	1160	4490	6320	1640	1010	600	243	107	84
14	87	87	3390	1100	4030	5210	1550	1040	580	235	106	90
15	85	88	9970	1750	3690	4570	1500	1030	560	234	105	107
16	81	90	5510	5740	3550	4180	1820	1060	541	249	105	115
17	79	92	2940	6900	4390	3780	1820	1400	522	235	103	112
18	79	97	2050	4760	6080	3580	1730	2000	505	226	101	106
19	81	98	1650	6700	10800	3430	1730	1960	495	223	100	102
20	81	97	1360	6190	12800	3200	1840	1590	484	217	101	99
21	80	97	1140	7890	12400	2990	1850	1850	468	210	100	97
22	79	99	1010	5610	9330	2830	1970	2520	456	202	100	95
23	81	100	914	4610	7480	2680	1930	2050	445	192	98	94
24	82	99	834	7660	6760	2500	3030	1770	448	184	95	92
25	83	114	770	8120	5780	2310	2850	1580	456	175	92	91
26	84	155	719	5930	5210	2170	2480	1430	470	166	90	90
27	85	165	708	9290	4640	2360	2200	1360	491	160	89	88
28	87	142	797	9700	4290	3090	2010	1260	469	155	89	87
29	86	126	2020	6950	4350	2650	1860	1190	437	155	89	85
30	85	126	7920	6510	---	2410	1770	1120	411	153	88	84
31	83	---	4740	6530	---	2260	---	1060	---	148	88	---
TOTAL	2507	2965	71528	133650	196540	131260	62420	43890	18364	7518	3389	2737
MEAN	80.9	98.8	2307	4311	6777	4234	2081	1416	612	243	109	91.2
MAX	87	165	12000	9700	12800	7830	3030	2520	1010	388	144	115
MIN	74	81	220	1100	3550	2170	1500	1010	411	148	88	82
AC-FT	4970	5880	141900	265100	389800	260400	123800	87060	36420	14910	6720	5430

11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	125	743	1845	3459	3277	3393	1930	1019	458	179	89.7	76.9
MAX	351	3475	6355	11740	12770	9027	4989	2701	1660	390	227	185
(WY)	1980	1974	1984	1970	1986	1995	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1966 - 1996			
ANNUAL TOTAL	961615				676768							
ANNUAL MEAN	2635				1849				1375			
HIGHEST ANNUAL MEAN									3049			
LOWEST ANNUAL MEAN									131			
HIGHEST DAILY MEAN	40500				12800				59200			
LOWEST DAILY MEAN	66				74				14			
ANNUAL SEVEN-DAY MINIMUM	69				75				15			
INSTANTANEOUS PEAK FLOW					20300				75000			
INSTANTANEOUS PEAK STAGE					14.09				28.00			
ANNUAL RUNOFF (AC-FT)	1907000				1342000				996200			
10 PERCENT EXCEEDS	7090				5940				3490			
50 PERCENT EXCEEDS	699				643				394			
90 PERCENT EXCEEDS	82				84				65			

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 excellent. Flow regulated since November 1960 by Clair Engle Lake (station 11525400) 84 mi upstream, and by transbasin diversion to Judge Francois Carr Powerplant (station 11525430) since April 1963. Small diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 231,000 ft³/s, Dec. 22, 1964, gage height, 57.0 ft, present site and datum, from floodmarks, from rating curve extended above 123,000 ft³/s; minimum daily, 162 ft³/s, Oct. 4, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30,000 ft³/s or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1615	47,000	29.45	Feb. 5	1215	35,000	26.69
Dec. 30	1115	46,300	28.16	Feb. 21	1345	36,900	27.13

