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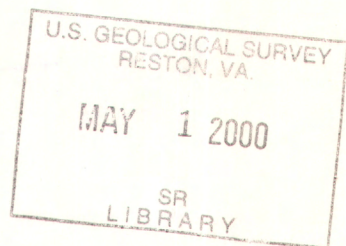
Utah

1999

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# Water Resources Data Utah Water Year 1999

Water-Data Report UT99-1





# CALENDAR FOR WATER YEAR 1999

1998

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	4	4	5	6	7			1	2	3	4	5
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	15	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
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1999

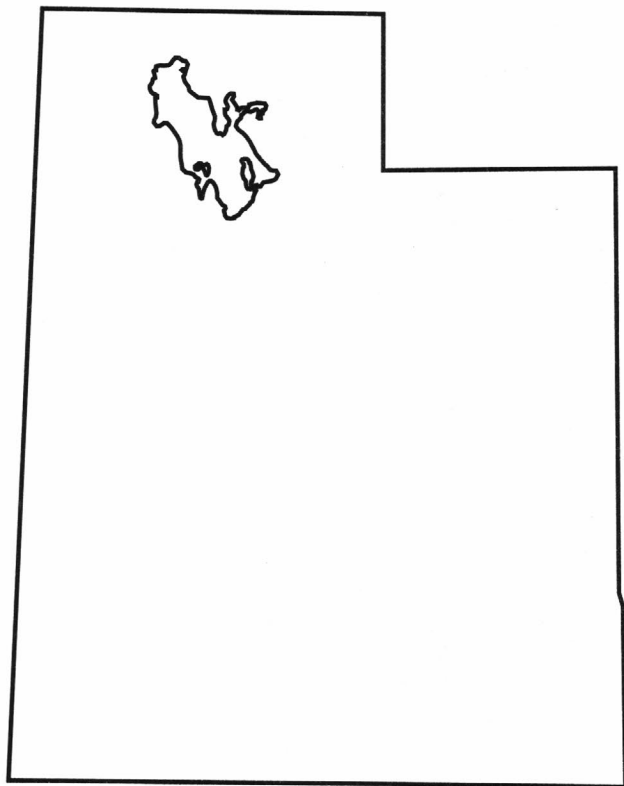
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10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28							28	29	30	31			
31																				
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
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JULY							AUGUST							SEPTEMBER						
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11	12	13	14	15	16	17	15	16	17	18	19	20	21	12	13	14	15	16	17	18
18	19	20	21	22	23	24	22	23	24	25	26	27	28	19	20	21	22	23	24	25
25	26	27	28	29	30	31	29	30	31					26	27	28	29	30		



# Water Resources Data Utah Water Year 1999

By L.R. Herbert, D.V. Allen, D.E. Wilberg, and J.R. Tibbets

Water-Data Report UT-99-1





UNITED STATES DEPARTMENT OF THE INTERIOR

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GEOLOGICAL SURVEY

Charles G. Groat, Director

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West Valley City, Utah 84119

2000



## PREFACE

This volume of the annual hydrologic data report of Utah 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 quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nations land and water resources. Hydrologic data for Utah are contained in one volume.

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, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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This report was prepared in cooperation with the State of Utah and with other agencies under the general supervision of Kimball Goddard, District Chief, Utah.



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XII WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water gaging stations in Utah and parts of surrounding states have been discontinued. Daily streamflow (d) and reservoir elevation (e) records were collected and published for the period of record, expressed in water years. Discontinued project stations with less than 2 years of data have not been included. Stations shown in bold were discontinued at end of previous water year. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

Station name	Station number	Drainage area (sq mi)	Period of record
COLORADO RIVER BASIN			
Cottonwood Wash at I-70 near Cisco, Ut (d)	09163675	170	1983-86
Twomile Creek near LaSal, Ut (d)	09169000	269	1944-51
Taylor Creek near Gateway, Co (d)	09177500	12	1944-67
Deep Creek near Paradox, Co (d)	09178000	—	1944-53
TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER			
Geyser Creek near Paradox, Co (d)	09178500	—	1944-51
Onion Creek above Onion Creek Bridge near Moab, Ut (d)	09180920	—	1979-81
Onion Creek below Onion Creek Bridge near Moab, Ut (d)	09180970	—	1979-81
Onion Creek near Moab, Ut (d)	09181000	18.8	1950-55
Professor (Rock) Creek near Moab, Ut (d)	09181500	33.6	1950-53
Castle Creek above diversions, near Moab, Ut (d)	09182000	7.58	1951-55 1958-75
Castle Creek near Moab, Ut (d)	09182500	53.1	1950-55 1957-58
Courthouse Wash at Arches Hwy Crossing near Moab, Ut (d)	09182900	143	1959-66
Courthouse Wash near Moab, Ut (d)	09183000	162	1950-55 1957 1966-89
Mill Creek near Moab, Ut (d)	09184000	74.9	1949-71 1972-93
Pack Creek at M4 Ranch, near Moab, Ut (d)	09184500	15.8	1955-59
Pack Creek near Moab, Ut (d)	09185000	57.4	1955-59
Hatch Wash near LaSal, Ut (d)	09185500	378	1951-71
Indian Creek Tunnel near Monticello, Ut (d)	09185800	—	1958-80
Indian Creek near Monticello, Ut (d)	09186000	4.70	1950-57
Indian Creek above Cottonwood Creek near Monticello, Ut (d)	09186500	31.2	1949-71 1988-91
Cottonwood Creek near Monticello, Ut (d)	09187000	115	1950-57
Indian Creek above Harts Draw near Monticello, Ut (d)	09187500	258	1949-57
Indian Creek below Bogus Pocket near Monticello, Ut (d)	09187550	262	1983-88
GREEN RIVER BASIN			
Blacks Fork above Blacks Fork Ranger Station, Ut (d)	09217500	48.8	1937-39
Blacks Fork (at Ranger St) near Robertson, Wy (d)	09217900	126	1937-39 1966-86
Blacks Fork at Blacks Fork Ranger Station, Ut (d)	09218000	a130	1937-39
Green River near Linwood, Ut (d)	09225500	a14,300	1928-63
Middle Fork Beaver Creek near Lonetree, Wy (d)	09226500	a28	1948-70
East Fork Beaver Creek near Lonetree, Wy (d)	09227000	a8.2	1949-62
West Fork Beaver Creek near Lonetree, Wy (d)	09227500	a23	1949-62
Burnt Fork near Burntfork, Wy (d)	09228500	52.8	1943-83
Henrys Fork near Manila (d)	09229500	520	1928-93
Green River at Flaming Gorge near Linwood, Ut (d)	09230500	a14,900	1923-38
Sheep Creek Upper Canal near Manila, Ut (d)	09231000	—	1950-61
Carter Creek Canal near Manila, Ut (d)	09231200	—	1956-61
Sheep Creek Lower Canal near Manila, Ut (d)	09231500	—	1950-61
Sheep Creek near Manila, Ut (d)	09232000	a42	1943-61
Sheep Creek at mouth near Manila, Ut (d)	09232500	111	1947-61
Carter Creek near Manila, Ut (d)	09233000	a19	1949-54
Red Lake Outlet near Manila, Ut (d)	09233500	a19	1946-49

Station name	Station number	Drainage area (sq mi)	Period of record
GREEN RIVER BASIN--Continued			
Carter Creek at mouth near Manila, Ut (d)	09234000	a110	1946-55
Red Creek near Dutch John, Ut (d)	09234700	140	1971-76
Green River at (near) Bridgeport, Ut (d)	09235000	a15,700	1912-15
Crouse Creek near Vernal, Ut (d)	09235100	30.2	1986-90
Pot Creek above diversions, near Vernal (d)	09235600	24.6	1957-93
Pot Creek near Vernal, Ut (d)	09235800	107	1958-82
Jones Hole Creek near Jensen, Ut (d)	09260500	a120	1950-56 1960-61
Brush Creek above cave near Vernal, Ut (d)	09261500	a23	1946-55
Big Brush Creek near Vernal, Ut (d)	09262000	79.6	1940-79
Little Brush Creek below East Pk Res near Vernal, Ut (d)	09262500	a20	1949-55
Little Brush Creek near Vernal, Ut (d)	09263000	a28	1946-52
Brush Creek near Jensen, Ut (d)	09263500	255	1940-65
ASHLEY CREEK BASIN			
Ashley Creek below Trout Creek near Vernal, Ut (d)	09264000	a27	1944-54
South Fork Ashley Creek near Vernal, Ut (d)	09264500	a20	1944-55
Oaks Park Canal near Vernal, Ut (d)	09265000	—	1946-69
Ashley Creek above Red Pine Creek near Vernal, Ut (d)	09265300	55.8	1965-75
Ashley Creek above Spring near Vernal, Ut (d)	09265500	a100	1941-45
Ashley Creek Spring near Vernal, Ut (d)	09266000	—	1944-45 1954-55
U.P.&L. Co.'s Tailrace near Vernal, Ut (d)	09267000	—	1917 1920-31
Ashley Creek above Dry Fork, near Vernal, Ut (d)	09267100	110	1969-72
Dry Fork above sinks, near Dry Fork, Ut (d)	09268000	44.4	1940-75
North Fork of Dry Fork near Dry Fork, Ut (d)	09268500	8.62	1947-89
Brownie Canyon above sinks, near Dry Fork, Ut (d)	09268900	8.24	1961-89
East Fork of Dry Fork near Dry Fork, Ut (d)	09269000	a12	1947-63
East Fork of Dry Fork at mouth near Dry Fork, Ut (d)	09269500	a18	1950-52
Dry Fork below springs near Dry Fork, Ut (d)	09270000	97.4	1904 1941-45 1954-69
Dry Fork at mouth near Dry Fork, Ut (d)	09270500	116	1954-89
Ashley Creek at Sign of the Maine, near Vernal, Ut (d)	09271000	241	1900-04 1939-65
Highline Canal below Mantle Gulch near Jensen, Ut (d)	09271070	—	1969-72
Steinaker Reservoir near Vernal, Ut (e)	09271300	—	1962-68
River Irrigation Company Canal near Jensen, Ut (d)	09271470	—	1969-72
Ashley Creek near Jensen, Ut (d)	09271500	383	1947-83
Stewart Lake Outflow near Jensen, Ut (d)	09271600	—	1990-94
TRIBUTARIES BETWEEN ASHLEY CREEK AND DUCHESNE RIVER			
Halfway Hollow Tributary near LaPoint, Ut (d)	09271800	a5.6	1960-74
DUCHESNE RIVER BASIN			
Duchesne Tunnel near Kamas, Ut (d)	09272500	--	1954-69
Duchesne River at Provo River Trail near Hanna, Ut (d)	09273000	a39	1930-33 1935-54
Duchesne River below Little Deer Creek, near Hanna, Ut (d)	09273200	a39	1965-68
Hades Creek near Hanna, Ut (d)	09273500	a75	1950-68
Duchesne River (North Fork) near Hanna, Ut (d)	09274000	a78	1922-23 1929-30 1946-63
West Fork Duchesne River below Vat Diversion near Hanna, Ut (d)	09274900	37.0	1989-94
West Fork Duchesne River below Dry Hollow near Hanna, Ut (d)	09275000	43.8	1950-68 1974-81

XIV WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

Station name	Station number	Drainage area (sq mi)	Period of record
DUCHESNE RIVER BASIN--Continued			
West Fork Duchesne River near Hanna, Ut (d)	09275500	61.6	1945-94
Wolf Creek above Rhoades Canyon near Hanna, Ut (d)	09276000	10.6	1946-84
Wolf Creek near Hanna, Ut (d)	09276500	a19	1922-23
Duchesne River at Hanna, Ut (d)	09277000	a230	1953-61
Comb. flow Duchesne River & Duchesne Tunnel near Tabiona, Ut (d)	09277501	—	1919-67
Rock Creek above South Fork, near Hanna, Ut (d)	09277800	98.9	1965-84 1988-94
South Fork Rock Creek near Hanna, Ut (d)	09278000	15.7	1953-92
Rock Creek near Hanna, Ut (d)	09278500	122	1950-69 1974-88
Rock Creek below Miners Gulch near Hanna, Ut (d)	09278700	133	1974-81
Rock Creek near Talmage, Ut (d)	09279100	238	1963-94
Duchesne River at Duchesne, Ut (d)	09279500	a660	1918-70
Strawberry River and Willow Creek Ditches near Heber, Ut (d)	09280000	—	1950-60
Hobble Creek at Daniels Summit near Wallsburg, Ut (d)	09280400	2.89	1964-84
Upper Hobble Creek Ditch near Heber, Ut (d)	09280500	—	1950-52
Lower Hobble Creek Ditch near Heber, Ut (d)	09281000	—	1950-52
Hobble Creek Ditch (Upper & Lower) near Heber, Ut (d)	09281500	—	1949-60
Strawberry Tunnel at West Portal near Thistle, Ut (d)	09282000	—	1915-25 1932-34 1935-68
Strawberry Reservoir near Soldier Springs, Ut (e)	09282500	170	1913-68
Indian Creek in Strawberry Valley, Ut (d)	09284000	a50	1905-06 1909-10
Strawberry River blw mouth of Indian Creek, Strawberry Valley, Ut (d)	09284500	182	1903-06 1909
Strawberry River near Soldier Springs, Ut (d)	09285000	213	1942-56 1963-94
Willow Creek near Soldier Springs, Ut (d)	09285500	a44	1943-47
Strawberry River above Red Creek near Fruitland, Ut (d)	09285700	363	1964-81
Strawberry River at Pinnacles near Fruitland, Ut (d)	09285900	372	1989-94
West Fork Duchesne River near Hanna, Ut (d)	09275500	61.6	1945-94
<b>Red Creek above reservoir, near Fruitland, Ut (d)</b>	<b>09286100</b>	<b>31.4</b>	<b>1986-98</b>
Red Creek near Fruitland, Ut (d)	09286500	a89	1918-22 1956-61
Currant Creek below Currant Creek Dam, near Fruitland, Ut (d)	09286700	48.0	1983-94
Currant Creek below Red Ledge Hollow near Fruitland, Ut (d)	09287000	50.1	1946-68 1974-83
Water Hollow near Fruitland, Ut (d)	09287500	a14	1946-84
Red Creek below Currant Creek near Fruitland, Ut (d)	09288100	297	1964-81
West Fork Avintaquin Creek near Fruitland, Ut (d)	09288150	56.1	1964-86
Starvation Reservoir near Duchesne, Ut (e)	09288395	1,058	1989-94
Strawberry River below Starvation Reservoir near Duchesne, Ut (d)	09288400	1,059	1989-94
Strawberry River at Duchesne (Theodore), Ut (d)	09288500	1,066	1908-10 1915-68
Sowers Creek near Duchesne, Ut (d)	09288900	40.6	1964-86
Antelope Creek near Myton, Ut (d)	09289000	a198	1918-21
Brown Duck Creek near Mountain Home, Ut (d)	09290000	a15	1933-34 1943-55
Lake Fork River below Taskeech Damsite near Mt Home, Ut (d)	09291200	138	1977-84
Yellowstone Creek below Swift Creek near Altonah, Ut (d)	09291500	a99	1950-55
Yellowstone River at mouth near Altonah, Ut (d)	09293000	142	1943-44 1976-81
Lake Fork River (below Forks) near Altonah, Ut (d)	09293500	304	1904 1907-10 1917-20 1976-81

Station name	Station number	Drainage area (sq mi)	Period of record
DUCHESNE RIVER BASIN--Continued			
Lake Fork River at Hwy 87 near Altamont, Ut (d)	09293600	318	1976-81
Pigeon Water Creek near Altamont, Ut (d)	09293700	95.5	1976-79
Lake Fork River near Upalco, Ut (d)	09294000	427	1943-55
			1976-81
Lake Fork (Creek) near Myton, Ut (d)	09294500	484	1900-03
			1907-36
			1976-81
Uinta River below Gilbert Creek near Neola, Ut (d)	09295500	a33	1951-55
Uinta River above Clover Creek near Neola, Ut (d)	09296000	132	1946-55
Clover Creek near Neola, Ut (d)	09296500	a9.5	1950-55
Uinta River near Neola, Ut (d)	09297000	163	1922-27
			1930-83
Uinta River near Whiterocks, Ut (d)	09297500	218	1899-1903
			1907-10
			1917-20
West Channel Uinta River below diversion works near Whiterocks, Ut (d)	09297600	216	1976-81
East Channel Uinta River below diversion works near Whiterocks, Ut (d)	09297700	215	1977-81
East Channel Uinta River at County Road Bridge near Whiterocks, Ut (d)	09297800	253	1976-81
East Channel Uinta River at LaPoint Road near LaPoint, Ut (d)	09297900	382	1976-82
Farm Creek near Whiterocks, Ut (d)	09298000	14.9	1950-81
Whiterocks River above Paradise Creek near Whiterocks, Ut (d)	09298500	a90	1946-55
Paradise Creek near Whiterocks, Ut (d)	09299000	a10	1946-55
Whiterocks River below damsite near Whiterocks, Ut (d)	09299400	110	1976-81
Whiterocks River below Farm Creek Canal near Whiterocks, Ut (d)	09299600	120	1976-81
Whiterocks River 1 mile east of Whiterocks, Ut (d)	09299700	124	1976-81
Deep Creek at State Hwy 246 near LaPoint, Ut (d)	09299900	72.2	1976-79
Deep Creek near LaPoint, Ut (d)	09300000	a75	1943-45
			1950-55
Uinta River at Fort Duchesne, Ut (d)	09300500	557	1899-1904
			1907-10
			1917-20
			1943-58
			1976-81
Dry Gulch near Neola, Ut (d)	09301000	a67	1951-58
Dry Gulch near Fort Duchesne, Ut (d)	09301200	469	1976-81
WHITE RIVER BASIN			
White River near Colorado State Line, Ut (d)	09306395	3,680	1977-86
White River above Hells Hole Canyon near Watson, Ut (d)	09306400	a3,700	1974-76
Hells Hole Canyon Creek at mouth near Watson, Ut (d)	09306405	24.5	1975-83
Evacuation Creek above Missouri Creek near Dragon, Ut (d)	09306410	100	1975-83
Evacuation Creek below Park Canyon near Watson, Ut (d)	09306415	246	1975-76
Thimble Rock Canyon near Watson, Ut (d)	09306417	1.7	1975-76
Evacuation Creek at Watson, Ut (d)	09306420	259	1975-75
Evacuation Creek Tributary near Watson, Ut (d)	09306425	12.4	1974-76
Evacuation Creek near mouth near Watson, Ut (d)	09306430	284	1975-81
White River below Southam Canyon near Watson, Ut (d)	09306600	a4,030	1975-76
Southam Canyon Wash near Watson, Ut (d)	09306605	2.5	1974-76
Southam Canyon Wash at mouth near Watson, Ut (d)	09306610	8.3	1974-76
Asphalt Wash below Center Fork near Watson, Ut (d)	09306620	94.4	1975-76
Asphalt Wash near mouth near Watson, Ut (d)	09306625	97.5	1974-83
White River below Asphalt Wash near Watson, Ut (d)	09306700	a4,130	1974-77
Bitter Creek above Dick Canyon near Watson, Ut (d)	09306740	11.7	1975-78
Sweetwater Canyon below South Canyon near Watson, Ut (d)	09306760	22.6	1975-78
Sweetwater Canyon Creek near mouth near Watson, Ut (d)	09306780	124	1975-78
Bitter Creek near Bonanza, Ut (d)	09306800	324	1971-89
Bitter Creek at mouth near Bonanza, Ut (d)	09306850	398	1975-83



XVI WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

Station name	Station number	Drainage area (sq mi)	Period of record
WHITE RIVER BASIN—Continued			
Sand Wash near Ouray, Ut (d)	09306870	59.7	1975-81
Sand Wash at mouth near Ouray, Ut (d)	09306872	71.1	1977-81
Coyote Wash near mouth near Ouray, Ut (d)	09306878	228	1977-83
North Wash near Ouray, Ut (d)	09306880	11.0	1980-81
Cottonwood Wash near mouth near Ouray, Ut (d)	09306885	70.6	1977-81
White River at mouth near Ouray, Ut (d)	09306900	5,120	1974-86
TRIBUTARIES BETWEEN DUCHESNE RIVER AND PRICE RIVER			
Green River near Ouray, Ut (d)	09307000	a35,500	1948-66
Pariette Draw near Ouray, Ut (d)	09307200	153	1976-84
Combined Flow Pariette Draw at mouth and Lambs Diversion (d)	09307290	—	1978-80
Lambs Diversion from Pariette Draw near Ouray, Ut (d)	09307295	—	1978-82
Pariette Draw at mouth near Ouray, Ut (d)	09307300	298	1975-84
Willow Creek above diversions near Ouray, Ut (d)	09307500	297	1951-55 1958-70 1975-83
Hill Creek above Towave Reservoir near Ouray, Ut (d)	09307800	89.7	1975-81
Hill Creek near mouth near Ouray, Ut (d)	09307900	288	1975-81
Willow Creek near Ouray, Ut (d)	09308000	897	1948-55 1975-83
Minnie Maud Creek near Myton, Ut (d)	09308500	32.0	1950-55 1957-89
Minnie Maud Creek at Nutter Ranch near Myton, Ut (d)	09309000	231	1948-55
PRICE RIVER BASIN			
Fairview Ditch near Fairview, Ut (d)	09309500	—	1950-65
Gooseberry Creek near Fairview, Ut (d)	09309800	a7.51	1960-69
Boardinghouse Creek at mouth near Scofield, Ut (d)	09310575	2.04	1983-84
Eccles Canyon near Scofield, Ut (d)	09310600	5.5	1980-84
Price River near Scofield, Ut (d)	09311500	a155	1918-21 1925-31 1939-69 1979-80
Price River near Soldier Summit, Ut (d)	09311700	a180	1962-63
North Fork White River near Soldier Summit, Ut (d)	09312000	23.3	1942-47
White River near Soldier Summit, Ut (d)	09312500	52.8	1938-67
Beaver Creek near Soldier Summit, Ut (d)	09312700	26.1	1961-89
Willow Creek near Castle Gate, Ut (d)	09312800	62.8	1963-89
Willow Creek at Castle Gate, Ut (d)	09312900	77.4	1980-81
Spring Canyon below Sowbelly Gulch at Helper, Ut (d)	09313040	23.0	1979-81
Price River near Helper, Ut (d)	09313500	a530	1904-34
Coal Creek near Helper, Ut (d)	09313965	25.3	1978-81
Soldier Creek below Mine near Wellington, Ut (d)	09313975	17.7	1978-84
Dugout Creek near Sunnyside, Ut (d)	09313985	5.8	1980-81
Price River near Wellington, Ut (d)	09314000	853	1950-58
Price River below Miller Creek near Wellington, Ut (d)	09314250	956	1972-86
Desert Seep Wash near Wellington, Ut (d)	09314280	191	1972-86
Grassy Trail Creek at Sunnyside, Ut (d)	09314340	40.1	1978-85
Horse Canyon near Sunnyside, Ut (d)	09314374	12.5	1978-81
Price River at Woodside, Ut (d)	09314500	1,540	1909-10 1911 1945-92
TRIBUTARIES BETWEEN PRICE RIVER AND SAN RAFAEL RIVER			
Saleratus Wash at Green River, Ut (d)	09315500	a180	1949-70
Browns Wash near Green River, Ut (d)	09316000	a75	1950-68
Floy Wash near Green River, Ut (d)	09316100	56.6	1983-86

WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

XVII

Station name	Station number	Drainage area (sq mi)	Period of record
TRIBUTARIES BETWEEN PRICE RIVER AND SAN RAFAEL RIVER--Continued			
Boulger Creek near Fairview, Ut (d)	09317000	a1.9	1938-40 1942-49
Candland Ditch near Mt. Pleasant, Ut (d)	09317500	—	1950-58
Crandall Canyon at mouth near Huntington, Ut (d)	09317919	5.70	1978-84
Tie Fork Canyon near Huntington, Ut (d)	09317920	11.7	1978-81
Huntington Creek near Huntington, Ut (d)	09318000	187	1909-79
Huntington Creek near Castle Dale, Ut (d)	09318500	325	1911-17 1919-21
Horseshoe Tunnel near Ephraim, Ut (d)	09320000	—	1950-58
Larsen Tunnel near Ephraim, Ut (d)	09320500	—	1949-58
Coal Fork Ditch near Mount Pleasant, Ut (d)	09321000	—	1950-58 1976
Twin Creek Tunnel near Mount Pleasant, Ut (d)	09321500	—	1950-58
Black Canyon Ditch near Spring City, Ut (d)	09322000	—	1950-58
Cedar Creek Tunnel near Spring City, Ut (d)	09322500	—	1950-58
Reeder Ditch near Spring City, Ut (d)	09323500	—	1950-58
Seely Creek near Orangeville, Ut (d)	09324000	a150	1954-57
Cottonwood Creek above Straight Canyon near Orangeville, Ut (d)	09324200	21.9	1978-81
Cottonwood Creek near Orangeville, Ut (d)	09324500	208	1910-27 1933-70 1975-85
Cottonwood Creek near Castle Dale, Ut (d)	09325000	261	1947-58
San Rafael River above Ferron Creek near Castle Dale, Ut (d)	09325100	a680	1965-70
John August Ditch near Ephraim, Ut (d)	09325500	—	1949-58
Madsen Ditch near Ephraim, Ut (d)	09326000	—	1950-58
Ferron Creek near Ferron, Ut (d)	09327000	159	1909-11
Ferron Creek near Castle Dale, Ut (d)	09327500	a210	1912-14 1948-58
Ferron Creek below Paradise Ranch near Clawson, Ut (d)	09327550	221	1976-86
San Rafael River near Castle Dale, Ut (d)	09328000	930	1948-64 1972-86
San Rafael River at San Rafael Bridge Campground, nr Castle Dale, Ut (d)	09328100	1,284	1975-86
Crescent Wash Reservoir, Ut (e)	09328870	19.0	1954-57
DIRTY DEVIL RIVER BASIN			
Fremont River below Fish Lake near Fremont, Ut (d)	09329000	a27	1939-45
<b>Seven Mile Creek near Fish Lake, Ut (d)</b>	<b>09329050</b>	<b>24.0</b>	<b>1964-98</b>
Fremont River near Fremont, Ut (d)	09329500	205	1949-58
Pine Creek near Bicknell, Ut (d)	09329900	104	1965-80
Plesant Creek near Caineville, Ut (d)	09330210	115	1969-72
Bull Creek near Hanksville, Ut (d)	09330410	7.53	1983-91
Muddy Creek (Lower Station) near Emery, Ut (d)	09331000	114	1911-14
Ivie Creek above diversions near Emery, Ut (d)	09331500	a50	1951-61
Convulsion Canyon near Emery, Ut (d)	09331850	21.6	1981-84
Quitcupah Creek near Emery, Ut (d)	09331900	104	1978-81
Christiansen Wash near Emery, Ut (d)	09331950	13.6	1978-84
Muddy Creek below I-70 near Emery, Ut (d)	09332100	418	1973-86
Muddy Creek below Ivie Creek near Emery, Ut (d)	09332500	a440	1950-61
Muddy Creek at Delta Mine near Hanksville, Ut (d)	09332700	841	1975-86
Muddy Creek at mouth near Hanksville, Ut (d)	09332800	1,552	1976-80
Dirty Devil River near Hanksville, Ut (d)	09333000	a3,490	1946-48
Dirty Devil River above Poison Spring Wash, near Hanksville, Ut (d)	09333500	4,159	1948-93
North Wash near Hanksville, Ut (d)	09334000	136	1951-70
White Canyon near Hanksville (Hite), Ut (d)	09334500	276	1951-70
Colorado River at Hite, Ut (d)	09335000	a76,600	1948-58

XVIII WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

Station name	Station number	Drainage area (sq mi)	Period of record
ESCALANTE RIVER BASIN			
North Creek near Escalante, Ut (d)	09335500	a90	1950-55
Birch Creek near Escalante, Ut (d)	09336000	a36	1950-51
Birch Creek at mouth near Escalante, Ut (d)	09336500	a100	1952-55
East Fork Boulder Creek near Boulder, Ut (d)	09338000	21.4	1951-55
			1958-72
East Fork Deer Creek near Boulder, Ut (d)	09338500	a1.9	1950-55
Boulder Creek (below Deer Creek) near Boulder, Ut (d)	09339000	a175	1950-55
Escalante River at mouth near Escalante, Ut (d)	09339500	a1,770	1951-55
SAN JUAN RIVER BASIN			
McElmo Creek near Bluff, Ut (d)	09372200	—	1981-82
Spring Creek above diversions near Monticello, Ut (d)	09376900	4.95	1966-72
Davenport and Campbell Canal near Monticello, Ut (d)	09377500	—	1914-16
Spring (Vaga) Creek near Monticello, Ut (d)	09377000	a8.5	1914-16
Green Canal near Monticello, Ut (d)	09378000	—	1914-16
North Creek above Ranger Station near Monticello, Ut (d)	09378100	8.68	1980-85
Montezuma Creek at Golf Course, at Monticello, Ut (d)	09378200	17.6	1979-92
Montezuma Creek near Bluff, Ut (d)	09378600	1,154	1985-93
Recapture Creek below Johnson Creek, near Blanding, Ut (d)	09378650	50.2	1975-93
Cottonwood Wash near Blanding, Ut (d)	09378700	205	1965-87
Comb Wash near Bluff, Ut (d)	09379000	278	1959-68
COMBINED INFLOW ABOVE GLEN CANYON DAM			
Colorado plus Green plus San Juan (temp) (d)	09379505	—	1928-84
COLORADO RIVER TRIBUTARIES BELOW GLEN CANYON DAM			
Henrieville Creek near Henrieville, Ut (d)	09381000	a29	1950-55
Paria River near Cannonville, Ut (d)	09381500	a220	1951-55
Mill Creek above study area near Glendale, Ut (d)	09403620	4.81	1976-77
Skutumpah Creek below study area near Glendale, Ut (d)	09403630	16.0	1976-77
Intermediate Drainage near Glendale, Ut (d)	09403640	2.49	1976-77
Thompson Creek above study area near Glendale, Ut (d)	09403650	9.80	1976-77
Thompson Creek below study area near Glendale, Ut (d)	09403660	16.6	1976-77
Johnson Wash above Flood Canyon, near Kanab, Ut	09403690	237	1994-97
VIRGIN RIVER BASIN			
Deep Creek near Cedar City, Ut (d)	09405200	6.72	1987-93
East Fork Deep Creek near Cedar City, Ut (d)	09405250	7.82	1987-93
Crystal Creek near Cedar City, Ut (d)	09405300	10.2	1957-61
North Fork Virgin River near Glendale, Ut (d)	09405400	5.65	1973-78
North Fork Virgin River below Bulloch Canyon near Glendale, Ut (d)	09405420	29.6	1975-84
North Fork Virgin River above Zion Narrows near Glendale, Ut (d)	09405450	45.5	1979-84
North Fork Virgin River above Big Bend near Springdale, Ut (d)	09405490	311	1991-94
Springdale Canal near Springdale, Ut (d)	09405499	—	1969-89
North Creek near Virgin, Ut (d)	09405900	110	1984-93
LaVerkin Creek near LaVerkin, Ut (d)	09406150	91.3	1984-91
Kanarra Creek at Kanarraville, Ut (d)	09406300	9.85	1960-82
Ash Creek near New Harmony, Ut (d)	09406500	a133.9	1939-48
Ash Creek Reservoir near New Harmony, Ut (e)	09406600	—	1973-82
South Ash Creek below Mill Creek near Pintura, Ut (d)	09406700	11.0	1966-82
Ash Creek above Toquerville, Ut (d)	09407000	201	1941-42
			1984-91
West Field Ditch at Toquerville, Ut (d)	09407150	—	1973-82
Ash Creek below West Field Ditch at Toquerville, Ut (d)	09407200	201	1973-82
Ash Creek below diversion dam at Toquerville, Ut (d)	09407201	—	1973-82
Ash Creek near Toquerville, Ut (d)	09407600	213	1956-58
Ash Creek near LaVerkin, Ut (d)	09407800	215	1957-58
Virgin River above Quail Creek near Hurricane, Ut (d)	09408135	1,381	1989-90
			1992-93



WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

XIX

Station name	Station number	Drainage area (sq mi)	Period of record
VIRGIN RIVER BASIN—Continued			
Fort Pierce Wash near St. George, Ut (d)	09408195	1,349	1985-89
Santa Clara-Pinto Diversion near Pinto, Ut (d)	09408500	—	1954-62
			1970-95
Santa Clara River near Central, Ut (d)	09409000	a97	1909-30
			1939-61
Moody Wash near Veyo, Ut (d)	09409500	a33	1939-42
			1955-69
Santa Clara River above Winsor Dam near Santa Clara, Ut (d)	09410000	338	1942-71
Santa Clara River near Santa Clara, Ut (d)	09410400	410	1965-74
Santa Clara River (Creek) near St. George, Ut (d)	09412500	502	1909-13
THE GREAT BASIN			
Great Salt Lake at Promontory Point, Ut (e)	10010050	—	1975-82
Great Salt Lake at AIC near Syracuse, Ut (e)	10010300	—	1975-82
BEAR RIVER BASIN			
East Fork Bear River near Evanston, Wy (d)	10010400	34.6	1974-86
Hilliard East Fork Canal near State Line near Evanston, Wy (d)	10010500	—	1944-47
			1953-56
West Fork Bear River at Whitney Dam, near Oakley, Ut (d)	10011200	a7.5	1964-86
West Fork Bear River below Deer Creek near Evanston, Wy (d)	10011400	52.2	1974-86
Mill Creek at Utah-Wyoming State Line (d)	10012000	a59	1950-62
Mill Creek near Evanston, Wy (d)	10012500	60.6	1942-48
Bear River above Sulphur Creek near Evanston, Wy (d)	10014000	282	1946-56
Sulphur Creek above reservoir, below LaChapelle Creek, near Evanston, Wy (d)	10015700	64.2	1957-97
Sulphur Creek below reservoir, near Evanston, Wy (d)	10015900	69.2	1958-92
Sulphur Creek near Evanston, WY (d)	10016000	80.5	1942-59
Bear River at Millis, near Evanston, Wy (d)	10016500	a420	1942-46
Yellow Creek near Evanston, Wy (d)	10017000	a80	1943-45
			1950-78
Coyote Creek near Evanston, Wy (d)	10017500	a28	1942-45
Bear River near Evanston, Wy (d)	10019000	715	1913-56
Chapman Canal at State Line near Evanston, Wy (d)	10019500	—	1942-86
Woodruff Narrows Reservoir near Woodruff, Ut (e)	10020200	784	1966-96
Bear River near Woodruff, Ut (d)	10020500	a870	1943-61
Woodruff Creek below reservoir near Woodruff, Ut (d)	10020900	50.0	1971-86
Woodruff Creek near Woodruff, Ut (d)	10021000	a65	1938-43
			1950-75
Birch Creek near Woodruff, Ut (d)	10021500	a17	1949-56
Randolph Creek near Randolph, Ut (d)	10024000	30.3	
Otter Creek near Randolph, Ut (d)	10025000	36.2	1939-44
Bear River near Randolph, Ut (d)	10026500	1,616	1943-92
Rock Creek near Fossil, Wy (d)	10026800	49.0	1961-66
Twin Creek at Sage, Wy (d)	10027000	246	1946-62
Bear River below Pixley Dam near Cokeville, Wy (d)	10028500	2,032	1941-43
			1952-56
			1958
Bear River above Sublette Creek near Cokeville, WY (d)	10029500	a2,110	1948-55
Smiths Fork above Hobble Creek near Geneva, Id (d)	10031000	—	1944-46
Hobble Creek near Geneva, Id (d)	10031500	86.1	1943-46
Coal (Howland) Creek near Cokeville, Wy (d)	10032500	—	1944-48
			1953-56
Muddy Creek above Mill Creek near Cokeville, Wy (d)	10032700	20.7	1964-69
Mill Creek near Cokeville, Wy (d)	10032800	8.07	1965-69
Grade Creek near Cokeville, Wy (d)	10033000	—	1944-48
Pine Creek above Diversions near Cokeville, Wy (d)	10033500	—	1944-48
			1953-56

XX WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

Station name	Station number	Drainage area (sq mi)	Period of record
BEAR RIVER BASIN--Continued			
Pine Creek above Covey Canal near Cokeville, Wy (d)	10034500	—	1944-48 1953-56
Smiths Fork at Cokeville, Wy (d)	10035000	275	1942-52
Spring Creek to Collette Creek near Cokeville, Wy (d)	10036000	—	1944-45 1953-56
Birch Creek near Cokeville, Wy (d)	10036500	—	1944-45
Hickman Canal near Cokeville, Wy (d)	10037000	—	1944-48
George Bourne Canal near Cokeville, Wy (d)	10037500	—	1944-48
Thomas Fork near Geneva, Id (d)	10040000	45.3	1939-51
Salt Creek near Geneva, Id (d)	10040500	37.6	1939-51
Thomas Fork near Wyoming-Idaho state line (d)	10041000	113	1949-92
Thomas Fork above Diversions near Geneva, Id (d)	10041500	—	1944-46
Thomas Fork near Raymond, Id (d)	10042500	202	1942-52
Bear River at Harer, Id (d)	10044000	2,839	1913-86
Dingle Inlet Canal near Dingle, Id (d)	10044300	--	1911-92
Bear River at Dingle, Id (d)	10044500	a2,810	1903-14
Bear River below Stewart Dam near Montpelier, Id (d)	10046500	2,853	1922-92
Montpelier Creek near Montpelier, Id (d)	10047000	28.2	1939-44
Montpelier Creek below Diversions at Montpelier, Id (d)	10048500	—	1944-47
St. Charles Creek above Diversions near St. Charles, Id (d)	10054600	17.4	1944-45 1961-66
Bloomington Creek near Bloomington, Id (d)	10058500	22.1	1942-47
Bloomington Creek at Bloomington, Id (d)	10058600	24.0	1960-86
Paris Power Canal near Paris, Id (d)	10060000	—	1943-47
Paris Creek near Paris, Id (d)	10060500	18.6	1943-47
Slight Canyon Creek near Pairs, Id (d)	10062000	6.81	1943-45
Mill Creek above West Fork near Liberty, Id (d)	10062500	18.4	1944-47
Mill Creek near Liberty, Id (d)	10063000	27.2	1943-47
Bear River at Pescadero, Id (d)	10068500	3,705	1921-54
Georgetown Creek near Georgetown, Id (d)	10069000	22.2	1911-14 1939-56
Georgetown Creek below diversions at Georgetown, Id (d)	10070500	—	1944-47
Skinner Creek at Nounan, Id (d)	10071500	5.41	1939-45
Stauffer Creek near Nounan, Id (d)	10072000	—	1939-44
Eightmile Creek near Soda Springs, Id (d)	10072800	22.6	1960-86
Eightmile Creek below Diversions near Soda Springs, Id (d)	10073500	31.0	1944-47
Bear River at Soda Springs, Id (d)	10075000	3,972	1896-98 1925-44 1944-49 1953
Soda Creek at Fivemile Meadow near Soda Springs, Id (d)	10076400	a49	1964-86
Soda Creek at Lau Ranch near Soda Springs, Id (d)	10076500	a49	1923-26
Soda Creek near Soda Springs, Id (d)	10077000	54.6	1913-26 1928-29
Soda Creek below Diversions at Soda Springs, Id (d)	10078000	—	1945-47
Treasureton Canal near Swan Lake, Id (d)	10083500	—	1939-46
Cottonwood Creek near Swan Lake, Id (d)	10084000	42.6	1939-46
Cottonwood Creek near Cleveland, Id (d)	10084500	61.7	1938-86
Mink Creek Canal near Mink Creek, Id (d)	10087000	—	1949-52
Mink Creek below Dry Fork near Mink Creek, Id (d)	10087500	19.3	1947-52 1955-62
Twin Lakes Canal near Mink Creek, Id (d)	10088000	—	1943-52
Preston Riverdale and Mink Creek Canal near Mink Creek, Id (d)	10088500	—	1943-52
Mink Creek near Mink Creek, Id (d)	10089500	58.7	1943-52
Bear River near Preston (at Battlecreek), Id (d)	10090500	4,545	1889-1919 1944-45 1981-86

WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

XXI

Station name	Station number	Drainage area (sq mi)	Period of record
BEAR RIVER BASIN--Continued			
Deep Creek near Clifton, Id (d)	10091200	107	1966-78
Bear River near Weston, Id (d)	10091500	4,880	1919-44
Weston Creek at Weston, Id (d)	10092000	a63	1942-44
Cub River Irrigation Company Pump Canal near Weston, Id (d)	10092500	—	1934-44
Cub River near Preston, Id (d)	10093000	19.4	1940-52
			1955-86
Cub River-Worm Creek Canal near Preston, Id (d)	10094000	—	1943-52
Preston-Whitney Canal near Preston, Id (d)	10095000	—	1944-45
			1946-52
Cub River Canal near Preston, Id (d)	10095500	—	1944-52
East Branch Cub River Canal near Lewiston, Ut (d)	10095900	—	1962-63
Cub River above Maple Creek near Franklin, Id (d)	10096000	53.7	1940-52
Maple Creek near Franklin, Id (d)	10096500	21.2	1946-52
Worm Creek near Preston, Id (d)	10098500	11.0	1943-46
High Creek near Richmond, Ut (d)	10099000	16.2	1944-52
			1971-72
			1978-89
Cub River near Richmond, Ut (d)	10102200	a200	1962-63
Bear River near Smithfield, Ut (d)	10102250	5193	1964-78
			1990-95
Summit Creek above diversions near Smithfield, Ut (d)	10102300	11.6	1944-45
			1961-79
Birch Creek at mouth near Smithfield, Ut (d)	10103000	—	1944-45
South Fork Little Bear River near Avon, Ut (d)	10104600	26.0	1966-74
Little Bear River below Davenport Creek near Avon, Ut (d)	10104700	61.6	1960-92
East Fork Little Bear River above Reservoir near Avon, Ut (d)	10104900	56.7	1964-86
East Fork Little Bear River (below Pole Creek) near Avon, Ut (d)	10105000	49.7	1938-50
East Fork Little Bear River below Pole Creek near Avon, Ut (d)	10105500	a67	1927-30
Little Bear River near Paradise, Ut (d)	10106000	203	1937-86
Hyrum Reservoir near Hyrum, Ut (e)	10107000	220	1938-80
Little Bear River near Hyrum, Ut (d)	10107500	222	1938-74
Little Bear River at Wellsville, Ut (d)	10107600	245	1966-68
Utah Power and Light Tailrace near Logan, Ut (d)	10108000	—	1913-70
Logan, Hyde Park and Smithfield Canal near Logan, Ut (d)	10108500	—	1904-07
			1909-10
			1912-64
Logan River near Logan, Ut (d)	10109500	—	1896-1912
Logan Northern Canal near Logan, Ut (d)	10110500	—	1913-16
			1944-45
Logan River below Logan Northern Canal near Logan, Ut (d)	10111000	—	1915-17
Blacksmith Fork below Mill Creek near Hyrum, Ut (d)	10111700	78.0	1965-69
			1985-92
Blacksmith Fork at Hardware Ranch near Hyrum, Ut (d)	10112000	a130	1944-50
Blacksmith Fork at Municipal Powerplant near Hyrum, Ut (d)	10112500	153	1929-35
Hyrum City Power Canal near Hyrum, Ut (d)	10113000	—	1904-10
(Blacksmith Fork Municipal Powerplant Race)			1914-17
Blacksmith Fork above Utah Power and Light Co.'s Dam, near Hyrum, Ut (d)	10113500	263	1914-96
Blacksmith Fork at U.P. & L. Plant near Hyrum, Ut (d)	10114000	—	1914-16
Blacksmith Fork below U.P. & L. Plant near Hyrum, Ut (d)	10114500	286	1900-02
(Blacksmith Fork at Hyrum)			1904-10
			1914-16
Logan River below Blacksmith Fork near Logan, Ut (d)	10115200	524	1964-80
Clarkston Creek near Newton, Ut (d)	10115500	a43	1939-47
Cutler Reservoir at Cache Junction, Ut (e)	10116000	—	1944-50
West Canal above Salt Creek diversion near Tremonton, Ut (d)	10117510	—	1980-84
			1986

XXII WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

Station name	Station number	Drainage area (sq mi)	Period of record
BEAR RIVER BASIN--Continued			
West Canal below Salt Creek diversion near Tremonton, Ut (d)	10117530	—	1980-84 1986
Malad River below Springs near Malad City, Id (d)	10118200	a3.3	1931-32 1940-47
Warm Springs Canal near Samaria, Id (d)	10118300	—	1940-45
Malad River near Samaria, Id (d)	10118400	a31	1941-45
Little Malad River above Elkhorn Reservoir near Malad, Id (d)	10119000	a120	1911-13
Elkhorn Reservoir near Malad City (near Malad), Id (e)	10119500	153	1940-53
Little Malad River below Elkhorn Reservoir near Malad, Id (d)	10120000	153	1940-53
Little Malad River below Sand Ridge Dam near Malad, Id (d)	10120500	223	1945-51
Devil Creek above Campbell Creek near Malad City, Id (d)	10122500	a13	1938-61
Devil Creek above Evans Dividers near Malad City, Id (d)	10123000	a36	1940-43 1946-53
Devil Creek near Malad City (near Malad), Idaho (d)	10123500	a39	1931-40
Deep Creek below First Creek near Malad City, Id (d)	10125000	a32	1931-48
Malad River at Woodruff, Id (d)	10125500	a485	1938-82
Malad river near Plymouth, Ut (d)	10125600	a632	1964-80
Bear River Duck Club near Bear River City, Ut (d)	10125700	—	1964-73
Malad River below Bear River Duck Club Canal near Bear River City, Ut (d)	10125800	a698	1964-74
TRIBUTARIES TO GREAT SALT LAKE BETWEEN BEAR RIVER AND WEBER RIVER			
Sulphur Creek near Corinne, Ut (d)	10126180	15.4	1972-86
Box Elder Creek at Mantua, Ut (d)	10126400	14.0	1960-63
Box Elder Creek near Brigham City, Ut (d)	10126500	33.4	1918-21
Box Elder Creek at Brigham City, Ut (d)	10127000	34.2	1909-12
Salt Spring near Tremonton, Ut (d)	10127040	—	1979-86
Salt Creek below Salt Spring near Tremonton, Ut (d)	10127050	—	1979-86
Black Slough near Brigham City, Ut (d)	10127100	31.1	1972-86
Highway 83 Culverts (d)	10127107	—	1980-86
Sulphur Creek & Black Slough (d)	10127108	—	1980-86
Culverts & Sulphur Creek & Black Slough (d)	10127109	—	1980-86
Bear River Basin outflow across State Hwy 83 near Corinne, Ut (d)	10127110	—	1972-86
WEBER RIVER BASIN			
Smith and Morehouse Creek near Oakley, Ut (d)	10128000	33.8	1947 1976-86
South Fork Weber River near Oakley, Ut (d)	10128200	a16	1965-74
Weber Provo Diversion Canal at Oakley, Ut (d)	10129000	—	1931-69
Weber River near Peoa, Ut (d)	10129300	296	1957-77
Crandall Creek near Peoa, Ut (d)	10129350	11.8	1963-73
Silver Creek near Wanship, Ut (d)	10130000	27.9	1942-46 1982-85 1990-96
East Fork Chalk Creek near Coalville, Ut (d)	10130700	a35	1965-74
Lost Creek at Croydon, Ut (d)	10132900	a220	1966-67
Lost Creek at Devils Slide (near Croydon), Ut (d)	10133000	223	1905 1921-33
Weber River at Devils Slide, Ut (d)	10133500	1,192	1905-55
Kimball Creek above East Canyon Creek near Park City, Ut (d)	10133540	12.2	1990-96
McLeod Creek near Park City, Ut (d)	10133600	8.78	1990-96
Threemile Creek near Park City, Ut (d)	10133700	2.68	1964-74 1982-84
East Canyon Cr above Big Bear Hollow, near Park City, Ut	10133895	75.0	1990-96
East Canyon Creek near Park City, Ut (d)	10133900	68.9	1982-84
Hardscrabble Creek near Porterville, Ut (d)	10135000	28.0	1937-40 1941-70
East Canyon Creek below diversions near Morgan, Ut (d)	10135500	—	1951-55



WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

XXIII

Station name	Station number	Drainage area (sq mi)	Period of record
WEBER RIVER BASIN—Continued			
Weber River near Morgan, Ut (d)	10136000	a1,500	1951-55
Weber River at Ogden, Ut (d)	10137000	a1,670	1951-58
Causey Reservoir near Huntsville, Ut (e)	10137290	92.2	1966-68
South Fork Ogden River below Causey Dam near Huntsville, Ut (d)	10137300	92.3	1966-67
South Fork Ogden River at Huntsville, Ut (d)	10137600	a170	1937-57 1959-65
North Fork Ogden River near Eden, Ut (d)	10137680	6.03	1964-74
North Fork River near Huntsville, Ut (d)	10137700	61.4	1960-65
Middle Fork Ogden River above diversion near Huntsville, Ut (d)	10137780	31.3	1964-74
Middle Fork Ogden River at Huntsville, Ut (d)	10137800	32.9	1958-65
Spring Creek at Huntsville, Ut (d)	10137900	a7.2	1958-65
Wheeler Creek near Huntsville, Ut (d)	10139300	11.1	1959-95
Ogden River near Ogden, Ut (d)	10139500	321	1904-12 1931-59
Ogden River below Pineview Dam near Ogden, Ut (d)	10140000	321	1937-59
Ogden River at Powder Mill near Ogden, Ut (d)	10140500	a360	1889-90 1897-98
Willard Bay Reservoir near Plain City, Ut (e)	10408000	—	1965-81
Hooper Slough near Hooper, Ut (d)	10141040	13.0	1975-83
South Fork Weber Canal near Hooper, Ut (d)	10141050	—	1972-76
South Fork Weber River near Hooper, Ut (d)	10141100	—	1972-75
Middle Fork Weber River near Hooper, Ut (d)	10141150	—	1971-75
North Fork Weber River near Hooper, Ut (d)	10141200	—	1971-75
TRIBUTARIES TO GREAT SALT LAKE BETWEEN WEBER RIVER AND JORDAN RIVER			
Storm Drain at 1700 N. 475 W., Sunset, Ut (d)	10141395	0.28	1948-83
Howard Slough at Hooper, Ut (d)	10141400	—	1952-55 1972-84
Holmes Creek near Kaysville, Ut (d)	10141500	2.49	1951-66
Farmington Creek above diversions near Farmington, Ut (d)	10142000	10.0	1950-71
Ricks Creek above diversions, near Centerville, Ut (d)	10142500	2.35	1951-66
Parrish Creek above diversions near Centerville, Ut (d)	10143000	2.08	1950-68
Centerville Creek above diversions near Centerville, Ut (d)	10143500	3.15	1950-80
Stone Creek above diversions near Bountiful, Ut (d)	10144000	4.48	1951-66
Mill Creek at Mueller Park near Bountiful, Ut (d)	10145000	8.88	1951-68
Storm Drain east of Orchard Drive at Bountiful, Ut (d)	10145125	0.80	1949-83
Storm Drain to Mill Creek, 620 S. 200 W., Bountiful, Ut (d)	10145126	0.28	1949-83
Salt Creek near Nephi, Ut (d)	10145500	a95	1925-38
JORDAN RIVER BASIN			
Currant Creek near Goshen, Ut (d)	10146500	303	1954-60
Summit Creek near Santaquin, Ut (d)	10147000	19.2	1911-16 14.6 1955-66
Payson Creek above diversions, near Payson, Ut (d)	10147500	18.8	1948-62
Payson Creek (Peteetneet Creek ) near Payson, Ut (d)	10148000	25.6	1910-16
Tie Fork near Soldier Summit, Ut (d)	10148200	19.4	1964-96
Nebo Creek near Thistle, Ut (d)	10148400	36.7	1964-73
Spanish Fork at Thistle, Ut (d)	10148500	450	1908-25 1932-74
Diamond Fork near Thistle, Ut (d)	10150000	141	1908-17 1940-55
U.S. Bureau of Reclamation Power Canal near Spanish Fork, Ut (d)	10151000	—	1909-17
Spanish Fork near Spanish Fork, Ut (d)	10151500	a670	1909-17
Spanish Fork near Lakeshore, Ut (d)	10152000	675	1904-07 1909-25 1938-88
Spanish Fork at mouth near Lake Shore, Ut (d)	10152001	—	1978-82

XXIV WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

Station name	Station number	Drainage area (sq mi)	Period of record
JORDAN RIVER BASIN—Continued			
Hobble Creek near Springville, Ut (d)	10152500	105	1904-16 1945-74
Maple Creek near Mapleton, Ut (d)	10152700	3.13	1965-72
Maple Creek near Springville, Ut (d)	10153000	10.8	1912-13
Provo River near Kamas, Ut (d)	10153500	29.6	1950-69
North Fork Provo River near Kamas, Ut (d)	10153800	24.4	1964-96
Shingle Creek near Kamas, Ut (d)	10154000	a8.4	1963-73
Provo River below Jordanelle Dam, near Heber, Ut (d)	10155100	252	1991-94
<b>Daniels Creek above diversions near Heber City (d)</b>	<b>10157000</b>	<b>37.2</b>	<b>1992-98</b>
Round Valley Creek near Wallsburg, Ut (d)	10158500	71.9	1938-50
Deer Creek near Wildwood, Ut (d)	10160000	a26	1939-50
Provo River near Wildwood, Ut (d)	10160500	574	1939-49
North Fork Provo River at Wildwood, Ut (d)	10160800	12.3	1965-74
Provo River at Vivian Park, Ut (d)	10161000	598	1912-63
South Fork Provo River at Vivian Park, Ut (d)	10161500	33.4	1912-62
Provo River above Telluride Power Co. Dam near Provo, Ut (d)	10162000	a640	1905-11
Provo River at mouth of canyon near Provo, Ut (d)	10162500	a640	1889-1906
Rock Creek Overflow east of Highway 189 near Provo, Ut (d)	10162850	0.66	1948-83
South Fork of American Fork near American Fork, Ut (d)	10164000	8.87	1912-14
American Fork (River) near American Fork, Ut (d)	10165000	a66	1889-90 1897 1900-01 1903-05
Dry Creek near Alpine, Ut (d)	10165500	9.82	1948-55
Fort Creek at Alpine, Ut (d)	10166000	6.55	1947-55
Utah Lake near Lehi (at Geneva) (near Spanish Fork), Ut (e)	10166500	2,965	1883-1960
Jordan River at Narrows, near Lehi, Ut (d)	10167000	3,010	1904 1913-88
Jordan River Station No. 1 at Narrows, Ut (d)	10167001	—	1980-83
East Jordan Canal at Jordan Narrows near Bluffdale, Ut (d)	10167100	—	1980-83
East Jordan Canal at Little Cottonwood Creek near Sandy, Ut (US) (d)	10167105	—	1980-82
East Jordan Canal at Little Cottonwood Creek near Sandy, Ut (DS) (d)	10167106	—	1980-82
East Jordan Canal at pumphouse at 6200 So. near Murray, Ut (d)	10167115	—	1980-82
Upper Canal at 5800 South (Tolcate Lane) near Murray, Ut (d)	10167122	—	1980-82
Upper Canal at Wild Rose Lane near Salt Lake City, Ut (d)	10167125	—	1980-82
Faust Creek below Tooele City well near Vernon, Ut (d)	10172726	—	1992-96
Upper Canal at Mill Creek (2000 East) near Salt Lake City, Ut (d)	10167127	—	1980-81
Jordan & Salt Lake Canal at Little Cottonwood Creek nr SLC, Ut (US) (d)	10167141	—	1980-82
Jordan & Salt Lake Canal at Little Cottonwood Creek nr SLC, Ut (DS) (d)	10167142	—	1980-82
Jordan & Salt Lake Canal at Big Cottonwood Creek nr Murray, Ut (US) (d)	10167145	—	1980-81
Jordan & Salt Lake Canal at Big Cottonwood Creek nr Murray, Ut (DS) (d)	10167146	—	1980-81
Jordan & Salt Lake Canal at Mill Creek near Salt Lake City, Ut (US) (d)	10167147	—	1980-82
Jordan & Salt Lake Canal at Mill Creek near Salt Lake City, Ut (DS) (d)	10167148	—	1980-82
Jordan & Salt Lake Canal at Zenith Ave near Salt Lake City, Ut (d)	10167149	—	1980-81
Utah & Salt Lake Canal at Jordan Narrows near Bluffdale, Ut (d)	10167160	—	1980-83
Jordan River at 9400 South near South Jordan, Ut (d)	10167200	q3,130	1965-67
Bells Canyon Conduit 1000 East 110000 South (d)	10167220	—	1948-81 1982-86
Jordan River at 90th South near Midvale, Ut (d)	10167230	q3,130	1980-84 1986-89
90th South Conduit at Jordan River near Midvale, Ut (d)	10167240	—	1980-84
I-215 Median Drain at Jordan River near Murray, Ut (d)	10167242	0.20	1984-86
Jordan River at 5800 South near Salt Lake City, Ut (d)	10167300	q3,254	1965-68 1980-85
Little Cottonwood Creek (channel) near Salt Lake City, Ut (d)	10167499	—	1980-88

WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

XXV

Station name	Station number	Drainage area (sq mi)	Period of record
JORDAN RIVER BASIN—Continued			
Little Cottonwood Creek near Salt Lake City, Ut (d)	10167500	27.4	1898-99 1904-68 1980
Little Cottonwood Creek at 2050 East near Salt Lake City, Ut (d)	10167700	35.2	1963-67 1979-81 1983-87
Little Cottonwood Creek at Crestwood Park at Salt Lake City, Ut (d)	10167800	—	1987-89
Little Cottonwood Creek at Jordan River near Salt Lake City, Ut (d)	10168000	—	1980-84 1987-88
Big Cottonwood Creek (Cottonwood Creek) near Salt Lake City, Ut (d)	10168500	50.0	1898-1967
Big Cottonwood Creek at 5550 South near Salt Lake City, Ut (d)	10168800	57.3	1964-68 1980-89
Neffs Creek above Wasatch Boulevard near Salt Lake City, Ut (d)	10168832	—	1984-86
Spring Run at 9th East & 48th South near Murray, Ut (d)	10169000	—	1933-35
Big Cottonwood Creek at Jordan River near Salt Lake City, Ut (d) (at 2nd West near Murray, Ut )	10169500	a78	1933-35 1980-82 1987-88
Mill Creek above Elbow Fork near Salt Lake City, Ut (d)	10169800	7.7	1964-68
Mill Creek near Salt Lake City, Ut (d)	10170000	21.7	1964-68 1980
Boundry Springs near Salt Lake City, Ut (d)	10170001	—	1963-67
Mill Creek at 2200 East near Salt Lake City, Ut (d)	10170200	22.6	1963-67
Mill Creek at Jordan River near Salt Lake City, Ut (d)	10170250	a32	1984 1986-88
Combined flow Jordan River and Surplus Canal at Salt Lake City, Ut (d)	10170490	—	1943-89
North Point Canal below Goss Flume at Salt Lake City, Ut (d)	10170700	—	1963-67 1979-83
Surplus Canal at North Temple at Salt Lake City, Ut (d)	10170750	—	1976-82
Surplus Canal at Cohen Flume near Salt Lake City, Ut (d)	10170800	—	1963-67
Parleys Creek near Salt Lake City, Ut (d)	10171500	50.1	1898-1963
Parleys Creek at Suicide Rock near Salt Lake City, Ut (d)	10171600	50.7	1964-68 1980-88
Emigration Creek below Burr Fork near Salt Lake City, Ut (d)	10171900	5.9	1964-68
Emigration Creek near Salt Lake City, Ut (d)	10172000	18.4	1898-1960 1960-68 1980-86
Emigration Creek below 1300 East at Salt Lake City, Ut (d)	10172100	a9	1963-67
Red Butte Creek below reservoir near Salt Lake City, Ut (d)	10172220	7.95	1942-67 1980-88
1300 South Conduits at Jordan River, combined flows (d)	10172350	—	1981 1987-88
South Conduit of 1300 So. Conduit at Jordan River, Salt Lake City, Ut (d)	10172351	—	1986-89
North Conduit of 1300 So. Conduit at Jordan River, Salt Lake City, Ut (d)	10172352	—	1980-81 1985-89
City Creek above Wasatch Drive, near Salt Lake City, Ut (d)	10172400	17.0	1964-68
City Creek near Salt Lake City, Ut (d)	10172500	19.2	1898-1960 1960-69 1980
Jordan River at 5th North at Salt Lake City, Ut (d)	10172550	—	1975-86
Jordan River at Cudahy Lane near Salt Lake City, Ut (d)	10172600	q3,590	1963-68 1974-76
Sewage Canal at Cudahy Lane near Salt Lake City, Ut (d)	10172620	—	1963-67
Storm Drain at International Center near Salt Lake City, Ut (d)	10172624	0.08	1984-86

XXVI WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

Station name	Station number	Drainage area (sq mi)	Period of record
JORDAN RIVER BASIN—Continued			
Goggin Drain near Magna, Ut (d)	10172630	—	1964-67 1972-84
Lee Creek near Magna, Ut (d)	10172640	—	1972-82
Kennecott Drain near Magna, Ut (d)	10172650	—	1964-67 1972-84
RUSH VALLEY			
East Government Creek Tributary near Vernon, Ut (d)	10172720	a0.98	1961-74
TOOELE VALLEY			
Faust Creek below Tooele City Well near Vernon, Ut (d)	10172726	—	1992-96
<b>Settlement Creek above reservoir near Tooele, Ut (d)</b>	<b>10172791</b>	<b>16.8</b>	<b>1988-98</b>
Middle Canyon Creek near Tooele, Ut (d)	10172794	12.1	1984-86
Box Elder Wash near Grantsville, Ut (d)	10172795	9.84	1986-94
North Willow Creek near Grantsville, Ut (d)	10172805	5.38	1979-92
GREAT SALT LAKE DESERT			
Trout Creek near Callao, Ut (d)	10172870	8.19	1959-95
Deep Creek near Goshute, Ut (d)	10172893	a43	1964-68
Great Salt Lake West Pond near Wendover, Ut (e)	10172903	—	1987-89
Pine Creek near Grouse Creek, Ut (d)	10172921	—	1972-73
Dove Creek near Park Valley, Ut (d)	10172940	33.2	1959-68 1971-73
Fisher Creek near Park Valley, Ut (d)	10172950	—	1972-73
Indian Creek near Park Valley, Ut (d)	10172955	—	1971-73
West Locomotive Spring at Locomotive Spring near Snowville, Ut (d)	10172963	—	1969-73
Baker Spring at Locomotive Spring near Snowville, Ut (d)	10172964	—	1969-73
Bar M Spring at Locomotive Spring near Snowville, Ut (d)	10172965	—	1969-80
Off Spring at Locomotive Spring near Snowville, Ut (d)	10172967	—	1969-80
Sparks Spring at Locomotive Spring near Snowville, Ut (d)	10172968	—	1969-80
SEVIER LAKE BASIN			
Hatch Bence Canal near Hatch, Ut (d)	10173000	—	1914 1916-19
Mammoth Creek near Hatch, Ut (d)	10173500	151	1912-14 1915-19
Midway Creek near Hatch, Ut (d)	10173600	25.7	1958-62
Navajo Lake west of Dyke near Hatch, Ut (e)	10173700	—	1954-59
Duck Creek near Hatch, Ut (d)	10173900	—	1954-59
Asay Creek above West Fork near Hatch, Ut (d)	10174000	105	1954-59
Asay Creek near Hatch, Ut (d)	10174200	a96	1912-14 1939-41
Red Canyon Tributary near Bryce Canyon, Ut (d)	10174800	a2.2	1959-74
State Canal near Panguitch, Ut (d)	10175500	—	1913-19
Long Canal near Panguitch, Ut (d)	10176000	—	1914-19
Panguitch Creek near Panguitch, Ut (d)	10176300	97.0	1961-80
East Panguitch Canal near Panguitch, Ut (d)	10176500	—	1914-19
Panguitch Creek above Canals near Panguitch, Ut (d)	10177000	a110	1915-20
Panguitch Creek below Canals at Panguitch, Ut (d)	10177500	—	1915 1917-18
Barton and LeFevere Canal near Panguitch, Ut (d)	10178000	—	1915-19
McEwen Canal near Panguitch, Ut (d)	10178500	—	1914-19
Old Houston Canal near Panguitch, Ut (d)	10179000	—	1915-19
Sevier River near Circleville, Ut (d)	10180000	986	1912 1914-27
Fox Canal near Circleville, Ut (d)	10180500	—	1950-95 1914-19



WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

XXVII

Station name	Station number	Drainage area (sq mi)	Period of record
SEVIER LAKE BASIN—Continued			
Circleville Canal near Circleville, Ut (d)	10181000	—	1914-19
Old Kingston Canal near Circleville, Ut (d)	10181500	—	1914-19
Dalton Canal at Circleville, Ut (d)	10182000	—	1914-19
Mitchell Slough Canal near Junction, Ut (d)	10182500	—	1914-19
Junction Middle Canal near Junction, Ut (d)	10183000	—	1915-19
East Fork Sevier River near Ruby's Inn, Ut (d)	10183900	71.6	1962-95
Tropic and East Fork Canal near Tropic, Ut (d)	10184000	—	1950-61
East Fork Sevier River near Antimony, Ut (d)	10184450	a570	1961-66
Coyoto Canal near Coyoto, Ut (d)	10184500	—	1916-19
Antimony Creek near Antimony, Ut (d)	10185000	50.3	1946-48
			1957-76
East Fork Sevier River at Antimony (Coyoto), Ut (d)	10185500	—	1915-19
Otter Creek Reservoir Feeder Canal at mouth near Coyoto, Ut (d)	10186500	—	1915-20
Otter Creek near Koosharem, Ut (d)	10187300	23.5	1964-82
Otter Creek above reservoir near Antimony, Ut (d)	10187500	322	1915-20
			1961-64
			1971-80
Otter Creek Reservoir near Antimony, Ut (e)	10188000	373	1914-15
			1934-95
Otter Creek near Antimony (Coyoto), Ut (d)	10188500	—	1913-19
Combined Flow Sevier River and East Fork Sevier River (d)	10189001	—	1915-77
Kingston Canal at Kingston, Ut (d)	10189500	—	1914-19
Sevier River near Junction, Ut (d)	10190500	a2,390	1911-16
Piute Reservoir near Marysville, Ut (e)	10191000	2438	1914-95
Sevier River near Marysville, Ut (d)	10192000	a2,560	1906-11
Sevier River at Marysville, Ut (d)	10192500	a2,580	1912-14
Pine (Bullion) Creek at Marysville, Ut (d)	10193500	a29	1914
			1918-19
Sevier River above Clear Creek, near Sevier, Ut (d)	10194000	2,707	1911-16
			1939-55
			1961-95
Cove Canal at Sevier, Ut (d)	10194500	—	1914-19
Clear Creek at Sevier, Ut (d)	10195000	169	1912-19
			1934-58
Sevier River at Sevier, Ut (d)	10195500	a2,850	1917-29
Monroe South Bend Canal near Joseph, Ut (d)	10196000	—	1914-19
Sevier Valley Canal near Joseph, Ut (d)	10196500	—	1912-19
Joseph Canal near Joseph, Ut (d)	10197000	—	1914-19
Sevier Valley Canal near Richfield, Ut (d)	10198000	—	1912-19
State Canal near Redmond, Ut (d)	10200000	—	1913-19
Wells Canal near Joseph, Ut (d)	10200500	—	1914-19
Monroe Canal near Elsinore, Ut (d)	10201000	—	1914-19
Elsinore Canal near Elsinore, Ut (d)	10201500	—	1914-19
Brooklyn Canal near Elsinore, Ut (d)	10202000	—	1914-19
Richfield Canal near Fillmore, Ut (d)	10202500	—	1914-19
Annabella Canal at Elsinore, Ut (d)	10203000	—	1914-19
Vermilion Canal near Richfield, Ut (d)	10203500	—	1914-19
Sevier River near Richfield, Ut (d)	10204000	—	1916-18
Mill Creek near Glenwood, Ut (d)	10204200	18.9	1963-74
Rockyford Canal near Vermilion, Ut (d)	10204500	—	1914-35
Sheep Creek near Salina, Ut (d)	10205100	0.30	1958-69
West Fork Sheep Creek near Salina, Ut (d)	10205200	0.43	1958-69
Sheep Creek at mouth near Salina, Ut (d)	10205300	1.47	1958-69
Salina Creek at Salina, Ut (d)	10206000	292	1914-16
			1918-19
			1943-55
			1960-95

XXVIII WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

Station name	Station number	Drainage area (sq mi)	Period of record
SEVIER LAKE BASIN—Continued			
Sevier River below Salina Creek near Salina, Ut (d)	10206001	—	1985-86
West View Canal at Redmond, Ut (d)	10206500	—	1914-19
Fayette Canal near Centerfield, Ut (d)	10207000	—	1914-19
Dover Canal near Gunnison, Ut (d)	10207500	—	1914-19
Sevier River near Gunnison, Ut (d)	10208000	a3,990	1901-17
Oak Creek near Fairview, Ut (d)	10208500	11.8	1965-89
Pleasant Creek near Mount Pleasant, Ut (d)	10210000	—	1955-75
Twin Creek near Mount Pleasant, Ut (d)	10211000	a5.9	1955-66
San Pitch River near Mount Pleasant, Ut (d)	10210500	170	1988-89
Big Hollow at Fountain Green, Ut (d)	10215500	—	1965-68
Oak Creek near Spring City, Ut (d)	10215700	8.35	1964-74 1979-94
Gunnison Reservoir near Sterling, Ut (e)	10216200	a670	1966-83
San Pitch River near Sterling, Ut (d)	10216210	672	1965-80
Twelvemile Creek near Mayfield, Ut (d)	10216400	59.4	1960-80
San Pitch River near Gunnison, Ut (d)	10216500	886	1900-05 1912-18 1952
Sevier River at Clark's Bridge near Fayette, Ut (d)	10217500	a4,960	1914-16
Sevier Bridge Reservoir, near Juab, Ut (e)	10218500	5,155	1914-95
Wellington Canal near Mills, Ut (d)	10219100	—	1914-18
Chicken Creek near Levan, Ut (d)	10219200	27.9	1963-95
Sevier River near Mills, Ut (d)	10220000	a5,800	1914-17
Sevier River Land and Water Co. Canal near Leamington, Ut (d)	10220500	—	1914-19
McIntyre Canal near Leamington, Ut (d)	10222500	—	1914-18
Leamington Canal near Leamington, Ut (d)	10223000	—	1914-19
Sevier River at Leamington, Ut (d)	10223500	a5,860	1889-93 1912-14
Oak Creek above Little Creek, near Oak City, Ut (d)	10224100	5.58	1964-97
Oak Creek below Big Spring near Oak City, Ut (d)	10224300	17.8	1979-86
Delta and Melville Reservoir near Delta, Ut (e)	10224500	—	1914-17
Canal A (Delta and Melville Canal) near Delta, Ut (d)	10225000	—	1912-19
Sevier River near Delta, Ut (d)	10228000	a7,380	1912-19
Gunnison Bend Reservoir near Delta, Ut (e)	10228500	—	1914-19
Sevier River at Oasis, Ut (d)	10231500	a8,080	1912-27
Chalk Creek near Fillmore, Ut (d)	10232500	58.7	1914 1945-71
Meadow Creek near Meadow, Ut (d)	10233000	11.6	1914 1965-75
Corn Creek near Kanosh, Ut (d)	10233500	—	1914 1965-75
Three Creeks near Beaver, Ut (d)	10234000	19.5	1947-61
South Creek near Beaver, Ut (d)	10235000	14.7	1906 1965-76
North Fork North Creek above Pole Creek near Beaver, Ut (d)	10235500	a6.9	1947-49
North Fork North Creek near Beaver, Ut (d)	10236000	14.1	1906 1966-76
South Fork North Creek near Beaver, Ut (d)	10236500	23.0	1906 1966-76
Indian Creek near Beaver, Ut (d)	10237500	18.5	1906 1947-49 1965-76
Indian Creek at Adamsville, Ut (d)	10238000	a180	1914-16
Minersville Reservoir near Minersville, Ut (e)	10238500	534	1915-22 1938-95

WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

XXIX

Station name	Station number	Drainage area (sq mi)	Period of record
SEVIER LAKE BASIN--Continued			
Minersville Canal at Minersville, Ut (d)	10239500	—	1906 1914 1951-55
Beaver River at Minersville, Ut (d)	10240000	a560	1909-13 1951-55
Beaver River near Milford, Ut (d)	10241000	a1,100	1952-55
PAROWAN VALLEY			
Little Creek near Paragonah, Ut (d)	10241400	15.8	1960-80
Red Creek near Paragonah, Ut (d)	10241430	a6.3	1965-75
Center Creek above Parowan Creek near Parowan, Ut (d)	10241470	11.6	1965-87
Center Creek near Parowan, Ut (d)	10241500	a60	1943-50
Summit Creek near Summit, Ut (d)	10241600	24.0	1965-87
CEDAR VALLEY, IRON COUNTY			
Ashdown Creek near Cedar City, Ut (d)	10241800	13.1	1958-61
Grassy Creek near Enterprise, Ut (d)	10242430	a2.5	1965-68
SNAKE VALLEY			
Snake Creek near Baker, Nv (d)	10243230	a30	1913-15
Baker Creek at Narrows near Baker, Nv (d)	10243240	16.4	1947-55
Baker Creek near Baker, Nv (d)	10243250	a10	1913-15
Lehman Creek near Baker, Nv (d)	10243260	a11	1947-55
SNAKE RIVER BASIN			
George Creek near Yost, Ut (d)	13077700	7.84	1959-89
Clear Creek near Naf, Id (d)	13079000	20.2	1910-11 1944-70

Explanation:

a: approximate

q: includes 255 sq mi in closed basin in Cedar Valley

DS: downstream

US: upstream

XXX WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality station prior to the 1999 water year. Daily records of (b) microbiological, (c) chemical and/or specific conductance, (s) sediment, or (t) water temperature were collected and published for the record shown for each station. Stations shown in bold were discontinued at the end of the previous water year.

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
COLORADO RIVER BASIN				
Cottonwood Wash at I-70 near Cisco, Ut	09163675	170	c,s,t	1983-86
TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER				
Onion Creek above Onion Creek Bridge near Moab, Ut	09180920	—	c,t	1980-81
Onion Creek below Onion Creek Bridge near Moab, Ut	09180970	—	c,t	1980-81
Castle Creek above diversions, near Moab, Ut	09182000	7.58	c,t	1971-75
Courthouse Wash near Moab, Ut	09183000	162	c,t	1971-89
Indian Creek Tunnel near Monticello, Ut	09185800	—	c,t	1971-80
Indian Creek below Bogus Pocket near Monticello, Ut	09187550	262	c,s,t	1983-88
GREEN RIVER BASIN				
East Fork Beaver Creek near Lonetree, Wy	09227000	a8.2	c,s,t	1977
Sheep Creek Upper Canal near Manila, Ut	09231000	—	c	1976
Red Creek near Dutch John, Ut	09234700	140	c,s,t	1971-76
Crouse Creek near Vernal, Ut	09235100	30.2	c,t	1987-90
Pot Creek near Vernal, Ut	09235800	107	c,t	1971-82
ASHLEY CREEK BASIN				
Brush Creek above cave near Vernal, Ut	09261500	a23	c,t	1950-73
Big Brush Creek near Vernal, Ut	09262000	79.6	c,t	1908-81
Little Brush Creek near Vernal, Ut	09263000	a28	c	1950
Brush Creek near Jensen, Ut	09263500	255	c	1988-89
Oaks Park Canal near Vernal, Ut	09265000	—	c	1957
Ashley Creek above Red Pine Creek near Vernal, Ut	09265300	55.8	c,t	1971-75
Dry Fork above sinks, near Dry Fork, Ut	09268000	44.4	c,t	1954-75
North Fork of Dry Fork near Dry Fork, Ut	09268500	8.62	c,t	1955-89
Brownie Canyon above sinks, near Dry Fork, Ut	09268900	8.24	c,t	1971-89
East Fork of Dry Fork at mouth near Dry Fork	09269500	a18	c,t	1954
Dry Fork below springs near Dry Fork, Ut	09270000	97.4	c,t	1947-58
Dry Fork at mouth near Dry Fork, Ut	09270500	116	c,t	1954-89
Ashley Creek at Sign of the Maine, near Vernal, Ut	09271000	241	c,t	1947 1949 1955-58 1973-74
Highline Canal below Mantle Gulch near Jensen, Ut	09271070	—	c,t	1971-72
River Irrigation Company Canal near Jensen, Ut	09271470	—	c,t	1971-72
Ashley Creek near Jensen, Ut	09271500	383	c,t	1947-51 1954-58 1971-83 1986-89
Stewart Lake Outflow near Jensen, Ut	09271600	—	c,t	1986-97
DUCHESNE RIVER BASIN				
Duchesne Tunnel near Kamas, Ut	09272500	—	c,t	1972
Duchesne River at Provo River Trail near Hanna, Ut	09273000	a39	c	1954 1957 1956-57
Hades Creek near Hanna, Ut	09273500	a75	c	1951
Duchesne River (North Fork) near Hanna, Ut	09274000	a78	c,t	1960-62 1988



WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

XXXI

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
DUCHESNE RIVER BASIN—Continued				
West Fork Duchesne River below Dry Hollow near Hanna, Ut	09275000	43.8	c,t	1957 1960 1964 1974-81
Wolf Creek above Rhoades Canyon near Hanna, Ut	09276000	10.6	c,t	1951 1956-57 1962 1971-83
Duchesne River at Hanna, Ut	09277000	a230	c,t	1957-64 1973
Rock Creek near Hanna, Ut	09278500	122	c,t	1957 1974-83 1987-88
Rock Creek below Miners Gulch near Hanna, Ut	09278700	133	c,t	1974-81
<b>Red Creek above reservoir, near Fruitland, Ut (d)</b>	<b>09286100</b>	<b>34.1</b>	<b>c,t</b>	<b>1986-91</b>
Rock Creek near Talmage, Ut	09291000	238	c,t	1947-48 1963-65 1971-91
Duchesne River at Duchesne, Ut	09279500	a660	c,t	1941-43 1946-74
Hobble Creek at Daniels Summit near Wallsburg, Ut	09280400	2.89	c,t	1971-83
Strawberry Reservoir near Soldier Springs, Ut	09282500	170	c	1949 1957-58
Willow Creek near Soldier Springs, Ut	09285500	a44	t	1990
Strawberry River above Red Creek near Fruitland, Ut	09285700	363	c,t	1941 1971-81
Red Creek near Fruitland, Ut	09286500	a89	c	1941 1947-49 1957-58
Currant Creek below Red Ledge Hollow near Fruitland, Ut	09287000	50.1	c,t	1951 1956-57 1962-64 1971-83
Water Hollow near Fruitland, Ut	09287500	a14	c,t	1956-57 1960-64 1971-83
Red Creek below Currant Creek near Fruitland, Ut	09288100	297	c,t	1971-81
West Fork Avintaquin Creek near Fruitland, Ut	09288150	56.1	c,t	1971-83
Strawberry River at Duchesne (Theodore), Ut	09288500	1,066	c,t	1941 1946-50 1954-58 1962-68 1973-74
Sowers Creek near Duchesne, Ut	09288900	40.6	c,t	1971-83
Antelope Creek near Myton, Ut	09289000	a198	c	1941 1949
Lake Fork River below Taskeech Damsite near Mt Home, Ut	09291200	138	c,t	1977-83
Yellowstone River at mouth near Altonah, Ut	09293000	142	c,t	1977-81
Lake Fork River (below Forks) near Altonah, Ut	09293500	304	c,t	1949 1977-81
Lake Fork River at Hwy 87 near Altamont, Ut	09293600	318	c,t	1977-81
Pigeon Water Creek near Altamont, Ut	09293700	95.5	c,t	1977-78
Lake Fork River near Upalco, Ut	09294000	427	c,t	1941 1957-58 1964-65 1973 1977-81

XXXII WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
DUCHESNE RIVER BASIN—Continued				
Lake Fork (Creek) near Myton, Ut	09294500	484	c,t	1941 1947-48 1951 1973 1977-81
Uinta River near Neola, Ut	09297000	163	c,t	1941 1957-58 1963-83
Uinta River near Whiterocks, Ut	09297500	218	c	1849
West Channel Uinta Riv blw diversion works nr Whiterocks, Ut	09297600	216	c,t	1977-81
East Channel Uinta Riv blw diversion works near Whiterocks, Ut	09297700	215	c,t	1977-81
East Channel Uinta Riv at County Road Bridge nr Whiterocks, Ut	09297800	253	c,t	1977-81
East Channel Uinta Riv at LaPoint Road near LaPoint, Ut	09297900	382	c,t	1977-82
Farm Creek near Whiterocks, Ut	09298000	14.9	c,t	1971-81
Whiterocks River below damsite near Whiterocks, Ut	09299400	110	c,t	1977-81
Whiterocks River below Farm Creek Canal near Whiterocks, Ut	09299600	120	c,t	1977-81
Whiterocks River 1 Mile East of Whiterocks, Ut	09299700	124	c,t	1977-81
Deep Creek at State Hwy 246 near LaPoint, Ut	09299900	72.2	c,t	1977-79
Uinta River at Fort Duchesne, Ut	09300500	557	c,t	1941 1947-51 1954-59 1965-70 1973 1977-81
Dry Gulch near Neola, Ut	09301000	a67	c	1958 1963-64
Dry Gulch near Fort Duchesne, Ut	09301200	469	c,t	1977-81
Uinta River at Randlett, Ut	09301500	1,064	c,s,t	1950 1963 1977-81
WHITE RIVER BASIN				
White River near Colorado State Line, Ut	09306395	3,680	c,s,t	1976-85
White River above Hells Hole Canyon near Watson, Ut	09306400	a3,700	c,s,t	1974-76
Hells Hole Canyon Creek at mouth near Watson, Ut	09306405	24.5	c,s,t	1975-76 1979-82
Evacuation Creek above Missouri Creek near Dragon, Ut	09306410	100	c,s,t	1974-83
Evacuation Creek below Park Canyon near Watson, Ut	09306415	246	c,s,t	1974-75
Evacuation Creek at Watson, Ut	09306420	259	c,s,t	1948 1974-77
Evacuation Creek near mouth near Watson, Ut	09306430	284	c,s,t	1974-83
White River below Southam Canyon near Watson, Ut	09306600	a4,030	c,s,t	1974-76
Southam Canyon Wash near Watson, Ut	09306605	2.5	c,s,t	1976
Southam Canyon Wash at mouth near Watson, Ut	09306610	8.3	c,s,t	1976 1979-82
Asphalt Wash below Center Fork near Watson, Ut	09306620	94.4	c,s,t	1976
Asphalt Wash near mouth near Watson, Ut	09306625	97.5	c,s,t	1975-76 1979-81
White River below Asphalt Wash near Watson, Ut	09306700	a4,130	c,s,t	1974-78 1981-83
Bitter Creek above Dick Canyon near Watson, Ut	09306740	11.7	c,s,t	1974-78
Sweetwater Canyon below South Canyon near Watson, Ut	09306760	22.6	c,s,t	1974-78
Sweetwater Canyon Creek near mouth near Watson, Ut	09306780	124	c,s,t	1975-78
Bitter Creek near Bonanza, Ut	09306800	324	c,s,t	1971-83 1987-88
Bitter Creek at mouth near Bonanza, Ut	09306850	398	c,s,t	1974-83

WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

XXXIII

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
WHITE RIVER BASIN—Continued				
Sand Wash near Ouray, Ut	09306870	59.7	c,t	1976 1979 1980
Sand Wash at mouth near Ouray, Ut	09306872	71.1	c,s,t	1978-80
Coyote Wash near mouth near Ouray, Ut	09306878	228	c,s,t	1976-83
North Wash near Ouray, Ut	09306880	11.0	c,t	1980-81
Cottonwood Wash near mouth near Ouray, Ut	09306885	70.6	c,s,t	1977-81
White River at mouth near Ouray, Ut	09306900	5,120	b,c,s,t	1974-86
TRIBUTARIES BETWEEN DUCHESNE RIVER AND PRICE RIVER				
Green River near Ouray, Ut	09307000	a35,500	c,s,t	1950-52 1958-66
Pariette Draw near Ouray, Ut	09307200	153	c,s,t	1975-84
Pariette Draw at mouth near Ouray, Ut	09307300	298	c,s,t	1975-84 1987-91
Willow Creek above diversions near Ouray, Ut	09307500	297	c,s,t	1969-70 1974-83
Hill Creek above Towave Reservoir near Ouray, Ut	09307800	89.7	c,s,t	1974-81
Hill Creek near mouth near Ouray, Ut	09307900	288	c,s,t	1975-81
Willow Creek near Ouray, Ut	09308000	897	c,s,t	1950-55 1974-83
Minnie Maud Creek near Myton, Ut	09308500	32.0	c,t	1971-83 1987-89
PRICE RIVER BASIN				
Fairview Ditch near Fairview, Ut	09309500	—	c	1958
Gooseberry Creek near Fairview, Ut	09309800	a7.51	c,t	1969-70
Boardinghouse Creek at mouth near Scofield	09310575	2.04	c,s,t	1982-84
Eccles Canyon near Scofield, Ut	09310600	5.5	b,c,s,t	1979-84
Price River near Scofield, Ut	09311500	a155	c,t	1962 1969-70 1979-80
White River near Soldier Summit, Ut	09312500	52.8	c,t	1947 1957-58 1969 1979
Beaver Creek near Soldier Summit, Ut	09312700	26.1	c,t	1969-83 1987-89
Willow Creek near Castle Gate, Ut	09312800	62.8	c,t	1969-83 1987-89
Willow Creek at Castle Gate, Ut	09312900	77.4	b,c,s,t	1979-81
Spring Canyon below Sowbelly Gulch at Helper, Ut	09313040	23.0	c,s,t	1978-81
Price River near Helper, Ut	09313500	a530	c,t	1970
Coal Creek near Helper, Ut	09313965	25.3	b,c,s,t	1976-81
Soldier Creek below Mine near Wellington, Ut	09313975	17.7	b,c,s,t	1969 1976-84
Dugout Creek near Sunnyside, Ut	09313985	5.8	b,c,s,t	1979-81
Price River below Miller Creek near Wellington, Ut	09314250	956	c,t	1969-83
Desert Seep Wash near Wellington, Ut	09314280	191	c,t	1969 1972-83
Grassy Trail Creek at Sunnyside, Ut	09314340	40.1	b,c,s,t	1975-84
Horse Canyon near Sunnyside, Ut	09314374	12.5	b,c,s,t	1975-81
Price River at Woodside, Ut	09314500	1,540	c,s,t	1948-56 1958-97

XXXIV WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
TRIBUTARIES BETWEEN PRICE RIVER AND SAN RAFAEL RIVER				
Saleratus Wash at Green River, Ut	09315500	a180	c	1947-48 1957
Browns Wash near Green River, Ut	09316000	a75	c	1948 1957
Floy Wash near Green River, Ut	09316100	56.6	c,s,t	1983-86
Candland Ditch near Mt Pleasant, Ut	09317500	—	c	1958
Crandall Canyon at mouth near Huntington, Ut	09317919	5.7	b,c,s,t	1976-84
Tie Fork Canyon near Huntington, Ut	09317920	11.7	b,c,s,t	1978-81
Huntington Creek near Huntington, Ut	09318000	187	b,c,s,t	1949 1956-79
Larsen Tunnel near Ephraim, Ut	09320500	—	b	1978
Seely Creek near Orangeville, Ut	09324000	a150	c,t	1956-58 1975
Cottonwood Creek above Straight Canyon near Orangeville, Ut	09324200	21.9	b,c,s,t	1978-81
Cottonwood Creek near Orangeville, Ut	09324500	208	c,s,t	1946 1956-83
Cottonwood Creek near Castle Dale, Ut	09325000	26	c,t	1948 1958-62 1975-78
San Rafael River Above Ferron Creek near Castle Dale, Ut	09325100	a680	c,t	1964-65 1968 1977-1978
Ferron Creek near Castle Dale, Ut	09327500	a210	c,t	1960-68 1974-78
San Rafael River near Castle Dale, Ut	09328000	930	c,t	1948 1957-68
San Rafael River at San Rafael Bridge Campground, near Castle Dale, Ut	09328100	1,28	c,s,t	1975-83
DIRTY DEVIL RIVER BASIN				
<b>Seven Mile Creek near Fish Lake, Ut</b>	<b>09239050</b>	<b>24.0</b>	<b>c,t</b>	<b>1971-91</b>
Fremont River near Fremont, Ut	09329500	205	c,t	1975-76
Pine Creek near Bicknell, Ut	09329900	104	c,t	1971-80
Pleasant Creek near Caineville Ut	09330210	115	c,s,t	1969-72 1975-76
Bull Creek near Hanksville, Ut	09330410	7.53	c,s	1983-91
Ivie Creek above diversions near Emery, Ut	09331500	a50	c,t	1975-76
Convulsion Canyon near Emery, Ut	09331850	21.6	c,s,t	1980-84
Quitcupah Creek near Emery, Ut	09331900	104	b,c,s,t	1978-81
Christiansen Wash near Emery, Ut	09331950	13.6	b,c,s,t	1978-84
Muddy Creek below I-70 near Emery, Ut	09332100	418	c,s,t	1973-87
Muddy Creek at Delta Mine near Hanksville, Ut	09332700	841	c,s,t	1975-85
Muddy Creek at mouth near Hanksville, Ut	09332800	1,552	c,s,t	1975-80
Dirty Devil River near Hanksville, Ut	09333000	a3,490	c,t	1975-76
Colorado River at Hite, Ut	09335000	a76,600	c,s	1950-56
ESCALANTE RIVER BASIN				
East Fork Boulder Creek near Boulder, Ut	09338000	21.4	c,t	1971-72
Escalante River at mouth near Escalante, Ut	09339500	a1,770	c	1951-53
SAN JUAN RIVER BASIN				
McElmo Creek near Bluff, Ut	09372200		c,t	1978-82
Spring Creek above diversions near Monticello, Ut	09376900	4.95	c,t	1971-72
North Creek above Ranger Station near Monticello, Ut	09378100	8.68	c,t	1980-83
Montezuma Creek near Bluff, Ut	09378600	1,154	c	1985-93
Cottonwood Wash near Blanding, Ut	09378700	205	c,s,t	1968-83



WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

XXXV

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
COLORADO RIVER TRIBUTARIES BELOW GLEN CANYON DAM				
Mill Creek above study area near Glendale, Ut	09403620	4.81	c,t	1975-77
Thompson Creek below study area near Glendale, Ut	09403660	16.6	c,t	1976-77
VIRGIN RIVER BASIN				
North Fork Virgin River near Glendale, Ut	09405400	5.65	c,t	1973-78
North Fork Virgin River below Bulloch Canyon near Glendale, Ut	09405420	29.6	c,s,t	1974 1983-86
North Fork Virgin River above Zion Narrows near Glendale, Ut	09405450	45.5	c,s,t	1979 1983-86
LaVerkin Creek near LaVerkin, Ut	09406150	91.3	c,t	1987-91
Kanarra Creek at Kanarraville, Ut	09406300	9.85	c,t	1971-82
South Ash Creek below Mill Creek near Pintura, Ut	09406700	11.0	c,t	1971-82
Ash Creek above Toquerville, Ut	09407000	201	c,t	1987-91
West Field Ditch at Toquerville, Ut	09407150		c,t	1973-78
Ash Creek below West Field Ditch at Toquerville, Ut	09407200	201	c,t	1973-82
Virgin River above Quail Creek near Hurricane, Ut	09408135	1,381	t	1992-93
Virgin River near Hurricane, Ut	09408150	1,499	c,s,t	1967-93
Santa Clara-Pinto Diversion near Pinto, Ut	09408500	—	c,t	1973-76 1978-91
Santa Clara River above Winsor Dam near Santa Clara, Ut	09410000	338	c,s,t	1962-72
Santa Clara River near Santa Clara, Ut	09410400	410	c,t	1971-74
Virgin River near St. George, Ut	09413500	3,961	c,s,t	1966-73
THE GREAT BASIN				
Great Salt Lake at AIC near Syracuse, Ut	10010300	—	c,t	1972
BEAR RIVER BASIN				
East Fork Bear River near Evanston, Wy	10010400	34.6	c,t	1973-83
Hilliard East Fork Canal near State Line near Evanston, Wy	10010500	—	c,t	1967 1973-79
West Fork Bear River at Whitney Dam, near Oakley, Ut	10011200	a7.5	c,t	1965-67 1973-83
West Fork Bear River below Deer Creek near Evanston, Wy	10011400	52.2	c,t	1973-83
Mill Creek at Utah-Wyoming State Line	10012000	a59	c,t	1961
Sulphur Creek above reservoir, below LaChapelle Creek, near Evanston, Wy	10015700	64.2		1961-68 1972-84 1987-91
Sulphur Creek below Reservoir near Evanston, Wy	10015900	69.2	c,t	1958-92
Yellow Creek near Evanston Wy	10017000	a80	c,t	1958 1961 1968 1972-78
Bear River near Evanston, Wy	10019000	715	c,t	1967-68
Chapman Canal at State Line near Evanston, Wy	10019500	—	c,t	1957 1967-68 1972-83
Bear River near Woodruff, Ut	10020500	a870	c,t	1957-58 1961
Woodruff Creek below reservoir near Woodruff, Ut	10020900	50.0	c,t	1972-83
Woodruff Creek near Woodruff, Ut	10021000	a65	c,t	1961 1967-68 1972-75
Bear River near Randolph, Ut	10026500	1,616	c,t	1943-92
Rock Creek near Fossil, Wy	10026800	49.0	c,t	1961
Bear River below Pixley Dam near Cokeville, Wy	10028500	2,03	c,t	1958 1965-68 1973-83 1988-91

XXXVI WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
BEAR RIVER BASIN—Continued				
Muddy Creek above Mill Creek near Cokeville, Wy	10032700	20.7	c,t	1967-68
Mill Creek near Cokeville, Wy	10032800	8.07	c,t	1967-68
Smiths Fork at Cokeville, Wy	10035000	275	c,t	1984-85
Bear River at Border, Wy	10039500	2,486	c,s	1966-93
Thomas Fork near Wyoming-Idaho state line	10041000	113	c,t	1949-92
Bear River at Harer, Id	10044000	2,839	c,t	1967-68
St. Charles Creek above Diversions near St. Charles, Id	10054600	17.4	c,t	1967-68
Bloomington Creek at Bloomington, Id	10058600	24.0	c,t	1961 1967-68 1973-83
Bear River at Pescadero, Id	10068500	3,705	c,t	1967-68 1972-91
Eightmile Creek near Soda Springs, Id	10072800	22.6	c,t	1961 1965-68 1973-83
Bear River at Soda Springs, Id	10075000	3,972	c,t	1965-68 1972-83
Cottonwood Creek near Cleveland, Id	10084500	61.7	c,t	1961 1967-68 1972-83
Mink Creek below Dry Fork near Mink Creek, Id	10087500	19.3	c,t	1961
Bear River near Preston (at Battlecreek), Id	10090500	4,545	c,t	1947 1953 1961 1965-68 1973-83
Deep Creek near Clifton, Id	10091200	107	c,t	1967-68 1972-78
Cub River near Preston, Id	10093000	19.4	c,t	1958-61 1967-68 1972-83
East Branch Cub River Canal near Lewiston, Ut	10095900	—	c,t	1967-68
High Creek near Richmond, Ut	10099000	16.2	c,t	1978-83 1987-89
Cub River near Richmond, Ut	10102200	a200	c,t	1959 1967-68
Bear River near Smithfield, Ut	10102250	5,193	c,t	1964-68 1973-78 1991
Summit Creek above diversions near Smithfield, Ut	10102300	11.6	c,t	1967-68 1972-79
South Fork Little Bear River near Avon, Ut	10104600	26.0	c,t	1967-68 1972-74
Little Bear River below Davenport Creek near Avon, Ut	10104700	61.5	s	1986-91
East Fork Little Bear River above Reservoir near Avon, Ut	10104900	56.7	c,t	1967-68 1972-83
Little Bear River near Paradise, Ut	10106000	203	c,t	1947 1961 1967-68 1972-83
Little Bear River near Hyrum, Ut	10107500	222	c,t	1961 1967-68
Little Bear River at Wellsville, Ut	10107600	245	c,t	1967-68
Blacksmiths Fork above Utah Power & Light Co.'s Dam near Hyrum, Ut	10113500	263	c,t	1961 1966-68 1973-91
Logan River below Blacksmith Fork near Logan, Ut	10115200	524	c,t	1964-68 1972-80
Blacksmith Fork below Mill Creek, near Hyrum, Ut	10111700	78	c,t	1965-69 1985-92

WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999    XXXVII  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
BEAR RIVER BASIN—Continued				
West Canal above Salt Creek diversion near Tremonton, Ut	10117510	—	c,t	1979-83
West Canal below Salt Creek diversion near Tremonton, Ut	10117530	—	c,t	1979-83
Deep Creek below First Creek near Malad City, Id	10125000	a32	c,t	1967
Malad River near Plymouth, Ut	10125600	a632	c,t	1964-65 1968
				1972-80
Bear River Duck Club near Bear River City, Ut	10125700	—	c,t	1967-68
Malad River below Bear River Duck Club Canal near Bear River City, Ut	10125800	a698	c,t	1965-68
Bear River near Corinne, Ut	10126000	7,029	c,t	1973-94
TRIBUTARIES TO GREAT SALT LAKE BETWEEN BEAR RIVER AND WEBER RIVER				
Sulphur Creek near Corinne, Ut	10126180	15.4	c,t	1963-64 1972-83
Salt Creek below Salt Spring near Tremonton, Ut	10127050	—	c,t	1979-83
Black Slough near Brigham City, Ut	10127100	31.1	c,t	1973-83
WEBER RIVER BASIN				
Smith and Morehouse Creek near Oakley, Ut	10128000	33.8	c,t	1975-83 1987
South Fork Weber River near Oakley, Ut	10128200	a16	c,t	1971-74
Weber River near Peoa, Ut	10129300	296	c,t	1971-77
Crandall Creek near Peoa, Ut	10129350	11.8	c,t	1971-73
Silver Creek near Wanship, Ut	10130000	27.9	c,t	1983-84 1991-92
East Fork Chalk Creek near Coalville, Ut	10130700	a35	c,t	1972-74
Kimball Creek above East Canyon Creek near Park City, Ut	10133540	12.2	c,t	1990-92
McLeod Creek near Park City, Ut	10133600	8.78	c,t	1991-1995
Threemile Creek near Park City, Ut	10133700	2.68	c,t	1971-74 1983
East Canyon Creek near Big Bear Hollow, near Park City, Ut	10133895	75.0	c,t	1990-92
East Canyon Creek near Park City, Ut	10133900	68.9	c,t	1983
North Fork Ogden River near Eden, Ut	10137680	6.03	c,t	1971-74
Middle Fork Ogden River above diversion near Huntsville, Ut	10137780	31.3	c,t	1971-74
Wheeler Creek near Huntsville, Ut	10139300	11.1	c,t	1971-75 1977-91
Ogden River near Ogden, Ut	10139500	321	c,t	1988
Hooper Slough near Hooper, Ut	10141040	13.0	c,t	1975 1979-83
Weber River near Plain City, Ut	10141000	2,081	c,s	1974-93
South Fork Weber Canal near Hooper, Ut	10141050	—	c,t	1972-75
South Fork Weber River near Hooper, Ut	10141100	—	c,t	1972-75
North Fork Weber River near Hooper, Ut	10141200	—	c,t	1972-76
TRIBUTARIES TO GREAT SALT LAKE BETWEEN WEBER RIVER AND JORDAN RIVER				
Howard Slough at Hooper, Ut	10141400	—	c,s,t	1972-84
Farmington Creek above diversion near Farmington, Ut	10142000	10.0	c,t	1978-81
JORDAN RIVER BASIN				
Tie Fork near Soldier Summit, Ut	10148200	19.4	c,t	1928 1971-91
Nebo Creek near Thistle, Ut	10148400	36.7	c,t	1971-73
Spanish Fork at Thistle, Ut	10148500	450	c,t	1971-74
Spanish Fork below Halls Falls near Thistle, Ut	10148510	452	c,t	1983-92
Spanish Fork near Lakeshore, Ut	10152000	675	b,c,t	1971-83 1988

XXXVIII WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
JORDAN RIVER BASIN—Continued				
Hobble Creek near Springville, Ut	10152500	105	c,t	1971-74
Maple Creek near Mapleton, Ut	10152700	3.13	c,t	1971-72
Provo River near Kamas, Ut	10153500	29.6	c,t	1972
North Fork Provo River near Kamas, Ut	10153800	24.4	c,t	1971-91
Shingle Creek near Kamas, Ut	10154000	a8.4	c,t	1971-73
North Fork Provo River at Wildwood, Ut	10160800	12.3	c,t	1971-74
Dry Creek near Alpine, Ut	10165500	9.82	c,t	1971
				1980-81
Jordan River at Narrows near Lehi, Ut	10167000	3,010	c,t	1987-91
Jordan River Station No. 1 at Narrows, Ut	10167001	—	c,s,t	1980-83
East Jordan Canal at Little Cottonwood Creek near Sandy, Ut	10167105	—	c	1980
East Jordan Canal at pumphouse at 6200 So near Murray, Ut	10167115	—	c,s,t	1980-81
Upper Canal at 5800 South (Tolcate Ln) near Murray, Ut	10167122	—	c,t	1980
Upper Canal at Wild Rose Ln near Salt Lake City, Ut	10167125	—	c,s,t	1980-81
Jordan & Salt Lake Canal at Little Cottonwood Creek nr SLC, Ut	10167141	—	c,t	1980-81
Jordan & Salt Lake Canal at Zenith Ave near Salt Lake City, Ut	10167149	—	c,s,t	1980
Jordan River at 9400 South near South Jordan, Ut	10167200	3,130	c,s,t	1965-68
Bells Canyon Conduit 1000 East 110000 South	10167220	—	c,s,t	1981-82
Jordan River at 90th South near Midvale, Ut	10167230	a3,130	c,s,t	1980-83
				1986-89
90th South Conduit at Jordan River near Midvale, Ut	10167240	—	b,c,s,t	1980-82
Jordan River at 5800 South near SLC, Ut	10167300	3,254	b,c,s,t	1965-68
				1974-83
Little Cottonwood Creek (channel) near SLC, Ut	10167499	—	c,s,t	1979-88
Little Cottonwood Creek at 2050 East near SLC, Ut	10167700	35.2	c,t	1973-75
				1980
Little Cottonwood Creek at Jordan River near SLC, Ut	10168000	—	c,s	1979-82
				1987-88
Big Cottonwood Creek (Cottonwood Creek) near SLC, Ut	10168500	50.0	c,s,t	1964-70
Big Cottonwood Creek at 5550 South near SLC, Ut	10168800	57.3	c,s,t	1964
				1980-89
Neffs Creek above Wasatch Boulevard near SLC, Ut	10168832	—	c,s,t	1981
Big Cottonwood Creek at Jordan River near SLC, Ut	10169500	—	b,c,s,t	1980-81
Mill Creek near Salt Lake City, Ut	10170000	21.7	b,c,s,t	1964-68
				1979
Mill Creek at Jordan River near SLC, Ut	10170250	a32	b,c,st	1979-82
Jordan River at Salt Lake City, Ut	10171000	3,438	b,c	1974-94
Parleys Creek at Suicide Rock near SLC, Ut	10171600	50.7	b,c,s,t	1964-68
				1979-81
Emigration Creek near Salt Lake City, Ut	10172000	18.4	b,c,s,t	1964-68
				1980-81
Red Butte Creek at Ft. Douglas, near SLC, Ut	10172200	7.25	b,c,s,t	1965-95
Red Butte Creek below reservoir near SLC, Ut	10172220	7.95	c,t	1980-81
1300 South Conduits at Jordan River, combined flows	10172350	—	b	1981
City Creek above Wasatch Drive, near SLC, Ut	10172400	17.0	c,s,t	1964-68
Jordan River at 5th North at SLC, Ut	10172550	—	b,c,s,t	1968-70
				1975
				1980-84
Jordan River at Cudahy Lane near SLC, Ut	10172600	q3,590	b,c,t	1963
				1973-79
Goggin Drain near Magna, Ut	10172630	—	c,t	1964-66
				1972-84
Lee Creek near Magna, Ut	10172640	—	c,t	1972-82
Kennecott Drain near Magna, Ut	10172650	—	c,s,t	1962-66
				1972-84
<b>Settlement Creek above reservoir near Tooele, Ut v</b>	<b>10172791</b>	<b>16.8</b>	<b>c,t</b>	<b>1988-91</b>
North Willow Creek near Grantsville, Ut	10172805	5.38	c,t	1979-92

WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999    XXXIX  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
GREAT SALT LAKE DESERT				
Great Salt Lake West Pond near Wendover, Ut	10172903	—	c,t	1988-90
West Locomotive Spring at Locomotive Spring near Snowville, Ut	10172963	—	c,t	1973-75
Baker Spring at Locomotive Spring near Snowville, Ut	10172964	—	c,t	1969-70 1973-75
Bar M Spring at Locomotive Spring near Snowville, Ut	10172965	—	c,t	1969-70 1973-80
East Jordan Canal at Little Cottonwood Creek near Sandy, Ut	10167105	—	c	1980
East Jordan Canal at pumphouse at 6200 So near Murray, Ut	10167115	—	c,s,t	1980-81
Upper Canal at 5800 South (Tolcate Ln) near Murray, Ut	10167122	—	c,t	1980
Trout Creek near Callao, Ut	10172870	8.19	c,t	1971-91
Off Spring at Locomotive Spring near Snowville, Ut	10172967	—	c,t	1969-70 1973-80
Sparks Spring at Locomotive Spring near Snowville, Ut	10172968	—	c,t	1969-70 1973-80
SEVIER LAKE BASIN				
Midway Creek near Hatch, Ut	10173600	25.7	c	1974
Sevier River at Hatch, Ut	10174500	340	c,s,t	1985-92
Panguitch Creek near Panguitch, Ut	10176300	97.0	c,t	1971-80
Sevier River near Circleville, Ut	10180000	986	c,t	1971-91
East Fork Sevier River near Ruby's Inn, Ut	10183900	71.6	c,t	1971-91
Antimony Creek near Antimony, Ut	10185000	50.3	c,t	1971-76
Otter Creek near Koosharem, Ut	10187300	23.5	c,t	1971-82
Otter Creek above Reservoir near Antimony, Ut	10187500	322	c,t	1971-80
Clear Creek at Sevier, Ut	10195000	169	c,t	1988-89
Mill Creek near Glenwood, Ut	10204200	18.9	c,t	1973
Sheep Creek near Salina, Ut	10205100	0.30	c	1985
Salina Creek at Salina, Ut	10206000	51.8	c,t	1971-91
Oak Creek near Fairview, Ut	10208500	11.8	c,t	1971-89
Pleasant Creek near Mount Pleasant, Ut	10210000	—	c,t	1971-75
San Pitch River near Sterling, Ut	10216210	672	c,t	1971-80
Twelvemile Creek near Mayfield, Ut	10216400	59.4	c,t	1971-80
Chicken Creek near Levan, Ut	10219200	27.9	c,t	1971-94t
Sevier River near Lynndyl, Ut	10224000	5,966	b,c,t	1951-94
Oak Creek above Little Creek, near Oak City, Ut	10224100	5.58	c,t	1971-83 1987-91
Oak Creek below Big Spring near Oak City, Ut	10224300	17.8	c,t	1979-83
Chalk Creek near Fillmore, Ut	10232500	58.7	c,t	1985
Meadow Creek near Meadow, Ut	10233000	11.6	c,t	1944 1971-75 1985
Corn Creek near Kanosh, Ut	10233500	—	c,t	1944 1964 1971-75 1985
South Creek near Beaver, Ut	10235000	14.7	c,t	1965 1971-76
North Fork North Creek near Beaver, Ut	10236000	14.1	c,t	1972-77
South Fork North Creek near Beaver, Ut	10236500	23.0	c,t	1971-76
Indian Creek near Beaver, Ut	10237500	18.5	c,t	1965 1971-77
Indian Creek at Adamsville, Ut	10238000	a180	c,t	1964



XL WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
PAROWAN VALLEY				
Little Creek near Paragonah, Ut	10241400	15.8	c,t	1971-80
Red Creek near Paragonah, Ut	10241430	a6.3	c,t	1971-75
Center Creek above Parowan Creek near Parowan, Ut	10241470	11.6	c,t	1971-83
Summit Creek near Summit, Ut	10241600	24.0	c,s,t	1971-83
SNAKE RIVER VALLEY				
George Creek near Yost, Ut	13077700	7.84	c,t	1965-67 1972-90
Clear Creek near Naf, Id	13079000	20.2	c,t	1965-67

Explanation:  
a : approximate





## INTRODUCTION

Water-resources data for the 1999 water year for Utah consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground water. This report contains discharge records for 161 gaging stations; stage and contents for 15 lakes and reservoirs; water quality for 26 hydrologic stations, and 198 wells; and water levels for 56 observation wells. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Utah.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface Water Supply of the United States." Through September 30, 1969, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels and Artesian Pressures in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Virginia, 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry 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 report is identified as "U.S. Geological Survey Water-Data Report UT-99-1." For archiving and general distribution, the reports for water years 1971-74 are also 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, Virginia 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 (801) 908-5000.

## COOPERATION

The U.S. Geological Survey and organizations of the State of Utah have had cooperative agreements for the systematic collection of streamflow records since 1909, for ground-water levels since 1935, and for water-quality records since 1941. Organizations that assisted in collecting data through cooperative agreement with the Geological Survey are:

Department of Natural Resources, Kathleen B. Clarke, Executive Director  
Division of Water Rights, R. L. Morgan, State Engineer  
Division of Water Resources, D. L. Anderson, Director  
Bear River Commission, Denise Wheeler, Chairman  
Salt Lake County Flood Control, Brent Overson, Chairman  
Weber Basin Water Conservancy District, Ivan Flint  
Ogden River Water Users, Terel Grimley  
Weber River Water Users, Floyd Baham  
Central Utah Water Conservancy District, Don Christiansen  
Tooele County, Ray Johnson, Engineer  
Nephi City, Lee Fowkes  
Kane County Water Conservancy District, Todd MacFarland  
St. George City, Kirk Bradley  
Washington County Water Conservancy District, Ron Thompson  
Kanab City, Keith Robinson  
Southern Nevada Water Authority  
Central Iron County Water Conservancy District, Scott Wilson

Assistance in the form of funds was given by the Bureau of Reclamation, U.S. Department of the Interior, in collecting records for six gaging stations. Records for nine gaging stations in Idaho in the Bear River basin and eight in Utah were collected by the Utah Power Co. under Federal Energy Regulatory Commission License.

Other district offices of the Geological Survey, Water Resources Division, obtained the records listed below:

Colorado District.--Colorado River near Colorado-Utah State line.  
Green River near Jensen, UT  
Wyoming District.--Bear River at Evanston, WY  
Blacks Fork near Millburne, WY  
Blacks Fork near Robertson, WY  
East Fork of Smiths Fork, near Robertson, WY  
Green River near Green River, WY

Records for all stream-gaging stations operated by the Geological Survey in the Bear River basin in Utah, Idaho, and Wyoming are included in this report.

Organizations that supplied data are acknowledged in station descriptions.

## SUMMARY OF HYDROLOGIC CONDITIONS

by David V. Allen

Hydrologic conditions for Utah vary greatly across the state because of topography, geology, and changing seasonal atmospheric conditions. Annual precipitation ranges from about 5 inches in Great Salt Lake Desert to about 60 inches on the highest mountains (Butler and Marsell, 1972). Pacific frontal storms with moisture from the Pacific Ocean and Gulf of California generally occur during winter and early spring and are responsible for the mountain snowpack. Snowpack typically increases with elevation, with storm accumulations greater than 12 inches of snow common at elevations above 8,000 feet above sea level. During the summer months, monsoonal moisture from the warm waters of the Pacific Ocean and Gulf of California can cause thunderstorms that vary greatly in areal extent and intensity. When conditions are correct, storms moving across Great Salt Lake pick up additional moisture from evaporation of lake water and precipitation can be locally enhanced; this is the so called "lake effect." The mountain ranges and plateaus of Utah are characterized by steep slopes, sparse vegetation, thin soils, and in areas such as the Colorado River Basin, large expanses of bedrock and steep-walled canyons. These conditions can lead to rapid runoff and flooding as a result of both snowmelt or thunderstorms.

## Precipitation

Precipitation in Utah during the 1999 water year was greater than normal<sup>1</sup> (1961-90) at 7 of 12 selected precipitation-recording stations operated by the National Oceanic and Atmospheric Administration (National Oceanic and Atmospheric Administration, 1998 and 1999) in Utah (fig. 1). The seven stations that received greater-than-normal precipitation were located in the central and eastern parts of the State, and include Black Rock, Bluff, Callao, Green River, Hanksville, Nephi and Vernal. The average departure for these seven stations was +1.85 inches, and Green River recorded the largest annual departure from normal (+4.04 inches), much of which occurred in July when the largest monthly departure statewide was recorded (+3.83 inches). Hanksville recorded the least total precipitation of all the selected stations with 6.92 inches, however, this is +1.16 inches greater than normal. Of the five stations that recorded less-than-normal annual precipitation (average -2.67 inches), Alta recorded greatest departure with -8.35 inches less than normal.

**Table 1.** Precipitation and departure from normal precipitation at selected sites for water year 1999

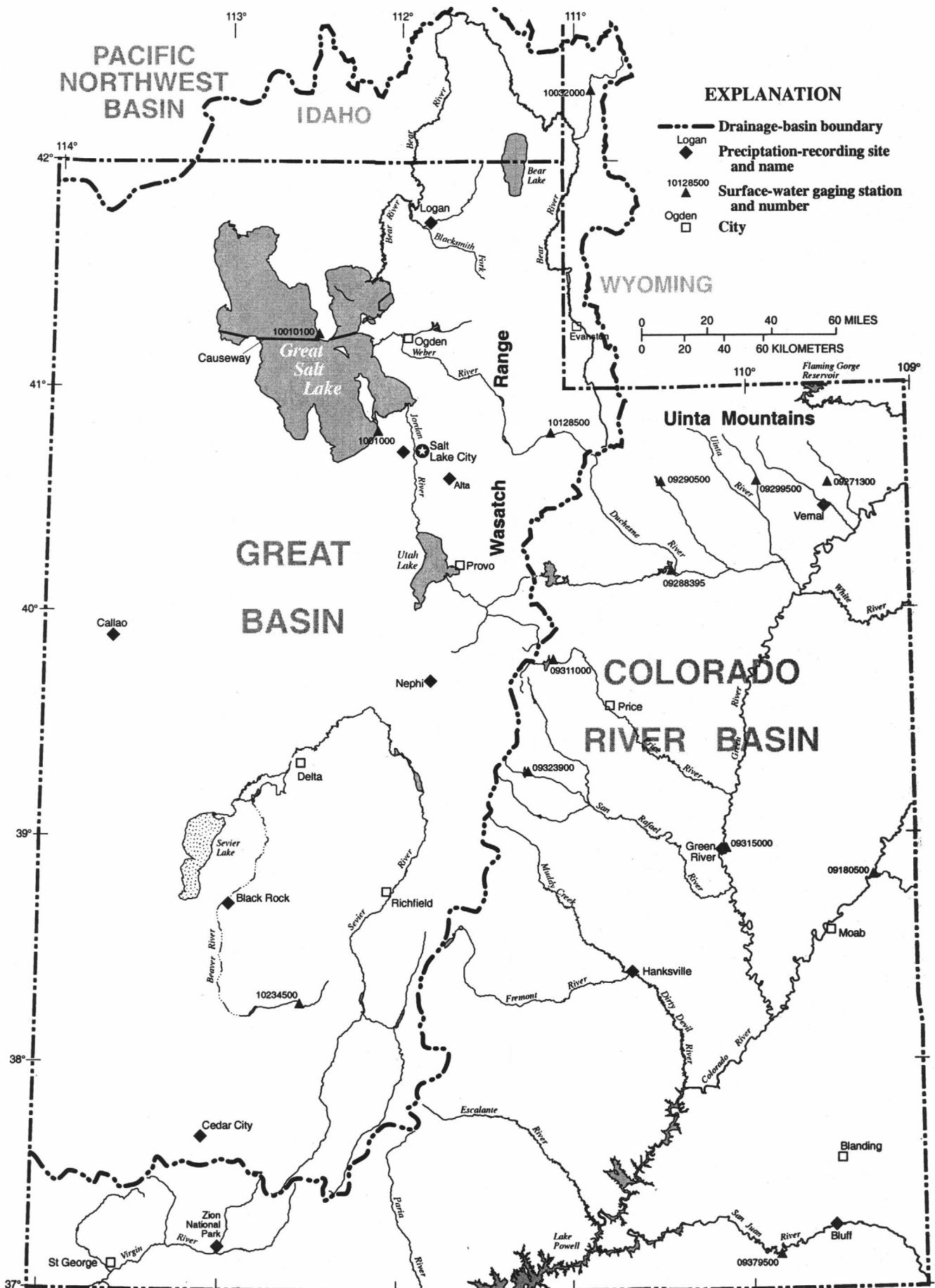
[In inches; upper number indicates precipitation; lower number (in parentheses) indicates precipitation departure from 1961-90 normal precipitation; e, estimated from partial record; M, missing entire month; — no value; T, trace]

Site	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul <sup>1</sup>	Aug <sup>1</sup>	Sep <sup>1</sup>	Total Departure
Alta	3.99 (0.51)	3.56 (-2.14)	3.04 (-3.86)	6.30 (-0.69)	5.49 (-0.94)	3.16 (-3.60)	6.40 (0.32)	e4.99 (1.60)	e1.80 (-0.03)	2.57 (0.95)	2.54 (0.75)	1.39 (-1.22)	45.23 (-8.35)
Black Rock	1.26 (0.48)	0.76 (-0.01)	e1.92 (1.33)	0.10 (-0.40)	0.30 (-0.18)	0.27 (1.20)	1.86 (0.88)	0.28 (-0.50)	0.73 (0.19)	0.51 (-0.35)	1.09 (0.26)	0.47 (-0.39)	9.55 (0.46)
Bluff	1.59 (0.53)	0.50 (-0.27)	0.50 (-0.25)	0.07 (-0.64)	0.13 (-0.54)	0.00 (-0.67)	0.81 (0.33)	0.61 (0.20)	0.17 (-0.06)	0.63 (-0.29)	3.14 (2.31)	0.71 (-0.02)	8.86 (0.63)
Callao	2.44 (1.78)	M —	0.10 (-0.18)	e0.74 (0.45)	0.07 (-0.26)	0.03 (-0.38)	1.79 (1.32)	0.36 (-0.45)	0.95 (0.22)	0.08 (-0.45)	0.27 (-0.39)	0.32 (-0.28)	7.15 (4.96)
Cedar City	2.53 (1.58)	1.14 (0.14)	0.42 (-0.28)	0.05 (-0.64)	0.86 (-0.03)	0.26 (-1.10)	0.69 (-0.41)	0.66 (-0.18)	0.83 (0.40)	1.33 (0.24)	1.01 (-0.46)	0.60 (-0.38)	10.38 (-1.12)
Green River	0.98 (0.09)	0.80 (0.35)	e0.05 (-0.36)	0.11 (-0.29)	0.38 (0.06)	0.00 (-0.59)	1.47 (0.97)	0.15 (-0.48)	0.75 (0.35)	4.40 (3.83)	1.10 (0.35)	0.55 (-0.24)	10.74 (4.04)
Hanksville	1.02 (0.34)	0.52 (0.11)	0.15 (-0.16)	0.10 (-0.28)	0.05 (-0.20)	0.01 (-0.50)	1.45 (1.03)	e0.17 (-0.32)	0.34 (0.04)	1.14 (0.60)	1.54 (0.81)	0.43 (-0.31)	6.92 (1.16)
Logan	2.05 (0.18)	0.99 (-0.74)	e0.98 (-0.74)	e2.53 (1.13)	e2.36 (0.71)	0.83 (-1.19)	2.82 (0.67)	2.64 (0.60)	1.78 (0.21)	0.16 (-0.62)	1.02 (0.05)	0.31 (-1.31)	18.47 (-1.05)
Nephi	2.03 (0.77)	e1.05 (-0.34)	0.77 (-0.56)	e1.58 (2.44)	e0.97 (1.83)	0.49 (-1.22)	3.47 (1.96)	2.86 (1.48)	1.29 (0.44)	0.53 (-0.31)	1.30 (0.29)	0.37 (1.24)	16.71 (1.87)
Salt Lake City	1.25 (-0.19)	1.27 (-0.02)	1.27 (-0.13)	1.29 (0.18)	0.92 (-0.31)	0.80 (-1.11)	3.09 (0.97)	2.59 (0.79)	0.82 (-0.11)	0.25 (-0.56)	0.70 (-0.16)	0.45 (-0.83)	14.70 (-1.48)
Vernal	1.72 (0.66)	0.83 (0.23)	0.25 (-0.38)	0.80 (0.38)	0.56 (0.15)	T (-0.65)	1.75 (0.94)	1.55 (0.67)	0.29 (-0.50)	0.68 (0.18)	2.08 (1.50)	1.09 (0.22)	11.60 (3.40)
Zion N.P.	1.90 (0.98)	1.39 (-0.07)	0.07 (-1.21)	0.49 (-1.10)	0.95 (-0.65)	0.22 (-1.83)	2.12 (0.97)	0.73 (-0.11)	1.14 (0.66)	1.89 (0.64)	2.02 (0.23)	1.15 (0.15)	14.07 (-1.34)
Total Departure	5.93	-2.76	-6.78	-1.51	-2.41	-13.69	9.95	3.30	1.81	3.86	5.54	-5.42	

<sup>1</sup>Provisional data.

<sup>1</sup>The National Oceanic and Atmospheric Administration defines "normal" as the average value of a meteorological element over a period of time. Since January 1, 1993 the averaging period is calendar years 1961 to 1990.





Statewide during the 1999 water year, 6 months received greater-than-normal precipitation and 6 months received less-than-normal precipitation. November to March was the longest continuous period of less-than-normal precipitation statewide. March was the driest month when all of the 12 stations recorded less-than-normal precipitation, with a total of -13.69 inches departure from normal. April to August was the longest continuous period of greater-than-normal precipitation, and April was the wettest month with a departure from normal of +9.95 inches. July was also the wettest July ever recorded at Green River, National Weather Service Office (4.40 inches, 105 years of record).

#### Streamflow, Flooding, and Reservoir Storage

Mean annual discharge at five of seven long-term, selected gaging stations (fig. 2) for the 1999 water year was greater than the long-term annual seventy-fifth percentile (1944-98) discharge. These stations were Whiterocks River near Whiterocks, Ut. (09299500), Green River near Green River, Ut. (09315000), Smiths Fork near Border, Wy. (10032000), Weber River near Oakley, Ut. (10128500), and Beaver River near Beaver, Ut. (10234500). Two stations, Colorado River near Cisco, Ut. (09180500) and San Juan River near Bluff, Ut. (09379500), recorded a mean annual discharge between the median and seventy-fifth percentile. The mean annual discharges ranged from a maximum of 176 percent of the long-term median discharge at Beaver River near Beaver, Ut., to a minimum of 101 percent of the long-term median discharge at Colorado River near Cisco, Ut.; the average for the 7 gaging stations was 131 percent, slightly less than the 1998 average of 132 percent. A new maximum monthly-mean-discharge (43.0 cubic-feet-per-second) for the period since 1945 was set during February at Whiterocks River near Whiterocks, Ut. Most of the seven index stations exhibited a relative decrease in discharge during April 1999 compared to 1945-98. This was possibly the result of abnormally cool temperatures and wet conditions that increased the mid- and high-elevation snowpack during the month, which in effect delayed the start of the snowmelt season until May. New record peak discharges occurred at 6 gages, with more than 2 years of continuous record, during water year 1999 (table 2).

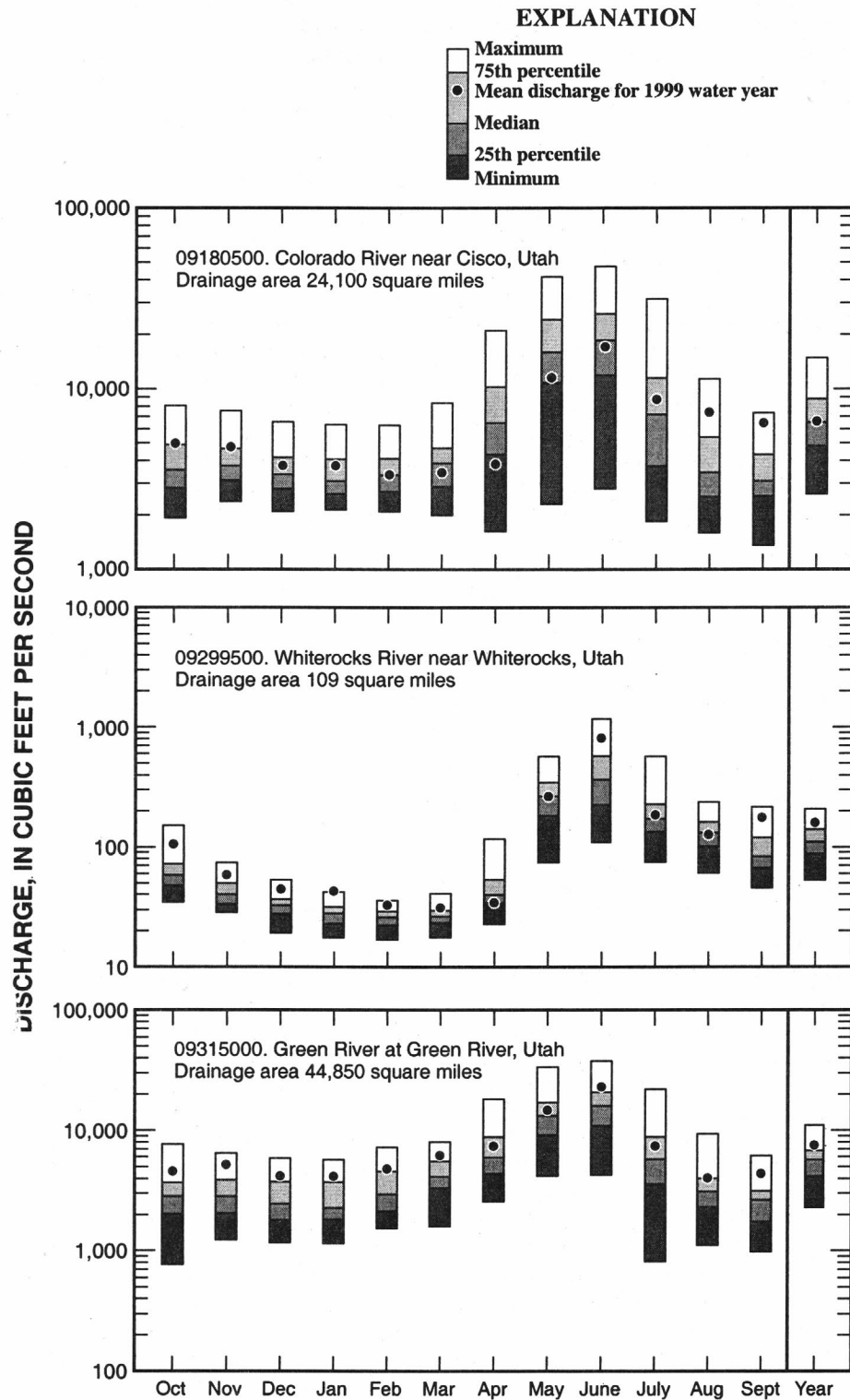
**Table 2.** Record peak discharges, in cubic feet per second, established in 1999 water year.  
[e, estimated; --, no data]

Station	Drainage Basin	1999 Peak Discharge	Date	Recurrence Interval, in years	Previous Peak Discharge	Date	Years of Record
09276600	Duchesne River	624	5-28-99	5-10	614	6-26-95	10
09292500	Duchesne River	2,670	6-20-99	250	2,360	6-11-90	53
09296800	Duchesne River	3,610	6-21-99	25-50	e 3,000	6-15-95	10
09404700	Virgin River	1,360	7-30-99	50-100	1,170	9-11-98	7
10102200	Bear River	971	5-27-99 and 5-31-99	--	e 500 (daily)	5-9-63	3
10155300	Provo River	2,040	5-28-99	--	1,720	5-18-97	4

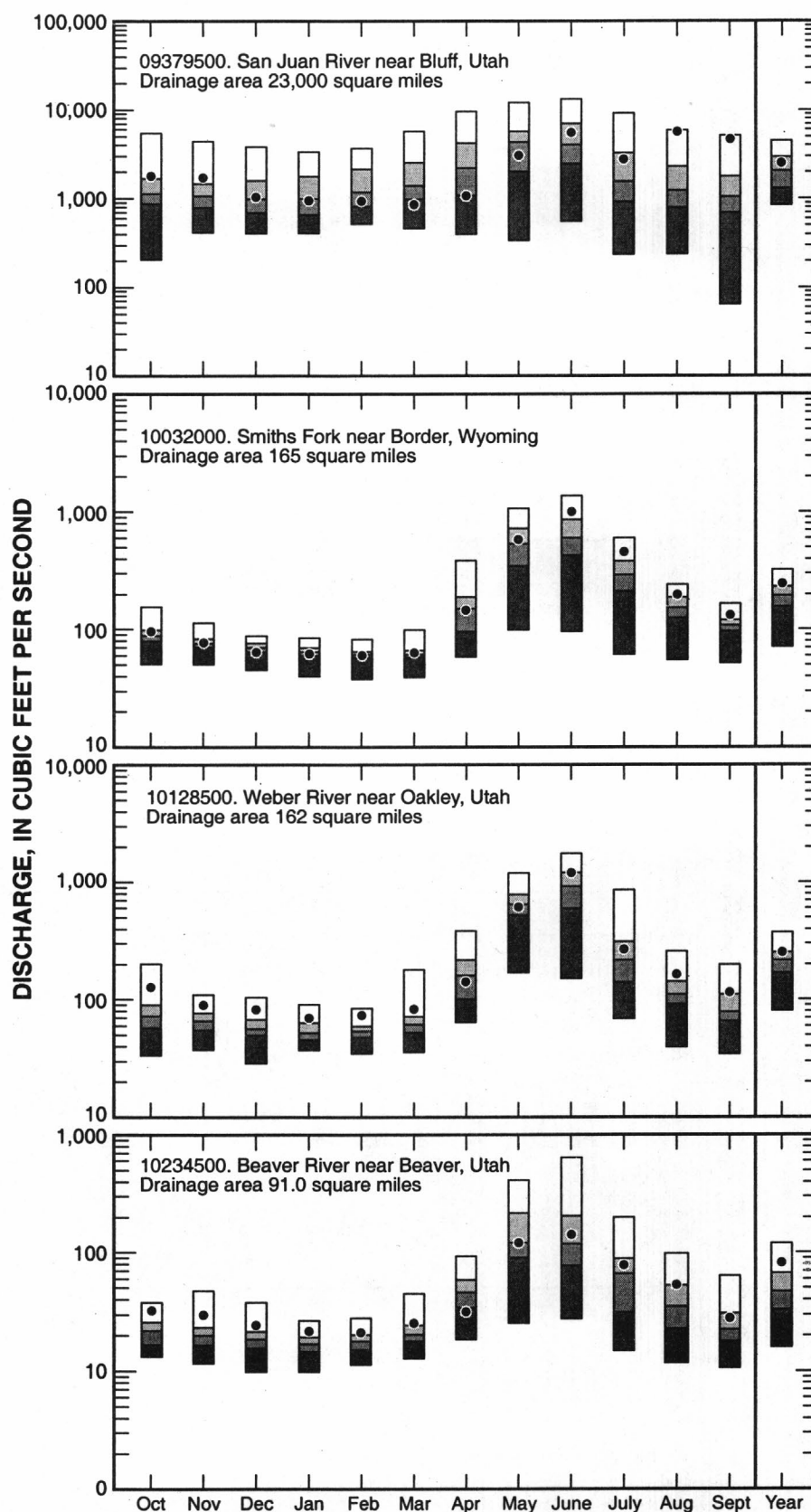
Combined reservoir contents on September 30, 1999, at 12 of 15 selected reservoirs in Utah averaged 118 percent of the long-term (1961-90) average-usable-contents<sup>2</sup>, a decrease from 146 percent from the 1998 water year. Contents at the end of the water year were greater than or equal to the long-term average at all of the 12 reservoirs, however, data for Otter Creek, Piute, and Sevier Bridge reservoirs was unavailable. The largest percentage of capacity was at Scofield Reservoir near Scofield (09311000), with 131 percent, and the smallest percent of capacity was at Moon Lake Reservoir near Mountain Home, Utah, which was 104 percent of capacity. Low demand for stored surface water for irrigation was the result of high natural instream flows caused by greater-than-normal precipitation during April through August. Storage in Bear Lake, located in northern Utah, peaked at about 1,354,000 acre-feet during July 4-6, 1999, which is about 11,000 acre-feet less than the peak for the 1998 water year (1,365,000 acre-feet) and 132 percent of the long-term average contents (1,027,400 acre-feet). Minimum storage in Bear Lake was 1,095,000 acre-feet on March 26-31, 1999, which is 19,000 more than the minimum for the 1998 water year (1,076,000 acre-feet).

The south part of Great Salt Lake (10010000) reached a maximum daily mean elevation for the 1999 water year of 4,204.6 feet above sea level on June 9 and 15, 1999 (fig. 3), which was 1.0 feet higher than the peak elevation for the previous water year. Fluctuations in the level of Great Salt Lake occur because of changes in the rates of fresh water inflow, movement of water through the Southern Pacific Railroad causeway, and evaporation outflow. Great Salt Lake normally reaches its peak elevation between late April and early June, and its lowest elevation normally occurs between late September and early December. The minimum elevation for the 1999 water year was 4,202.3 feet above sea level on October 1-2 and 23-24, 1998, which is 2.0 feet higher than the minimum for the 1998 water year. The elevation of the north part of Great Salt Lake (10010100) ranged from a minimum of 4,201.2 feet above sea level on October 24-25, 1998, to a maximum of 4,203.2 feet above sea level on June 25, 1999. Salinity of the south part at the Saltair gage was 8.5 percent on October 1, 1998, and 8.2 percent on September 29, 1999, an overall decrease from 9.8 percent salinity in the 1998 water year (average of 4 measurements). Salinity of the north arm generally decreased from a maximum of 26.6 percent on October 14, 1998, to a minimum of 24.3 percent on August 26, 1999, and averaged 25.2 percent (4 observations), down from 26.2 percent (8 observations) the previous water year.

<sup>2</sup>Long-term averages provided by National Oceanic and Atmospheric Administration. Averages for East Canyon (1966-90), Joes Valley (1966-90), Starvation (1970-90), and Steinaker (1975-90), Reservoirs are calculated on the basis of the water years shown in parentheses.



**Figure 2.** Comparison of monthly and annual mean discharge for water year 1999 with maximum, 75th percentile, median, 25th percentile, and minimum monthly and annual discharge for water years 1945-98 at seven long-term, representative streamflow-gaging stations in Utah and Wyoming.



**Figure 2.** Comparison of monthly and annual mean discharge for water year 1999 with maximum, 75th percentile, median, 25th percentile, and minimum monthly and annual discharge for water years 1945-98 at seven long-term, representative streamflow-gaging stations in Utah and Wyoming--Continued.

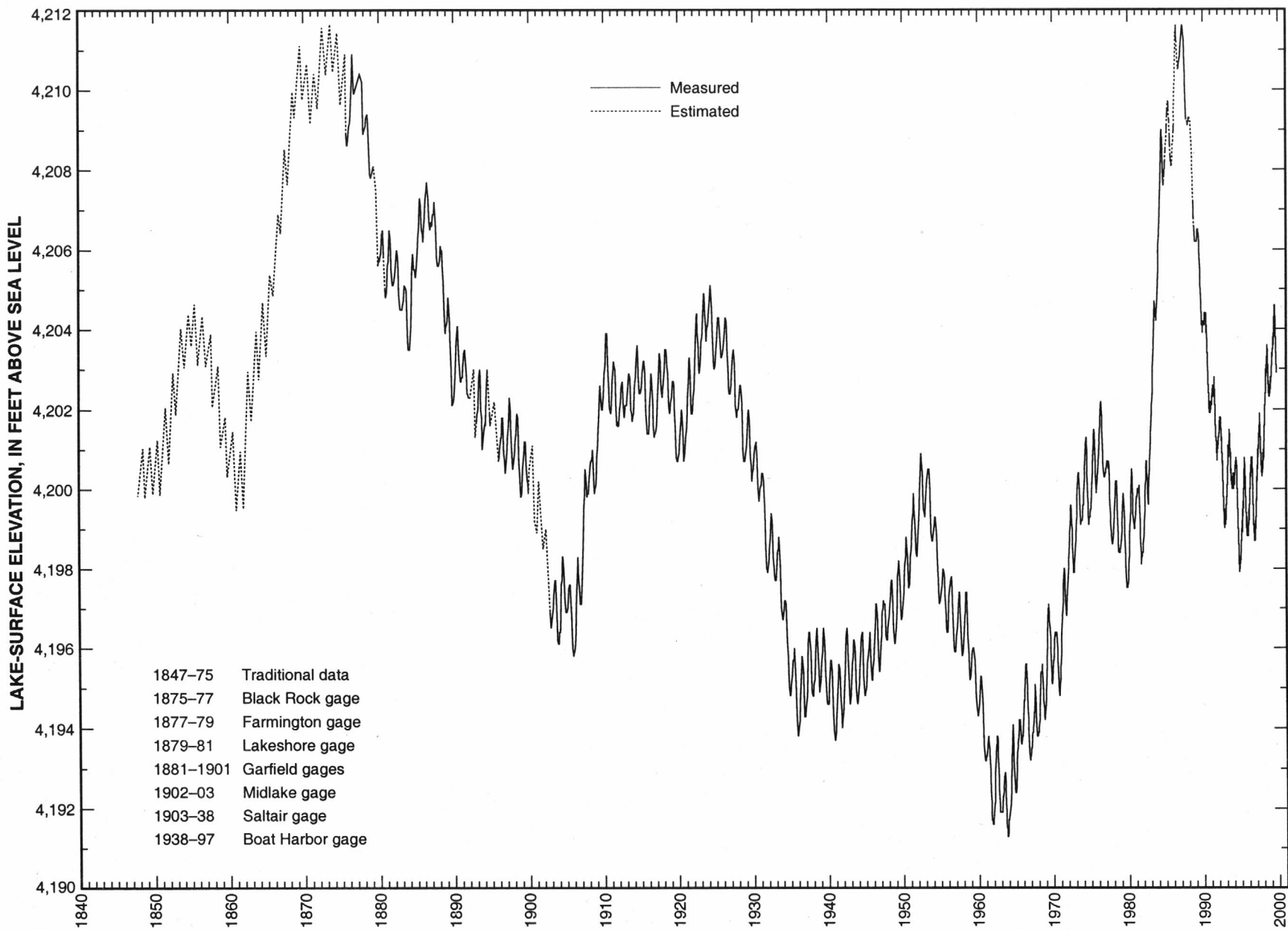


Figure 3. Fluctuations in elevation of Great Salt Lake, 1845-99.



#### Ground Water

Six wells (fig. 4) were selected to show trends in ground-water levels for water years 1990-99. The wells are in Curlew Valley, Pahvant Valley, Beryl-Enterprise area, East Shore area near Ogden, and the Vernal and Blanding areas. The water-level hydrographs for the 1990-99 water years (fig. 5) show that statewide water-level trends are mixed. When compared to water year 1998, water levels generally rose about 2 feet in well (D-36-22)22daa- 1 in the Blanding area. During water years 1990-99, the greatest water-level decline was recorded at well (B- 6- 2)26ada- 1 (about 2 feet) near Ogden.

Statewide, of the 27 wells equipped with continuous recording devices for more than 2 consecutive years, two recorded record-maximum water levels during the 1999 water year, while two recorded record-minimum water levels. The two wells that recorded record maximums are located in Utah and Washington Counties, and the two wells with new record minimums are located in Box Elder and Kane counties. In Wasatch County, 26 wells have been measured on a monthly basis since 1993. Of those 26 wells, a new maximum water-level for period-of-record was measured in 1 well and new minimum water levels for period-of-record were measured in 5 wells.

#### Chemical quality of streamflows

Long-term water-quality data are collected at three National Stream-Quality Accounting Network (NASQAN) and Benchmark stations in Utah and one in Colorado (fig. 6), which are the same as for the 1998 water year. Water-quality samples or data were also collected at eight other sites in the Colorado River Basin, and 10 sites on tributaries to Great Salt Lake.

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- National Oceanic and Atmospheric Administration, 1998, Climatological data, Utah: Asheville, N. C., National Climate Center, v. 100, no. 10-12.
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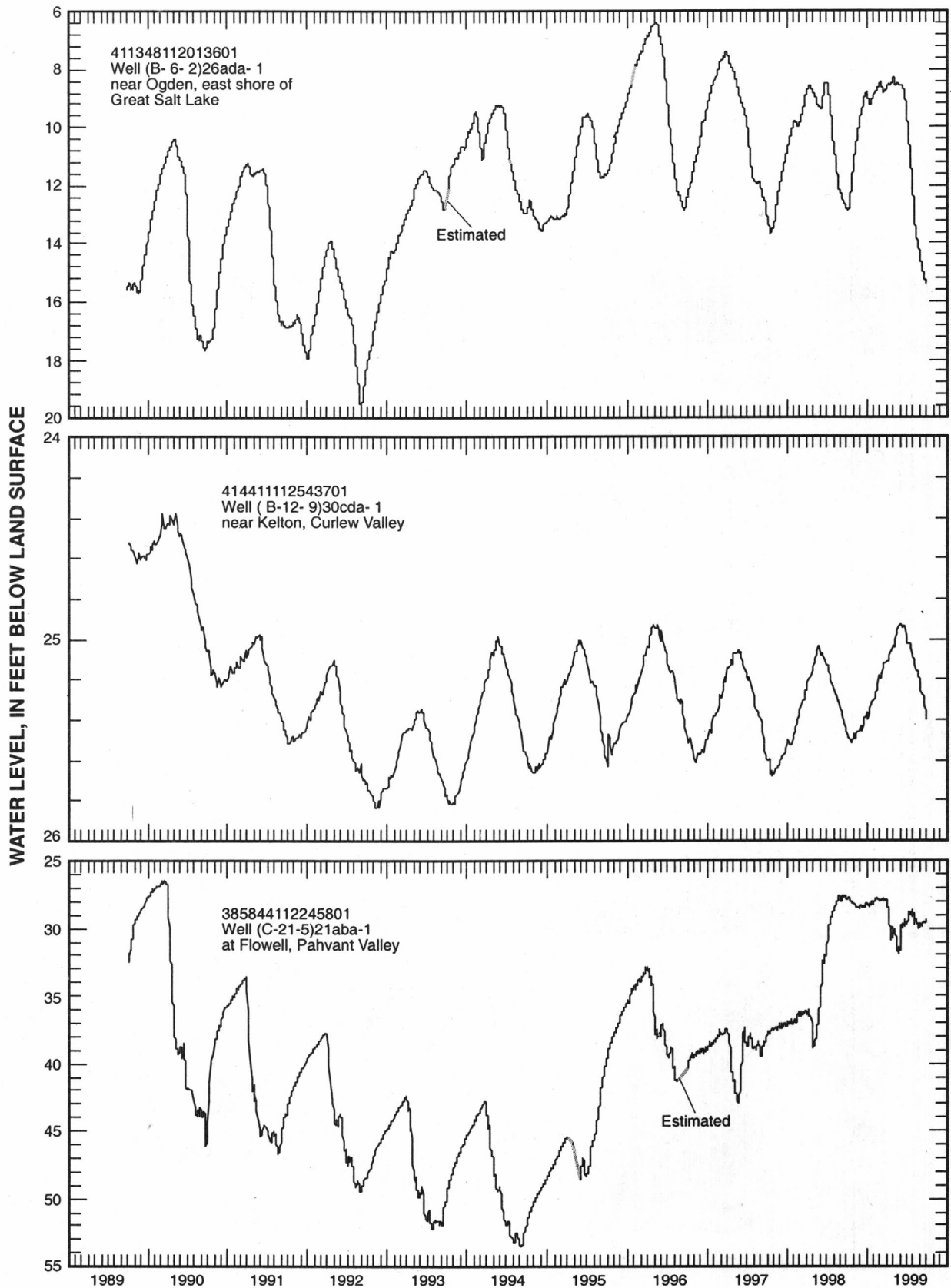


Figure 5. Fluctuations of water levels in selected wells in Utah for water years 1990-99.

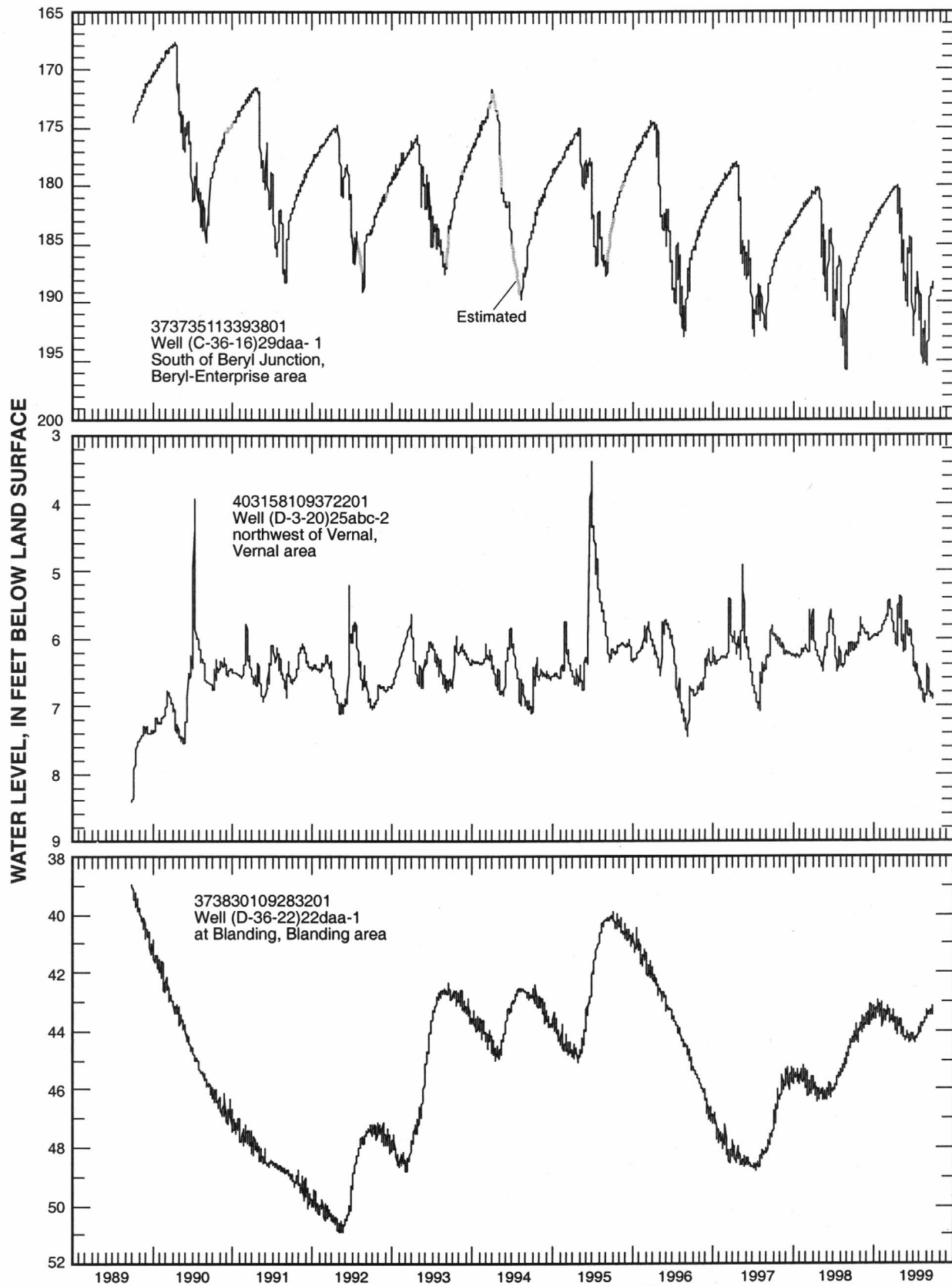
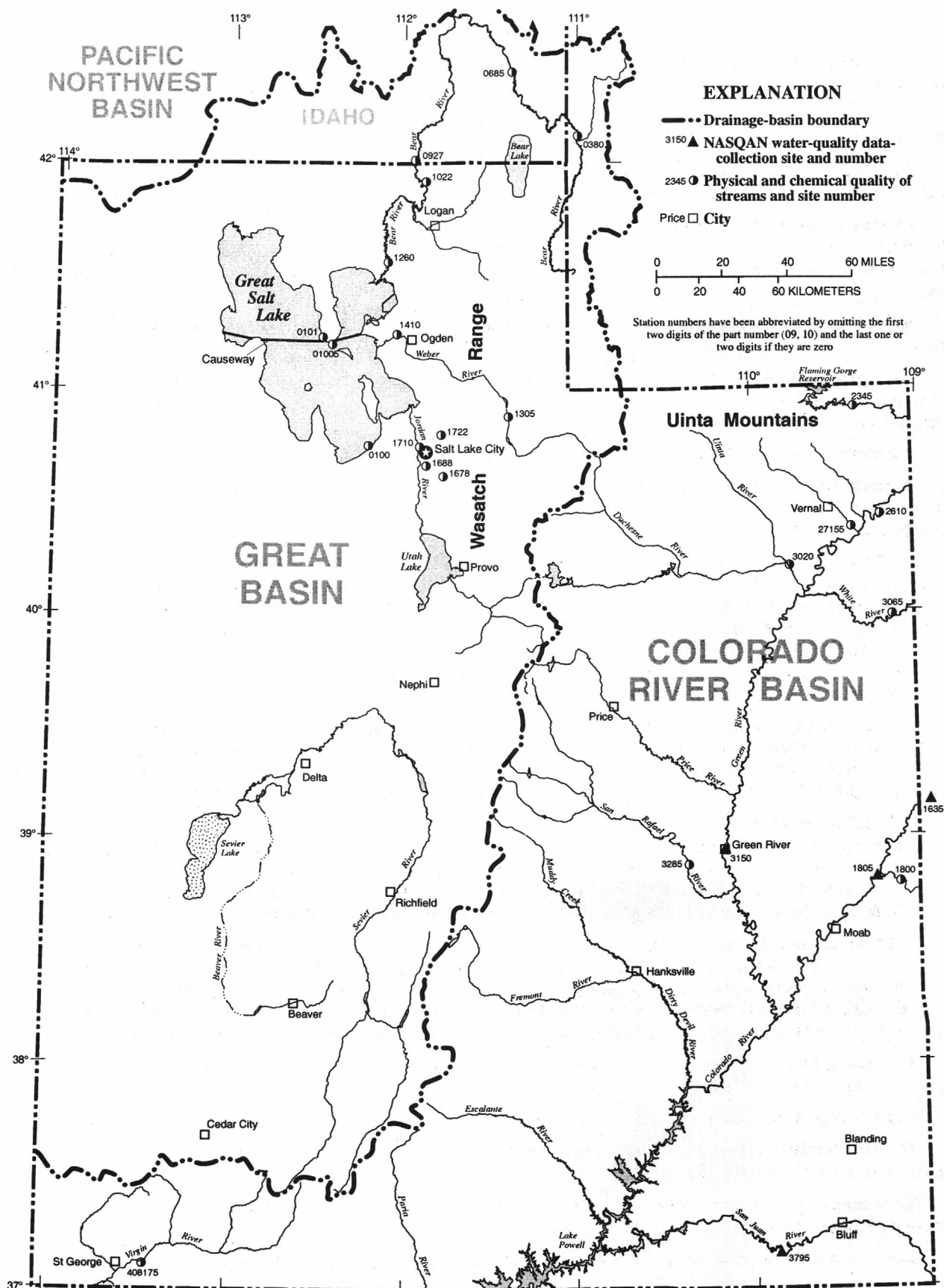


Figure 5. Fluctuations of water levels in selected wells in Utah for water years 1990-99--Continued.

## WATER RESOURCES DATA FOR UTAH, 1999



**Figure 6.** Location of four National Stream-Quality Accounting Network (NASQAN) and other surface-water sites at which water-quality data were collected in water year 1999.



## DEFINITION OF TERMS

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

**Acid neutralizing capacity (ANC)** is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point.

**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 measurement 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 multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

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

**Alkalinity** is the capacity of solutes in an aqueous system to neutralize acid.

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

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

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

**Fecal streptococcal bacteria** are bacteria found also in the intestine 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. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35 C plus or minus 1.0 C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

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

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

**Benthic invertebrates** are invertebrate animals inhabiting the bottoms of lakes, streams, and other water bodies. They are useful as indicators of water quality.

**Biochemical oxygen demand (BOD)** is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by 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/m<sup>3</sup>), and periphyton and benthic organisms in grams per square mile (g/m<sup>2</sup>).

**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.

**Cells/volume** refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

**Cfs-day** 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, about 646,000 gallons, or 2,447 cubic meters.

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

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

**Color unit** is produced by one 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.

**Continuing-record station** is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken one or more times daily.
3. When sediment discharge records include periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

**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.

**Cubic foot per second (FT<sup>3</sup>/S, ft<sup>3</sup>/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.

**Discharge** is the volume of water (or more broadly, volume of 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  $\mu$ m membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

**Dissolved-solids concentration** of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During 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.

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

**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 a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

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

**Hardness** of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ( $\text{CaCO}_3$ ).

**High tide** is the maximum height reached by each rising tide.

**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 8-digit number.

**Low tide** is the minimum height reached by each falling tide.

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

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

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

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

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

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

**Micrograms per gram (mg/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, mg/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 one milligram per liter.

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

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

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

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

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

**National Stream-Quality Accounting Network (NASQAN)** monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Sam-

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

**The National Atmospheric Deposition Program/ National Trends Network (NADP/NTN)** provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO<sub>2</sub> emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO<sub>2</sub> and NO<sub>x</sub> scheduled to begin in 2000.

**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.

**Organism** is any living entity.

**Organism count/area** refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m<sup>2</sup>), 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 5-digit number used in the U.S. Geological Survey computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent. The codes used in NWIS 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 particular 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 either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

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

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

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

**Percent composition** 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, mass, or volume.

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

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



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

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

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

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

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

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

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

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

**Primary productivity** is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon 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 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 [ $\text{mg O}/(\text{m}^2/\text{time})$ ] for periphyton and macrophytes and [ $\text{mg O}/(\text{m}^3/\text{time})$ ] 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 and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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

**River mile** as used herein, is the distance above the mouth of Delaware Bay, measured along the center line of the navigation channel or the main stem of the Delaware River. River mile data were furnished by the Delaware River Basin Commission.

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

**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 of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

**Sediment** is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity,



characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

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

**Bed load discharge** (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load 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). The entire sample is used for the analysis.

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

**Suspended-sediment discharge** (tons/day) is the rate at which dry mass 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 as follows: concentration (mg/L) x discharge (ft<sup>3</sup>/s) x 0.0027.

**Suspended-sediment load** is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

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

**Total sediment discharge** (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during 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 within 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 a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

**Stage-discharge relation** is the relation between gage height (stage) and 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" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

**Substrate** is the physical surface upon which an organism lives.

**Natural substrate** refers to any naturally occurring immersed 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 or 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 hard-board) for benthic organism collection, and plexiglass strips for periphyton collection.

**Surface area** of a lake is that area outlined on the latest USGS topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimeted. all areas shown are those for the stage when the planimeted map was made.

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

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

**Suspended, recoverable** is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that

results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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

**Suspended, total** is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um 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.

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

**Taxonomy** is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a 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

**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 of the constituent, 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** 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 both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

**Total discharge** is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

**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, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

**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 are also 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.

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

**Water 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, 1985, is called the "1985 water year."

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

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

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

### DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is 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 entering between two main-stream stations is listed between A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a list of stations in the front of the 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.

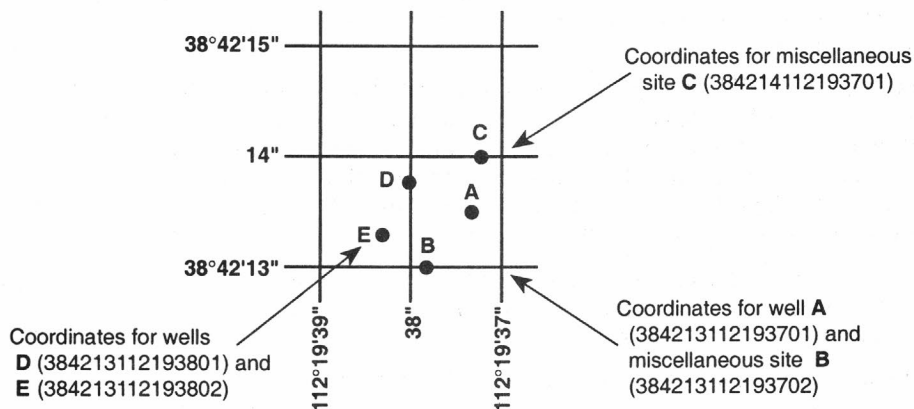
As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station number, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are consecutive. The complete 8-digit number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number "09" plus the 6-digit downstream order number "041010."

### NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site number system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, assign sequential numbers "01," "02," etc. as one would for wells. See figure 7.

In addition to the well number that is based on latitude and longitude given for each well, another well number is given that is based on the U.S. Bureau of Land Management's system of land subdivision. This well number is familiar to the water users of Utah and shows the location of the well by quadrant, township, range section, and position within the section. See figure 12. The capital letter at the beginning of the location number indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian--A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lowercase letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, and the third the quarter-quarter-quarter section. The letters are assigned within the section in a counter-clockwise direction beginning with (a) in the northeast quarter of the section. Letters are assigned within each quarter section and quarter-quarter section in the same manner. Where two or more locations are within the smallest subdivision, consecutive numbers beginning with 1 are added to the letters in the order in which the wells are inventoried. For example, (C-16-9) 15daa-2 indicates a well in the northeast quarter of the northeast quarter of the southeast quarter of sec. 15, T. 16 S., R.9 W., and shows that this is the second well inventoried in the quarter-quarter-quarter section. The capital letter C indicates that the township is south of the Salt Lake Base Line and that the range is west of the Salt Lake Meridian.



**Figure 7.** System for numbering wells and miscellaneous sites (latitude and longitude).

In addition to the Salt Lake Base Line and Salt Lake Meridian, which apply to most of Utah, the Uintah Base Line and Meridian are the basis for describing locations in a small, irregularly shaped area of north-eastern Utah. The quadrants, townships, ranges, sections, and parts of sections are designated in the same way as for the Salt Lake Base Line and Meridian. For any location in the Uintah area, however, the letter "U" precedes the parenthesis.

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

**The National Atmospheric Deposition Program/National Trends Network (NADP/NTN)** provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO<sub>2</sub> emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO<sub>2</sub> and NO<sub>x</sub> scheduled to begin in 2000.

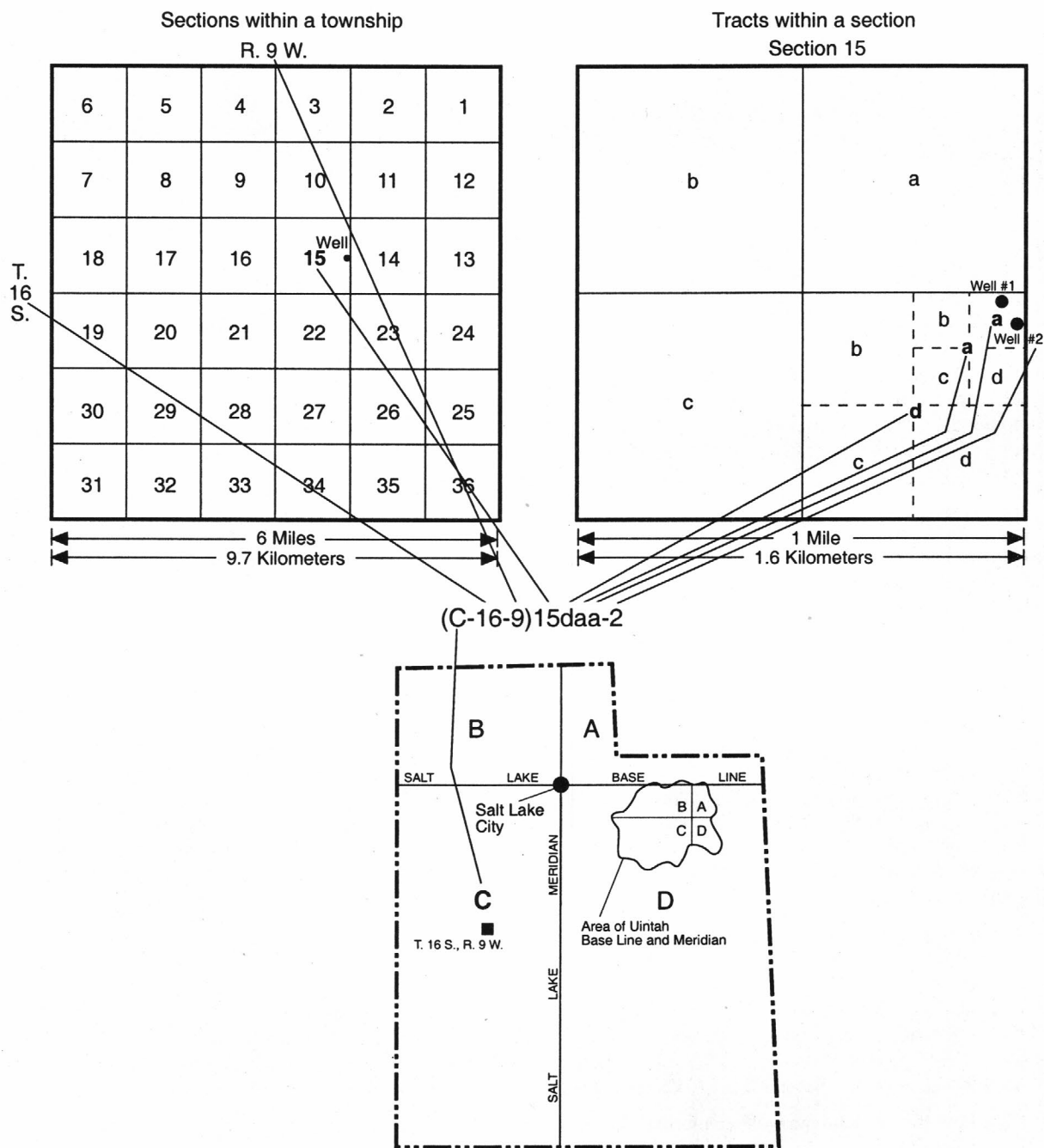
Data from the network, as well as information about individual sites, are available through the world wide web at:

<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





**Figure 8.** System for numbering wells and miscellaneous sites (township and range).

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://www.rvares.er.usgs.gov/nawqa/nawqa\\_home.html](http://www.rvares.er.usgs.gov/nawqa/nawqa_home.html)

## **EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS**

### **Collection and Computation of Data**

The base data collected at gaging stations (fig. 13) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, Water-Supply Paper 2175, and the U.S. Geological Survey Techniques of Water Resources Investigations (TWRI's), Book 3, Chapter 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).

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. 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 computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations, the stage-discharge relation is affected by the 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 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 northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

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 on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.



### 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 heading, 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 with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. 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 records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that flow at it can reasonably be considered equivalent to flow at the present station.

**REVISED RECORDS.**--Because of new information, published records occasionally are found to be 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 in which the most recently revised figure was first published is given.

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

**REMARKS.**--All periods of estimated daily discharge 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 is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; 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 here.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Included here 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.

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

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, 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 (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station 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. No changes have been made to the data presentations of lake contents.

### 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 is usually 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 are also 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.

ANNUAL MEAN.--The arithmetic mean for the individual daily mean discharges for the year noted or 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.

ANNUAL 7-DAY MINIMUM.--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.)

**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 for a footnote may be used to provide further information.

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

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

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

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

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

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

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

**90 PERCENT EXCEEDS.**--The discharge that has been 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 are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

### **Accuracy of Field Data and Computed Results**

The accuracy of streamflow data 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 observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy. Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

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 observed discharge.

### **Other Data Available**

Information of a more detailed nature than that published for most of the gaging stations such as discharge measurements, gage-height records, and rating tables is available from the district office. Also, most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

## **EXPLANATION OF WATER-QUALITY RECORDS**

### **Collection and Examination of Data**

Surface-water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, etc.); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling, or other pertinent data are given in the table containing the chemical analyses of the ground water.

### Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately 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 at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values 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 upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record.

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

### Remarks Codes

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

PRINT OUTPUT	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
V	Analyte was detected in both the environmental sample and the associated blanks
&	Biological organism estimated as dominant.

### Dissolved Trace-Element Concentrations

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/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 ug/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

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).



### Water Quality-Control Data

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

#### Blank Samples

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

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

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

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

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

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

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

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

#### Reference Samples

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

#### Replicate Samples

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

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

#### Spike Samples

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

#### Water Temperature

Water temperatures are measured at most of 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 one daily, the water temperatures are taken at about the same time each day. Large streams have a small diel 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, maximum and minimum temperatures for each day are published.

### **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 sections. During periods of rapidly changing flow or rapidly changing concentration samples may have been collected more frequently (twice daily). 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 0.9927, 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 loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment data were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the streams. Methods used in the computation of sediment records are described in the TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

### **Laboratory Analysis**

Methods used to analyze sediment samples and to compute sediment records are described in the TWRI Book 54, chapter C1. Methods used by the U.S. Geological Survey laboratories are given in the 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.

### **Accuracy of Laboratory Analysis**

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L gave a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. Sulfate values in this report have not been corrected for this bias.

## **EXPLANATION OF GROUND-WATER LEVEL RECORDS**

### **Collection of the Data**

Generally, only ground-water level data from selected wells with continuous recorders from a basic network of observation wells are published herein (fig. 14). This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers. In addition to the wells with continuous recorders, water-level data collected on a monthly basis for 26 selected wells in Wasatch County are also published.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs (see figures 11 and 12).

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey TWRI publications referred to in the "On-site Measurements and Sample Collection" and the Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).



Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth of water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

#### **Access to WATSTORE Data**

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

<http://water.usgs.gov>

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

## 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, Colorado 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 the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

### Book 1. Collection of Water Data by Direct Measurement

#### Section D. Water Quality

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

### Book 2. Collection of Environmental Data

#### Section D. Surface Geophysical Methods

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

#### Section E. Subsurface Geophysical Methods

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

#### Section F. Drilling and Sampling Methods

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

### Book 3. Applications of Hydraulics

#### Section A. Surface-Water Techniques

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI Book 3, Chapter A2. 1967. 12 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 the 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.

#### **Section B. Ground-Water Techniques**

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS-TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS-TWRI Book 3, Chapter B2. 1976. 172 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.

#### **Section C. Sedimentation and Erosion Techniques**

- 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.

### **Book 4. Hydrologic Analysis and Interpretation**

#### **Section A. Statistical Analysis**

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

#### **Section B. Surface Water**

- 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.

#### **Section D. Interrelated Phases of the Hydrologic Cycle**

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

### **Book 5. Laboratory Analysis**

#### **Section A. Water Analysis**

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

#### **Section C. Sediment Analysis**

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

### **Book 6. Modeling Techniques**

#### **Section A. Ground Water**

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

### **Book 7. Automated Data Processing and Computations**

#### **Section C. Computer Programs**

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

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

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

**Section B. Instruments for Measurement of Discharge**

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

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

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI Book 9, Chapter A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI Book 9, Chapter A2. 1998. 94 p.
- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI Book 9, Chapter A3. 1998. 75 p.
- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI Book 9, Chapter A4. 1999. 152 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI Book 9, Chapter A5. 1999. 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS-TWRI Book 9, Chapter A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, by D.N. Myers and F.D. Wilde: USGS-TWRI Book 9, Chapter A7.1. 1997. 49 pages.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Five-Day Biochemical Oxygen Demand*, by G.C. Delzer and S.W. McKenzie: USGS-TWRI Book 9, Chapter A7.2 1999. 28 p.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-Material Samples*, by D.B. Radtke: USGS-TWRI Book 9, Chapter A8. 1998. 48 pages.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS-TWRI Book 9, Chapter A9. 1998. 60 pages.

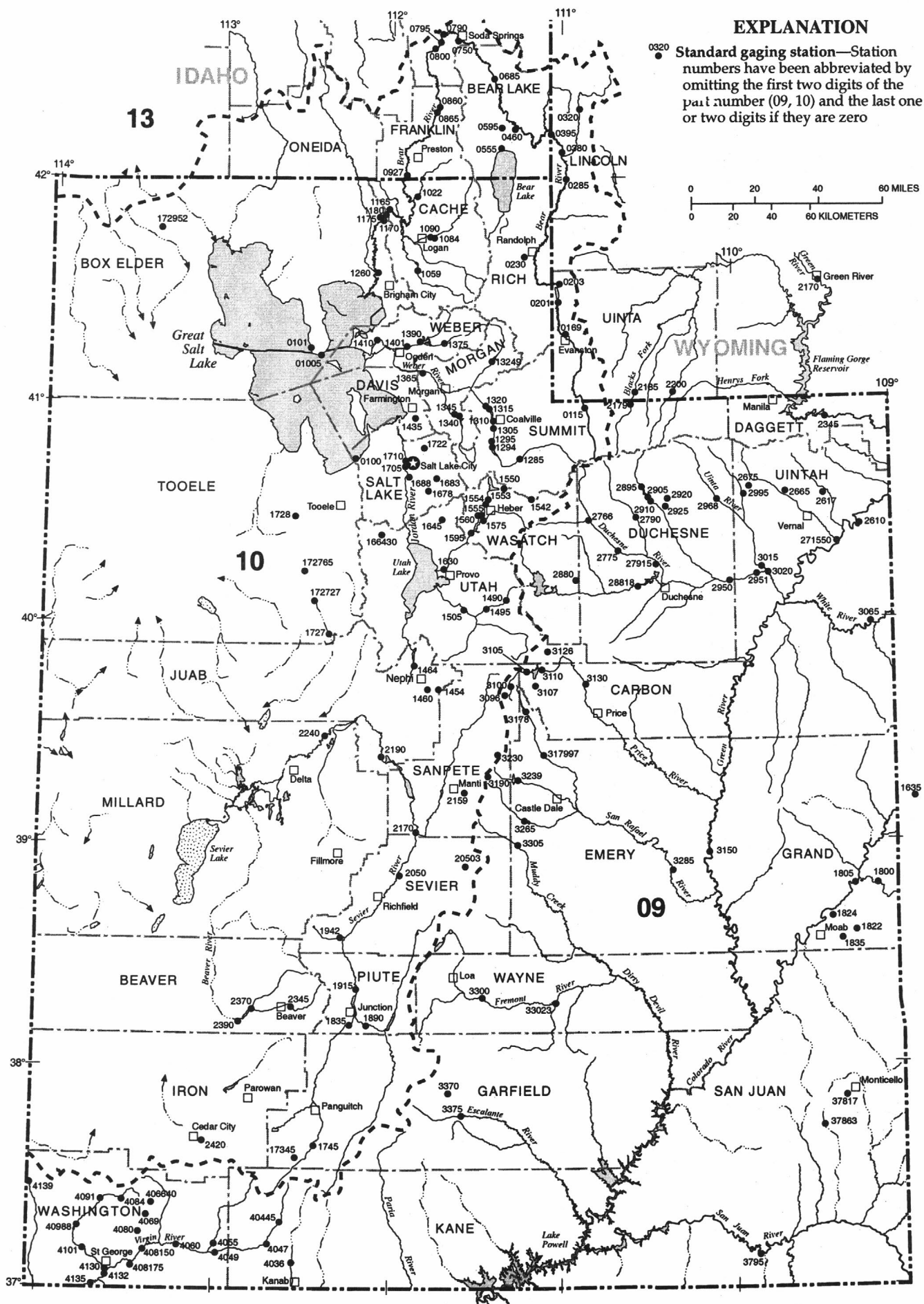


Figure 9. Location of U.S.G.S. gaging stations in Utah.



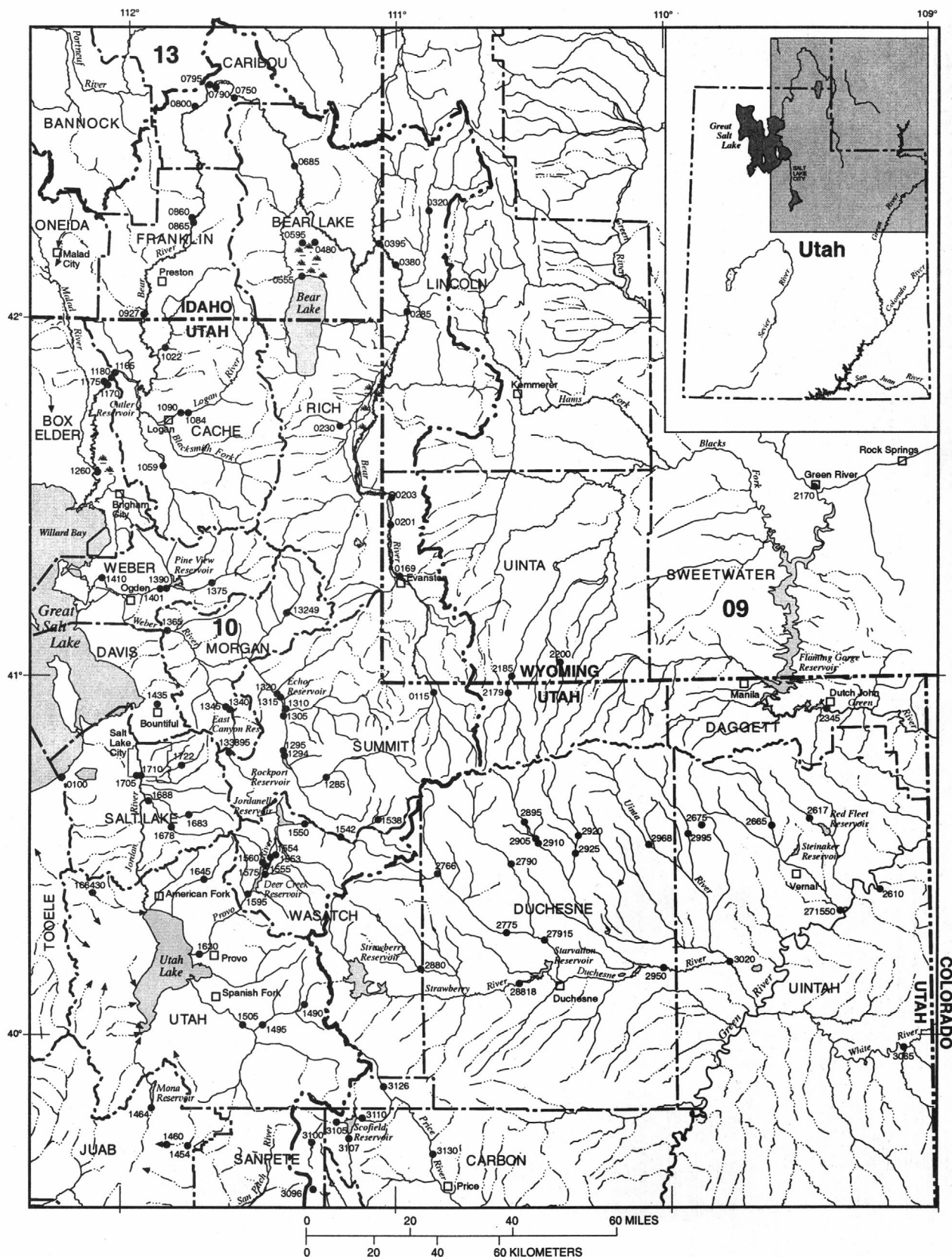


Figure 9. Location of U.S.G.S. gaging stations in Utah—Continued.

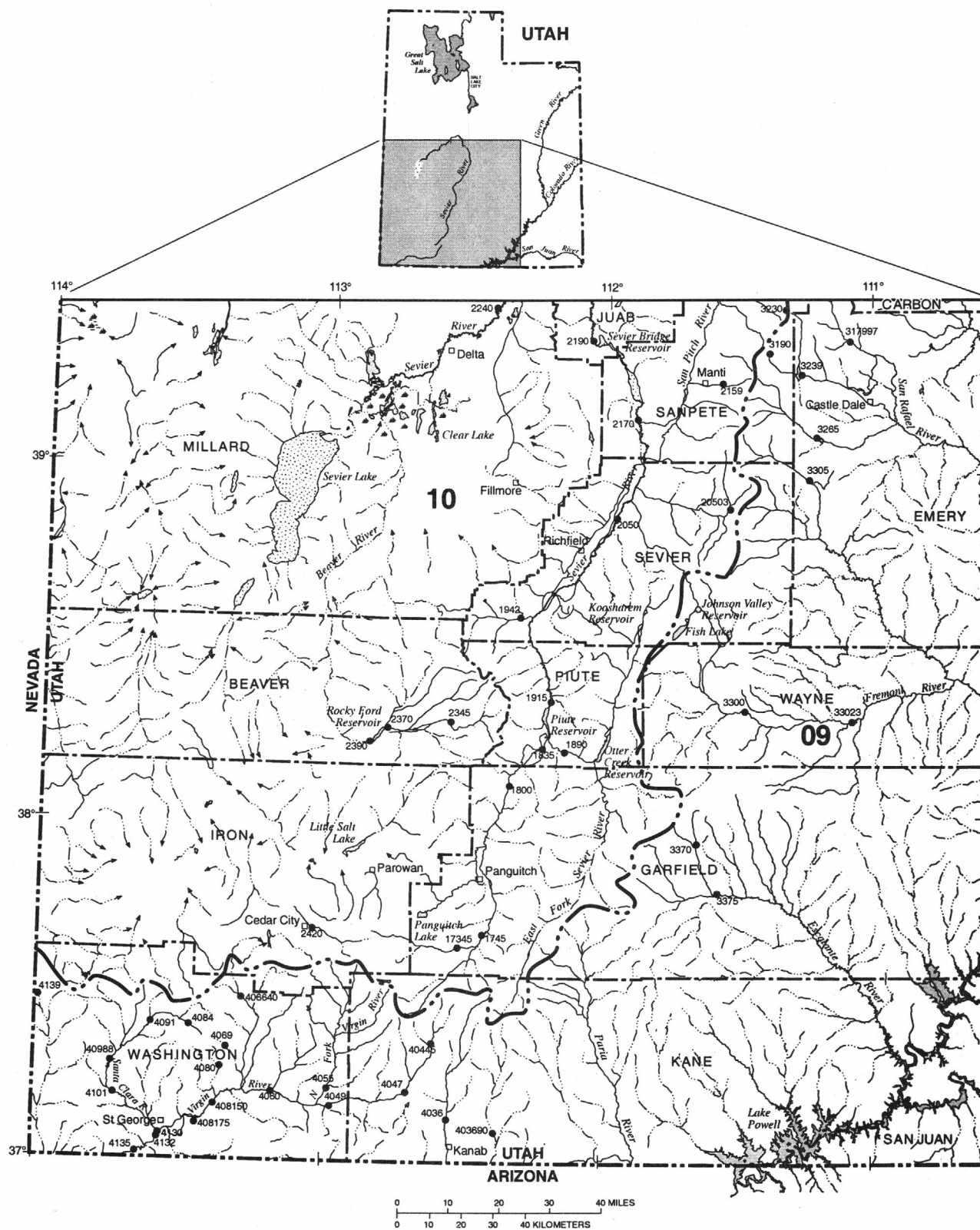


Figure 9. Location of U.S.G.S. gaging stations in Utah—Continued.

## COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°07'58", long 109°01'35", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.5, T.11 S., R.104 W., Mesa County, Hydrologic Unit 14010005, on right bank 0.5 mi downstream from McDonald Creek, 1.7 mi upstream from Colorado-Utah State line, and 12 mi southwest of Mack.

DRAINAGE AREA.--17,843 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 4,325 ft above sea level, from topographic map. May 1951 to October 1979, water-stage recorder at site 5.7 mi upstream at different datum. October 1979 to March 1995, water stage recorder at site 0.2 mi downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation. (Records include all return flow from irrigated areas).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4120	5050	4170	4060	3030	3090	3180	7570	17200	13000	7890	5270
2	4210	4930	4030	3780	3220	3090	3290	7550	15700	12800	8110	5730
3	4540	5040	4060	3520	3250	3080	3650	7180	16100	12400	7770	6200
4	4680	5120	4040	e3500	3230	3120	3820	7430	16500	11900	7640	6830
5	5060	4910	3920	3580	3260	3200	3620	7360	16100	11600	7860	6780
6	5180	5170	e3800	3520	3400	3080	3320	6640	16000	10900	8060	6640
7	5090	4770	e3500	3570	3390	2990	3150	5960	14700	10400	7910	6140
8	4920	4760	e3300	3640	3330	2940	3010	5760	13800	9820	7870	5800
9	4760	4880	3350	3190	3310	2930	2960	5980	15500	9350	7880	5610
10	4780	5120	e3400	3360	3480	2880	3040	6700	16600	8980	7630	5470
11	4740	4590	e3300	3530	3650	2840	2930	7660	16200	8450	8500	5390
12	4670	4560	e3200	3540	3340	2830	2730	6870	14600	8290	8870	5380
13	4640	4560	e3100	3600	3080	2700	2410	6080	14100	7890	7840	5600
14	4590	4630	e3100	3550	3020	2860	1900	6100	13800	7280	7160	5400
15	4560	4630	e3200	3150	3190	2840	2100	6840	13400	7920	6850	5270
16	4470	4650	3340	2970	3270	2880	2470	7400	13600	7740	7060	5450
17	4620	4660	3570	2970	3190	3040	2540	7470	13900	7180	6800	5730
18	4660	4580	e3500	3200	3180	3070	2280	7400	15800	6460	6570	5820
19	4750	4590	3600	3350	3180	3110	2000	7560	16200	6270	6320	5970
20	4730	4420	3770	3430	3160	3130	2010	9100	15500	6290	6320	6580
21	4700	4270	e3500	3620	3180	3310	2410	11000	15200	6240	6150	6900
22	4770	4280	e3000	3600	3120	3520	3010	11800	15500	5900	6330	6740
23	4860	4360	e2700	3400	3100	3590	3800	12400	15600	5620	6120	6440
24	4970	4420	e2700	3270	3100	3530	4240	14000	15100	5470	5750	6340
25	4840	4310	e2800	3310	3020	3600	4810	15600	15300	5690	5470	6380
26	5350	4250	e3000	3340	3120	3780	5180	16500	15500	5680	5210	6540
27	5500	4210	e3500	3330	3100	3870	5490	15800	15500	5620	5030	6390
28	5920	4180	e3700	3320	3100	4040	5250	15300	14900	5810	5070	6190
29	5740	4170	3990	3220	---	4130	5250	15700	14300	5790	5280	6110
30	5360	4180	3830	3100	---	3520	5760	17100	13500	6740	5180	6140
31	5400	---	4110	3000	---	3250	---	17200	---	7170	5050	---
TOTAL	151180	138250	108080	105520	90000	99840	101610	303010	455700	250650	211550	181230
MEAN	4877	4608	3486	3404	3214	3221	3387	9775	15190	8085	6824	6041
MAX	5920	5170	4170	4060	3650	4130	5760	17200	17200	13000	8870	6900
MIN	4120	4170	2700	2970	3020	2700	1900	5760	13400	5470	5030	5270
AC-FT	299900	274200	214400	209300	178500	198000	201500	601000	903900	497200	419600	359500

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1999, BY WATER YEAR (WY)

	MEAN	4013	4064	3642	3419	3493	3948	5984	14410	17630	8029	3988	3720
MAX	7672	6925	5993	6129	5996	7486	15600	37960	43830	29650	10190	7174	
(WY)	1987	1987	1986	1985	1985	1986	1985	1984	1957	1995	1983	1997	
MIN	1916	2363	2048	1871	1815	1984	1631	2283	2688	1662	1350	1361	
(WY)	1957	1978	1964	1964	1964	1964	1977	1977	1977	1977	1977	1956	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1951 - 1999	
ANNUAL TOTAL	2518510		2196620			
ANNUAL MEAN	6900		6018		6394	
HIGHEST ANNUAL MEAN					13470	
LOWEST ANNUAL MEAN					2559	
HIGHEST DAILY MEAN	24700	May 22	17200	May 31	68300	May 27 1984
LOWEST DAILY MEAN	2700	Dec 23	1900	Apr 14	960	Sep 7 1956
ANNUAL SEVEN-DAY MINIMUM	3030	Dec 21	2190	Apr 14	1110	Sep 2 1956
INSTANTANEOUS PEAK FLOW			17900	Jun 1	a69800	May 27 1984
INSTANTANEOUS PEAK STAGE			8.66	Jun 1	b16.12	May 27 1984
ANNUAL RUNOFF (AC-FT)	4995000		4357000		4632000	
10 PERCENT EXCEEDS	14300		13500		14200	
50 PERCENT EXCEEDS	4880		4770		4060	
90 PERCENT EXCEEDS	3720		3040		2280	

e Estimated

a At site 0.2 mi downstream, at present datum.

b From high-water mark.

COLORADO RIVER MAIN STEM

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09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1969 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1979 to current year.

WATER TEMPERATURE: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1979.

REMARKS.-- Daily records of specific conductance are good, except for the period Oct. 4 to Jan. 28, which are fair. Daily records of water temperature are good. October 1979, water-quality data collection was moved 5.5 mi upstream to this site from previous site 09163530. Water-quality records for this site are considered to be equivalent to data obtained at old site. Data from the old site are stored with this station. Prior to October 1995, unpublished maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,940 microsiemens Aug. 13, 1981; minimum, 277 microsiemens June 11, 1985.

WATER TEMPERATURE: Maximum, 27.0°C Aug. 7-9, 1981; minimum, -0.3°C on several days in Dec. 1996 and Jan. 1997

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,250 microsiemens, Oct. 28; minimum, 419 microsiemens, May 30.

WATER TEMPERATURE: Maximum, 24.5° C, July 28; minimum, 0.0° C, on many days in Dec. and Jan.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL AS (MG/L CAC03) (00900)	CALCIUM DIS- SOLVED AS (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED AS (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT												
08...	1200	5000	1070	8.4	11.9	8.8	370	97	31	84	2	5.5
NOV												
30...	1200	4250	1100	8.5	6.0	12.1	340	86	31	97	2	3.4
DEC												
14...	1340	3650	1160	8.4	.6	12.8	370	94	32	105	2	3.9
JAN												
28...	1100	3420	1160	8.1	3.3	11.2	360	92	31	111	3	4.3
FEB												
19...	1330	3190	1120	8.1	4.3	11.1	330	83	31	104	2	3.7
MAR												
15...	1015	2840	1170	8.5	8.5	10.3	340	83	31	120	3	4.1
APR												
01...	1400	3190	923	8.0	8.5	9.3	290	77	24	79	2	3.6
23...	1300	3950	1010	8.3	12.9	8.6	310	80	26	87	2	3.7
MAY												
13...	1130	6010	756	8.3	13.0	8.4	250	65	21	53	1	2.7
24...	1330	13700	482	8.0	15.4	7.9	160	45	12	30	1	1.9
JUN												
09...	1150	15700	473	8.2	15.5	8.2	160	44	12	28	1	1.7
JUL												
06...	1400	11000	523	8.0	21.2	7.6	180	50	12	33	1	1.9
19...	1320	6280	871	8.4	20.8	7.5	290	78	22	58	2	2.8
AUG												
12...	1430	8460	861	8.0	19.4	7.8	270	79	18	64	2	3.5
SEP												
20...	1240	6540	895	8.2	16.7	8.0	290	78	24	62	2	3.4

## COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)	SILICA, DIS- SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)
OCT 08...	165	10	151	--	290	76	.36	11	743	692	1.01	10000
NOV 30...	173	6	152	--	270	92	.35	8.5	736	686	1.00	8450
DEC 14...	184	7	163	--	270	110	.35	11	760	729	1.03	7490
JAN 28...	188	--	154	--	280	110	.34	9.9	764	727	1.04	7050
FEB 19...	188	--	154	--	260	110	.29	9.2	738	696	1.00	6360
MAR 15...	165	7	147	160	260	130	.33	6.5	752	727	1.02	5770
APR 01...	161	--	132	140	220	79	.28	9.6	608	574	.83	5240
23...	159	--	130	150	240	91	.28	7.3	659	611	.90	7030
MAY 13...	146	--	120	140	170	45	.27	11	484	442	.66	7850
24...	107	--	88	100	94	25	.16	9.5	309	273	.42	11400
JUN 09...	100	--	82	98	96	29	.17	8.5	291	270	.40	12300
JUL 06...	90	--	74	100	110	30	.26	8.0	332	295	.45	9860
19...	134	5	118	130	220	57	.33	9.0	561	517	.76	9510
AUG 12...	143	--	117	130	230	43	.31	11	565	526	.77	12900
SEP 20...	144	--	118	180	230	55	.35	10	582	540	.79	10300
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L) AS N (00623)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)	CARBON, ORGANIC DIS- SOLVED (MG/L) AS C (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L) AS C (00689)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT 08...	<.010	.643	.026	.40	.19	.082	.016	.018	2.7	--	<10	5.3
NOV 30...	.010	.515	<.020	.21	.19	.019	.013	<.010	2.6	.7	11	16
DEC 14...	.021	.698	.024	.19	.12	<.050	.012	<.010	2.4	.7	13	27
JAN 28...	.018	.627	.026	.43	.20	.069	.006	<.010	2.4	--	<10	28
FEB 19...	.010	.540	<.020	.26	.18	.029	.007	.012	2.3	.6	<10	26
MAR 15...	<.010	.255	<.020	.34	.19	.023	.008	<.010	2.9	.4	E7.7	28
APR 01...	<.010	.453	.072	.70	.34	.132	.014	.011	3.3	.8	E8.3	15
23...	.014	.330	.088	.83	.39	.194	.032	.034	3.6	.5	E6.6	12
MAY 13...	<.010	.474	.046	.85	.28	.291	.024	.026	4.1	--	<10	4.0
24...	<.010	.356	.083	1.7	.29	.662	.015	.017	3.9	1.0	10	4.2
JUN 09...	<.010	.270	<.020	.54	.25	.270	.013	.013	3.0	1.4	<10	2.4
JUL 06...	<.010	.291	.025	.37	.17	--	.016	.016	2.8	--	E6.4	E2.8
19...	<.010	.585	<.020	.39	.17	.095	.013	.015	2.9	.4	<10	E1.9
AUG 12...	<.010	.748	<.020	.22	.20	1.38	.015	<.010	3.6	.8	<10	<3.0
SEP 20...	<.010	.594	.020	1.8	.19	.861	.009	<.010	2.8	2.2	<10	<2.2

E Estimated.



09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued  
(National Water-Quality Assessment Program station)

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- <sup>a</sup> MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAMPLER <sup>b</sup> TYPE (CODE) (84164)
OCT						
08...	1115	5000	104	1400	--	3009
08...	1200	5000	82	1110	--	3039
NOV						
30...	1130	4250	20	225	--	3009
30...	1200	4250	12	138	--	3039
DEC						
14...	1300	3650	13	124	--	3009
14...	1340	3650	11	107	--	3039
JAN						
28...	1100	3420	74	684	--	3039
28...	1120	3420	91	838	--	3009
FEB						
19...	1300	3190	27	233	--	3009
19...	1330	3190	19	165	--	3039
MAR						
15...	1000	2840	14	108	--	3009
15...	1015	2840	8	61	--	3039
APR						
01...	1330	3190	134	1150	--	3009
01...	1400	3190	107	920	--	3039
23...	1230	3950	267	2850	93	3009
MAY						
13...	1100	6010	309	5010	87	3009
13...	1130	6010	296	4810	--	3039
24...	1300	13700	1290	47700	67	3009
24...	1330	13700	1160	43100	--	3039
JUN						
09...	1110	15700	465	19700	--	3009
09...	1150	15700	363	15400	--	3039
JUL						
06...	1330	11000	207	6150	62	3009
06...	1400	11000	124	3690	--	3039
19...	1240	6280	218	3700	85	3009
19...	1320	6280	122	2070	--	3039
AUG						
12...	1410	8460	4780	109000	97	3009
12...	1430	8460	5110	117000	--	3039
SEP						
20...	1200	6540	1350	23800	94	3009
20...	1240	6540	1190	21000	--	3039

a Suspended sediment concentrations associated with a sampler type coded 3039 were determined from a subsample split of a composite sample.

b Code 3009 is a D-74 suspended sediment sampler; Code 3039 is a D-77TM water-quality sampler.

## COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued  
(National Water-Quality Assessment Program station)

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1150	1130	1140	1160	1150	1160	1140	1130	1130	985	977	982
2	1160	1150	1160	1180	1160	1170	1140	1110	1130	1000	984	996
3	1170	1030	1110	1200	1180	1190	1130	1110	1120	1010	1000	1000
4	---	---	---	1200	1190	1190	1130	1110	1120	1010	1000	1010
5	1110	1090	1100	1190	1190	1190	1110	1100	1100	1020	1010	1020
6	1100	1090	1100	1190	1160	1170	1100	1090	1100	1020	1020	1020
7	1100	1080	1090	1190	1150	1170	1100	1090	1100	1030	1010	1020
8	1110	1080	1100	1200	1190	1190	1110	1080	1090	1020	1020	1020
9	1120	1110	1120	1200	1170	1180	1130	1100	1110	1020	1020	1020
10	1130	1120	1130	1180	1150	1170	1130	1120	1120	1020	1010	1020
11	1130	1120	1130	1180	1160	1170	1170	1120	1140	1020	1020	1020
12	1130	1100	1120	1240	1140	1190	1160	1120	1140	1040	1020	1030
13	1120	1100	1110	1240	1200	1220	1120	1080	1100	1040	1030	1030
14	1110	1100	1110	1220	1200	1210	1130	1090	1110	1050	1030	1040
15	1120	1100	1110	1210	1180	1200	1130	1110	1110	1050	1040	1040
16	1120	1100	1120	1200	1180	1190	1110	1070	1080	1080	1050	1070
17	1130	1110	1120	1200	1190	1190	1080	1060	1070	1120	1070	1090
18	1130	1110	1120	1190	1180	1190	1060	1040	1050	1140	1120	1140
19	1130	1120	1120	1180	1170	1180	1050	1040	1040	1140	1120	1130
20	1140	1120	1130	1170	1140	1160	1040	1020	1030	1130	1100	1120
21	1130	1120	1120	1160	1130	1150	1030	1020	1020	1100	1080	1090
22	1120	1110	1120	1140	1130	1130	1060	1030	1040	1110	1100	1100
23	1120	1100	1120	1160	1130	1150	---	---	---	1160	1110	1140
24	1130	1110	1120	1170	1150	1160	---	---	---	1190	1160	1180
25	1130	1100	1120	1150	1140	1140	1130	1060	1080	1190	1180	1180
26	1150	1130	1140	1150	1140	1140	1160	1130	1150	1190	1170	1180
27	1200	1130	1160	1150	1130	1140	1160	1140	1160	1190	1180	1190
28	1250	1170	1210	1140	1130	1140	1150	1070	1120	1210	1170	1190
29	1200	1140	1170	1150	1130	1140	1070	995	1040	1240	1210	1220
30	1240	1190	1210	1140	1120	1130	995	968	982	1220	1190	1210
31	1200	1160	1170	---	---	---	977	968	973	1210	1170	1200
MONTH	---	---	---	1240	1120	1170	---	---	---	1240	977	1090
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1220	1200	1210	1120	1080	1110	908	877	897	864	772	824
2	1240	1220	1230	1090	1060	1080	928	902	918	874	776	824
3	1240	1230	1230	1080	1050	1070	946	925	938	776	750	761
4	1240	1170	1190	1090	1060	1080	954	935	946	784	715	756
5	1170	1150	1160	1100	1070	1090	960	940	951	792	700	759
6	1170	1150	1160	1140	1090	1110	977	954	964	797	775	789
7	1170	1140	1150	1130	1110	1120	1010	976	990	775	753	758
8	1170	1160	1160	1140	1120	1130	1050	1010	1030	856	751	767
9	1170	1150	1160	1150	1130	1140	1050	1030	1040	867	839	848
10	1180	1150	1160	1160	1150	1160	1060	1040	1050	841	772	804
11	1180	1110	1140	1240	1160	1170	1060	1040	1050	793	736	757
12	1130	1110	1120	1190	1150	1180	1060	1040	1050	738	727	730
13	1150	1120	1130	1220	1160	1190	1070	1050	1060	768	738	755
14	1150	1120	1140	1220	1130	1160	1110	1070	1090	789	761	776
15	1200	1140	1170	1200	1170	1190	1160	1110	1140	761	728	740
16	1240	1200	1230	1180	1150	1170	1140	1100	1110	728	688	703
17	1220	1180	1190	1160	1090	1130	1110	1050	1080	688	663	671
18	1190	1160	1180	1120	1090	1110	1090	1050	1070	671	660	666
19	1160	1140	1150	1100	1060	1090	1120	1080	1100	671	644	664
20	1150	1120	1140	1110	1070	1090	1160	1110	1130	644	605	629
21	1140	1130	1130	1080	1040	1070	1170	1150	1160	605	535	573
22	1160	1130	1150	1040	1000	1030	1160	1040	1110	537	506	524
23	1130	1110	1110	1050	979	1020	1040	954	990	511	486	502
24	1140	1110	1130	1050	943	971	971	946	959	492	455	476
25	1140	1110	1130	996	924	934	984	950	963	460	437	449
26	1130	1110	1120	1000	893	930	995	957	972	439	420	430
27	1160	1110	1140	933	891	907	957	903	932	442	421	435
28	1120	1100	1110	910	870	886	903	870	879	455	442	450
29	---	---	---	872	862	868	929	878	900	452	437	447
30	---	---	---	867	843	850	878	803	841	463	419	430
31	---	---	---	900	850	874	---	---	---	427	421	425
MONTH	1240	1100	1160	1240	843	1060	1170	803	1010	874	419	649

## COLORADO RIVER MAIN STEM

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09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued  
(National Water-Quality Assessment Program station)

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	426	421	423	486	471	478	939	849	885	1030	1000	1020
2	447	421	438	489	477	484	849	805	824	1050	997	1010
3	452	440	446	493	479	487	806	780	793	1080	1020	1040
4	447	433	441	502	489	496	798	777	784	---	---	---
5	434	432	433	513	500	507	782	755	772	---	---	---
6	443	433	437	539	512	526	824	755	779	---	---	---
7	481	443	463	549	532	541	794	770	784	---	---	---
8	496	481	489	807	548	606	789	769	780	---	---	---
9	485	446	470	694	603	644	769	758	762	---	---	---
10	451	425	443	634	621	626	776	753	759	---	---	---
11	436	425	432	661	631	643	902	747	781	---	---	---
12	461	428	446	691	661	677	949	786	868	---	---	---
13	466	456	462	730	687	705	888	814	846	---	---	---
14	475	460	468	778	730	749	822	812	816	---	---	---
15	486	472	479	870	732	786	840	819	830	---	---	---
16	496	479	488	816	776	792	849	835	840	---	---	---
17	513	482	485	818	804	811	875	840	862	961	958	959
18	573	494	520	843	817	831	964	863	879	960	926	947
19	508	484	498	873	843	863	964	870	884	926	894	912
20	491	482	488	893	869	883	954	873	894	994	867	904
21	495	480	487	908	891	897	920	883	901	896	867	883
22	515	473	488	908	891	898	1020	920	973	893	870	885
23	492	475	485	915	893	907	1010	983	995	885	862	875
24	479	468	475	935	904	919	990	966	981	895	879	886
25	473	460	470	984	915	938	987	971	978	918	884	894
26	464	453	461	952	931	944	998	977	991	884	872	877
27	456	442	451	950	931	942	1020	992	1010	879	858	867
28	456	442	451	967	906	928	1020	1000	1020	861	854	856
29	465	451	459	917	904	910	1030	1000	1020	856	845	850
30	477	463	472	924	866	896	1060	1030	1040	864	851	858
31	---	---	---	1090	904	980	1050	1030	1040	---	---	---
MONTH	573	421	465	1090	471	751	1060	747	883	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.7	16.5	17.3	10.6	9.3	10.0	6.3	5.5	5.9	.2	.0	.1
2	16.5	15.1	15.8	10.8	10.0	10.4	6.1	5.4	5.8	.2	.0	.1
3	16.0	15.1	15.6	10.9	10.0	10.4	5.8	5.2	5.5	.0	.0	.0
4	15.1	13.1	13.8	10.2	9.0	9.5	5.4	4.8	5.2	.0	.0	.0
5	13.1	11.8	12.6	9.2	8.3	8.7	5.0	3.8	4.6	.3	.0	.1
6	12.4	10.6	11.6	8.3	7.5	7.8	3.8	2.4	3.0	.1	.0	.1
7	12.8	10.9	11.8	7.7	6.7	7.2	2.4	1.0	1.6	.5	.0	.2
8	13.0	11.3	12.2	7.2	6.7	6.8	1.0	.2	.5	1.0	.1	.5
9	13.7	11.9	12.8	6.9	5.8	6.5	1.3	.2	.7	.9	.0	.5
10	13.7	12.3	13.0	5.8	4.6	5.1	1.2	.4	.9	1.0	.0	.5
11	13.7	12.1	12.9	4.9	3.9	4.4	.7	.0	.3	1.2	.2	.7
12	13.6	12.0	12.8	5.2	3.6	4.3	.8	.0	.3	1.7	.8	1.2
13	13.3	11.8	12.6	5.5	4.4	5.0	.9	.0	.4	1.7	.9	1.3
14	13.5	11.8	12.7	5.9	4.8	5.4	.9	.0	.4	1.5	.8	1.1
15	13.4	12.2	12.9	6.1	5.0	5.6	1.0	.0	.5	1.1	.5	.9
16	13.1	11.9	12.5	6.5	5.4	6.0	1.4	.4	.9	.5	.0	.2
17	12.6	11.1	11.8	6.9	6.0	6.5	1.6	.6	1.1	.5	.0	.2
18	11.9	10.4	11.2	6.7	5.9	6.3	1.6	.8	1.2	1.5	.3	.8
19	11.4	10.0	10.8	5.9	5.2	5.6	1.3	.6	1.0	2.2	1.2	1.6
20	11.5	10.3	10.9	5.4	4.4	4.8	1.4	.5	1.0	2.4	1.6	2.0
21	11.3	10.5	11.0	4.6	3.7	4.2	.5	.0	.1	2.5	2.0	2.2
22	11.8	10.9	11.3	4.5	3.6	4.1	.0	.0	.0	2.9	1.8	2.3
23	12.8	11.4	12.0	4.8	3.7	4.2	.0	.0	.0	3.4	2.2	2.7
24	12.6	11.4	12.0	5.0	4.2	4.6	.0	.0	.0	3.2	2.6	2.8
25	12.2	11.1	11.6	5.7	4.8	5.2	.0	.0	.0	3.9	2.8	3.3
26	11.9	10.8	11.4	5.6	4.8	5.2	.0	.0	.0	4.3	3.5	3.9
27	11.7	11.0	11.4	5.6	4.7	5.2	.0	.0	.0	4.6	3.6	4.0
28	11.4	10.6	11.0	5.7	5.1	5.4	.0	.0	.0	3.9	2.8	3.3
29	10.8	9.8	10.2	6.4	5.7	6.0	.0	.0	.0	3.4	2.3	2.9
30	10.1	9.5	9.8	6.2	5.6	5.9	.0	.0	.0	3.2	1.8	2.5
31	10.5	9.2	9.8	---	---	---	.0	.0	.0	2.7	1.4	2.1
MONTH	17.7	9.2	12.2	10.9	3.6	6.2	6.3	.0	1.3	4.6	.0	1.4

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	3.2	1.8	2.3	8.1	5.9	6.9	8.7	7.5	8.2	12.7	11.8	12.2
2	3.1	1.7	2.4	8.8	6.5	7.6	7.5	6.4	7.0	12.1	10.8	11.6
3	4.0	2.2	3.0	8.4	6.6	7.5	8.2	6.0	7.0	12.0	10.6	11.2
4	3.9	2.7	3.3	8.5	6.7	7.5	7.7	6.7	7.3	11.3	9.9	10.6
5	4.4	3.5	3.9	7.8	6.6	7.1	8.6	6.2	7.2	10.7	9.6	10.2
6	5.4	3.9	4.5	8.3	6.2	7.1	10.4	7.5	8.8	11.6	9.5	10.6
7	5.6	4.5	5.0	7.5	6.6	7.1	11.1	8.8	9.9	13.3	10.9	12.0
8	6.2	5.0	5.6	8.6	6.6	7.5	11.7	8.8	10.1	15.1	12.9	13.9
9	7.6	5.8	6.5	8.8	6.8	7.8	11.0	9.2	10.0	14.8	13.8	14.5
10	7.4	5.2	6.6	9.1	6.8	8.0	10.1	7.5	8.8	13.8	12.8	13.3
11	5.2	3.5	4.1	9.2	7.3	8.2	10.3	8.0	9.1	12.9	11.6	12.5
12	3.6	2.2	2.8	9.0	7.3	8.0	11.9	9.1	10.4	13.0	11.3	12.3
13	2.9	1.2	2.0	9.0	6.5	7.8	13.6	10.5	12.0	14.0	12.7	13.2
14	3.3	1.6	2.3	9.5	6.9	8.2	13.5	11.5	12.6	15.0	13.4	14.3
15	4.4	2.3	3.2	9.9	7.6	8.7	12.8	10.9	11.9	14.5	13.2	13.8
16	4.1	2.9	3.5	10.4	7.8	9.0	11.9	10.0	10.9	13.9	12.3	13.3
17	4.8	3.2	3.9	11.3	8.6	9.8	12.8	9.4	11.0	13.9	12.0	13.1
18	4.9	3.4	4.1	12.1	9.2	10.5	14.1	10.9	12.4	14.8	12.7	13.7
19	5.0	4.0	4.4	12.5	9.9	11.1	14.9	12.2	13.6	15.8	14.1	15.0
20	5.6	3.6	4.5	12.6	10.3	11.4	14.9	13.5	14.3	16.7	14.3	15.6
21	5.0	4.1	4.5	12.7	10.6	11.5	14.4	13.3	13.7	16.7	14.9	15.8
22	4.9	3.4	4.1	12.7	10.5	11.5	13.7	12.5	13.2	16.5	14.4	15.5
23	5.8	3.7	4.6	11.7	10.4	11.0	13.7	11.8	12.7	16.1	14.4	15.3
24	6.3	4.1	5.1	11.9	9.5	10.7	12.9	10.7	11.9	15.7	14.2	14.8
25	6.9	4.8	5.7	12.6	10.4	11.4	11.3	9.8	10.6	14.4	13.6	14.0
26	7.2	5.4	6.2	12.1	10.9	11.5	12.5	10.3	11.3	14.8	13.0	13.9
27	7.3	5.1	6.1	12.4	11.0	11.6	13.9	11.6	12.7	15.6	13.3	14.4
28	7.6	5.4	6.4	11.3	9.9	10.7	13.5	12.3	12.7	16.0	14.2	15.1
29	---	---	---	11.5	9.2	10.3	12.5	11.9	12.2	15.8	14.7	15.2
30	---	---	---	10.9	9.5	10.2	13.0	11.9	12.4	15.1	13.8	14.4
31	---	---	---	10.3	8.7	9.6	---	---	---	14.5	13.3	13.9
MONTH	7.6	1.2	4.3	12.7	5.9	9.3	14.9	6.0	10.9	16.7	9.5	13.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	14.4	12.9	13.7	19.4	17.7	18.6	22.0	20.1	21.1	20.8	19.3	20.0
2	14.5	13.1	13.7	19.8	18.4	19.1	22.0	20.5	21.3	19.7	18.4	19.0
3	14.3	12										

## DOLORES RIVER BASIN

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09180000 DOLORES RIVER NEAR CISCO, UT

LOCATION.--Lat 38°47'50", long 109°11'40", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 18, T. 23 S., R. 25 E., Grand County, Hydrologic Unit 14030004, on left bank 0.2 mi downstream from Line Canyon, 9.1 mi upstream from mouth, 13.5 mi downstream from Colorado-Utah State line, and 13.9 mi southeast of Cisco.

DRAINAGE AREA.--4,580 mi<sup>2</sup>, approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

REVISED RECORDS.--WDR UT-75-1: 1974.

GAGE.--Water-stage recorder. Elevation of gage is 4,165 ft above sea level, from river-profile map. Dec. 6, 1950 to Apr. 18, 1967, at site 200 ft downstream at different datum; Apr. 19, 1967 to Sept. 3, 1975 at site 10 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Macphee Reservoir, capacity 381,000 acre-ft, since 1986. Many diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft<sup>3</sup>/s Apr. 21, 1958, gage height, 9.84 ft at different datum; minimum, 3.4 ft<sup>3</sup>/s Sept. 23, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 25	1553	*4,490	*10.86	Jul 30	1900	3,430	10.24
Jun 19	2145	3,270	10.14				

Minimum daily discharge, 120 ft<sup>3</sup>/s, Oct 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	275	201	e188	e150	139	305	1820	1930	1370	1270	820
2	141	259	199	e190	157	141	306	1670	1920	1260	1170	860
3	157	457	208	e190	173	169	318	1600	1780	1110	880	944
4	143	412	211	e180	171	202	300	1620	1530	999	853	955
5	149	298	197	e170	177	202	289	1580	1390	936	1020	842
6	145	254	193	e170	190	222	287	1520	1250	894	1120	701
7	165	223	189	e160	199	220	e273	1360	1110	854	936	649
8	179	216	163	e160	191	214	e313	1460	1020	883	819	607
9	162	212	157	e170	184	198	e339	1690	1080	963	724	686
10	152	230	156	e160	192	193	412	1510	1170	815	690	1000
11	145	231	153	e148	188	203	371	1290	1200	710	870	1050
12	145	217	170	e140	190	204	362	1140	1420	667	1080	1090
13	146	221	171	e136	165	210	359	1030	1670	777	860	1030
14	142	220	191	e133	155	210	431	1000	1640	734	683	1030
15	141	210	167	e130	168	203	e740	1070	1690	772	669	1030
16	141	214	165	e124	172	189	747	1090	1660	650	761	1460
17	153	221	168	e121	176	201	549	1050	2110	682	634	1140
18	159	204	163	e130	172	235	443	1010	2580	597	576	1070
19	168	182	186	e142	173	272	391	1490	2930	532	716	979
20	165	178	198	e154	173	314	379	2210	2920	661	924	887
21	169	170	205	e166	171	373	396	2650	2460	675	1450	743
22	175	165	152	e180	164	401	440	3160	2240	606	1310	621
23	188	167	123	e172	156	420	473	3460	1990	656	1130	501
24	193	206	124	e164	135	394	523	3680	1900	651	850	429
25	213	199	e130	e160	125	354	921	4110	1770	609	822	440
26	225	223	e136	e166	134	342	1270	4100	2090	1080	876	419
27	428	222	e142	e166	140	362	1460	3510	2150	903	797	372
28	574	212	e152	e165	141	347	1660	2920	1950	787	870	349
29	543	210	e162	e160	---	328	1480	2390	1760	810	1160	338
30	385	204	e164	e155	---	302	1310	2100	1520	1110	1070	327
31	306	---	e172	e150	---	293	---	1940	---	917	825	---
TOTAL	6417	6912	5268	4900	4682	8057	17847	62230	53830	25670	28415	23369
MEAN	207	230	170	158	167	260	595	2007	1794	828	917	779
MAX	574	457	211	190	199	420	1660	4110	2930	1370	1450	1460
MIN	120	165	123	121	125	139	273	1000	1020	532	576	327
AC-FT	12730	13710	10450	9720	9290	15980	35400	123400	106800	50920	56360	46350

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1999, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	264	268	215	182	238	503	1840	3015	1752	597	335	265	
MAX	617	894	606	370	518	1037	5338	8803	3895	1827	917	779	
(WY)	1987	1987	1987	1987	1987	1987	1993	1993	1995	1995	1999	1999	
MIN	133	145	115	109	167	142	177	397	411	195	73.3	80.6	
(WY)	1990	1991	1990	1990	1999	1990	1990	1990	1989	1994	1996	1989	



## DOLORES RIVER BASIN

09180000 DOLORES RIVER NEAR CISCO, UT--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1987 - 1999	
ANNUAL TOTAL	315494		247597			
ANNUAL MEAN	864		678		791	
HIGHEST ANNUAL MEAN					1768	1993
LOWEST ANNUAL MEAN					200	1990
HIGHEST DAILY MEAN	6880	May 4	4110	May 25	12900	May 18 1993
LOWEST DAILY MEAN	116	Sep 30	120	Oct 1	34	Aug 12 1990
ANNUAL SEVEN-DAY MINIMUM	125	Sep 25	131	Jan 12	39	Aug 8 1990
ANNUAL RUNOFF (AC-FT)	625800		491100		573100	
10 PERCENT EXCEEDS	2570		1630		2150	
50 PERCENT EXCEEDS	227		354		264	
90 PERCENT EXCEEDS	152		152		130	

e Estimated

## DOLORES RIVER BASIN

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09180000 DOLORES RIVER NEAR CISCO, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1951 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1951 to September 1959, October 1964 to September 1981, March 1982 to current year.

WATER TEMPERATURES: March 1951 to September 1959, October 1964 to September 1981, March 1982 to current year.

SUSPENDED-SEDIMENT DISCHARGE: March 1951 to December 1953, October 1957 to September 1964.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 21,600 microsiemens July 9, 1977; minimum, 240 microsiemens June 22, 1983.

WATER TEMPERATURES: Maximum, 30.0°C July 3, 1997; minimum, 0.0°C on many days during winter period each year.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 3,600 microsiemens, Mar 1; minimum observed, 310 microsiemens, Jun 27.

WATER TEMPERATURES: Maximum observed, 26.5°C, Jul 23; minimum observed, 0.0°C, many days during Dec and Jan.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1010	1600	2960	2490	3600	1540	540	395	---	410	730
2	---	1170	1630	1960	2780	3230	1630	410	---	---	440	730
3	---	1370	1700	1990	---	---	1740	---	390	415	560	730
4	1550	1100	1590	2090	2640	3120	1680	---	410	395	590	730
5	1530	1310	1630	2120	2430	3190	1530	540	430	430	730	---
6	1260	970	1650	2380	---	2370	---	---	470	---	570	---
7	1240	1120	1550	1930	2660	2210	1480	540	500	---	580	---
8	1250	1130	1750	2390	2510	2160	1420	---	---	---	620	810
9	1950	1250	1750	2640	2710	2050	1480	435	---	---	920	960
10	1740	1480	1820	3090	2180	2080	1430	420	580	---	920	---
11	1430	1560	1970	2050	2110	2140	1310	---	---	570	730	---
12	1360	1780	2200	3150	2320	2230	1120	530	---	620	750	460
13	1540	1740	2560	2400	2450	2180	1230	---	530	650	800	430
14	1490	1580	1970	1890	2400	2090	1090	640	500	---	800	950
15	1500	1600	2310	2990	2380	2100	1000	---	---	---	890	970
16	1420	1500	2400	2980	2380	2150	800	640	375	720	880	970
17	1550	1610	2840	2600	2310	2140	810	---	---	790	870	970
18	1570	1660	2060	2140	2500	2300	---	---	---	760	860	970
19	1640	1650	2200	3170	2910	2310	---	670	---	880	670	970
20	1520	1670	1810	3010	2500	2170	790	520	350	860	660	---
21	1490	1750	2300	3080	2380	1980	860	420	345	680	660	980
22	1430	1830	2550	2320	2510	1600	---	420	---	670	580	970
23	1390	1810	2190	2120	2540	1440	920	410	405	850	720	970
24	1210	1920	2150	2130	2410	1200	---	380	---	730	720	---
25	1450	1840	---	2190	2900	1290	930	---	350	680	720	970
26	1250	1790	2290	3230	2770	1230	770	350	350	770	730	980
27	1210	1600	2230	2880	2910	1390	680	---	310	590	720	970
28	1270	1630	3380	2090	3350	1440	500	360	315	840	730	---
29	980	1530	2430	2510	---	1380	470	---	---	650	720	1130
30	690	1440	2300	2920	---	1480	470	385	---	640	730	1250
31	1370	---	2400	2580	---	1540	---	---	---	590	730	---
MEAN	1400	1510	2110	2520	2560	2060	1110	478	412	672	710	891

## DOLORES RIVER BASIN

09180000 DOLORES RIVER NEAR CISCO, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11.0	4.0	.0	4.5	10.0	8.5	13.5	15.0	---	22.5	20.0
2	---	10.5	5.0	.0	3.5	9.0	7.0	9.0	---	---	23.0	21.0
3	---	10.0	4.0	.0	---	---	8.0	---	14.5	22.5	20.5	20.5
4	14.0	9.0	4.5	.0	3.0	9.0	7.0	---	15.5	20.0	21.0	20.0
5	12.0	7.5	4.0	.0	4.0	6.5	10.0	10.0	13.0	22.0	20.5	---
6	11.0	7.0	2.0	.5	---	7.5	---	---	15.0	---	22.0	---
7	12.5	7.0	.0	.0	6.0	9.0	13.0	10.0	13.5	---	22.0	---
8	14.0	7.5	.0	.0	7.0	7.0	14.0	---	---	---	21.0	19.0
9	15.0	6.0	1.0	.0	5.0	7.0	10.0	16.0	---	---	21.5	20.0
10	12.5	5.0	.0	.0	4.0	7.0	11.5	13.0	19.0	---	21.0	---
11	14.0	4.0	.0	.5	7.0	7.0	12.0	---	---	24.0	20.5	---
12	12.0	5.0	.0	.0	3.5	9.0	10.0	15.0	---	22.0	21.0	19.0
13	12.5	5.0	.0	.0	4.0	10.0	15.0	---	18.0	24.5	21.0	17.5
14	15.0	6.0	.0	.0	2.5	11.0	15.0	14.5	17.0	---	20.5	18.0
15	13.0	5.0	.0	.0	5.0	12.0	13.0	---	---	---	21.5	21.0
16	13.0	6.0	.0	.0	4.0	12.0	12.0	14.0	17.0	23.0	20.0	20.0
17	10.0	6.0	.0	1.0	5.0	9.0	9.0	---	---	25.0	20.0	19.0
18	13.0	6.0	1.0	3.0	5.0	10.0	---	---	---	25.0	20.5	19.5
19	14.0	5.0	1.5	2.0	5.5	13.0	---	16.0	---	20.0	21.0	20.0
20	14.0	3.0	2.0	.0	6.0	14.0	15.0	15.0	16.0	20.0	20.5	---
21	12.0	4.5	.0	3.0	5.0	11.5	14.5	15.0	18.0	20.5	20.0	20.0
22	12.0	3.5	.0	3.0	5.5	14.0	---	15.0	---	23.5	22.0	19.0
23	13.0	4.0	.0	3.0	6.0	13.0	14.0	14.0	19.0	26.5	21.5	20.0
24	12.0	5.0	.0	5.0	8.0	10.0	---	14.5	---	23.0	21.0	---
25	11.0	4.0	---	4.0	6.0	13.0	10.0	---	20.0	24.0	22.0	20.0
26	11.0	4.0	.0	5.0	8.5	12.5	9.0	12.0	24.0	24.0	21.5	19.0
27	11.0	4.0	.0	4.0	6.0	13.0	11.5	---	23.0	23.0	20.5	18.0
28	12.0	5.5	.0	5.0	8.5	13.0	12.0	16.0	18.5	22.0	21.5	---
29	11.5	6.0	.0	1.0	---	12.0	11.5	---	---	23.0	21.0	13.0
30	10.0	5.0	.0	2.0	---	13.5	12.0	15.0	---	22.5	20.0	15.0
31	10.0	---	.0	2.0	---	10.0	---	---	---	21.0	20.5	---
MEAN	12.4	5.9	1.0	1.4	5.3	10.5	11.4	13.8	17.4	22.8	21.1	19.0

## COLORADO RIVER MAIN STEM

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09180500 COLORADO RIVER NEAR CISCO, UT

LOCATION.--Lat 38°48'38", long 109°17'34", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 17, T. 23 S., R. 24 E., Grand County, Hydrologic Unit 14030005, on left bank 1 mi downstream from Dolores River, 11 mi south of Cisco, 36 mi downstream from Colorado-Utah State line, 97 mi upstream from Green River, and 235 mi upstream from San Juan River, at mile 1,022.3 from Arizona-Sonora.

DRAINAGE AREA.--24,100 mi<sup>2</sup>, approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1895 to current year (1895 to 1910, calendar-year estimates only). Monthly discharge only for some periods, published in WSP 1313. Published as Grand River near Moab, October 1913 to November 1914, and as Grand River near Cisco, November 1914 to September 1917.

REVISED RECORDS.--WSP 918: 1913, 1937. WSP 1313: 1918-22.

GAGE.--Water-stage recorder. Elevation of gage is 4,090 ft above sea level, from river-profile map. Prior to Nov. 10, 1914, several staff and chain gages at bridge near Moab, 31 mi downstream at datum, 3,937.73 ft above mean sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions above station for irrigation and power, including several transmountain diversions. Flow regulated by Blue Mesa Reservoir since Nov. 27, 1965.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,800 ft<sup>3</sup>/s June 19, 1917, gage height, 19.7 ft; minimum recorded, 558 ft<sup>3</sup>/s July 21, 1934, gage height, 0.44 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood on July 4, 1884 reached a discharge of about 125,000 ft<sup>3</sup>/s from flood record at Fruita, Colorado.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 26,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 26	1500	*20,600	*8.42				

Minimum discharge, 2,300 ft<sup>3</sup>/s, Apr 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4150	5410	4350	4530	3050	3210	3490	8270	19500	14700	8610	5660
2	4140	5140	4250	4590	3220	3210	3550	9070	18000	14100	8870	6200
3	4520	5370	4220	4550	3410	3240	3790	8390	17800	13700	8360	6850
4	4670	5460	4250	4360	3350	3320	4120	8590	18200	13000	8130	7280
5	4940	5210	4200	4180	3410	3300	3970	8730	17700	12700	8510	7330
6	5180	5190	4170	4180	3490	3440	3720	8160	17500	12000	8760	7070
7	5180	5110	4080	4060	3620	3240	3460	7360	16300	11300	8470	6620
8	5040	4900	3820	4050	3530	3130	3260	7110	14800	10800	8360	6200
9	4840	4990	3570	4200	3490	3090	3210	7550	16000	10300	8200	6020
10	4810	5210	3640	4130	3630	3040	3340	8060	17600	9670	8020	6200
11	4800	4940	3750	4020	3830	3000	3310	8790	17800	9050	9620	6150
12	4710	4730	3600	3890	3660	2980	3070	8460	16400	8760	10100	6170
13	4680	4710	3540	3890	3280	2870	2870	7390	16100	8590	8620	6310
14	4650	4760	3690	3760	3100	3030	2570	7200	15700	7890	7650	6250
15	4580	4780	3770	3550	3230	2980	2630	7710	15200	8770	7140	6060
16	4540	4770	3760	3210	3420	2960	3060	8530	15200	8530	7400	6550
17	4600	4800	3730	3140	3440	3110	3050	8520	16000	7810	7200	6520
18	4710	4740	3820	3300	3300	3260	2840	8490	18000	6860	6880	6540
19	4780	4680	3910	3480	3380	3340	2520	8770	19700	6570	6680	6650
20	4790	4660	3910	3560	3320	3400	2410	10700	19000	6530	6770	7070
21	4790	4370	3960	3750	3360	3600	2590	13000	18200	6560	7290	7270
22	4820	4390	3590	3800	3260	3880	3120	14600	18000	6290	7340	7100
23	4920	4380	3150	3610	3220	4010	3800	15600	18000	5980	7000	6690
24	5050	4520	e3100	3480	3250	3980	4440	17100	17500	5870	6390	6460
25	5100	4490	e3200	3450	3090	3970	5230	19200	17200	5890	6020	6430
26	5400	4400	e3300	3530	3220	4010	6000	20300	17700	6290	5890	6570
27	6100	4370	e3400	3510	3240	4180	6480	19500	18000	6230	5570	6480
28	6760	4320	e3500	3500	3240	4300	6660	18200	17300	6250	5640	6260
29	6280	4320	e3800	3400	---	4390	6430	17800	16600	6230	6060	6130
30	5760	4310	e3860	3190	---	4130	6450	19100	15400	7150	6050	6130
31	5630	---	e4200	3050	---	3630	---	19200	---	7760	5610	---
TOTAL	154920	143430	117090	116900	94040	107230	115440	359450	516400	272130	231210	195220
MEAN	4997	4781	3777	3771	3359	3459	3848	11600	17210	8778	7458	6507
MAX	6760	5460	4350	4590	3830	4390	6660	20300	19700	14700	10100	7330
MIN	4140	4310	3100	3050	3050	2870	2410	7110	14800	5870	5570	5660
AC-FT	307300	284500	232200	231900	186500	212700	229000	713000	1024000	539800	458600	387200

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1999, BY WATER YEAR (WY)

	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
MEAN	4018	3843	3332	3126	3295	3860	8392	19580	22420	9180	4362	3733
MAX	9416	7601	6588	6371	6326	8412	22590	42090	55530	31750	11400	11330
(WY)	1942	1987	1987	1985	1985	1985	1942	1984	1917	1957	1984	1929
MIN	1353	1730	2044	1900	2015	2009	1638	2322	2820	1057	1017	1078
(WY)	1935	1935	1940	1937	1935	1977	1977	1977	1977	1934	1934	1934

## COLORADO RIVER MAIN STEM

09180500 COLORADO RIVER NEAR CISC0, UT--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1914 - 1999	
ANNUAL TOTAL	2759970		2423460		7434	
ANNUAL MEAN	7562		6640		14930	1984
HIGHEST ANNUAL MEAN					2631	1977
LOWEST ANNUAL MEAN					73200	Jun 19 1917
HIGHEST DAILY MEAN	28500	May 23	20300	May 26	640	Jul 21 1934
LOWEST DAILY MEAN	3100	Dec 24	2410	Apr 20	736	Jul 15 1934
ANNUAL SEVEN-DAY MINIMUM	3320	Dec 22	2730	Apr 14	5386000	
ANNUAL RUNOFF (AC-FT)	5474000		4807000		18800	
10 PERCENT EXCEEDS	17400		15300		3940	
50 PERCENT EXCEEDS	4840		4900		2260	
90 PERCENT EXCEEDS	3860		3220			

e Estimated



## COLORADO RIVER MAIN STEM

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09180500 COLORADO RIVER NEAR CISCO, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1928 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1952, October 1954 to September 1981, March 1982 to current year.

WATER TEMPERATURES: May 1949 to September 1959, October 1964 to September 1981, March 1982 to current year.

SUSPENDED-SEDIMENT DISCHARGE: May 1930 to September 1984.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 4,820 microsiemens Dec. 13, 1957; minimum daily, 291 microsiemens May 31, 1953.

WATER TEMPERATURES: Maximum, 29.0°C July 29, 1966; minimum, 0.0°C on many days during winter period most years.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 69,000 mg/L Oct. 27, 1951; minimum daily mean, 4 mg/L Aug. 22, 1960.

SEDIMENT LOADS: Maximum daily, 2,790,000 tons Oct. 14, 1941; minimum daily, 14 tons Aug. 22, 1960.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 1,380 microsiemens, Dec 28; minimum observed, 430 microsiemens, May 31, Jun 1, 11.

WATER TEMPERATURE: Maximum observed, 25.0°C, Jul 24, 25, 29-31; minimum observed, 0.0°C, many days in Dec and Jan.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	
OCT 28...	1000	ENVIRONMENTAL	3.96	6390	1130	8.2	13.5	11.0	700	
NOV 20...	1030	ENVIRONMENTAL	3.15	4610	1120	8.4	1.0	5.0	9.8	
DEC 16...	1430	ENVIRONMENTAL	2.77	3770	1190	8.4	3.5	1.0	4.4	
MAR 29...	1500	ENVIRONMENTAL	3.06	4380	960	8.4	23.0	12.0	32	
APR 26...	1230	ENVIRONMENTAL	3.73	6010	930	8.1	13.5	12.0	470	
MAY 24...	1200	ENVIRONMENTAL	7.47	17500	455	8.0	21.0	16.0	230	
24...	1210	REPLICATE	7.47	17500	455	8.0	21.0	16.0	270	
JUN 28...	1200	ENVIRONMENTAL	7.59	17500	420	8.0	27.0	18.5	140	
JUL 21...	1030	ENVIRONMENTAL	3.99	6620	860	8.4	29.5	22.0	80	
21...	1040	REPLICATE	3.99	6620	860	8.4	29.5	22.0	120	
AUG 30...	1130	ENVIRONMENTAL	3.85	6210	950	8.3	23.0	22.5	910	
30...	1133	SPIKE	3.85	6210	950	8.3	23.0	22.5	--	
SEP 20...	1030	ENVIRONMENTAL	4.22	7170	880	8.2	13.5	17.0	980	
DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)
OCT 28...	8.8	94	650	.92	360	220	98	28	89	34
NOV 20...	12.3	112	658	.70	360	210	91	32	98	37
DEC 16...	13.3	108	661	1.1	350	180	88	31	112	41
MAR 29...	9.6	105	651	.58	250	120	65	22	87	42
APR 26...	9.0	98	647	.85	280	160	73	24	80	38
MAY 24...	8.1	85	737	--	160	61	44	12	28	27
24...	8.1	85	737	--	150	54	43	11	27	27
JUN 28...	7.9	100	650	.41	150	68	42	10	24	26
JUL 21...	7.3	98	651	.70	280	160	77	22	64	33
21...	7.3	98	651	.79	280	160	76	21	63	33
AUG 30...	7.0	95	650	.75	350	220	96	27	66	29
30...	7.0	95	650	--	--	--	--	--	--	--
SEP 20...	8.1	99	653	.61	300	170	81	23	60	30

## COLORADO RIVER MAIN STEM

09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 28...	2	4.3	0	177	145	320	81	.43	9.4	784
NOV 20...	2	3.8	7	173	153	290	100	.30	9.0	758
DEC 16...	3	3.8	7	187	165	270	120	.34	9.5	788
MAR 29...	2	3.9	6	152	134	200	100	.31	9.0	606
APR 26...	2	4.1	0	150	123	230	76	.30	9.8	610
MAY 24...	1	2.1	0	119	98	90	25	.22	9.0	287
24...	1	1.9	0	122	100	89	23	.19	8.9	287
JUN 28...	.9	1.6	0	98	80	85	21	.20	7.9	259
JUL 21...	2	2.8	5	140	123	220	62	.41	8.8	564
21...	2	2.9	5	140	123	220	60	.37	8.7	575
AUG 30...	2	3.7	0	157	128	270	59	.36	10	636
30...	--	--	0	157	--	--	--	--	--	--
SEP 20...	2	3.2	0	153	126	250	51	.32	9.3	590

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
OCT 28...	718	1.07	13500	--	--	<.010	--	.696	.077	.10
NOV 20...	716	1.03	9430	--	--	<.010	--	.509	<.020	--
DEC 16...	745	1.07	8020	.571	2.5	.027	.09	.598	.029	.04
MAR 29...	568	.82	7170	--	--	.010	--	.336	<.020	--
APR 26...	572	.83	9900	.475	2.1	.015	.05	.490	.112	.14
MAY 24...	271	.39	13600	.305	1.4	.012	.04	.317	.077	.10
24...	267	.39	13600	.308	1.4	.010	.03	.318	.078	.10
JUN 28...	242	.35	12200	--	--	<.010	--	.248	.034	.04
JUL 21...	530	.77	10100	--	--	<.010	--	.584	<.020	--
21...	525	.78	10300	--	--	<.010	--	.571	<.020	--
AUG 30...	614	.86	10700	--	--	<.010	--	.598	<.020	--
30...	--	--	--	--	--	--	--	--	--	--
SEP 20...	553	.80	11400	--	--	<.010	--	.469	<.020	--

## COLORADO RIVER MAIN STEM

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09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)
OCT 28...	2.5	.15	2.5	.22	3.2	1.38	<.050	.001	.00
NOV 20...	--	--	.23	.19	.74	<.050	<.050	<.001	--
DEC 16...	.22	.47	.25	.50	.84	<.050	.067	.001	.00
MAR 29...	--	--	.55	.25	.88	.085	.009	.002	.01
APR 26...	2.0	.25	2.1	.36	2.6	.740	.017	.011	.03
MAY 24...	2.2	--	2.3	<.10	2.6	1.12	.008	.005	.02
24...	2.5	--	2.6	<.10	2.9	1.43	.010	.005	.02
JUN 28...	.51	.13	.54	.16	.79	.234	.015	.009	.03
JUL 21...	--	--	.47	.11	1.1	.170	.011	.009	.03
21...	--	--	.53	.22	1.1	.156	.011	.008	.02
AUG 30...	--	--	3.4	.15	4.0	1.86	.011	.007	.02
30...	--	--	--	--	--	--	--	--	--
SEP 20...	--	--	3.3	.14	3.7	1.95	.006	.004	.01

DATE	TIME	SAMPLE TYPE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
OCT 28...	1000	ENVIRONMENTAL	--	--	<1	--	--	--	--	--
NOV 20...	1030	ENVIRONMENTAL	--	--	1	--	--	--	--	--
DEC 16...	1430	ENVIRONMENTAL	--	--	1	--	--	--	--	--
MAR 29...	1500	ENVIRONMENTAL	1.3	<1.0	1	52	<1.0	<1.0	<1.0	<1.0
APR 26...	1230	ENVIRONMENTAL	--	--	<1	--	--	--	--	--
MAY 24...	1200	ENVIRONMENTAL	1.6	<1.0	2	60	<1.0	<1.0	<1.0	<1.0
24...	1210	REPLICATE	1.7	<1.0	2	61	<1.0	<1.0	<1.0	<1.0
JUN 28...	1200	ENVIRONMENTAL	7.5	<1.0	<1	41	<1.0	<1.0	<1.0	<1.0
JUL 21...	1030	ENVIRONMENTAL	--	--	1	--	--	--	--	--
21...	1040	REPLICATE	--	--	<1	--	--	--	--	--
AUG 30...	1130	ENVIRONMENTAL	--	--	<1	--	--	--	--	--
30...	1133	SPIKE	--	--	--	--	--	--	--	--
SEP 20...	1030	ENVIRONMENTAL	2.3	<1.0	<1	64	<1.0	<1.0	<1.0	<1.0

## COLORADO RIVER MAIN STEM

09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 28...	--	<10	--	37	--	--	--	--	1020	<10	--
NOV 20...	--	<10	--	41	--	--	--	--	995	<10	--
DEC 16...	--	22	--	39	--	--	--	--	960	<10	--
MAR 29...	1.4	E5.4	<1.0	26	4.9	4.2	2.8	<1.0	678	<10	1.6
APR 26...	--	E5.6	--	39	--	--	--	--	783	<10	--
MAY 24...	1.5	14	<1.0	9	<1.0	3.1	2.7	<1.0	415	<10	1.8
24...	1.2	E9.6	<1.0	16	<1.0	3.2	2.9	<1.0	398	<10	2.5
JUN 28...	1.3	<10	<1.0	12	<1.0	5.4	<1.0	<1.0	380	<10	1.4
JUL 21...	--	13	--	28	--	--	--	--	800	E6	--
21...	--	<10	--	27	--	--	--	--	787	<10	--
AUG 30...	--	<10	--	32	--	--	--	--	1050	<10	--
30...	--	--	--	--	--	--	--	--	--	--	--
SEP 20...	2.3	<10	<1.0	31	<1.0	6.1	1.8	<1.0	794	<10	2.1

DATE	TIME	SAMPLE TYPE	BORON, DIS- SOLVED (UG/L AS B) (01020)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT 28...	1000	ENVIRONMENTAL	69	4
NOV 20...	1030	ENVIRONMENTAL	73	4
DEC 16...	1430	ENVIRONMENTAL	71	4
MAR 29...	1500	ENVIRONMENTAL	49	2
APR 26...	1230	ENVIRONMENTAL	58	3
MAY 24...	1200	ENVIRONMENTAL	30	1
24...	1210	REPLICATE	33	1
JUN 28...	1200	ENVIRONMENTAL	23	1
JUL 21...	1030	ENVIRONMENTAL	49	3
21...	1040	REPLICATE	48	3
AUG 30...	1130	ENVIRONMENTAL	66	3
30...	1133	SPIKE	--	--
SEP 20...	1030	ENVIRONMENTAL	59	3

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09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
OCT			
28...	1000	ENVIRONMENTAL	--
NOV			
20...	1030	ENVIRONMENTAL	--
DEC			
16...	1430	ENVIRONMENTAL	--
MAR			
29...	1500	ENVIRONMENTAL	3.7
APR			
26...	1230	ENVIRONMENTAL	--
MAY			
24...	1200	ENVIRONMENTAL	2.2
24...	1210	REPLICATE	2.3
JUN			
28...	1200	ENVIRONMENTAL	1.8
JUL			
21...	1030	ENVIRONMENTAL	--
21...	1040	REPLICATE	--
AUG			
30...	1130	ENVIRONMENTAL	--
30...	1133	SPIKE	--
SEP			
20...	1030	ENVIRONMENTAL	4.4

DATE	TIME	SAMPLE TYPE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)
OCT				
28...	1000	ENVIRONMENTAL	3.1	>10
NOV				
20...	1030	ENVIRONMENTAL	5.0	.60
DEC				
16...	1430	ENVIRONMENTAL	4.0	.60
MAR				
29...	1500	ENVIRONMENTAL	3.5	.70
APR				
26...	1230	ENVIRONMENTAL	3.9	7.6
MAY				
24...	1200	ENVIRONMENTAL	11	>10
24...	1210	REPLICATE	17	>10
JUN				
28...	1200	ENVIRONMENTAL	2.8	3.4
JUL				
21...	1030	ENVIRONMENTAL	3.0	2.5
21...	1040	REPLICATE	3.0	1.7
AUG				
30...	1130	ENVIRONMENTAL	3.4	>10
30...	1133	SPIKE	--	--
SEP				
20...	1030	ENVIRONMENTAL	7.5	>5.0



## COLORADO RIVER MAIN STEM

09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

			METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)		
DATE	TIME	SAMPLE TYPE											
OCT 28...	1000	ENVIRONMENTAL	<.004	<.0030	<.0050	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
NOV 20...	1030	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
DEC 16...	1430	ENVIRONMENTAL	<.004	<.0030	E.0014	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
MAR 29...	1500	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
APR 26...	1230	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	.0134		
MAY 24...	1200	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
24...	1210	REPLICATE	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
JUN 28...	1200	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
JUL 21...	1030	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
21...	1040	REPLICATE	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
AUG 30...	1130	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
30...	1133	SPIKE	.619	.628	.554	.561	.511	E.665	.412	.586	.678		
SEP 20...	1030	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020		
		PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
OCT 28...	<.0040	<.0100	<.0040	<.0030	<.0050	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	E.0140	
NOV 20...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
DEC 16...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
MAR 29...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
APR 26...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
MAY 26...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0200	<.0130	<.0030	<.0170	<.0010	<.0040	E.0061	
24...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
24...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
JUN 28...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0075	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
JUL 21...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
21...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
AUG 30...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	
30...	.699	.698	.697	.651	.535	E.659	.505	.647	.531	.634	.658	E.417	
SEP 20...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030	

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09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC (UG/L) (91063)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U GF, REC (UG/L) (91064)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (UG/L) (91065)	SET NUMBER SCHED- ULE 2001 (NO.) (99818)
OCT 28...	<.0020	<.0040	<.0040	<.0030	<.0130	<.0010	<.0050	105	101	93.1	8306.00
NOV 20...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	97.8	98.9	78.1	8328.10
DEC 16...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	122	96.2	84.0	8355.00
MAR 29...	<.0020	E.0019	<.0040	<.0030	<.0130	<.0010	<.0050	104	115	101	9091.00
APR 26...	<.0020	E.0023	<.0040	<.0030	<.0130	<.0010	<.0050	77.8	103	87.5	9118.00
MAY 24...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	103	--	95.0	9147.00
MAY 24...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	101	--	99.5	9147.00
JUN 28...	<.0020	E.0018	<.0040	<.0030	<.0130	<.0010	<.0050	88.7	--	81.0	9182.00
JUL 21...	<.0020	E.0003	<.0040	<.0030	<.0130	<.0010	<.0050	113	--	109	9208.00
JUL 21...	<.0020	E.0004	<.0040	<.0030	<.0130	<.0010	<.0050	103	--	99.2	9207.10
AUG 30...	<.0020	E.0022	<.0040	<.0030	<.0130	<.0010	<.0050	120	--	104	9251.00
AUG 30...	.662	.635	.552	.662	.559	E.816	.397	115	--	101	9251.00
SEP 20...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	119	--	99.8	9266.10
DATE	SAMPLE VOLUME SCHED- ULE 2001 (ML) (99856)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	P, P' DDE DISSOLV (UG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
OCT 28...	884	<.0070	<.0020	<.0100	<.0180	<.0050	<.0040	<.0030	<.0020	<.0120	<.0040
NOV 20...	862	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
DEC 16...	917	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	E.0013	<.0040
MAR 29...	925	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
APR 26...	909	<.0070	<.0020	.0060	E.0041	<.0020	.0231	<.0030	<.0020	<.0060	<.0040
MAY 24...	909	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	E.0017	<.0040
MAY 24...	877	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
JUN 28...	869	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
JUL 21...	917	<.0070	<.0020	<.0050	<.0180	E.0014	<.0040	<.0030	<.0020	E.0003	<.0040
JUL 21...	847	<.0070	<.0020	<.0050	<.0180	E.0024	<.0040	<.0030	<.0020	<.0060	<.0040
AUG 30...	813	<.0070	<.0020	<.0050	<.0180	E.0043	<.0040	<.0030	<.0020	<.0060	<.0040
AUG 30...	854	.891	.696	.781	.672	E.395	.665	.652	.608	.411	.593
SEP 20...	900	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040

## COLORADO RIVER MAIN STEM

09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	MALA- THION, DIS- SOLVED (UG/L) (39532)	PARA- THION, DIS- SOLVED (UG/L) (39542)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)
OCT 28...	<.004	<.001	<.004	<.005	<.004	<.002	E.006	<.002	<.0020	--	--
NOV 20...	<.004	<.001	<.002	<.005	<.004	<.002	E.004	<.002	<.0020	--	--
DEC 16...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	--	--
MAR 29...	<.004	<.001	<.002	<.005	<.004	<.002	.012	<.002	<.0020	.079	--
APR 26...	<.004	<.001	.018	E.004	<.004	E.002	.007	.050	.0417	.102	--
MAY 24...	<.004	<.001	.009	<.005	<.004	<.002	<.001	.011	.0067	.114	.084
24...	<.004	<.001	.010	<.005	<.004	<.002	<.001	.014	.0151	.112	.082
JUN 28...	<.004	<.001	E.004	<.005	<.004	<.002	E.002	.004	<.0020	.082	--
JUL 21...	<.004	<.001	.006	E.003	<.004	<.002	.004	E.004	<.0020	.076	--
21...	<.004	<.001	.006	<.005	<.004	<.002	.005	.006	<.0020	.076	.056
AUG 30...	<.004	<.001	.005	E.003	<.004	<.002	.004	<.002	<.0020	.090	.066
30...	.615	.620	.698	.450	.597	.618	.656	.682	.688	--	--
SEP 20...	<.004	<.001	<.002	<.005	<.004	<.002	.006	<.002	<.0020	.083	--

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	1120	1120	1130	1220	1190	---	900	430	475	---	1050
2	1170	1110	1120	1100	---	1190	1000	920	440	480	---	---
3	1180	1120	1120	1110	1320	1210	990	840	450	485	---	1060
4	1160	1140	1120	1130	1290	1210	1010	830	450	495	---	950
5	1170	1130	1120	1130	1280	1230	1010	810	440	500	---	990
6	1120	1110	1120	1140	1190	1200	1010	820	440	520	750	900
7	1110	1100	1120	1150	1240	1190	1010	850	460	530	---	860
8	1100	1130	1120	1170	1190	1180	1030	860	490	550	760	890
9	1100	1130	1160	1160	1220	1200	1070	870	490	630	---	900
10	1090	1130	1170	1130	1190	1200	1090	860	450	650	770	900
11	1110	1110	1170	1110	1170	1210	1090	790	430	640	860	860
12	1100	1130	1200	1100	1190	1240	1070	740	440	690	850	870
13	1090	1180	1190	1140	1160	1250	1090	740	460	700	880	890
14	1080	1150	1190	1130	1180	1270	1090	770	460	740	820	900
15	1080	1150	1210	1170	1180	1220	1120	770	470	830	820	---
16	1080	1130	1210	1180	1210	1230	1160	730	480	930	820	850
17	1090	1120	1230	1200	1290	1220	1150	690	---	820	840	860
18	1100	1130	1180	1210	---	1220	1110	670	570	810	---	900
19	1100	1130	1160	1250	---	1210	1110	670	570	840	930	910
20	1090	1120	1180	1270	1230	1190	1130	620	480	870	860	900
21	1090	1110	1150	1250	1190	1180	1160	590	490	890	850	860
22	1100	1110	1140	1210	1180	1110	---	550	490	890	940	---
23	1090	1120	1200	1200	1200	1080	1150	520	490	890	900	870
24	1100	1120	1280	1230	1170	1080	1010	500	480	890	---	870
25	1080	1130	1290	1280	1190	1020	980	480	470	930	930	880
26	1100	1130	1280	1240	1170	990	---	450	460	---	---	870
27	1100	1110	1310	1220	1170	1000	1010	440	460	930	---	860
28	1160	1120	1380	1240	1210	980	1000	450	450	---	960	850
29	1130	1110	1260	1240	---	940	960	---	450	920	970	860
30	1130	1120	1170	1250	---	940	940	450	460	880	1020	850
31	1180	---	1110	1230	---	930	---	430	---	890	---	---
MEAN	1110	1120	1190	1180	1210	1150	1060	687	469	734	870	897

COLORADO RIVER MAIN STEM

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09180500 COLORADO RIVER NEAR CISCO, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	10.0	2.0	.0	5.0	8.0	---	14.0	16.0	20.0	---	20.0
2	16.0	10.0	2.0	.0	---	8.0	12.0	14.0	16.0	20.0	---	---
3	16.0	9.0	2.0	.0	5.0	8.0	12.0	14.0	16.0	21.0	---	20.0
4	16.0	9.0	2.0	.0	5.0	8.0	12.0	14.0	16.0	22.0	---	20.0
5	16.0	9.0	2.0	.0	6.0	8.0	12.0	14.0	16.0	22.0	---	20.0
6	16.0	8.0	2.0	.0	6.0	8.0	12.0	14.0	16.0	22.0	22.0	20.0
7	16.0	8.0	2.0	.0	6.0	10.0	12.0	14.0	16.0	23.0	---	20.0
8	16.0	8.0	2.0	.0	6.0	10.0	12.0	14.0	16.0	23.0	22.0	20.0
9	16.0	8.0	2.0	.0	6.0	10.0	12.0	16.0	16.0	23.0	---	20.0
10	14.0	8.0	2.0	.0	6.0	10.0	12.0	16.0	16.0	23.0	22.0	20.0
11	14.0	8.0	2.0	.0	7.0	10.0	12.0	16.0	16.0	23.0	22.0	20.0
12	14.0	8.0	2.0	.0	7.0	10.0	12.0	16.0	17.0	23.0	22.0	20.0
13	14.0	8.0	2.0	.0	7.0	10.0	13.0	16.0	17.0	23.0	22.0	20.0
14	14.0	7.0	2.0	.0	7.0	11.0	14.0	16.0	17.0	23.0	22.0	20.0
15	14.0	7.0	2.0	.0	7.0	11.0	14.0	16.0	17.0	23.0	22.0	---
16	14.0	7.0	2.0	.0	7.0	11.0	14.0	16.0	17.0	23.0	22.0	18.0
17	14.0	7.0	2.0	.0	8.0	11.0	14.0	16.0	---	23.0	22.0	18.0
18	14.0	7.0	2.0	.0	---	11.0	14.0	16.0	18.0	23.0	---	18.0
19	14.0	7.0	2.0	2.0	---	11.0	14.0	16.0	18.0	24.0	22.0	18.0
20	12.0	7.0	2.0	2.0	8.0	11.0	14.0	16.0	18.0	24.0	22.0	18.0
21	12.0	7.0	2.0	2.0	8.0	11.0	14.0	16.0	18.0	24.0	22.0	18.0
22	12.0	7.0	.0	2.0	8.0	11.0	---	16.0	18.0	24.0	22.0	---
23	12.0	7.0	.0	2.0	8.0	11.0	14.0	16.0	18.0	24.0	22.0	18.0
24	12.0	7.0	.0	2.0	8.0	12.0	14.0	16.0	20.0	25.0	---	18.0
25	12.0	7.0	.0	4.0	8.0	12.0	14.0	16.0	20.0	25.0	22.0	18.0
26	12.0	7.0	.0	4.0	8.0	12.0	---	16.0	20.0	---	---	18.0
27	12.0	7.0	.0	4.0	8.0	12.0	14.0	16.0	20.0	25.0	---	18.0
28	12.0	7.0	.0	4.0	8.0	12.0	14.0	16.0	20.0	---	22.0	18.0
29	12.0	7.0	.0	4.0	---	12.0	14.0	---	20.0	25.0	22.0	18.0
30	12.0	7.0	.0	4.0	---	12.0	14.0	16.0	20.0	25.0	22.0	18.0
31	12.0	---	.0	4.0	---	12.0	---	16.0	---	25.0	---	---
MEAN	13.8	7.7	1.4	1.3	6.9	10.5	13.1	15.5	17.6	23.2	22.0	19.0

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT							
28...	1000	ENVIRONMENTAL	6390	11.0	1840	31700	98
NOV							
20...	1030	ENVIRONMENTAL	4610	5.0	80	996	80
DEC							
16...	1430	ENVIRONMENTAL	3770	1.0	56	570	70
MAR							
29...	1500	ENVIRONMENTAL	4380	12.0	90	1060	80
APR							
26...	1230	ENVIRONMENTAL	6010	12.0	1360	22100	89
MAY							
24...	1200	ENVIRONMENTAL	17500	16.0	1630	77200	78
24...	1210	REPLICATE	17500	16.0	2050	96700	72
JUN							
28...	1200	ENVIRONMENTAL	17500	18.5	262	12400	65
JUL							
21...	1030	ENVIRONMENTAL	6620	22.0	217	3880	83
21...	1040	REPLICATE	6620	22.0	190	3400	83
AUG							
30...	1130	ENVIRONMENTAL	6210	22.5	3310	55500	97
SEP							
20...	1030	ENVIRONMENTAL	7170	17.0	2640	51100	97

## TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

09182200 CASTLE CREEK BELOW CASTLETON, NEAR MOAB, UT

LOCATION.--Lat 38°36'45", long 109°19'54", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 24, T. 25 S., R. 23 E., Grand County, Hydrologic Unit 14030005, on left bank and 25.5 mi northwest of Moab.

DRAINAGE AREA.--17.6 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1992 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,600 ft above sea level, from topographic map.

REMARKS.--Records poor. Small diversions for irrigation above and below the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 650 ft<sup>3</sup>/s Sept. 12, 1996, gage height, 5.50 ft, from slope-area measurement; minimum daily discharge, 1.4 ft<sup>3</sup>/s Sept. 10, 1994.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
(a) Jul 15	----	*15	----				
Minimum daily discharge, 1.8 ft <sup>3</sup> /s, Apr 21.							
(a) Peak is an estimated daily discharge.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.1	e2.9	e2.5	e2.9	e3.1	e2.8	e2.4	e2.9	e3.2	e3.4	e2.4	e3.5
2	e3.1	e2.9	e2.5	e2.8	e2.8	e2.8	e2.5	e2.8	e3.4	e3.2	e2.2	e3.3
3	e3.1	e2.9	e2.5	e2.8	e2.9	e2.8	e2.7	e3.1	e3.3	e3.2	e2.4	e3.7
4	e3.1	e2.9	e2.5	e3.0	e2.9	e2.8	e2.8	e3.0	e3.1	e3.2	e2.7	e3.5
5	e3.0	e2.9	e2.4	e3.0	e2.8	e2.9	e2.4	e2.9	e3.3	e3.1	e2.5	e3.3
6	e3.3	e2.9	e2.3	e2.9	e2.6	e3.0	e2.4	e2.9	e3.4	e3.2	e2.6	e3.1
7	e3.4	e2.7	e2.3	e2.9	e2.6	e2.9	e2.2	e2.7	e3.3	e3.2	e2.4	e3.0
8	e3.2	e2.9	e2.2	e2.9	e2.6	e2.8	e2.1	e2.5	e3.2	e3.4	e2.4	e2.9
9	e3.4	e2.7	e2.3	e2.9	e2.7	e2.7	e2.1	e2.5	e3.1	e3.8	e2.3	e2.8
10	e3.1	e2.4	e2.4	e2.8	e2.8	e2.6	e2.0	e2.5	e3.1	e3.5	e2.7	e2.7
11	e3.1	e2.5	e2.3	e2.9	e2.6	e2.6	e2.1	e2.7	e3.1	e3.0	e2.9	e2.7
12	e3.0	e2.5	e2.4	e2.9	e2.6	e2.7	e2.1	e2.7	e3.0	e3.1	e2.6	e2.7
13	e3.0	e2.5	e2.5	e2.9	e2.7	e2.6	e2.1	e2.6	e3.1	e3.3	e2.5	e2.7
14	e3.0	e2.5	e2.5	e2.8	e2.7	e2.6	e2.0	e2.7	e3.2	e3.5	e2.5	e2.7
15	e3.1	e2.5	e2.4	e2.8	e2.7	e2.6	e1.9	e2.6	e3.3	e15	e2.5	e2.7
16	e3.3	e2.5	e2.6	e2.7	e2.6	e2.5	e2.1	e2.5	e3.2	e3.4	e2.5	e2.8
17	e3.2	e2.5	e2.6	e2.7	e2.6	e2.5	e2.1	e2.7	e3.3	e3.0	e2.4	e2.6
18	e3.1	e2.5	e2.5	e2.7	e2.7	e2.5	e2.1	e2.8	e3.2	e3.0	e2.5	e2.6
19	e3.1	e2.5	e2.7	e2.7	e2.6	e2.4	e2.0	e2.8	e3.2	e3.3	e2.5	e2.7
20	e3.2	e2.3	e2.7	e2.7	e2.6	e2.4	e1.9	e2.8	e3.1	e2.9	e2.5	e2.8
21	e3.3	e2.4	e2.6	e3.3	e2.7	e2.4	e1.8	e2.7	e3.2	e2.8	e2.5	e2.5
22	e3.4	e2.4	e2.6	e3.0	e2.7	e2.5	e2.0	e2.9	e3.4	e2.7	e2.6	e2.6
23	e3.5	e2.4	e2.6	e2.9	e2.7	e2.6	e2.2	e2.7	e3.3	e2.7	e2.5	e2.7
24	e3.5	e2.5	e2.5	e3.2	e2.9	e2.7	e2.7	e2.9	e3.3	e2.8	e2.6	e2.5
25	e5.0	e2.4	e2.5	e2.9	e2.9	e2.7	e3.0	e3.0	e3.3	e2.8	e2.8	e2.3
26	e3.5	e2.4	e2.5	e3.2	e2.7	e2.6	e2.9	e3.2	e3.3	e2.7	e3.0	e2.2
27	e3.4	e2.4	e2.7	e2.9	e2.8	e2.8	e2.8	e3.0	e3.2	e2.7	e3.2	e2.2
28	e3.3	e2.4	e2.9	e2.8	e2.8	e2.8	e2.7	e3.1	e3.3	e2.7	e9.0	e2.2
29	e3.1	e2.6	e3.0	e2.8	---	e2.6	e3.0	e3.0	e3.2	e2.5	e3.5	e2.0
30	e3.0	e2.5	e3.0	e2.8	---	e2.5	e2.8	e3.1	e3.3	e2.8	e3.5	e1.9
31	e3.0	---	e2.9	e2.8	---	e2.3	---	e3.3	---	e2.6	e3.4	---
TOTAL	100.9	77.3	78.9	89.3	76.4	82.0	69.9	87.6	96.9	106.5	88.6	81.9
MEAN	3.25	2.58	2.55	2.88	2.73	2.65	2.33	2.83	3.23	3.44	2.86	2.73
MAX	5.0	2.9	3.0	3.3	3.1	3.0	3.0	3.3	3.4	15	9.0	3.7
MIN	3.0	2.3	2.2	2.7	2.6	2.3	1.8	2.5	3.0	2.5	2.2	1.9
AC-FT	200	153	156	177	152	163	139	174	192	211	176	162

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1999, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	2.72	2.44	2.42	2.49	2.50	2.57	2.43	5.68	6.91	4.66	2.91	2.67
MAX	4.07	3.20	3.45	3.34	2.79	3.59	3.01	11.8	13.2	9.09	3.93	3.88
(WY)	1998	1998	1998	1998	1998	1998	1998	1999	1999	1999	1999	1999
MIN	1.73	1.84	1.85	1.94	2.27	2.22	2.12	2.83	3.23	2.40	1.70	1.55
(WY)	1995	1993	1995	1993	1994	1997	1995	1999	1999	1994	1994	1994

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1992 - 1999

ANNUAL TOTAL	1431.3	1036.2	
ANNUAL MEAN	3.92	2.84	
HIGHEST ANNUAL MEAN			3.48
LOWEST ANNUAL MEAN			4.35
HIGHEST DAILY MEAN	18	15	29
LOWEST DAILY MEAN	2.2	1.8	1.4
ANNUAL SEVEN-DAY MINIMUM	2.3	2.0	1.5
ANNUAL RUNOFF (AC-FT)	2840	2060	2520
10 PERCENT EXCEEDS	5.9	3.3	5.5
50 PERCENT EXCEEDS	3.1	2.8	2.7
90 PERCENT EXCEEDS	2.5	2.4	1.9

e Estimated

TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

61

09182400 CASTLE CREEK BELOW CASTLE VALLEY, NEAR MOAB, UT

LOCATION.--Lat 38°40'26", long 109°26'58", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 35, T. 24 S., R. 22 E., Grand County, Hydrologic Unit 14030005, on left bank and 16.5 mi northwest of Moab.

DRAINAGE AREA.--58.1 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1992 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,120 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small diversions for irrigation above and below the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 296 ft<sup>3</sup>/s July 28, 1998, gage-height, 7.43 ft; minimum daily discharge, 3.2 ft<sup>3</sup>/s several days in July, 1994.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 25	1400	53	5.62	Jul 15	0200	*280	*7.70

Minimum daily discharge, 4.2 ft<sup>3</sup>/s, Aug 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	e8.5	e7.9	6.1	e6.5	7.0	6.1	5.7	5.5	5.3	4.3	e6.2
2	5.2	e8.8	8.0	5.8	e6.3	7.0	6.6	5.4	5.7	5.1	4.2	e6.0
3	5.2	e8.7	8.0	5.7	e6.5	7.0	7.0	5.8	5.6	5.1	4.5	e6.6
4	5.2	e8.5	7.8	5.8	e6.4	7.0	7.2	5.7	5.2	5.1	4.9	e6.3
5	5.1	e8.3	7.8	5.8	6.3	7.1	6.6	5.5	5.7	4.9	4.7	e6.0
6	5.4	e8.5	7.4	5.6	6.2	7.2	6.6	5.5	5.8	5.1	4.8	e5.8
7	5.5	e8.3	7.4	5.6	6.2	7.0	6.2	5.2	5.6	5.1	4.6	e5.7
8	5.0	e8.7	7.3	5.6	6.3	6.8	5.8	4.9	5.4	5.7	4.6	e5.6
9	5.2	e8.5	7.6	5.5	6.3	6.8	5.9	4.9	5.3	6.6	4.5	e5.6
10	4.7	e8.1	7.6	5.5	6.6	6.7	5.7	5.0	5.2	5.8	5.6	5.4
11	4.7	e8.2	7.3	5.6	6.3	6.8	5.9	5.2	5.2	5.2	6.0	5.5
12	4.6	e8.2	7.4	5.5	6.3	7.0	5.9	5.2	5.1	5.3	5.4	5.5
13	4.6	e8.0	7.5	5.5	6.4	6.8	5.7	4.9	5.2	5.6	e5.3	5.5
14	4.8	e8.0	7.5	5.4	6.4	6.8	5.5	5.2	5.3	6.1	e5.2	5.4
15	4.9	e8.0	7.3	5.4	6.4	6.8	5.0	5.1	5.4	27	e5.2	5.5
16	5.7	e8.0	7.4	5.3	6.3	6.6	5.2	4.8	5.4	5.8	e5.1	5.6
17	5.5	e8.1	7.3	5.3	6.4	6.5	5.2	4.9	5.6	5.4	e5.0	5.5
18	5.2	e8.1	7.2	5.3	6.5	6.5	5.0	5.1	5.5	5.4	e5.1	5.5
19	5.1	e8.1	7.3	5.3	6.4	6.4	5.0	5.1	5.5	5.8	e5.1	5.6
20	5.2	e7.7	7.2	5.3	6.5	6.4	4.9	5.2	5.3	4.8	e5.2	5.8
21	5.3	e7.8	6.9	6.5	6.6	6.4	4.8	5.0	5.5	4.6	e5.2	5.5
22	6.0	e7.8	6.8	5.6	6.6	6.5	4.9	5.1	5.5	4.5	e5.3	5.7
23	6.4	e7.9	6.8	5.2	6.7	6.6	5.1	4.9	5.2	4.4	e5.2	5.9
24	6.4	e8.0	6.6	e6.0	6.8	6.7	5.8	5.2	5.2	4.5	e5.4	5.8
25	13	e7.9	6.6	e5.6	6.8	6.7	5.9	5.3	5.2	4.5	e5.6	5.7
26	9.7	e7.9	6.6	e6.2	6.8	6.5	5.8	5.4	5.2	4.4	e5.8	5.6
27	9.4	e7.9	6.7	e5.8	6.9	6.7	5.5	5.0	5.1	4.4	e6.0	5.5
28	9.4	e8.0	6.8	e5.7	7.0	6.7	5.4	5.2	5.2	4.4	e17	5.6
29	e9.0	e8.2	6.9	e5.8	---	6.3	5.9	5.1	5.1	4.3	e6.2	5.2
30	e9.1	e8.0	6.9	e5.7	---	6.2	5.4	5.2	5.2	4.7	e6.2	4.8
31	e8.9	---	6.3	e5.7	---	5.8	---	5.5	---	4.5	e6.1	---
TOTAL	194.7	244.7	224.1	174.7	181.7	207.3	171.5	161.2	160.9	179.4	173.3	169.9
MEAN	6.28	8.16	7.23	5.64	6.49	6.69	5.72	5.20	5.36	5.79	5.59	5.66
MAX	13	8.8	8.0	6.5	7.0	7.2	7.2	5.8	5.8	27	17	6.6
MIN	4.6	7.7	6.3	5.2	6.2	5.8	4.8	4.8	5.1	4.3	4.2	4.8
AC-FT	386	485	445	347	360	411	340	320	319	356	344	337

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1999, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	7.10	8.18	7.58	7.35	7.22	7.43	6.67	7.25
MAX	8.33	8.95	8.36	8.53	8.37	8.77	8.43	17.2
(WY)	1998	1998	1996	1993	1998	1998	1993	1993
MIN	5.85	6.87	6.89	5.64	6.45	6.46	5.56	4.67
(WY)	1995	1995	1997	1999	1995	1995	1997	1998

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1992 - 1999

ANNUAL TOTAL	2489.3	2243.4	
ANNUAL MEAN	6.82	6.15	6.97
HIGHEST ANNUAL MEAN			8.84
LOWEST ANNUAL MEAN			6.08
HIGHEST DAILY MEAN	19 Sep 12	27 Jul 15	34 May 27 1993
LOWEST DAILY MEAN	3.8 Apr 30	4.2 Aug 2	3.2 Jul 7 1994
ANNUAL SEVEN-DAY MINIMUM	4.3 May 13	4.4 Jul 27	3.2 Jul 7 1994
ANNUAL RUNOFF (AC-FT)	4940	4450	5050
10 PERCENT EXCEEDS	8.6	7.9	8.6
50 PERCENT EXCEEDS	6.9	5.7	6.6
90 PERCENT EXCEEDS	4.8	4.9	4.6

e Estimated



## TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

09183500 MILL CREEK AT SHELEY TUNNEL, NEAR MOAB, UT

LOCATION.--Lat 38°28'59", long 109°24'12", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 4, T. 27 S., R. 23 E. in San Juan County, Hydrologic Unit 14030005 on the left bank 1,000 ft above Sheley Tunnel, and 9 mi southeast of Moab.

DRAINAGE AREA.--26.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1954 to September 1959, October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,500 ft above sea level, from a topographic map. Prior to Oct. 1, 1987 at different site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small diversion for irrigation above the station. Sheley Tunnel, which diverts water from Mill Creek for K. E. McDougald Reservoir, is located 1,000 ft below the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft<sup>3</sup>/s Aug. 8, 1993, gage height, 7.66 ft from floodmarks, from rating curve extended above 340 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum recorded, 2.1 ft<sup>3</sup>/s April 5, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 27	1400	92	3.15	Aug 28	0345	*410	*4.96
Aug 24	2115	108	3.28	Sep 17	0130	154	3.60

Minimum daily discharge, 4.6 ft<sup>3</sup>/s, Feb 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	e9.5	e9.0	e6.6	e6.5	6.1	6.6	8.5	19	15	13	16
2	7.8	e9.6	e9.0	e6.4	e6.3	6.1	e7.0	8.5	19	15	13	16
3	7.9	e9.4	e8.9	e6.3	e6.3	6.1	e7.2	8.4	19	14	12	15
4	8.9	e9.3	e8.9	e6.3	e6.1	6.1	6.2	8.1	18	14	12	14
5	9.0	e9.0	e9.1	e6.4	e6.2	5.9	6.1	7.9	18	13	14	13
6	9.4	e9.0	e8.5	e6.4	6.2	5.9	6.1	7.8	17	13	14	12
7	9.5	e9.0	e8.4	e6.5	6.2	6.0	6.3	7.9	17	13	12	12
8	9.2	e8.8	e8.5	e6.4	6.2	6.0	6.3	8.5	17	21	12	11
9	9.4	e9.0	e8.7	e6.3	6.3	6.0	6.3	10	18	17	12	10
10	8.5	e8.0	e8.3	e6.3	6.2	6.0	5.9	11	18	15	14	9.9
11	8.4	e8.8	e8.3	e6.3	4.6	6.0	6.5	11	18	15	20	9.6
12	8.4	e8.8	e8.3	e6.5	e5.8	6.2	6.3	10	18	14	15	9.4
13	8.3	e8.8	e8.3	e6.4	e6.1	5.9	6.5	11	18	15	13	8.8
14	8.6	e9.0	e8.3	e6.3	6.5	6.0	7.0	13	18	14	13	8.3
15	8.4	e9.3	e8.4	e6.4	6.3	6.2	6.7	14	19	21	13	8.9
16	9.3	e9.3	e8.4	e6.3	6.2	6.2	6.5	14	21	16	14	9.0
17	11	e9.5	e8.4	e6.4	6.1	6.3	6.7	13	25	15	13	16
18	9.4	e9.5	e8.4	e6.5	6.0	6.6	6.7	14	27	14	13	9.9
19	9.6	e9.5	e8.5	e6.5	6.0	6.7	7.4	15	26	14	13	9.6
20	e9.6	e8.7	e8.4	e6.5	5.9	6.8	8.4	15	25	13	13	11
21	e9.4	e8.7	e8.2	e6.6	5.9	6.9	8.9	16	24	13	14	9.7
22	e9.6	e8.8	e6.5	e6.4	5.8	7.0	8.7	15	23	13	13	9.3
23	e11	e9.2	e6.4	e6.4	5.8	6.9	8.0	18	23	13	13	9.1
24	e11	e9.3	e6.2	e6.7	5.9	6.7	12	19	21	12	15	9.1
25	e19	e9.1	e6.3	e6.5	5.9	6.5	8.3	17	19	11	13	9.0
26	e11	e9.1	e6.4	e6.7	5.9	6.7	7.6	16	17	11	12	8.9
27	e49	e9.0	e6.5	6.4	5.9	6.6	8.6	16	17	11	12	8.5
28	e12	e9.3	e6.5	5.9	5.9	6.4	9.1	16	16	11	53	8.4
29	e11	e9.5	e6.5	e6.0	---	6.3	9.9	16	16	13	24	8.3
30	e10	e9.0	e6.6	e6.0	---	6.5	9.1	18	15	14	20	8.4
31	e9.6	---	e6.5	e6.5	---	6.5	---	19	---	14	18	---
TOTAL	341.1	272.8	243.6	198.1	169.0	196.1	222.9	402.6	586	437	475	318.1
MEAN	11.0	9.09	7.86	6.39	6.04	6.33	7.43	13.0	19.5	14.1	15.3	10.6
MAX	49	9.6	9.1	6.7	6.5	7.0	12	19	27	21	53	16
MIN	7.8	8.0	6.2	5.9	4.6	5.9	5.9	7.8	15	11	12	8.3
AC-FT	677	541	483	393	335	389	442	799	1160	867	942	631

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955-59, 1988-99, BY WATER YEAR (WY)

	1955	1956	1957	1958	1959	1988	1989	1990	1991	1992	1993	1994
MEAN	8.80	7.61	6.87	6.27	5.88	6.52	11.1	28.6	28.7	15.2	10.5	8.98
MAX	15.4	15.6	11.0	8.82	8.06	9.43	22.2	70.5	67.9	40.7	18.7	13.5
(WY)	1998	1988	1988	1988	1988	1988	1958	1958	1957	1995	1993	1993
MIN	4.84	3.89	4.30	4.60	4.48	4.88	5.42	8.03	7.08	5.32	4.69	5.00
(WY)	1957	1957	1955	1957	1956	1957	1990	1990	1959	1959	1990	1959

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1955-59, 1988-99
ANNUAL TOTAL	5498.6	3862.3	
ANNUAL MEAN	15.1	10.6	12.1
HIGHEST ANNUAL MEAN			20.4
LOWEST ANNUAL MEAN			6.13
HIGHEST DAILY MEAN	56	53	141
LOWEST DAILY MEAN	6.2	4.6	2.8
ANNUAL SEVEN-DAY MINIMUM	6.4	5.9	3.2
ANNUAL RUNOFF (AC-FT)	10910	7660	8770
10 PERCENT EXCEEDS	33	17	24
50 PERCENT EXCEEDS	9.4	9.0	7.9
90 PERCENT EXCEEDS	7.2	6.2	5.0

e Estimated

## 09217000 GREEN RIVER NEAR GREEN RIVER, WY

LOCATION.--Lat 41°30'59", long 109°26'54", in NW¼ NE¼ NE¼ sec.26, T.18 N., R.107 W., Sweetwater County, Hydrologic Unit 14040106, on right bank 0.1 mi downstream from Bitter Creek, 1.0 mi southeast of town of Green River, and 4.0 mi upstream from high-water line of Flaming Gorge Reservoir.