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	894	705	1530	13800	14500	12700	8340	6700	4530	1990	1090	820
2	878	705	1990	9700	13300	11800	9310	6480	4430	2010	1060	817
3	866	705	1360	7870	11900	12000	8180	6080	4510	1990	1050	805
4	865	705	2070	6680	16300	14500	7450	5670	4460	1940	1050	799
5	850	705	2990	5850	32100	21500	6980	5330	4210	1830	1040	806
6	843	699	3730	5220	29000	18200	6740	5070	3970	1730	1020	819
7	840	699	2410	4690	25900	15200	6810	4870	3880	1710	1010	816
8	845	701	1830	4340	23700	14200	7010	4700	3750	1690	994	780
9	838	727	1520	4860	23200	14600	7180	4500	3450	1670	972	772
10	788	732	1380	6320	21000	15000	6890	4330	3190	1650	958	766
11	714	727	2140	5290	18600	18700	6250	4250	3010	1600	937	756
12	725	722	26500	4730	16300	21000	5940	4430	2930	1550	925	747
13	727	721	25000	4320	15400	17200	5560	4760	2840	1500	918	762
14	722	721	12300	3990	15200	14200	5260	6210	2750	1490	907	784
15	720	721	24400	4920	14100	12400	5090	7270	2700	1720	896	956
16	708	723	16700	11400	13500	11500	5850	8640	2670	1740	895	1020
17	709	734	9120	21200	16300	11000	6340	9600	2590	1540	889	914
18	705	760	6580	15100	20700	10800	6010	11200	2450	1440	883	866
19	705	766	5230	19300	26800	10600	6040	11000	2330	1380	883	842
20	705	753	4410	18700	34700	9850	6370	9800	2270	1340	877	826
21	701	751	3830	22100	35000	9080	6310	8920	2240	1300	878	815
22	697	762	3420	16800	31100	8510	6680	10900	2200	1260	881	799
23	699	782	3120	13900	26400	8010	6690	8860	2150	1250	875	796
24	702	781	2840	21800	24300	7450	12500	7550	2180	1230	860	791
25	705	831	2600	22400	21200	6980	11900	6630	2160	1210	843	784
26	708	1030	2420	16900	18800	6580	9620	5970	2170	1190	829	776
27	710	1030	2310	21700	16300	6930	8360	5710	2160	1160	827	779
28	710	918	2510	24600	13500	9950	7470	5390	2130	1140	830	773
29	711	868	7500	17900	13500	8500	6900	5110	2030	1130	830	772
30	712	899	36100	15100	---	7590	6730	4860	1980	1130	819	767
31	711	---	24700	15100	---	7100	---	4620	---	1140	814	---
TOTAL	23413	23083	244540	386580	602600	373630	216760	205410	88320	46650	28540	24325
MEAN	755	769	7888	12470	20780	12050	7225	6626	2944	1505	921	811
MAX	894	1030	36100	24600	35000	21500	12500	11200	4530	2010	1090	1020
MIN	697	699	1360	3990	11900	6580	5090	4250	1980	1130	814	747
AC-FT	46440	45790	485000	766800	1195000	741100	429900	407400	175200	92530	56610	48250

11530000 TRINITY RIVER AT HOOPA, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1960, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	926	2578	6468	9239	11830	10400	10170	8663	4755	1635	650	508
MAX	5405	9589	28060	30140	50380	26370	19320	16700	9875	4265	1365	1248
(WY)	1951	1938	1956	1956	1958	1938	1938	1938	1953	1941	1953	1912
MIN	260	373	531	647	2433	3815	4790	3000	1378	466	249	213
(WY)	1933	1940	1937	1937	1937	1955	1944	1934	1934	1918	1934	1934

SUMMARY STATISTICS

WATER YEARS 1912 - 1960

ANNUAL MEAN	5618	
HIGHEST ANNUAL MEAN	12270	1958
LOWEST ANNUAL MEAN	2630	1934
HIGHEST DAILY MEAN	158000	Dec 22 1955
LOWEST DAILY MEAN	162	Oct 4 1931
ANNUAL SEVEN-DAY MINIMUM	164	Oct 1 1931
INSTANTANEOUS PEAK FLOW	a190000	Dec 22 1955
INSTANTANEOUS PEAK STAGE	36.90	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	4070000	
10 PERCENT EXCEEDS	12700	
50 PERCENT EXCEEDS	3070	
90 PERCENT EXCEEDS	442	

a From rating curve extended above 56,000 ft³/s.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	822	3146	6981	10390	9536	10000	6537	4476	2574	1180	720	642
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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1964 - 1996

ANNUAL TOTAL	3139411	2263851	
ANNUAL MEAN	8601	6185	4732
HIGHEST ANNUAL MEAN			11350
LOWEST ANNUAL MEAN			786
HIGHEST DAILY MEAN	69800	Jan 9	36100
LOWEST DAILY MEAN	697	Oct 22	697
ANNUAL SEVEN-DAY MINIMUM	702	Oct 18	702
INSTANTANEOUS PEAK FLOW			47000
INSTANTANEOUS PEAK STAGE			29.45
ANNUAL RUNOFF (AC-FT)	6227000	4490000	3428000
10 PERCENT EXCEEDS	24000	16800	10900
50 PERCENT EXCEEDS	3250	2790	2070
90 PERCENT EXCEEDS	730	730	570

11530500 KLAMATH RIVER NEAR KLAMATH, CA

LOCATION.--Lat 41°30'52", long 123°59'57", in SW 1/4, sec.13, T.13 N., R.2 E., Del Norte County, Hydrologic Unit 18010209, on right bank 0.2 mi upstream from Turwar Creek and 2.2 mi southeast of Klamath.
DRAINAGE AREA.--12,100 mi², approximately (not including Lost River or Lower Klamath Lake basins).

PERIOD OF RECORD.--October 1910 to December 1926 (published as "near Requa"), October 1950 to September 1994;
October 1995 to September 1996, stage only. Monthly discharge only for some periods, published in WSP 1315-B.

CHEMICAL DATA: Water years 1951-95.

BIOLOGICAL DATA: Water years 1975-81.

SPECIFIC CONDUCTANCE: Water years 1975-81.

WATER TEMPERATURE: Water years 1966-81.

SEDIMENT DATA: Water years 1955-56, 1975-95.

REVISED RECORDS.--WSP 1285: 1951(P). WSP 1445: 1918-20. WDR CA-81-2: 1980.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is sea level. Prior to June 1926, nonrecording gage at site 2.6 mi upstream at different datum. Oct. 1, 1950, to Oct. 2, 1975, water-stage recorder at site 2.6 mi upstream at datum 5.60 ft above sea level.

REMARKS.--Records fair. Interruptions in record were due to malfunction of sensing and (or) recording instruments. 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.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.43	6.39	6.30	6.28	10.46	7.98	19.94	16.92	16.54	16.10	16.62	15.90
2	6.39	6.35	6.31	6.25	10.44	8.87	16.94	15.16	16.11	15.12	15.59	15.46
3	6.41	6.33	6.27	6.25	8.87	8.07	15.16	14.14	15.51	14.94	15.52	15.28
4	6.39	6.32	6.32	6.26	11.28	8.13	14.14	13.26	17.57	14.91	17.38	15.50
5	6.37	6.32	6.51	6.26	12.99	11.11	13.29	12.59	21.20	17.57	18.90	17.38
6	6.37	6.30	6.43	6.27	13.62	11.58	12.73	12.03	21.20	20.28	18.53	17.26
7	6.45	6.32	6.35	6.27	11.58	9.82	12.25	11.70	20.41	20.14	17.29	16.61
8	6.37	6.31	6.39	6.28	9.82	8.98	12.25	11.72	20.71	20.32	16.64	16.44
9	6.49	6.32	6.53	6.39	8.98	8.53	13.08	12.02	21.30	20.54	16.88	16.46
10	6.44	6.30	6.53	6.43	8.79	8.41	13.57	13.06	20.99	19.89	17.02	16.83
11	6.56	6.30	6.43	6.37	11.62	8.79	13.10	12.28	19.97	18.90	18.32	16.95
12	6.51	6.36	6.46	6.37	14.45	11.62	12.28	11.82	19.01	18.04	18.69	17.93
13	6.39	6.33	6.49	6.44	21.04	19.20	11.83	11.45	18.24	17.54	17.78	16.89
14	6.34	6.29	6.46	6.40	19.20	16.46	11.47	11.25	17.71	17.12	16.90	15.95
15	6.29	6.24	6.40	6.37	20.64	17.11	13.57	11.28	17.17	16.74	15.95	15.38
16	6.26	6.20	6.42	6.37	20.32	16.38	16.15	13.57	16.84	16.52	15.49	15.06
17	6.22	6.20	6.45	6.37	16.61	13.78	18.15	16.15	18.38	16.64	15.10	14.76
18	6.22	6.19	---	---	13.84	12.61	17.48	16.08	19.55	18.34	14.84	14.69
19	6.21	6.18	---	---	12.62	11.71	18.54	17.47	20.37	19.23	14.81	14.62
20	6.18	6.16	---	---	11.72	11.01	19.48	18.15	21.38	20.37	14.67	14.21
21	6.27	6.16	---	6.43	11.04	10.41	20.28	19.32	21.70	21.12	14.23	13.80
22	6.30	6.17	6.83	6.65	10.42	10.02	19.49	17.26	21.58	20.08	13.83	13.57
23	6.24	6.14	7.53	6.63	10.04	9.72	17.67	16.76	20.11	19.59	13.58	13.01
24	6.62	6.14	7.72	7.32	9.76	9.46	20.19	17.67	19.94	19.17	13.01	12.55
25	6.32	6.14	8.04	7.40	9.49	9.23	19.92	18.53	19.29	18.19	12.56	12.21
26	6.32	6.14	8.06	7.66	9.23	9.04	18.54	17.01	18.24	17.40	12.23	11.89
27	6.36	6.16	7.66	7.14	9.07	8.98	20.09	17.06	17.51	16.81	12.84	11.79
28	6.31	6.16	7.14	6.91	9.53	9.04	20.29	18.77	16.91	16.48	14.08	12.84
29	6.20	6.14	6.96	6.89	19.31	9.53	18.79	17.19	16.98	16.55	13.74	12.93
30	6.28	6.13	7.98	6.96	25.78	19.31	17.19	16.56	---	---	12.96	12.50
31	6.29	6.28	---	---	25.15	19.94	16.70	16.48	---	---	12.82	12.43
MONTH	6.62	6.13	---	---	25.78	7.98	20.29	11.25	21.70	14.91	18.90	11.79