DRAINAGE AREA.--14,000 mi<sup>2</sup>, of which 4,260 mi<sup>2</sup>, including 3,959 mi<sup>2</sup> in Great Divide Basin in southern Wyoming, probably is noncontributing.

PERIOD OF RECORD.--April 1951 to current year.

REVISED RECORDS.--WSP 1713: 1957. WDR-76-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by Fontenelle Reservoir (station 09211150) since August 1963. Natural flow of stream affected by transbasin diversions, storage reservoirs, power generation, and diversions for irrigation of about 223,000 acres upstream from station. National Weather Service data collection platform with satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed, 22,200 ft<sup>3</sup>/s, June 19, 1918, at site 1.5 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	1210	1230	e1300	e950	e1420	1350	1690	e7300	7760	2580	1520
2	1210	1210	1220	e1260	e980	1560	1340	2000	e8000	7720	2560	1390
3	1220	1210	1220	e1300	e1010	1510	1350	2080	8290	7670	2540	1340
4	1250	1190	1230	e1420	e1050	1540	1380	2060	9090	7630	2180	1310
5	1240	1180	1200	e1480	e1070	1380	1380	1980	9170	7600	1930	1280
6	1210	1210	1230	e1420	e1080	1330	1400	2020	9220	7640	1870	1270
7	1210	1210	e1170	e1400	e1100	1340	1400	2110	9130	6830	1810	1260
8	1210	1200	e1040	e1370	e1070	1330	1390	1990	9080	5650	1760	1260
9	1210	1190	e1050	e1380	e1090	1330	1420	1980	9040	4890	1700	1280
10	1210	1180	e1010	e1300	e960	1320	1420	1930	9080	4650	1700	1270
11	1210	1200	e1030	e1340	e960	1320	1410	2140	9180	4560	1700	1270
12	1210	1280	e1100	e1310	e1000	1310	1400	2590	9150	4490	1680	1250
13	1210	e1290	e1300	e1300	e1060	1310	1400	3480	9090	4410	1690	1250
14	1250	e1290	e1630	e1290	e1200	1330	1390	3330	9000	4270	1660	1250
15	1250	e1280	e1540	e1270	e1340	1350	1400	3200	8920	3840	1650	1250
16	1280	e1270	e1500	e1270	e1370	1370	1390	3170	8460	3350	1640	1240
17	1260	1260	e1500	e1280	e1400	1380	1390	3180	8000	3250	1640	1250
18	1220	1250	e1300	e1280	e1380	1380	1410	3170	7720	3250	1630	1250
19	1220	1250	e1200	e1280	e1370	1400	1410	3600	7590	3260	1620	1250
20	1220	1240	e1100	e1250	e1250	1480	1450	3640	7660	3260	1620	1360
21	1220	1240	e960	e1250	e1230	1500	1440	3650	7680	3260	1610	1290
22	1220	1250	e900	e1300	e1300	1520	1450	3670	7770	3260	1600	1270
23	1220	1250	e900	e1390	e1300	1590	1630	3700	7830	3240	1600	1270
24	1220	1250	e980	e1300	e1300	1560	1760	3720	7960	3230	1600	1260
25	1220	1240	e1040	e1200	e1350	1490	1760	4060	8160	3240	1600	1260
26	1220	1240	e1200	e1100	e1480	1440	e1800	4700	8200	3210	1590	1260
27	1220	1230	e1300	e980	e1440	1410	e1790	5440	8160	3170	1600	1230
28	1220	1250	e1400	e920	e1400	1390	1820	6400	8020	3250	1580	1230
29	1220	1230	e1400	e910	---	1380	1920	6620	7960	3250	1600	1250
30	1210	1230	e1380	e910	---	1360	2150	6720	7840	2870	1590	1250
31	1210	---	e1360	e920	---	1340	---	e6800	---	2650	1610	---
TOTAL	37910	37010	37620	38680	33490	43670	45400	106820	251750	140610	54740	38370
MEAN	1223	1234	1214	1248	1196	1409	1513	3446	8392	4536	1766	1279
MAX	1280	1290	1630	1480	1480	1590	2150	6800	9220	7760	2580	1520
MIN	1210	1180	900	910	950	1310	1340	1690	7300	2650	1580	1230
AC-FT	75190	73410	74620	76720	66430	86620	90050	211900	499300	278900	108600	76110

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1999, BY WATER YEAR (WY)

	MEAN	969	853	732	750	824	1048	1658	2640	4976	3338	1603	1148
MAX	3109	1844	1419	1442	1980	1852	3416	5665	11700	9415	3577	7746	
(WY)	1983	1984	1972	1996	1974	1974	1962	1952	1986	1986	1982	1965	
MIN	279	281	272	266	267	350	516	434	414	368	372	251	
(WY)	1989	1989	1989	1989	1989	1989	1968	1992	1977	1977	1977	1988	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1952 - 1999
ANNUAL TOTAL	722000	866070	--
ANNUAL MEAN	1978	2373	1713
HIGHEST ANNUAL MEAN	--	--	3089
LOWEST ANNUAL MEAN	--	--	689
HIGHEST DAILY MEAN	7010	Jul 11	16700
LOWEST DAILY MEAN	900	Dec 22	170
ANNUAL SEVEN-DAY MINIMUM	1010	Dec 19	214
INSTANTANEOUS PEAK FLOW	--	9410	16800 <sup>a</sup>
INSTANTANEOUS PEAK STAGE	--	5.95	8.53
ANNUAL RUNOFF (AC-FT)	1432000	1718000	1241000
10 PERCENT EXCEEDS	3700	7020	3800
50 PERCENT EXCEEDS	1370	1380	1100
90 PERCENT EXCEEDS	1210	1200	450

a Caused by emergency release from Fontenelle Reservoir.  
e Estimated.

## GREEN RIVER BASIN

09217900 BLACKS FORK NEAR ROBERTSON, WY

LOCATION.--Lat 40°57'33", long 110°34'46", in SW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> sec.27, T.3 N., R.12 E., Summit County, Utah, Hydrologic Unit 14040107, on left bank 1 mi downstream from East Fork, 2.7 mi south of Utah-Wyoming State line, and 18 mi south of Robertson.

DRAINAGE AREA.--130 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1937 to July 1939 (published as "at Blacks Fork Ranger Station"), July 1966 to September 1986, October 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,811.3 ft above sea level (Bureau of Reclamation benchmark). Datums published from October 1968 to September 1978 are incorrect. October 1937 to July 1939, at site 970 ft downstream at different datum, July 1966 to September 1986 and October 1992 to September 1993 at site 0.2 mi downstream at datum 6.5 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 28	2145	1,650	4.28
June 20	0045	*2,030	*4.58

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	46	e43	e26	e27	26	16	31	780	842	131	84
2	66	49	e42	e25	e28	23	16	35	836	836	119	143
3	68	45	e44	e26	e28	22	16	35	727	812	125	148
4	72	e45	e43	e27	e30	21	e17	29	628	698	129	123
5	71	e45	e38	e28	e30	e19	e16	26	514	566	135	107
6	69	44	e26	e31	e32	e17	16	33	527	497	123	98
7	75	e43	e26	e31	e32	e18	e16	41	656	543	110	91
8	68	e41	e27	e30	32	e19	15	70	725	538	104	87
9	61	e40	e25	e29	e33	e18	15	84	765	448	97	84
10	58	e40	e26	e29	e31	e18	16	66	715	384	94	82
11	54	e41	e27	e32	e28	e18	e17	60	623	336	95	81
12	55	e42	e28	e30	e28	e18	17	60	752	295	93	75
13	53	e44	e28	e30	e30	e18	16	83	933	265	83	71
14	50	e45	e28	e29	e33	e19	16	87	1020	295	76	68
15	52	e48	e29	e31	e35	e19	17	78	1180	291	72	66
16	55	e46	e29	e31	35	19	e19	71	1450	256	70	63
17	60	e42	e30	e30	33	e22	19	72	1680	240	68	61
18	55	41	e29	e30	e33	e21	21	112	1500	206	66	60
19	58	e40	e26	e30	e32	e20	29	159	1590	198	68	70
20	56	e38	e18	e30	e31	e19	32	201	1620	197	91	79
21	55	e39	e15	e29	e30	17	29	268	1420	189	102	64
22	60	e39	e14	e29	30	e20	24	345	1380	177	77	59
23	56	e39	e17	e29	e30	e22	22	490	1340	159	72	57
24	50	e39	e20	e28	28	21	22	809	1210	149	75	56
25	54	e37	e22	e27	e28	22	22	1130	1210	141	74	52
26	56	e35	e25	e25	e29	20	22	1040	1120	131	72	48
27	55	e35	e25	e27	e28	17	24	1020	940	127	83	45
28	55	36	e27	e25	e27	e17	27	1210	862	132	92	46
29	51	41	e29	e25	---	e18	30	1350	821	150	77	45
30	52	e43	e30	e25	---	18	29	1230	811	174	75	46
31	51	---	e28	e26	---	e18	---	1040	---	190	127	---
TOTAL	1817	1248	864	880	851	604	613	11365	30335	10462	2875	2259
MEAN	58.6	41.6	27.9	28.4	30.4	19.5	20.4	367	1011	337	92.7	75.3
MAX	75	49	44	32	35	26	32	1350	1680	842	135	148
MIN	50	35	14	25	27	17	15	26	514	127	66	45
AC-FT	3600	2480	1710	1750	1690	1200	1220	22540	60170	20750	5700	4480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1999, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999		
MEAN	54.7	41.1	33.0	27.3	24.2	25.4	49.1	398	801	351	113	70.0																								
MAX	136	62.0	50.0	55.7	36.9	38.6	112	789	1273	1003	232	157																								
(WY)	1983	1974	1974	1997	1974	1969	1985	1984	1983	1975	1983	1982																								
MIN	23.9	22.1	11.1	6.73	9.32	9.78	19.4	134	298	64.5	46.3	37.3																								
(WY)	1993	1994	1977	1977	1977	1994	1975	1975	1994	1994	1994	1976																								

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1966 - 1999
ANNUAL TOTAL	74040	64173	--
ANNUAL MEAN	203	176	166
HIGHEST ANNUAL MEAN	--	--	228
LOWEST ANNUAL MEAN	--	--	79.3
HIGHEST DAILY MEAN	1640	Jun 30	1880
LOWEST DAILY MEAN	14	Dec 22	3.2
ANNUAL SEVEN-DAY MINIMUM	19	Feb 20	3.9
INSTANTANEOUS PEAK FLOW	--	--	2480 <sup>a</sup>
INSTANTANEOUS PEAK STAGE	--	4.58	5.17
ANNUAL RUNOFF (AC-FT)	146900	127300	120300
10 PERCENT EXCEEDS	620	705	516
50 PERCENT EXCEEDS	55	45	--
90 PERCENT EXCEEDS	21	19	21

a Gage height, 4.91 ft, site and datum then in use.  
e Estimated.

## 09220000 EAST FORK OF SMITH FORK NEAR ROBERTSON, WY

LOCATION.--Lat 41°03'15", long 110°23'52", in NE<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> sec.5, T.12 N., R.115 W., Uinta County, Hydrologic Unit 14040107, Wasatch National Forest, on left bank 60 ft downstream from bridge, 1.0 mi upstream from Gilbert Creek, 6.1 mi downstream from State Line Reservoir, and 9.0 mi south of Robertson.

DRAINAGE AREA.--53.0 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1939 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313. Prior to Oct. 1, 1978, published as East Fork of Smith Fork near Robertson.

REVISED RECORDS.--WSP 979: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,470 ft above sea level, from topographic map. Prior to July 12, 1957, at datum 3.96 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow completely regulated by State Line Reservoir, 6.1 mi upstream, total capacity, 14,000 acre-ft, dead storage is about 2,000 acre-ft, since May 1979. Result of discharge measurement, in cubic feet per second, made during the period when the station was not in operation is given below:

Oct. 9 . . . 34.2

COOPERATION.--Station operated and record provided by Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e14	322	186	100	87
2	---	---	---	---	---	---	---	e14	271	185	100	92
3	---	---	---	---	---	---	---	e14	223	186	89	92
4	---	---	---	---	---	---	---	13	223	186	84	91
5	---	---	---	---	---	---	---	11	218	168	83	90
6	---	---	---	---	---	---	---	10	213	146	84	90
7	---	---	---	---	---	---	---	11	163	140	83	90
8	---	---	---	---	---	---	---	14	161	152	83	89
9	---	---	---	---	---	---	---	11	158	156	83	89
10	---	---	---	---	---	---	---	9.2	121	143	83	90
11	---	---	---	---	---	---	---	10	121	142	83	89
12	---	---	---	---	---	---	---	9.0	121	142	83	88
13	---	---	---	---	---	---	---	13	121	154	82	88
14	---	---	---	---	---	---	---	13	123	162	81	79
15	---	---	---	---	---	---	---	11	123	162	81	70
16	---	---	---	---	---	---	---	11	123	164	81	69
17	---	---	---	---	---	---	---	11	123	164	68	69
18	---	---	---	---	---	---	---	15	147	163	61	69
19	---	---	---	---	---	---	---	17	372	163	66	71
20	---	---	---	---	---	---	---	22	568	153	73	69
21	---	---	---	---	---	---	---	33	446	150	72	68
22	---	---	---	---	---	---	---	34	397	150	72	68
23	---	---	---	---	---	---	---	35	360	149	72	68
24	---	---	---	---	---	---	---	69	296	149	80	68
25	---	---	---	---	---	---	---	152	276	148	85	68
26	---	---	---	---	---	---	---	263	264	148	84	68
27	---	---	---	---	---	---	---	317	234	117	85	68
28	---	---	---	---	---	---	---	310	207	101	86	68
29	---	---	---	---	---	---	---	309	194	103	85	68
30	---	---	---	---	---	---	---	315	186	103	84	68
31	---	---	---	---	---	---	---	320	---	102	83	---
TOTAL	---	---	---	---	---	---	---	2410.2	6875	4637	2519	2341
MEAN	---	---	---	---	---	---	---	77.7	229	150	81.3	78.0
MAX	---	---	---	---	---	---	---	320	568	186	100	92
MIN	---	---	---	---	---	---	---	9.0	121	101	61	68
AC-FT	---	---	---	---	---	---	---	4780	13640	9200	5000	4640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1971, BY WATER YEAR (WY)

MEAN	15.9	10.9	8.10	7.15	7.19	8.00	20.5	126	216	88.9	33.7	19.6
MAX	34.8	19.0	16.9	16.4	13.4	15.0	90.0	201	430	269	120	59.8
(WY)	1962	1952	1966	1966	1966	1943	1946	1952	1965	1965	1965	1965
MIN	5.21	5.50	2.11	1.34	1.55	2.14	5.01	31.6	59.3	15.9	6.64	6.68
(WY)	1957	1957	1963	1963	1963	1963	1970	1953	1954	1940	1940	1956

SUMMARY STATISTICS

FOR 1999 WATER YEAR\*

WATER YEARS 1939 - 1971

ANNUAL MEAN	---	47.1
HIGHEST ANNUAL MEAN	---	88.9
LOWEST ANNUAL MEAN	---	25.4
HIGHEST DAILY MEAN	568	1030
LOWEST DAILY MEAN	9.0	1.0
INSTANTANEOUS PEAK FLOW	707	1450
INSTANTANEOUS PEAK STAGE	6.17	6.75
ANNUAL RUNOFF (AC-FT)	---	34160
10 PERCENT EXCEEDS	---	140
50 PERCENT EXCEEDS	---	13
90 PERCENT EXCEEDS	---	5.6

\* During period of operation.

# For period of record through 1999.

e Estimated.

## GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT

LOCATION.--Lat 40°54'30", long 109°25'20", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 15. T. 2 N., R. 22 E., Daggett County, Hydrologic Unit 14040106, Ashley National Forest on right bank 0.5 mi downstream from Flaming Gorge Dam, 2 mi south of Dutch John, 4 mi northeast of Greendale, and 407 mi from mouth.

DRAINAGE AREA.--19,350 mi<sup>2</sup>, approximately, including about 4,260 mi<sup>2</sup> which is probably noncontributing. This noncontributing area includes 3,959 mi<sup>2</sup> in Great Divide Basin in southern Wyoming.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,594.48 ft above sea level. Prior to Sept. 2, 1959, water-stage recorder at site 2.2 mi upstream at different datum. Sept. 3, 1959, to Sept. 30, 1985, at datum 5.0 ft lower.

REMARKS.-- Records good. Flow completely regulated by Flaming Gorge Reservoir 0.5 mi upstream, beginning Nov. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft<sup>3</sup>/s June 12, 1957, gage height, 10.60 ft, site and datum then in use; maximum gage height, 14.51 ft May 12, June 6, 1986, datum then in use; minimum, 2.3 ft<sup>3</sup>/s Mar. 20, 22, 27, 28, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,200 ft<sup>3</sup>/s, Jun 14, gage height, 16.20 ft; minimum daily discharge, 1,290 ft<sup>3</sup>/s, Aug 28-29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2370	2410	2400	2420	2760	3240	3410	3420	6530	4440	2090	2070
2	2370	2410	2400	2420	2770	3240	3410	3410	6530	4450	2080	2070
3	2370	2410	2400	2420	2770	3250	3410	3410	7460	4380	2100	2070
4	2370	2420	2400	2430	2770	3240	3410	3410	8350	4450	2100	2070
5	2380	2440	2400	2420	2760	3240	3080	3400	8420	4470	2080	2070
6	2390	2400	2400	2430	2760	3240	2970	3410	8400	4480	2080	2070
7	2390	2410	2400	2420	2760	3250	2970	3420	8500	4490	2080	2070
8	2390	2410	2400	2420	2760	3250	2970	3420	8520	4490	2080	2080
9	2380	2400	2400	2420	2760	2870	3120	3420	8360	4490	2080	2080
10	2380	2410	2400	2420	2770	3250	3410	3710	8540	4490	2080	2080
11	2390	2420	2410	2410	2770	3250	3410	4490	9060	4490	2080	2040
12	2390	2410	2410	2400	2780	3250	3410	4430	10900	4490	2080	2080
13	2390	2420	2410	2400	2780	3250	3410	4420	10900	4180	2080	2080
14	2390	2410	2410	2400	2780	3250	3410	4420	10900	3720	2080	2090
15	2410	2410	2410	2400	2790	3250	3410	4410	10900	3360	2080	2090
16	2400	2710	2410	2400	2790	3350	3410	4420	10900	2960	2080	2090
17	2430	2710	2430	2400	2780	3400	3420	4420	10900	2520	2080	2080
18	2420	2150	2410	2400	2790	3400	3390	4420	10900	2140	2080	2080
19	2420	2390	2460	2400	2780	3400	2730	4400	10900	2110	2080	2090
20	2420	2390	2470	2400	3160	3400	2090	4390	10900	2110	2080	1640
21	2400	2400	2410	2390	3240	3400	3200	4370	9600	2100	2080	1620
22	2400	2400	2410	2400	3240	3400	3420	4380	7580	2100	2080	2100
23	2410	2400	2410	2400	3240	3410	3420	4360	6090	2100	2080	2080
24	2410	2390	2410	2400	3240	3400	3420	5470	4790	2100	2080	2080
25	2410	2400	2410	2400	3240	3410	3420	6000	4420	2100	2080	2080
26	2410	2400	2410	2410	3240	3410	3410	6150	4410	2100	2080	2080
27	2410	2400	2420	2750	3240	3400	3420	6460	4410	2090	1330	2080
28	2400	2400	2420	2760	3240	3410	3420	6460	4410	2090	1290	2090
29	2410	2400	2420	2760	---	3410	3420	6460	4420	2090	1290	2090
30	2410	2400	2420	2760	---	3410	3420	6510	4430	2090	2050	2090
31	2410	---	2430	2760	---	3410	---	6490	---	2090	2070	---
TOTAL	74330	72530	74800	76420	81760	102740	98220	141760	241330	99760	62160	61480
MEAN	2398	2418	2413	2465	2920	3314	3274	4573	8044	3218	2005	2049
MAX	2430	2710	2470	2760	3240	3410	3420	6510	10900	4490	2100	2100
MIN	2370	2150	2400	2390	2760	2870	2090	3400	4410	2090	1290	1620
AC-FT	147400	143900	148400	151600	162200	203800	194800	281200	478700	197900	123300	121900

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

	MEAN	1921	2087	2286	2205	2190	1853	1999	2515	2631	2412	2057	1921
MAX	3911	3655	3626	4145	4090	3818	4271	7146	8044	10130	5056	3729	
(WY)	1983	1983	1973	1985	1984	1977	1997	1986	1999	1983	1983	1983	
MIN	128	312	743	903	773	599	587	984	916	474	497	734	
(WY)	1964	1964	1964	1971	1971	1964	1964	1990	1992	1965	1965	1965	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1964 - 1999

ANNUAL TOTAL	970530	1187290		
ANNUAL MEAN	2659	3253		
HIGHEST ANNUAL MEAN			2173	
LOWEST ANNUAL MEAN			4270	1983
HIGHEST DAILY MEAN	4520	Jun 10	10900	Jun 12
LOWEST DAILY MEAN	1630	Sep 22	1290	Aug 28
ANNUAL SEVEN-DAY MINIMUM	1820	Jul 1	1740	Aug 27
ANNUAL RUNOFF (AC-FT)	1925000		2355000	1574000
10 PERCENT EXCEEDS	3120		4490	3790
50 PERCENT EXCEEDS	2410		2420	1920
90 PERCENT EXCEEDS	2190		2080	896

## 09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1956 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1956 to September 1959, October 1963 to current year.

WATER TEMPERATURES: October 1956 to September 1959, October 1963 to current year.

SEDIMENT DATA: October 1956 to September 1959.

INSTRUMENTATION.--Water-quality monitor since December 1986.

REMARKS.--Storage in Flaming Gorge Reservoir began on Nov. 1, 1962. Samples for daily records are taken inside Penstock.

Extremes are given for two separate periods--water years 1957-62, and water years 1964 to current year. Extremes for the 1963 water year (October 1962 to September 1963) are not included. Temperature extremes for the 1994 water year are not included. Unpublished daily records of specific conductance obtained before 1965 were included in the determination of extremes for period of daily record and are available in files of district office. Daily records provided by Bureau of Reclamation.

Water-quality monitor located in separate shelter 0.6 mi downstream from Flaming Gorge Dam. Instrument failure, resulted in lost record for 1999.

EXTREMES FOR PERIOD OF DAILY RECORD.--(water years 1957-62, 1964 to current year).

SPECIFIC CONDUCTANCE (water years 1957-58, 1960-62): Maximum daily, 1,340 microsiemens Aug. 30, 1961; minimum daily, 325 microsiemens June 2, 1961.

WATER TEMPERATURES (water years 1957-59): Maximum, 24.0°C July 24, 25, 1959; minimum, 0.0°C on many days during winter period each year.

SPECIFIC CONDUCTANCE (water years 1964 to current year): Maximum daily, 1,060 microsiemens Nov. 9, 1971; minimum recorded, 507 microsiemens July 29, 1998.

WATER TEMPERATURES: Maximum recorded, 17.2°C July 9, 1989; minimum recorded 1.6°C Mar. 1, 2, 1987.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: None determined this year.

WATER TEMPERATURE: None determined this year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
OCT 13...	1710	9.70	2310	610	6.6	21.0	11.5	--	--	--
NOV 30...	1500	9.71	2280	620	7.3	11.0	7.0	8.6	87	624
JAN 05...	1245	9.73	2390	630	8.3	7.0	6.0	9.1	90	618
FEB 16...	1415	10.11	2790	640	8.4	5.0	4.0	9.9	94	615
MAR 23...	1610	10.71	3430	340	8.2	15.0	4.0	10.3	98	612
MAY 12...	1220	11.65	4450	620	8.6	12.0	6.0	9.9	99	614
JUN 10...	1340	14.81	8400	600	8.5	14.5	9.7	9.7	106	616
JUL 22...	1220	9.64	2070	610	8.5	23.0	12.5	8.5	98	621
AUG 25...	1610	9.70	2080	620	8.2	24.0	E14.5	8.2	--	618
DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT 13...	230	56	21	42	29	1	2.3	74	150	13
NOV 30...	230	58	22	44	29	1	2.5	15	150	14
JAN 05...	230	59	21	46	30	1	2.5	1.5	160	14
FEB 16...	240	61	22	47	29	1	2.7	1.2	160	14
MAR 23...	240	59	22	46	29	1	2.6	1.9	160	15
MAY 12...	240	59	22	46	29	1	2.5	.8	150	48
JUN 10...	240	60	21	45	29	1	2.2	.9	150	14
JUL 22...	220	54	20	45	31	1	2.3	.9	150	15
AUG 25...	230	55	21	47	31	1	2.3	1.9	150	15



## GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)
OCT 13...	.26	5.4	405	379	.55	2530	.031	.20	.23	152
NOV 30...	.22	5.8	411	393	.56	2530	.057	.17	.22	155
JAN 05...	.25	5.9	422	398	.57	2720	.101	.21	.31	156
FEB 16...	.20	6.5	423	407	.58	3190	.096	.22	.32	157
MAR 23...	.24	5.3	428	404	.58	3960	.051	.23	.28	161
MAY 12...	.25	3.6	404	439	.55	4850	.021	.45	.47	176
JUN 10...	.25	4.0	401	385	.55	9090	.025	.23	.25	153
JUL 22...	.23	3.0	406	379	.55	2270	.013	.27	.28	153
AUG 25...	.22	3.1	397	392	.54	2230	.013	.25	.26	160

DATE	TIME	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT 13...	1710	<1
NOV 30...	1500	<1
JAN 05...	1245	<1
FEB 16...	1415	<1
MAR 23...	1610	<1
MAY 12...	1220	<1
JUN 10...	1340	<1
JUL 22...	1220	<1
AUG 25...	1610	<1

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

e Estimated

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN
OCTOBER					NOVEMBER				DECEMBER				JANUARY		
1	12.6	12.2	12.3		---	---	---		---	---	---		---	---	---
2	12.7	12.3	12.6		---	---	---		---	---	---		---	---	---
3	12.3	12.2	12.3		---	---	---		---	---	---		---	---	---
4	13.1	12.3	12.8		---	---	---		---	---	---		---	---	---
5	12.9	12.6	12.8		---	---	---		---	---	---		---	---	e6.0
6	13.4	12.3	12.7		---	---	---		---	---	---		---	---	---
7	12.3	12.2	12.2		---	---	---		---	---	---		---	---	---
8	12.4	12.2	12.3		---	---	---		---	---	---		---	---	---
9	12.4	11.9	12.2		---	---	---		---	---	---		---	---	---
10	12.1	11.8	12.0		---	---	---		---	---	---		---	---	---
11	12.1	11.8	11.9		---	---	---		---	---	---		---	---	---
12	11.9	11.7	11.8		---	---	---		---	---	---		---	---	---
13	12.0	11.8	11.9		---	---	---		---	---	---		---	---	---
14	12.0	11.7	11.8		---	---	---		---	---	---		---	---	---
15	12.0	11.6	11.8		---	---	---		---	---	---		---	---	---
16	11.7	11.3	11.6		---	---	---		---	---	---		---	---	---
17	11.6	11.2	11.3		---	---	---		---	---	---		---	---	---
18	11.5	11.0	11.3		---	---	---		---	---	---		---	---	---
19	11.4	11.0	11.2		---	---	---		---	---	---		---	---	---
20	11.4	11.0	11.2		---	---	---		---	---	---		---	---	---
21	11.3	10.9	11.1		---	---	---		---	---	---		---	---	---
22	11.0	10.6	10.8		---	---	---		---	---	---		---	---	---
23	10.9	10.6	10.8		---	---	---		---	---	---		---	---	---
24	10.8	10.4	10.6		---	---	---		---	---	---		---	---	---
25	10.6	10.0	10.4		---	---	---		---	---	---		---	---	---
26	---	---	---		---	---	---		---	---	---		---	---	---
27	---	---	---		---	---	---		---	---	---		---	---	---
28	---	---	---		---	---	---		---	---	---		---	---	---
29	---	---	---		---	---	---		---	---	---		---	---	---
30	---	---	---		---	---	e7.0		---	---	---		---	---	---
31	---	---	---		---	---	---		---	---	---		---	---	---
MONTH	---	---	---		---	---	---		---	---	---		---	---	---

## GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

[illegible]

## GREEN RIVER BASIN

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## 09261000 GREEN RIVER NEAR JENSEN, UT

LOCATION.--Lat 40°24'34", long 109°14'05", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 5, T. 5 S., R. 24 E., Uintah County, Hydrologic Unit 14060001, Dinosaur National Monument, on right bank 300 ft upstream from highway bridge, 1 mi downstream from Cub Creek and Chew Ranch, 4 mi southeast of Dinosaur National Monument headquarters, 6.5 mi northeast of Jensen, 12 mi upstream from Brush Creek, and 313.9 mi from mouth.

DRAINAGE AREA.--29,660 mi<sup>2</sup>, approximately, including about 4,260 mi<sup>2</sup>, which probably is noncontributing. This noncontributing area includes 3,959 mi<sup>2</sup> in Great Divide Basin in southern Wyoming.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1903 to December 1904, June to August 1905 (gage heights only), March to September 1906, July to October 1914, August to December 1915, October 1946 to current year. Prior to October 1946, published as "at Jensen," except October to December 1903, which was published as "near Vernal."

REVISED RECORDS.--WSP 1243: 1904(m). WRD UT-73: 1972. WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,758 ft above sea level, from river-profile map. Prior to Oct. 1, 1946, nonrecording gages at site 15 mi downstream at different datums. Dec. 13, 1946 to Sept. 30, 1948, water-stage recorder at present site at datum 1.50 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Days that are estimated for max, min & mean are values from partial record for the day. Transbasin diversions and diversions for irrigation above station. Flow regulated by Flaming Gorge Reservoir (see station 09234500) 93.1 mi upstream beginning Nov. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,000 ft<sup>3</sup>/s May 18, 1984; gage height, 14.66 ft; minimum observed, 102 ft<sup>3</sup>/s Dec. 6, 1904.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,200 ft<sup>3</sup>/s, Jun 2, gage height, 10.14 ft; minimum daily discharge, 1,500 ft<sup>3</sup>/s, Aug 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2650	3440	3240	e2800	3360	4400	5630	10900	20300	8810	2910	2370
2	2650	3490	3240	e2900	3330	4620	6030	12400	20600	8330	2960	2450
3	2670	3480	3300	e2990	3300	4600	6320	11800	18300	7850	3090	2520
4	2780	3450	3300	e2900	e3300	4810	6170	11900	18200	7710	3160	2480
5	2870	3430	3270	e2900	3390	4930	5850	11500	19500	7630	3040	2530
6	2890	3530	3240	2960	3430	4530	5290	10700	19100	7520	2960	2610
7	3010	3410	3060	2950	e3450	4520	4930	9290	18200	7320	2880	2720
8	3220	3320	2710	e2950	3550	4460	4990	8570	17500	6990	2780	2680
9	3190	3250	2840	2930	e3640	4420	5010	8380	17300	6850	2810	2570
10	3110	3130	2720	e2920	3820	3990	5420	9030	17300	6670	2770	2480
11	3040	3170	2740	e2910	3750	4310	6130	11500	17900	6780	2730	2390
12	3040	3260	2720	e2900	3560	4420	5730	13200	18300	6550	2650	2300
13	3100	3200	2710	e2890	3550	4450	5520	11400	19200	6280	2600	2310
14	3110	3190	2810	e2910	3620	4480	5350	10700	18800	5770	2560	2290
15	3060	3250	2930	e2910	3680	4450	5600	10900	18500	5260	2530	2280
16	3180	3340	2940	e2920	e3630	4540	6250	12500	18400	4820	2490	2260
17	3060	3420	3050	2880	e3690	4710	6510	11800	18800	4380	2460	2240
18	2870	3630	3080	2840	e3750	5030	6080	11300	19000	4210	2450	2230
19	3020	3230	3060	e2910	e3810	5250	5740	10800	19200	3930	2440	2240
20	3000	3270	2940	e2920	e3870	5300	5150	11100	19700	3570	2420	2260
21	3000	3240	3030	e2990	e3930	5310	4490	12600	19200	3410	2500	2040
22	3040	3230	3090	e2930	e3990	5400	6520	14100	17700	3310	2490	1840
23	3050	3230	e2910	e2910	e4050	5600	8790	14900	15500	3270	2470	2070
24	3050	3150	e2900	2960	e4050	5840	8730	15700	13900	3180	2400	2260
25	3070	3120	e2850	3020	e4100	5780	8620	17800	12400	3100	2420	2320
26	3100	3200	e2800	e2930	e4150	5750	9030	19500	11600	3020	2480	2310
27	3130	3180	e2790	e2950	4360	5840	11400	19900	11100	2950	2430	2250
28	3160	3180	e2710	e3230	4260	6140	11000	19600	10700	2900	2010	2230
29	3150	3220	e2770	e3280	---	6420	10100	19100	10000	2920	1570	2220
30	3140	3230	e2800	3350	---	6300	10100	19000	9220	3110	1500	2210
31	3210	---	e2800	3360	---	5750	---	19500	---	2940	1870	---
TOTAL	93620	98870	91350	92100	104370	156350	202480	411370	505420	161340	78830	69960
MEAN	3020	3296	2947	2971	3728	5044	6749	13270	16850	5205	2543	2332
MAX	3220	3630	3300	3360	4360	6420	11400	19900	20600	8810	3160	2720
MIN	2650	3120	2710	2800	3300	3990	4490	8380	9220	2900	1500	1840
AC-FT	185700	196100	181200	182700	207000	310100	401600	816000	1003000	320000	156400	138800

CAL YR 1998 TOTAL 2023130 MEAN 5543 MAX 17100 MIN 1890 AC-FT 4013000  
WTR YR 1999 TOTAL 2066060 MEAN 5660 MAX 20600 MIN 1500 AC-FT 4098000

e Estimated

## GREEN RIVER BASIN

09261000 GREEN RIVER NEAR JENSEN, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1947 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1947 to September 1952, October 1961 to September 1996.

WATER TEMPERATURES: March 1949 to September 1959, October 1961 to September 1996, October 1998 to September 30, 1999.

SUSPENDED-SEDIMENT DISCHARGE: May 1948 to September 1979.

INSTRUMENTATION.--Temperature data logger October 1, 1998 to September 30, 1999.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office. Sediment data for water years 1998 and 1999 was collected by Colorado District of U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,330 microsiemens Sept. 10, 1963; minimum daily, 176 microsiemens May 24, 1963.

WATER TEMPERATURES: Maximum, 30.0°C July 11, 1958; minimum, 0.0°C on many days during winter period each year.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 40,600 mg/L Aug. 23, 1960; minimum daily mean, 9 mg/L Oct. 7-11, 1953, Nov. 22, 1962, and Sept. 1, 1972.

SEDIMENT LOADS: Maximum daily, 2,500,000 tons Mar. 29, 1962; minimum daily, 10 tons on many days in 1962 and 1963.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 23.8°C, Jul 23; minimum, 0.0°C, Dec 20, 21, 27, 28.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (000020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
OCT									
16...	0830	4.21	3070	620	8.1	4.5	10.0	--	--
MAR									
26...	0810	5.35	5520	690	8.3	12.0	7.5	11.3	632
31...	1020	5.36	5520	622	--	--	7.4	--	--
MAY									
13...	1340	7.20	11100	410	8.3	13.0	10.0	9.4	631
20...	0915	7.17	10800	479	--	--	13.6	--	--
25...	1600	9.41	18300	--	--	--	15.4	--	--
28...	0845	9.80	19700	345	--	--	14.7	--	--
JUN									
02...	1555	10.02	20400	--	--	--	14.5	--	--
11...	0830	8.34	17900	380	8.3	13.5	13.0	9.1	640
24...	1030	8.17	13800	405	--	--	16.8	--	--
JUL									
22...	1750	4.18	3180	540	8.5	34.0	23.0	7.6	638
AUG									
26...	1730	3.57	2490	620	8.7	32.0	21.5	8.7	637

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B) (01020)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT				
16...	0830	--	<1	<1
MAR				
26...	0810	81	--	3
31...	1020	--	--	--
MAY				
13...	1340	54	--	<1
20...	0915	--	--	--
25...	1600	--	--	--
28...	0845	--	--	--
JUN				
02...	1555	--	--	--
11...	0830	59	--	<1
24...	1030	--	--	--
JUL				
22...	1750	70	--	<1
AUG				
26...	1730	75	--	<1

## GREEN RIVER BASIN

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09261000 GREEN RIVER NEAR JENSEN, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.7	13.9	15.1	8.6	7.4	8.0	e5.6	e4.8	e5.4	3.5	2.4	2.8
2	e16.7	e14.5	e16.1	7.9	7.1	7.5	e6.4	e4.7	e5.5	2.9	1.7	2.3
3	e19.0	e17.8	e18.3	8.2	7.2	7.7	6.1	4.4	5.2	2.1	.9	1.5
4	18.1	16.0	16.8	7.5	6.3	6.9	5.9	4.1	5.0	1.8	.2	1.0
5	e16.1	e14.1	e15.0	7.4	5.5	6.4	e5.5	e4.2	e4.7	2.9	.7	1.6
6	e15.5	e12.8	e14.2	e6.9	e5.9	e6.5	e3.0	e2.3	e2.6	3.5	1.8	2.4
7	e15.8	e12.5	e14.0	e6.3	e5.5	e5.9	e1.8	e.6	e1.2	4.0	2.2	2.9
8	e16.2	e13.2	e14.6	e5.5	e4.8	e5.0	e2.4	e.8	e1.3	e3.8	e2.5	e3.1
9	e16.1	e13.1	e14.5	e4.6	e4.1	e4.4	e2.2	e1.7	e1.8	e2.8	e1.3	e2.0
10	e15.3	e12.8	e14.0	e3.5	e3.0	e3.3	e1.8	e1.5	e1.7	e2.8	e1.3	e1.9
11	e14.8	e12.2	e13.4	e3.4	e2.6	e3.1	e1.3	e.4	e.9	e3.5	e1.4	e2.2
12	e14.0	e11.0	e12.4	e4.2	e2.7	e3.4	---	---	e1.2	e3.9	e2.3	e3.0
13	e14.0	e11.0	e12.3	e5.5	e3.3	e4.3	e1.8	e1.0	e1.5	e3.9	e2.5	e3.1
14	e13.7	e11.0	e12.2	e5.8	e3.9	e4.8	e1.8	e1.2	e1.6	e2.9	e1.8	e2.2
15	e11.6	e10.7	e11.0	e6.1	e4.1	e5.0	e1.9	e1.3	e1.7	e2.9	e1.6	e2.2
16	e10.1	e8.2	e8.7	e6.5	e4.6	e5.5	e3.2	e2.7	e2.8	e2.4	e1.6	e1.9
17	e8.5	e7.4	e7.8	6.3	4.8	5.5	3.4	1.7	2.5	---	---	e2.7
18	e8.8	e6.3	e7.3	6.3	5.1	5.7	3.5	1.8	2.6	---	---	e3.4
19	e9.2	e6.6	e7.7	e5.9	e5.1	e5.5	2.6	.1	1.2	e4.2	e3.8	e4.2
20	e9.3	e6.9	e7.9	e4.4	e3.5	e4.2	.2	.0	.1	e3.8	e3.2	e3.3
21	e9.4	e6.8	e7.9	e4.6	e3.1	e3.8	.2	.0	.1	e3.7	e3.0	e3.6
22	10.2	7.8	8.8	e4.9	e3.2	e4.0	.2	.1	.1	e3.1	e2.1	e2.6
23	10.7	8.7	9.5	e5.5	e4.0	e4.7	e.2	e.1	e.1	e1.8	e1.6	e1.6
24	10.4	8.3	9.3	e5.4	e4.2	e4.8	---	---	e.2	---	---	e2.2
25	9.8	8.2	9.0	e5.5	e4.4	e5.0	e.2	e.1	e.2	---	---	e2.8
26	10.0	8.7	9.4	e5.1	e3.5	e4.3	.2	.1	.1	e3.4	e2.9	e3.4
27	10.1	8.6	9.2	e5.3	e3.7	e4.5	.2	.0	.1	e3.8	e2.3	e3.0
28	10.1	8.5	9.3	e5.8	e4.4	e5.0	.2	.0	.1	e3.3	e1.7	e2.5
29	9.6	---	---	e6.6	e5.9	e6.2	1.0	.1	.3	e2.2	e.3	e1.3
30	9.4	7.9	8.6	e6.6	e5.4	e5.9	2.6	.4	1.6	---	---	e1.5
31	9.5	7.8	8.6	---	---	---	2.9	1.9	2.3	---	---	e1.7
MONTH	19.0	---	---	8.6	2.6	5.2	---	---	1.8	---	---	2.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	e1.9	6.1	3.2	4.6	6.8	5.6	6.3	10.5	9.2	9.1
2	---	---	e2.1	5.5	3.7	4.5	6.0	5.0	5.4	10.9	9.6	10.1
3	---	---	e2.3	5.2	3.1	4.0	5.6	4.5	5.0	10.1	8.8	9.1
4	e3.4	e2.1	e2.6	4.2	3.1	3.7	e6.2	e4.3	e5.2	8.8	8.0	8.4
5	4.7	2.7	3.7	3.8	2.2	2.9	7.1	5.2	6.0	8.5	7.2	7.8
6	e5.2	e4.1	e4.5	4.3	1.6	2.8	8.4	5.9	6.9	8.6	6.7	7.6
7	e4.9	e3.7	e4.2	4.4	2.6	3.5	9.4	6.7	7.9	10.9	7.8	9.2
8	e5.2	e3.7	e4.3	5.3	3.2	4.1	9.5	7.4	8.3	12.7	10.0	11.3
9	e4.2	e3.8	e3.9	5.8	3.5	4.6	8.2	6.5	7.7	12.5	11.5	12.0
10	---	---	e3.6	6.2	4.0	4.9	7.3	5.5	6.3	11.5	9.8	10.5
11	---	---	e3.0	5.9	4.0	4.9	7.5	5.1	6.2	10.9	9.2	9.9
12	---	---	e2.9	6.1	4.3	5.0	9.2	6.5	7.8	10.9	9.2	10.1
13	---	---	e3.0	6.3	3.8	4.9	10.9	8.3	9.4	10.9	9.8	10.3
14	---	---	e3.2	7.0	3.7	5.2	10.6	8.6	9.5	11.2	9.2	10.1
15	---	---	e3.3	7.4	4.7	6.0	8.8	6.9	7.8	11.5	9.3	10.4
16	---	---	e3.5	8.0	5.4	6.6	9.0	6.3	7.4	11.1	9.4	10.5
17	---	---	e3.3	7.9	5.5	6.6	9.1	6.9	7.9	10.7	8.7	9.7
18	---	---	e3.4	8.1	5.5	6.7	10.4	7.5	8.8	12.4	9.8	11.0
19	---	---	e3.5	8.3	5.8	6.9	11.2	8.7	9.9	13.7	11.1	12.3
20	---	---	e3.3	8.4	6.3	7.2	11.6	10.1	10.6	14.6	12.2	13.4
21	---	---	e3.5	8.5	6.8	7.5	10.8	9.8	10.2	15.0	13.0	14.0
22	---	---	e3.6	8.9	7.0	7.7	9.8	8.9	9.4	15.2	13.5	14.3
23	e3.8	e2.9	e3.7	8.6	6.7	7.5	9.8	8.6	9.0	15.7	13.9	14.8
24	e2.9	e2.7	e2.7	8.7	6.6	7.6	8.9	7.7	8.2	15.9	14.4	15.0
25	---	---	e3.7	9.2	6.9	7.9	9.0	7.2	8.0	15.1	14.0	14.7
26	e6.0	e3.7	e4.6	8.8	7.6	8.1	9.3	7.9	8.6	14.9	13.6	14.2
27	4.5	2.9	3.6	9.3	7.7	8.3	10.2	9.0	9.5	14.8	13.5	14.1
28	5.2	2.3	3.6	8.0	6.4	7.2	10.6	9.5	10.0	15.1	13.7	14.4
29	---	---	---	7.6	5.7	6.6	10.1	9.2	9.5	14.7	13.5	14.1
30	---	---	---	8.3	6.1	7.1	10.7	9.8	10.2	14.4	13.2	13.7
31	---	---	---	7.5	6.8	7.2	---	---	---	14.0	12.5	13.5
MONTH	---	---	3.4	9.3	1.6	5.9	11.6	4.3	8.1	15.9	6.7	11.6



## GREEN RIVER BASIN

09261000 GREEN RIVER NEAR JENSEN, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	13.4	12.0	12.7	19.5	17.6	18.4	21.5	17.8	19.5	20.4	17.8	19.0
2	13.5	11.9	13.0	19.7	17.8	18.6	22.2	18.4	20.2	19.3	17.1	18.2
3	12.6	11.6	12.0	19.8	17.9	18.7	21.4	19.2	20.3	18.8	16.6	17.8
4	12.9	11.9	12.3	20.4	18.3	19.3	22.0	18.8	20.3	17.7	15.2	16.6
5	12.1	10.8	11.6	20.8	18.3	19.6	e21.2	e19.0	e20.1	17.3	14.2	15.8
6	12.9	10.7	11.8	21.2	18.5	19.9	e21.7	e18.9	e20.2	18.1	14.5	16.2
7	14.0	12.1	13.0	21.6	19.5	20.6	22.1	18.7	20.4	18.5	15.1	16.8
8	14.4	12.6	13.4	21.0	19.4	20.2	21.7	18.6	20.3	18.3	15.3	16.9
9	14.4	12.7	13.5	20.8	18.4	19.5	21.4	19.0	20.3	17.6	14.7	16.3
10	14.7	13.2	13.8	20.3	17.6	19.0	20.9	18.9	19.9	17.9	15.2	16.6
11	14.3	12.7	13.4	20.7	18.5	19.5	20.9	18.9	19.9	18.6	15.9	17.2
12	15.0	13.2	14.0	21.3	18.6	19.8	20.4	17.8	19.1	e17.6	e14.9	e16.3
13	15.3	13.5	14.3	21.3	19.2	20.1	20.2	17.3	18.8	17.6	14.3	16.0
14	15.1	14.2	14.6	19.9	18.8	19.2	20.4	17.1	18.7	17.1	14.1	15.7
15	14.7	13.9	14.3	20.4	18.2	19.1	20.6	17.7	19.2	16.6	13.9	15.3
16	15.0	13.6	14.2	19.6	17.9	18.7	21.2	18.0	19.6	17.3	13.4	15.3
17	14.4	13.6	13.9	20.7	17.3	18.8	20.5	18.5	19.6	17.2	13.8	15.5
18	14.8	13.4	14.0	21.4	18.4	19.8	21.0	17.6	19.3	17.1	14.2	15.7
19	16.0	14.0	15.0	21.8	19.7	20.6	20.3	17.7	18.9	16.4	14.5	15.0
20	16.2	15.0	15.5	21.6	18.7	20.2	20.3	17.8	19.1	15.7	13.6	14.7
21	16.7	15.0	15.7	21.4	18.6	20.0	20.4	17.7	19.1	15.1	12.2	13.7
22	16.6	15.3	15.9	23.1	19.3	21.1	21.2	18.1	19.6	15.7	13.0	14.3
23	17.3	15.5	16.4	23.8	20.0	21.8	21.9	18.3	20.0	16.3	13.7	14.9
24	18.4	16.1	17.2	22.8	20.4	21.6	21.3	18.8	20.2	15.9	13.8	14.9
25	18.9	16.7	17.8	23.0	20.1	21.5	20.9	18.6	19.9	15.9	13.2	14.6
26	19.3	17.3	18.2	22.3	19.3	20.9	21.2	18.3	19.8	15.0	12.6	13.9
27	19.5	17.7	18.5	22.5	19.5	21.0	20.4	18.4	19.5	13.9	11.8	12.8
28	19.4	17.5	18.4	23.0	20.2	21.5	21.3	18.3	19.8	12.4	9.7	11.0
29	19.9	17.8	18.6	23.0	20.7	21.9	21.8	18.7	20.5	12.0	9.0	10.4
30	19.7	17.5	18.6	22.5	19.3	21.3	21.7	19.5	20.7	13.0	9.2	10.9
31	---	---	---	20.7	18.9	19.6	21.3	19.5	20.5	---	---	---
MONTH	19.9	10.7	14.9	23.8	17.3	20.1	22.2	17.1	19.8	20.4	9.0	15.3

e Estimated

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)
MAR 31...	1020	5520	7.4	409	6100	51	57	82	100	100	--
MAY 20...	0915	10800	13.6	331	9650	56	70	85	99	100	--
25...	1600	18300	15.4	930	46000	65	81	91	99	100	--
28...	0845	19700	14.7	700	37200	56	70	82	99	100	--
JUN 02...	1555	20400	14.5	531	29200	55	--	88	98	100	73
24...	1030	13800	16.8	284	10600	42	69	90	99	100	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD MATERIAL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SEDI-MENT, DIS-CHARGE, BEDLOAD (TONS/DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)
MAR 31...	1020	5520	7.4	804	.00	1	18	94	99	99	99	100
MAY 20...	0915	10800	13.6	825	.00	1	9	53	89	99	99	100
25...	1600	18300	15.4	2290	.00	1	7	45	82	96	99	100
28...	0845	19700	14.7	--	.00	1	8	52	88	98	99	100
JUN 02...	1555	20400	14.5	1190	.00	.00	6	42	77	95	99	100

## 09261700 BIG BRUSH CREEK ABOVE RED FLEET RESERVOIR, NEAR VERNAL, UT

LOCATION.--Lat 40°35'20", long 109°27'53", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 5, T. 3 S., R. 22 E., Uintah County, Hydrologic Unit 14060002, on right bank 950 ft below State Highway 44, 5.5 mi upstream from Little Brush Creek, and 10.5 mi northeast of Vernal.

DRAINAGE AREA.--72.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,625 ft above sea level, from topographic map. Prior to September 1980, water-stage recorder at site 250 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Water from Oaks Park Reservoir (capacity 6,250 acre-ft), near headwaters, is diverted through Oaks Park Canal to Ashley Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 384 ft<sup>3</sup>/s May 22, 1998, gage height, 2.09 ft; maximum gage height, 3.06 ft May 23, 1980 at different datum; minimum daily, 7.6 ft<sup>3</sup>/s Feb. 10, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 328 ft<sup>3</sup>/s, Jun 1, gage height, 1.99 ft; minimum daily discharge, 13 ft<sup>3</sup>/s, several days in Feb and Mar.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	21	19	e17	e14	14	21	56	308	46	41	35
2	24	21	19	e18	e14	14	20	57	302	43	40	43
3	23	21	19	e18	e14	14	19	63	301	43	39	54
4	23	21	19	e19	e15	14	19	57	295	43	38	47
5	23	21	19	e19	e15	14	19	50	287	43	37	46
6	23	21	19	e19	e14	14	18	45	275	43	39	44
7	23	21	19	e19	e14	14	18	46	270	42	41	41
8	22	21	19	e19	e14	13	17	58	263	42	42	38
9	22	20	19	e18	e14	13	17	110	255	41	42	35
10	22	20	19	e18	e14	13	17	95	250	40	42	34
11	22	20	20	e18	e15	13	16	72	241	38	42	34
12	21	20	20	e18	15	15	16	66	227	36	42	32
13	21	20	20	e18	14	14	17	77	213	35	41	31
14	21	20	20	e17	14	13	20	91	198	35	41	30
15	21	19	20	e17	14	13	21	82	183	35	42	30
16	21	19	21	e17	13	14	21	94	167	44	41	29
17	21	19	21	e16	13	14	20	80	154	42	41	28
18	21	19	21	e16	13	14	22	94	138	41	42	28
19	21	19	21	e16	14	15	27	149	129	42	43	28
20	21	19	21	e16	14	16	39	191	110	43	43	29
21	21	19	e18	e16	14	15	44	213	101	42	43	28
22	21	19	e17	e16	14	15	41	230	89	42	43	27
23	21	19	e17	e15	14	15	37	242	75	43	43	27
24	21	19	e17	e15	14	14	35	254	68	42	42	27
25	21	19	e18	e16	14	15	34	266	62	41	40	25
26	21	19	e18	e15	15	16	31	277	58	40	39	25
27	21	19	e18	e15	14	19	32	292	54	39	38	25
28	21	19	e18	e15	14	19	38	317	50	39	37	25
29	21	19	e18	e15	---	20	43	315	48	39	36	25
30	21	19	e18	e14	---	21	52	313	48	39	36	24
31	21	---	e19	e14	---	22	---	314	---	41	36	---
TOTAL	671	592	591	519	394	469	791	4666	5219	1264	1252	974
MEAN	21.6	19.7	19.1	16.7	14.1	15.1	26.4	151	174	40.8	40.4	32.5
MAX	24	21	21	19	15	22	52	317	308	46	43	54
MIN	21	19	17	14	13	13	16	45	48	35	36	24
AC-FT	1330	1170	1170	1030	781	930	1570	9260	10350	2510	2480	1930

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1999, BY WATER YEAR (WY)

	MEAN	22.1	18.4	16.0	14.9	14.4	15.6	45.1	152	124	47.4	34.4	25.2
MAX	38.2	29.3	25.4	22.4	21.4	24.5	88.9	296	314	126	51.2	35.1	
(WY)	1987	1987	1984	1984	1987	1986	1985	1998	1983	1983	1983	1997	
MIN	13.5	12.4	10.2	10.1	10.6	10.8	17.7	50.8	26.8	25.9	20.3	15.7	
(WY)	1990	1991	1993	1993	1993	1982	1982	1989	1989	1989	1989	1989	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1980 - 1999

ANNUAL TOTAL	24710	17402	
ANNUAL MEAN	67.7	47.7	44.3
HIGHEST ANNUAL MEAN			69.6
LOWEST ANNUAL MEAN			23.6
HIGHEST DAILY MEAN	375	May 22	375
LOWEST DAILY MEAN	13	Feb 28	7.6
ANNUAL SEVEN-DAY MINIMUM	13	Feb 28	8.8
ANNUAL RUNOFF (AC-FT)	49010	34520	32090
10 PERCENT EXCEEDS	261	94	101
50 PERCENT EXCEEDS	22	21	22
90 PERCENT EXCEEDS	17	14	12

e Estimated

## GREEN RIVER BASIN

09266500 ASHLEY CREEK NEAR VERNAL, UT

LOCATION.--Lat 40°34'39", long 109°37'17", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 12, T. 3 S., R. 20 E., Uintah County, Hydrologic Unit 14060002, on right bank 0.8 mi upstream from head of Utah Power & Light Co.'s canal, 4.5 mi upstream from Dry Fork, and 10 mi northwest of Vernal.

DRAINAGE AREA.--101 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1911 to April 1912, August to December 1912, October 1913 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 6,230.61 ft above sea level. Prior to Nov. 14, 1917, nonrecording and water-stage recorder at several sites within 1.5 mi of present site at various datums. Nov. 14, 1917 to July 30, 1968, water-stage recorder at site 75 ft downstream at various datums.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow increased since July 1940 by water released from Oaks Park Reservoir, capacity, 6,250 acre-ft on Big Brush Creek and diverted to Ashley Creek basin for irrigation. City of Vernal pipeline, capacity, approximately 11 ft<sup>3</sup>/s, diverts water from tributary spring about 1,000 ft above station (diversion began Aug. 1, 1941); at times, part of this flow is returned to Ashley Creek 2.5 mi below station. Prior to September 1961, pipeline capacity was approximately 5 ft<sup>3</sup>/s and the return flow entered Ashley Creek 0.5 mi below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft<sup>3</sup>/s June 15, 1995, gage height, 5.64 ft from highwater mark; maximum gage height, 6.09 ft June 16, 1929, datum then in use; minimum, 3.2 ft<sup>3</sup>/s Mar. 16, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 25	1945	*1,890	*4.85				
Minimum daily discharge, 13 ft <sup>3</sup> /s, Apr 11-13.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	42	31	e19	e20	18	17	26	681	150	99	61
2	45	42	32	e19	e20	18	17	26	842	143	89	108
3	55	42	31	e19	20	18	17	30	614	137	79	145
4	64	38	31	e19	20	18	16	28	449	131	79	104
5	62	35	31	e19	20	18	15	25	372	125	84	88
6	64	37	27	e19	20	18	16	24	353	118	87	80
7	65	38	25	e20	19	18	15	25	557	112	83	75
8	50	37	26	e18	19	18	15	40	486	115	78	70
9	46	39	24	e19	20	18	15	71	461	115	76	71
10	44	39	21	e20	25	18	14	76	406	104	76	69
11	42	38	21	e21	25	18	13	66	356	101	90	71
12	42	37	21	e20	19	20	13	62	378	97	93	68
13	41	37	22	e21	19	20	13	66	384	113	95	67
14	40	38	23	e21	20	17	14	77	389	114	96	64
15	38	39	24	e20	19	18	15	77	376	118	97	63
16	38	39	25	e20	19	18	14	84	415	117	95	60
17	39	39	25	e21	19	18	14	76	468	119	92	59
18	38	39	23	e21	19	18	14	94	401	109	94	58
19	38	38	21	e20	19	18	15	137	523	103	90	60
20	38	35	20	e20	18	19	17	199	410	105	93	65
21	37	33	e19	e21	18	20	20	289	351	103	119	60
22	38	34	e18	e22	18	19	20	415	313	96	122	57
23	39	36	e17	e22	18	18	20	636	274	88	114	55
24	39	35	e16	e23	18	18	18	882	241	86	106	54
25	39	34	e16	e24	18	18	18	1250	228	95	100	54
26	43	33	e17	e23	18	20	18	1110	213	94	89	50
27	45	33	e17	e23	18	19	19	1030	196	100	70	49
28	44	33	e17	e21	18	18	20	1070	180	109	66	48
29	43	32	e18	e21	---	17	24	1010	167	108	73	48
30	42	32	e18	e20	---	18	27	1000	158	111	63	44
31	43	---	e19	e19	---	17	---	857	---	116	64	---
TOTAL	1386	1103	696	635	543	566	503	10858	11642	3452	2751	2025
MEAN	44.7	36.8	22.5	20.5	19.4	18.3	16.8	350	388	111	88.7	67.5
MAX	65	42	32	24	25	20	27	1250	842	150	122	145
MIN	37	32	16	18	18	17	13	24	158	86	63	44
AC-FT	2750	2190	1380	1260	1080	1120	998	21540	23090	6850	5460	4020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915-17, 1919-99, BY WATER YEAR (WY)

	MEAN	53.9	38.7	28.9	24.1	21.3	20.4	48.8	343	329	128	83.8	67.9
MAX	154	104	64.2	45.0	40.0	43.3	162	739	1051	360	161	230	
(WY)	1942	1942	1942	1928	1928	1916	1962	1986	1983	1975	1952	1927	
MIN	6.91	5.57	7.74	5.12	4.60	4.54	6.22	71.7	59.1	39.2	16.0	7.81	
(WY)	1990	1990	1989	1977	1978	1978	1975	1977	1934	1977	1989	1989	

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1915-17, 1919-99

ANNUAL TOTAL	48450	36160	
ANNUAL MEAN	133	99.1	99.3
HIGHEST ANNUAL MEAN			178
LOWEST ANNUAL MEAN			31.5
HIGHEST DAILY MEAN	1130	May 21	2530
LOWEST DAILY MEAN	16	Dec 24	3.5
ANNUAL SEVEN-DAY MINIMUM	17	Dec 22	3.8
ANNUAL RUNOFF (AC-FT)	96100	71720	71940
10 PERCENT EXCEEDS	416	219	231
50 PERCENT EXCEEDS	40	38	43
90 PERCENT EXCEEDS	19	18	15
e Estimated			

## GREEN RIVER BASIN

77

09267500 MOSBY CANAL NEAR LAPOINT, UT

LOCATION.--Lat 40°36'30", long 109°53'00", in sec. 27, T. 2 S., R. 18 E., Uintah County, Hydrologic Unit 14060002, on left bank 4.5 mi southeast of Paradise Park Reservoir, 8 mi downstream from diversion from Dry Fork, and 16 mi northwest of Lapoint.

PERIOD OF RECORD.--July 1954 to current year. Seasonal records only since October 1984.

GAGE.--Water-stage recorder and 4 ft. Parshall flume control. Elevation of gage is 9,500 ft above sea level, from topographic map.

REMARKS.--Records fair. No flow is assumed November through April. Canal began diverting in 1942 or 1943 from Dry Fork for irrigation in Deep Creek basin. Since 1975 flow regulated by Julius Park Reservoir, capacity 200 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 46 ft<sup>3</sup>/s July 19, 1995; no flow for extended periods each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	---	---	---	---	---	---	---	26	25	17	11
2	8.8	---	---	---	---	---	---	---	30	25	15	11
3	8.9	---	---	---	---	---	---	---	29	26	9.2	11
4	9.0	---	---	---	---	---	---	---	23	26	8.8	11
5	8.8	---	---	---	---	---	---	---	22	14	9.0	10
6	---	---	---	---	---	---	---	---	22	16	9.4	10
7	---	---	---	---	---	---	---	---	23	18	9.0	10
8	---	---	---	---	---	---	---	---	19	18	8.7	10
9	---	---	---	---	---	---	---	---	16	18	8.8	10
10	---	---	---	---	---	---	---	---	16	18	8.6	10
11	---	---	---	---	---	---	---	---	15	17	8.8	10
12	---	---	---	---	---	---	---	---	15	17	8.6	10
13	---	---	---	---	---	---	---	---	15	16	9.6	10
14	---	---	---	---	---	---	---	---	15	18	11	10
15	---	---	---	---	---	---	---	---	17	23	13	10
16	---	---	---	---	---	---	---	---	25	19	14	10
17	---	---	---	---	---	---	---	---	41	19	11	10
18	---	---	---	---	---	---	---	---	44	18	12	9.9
19	---	---	---	---	---	---	---	---	39	17	12	10
20	---	---	---	---	---	---	---	---	37	20	12	9.9
21	---	---	---	---	---	---	---	---	33	18	11	9.8
22	---	---	---	---	---	---	---	---	32	17	11	9.7
23	---	---	---	---	---	---	---	---	31	17	11	9.7
24	---	---	---	---	---	---	---	---	31	16	11	9.7
25	---	---	---	---	---	---	---	---	32	16	11	9.5
26	---	---	---	---	---	---	---	---	34	14	11	9.5
27	---	---	---	---	---	---	---	---	34	14	11	9.5
28	---	---	---	---	---	---	---	18	33	14	10	9.4
29	---	---	---	---	---	---	---	39	30	14	10	9.3
30	---	---	---	---	---	---	---	32	24	18	10	9.2
31	---	---	---	---	---	---	---	29	---	20	10	---
TOTAL	---	---	---	---	---	---	---	---	803	566	332.5	299.1
MEAN	---	---	---	---	---	---	---	---	26.8	18.3	10.7	9.97
MAX	---	---	---	---	---	---	---	---	44	26	17	11
MIN	---	---	---	---	---	---	---	---	15	14	8.6	9.2
AC-FT	---	---	---	---	---	---	---	---	1590	1120	660	593

## GREEN RIVER BASIN

09271550 ASHLEY CREEK BELOW UNION CANAL DIVERSION NEAR JENSEN, UT

LOCATION.--Lat 40°21'29", long 109°23'13", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 25, T. 5 S., R. 22 E., Uintah County, Hydrologic Unit 14060002, on right bank about 0.5 mi below Union Canal diversion at County road bridge, 1.7 mi above mouth and 2.5 mi southwest of Jensen.

DRAINAGE AREA.--389 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,740 ft above sea level from topographic map.

REMARKS.--Records fair except for estimated daily discharges which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,300 ft<sup>3</sup>/s June 16, 1995, gage height, 6.34 ft from high water mark, and rating curve extended above 1,800 ft<sup>3</sup>/s; minimum daily discharge, 0.03 ft<sup>3</sup>/s Aug. 7, 26, 27, 30, 31, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,500 ft<sup>3</sup>/s May 26, gage height, 5.62 ft; minimum discharge, 1.7 ft<sup>3</sup>/s, Jul 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e10	31	23	e17	e36	e36	6.5	41	865	85	11	45
2	e13	29	23	e18	e37	e35	14	33	831	28	12	48
3	e15	36	24	e19	e38	e32	8.2	61	782	19	10	68
4	e20	34	24	e18	e39	28	7.8	65	540	7.9	10	55
5	e24	31	24	e19	e36	27	8.6	47	393	4.2	10	41
6	e29	31	23	e20	e37	25	8.4	35	331	3.3	9.5	34
7	e30	30	21	e21	e39	26	8.5	34	510	2.1	10	34
8	29	31	e20	e21	e36	26	8.4	33	446	3.2	10	25
9	30	35	e19	e22	e20	27	7.7	46	472	11	8.7	24
10	29	33	e18	e23	e28	26	8.2	71	448	7.7	5.8	18
11	26	31	e17	e23	e25	25	7.4	69	273	2.9	5.2	13
12	27	30	e16	e24	e27	26	6.4	57	290	2.6	6.8	12
13	29	29	e17	e23	e28	27	6.4	54	427	3.3	6.9	11
14	28	29	e17	e22	e29	26	5.5	81	584	5.1	7.0	14
15	27	28	e18	e24	e30	26	5.0	83	588	6.7	8.4	16
16	31	28	e18	e25	e33	25	6.2	73	618	10	10	15
17	35	28	e17	e26	34	25	10	76	770	24	6.0	16
18	35	27	e17	e27	34	24	8.5	66	639	25	6.4	13
19	34	26	e18	e28	35	21	6.8	105	685	26	5.2	11
20	34	25	e18	e27	34	14	7.9	144	670	30	8.9	21
21	35	25	e17	e26	34	8.9	9.3	272	569	29	17	17
22	35	25	e16	e28	33	7.8	22	404	475	28	19	18
23	39	25	e16	e30	32	7.0	26	618	394	19	17	20
24	41	25	e15	e31	32	6.9	32	964	280	14	14	16
25	39	25	e14	e36	34	7.6	36	1230	206	13	13	18
26	40	24	e15	e38	36	6.8	45	1230	175	11	9.6	15
27	41	24	e15	e36	37	6.8	35	1170	123	8.1	9.0	22
28	50	24	e16	e32	e36	6.5	30	1240	118	5.2	14	26
29	39	25	e16	e32	---	6.4	30	1240	54	5.5	21	28
30	36	24	e17	e34	---	6.6	45	1180	45	7.5	19	29
31	34	---	e17	e34	---	6.5	---	1200	---	10	34	---
TOTAL	964	848	566	804	929	604.8	466.7	12022	13601	457.3	354.4	743
MEAN	31.1	28.3	18.3	25.9	33.2	19.5	15.6	388	453	14.8	11.4	24.8
MAX	50	36	24	38	39	36	45	1240	865	85	34	68
MIN	10	24	14	17	20	6.4	5.0	33	45	2.1	5.2	11
AC-FT	1910	1680	1120	1590	1840	1200	926	23850	26980	907	703	1470

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1999, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	35.4	35.9	28.4	26.3	32.9	29.8	16.0	229	359	59.5	14.1	17.5
MAX	114	113	90.3	77.2	87.3	58.7	37.5	453	1121	354	40.4	49.6
(WY)	1998	1998	1998	1998	1998	1998	1998	1997	1995	1993	1993	1997
MIN	13.3	17.1	13.1	12.0	15.2	12.7	2.43	9.97	4.80	.51	.40	1.41
(WY)	1993	1995	1993	1996	1996	1996	1992	1992	1992	1994	1994	1994

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1992 - 1999

ANNUAL TOTAL	46646.8	32360.2	73.5
ANNUAL MEAN	128	88.7	148
HIGHEST ANNUAL MEAN			12.7
LOWEST ANNUAL MEAN			3560
HIGHEST DAILY MEAN	1860	May 21	1240
LOWEST DAILY MEAN	5.4	Apr 27	2.1
ANNUAL SEVEN-DAY MINIMUM	7.0	Apr 25	4.7
ANNUAL RUNOFF (AC-FT)	92520		64190
10 PERCENT EXCEEDS	430		187
50 PERCENT EXCEEDS	41		26
90 PERCENT EXCEEDS	14		7.6
			3.0

e Estimated

## GREEN RIVER BASIN

79

09271550 ASHLEY CREEK BELOW UNION CANAL DIVERSION NEAR JENSEN, UT--Continued

## WATER QUALITY RECORDS

PERIOD OF RECORD.--November 1991 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT 20...	1100	2.41	6.3	1620	8.0	8.5	28
MAR 16...	1600	2.30	25	2080	8.6	12.0	55
MAY 19...	0745	2.81	82	1200	8.3	13.5	22
JUN 16...	1600	4.30	575	220	8.2	16.5	3
JUL 13...	0745	1.80	4.9	2000	8.0	20.0	21
SEP 16...	1310	--	19	1950	8.3	19.0	31



## GREEN RIVER BASIN

09276600 WEST FORK DUCHESNE RIVER ABOVE NORTH FORK, NEAR HANNA, UT

LOCATION.--Lat 40°27'42", long 110°50'10", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 19, T. 1 N., R. 8 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank .2 mi above confluence with North Fork of Duchesne River and 4.5 mi northwest of Hanna.

DRAINAGE AREA.--89.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,880 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. One small diversion for irrigation above station. Flow regulated by Vat diversion, 12 miles above the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 624 ft<sup>3</sup>/s May 28, 1999, gage height, 3.94 ft, maximum gage height, 406 ft, Jun 26, 1995; minimum daily discharge, 6.8 ft<sup>3</sup>/s Aug 30, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 624 ft<sup>3</sup>/s, May 28, gage height, 3.94 ft; minimum daily discharge, 18 ft<sup>3</sup>/s, several days in Apr.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	26	20	e19	e21	e20	e21	37	334	92	43	e36
2	32	25	20	e20	e21	e20	e23	40	381	86	39	e43
3	29	25	21	e19	e20	e20	e22	46	334	83	e37	e41
4	29	22	21	e19	e20	e21	e22	41	275	78	e36	e35
5	29	23	e21	e19	e20	e21	e23	37	244	72	e36	e34
6	28	24	e19	e19	e20	e21	e23	34	246	68	e40	e33
7	28	25	e20	e19	e21	e20	e22	39	289	68	e37	e31
8	27	25	e21	e19	e21	e19	e20	49	343	71	e32	e31
9	27	e25	e21	e19	e21	e19	e19	57	359	65	e31	e30
10	27	e25	e22	e19	e20	e19	e19	50	328	61	e30	e30
11	28	e24	e21	e20	e20	e20	e18	43	294	58	e35	e29
12	28	24	e21	e20	e19	e20	e18	44	296	56	e34	e28
13	27	e24	e21	e20	e19	e19	18	50	306	54	e33	e28
14	27	24	e20	e19	e20	e19	19	55	295	58	e31	e24
15	27	24	e20	e20	e20	e20	18	48	296	58	e29	24
16	27	23	e21	e20	e21	e20	18	45	278	57	e29	24
17	26	23	e21	e20	e21	e21	19	43	255	63	e29	24
18	25	23	e21	e19	e21	e21	22	51	233	54	e32	24
19	26	22	e20	e19	e21	e21	27	97	214	51	e32	25
20	25	e22	e20	e20	e21	e22	32	112	196	52	e33	25
21	25	e22	e20	e20	e21	e22	30	150	181	53	e31	24
22	27	e21	e21	e21	e21	e22	28	176	169	52	e32	24
23	27	22	e21	e21	e22	e21	28	211	155	51	e32	23
24	25	21	e21	e21	e22	e21	28	315	144	49	e32	23
25	28	e21	e21	e20	e22	e22	28	342	134	47	e35	23
26	31	e21	e20	e20	e21	e22	29	400	125	44	e35	22
27	30	e21	e20	e20	e21	e21	37	440	116	45	e36	23
28	28	e21	e19	e19	e21	e21	38	440	109	46	e36	23
29	27	21	e19	e19	---	e20	45	474	103	44	e36	23
30	30	21	e20	e19	---	e20	40	441	99	48	e37	23
31	27	---	e19	e20	---	e20	---	417	---	55	e38	---
TOTAL	856	690	633	608	579	635	754	4824	7131	1839	1058	830
MEAN	27.6	23.0	20.4	19.6	20.7	20.5	25.1	156	238	59.3	34.1	27.7
MAX	32	26	22	21	22	22	45	474	381	92	43	43
MIN	25	21	19	19	19	19	18	34	99	44	29	22
AC-FT	1700	1370	1260	1210	1150	1260	1500	9570	14140	3650	2100	1650

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1999, BY WATER YEAR (WY)

MEAN	18.8	17.4	15.6	14.3	14.6	17.5	28.1	87.1	109	41.7	25.5	21.4
MAX	29.0	26.1	22.9	19.6	20.7	23.3	41.3	160	254	90.6	42.4	35.8
(WY)	1998	1998	1998	1999	1999	1998	1997	1998	1995	1998	1997	1997
MIN	10.6	11.3	10.9	10.9	10.4	11.6	17.1	28.9	15.4	15.5	11.3	9.02
(WY)	1993	1990	1993	1993	1990	1992	1992	1994	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1990 - 1999
ANNUAL TOTAL	22532	20437	
ANNUAL MEAN	61.7	56.0	34.3
HIGHEST ANNUAL MEAN			62.3
LOWEST ANNUAL MEAN			16.7
HIGHEST DAILY MEAN	444	474	474
LOWEST DAILY MEAN	17	18	6.8
ANNUAL SEVEN-DAY MINIMUM	17	18	7.4
ANNUAL RUNOFF (AC-FT)	44690	40540	24850
10 PERCENT EXCEEDS	209	129	54
50 PERCENT EXCEEDS	28	25	20
90 PERCENT EXCEEDS	18	20	12

e Estimated

LOCATION.--Lat 40°18'01", long 110°36'06", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 18, T. 2 S., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank on upstream side of bridge on State Highway 35, 6 mi upstream from Rock Creek, and 7 mi southeast of Tabiona.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,190 ft above sea level, from topographic map. Prior to Oct. 15, 1934, nonrecording gage, and Oct. 16, 1934 to Nov. 6, 1953, water-stage recorder at site 0.5 mi upstream at various datums. Nov. 7, 1953 to Nov. 7, 1972, at site 1 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Several diversions above station for irrigation, including a transbasin diversion through Duchesne Tunnel 20 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft<sup>3</sup>/s June 16, 1963, gage height, 7.97 ft from floodmarks, caused by failure of Little Deer Creek Dam 20 mi upstream. Rating curve extended above 400 ft<sup>3</sup>/s on basis of slope-area measurement and area-velocity study of peak flow; minimum discharge, 18 ft<sup>3</sup>/s June 5, 6, 1992.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 19	0545	*1,770	*4.89				
Minimum discharge, 73 ft <sup>3</sup> /s, Feb 20.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	132	112	97	94	95	100	148	773	359	105	141
2	133	130	112	92	91	93	132	148	820	338	98	176
3	132	128	110	e93	95	91	124	155	819	315	89	163
4	132	125	112	e95	92	92	125	151	716	303	89	150
5	134	128	99	96	93	87	137	142	663	282	95	140
6	134	131	97	96	92	87	124	136	631	264	102	133
7	133	123	112	96	92	89	116	138	712	255	95	130
8	132	133	112	94	93	88	94	150	1020	258	88	129
9	130	123	109	92	94	89	95	166	1160	239	90	129
10	129	127	109	95	e92	87	89	167	1200	224	89	129
11	128	127	116	96	92	88	92	151	1080	213	97	127
12	128	124	105	95	e92	86	93	148	1180	205	95	124
13	129	125	104	94	e92	86	92	165	1340	198	89	122
14	128	125	104	92	92	89	96	182	1330	203	86	121
15	127	126	105	95	92	93	95	172	1350	217	82	117
16	129	123	104	93	90	94	92	165	1420	202	81	108
17	129	123	105	94	94	95	93	158	1530	223	83	108
18	131	123	105	94	91	98	96	162	1510	193	84	105
19	127	118	103	96	92	101	102	193	1420	183	86	106
20	122	111	105	96	87	104	113	221	1350	176	92	111
21	127	119	e109	98	92	105	121	267	1230	174	87	107
22	135	121	107	e99	91	99	117	309	1160	162	90	107
23	138	119	e107	97	91	101	119	389	1060	146	90	106
24	134	118	e109	96	91	99	119	563	772	126	90	108
25	142	114	e110	95	93	106	116	669	680	116	106	103
26	144	116	e109	95	92	108	116	787	632	111	113	104
27	142	115	e106	93	88	103	125	853	515	102	117	103
28	133	116	e103	89	93	96	137	890	430	95	126	103
29	130	114	102	e89	---	98	166	1000	394	91	123	110
30	141	113	98	e90	---	130	157	933	379	100	130	108
31	137	---	98	e92	---	102	---	912	---	118	148	---
TOTAL	4101	3670	3298	2924	2573	2979	3393	10790	29276	6191	3035	3628
MEAN	132	122	106	94.3	91.9	96.1	113	348	976	200	97.9	121
MAX	144	133	116	99	95	130	166	1000	1530	359	148	176
MIN	122	111	97	89	87	86	89	136	379	91	81	103
AC-FT	8130	7280	6540	5800	5100	5910	6730	21400	58070	12280	6020	7200

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1999, BY WATER YEAR (WY)

MEAN	116	119	107	95.2	92.5	99.4	153	487	630	202	108	107
MAX	230	180	151	147	124	153	348	1165	1657	690	216	233
(WY)	1983	1983	1984	1966	1986	1986	1943	1952	1921	1975	1983	1927
MIN	37.5	57.6	67.0	59.5	53.2	53.8	53.9	63.9	54.7	40.3	44.1	48.7
(WY)	1935	1935	1993	1935	1935	1935	1977	1992	1992	1994	1977	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1919 - 1999
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ANNUAL TOTAL	81780		75858			
ANNUAL MEAN	224		208		193	
HIGHEST ANNUAL MEAN					354	1922
LOWEST ANNUAL MEAN					68.9	1992
HIGHEST DAILY MEAN	1150	Jun 3	1530	Jun 17	2490	Jun 13 1921
LOWEST DAILY MEAN	74	Feb 27	81	Aug 16	21	Jun 5 1992
ANNUAL SEVEN-DAY MINIMUM	77	Feb 25	84	Aug 13	30	May 31 1992
ANNUAL RUNOFF (AC-FT)	162200		150500		139900	
10 PERCENT EXCEEDS	704		408		400	
50 PERCENT EXCEEDS	124		114		110	
90 PERCENT EXCEEDS	85		91		74	

e Estimated

## GREEN RIVER BASIN

09279000 ROCK CREEK NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°29'36", long 110°34'39", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 9, T. 1 N., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on right bank at Lower Stillwater damsite "B", 0.1 mi upstream from Corral Creek, 6.8 mi downstream from South Fork, and 11.9 mi northwest of Mountain Home.

DRAINAGE AREA.--147 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area, WDR UT-95-1; 1994.

GAGE.--Water-stage recorder. Elevation of gage is 7,250 ft above sea level, from river-profile map. Prior to Apr. 12, 1939, nonrecording gage at site 300 ft upstream at different datum.

REMARKS.--Records good to fair. Flow partially regulated by Upper Stillwater Reservoir 8 mi upstream, beginning Nov. 3, 1987. Total capacity, 32,000 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,920 ft<sup>3</sup>/s June 18, 1971, gage height, 5.98 ft; maximum gage height, 6.26 ft June 4, 1986, from floodmarks; minimum recorded, 7.0 ft<sup>3</sup>/s Mar. 13, 1940, Mar. 20, 1942 (probably caused by ice jams above station).

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 1,050 ft<sup>3</sup>/s, Jun 21, gage height, 4.61 ft; minimum discharge, 44 ft<sup>3</sup>/s, May 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	124	118	114	104	99	110	64	687	467	239	271
2	123	124	117	116	107	98	109	61	701	486	228	290
3	124	122	117	119	103	98	109	e60	703	660	225	285
4	123	120	117	e112	103	e97	109	e55	697	628	226	274
5	122	123	112	112	104	99	108	52	686	552	233	267
6	122	123	e112	112	103	97	110	51	676	500	229	265
7	116	120	115	111	103	96	113	51	674	487	223	263
8	99	123	118	112	104	98	114	51	668	503	220	261
9	75	121	116	117	104	110	114	51	670	435	218	260
10	63	120	116	110	e103	109	112	50	684	386	219	263
11	61	121	118	110	e103	109	111	48	688	357	224	270
12	61	121	117	110	105	108	111	48	692	321	219	268
13	61	121	117	110	102	109	114	53	716	312	216	266
14	60	122	117	110	101	109	112	60	752	316	214	259
15	60	122	117	109	100	110	114	54	765	356	211	257
16	62	121	117	110	104	111	113	51	760	311	209	260
17	86	121	117	108	101	110	113	61	785	335	205	268
18	109	121	117	109	100	111	114	88	776	283	214	266
19	123	119	116	109	100	114	115	102	901	267	236	268
20	122	118	115	109	105	114	117	135	992	261	277	266
21	121	120	e112	106	100	112	117	170	1010	257	279	262
22	126	119	e110	110	97	112	115	204	952	241	273	259
23	131	119	107	107	98	111	127	247	880	222	271	258
24	126	119	e115	108	98	110	129	317	806	213	269	256
25	131	118	122	107	98	110	127	395	798	199	270	253
26	129	118	126	107	97	110	119	467	770	190	271	250
27	128	119	121	106	104	108	101	531	764	189	271	241
28	125	119	119	110	98	106	91	582	629	183	272	194
29	126	118	117	e109	---	107	92	629	531	193	270	149
30	131	118	116	109	---	111	77	631	470	214	275	115
31	125	---	115	103	---	110	---	653	---	244	275	---
TOTAL	3295	3614	3606	3411	2849	3313	3337	6072	22283	10568	7481	7584
MEAN	106	120	116	110	102	107	111	196	743	341	241	253
MAX	131	124	126	119	107	114	129	653	1010	660	279	290
MIN	60	118	107	103	97	96	77	48	470	183	205	115
AC-FT	6540	7170	7150	6770	5650	6570	6620	12040	44200	20960	14840	15040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1999, BY WATER YEAR (WY)

	MEAN	55.8	53.8	51.2	47.8	46.7	49.9	48.7	131	279	216	99.0	82.8
MAX	133	135	137	123	111	116	111	111	431	743	599	241	253
(WY)	1998	1998	1998	1998	1998	1998	1998	1999	1997	1999	1998	1999	1999
MIN	32.0	30.2	29.5	27.3	29.0	29.9	33.5	41.3	43.7	44.0	41.8	38.4	
(WY)	1990	1990	1991	1991	1988	1988	1995	1992	1992	1991	1991	1993	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1988 - 1999	
ANNUAL TOTAL	70317		77413			
ANNUAL MEAN	193		212		97.0	
HIGHEST ANNUAL MEAN					212	
LOWEST ANNUAL MEAN					40.1	
HIGHEST DAILY MEAN	1310		1010		1310	
LOWEST DAILY MEAN	45		48		22	
ANNUAL SEVEN-DAY MINIMUM	47		50		26	
ANNUAL RUNOFF (AC-FT)	139500		153500		70250	
10 PERCENT EXCEEDS	351		531		194	
50 PERCENT EXCEEDS	122		119		45	
90 PERCENT EXCEEDS	54		98		32	

e Estimated

## 09279150 DUCHESNE RIVER ABOVE KNIGHT DIVERSION, NEAR DUCHESNE, UT

LOCATION.--Lat 40°16'14", long 110°26'31", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 34, T. 2 S., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank at downstream edge of bridge on State Highway 35, 1.7 mi up-stream from Knight diversion dam, 3.9 mi downstream from Rock Creek, and 7.7 mi north-northwest of Duchesne.

DRAINAGE AREA.--623 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,840 ft above sea level, from topographic map. Prior to Apr. 25, 1973, at site 150 ft upstream at different gage datum.

REMARKS.--Records good. Estimates are fair. Several diversions above station for irrigation, including a transbasin diversion to the Great Basin through Duchesne Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,970 ft<sup>3</sup>/s June 6, 1986, gage height, 7.52 ft, from flood-marks; minimum, 37 ft<sup>3</sup>/s Jan. 31, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 20	0800	*2,740	*7.26				

Minimum discharge, 153 ft<sup>3</sup>/s, Feb 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	269	240	229	214	218	230	231	1270	749	335	430
2	253	267	242	215	208	215	222	223	1300	726	318	539
3	255	260	238	214	216	210	222	230	1370	871	309	487
4	253	250	241	213	208	212	224	221	1220	862	307	447
5	253	257	223	228	213	201	215	205	1170	761	326	424
6	249	268	207	226	209	202	220	196	1110	686	324	411
7	252	253	217	223	211	206	220	194	1140	649	314	400
8	237	271	225	217	215	202	221	205	1410	687	300	398
9	217	255	239	214	215	219	224	228	1610	592	316	400
10	195	258	225	220	231	217	212	226	1640	520	314	396
11	191	260	232	220	196	218	217	198	1540	480	327	405
12	189	256	235	220	206	215	216	185	1600	443	318	392
13	187	256	237	218	213	215	218	199	1760	420	303	387
14	189	258	237	209	212	219	221	248	1940	420	294	374
15	190	258	235	220	208	223	216	223	2120	502	287	373
16	201	256	235	215	203	225	210	204	2190	427	281	359
17	208	257	235	219	215	227	209	189	2360	494	275	366
18	236	258	234	217	207	229	211	214	2290	426	285	361
19	259	248	229	222	210	238	217	240	2370	390	291	371
20	252	241	220	220	198	243	232	314	2490	372	360	377
21	251	249	208	226	209	243	247	391	2350	367	365	372
22	262	254	196	208	204	239	239	465	2170	349	360	370
23	276	251	e180	220	204	240	255	566	1980	317	348	364
24	265	249	e180	221	203	237	262	753	1530	297	339	362
25	284	243	e185	218	208	242	251	922	1420	299	358	356
26	289	246	e192	216	206	246	247	1050	1340	281	370	346
27	286	246	e209	214	200	238	236	1150	1220	268	375	345
28	272	247	e211	200	213	226	244	1250	1030	260	391	308
29	265	245	e219	205	---	225	306	1400	871	252	386	272
30	287	243	e225	210	---	235	262	1370	772	287	381	235
31	277	---	232	211	---	235	---	1380	---	365	434	---
TOTAL	7533	7629	6863	6728	5855	6960	6926	15070	48583	14819	10291	11427
MEAN	243	254	221	217	209	225	231	486	1619	478	332	381
MAX	289	271	242	229	231	246	306	1400	2490	871	434	539
MIN	187	241	180	200	196	201	209	185	772	252	275	235
AC-FT	14940	15130	13610	13340	11610	13810	13740	29890	96360	29390	20410	22670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1999, BY WATER YEAR (WY)

	197	195	168	158	152	165	212	645	1160	446	197	179
MEAN	197	195	168	158	152	165	212	645	1160	446	197	179
MAX	430	308	266	242	222	242	464	1525	2929	1447	443	381
(WY)	1983	1983	1998	1998	1998	1998	1985	1984	1986	1975	1983	1999
MIN	100	124	107	117	116	103	86.3	106	94.0	94.7	84.4	77.6
(WY)	1978	1978	1991	1978	1977	1977	1977	1990	1992	1994	1996	1992

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1971 - 1999
ANNUAL TOTAL	157050	148684	
ANNUAL MEAN	430	407	323
HIGHEST ANNUAL MEAN			580
LOWEST ANNUAL MEAN			118
HIGHEST DAILY MEAN	2420	2490	4700
LOWEST DAILY MEAN	180	180	54
ANNUAL SEVEN-DAY MINIMUM	189	192	60
ANNUAL RUNOFF (AC-FT)	311500	294900	233900
10 PERCENT EXCEEDS	983	871	636
50 PERCENT EXCEEDS	258	247	175
90 PERCENT EXCEEDS	209	207	113

e Estimated

## GREEN RIVER BASIN

09288000 CURRANT CREEK NEAR FRUITLAND, UT

LOCATION.--Lat 40°12'01", long 110°54'25", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 21, T. 3 S., R. 9 W., Uintah Meridian, Wasatch County, Hydrologic Unit 14060004, on left bank 30 ft downstream from Deep Creek, 150 ft upstream from bridge on U.S. Highway 40 and 3.5 mi southwest of Fruitland.