11530500 KLAMATH RIVER NEAR KLAMATH, CA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.55	12.82	13.85	13.51	10.94	10.77	7.95	7.80	6.54	6.32	5.98	5.76
2	15.60	14.44	13.62	13.10	10.94	10.66	7.86	7.61	6.37	6.27	5.82	5.74
3	14.44	13.55	13.16	12.64	10.70	10.55	7.69	7.51	6.34	6.23	5.80	5.74
4	13.57	13.01	12.77	12.10	10.69	10.51	7.56	7.44	6.32	6.22	5.79	5.71
5	13.03	12.66	12.32	11.78	10.51	10.21	7.45	7.37	6.29	6.18	5.80	5.72
6	12.68	12.59	11.95	11.52	10.21	10.05	7.39	7.27	6.31	6.19	5.79	5.75
7	12.80	12.58	11.57	11.35	10.05	9.88	7.34	7.24	6.22	6.14	5.97	5.73
8	13.00	12.76	11.45	11.07	9.93	9.76	7.26	7.20	6.19	6.13	5.96	5.88
9	13.22	12.90	11.31	10.87	9.74	9.47	7.23	7.16	6.20	6.11	5.98	5.79
10	13.08	12.73	11.27	10.65	9.47	9.25	7.22	7.11	6.18	6.07	5.98	5.89
11	12.73	12.32	10.76	10.47	9.25	9.10	7.16	7.05	6.11	6.05	5.95	5.85
12	12.33	12.11	10.96	10.49	9.10	9.00	7.10	6.99	6.11	6.04	5.93	5.84
13	12.11	11.70	11.35	10.79	9.00	8.89	7.09	6.93	6.11	6.03	6.04	5.87
14	11.72	11.50	12.93	11.16	8.92	8.79	7.04	6.90	6.06	5.96	6.09	5.94
15	11.51	11.40	13.00	12.71	8.82	8.68	7.23	6.89	6.05	5.96	6.70	6.09
16	12.67	11.45	13.00	12.63	8.76	8.63	7.36	7.07	6.00	5.95	6.81	6.53
17	12.73	12.45	14.11	12.61	8.71	8.54	7.23	6.94	5.99	5.93	6.53	6.21
18	12.48	12.16	16.15	14.09	8.55	8.42	6.96	6.88	5.99	5.93	6.21	6.11
19	12.48	12.11	16.19	15.23	8.46	8.32	6.92	6.80	5.97	5.92	6.17	6.07
20	12.54	12.42	15.40	14.22	8.34	8.25	6.81	6.74	5.95	5.92	6.13	5.99
21	12.63	12.37	15.88	14.02	8.28	8.20	6.77	6.69	5.95	5.91	6.12	6.00
22	12.83	12.63	17.10	15.88	8.22	8.14	6.69	6.63	5.97	5.92	6.16	5.97
23	14.30	12.79	16.16	14.61	8.15	8.08	6.68	6.58	5.97	5.90	6.12	6.02
24	20.84	14.30	14.64	13.66	8.23	8.11	6.67	6.50	5.96	5.86	6.12	6.00
25	20.25	17.55	13.73	13.34	8.20	8.09	6.67	6.48	5.99	5.83	6.15	6.03
26	17.65	15.95	13.50	13.06	8.21	8.08	6.63	6.47	6.04	5.80	6.18	6.00
27	16.17	14.96	13.21	12.94	8.14	8.05	6.56	6.39	6.03	5.79	6.18	5.98
28	15.07	14.31	13.01	12.48	8.10	8.01	6.56	6.38	5.95	5.79	6.20	5.99
29	14.36	13.84	12.48	11.70	8.04	7.90	6.61	6.35	5.98	5.80	6.14	5.97
30	14.00	13.69	11.80	11.34	7.99	7.83	6.63	6.35	5.93	5.76	6.14	5.96
31	---	---	11.42	10.91	---	---	6.68	6.39	5.95	5.73	---	---
MONTH	20.84	11.40	17.10	10.47	10.94	7.83	7.96	6.35	6.54	5.73	6.81	5.71

SMITH RIVER BASIN

11532500 SMITH RIVER NEAR CRESCENT CITY, CA

LOCATION.--Lat 41°47'30", long 124°04'30", in SW 1/4 SW 1/4 sec. 9, T.16 N., R.1 E., Del Norte County, Hydrologic Unit 18010101, Redwood National Park, on right bank opposite mouth of Cedar Creek, 1.6 mi downstream from South Fork and 7 mi east of Crescent City.

DRAINAGE AREA.--614 mi².

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1929: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 79.26 ft above sea level. Prior to Oct. 9, 1991, at site 1.1 mi upstream at datum 10.35 ft higher.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 228,000 ft³/s, Dec. 22, 1964, gage height, 48.5 ft, from floodmarks, from rating curve extended above 110,000 ft³/s on basis of slope-area measurement at gage height 39.51 ft, former site and datum; minimum daily, 160 ft³/s, Oct. 24, 25, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 36,000 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 12	1700	68,500	24.07	Apr. 24	0330	49,600	21.51
Dec. 30	1830	50,200	21.60				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	336	194	16800	11800	8970	8220	14700	4290	2470	796	423	301
2	320	192	6640	8060	7420	7120	9980	3860	2310	771	421	294
3	315	190	3970	6280	6320	8130	7240	3470	2160	749	420	290
4	319	188	9710	5410	11800	12800	5790	3160	2030	745	416	289
5	308	188	17700	4620	16900	18500	4960	2900	1910	723	410	303
6	300	188	12700	4030	15600	11000	4530	2690	1800	696	404	301
7	296	192	6690	3800	13200	9380	4310	2520	1710	677	394	295
8	295	321	4600	8230	13200	10100	4010	2370	1630	659	388	291
9	295	917	4810	9970	21100	9610	3850	2250	1560	644	382	289
10	295	589	5060	9430	12900	8750	3730	2130	1500	627	373	286
11	405	452	14100	6540	9290	14500	3460	2040	1440	612	367	281
12	566	2710	49100	5140	7400	12800	4430	2020	1370	597	365	285
13	337	1820	30800	4290	6240	9260	4530	2030	1320	584	360	297
14	265	966	24500	3800	5400	7330	3950	3700	1270	570	352	322
15	239	702	32100	8820	4790	6280	3630	7780	1220	570	349	999
16	229	620	16500	13300	4430	5610	5680	6240	1180	597	346	608
17	225	597	10100	11600	7880	5120	8020	7110	1140	569	340	430
18	222	2030	7550	10900	16800	4960	7130	17600	1110	600	337	372
19	219	1370	5890	18500	20300	4750	8150	14500	1070	565	334	347
20	208	939	4800	22300	16800	4230	8150	8940	1040	542	337	332
21	205	809	4080	21200	17600	3800	7400	10800	1010	527	340	321
22	199	1160	3540	12700	12500	3900	7880	13300	983	510	338	312
23	198	1060	3120	13100	11900	3780	11700	8800	980	496	331	306
24	197	967	2780	26300	12100	3480	37900	6580	1110	487	321	303
25	195	4850	2520	14300	8670	3240	16600	5310	1030	478	312	299
26	214	5480	2300	10200	6880	3040	10600	4510	966	468	316	292
27	237	2670	2290	26100	5830	3990	7820	3930	927	458	324	289
28	220	1970	2740	19300	6360	6470	6260	3480	894	451	323	285
29	207	1660	21100	14000	8940	5000	5300	3160	860	446	315	283
30	198	10200	43400	12000	---	4260	4720	2880	829	434	306	282
31	195	---	23800	10800	---	5500	---	2660	---	427	303	---
TOTAL	8259	46191	395790	356820	317520	224910	236410	167010	40829	18075	11047	10184
MEAN	266	1540	12770	11510	10950	7255	7880	5387	1361	583	356	339
MAX	566	10200	49100	26300	21100	18500	37900	17600	2470	796	423	999
MIN	195	188	2290	3800	4430	3040	3460	2020	829	427	303	281
AC-FT	16380	91620	785000	707800	629800	446100	468900	331300	80980	35850	21910	20200