DRAINAGE AREA.--140 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1934 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 6,670 ft above sea level, from topographic map. Aug. 6, 1952 to Nov. 8, 1966, water-stage recorder at site 150 ft downstream at datum 1.30 ft lower. See WSP 1733 for history of changes prior to Aug. 6, 1952.

REMARKS.--Records good except for estimated day which are fair. Currant Creek feeder canal, constructed by the Bureau of Reclamation in 1936, diverts water from headwaters of Currant Creek to Strawberry Reservoir, from which it is diverted through Strawberry Tunnel to the Great Basin for irrigation in Strawberry Valley project. Beginning in 1962, Deep Creek was diverted intermittently into private fish ponds and entered Currant Creek 400 ft below gage. However, since approximately 1976 when the upstream pond washed out, Deep Creek has been entering Currant Creek 30 ft above gage. Flow partially regulated by Currant Creek Reservoir 15 miles upstream, beginning Oct. 4, 1982. Total capacity, 15,670 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,260 ft<sup>3</sup>/s May 4, 1952, gage height, 2.72 ft, site and datum then in use; maximum gage height, 5.92 ft, Jan. 27, 1974, backwater from ice; minimum recorded, 3.6 ft<sup>3</sup>/s Aug. 9, 10, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 185 ft<sup>3</sup>/s, May 25, gage height, 2.43 ft; minimum daily discharge, 36 ft<sup>3</sup>/s, Dec 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	49	58	55	49	55	46	63	161	78	54	48
2	55	49	58	52	45	52	51	62	162	77	52	54
3	52	48	58	48	49	52	52	65	165	78	52	53
4	51	49	59	48	47	50	53	62	162	76	52	52
5	52	49	52	53	48	48	52	60	157	77	51	51
6	52	51	47	54	48	48	53	57	158	77	52	50
7	51	48	48	53	49	48	52	57	159	79	50	48
8	51	51	54	52	51	48	54	59	155	80	50	47
9	51	49	54	52	51	49	53	61	152	77	50	47
10	51	49	45	52	53	49	51	58	155	76	51	48
11	52	50	51	51	44	48	52	57	157	73	52	50
12	53	49	58	51	43	49	52	57	157	68	51	48
13	52	50	56	50	46	49	52	64	158	66	50	48
14	53	52	54	49	49	51	53	69	156	71	49	47
15	53	53	55	50	47	53	52	63	155	68	49	48
16	53	53	59	50	47	53	51	61	155	70	49	48
17	53	53	57	51	50	53	51	59	156	69	48	48
18	54	54	57	51	49	54	51	59	155	67	48	47
19	54	53	55	52	49	55	51	87	155	67	48	49
20	53	52	51	51	47	55	52	98	152	67	49	48
21	53	54	42	51	49	54	52	141	129	67	49	48
22	54	54	36	48	47	53	51	164	116	66	48	48
23	53	54	41	49	47	53	53	170	115	64	48	47
24	54	55	46	50	48	51	59	177	113	58	48	46
25	58	55	56	50	48	51	59	181	110	54	49	46
26	60	56	58	50	48	51	56	177	99	54	49	46
27	57	57	56	48	47	50	59	170	91	54	49	47
28	53	57	56	42	52	47	60	165	81	54	50	49
29	49	58	57	43	---	47	70	165	79	54	48	50
30	53	58	56	44	---	47	67	165	79	58	49	50
31	51	---	56	47	---	46	---	163	---	58	50	---
TOTAL	1653	1569	1646	1547	1347	1569	1620	3116	4154	2102	1544	1456
MEAN	53.3	52.3	53.1	49.9	48.1	50.6	54.0	101	138	67.8	49.8	48.5
MAX	62	58	59	55	53	55	70	181	165	80	54	54
MIN	49	48	36	42	43	46	46	57	79	54	48	46
AC-FT	3280	3110	3260	3070	2670	3110	3210	6180	8240	4170	3060	2890

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1999, BY WATER YEAR (WY)

	34.3	34.1	32.2	32.2	33.3	37.8	51.0	65.2	67.2	43.0	39.0	38.4
MEAN	34.3	34.1	32.2	32.2	33.3	37.8	51.0	65.2	67.2	43.0	39.0	38.4
MAX	53.3	52.3	53.1	49.9	48.1	60.7	84.3	117	216	84.9	69.5	64.0
(WY)	1999	1999	1999	1999	1999	1986	1986	1986	1998	1998	1998	1998
MIN	25.7	24.9	22.7	23.2	24.3	26.9	31.6	27.5	25.4	25.8	24.6	24.6
(WY)	1989	1991	1992	1992	1989	1992	1992	1992	1992	1992	1988	1988

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1986 - 1999	
ANNUAL TOTAL	27497		23323			
ANNUAL MEAN	75.3		63.9		42.3	
HIGHEST ANNUAL MEAN					74.6	
LOWEST ANNUAL MEAN					26.1	
HIGHEST DAILY MEAN	242	Jun 21	181	May 25	242	Jun 21 1998
LOWEST DAILY MEAN	35	Feb 27	36	Dec 22	12	Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	38	Feb 27	45	Jan 27	19	Dec 20 1990
ANNUAL RUNOFF (AC-FT)	54540		46260		30660	
10 PERCENT EXCEEDS	113		103		62	
50 PERCENT EXCEEDS	58		52		35	
90 PERCENT EXCEEDS	43		48		25	

## 09288180 STRAWBERRY RIVER NEAR DUCHESNE, UT

LOCATION.--Lat 40°09'17", long 110°33'15", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 3, T. 4 S., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on right bank 150 ft downstream from County Road bridge, 2,000 ft upstream from maximum high-water line of Starvation Reservoir, and 7.9 mi west of Duchesne.

DRAINAGE AREA.--917 mi<sup>2</sup> (includes approximately 170 mi<sup>2</sup> tributary to Strawberry Reservoir).

PERIOD OF RECORD.--May 1968 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,722 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Strawberry Reservoir since July 14, 1912. Capacity, 1,106,500 acre-ft since June 30, 1973; 283,000 acre-ft prior to June 30, 1973. New earthfilled dam located 7 mi below old dam was completed in September 1972 and storage began June 30, 1973. The elevation of new reservoir reached the elevation of the old reservoir on March 15 and the old dam was breached on June 6, 1985.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft<sup>3</sup>/s May 31, 1983, gage height, 8.29 ft; maximum gage height, 10.16 ft Jan. 2, 1983, result of an ice jam; minimum recorded, 17 ft<sup>3</sup>/s June 20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 820 ft<sup>3</sup>/s, Jun 3, gage height, 7.21 ft; minimum daily discharge, 115 ft<sup>3</sup>/s, Sep 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	274	263	e252	251	264	262	200	457	173	e151	127
2	294	224	263	e250	246	268	263	e190	445	170	e152	215
3	286	192	263	e248	258	262	266	e192	465	166	e149	199
4	288	226	264	e250	247	270	268	e190	437	162	e148	145
5	298	264	255	e248	253	258	265	e191	437	164	e148	136
6	291	269	258	246	254	254	264	e193	448	162	e150	132
7	293	266	255	247	249	251	265	e194	425	157	e150	128
8	287	272	268	246	251	252	267	e193	403	156	e148	125
9	288	267	258	242	258	262	270	e192	376	153	e148	125
10	270	265	256	249	270	264	269	e195	366	152	e148	127
11	266	267	270	247	257	264	268	e193	304	147	e149	126
12	263	265	257	249	260	266	269	e192	293	144	149	125
13	261	265	259	250	259	260	272	e194	284	141	152	124
14	237	266	256	242	257	260	270	209	284	143	154	122
15	265	268	255	249	252	259	262	208	277	155	148	122
16	269	268	262	248	247	267	246	203	276	152	145	121
17	271	268	261	249	258	268	237	197	281	176	143	121
18	270	269	264	249	254	275	243	190	278	154	140	122
19	270	265	259	251	255	282	266	206	270	149	127	125
20	270	260	254	251	248	291	234	226	256	151	141	129
21	269	263	256	257	260	262	235	247	249	147	147	120
22	274	264	e254	248	254	254	234	299	233	143	135	119
23	274	264	e250	256	253	284	236	336	226	139	134	119
24	271	263	e250	256	248	260	234	389	222	135	127	121
25	282	220	e253	253	255	264	236	e395	219	131	131	119
26	288	238	e255	253	251	265	238	e400	209	129	123	121
27	281	262	e252	e253	246	266	229	e415	201	131	136	124
28	278	264	e250	e252	252	262	224	423	194	139	137	119
29	276	264	e250	e251	---	259	248	447	179	158	131	122
30	290	263	e253	251	---	260	232	460	173	e153	125	115
31	280	---	e255	250	---	255	---	430	---	e150	138	---
TOTAL	8600	7745	7978	7743	7103	8188	7572	8189	9167	4682	4404	3895
MEAN	277	258	257	250	254	264	252	264	306	151	142	130
MAX	300	274	270	257	270	291	272	460	465	176	154	215
MIN	237	192	250	242	246	251	224	190	173	129	123	115
AC-FT	17060	15360	15820	15360	14090	16240	15020	16240	18180	9290	8740	7730

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1999, BY WATER YEAR (WY)

	MEAN	110	98.3	97.2	92.4	98.3	117	176	410	291	143	118	116
MAX	378	258	372	362	336	293	387	1031	1181	518	403	371	
(WY)	1984	1999	1984	1984	1984	1983	1983	1984	1983	1983	1983	1984	
MIN	37.1	57.0	47.9	40.8	48.5	59.6	57.5	44.2	32.9	36.9	29.9	33.8	
(WY)	1978	1978	1978	1977	1971	1977	1977	1977	1977	1977	1977	1977	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1968 - 1999

ANNUAL TOTAL	107747	85266		
ANNUAL MEAN	295	234		155
HIGHEST ANNUAL MEAN				443
LOWEST ANNUAL MEAN				47.5
HIGHEST DAILY MEAN	990	465	Jun 3	2010
LOWEST DAILY MEAN	129	115	Sep 30	18
ANNUAL SEVEN-DAY MINIMUM	136	120	Sep 24	20
ANNUAL RUNOFF (AC-FT)	213700	169100		112400
10 PERCENT EXCEEDS	544	284		339
50 PERCENT EXCEEDS	263	252		96
90 PERCENT EXCEEDS	144	135		60

e Estimated



## GREEN RIVER BASIN

09289500 LAKE FORK RIVER/ABOVE MOON LAKE, NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°36'24", long 110°31'35", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 35, T. 3 N., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, on right bank 2,000 ft upstream from head of Moon Lake at maximum stage, 2 mi upstream from Brown Duck Creek, 16 mi northeast of Mountain Home.

DRAINAGE AREA.--77.9 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1933 to September 1934 (published as West Fork of Lake Fork above Moon Lake, near Mountain Home); July 1942 to September 1955; October 1963 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,180 ft above sea level, from topographic map. April 1933 to September 1934, at site 2.5 mi upstream at different datum. July 13, 1942 to Oct. 1, 1984, at datum 1.00 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft<sup>3</sup>/s June 27, 1995, gage height, 6.44 ft, minimum daily, 12 ft<sup>3</sup>/s several days in 1993, 1996 and 1997.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 18	2200	*2,550	*6.80				
Minimum daily discharge, 28 ft <sup>3</sup> /s, Apr 8.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	63	46	e32	e29	e33	e30	43	600	684	141	110
2	84	63	46	e31	e29	e34	e30	45	555	624	129	240
3	82	59	45	e30	e29	e33	e30	46	432	580	124	248
4	82	52	45	e29	e29	e33	e29	44	339	479	125	200
5	79	58	e45	e30	e29	e31	e30	42	284	398	231	168
6	82	59	e44	e30	e30	e30	e29	42	258	354	160	150
7	84	59	e45	e30	e31	e29	e29	49	294	391	131	134
8	77	60	e43	e31	e31	e29	e28	61	346	381	119	122
9	72	57	e41	e31	e32	e29	e29	66	425	303	111	114
10	70	59	e41	e32	e34	e30	e29	60	395	263	105	108
11	66	58	e41	e31	e33	e29	e29	58	334	237	109	104
12	65	56	e41	e30	e32	e30	e29	56	480	216	102	97
13	63	57	e42	e31	e32	e30	e30	64	702	202	94	93
14	61	56	e39	e32	e31	e31	e30	70	842	235	88	89
15	61	56	e37	e32	e30	e31	e31	65	1040	235	84	87
16	63	55	e35	e31	e29	e32	31	61	1230	213	81	84
17	63	54	e33	e32	e29	e31	32	59	1310	228	81	82
18	62	54	e31	e31	e30	e31	38	66	1480	186	79	80
19	62	52	e30	e32	e30	e30	47	91	1480	197	83	85
20	61	e52	e30	e31	e30	e30	51	114	1460	203	109	88
21	60	e51	e30	e30	e31	e30	46	140	1220	182	118	78
22	65	51	e31	e29	e31	e29	42	176	1310	181	98	73
23	67	50	e31	e30	e32	e29	39	227	1300	183	100	70
24	61	49	e32	e31	e32	e29	38	343	1100	176	95	69
25	66	49	e30	e31	e33	e30	37	466	1150	167	92	65
26	67	48	e31	e30	e34	e29	38	513	1040	156	88	61
27	69	48	e33	e29	e33	e29	42	628	851	157	96	59
28	66	48	e34	e29	e33	e29	45	810	751	158	103	59
29	65	48	e33	e29	---	e29	49	931	714	169	94	58
30	67	47	e33	e30	---	e29	44	851	706	160	104	57
31	63	---	e33	e31	---	e29	---	804	---	171	151	---
TOTAL	2138	1628	1151	948	868	937	1061	7091	24428	8469	3425	3132
MEAN	69.0	54.3	37.1	30.6	31.0	30.2	35.4	229	814	273	110	104
MAX	84	63	46	32	34	34	51	931	1480	684	231	248
MIN	60	47	30	29	29	29	28	42	258	156	79	57
AC-FT	4240	3230	2280	1880	1720	1860	2100	14060	48450	16800	6790	6210

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

MEAN	53.3	39.4	30.5	26.0	23.9	24.4	40.2	250	553	229	97.6	71.1
MAX	142	80.1	61.3	40.1	39.5	46.5	89.5	578	946	772	212	174
(WY)	1983	1983	1983	1983	1988	1988	1969	1969	1995	1995	1965	1997
MIN	26.3	22.9	15.0	14.8	13.6	15.0	18.6	65.9	186	61.9	46.5	32.1
(WY)	1989	1980	1993	1993	1997	1977	1993	1977	1992	1994	1988	1988

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1964 - 1999
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ANNUAL TOTAL	55993		55276			
ANNUAL MEAN	153		151		120	
HIGHEST ANNUAL MEAN					195	1995
LOWEST ANNUAL MEAN					60.4	1977
HIGHEST DAILY MEAN	1280	Jun 26	1480	Jun 18	2120	Jun 27 1995
LOWEST DAILY MEAN	19	Feb 19	28	Apr 8	12	Feb 6 1989
ANNUAL SEVEN-DAY MINIMUM	20	Feb 18	29	Apr 6	13	Apr 10 1993
ANNUAL RUNOFF (AC-FT)	111100		109600		86910	
10 PERCENT EXCEEDS	429		393		304	
50 PERCENT EXCEEDS	61		58		43	
90 PERCENT EXCEEDS	21		30		21	

e Estimated

## GREEN RIVER BASIN

87

## 09290500 MOON LAKE RESERVOIR NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°33'43", long 110°29'21", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 19, T. 2 N., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, at dam on Lake Fork River, 1.4 mi downstream from Brown Duck Creek, 10.5 mi upstream from Yellowstone River, and 12.5 mi northwest of Mountain Home.

DRAINAGE AREA.--108 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1937 to current year.

REVISED RECORDS.--WDR UT-77-1: 1975.

GAGE.--Nonrecording gage read once daily on days shown. Datum of gage is 8064.16 ft above sea level, (levels by Bureau of Reclamation).

REMARKS.--Reservoir formed by earthfill, rock-faced dam with concrete core. Storage began Dec. 9, 1937. Capacity, 35,760 acre-ft between elevations 8,072.00 ft, crest of original outlet of lake, about 2,000 ft upstream from dam, and 8,137.00 ft, top of spillway gates. Elevation of spillway crest is 8,121.00 ft and elevation of sill of outlet works is 8,064.16 ft. Dead storage between sill of outlet and crest of original outlet of lake, 2,050 acre-ft. Total dead storage, 13,740 acre-ft. Figures given herein represent usable contents. Water is used for irrigation on lands under Moon Lake Water Users Association and Uintah Indian Irrigation projects.

COOPERATION.--Capacity table provided by Bureau of Reclamation. Gage heights furnished by Moon Lake Water Users Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 37,560 acre-ft July 10, 11, 1950; elevation, 8,139.30 ft; minimum observed, 226 acre-ft Sept. 30, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 35,760 acre-ft Apr 1, 11, elevation 8,137.0 ft; minimum contents observed, 24,620 acre-ft Oct 1, elevation 8121.7.

## MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Oct 31.....	--	*26,000	+1180
Nov 30.....	--	*28,530	+2530
Dec 31.....	--	*30,710	+2181
CAL YR 1998.....	--	--	-290
Jan 31.....	--	*32,560	+1850
Feb 28.....	--	*34,000	+1440
Mar 31.....	--	*35,380	+1380
Apr 30.....	--	*33,020	-2360
May 31.....	--	*32,860	-160
Jun 30.....	--	*35,380	+2520
Jul 31.....	--	*24,910	-470
Aug 31.....	--	*27,460	-7450
Sep 30.....	--	*25720	-1740
WTR YR 1999.....	--	--	+900

\*No gage reading, contents interpolated.  
Readings normally made on the first of each month.

## GREEN RIVER BASIN

09291000 LAKE FORK RIVER BELOW MOON LAKE, NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°33'23", long 110°29'02", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 20, T. 2 N., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, on right bank 2,000 ft downstream from Moon Lake Dam, 2 mi downstream from Brown Duck Creek, and 12 mi northwest of Mountain Home.

DRAINAGE AREA.--112 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1921 to September 1934 (fragmentary), April 1942 to current year. Published as West Fork of Lake Fork near Mountain Home 1921-34, and as Lake Fork below Moon Lake, near Mountain Home 1942-65.

REVISED RECORDS.--WSP 1313: 1930 (M). WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,970 ft above sea level by barometer. Prior to April 1942, at damsite 2,000 ft upstream at different datum.

REMARKS.--Records fair. Flow regulated by Moon Lake Reservoir (see station 09290500). No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 2,180 ft<sup>3</sup>/s June 19, 1949 (gage height, 4.83 ft), from rating curve extended above 860 ft<sup>3</sup>/s; maximum gage height, 5.46 ft June 26, 1944; no flow at times when reservoir gates are closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,390 ft<sup>3</sup>/s, Jun 17, gage height, 4.45 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	87	3.0	e3.9	e3.8	e3.5	7.9	121	673	449	262	250
2	1.9	103	3.2	e3.9	e3.8	e3.5	7.9	121	786	623	260	226
3	1.8	120	3.5	e4.0	e3.8	e3.5	7.9	120	774	600	261	76
4	2.1	120	3.7	e4.0	e3.8	e3.5	7.9	121	751	531	260	18
5	2.1	54	e3.6	e4.0	e3.8	e3.5	7.9	101	728	436	261	19
6	1.9	e.00	e3.5	e4.0	e3.8	e3.5	7.9	57	702	367	264	20
7	37	e.00	e3.5	e4.0	e3.8	e3.5	7.9	16	683	372	271	20
8	94	e.00	e3.5	e4.0	e3.8	e3.5	7.9	5.1	669	450	268	20
9	104	e.00	e3.5	e4.0	e3.8	e3.5	7.9	88	658	339	286	20
10	104	e.00	e3.5	e4.0	e3.8	e3.5	7.9	218	656	301	300	149
11	103	e.00	e3.5	e4.0	e3.8	e3.5	7.9	236	648	265	303	209
12	57	e.00	e3.6	e4.0	e3.6	e3.5	7.9	328	641	250	300	212
13	85	e.00	e3.7	e4.0	e3.6	e3.5	7.9	327	656	240	299	232
14	85	e.00	e3.6	e3.9	e3.6	e3.5	22	326	606	236	298	250
15	85	e.00	e3.5	e3.9	e3.6	e3.5	87	322	580	239	294	248
16	84	.31	e3.5	e3.9	e3.6	e3.5	144	323	762	240	309	245
17	84	1.0	e3.5	e3.9	e3.6	e3.5	142	323	1150	259	321	236
18	84	1.1	e3.5	e3.9	e3.6	e3.5	141	319	1310	256	318	236
19	84	1.1	e3.5	e3.9	e3.6	e3.5	141	316	1270	246	312	257
20	84	1.2	e3.5	e3.9	e3.7	e3.5	158	315	1250	244	309	191
21	84	.62	e3.5	e3.9	e3.7	3.8	191	314	1070	240	307	148
22	83	e.00	e3.7	e3.9	e3.7	3.8	147	313	950	238	307	149
23	82	e.00	e3.8	e3.9	e3.7	3.9	123	312	1050	236	276	147
24	82	e.00	e3.9	e3.9	e3.7	4.2	123	311	1120	235	256	146
25	82	e.00	e3.9	e3.9	e3.6	5.4	122	315	1120	233	254	145
26	83	1.1	e3.8	e3.9	e3.6	7.4	121	317	891	252	258	144
27	84	2.7	e3.8	e3.9	e3.6	7.5	121	421	690	262	257	142
28	85	2.7	e3.8	e3.9	e3.6	7.5	119	534	766	262	254	142
29	86	2.3	e3.9	e3.9	---	7.6	122	539	806	265	253	139
30	87	2.8	e3.9	e3.8	---	7.8	121	541	602	262	252	137
31	87	---	e3.9	e3.8	---	7.9	---	541	---	264	249	---
TOTAL	2110.7	500.93	111.8	121.8	103.5	136.8	2247.7	8561.1	25018	9692	8679	4573
MEAN	68.1	16.7	3.61	3.93	3.70	4.41	74.9	276	834	313	280	152
MAX	104	120	3.9	4.0	3.8	7.9	191	541	1310	623	321	257
MIN	1.8	.00	3.0	3.8	3.6	3.5	7.9	5.1	580	233	249	18
AC-FT	4190	994	222	242	205	271	4460	16980	49620	19220	17210	9070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1999, BY WATER YEAR (WY)

	MEAN	50.7	7.72	1.00	1.46	2.33	3.55	49.3	298	373	358	250	142
MAX	202	120	17.3	28.2	44.4	72.3	202	555	920	717	410	326	
(WY)	1983	1966	1984	1984	1966	1966	1943	1969	1983	1995	1944	1984	
MIN	.000	.000	.000	.000	.000	.000	.000	.000	130	144	155	35.6	.000
(WY)	1991	1948	1943	1943	1943	1943	1944	1977	1945	1961	1989	1992	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1943 - 1999

ANNUAL TOTAL	62007.03	61856.33	
ANNUAL MEAN	170	169	129
HIGHEST ANNUAL MEAN			211
LOWEST ANNUAL MEAN			60.9
HIGHEST DAILY MEAN	1070	1310	2000
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
ANNUAL RUNOFF (AC-FT)	123000	122700	93440
10 PERCENT EXCEEDS	428	532	365
50 PERCENT EXCEEDS	73	83	15
90 PERCENT EXCEEDS	.00	3.5	.00

e Estimated

## GREEN RIVER BASIN

89

## 09292000 YELLOWSTONE RIVER AT BRIDGE CAMPGROUND, NEAR ALTONAH, UT

LOCATION.--Lat 40°32'47", long 110°19'59", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 27, T. 2 N., R. 4 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on right bank .5 mi upstream from power plant of Moon Lake Electric Association, Inc., 1.5 mi downstream from Yellowstone Ranch, 10.6 mi northwest of Altonah.

DRAINAGE AREA.--114 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,650 ft. above sea level, from USGS topographic map.

REMARKS.--Records good to fair, except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1260 ft<sup>3</sup>/s Jun 4, 1997, gage height 6.38 ft; minimum daily discharge 18 ft<sup>3</sup>/s Dec 5, 22, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1200 ft<sup>3</sup>/s, Jun 20; minimum daily discharge, 18 ft<sup>3</sup>/s, Dec 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	50	23	39	e34	31	29	68	e450	e410	e170	180
2	83	53	22	e37	e36	31	28	68	e450	e390	e165	299
3	83	47	21	e35	e34	31	30	70	e400	e370	e150	297
4	81	39	20	e36	32	31	32	56	e350	e320	e160	264
5	76	44	18	37	32	32	30	40	e305	e300	e174	245
6	76	44	e20	37	32	39	27	38	e300	e280	e165	230
7	76	35	e20	36	33	29	27	46	e315	e290	e155	212
8	69	46	e21	37	34	30	25	61	e340	e300	e150	196
9	65	41	e21	e37	35	30	25	74	e370	e270	e150	185
10	62	52	e22	37	35	33	31	60	e390	e240	e150	176
11	58	41	e22	35	e34	29	28	51	e360	e230	e150	170
12	57	39	e22	34	e33	29	24	49	e390	e220	e150	151
13	55	38	e22	34	e33	29	26	66	e480	e210	e140	144
14	52	37	e23	36	e33	30	27	88	e640	e220	e135	137
15	52	35	e23	33	e33	30	26	76	e940	e230	e130	131
16	56	33	e24	34	e33	30	28	67	e1000	e210	e130	125
17	56	32	e24	34	33	31	27	59	e1100	e220	e120	116
18	54	31	e23	34	e32	31	33	71	e1050	e210	e130	105
19	52	26	e22	35	31	33	38	68	e1000	e200	e140	110
20	50	31	e21	36	e31	34	42	68	e1200	e210	e160	e112
21	49	32	e20	37	e30	33	38	92	e1100	e200	e180	e105
22	56	29	e19	e37	e31	32	34	136	e1000	e190	e150	e96
23	56	27	e19	36	e32	32	33	e146	e1000	e180	e140	e92
24	50	26	e20	36	32	32	33	e160	e820	e170	e160	e90
25	60	25	e21	36	29	34	32	e195	e860	e160	e145	e86
26	61	25	e22	36	30	34	35	e240	e620	e160	e140	e80
27	62	24	e23	36	37	32	42	e320	e500	e160	128	e77
28	55	24	e22	e35	31	31	68	e450	e460	e160	146	e75
29	55	25	e21	e34	---	30	61	e560	e440	e170	133	e70
30	58	24	21	e34	---	31	70	e520	e420	e175	130	e65
31	52	---	31	e34	---	30	---	e540	---	e180	215	---
TOTAL	1911	1055	673	1104	915	974	1029	4603	19050	7235	4641	4421
MEAN	61.6	35.2	21.7	35.6	32.7	31.4	34.3	148	635	233	150	147
MAX	84	53	31	39	37	39	70	560	1200	410	215	299
MIN	49	24	18	33	29	29	24	38	300	160	120	65
AC-FT	3790	2090	1330	2190	1810	1930	2040	9130	37790	14350	9210	8770

CAL YR 1998 TOTAL 47985 MEAN 131 MAX 833 MIN 18 AC-FT 95180  
WTR YR 1999 TOTAL 47611 MEAN 130 MAX 1200 MIN 18 AC-FT 94440

e Estimated

## GREEN RIVER BASIN

09292500 YELLOWSTONE RIVER NEAR ALTONAH, UT

LOCATION.--Lat 40°30'43", long 110°20'27", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 4, T. 1 N., R. 4 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 1.5 mi downstream from powerplant of Moon Lake Electric Association, Inc., 2 mi downstream from Hell Canyon, 8.2 mi northwest of Altonah.

DRAINAGE AREA.--132 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1944 to current year. Prior to October 1965, published as Yellowstone Creek near Altonah.

REVISED RECORDS.--WDR UT-77-1: Drainage area, WDR UT-95-1: 1994.

GAGE.--Water-stage recorder. Elevation of gage is 7,430 ft above sea level, from river-profile map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft<sup>3</sup>/s June 20, 1999, gage height, 4.50 ft. Maximum gage height, 4.93 ft June 11, 1990; minimum daily, 25 ft<sup>3</sup>/s Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 20	0200	*2,670	*4.50				

Minimum daily discharge, 47 ft<sup>3</sup>/s, Apr 10-11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	111	80	70	66	54	51	71	660	492	199	244
2	146	113	79	e65	e64	54	50	70	666	479	190	369
3	145	106	78	e62	e62	54	49	72	563	466	185	375
4	143	97	78	e67	e60	53	49	69	466	420	195	314
5	137	103	75	e67	58	54	49	65	401	365	210	283
6	138	104	80	68	59	54	50	64	360	328	208	272
7	139	92	e80	66	58	52	48	69	399	340	196	258
8	131	105	e76	e64	59	53	49	83	451	365	190	244
9	127	98	e74	e64	60	52	48	95	539	309	188	238
10	124	105	e74	e64	58	54	47	87	573	277	186	234
11	121	101	e74	e62	58	54	47	80	505	261	192	230
12	119	98	e70	62	e60	52	48	79	612	250	188	216
13	115	97	e68	61	e60	53	49	89	843	242	178	209
14	113	95	e68	e61	e63	53	52	109	1110	253	173	203
15	113	93	e68	e61	65	54	50	99	1320	283	170	198
16	118	91	72	e61	62	55	48	93	1460	252	166	190
17	117	91	e66	e61	59	55	50	87	1690	261	164	182
18	115	89	e60	61	64	56	55	92	1570	241	176	174
19	114	84	e58	62	57	58	61	115	1500	232	178	178
20	112	86	e55	e62	58	58	66	126	1810	256	231	181
21	111	89	e53	63	59	57	63	143	1330	240	250	166
22	117	87	e50	e63	57	55	60	166	1130	228	223	158
23	116	84	e54	e62	e57	55	58	205	1170	218	216	153
24	110	84	e57	62	e56	55	59	287	938	211	238	150
25	119	82	e62	62	56	57	58	383	972	204	218	144
26	119	82	e70	63	55	57	60	461	800	197	207	139
27	120	81	e77	63	58	54	67	549	627	196	203	135
28	115	81	e79	e64	57	52	77	679	550	203	220	134
29	113	81	e77	e66	---	52	e76	850	527	211	211	132
30	117	80	e74	e66	---	53	e74	804	501	211	203	130
31	112	---	e71	e66	---	51	---	837	---	218	275	---
TOTAL	3803	2790	2157	1971	1665	1680	1668	7078	26043	8709	6227	6233
MEAN	123	93.0	69.6	63.6	59.5	54.2	55.6	228	868	281	201	208
MAX	147	113	80	70	66	58	77	850	1810	492	275	375
MIN	110	80	50	61	55	51	47	64	360	196	164	130
AC-FT	7540	5530	4280	3910	3300	3330	3310	14040	51660	17270	12350	12360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1999, BY WATER YEAR (WY)

MEAN	90.6	70.4	58.7	50.5	47.8	48.0	62.9	243	498	241	151	120
MAX	213	122	95.6	72.0	62.5	78.8	128	599	1011	744	366	236
(WY)	1983	1983	1983	1984	1983	1986	1969	1969	1983	1965	1965	1997
MIN	53.0	43.8	36.0	26.5	29.9	31.0	41.1	72.0	161	101	75.7	60.5
(WY)	1993	1990	1993	1979	1977	1977	1970	1977	1954	1961	1992	1992

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1945 - 1999

ANNUAL TOTAL	66961	70024										
ANNUAL MEAN	183	192								140		
HIGHEST ANNUAL MEAN										235		1983
LOWEST ANNUAL MEAN										75.9		1977
HIGHEST DAILY MEAN	1180	Jun 26	1810	Jun 20						1810	Jun 20	1999
LOWEST DAILY MEAN	46	Mar 18	47	Apr 10						22	Jan 1	1979
ANNUAL SEVEN-DAY MINIMUM	48	Mar 16	48	Apr 7						26	Dec 31	1978
ANNUAL RUNOFF (AC-FT)	132800		138900							101600		
10 PERCENT EXCEEDS	417		432							312		
50 PERCENT EXCEEDS	108		93							75		
90 PERCENT EXCEEDS	50		54							45		

e Estimated

## 09295000 DUCHESNE RIVER AT MYTON, UT

LOCATION.--Lat 40°12'01", long 110°03'47", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 25, T. 3 S., R. 2 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank at Myton, 3 mi downstream from Lake Fork.

DRAINAGE AREA.--2,750 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1899 to December 1902, April to December 1903, March to December 1904, March to July and September to November 1905, April to July 1906, April to December 1907, March to December 1908, April to December 1909, March to November 1910, July 1911 to current year. Published as "at Price road bridge" 1899-1902.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,061.40 ft above sea level. Prior to Oct. 14, 1933, nonrecording gages at several sites within 0.5 mi of present site at various datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by several reservoirs. Large diversions above station for irrigation, including transmountain diversions to the Great Basin through Duchesne and Strawberry Tunnels, Hobbie Creek ditch, and Strawberry River and Willow Creek ditch.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 12,800 ft<sup>3</sup>/s Jun 10, 1922, gage height, 7.94 ft, site and datum then in use, from rating curve extended above 8,000 ft<sup>3</sup>/s; minimum, less than 1 ft<sup>3</sup>/s Jul 16, 1931, and for several days in Aug and Sep 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,370 ft<sup>3</sup>/s, Jun 20, gage height, 7.65 ft; minimum daily discharge, 58 ft<sup>3</sup>/s, Apr 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	648	662	661	551	581	586	436	172	1090	728	e359	e366
2	643	660	661	499	549	603	433	158	1210	692	e341	e372
3	649	688	658	517	570	581	408	188	1390	799	e330	e379
4	638	670	652	508	564	572	413	163	1240	778	e315	e388
5	634	672	635	564	582	548	404	140	1250	607	e297	e403
6	638	750	576	592	581	536	366	146	1220	502	e306	e427
7	645	719	625	528	582	553	330	131	1330	429	e319	472
8	600	719	644	515	590	540	296	114	1470	472	e296	521
9	568	735	625	487	603	550	194	99	1650	432	e323	520
10	540	689	591	508	632	555	173	99	1830	302	e358	511
11	516	715	607	508	558	561	174	113	1800	265	e359	523
12	514	709	626	496	592	552	179	105	1760	223	e381	512
13	514	711	636	492	600	548	144	92	2040	204	e361	508
14	505	710	621	469	585	555	107	125	2420	189	e354	487
15	515	711	610	507	584	563	82	122	2760	263	e355	478
16	496	706	612	484	568	564	75	109	2990	255	e345	464
17	392	702	600	486	586	546	62	96	3690	277	e318	460
18	365	704	601	468	579	536	65	81	4490	286	e295	451
19	440	688	593	490	587	534	58	76	4800	295	e293	454
20	478	661	587	490	560	537	63	97	5130	279	e288	506
21	505	674	587	504	572	537	102	78	4890	282	e294	497
22	537	694	557	460	566	528	103	74	4030	286	e302	490
23	556	686	539	494	560	512	117	77	3770	251	e309	489
24	565	677	483	502	576	498	185	166	3350	216	e316	487
25	569	666	479	501	579	469	177	311	2970	220	e322	485
26	602	668	560	506	580	466	126	380	2730	205	e327	468
27	604	671	583	548	555	455	103	534	1920	e207	e334	462
28	595	672	681	522	575	439	96	774	1580	e214	e340	461
29	578	676	716	542	---	431	174	1030	1360	e214	e346	449
30	612	664	675	566	---	428	195	1130	1110	e233	e353	432
31	677	---	651	576	---	430	---	1150	---	e334	e359	---
TOTAL	17338	20729	18932	15880	16196	16313	5840	8130	73270	10939	10195	13922
MEAN	559	691	611	512	578	526	195	262	2442	353	329	464
MAX	677	750	716	592	632	603	436	1150	5130	799	381	523
MIN	365	660	479	460	549	428	58	74	1090	189	288	366
AC-FT	34390	41120	37550	31500	32120	32360	11580	16130	145300	21700	20220	27610

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1999, BY WATER YEAR (WY)

	MEAN	239	291	309	297	319	364	376	1071	1684	431	174	193
MAX	1031	1055	1037	982	715	880	1293	4185	6356	2372	695	1597	
(WY)	1984	1984	1984	1984	1984	1916	1952	1952	1922	1917	1921	1927	
MIN	4.81	32.6	34.3	62.3	79.3	56.0	9.43	37.1	17.8	5.01	5.13	1.37	
(WY)	1935	1991	1971	1991	1990	1990	1961	1994	1934	1961	1940	1934	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR			FOR 1999 WATER YEAR			WATER YEARS 1912 - 1999		
ANNUAL TOTAL	251288			227684					
ANNUAL MEAN	688			624			479		
HIGHEST ANNUAL MEAN							1318		
LOWEST ANNUAL MEAN							52.0		
HIGHEST DAILY MEAN	3260			Jun 27			5130		
LOWEST DAILY MEAN	49			Apr 30			58		
ANNUAL SEVEN-DAY MINIMUM	76			Apr 27			72		
ANNUAL RUNOFF (AC-FT)	498400						451600		
10 PERCENT EXCEEDS	1190						760		
50 PERCENT EXCEEDS	550						516		
90 PERCENT EXCEEDS	355						170		

e Estimated



## GREEN RIVER BASIN

09295100 DUCHESNE RIVER ABOVE UINTA RIVER, NEAR RANDLETT, UT

LOCATION.--Lat 40°12'24", long 109°51'33", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 23, T.03 S., R.01 E., Uintah Meridian, Uintah County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank beside county road bridge.

DRAINAGE AREA.-- 4,235 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1997 to February 1998 miscellaneous measurements, March 1998 to September 1998.

GAGE.--Water-stage recorder. Altitude of gage is 4,830 ft. from topographic map.

REMARKS.--Records good, except for estimated record, which is fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,600 ft<sup>3</sup>/s June 21, 1999, gage height 8.64 ft.; minimum daily discharge, 29 ft<sup>3</sup>/s April 30, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,600 ft<sup>3</sup>/s, Jun 21, gage height, 8.64 ft; minimum daily discharge, 43 ft<sup>3</sup>/s, Apr 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	668	713	e455	637	633	465	259	1300	731	320	493
2	651	676	715	e460	600	652	466	221	1340	646	284	648
3	653	696	713	e450	611	633	448	248	1620	731	269	836
4	661	678	708	e470	605	619	442	245	1490	756	244	684
5	639	676	700	e460	631	597	447	192	1460	615	222	553
6	650	740	637	e480	629	583	405	191	1400	496	227	500
7	656	728	633	e460	630	598	381	194	1510	422	230	483
8	630	715	639	e450	642	590	343	164	1600	433	208	528
9	598	750	683	e435	659	594	249	142	1800	472	211	532
10	576	707	653	e445	691	607	191	135	2020	320	254	514
11	550	716	622	e455	615	603	183	141	2050	257	255	517
12	548	720	656	e425	580	597	207	157	1950	222	272	510
13	553	723	675	e450	616	590	167	123	2140	182	245	496
14	529	719	658	e430	630	594	131	136	2520	160	219	477
15	510	725	634	e435	642	606	90	147	2800	195	217	460
16	523	721	648	e440	616	604	74	124	2990	260	203	456
17	458	718	601	e425	629	585	61	115	3360	259	172	451
18	406	726	616	e430	630	567	60	87	3940	290	127	436
19	437	714	612	446	634	566	48	77	4120	284	137	441
20	517	692	584	e440	610	570	43	93	4410	262	207	496
21	481	698	e550	455	609	577	77	98	4410	259	301	501
22	537	721	e500	475	605	565	113	95	3920	278	289	481
23	557	715	e470	527	601	547	124	74	3580	243	249	489
24	570	713	e455	550	621	535	201	129	3320	205	253	486
25	575	706	e425	545	625	510	253	299	2980	205	269	474
26	610	704	e445	544	628	499	178	387	2810	200	274	452
27	610	711	e455	594	607	492	146	560	2170	179	306	450
28	607	713	e470	569	613	471	123	797	1710	167	424	464
29	588	717	e455	574	---	460	190	1140	1440	174	495	457
30	611	716	e430	603	---	458	291	1380	1150	187	435	449
31	679	---	e450	616	---	460	---	1340	---	267	476	---
TOTAL	17831	21322	18205	14993	17446	17562	6597	9490	73310	10357	8294	15214
MEAN	575	711	587	484	623	567	220	306	2444	334	268	507
MAX	679	750	715	616	691	652	466	1380	4410	756	495	836
MIN	406	668	425	425	580	458	43	74	1150	160	127	436
AC-FT	35370	42290	36110	29740	34600	34830	13090	18820	145400	20540	16450	30180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1999, BY WATER YEAR (WY)

	575	711	587	484	623	567	273	434	2211	683	372	553
MEAN	575	711	587	484	623	567	326	562	2444	1033	476	600
MAX	575	711	587	484	623	567	326	562	2444	1033	476	600
(WY)	1999	1999	1999	1999	1999	1999	1998	1998	1999	1998	1998	1998
MIN	575	711	587	484	623	567	220	306	1979	334	268	507
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1998	1999	1999	1999

SUMMARY STATISTICS

FOR 1999 WATER YEAR

WATER YEARS 1998 - 1999

ANNUAL TOTAL	230621		
ANNUAL MEAN	632		
HIGHEST ANNUAL MEAN		632	1999
LOWEST ANNUAL MEAN		632	1999
HIGHEST DAILY MEAN	4410	Jun 20	4410 Jun 20 1999
LOWEST DAILY MEAN	43	Apr 20	29 Apr 30 1998
ANNUAL SEVEN-DAY MINIMUM	65	Apr 15	64 Apr 27 1998
ANNUAL RUNOFF (AC-FT)	457400		457700
10 PERCENT EXCEEDS	752		1480
50 PERCENT EXCEEDS	523		530
90 PERCENT EXCEEDS	176		185

e Estimated

## 09296800 UINTA RIVER BELOW POWERPLANT DIVERSION, NEAR NEOLA, UT

LOCATION.--Lat 40°35'29", long 110°06'49", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 9, T. 2 N., R. 2 W., Uintah Meridian, Duchesne County. Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 100 ft downstream from National Forest boundary, 4.7 mi upstream of Moon Lake Electric Association Inc. hydroelectric powerplant, and 11.5 mi northwest of Neola, Ut.

DRAINAGE AREA.--157 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,330 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Moon Lake Electric powerplant canal diversion about 0.75 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,610 ft<sup>3</sup>/s Jun 21, 1999, gage height 7.07 ft; minimum daily discharge, 11 ft<sup>3</sup>/s Jan 8, 19, 20, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,610 ft<sup>3</sup>/s, Jun 21, gage height, 7.07 ft; minimum daily discharge, 35 ft<sup>3</sup>/s, Feb 17 and Apr 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	119	96	e84	46	40	60	64	1270	1220	281	254
2	189	125	95	e84	50	39	40	61	1210	1190	249	843
3	192	119	94	e83	47	39	37	74	970	1220	241	858
4	184	108	93	e83	43	39	38	61	758	1110	245	526
5	178	117	95	e82	44	39	37	55	593	864	256	367
6	174	121	e96	e81	41	e39	40	53	520	706	304	305
7	171	109	e95	81	43	38	38	57	635	773	250	303
8	146	122	e94	79	43	38	40	e78	784	995	250	e277
9	138	115	e93	e75	44	38	39	98	961	712	245	250
10	134	140	e92	e71	40	39	35	82	1020	538	234	247
11	e134	113	e91	e67	e44	36	36	71	836	473	229	246
12	e133	113	e90	e59	e42	38	39	67	1090	428	220	230
13	131	111	e87	51	e40	38	39	81	1520	401	208	219
14	e131	112	e87	59	e38	40	42	108	1420	425	196	208
15	e132	110	e85	49	e36	41	39	97	1200	537	188	202
16	e135	108	e80	49	e36	41	37	92	957	438	181	195
17	e138	108	e80	49	e35	42	39	84	1430	443	196	191
18	e133	106	e80	49	e35	43	43	92	1260	381	195	185
19	e131	101	e80	50	e36	45	49	124	1420	361	196	191
20	125	111	e75	50	e37	46	53	148	1310	481	219	193
21	125	103	e70	49	e38	45	53	180	1590	381	239	178
22	130	102	e73	57	e38	43	e54	223	1650	335	219	172
23	130	100	e77	52	e39	43	e56	290	1840	297	209	168
24	124	100	e80	49	39	43	e58	454	1730	335	216	165
25	133	98	e82	49	39	44	e60	732	1760	324	206	160
26	132	98	e83	47	39	44	e61	976	1750	293	196	153
27	131	98	e85	47	e38	43	e62	1030	1570	301	205	147
28	127	98	e87	54	38	40	65	1180	1370	308	218	146
29	126	98	e87	65	---	40	e87	1620	1320	309	205	145
30	129	96	e85	63	---	58	75	1720	1240	293	202	143
31	122	---	e85	58	---	61	---	1660	---	290	290	---
TOTAL	4433	3279	2672	1925	1128	1302	1451	11712	36984	17162	6988	7867
MEAN	143	109	86.2	62.1	40.3	42.0	48.4	378	1233	554	225	262
MAX	195	140	96	84	50	61	87	1720	1840	1220	304	858
MIN	122	96	70	47	35	36	35	53	520	290	181	143
AC-FT	8790	6500	5300	3820	2240	2580	2880	23230	73360	34040	13860	15600

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1999, BY WATER YEAR (WY)

	MEAN	82.5	53.0	36.3	34.7	31.0	32.6	42.0	287	692	359	193	171
MAX	179	109	86.2	62.1	55.0	45.7	53.5	536	1484	852	355	305	
(WY)	1998	1999	1999	1999	1998	1998	1998	1993	1995	1995	1998	1997	
MIN	28.2	17.8	13.9	12.4	16.0	21.5	30.7	128	188	100	62.9	61.4	
(WY)	1991	1991	1992	1992	1992	1992	1993	1995	1992	1994	1992	1992	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1991 - 1999	
ANNUAL TOTAL	90309		96903			
ANNUAL MEAN	247		265		168	
HIGHEST ANNUAL MEAN					268	
LOWEST ANNUAL MEAN					80.5	
HIGHEST DAILY MEAN	1370		1840		3000	
LOWEST DAILY MEAN	36		35		11	
ANNUAL SEVEN-DAY MINIMUM	38		36		12	
ANNUAL RUNOFF (AC-FT)	179100		192200		121700	
10 PERCENT EXCEEDS	630		860		378	
50 PERCENT EXCEEDS	121		108		56	
90 PERCENT EXCEEDS	46		39		25	

e Estimated

## GREEN RIVER BASIN

## 09299500 WHITEROCKS RIVER NEAR WHITEROCKS, UT

LOCATION.--Lat 40°35'13", long 109°55'37", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 7, T. 2 N., R. 1 E., Uintah Meridian, Uintah County, Hydrologic Unit 14060003, on right bank, 3.2 mi upstream from U.S. Forest Boundary, and 9.6 mi north-east of Whiterocks.

DRAINAGE AREA.--109 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1899 to December 1903, April to December 1907, March 1908 to November 1910, October 1913 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as Whiterocks River in Canyon, 1899, and as Whiterocks Creek near Whiterocks, 1918- 25. November 1917 to June 1921 United States Whiterocks Canal diverted above station (records equivalent if flow of Whiterocks Canal is included).

GAGE.--Water-stage recorder. Elevation of gage is 7,160 ft above sea level, from topographic map. Prior to Oct. 16, 1930, nonrecording gages at several sites within 2 mi of present site at various datums. Oct. 16, 1930 to Nov. 26, 1984, water-stage recorder at various sites and datums about 3 mi downstream.

REMARKS.--Records fair. Flow slightly regulated by small mountain lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,640 ft<sup>3</sup>/s June 22, 1983, gage height, 5.28 ft, from rating curve extended above 2,000 ft<sup>3</sup>/s, site and datum then in use; minimum recorded, 9.2 ft<sup>3</sup>/s April 3, 1977, site and datum then in use. Minimum discharge at present site and datum, 4.9 ft<sup>3</sup>/s March 30, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 16	2345	*2,090	*5.90	No other peaks greater than base discharge.			
Minimum instantaneous discharge, 14 ft <sup>3</sup> /s, Apr 11.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	67	50	e51	36	30	29	50	852	315	139	187
2	145	71	50	49	36	30	29	48	927	294	133	413
3	153	68	49	48	36	30	27	58	755	276	128	473
4	152	61	49	48	35	30	29	51	549	260	125	328
5	141	63	44	49	35	28	28	46	445	241	138	277
6	138	66	32	49	33	30	30	45	403	227	188	247
7	134	57	44	48	33	30	29	49	532	223	145	227
8	129	66	48	46	33	29	29	62	627	237	130	212
9	124	61	e51	46	33	29	28	85	776	218	125	205
10	122	64	e50	47	31	29	26	71	772	201	121	196
11	118	64	e49	47	29	29	27	64	676	184	123	190
12	117	61	e47	46	45	30	28	62	881	170	118	173
13	115	63	e46	44	38	30	28	64	1090	161	113	163
14	112	60	e45	43	35	31	30	72	1170	164	109	155
15	109	59	e46	43	33	31	28	66	1070	201	105	148
16	116	57	e50	42	32	31	28	63	1290	172	103	141
17	114	58	e52	41	32	32	29	56	1660	183	102	136
18	112	56	e45	41	32	32	31	60	1220	165	100	129
19	106	54	e41	41	32	34	34	86	1360	152	99	134
20	86	54	e37	40	31	34	41	106	1190	177	109	130
21	81	62	e39	41	31	35	39	139	1050	148	118	122
22	73	56	e35	41	31	34	37	184	863	138	110	117
23	72	53	e34	39	31	33	36	248	781	128	104	113
24	69	52	e36	40	30	33	41	339	643	128	128	112
25	72	52	e37	40	30	34	40	435	596	145	122	108
26	73	52	e40	40	30	34	42	517	551	133	120	103
27	76	51	e43	39	29	33	52	536	485	140	125	97
28	73	51	e46	34	29	31	49	1040	426	145	146	97
29	70	52	e48	36	---	31	57	1220	378	149	142	96
30	75	51	e50	37	---	31	55	1190	345	147	162	95
31	71	---	e49	37	---	29	---	1100	---	156	209	---
TOTAL	3298	1762	1382	1333	921	967	1036	8212	24363	5778	3939	5324
MEAN	106	58.7	44.6	43.0	32.9	31.2	34.5	265	812	186	127	177
MAX	153	71	52	51	45	35	57	1220	1660	315	209	473
MIN	69	51	32	34	29	28	26	45	345	128	99	95
AC-FT	6540	3490	2740	2640	1830	1920	2050	16290	48320	11460	7810	10560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1999, BY WATER YEAR (WY)

	MEAN	68.5	45.3	34.7	29.7	27.1	27.9	48.3	279	404	183	126	95.3
MAX	155	93.0	58.7	47.2	37.8	41.0	118	584	1178	573	238	217	
(WY)	1939	1939	1942	1930	1930	1986	1962	1937	1983	1995	1984	1997	
MIN	34.8	28.6	19.3	17.7	17.0	17.8	22.9	74.8	50.1	22.4	41.7	42.8	
(WY)	1989	1978	1991	1991	1977	1961	1975	1957	1934	1934	1940	1933	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1930 - 1999
ANNUAL TOTAL	62936	58315	
ANNUAL MEAN	172	160	114
HIGHEST ANNUAL MEAN			209
LOWEST ANNUAL MEAN			42.0
HIGHEST DAILY MEAN	1030	1660	2300
LOWEST DAILY MEAN	32	26	14
ANNUAL SEVEN-DAY MINIMUM	33	28	15
ANNUAL RUNOFF (AC-FT)	124800	115700	82820
10 PERCENT EXCEEDS	560	407	250
50 PERCENT EXCEEDS	72	62	51
90 PERCENT EXCEEDS	36	30	25

e Estimated

## 09301500 UINTA RIVER AT RANDLETT, UT

LOCATION.--Lat 40°14'01", long 109°48'11", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 07, T. 3 S., R. 2 E., Uintah Meridian, Uintah County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on right bank at Randlett, 0.1 mi upstream from county road bridge on State Highway 88, and 2.8 miles from mouth.

DRAINAGE AREA.--1,064 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1899 to November 1904, October 1976 to September 1981, Nov. 1899 to Nov. 1904, published as "at Ouray School", April 1997 to February 1998 miscellaneous measurements, March 1998 to September 1998.

GAGE.--Water-stage recorder. Altitude of gage is 4,790 ft. from topographic map. Nov. 1899 to Nov. 1904, staff gage at different datum; October 1976 to September 1981 also at different datum.

REMARKS.--Records good, except for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,310 ft<sup>3</sup>/s June 17, 1998, gage height 9.24 ft.; minimum daily discharge, 3.6 ft<sup>3</sup>/s July 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,870 ft<sup>3</sup>/s, Jun 17, gage height, 8.84 ft; minimum daily discharge, 36 ft<sup>3</sup>/s Apr 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	250	257	e135	e130	190	61	235	1240	388	180	273
2	198	260	250	e150	e138	195	59	167	1060	289	149	552
3	190	371	251	e140	e140	186	52	225	1210	280	116	1300
4	246	327	245	e145	e150	186	55	327	925	253	100	997
5	265	289	229	e150	e170	170	55	220	731	214	106	613
6	231	326	189	e151	e158	156	59	181	609	150	108	441
7	219	328	187	e161	e170	170	46	167	660	105	109	349
8	210	309	203	e150	e160	164	42	138	733	119	85	282
9	203	343	229	e142	e180	156	37	121	818	202	77	252
10	180	304	229	e150	e170	156	41	125	957	154	73	252
11	159	322	204	e160	e190	155	39	112	879	111	88	235
12	151	312	e200	e160	210	154	38	110	816	100	108	236
13	147	307	e210	e153	221	146	38	112	1050	80	98	224
14	148	300	e200	e148	236	138	37	132	1410	85	101	197
15	147	297	e192	e160	230	118	56	160	1620	124	94	178
16	164	295	e200	e150	216	117	52	139	1850	136	88	169
17	289	291	e210	e142	233	119	36	122	2290	169	85	147
18	246	285	e200	e149	229	115	38	107	2430	179	85	153
19	229	274	e160	e150	242	108	37	106	2240	144	85	145
20	221	258	e140	e152	204	113	43	92	2370	125	87	215
21	188	267	e130	e158	202	145	51	99	2270	119	110	223
22	181	280	e140	e160	189	140	53	92	1930	118	129	191
23	178	280	e135	e168	181	108	121	88	1670	108	122	185
24	189	275	e140	e172	197	86	181	173	1410	91	110	176
25	184	271	e142	e180	198	79	250	414	1210	94	121	174
26	212	268	e150	e170	200	83	168	690	1120	86	131	164
27	236	267	e160	e160	177	76	127	832	963	83	106	143
28	235	268	e140	e150	183	74	133	1020	729	77	126	135
29	248	272	e150	e140	---	71	177	1360	517	84	168	140
30	266	264	e130	e140	---	71	328	1530	440	139	167	165
31	278	---	e140	e139	---	72	---	1490	---	152	200	---
TOTAL	6434	8760	5742	4735	5304	4017	2510	10886	38157	4558	3512	8906
MEAN	208	292	185	153	189	130	83.7	351	1272	147	113	297
MAX	289	371	257	180	242	195	328	1530	2430	388	200	1300
MIN	147	250	130	135	130	71	36	88	440	77	73	135
AC-FT	12760	17380	11390	9390	10520	7970	4980	21590	75680	9040	6970	17670

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977-81, 1998-99, BY WATER YEAR (WY)

	63.6	75.7	58.2	57.9	82.4	93.6	60.3	134	589	113	56.7	93.1
MEAN	63.6	75.7	58.2	57.9	82.4	93.6	60.3	134	589	113	56.7	93.1
MAX	208	292	185	153	189	223	134	351	1411	455	150	297
(WY)	1999	1999	1999	1999	1999	1979	1998	1999	1998	1998	1998	1999
MIN	16.8	13.6	19.7	16.5	20.5	24.2	15.0	19.9	17.7	12.3	16.0	14.6
(WY)	1978	1978	1979	1978	1978	1977	1977	1977	1977	1977	1977	1979

## SUMMARY STATISTICS

## FOR 1999 WATER YEAR

## WATER YEARS 1977-81, 1998-99

ANNUAL TOTAL	103521		
ANNUAL MEAN	284		
HIGHEST ANNUAL MEAN		102	
LOWEST ANNUAL MEAN		284	1999
HIGHEST DAILY MEAN	2430	23.8	1977
LOWEST DAILY MEAN	36		
ANNUAL SEVEN-DAY MINIMUM	39	3000	Jun 18 1998
ANNUAL RUNOFF (AC-FT)	205300	5.3	Jul 14 1977
10 PERCENT EXCEEDS	611	7.2	Jul 13 1977
50 PERCENT EXCEEDS	169		
90 PERCENT EXCEEDS	85		

e Estimated

## GREEN RIVER BASIN

09302000 DUCHESNE RIVER NEAR RANDLETT, UT

LOCATION.--Lat 40°12'56", long 109°46'58", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 16, T. 3 S., R. 2 E., Uintah Meridian, Uintah County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 0.25 mi downstream from Uintah River, 1.2 mi southeast of Randlett, and 6.5 mi southeast of Fort Duchesne.

DRAINAGE AREA.--4,247 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,756.1 ft above sea level. Prior to Aug. 23, 1944 at site 300 ft downstream at different datum. Aug. 23, 1944 to Sept. 4, 1964 at site 200 ft upstream at datum 1.87 ft higher. Sept. 5, 1964 to June 6, 1968 at site 700 ft upstream at datum 1.68 ft higher. June 7, 1968 to Aug. 31, 1970 at site 200 ft upstream at datum 1.87 ft higher. Sept. 1, 1970 to June 7, 1975 at site 300 ft upstream at datum 2.23 ft higher. June 7, 1975 to May 5, 1977 at site 200 ft upstream at datum 1.87 ft higher.

REMARKS.--Records good except where estimated, which are fair. Flow regulated by several reservoirs. Large diversions above station for irrigation, including transbasin diversions to the Great Basin through Duchesne and Strawberry Tunnels, Hobbie Creek ditch, Strawberry River, and Willow Creek Ditch.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 11,500 ft<sup>3</sup>/s June 20, 1983; maximum gage height, 10.22 ft June 5, 1986; minimum, 2.2 ft/s Aug. 12, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,010 ft<sup>3</sup>/s, Jun 20, gage height, 9.84 ft; minimum daily discharge, 127 ft<sup>3</sup>/s, Apr 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	909	995	e931	e590	e767	787	528	524	2680	1240	605	917
2	904	1000	947	e610	e738	819	535	398	2480	998	492	1410
3	905	1150	947	e590	e751	790	527	480	2830	1070	413	2740
4	954	1100	937	e615	e755	778	526	594	2350	1090	360	2260
5	960	1030	917	e610	e801	741	534	434	2150	885	347	1410
6	929	1130	802	e631	e787	712	e494	407	1960	645	357	1120
7	920	1150	795	e621	e800	740	e457	394	2100	477	365	992
8	889	1100	841	e600	e802	734	e415	319	2260	500	321	973
9	835	1190	875	e577	e839	728	e316	270	2470	686	309	1030
10	792	1100	839	e595	e861	746	e262	248	2870	419	344	999
11	736	1110	838	e615	e805	742	e252	242	2860	294	361	977
12	730	1110	906	e585	e790	743	e275	263	2660	275	409	970
13	738	1100	939	e603	e837	730	e235	230	3060	207	370	936
14	726	1090	924	e578	e866	730	190	250	3810	193	349	888
15	714	1090	929	e595	e872	722	174	294	4350	288	342	833
16	726	1080	931	e590	e832	708	162	247	4850	346	323	814
17	837	1070	913	e567	e860	688	157	224	5660	377	298	775
18	713	1070	902	e579	803	667	156	191	6470	418	262	762
19	707	1040	905	e596	825	664	145	181	6450	366	270	752
20	812	994	e724	e592	758	674	127	175	6710	316	325	895
21	719	994	e680	e613	751	719	148	181	6640	342	471	924
22	760	1010	e640	e635	747	708	189	175	6090	403	493	858
23	780	910	e605	e695	731	652	244	155	5460	364	421	859
24	808	892	e595	e722	768	616	390	264	4970	308	411	844
25	809	877	e567	e725	777	579	524	640	4320	309	437	829
26	872	e879	e595	e714	784	574	370	1030	3960	300	462	795
27	902	e981	e615	e754	739	558	282	1430	3200	280	468	757
28	898	e977	e610	e719	754	530	265	1970	2490	271	682	762
29	904	e974	e605	e714	---	520	355	2720	2140	284	793	758
30	934	e944	e560	e743	---	520	650	3130	1790	366	740	780
31	1030	---	e590	e755	---	529	---	3000	---	467	801	---
TOTAL	25852	31137	24404	19728	22200	21148	9884	21060	112090	14784	13401	30619
MEAN	834	1038	787	636	793	682	329	679	3736	477	432	1021
MAX	1030	1190	947	755	872	819	650	3130	6710	1240	801	2740
MIN	707	877	560	567	731	520	127	155	1790	193	262	752
AC-FT	51280	61760	48410	39130	44030	41950	19600	41770	222300	29320	26580	60730

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1999, BY WATER YEAR (WY)

	MEAN	319	393	417	407	448	500	414	996	1948	523	218	239
MAX	1529	1443	1353	1246	964	1202	1865	4938	7988	3177	926	1264	
(WY)	1984	1984	1984	1984	1984	1984	1952	1952	1983	1995	1965	1997	
MIN	52.9	42.6	39.6	43.3	52.6	86.4	28.5	47.5	50.0	10.1	9.91	18.9	
(WY)	1990	1990	1990	1990	1990	1995	1961	1961	1961	1961	1961	1960	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1943 - 1999	
ANNUAL TOTAL	382827		346307			
ANNUAL MEAN	1049		949		567	
HIGHEST ANNUAL MEAN					1736	
LOWEST ANNUAL MEAN					76.4	
HIGHEST DAILY MEAN	5860		Jun 18		11500	
LOWEST DAILY MEAN	64		Apr 30		3.2	
ANNUAL SEVEN-DAY MINIMUM	112		Apr 28		4.2	
ANNUAL RUNOFF (AC-FT)	759300		686900		411100	
10 PERCENT EXCEEDS	2090		1570		1140	
50 PERCENT EXCEEDS	806		739		345	
90 PERCENT EXCEEDS	476		278		60	

e Estimated

## GREEN RIVER BASIN

97

09302000 DUCHESNE RIVER NEAR RANDLETT, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to September 1951, November 1956 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1950 to September 1951, November 1956 to September 1980, June 1981 to current year.

WATER TEMPERATURES: December 1950 to September 1951, November 1956 to September 1978, October 1979 to September 1980, June 1981 to current year.

INSTRUMENTATION.--Temperature data logger April, 1999 to September 30, 1999.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 4,490 microsiemens Aug. 24, 1960; minimum observed, 225 microsiemens June 22, 1983.

WATER TEMPERATURES: Maximum, 29.0°C several days during 1982, 1989, 1991, 1992, 1994, 1995; minimum, 0.0°C on many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 1,960 microsiemens, Apr 24, 25; minimum observed, 265 microsiemens, Jun 23, 24.

WATER TEMPERATURE: Maximum recorded, 27.0°C, Jul 12; minimum observed, 0.0°C, many days in Jan.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT												
14...	1645	4.32	718	800	8.0	21.0	10.0	--	--	--	300	59
DEC												
01...	1520	4.88	892	630	7.5	12.0	5.5	11.8	111	642	240	50
JAN												
14...	1030	--	--	670	8.0	-5.0	.0	11.5	93	645	250	55
FEB												
17...	1400	4.52	860	690	8.5	8.0	3.5	11.2	102	630	270	57
MAR												
24...	1400	4.06	605	630	8.6	20.0	11.0	10.9	119	638	250	54
MAY												
11...	1610	2.97	238	1240	8.6	15.0	14.0	9.8	115	636	420	87
JUN												
11...	1140	7.46	2970	325	8.3	15.0	13.0	9.2	104	640	140	32
JUL												
21...	1700	3.54	425	860	8.6	30.0	24.0	7.9	113	640	310	68
AUG												
27...	1440	3.64	411	810	8.4	25.0	22.0	8.3	115	638	300	64
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
OCT												
14...	36	65	32	2	1.8	4.1	190	25	.46	9.8	546	513
DEC												
01...	27	43	28	1	1.5	11	130	19	.30	7.8	411	388
JAN												
14...	28	50	30	1	1.3	3.4	150	25	.31	9.2	456	430
FEB												
17...	30	50	29	1	1.9	1.2	150	21	.28	8.2	452	433
MAR												
24...	27	46	29	1	1.5	.9	130	20	.26	5.1	417	396
MAY												
11...	49	121	38	3	3.2	1.2	370	48	.53	7.5	--	837
JUN												
11...	14	19	23	.7	1.3	1.0	59	9.6	.19	7.6	215	209
JUL												
21...	34	71	33	2	2.8	1.0	210	30	.43	11	589	556
AUG												
27...	33	67	33	2	2.7	1.7	190	27	.39	11	547	531



## GREEN RIVER BASIN

09302000 DUCHESNE RIVER NEAR RANDETT, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)
OCT 14...	.74	1060	--	--	--	--	--	--	--	--	214
DEC 01...	.56	990	--	--	<.010	--	<.050	<.020	<.010	--	178
JAN 14...	.62	--	.191	.85	.017	.06	.208	<.020	<.010	--	174
FEB 17...	.61	1050	--	--	<.010	--	.076	<.020	<.010	--	194
MAR 24...	.57	681	--	--	<.010	--	<.050	<.020	<.010	--	181
MAY 11...	1.14	538	--	--	<.010	--	<.050	<.020	.012	.04	253
JUN 11...	.29	1720	--	--	<.010	--	.059	<.020	.013	.04	109
JUL 21...	.80	676	--	--	<.010	--	.084	<.020	<.010	--	218
AUG 27...	.74	607	--	--	<.010	--	<.050	<.020	.011	.03	220

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B) (01020)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT 14...	1645	358	<1
DEC 01...	1520	237	1
JAN 14...	1030	182	<1
FEB 17...	1400	251	<1
MAR 24...	1400	230	<1
MAY 11...	1610	510	<1
JUN 11...	1140	89	<1
JUL 21...	1700	328	<1
AUG 27...	1440	343	<1

## GREEN RIVER BASIN

99

09302000 DUCHESNE RIVER NEAR RANDETT, UT--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	790	760	630	680	670	720	760	1170	410	430	850	870
2	---	760	650	630	650	710	870	1310	410	560	920	700
3	980	710	620	730	650	650	820	1280	275	560	880	820
4	1080	750	630	670	670	700	820	1190	490	580	910	820
5	960	670	630	720	710	720	850	1090	485	560	870	700
6	---	660	670	720	700	680	830	1090	490	590	880	670
7	810	670	660	750	710	750	900	1140	490	590	880	670
8	1080	670	620	760	710	740	900	1530	350	930	900	650
9	820	660	610	750	870	730	1710	1550	355	940	910	640
10	840	670	620	750	910	760	1780	1470	345	880	910	640
11	800	670	610	770	720	670	1620	1300	275	870	920	670
12	810	750	600	710	700	680	1640	1460	270	900	920	740
13	780	670	610	710	700	670	1170	1460	270	900	800	850
14	740	680	630	710	720	620	1680	1390	420	900	810	720
15	780	670	600	680	700	710	1120	1420	435	880	810	770
16	830	660	660	700	690	700	1730	1330	420	880	810	840
17	1070	660	660	700	630	660	1690	1290	300	870	1360	740
18	970	660	670	660	660	670	1680	1360	300	950	640	770
19	790	660	660	690	680	660	1670	1460	295	950	640	840
20	850	660	670	740	690	690	1640	1470	295	910	640	840
21	790	660	670	740	690	680	1640	470	295	910	640	770
22	850	650	630	770	670	700	1610	435	300	910	640	740
23	860	660	660	690	680	710	1790	435	265	890	640	750
24	790	650	710	700	690	720	1960	340	265	940	810	760
25	790	650	630	770	710	720	1960	340	365	1000	650	770
26	860	650	720	700	690	730	1800	350	340	980	810	760
27	800	650	650	770	690	720	1660	350	320	1000	810	770
28	800	650	720	660	710	720	1800	345	320	1010	800	760
29	790	650	660	650	---	720	1320	350	320	990	870	780
30	790	660	720	650	---	720	1790	345	340	850	880	830
31	800	---	670	670	---	760	---	410	---	850	870	---
MEAN	852	675	650	710	702	703	1440	998	350	837	828	755

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	13.5	4.0	1.0	3.5	4.5	9.0	10.0	18.0	22.0	24.0	19.5
2	---	13.0	3.5	1.5	3.0	5.0	---	12.5	16.5	22.5	23.5	19.5
3	13.5	9.0	3.5	.5	1.0	5.5	---	12.0	10.0	21.0	21.0	15.0
4	15.0	13.0	3.5	1.5	1.0	5.0	---	10.0	10.0	24.5	21.0	19.0
5	10.5	13.0	.5	1.0	1.0	5.0	9.5	10.0	10.0	20.5	21.0	19.0
6	---	13.0	.0	1.0	3.0	8.0	14.0	16.5	11.0	25.0	21.0	19.0
7	12.5	9.0	.0	1.0	2.5	8.0	14.0	17.0	11.5	25.0	23.0	19.0
8	10.0	5.5	.0	1.0	1.5	6.5	11.5	17.5	16.0	25.0	19.5	19.0
9	12.0	5.0	.0	1.0	2.0	4.0	14.5	17.5	16.0	25.5	19.5	19.0
10	11.0	4.5	.5	1.0	2.0	4.0	14.0	14.5	15.5	24.5	23.5	16.0
11	13.0	4.5	.0	1.0	1.5	12.0	9.5	12.0	16.5	22.0	23.0	16.5
12	13.5	4.5	.5	1.0	2.0	4.5	14.5	12.5	14.5	23.5	23.5	14.5
13	12.0	5.5	.5	1.0	2.0	12.0	18.0	12.5	16.5	25.5	23.5	17.5
14	12.5	5.5	.5	1.0	3.0	12.0	11.5	13.5	16.5	20.5	23.5	14.5
15	12.0	5.5	.5	1.0	2.0	11.5	18.0	14.0	17.0	23.0	22.0	15.0
16	11.0	4.0	1.0	1.0	2.0	12.0	15.0	14.5	16.5	24.5	22.0	17.5
17	9.0	4.0	1.0	1.5	3.5	12.0	15.5	20.0	17.5	21.5	22.5	14.5
18	9.0	3.5	.5	1.5	3.5	8.5	16.5	19.5	17.5	26.5	22.0	15.5
19	13.0	3.0	.0	1.5	3.5	8.5	15.5	22.5	17.5	26.0	21.5	17.5
20	9.5	3.0	.0	1.0	2.0	10.5	13.5	17.5	17.5	20.5	20.5	17.5
21	13.0	3.5	.0	1.0	2.5	11.5	10.5	17.5	17.5	25.5	22.0	15.5
22	13.0	3.5	.0	1.5	2.0	7.0	14.0	15.0	17.5	26.5	21.5	14.5
23	13.5	4.0	.0	1.0	3.5	10.5	15.0	17.5	16.5	20.5	21.5	14.5
24	13.5	6.0	.0	1.5	4.0	6.5	13.0	17.5	16.5	26.5	22.0	14.5
25	13.0	4.5	.0	1.0	4.0	11.5	12.5	17.5	17.5	20.5	21.5	15.5
26	13.5	6.5	.0	1.0	4.5	11.5	15.0	18.5	18.0	23.5	22.5	14.5
27	15.0	4.5	.5	2.5	3.5	11.0	14.5	19.0	18.0	22.5	21.5	14.0
28	15.0	4.5	.5	2.5	3.5	10.5	10.5	18.5	19.5	24.0	22.0	13.5
29	13.5	4.0	.5	3.0	---	11.5	12.5	16.5	20.0	23.0	22.5	14.5
30	13.5	3.5	.0	3.0	---	11.0	10.0	17.5	22.0	23.5	22.5	9.5
31	13.5	---	.0	4.0	---	11.5	---	17.0	---	23.5	21.5	---
MEAN	12.5	6.2	.7	1.4	2.6	8.8	13.4	15.7	16.2	23.5	22.0	16.2

## GREEN RIVER BASIN

09302000 DUCHESNE RIVER NEAR RANDLETT, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	15.2	9.3	12.0
2	---	---	---	---	---	---	---	---	---	14.5	10.6	12.7
3	---	---	---	---	---	---	---	---	---	13.2	10.9	12.0
4	---	---	---	---	---	---	---	---	---	12.5	9.0	10.6
5	---	---	---	---	---	---	---	---	---	12.9	7.7	10.1
6	---	---	---	---	---	---	---	---	---	14.4	7.8	11.0
7	---	---	---	---	---	---	---	---	---	16.8	9.9	13.3
8	---	---	---	---	---	---	---	---	---	18.8	13.3	15.8
9	---	---	---	---	---	---	---	---	---	16.1	11.8	14.1
10	---	---	---	---	---	---	---	---	---	13.0	9.3	11.3
11	---	---	---	---	---	---	---	---	---	15.3	8.3	11.7
12	---	---	---	---	---	---	---	---	---	---	---	e10.4
13	---	---	---	---	---	---	---	---	---	---	---	e13.1
14	---	---	---	---	---	---	---	---	---	---	---	14.5
15	---	---	---	---	---	---	13.5	7.2	e11.8 10.4	17.3	12.0	14.6
16	---	---	---	---	---	---	14.1	6.9	10.4	15.1	11.4	13.2
17	---	---	---	---	---	---	15.1	7.5	11.2	17.2	9.9	13.4
18	---	---	---	---	---	---	15.8	9.7	12.6	---	---	e15.4
19	---	---	---	---	---	---	16.7	10.4	13.5	20.4	14.3	17.0
20	---	---	---	---	---	---	14.5	11.8	13.1	21.1	13.7	17.3
21	---	---	---	---	---	---	12.0	9.5	10.8	21.3	15.3	18.2
22	---	---	---	---	---	---	12.1	9.1	10.4	23.0	15.4	19.0
23	---	---	---	---	---	---	12.0	8.6	10.3	22.6	16.6	19.4
24	---	---	---	---	---	---	10.9	9.1	10.0	21.1	16.7	18.6
25	---	---	---	---	---	---	12.5	8.5	10.4	19.0	15.9	17.4
26	---	---	---	---	---	---	---	---	e12.3	17.9	14.9	16.5
27	---	---	---	---	---	---	14.6	12.2	13.4	18.3	14.2	16.3
28	---	---	---	---	---	---	14.2	11.2	12.8	18.1	13.9	16.2
29	---	---	---	---	---	---	13.1	10.9	11.9	17.8	14.4	15.3
30	---	---	---	---	---	---	12.2	10.2	11.1	14.8	12.6	13.7
31	---	---	---	---	---	---	---	---	---	14.8	12.5	13.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	14.4
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	14.7	11.9	13.2	21.7	17.2	19.4	24.0	19.1	21.5	20.7	18.7	19.8
2	14.8	12.0	13.1	21.6	18.6	20.0	24.8	19.7	22.2	19.5	17.1	18.0
3	---	---	e11.2	22.7	17.5	19.9	22.8	20.0	21.3	17.7	16.0	16.8
4	---	---	e12.3	22.9	18.7	20.7	24.5	19.2	21.5	16.9	14.5	15.9
5	12.5	10.3	11.4	23.6	18.1	20.7	23.7	20.2	21.9	17.8	14.3	16.0
6	14.7	11.1	12.8	25.1	19.1	22.0	25.0	19.6	22.0	18.8	14.6	16.7
7	16.9	13.3	14.9	25.3	20.9	22.8	24.4	19.4	21.9	18.7	15.1	17.0
8	16.5	13.7	15.2	25.1	21.0	22.8	24.5	19.6	22.0	18.5	14.2	16.4
9	16.3	13.9	15.2	25.4	20.5	22.9	24.2	19.6	21.9	17.7	14.1	16.1
10	15.7	13.9	14.5	25.3	20.1	22.7	22.4	20.0	21.1	18.4	15.0	16.7
11	14.7	12.5	13.5	26.2	20.5	23.2	21.8	18.4	20.1	19.2	15.3	17.1
12	16.6	14.0	15.1	27.0	20.9	23.8	22.4	17.7	20.0	18.5	14.6	16.6
13	16.6	14.6	15.7	26.3	21.4	23.7	23.7	18.0	20.7	18.2	13.9	16.1
14	16.6	15.0	15.5	23.6	21.0	21.9	23.4	18.2	20.7	17.6	13.9	15.8
15	15.4	14.6	14.9	23.9	19.8	21.8	23.1	18.7	20.9	17.2	13.6	15.4
16	14.8	14.2	14.5	21.5	19.4	20.5	23.9	18.4	21.1	17.6	13.3	15.5
17	14.6	14.0	14.3	23.7	18.2	20.7	23.9	19.3	21.4	18.4	13.7	16.0
18	14.1	13.6	13.9	24.2	20.1	22.0	24.5	17.9	21.1	18.1	14.0	16.1
19	14.7	14.0	14.5	24.3	20.5	21.9	24.2	19.7	21.8	16.8	14.7	15.6
20	14.9	14.5	14.7	23.4	18.6	21.0	23.5	19.3	21.2	16.9	13.2	14.9
21	15.0	14.7	14.9	24.0	19.3	21.5	22.8	19.1	20.8	17.2	13.2	15.2
22	14.9	14.6	14.8	25.7	20.0	22.7	24.0	19.2	21.5	17.2	13.1	15.2
23	15.0	14.7	14.9	26.5	20.6	23.4	24.1	19.1	21.6	17.1	14.1	15.5
24	15.3	15.0	15.1	24.7	21.6	23.2	23.0	19.4	21.4	16.9	13.9	15.4
25	15.3	15.1	15.3	26.4	20.4	23.2	22.4	19.8	20.9	16.8	13.0	14.9
26	15.5	15.3	15.4	24.1	20.1	22.4	22.8	18.6	20.5	15.7	13.0	14.3
27	15.5	15.4	15.4	25.2	20.0	22.4	22.0	18.8	20.4	14.3	10.7	12.5
28	15.5	15.4	15.5	26.7	20.5	23.4	21.3	17.5	19.5	12.8	9.1	11.0
29	19.3	15.5	16.8	25.7	22.0	23.6	22.5	17.8	20.1	12.6	8.4	10.5
30	19.9	16.7	18.3	22.9	21.2	21.8	21.7	18.7	20.2	13.3	8.8	11.0
31	---	---	---	23.0	19.8	21.1	21.7	18.6	20.2	---	---	---
MONTH	---	---	14.6	27.0	17.2	22.0	25.0	17.5	21.1	20.7	8.4	15.5

e Estimated

## 09306500 WHITE RIVER NEAR WATSON, UTAH

LOCATION.--Lat 39°58'44", long 109°10'41" , in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 2, T. 10 S., R. 24 E., Uintah County, Hydrologic Unit 14050007, on left bank 350 ft downstream from bridge on State Highway 45, 1 mi downstream from Evacuation Creek, and 7 mi north of Watson.

DRAINAGE AREA.--4,020 mi<sup>2</sup>, approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1906 (no winter records), May to November 1918, April 1923 to September, 1979, October 1985 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Dragon" 1906 and "near Rangely, Colo." 1904, 1905, 1918.

GAGE.--Water-stage recorder. Datum of gage is 4,946.78 ft above sea level. See WSP 1733 for history of changes prior to Oct. 27, 1959.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 31,900 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 8,160 ft<sup>3</sup>/s July 15, 1929; maximum gage height, 13.1 ft Feb. 11, 1962, from floodmark in well (backwater from ice); minimum, 11 ft<sup>3</sup>/s Dec. 6, 1972, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 1	1415	*3,280	*5.70				
Minimum daily discharge, 282 ft <sup>3</sup> /s, Sep 12.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e513	626	521	e490	e380	553	557	1270	3130	956	708	e492
2	e540	601	510	e500	e390	601	584	1290	2880	907	670	506
3	579	648	e454	e520	e400	620	604	1180	2590	857	612	533
4	e604	623	e312	e505	e410	553	599	1200	2570	806	563	567
5	e657	e617	e343	e520	e430	558	571	1200	2530	755	e642	576
6	e730	611	e374	e500	e440	546	534	1110	2480	707	e582	521
7	e738	597	e406	e499	e430	528	e547	1020	2190	667	577	487
8	e706	593	e324	e500	e450	509	549	963	1910	750	600	463
9	e692	594	e329	e480	e405	525	533	947	2080	946	590	434
10	e671	592	425	e490	e400	526	558	1110	2340	737	555	376
11	e688	546	521	e470	e415	522	546	1350	2380	706	541	404
12	e662	566	548	e468	e410	518	566	1280	2200	670	560	282
13	e647	553	578	e465	e430	511	489	1160	2080	633	596	574
14	e628	578	693	e465	e420	512	508	1110	2060	626	563	416
15	e608	e571	708	e450	e405	499	e543	1170	2030	763	529	375
16	e618	563	706	e460	e430	513	583	1230	2040	754	522	361
17	e628	558	745	e450	e470	520	544	1170	2290	748	502	345
18	e638	552	736	e470	e488	530	526	1160	2440	680	485	327
19	e648	e549	660	e475	e500	542	e518	1180	2320	651	482	380
20	658	e543	e600	e480	e520	564	533	1360	2210	605	480	444
21	615	520	e560	e470	e500	579	594	1610	2100	639	574	376
22	606	478	e520	e440	e520	600	668	1870	1950	676	536	402
23	601	532	e490	e430	e528	613	789	2070	1880	712	561	e384
24	616	535	e480	e450	494	604	798	2190	1830	660	506	370
25	600	518	e485	e470	534	587	826	2400	1710	665	452	351
26	e610	511	e495	e455	543	586	1040	2750	1560	633	464	361
27	619	505	e480	e450	608	605	e1160	2940	1410	611	446	369
28	644	506	e470	e445	579	626	1130	2720	1300	e600	426	362
29	625	539	e480	e430	---	617	1040	2650	1150	548	479	370
30	662	527	e495	e420	---	558	1050	2800	1030	679	503	380
31	639	---	e475	e405	---	542	---	2940	---	795	554	---
TOTAL	19690	16852	15923	14522	12929	17267	20087	50400	62670	22142	16860	12588
MEAN	635	562	514	468	462	557	670	1626	2089	714	544	420
MAX	738	648	745	520	608	626	1160	2940	3130	956	708	576
MIN	513	478	312	405	380	499	489	947	1030	548	426	282
AC-FT	39060	33430	31580	28800	25640	34250	39840	99970	124300	43920	33440	24970

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924-76, 1986-99, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	473	432	366	357	428	583	714	1614	1845	737	482	443
MAX	1029	716	600	580	1414	1180	2466	3537	4018	2923	1915	1917
(WY)	1930	1998	1926	1926	1986	1939	1929	1929	1929	1929	1929	1929
MIN	243	279	176	160	246	336	368	384	227	109	142	208
(WY)	1964	1995	1995	1937	1949	1952	1961	1977	1934	1934	1994	1955

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1924-76, 1986-99
ANNUAL TOTAL	382710	281930	
ANNUAL MEAN	1049	772	707
HIGHEST ANNUAL MEAN			1736
LOWEST ANNUAL MEAN			308
HIGHEST DAILY MEAN	3820	May 23	3130 Jun 1
LOWEST DAILY MEAN	312	Dec 4	282 Sep 12
ANNUAL SEVEN-DAY MINIMUM	359	Dec 4	359 Dec 4
ANNUAL RUNOFF (AC-FT)	759100	559200	511900
10 PERCENT EXCEEDS	2640	1580	1600
50 PERCENT EXCEEDS	619	566	450
90 PERCENT EXCEEDS	430	420	290
e Estimated			

## GREEN RIVER BASIN

09306500 WHITE RIVER NEAR WATSON, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to September 1979, October 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1950 to September 1979, October 1986 to September 1993.

WATER TEMPERATURES: December 1950 to September 1979, October 1986 to September 1993.

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to June 1979, October 1985 to September 1990.

INSTRUMENTATION.--Water-quality monitor November 1985 to September 1993.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 4,450 microsiemens Aug. 4, 1955; minimum recorded, 136 microsiemens May 20, 1989.

WATER TEMPERATURES: Maximum recorded, 33.0°C July 15, 1977; minimum, 0.0°C many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 31,100 mg/L Aug. 8, 1987; minimum daily mean, 31 mg/L Sept. 7, 8, 1989.

SEDIMENT LOADS: Maximum daily, 121,000 tons Aug. 8, 1987; minimum daily, 12 tons Sept. 7, 8, 1989.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED WATER (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT 15...	1130	2.78	607	750	7.8	25.5	12.0	--	--	--	270
MAR 25...	1210	2.50	549	850	8.6	8.0	12.0	10.3	116	630	340
AUG 26...	1210	2.47	438	700	8.4	30.0	23.5	7.2	103	635	270

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT 15...	60	29	47	27	1	1.4	5.7	200	12	.26
MAR 25...	72	38	71	31	2	1.7	.9	250	16	.22
AUG 26...	61	28	51	29	1	2.1	1.6	180	12	.25

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)
OCT 15...	12	569	470	.77	933	<.010	<.050	<.020	<.010	188
MAR 25...	10	585	578	.80	867	<.010	.074	<.020	<.010	194
AUG 26...	12	468	472	.64	553	<.010	.084	<.020	<.010	207

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B) (01020)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT 15...	1130	62	<1
MAR 25...	1210	70	1
AUG 26...	1210	61	1

## GREEN RIVER BASIN

103

09309600 FAIRVIEW TUNNEL NEAR FAIRVIEW, UT (Transmountain diversion)

LOCATION.--Lat 39°40'03", long 111°18'41", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 25, T. 13 S., R. 5 E., Sanpete County, Hydrologic Unit 14060007, on right bank 1,000 ft upstream from tunnel portal, 7.3 mi east-northeast of Fairview.

PERIOD OF RECORD.--July 1967 to current year. Seasonal records only. (July to September 1967, gage height only.)

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 8,660 ft above sea level, from topographic map.

REMARKS.--Records poor. Fairview Tunnel diverts from San Rafael River and Price River drainages in the Colorado River Basin to San Pitch River in the Great Basin. Due to the location of the gage, reported flow may not be actual flow through tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 66 ft<sup>3</sup>/s June 17, 1993, gage height, 2.46 ft; no flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e.00	e.00	e.00	e7.6	11	8.6
2	---	---	---	---	---	---	e.00	e.00	e.00	e7.7	11	e7.6
3	---	---	---	---	---	---	e.00	e.00	e.00	e7.9	13	e7.1
4	---	---	---	---	---	---	e.00	e.00	e.00	e9.6	13	e6.4
5	---	---	---	---	---	---	e.00	e.00	e.00	e9.0	14	e6.1
6	---	---	---	---	---	---	e.00	e.00	e.00	e7.4	14	e5.9
7	---	---	---	---	---	---	e.00	e.00	e.00	e11	13	e5.6
8	---	---	---	---	---	---	e.00	e.00	e.00	e9.4	12	e5.4
9	---	---	---	---	---	---	e.00	e.00	e.00	e14	12	e4.9
10	---	---	---	---	---	---	e.00	e.00	e.00	e13	12	e5.0
11	---	---	---	---	---	---	e.00	e.00	e.00	e14	11	e6.0
12	---	---	---	---	---	---	e.00	e.00	e.00	e15	10	e5.4
13	---	---	---	---	---	---	e.00	e.00	e.00	e14	9.5	e4.0
14	---	---	---	---	---	---	e.00	e.00	e.00	e12	9.4	e3.2
15	---	---	---	---	---	---	e.00	e.00	e.00	e11	9.7	e3.8
16	---	---	---	---	---	---	e.00	e.00	e.00	e10	10	e2.6
17	---	---	---	---	---	---	e.00	e.00	e.10	e9.8	11	e2.0
18	---	---	---	---	---	---	e.00	e.00	e.30	e9.0	11	e1.7
19	---	---	---	---	---	---	e.00	e.00	e.50	e9.2	11	e2.0
20	---	---	---	---	---	---	e.00	e.00	e.60	e9.4	11	e1.8
21	---	---	---	---	---	---	e.00	e.00	e.64	e9.3	11	e1.4
22	---	---	---	---	---	---	e.00	e.00	e.65	e9.0	11	e1.0
23	---	---	---	---	---	---	e.00	e.00	e1.2	e9.0	12	e.81
24	---	---	---	---	---	---	e.00	e.00	e3.0	e9.0	11	e.58
25	---	---	---	---	---	---	e.00	e.00	e2.7	e10	10	e.41
26	---	---	---	---	---	---	e.00	e.00	e2.8	e12	9.9	e.30
27	---	---	---	---	---	---	e.00	e.00	e3.7	e14	9.7	e.20
28	---	---	---	---	---	---	e.00	e.00	e5.0	16	9.2	e.17
29	---	---	---	---	---	---	e.00	e.00	e7.9	16	8.7	e.13
30	---	---	---	---	---	---	e.00	e.00	e7.5	13	9.2	e.10
31	---	---	---	---	---	---	---	e.00	---	12	8.7	---
TOTAL	---	---	---	---	---	---	0.00	0.00	36.59	339.3	339.0	100.20
MEAN	---	---	---	---	---	---	.000	.000	1.22	10.9	10.9	3.34
MAX	---	---	---	---	---	---	.00	.00	7.9	16	14	8.6
MIN	---	---	---	---	---	---	.00	.00	.00	7.4	8.7	.10
AC-FT	---	---	---	---	---	---	.00	.00	73	673	672	199

e Estimated



## GREEN RIVER BASIN

09310000 GOOSEBERRY CREEK NEAR SCOFIELD, UT

LOCATION.--Lat 39°42'57", long 111°17'58", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 6, T. 13 S., R. 6 E., Sanpete County, Hydrologic Unit 14060007, on left bank 300 ft downstream from old Mammoth Dam, 5.5 mi upstream from mouth, and 7 mi west of Scofield.