11532500 SMITH RIVER NEAR CRESCENT CITY, CA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1027	4578	7408	8488	7455	6583	4433	2787	1292	535	340	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 1995 CALENDAR YEAR				FOR 1996 WATER YEAR				WATER YEARS 1932 - 1996			
ANNUAL TOTAL	1843084				1833045							
ANNUAL MEAN	5050				5008				3757			
HIGHEST ANNUAL MEAN									7027			
LOWEST ANNUAL MEAN									975			
HIGHEST DAILY MEAN	55100				49100				180000			
LOWEST DAILY MEAN	188				188				160			
ANNUAL SEVEN-DAY MINIMUM	190				190				163			
INSTANTANEOUS PEAK FLOW					68500				228000			
INSTANTANEOUS PEAK STAGE					24.07				48.50			
ANNUAL RUNOFF (AC-FT)	3656000				3636000				2721000			
10 PERCENT EXCEEDS	13700				13200				8860			
50 PERCENT EXCEEDS	2030				2300				1570			
90 PERCENT EXCEEDS	301				292				265			

SMITH RIVER BASIN

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. No figures are given for elevations below 13.32 from October 1 to August 19.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 34.12 ft, Jan. 8, 1990.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.38	13.37	---	---	23.52	18.62	20.84	19.41	18.71	18.08	18.80	18.00
2	13.37	13.37	---	---	19.29	16.97	19.41	18.00	18.08	17.53	18.00	17.69
3	13.37	13.36	---	---	16.97	16.23	18.00	17.43	17.53	17.19	18.44	17.72
4	13.36	13.36	---	---	19.94	16.27	17.44	17.01	19.78	17.26	21.55	18.44
5	13.36	13.35	---	---	23.84	18.16	17.01	16.65	21.01	19.49	22.38	19.96
6	13.35	13.35	---	---	22.36	18.67	16.65	16.34	20.73	19.84	19.96	18.62
7	13.35	13.34	---	---	18.67	17.29	16.75	16.21	19.84	19.49	18.80	18.36
8	13.34	13.33	13.62	---	17.29	16.54	18.81	16.75	20.43	19.42	18.83	18.60
9	13.33	13.33	14.28	13.62	17.05	16.53	19.77	18.00	22.90	20.43	18.75	18.37
10	13.33	13.32	13.98	13.60	18.07	16.68	19.77	18.28	20.69	19.08	18.37	18.09
11	13.55	13.32	13.67	13.52	21.31	18.07	18.28	17.44	19.09	18.16	20.95	18.32
12	13.77	13.55	15.95	13.67	29.02	21.24	17.44	16.89	18.16	17.57	20.44	18.97
13	13.55	---	15.77	14.56	28.98	22.27	17.42	16.67	17.57	17.13	18.97	18.06
14	---	---	14.56	14.06	25.82	20.93	18.79	17.42	17.13	16.77	18.06	17.48
15	---	---	14.06	13.83	25.68	22.90	19.67	18.79	16.77	16.50	17.48	17.10
16	---	---	13.83	13.75	22.90	21.45	20.80	19.22	16.50	16.38	17.10	16.81
17	---	---	13.86	13.68	21.45	19.99	20.55	18.68	19.62	16.42	16.81	16.63
18	---	---	15.49	13.86	19.99	18.53	21.27	18.23	21.27	19.62	16.66	16.56
19	---	---	15.07	14.36	19.12	17.80	21.60	20.74	22.54	20.52	16.59	16.37
20	---	---	14.36	14.05	19.23	16.71	24.63	20.30	21.48	20.37	16.37	16.11
21	---	---	14.07	13.95	16.71	16.36	23.92	20.77	21.57	20.43	16.11	15.92
22	---	---	14.44	14.07	16.36	16.07	20.77	19.24	20.43	19.08	16.26	15.90
23	---	---	14.42	14.19	16.07	15.83	22.36	19.05	20.44	18.77	16.26	15.86
24	---	---	14.41	14.11	15.85	15.65	24.67	21.40	20.35	18.92	15.86	15.68
25	---	---	18.75	14.41	15.65	15.47	21.40	19.61	18.92	18.03	15.68	15.56
26	---	---	18.75	16.21	15.47	15.33	19.61	18.82	18.03	17.43	15.56	15.45
27	---	---	16.21	15.30	15.61	15.29	24.56	18.92	17.43	17.07	17.48	15.44
28	---	---	15.30	15.01	19.45	15.61	23.28	20.46	18.03	17.15	17.67	16.89
29	---	---	15.01	14.79	24.38	19.45	20.46	19.68	18.83	18.03	16.89	16.39
30	---	---	20.30	14.98	27.13	24.38	19.68	19.26	---	---	16.39	16.08
31	---	---	---	---	26.31	20.84	19.27	18.71	---	---	18.85	16.04