DRAINAGE AREA.--16.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1930 to September 1931, May 1940 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,400 ft above sea level, from topographic map. October 1930 to September 1931, at different datum, May 1940 to September 1954, at datum 0.50 ft higher.

REMARKS.--Records poor. Transmountain diversion above station for irrigation in Sevier River basin, part of which is water diverted into Gooseberry Creek from Boulger Creek. A small reservoir on Gooseberry Creek 5 mi above station, capacity about 1,900 acre-ft is used to regulate these diversions. Flow also affected by small reservoir 1 mi above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 419 ft<sup>3</sup>/s May 22, 1984; maximum gage height, 3.37 ft May 27, 1986; no flow Nov. 11, 1964, Sept. 23-26, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 305 ft<sup>3</sup>/s, May 24, gage height, 3.23 ft; minimum daily discharge, 1.1 ft<sup>3</sup>/s, Jan 8, 10-13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	5.8	4.9	e1.5	e2.2	2.5	6.7	14	151	21	9.8	10
2	5.4	5.6	4.8	e1.3	e2.1	2.7	e6.4	19	152	21	8.9	9.6
3	5.3	5.7	4.6	e1.5	e2.1	2.8	e5.8	27	142	20	8.6	8.7
4	5.5	5.2	4.8	e1.5	2.2	2.8	e5.2	19	114	19	8.9	8.6
5	5.5	e5.4	4.3	e1.4	2.5	e2.8	e4.6	15	99	19	9.0	8.1
6	5.1	e5.6	e4.1	1.2	2.2	2.7	e4.0	14	93	18	9.0	7.9
7	4.9	e4.8	4.0	1.2	2.2	2.8	e4.0	18	89	18	8.3	7.8
8	4.7	e5.8	3.9	1.1	2.2	2.9	e4.2	30	83	18	9.4	7.7
9	4.5	5.8	3.8	1.2	2.4	3.0	e4.4	38	88	16	12	7.9
10	4.6	5.6	e3.2	1.1	e2.3	e2.9	e4.2	27	100	15	12	7.8
11	4.4	5.4	2.7	e1.1	e2.2	2.8	e4.0	23	103	14	16	7.8
12	4.7	5.2	2.6	1.1	e2.5	2.9	e4.6	25	97	14	11	7.7
13	4.8	5.0	2.3	1.1	e2.6	e2.9	e5.2	42	95	14	10	7.5
14	4.6	5.2	2.2	e1.2	2.8	e2.8	e5.8	57	89	14	9.5	7.4
15	4.7	5.4	2.0	e1.2	2.8	2.8	e6.8	51	82	16	9.4	7.5
16	4.8	5.1	1.8	e1.2	2.8	3.0	e8.3	46	76	13	9.3	7.3
17	5.1	5.3	1.6	1.3	e2.9	e3.1	8.7	41	70	13	9.1	7.1
18	5.1	5.3	1.7	1.2	e3.0	e3.4	8.6	61	48	12	9.2	7.0
19	5.1	4.9	1.7	1.5	2.8	e3.8	12	87	40	12	8.9	7.3
20	5.0	4.6	e1.6	e1.5	2.8	e4.2	17	107	36	12	13	7.8
21	4.9	4.9	e1.4	e1.4	e2.8	4.3	17	138	34	11	13	7.1
22	5.3	5.0	e1.2	e1.5	e2.8	4.2	12	165	33	11	10	7.0
23	5.4	5.0	e1.2	1.6	2.7	e4.6	11	206	30	10	9.4	6.8
24	5.3	5.0	e1.3	1.9	2.6	e5.0	e10	245	28	10	9.3	6.6
25	5.9	4.7	e1.3	1.8	2.6	5.4	12	222	25	9.5	9.7	6.4
26	8.5	4.8	e1.2	e1.9	2.8	6.4	10	211	24	9.4	9.6	5.8
27	8.8	4.9	1.2	e1.8	2.7	6.0	15	209	23	9.5	9.9	5.4
28	6.6	5.0	1.2	e1.6	2.6	e5.5	20	206	22	11	9.4	5.5
29	5.9	5.1	1.2	e1.7	---	e5.8	20	210	22	12	8.8	5.4
30	6.3	4.9	1.3	e1.8	---	6.1	15	187	22	11	12	5.1
31	6.1	---	e1.3	1.9	---	6.5	---	167	---	10	14	---
TOTAL	167.9	156.0	76.4	44.3	71.2	119.4	272.5	2927	2110	433.4	316.4	219.6
MEAN	5.42	5.20	2.46	1.43	2.54	3.85	9.08	94.4	70.3	14.0	10.2	7.32
MAX	8.8	5.8	4.9	1.9	3.0	6.5	20	245	152	21	16	10
MIN	4.4	4.6	1.2	1.1	2.1	2.5	4.0	14	22	9.4	8.3	5.1
AC-FT	333	309	152	88	141	237	541	5810	4190	860	628	436

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1999, BY WATER YEAR (WY)

	MEAN	4.91	4.59	3.81	3.46	3.46	4.31	18.2	102	61.6	13.9	7.27	5.08
MAX	13.5	11.6	9.00	7.83	7.37	10.6	55.4	239	239	47.9	16.7	14.1	
(WY)	1983	1983	1942	1984	1984	1972	1942	1952	1983	1983	1965	1965	
MIN	.65	1.92	1.81	1.40	1.40	2.13	3.37	12.9	9.35	3.75	1.96	1.89	
(WY)	1979	1991	1960	1960	1960	1963	1975	1977	1992	1977	1977	1977	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1941 - 1999

ANNUAL TOTAL	8208.9	6914.1	
ANNUAL MEAN	22.5	18.9	19.5
HIGHEST ANNUAL MEAN			40.7
LOWEST ANNUAL MEAN			4.65
HIGHEST DAILY MEAN	170	245	419
LOWEST DAILY MEAN	1.2	1.1	.00
ANNUAL SEVEN-DAY MINIMUM	1.2	1.1	.06
ANNUAL RUNOFF (AC-FT)	16280	13710	14110
10 PERCENT EXCEEDS	82	41	50
50 PERCENT EXCEEDS	6.7	5.8	5.1
90 PERCENT EXCEEDS	4.5	1.6	2.6

e Estimated

## 09310500 FISH CREEK ABOVE RESERVOIR, NEAR SCOFIELD, UT

LOCATION.--Lat 39°46'28", long 111°11'25", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 18, T. 12 S., R. 7 E., Carbon County, Hydrologic Unit 14060007, on right bank 0.8 mi upstream from bridge, 1.2 mi downstream from French Creek, and 4.5 mi north of Scofield.

DRAINAGE AREA.--60.1 mi<sup>2</sup>.

PERIOD OF RECORD.--June to October 1931, April to September 1932, October 1938 to current year. Published as Price River above Scofield Reservoir, near Scofield, October 1938 to September 1967.

REVISED RECORDS.--WDR UT-77-1: Drainage area. WDR UT-88-1: 1987.

GAGE.--Water-stage recorder. Elevation of gage is 7,670 ft above sea level, from topographic map. June 1931 to September 1932, and October 1938 to July 27, 1967, at various sites about 0.5 mi downstream at different datums.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small transmountain diversions in headwaters for irrigation in Sevier Lake basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft<sup>3</sup>/s May 21, 1984, gage height, 6.20 ft; minimum recorded, 0.6 ft<sup>3</sup>/s Oct. 31, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 270 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 24	2100	*641	*3.87	No other peak greater than base discharge.			

Minimum daily discharge, 3.4 ft<sup>3</sup>/s, Feb 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	14	e12	e11	e4.9	e6.2	e16	64	301	50	20	16
2	13	14	e12	e10	e4.4	e6.4	e17	73	294	48	19	16
3	12	13	e11	e10	e4.6	e6.2	e16	97	276	45	19	16
4	12	e13	e10	e11	e4.5	e6.1	e12	81	239	43	19	14
5	13	e13	e9.6	e10	e4.5	e6.1	e13	70	214	40	20	14
6	13	e14	e9.8	e9.4	e4.4	e6.1	e16	68	197	39	19	15
7	13	e15	e10	e9.6	e4.6	e6.0	e17	80	192	40	19	14
8	12	e16	e11	e9.5	e4.6	e5.8	e18	109	181	40	19	13
9	12	e17	e11	e9.3	e4.3	e6.3	e20	132	176	38	23	14
10	12	e16	e11	e9.1	e3.8	e6.6	e22	115	179	34	23	14
11	12	e15	e10	e10	e3.6	e6.7	e20	106	179	33	31	14
12	12	e15	e9.7	e10	e3.6	e7.1	e20	107	172	33	24	14
13	12	e16	e9.3	e9.4	e4.0	e7.5	e19	137	163	31	20	14
14	12	e17	e9.3	e8.8	e4.2	e8.1	e20	168	156	32	19	14
15	12	e17	e9.4	e9.0	e4.0	e9.0	e21	159	149	36	18	13
16	12	e15	e9.6	e8.5	e3.8	e11	e23	153	142	32	18	14
17	11	e15	e9.8	e8.8	e3.6	e12	e23	142	135	31	18	15
18	11	e15	e10	e8.5	e3.6	e14	e25	166	114	28	17	14
19	11	e15	e9.8	e8.2	e3.4	e18	e33	207	99	28	18	16
20	11	e15	e9.4	e8.0	e3.5	e20	e41	239	90	28	20	17
21	11	e15	e9.0	e7.3	e3.6	e16	e42	294	86	28	24	15
22	11	e14	e8.7	e6.9	e3.5	e15	e40	360	83	27	20	15
23	11	e13	e8.6	e6.9	e3.7	e14	e40	443	76	26	19	15
24	12	e13	e8.9	e7.1	e4.5	e15	e43	518	71	25	17	15
25	13	e13	e9.2	e7.4	e5.3	e16	e45	520	67	24	15	14
26	16	e13	e9.5	e7.0	e5.3	e15	e50	479	63	23	15	14
27	17	e13	e9.7	e6.2	e5.7	e14	e62	461	60	22	15	13
28	16	e14	e10	e6.1	e6.0	e14	e70	434	57	21	15	13
29	14	e13	e10	e6.2	---	e15	75	432	54	24	15	13
30	14	e13	e11	e6.0	---	e15	64	383	52	22	18	13
31	14	---	e11	e5.3	---	e16	---	342	---	22	23	---
TOTAL	389	434	309.3	260.5	119.5	340.2	943	7139	4317	993	599	431
MEAN	12.5	14.5	9.98	8.40	4.27	11.0	31.4	230	144	32.0	19.3	14.4
MAX	17	17	12	11	6.0	20	75	520	301	50	31	17
MIN	11	13	8.6	5.3	3.4	5.8	12	64	52	21	15	13
AC-FT	772	861	613	517	237	675	1870	14160	8560	1970	1190	855

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MEAN	11.6	11.4	9.75	8.90	9.36	13.2	61.0	269	142	30.9	15.0	11.3
MAX	26.7	28.8	19.3	20.3	21.2	42.7	167	681	731	99.6	37.5	27.0
(WY)	1983	1983	1985	1971	1994	1986	1988	1952	1983	1983	1983	1983
MIN	5.34	6.01	5.16	3.34	3.79	5.00	11.5	23.5	14.4	6.83	4.07	3.49
(WY)	1978	1965	1962	1979	1979	1964	1975	1977	1977	1977	1977	1977

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1939 - 1999

ANNUAL TOTAL	21738.5	16274.5	
ANNUAL MEAN	59.6	44.6	49.7
HIGHEST ANNUAL MEAN			113
LOWEST ANNUAL MEAN			10.2
HIGHEST DAILY MEAN	460	520	1310
LOWEST DAILY MEAN	6.9	3.4	2.6
ANNUAL SEVEN-DAY MINIMUM	7.9	3.6	2.8
ANNUAL RUNOFF (AC-FT)	43120	32280	35980
10 PERCENT EXCEEDS	213	133	130
50 PERCENT EXCEEDS	16	15	13
90 PERCENT EXCEEDS	10	6.2	7.0

e Estimated

## GREEN RIVER BASIN

09310700 MUD CREEK BELOW WINTER QUARTERS CANYON, AT SCOFIELD, UT

LOCATION.--Lat 39°43'18", long 111°09'38", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 5, T. 13 S., R. 7 E., Carbon County, Hydrologic Unit 14060007, on left bank 1.3 mi upstream from mouth, 0.1 mi below Winter Quarters Canyon, 0.2 mi upstream from Scofield.

DRAINAGE AREA.--29.1 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1978 to September 1986. October 1990 to current year. Formerly published as "Pleasant Valley Creek below Winter Quarters Canyon, at Scofield."

GAGE.--Water-stage recorder. Altitude of gage is 7,720 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 389 ft<sup>3</sup>/s May 21, 1984, gage height, 3.30 ft; minimum, 1.4 ft<sup>3</sup>/s Sept. 8, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 28	2008	*115	*3.01	Aug 11	0318	33	2.24

Minimum daily discharge, 4.2 ft<sup>3</sup>/s, Apr 6-7, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	7.1	6.3	5.8	e4.9	6.6	7.3	22	89	17	9.0	8.1
2	6.7	7.0	6.4	e5.8	e4.8	6.2	7.3	23	92	17	8.4	9.8
3	7.5	7.0	6.2	e5.6	e4.9	e6.1	6.4	30	83	16	8.0	9.0
4	7.6	6.4	e6.1	e6.0	e5.0	6.2	5.0	25	73	15	8.5	8.3
5	6.9	6.6	e5.7	5.5	5.0	e5.9	e4.3	25	64	14	8.3	8.0
6	7.0	6.8	e5.2	5.5	5.1	6.4	4.2	24	59	13	8.2	8.3
7	7.0	6.8	e5.2	5.6	5.1	6.0	4.2	26	61	12	8.1	8.0
8	7.0	6.9	e5.3	5.4	e5.5	6.1	4.3	32	60	12	8.6	8.0
9	6.9	7.0	e5.4	5.5	e5.2	5.8	4.2	35	61	11	11	8.5
10	6.8	7.1	e5.2	5.5	e4.9	e5.0	e4.3	30	59	11	12	8.4
11	7.0	6.9	e5.4	5.3	e4.7	e5.2	e5.5	28	56	10	15	8.9
12	6.9	6.6	5.6	5.3	e4.8	5.7	6.8	28	53	9.8	8.9	8.4
13	6.7	7.2	e5.5	5.3	e5.1	e5.9	7.7	33	50	10	8.3	8.0
14	6.5	7.1	5.3	5.1	e5.3	e6.0	8.0	38	49	12	8.5	7.9
15	6.7	6.7	e5.1	5.2	e5.1	6.1	8.2	34	49	10	9.1	7.9
16	6.7	6.8	5.0	5.0	e5.0	6.9	8.2	32	47	9.2	8.6	7.8
17	6.7	6.7	5.1	4.8	e5.1	7.3	8.7	31	46	9.3	8.3	8.1
18	6.5	6.7	e5.3	5.3	e5.1	8.5	10	36	42	9.2	8.2	8.1
19	6.8	6.4	e5.2	5.3	e5.0	9.9	11	41	39	9.2	8.3	8.1
20	6.6	e6.5	e5.0	5.3	e4.8	9.8	13	46	37	12	8.2	8.0
21	6.9	e6.5	e4.8	e5.4	e5.0	8.0	13	54	33	11	8.6	7.7
22	6.7	6.5	e4.6	e5.4	e4.9	7.7	12	64	30	9.1	8.6	7.4
23	6.7	6.4	e4.8	e5.4	e5.2	7.0	12	72	29	8.4	8.2	7.2
24	6.6	6.3	e5.0	5.4	e5.5	7.5	13	84	27	8.6	9.2	7.6
25	11	6.5	e5.2	5.3	e5.8	7.7	13	92	25	8.0	8.5	7.2
26	12	6.7	e5.5	e5.1	e6.0	7.2	13	94	23	7.9	8.0	6.8
27	9.0	6.4	e5.7	e4.9	e6.2	6.3	15	96	22	9.6	9.9	7.2
28	7.5	6.7	e5.8	e4.8	e6.4	6.2	18	102	20	8.8	8.7	6.7
29	7.2	6.7	e5.7	e4.9	---	6.6	21	108	19	11	8.1	7.0
30	7.9	6.5	5.7	e4.9	---	6.5	20	103	18	11	9.4	7.0
31	7.2	---	5.6	e4.9	---	7.0	---	99	---	9.8	9.1	---
TOTAL	225.8	201.5	167.9	164.5	145.4	209.3	288.6	1587	1415	341.9	277.8	237.4
MEAN	7.28	6.72	5.42	5.31	5.19	6.75	9.62	51.2	47.2	11.0	8.96	7.91
MAX	12	7.2	6.4	6.0	6.4	9.9	21	108	92	17	15	9.8
MIN	6.5	6.3	4.6	4.8	4.7	5.0	4.2	22	18	7.9	8.0	6.7
AC-FT	448	400	333	326	288	415	572	3150	2810	678	551	471

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1999, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	7.14	6.48	5.69	5.44	5.69	7.95	16.9	59.5	50.6	13.1	8.03	7.97									
MAX	12.2	10.3	9.51	8.74	9.19	18.3	40.7	141	134	30.8	16.0	14.0									
(WY)	1985	1986	1985	1986	1984	1986	1985	1984	1983	1983	1984	1986									
MIN	2.73	3.35	2.80	1.95	3.00	4.27	9.00	9.19	6.34	3.43	2.91	2.03									
(WY)	1979	1980	1980	1980	1979	1979	1979	1992	1994	1981	1992	1979									

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1979 - 1999

ANNUAL TOTAL	4448.0	5262.1		
ANNUAL MEAN	12.2	14.4		
HIGHEST ANNUAL MEAN			16.2	
LOWEST ANNUAL MEAN			30.7	1984
HIGHEST DAILY MEAN	56	May 29	5.52	1981
LOWEST DAILY MEAN	4.6	Jan 6	300	May 24 1984
ANNUAL SEVEN-DAY MINIMUM	4.9	Jan 15	1.6	Sep 8 1979
ANNUAL RUNOFF (AC-FT)	8820		1.6	Jan 11 1980
10 PERCENT EXCEEDS	31		11770	
50 PERCENT EXCEEDS	6.9		38	
90 PERCENT EXCEEDS	5.2		7.4	
			3.7	

e Estimated

## GREEN RIVER BASIN

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## 09311000 SCOFIELD RESERVOIR NEAR SCOFIELD, UT

LOCATION.--Lat 39°47'15", long 111°07'30", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 10, T. 12 S., R. 7 E., Carbon County, Hydrologic Unit 14060007, on right bank 200 ft upstream from face of dam on Price River and 4.7 mi northeast of Scofield.

DRAINAGE AREA.--154 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1941, April 1942 to current year. Fragmentary records 1926-41 in files of Office of State Engineer.

REVISED RECORDS.--WSP 1089: 1946. WDR UT-77-1: Drainage area.

GAGE.--Staff gage read twice daily. Datum of gage is sea level (levels by Bureau of Reclamation). Prior to Nov. 8, 1945, at site 800 ft upstream 200 ft from old dam at datum 4.51 ft higher.

REMARKS.--Reservoir is formed by earth and rockfill; rock-faced dam 800 ft downstream from old dam in use prior to Nov. 8, 1945. Storage began in May 1926. Usable capacity of reservoir formed by new dam is 65,780 acre-ft between elevations 7,586.0 ft (bottom of outlet works) and 7,617.5 ft (crest of spillway). Dead storage, 8,000 acre-ft below elevation 7,586.0 ft. Figures given herein represent usable contents. Water used for irrigation in vicinity of Price.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 77,280 acre-ft June 12, 13, 1983; elevation, 7,621.8 ft; minimum observed, 280 acre-ft Oct. 3, 1945; elevation, 7,586.2 ft.

EXTREMES FOR CURRENT YEAR.--Maximum observed contents, 70,480 acre-ft, Jun 7, elevation, 7,619.2 ft; minimum observed, 40,610 acre-ft, Oct 30, 31, elevation, 7608.0.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45000	40730	42150	43020	43840	44620	47490	49040	68760	66820	57200	51060
2	44800	40780	42200	43050	43870	44770	47650	49300	69330	66480	56960	50830
3	44650	40880	42230	43070	43890	44970	47540	49420	69760	66030	56690	50620
4	44570	40950	42250	43120	43920	45180	47570	49680	70040	65810	56420	50360
5	44470	41020	42280	43140	43940	45530	47600	49940	70190	65300	56180	50070
6	44320	41140	42300	43170	43970	45660	47600	50200	70330	65020	55940	49790
7	43940	41220	42330	43190	43990	45730	47620	50460	70480	64520	55690	49530
8	43690	41290	42350	43220	44020	45840	47620	50720	70450	65920	55480	49300
9	43490	41340	42400	43240	44040	45940	47650	50980	70420	63960	55270	49110
10	43290	41390	42430	43270	44070	45990	47670	51250	70390	63560	55130	48830
11	43100	41440	42450	43290	44100	46040	47700	51770	70360	63230	55050	48570
12	42870	41490	42470	43320	44140	46090	47720	52300	70330	62790	54860	48340
13	42820	41540	42500	43340	44170	46140	47750	52820	70300	62450	54680	48130
14	42620	41590	42520	43370	44200	46190	47770	53350	70190	62120	54470	47880
15	42570	41640	42550	43390	44220	46240	47880	53640	70130	61840	54280	47620
16	42380	41680	42570	43420	44240	46290	47930	53860	70070	61600	54090	47360
17	42080	41710	42600	43440	44270	46340	47950	54090	70020	61290	53990	47110
18	42080	41730	42620	43470	44300	46420	48010	54550	69790	61020	53720	46880
19	41880	41780	42650	43490	44340	46500	48030	55000	69590	60800	53540	46650
20	41680	41810	42670	43520	44370	46600	48110	55940	69440	60470	53350	46440
21	41490	41860	42700	43540	44400	46680	48160	56880	69330	60080	e53350	---
22	41290	41880	42720	43570	44420	46730	48180	57820	69130	59130	e53350	---
23	41100	41910	42750	43590	44440	46830	48210	58770	68990	59260	e52400	---
24	41050	41930	42800	43620	44470	46960	48240	59670	68780	59050	e52400	---
25	41000	41980	42820	43640	44520	47060	48240	61180	68590	58880	52400	---
26	40950	42000	42850	43670	44550	47130	48260	62700	68360	58610	52240	---
27	40950	42030	42870	43690	44570	47180	48420	63730	68130	58390	52090	---
28	40850	42050	42900	43720	44600	47260	48570	65080	67620	58180	51800	---
29	40730	42080	42920	43740	---	47310	48730	66340	67500	57930	51590	---
30	40610	42130	42950	43770	---	47360	48880	67050	67160	57690	51430	e46400
31	40610	---	42970	43790	---	47440	---	67900	---	57440	51300	---
MAX	45000	42100	43000	43800	44600	47400	48900	67900	70500	66800	57200	---
MIN	40600	40700	42200	43000	43800	44600	47500	49000	67200	57400	51300	---
(#)	7608.0	7608.6	7609.0	7609.3	7609.6	7610.7	7611.3	7618.3	7618.0	7614.5	7612.2	---
(*)	-4590	+1520	+840	+820	+810	+2840	+1440	+19020	-740	-9720	-6140	e-4900

CAL YR 1998 .....(\*) +840  
WTR YR 1999 .....(\*) +1200

(#) Elevation in feet, at end of month.  
(\*) Change in contents, in acre-feet.  
(e) Estimated

## 09312600 WHITE RIVER BELOW TABBYUNE CREEK, NEAR SOLDIER SUMMIT, UT

LOCATION.--Lat 39°52'33", long 111°02'12", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 9, T. 11 S., R. 8 E., Utah County, Hydrologic Unit 14060007, 50 ft downstream from bridge on U.S. Highways 6-50, 1.5 mi downstream from Tabbyune Creek, 2.5 mi northwest of the Colton railroad siding, and 4.5 mi southeast of Soldier Summit.

DRAINAGE AREA.--75.6 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,230 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 962 ft<sup>3</sup>/s May 27, 1983, gage height, 5.82 ft; no flow many days August and September 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
(a) May 29	----	*170	----				
Minimum daily discharge, 2.8 ft <sup>3</sup> /s, Feb 11.							
(a) Peak is an estimated daily discharge.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e6.3	e7.8	e5.1	e4.9	e3.3	e5.6	18	51	e130	18	e9.4	e4.8
2	e6.4	e7.8	e5.2	e4.9	e3.0	e5.4	16	e54	e138	17	9.2	e7.8
3	e8.0	e7.4	e5.0	e4.8	e3.0	e5.2	15	e66	e120	16	8.5	e6.2
4	e8.1	e7.0	e4.9	e5.4	e3.1	e5.2	15	e56	e115	16	8.9	e5.4
5	e7.0	e7.2	e4.7	e5.2	e3.1	e5.0	14	e56	e88	15	8.5	e4.9
6	e7.2	e7.2	e4.1	e5.2	e3.1	e5.6	15	e54	e74	14	e8.2	e5.1
7	e7.2	e7.2	e4.2	e5.2	e3.1	e5.4	14	e56	e76	14	e7.9	e4.2
8	e7.2	e7.3	e4.2	e4.8	e3.2	e5.4	14	e70	e74	14	7.7	e4.2
9	e6.9	e7.4	e4.3	e4.9	e3.1	e5.0	15	e80	e76	14	8.5	e5.0
10	e6.8	e7.5	e4.1	e4.9	e3.0	e4.7	14	e74	e68	13	9.0	e4.8
11	e7.4	e7.3	e4.2	e4.6	e2.8	e5.8	13	e66	e54	13	9.4	e5.4
12	e7.2	e7.0	e4.4	e4.6	e2.9	e7.0	13	e66	e43	12	7.5	e5.0
13	e7.0	e7.3	e4.3	e4.6	e3.0	e7.6	13	e76	e34	12	5.9	e4.8
14	e6.9	e6.7	e4.2	e4.3	e3.2	e8.0	15	e90	e31	12	5.9	e4.7
15	e7.0	e6.3	e4.0	e4.4	e3.0	e8.0	16	e84	e32	13	5.4	e4.7
16	e7.0	e6.5	e3.8	e4.0	e3.0	e10	16	e80	e29	12	4.9	e4.7
17	e7.0	e6.4	e3.9	e3.5	e3.1	e14	16	e74	28	12	5.3	e4.8
18	e6.8	e6.4	e4.1	e3.7	e3.1	e18	18	e80	28	11	5.0	e4.8
19	e7.2	e5.6	e3.9	e3.7	e3.0	e22	21	e84	26	10	4.5	e4.8
20	e7.0	e5.5	e3.7	e3.7	e2.9	32	26	e90	26	11	4.6	e4.6
21	e7.4	e5.7	e3.5	e3.8	e3.1	25	29	e100	25	11	5.0	e4.5
22	e7.3	e5.9	e3.2	e3.8	e3.1	22	27	e110	25	10	5.0	e4.3
23	e7.2	e5.8	e3.4	e3.8	e3.3	22	25	e125	24	e9.4	4.7	e4.5
24	e7.0	e5.5	e3.6	e3.8	e3.6	20	25	e140	23	e9.6	4.7	e4.3
25	e13	e5.6	e3.9	e3.6	e3.9	20	28	e150	22	e9.0	4.7	e4.2
26	e16	e5.7	e4.2	e3.4	e4.3	21	27	e155	21	e8.8	4.7	e4.1
27	e11	e5.5	e4.5	e3.3	e4.5	21	28	e160	20	e15	6.4	e4.2
28	e8.2	e5.6	e4.8	e3.1	e5.0	19	30	e165	20	e11	e5.6	e4.1
29	e8.0	e5.6	e4.7	e3.3	---	18	43	e170	19	e8.6	e4.7	e4.3
30	e9.0	e5.4	e4.7	e3.3	---	19	48	e162	18	e10	e5.8	e4.3
31	e8.0	---	e4.5	e3.3	---	19	---	e150	---	e9.8	e5.5	---
TOTAL	243.7	195.1	131.3	129.8	91.8	410.9	627	2994	1507	381.2	201.0	143.5
MEAN	7.86	6.50	4.24	4.19	3.28	13.3	20.9	96.6	50.2	12.3	6.48	4.78
MAX	16	7.8	5.2	5.4	5.0	32	48	170	138	18	9.4	7.8
MIN	6.3	5.4	3.2	3.1	2.8	4.7	13	51	18	8.6	4.5	4.1
AC-FT	483	387	260	257	182	815	1240	5940	2990	756	399	285

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1999, BY WATER YEAR (WY)

MEAN	5.84	5.39	4.45	4.09	4.93	13.6	63.7	160	56.0	15.8	7.33	5.17
MAX	11.9	9.91	8.16	7.68	20.3	55.0	169	416	209	41.2	22.8	11.7
(WY)	1985	1983	1984	1984	1986	1986	1986	1984	1983	1983	1983	1980
MIN	1.60	2.06	1.46	.64	1.90	2.73	5.68	4.37	1.95	.48	.016	.12
(WY)	1978	1991	1977	1977	1969	1991	1977	1977	1977	1977	1977	1977

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1968 - 1999

ANNUAL TOTAL	13163.3	7056.3		
ANNUAL MEAN	36.1	19.3		
HIGHEST ANNUAL MEAN			29.0	
LOWEST ANNUAL MEAN			61.9	1983
HIGHEST DAILY MEAN	305	May 4	170	May 29
LOWEST DAILY MEAN	2.8	Jan 6	2.8	Feb 11
ANNUAL SEVEN-DAY MINIMUM	3.0	Jan 15	3.0	Feb 10
ANNUAL RUNOFF (AC-FT)	26110		14000	
10 PERCENT EXCEEDS	137		56	
50 PERCENT EXCEEDS	7.8		7.2	
90 PERCENT EXCEEDS	3.8		3.7	

e Estimated

## GREEN RIVER BASIN

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09313000 PRICE RIVER NEAR HEINER, UT

LOCATION.--Lat 39°43'08", long 110°51'55", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 1, T. 13 S., R. 9 E., Carbon County, Hydrologic Unit 14060007, on left bank 0.7 mi north of Heiner and 0.8 mi downstream from Willow Creek.

DRAINAGE AREA.--455 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1934 to September 1969, October 1979 to September 1981, October 1990 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,000 ft above sea level, from topographic map. Prior to September 1969 at present site at datum 2.00 ft lower. October 1979 to September 1981 a water-stage recorder at site 400 ft downstream at different datum.

REMARKS.--Records poor. Flow affected by regulation of Scofield Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,340 ft<sup>3</sup>/s Sept. 13, 1940, gage height, 7.98 ft, from rating curve extended above 750 ft<sup>3</sup>/s on basis of slope-area measurements of peak flow; minimum recorded, 0.4 ft<sup>3</sup>/s Aug. 21, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 385 ft<sup>3</sup>/s, Jul 18, gage height, 5.49 ft; minimum daily discharge, 9.0 ft<sup>3</sup>/s, Dec 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	e25	e20	e14	e20	e32	e45	e100	254	224	e142	138
2	108	e25	e21	e14	e19	e30	e55	e104	287	208	e139	176
3	109	e24	e19	e14	e19	e29	e54	e110	337	213	e135	136
4	112	e24	e18	e17	e20	e29	e54	e108	343	213	137	128
5	110	e23	e17	e16	e20	e28	e53	e101	353	213	137	126
6	108	e23	e15	e15	e21	e32	e54	95	355	213	142	123
7	108	e22	e15	e15	e21	e31	e53	102	355	211	137	121
8	107	e21	e15	e16	e21	e31	e53	105	e370	213	124	116
9	107	e21	e16	e16	e22	e30	e54	117	e365	210	127	115
10	108	e22	e15	e16	e22	e29	e53	120	e360	208	126	114
11	106	e21	e16	e15	e22	e30	e50	109	335	207	137	117
12	107	e25	e17	e15	e21	e40	e49	108	327	207	133	116
13	e105	e25	e16	e15	e22	e45	e49	112	316	208	122	112
14	e105	e26	e16	e14	e24	e45	e55	127	305	201	113	115
15	e104	e26	e14	e15	e23	e45	e62	127	296	201	111	117
16	e104	e27	e12	e14	e23	e40	e70	122	288	195	108	122
17	e103	e27	e13	e14	e24	e42	e70	117	285	197	107	123
18	e100	e26	e14	e17	e24	e45	e72	126	274	e230	106	125
19	e102	e24	e12	e17	e23	e52	e72	133	255	e205	103	130
20	e101	e23	e11	e17	e23	e70	e74	155	236	e184	111	127
21	e103	e24	e10	e18	e26	e55	e78	163	220	e184	122	124
22	e102	e25	e9.0	e18	e26	e45	e75	171	210	e170	131	123
23	e102	e24	e9.5	e19	e26	e45	e72	181	213	e160	121	123
24	e101	e23	e10	e19	e27	e43	e72	188	210	e170	116	125
25	e140	e23	e11	e19	e27	e43	e80	186	193	e160	118	124
26	e165	e23	e12	e18	e27	e48	e77	182	203	e157	116	123
27	e120	e22	e13	e18	e28	e48	e82	176	212	e180	118	121
28	e110	e23	e14	e18	e30	e42	e90	171	209	e160	129	122
29	e85	e23	e13	e20	---	e37	e104	187	213	e140	126	107
30	e30	e22	e13	e20	---	e40	e118	224	218	e156	132	108
31	e27	---	e13	e20	---	e40	---	232	---	e150	132	---
TOTAL	3207	712	439.5	513	651	1241	1999	4359	8397	5948	3858	3697
MEAN	103	23.7	14.2	16.5	23.2	40.0	66.6	141	280	192	124	123
MAX	165	27	21	20	30	70	118	232	370	230	142	176
MIN	27	21	9.0	14	19	28	45	95	193	140	103	107
AC-FT	6360	1410	872	1020	1290	2460	3970	8650	16660	11800	7650	7330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935-69, 1980-81, 1991-99, BY WATER YEAR (WY)

	MEAN	46.1	18.1	12.5	10.4	13.9	43.3	161	344	259	195	134	90.6
MAX	153	90.7	30.1	18.4	33.1	181	523	1538	913	321	260	178	
(WY)	1998	1938	1966	1953	1996	1969	1952	1952	1952	1995	1995	1968	
MIN	3.84	3.23	4.00	4.00	5.46	7.96	29.0	80.2	52.3	28.1	12.6	6.39	
(WY)	1935	1935	1935	1935	1961	1991	1961	1961	1961	1961	1992	1992	

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1935-69, 1980-81, 1991-99

ANNUAL TOTAL	55127.5	35021.5		
ANNUAL MEAN	151	95.9	111	
HIGHEST ANNUAL MEAN			310	1952
LOWEST ANNUAL MEAN			25.3	1961
HIGHEST DAILY MEAN	600	May 4	370	Jun 8
LOWEST DAILY MEAN	6.9	Feb 11	9.0	Dec 22
ANNUAL SEVEN-DAY MINIMUM	7.1	Feb 6	10	Dec 19
ANNUAL RUNOFF (AC-FT)	109300		69470	
10 PERCENT EXCEEDS	370		210	
50 PERCENT EXCEEDS	112		95	
90 PERCENT EXCEEDS	9.5		16	

e Estimated



## GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT

LOCATION (REVISED).--Lat 38°59'10", long 110°09'02", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 15, T. 21 S., R. 16 E., Emery County, Hydrologic Unit 14060008, on right bank 1,400 ft upstream from railroad bridge, .9 mi southeast of town of Green River, 22.7 mi upstream from San Rafael River, at mile 117.6 upstream from mouth.

DRAINAGE AREA.--44,850 mi<sup>2</sup> approximately, of which about 4,260 mi<sup>2</sup> (including 3,959 mi<sup>2</sup> in Great Divide Basin in southern Wyoming) is noncontributing.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to October 1899, October 1904 to current year. Published as "at Blake" 1894-99, as "near Elgin" 1911, and as "at Little Valley, near Green River" 1910-23.

REVISED RECORDS.--WSP 918: 1895-1900. WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,040.18 ft above sea level. Prior to Nov. 6, 1914, staff, wire-weight, or chain gages at several sites within 7 mi of present site at various datums. Nov. 6, 1914 to June 20, 1924, water-stage recorder at site 7 mi downstream at different datum. June 21 to Sept. 18, 1924, chain gage, and Sept. 19, 1924 to May 7, 1947, water-stage recorder at site 100 ft downstream at present datum. May 8, 1947 to Sept. 7, 1994, water-stage recorder at site 900 ft downstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation above station. Flow regulated by Flaming Gorge Reservoir (see station 09234400) since Nov. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,100 ft<sup>3</sup>/s June 27, 1917, gage height 14.53 ft, site and datum then in use; minimum 255 ft<sup>3</sup>/s Nov. 26, 1931; minimum gage height, 4.08 ft Aug. 1, Dec. 5, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 17,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 22	2045	*27,200	*13.01				

Minimum daily discharge, 3,000 ft<sup>3</sup>/s, Dec 23, 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4120	5100	4930	e4300	e4100	5600	7410	12600	24800	13600	4460	3700
2	4100	5170	4960	e4300	e4100	5790	7180	12200	25200	11900	4460	3600
3	4100	5200	4940	e4300	e4100	5740	6810	12700	25500	10900	4720	4470
4	4160	5280	4930	e4200	e4210	5900	6800	14400	25800	10300	4370	5190
5	4180	5460	4890	e4330	e4450	6100	7130	14500	25000	9780	4350	5990
6	4540	5440	4880	e4220	e4250	6080	7350	14300	23600	9350	4340	5760
7	4590	5340	4820	e4200	e4410	6180	7160	e13000	23700	9050	4570	5180
8	4600	5410	4630	e4180	e4600	6190	6780	e12000	e23200	8810	4480	e5000
9	4690	5440	4510	e4210	e4730	5930	6150	e11000	e22700	8640	4340	e4850
10	4740	5330	4320	e4200	e4500	5810	5870	e10000	e22000	8540	4310	4710
11	4820	5350	4210	e4270	e4300	5770	5800	9750	21800	8430	4360	4700
12	4800	5230	4060	e4220	e4230	5740	5850	9970	21900	7980	4770	4540
13	4680	5190	e4000	e4240	e4270	5420	6290	12200	21800	7720	4220	4360
14	4620	5130	4140	e4220	e4480	5590	6750	14600	21700	7660	4070	4220
15	4580	5110	4080	e4270	e4650	5680	6350	13600	22800	8150	3970	4020
16	4630	5080	4130	e4100	e4700	5740	6150	12400	23600	7530	3880	4110
17	4660	5050	4240	e4050	e4700	5760	6000	12200	24100	7060	3720	4010
18	4710	5080	e4100	e3900	e4800	5740	6260	13500	24700	6750	3660	3920
19	4730	5090	e4050	e3900	e4950	5790	6880	14000	25300	6440	3640	3840
20	4620	5120	e4250	e4000	e5280	5940	6970	12700	25800	6040	3530	3840
21	4520	5270	e3800	e4000	e5230	6260	6550	12300	26100	5870	3550	3850
22	4920	5020	e3300	e4100	e5170	6510	6290	12300	26800	e5480	3710	3910
23	4790	4940	e3000	e4200	e5180	6600	5840	13900	26800	e5300	3830	4140
24	4790	4930	e3000	e4200	e5360	6600	5800	15800	25100	e5100	3860	3990
25	4950	4920	e3130	e4200	e5600	6670	8260	16900	22300	e4800	3800	3690
26	4890	4950	e3400	e4100	5550	6820	10300	18100	19600	e4600	3740	3620
27	4950	4900	e3600	e4000	5520	6960	10100	19700	17500	4390	3690	3850
28	4960	4870	e3720	e3900	5520	6880	10200	21500	e16000	4380	3850	3840
29	4940	5020	e3900	e3800	---	6780	12100	22600	e15000	4190	3740	3870
30	5130	4920	e4200	e3800	---	6880	13000	23600	14400	4310	3830	3880
31	5090	---	e4200	e3950	---	7200	---	24300	---	4650	4080	---
TOTAL	144600	154340	128320	127860	132940	190650	220380	452620	684600	227700	125900	128650
MEAN	4665	5145	4139	4125	4748	6150	7346	14600	22820	7345	4061	4288
MAX	5130	5460	4960	4330	5600	7200	13000	24300	26800	13600	4770	5990
MIN	4100	4870	3000	3800	4100	5420	5800	9750	14400	4190	3530	3600
AC-FT	286800	306100	254500	253600	263700	378200	437100	897800	1358000	451600	249700	255200

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 1999, BY WATER YEAR (WY)

	3078	2953	2421	2373	2903	4681	7430	15570	18950	7962	3732	2890
MEAN	3078	2953	2421	2373	2903	4681	7430	15570	18950	7962	3732	2890
MAX	7701	6490	5894	5739	7258	11430	18370	33940	46650	31630	11220	9960
(WY)	1983	1987	1987	1985	1962	1910	1962	1952	1921	1907	1907	1909
MIN	718	935	801	1000	1509	1617	2591	4212	2128	645	712	603
(WY)	1935	1935	1909	1910	1935	1963	1963	1990	1934	1934	1934	1934

## GREEN RIVER BASIN

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## 09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1906 - 1999	
ANNUAL TOTAL	2911420		2718560		6251	
ANNUAL MEAN	7976		7448		12280	1907
HIGHEST ANNUAL MEAN					1805	1934
LOWEST ANNUAL MEAN					66700	Jun 27 1917
HIGHEST DAILY MEAN	24100	May 25	26800	Jun 22	380	Dec 5 1934
LOWEST DAILY MEAN	3000	Dec 23	3000	Dec 23	419	Jul 30 1934
ANNUAL SEVEN-DAY MINIMUM	3310	Dec 22	3310	Dec 22	4529000	
ANNUAL RUNOFF (AC-FT)	5775000		5392000		15300	
10 PERCENT EXCEEDS	18200		15300		3520	
50 PERCENT EXCEEDS	5020		5020		1550	
90 PERCENT EXCEEDS	4140		3890			

e Estimated

## GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

LOCATION.--Daily samples collected at gage site.

PERIOD OF RECORD.--August 1928 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1981, March 1982 to current year.

WATER TEMPERATURES: May 1949 to September 1959, October 1964 to September 1981, March 1982 to current year.

SUSPENDED-SEDIMENT DISCHARGE: May 1930 to September 1984.

INSTRUMENTATION.--Water-quality monitor April 1985 to September 1989.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,250 microsiemens Dec. 1, 1967; minimum daily, 255 microsiemens June 30, 1978.

WATER TEMPERATURES: Maximum, 30.0°C Aug. 13, 1958; minimum, 0.0°C on many days during winter period each year.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 66,000 mg/L July 11, 1936; minimum daily, 19 mg/L Sept. 30, 1974.

SEDIMENT LOADS: Maximum daily, 2,230,000 tons July 11, 1936; minimum daily, 54 tons Sept. 27, 1956.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 1,240 microsiemens, Sep 3; minimum observed, 370 microsiemens, Jun 3.

WATER TEMPERATURE: Maximum observed, 28.0°C, Jul 25, 28; minimum observed, 0.0°C, many days during Dec and Jan.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	
OCT 27...	1430	ENVIRONMENTAL	7.28	4780	780	8.4	11.0	12.0	64	9.2	100	
NOV 17...	1145	ENVIRONMENTAL	7.31	5020	750	8.3	5.0	6.0	19	10.7	101	
DEC 07...	1400	ENVIRONMENTAL	7.24	4780	730	8.3	-1.0	3.0	1.5	11.4	98	
MAR 24...	1030	ENVIRONMENTAL	7.85	6770	740	8.4	6.5	10.0	150	9.7	101	
APR 19...	1415	ENVIRONMENTAL	7.95	7100	720	8.5	19.0	12.5	64	9.2	98	
MAY 19...	1230	ENVIRONMENTAL	9.72	14000	540	8.2	17.0	13.0	200	8.9	100	
19...	1240	REPLICATE	9.72	14000	540	8.2	17.0	13.0	320	8.9	100	
JUL 01...	1100	ENVIRONMENTAL	9.58	13400	405	8.2	21.0	21.5	56	7.4	99	
29...	1100	ENVIRONMENTAL	7.00	4200	730	8.3	29.0	24.5	260	6.9	98	
29...	1110	REPLICATE	7.00	4200	730	8.3	29.0	24.5	280	6.9	98	
AUG 25...	1115	ENVIRONMENTAL	6.84	3830	750	8.4	24.5	23.5	170	6.9	96	
25...	1118	SPIKE	6.84	3830	750	8.4	24.5	23.5	--	6.9	96	
SEP 22...	1130	ENVIRONMENTAL	6.93	3880	780	8.4	13.5	17.5	480	7.9	97	
DATE	BARO-METRIC PRES-SURE (MM OF HG) (00025)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM AD-SORP-TION RATIO (00932)	SODIUM POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD HCO3 (00453)	
OCT 27...	651	.28	270	100	61	30	60	--	2	<.10	6	197
NOV 17...	650	.32	270	110	60	29	57	32	2	2.3	0	198
DEC 07...	658	.27	210	31	47	23	46	32	1	3.5	0	223
MAR 24...	653	.35	250	86	56	26	58	34	2	2.5	6	186
APR 19...	675	--	250	96	57	26	54	32	2	2.4	8	169
MAY 19...	648	.41	180	53	42	18	38	31	1	1.7	0	155
19...	648	.37	180	49	41	17	36	31	1	1.6	0	154
JUL 01...	653	--	140	39	34	13	26	29	1	1.6	0	119
29...	651	--	260	110	66	22	52	30	1	2.3	0	176
29...	651	--	250	110	65	22	52	30	1	2.4	0	176
AUG 25...	652	.29	250	96	58	25	64	36	2	2.7	7	172
25...	652	--	--	--	--	--	--	--	--	--	7	172
SEP 22...	656	.36	260	91	58	27	63	34	2	2.5	7	189

## GREEN RIVER BASIN

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09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT 27...	172	220	19	.33	6.2	536	--	--	--	<.010	.060
NOV 17...	162	200	18	.23	6.7	505	471	.69	6840	<.010	.101
DEC 07...	183	190	19	.22	5.4	494	447	.67	6380	<.010	.101
MAR 24...	163	200	19	.27	6.2	506	467	.69	9250	<.010	.165
APR 19...	151	190	17	.25	5.4	479	444	.65	9180	<.010	<.050
MAY 19...	127	130	12	.26	8.5	319	324	.43	12100	<.010	.133
19...	126	130	12	.21	8.3	349	320	.47	13200	<.010	.136
JUL 01...	98	86	9.0	.20	6.3	261	235	.35	9440	<.010	<.050
29...	144	190	16	.29	7.1	479	446	.65	5430	<.010	<.050
29...	144	190	16	.28	7.0	476	445	.65	5400	<.010	<.050
AUG 25...	152	200	21	.30	6.3	497	470	.68	5140	<.010	.066
25...	152	--	--	--	--	--	--	--	--	--	--
SEP 22...	167	220	20	.30	5.7	524	496	.71	5490	<.010	.124
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)
OCT 27...	.059	.08	.41	.16	.47	.22	.53	.253	<.050	.001	.00
NOV 17...	.024	.03	.58	.19	.61	.22	.71	.068	<.050	<.001	--
DEC 07...	<.020	--	--	--	.32	.17	.42	.300	<.050	.003	.01
MAR 24...	<.020	--	--	--	.83	.19	.99	.321	.008	.004	.01
APR 19...	.170	.22	.43	--	.60	.16	--	.175	.005	.002	.01
MAY 19...	.021	.03	.20	.25	.22	.28	.35	.835	.013	.009	.03
19...	<.020	--	--	--	.21	.23	.34	.858	.011	.009	.03
JUL 01...	<.020	--	--	--	.69	.22	--	.501	.006	.007	.02
29...	<.020	--	--	--	.92	.20	--	.807	.008	.005	.02
29...	<.020	--	--	--	.99	.17	--	.804	.013	.005	.02
AUG 25...	<.020	--	--	--	.70	.23	.77	.468	.010	.005	.02
25...	--	--	--	--	--	--	--	--	--	--	--
SEP 22...	<.020	--	--	--	1.2	.24	1.3	.853	<.004	<.001	--

## GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
OCT 27...	1430	ENVIRONMENTAL	--	--	1	--	--	--	--	--
NOV 17...	1145	ENVIRONMENTAL	--	--	2	--	--	--	--	--
DEC 07...	1400	ENVIRONMENTAL	--	--	<1	--	--	--	--	--
MAR 24...	1030	ENVIRONMENTAL	2.3	<1.0	1	68	<1.0	<1.0	2.4	<1.0
APR 19...	1415	ENVIRONMENTAL	--	--	1	--	--	--	--	--
MAY 19...	1230	ENVIRONMENTAL	2.8	<1.0	1	49	<1.0	<1.0	<1.0	<1.0
MAY 19...	1240	REPLICATE	2.5	<1.0	1	47	<1.0	<1.0	<1.0	<1.0
JUL 01...	1100	ENVIRONMENTAL	3.3	<1.0	<1	43	<1.0	<1.0	<1.0	<1.0
JUL 29...	1100	ENVIRONMENTAL	--	--	3	--	--	--	--	--
JUL 29...	1110	REPLICATE	--	--	2	--	--	--	--	--
AUG 25...	1115	ENVIRONMENTAL	--	--	2	--	--	--	--	--
AUG 25...	1118	SPIKE	--	--	--	--	--	--	--	--
SEP 22...	1130	ENVIRONMENTAL	1.6	<1.0	3	79	<1.0	<1.0	<1.0	<1.0

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 27...	--	<10	--	31	--	--	--	--	683	<10	--
NOV 17...	--	<10	--	31	--	--	--	--	650	<10	--
DEC 07...	--	<10	--	24	--	--	--	--	558	<10	--
MAR 24...	1.9	E5.4	<1.0	24	<1.0	2.9	1.7	<1.0	590	<10	2.7
APR 19...	--	<10	--	22	--	--	--	--	565	<10	--
MAY 19...	2.1	<10	<1.0	15	<1.0	2.4	2.4	<1.0	409	<10	1.6
MAY 19...	2.3	<10	<1.0	16	<1.0	2.4	2.9	<1.0	399	<10	1.8
JUL 01...	1.5	<10	<1.0	E4	<1.0	1.9	1.3	<1.0	313	<10	1.2
JUL 29...	--	<10	--	25	--	--	--	--	681	E5	--
JUL 29...	--	<10	--	25	--	--	--	--	670	<10	--
AUG 25...	--	<10	--	240	--	--	--	--	666	<10	--
AUG 25...	--	--	--	--	--	--	--	--	--	--	--
SEP 22...	2.5	<10	<1.0	31	<1.0	3.6	2.2	<1.0	696	<10	1.6

DATE	TIME	SAMPLE TYPE	BORON, DIS- SOLVED (UG/L AS B) (01020)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT 27...	1430	ENVIRONMENTAL	123	<1
NOV 17...	1145	ENVIRONMENTAL	124	2
DEC 07...	1400	ENVIRONMENTAL	96	<1
MAR 24...	1030	ENVIRONMENTAL	97	1
APR 19...	1415	ENVIRONMENTAL	86	<1
MAY 19...	1230	ENVIRONMENTAL	62	<1
MAY 19...	1240	REPLICATE	62	<1
JUL 01...	1100	ENVIRONMENTAL	52	<1
JUL 29...	1100	ENVIRONMENTAL	114	2
JUL 29...	1110	REPLICATE	111	1
AUG 25...	1115	ENVIRONMENTAL	140	<1
AUG 25...	1118	SPIKE	--	--
SEP 22...	1130	ENVIRONMENTAL	140	1

## GREEN RIVER BASIN

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09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)
OCT					
27...	1430	ENVIRONMENTAL	--	3.4	.90
NOV					
17...	1145	ENVIRONMENTAL	--	--	--
DEC					
07...	1400	ENVIRONMENTAL	--	3.1	.60
MAR					
24...	1030	ENVIRONMENTAL	3.4	4.4	1.4
APR					
19...	1415	ENVIRONMENTAL	--	3.8	1.8
MAY					
19...	1230	ENVIRONMENTAL	2.5	6.0	3.7
19...	1240	REPLICATE	2.4	--	5.7
JUL					
01...	1100	ENVIRONMENTAL	1.7	3.9	5.1
29...	1100	ENVIRONMENTAL	--	3.5	4.7
29...	1110	REPLICATE	--	3.5	3.7
AUG					
25...	1115	ENVIRONMENTAL	--	3.6	2.4
25...	1118	SPIKE	--	--	--
SEP					
22...	1130	ENVIRONMENTAL	3.7	4.5	>5.0



## GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

			METRI- BUZIN SENSOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U (UG/L) (82667)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	
DATE	TIME	SAMPLE TYPE										
OCT 27...	1430	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
NOV 17...	1145	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
DEC 07...	1400	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
MAR 24...	1030	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
APR 19...	1415	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
MAY 19...	1230	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
19...	1240	REPLICATE	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
JUL 01...	1100	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	E.0087	<.0020	<.0060	<.0020	
29...	1100	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
29...	1110	REPLICATE	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
AUG 25...	1115	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
25...	1118	SPIKE	.638	.536	.361	.419	.439	E.706	1.13	.548	.573	
SEP 22...	1130	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020	
DATE	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
OCT 27...	<.0040	E.0050	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
NOV 17...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
DEC 07...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
MAR 24...	<.0040	<.0100	.0050	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
APR 19...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
MAY 19...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
19...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
JUL 01...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
29...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
29...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
AUG 25...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
25...	.616	.813	.631	.692	.382	E.659	.425	.757	.639	.689	.764	E.202
SEP 22...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030

## GREEN RIVER BASIN

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09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC (91063)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U GF, REC (91064)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (91065)	SET NUMBER SCHED- ULE 2001 (NO.) (99818)
OCT 27...	<.0020	<.0040	<.0040	<.0030	<.0130	<.0010	<.0050	111	103	95.7	8306.00
NOV 17...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	101	101	90.6	8324.00
DEC 07...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	94.7	92.9	84.5	8349.00
MAR 24...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	83.7	81.4	80.6	9089.00
APR 19...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	93.1	110	97.4	9111.10
MAY 19...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	108	--	104	9144.00
MAY 19...	<.0020	E.0011	<.0040	<.0800	<.0130	<.0010	<.0050	104	--	121	9144.00
JUL 01...	<.0020	<.0020	<.0040	<.0030	--	<.0010	<.0050	125	--	109	9189.00
JUL 29...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	92.6	--	93.2	9222.10
JUL 29...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	102	--	101	9223.00
AUG 25...	<.0020	<.0020	<.0040	<.0030	--	<.0010	<.0050	100	--	103	9245.00
AUG 25...	.826	.580	.399	.786	.772	E.940	.354	112	--	100	9245.00
SEP 22...	<.0020	E.0034	<.0040	<.0030	<.0130	<.0010	<.0050	107	--	101	9270.00

DATE	SAMPLE VOLUME SCHED- ULE 2001 (ML) (99856)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	PONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	P, P' DDE DISSOLV (UG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
OCT 27...	819	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
NOV 17...	847	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
DEC 07...	892	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
MAR 24...	917	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
APR 19...	884	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
MAY 19...	943	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
MAY 19...	909	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
JUL 01...	892	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
JUL 29...	840	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
JUL 29...	826	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
AUG 25...	800	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
AUG 25...	847	.716	.634	.747	.619	E.455	.655	.728	.730	.471	.721
SEP 22...	877	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040

## GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	MALA- THION, DIS- SOLVED (UG/L) (39532)	PARA- THION, DIS- SOLVED (UG/L) (39542)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)
OCT 27...	<.004	<.001	<.002	<.010	<.004	<.002	<.001	<.002	<.0020	--	--
NOV 17...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	--	--
DEC 07...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	--	--
MAR 24...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	.092	--
APR 19...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	.086	--
MAY 19...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	.118	.085
19...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0250	.113	.081
JUL 01...	<.004	<.001	<.004	.011	<.004	<.002	.006	<.002	<.0020	.119	--
29...	<.004	<.001	.006	<.005	<.004	<.002	.009	<.002	<.0020	.098	--
29...	<.004	<.001	.006	<.005	<.004	<.002	.010	<.002	<.0020	.095	--
AUG 25...	<.004	<.001	<.002	<.005	<.004	<.002	<.004	<.002	<.0020	.089	--
25...	.838	.730	.810	.328	.358	.710	.683	.704	.710	--	--
SEP 22...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	.101	--

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	760	780	760	810	770	790	760	710	420	435	720	790
2	770	790	---	770	780	780	740	720	385	425	720	780
3	780	810	780	750	780	780	740	720	370	440	---	1240
4	780	800	770	750	780	790	730	660	375	480	750	840
5	780	---	770	---	780	780	730	610	375	490	900	800
6	770	780	780	750	780	770	730	570	395	500	780	830
7	770	780	750	750	770	760	730	560	---	510	820	780
8	780	800	750	770	770	760	720	560	425	510	---	770
9	800	780	760	760	750	770	720	560	435	530	750	770
10	---	770	760	750	750	760	730	580	---	530	740	770
11	770	770	---	740	790	760	740	590	435	550	780	800
12	780	760	---	740	790	780	750	610	435	580	1020	770
13	790	760	790	740	800	780	770	610	430	590	810	760
14	780	---	800	750	800	780	780	570	425	600	790	770
15	780	780	810	750	790	800	800	510	420	740	800	780
16	770	790	790	740	800	800	790	510	425	700	780	770
17	780	780	790	740	800	810	760	540	425	690	---	780
18	780	780	790	740	790	810	750	560	440	670	800	---
19	780	790	790	750	810	800	750	540	430	670	790	780
20	790	780	800	740	820	790	740	---	455	680	780	800
21	810	770	820	750	810	800	730	570	440	690	760	790
22	800	770	840	730	820	---	710	570	440	690	840	810
23	800	770	860	740	820	790	710	560	430	710	740	790
24	---	780	---	750	810	770	710	520	430	680	760	800
25	840	770	---	750	810	770	710	460	430	700	780	830
26	---	780	---	760	800	780	700	440	405	700	780	810
27	820	---	---	760	790	790	670	420	400	710	800	---
28	800	780	900	750	790	810	650	400	395	760	---	810
29	790	770	910	750	---	800	640	---	400	800	850	800
30	790	760	870	750	---	790	650	390	410	730	---	810
31	780	---	850	760	---	780	---	380	---	820	790	---
MEAN	786	779	804	751	791	784	728	552	417	623	793	808

## GREEN RIVER BASIN

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## 09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	12.5	7.0	.0	2.0	8.0	8.0	14.0	17.5	23.0	25.5	23.5
2	16.0	13.0	---	.0	2.0	9.0	8.0	14.0	16.5	24.0	26.0	24.0
3	16.0	11.0	7.0	1.0	3.5	9.0	9.0	13.0	16.0	23.5	---	22.0
4	15.5	12.0	7.0	1.0	2.0	9.0	9.0	13.0	15.5	24.0	25.0	22.0
5	15.5	---	6.0	---	3.0	8.0	10.0	12.0	14.5	24.5	25.0	20.0
6	15.0	9.0	4.0	1.0	3.0	8.0	10.0	13.0	15.0	25.0	25.0	20.5
7	15.0	9.0	4.0	1.0	4.0	7.5	11.0	14.0	---	25.0	25.0	22.0
8	15.0	8.0	2.0	1.0	4.0	7.0	11.0	14.0	18.0	25.0	---	23.0
9	15.0	7.0	2.0	.0	4.0	7.0	10.0	14.0	18.0	25.0	26.0	22.0
10	---	6.0	2.0	2.0	4.0	7.0	10.0	14.0	---	26.0	24.0	22.0
11	15.0	5.0	---	2.0	4.5	6.0	11.0	15.0	18.0	26.0	25.0	22.5
12	15.0	6.0	---	1.0	4.0	7.0	12.0	15.0	19.0	26.0	23.0	21.5
13	15.0	5.0	1.0	2.0	4.0	10.0	13.0	15.0	19.5	26.0	24.0	21.0
14	15.0	---	1.0	1.0	4.0	10.0	13.0	15.0	20.0	25.0	24.0	21.0
15	14.0	7.0	1.0	1.0	4.5	10.0	12.5	13.5	20.0	25.0	24.0	20.0
16	13.0	7.0	1.0	.0	4.0	10.0	13.0	15.0	20.0	25.0	25.0	20.0
17	14.0	8.0	.0	1.5	4.0	12.0	14.0	15.0	18.5	25.0	---	20.0
18	13.5	7.0	.0	1.0	6.0	12.0	15.0	15.0	19.0	25.0	25.0	---
19	13.0	7.5	2.0	2.0	5.0	12.0	15.0	16.0	18.5	25.0	25.0	20.0
20	13.0	6.0	.0	1.0	5.0	12.0	15.0	---	20.0	26.0	24.0	20.0
21	12.0	5.5	.0	2.0	5.0	13.0	14.0	17.0	19.0	25.0	25.0	20.0
22	13.0	5.0	.0	2.0	5.0	---	13.0	18.0	20.0	27.0	25.5	18.0
23	12.0	6.0	.0	1.0	5.0	11.0	12.0	19.0	20.0	27.0	25.0	20.5
24	---	6.0	---	2.0	5.0	12.0	12.5	19.0	21.0	25.5	25.0	21.0
25	12.0	7.0	---	3.0	4.0	13.0	12.5	18.0	20.5	28.0	25.0	21.0
26	---	6.0	---	3.0	6.0	12.0	13.5	19.0	23.0	26.0	26.0	21.5
27	13.0	---	---	3.0	7.0	13.0	14.0	20.0	23.5	27.0	25.0	---
28	13.0	5.0	.0	2.0	8.0	13.0	13.0	20.0	23.0	28.0	---	17.0
29	13.0	7.0	.0	1.0	---	12.0	12.5	---	23.0	27.0	25.0	15.0
30	13.0	7.0	.0	2.0	---	12.0	13.0	19.0	23.0	26.0	---	15.0
31	13.0	---	.0	2.0	---	11.0	---	18.0	---	25.0	23.0	---
MEAN	14.1	7.4	2.0	1.4	4.3	10.1	12.0	15.7	19.3	25.5	24.8	20.6

## SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT							
27...	1430	ENVIRONMENTAL	4780	12.0	287	3700	90
NOV							
17...	1145	ENVIRONMENTAL	5020	6.0	300	4070	86
DEC							
07...	1400	ENVIRONMENTAL	4780	3.0	46	594	81
MAR							
24...	1030	ENVIRONMENTAL	6770	10.0	408	7460	82
APR							
19...	1415	ENVIRONMENTAL	7100	12.5	224	4290	73
MAY							
19...	1230	ENVIRONMENTAL	14000	13.0	1230	46500	59
19...	1240	REPLICATE	14000	13.0	1290	48800	66
JUL							
01...	1100	ENVIRONMENTAL	13400	21.5	918	33200	34
29...	1100	ENVIRONMENTAL	4200	24.5	955	10800	96
29...	1110	REPLICATE	4200	24.5	863	9790	95
AUG							
25...	1115	ENVIRONMENTAL	3830	23.5	596	6160	97
SEP							
22...	1130	ENVIRONMENTAL	3880	17.5	1010	10600	97

## GREEN RIVER BASIN

09317800 ELECTRIC LAKE NEAR SCOFIELD, UT

LOCATION.--Lat 39°36'03", long 111°12'41", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 14, T. 14 S., R. 6 E., Emery County, Hydrologic Unit 14060009, 25 mi northwest of Huntington, 21 mi east of Fairview.

DRAINAGE AREA.--31.0 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1973 to current year. Not published prior to 1986. Records available from Utah Power & Light Co.

GAGE.--Elevation of gage is 8,300 ft above sea level, Utah Power and Light Co. datum.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 31,770 acre-ft Jun 10, elevation, 8,575.75 ft; minimum contents 23,670 acre-ft Apr 18, elevation, 8,556.49 ft.

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25660	25400	25170	24550	24190	23820	23720	23860	30120	31500	31180	29410
2	25660	25400	25160	24530	24180	23800	23720	23880	30440	31490	31140	29340
3	25650	25380	25140	24520	24150	23790	23720	23950	30710	31490	31110	29280
4	25650	25380	25140	24520	24130	23780	23730	23990	30950	31480	31030	29210
5	25630	25370	25130	24500	24130	23780	23730	24040	31150	31470	30980	29140
6	25620	25370	25110	24480	24120	23770	23730	24070	31340	31460	30930	29070
7	25600	25360	25100	24470	24100	23770	23730	24120	31530	31460	30880	28980
8	25590	25370	25080	24450	24080	23760	23720	24200	31660	31460	30840	28830
9	25580	25380	25060	24440	24060	23750	23720	24310	31740	31460	30820	28670
10	25560	25360	25040	24410	24060	23750	23720	24400	31770	31460	30760	28520
11	25550	25360	25010	24400	24060	23750	23720	24460	31760	31440	30750	28370
12	25530	25350	24970	24380	24060	23750	23720	24490	31760	31430	30700	28210
13	25520	25340	24940	24360	24040	23750	23720	24540	31760	31430	30620	28050
14	25510	25330	24910	24350	24030	23740	23720	24630	31730	31430	30560	27920
15	25490	25330	24880	24330	24020	23740	23700	24710	31720	31440	30490	27720
16	25480	25320	24850	24320	24000	23730	23690	24790	31720	31440	30420	27500
17	25460	25310	24830	24310	23980	23720	23680	24860	31710	31440	30360	27280
18	25450	25300	24800	24290	23970	23720	23670	24990	31700	31430	30290	27050
19	25430	25290	24780	24290	23960	23710	23680	25170	31680	31420	30240	26830
20	25420	25280	24760	24280	23940	23710	23710	25420	31660	31420	30170	26610
21	25410	25260	24740	24310	23920	23710	23730	25690	31640	31420	30110	26400
22	25410	25250	24730	24300	23930	23700	23730	25990	31620	31430	30040	26180
23	25400	25240	24730	24290	23920	23700	23740	26370	31620	31420	29960	25960
24	25390	25240	24720	24280	23900	23700	23740	26800	31600	31420	29910	25750
25	25400	25220	24680	24260	23880	23710	23750	27240	31590	31410	29840	25540
26	25410	25210	24660	24260	23860	23710	23760	27650	31570	31400	29780	25330
27	25420	25160	24640	24250	23850	23710	23770	28080	31560	31380	29720	25120
28	25420	25190	24620	24240	23840	23710	23800	28510	31540	31340	29660	24910
29	25410	25180	24600	24230	---	23710	23830	28980	31530	31300	29590	24700
30	25410	25170	24570	24220	---	23710	23850	29430	31510	31270	29520	24500
31	25410	---	24550	24200	---	23720	---	29810	---	31230	29480	---
MAX	25660	25400	25170	24550	24190	23820	23850	29810	31770	31500	31180	29410
MIN	25390	25160	24550	24200	23840	23700	23670	23860	30120	31230	29480	24500
(#)	8561.06	8560.46	8558.83	8557.92	8556.95	8556.62	8556.97	8571.54	8575.21	8574.62	8570.80	8558.70
(*)	-100	-240	-620	-350	-360	-120	+130	+5960	+1700	-280	-1750	-4980

CAL YR 1998.....(\*) +1720

WTR YR 1999.....(\*) -1010

(#) Elevation, in feet, at end of month.

(\*) Change in contents, in acre-feet.

LOCATION.--Lat 39°23'07", long 111°05'15", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 36, T. 16 S., R. 7 E., Emery County, Hydrologic Unit 14060009, on right bank about 500 ft upstream from bridge to Deer Creek Mine, 8 mi northwest of Huntington.

PERIOD OF RECORD.--October 1979 to current year. Water years 1981-85 not published, records available in office of Utah Power & Light Co., located in Salt Lake City, Ut.

REMARKS.--Records fair except for some periods in Dec. and Jan., which are poor because of effects from ice. Small transmountain diversions to tributaries of San Pitch River (Sevier Lake Basin). Flow regulated by reservoirs above station.

AVERAGE DISCHARGE.--16 years, 81.7 ft<sup>3</sup>/s, 59,190 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft<sup>3</sup>/s May 24, 1984, gage height, 4.96 ft; minimum discharge, 3.0 ft<sup>3</sup>/s Feb 2-5, 1981.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	131	37	41	17	28	29	60	249	157	92	69
2	86	130	34	36	18	27	27	67	305	192	90	73
3	92	124	33	33	22	26	28	77	294	180	89	78
4	94	121	33	34	23	25	28	65	270	173	88	78
5	92	120	27	34	26	23	26	51	243	169	83	78
6	103	121	32	29	23	24	27	50	216	168	86	73
7	101	118	41	29	24	24	27	57	233	188	83	77
8	88	121	26	26	24	23	28	83	280	194	81	109
9	88	118	24	28	25	23	30	99	335	189	82	109
10	87	117	22	28	25	24	27	87	354	188	85	111
11	86	117	24	38	22	23	28	79	353	187	95	115
12	86	114	34	39	25	22	26	97	350	182	73	111
13	86	105	29	37	27	23	31	123	357	159	71	111
14	103	88	31	33	32	23	40	165	374	90	70	116
15	109	88	35	33	26	23	40	141	402	111	69	132
16	102	100	44	33	25	23	41	131	431	103	66	132
17	89	115	47	33	27	24	42	120	427	102	64	137
18	90	100	43	33	25	26	52	128	415	99	60	143
19	90	87	32	33	25	28	58	162	411	102	62	146
20	88	75	22	34	25	30	62	191	371	102	65	147
21	90	43	24	28	26	21	66	228	333	94	68	136
22	92	38	31	30	24	21	56	254	303	87	67	136
23	92	34	29	29	25	24	57	274	286	84	66	126
24	88	35	30	33	25	23	52	303	263	95	65	128
25	103	33	40	29	27	28	52	306	237	92	60	126
26	107	34	44	29	25	32	49	307	214	91	59	121
27	108	33	48	28	26	29	58	310	196	97	60	119
28	135	34	46	27	26	28	64	306	178	98	63	119
29	135	34	48	22	---	27	69	317	171	102	59	136
30	136	34	50	20	---	32	60	297	170	104	58	93
31	132	---	52	18	---	31	---	272	---	95	64	---
TOTAL	3064	2562	1092	957	690	788	1280	5207	9021	4074	2243	3385
MEAN	98.8	85.4	35.2	30.9	24.6	25.4	42.7	168	301	131	72.4	113
MAX	136	131	52	41	32	32	69	317	431	194	95	147
MIN	86	33	22	18	17	21	26	50	170	84	58	69
AC-FT	6080	5080	2170	1900	1370	1560	2540	10330	17890	8080	4450	6710
CAL YR 1998	TOTAL 38677		MEAN 106	MAX 424	MIN 15	AC-FT 76720						
WTR YR 1999	TOTAL 34363		MEAN 94.1	MAX 431	MIN 17	AC-FT 68160						



## GREEN RIVER BASIN

09319000 EPHRAIM TUNNEL NEAR EPHRAIM, UT (Transmountain diversion)

LOCATION.--Lat 39°19'47", long 111°25'51", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 14, T. 17 S., R. 4 E., Sanpete County, Hydrologic Unit 14060009, at east tunnel portal, 9.0 mi east of Ephraim.

PERIOD OF RECORD.--September 1949 to current year. Monthly discharge only for September 1949 to September 1960; figures of daily discharge available in Salt Lake City District Office, Geological Survey. Seasonal records only since October 1971.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 9,694.9 ft above sea level. (Levels by U.S. Geological Survey, Topographic Division.)

REMARKS.--Records fair except for estimated daily discharges, which are poor. Tunnel diverts from Cottonwood Creek drainage in Colorado River Basin to San Pitch River in the Great Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 142 ft<sup>3</sup>/s June 6, 1964, gage height, 5.43 ft; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e.00	e.22	e12	19	2.4	.94
2	---	---	---	---	---	---	e.00	e.23	e11	18	2.2	.99
3	---	---	---	---	---	---	e.00	e.25	e10	16	2.2	.94
4	---	---	---	---	---	---	e.00	e.28	10	14	2.2	.90
5	---	---	---	---	---	---	e.00	e.30	12	13	2.2	1.1
6	---	---	---	---	---	---	e.00	e.31	14	13	2.0	.74
7	---	---	---	---	---	---	e.00	e.33	19	12	1.9	.85
8	---	---	---	---	---	---	e.00	e.34	23	5.3	1.8	.86
9	---	---	---	---	---	---	e.00	e.45	24	7.3	1.8	.80
10	---	---	---	---	---	---	e.00	e.59	24	9.8	5.2	.83
11	---	---	---	---	---	---	e.00	e.62	25	12	5.8	.99
12	---	---	---	---	---	---	e.00	e.90	24	13	2.4	.74
13	---	---	---	---	---	---	e.00	e.90	24	13	1.9	.72
14	---	---	---	---	---	---	e.00	e.96	24	13	1.5	.69
15	---	---	---	---	---	---	e.00	e1.1	48	12	1.4	1.6
16	---	---	---	---	---	---	e.00	e1.4	64	10	1.3	.77
17	---	---	---	---	---	---	e.00	e2.0	53	7.1	1.3	.70
18	---	---	---	---	---	---	e.10	e2.1	34	5.5	1.3	.69
19	---	---	---	---	---	---	e.11	e2.2	32	5.0	1.2	1.4
20	---	---	---	---	---	---	e.12	e3.3	28	5.0	1.7	.95
21	---	---	---	---	---	---	e.12	e3.5	25	5.2	1.2	.70
22	---	---	---	---	---	---	e.12	e4.5	24	4.3	1.1	.39
23	---	---	---	---	---	---	e.13	e6.8	24	3.7	.95	.28
24	---	---	---	---	---	---	e.13	e8.0	22	3.8	.90	.27
25	---	---	---	---	---	---	e.14	e9.6	25	2.9	.99	.24
26	---	---	---	---	---	---	e.15	e12	27	2.8	.95	.22
27	---	---	---	---	---	---	e.16	e13	25	4.1	4.2	.19
28	---	---	---	---	---	---	e.17	e14	22	3.1	1.3	.12
29	---	---	---	---	---	---	e.19	e15	21	3.0	1.0	.12
30	---	---	---	---	---	---	e.21	e14	20	3.6	1.6	.11
31	---	---	---	---	---	---	---	e13	---	2.7	1.1	---
TOTAL	---	---	---	---	---	---	1.85	132.18	750	262.2	58.99	20.84
MEAN	---	---	---	---	---	---	.062	4.26	25.0	8.46	1.90	.69
MAX	---	---	---	---	---	---	.21	15	64	19	5.8	1.6
MIN	---	---	---	---	---	---	.00	.22	10	2.7	.90	.11
AC-FT	---	---	---	---	---	---	3.7	262	1490	520	117	41

e Estimated

## GREEN RIVER BASIN

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## 09323000 SPRING CITY TUNNEL NEAR SPRING CITY, UT (Transmountain diversion)

LOCATION.--Lat 39°25'34", long 111°21'51", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 16, T. 16 S., R. 5 E., Sanpete County, Hydrologic Unit 14060009, at west portal of tunnel, 11 mi east of Spring City.

PERIOD OF RECORD.--October 1949 to current year. Monthly discharges only for October 1949 to September 1960. Figures of daily discharge available from Salt Lake City District Office, Geological Survey. Seasonal records only since October 1971.

GAGE.--Water-stage recorder. Datum of gage is 9,838 ft above sea level. Prior to Aug. 24, 1960, at datum about 0.3 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Tunnel diverts from Cottonwood Creek drainage in Colorado River Basin to San Pitch River in the Great Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 111 ft<sup>3</sup>/s July 23, 1965; possibly no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e.15	.68	2.7	6.1	e2.9	1.6
2	---	---	---	---	---	---	e.17	.72	2.4	6.5	e2.8	1.6
3	---	---	---	---	---	---	e.18	.74	e2.0	5.4	e2.7	1.5
4	---	---	---	---	---	---	e.19	.76	e1.9	5.2	e2.7	1.5
5	---	---	---	---	---	---	e.20	.76	e1.8	4.7	e2.7	1.4
6	---	---	---	---	---	---	e.20	.74	e1.7	4.6	e2.7	1.4
7	---	---	---	---	---	---	e.25	.74	e1.9	4.7	e2.5	1.3
8	---	---	---	---	---	---	e.26	.74	e2.4	4.4	e2.4	1.3
9	---	---	---	---	---	---	e.25	.81	3.2	4.9	e2.4	1.2
10	---	---	---	---	---	---	e.25	.71	3.4	5.2	e3.1	1.3
11	---	---	---	---	---	---	e.27	.71	3.7	4.9	e3.4	1.6
12	---	---	---	---	---	---	e.32	.71	4.6	4.6	e2.6	1.2
13	---	---	---	---	---	---	e.35	.69	4.4	4.4	e2.4	1.1
14	---	---	---	---	---	---	e.35	.67	4.6	5.6	e2.3	1.1
15	---	---	---	---	---	---	e.34	.65	5.2	5.1	e2.2	1.1
16	---	---	---	---	---	---	e.33	.66	4.9	4.6	e2.2	1.1
17	---	---	---	---	---	---	e.32	.68	4.4	4.4	e2.2	1.1
18	---	---	---	---	---	---	e.50	.69	4.6	4.1	e2.1	1.1
19	---	---	---	---	---	---	e.68	1.0	4.6	4.0	e2.2	1.2
20	---	---	---	---	---	---	e.70	1.3	3.7	4.2	e2.4	e1.1
21	---	---	---	---	---	---	e.58	1.3	3.1	3.9	e2.0	e1.1
22	---	---	---	---	---	---	e.48	1.4	2.9	3.7	e1.9	e1.1
23	---	---	---	---	---	---	e.56	2.0	e2.4	3.7	e1.9	e1.1
24	---	---	---	---	---	---	e.62	2.4	e2.2	e3.5	2.0	e1.0
25	---	---	---	---	---	---	e.60	2.3	e2.0	e3.4	1.9	e1.0
26	---	---	---	---	---	---	e.74	2.5	e2.0	e3.4	1.9	e1.0
27	---	---	---	---	---	---	e.80	2.9	e2.3	4.0	2.6	e1.0
28	---	---	---	---	---	---	e.84	3.3	e4.3	e3.7	1.9	e1.1
29	---	---	---	---	---	---	.82	3.5	5.9	e3.4	1.7	e1.1
30	---	---	---	---	---	---	.78	3.1	5.7	e3.2	2.6	e1.0
31	---	---	---	---	---	---	---	2.7	---	e3.0	1.7	---
TOTAL	---	---	---	---	---	---	13.08	42.56	100.9	136.5	73.0	36.3
MEAN	---	---	---	---	---	---	.44	1.37	3.36	4.40	2.35	1.21
MAX	---	---	---	---	---	---	.84	3.5	5.9	6.5	3.4	1.6
MIN	---	---	---	---	---	---	.15	.65	1.7	3.0	1.7	1.0
AC-FT	---	---	---	---	---	---	26	84	200	271	145	72

e Estimated

## GREEN RIVER BASIN

## 09323900 JOES VALLEY RESERVOIR NEAR ORANGEVILLE, UT

LOCATION.--Lat 39°17'20", long 111°16'10", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 5, T. 18 S., R. 6 E., Emery County, Hydrologic Unit 14060009, on Seeley Creek 5.2 mi upstream from Cottonwood Creek, and 12.6 mi west of Orangeville.

DRAINAGE AREA.--146 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder in control house at downstream end of outlet tunnel. Datum of gage is sea level (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill rock-faced dam. Storage began Nov. 3, 1965. Usable capacity, 54,610 acre-ft between elevations 6,910.0 and 6,989.7 ft above mean sea level. Dead storage, 870 acre-ft between elevations 6,817.0 and 6,866.5 ft. Inactive storage, 6,980 acre-ft between elevations 6,866.5 and 6,910.0 ft. Figures given herein represent total contents. Water is used for irrigation. Huntington North Reservoir, a small off-channel reservoir near Huntington, is operated in conjunction with Joes Valley Reservoir; records not included.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 66,030 acre-ft June 20, 21, 1983; minimum observed since reservoir was first filled, 7,710 acre-ft Oct. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 62,530 acre-ft, Jun 17-19, elevation, 6,990.5 ft; minimum observed, 43,190 acre-ft, Oct 25, elevation, 6,972.2 ft.

## MONTHEND ELEVATION, IN FEET, AND CONTENTS AT 2400, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sep 30.....	6,976.4	47,210	--
Oct 31.....	6,972.6	43,560	-3,650
Nov 30.....	6,973.5	44,410	+850
Dec 31.....	6,973.5	44,410	0
CAL YR 1998.....	--	--	-3,200
Jan 31.....	6,973.8	44,690	+280
Feb 28.....	6,973.9	44,790	+100
Mar 31.....	6,974.5	45,360	+570
Apr 30.....	6,975.2	46,040	+680
May 31.....	6,986.4	57,810	+11,770
Jun 30.....	6,989.7	61,590	+3,780
Jul 31.....	6,985.4	56,690	-4,900
Aug 31.....	6,980.5	51,390	-5,300
Sep 30.....	6,977.0	47,810	-3,580
WTR YR 1999.....	--	--	+600

## 09326500 FERRON CREEK (UPPER STATION) NEAR FERRON, UT

LOCATION.--Lat 39°06'15", long 111°12'57", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 2, T. 20 S., R. 6 E., Emery County, Hydrologic Unit 14060009, on right bank 1.8 mi upstream from Dry Wash and 4.5 mi west of Ferron.

DRAINAGE AREA.--138 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1911 to September 1923, October 1947 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for station at site 2 mi downstream published as Ferron Creek near Ferron, Apr. 1909 to Oct. 1911, not equivalent because of diversions 1.5 mi downstream from present site.

REVISED RECORDS.--WSP 1243: 1951(P). WSP 1313: 1920(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,210 ft above sea level, from topographic map. May 6, 1911 to Sept. 30, 1923, nonrecording gages in vicinity of present site at different datums. Dec. 19, 1947 to Sept. 30, 1966, at site 1.5 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Slight regulation by small reservoir above station (capacity not known). Small diversions above station for irrigation, including a transmountain diversion to tributary of San Pitch River (Sevier Lake basin). Greater part of flow diverted during irrigation season by Upper North and Upper South Canals, 1.5 mi below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,180 ft<sup>3</sup>/s Aug. 27, 1952, gage height, 9.71 ft, site and datum then in use, from rating table extended above 400 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 8.70 ft and 9.71 ft; site and datum then in use; no flow Oct. 19-21, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 28	2200	612	5.13	Jul 8	1500	881	5.71
Jun 17	1530	784	5.51	Jul 29	1515	*1,530	*6.86

Minimum daily discharge, 10 ft<sup>3</sup>/s, Dec 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	26	19	e17	e15	14	23	55	441	139	50	31
2	24	31	19	e16	e14	15	19	61	451	132	45	35
3	23	24	19	e15	e13	15	21	77	390	125	44	32
4	27	18	18	e13	e13	15	22	59	351	118	44	31
5	24	21	14	e14	e12	14	20	52	290	114	46	30
6	25	22	e14	e15	12	14	21	56	275	109	72	29
7	26	23	e14	e14	12	14	21	76	331	115	55	27
8	26	25	e15	e13	13	14	21	105	354	141	42	26
9	24	24	e14	e13	14	14	22	107	351	99	42	26
10	23	21	e14	e13	14	14	19	86	348	83	49	26
11	22	23	e14	e13	e11	14	21	75	338	78	82	37
12	22	22	e15	e13	e12	14	21	78	342	73	43	28
13	22	22	e16	e14	e13	13	25	e90	344	71	38	26
14	22	23	e17	e13	e14	15	27	e100	336	74	35	39
15	21	23	e17	e13	e14	15	25	110	346	81	34	92
16	21	23	e16	e14	e14	16	24	108	343	69	34	39
17	21	22	e16	e14	e13	17	28	100	358	67	32	34
18	20	21	e15	e14	13	20	37	119	328	62	31	32
19	21	18	e15	e15	13	25	49	145	301	77	41	37
20	21	17	e12	e15	13	26	57	165	279	60	45	46
21	23	e17	e10	e14	12	23	54	212	256	60	39	34
22	27	e20	e11	e13	13	21	43	251	237	56	35	32
23	29	22	e12	e14	15	22	42	304	226	53	33	31
24	24	21	e13	e16	12	20	43	394	211	53	31	30
25	44	20	e14	14	13	24	44	451	199	51	32	26
26	45	19	e14	15	12	28	49	421	185	49	32	24
27	37	19	e15	14	13	26	63	482	172	62	46	23
28	28	19	e16	e13	13	22	64	512	160	53	38	23
29	26	19	e16	e12	---	22	68	519	151	131	31	23
30	31	19	e17	e13	---	26	54	496	145	66	40	23
31	26	---	e17	e14	---	27	---	472	---	56	39	---
TOTAL	797	644	468	433	365	579	1047	6338	8839	2577	1300	972
MEAN	25.7	21.5	15.1	14.0	13.0	18.7	34.9	204	295	83.1	41.9	32.4
MAX	45	31	19	17	15	28	68	519	451	141	82	92
MIN	20	17	10	12	11	13	19	52	145	49	31	23
AC-FT	1580	1280	928	859	724	1150	2080	12570	17530	5110	2580	1930

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912-23, 1948-99, BY WATER YEAR (WY)

	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
MEAN	18.2	13.8	10.8	9.09	10.1	14.0	44.5	220	296	101	42.0	24.5
MAX	70.2	32.2	21.5	19.7	30.4	26.7	128	486	732	404	128	51.0
(WY)	1917	1985	1985	1998	1998	1998	1985	1952	1984	1983	1983	1952
MIN	7.59	6.40	4.27	3.00	4.61	5.02	13.7	44.8	40.3	17.2	12.0	9.30
(WY)	1960	1995	1963	1963	1978	1977	1967	1977	1977	1977	1977	1994

## GREEN RIVER BASIN

09326500 FERRON CREEK (UPPER STATION) NEAR FERRON, UT--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1912-23, 1948-99	
ANNUAL TOTAL	27327		24359		67.1	
ANNUAL MEAN	74.9		66.7		140	1984
HIGHEST ANNUAL MEAN					17.6	1977
LOWEST ANNUAL MEAN					1240	Jun 7 1984
HIGHEST DAILY MEAN	462	Jun 3	519	May 29	1.0	Mar 22 1912
LOWEST DAILY MEAN	10	Dec 21	10	Dec 21	2.6	Jan 4 1960
ANNUAL SEVEN-DAY MINIMUM	12	Dec 20	12	Dec 20		
ANNUAL RUNOFF (AC-FT)	54200		48320		48630	
10 PERCENT EXCEEDS	267		191		198	
50 PERCENT EXCEEDS	30		25		18	
90 PERCENT EXCEEDS	17		13		8.0	

e Estimated

LOCATION.--Lat 38°51'30", long 110°22'10", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 34, T. 22 S., R. 14 E., Emery County, Hydrologic Unit 14060009, on left bank 300 ft upstream from bridge on State Highway 24, 14.0 mi southwest of Green River, and 34.3 mi upstream from mouth.

WATER-DISCHARGE RECORDS

REVISED RECORDS.--WDR UT-77-1: Drainage area.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 42,000 acres. Several small transmountain diversions from tributaries for irrigation in Sevier Lake basin, and some storage since Nov. 3, 1965, in Joes Valley Reservoir (see station 09323900).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft<sup>3</sup>/s Sept. 2, 1909, gage height, 12.7 ft, site and datum then in use, from rating curve extended above 3,100 ft<sup>3</sup>/s; no flow at times in some years.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jul 14	2345	*2,690	*11.84	No other peak greater than base discharge.			