11532650 SMITH RIVER NEAR FORT DICK, CA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20.44	18.85	16.30	16.07	15.29	15.17	13.86	13.84	13.35	13.35	13.15	13.14
2	19.40	18.07	16.07	15.83	15.17	15.06	13.84	13.81	13.35	13.34	13.14	13.12
3	18.07	17.29	15.83	15.64	15.06	14.96	13.81	13.78	13.36	13.35	13.13	13.11
4	17.29	16.76	15.64	15.45	14.96	14.87	13.80	13.78	13.38	13.35	13.12	13.10
5	16.76	16.42	15.45	15.31	14.87	14.79	13.78	13.74	13.36	13.32	13.17	13.11
6	16.42	16.25	15.31	15.19	14.79	14.71	13.75	13.71	13.32	---	13.15	13.14
7	16.26	16.13	15.19	15.08	14.71	14.65	13.72	13.68	13.32	---	13.15	13.12
8	16.13	15.95	15.08	14.96	14.65	14.58	13.70	13.66	---	---	13.17	13.13
9	16.01	15.85	14.97	14.88	14.58	14.53	13.68	13.64	---	---	13.15	13.12
10	16.01	15.82	14.88	14.79	14.53	14.48	13.66	13.62	---	---	13.12	13.11
11	15.90	15.67	14.79	14.73	14.48	14.43	13.63	13.60	---	---	13.11	13.10
12	16.47	15.90	14.76	14.71	14.43	14.38	13.61	13.57	---	---	13.11	13.10
13	16.47	16.20	14.81	14.70	14.38	14.35	13.59	13.54	---	---	13.13	13.11
14	16.20	15.95	16.74	14.81	14.35	14.29	13.57	13.53	---	---	13.38	13.13
15	15.95	15.85	18.18	16.74	14.29	14.25	13.56	13.53	---	---	14.38	13.38
16	18.13	15.87	17.85	16.64	14.25	14.22	13.61	13.56	---	---	14.04	13.53
17	18.23	17.65	18.96	16.62	14.22	14.17	13.56	13.51	---	---	13.53	13.33
18	17.66	17.60	21.56	18.96	14.17	14.14	13.61	13.56	---	---	13.33	13.25
19	18.43	17.62	20.99	18.99	14.14	14.11	13.57	13.52	---	---	13.25	13.21
20	18.41	17.71	18.99	17.75	14.11	14.07	13.54	13.50	13.20	13.19	13.21	13.19
21	17.85	17.61	20.43	17.65	14.09	14.05	13.51	13.47	13.21	13.19	13.19	13.16
22	17.99	17.77	20.41	18.82	14.05	14.02	13.49	13.46	13.21	13.20	13.17	13.15
23	23.57	17.99	18.82	17.76	14.09	14.00	13.46	13.44	13.20	13.19	13.15	13.14
24	26.66	22.49	17.77	17.08	14.18	14.09	13.45	13.42	13.19	13.17	13.14	13.13
25	22.49	19.54	17.08	16.59	14.13	14.04	13.43	13.41	13.17	13.15	13.13	13.12
26	19.54	18.29	16.59	16.25	14.04	14.00	13.42	13.39	13.16	13.16	13.13	13.12
27	18.29	17.50	16.25	15.98	14.00	13.96	13.41	13.38	13.19	13.16	13.12	13.11
28	17.50	16.95	15.98	15.76	13.97	13.93	13.40	13.37	13.19	13.17	13.12	13.11
29	16.95	16.57	15.76	15.58	13.93	13.90	13.40	13.35	13.18	13.16	13.11	13.11
30	16.57	16.30	15.58	15.43	13.90	13.86	13.38	13.35	13.17	13.15	13.11	13.10
31	---	---	15.43	15.29	---	---	13.38	13.35	13.16	13.14	---	---