Minimum daily discharge, 13 ft<sup>3</sup>/s, Apr 15, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	161	96	e58	e48	47	15	64	348	182	e115	202
2	64	184	94	e56	e47	47	14	57	317	155	e100	135
3	64	564	95	e56	e46	47	16	46	324	196	e90	621
4	66	169	93	e54	e49	48	19	40	351	168	81	202
5	74	117	93	e57	e55	50	20	41	303	135	75	123
6	78	115	91	e60	71	48	19	39	262	e115	73	101
7	82	143	e70	e63	74	45	24	36	256	e100	e140	89
8	86	128	e64	e59	74	43	22	29	317	e89	e130	81
9	93	121	e58	e57	69	41	e18	27	407	111	123	72
10	93	132	e53	e56	73	40	17	27	490	150	137	72
11	92	120	e55	e58	e64	38	16	27	549	100	400	66
12	98	119	e56	e63	e56	41	16	34	564	81	415	89
13	106	128	e56	e62	e50	39	e15	33	606	69	207	94
14	117	140	e58	e58	55	36	e14	30	626	304	134	e74
15	114	144	e56	e59	72	36	13	28	614	725	110	110
16	115	130	e58	e58	81	35	13	26	614	278	116	384
17	112	142	e60	e56	85	35	14	36	729	117	202	173
18	110	155	e57	e59	74	32	15	31	896	92	158	115
19	104	158	e60	e58	68	29	15	34	751	80	90	92
20	106	155	e62	e62	63	30	14	34	705	73	157	92
21	113	153	e50	e58	58	31	15	39	664	84	308	105
22	125	144	e45	e56	54	31	16	36	621	76	454	95
23	146	115	e44	e55	54	29	e27	49	582	66	161	90
24	232	110	e44	e58	51	27	30	59	520	55	104	88
25	168	109	e48	e62	50	23	24	62	485	e52	90	84
26	319	104	e50	e63	52	22	28	166	428	e54	87	81
27	571	98	e52	e57	53	22	39	281	371	e53	101	72
28	307	95	e54	e52	51	21	e42	320	e325	e56	264	71
29	198	105	e56	e49	---	20	45	339	e250	e100	256	72
30	150	109	e58	e47	---	19	52	360	212	e150	127	80
31	192	---	e58	e49	---	16	---	358	---	e130	134	---
TOTAL	4362	4367	1944	1775	1697	1068	647	2788	14487	4196	5139	3825
MEAN	141	146	62.7	57.3	60.6	34.5	21.6	89.9	483	135	166	128
MAX	571	564	96	63	85	50	52	360	896	725	454	621
MIN	64	195	44	47	46	16	13	26	212	52	73	66
AC-FT	8650	8660	3860	3520	3370	2120	1280	5530	28730	8320	10190	7590

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910-18, 1946-99, BY WATER YEAR (WY)

MEAN	92.9	68.2	47.2	43.9	71.5	107	106	302	563	158	91.5	77.6
MAX	848	358	125	224	200	729	748	1626	2772	965	344	309
(WY)	1917	1958	1910	1911	1910	1910	1910	1914	1983	1983	1916	1961
MIN	.85	5.68	11.8	13.1	20.9	23.3	6.84	3.72	1.09	.25	.38	.11
(WY)	1957	1978	1978	1991	1977	1976	1977	1977	1977	1994	1960	1956



## GREEN RIVER BASIN

09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1910-18, 1946-99	
ANNUAL TOTAL	56827		46295		144	
ANNUAL MEAN	156		127		483	1984
HIGHEST ANNUAL MEAN					17.6	1990
LOWEST ANNUAL MEAN						
HIGHEST DAILY MEAN	899	Aug 22	896	Jun 18	7300	Oct 8 1916
LOWEST DAILY MEAN	34	Apr 13	13	Apr 15	.00	Aug 24 1910
ANNUAL SEVEN-DAY MINIMUM	40	Apr 9	14	Apr 14	.00	Aug 15 1915
ANNUAL RUNOFF (AC-FT)	112700		91830		104200	
10 PERCENT EXCEEDS	401		318		317	
50 PERCENT EXCEEDS	90		73		51	
90 PERCENT EXCEEDS	52		28		12	

e Estimated

## GREEN RIVER BASIN

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09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1946 to September 1949, October 1950 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July to September 1949, November 1950 to September 1962, October 1964 to September 1979, daily, March 1982 to current year.

WATER TEMPERATURES: July to September 1949, October 1950 to September 1962, October 1964 to September 1977

SUSPENDED-SEDIMENT DISCHARGE: March 1948 to September 1949, October 1950 to September 1959.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily observed (water years 1949, 1951-70, 1974-77, 1982 to current year), 7,230 microsiemens July 15, 1954, and June 29, 1977; minimum daily observed (water years 1949, 1951-77, 1982 to current year), 650 microsiemens June 29, 1984.

WATER TEMPERATURES: Maximum (water years 1949, 1951-61, 1966-77), 35.0°C July 11, 1954; minimum, 0.0°C on many days during winter period each year.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 4,920 microsiemens, Apr 29; minimum observed, 740 microsiemens, Jun 21.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
DEC									
10...	1130	3.54	53	3000	8.2	-1.5	.5	220	143
FEB									
04...	1100	3.14	46	2870	8.1	3.0	1.0	210	137
MAR									
11...	1030	2.97	40	3300	8.1	6.0	7.0	220	154
APR									
13...	1100	2.60	15	4340	8.2	16.5	10.5	290	210
MAY									
28...	1000	4.93	331	1220	8.3	23.0	18.0	82	51
JUL									
08...	1030	3.46	89	1650	8.2	25.0	23.0	100	74
AUG									
19...	1030	3.60	92	2240	8.2	27.0	21.0	390	57

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
DEC								
10...	333	7.7	1500	60	.22	8.2	.35	.083
FEB								
04...	336	5.5	1400	55	.26	7.7	.31	E.041
MAR								
11...	392	7.6	1600	67	.26	6.7	.32	E.033
APR								
13...	542	11	2300	98	.24	7.2	.44	<.050
MAY								
28...	91	4.0	390	16	.29	5.7	4.2	3.16
JUL								
08...	153	5.1	670	26	.23	4.0	.60	.102
AUG								
19...	89	9.2	1200	28	.20	7.8	36	17.0

## GREEN RIVER BASIN

09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	2830	---	2710	3240	3980	4350	1110	1280	---	---
2	---	---	---	---	---	---	4030	4380	1100	1460	2330	---
3	---	2030	---	2110	---	---	4090	3860	1210	1510	---	1650
4	---	---	2940	---	2420	3430	4040	3980	1360	1220	---	---
5	2660	---	---	---	---	---	4030	3750	1340	1380	2110	2370
6	---	2650	---	---	---	---	4090	4070	1380	1520	---	---
7	---	---	2880	2240	---	3150	4320	4170	1430	1560	---	---
8	2320	2440	---	---	2210	---	4440	3810	1480	1660	---	---
9	---	---	---	---	---	---	4130	3750	1260	1770	---	2330
10	---	---	3170	2430	---	3330	4070	3460	1050	1950	2000	---
11	---	---	---	---	2720	---	4180	3540	919	2060	---	---
12	2400	2630	---	---	---	---	4240	3890	830	2150	---	2450
13	---	---	2550	---	---	---	4300	4120	790	2050	2450	---
14	---	---	---	2540	---	---	4320	4170	790	2000	---	---
15	---	---	---	---	3090	3310	4410	3510	750	2710	2310	---
16	2200	---	---	---	---	---	4380	3330	800	1850	---	---
17	---	2260	2850	2250	---	---	4340	3290	790	2330	---	2230
18	---	---	---	---	2370	3470	4470	3610	1830	2590	---	---
19	---	---	---	---	---	---	4590	3950	920	2690	---	2280
20	2350	---	---	---	---	---	4500	3380	800	---	2030	---
21	---	1930	2350	2120	2850	3500	4450	3660	740	---	---	---
22	2320	---	---	---	---	---	4480	3290	1070	---	2240	2260
23	---	---	---	---	---	---	4760	3340	1000	---	---	---
24	---	---	---	2320	3180	---	4490	3450	920	---	---	---
25	---	2490	---	---	---	3580	4680	3230	890	---	2420	---
26	---	---	---	---	---	---	4470	2690	900	2510	---	2290
27	2230	---	---	2380	---	---	4830	1150	1000	---	---	---
28	---	2840	3040	---	---	3380	4100	1220	1050	2560	---	---
29	---	---	---	---	---	---	4920	1100	1090	---	---	---
30	2340	---	---	---	---	---	3420	940	1110	---	---	2120
31	---	---	3180	---	---	3880	---	1090	---	---	2570	---
MEAN	2350	2410	2870	2300	2690	3430	4320	3280	1060	1940	2270	2220

## 09330000 FREMONT RIVER NEAR BICKNELL, UT

LOCATION.--Lat 38°18'25", long 111°31'05", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 7, T. 29 S., R. 4 E., Wayne County, Hydrologic Unit 14070003, on left bank 150 ft upstream of county road bridge, 2.9 mi southeast of Bicknell along Highway U-24.

DRAINAGE AREA.--751 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1909 to December 1912, published as "near Thurber", October 1937 to September 1958 (1944-46, fragmentary), October 1976 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,920 ft above sea level, from topographic map. May 1909 to Dec 1912, staff gage near present site at different datum. Oct 1937 to Jun 28, 1949, staff gages on two canals and river station about 0.25 mi downstream at different datums. Jun 28, 1949 to Apr 29, 1958, water-stage recorders replaced staff gages on river and canal site using same datum. Apr 29 to Sep 30, 1958, staff gage on river at site 600 ft farther downstream from water-stage recorder at datum 1.67 ft lower. Oct 1, 1976 to Apr 2, 1990, water-stage recorders at site about 150 ft downstream at different datum.

REMARKS.--Records good except for periods of heavy moss growth in the channel from Jun to Nov and estimated daily discharges, which are poor. Diversions for irrigation of about 10,600 acres above station. Flow regulated by Fish Lake, Johnson, Forsyth, and Mill Meadow Reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft<sup>3</sup>/s Mar 21, 1997 (but may have been less due to backwater from bridge abutment) gage height, 7.02 ft, from rating curve extended above 770 ft<sup>3</sup>/s. Maximum gage height, 7.59 ft Apr 24, 1998; minimum observed discharge, 18 ft<sup>3</sup>/s Jun 2, 4, 13-15, 17, 18, 1912.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 142 ft<sup>3</sup>/s, Apr 23, gage height, 4.67 ft; minimum daily discharge, 50 ft<sup>3</sup>/s, Jun 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	100	92	89	93	92	115	122	82	54	83	84
2	77	99	91	85	e90	91	118	118	83	53	78	81
3	79	92	89	e80	94	92	114	115	79	55	75	84
4	84	89	88	e80	95	91	124	119	75	57	77	82
5	79	89	84	82	98	89	125	118	85	64	80	82
6	77	92	e68	86	99	91	124	114	87	66	82	82
7	80	91	e70	88	97	92	119	109	87	68	76	80
8	81	93	70	86	100	90	113	108	83	79	71	74
9	78	93	74	83	101	90	119	112	74	90	69	73
10	75	e90	e70	87	101	88	119	115	71	69	68	74
11	74	85	73	88	e70	91	118	110	69	71	72	75
12	75	92	77	89	e90	89	118	107	67	70	70	76
13	80	91	78	88	93	88	117	97	62	68	68	76
14	79	94	79	87	97	90	112	94	61	68	67	76
15	78	94	79	90	97	90	110	90	61	68	65	80
16	79	90	80	91	94	89	112	81	59	69	65	79
17	82	89	82	93	95	89	111	77	61	69	70	79
18	90	85	83	95	94	88	112	82	59	69	68	77
19	90	85	84	96	95	89	111	82	57	70	72	76
20	93	82	84	94	91	93	122	77	56	72	82	76
21	103	85	e80	95	95	97	131	74	56	73	97	75
22	117	89	e70	e85	e85	95	136	72	57	74	104	75
23	111	88	e72	e90	92	95	136	71	55	73	87	74
24	109	87	e72	96	93	92	126	72	54	74	78	87
25	109	86	73	94	93	86	116	73	52	72	76	84
26	111	87	78	93	92	82	118	77	51	68	84	75
27	121	87	82	90	91	86	116	78	52	77	103	71
28	107	89	83	e88	93	86	113	83	51	88	100	70
29	102	97	87	88	---	88	125	87	50	86	92	72
30	101	94	88	90	---	91	127	90	51	83	90	75
31	101	---	88	92	---	107	---	86	---	87	90	---
TOTAL	2798	2704	2468	2758	2618	2807	3577	2910	1947	2204	2459	2324
MEAN	90.3	90.1	79.6	89.0	93.5	90.5	119	93.9	64.9	71.1	79.3	77.5
MAX	121	100	92	96	101	107	136	122	87	90	104	87
MIN	74	82	68	80	70	82	110	71	50	53	65	70
AC-FT	5550	5360	4900	5470	5190	5570	7090	5770	3860	4370	4880	4610

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1999, BY WATER YEAR (WY)

	MEAN	86.8	90.6	86.3	88.7	96.3	110	124	88.6	73.3	69.2	76.1	78.6
MAX	145	140	133	131	135	243	412	163	174	135	139	119	
(WY)	1985	1985	1985	1985	1984	1997	1987	1985	1984	1984	1984	1984	1984
MIN	54.1	59.7	63.7	66.1	70.0	66.4	63.3	58.7	46.1	50.7	46.3	51.4	
(WY)	1980	1980	1979	1980	1980	1980	1980	1981	1980	1980	1980	1978	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1977 - 1999	
ANNUAL TOTAL	31777		31574			
ANNUAL MEAN	87.1		86.5		89.0	
HIGHEST ANNUAL MEAN					138	
LOWEST ANNUAL MEAN					60.2	
HIGHEST DAILY MEAN	700		136		965	
LOWEST DAILY MEAN	51		50		34	
ANNUAL SEVEN-DAY MINIMUM	52		52		38	
ANNUAL RUNOFF (AC-FT)	63030		62630		64440	
10 PERCENT EXCEEDS	102		112		118	
50 PERCENT EXCEEDS	84		86		82	
90 PERCENT EXCEEDS	59		68		57	

e Estimated

## 09330230 FREMONT RIVER NEAR CAINEVILLE, UT

LOCATION.--Lat 38°16'45", long 111°13'54", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 20, T. 29 S., R. 8 E., Wayne County, Hydrologic Unit 14070003, on right bank 2.3 mi downstream from Pleasant Creek, 4.5 mi southwest of Caineville, and 9.8 mi east of Fruita, Utah.

DRAINAGE AREA.--1,208 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,760 ft above sea level, from topographic map. Prior to May 16, 1996 at site 500 ft upstream at datum 6.0 ft higher.

REMARKS.--Records good except for daily discharges from Dec 14 to Feb 25 and estimated daily discharges, which are poor. Many diversions for irrigation upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft<sup>3</sup>/s July 24, 1984, gage height, 10.20 ft, from rating curve extended above 640 ft<sup>3</sup>/s on basis of slope-area measurement at gage heights of 6.90 ft and 7.20 ft datum then in use and slope-conveyance study; minimum discharge, 8 ft<sup>3</sup>/s June 29, 1994.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jul 27	1715	<sup>a</sup> 586	6.31	Aug 18	2300	<sup>a</sup> 1,600	7.33
Jul 30	1710	<sup>a</sup> *3,520	*8.58	Aug 21	1700	<sup>a</sup> 1,940	7.56
Aug 4	1915	<sup>a</sup> 1,500	7.25	Aug 25	2130	<sup>a</sup> 985	6.80

<sup>a</sup>From rating curve extended above 170 ft<sup>3</sup>/s.  
Minimum daily discharge, 22 ft<sup>3</sup>/s, Jul 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	97	100	98	98	92	100	95	44	26	73	74
2	72	101	99	95	91	90	106	87	43	25	58	74
3	72	93	99	89	98	91	104	82	49	24	54	69
4	75	91	101	93	98	92	112	84	48	22	161	67
5	77	92	98	94	101	91	116	84	50	24	106	65
6	76	94	84	97	102	91	115	83	63	25	86	63
7	76	94	79	99	99	92	108	80	57	29	67	62
8	77	95	87	98	100	91	100	76	50	43	61	57
9	76	97	88	91	101	92	96	76	47	54	56	53
10	74	82	84	95	103	90	98	83	40	46	64	54
11	73	98	90	97	75	91	97	79	39	35	76	57
12	74	96	93	100	93	91	96	73	39	33	53	57
13	73	101	95	97	95	88	92	70	35	30	51	55
14	72	100	94	100	98	89	89	66	34	30	48	68
15	72	102	94	97	102	90	88	61	33	33	48	67
16	75	99	94	100	96	89	87	55	32	34	46	63
17	77	95	95	100	98	88	88	47	38	31	51	67
18	79	93	96	105	96	87	88	43	41	31	112	65
19	81	93	98	106	95	86	80	46	38	30	143	76
20	81	90	98	104	90	86	80	47	36	29	71	73
21	93	90	86	104	93	90	94	52	37	28	324	62
22	104	96	78	92	88	89	107	51	40	28	90	58
23	100	96	84	101	94	86	114	51	40	29	84	59
24	96	97	<sup>e</sup> 91	107	94	86	107	53	41	32	79	68
25	106	95	98	102	94	82	93	50	39	33	115	67
26	171	98	109	100	91	77	88	47	45	28	82	60
27	139	97	118	94	90	77	88	43	42	77	89	53
28	103	96	125	89	92	78	85	53	40	64	88	49
29	98	104	132	91	---	79	92	52	39	75	95	50
30	97	103	124	93	---	83	97	50	32	267	73	54
31	98	---	110	98	---	87	---	52	---	72	77	---
TOTAL	2708	2875	3021	3026	2665	2711	2905	1971	1251	1367	2681	1866
MEAN	87.4	95.8	97.5	97.6	95.2	87.5	96.8	63.6	41.7	44.1	86.5	62.2
MAX	171	104	132	107	103	92	116	95	63	267	324	76
MIN	71	82	78	89	75	77	80	43	32	22	46	49
AC-FT	5370	5700	5990	6000	5290	5380	5760	3910	2480	2710	5320	3700

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1999, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1968	68.4	122	1985	38.0	1980
1969	87.1	133	1985	58.6	1982
1970	88.9	134	1986	66.7	1969
1971	91.7	136	1985	60.2	1975
1972	98.0	143	1985	82.5	1979
1973	104	174	1997	79.3	1981
1974	97.7	334	1987	50.5	1996
1975	63.9	213	1973	26.6	1974
1976	43.0	155	1983	20.4	1997
1977	46.9	171	1985	23.0	1994
1978	59.1	162	1971	24.0	1978
1979	61.3	161	1997	23.8	1978

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1968 - 1999

ANNUAL TOTAL	29613	29047	75.7
ANNUAL MEAN	81.1	79.6	133
HIGHEST ANNUAL MEAN			1985
LOWEST ANNUAL MEAN			1978
HIGHEST DAILY MEAN	554	324	1200
LOWEST DAILY MEAN	19	22	112
ANNUAL SEVEN-DAY MINIMUM	22	25	13
ANNUAL RUNOFF (AC-FT)	58740	57610	54840
10 PERCENT EXCEEDS	101	102	110
50 PERCENT EXCEEDS	84	87	75
90 PERCENT EXCEEDS	33	40	29
e Estimated			

## 09330500 MUDDY CREEK NEAR EMERY, UT

LOCATION.--Lat 38°58'55", long 111°14'55", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 21, T. 21 S., R. 6 E., Emery County, Hydrologic Unit 14070002, on left bank 100 ft upstream from Emery Canal and 4.1 mi north of Emery.

DRAINAGE AREA.--105 mi<sup>2</sup>.

PERIOD OF RECORD.--April to July 1909, July 1910 to July 1914, June 1949 to current year.

REVISED RECORDS.--WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above sea level, from topographic map. Apr. 29 to July 31, 1909, reference point. July 23, 1910 to July 16, 1914, staff gages, at sites about 1 mi upstream at different datums. June 29, 1949 to May 1, 1957, water-stage recorder at site 100 ft upstream at datum 2.89 ft higher prior to Mar. 20, 1953, and at datum 1.89 ft higher thereafter.

REMARKS.--Records fair except for estimated daily discharges, which are poor. One small diversion for irrigation and two storage reservoirs (total capacity 700 acre-ft) above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,340 ft<sup>3</sup>/s May 10, 1952, gage height, 11.14 ft, present datum from rating curve extended above 400 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; no flow Apr. 13-16, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug 10	2330	*227	*3.09				
Minimum daily discharge, 9.0 ft <sup>3</sup> /s, Dec 21.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	23	17	e15	e13	e15	17	33	144	99	57	41
2	26	24	17	e13	e12	16	15	38	149	94	54	42
3	25	21	18	e12	e11	16	15	44	143	89	53	39
4	26	17	17	e10	e11	17	16	34	138	86	48	32
5	25	19	e12	e11	e11	14	15	33	135	81	44	31
6	24	19	e12	e13	e10	13	16	37	129	78	44	31
7	24	20	e12	e12	e10	13	17	53	127	78	42	30
8	23	22	e13	e11	e11	13	16	68	127	83	40	29
9	23	19	e12	e11	e12	12	18	67	128	71	41	29
10	22	16	e12	e11	e12	13	14	55	130	66	57	29
11	22	21	e12	e11	e9.6	12	15	47	136	63	65	37
12	22	20	e13	e11	e10	12	16	e46	147	61	52	30
13	22	e20	e14	e12	e11	11	20	60	153	66	50	29
14	21	e22	e15	e11	e12	13	21	71	157	67	49	39
15	21	23	e15	e11	e12	15	19	68	160	62	49	49
16	21	21	e14	e12	e12	16	19	65	165	57	48	33
17	21	20	e14	e12	e11	19	22	60	168	57	48	31
18	21	19	e13	e12	e11	22	29	70	162	53	48	30
19	21	16	e13	e13	e11	25	36	78	162	51	47	31
20	21	14	e11	e13	e11	24	39	82	159	48	48	32
21	23	e14	e9.0	e12	e10	21	36	90	154	48	55	30
22	24	e19	e9.5	e11	e11	20	29	97	150	53	46	28
23	25	22	e9.9	e12	e13	20	28	95	142	49	44	28
24	22	20	e11	e13	e11	18	27	104	139	49	44	28
25	28	19	e12	e12	e12	22	27	138	133	47	44	28
26	30	19	e12	e13	e11	23	30	128	127	48	40	26
27	28	18	e13	e12	e13	21	42	136	123	63	40	25
28	23	17	e14	e11	e13	18	43	140	116	59	41	24
29	22	17	e14	e10	---	18	39	143	109	58	51	24
30	25	17	e15	e11	---	21	34	144	104	84	60	25
31	23	---	e15	e12	---	21	---	145	---	63	45	---
TOTAL	729	578	410.4	366	317.6	534	730	2469	4216	2031	1494	940
MEAN	23.5	19.3	13.2	11.8	11.3	17.2	24.3	79.6	141	65.5	48.2	31.3
MAX	30	24	18	15	13	25	43	145	168	99	65	49
MIN	21	14	9.0	10	9.6	11	14	33	104	47	40	24
AC-FT	1450	1150	814	726	630	1060	1450	4900	8360	4030	2960	1860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911-13, 1950-99, BY WATER YEAR (WY)

	1911-13	1950-99	1911-13	1950-99	1911-13	1950-99	1911-13	1950-99	1911-13	1950-99	1911-13	1950-99
MEAN	18.4	12.1	9.51	8.41	8.91	12.5	32.3	102	125	71.1	41.3	26.5
MAX	60.9	34.8	22.6	22.0	24.6	37.7	112	306	330	239	104	59.7
(WY)	1985	1985	1985	1998	1998	1911	1985	1952	1983	1983	1983	1983
MIN	4.78	3.73	2.00	2.00	3.09	4.15	7.84	14.2	15.7	17.1	7.55	9.58
(WY)	1978	1912	1912	1911	1911	1995	1967	1977	1977	1977	1977	1977

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1911-13, 1950-99

	1998 CALENDAR YEAR	1999 WATER YEAR	1911-13	1950-99
ANNUAL TOTAL	19679.9	14815.0		
ANNUAL MEAN	53.9	40.6		
HIGHEST ANNUAL MEAN			39.2	
LOWEST ANNUAL MEAN			86.1	1983
HIGHEST DAILY MEAN	220 Jun 3	168 Jun 17	9.40	1977
LOWEST DAILY MEAN	9.0 Dec 21	9.0 Dec 21	.00	Apr 13 1911
ANNUAL SEVEN-DAY MINIMUM	11 Dec 20	11 Dec 20	1.0	Apr 10 1911
ANNUAL RUNOFF (AC-FT)	39040	29390	28370	
10 PERCENT EXCEEDS	145	106	101	
50 PERCENT EXCEEDS	27	23	17	
90 PERCENT EXCEEDS	14	12	7.0	

e Estimated





ESCALANTE RIVER BASIN

135

SUMMARY STATISTICS	09337000 PINE CREEK NEAR ESCALANTE, UT--Continued		FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1951-55,1958-99	
ANNUAL TOTAL	3992.1		3620.7				5.17	
ANNUAL MEAN	10.9		9.92				12.5	
HIGHEST ANNUAL MEAN							.62	
LOWEST ANNUAL MEAN							205	
HIGHEST DAILY MEAN	107	Sep 11	80	Sep 16			May 18 1964	
LOWEST DAILY MEAN	2.5	Jan 6	3.0	Dec 22			Mar 12 1954	
ANNUAL SEVEN-DAY MINIMUM	2.7	Jan 5	3.7	Dec 18			Jun 17 1954	
ANNUAL RUNOFF (AC-FT)	7920		7180				3750	
10 PERCENT EXCEEDS	24		15				9.5	
50 PERCENT EXCEEDS	7.9		8.3				3.0	
90 PERCENT EXCEEDS	3.0		5.5				.60	

e Estimated

ESCALANTE RIVER BASIN

09337500 ESCALANTE RIVER NEAR ESCALANTE, UT

LOCATION.--Lat 37°46'41", long 111°34'26", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 9, T. 35 S., R. 3 E., Garfield County, Hydrologic Unit 14070005, Bureau of Land Management, on left bank 150 ft downstream from Pine Creek and 1.5 mi northeast of Escalante.

DRAINAGE AREA.--320 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1909 to April 1913, October 1942 to September 1955, December 1971 to current year. Published as Escalante Creek near Escalante 1909-13.

REVISED RECORDS.--WSP 1149: 1943 (M), 1944, 1945 (M). WRD UT-73-1: 1972.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage, 5,670 ft above sea level, from topographic map. Prior to Apr. 30, 1913, staff at approximately same site at different datum.

REMARKS.--Records fair except for discharges less than 2.0 ft<sup>3</sup>/s and estimated daily discharges, which are poor. Considerable regulation of low flows by diversion into Wide Hollow Reservoir (an off-stream storage site about 4 mi upstream; capacity 2,320 acre-feet) and by diversion on Pine Creek for irrigation of about 2,300 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,550 ft<sup>3</sup>/s August 24, 1998, gage height, 11.05 ft from rating curve extended above 150 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 5.31 ft, 6.25 ft, 7.59 ft, and 11.05 ft; minimum daily, 0.07 ft<sup>3</sup>/s July 11, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,610 ft<sup>3</sup>/s, Jul 29, gage height, 6.73 ft; minimum daily discharge, 0.94 ft<sup>3</sup>/s, Jul 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	14	20	e18	23	20	6.0	10	16	2.4	20	36
2	6.7	25	23	e17	20	19	7.4	10	43	2.1	6.7	26
3	6.2	30	19	17	23	9.7	7.3	13	60	1.5	11	22
4	6.6	26	12	20	22	8.9	14	12	60	1.2	12	e20
5	7.1	25	e11	30	24	12	11	11	59	1.1	28	e10
6	7.1	24	e10	21	23	14	16	11	49	.94	20	e6.0
7	7.1	22	e9.0	16	22	15	9.6	7.6	50	1.7	14	e4.0
8	7.1	18	e9.0	19	17	17	11	13	44	31	13	e3.0
9	5.6	13	10	30	19	26	7.5	30	29	37	12	2.6
10	3.7	13	12	26	e18	23	7.4	19	25	6.7	32	3.0
11	5.3	18	18	21	19	22	14	14	25	5.1	52	9.5
12	5.9	21	19	19	19	19	16	18	25	6.1	11	4.7
13	9.3	26	21	19	23	9.7	16	27	24	4.9	9.8	5.9
14	6.6	34	20	23	23	10	13	36	22	7.8	10	16
15	6.2	28	20	24	23	12	12	22	22	8.4	10	55
16	7.8	25	21	24	16	9.7	5.6	19	18	7.5	10	139
17	11	19	22	26	11	6.3	5.4	18	17	7.0	10	20
18	13	13	22	22	18	9.0	6.1	21	19	6.0	18	108
19	14	26	23	13	23	8.5	12	26	13	12	19	23
20	14	20	21	e12	20	4.8	21	25	13	6.5	40	17
21	44	22	17	e12	20	6.7	17	30	13	5.1	85	14
22	79	23	e13	13	19	5.2	9.6	35	10	5.5	38	14
23	36	22	e13	19	19	5.7	15	56	8.2	5.5	24	16
24	15	21	e14	23	19	5.9	14	72	7.4	6.7	26	e13
25	59	20	e16	24	20	3.7	13	58	5.8	4.5	18	e12
26	94	20	e16	23	19	5.0	5.6	55	4.8	3.7	16	e8.0
27	42	20	e18	21	19	4.4	7.1	57	3.7	11	70	e8.0
28	13	21	e19	18	19	7.4	8.7	53	2.2	17	19	e8.0
29	14	25	e20	19	---	8.1	20	40	1.9	89	24	e7.5
30	26	21	23	21	---	9.1	11	28	2.2	52	86	e8.0
31	24	---	e18	27	---	6.5	---	25	---	22	54	---
TOTAL	603.1	655	529.0	637	560	343.3	339.3	871.6	692.2	378.94	818.5	639.2
MEAN	19.5	21.8	17.1	20.5	20.0	11.1	11.3	28.1	23.1	12.2	26.4	21.3
MAX	94	34	23	30	24	26	21	72	60	89	86	139
MIN	3.7	13	9.0	12	11	3.7	5.4	7.6	1.9	.94	6.7	2.6
AC-FT	1200	1300	1050	1260	1110	681	673	1730	1370	752	1620	1270

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1999, BY WATER YEAR (WY)

MEAN	7.82	7.05	7.39	8.58	10.3	12.3	14.4	23.0	18.8	6.44	8.69	7.53
MAX	29.9	23.8	18.1	26.4	23.8	39.7	54.8	124	125	30.5	30.8	39.4
(WY)	1973	1988	1943	1950	1943	1989	1993	1973	1983	1944	1983	1998
MIN	.90	.80	.77	.96	1.21	.67	1.23	.88	.48	.47	.84	.73
(WY)	1991	1991	1991	1991	1993	1991	1990	1954	1990	1978	1978	1955

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1943 - 1999
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ANNUAL TOTAL	7923.94		7067.14			
ANNUAL MEAN	21.7		19.4		11.2	
HIGHEST ANNUAL MEAN					30.7	1973
LOWEST ANNUAL MEAN					1.49	1991
HIGHEST DAILY MEAN	367	Sep 11	139	Sep 16	367	Sep 11 1998
LOWEST DAILY MEAN	.69	Jul 21	.94	Jul 6	.07	Jul 11 1990
ANNUAL SEVEN-DAY MINIMUM	1.0	Jul 15	1.6	Jul 1	.18	Aug 26 1990
ANNUAL RUNOFF (AC-FT)	15720		14020		8110	
10 PERCENT EXCEEDS	46		34		24	
50 PERCENT EXCEEDS	14		17		5.0	
90 PERCENT EXCEEDS	4.6		5.8		1.1	

e Estimated

## 09378170 SOUTH CREEK ABOVE RESERVOIR, NEAR MONTICELLO, UT

LOCATION.--Lat 37°50'48", long 109°22'08", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 2, T. 34 S., R. 23 E., San Juan County, Hydrologic Unit 14080203, 200 ft upstream from west side of reservoir and 2 mi southwest of Monticello, Ut.

DRAINAGE AREA.--8.64 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,170 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 163 ft<sup>3</sup>/s Nov. 5, 1987, gage height, 4.17 ft; minimum daily, 0.01 ft<sup>3</sup>/s Aug. 19, 20, 1996.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 34 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 25	1300	*21	*1.44				

Minimum daily discharge, 0.05 ft<sup>3</sup>/s, Mar 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.08	e.40	.18	.22	e.20	e.17	e.10	4.6	5.0	e.60	e.36	e.28
2	e.08	e.50	.18	.22	e.18	e.17	e.10	4.3	4.9	e.56	e.34	e.26
3	e.08	e.40	.15	.22	e.20	e.17	.21	4.6	4.9	e.52	e.34	e.24
4	e.08	e.30	.14	e.21	e.22	e.22	.23	4.3	4.7	e.48	e.34	e.24
5	e.08	e.34	.14	e.22	e.23	e.20	.24	3.7	4.6	e.44	e.32	e.22
6	e.08	e.32	e.12	.25	e.17	e.19	.24	3.3	4.3	e.41	e.38	e.22
7	e.08	e.30	e.13	.22	e.18	e.20	.51	3.2	3.5	e.40	e.32	e.21
8	e.08	e.40	e.12	.22	e.19	e.19	.60	3.2	3.1	.38	e.30	e.22
9	.12	e.48	e.14	e.18	.19	.14	.38	3.2	2.7	.32	e.40	.22
10	.14	e.40	e.13	e.20	.17	.11	.34	3.3	2.6	.32	e.36	.22
11	.12	e.38	e.12	e.19	.14	.11	.36	5.2	2.5	.32	e.32	.22
12	.11	e.38	e.14	e.25	e.14	e.10	.48	5.4	2.5	.32	e.30	.22
13	.11	e.36	e.16	e.22	e.15	e.09	.81	5.0	2.5	.32	e.28	.21
14	.10	e.32	e.16	e.18	e.15	e.08	.83	5.1	2.6	.32	e.26	.18
15	.13	e.28	e.15	e.19	.15	e.10	.60	5.0	2.6	.32	e.24	.46
16	.14	e.30	e.17	e.19	e.12	e.09	.58	5.0	2.6	.32	e.38	1.1
17	.14	.18	e.18	e.20	.13	e.10	.58	5.1	3.0	.28	e.28	e.40
18	.14	.18	e.14	e.25	.11	e.08	.58	4.8	3.1	.29	.22	e.30
19	.14	.17	e.20	e.24	.11	e.08	.64	4.3	3.0	.38	.19	e.22
20	.15	e.15	e.22	e.23	e.10	e.09	.76	4.0	3.1	.38	.22	e.20
21	.32	e.16	e.16	.24	.16	e.10	.83	4.0	3.1	.38	.27	e.18
22	.82	.18	e.15	.23	.14	e.09	.95	4.1	2.9	.39	.22	e.18
23	.18	.18	e.17	.18	e.12	e.07	1.5	4.2	2.7	.38	.22	e.18
24	.14	.18	e.16	.18	e.13	e.06	3.4	4.4	2.6	.38	.22	e.17
25	1.6	.14	e.20	.18	e.15	e.07	4.2	4.8	2.3	.38	1.1	e.17
26	e.50	.14	e.21	.16	e.17	e.09	5.5	4.6	1.9	.38	e.30	e.17
27	e1.0	.14	e.23	.14	e.15	e.10	5.6	4.2	1.4	.38	e.36	e.18
28	e.40	.14	e.24	.14	e.16	e.05	5.0	3.5	1.1	.38	e.42	e.17
29	e.36	.91	e.25	e.14	---	e.06	5.8	3.1	e.80	.45	e.30	e.18
30	e.44	.20	.26	e.13	---	e.09	4.9	3.0	e.70	e.40	e.22	e.17
31	e.50	---	.23	e.14	---	e.10	---	3.8	---	e.36	e.30	---
TOTAL	8.44	8.91	5.33	6.16	4.41	3.56	46.85	130.3	87.30	11.94	10.08	7.59
MEAN	.27	.30	.17	.20	.16	.11	1.56	4.20	2.91	.39	.33	.25
MAX	1.6	.91	.26	.25	.23	.22	5.8	5.4	5.0	.60	1.1	1.1
MIN	.08	.14	.12	.13	.10	.05	.10	3.0	.70	.28	.19	.17
AC-FT	17	18	11	12	8.7	7.1	93	258	173	24	20	15

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1999, BY WATER YEAR (WY)

	1987	1988	1988	1988	1986	1995	1993	1993	1995	1995	1987	1991
MEAN	.23	.62	.19	.17	.31	2.21	6.33	7.80	3.32	.67	.30	.28
MAX	.45	5.40	.64	.45	1.08	5.65	19.0	33.0	11.6	3.51	.52	.91
(WY)	1987	1988	1988	1988	1986	1995	1993	1993	1995	1995	1987	1991
MIN	.097	.076	.077	.075	.070	.080	.097	.074	.052	.14	.062	.075
(WY)	1997	1997	1997	1990	1993	1996	1996	1996	1996	1994	1996	1996

## SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1986 - 1999

ANNUAL TOTAL	566.73	330.87	
ANNUAL MEAN	1.55	.91	1.87
HIGHEST ANNUAL MEAN			5.89
LOWEST ANNUAL MEAN			.14
HIGHEST DAILY MEAN	15	May 6	60
LOWEST DAILY MEAN	.06	Jan 7	.01
ANNUAL SEVEN-DAY MINIMUM	.08	Sep 23	.02
ANNUAL RUNOFF (AC-FT)	1120		1360
10 PERCENT EXCEEDS	5.3		5.5
50 PERCENT EXCEEDS	.20		.22
90 PERCENT EXCEEDS	.10		.08

e Estimated

## SAN JUAN RIVER BASIN

09378630 RECAPTURE CREEK NEAR BLANDING, UT

LOCATION.--Lat 37°45'20", long 109°28'33", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 11, T. 35 S., R. 22 E., San Juan County, Hydrologic Unit 14080201, on right bank 100 ft below road fork, 1.9 mi north of Manti-LaSal National Forest boundary, and 9.4 mi north of Blanding.

DRAINAGE AREA.--3.77 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 7,200 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 142 ft<sup>3</sup>/s Oct. 20, 1972, gage height, 2.14 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8.0 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 9	2121	*4.2	*1.08				
No flow many days.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.02	e.03	e.03	.02	.36	3.1	.62	.05	.02	.16
2	.00	.02	.02	e.02	e.02	.02	.29	2.9	.67	.04	.02	.16
3	.00	.01	.02	e.02	e.02	.01	.28	2.9	.56	.04	.03	.14
4	.00	.01	.02	e.02	e.03	.01	.22	2.7	.47	.04	.03	.10
5	.00	.01	.02	e.02	e.03	.01	.25	2.5	.69	.04	.03	.06
6	.00	.01	e.01	e.03	e.02	.01	.28	2.1	.59	.05	.03	.03
7	.00	.01	e.02	e.03	e.02	.01	.42	2.2	.44	.06	.02	.02
8	.00	.01	e.01	e.03	e.03	.01	.49	2.6	.35	.08	.02	.01
9	.00	.01	e.02	e.02	e.03	.01	.37	3.7	.32	.06	.03	.01
10	.00	.01	e.02	e.02	e.02	.02	.21	4.1	.33	.07	.02	.01
11	.00	.01	e.01	e.02	e.01	.02	.22	3.8	.24	.06	.03	.01
12	.00	.01	e.02	e.03	e.01	.03	.38	3.2	.24	.07	.02	.01
13	.00	.01	e.02	e.02	e.02	.03	.71	3.3	.24	.07	.02	.01
14	.00	.01	e.02	e.02	e.02	.03	.67	3.6	.38	.10	.02	.01
15	.00	.00	e.02	e.02	e.03	.04	.63	3.5	.30	.05	.02	.06
16	.00	.00	e.02	e.02	e.02	.04	.59	3.0	.20	.05	.03	.03
17	.00	.00	e.02	e.02	e.02	.04	.54	2.5	.24	.04	.02	.02
18	.00	.00	e.02	e.03	e.02	.07	.58	2.4	.21	.05	.01	.02
19	.00	.00	e.03	e.03	e.03	.10	.65	1.9	.13	.05	.01	.02
20	.00	.01	e.03	e.02	e.02	.18	.77	1.5	.16	.03	.01	.01
21	.01	.01	e.01	e.02	e.02	.29	.87	1.3	.13	.03	.03	.01
22	.01	.01	e.01	e.02	e.01	.33	.96	1.2	.06	.04	.03	.01
23	.00	.01	e.01	e.02	e.01	.19	1.0	1.1	.06	.03	.03	.01
24	.00	.01	e.01	e.03	e.02	.16	1.8	1.1	.07	.03	.03	.01
25	.01	.01	e.01	e.03	e.03	.18	1.7	1.1	.09	.03	.04	.01
26	.01	.01	e.01	e.02	e.02	.21	1.7	1.0	.12	.03	.09	.01
27	.03	.01	e.02	e.02	.04	.21	2.2	.92	.05	.02	.02	.01
28	.01	.03	e.02	e.02	.02	.24	2.8	.79	.04	.02	.05	.01
29	.00	.04	e.02	e.02	---	.28	3.2	.76	.06	.02	.04	.01
30	.01	.02	e.02	e.02	---	.32	3.0	.72	.06	.02	.05	.02
31	.01	---	e.02	e.02	---	.34	---	.65	---	.02	.11	---
TOTAL	0.10	0.32	0.55	0.71	0.62	3.46	28.14	68.14	8.12	1.39	0.96	1.01
MEAN	.003	.011	.018	.023	.022	.11	.94	2.20	.27	.045	.031	.034
MAX	.03	.04	.03	.03	.04	.34	3.2	4.1	.69	.10	.11	.16
MIN	.00	.00	.01	.02	.01	.01	.21	.65	.04	.02	.01	.01
AC-FT	.2	.6	1.1	1.4	1.2	6.9	56	135	16	2.8	1.9	2.1

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1999, BY WATER YEAR (WY)

MEAN	.17	.13	.053	.036	.12	1.67	4.88	6.55	2.27	.16	.057	.019
MAX	4.77	2.32	.67	.64	.68	11.2	15.9	25.1	13.6	1.00	.73	.085
(WY)	1973	1988	1973	1973	1980	1993	1993	1983	1983	1995	1968	1988
MIN	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000
(WY)	1979	1977	1977	1968	1977	1977	1977	1977	1977	1996	1972	1966

## SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

## WATER YEARS 1966 - 1999

ANNUAL TOTAL	239.66			113.52					
ANNUAL MEAN	.66			.31			1.35		
HIGHEST ANNUAL MEAN							4.60		1983
LOWEST ANNUAL MEAN							.008		1977
HIGHEST DAILY MEAN							57	Oct 20	1972
LOWEST DAILY MEAN	8.1	May 4		4.1	May 10				
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 28		.00	Oct 1		.00	Dec 20	1965
ANNUAL RUNOFF (AC-FT)	.00	Sep 2		.00	Oct 1		.00	Dec 20	1965
10 PERCENT EXCEEDS	475			225			976		
50 PERCENT EXCEEDS	2.4			.89			4.0		
90 PERCENT EXCEEDS	.04			.03			.03		
	.00			.01			.00		

e Estimated

LOCATION.--Lat 37°08'49", long 109°51'51", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 42 S., R. 19 E., San Juan County, Hydrologic Unit 14080205, on left bank 1,600 ft downstream from Gypsum Creek, 1,800 ft upstream from highway bridge, 20 mi southwest of Bluff, at mile 113.5.

WATER-DISCHARGE RECORDS

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 28	0800	*12,000	*11.39	Aug 30	1830	8,430	9.32
Aug 17	1130	8,210	9.36	Sep 5	0400	8,060	9.10
Aug 23	0400	8,010	9.24				

Minimum discharge, 444 ft<sup>3</sup>/s, Oct 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	901	4100	1310	973	999	937	941	1770	6810	3120	2260	7550
2	2050	3610	1240	975	998	935	949	1970	6970	2900	2230	7070
3	1620	2510	1170	976	984	903	967	2050	7420	3000	3340	5830
4	1240	1870	1180	954	966	880	993	1970	7220	2780	4620	7540
5	1040	1580	1190	913	1000	883	972	2220	6850	2640	4890	7760
6	1090	1400	1190	879	983	884	e980	2010	6910	2510	4950	6970
7	886	1310	1180	890	1000	882	1020	1870	6650	2320	6440	6460
8	863	1290	1150	899	1030	867	935	1670	6180	2230	5190	6140
9	868	2850	1080	896	1020	852	835	1510	6330	2740	4230	5790
10	825	e3600	993	891	970	845	793	1480	6840	3920	3520	5520
11	810	3250	987	918	972	860	799	1820	7220	4010	3980	5310
12	796	1900	978	939	954	876	772	2060	6680	2880	5570	5140
13	775	1560	971	939	930	869	739	1840	6110	2530	6230	5060
14	746	1480	957	952	926	865	685	1680	5750	2330	6090	4850
15	686	1450	963	969	900	851	652	1850	5800	2000	5460	4040
16	643	1380	969	969	923	824	838	2530	6200	1830	6190	3760
17	678	1350	1020	927	914	832	974	2670	5410	1810	7460	3930
18	821	1330	1040	937	903	795	1010	2580	5120	1730	6520	3790
19	891	1310	1050	962	897	792	944	2410	5560	1620	5900	3730
20	940	1280	1080	956	941	802	887	2590	4930	2470	6760	3650
21	843	1300	1020	980	948	811	848	3030	4550	3800	7260	3690
22	1150	1270	1030	1010	909	773	1000	3270	4560	3040	6810	3670
23	1550	1220	987	1050	886	750	1610	3490	4090	3810	7460	3610
24	1790	1210	905	1020	867	760	1810	3860	e4200	3220	5990	3560
25	1870	1190	1020	998	855	824	1600	4860	4360	3390	6270	3310
26	2710	1170	939	1000	856	904	1640	5510	4010	2670	6540	3030
27	7540	1130	944	973	920	873	1800	5540	4090	2940	6260	2870
28	9490	1120	1020	964	942	937	1540	5820	4030	2670	6380	2760
29	24690	1130	1070	976	---	989	1500	6420	3990	2750	7270	2700
30	2770	1200	969	1000	---	976	1560	6650	3540	3490	7690	2120
31	2750	---	975	1010	---	914	---	6860	---	3560	7580	---
TOTAL	56322	52350	32577	29695	26393	26745	32593	95860	168380	86710	177340	141210
MEAN	1817	1745	1051	958	943	863	1086	3092	5613	2797	5721	4707
MAX	9490	4100	1310	1050	1030	989	1810	6860	7420	4010	7690	7760
MIN	643	1120	905	879	855	750	652	1480	3540	1620	2230	2120
AC-FT	111700	103800	64620	58900	52350	53050	64650	190100	334000	172000	351800	280100

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915-17, 1927-99, BY WATER YEAR (WY)

MEAN	1559	1243	1106	1125	1436	1892	3467	5317	5717	2569	1810	1661
MAX	10650	4435	3821	3374	3683	6209	10120	21520	15380	9212	9335	11870
(WY)	1942	1987	1966	1986	1987	1916	1942	1941	1941	1957	1929	1927
MIN	205	345	408	335	519	463	399	339	556	236	80.4	64.5
(WY)	1957	1935	1957	1931	1964	1964	1977	1977	1977	1963	1939	1956



## SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1915-17, 1927-99	
ANNUAL TOTAL	719008		926175			
ANNUAL MEAN	1970		2537		2306	
HIGHEST ANNUAL MEAN					5859	1941
LOWEST ANNUAL MEAN					844	1977
HIGHEST DAILY MEAN	9490	Oct 28	9490	Oct 28	52000	Jun 30 1927
LOWEST DAILY MEAN	409	Aug 21	643	Oct 16	.00	Jul 3 1934
ANNUAL SEVEN-DAY MINIMUM	497	Sep 24	733	Oct 11	.00	Jul 3 1934
ANNUAL RUNOFF (AC-FT)	1426000		1837000		1671000	
10 PERCENT EXCEEDS	4870		6240		5960	
50 PERCENT EXCEEDS	1360		1480		1330	
90 PERCENT EXCEEDS	731		864		504	

e Estimated

## SAN JUAN RIVER BASIN

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09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1929 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1977, October 1980 to current year.

WATER TEMPERATURES: May 1944 to September 1961, October 1964 to current year.

SUSPENDED-SEDIMENT DISCHARGE: July 1929 to September 1980.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

INSTRUMENTATION.--Water-quality monitor since October 1980.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,790 microsiemens Sept. 19, 1959; minimum daily, 208 microsiemens June 17, 1952.

WATER TEMPERATURES: Maximum, 33.4°C Aug. 14, 1998; minimum, 0.0°C on many days during winter period of most years.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 383,000 mg/L Sept. 21, 1929; minimum daily mean, no flow on several days in 1934 and 1939.

SEDIMENT LOADS: Maximum daily, 15,700,000 tons Oct. 20, 1972; minimum daily, 0 tons on several days in 1934 and 1939.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: None determined this year.

WATER TEMPERATURE: Maximum recorded, 25.8°C, Jul 8; minimum recorded, .7°C, Dec 25-28.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)
OCT									
30...	1115	ENVIRONMENTAL	5.56	2790	880	8.1	11.0	11.0	11000
NOV									
23...	1330	ENVIRONMENTAL	4.30	1230	760	8.2	12.0	5.5	90
DEC									
15...	1330	ENVIRONMENTAL	4.07	1030	810	8.1	- .5	1.0	27
MAR									
22...	1315	ENVIRONMENTAL	3.87	815	700	8.4	15.0	12.5	33
APR									
21...	1230	ENVIRONMENTAL	3.89	776	670	8.3	16.0	15.0	37
MAY									
17...	1330	ENVIRONMENTAL	5.30	2330	420	8.2	17.0	15.0	1000
17...	1340	REPLICATE	5.30	2330	415	8.1	17.0	15.0	720
JUN									
23...	1230	ENVIRONMENTAL	6.64	4030	305	8.0	25.0	18.0	250
JUL									
19...	1140	ENVIRONMENTAL	4.72	1640	490	8.2	24.0	22.0	--
19...	1150	REPLICATE	4.72	1640	490	8.2	24.0	22.0	800
AUG									
23...	1230	ENVIRONMENTAL	9.06	7720	470	8.0	27.0	18.5	3700
23...	1233	SPIKE	9.06	7720	470	8.0	27.0	18.5	--
SEP									
16...	1215	ENVIRONMENTAL	6.34	3900	380	8.2	22.0	16.0	200

## SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)
OCT										
30...	9.6	103	648	1.8	150	25	47	6.6	129	65
NOV										
23...	11.3	104	656	.51	290	160	78	23	47	26
DEC										
15...	11.9	97	661	--	310	170	83	24	52	27
MAR										
22...	9.6	106	650	--	240	130	65	19	51	31
APR										
21...	8.7	102	645	.29	260	140	73	18	45	28
MAY										
17...	7.9	92	655	.50	150	58	46	9.3	21	23
17...	7.9	92	655	--	160	61	47	9.4	21	23
JUN										
23...	7.7	96	650	.31	110	43	33	6.0	16	24
JUL										
19...	7.3	98	650	.44	170	78	51	11	26	24
19...	7.3	98	650	.50	170	74	50	10	26	25
AUG										
23...	7.8	97	654	.69	130	47	40	6.5	44	42
23...	7.8	97	654	--	--	--	--	--	--	--
SEP										
16...	7.4	88	653	.31	140	45	41	8.6	20	24
DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT										
30...	5	3.3	0	147	121	280	12	.62	7.7	600
NOV										
23...	1	2.3	0	160	131	240	15	.31	8.7	546
DEC										
15...	1	2.5	0	165	135	260	17	.30	8.1	573
MAR										
22...	1	2.5	5	126	111	230	18	.36	3.0	478
APR										
21...	1	2.6	0	140	114	200	16	.32	5.5	458
MAY										
17...	.7	1.8	0	116	95	97	9.4	.27	6.6	266
17...	.7	1.8	0	115	94	96	9.5	.27	6.7	263
JUN										
23...	.7	1.5	0	80	66	69	5.1	.19	6.1	190
JUL										
19...	.9	2.2	0	115	94	120	10	.10	7.7	316
19...	.9	2.2	0	115	94	120	11	.29	7.6	314
AUG										
23...	2	2.9	0	98	80	120	6.1	.39	9.5	295
23...	--	--	0	98	80	--	--	--	--	--
SEP										
16...	.7	1.8	0	114	94	84	6.1	.22	10	243

## SAN JUAN RIVER BASIN

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09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
OCT 30...	568	.82	4520	--	--	<.010	--	1.54	<.020	--
NOV 23...	495	.74	1810	--	--	<.010	--	.398	.024	.03
DEC 15...	536	.78	1590	.451	2.0	.012	.04	.463	.021	.03
MAR 22...	452	.65	1050	--	--	--	--	--	--	--
APR 21...	435	.62	960	--	--	<.010	--	.145	<.020	--
MAY 17...	250	.36	1670	--	--	<.010	--	.376	<.020	--
MAY 17...	251	.36	1650	--	--	<.010	--	.366	.020	.03
JUN 23...	177	.26	2070	--	--	<.010	--	.203	<.020	--
JUL 19...	289	.43	1400	--	--	<.010	--	.286	<.020	--
JUL 19...	289	.43	1390	--	--	<.010	--	.301	<.020	--
AUG 23...	279	.40	6150	--	--	<.010	--	.502	<.020	--
AUG 23...	--	--	--	--	--	--	--	--	--	--
SEP 16...	230	.33	2560	--	--	<.010	--	.152	<.020	--

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)
OCT 30...	--	--	6.6	.25	8.1	.962	<.050	.002	.01
NOV 23...	.38	.09	.40	.11	.80	.178	<.050	.012	.04
DEC 15...	.27	--	.29	<.10	.76	.047	.010	.006	.02
MAR 22...	--	--	--	--	--	--	--	--	--
APR 21...	--	--	.51	.15	.66	.084	.004	.001	.00
MAY 17...	--	--	2.4	.12	2.8	1.63	.007	.003	.01
MAY 17...	2.8	--	2.8	E.10	3.2	1.35	.007	.004	.01
JUN 23...	--	--	.85	.11	1.1	.634	.008	.006	.02
JUL 19...	--	--	1.5	.15	1.8	.851	.019	.019	.06
JUL 19...	--	--	1.7	.20	2.0	.736	.021	.018	.06
AUG 23...	--	--	11	.19	11	8.04	.021	.014	.04
AUG 23...	--	--	--	--	--	--	--	--	--
SEP 16...	--	--	.63	.16	.78	.464	.016	.010	.03

## SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
OCT 30...	1115	ENVIRONMENTAL	--	--	<1	--	--	--	--	--
NOV 23...	1330	ENVIRONMENTAL	--	--	1	--	--	--	--	--
DEC 15...	1330	ENVIRONMENTAL	--	--	<1	--	--	--	--	--
MAR 22...	1315	ENVIRONMENTAL	2.6	<1.0	<1	65	<1.0	<1.0	7.1	<1.0
APR 21...	1230	ENVIRONMENTAL	--	--	2	--	--	--	--	--
MAY 17...	1330	ENVIRONMENTAL	16	<1.0	1	58	<1.0	<1.0	<1.0	<1.0
17...	1340	REPLICATE	14	<1.0	<1	58	<1.0	<1.0	<1.0	<1.0
JUN 23...	1230	ENVIRONMENTAL	12	<1.0	1	69	<1.0	<1.0	<1.0	<1.0
JUL 19...	1140	ENVIRONMENTAL	--	--	<1	--	--	--	--	--
19...	1150	REPLICATE	--	--	<1	--	--	--	--	--
AUG 23...	1230	ENVIRONMENTAL	--	--	1	--	--	--	--	--
23...	1233	SPIKE	--	--	--	--	--	--	--	--
SEP 16...	1215	ENVIRONMENTAL	3.6	<1.0	1	77	<1.0	<1.0	<1.0	<1.0

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 30...	--	<10	--	20	--	--	--	--	689	<10	--
NOV 23...	--	<10	--	32	--	--	--	--	1030	<10	--
DEC 15...	--	<10	--	34	--	--	--	--	1080	<10	--
MAR 22...	3.4	<10	<1.0	31	<1.0	1.9	1.8	<1.0	933	<10	14
APR 21...	--	<10	--	25	--	--	--	--	894	<10	--
MAY 17...	1.9	<10	<1.0	16	<1.0	1.7	2.0	<1.0	568	<10	1.8
17...	2.1	<10	<1.0	16	<1.0	1.7	1.8	<1.0	576	<10	2.2
JUN 23...	2.1	<10	<1.0	9	<1.0	<1.0	<1.0	<1.0	454	<10	2.5
JUL 19...	--	<10	--	19	--	--	--	--	700	<10	--
19...	--	<10	--	18	--	--	--	--	674	E5	--
AUG 23...	--	<10	--	16	--	--	--	--	672	<10	--
23...	--	--	--	--	--	--	--	--	--	--	--
SEP 16...	1.6	<10	<1.0	18	<1.0	1.2	1.3	<1.0	481	<10	1.4

## SAN JUAN RIVER BASIN

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09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	BORON, DIS- SOLVED (UG/L AS B) (01020)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT				
30...	1115	ENVIRONMENTAL	51	1
NOV				
23...	1330	ENVIRONMENTAL	54	1
DEC				
15...	1330	ENVIRONMENTAL	70	2
MAR				
22...	1315	ENVIRONMENTAL	64	<1
APR				
21...	1230	ENVIRONMENTAL	61	2
MAY				
17...	1330	ENVIRONMENTAL	25	<1
17...	1340	REPLICATE	26	<1
JUN				
23...	1230	ENVIRONMENTAL	E12	<1
JUL				
19...	1140	ENVIRONMENTAL	37	<1
19...	1150	REPLICATE	41	<1
AUG				
23...	1230	ENVIRONMENTAL	50	<1
23...	1233	SPIKE	--	--
SEP				
16...	1215	ENVIRONMENTAL	26	<1

DATE	TIME	SAMPLE TYPE	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
OCT			
30...	1115	ENVIRONMENTAL	--
NOV			
23...	1330	ENVIRONMENTAL	--
DEC			
15...	1330	ENVIRONMENTAL	--
MAR			
22...	1315	ENVIRONMENTAL	2.2
APR			
21...	1230	ENVIRONMENTAL	--
MAY			
17...	1330	ENVIRONMENTAL	1.6
17...	1340	REPLICATE	1.6
JUN			
23...	1230	ENVIRONMENTAL	<1.0
JUL			
19...	1140	ENVIRONMENTAL	--
19...	1150	REPLICATE	--
AUG			
23...	1230	ENVIRONMENTAL	--
23...	1233	SPIKE	--
SEP			
16...	1215	ENVIRONMENTAL	1.1



## SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)		CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	
OCT						
30...	1115	ENVIRONMENTAL	64		>20	
NOV						
23...	1330	ENVIRONMENTAL	2.4		1.7	
DEC						
15...	1330	ENVIRONMENTAL	2.4		1.1	
MAR						
22...	1315	ENVIRONMENTAL	--		--	
APR						
21...	1230	ENVIRONMENTAL	3.5		1.7	
MAY						
17...	1330	ENVIRONMENTAL	2.8		>10	
17...	1340	REPLICATE	6.8		>10	
JUN						
23...	1230	ENVIRONMENTAL	2.3		1.1	
JUL						
19...	1140	ENVIRONMENTAL	2.5		9.8	
19...	1150	REPLICATE	2.5		7.8	
AUG						
23...	1230	ENVIRONMENTAL	3.9		>25	
23...	1233	SPIKE	--		--	
SEP						
16...	1215	ENVIRONMENTAL	2.8		4.7	

DATE	TIME	SAMPLE TYPE	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
OCT											
30...	1115	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
NOV											
23...	1330	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
DEC											
15...	1330	ENVIRONMENTAL	--	--	--	--	--	--	--	--	--
MAR											
22...	1315	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
APR											
21...	1230	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
MAY											
17...	1330	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
17...	1340	REPLICATE	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
JUN											
23...	1230	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
JUL											
19...	1140	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
19...	1150	REPLICATE	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
AUG											
23...	1230	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020
23...	1233	SPIKE	.659	.625	.540	.564	.588	E.632	.781	.657	.643
SEP											
16...	1215	ENVIRONMENTAL	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060	<.0020

## SAN JUAN RIVER BASIN

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09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	PEB- ULATE WATER FILTRD 0.7 U (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680)
OCT 30...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
NOV 23...	<.0040	E.0035	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
APR 21...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
MAY 17...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
MAY 17...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
JUN 23...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
JUL 19...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
JUL 19...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
AUG 23...	<.0040	.0181	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030
AUG 23...	.641	.727	.658	.641	.536	E.848	.574	.686	.626	.640	.715	E.950
SEP 16...	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170	<.0010	<.0040	<.0030

DATE	THIO- BENCARB WATER FLTRD 0.7 U (UG/L) (82681)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	DIAZ- INON D10 SRG WAT FLT 0.7 U (91063)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U (91064)	HCH ALPHA D6 SRG WAT FLT 0.7 U (91065)	SET NUMBER SCHED- ULE 2001 (NO.) (99818)
OCT 30...	<.0020	E.0011	<.0040	<.0030	<.0130	<.0010	<.0050	95.7	111	84.2	8309.00
NOV 23...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	91.0	101	71.8	8331.00
DEC 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	<.0020	E.0014	<.0040	<.0030	<.0130	<.0010	<.0050	88.4	107	96.1	9083.10
APR 21...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	93.3	110	95.4	9116.00
MAY 17...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	120	--	105	9141.00
MAY 17...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	124	--	105	9141.00
JUN 23...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	105	--	101	9179.10
JUL 19...	<.0020	.0069	<.0040	<.0030	--	<.0010	<.0050	118	--	105	9203.10
JUL 19...	<.0020	<.0020	<.0040	<.0030	--	<.0010	<.0050	120	--	108	9203.10
AUG 23...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	112	--	102	9238.10
AUG 23...	.694	.664	.549	.693	.694	E.761	.391	111	--	104	9238.10
SEP 16...	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	117	--	106	9265.00

## SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SAMPLE VOLUME SCHED- ULE (ML) (99856)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
OCT 30...	862	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
NOV 23...	869	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
DEC 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	819	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
APR 21...	862	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
MAY 17...	917	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
MAY 17...	909	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
JUN 23...	917	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
JUL 19...	892	<.0070	<.0020	<.0050	E.0152	E.0033	<.0040	<.0030	<.0020	<.0060	<.0040
JUL 19...	877	<.0070	<.0020	<.0050	E.0147	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
AUG 23...	847	<.0070	<.0020	<.0050	E.0060	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040
AUG 23...	917	.761	.679	.739	.655	E.402	.697	.701	.627	.444	.672
SEP 16...	869	<.0070	<.0020	<.0050	<.0180	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	MALA- THION, DIS- SOLVED (UG/L) (39532)	PARA- THION, DIS- SOLVED (UG/L) (39542)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	ACETO- CHLOR, WATER FLTRD (UG/L) (49260)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS (CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS (CM) (61726)
OCT 30...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	--	--
NOV 23...	<.004	<.001	<.002	<.005	<.004	<.002	E.004	<.002	<.0020	--	--
DEC 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	<.004	<.001	<.002	<.005	<.004	<.002	.007	<.002	<.0020	--	--
APR 21...	<.004	<.001	<.002	E.003	<.004	<.002	.006	<.002	<.0020	.062	--
MAY 17...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	.060	.044
MAY 17...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	.060	.043
JUN 23...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	.086	.069
JUL 19...	<.004	<.001	.005	.008	<.004	<.002	<.005	<.002	<.0020	.062	.046
JUL 19...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	.066	.050
AUG 23...	<.004	<.001	<.002	<.005	<.004	<.002	<.003	<.002	<.0020	.107	.080
AUG 23...	.700	.678	.690	.626	.592	.678	.665	.715	.675	--	--
SEP 16...	<.004	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	.068	--

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SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	410	350	380
19	---	---	---	---	---	---	---	---	---	440	380	408
20	---	---	---	---	---	---	---	---	---	460	390	427
21	---	---	---	---	---	---	---	---	---	470	400	445
22	---	---	---	---	---	---	---	---	---	470	380	437
23	---	---	---	---	---	---	---	---	---	440	360	408
24	---	---	---	---	---	---	---	---	---	400	350	380
25	---	---	---	---	---	---	---	---	---	390	350	370
26	---	---	---	---	---	---	---	---	---	390	330	368
27	---	---	---	---	---	---	---	---	---	390	340	370
28	---	---	---	---	---	---	---	---	---	390	350	370
29	---	---	---	---	---	---	---	---	---	380	340	368
30	---	---	---	---	---	---	---	---	---	380	330	359
31	---	---	---	---	---	---	---	---	---	370	330	351
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	360	290	340	320	230	276	---	---	---	---	---	---
2	360	340	347	320	250	285	---	---	---	---	---	---
3	350	300	329	330	250	291	---	---	---	---	---	---
4	320	300	313	330	250	291	---	---	---	---	---	---
5	320	300	314	340	220	289	---	---	---	---	---	---
6	320	290	307	340	260	304	---	---	---	---	---	---
7	320	250	296	350	260	319	---	---	---	---	---	---
8	320	270	298	350	260	315	---	---	---	---	---	---
9	330	260	296	390	300	355	---	---	---	---	---	---
10	320	280	302	390	290	350	---	---	---	---	---	---
11	320	250	296	400	310	368	---	---	---	---	---	---
12	320	230	289	420	330	378	---	---	---	---	---	---
13	320	240	292	430	340	392	---	---	---	---	---	---
14	310	230	289	---	---	---	---	---	---	---	---	---
15	320	230	284	---	---	---	---	---	---	---	---	---
16	320	230	289	---	---	---	---	---	---	---	---	---
17	320	280	304	---	---	---	---	---	---	---	---	---
18	320	220	285	---	---	---	---	---	---	---	---	---
19	320	240	284	---	---	---	---	---	---	---	---	---
20	330	240	294	---	---	---	---	---	---	---	---	---
21	330	240	301	---	---	---	---	---	---	---	---	---
22	330	240	285	---	---	---	---	---	---	---	---	---
23	330	240	285	---	---	---	---	---	---	---	---	---
24	330	240	285	---	---	---	---	---	---	---	---	---
25	330	230	280	---	---	---	---	---	---	---	---	---
26	320	230	279	---	---	---	---	---	---	---	---	---
27	320	230	275	---	---	---	---	---	---	---	---	---
28	320	230	277	---	---	---	---	---	---	---	---	---
29	330	240	281	---	---	---	---	---	---	---	---	---
30	330	240	280	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	360	220	296	---	---	---	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	18.8	16.1	17.5	11.8	10.2	11.2	7.7	6.7	7.2	4.8	3.4	4.0
2	17.8	15.1	16.5	11.8	11.0	11.5	---	---	---	4.9	3.4	4.1
3	17.2	14.3	15.3	11.5	10.4	10.8	---	---	---	4.2	2.8	3.5
4	15.0	6.3	12.5	10.7	9.5	10.0	---	---	---	3.4	2.0	2.5
5	14.2	12.5	13.5	9.9	8.7	9.1	---	---	---	---	---	---
6	13.7	12.1	13.0	8.8	7.7	8.2	7.3	5.2	5.7	2.9	1.9	2.5
7	13.8	11.7	12.8	9.1	7.9	8.5	---	---	---	3.2	2.3	2.8
8	14.3	12.3	13.2	9.1	8.8	9.0	---	---	---	3.9	2.6	3.2
9	15.0	13.0	14.0	8.9	7.1	8.1	3.2	2.6	2.9	3.6	2.4	2.9
10	15.0	13.3	14.2	7.1	5.4	6.0	3.0	2.0	2.6	3.3	2.2	2.8
11	14.8	13.0	14.0	6.1	5.2	5.5	2.8	1.6	2.1	3.3	2.3	2.8
12	14.9	13.0	14.1	6.5	5.1	5.7	2.5	1.5	2.0	3.7	2.8	3.3
13	14.9	13.1	14.1	6.9	5.7	6.3	2.5	1.5	1.9	3.7	2.6	3.3
14	15.2	13.4	14.6	7.5	6.1	6.7	2.6	1.4	1.9	3.8	2.6	3.2
15	15.2	---	---	8.0	6.6	7.1	---	---	---	3.6	2.4	3.0
16	14.2	11.9	13.1	8.3	7.1	7.6	3.0	1.8	2.3	3.2	2.5	2.8
17	13.0	10.6	11.9	8.3	7.4	7.7	3.3	2.2	2.7	3.2	1.8	2.5
18	12.9	11.1	12.2	8.0	7.1	7.5	3.3	2.3	2.7	4.7	3.2	3.8
19	13.2	11.3	12.4	7.9	6.7	7.2	3.8	2.4	3.0	5.7	4.1	4.7
20	14.6	12.2	13.4	---	---	---	4.9	3.7	4.2	6.4	5.5	5.9
21	14.6	13.2	13.8	6.2	4.8	5.4	---	---	---	7.3	5.2	6.0
22	13.5	12.5	13.0	5.8	4.6	5.2	---	---	---	7.3	4.2	5.3
23	14.5	12.9	13.6	7.2	---	---	1.9	.9	1.3	7.1	3.9	4.8
24	14.4	12.8	13.4	6.3	5.4	5.8	2.8	.8	1.4	7.1	4.5	5.3
25	13.8	13.1	13.5	6.6	5.5	6.0	1.6	.7	1.2	7.3	4.7	5.5
26	13.1	12.1	12.5	6.9	5.7	6.3	1.3	.7	1.2	5.8	4.9	5.4
27	12.7	11.9	12.4	7.1	5.8	6.4	1.3	.7	1.2	7.2	4.7	5.5
28	11.9	10.3	11.1	7.1	6.8	6.9	1.3	.7	1.2	6.0	4.6	5.3
29	11.3	10.1	10.7	8.1	7.1	7.6	1.6	.9	1.3	---	---	---
30	11.3	10.6	11.0	8.1	6.8	7.3	2.8	1.2	1.8	---	---	---
31	11.4	10.5	11.0	---	---	---	3.4	2.4	2.8	---	---	---
MONTH	18.8	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	7.0	3.5	4.4	10.5	---	---	10.9	8.9	9.7	---	---	---
2	7.0	3.7	4.6	10.8	9.1	10.1	9.2	6.8	8.4	---	---	---
3	5.6	4.1	4.9	10.9	7.6	10.0	9.2	6.9	8.2	---	---	---
4	7.0	4.7	5.1	11.6	8.1	10.2	9.7	8.0	8.8	---	---	---
5	6.9	5.1	5.9	10.5	---	---	9.7	7.2	8.6	11.9	---	---
6	7.2	6.3	6.7	10.9	---	---	12.2	9.1	10.7	10.4	---	---
7	7.3	5.6	6.5	10.6	---	---	13.5	9.7	12.0	15.7	---	---
8	---	---	---	10.3	---	---	13.1	9.9	11.9	15.2	---	---
9	---	---	---	11.2	9.1	10.1	13.0	9.8	11.4	---	---	---
10	---	---	---	11.0	5.4	9.8	12.1	8.4	10.3	---	---	---
11	6.4	4.1	5.1	11.0	9.7	10.3	12.8	10.0	11.5	---	---	---
12	---	---	---	10.4	9.0	9.6	14.5	12.2	13.4	17.5	---	---
13	---	---	---	10.5	8.6	9.7	16.0	13.3	14.6	17.8	---	---
14	---	---	---	11.0	8.7	10.0	15.9	12.9	14.4	17.9	---	---
15	6.4	4.1	5.1	11.0	9.8	10.5	15.8	12.8	14.1	17.7	---	---
16	7.3	4.5	5.4	11.9	---	---	14.2	11.2	12.9	17.5	13.7	15.6
17	7.3	4.5	5.5	12.0	9.0	11.4	14.4	11.6	13.1	17.1	---	---
18	7.2	---	---	12.7	---	---	15.3	---	---	16.9	---	---
19	7.7	2.0	6.7	13.7	---	---	16.3	10.9	14.6	18.0	---	---
20	7.7	5.9	7.0	13.8	10.3	12.7	16.2	11.6	13.4	17.9	---	---
21	8.1	6.8	7.6	14.5	12.5	13.6	17.0	12.3	15.1	19.3	---	---
22	7.7	6.1	7.0	14.8	12.5	13.8	16.4	13.2	14.6	18.6	---	---
23	7.4	5.6	6.5	14.1	11.5	12.6	14.4	12.4	13.3	18.6	16.6	17.7
24	8.1	6.1	7.3	13.5	7.4	11.2	14.4	12.8	13.5	18.1	14.8	17.0
25	8.7	6.9	7.9	14.3	11.7	13.2	13.7	11.9	12.8	17.6	15.4	16.1
26	9.1	7.0	8.1	14.5	12.7	13.7	16.0	12.9	14.3	16.4	10.5	14.5
27	9.4	7.7	8.7	15.2	13.4	14.2	16.3	14.9	15.7	16.9	14.6	15.8
28	9.9	---	---	14.2	12.0	13.3	---	---	---	17.0	15.6	16.2
29	---	---	---	14.4	11.1	13.1	---	---	---	16.8	14.7	15.6
30	---	---	---	14.3	12.7	13.3	---	---	---	15.3	14.2	14.7
31	---	---	---	13.0	10.9	11.9	---	---	---	15.5	14.0	14.9
MONTH	---	---	---	15.2	---	---	---	---	---	---	---	---

## SAN JUAN RIVER BASIN

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## 09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	16.0	13.4	15.0	21.7	13.2	19.8	24.2	22.0	23.3	19.2	17.4	18.2
2	15.9	14.5	15.0	22.3	20.1	21.3	24.6	22.7	23.6	17.5	16.1	16.8
3	14.7	13.0	14.0	22.9	20.3	21.5	23.6	21.9	22.6	18.4	16.2	17.2
4	14.6	---	---	22.9	20.6	21.9	22.5	20.4	21.5	18.3	---	---
5	12.8	---	---	24.0	---	---	22.4	20.2	20.8	16.3	---	---
6	11.6	---	---	25.1	16.2	21.0	22.1	19.7	20.8	16.6	---	---
7	15.2	---	---	25.4	16.5	21.7	22.1	19.1	20.6	---	---	---
8	16.2	13.8	15.1	25.8	23.9	24.8	22.1	20.1	21.4	---	---	---
9	16.1	---	---	25.4	23.8	24.5	22.0	19.9	21.1	---	---	---
10	16.3	---	---	25.0	23.2	23.9	22.1	20.7	21.2	---	---	---
11	16.1	---	---	23.9	21.0	22.3	21.6	20.0	20.7	---	---	---
12	16.1	---	---	24.4	21.0	22.4	21.1	17.5	19.1	---	---	---
13	17.9	---	---	24.5	22.4	23.8	19.2	16.9	18.2	---	---	---
14	18.3	15.8	17.1	24.3	22.5	23.4	18.9	16.9	17.9	---	---	---
15	18.3	15.4	17.3	24.1	21.6	22.7	18.1	16.4	17.1	---	---	---
16	18.0	16.4	17.5	24.4	21.8	23.1	18.3	16.0	17.3	---	---	---
17	18.5	17.3	17.8	24.7	22.7	23.8	19.5	16.8	18.1	---	---	---
18	19.0	16.0	17.7	24.7	22.9	23.7	19.9	17.5	18.9	---	---	---
19	19.0	14.5	17.6	24.1	21.8	22.6	19.8	17.9	19.1	---	---	---
20	20.5	12.3	17.5	24.4	19.6	22.6	19.7	17.8	18.8	---	---	---
21	20.5	18.6	19.6	24.4	21.4	22.8	19.8	17.9	18.8	---	---	---
22	20.5	18.1	19.2	23.5	21.1	22.0	19.8	17.5	18.8	---	---	---
23	20.9	17.6	19.2	24.0	21.1	22.7	19.4	16.8	18.3	---	---	---
24	20.9	13.5	19.0	24.1	21.9	23.0	19.8	17.6	18.9	---	---	---
25	20.7	18.3	19.7	24.2	21.9	23.2	19.7	17.6	18.8	---	---	---
26	21.3	18.3	20.0	24.9	22.1	23.5	19.3	17.2	18.4	---	---	---
27	21.7	18.7	20.4	24.9	22.6	24.0	18.8	17.8	18.4	---	---	---
28	21.6	18.5	20.3	24.8	22.8	23.8	19.0	17.0	18.0	---	---	---
29	21.5	18.5	20.2	24.8	22.6	24.0	19.2	16.8	18.1	---	---	---
30	21.5	18.5	20.3	24.6	22.0	23.5	19.1	16.8	18.1	---	---	---
31	---	---	---	24.2	21.9	23.3	19.7	17.0	18.6	---	---	---
MONTH	21.7	---	---	25.8	---	---	24.6	16.0	19.5	---	---	---

## SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (000061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM (70331)
OCT 30...	1115	ENVIRONMENTAL	2790	11.0	85400	644000	96
NOV 23...	1330	ENVIRONMENTAL	1230	5.5	419	1390	57
DEC 15...	1330	ENVIRONMENTAL	1030	1.0	199	553	48
MAR 22...	1315	ENVIRONMENTAL	815	12.5	92	202	47
APR 21...	1230	ENVIRONMENTAL	776	15.0	154	323	59
MAY 17...	1330	ENVIRONMENTAL	2330	15.0	4630	29100	57
17...	1340	REPLICATE	2330	15.0	4280	26900	56
JUN 23...	1230	ENVIRONMENTAL	4030	18.0	1680	18300	52
JUL 19...	1140	ENVIRONMENTAL	1640	22.0	1820	8080	76
19...	1150	REPLICATE	1640	22.0	1700	7550	82
AUG 23...	1230	ENVIRONMENTAL	7720	18.5	23800	496000	71
SEP 16...	1215	ENVIRONMENTAL	3900	16.0	1560	16400	45

LOCATION.--Lat 37°06'02", long 112°32'50", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 5, T. 43 S., R. 6 W., Kane County, Hydrologic Unit 15010003, on left bank at upstream side of bridge on U.S. Highway 89, 300 ft upstream from Tiny Canyon and 3.5 mi north of Kanab.

PERIOD OF RECORD.--July 1959 to September 1968 (peaks only). January 1979 to current year.

REVISED RECORDS.--WRD UT-98-1: 1997, daily values.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 5,060 ft above sea level, from topographic map. A crest-stage gage from Jul 22, 1959 to Sep 30, 1968 at different datum. Jul 6, 1979 to Sep 18, 1984 water-stage recorder at same site, different datum.

REMARKS.--Records poor. Several diversions above station for irrigation and stock watering.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,030 ft<sup>3</sup>/s Sep 8, 1961, gage height, 8.39 ft, from rating curve extended above 31 ft<sup>3</sup>/s on basis of slope area measurement at gage height, 7.09 ft; minimum daily discharge, 3.0 ft<sup>3</sup>/s Jun 15, 1986, Jul 20, 1994, and Sep 1-3, 1995.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 25	1700	262	4.46	Jul 28	0200	*774	*6.51
Oct 27	0130	212	4.22	Aug 5	2030	754	6.47
Jul 9	1715	277	4.49	Aug 30	1735	427	5.20

Minimum daily discharge, 4.9 ft<sup>3</sup>/s, Sep 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.5	12	11	14	11	7.6	8.1	7.6	7.7	7.3	5.0
2	10	9.5	12	12	14	14	7.3	8.1	9.2	6.6	6.1	17
3	8.8	9.3	11	10	13	16	7.8	8.3	7.2	6.6	5.8	6.6
4	8.2	8.2	12	12	14	15	7.8	9.3	9.6	7.0	5.8	8.8
5	7.8	8.1	12	11	15	14	7.6	9.9	8.0	6.6	82	7.9
6	8.9	8.4	12	13	14	13	7.0	8.6	7.8	7.5	27	7.7
7	7.7	9.5	e11	13	15	14	6.9	6.7	7.1	8.1	6.0	7.1
8	9.4	10	e10	13	13	18	7.2	7.0	7.8	8.2	5.5	6.1
9	8.5	9.7	e10	13	14	13	7.1	7.0	8.0	26	5.2	8.2
10	8.4	10	e10	13	24	12	7.8	6.6	7.2	14	6.3	6.0
11	8.3	11	e11	15	10	12	7.6	8.0	8.5	10	6.2	8.3
12	10	12	11	15	11	13	7.2	7.8	8.4	8.1	6.2	5.1
13	10	12	11	15	10	13	6.4	7.7	7.6	11	6.1	5.8
14	8.9	12	14	12	13	10	6.2	7.2	7.7	29	5.8	5.6
15	9.9	11	13	14	12	9.7	6.1	8.0	6.7	8.4	6.0	4.9
16	8.7	12	16	15	13	8.7	6.3	7.9	6.6	7.9	6.9	5.1
17	10	13	16	14	11	8.7	6.4	7.6	6.6	6.9	6.2	12
18	10	14	12	16	12	8.2	6.0	6.8	7.9	6.6	5.4	6.1
19	9.8	13	12	15	12	8.2	5.8	8.2	8.1	6.5	5.4	9.0
20	11	12	13	15	12	9.2	5.4	6.8	6.7	6.3	5.8	6.5
21	11	12	11	16	11	9.4	5.9	6.0	7.6	5.9	6.9	6.8
22	20	12	e10	18	12	8.7	6.1	6.1	7.1	5.5	7.9	6.5
23	8.8	11	e10	19	11	9.0	8.1	6.3	7.7	5.3	6.1	8.2
24	9.1	12	e11	16	11	8.2	9.4	6.8	7.4	5.1	6.6	8.6
25	71	13	e12	16	11	7.8	9.2	7.4	7.0	5.0	5.5	9.2
26	21	13	e13	15	11	7.7	11	6.7	8.2	5.3	6.0	7.8
27	47	13	14	15	11	8.0	9.8	6.7	8.2	6.0	5.3	6.9
28	9.3	14	14	14	11	7.7	11	6.4	8.1	74	5.9	5.8
29	8.7	13	11	14	---	7.4	8.1	6.5	6.5	77	5.7	5.5
30	8.9	15	12	15	---	7.2	7.3	7.0	6.8	12	41	6.7
31	8.6	---	12	14	---	7.4	---	6.9	---	19	58	---
TOTAL	408.7	341.2	371	439	355	329.2	223.4	228.4	228.9	419.1	371.9	220.8
MEAN	13.2	11.4	12.0	14.2	12.7	10.6	7.45	7.37	7.63	13.5	12.0	7.36
MAX	71	15	16	19	24	18	11	9.9	9.6	77	82	17
MIN	7.7	8.1	10	10	10	7.2	5.4	6.0	6.5	5.0	5.2	4.9
AC-FT	811	677	736	871	704	653	443	453	454	831	738	438

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1999, BY WATER YEAR (WY)

MEAN	10.9	10.5	11.5	13.2	17.0	25.5	24.3	10.2	7.26	7.47	8.76	10.4
MAX	25.7	15.2	21.7	27.9	45.1	72.4	132	27.6	12.1	13.8	16.5	28.1
(WY)	1982	1988	1980	1997	1980	1983	1980	1980	1981	1981	1981	1998
MIN	5.46	6.58	5.31	6.18	9.04	9.68	6.81	6.45	4.37	4.19	4.07	5.43
(WY)	1996	1990	1990	1987	1992	1988	1990	1997	1986	1982	1995	1989



## KANAB CREEK BASIN

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SUMMARY STATISTICS	09403600 KANAB CREEK NEAR KANAB, UT--Continued		WATER YEARS 1980 - 1999	
	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR		
ANNUAL TOTAL	5440.2	3936.6		
ANNUAL MEAN	14.9	10.8	13.0	
HIGHEST ANNUAL MEAN			28.4	1980
LOWEST ANNUAL MEAN			7.54	1996
HIGHEST DAILY MEAN	226	82	354	Apr 6 1980
LOWEST DAILY MEAN	4.3 Jul 30	4.9 Sep 15	3.0	Jun 15 1986
ANNUAL SEVEN-DAY MINIMUM	4.9 Jul 29	5.4 Jul 21	3.0	Jun 13 1986
ANNUAL RUNOFF (AC-FT)	10790	7810	9450	
10 PERCENT EXCEEDS	28	15	19	
50 PERCENT EXCEEDS	10	8.8	9.5	
90 PERCENT EXCEEDS	5.7	6.1	5.6	

e Estimated

## VIRGIN RIVER BASIN

09404450 EAST FORK VIRGIN RIVER NEAR GLENDALE, UT

LOCATION.--Lat 37°20'19", long 112°36'13", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 14, T. 40 S., R. 7 W., Kane County, Hydrologic Unit 15010008, on right bank 50 ft downstream from Lydia's Creek, and 1.0 mi north of the town of Glendale on U.S. Highway 89.

DRAINAGE AREA.--74.2 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and artificial control. Elevation of gage is 5,900 ft above sea level, from topographic map.

REMARKS.--Records good except for Jul 10 to Aug 31, which are fair, and estimated daily discharge, which is poor. A few small diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 640 ft<sup>3</sup>/s Jul 27, 1976, gage height, 4.14 ft; maximum gage height, 4.68 ft Jul 10, 1999, discharge unknown and affected by backwater; minimum discharge, 2.9 ft<sup>3</sup>/s several days in May and Jun 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jul 10	1545	*unknown	*4.68	Aug 15	1415	157	2.16

Minimum discharge, 3.5 ft<sup>3</sup>/s, Aug 16, gage height, 0.92 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	12	19	16	14	9.9	15	7.0	5.1	8.5	9.2
2	13	18	11	18	13	13	9.7	15	17	4.7	8.9	8.5
3	14	18	12	18	15	13	11	23	13	5.4	7.7	7.7
4	14	18	12	17	15	13	19	19	12	5.6	7.3	7.6
5	14	18	12	18	19	13	15	15	15	5.5	8.8	7.4
6	14	18	11	18	17	13	12	14	14	5.6	7.2	7.2
7	14	19	10	18	15	13	13	13	11	5.8	6.9	6.8
8	14	22	12	18	17	13	15	13	8.6	6.8	6.6	5.9
9	15	22	14	17	20	12	15	14	7.7	6.8	6.2	5.6
10	15	20	13	18	27	11	17	13	7.7	e60	6.9	6.2
11	15	21	14	18	17	11	16	11	8.0	18	8.3	6.3
12	15	22	16	17	19	11	14	8.9	9.0	11	7.2	6.4
13	15	22	16	13	20	12	13	8.0	10	11	6.6	6.0
14	15	23	14	14	20	12	12	8.0	9.3	13	6.4	6.7
15	14	24	15	14	17	12	11	7.6	8.7	11	15	8.8
16	15	19	20	15	14	12	11	9.5	9.1	10	9.1	11
17	15	16	19	15	14	12	11	9.4	10	9.5	8.7	9.7
18	15	14	19	16	15	11	12	8.4	9.6	9.3	7.8	12
19	15	16	19	14	15	12	11	8.2	9.1	8.5	7.0	11
20	16	20	19	16	14	14	9.8	8.0	9.2	7.4	10	9.6
21	21	20	18	16	14	14	8.6	7.7	9.3	6.6	14	8.7
22	26	20	17	14	14	12	9.1	8.4	8.1	5.7	11	9.1
23	19	20	19	14	13	10	17	8.1	7.4	6.6	8.4	10
24	17	20	20	15	14	10	23	8.8	7.6	7.3	6.7	9.6
25	27	19	19	14	14	9.8	25	9.3	7.6	6.4	6.4	9.5
26	26	19	19	15	13	9.1	22	9.5	8.1	6.6	5.7	9.3
27	24	19	19	15	13	9.1	18	13	7.7	7.1	5.9	9.2
28	19	19	19	14	14	9.2	15	12	7.5	11	6.9	8.7
29	19	19	20	15	---	8.9	16	9.1	7.7	13	6.4	9.1
30	19	16	20	15	---	8.4	15	9.2	6.4	11	16	9.3
31	19	---	20	16	---	8.6	---	8.4	---	9.2	11	---
TOTAL	526	579	500	494	448	356.1	426.1	344.5	282.4	310.5	259.5	252.1
MEAN	17.0	19.3	16.1	15.9	16.0	11.5	14.2	11.1	9.41	10.0	8.37	8.40
MAX	27	24	20	19	27	14	25	23	17	60	16	12
MIN	13	14	10	13	13	8.4	8.6	7.6	6.4	4.7	5.7	5.6
AC-FT	1040	1150	992	980	889	706	845	683	560	616	515	500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1999, BY WATER YEAR (WY)

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
MEAN	13.7	15.4	16.2	16.7	19.2	24.9	37.9	30.2	15.3	11.5	11.2	11.3																						
MAX	22.5	24.6	30.2	26.2	36.4	54.3	145	131	43.6	28.3	26.6	24.7																						
(WY)	1984	1984	1967	1980	1980	1993	1980	1980	1980	1983	1983	1980																						
MIN	6.60	8.38	9.58	9.40	9.90	11.5	8.93	6.38	5.16	5.23	5.10	5.10																						
(WY)	1990	1990	1990	1991	1991	1999	1989	1989	1989	1997	1996	1989																						

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1967 - 1999

ANNUAL TOTAL	6631.0	4778.2	18.6
ANNUAL MEAN	18.2	13.1	46.2
HIGHEST ANNUAL MEAN			8.26
LOWEST ANNUAL MEAN			285
HIGHEST DAILY MEAN	73	Sep 11	60
LOWEST DAILY MEAN	5.1	Aug 9	4.7
ANNUAL SEVEN-DAY MINIMUM	5.9	Aug 4	5.4
ANNUAL RUNOFF (AC-FT)	13150	9480	13470
10 PERCENT EXCEEDS	30	19	27
50 PERCENT EXCEEDS	16	13	15
90 PERCENT EXCEEDS	8.0	7.0	7.6

e Estimated

09404700 EAST FORK VIRGIN RIVER NEAR MOUNT CARMEL JUNCTION, UT

LOCATION.--Lat 37°12'32", long 112°41'12", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 25, T. 41 S., R. 8 W., Kane County, Hydrologic Unit 15010008, on left bank, 0.9 mi downstream of State Barn Wash, and 1.0 mi south of Mount Carmel Junction.