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 1996

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, 1976-96	02-08-96	39.5
					02-12-96	18.2
					09-15-96	b1.03

a Published as a miscellaneous measurement.

b Base flow.

Discharge measurements in the following table were made at special study and miscellaneous sites throughout the area covered by this volume.

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water year)	Measurements	
					Date	Discharge (ft ³ /s)
Alameda Creek Basin						
11177200 Vallecitos Creek	Arroyo de la Laguna	Lat 37°35'42", long 121°52'51", in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004, on right bank at culvert on Sunol Road, 700 ft upstream from mouth, and 0.3 mi east of Sunol.	7.48	1975-76, 1977-96	12-07-95 2-29-96 4-23-96 6-20-96	0.77 2.66 0.27 1.01
Salinas River basin						
11151870 Arroyo Seco near Greenfield, CA	Salinas River	Lat 36°14'15", long 121°28'50", in NE 1/4 SE 1/4 sec.36, T.19 S., R.4 E., Monterey County, Hydrologic Unit 18060005, on right bank 0.6 mi downstream from Rocky Creek, and 14.5 mi southwest of Greenfield.	113	1962-95	10-02-95 11-21-95 12-01-95 4-03-96 6-04-96	10.2 11.1 11.6 237 61.1
364336121160001 Tres Pinos Creek at Panoche Road, below Airstrip, near Paicines, CA	San Benito River	Lat 36°43'36", long 121°16'00", in SE 1/4 SE 1/4 Sec.12 T.14 S. R.6 E., San Benito County, Hydrologic Unit 18060002, 0.6 mi downstream of town of Paicines on Panoche Road, at stream crossing.	200		05-01-96	0.12
364416121164501 Tres Pinos Creek above Swanson Crossing, near Willow Grove School, CA	San Benito River	Lat 36°44'16", long 121°16'45" in NW 1/4 NE 1/4 Sec.11 T.14 S. R.6 E., San Benito County, Hydrologic Unit 18060002, off HWY 25, 5 mi south of town of Tres Pinos, above stream crossing.	203		05-01-96 07-09-96 09-24-96	1.41 6.43 5.40
364438121164201 Tres Pinos Creek above Murphy Road Bridge, near Paicines, CA	San Benito River	Lat 36°44'38", long 121°16'42" in NW 1/4 SE 1/4 Sec.2 T.14 S. R.6 E., San Benito County, Hydrologic Unit 18060002, off HWY 25, 4.1 mi south of town of Tres Pinos, above Murphy Road bridge.	203		05-01-96	3.00
11157500 Tres Pinos Creek near Tres Pinos, CA	San Benito River	Lat 36°45'53", long 121°17'45" in NW 1/4 NE 1/4 Sec.34 T.13 S. R.6 E., San Benito County, Hydrologic Unit 18060002, 2.1 mi south of town of Tres Pinos on HWY 25, on upstream, right bank side of HWY 25 bridge.	208		05-01-96 09-18-96 09-24-96	2.40 7.72 7.63
364626121183201 Tres Pinos Creek at Historical Park Crossing, near Tres Pinos, CA	San Benito River	Lat 36°46'26", long 121°18'32" in NE 1/4 SE 1/4 Sec.28 T.13 S. R.6 E., San Benito County, Hydrologic Unit 18060002, below stream crossing of San Benito Co. Historical Park entrance road, 1.4 mi south of Tres Pinos on HWY 25.	209		05-01-96 07-09-96 09-24-96	3.64 7.46 8.15

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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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