DRAINAGE AREA.--179 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 5,140 above sea level, from topographic map. Prior to June 17, 1998, water-stage recorder and crest stage gage 100 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Many diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft<sup>3</sup>/s Jul 30, 1999, gage height, 7.50 ft, from rating curve extended above 44 ft<sup>3</sup>/s on basis of slope-area measurement; minimum daily discharge 0.40 ft<sup>3</sup>/s Aug. 21, 1996.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 25	1030	205	4.30	Jul 30	1545	*1,360	*7.50
Jul 10	1810	523	5.55	Aug 30	1700	328	4.86
Jul 29	2145	243	4.49				

Minimum daily discharge, 1.8 ft<sup>3</sup>/s, Jul 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	26	22	20	19	20	14	18	4.0	1.9	5.1	6.1
2	9.5	26	22	20	18	20	12	17	8.2	1.7	e5.0	3.8
3	9.3	26	22	20	19	19	10	20	13	1.5	e5.0	3.2
4	9.3	25	23	21	20	20	14	21	8.1	1.6	e5.0	3.7
5	9.7	25	23	21	21	20	16	17	11	1.8	5.0	3.4
6	10	25	22	20	20	20	14	13	12	1.9	4.6	3.8
7	12	25	e20	20	20	20	14	12	9.7	2.1	3.8	2.9
8	13	29	e19	20	21	20	20	12	6.8	4.2	3.1	3.4
9	12	30	e20	20	22	20	21	11	5.5	7.4	3.7	2.3
10	11	27	e19	19	31	19	21	12	4.3	36	2.8	2.5
11	11	28	e18	19	19	19	19	9.6	3.9	10	5.0	2.7
12	10	30	e19	19	20	19	17	9.2	4.2	e8.0	4.3	2.2
13	11	28	21	18	20	18	13	7.4	4.1	e7.0	3.5	2.3
14	12	30	20	19	20	18	11	7.4	3.1	9.4	2.9	2.5
15	13	30	21	19	20	18	11	6.6	3.0	7.2	17	3.6
16	14	28	22	19	20	18	11	6.1	3.4	6.3	11	4.7
17	14	28	21	20	20	18	11	6.1	4.0	6.4	4.9	7.5
18	17	27	21	19	20	18	9.7	5.1	3.8	6.7	3.9	5.4
19	18	26	21	19	20	17	8.8	4.6	3.3	6.5	3.6	9.2
20	20	26	21	20	20	17	8.5	5.2	3.0	4.8	3.6	6.0
21	26	26	21	20	20	16	8.8	4.9	3.4	3.8	11	4.3
22	42	25	e20	19	19	17	8.9	4.2	2.9	3.5	7.7	5.1
23	28	25	e19	20	20	17	13	3.3	2.4	3.9	6.2	5.9
24	27	24	e18	20	20	17	21	3.7	2.5	4.8	5.2	6.2
25	63	24	e18	19	20	17	22	3.8	2.2	5.0	8.0	7.2
26	45	24	e19	19	20	16	22	3.4	2.0	5.2	e8.5	5.5
27	35	23	e20	20	20	16	17	4.1	2.1	6.8	e9.0	5.3
28	28	23	21	19	20	16	14	6.1	2.1	7.3	e9.5	4.6
29	28	25	20	21	---	16	16	3.7	1.9	19	9.9	6.9
30	29	23	21	20	---	14	19	3.9	1.8	95	43	8.1
31	28	---	21	20	---	13	---	3.9	---	6.6	20	---
TOTAL	623.4	787	635	609	569	553	437.7	265.3	141.7	293.3	240.8	140.3
MEAN	20.1	26.2	20.5	19.6	20.3	17.8	14.6	8.56	4.72	9.46	7.77	4.68
MAX	63	30	23	21	31	20	22	21	13	95	43	9.2
MIN	8.6	23	18	18	18	13	8.5	3.3	1.8	1.5	2.8	2.2
AC-FT	1240	1560	1260	1210	1130	1100	868	526	281	582	478	278

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999
MEAN	15.4	21.2	21.2	23.3	27.6	40.9	41.0
MAX	26.6	26.3	25.5	28.0	40.9	91.2	140
(WY)	1994	1994	1994	1993	1993	1993	1993
MIN	6.33	17.3	18.6	19.6	20.3	17.8	7.97
(WY)	1997	1997	1993	1999	1999	1999	1996

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1993 - 1999

ANNUAL TOTAL	7856.0	5295.5	
ANNUAL MEAN	21.5	14.5	20.2
HIGHEST ANNUAL MEAN			38.7
LOWEST ANNUAL MEAN			12.1
HIGHEST DAILY MEAN	157	95	189
LOWEST DAILY MEAN	1.6	1.5	.40
ANNUAL SEVEN-DAY MINIMUM	2.0	1.7	.46
ANNUAL RUNOFF (AC-FT)	15580	10500	14600
10 PERCENT EXCEEDS	42	25	38
50 PERCENT EXCEEDS	20	16	18
90 PERCENT EXCEEDS	3.5	3.4	1.9

e Estimated

## VIRGIN RIVER BASIN

09404900 EAST FORK VIRGIN RIVER NEAR SPRINGDALE, UT

LOCATION.--Lat 37°09'51", long 112°57'28", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 42 S., R. 10 W., Washington County, Hydrologic Unit 15010008, Zion National Park, on right bank 0.7 mi upstream from Zion National Park boundary, 1.2 mi upstream from Shunes Creek, 2.7 mi southeast of Springdale, and 3.4 mi south-southeast of Zion National Park headquarters.

DRAINAGE AREA.--395 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,940 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Numerous diversions for irrigation upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,100 ft<sup>3</sup>/s Aug. 10, 1997, gage height, 11.38 ft, from floodmarks, from rating curve extended above 200 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 6.41 ft and 9.70 ft; minimum daily discharge, 33 ft<sup>3</sup>/s Sept. 7-9, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jul 30	2045	1,090	8.02	Aug 30	1550	*2,680	*10.79

Minimum daily discharge, 33 ft<sup>3</sup>/s, Jul 21-24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	52	56	53	57	58	49	57	37	39	44	40
2	40	53	55	51	55	58	49	56	41	39	41	39
3	40	53	56	51	56	55	46	66	48	39	39	37
4	41	53	58	51	57	53	50	63	44	39	39	37
5	41	53	59	52	60	52	52	57	48	39	38	37
6	42	54	57	53	58	52	50	51	46	40	41	36
7	44	55	56	53	57	53	50	46	46	40	39	36
8	44	80	56	52	57	54	54	45	42	49	38	36
9	44	72	56	52	58	53	58	43	40	67	38	35
10	42	56	55	52	70	52	57	45	39	62	40	35
11	43	61	56	53	59	52	56	43	38	72	43	40
12	43	58	57	53	57	53	54	42	38	40	40	36
13	42	57	58	51	59	52	51	41	38	36	36	35
14	44	58	58	52	59	51	49	40	38	38	36	36
15	44	60	56	52	59	51	48	40	38	39	50	38
16	45	59	58	54	58	51	48	38	38	36	56	51
17	46	57	56	54	58	51	47	39	39	35	42	51
18	47	57	53	55	58	51	46	38	39	34	37	41
19	47	56	52	54	58	50	45	38	39	34	37	44
20	48	55	52	55	56	49	45	37	38	34	40	40
21	64	56	51	56	58	49	45	38	38	33	41	39
22	85	56	47	54	57	50	46	37	40	33	44	39
23	61	56	48	54	57	50	53	36	39	33	40	41
24	56	57	49	56	58	50	62	36	38	33	39	41
25	140	56	52	55	58	50	61	37	39	34	38	41
26	62	57	53	55	58	50	61	37	39	34	46	40
27	69	56	52	56	58	50	56	37	38	34	38	39
28	56	57	52	55	57	50	50	38	39	35	54	38
29	54	61	53	55	---	50	51	38	39	36	40	40
30	55	57	52	56	---	49	57	36	39	140	232	44
31	53	---	53	57	---	48	---	37	---	60	61	---
TOTAL	1622	1728	1682	1662	1627	1597	1546	1332	1202	1356	1487	1182
MEAN	52.3	57.6	54.3	53.6	58.1	51.5	51.5	43.0	40.1	43.7	48.0	39.4
MAX	140	80	59	57	70	58	62	66	48	140	232	51
MIN	40	52	47	51	55	48	45	36	37	33	36	35
AC-FT	3220	3430	3340	3300	3230	3170	3070	2640	2380	2690	2950	2340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1999, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	49.3	56.7	57.7	68.0	71.5	85.5	80.2	57.0
MAX	62.3	62.8	62.9	110	110	153	200	109
(WY)	1998	1998	1997	1993	1993	1993	1993	1993
MIN	38.8	49.1	53.6	53.6	58.1	51.5	47.0	37.2
(WY)	1992	1992	1992	1999	1999	1999	1996	1996

SUMMARY STATISTICS

	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1992 - 1999
ANNUAL TOTAL	21520	18023	
ANNUAL MEAN	59.0	49.4	58.4
HIGHEST ANNUAL MEAN			85.1
LOWEST ANNUAL MEAN			48.2
HIGHEST DAILY MEAN	450	232	450
LOWEST DAILY MEAN	36	33	33
ANNUAL SEVEN-DAY MINIMUM	37	33	33
ANNUAL RUNOFF (AC-FT)	42680	35750	42340
10 PERCENT EXCEEDS	81	58	80
50 PERCENT EXCEEDS	56	50	54
90 PERCENT EXCEEDS	39	37	37

## VIRGIN RIVER BASIN

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## 09405500 NORTH FORK VIRGIN RIVER NEAR SPRINGDALE, UT

LOCATION.--Lat 37°12'35", long 112°58'40", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 22, T. 41 S., R. 10 W., Washington County, Hydrologic Unit 15010008, Zion National Park, on right bank 0.2 mi downstream from point of diversion of Springdale Canal, 0.5 mi downstream from Pine Creek, and 1.9 mi northeast of Springdale.

DRAINAGE AREA.--344 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1913 to June 1914, June to November 1923, April to June, August and September 1925 (fragmentary), October 1925 to current year. Published as Zion Creek near Springdale 1913-14 and as Mukuntuweap River near Springdale 1923, 1925-32. Published as combined flow of river and Springdale canal 1923, 1925-88.

GAGE.--Water-stage recorder. Crest-stage gage since May 31, 1995. Elevation of gage is 3,970 ft above sea level, from topographic map. May 13, 1913, to June 30, 1914, nonrecording gage at site 3.8 mi downstream at different datum. June 6, 1923 to Sept. 1925, nonrecording gage at site 0.8 mi upstream. Oct. 1, 1925 to Dec. 14, 1949, nonrecording gage 50 ft downstream and 0.34 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Some regulation of low flows by Kolob Reservoir (20 mi upstream) and several diversions for irrigation upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,150 ft<sup>3</sup>/s Dec. 6, 1966, gage height, 12.98 ft, from rating curve extended above 2,000 ft<sup>3</sup>/s on basis of drift measurement at gage height 6.7 ft, and slope-area measurement at gage height 10.25 ft; minimum estimated, less than 5.0 ft<sup>3</sup>/s Apr. 12, 1995, result of landslide 1.0 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 25	0900	1,130	3.90	Aug 30	1520	*3,540	*7.53

a From rating curve extended above 1,600 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 10.25 ft.  
Minimum daily discharge, 38 ft<sup>3</sup>/s, Sep 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	86	77	76	60	67	71	124	78	50	48	59
2	62	83	76	70	53	69	71	141	126	48	47	55
3	63	72	75	68	60	71	71	200	136	48	46	50
4	63	69	77	66	63	73	75	166	119	47	47	48
5	61	69	72	68	67	69	74	146	153	47	44	48
6	61	67	65	72	62	66	71	142	168	48	47	47
7	62	67	62	72	60	68	74	148	130	49	47	45
8	61	114	64	69	61	64	70	172	111	59	47	43
9	61	101	69	65	63	65	78	185	100	83	44	43
10	61	67	58	71	134	59	69	167	95	70	48	44
11	61	79	62	70	55	62	79	153	91	87	88	45
12	61	74	70	70	60	59	76	161	90	68	51	44
13	61	73	73	67	66	59	74	181	88	64	47	44
14	61	75	73	64	69	64	86	172	81	64	46	44
15	61	79	73	67	66	64	83	152	78	63	54	45
16	64	76	73	69	63	63	82	138	77	63	50	43
17	65	75	76	68	63	65	85	131	76	59	47	43
18	64	71	73	68	64	70	97	126	73	56	54	43
19	65	67	74	68	63	75	107	118	72	76	47	43
20	64	65	76	64	59	78	118	116	71	63	48	41
21	73	69	66	63	62	82	110	112	68	53	48	41
22	103	69	54	56	57	77	106	107	66	51	57	41
23	88	69	64	57	59	79	110	104	65	47	57	43
24	84	68	59	62	61	72	116	99	64	45	50	42
25	287	71	66	60	61	76	108	96	63	44	47	41
26	112	74	70	61	61	83	112	95	61	44	48	39
27	111	74	72	61	61	87	164	94	60	44	46	39
28	95	76	71	51	63	82	154	97	57	52	44	38
29	89	86	74	53	---	78	141	91	53	57	62	e41
30	100	79	77	58	---	83	127	85	50	52	358	e41
31	88	---	77	63	---	82	---	81	---	49	109	---
TOTAL	2474	2264	2168	2017	1796	2211	2859	4100	2620	1750	1923	1323
MEAN	79.8	75.5	69.9	65.1	64.1	71.3	95.3	132	87.3	56.5	62.0	44.1
MAX	287	114	77	76	134	87	164	200	168	87	358	59
MIN	61	65	54	51	53	59	69	81	50	44	44	38
AC-FT	4910	4490	4300	4000	3560	4390	5670	8130	5200	3470	3810	2620

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	51.5	55.2	54.3	61.9	72.9	123	209	285	119	59.5	50.4	53.5
MAX	79.8	75.5	73.5	96.3	110	271	644	813	404	113	71.1	115
(WY)	1999	1999	1994	1997	1995	1995	1993	1993	1995	1995	1995	1998
MIN	33.4	35.9	36.6	39.0	47.8	54.0	76.2	55.8	36.5	34.5	34.4	24.8
(WY)	1992	1990	1990	1991	1990	1990	1990	1990	1990	1994	1990	1989

## VIRGIN RIVER BASIN

SUMMARY STATISTICS	09405500 NORTH FORK VIRGIN RIVER NEAR SPRINGDALE, UT--Continued		FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1989 - 1999	
ANNUAL TOTAL	62970		27505				99.7	
ANNUAL MEAN	173		75.4				207	1993
HIGHEST ANNUAL MEAN							43.6	1990
LOWEST ANNUAL MEAN								
HIGHEST DAILY MEAN	1070	May 21	358	Aug 30	1140	May 4 1993		
LOWEST DAILY MEAN	47	Jan 7	38	Sep 28	22	Aug 5 1994		
ANNUAL SEVEN-DAY MINIMUM	53	Aug 23	40	Sep 24	23	Aug 2 1994		
ANNUAL RUNOFF (AC-FT)	124900		54560		72220			
10 PERCENT EXCEEDS	539		113		171			
50 PERCENT EXCEEDS	76		67		58			
90 PERCENT EXCEEDS	58		47		36			

e Estimated

LOCATION.--Lat 37°12'15", long 113°10'48", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 23, T. 41 S., R. 12 W., Washington County, Hydrologic Unit 15010008, on right bank 0.25 mi downstream from North Creek and 0.5 mi east of Virgin.

PERIOD OF RECORD.--April 1909 to September 1971, October 1978 to current year. Fragmentary prior to 1926, monthly discharge published in WSP 1313.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,500 ft above sea level, from topographic map. At present location since July 18, 1985; from Oct. 1, 1978, to July 5, 1985, located 2 mi downstream on left bank, and from Dec. 19, 1949, to September 1971, located directly across from previous site, on right bank at different datum. Prior to Dec. 19, 1949, nonrecording gages at several sites within 3 mi of present site at various datums.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,800 ft<sup>3</sup>/s Dec. 6, 1966, gage height, 18.00 ft, site and datum then in use, from rating curve extended above 5,000 ft<sup>3</sup>/s on basis of one slope-area measurement and one float measurement; minimum observed, 22 ft<sup>3</sup>/s July 10, 1920 and June 11, 1921.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 25	1035	2,530	12.29	Aug 30	1850	a*5,530	a*14.52

Minimum daily discharge, 71 ft<sup>3</sup>/s, Sep 29.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	200	158	149	142	134	133	201	115	80	94	125
2	124	188	157	144	135	135	130	217	158	80	88	108
3	124	157	156	142	134	137	128	288	228	76	83	98
4	126	149	157	138	140	139	141	304	167	77	80	93
5	126	147	155	140	160	136	142	234	282	76	78	88
6	120	147	142	146	153	132	131	214	242	76	81	84
7	118	147	139	146	145	135	131	208	194	84	80	82
8	119	268	136	144	150	134	137	231	160	159	78	79
9	119	264	144	137	149	132	148	262	145	162	78	78
10	117	163	133	144	317	128	145	241	133	127	95	81
11	115	174	134	145	157	127	152	219	128	207	181	85
12	116	167	e144	147	136	127	141	218	126	125	98	82
13	112	163	149	142	144	123	132	240	123	109	81	80
14	115	164	150	138	151	125	141	239	120	109	75	79
15	114	166	159	140	150	125	137	206	113	111	112	81
16	122	162	159	144	143	121	136	189	110	101	111	81
17	121	156	160	145	140	122	134	178	109	95	104	106
18	121	152	156	145	141	130	145	173	107	90	84	82
19	123	147	156	144	141	136	157	167	103	131	88	86
20	124	145	158	142	133	137	171	161	103	142	87	84
21	130	147	148	143	133	142	168	157	102	94	87	76
22	226	148	132	135	133	138	164	146	101	88	100	75
23	163	148	140	131	129	139	179	141	97	79	95	78
24	152	147	e141	136	133	134	224	140	94	75	88	78
25	643	150	141	136	131	133	194	136	95	75	82	76
26	245	151	145	141	129	140	208	131	92	75	89	78
27	232	151	150	145	129	145	246	128	90	76	80	73
28	183	151	148	137	130	140	226	133	89	123	93	74
29	172	175	150	131	---	138	207	131	86	121	81	71
30	189	163	152	136	---	142	207	125	82	138	711	76
31	209	---	151	140	---	141	---	117	---	188	293	---
TOTAL	4945	4957	4600	4373	4108	4147	4835	5875	3894	3349	3655	2517
MEAN	160	165	148	141	147	134	161	190	130	108	118	83.9
MAX	643	268	160	149	317	145	246	304	282	207	711	125
MIN	112	145	132	131	129	121	128	117	82	75	75	71
AC-FT	9810	9830	9120	8670	8150	8230	9590	11650	7720	6640	7250	4990

MEAN	130	147	157	163	191	252	391	434	159	121	137	139
MAX	528	606	648	791	833	822	981	1582	762	484	441	504
(WY)	1923	1923	1967	1911	1980	1910	1993	1979	1983	1911	1916	1911
MIN	61.3	82.9	77.4	70.9	90.9	91.7	121	87.5	58.1	30.4	43.5	53.1
(WY)	1929	1926	1932	1932	1926	1924	1970	1959	1961	1928	1928	1956



## VIRGIN RIVER BASIN

SUMMARY STATISTICS	09406000 VIRGIN RIVER AT VIRGIN, UT--Continued		FOR 1999 WATER YEAR		WATER YEARS 1910-71, 1979-99	
	FOR 1998 CALENDAR YEAR					
ANNUAL TOTAL	97403		51255			
ANNUAL MEAN	267		140		202	
HIGHEST ANNUAL MEAN					465	1922
LOWEST ANNUAL MEAN					95.7	1990
HIGHEST DAILY MEAN	2420	Sep 11	711	Aug 30	10600	Sep 30 1911
LOWEST DAILY MEAN	77	Aug 29	71	Sep 29	22	Jul 10 1920
ANNUAL SEVEN-DAY MINIMUM	81	Aug 23	75	Sep 24	23	Jun 8 1921
ANNUAL RUNOFF (AC-FT)	193200		101700		146200	
10 PERCENT EXCEEDS	679		196		386	
50 PERCENT EXCEEDS	156		137		130	
90 PERCENT EXCEEDS	106		81		71	

e Estimated

09406640 LEAP CREEK BELOW MAPLE HOLLOW, NEAR PINTURA, UT

LOCATION.--Lat. 37°23'00", long 113°17'36", in NW<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> sec. 22, T. 39 S., R. 13 W., Washington County, Hydrologic Unit 15010008, Dixie National Forest, on right bank, about 200 ft downstream of Maple Hollow, about 200 ft upstream of unnamed diversion, and about 3 mi north-northwest of Pintura.

DRAINAGE AREA.-- 9.19 mi<sup>2</sup>.

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

REVISED RECORD.--WRD UT-98-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,980 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversions upstream of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 179 ft<sup>3</sup>/s Sep 26, 1997, gage height, 7.42 ft, from rating curve extended above 24 ft<sup>3</sup>/s on the basis of slope-area measurement at gage height 6.17; no flow, several months in 1996 and 1997.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 2	1315	*15	*4.29				

Minimum discharge, 0.01 ft<sup>3</sup>/s, Sep 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.70	1.2	1.2	1.0	1.1	1.0	.87	1.2	.57	.16	.28	.20
2	e.70	1.2	1.2	.97	1.1	.95	.92	1.2	4.3	.15	.25	.17
3	e.70	1.2	1.2	.93	1.1	.95	.95	1.4	1.6	.14	.23	.17
4	e.70	1.1	1.2	.97	1.1	.95	1.1	1.3	1.4	.13	.18	.15
5	e.70	1.2	e1.2	1.0	1.4	.93	.99	1.2	2.2	.13	.22	.13
6	e.70	1.2	e1.0	.93	1.3	.94	.96	1.1	1.9	.12	.24	.11
7	e.65	1.2	e1.0	.95	1.2	.95	1.0	1.1	1.4	.12	.20	.09
8	e.65	1.2	e.90	.92	1.3	.97	.96	1.1	1.2	1.6	.15	.07
9	e.65	1.3	e.90	.95	1.4	.95	1.0	1.0	1.0	.93	.13	.06
10	e.65	1.3	e.90	.94	e2.5	.93	.99	1.1	.95	.66	.20	.09
11	e.65	1.4	e.90	.96	e1.5	.97	.95	1.0	.87	.55	.30	.31
12	e.65	1.5	e1.0	.96	e1.2	1.0	.95	.99	.80	.50	.19	.11
13	e.65	1.6	e1.0	.94	e1.2	.96	.91	.97	.75	.40	.15	.10
14	.64	1.7	e1.0	.97	1.2	.95	.88	.95	.69	.45	.13	.10
15	.68	1.6	e1.0	1.0	1.2	.91	.85	.96	.64	.47	.13	.11
16	.76	1.4	e1.0	.97	1.2	.90	.84	.93	.59	.47	.11	.14
17	.74	1.3	e1.0	.98	1.1	.86	.84	.89	.54	.40	.11	.15
18	.72	1.3	1.0	.98	1.1	.86	.81	.89	.52	.34	.10	.12
19	.70	1.3	e1.0	.98	1.1	.85	.81	.91	.47	.30	.08	.13
20	.69	1.2	e1.0	.98	1.1	.84	.82	.89	.45	.28	.09	.11
21	.78	1.2	e1.0	.95	1.0	.84	.83	.83	.40	.26	.15	.10
22	.81	1.2	e.90	1.0	1.1	.84	.87	.81	.37	.25	.28	.09
23	.80	1.2	e.90	1.2	1.1	.87	1.1	.79	.35	.23	.13	.12
24	.79	1.2	e.90	.97	1.0	.85	1.2	.75	.31	.22	.11	.12
25	2.2	1.2	e.90	.92	1.0	.84	1.3	.75	.28	.21	.10	.12
26	1.6	1.2	e.90	e.90	1.0	.83	1.5	.74	.25	.21	.15	.10
27	1.6	1.2	e.90	e.90	1.0	.81	1.4	.74	.23	.21	.14	.08
28	1.1	1.2	1.0	e1.0	1.0	.80	1.3	.76	.21	.50	.10	.07
29	1.1	1.2	.98	e1.0	---	.80	1.3	.68	.19	.59	.09	.09
30	1.2	1.2	1.0	1.1	---	.79	1.3	.62	.17	.47	.75	.09
31	1.2	---	1.0	1.1	---	.82	---	.58	---	.33	.36	---
TOTAL	26.86	38.4	30.98	30.32	33.6	27.71	30.50	29.13	25.60	11.78	5.83	3.60
MEAN	.87	1.28	1.00	.98	1.20	.89	1.02	.94	.85	.38	.19	.12
MAX	2.2	1.7	1.2	1.2	2.5	1.0	1.5	1.4	4.3	1.6	.75	.31
MIN	.64	1.1	.90	.90	1.0	.79	.81	.58	.17	.12	.08	.06
AC-FT	53	76	61	60	67	55	60	58	51	23	12	7.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1999, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999
MEAN	.43	.94	.94	1.74	4.05	6.35
MAX	.87	1.71	1.32	3.86	14.1	18.7
(WY)	1999	1997	1995	1995	1995	1998
MIN	.057	.37	.35	.53	1.20	.89
(WY)	1997	1998	1998	1998	1999	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1994 - 1999
ANNUAL TOTAL	1513.74	294.31	
ANNUAL MEAN	4.15	.81	2.32
HIGHEST ANNUAL MEAN			5.09
LOWEST ANNUAL MEAN			.65
HIGHEST DAILY MEAN	20	Apr 24	54
LOWEST DAILY MEAN	.30	Jan 1	.00
ANNUAL SEVEN-DAY MINIMUM	.30	Jan 5	.00
ANNUAL RUNOFF (AC-FT)	3000	584	1680
10 PERCENT EXCEEDS	14	1.2	6.4
50 PERCENT EXCEEDS	1.4	.90	.86
90 PERCENT EXCEEDS	.67	.13	.04

e Estimated

## VIRGIN RIVER BASIN

09406900 WET SANDY CREEK NEAR PINTURA, UT

LOCATION.--Lat. 37°19'27", long 113°21'23", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 7, T. 40 S., R. 13 W., Washington County, Hydrologic Unit 15010008, Dixie National Forest, on left bank about 100 ft upstream from unnamed diversion, 4.5 mi west of Pintura, Utah, and 5.0 mi upstream of mouth.

DRAINAGE AREA.--5.02 mi<sup>2</sup>.

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

REVISED RECORD.--WRD UT-98-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 5,400 ft above sea level, from topographic map.

REMARKS.--Records fair except for daily discharges greater than 10 ft<sup>3</sup>/s, less than 2.0 ft<sup>3</sup>/s, and estimates, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 321 ft<sup>3</sup>/s (estimated) Jul 15, 1996, gage height, 7.48 ft, from floodmarks; from rating curve extended above 4.5 ft<sup>3</sup>/s on the basis of velocity-area measurement at gage heights 7.05 ft and 7.20 ft, minimum daily discharge, 0.06 ft<sup>3</sup>/s (estimated) Aug 23, 24, and 26, 1996.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jul 28	1915	*188	*7.41	No other peak greater than base discharge.			
Minimum daily discharge, 0.40 ft <sup>3</sup> /s, Sep 27, 30.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1.7	1.4	.95	e.70	.54	e.50	.56	.53	.70	e.80	.67
2	2.3	1.7	1.3	e.80	e.70	.54	e.50	.54	1.5	.69	e.70	.64
3	2.3	1.7	1.3	e.80	e.70	.55	e.50	.76	.74	.68	e.60	.73
4	2.3	1.7	1.4	e.80	.75	.56	e.50	.60	.89	.69	.57	.69
5	2.2	1.6	e1.0	e.80	.78	.56	.58	.56	1.1	.68	.59	.65
6	2.2	1.6	e1.0	.89	.74	.56	.54	.57	.84	.68	.58	.64
7	2.1	1.6	e.90	.89	.72	.59	.56	.57	.79	.78	.66	.56
8	2.1	1.8	e.90	.85	.71	.59	e.50	.57	.77	3.6	1.7	.57
9	2.1	2.0	e1.0	e.80	.72	.57	e.50	.59	.76	1.3	2.5	.59
10	2.0	1.8	e1.0	.89	.81	e.50	e.50	.61	.76	1.1	1.6	.57
11	2.0	1.7	1.2	.88	e.70	.58	.53	.62	.77	1.5	1.2	.59
12	1.9	1.7	1.3	.87	e.70	e.50	.52	.61	.76	1.2	.84	.56
13	1.9	1.7	1.2	e.80	e.60	e.50	.48	.60	.74	1.2	.81	.50
14	1.9	1.7	1.2	e.80	.64	.55	.46	.61	.73	1.5	.71	.51
15	1.9	1.6	1.2	e.80	.61	.54	.47	.63	.73	1.3	.63	.50
16	1.9	1.6	1.2	.83	.60	.55	.46	.63	.72	1.4	.62	.49
17	1.8	1.6	1.2	.81	.60	.55	.47	.62	.71	1.0	.59	.48
18	1.8	1.5	1.2	.81	.58	.55	.45	.62	.71	.94	.56	.46
19	1.8	1.5	1.2	.80	.57	.52	.45	.59	.71	.89	.55	.47
20	1.8	1.5	1.1	.80	e.50	.52	.45	.58	.72	.86	.57	.45
21	2.0	1.5	e.90	.77	.58	.52	.46	.57	.72	.88	.88	.45
22	1.9	1.5	e.80	e.70	e.50	.52	.47	.57	.73	.86	.81	.44
23	1.8	1.4	e.80	e.70	e.50	.53	.62	.56	.71	.85	.70	.43
24	1.8	1.4	e.80	.76	e.50	.52	.59	.58	.70	.89	.72	.43
25	2.6	1.4	e.90	.75	e.50	.51	.62	.58	.70	.87	.78	.42
26	2.1	1.4	1.0	e.70	.56	.50	.55	.58	.71	.82	.67	.41
27	2.1	1.4	1.0	e.70	.55	.50	.50	.58	.71	.81	.71	.40
28	1.8	1.4	1.0	e.60	.54	.49	.52	.57	.71	e30	.69	.41
29	1.8	1.4	1.0	e.70	---	.49	.55	.56	.71	e5.0	.61	.41
30	1.8	1.4	.99	e.70	---	.47	.61	.54	.71	e1.0	.81	.40
31	1.7	---	.96	.74	---	.50	---	.53	---	e.90	.62	---
TOTAL	62.0	47.5	33.35	24.49	17.66	16.47	15.41	18.26	23.09	65.57	25.38	15.52
MEAN	2.00	1.58	1.08	.79	.63	.53	.51	.59	.77	2.12	.82	.52
MAX	2.6	2.0	1.4	.95	.81	.59	.62	.76	1.5	.30	2.5	.73
MIN	1.7	1.4	.80	.60	.50	.47	.45	.53	.53	.68	.55	.40
AC-FT	123	94	66	49	35	33	31	36	46	130	50	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1999, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999
MEAN	.99	.82	.67	.75	1.58	3.44
MAX	2.00	1.58	1.08	1.19	4.74	11.5
(WY)	1999	1999	1999	1999	1995	1998
MIN	.092	.34	.29	.31	.63	.53
(WY)	1997	1995	1998	1998	1999	1999

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1994 - 1999

ANNUAL TOTAL	1174.28	364.70	
ANNUAL MEAN	3.22	1.00	
HIGHEST ANNUAL MEAN		1.92	
LOWEST ANNUAL MEAN		3.84	1995
HIGHEST DAILY MEAN	12	30	Jul 28
LOWEST DAILY MEAN	.22	.40	Sep 27
ANNUAL SEVEN-DAY MINIMUM	.25	.41	Sep 24
ANNUAL RUNOFF (AC-FT)	2330	723	1390
10 PERCENT EXCEEDS	5.7	1.8	5.0
50 PERCENT EXCEEDS	3.2	.71	.80
90 PERCENT EXCEEDS	1.45	.50	.28

e Estimated

## 09408000 LEEDS CREEK NEAR LEEDS, UT

LOCATION.--Lat 37°16'03", long 113°22'12", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 36, T. 40 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on left bank 1,150 ft upstream from Leeds Ditch diversion, 2.1 mi north of Leeds, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--15.5 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1915 to June 1920 (fragmentary) in reports of Geological Survey; October 1964 to current year.

GAGE.--Water-stage recorder. Crest-stage gage since May 30, 1989. Elevation of gage is 4,000 ft above sea level, from topographic map. Prior to June 1920, at various sites and datums about 600 ft downstream; Oct. 28, 1964, to Aug. 20, 1967, water-stage recorder at site 1,000 ft downstream at different datum.

REMARKS.-- Records good except estimated daily discharges, which are poor. One diversion above station for domestic use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 12, 1964, reached a stage of 6.00 ft, former site and datum, discharge 2,980 ft<sup>3</sup>/s from slope-area measurement of peak flow.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft<sup>3</sup>/s Aug. 3, 1988, gage height, 9.41 ft, from rating curve extended above 33 ft<sup>3</sup>/s on basis of slope-area measurement; minimum daily discharge, 1.1 ft<sup>3</sup>/s Sept. 17, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jul 8	1445	a*41	*2.56				

a From rating curve extended above 21 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 9.41 ft.  
Minimum daily discharge, 2.9 ft<sup>3</sup>/s, Sep 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	7.4	6.4	5.6	5.1	4.5	4.0	4.5	3.3	5.3	4.9	3.6
2	7.9	7.3	6.4	5.6	5.1	4.5	4.0	4.4	5.2	5.2	4.7	3.5
3	7.9	7.3	6.4	5.6	5.0	4.5	4.1	4.6	4.9	5.2	4.6	3.5
4	7.8	7.3	6.4	5.6	4.9	4.5	4.7	4.5	5.2	5.1	4.5	3.4
5	7.8	7.3	6.4	5.6	5.2	4.5	4.4	4.4	6.1	5.0	4.4	3.4
6	7.8	7.2	6.4	5.6	5.0	4.5	4.3	4.4	5.6	4.9	4.5	3.4
7	7.7	7.1	6.4	5.5	4.9	4.5	4.3	4.3	5.6	5.0	4.4	3.2
8	7.7	7.7	6.4	5.4	4.9	4.5	4.3	4.3	5.6	14	4.3	3.2
9	7.5	7.6	6.3	5.4	4.9	4.5	4.3	4.2	5.4	8.2	4.2	3.3
10	7.5	7.3	6.2	5.4	5.4	4.5	4.2	4.2	5.4	7.6	4.4	3.2
11	7.5	7.3	6.2	5.4	5.2	4.5	4.2	4.2	5.4	7.2	4.8	3.2
12	7.4	7.3	6.2	5.4	4.9	4.5	4.2	4.2	5.4	6.8	4.3	3.2
13	7.3	7.3	6.2	5.4	4.9	4.2	4.2	4.1	5.4	6.5	4.2	3.1
14	7.3	7.4	6.2	5.3	4.9	4.2	4.2	4.0	5.5	6.5	4.1	3.2
15	7.3	7.5	6.2	5.2	4.9	4.2	4.2	4.0	5.5	6.2	4.2	3.2
16	7.3	7.5	6.0	5.2	4.9	4.2	4.2	4.0	5.6	6.1	4.1	3.2
17	7.3	7.4	6.0	5.2	4.9	4.2	4.2	4.0	5.6	5.7	4.1	3.1
18	7.3	7.3	6.0	5.2	4.9	4.2	4.1	4.0	5.6	5.5	3.9	3.2
19	7.3	7.3	6.0	5.2	4.8	4.2	4.0	3.9	5.6	5.4	3.9	3.2
20	7.3	7.3	6.0	5.2	4.7	4.1	4.0	3.8	5.6	5.2	3.9	3.1
21	7.4	7.4	6.0	5.1	4.7	4.0	4.1	3.8	5.7	5.0	3.9	3.0
22	7.3	7.2	e5.5	5.1	4.7	4.0	4.1	3.7	5.7	5.0	3.9	3.0
23	7.3	7.1	e5.5	5.1	4.7	4.0	4.4	3.6	5.7	4.8	3.8	3.3
24	7.3	7.1	e5.5	5.1	4.5	4.0	4.4	3.7	5.6	4.7	3.7	3.3
25	8.3	7.1	e5.5	5.1	4.5	4.0	4.4	3.7	5.6	4.6	3.8	3.2
26	7.9	7.1	5.8	5.1	4.5	4.0	4.4	3.6	5.6	4.6	3.8	3.1
27	8.1	7.0	5.8	5.1	4.5	4.0	4.2	3.7	5.6	4.4	3.8	3.0
28	8.0	6.8	5.8	5.1	4.5	4.0	4.2	3.7	5.6	6.7	3.7	2.9
29	7.7	6.8	5.8	5.1	---	4.0	4.2	3.5	5.5	6.5	3.6	2.9
30	7.6	6.6	5.8	5.1	---	4.0	4.4	3.3	5.4	5.7	4.0	2.9
31	7.5	---	5.7	5.1	---	4.0	---	3.3	---	5.2	3.9	---
TOTAL	235.3	217.3	187.4	164.1	136.0	131.5	126.9	123.6	163.5	183.8	128.3	96.0
MEAN	7.59	7.24	6.05	5.29	4.86	4.24	4.23	3.99	5.45	5.93	4.14	3.20
MAX	8.3	7.7	6.4	5.6	5.4	4.5	4.7	4.6	6.1	14	4.9	3.6
MIN	7.3	6.6	5.5	5.1	4.5	4.0	4.0	3.3	3.3	4.4	3.6	2.9
AC-FT	467	431	372	325	270	261	252	245	324	365	254	190

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	4.09	4.19	4.69	4.68	6.69	9.50	9.89	10.9	13.5	11.1	7.30	4.79
MAX	9.16	10.8	26.6	12.2	52.0	36.3	33.1	28.7	38.1	34.3	21.6	12.5
(WY)	1984	1988	1967	1993	1980	1983	1969	1969	1973	1983	1988	1983
MIN	2.05	1.85	2.01	2.18	2.32	2.46	2.00	2.30	2.15	1.51	1.62	1.73
(WY)	1971	1978	1978	1991	1991	1977	1977	1977	1977	1977	1977	1972

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1965 - 1999

ANNUAL TOTAL	4831.3	1893.7	
ANNUAL MEAN	13.2	5.19	
HIGHEST ANNUAL MEAN			7.62
LOWEST ANNUAL MEAN			18.1
HIGHEST DAILY MEAN	34	14	412
LOWEST DAILY MEAN	3.7	2.9	1.1
ANNUAL SEVEN-DAY MINIMUM	3.9	3.0	1.3
ANNUAL RUNOFF (AC-FT)	9580	3760	5520
10 PERCENT EXCEEDS	25	7.3	17
50 PERCENT EXCEEDS	10	5.0	4.7
90 PERCENT EXCEEDS	4.9	3.6	2.4
e Estimated			

## VIRGIN RIVER BASIN

09408150 VIRGIN RIVER NEAR HURRICANE, UT

LOCATION.--Lat 37°10'20", long 113°23'07", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 35, T. 41 S., R. 14 W., Washington County, Hydrologic Unit 15010008, Bureau of Land Management, on right bank, 0.6 mi downstream from Quail Creek Reservoir Dam, 1.2 mi upstream from State Highway 9, and 5.2 mi west of Hurricane.

DRAINAGE AREA.--1,493 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1967 to February 1989, October 1990 to current year.

REVISED RECORDS.--WDR UT-78-1 and WRD UT-94-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,800 ft above sea level, from topographic map. Mar 20, 1967 to Feb 14, 1989 at site 1.2 mi downstream at different datum and Oct 1, 1990 to Mar 30, 1993 at site 1.3 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Since 1985, flow diverted about 14 mi upstream into a pipeline that feeds Quail Creek Reservoir, an offstream site 0.6 mi upstream of gage. Flow subject to releases from Quail Creek Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 66,000 ft<sup>3</sup>/s Jan 1, 1989, from slope-area measurement of Quail Creek Reservoir dike failure; minimum daily discharge, 23 ft<sup>3</sup>/s Dec 11, 1986, at site 1.2 mi downstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1909, 17.34 ft Dec 6, 1966, from floodmarks; discharge, 20,100 ft<sup>3</sup>/s, site and datum established in Mar 1967, from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft<sup>3</sup>/s and maximum (\*) from rating curve extended above 1,900 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 12.55 ft.:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 25	1345	2,280	9.47	Aug 30	2105	*5,110	*12.68
Jul 28	2150	3,880	11.28				

Minimum daily discharge, 70 ft<sup>3</sup>/s, Aug 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	191	179	194	159	130	82	267	83	75	147	214
2	109	186	181	190	151	112	83	268	89	78	137	209
3	104	155	182	185	157	127	80	296	228	79	94	148
4	110	141	183	183	165	129	87	364	134	81	70	144
5	125	147	187	194	181	117	100	248	255	71	76	131
6	126	143	179	191	173	117	85	225	182	78	97	129
7	115	140	187	191	163	122	81	211	145	93	91	105
8	109	242	185	190	160	121	97	221	106	e125	90	e104
9	125	419	195	186	167	118	94	247	86	e145	91	e104
10	124	191	192	197	405	110	99	226	84	e140	89	e106
11	128	167	196	182	250	105	94	188	83	e190	207	e120
12	128	173	199	148	169	99	131	187	82	e170	129	e115
13	125	161	207	126	170	94	171	203	82	e150	101	e102
14	126	157	208	120	173	97	175	199	82	139	102	e96
15	132	162	213	130	166	94	151	174	80	136	120	87
16	128	169	212	144	152	89	123	157	79	114	151	105
17	102	172	207	147	144	87	117	158	79	97	135	127
18	101	171	200	146	150	84	126	217	80	96	99	99
19	95	168	199	141	143	e88	118	255	83	95	114	102
20	90	213	202	146	141	e88	107	150	82	231	111	99
21	93	211	194	144	145	e85	104	96	82	119	107	82
22	200	169	182	139	141	e83	113	94	80	90	112	82
23	136	164	192	144	145	76	129	88	84	77	109	95
24	96	156	e193	139	150	76	215	88	81	80	105	101
25	652	155	194	141	146	77	198	89	90	89	101	106
26	309	148	200	167	142	85	221	90	94	89	104	106
27	264	147	201	171	148	87	233	88	91	94	103	95
28	168	145	198	154	153	94	224	91	98	316	111	89
29	151	164	198	156	---	93	206	89	94	383	104	90
30	171	178	197	160	---	84	231	85	89	236	763	104
31	189	---	198	160	---	80	---	88	---	332	618	---
TOTAL	4735	5305	6040	5006	4709	3048	4075	5447	3087	4288	4588	3396
MEAN	153	177	195	161	168	98.3	136	176	103	138	148	113
MAX	652	419	213	197	405	130	233	364	255	383	763	214
MIN	90	140	179	120	141	76	80	85	79	71	70	82
AC-FT	9390	10520	11980	9930	9340	6050	8080	10800	6120	8510	9100	6740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1999, BY WATER YEAR (WY)

	124	147	170	211	253	337	415	504	200	118	126	135
MEAN	124	147	170	211	253	337	415	504	200	118	126	135
MAX	304	280	440	662	1200	1178	1230	1657	869	248	316	330
(WY)	1987	1988	1972	1989	1980	1978	1993	1983	1983	1983	1983	1998
MIN	54.2	56.4	51.4	58.9	59.8	92.8	62.5	72.3	58.6	46.4	71.0	56.8
(WY)	1991	1991	1987	1991	1991	1977	1977	1972	1974	1972	1978	1977

## VIRGIN RIVER BASIN

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SUMMARY STATISTICS	09408150 VIRGIN RIVER NEAR HURRICANE, UT--Continued		WATER YEARS 1967 - 1999	
	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR		
ANNUAL TOTAL	109626	53724		
ANNUAL MEAN	300	147	228	
HIGHEST ANNUAL MEAN			515	1980
LOWEST ANNUAL MEAN			72.2	1991
HIGHEST DAILY MEAN	2460	Sep 11 763	13200	Jan 1 1989
LOWEST DAILY MEAN	57	Aug 15 70	23	Dec 11 1986
ANNUAL SEVEN-DAY MINIMUM	76	Aug 14 79	31	Dec 8 1986
ANNUAL RUNOFF (AC-FT)	217400	106600	165200	
10 PERCENT EXCEEDS	709	211	436	
50 PERCENT EXCEEDS	186	135	141	
90 PERCENT EXCEEDS	108	84	67	

e Estimated

## VIRGIN RIVER BASIN

09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT

LOCATION.--Lat 37°06'54", long 113°26'18", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 20, T. 42 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on right bank immediately upstream from concrete flume, 0.2 mi downstream from diversion, 2.2 mi southeast of Washington, Utah.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Parshall flume since Nov 8, 1991. Elevation of gage is 2,680 ft above sea level, from topographic map. Prior to Nov 8, 1991 at site 150 ft downstream at same datum. Water-quality monitoring equipment located adjacent to and upstream 5 feet.

REMARKS.-- Records good. Completely regulated canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 116 ft<sup>3</sup>/s Oct 22, 1989; no flow at times most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	28	32	30	2.6	66	73	78	77	81	43	37
2	101	28	31	30	9.8	64	75	78	80	79	66	78
3	88	28	32	30	20	77	72	78	84	82	78	83
4	77	28	32	40	21	91	71	54	72	84	67	83
5	78	28	32	81	22	90	71	81	59	77	69	63
6	79	27	32	82	21	90	69	86	16	77	75	54
7	78	27	32	82	21	90	73	85	45	92	76	74
8	77	27	32	82	21	91	74	92	69	101	76	72
9	79	30	32	81	21	90	75	96	81	101	77	86
10	79	28	32	81	9.3	90	75	96	80	81	77	87
11	79	28	32	80	.00	84	79	92	79	57	77	90
12	79	9.6	32	78	.00	83	79	90	77	63	77	93
13	79	1.1	33	76	1.1	83	79	92	77	79	77	89
14	79	22	33	75	2.8	77	75	92	77	77	82	77
15	79	27	33	76	17	82	71	91	74	78	89	77
16	79	28	33	76	25	80	70	91	73	78	93	73
17	77	28	32	75	24	75	75	91	72	86	91	80
18	76	29	32	75	24	70	76	94	74	86	87	81
19	76	29	32	74	24	72	76	97	75	86	89	67
20	75	31	32	74	24	72	74	91	76	44	83	53
21	55	31	32	74	45	72	74	84	76	56	76	71
22	51	30	31	74	31	72	72	83	74	86	60	64
23	52	30	31	74	8.1	72	76	64	78	85	88	72
24	51	30	31	74	8.2	72	83	52	76	86	77	82
25	60	30	31	24	8.8	75	82	82	80	87	57	81
26	56	31	31	.00	9.0	81	72	83	91	88	82	80
27	31	31	31	.00	47	82	86	82	95	88	84	76
28	29	30	31	.00	67	87	87	82	98	93	85	73
29	28	31	31	.00	---	85	79	82	97	71	86	70
30	28	32	31	.00	---	78	76	78	93	66	98	71
31	29	---	31	.00	---	75	---	81	---	70	67	---
TOTAL	2084	817.7	985	1698.00	534.70	2468	2269	2598	2275	2465	2409	2237
MEAN	67.2	27.3	31.8	54.8	19.1	79.6	75.6	83.8	75.8	79.5	77.7	74.6
MAX	101	32	33	82	67	91	87	97	98	101	98	93
MIN	28	1.1	31	.00	.00	64	69	52	16	44	43	37
AC-FT	4130	1620	1950	3370	1060	4900	4500	5150	4510	4890	4780	4440

CAL YR 1998 TOTAL 21708.10 MEAN 59.5 MAX 113 MIN .00 AC-FT 43060  
WTR YR 1999 TOTAL 22840.40 MEAN 62.6 MAX 101 MIN .00 AC-FT 45300



09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1987 to current year.

SPECIFIC CONDUCTANCE: December 1987 to current year.

WATER TEMPERATURE: December 1987 to current year.

REMARKS.--Records for specific conductance are fair; records for temperature are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 5,330 microsiemens, Jul 19, 1990; minimum recorded, 450 microsiemens, May 21, 1998.

WATER TEMPERATURE: Maximum, 32.7°C, Jul 15, 1988; minimum, 0.0°C, Dec 21, 1990.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,110 microsiemens, Jun 22; minimum, 826 microsiemens, Oct 26.

WATER TEMPERATURE: Maximum, 29.5°C, Aug 22; minimum, 0.2°C, Dec 24.

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2300	---	---	1510	1460	1480	1620	1540	1580	1480	1400	1450
2	2200	---	---	1520	1440	1480	1610	1540	1570	1460	1400	1420
3	2290	---	---	1710	1420	1600	1640	1530	1570	1570	1410	1470
4	2260	---	---	1820	1640	1750	1610	1520	1570	1650	1490	1520
5	2100	1930	2030	2030	1700	1820	1590	1480	1540	1900	1350	1570
6	2060	---	---	1900	1700	1800	1720	1450	1540	1660	1340	1500
7	2150	---	---	1870	1760	1830	2140	1320	1600	1580	1400	1490
8	2250	1990	2160	1970	1530	1840	1790	1390	1550	1550	1460	1500
9	2040	1890	1970	2010	1590	1630	1890	1480	1600	1530	1430	1490
10	2000	1890	1940	1660	1560	1610	1660	1480	1550	1960	1340	1550
11	2030	1870	1940	1710	1460	1580	2070	1430	1630	1690	1300	1490
12	1940	1800	1880	1570	1330	1380	1850	1440	1580	1900	1540	1680
13	2160	1610	1870	1570	1550	1560	1670	1490	1540	1910	1810	1860
14	2150	1790	1960	1810	1560	1640	1570	1460	1520	1990	1800	1910
15	2120	1960	2030	1740	1620	1680	1600	1430	1500	2100	1800	1940
16	2070	1760	1940	1730	1560	1610	1520	1420	1470	2030	1680	1780
17	2230	1760	2100	1600	1490	1550	1590	1400	1450	1950	1640	1730
18	2230	2060	2140	1960	1440	1570	1570	1350	1480	1770	1690	1730
19	2330	2110	2260	1620	1520	1570	1570	1440	1500	1840	1690	1760
20	2420	2220	2330	2270	1240	1600	1580	1440	1510	2040	1670	1800
21	2470	2090	2320	2070	1210	1350	1520	1460	1490	1880	1660	1770
22	2350	1340	1780	---	---	---	1580	1460	1520	1840	1710	1780
23	1770	1400	1590	---	---	---	1990	1490	1650	2090	1720	1840
24	1990	1770	1890	1780	---	---	2000	1440	1520	1900	1610	1800
25	2080	862	1680	1890	1780	1810	1900	1410	1590	---	---	---
26	1450	826	1170	1950	1800	1840	1910	1430	1550	---	---	---
27	1810	1280	1470	1890	1780	1810	1840	1410	1500	---	---	---
28	1730	1390	1630	1870	1790	1830	1620	1410	1480	---	---	---
29	1790	1670	1740	1970	1730	1840	1630	1430	1490	---	---	---
30	1790	1490	1690	1740	1510	1610	1610	1410	1480	---	---	---
31	1730	1410	1540	---	---	---	1560	1400	1460	---	---	---
MONTH	2470	---	---	---	---	---	2140	1320	1530	---	---	---

09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	1940	1640	1760	2530	2380	2470	1260	1180	1230
2	1800	1580	1700	2090	1940	2040	2610	2320	2480	1380	1140	1240
3	2000	1650	1780	2100	1900	2000	2660	2130	2390	1370	1020	1220
4	1950	1540	1710	2020	1930	1980	2500	2300	2440	---	---	---
5	1810	1470	1650	2090	1790	1960	2500	2130	2240	1260	1110	1200
6	1670	1520	1600	2100	2000	2050	2390	2070	2220	1360	1170	1260
7	1720	1600	1650	2150	2030	2080	2520	2330	2450	1420	1200	1320
8	1750	1690	1720	2100	1950	2040	2580	2060	2290	1490	1180	1320
9	1840	1600	1690	2110	1910	2040	2470	2060	2290	1440	1110	1230
10	---	1650	---	2120	2050	2080	2260	2040	2110	1340	1140	1250
11	---	1680	---	2760	2070	2220	2490	1990	2260	1470	1310	1420
12	---	---	---	2720	2180	2380	2310	1570	1950	1590	1340	1470
13	---	---	---	2410	2170	2290	1740	1490	1600	1620	1250	1420
14	1880	1440	1640	2480	2230	2390	1700	1560	1620	1620	1210	1370
15	1740	1460	1630	2420	---	---	1860	1540	1650	1590	1290	1450
16	1730	1590	1660	---	---	---	2050	1860	1920	1640	1380	1550
17	1790	1700	1740	2460	---	---	2080	1720	1880	1780	1490	1600
18	1900	1650	1770	2570	2370	2470	2100	1780	1930	1950	1130	1530
19	1790	1620	1720	2610	2170	2430	2260	1700	1900	1280	1210	1240
20	1780	1720	1760	2350	2120	2220	2400	1760	2060	2540	1160	1370
21	1840	1750	1780	2400	2150	2290	2200	1770	1970	2000	1390	1890
22	1840	1610	1750	2290	2180	2240	2230	---	---	2040	1920	1980
23	1800	1750	1770	2430	2290	2350	2020	1790	1860	2120	---	---
24	1850	1710	1770	2410	2290	2350	1900	1270	1540	2190	---	---
25	1860	1690	1770	2480	2320	2400	1460	1260	1390	2050	1970	2010
26	1840	1650	1750	2470	2300	2380	1610	---	---	2060	1920	1990
27	1890	1660	1760	2380	2140	2280	1690	1170	1370	2100	1900	2020
28	1740	1610	1710	2460	2080	2210	1350	1180	1250	2140	1990	2070
29	---	---	---	2320	2150	2230	1350	1240	1310	2070	1950	2000
30	---	---	---	2400	2170	2290	1420	1170	1310	2210	2020	2120
31	---	---	---	2520	2310	2410	---	---	---	2160	2040	2100
MONTH	---	---	---	---	---	---	2660	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	2430	2050	2190	2400	2180	2310	---	---	---	---	---	---
2	2230	2030	2150	3020	2160	2640	---	---	---	---	---	---
3	2290	1160	1490	2720	2360	2530	---	---	---	---	---	---
4	1830	1340	1620	2510	2310	2420	2990	2210	2550	---	---	---
5	1800	866	1340	2640	2290	2450	2690	2100	2570	---	---	---
6	1680	1190	1450	2940	2290	2620	2120	1900	2020	---	---	---
7	1650	1330	1530	2740	2170	2290	2020	1660	1940	---	---	---
8	1880	1610	1800	2870	1800	2220	2000	1880	1950	---	---	---
9	2270	1860	2100	2260	1210	1600	2110	1880	1980	---	---	---
10	2290	2170	2230	1680	1130	1440	2100	1860	2050	---	---	---
11	2340	2190	2270	1790	---	---	2810	1350	1720	---	---	---
12	2340	2180	2270	1540	---	---	2060	1440	1660	---	---	---
13	2310	2240	2290	1610	1520	1570	2050	1800	1900	---	---	---
14	2380	2250	2320	2720	1390	1660	2090	1890	1990	---	---	---
15	2420	2180	2330	1930	1630	1710	2040	1710	1890	2510	2390	2450
16	2410	2340	2370	1830	1630	1760	1770	1390	1550	2480	2380	2430
17	2420	2340	2390	2030	1760	1910	1880	1490	1640	2670	1850	2240
18	2440	2300	2380	2050	1890	1970	1950	1640	1820	2290	2040	2170
19	2440	2310	2390	2030	1900	1940	2020	1720	1880	2380	---	---
20	2430	2260	2330	2310	---	---	---	1740	---	2260	---	---
21	2420	2240	2330	2750	---	---	1900	1710	1780	2500	1780	2250
22	3110	2140	2430	1960	1580	1780	1710	1570	1650	2550	1960	2350
23	2590	2260	2350	2220	1890	2040	1660	1470	1590	2280	2110	2200
24	2460	2320	2390	2170	2050	2110	---	1510	---	2220	2050	2120
25	2530	2240	2400	2320	2050	2170	2090	---	---	2180	1990	2100
26	2320	1900	2200	2120	1960	2000	2170	1870	1990	2110	1980	2050
27	2420	2000	2250	2720	2000	2090	1940	1800	1850	2220	2040	2140
28	2290	2140	2210	---	---	---	2070	1630	1920	2230	2070	2170
29	2360	2000	2180	---	---	---	1970	1670	1860	2240	2100	2200
30	2390	2010	2240	---	---	---	---	---	---	2320	1990	2150
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	3110	866	2140	---	---	---	---	---	---	---	---	---

09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.9	14.6	17.9	15.5	10.7	12.7	11.8	8.3	9.8	9.3	6.0	7.4
2	22.5	14.0	17.8	15.4	11.2	12.8	11.4	8.0	9.5	8.0	4.9	6.3
3	20.8	15.1	17.5	14.7	9.8	11.9	11.3	7.8	9.3	7.4	4.4	5.6
4	20.0	12.8	15.9	13.6	8.7	11.0	10.6	8.0	9.3	6.8	3.4	4.8
5	18.2	11.2	14.2	14.2	8.9	11.0	8.4	5.6	7.2	6.6	3.6	4.8
6	19.1	10.4	14.4	12.4	8.3	10.2	6.9	5.0	5.6	7.2	3.5	5.1
7	20.2	11.9	15.8	12.5	7.7	9.8	6.7	3.7	5.0	8.0	4.4	6.0
8	21.2	12.9	16.6	11.1	8.6	10.3	6.3	3.2	4.4	7.4	4.7	5.9
9	20.7	12.6	16.4	9.0	6.9	7.8	6.0	3.1	4.4	7.3	3.8	5.2
10	19.8	12.2	15.7	9.6	5.6	7.3	5.5	2.0	3.5	7.9	4.3	5.7
11	19.6	11.8	15.5	9.2	7.7	8.3	6.5	3.1	4.4	7.9	4.5	6.1
12	19.0	11.8	15.4	11.2	7.3	8.9	7.0	3.3	4.8	9.6	5.5	7.3
13	20.3	13.0	16.2	12.5	5.1	8.3	7.7	3.9	5.5	9.0	5.4	7.1
14	19.2	12.2	15.6	12.4	5.8	8.9	8.7	4.9	6.5	9.3	4.8	6.9
15	17.9	12.0	14.7	12.9	8.3	10.3	8.8	5.7	7.0	7.6	4.9	6.2
16	16.0	11.6	13.5	12.5	8.4	10.2	8.8	5.7	7.0	8.6	4.8	6.3
17	16.8	9.4	12.7	12.6	8.8	10.3	8.9	5.7	7.0	8.8	5.7	7.1
18	17.8	10.0	13.6	12.1	8.1	9.8	8.7	5.5	6.9	9.6	6.3	7.9
19	17.7	10.7	13.7	11.1	7.5	9.0	8.8	6.3	7.3	9.7	6.7	8.1
20	18.3	10.7	14.0	10.4	6.3	8.1	8.1	6.3	7.4	10.5	7.8	8.8
21	17.2	12.5	14.3	10.9	6.3	7.9	6.3	2.0	4.3	10.7	7.9	9.1
22	16.0	12.9	14.1	10.0	6.3	7.9	3.6	.5	1.8	9.3	5.4	7.2
23	18.4	11.9	14.7	11.1	6.9	8.6	3.1	.3	1.6	9.1	4.8	6.9
24	16.4	11.9	14.3	11.4	7.8	9.2	4.0	.2	1.9	10.1	7.8	8.7
25	17.6	12.7	14.5	11.3	7.5	9.1	4.9	1.5	3.1	---	---	---
26	14.0	11.4	12.7	11.3	7.5	9.2	5.2	2.1	3.6	---	---	---
27	---	---	---	10.5	7.7	9.1	5.3	2.6	3.8	---	---	---
28	16.1	10.9	13.2	11.1	9.5	10.2	6.5	2.9	4.4	---	---	---
29	15.0	12.0	13.4	12.1	10.2	10.9	7.4	3.8	5.3	---	---	---
30	15.8	11.9	13.4	12.3	8.8	10.2	7.2	4.4	5.8	---	---	---
31	15.6	10.9	12.8	---	---	---	8.8	5.5	6.8	---	---	---
MONTH	---	---	---	15.5	5.1	9.6	11.8	.2	5.6	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	10.1	---	---	14.7	8.9	11.5	14.9	7.3	10.8	16.5	10.7	13.3
2	9.4	5.2	7.1	15.9	9.4	12.3	13.7	8.1	11.3	17.3	12.5	14.7
3	10.1	5.6	7.6	16.0	9.7	12.6	12.0	8.2	10.2	14.7	12.7	14.0
4	8.3	6.5	7.4	15.5	10.3	12.7	16.4	8.8	11.8	---	---	---
5	10.3	8.0	8.8	13.5	8.6	11.1	16.0	9.5	12.4	17.1	11.1	14.0
6	10.2	8.6	9.3	15.4	8.5	11.6	17.0	10.4	13.3	19.2	12.1	15.4
7	10.4	8.3	9.5	12.9	10.2	11.2	14.8	10.8	12.2	21.0	14.2	17.4
8	11.2	9.7	10.3	14.1	8.3	11.0	17.2	8.5	12.2	20.3	15.2	17.7
9	12.3	10.0	10.9	13.8	9.1	11.3	14.0	9.8	11.3	19.0	14.6	16.7
10	---	---	---	14.5	8.5	11.2	16.7	8.1	12.1	17.8	12.7	15.3
11	---	---	---	12.7	10.3	11.5	15.8	10.0	13.1	20.3	12.3	16.0
12	---	---	---	14.8	8.9	11.5	16.0	12.2	13.8	21.9	14.4	17.8
13	---	---	---	15.8	7.9	11.5	18.3	11.6	14.4	22.0	16.0	18.7
14	11.7	6.9	8.7	15.4	9.5	12.6	16.7	11.3	13.6	21.0	14.9	17.8
15	11.9	7.5	9.4	---	9.9	---	16.1	10.0	12.6	20.6	14.3	17.2
16	11.2	7.6	9.1	---	---	---	18.2	10.2	13.5	20.3	13.4	16.7
17	12.0	7.3	9.3	17.3	---	---	19.7	11.6	15.3	22.0	13.3	17.4
18	11.1	7.5	9.2	18.0	10.9	14.2	20.9	13.4	16.6	21.3	14.9	17.9
19	12.6	7.9	9.6	18.2	11.0	14.4	21.3	13.5	17.2	20.8	14.5	17.4
20	10.3	6.5	8.4	17.4	12.1	14.7	18.7	14.0	16.6	22.8	13.6	18.1
21	10.7	8.0	9.1	18.5	11.3	14.5	19.0	14.2	16.6	24.7	15.8	20.0
22	11.1	6.1	8.4	18.2	10.5	14.3	16.2	10.0	13.7	24.9	16.8	20.8
23	12.1	6.4	8.8	17.2	11.6	14.1	15.2	11.7	13.2	24.1	---	---
24	13.0	7.0	9.7	18.5	10.5	14.3	13.3	11.9	12.6	22.8	---	---
25	12.8	8.4	10.4	19.1	11.9	15.3	15.9	11.5	13.2	24.4	16.6	---
26	13.0	8.1	10.2	20.0	12.8	16.1	18.8	10.8	15.0	26.0	17.6	21.5
27	12.3	8.3	10.1	18.6	12.5	15.5	18.2	14.6	16.2	27.4	18.4	22.6
28	13.9	7.9	10.5	18.6	11.7	15.0	16.3	13.5	15.0	24.2	19.3	21.9
29	---	---	---	19.2	11.3	15.1	14.2	11.6	12.9	24.6	18.9	21.5
30	---	---	---	17.9	12.3	15.1	13.7	11.3	12.3	24.6	16.8	20.4
31	---	---	---	14.8	9.6	12.0	---	---	---	24.3	16.3	20.2
MONTH	---	---	---	---	---	---	21.3	7.3	13.5	---	---	---

## VIRGIN RIVER BASIN

09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	23.2	16.5	19.9	28.4	20.0	24.0	26.9	19.7	22.9	25.3	---	---
2	19.5	16.9	17.6	28.2	20.0	23.9	25.1	19.6	22.4	25.2	19.2	21.5
3	21.3	15.0	17.8	27.0	19.9	23.4	28.3	19.8	23.8	26.2	16.4	20.6
4	18.2	14.2	15.5	26.9	19.0	22.8	27.0	20.1	23.6	26.5	15.6	20.5
5	19.0	13.9	16.2	29.0	18.9	23.6	28.3	20.1	23.5	27.7	15.7	---
6	23.6	15.0	18.9	28.6	20.4	24.4	26.2	19.0	22.3	27.9	---	---
7	23.4	16.1	19.6	26.0	20.8	23.2	27.4	18.7	22.4	27.9	16.5	21.6
8	24.3	16.1	19.9	24.6	21.2	22.8	27.0	16.9	21.5	27.3	16.6	21.4
9	25.3	16.3	20.5	25.9	21.9	23.5	27.5	16.2	21.4	22.4	17.2	19.3
10	25.8	17.2	21.3	25.3	21.6	23.0	26.1	19.2	22.0	26.7	16.1	20.5
11	26.5	17.6	22.0	---	---	---	25.6	18.6	22.0	26.7	17.3	21.2
12	27.3	18.5	22.9	24.7	---	---	27.7	17.6	22.1	26.8	18.0	21.7
13	28.3	18.9	23.6	23.2	21.1	22.2	27.9	17.2	22.1	27.1	17.2	21.5
14	27.9	19.7	23.8	26.3	19.4	22.9	24.3	17.3	20.7	27.6	17.9	21.5
15	27.8	19.8	23.7	27.4	20.2	23.5	27.3	18.1	22.3	27.7	17.2	21.6
16	26.8	20.4	23.6	27.9	19.9	23.4	27.2	19.6	22.8	28.2	17.7	21.8
17	27.3	20.1	23.7	27.0	19.7	23.2	28.4	19.2	23.3	27.1	16.9	21.3
18	28.4	19.9	23.9	26.6	18.4	22.3	27.7	19.4	23.2	24.0	17.3	20.1
19	28.8	19.5	24.0	27.4	19.8	23.2	26.4	19.3	22.6	25.9	17.0	---
20	28.5	20.0	24.2	---	20.2	---	25.2	19.7	22.3	26.3	---	---
21	27.4	20.6	23.9	26.6	---	---	28.6	19.3	23.4	26.3	15.6	20.4
22	27.6	18.9	23.1	27.4	18.4	22.6	29.5	19.5	23.9	20.8	16.8	19.0
23	27.6	18.7	23.1	27.2	18.1	22.4	27.2	19.5	23.2	26.8	18.4	21.5
24	27.5	19.2	23.3	26.8	17.9	21.9	28.0	19.8	---	26.2	17.5	21.3
25	27.2	19.0	23.0	26.7	17.9	21.9	28.6	---	---	26.3	17.2	21.1
26	26.9	18.9	22.8	28.0	19.3	23.3	28.9	19.0	23.6	26.5	16.6	20.8
27	27.2	18.2	22.5	25.7	20.0	23.0	28.7	20.3	24.1	23.2	14.6	18.6
28	26.8	18.1	22.4	25.5	19.9	22.5	28.9	19.7	23.8	20.5	10.8	15.1
29	27.2	18.9	23.0	26.1	20.3	22.6	28.8	20.3	24.1	22.3	10.9	15.7
30	27.7	19.5	23.5	24.9	20.6	22.2	24.8	21.5	23.1	23.1	11.8	16.8
31	---	---	---	25.8	20.0	22.4	23.4	---	---	---	---	---
MONTH	28.8	13.9	21.8	---	---	---	29.5	---	---	28.2	---	---

## 09408400 SANTA CLARA RIVER NEAR PINE VALLEY, UT

LOCATION.--Lat 37°23'00" long 113°28'57", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 24, T. 39 S., R. 15 W., Washington County, Hydrologic Unit 15010008, in Dixie National Forest, on right bank 150 ft upstream from highway bridge, 0.6 mi downstream from Pine Valley Reservoir, 1.6 mi southeast of town of Pine Valley, and 2.5 mi upstream from Grass Valley Creek.

DRAINAGE AREA.--18.7 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,640 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow slightly regulated by Pine Valley Reservoir. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 776 ft<sup>3</sup>/s Dec. 6, 1966, gage height, 6.85 ft; minimum daily discharge, 0.51 ft<sup>3</sup>/s Feb. 15, 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 2	1400	*33	*2.23				
Jun 6	2100	*33	*2.23				

Minimum daily discharge, 2.1 ft<sup>3</sup>/s, Jan 31, Feb 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	6.4	5.1	e3.3	2.1	2.9	3.6	7.9	7.4	5.8	4.1	3.0
2	6.6	6.2	5.1	e3.3	e2.5	2.9	3.5	7.7	20	5.6	4.0	2.9
3	6.4	6.0	5.0	e3.0	2.7	2.9	3.4	9.9	23	5.4	3.9	2.8
4	6.3	5.8	5.0	e3.0	2.7	3.0	3.5	9.1	21	5.3	3.9	2.8
5	6.3	5.8	4.9	e3.0	3.0	2.9	3.3	8.5	21	5.1	3.8	2.7
6	6.2	5.7	4.8	e3.2	2.9	2.9	3.3	8.5	26	5.0	4.4	2.6
7	6.1	5.6	4.7	e3.3	2.9	3.0	3.4	10	30	5.1	4.0	2.6
8	5.9	5.7	4.7	e3.5	2.9	3.0	3.3	15	26	13	3.7	2.5
9	5.8	6.0	4.7	e3.4	3.1	2.9	3.5	17	22	12	3.6	2.5
10	5.7	5.7	e4.8	e3.3	e3.2	2.9	3.4	15	19	7.7	3.7	2.6
11	5.7	5.8	4.8	e3.1	e3.3	3.0	3.6	14	17	7.0	4.3	2.8
12	5.6	5.7	4.6	e3.4	e3.5	3.0	3.5	15	16	6.5	3.8	2.7
13	5.5	5.8	4.5	e3.3	3.4	3.0	3.7	17	15	6.3	3.6	2.5
14	5.4	6.6	4.5	e3.0	3.3	2.9	4.2	17	13	6.4	3.5	2.6
15	5.4	7.6	4.4	e3.0	3.5	2.9	4.4	15	12	6.2	3.4	2.7
16	5.6	7.1	4.3	e3.0	3.5	2.9	4.5	13	11	6.0	3.3	2.7
17	5.6	6.8	4.3	e3.0	3.4	2.9	4.7	12	11	5.5	3.4	2.6
18	5.5	6.4	4.3	e2.9	3.3	3.0	5.5	11	10	5.3	3.4	2.6
19	5.4	6.1	4.3	e2.7	3.3	3.1	6.2	11	9.4	5.1	3.3	2.5
20	5.3	5.8	4.3	e2.6	3.2	3.2	7.5	10	8.9	4.9	3.2	2.4
21	5.7	5.7	4.0	2.5	3.2	3.2	7.9	10	8.4	4.8	3.1	2.4
22	6.0	5.6	e3.8	2.5	3.1	3.3	7.5	10	8.0	4.6	3.2	2.4
23	5.8	5.6	e2.7	2.7	3.2	3.4	7.0	10	7.7	4.5	3.1	2.4
24	5.4	5.5	e2.8	3.3	3.1	3.0	6.5	9.8	7.4	4.4	3.1	2.4
25	8.3	5.5	e3.0	3.1	3.1	3.1	6.3	9.4	7.1	4.3	3.1	2.3
26	6.9	5.3	e3.1	3.4	3.0	3.4	7.5	9.1	6.9	4.2	3.1	2.3
27	7.5	5.3	e3.2	3.3	3.0	3.6	11	8.9	6.7	4.2	3.0	2.3
28	7.1	5.5	e3.3	e3.2	2.9	3.7	11	8.8	6.4	4.5	2.9	2.3
29	6.8	5.4	e3.3	3.0	---	3.7	9.8	8.6	6.2	5.6	2.9	2.2
30	6.9	5.2	e3.3	2.4	---	3.8	8.6	8.1	6.0	4.9	3.2	2.2
31	6.6	---	e3.4	2.1	---	3.8	---	7.8	---	4.5	3.3	---
TOTAL	190.0	177.2	129.0	93.8	86.3	97.2	165.1	344.1	409.5	179.7	108.3	76.3
MEAN	6.13	5.91	4.16	3.03	3.08	3.14	5.50	11.1	13.6	5.80	3.49	2.54
MAX	8.3	7.6	5.1	3.5	3.5	3.8	11	17	30	13	4.4	3.0
MIN	5.3	5.2	2.7	2.1	2.1	2.9	3.3	7.7	6.0	4.2	2.9	2.2
AC-FT	377	351	256	186	171	193	327	683	812	356	215	151

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1999, BY WATER YEAR (WY)

MEAN	3.61	3.88	3.75	2.78	3.33	6.63	16.9	33.6	25.6	11.1	6.09	4.14
MAX	12.5	21.4	30.3	5.08	8.29	24.8	43.4	122	126	47.9	23.2	12.1
(WY)	1973	1988	1967	1979	1995	1995	1969	1973	1983	1983	1983	1983
MIN	.84	.95	1.02	1.10	.68	1.20	1.66	4.58	2.10	1.21	1.07	1.02
(WY)	1978	1978	1978	1990	1990	1977	1977	1996	1996	1963	1960	1977

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1960 - 1999

ANNUAL TOTAL	6677.9	2056.5	
ANNUAL MEAN	18.3	5.63	
HIGHEST ANNUAL MEAN			10.1
LOWEST ANNUAL MEAN			29.4
HIGHEST DAILY MEAN	132	May 21	397
LOWEST DAILY MEAN	1.8	Jan 20	.51
ANNUAL SEVEN-DAY MINIMUM	2.1	Jan 3	.55
ANNUAL RUNOFF (AC-FT)	13250	4080	7350
10 PERCENT EXCEEDS	50	10	24
50 PERCENT EXCEEDS	8.9	4.3	4.0
90 PERCENT EXCEEDS	2.8	2.7	1.7

e Estimated

## VIRGIN RIVER BASIN

09409100 SANTA CLARA RIVER ABOVE BAKER RESERVOIR, NEAR CENTRAL, UT

LOCATION.--Lat 37°23'05", long 113°37'52", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 22, T. 39 S., R. 16 W., Washington County, Hydrologic Unit 15010008, on left bank 0.6 mi downstream from Kane Spring Draw, 0.8 mi upstream from Baker Dam, 2.6 mi south of Central, Utah, and 4.0 mi north of Veyo, Utah.

DRAINAGE AREA.--116 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,875 ft above sea level, from topographic map.

REMARKS.--Records good except for daily discharges less than 2.0 ft<sup>3</sup>/s, which are poor. Diversion 0.5 mi upstream for power generation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft<sup>3</sup>/s (estimated), Mar. 11, 1995, gage height, 5.79 ft, from rating curve extended above 100 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 2.28 ft and velocity-area measurement at gage height 2.78 ft; minimum daily discharge, 0.13 ft<sup>3</sup>/s Aug. 15, 16, 1991.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 6, 1966 reached a discharge of 2,080 ft<sup>3</sup>/s, from flow over dam measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 47 ft<sup>3</sup>/s, Oct 25, gage height, 1.43 ft; minimum daily discharge, 0.22 ft<sup>3</sup>/s, Aug 22-23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	.77	1.1	1.1	1.6	1.7	10	.94	.71	.29	7.7	.37
2	1.8	.79	1.1	1.1	1.6	1.3	10	.85	8.2	.28	7.4	.34
3	1.8	.81	1.2	1.1	1.5	1.3	9.5	1.5	14	.28	6.9	.34
4	1.5	.81	1.2	1.2	1.4	1.3	9.6	1.2	7.7	.28	6.7	.32
5	1.1	.83	1.1	1.2	1.5	1.3	9.4	1.0	7.7	.28	6.6	.30
6	1.2	.83	.98	1.1	1.5	1.3	9.1	.86	9.4	.26	6.5	.30
7	1.1	.88	.93	1.1	1.5	1.4	8.5	1.2	13	.29	6.5	.30
8	1.2	1.1	1.2	1.1	1.6	1.4	3.0	1.7	9.8	.52	6.5	.30
9	1.2	2.4	1.1	1.2	1.5	1.4	.77	4.2	6.1	.67	6.5	.31
10	1.5	2.9	.79	1.1	5.3	1.3	.83	4.3	3.4	.42	6.7	.34
11	1.5	1.7	.95	1.2	1.8	1.4	.87	3.2	1.4	.41	6.7	.35
12	1.6	1.3	1.1	1.3	2.1	1.4	.85	3.2	1.0	.31	6.7	.38
13	1.6	1.3	1.2	1.4	2.4	1.3	.85	4.5	.85	.33	6.6	.36
14	1.4	1.8	1.2	1.7	2.0	1.3	.93	5.1	.83	8.0	6.7	.37
15	1.7	4.0	1.0	1.4	1.9	1.3	.83	2.7	.66	13	7.1	.36
16	1.8	3.5	.95	1.4	1.6	1.3	.75	2.7	.69	13	6.9	.35
17	1.8	2.9	.92	1.4	1.6	1.3	.81	1.8	.66	13	6.5	.34
18	1.7	2.7	.97	1.4	1.5	1.3	.72	1.5	.63	11	6.4	.36
19	1.4	1.7	.92	1.5	1.5	1.3	.67	1.2	.63	10	6.4	.38
20	1.4	1.6	.94	1.6	1.6	1.4	.75	.96	.61	8.3	2.2	.37
21	2.0	1.3	.76	1.6	1.6	1.4	.92	.97	.53	7.4	.24	.38
22	2.4	1.3	.61	1.5	1.5	1.3	.79	.97	.48	7.1	.22	.39
23	1.8	1.3	.70	1.5	1.5	1.4	1.1	1.1	.50	7.0	.22	.40
24	1.6	1.2	.77	1.3	1.5	1.4	1.1	1.1	.40	6.9	.23	.40
25	11	1.2	.98	1.2	1.5	1.4	.82	1.1	.35	6.9	.23	.38
26	3.6	1.2	1.0	1.4	1.8	1.4	1.2	1.3	.35	7.0	.25	.39
27	4.8	1.2	1.0	1.4	1.8	6.3	1.3	1.1	.37	6.9	.33	.40
28	1.2	1.4	.98	1.3	1.8	12	1.9	.86	.34	7.3	.40	.42
29	.75	1.4	1.0	1.7	---	12	1.3	.91	.34	9.7	.38	.46
30	.90	1.1	1.0	1.7	---	9.6	1.2	.82	.36	9.6	.41	.45
31	.80	---	1.1	1.5	---	9.3	---	.80	---	8.4	.37	---
TOTAL	60.07	47.22	30.75	41.7	50.0	84.5	90.36	55.64	91.99	165.12	133.48	10.91
MEAN	1.94	1.57	.99	1.35	1.79	2.73	3.01	1.79	3.07	5.33	4.31	.36
MAX	11	4.0	1.2	1.7	5.3	12	10	5.1	14	13	7.7	.46
MIN	.75	.77	.61	1.1	1.4	1.3	.67	.80	.34	.26	.22	.30
AC-FT	119	94	61	83	99	168	179	110	182	328	265	22

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1999, BY WATER YEAR (WY)

	3.36	3.84	4.02	3.34	3.86	13.7	11.0	22.8	20.9	8.07	3.10	4.12
MEAN	3.36	3.84	4.02	3.34	3.86	13.7	11.0	22.8	20.9	8.07	3.10	4.12
MAX	14.6	12.9	10.6	12.9	11.8	63.7	35.1	77.8	84.1	32.1	7.36	15.5
(WY)	1996	1996	1993	1993	1993	1995	1993	1993	1995	1995	1995	1995
MIN	.41	.50	.40	.55	.55	.75	.87	.47	.34	.28	.30	.36
(WY)	1992	1990	1990	1990	1990	1990	1996	1990	1996	1996	1996	1999

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1990 - 1999

ANNUAL TOTAL	5913.57	861.74	8.53
ANNUAL MEAN	16.2	2.36	24.5
HIGHEST ANNUAL MEAN			1.39
LOWEST ANNUAL MEAN			393
HIGHEST DAILY MEAN	139	May 21	14
LOWEST DAILY MEAN	.55	Jan 6	.22
ANNUAL SEVEN-DAY MINIMUM	.57	Jan 6	.25
ANNUAL RUNOFF (AC-FT)	11730	1710	6180
10 PERCENT EXCEEDS	57	7.0	20
50 PERCENT EXCEEDS	2.2	1.3	1.4
90 PERCENT EXCEEDS	.80	.37	.45

## VIRGIN RIVER BASIN

173

09409880 SANTA CLARA RIVER AT GUNLOCK, UT

LOCATION.--Lat 37°16'55", long 113°46'00", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 28, T. 40 S., R. 17 W., Washington County, Hydrologic Unit 15010008, on right bank at downstream side of bridge on county road at Gunlock, 0.5 mi downstream from tailrace of powerhouse.

DRAINAGE AREA.--271 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,628 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor. Many diversions for irrigation upstream of gage. Some regulation of low flow by several reservoirs and powerplant upstream of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,830 ft<sup>3</sup>/s, estimated, Mar. 11, 1995, gage height, 8.07 ft; no flow several days during 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 118 ft<sup>3</sup>/s, Jul 7, gage height, 3.79 ft; minimum daily discharge, 3.1 ft<sup>3</sup>/s, Sep 11 and 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	24	25	27	36	25	17	21	15	6.2	9.5	7.9
2	18	24	25	28	36	26	15	19	18	5.6	9.6	5.9
3	18	24	25	27	36	25	17	19	21	4.0	8.2	5.8
4	19	23	25	27	37	25	19	18	22	4.3	9.0	5.3
5	19	24	25	27	39	25	18	18	25	5.3	8.9	5.2
6	18	23	24	26	39	23	19	18	24	4.7	8.8	4.5
7	17	23	23	27	e39	23	20	18	22	9.1	6.3	4.5
8	17	25	22	27	e39	23	19	16	21	11	7.8	3.8
9	16	24	22	27	e40	23	19	16	20	10	8.2	3.9
10	14	23	20	28	e50	22	16	19	19	11	7.8	4.4
11	14	23	23	28	44	20	17	20	19	10	8.3	3.2
12	16	23	23	25	43	22	18	21	16	11	7.4	3.1
13	16	23	23	30	43	22	18	21	13	10	8.1	4.6
14	16	24	23	30	41	19	17	21	15	11	8.2	4.5
15	16	23	24	31	40	17	17	21	14	12	7.5	4.5
16	16	23	24	31	38	17	17	22	13	12	6.6	4.6
17	17	23	25	32	38	17	17	24	12	12	6.6	4.7
18	17	23	24	31	35	17	15	23	11	12	6.4	4.2
19	17	23	24	32	34	16	16	24	11	11	6.5	4.1
20	17	24	24	33	33	14	16	22	11	10	7.0	4.6
21	18	23	22	34	32	13	16	22	11	9.3	5.2	4.6
22	20	23	21	35	30	15	17	21	11	9.6	3.7	4.5
23	20	24	e26	36	34	15	18	19	10	8.8	6.2	5.2
24	20	24	e25	35	36	15	20	20	9.1	7.4	6.6	5.1
25	29	24	25	36	35	15	21	19	7.8	6.3	6.5	4.0
26	28	25	25	38	30	13	19	19	6.0	7.6	6.6	3.1
27	35	24	26	37	21	12	20	19	6.9	7.6	6.2	4.5
28	24	25	28	37	22	13	21	19	7.7	11	4.6	4.6
29	24	25	29	37	---	14	21	16	6.8	12	5.0	5.2
30	24	25	26	37	---	16	22	14	6.8	11	8.4	5.3
31	24	---	26	36	---	17	---	16	---	9.7	10	---
TOTAL	600	711	752	972	1020	579	542	605	425.1	282.5	225.7	139.4
MEAN	19.4	23.7	24.3	31.4	36.4	18.7	18.1	19.5	14.2	9.11	7.28	4.65
MAX	35	25	29	38	50	26	22	24	25	12	10	7.9
MIN	14	23	20	25	21	12	15	14	6.0	4.0	3.7	3.1
AC-FT	1190	1410	1490	1930	2020	1150	1080	1200	843	560	448	276

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1999, BY WATER YEAR (WY)

	MEAN	11.2	15.7	16.0	22.0	39.6	55.0	42.0	43.3	32.5	12.8	9.65	9.03
MAX	28.0	30.9	26.0	95.4	372	211	150	222	138	40.4	30.5	26.5	
(WY)	1984	1981	1981	1980	1980	1979	1973	1973	1973	1995	1980	1980	
MIN	3.14	5.78	7.72	4.73	7.69	8.08	6.05	5.14	4.85	2.72	3.10	2.80	
(WY)	1992	1990	1978	1972	1972	1971	1977	1989	1972	1977	1989	1990	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1970 - 1999	
ANNUAL TOTAL	20954		6853.7			
ANNUAL MEAN	57.4		18.8		25.6	
HIGHEST ANNUAL MEAN					86.8	
LOWEST ANNUAL MEAN					7.10	
HIGHEST DAILY MEAN	649	Feb 24	50	Feb 10	2040	Feb 15 1980
LOWEST DAILY MEAN	14	Aug 29	3.1	Sep 12	.00	Jul 26 1977
ANNUAL SEVEN-DAY MINIMUM	15	Oct 9	3.9	Sep 6	.02	Aug 1 1977
ANNUAL RUNOFF (AC-FT)	41560		13590		18570	
10 PERCENT EXCEEDS	124		32		54	
50 PERCENT EXCEEDS	26		19		13	
90 PERCENT EXCEEDS	18		5.7		5.0	

e Estimated



## VIRGIN RIVER BASIN

09410100 SANTA CLARA RIVER BELOW WINSOR DAM, NEAR SANTA CLARA, UT

LOCATION.--Lat 37°11'22", long 113°46'02", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 28, T. 41 S., R. 17 W., Washington County, Hydrologic Unit 15010008, on right bank 1,100 ft downstream from Winsor Dam, 0.6 mi northwest of Shivwits Indian Village, and 7.5 mi northwest of Santa Clara.

DRAINAGE AREA.--378 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1971 to current year.

REVISED RECORDS.--WRD UT-73-1:1972(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,210 ft above sea level, from topographic map, prior to Mar. 29, 1988, at several sites upstream and downstream at different datums.

REMARKS.--Records good except for daily discharges less than 2.0 ft<sup>3</sup>/s, which are poor. Flow regulated by Gunlock Reservoir. Several diversions upstream for irrigation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 5,850 ft<sup>3</sup>/s, flood of 1938 (exact date unknown), gage height, 7.90 ft (datum then in use) from slope area measurement.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft<sup>3</sup>/s Mar. 12, 1995, gage height, 20.17 ft from rating curve extended above 1,300 ft<sup>3</sup>/s on basis of slope-area measurement; no flow several days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 364 ft<sup>3</sup>/s, Feb 10, gage height, 13.45 ft; minimum daily discharge, 0.19 ft<sup>3</sup>/s, Oct 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	13	15	15	11	6.2	9.7	5.7	12	12	8.4	11
2	9.2	13	15	14	11	6.9	9.6	5.2	15	12	8.7	11
3	9.2	13	15	13	12	11	7.9	5.4	12	12	9.7	9.2
4	9.3	13	14	13	10	11	7.0	5.7	7.9	12	12	8.7
5	2.5	13	15	14	11	11	7.4	5.4	7.1	12	12	17
6	.46	13	15	14	10	11	10	7.4	5.7	12	12	16
7	.31	11	15	14	10	11	12	10	5.1	13	12	11
8	.23	29	15	14	10	10	12	10	4.8	16	14	11
9	.19	12	15	13	11	13	11	12	4.8	18	18	12
10	5.2	10	15	13	15	13	12	12	4.9	7.7	16	13
11	7.8	11	15	12	12	11	12	12	4.8	5.6	16	13
12	9.0	15	15	9.7	13	12	12	13	7.9	5.2	16	13
13	9.4	15	15	9.4	13	12	11	13	12	4.3	14	15
14	9.3	15	15	9.3	13	10	11	12	12	7.8	10	17
15	10	15	16	9.4	11	9.7	8.9	12	13	4.6	9.7	17
16	9.6	15	16	9.3	9.6	9.2	5.7	11	13	4.7	11	17
17	10	15	15	9.3	7.0	9.2	4.8	11	13	4.6	11	18
18	10	16	17	9.4	5.3	9.3	6.3	9.4	12	4.4	11	16
19	11	16	18	9.7	6.3	9.4	9.2	5.7	11	2.4	12	16
20	11	15	16	10	6.0	9.5	11	2.7	10	5.7	13	16
21	11	16	16	9.9	5.9	9.2	12	4.7	8.6	11	15	13
22	11	16	17	10	5.9	9.1	12	7.9	15	14	13	11
23	11	16	19	10	5.5	9.1	12	12	15	12	16	9.2
24	11	16	18	11	5.4	8.7	14	14	15	13	15	8.0
25	21	14	19	12	5.4	8.9	8.1	13	14	14	11	7.9
26	20	14	18	12	5.3	9.0	6.6	13	13	15	7.1	8.0
27	22	14	18	12	5.9	8.9	5.0	13	13	18	10	13
28	13	14	21	12	6.3	9.5	5.0	13	13	21	10	13
29	13	14	23	12	---	13	5.7	12	13	23	11	13
30	13	14	23	12	---	13	6.1	12	13	18	16	11
31	13	---	21	13	---	12	---	12	---	8.8	9.7	---
TOTAL	301.89	436	520	360.4	252.8	315.8	277.0	307.2	320.6	343.8	380.3	385.0
MEAN	9.74	14.5	16.8	11.6	9.03	10.2	9.23	9.91	10.7	11.1	12.3	12.8
MAX	22	29	23	15	15	13	14	14	15	23	18	18
MIN	.19	10	14	9.3	5.3	6.2	4.8	2.7	4.8	2.4	7.1	7.9
AC-FT	599	865	1030	715	501	626	549	609	636	682	754	764

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1999, BY WATER YEAR (WY)

	MEAN	3.65	5.61	3.84	13.5	34.0	53.3	46.0	39.9	35.0	18.4	15.3	10.8
MAX	27.1	43.6	35.2	158	366	260	169	157	168	168	46.2	33.9	29.1
(WY)	1984	1984	1984	1980	1980	1995	1978	1973	1983	1983	1980	1980	1980
MIN	.000	.000	.000	.000	.000	.14	6.08	5.06	8.03	.90	.33	.000	.000
(WY)	1978	1978	1991	1975	1975	1977	1977	1977	1991	1990	1990	1977	1977

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1973 - 1999

ANNUAL TOTAL	14139.96	4200.79	
ANNUAL MEAN	38.7	11.5	23.2
HIGHEST ANNUAL MEAN			90.1
LOWEST ANNUAL MEAN			3.76
HIGHEST DAILY MEAN	233	29	1530
LOWEST DAILY MEAN	.19	.19	.00
ANNUAL SEVEN-DAY MINIMUM	.28	2.4	.00
ANNUAL RUNOFF (AC-FT)	28050	8330	16790
10 PERCENT EXCEEDS	96	16	52
50 PERCENT EXCEEDS	18	12	12
90 PERCENT EXCEEDS	1.7	5.7	.00

## VIRGIN RIVER BASIN

175

09413000 SANTA CLARA RIVER AT ST. GEORGE, UT

LOCATION.--Lat 37°04'31", long 113°35'32", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 1, T. 43 S., R. 16 W., Washington County, Hydrologic Unit 15010008 on right bank 0.8 mi upstream from mouth and 2 mi south of St. George.

DRAINAGE AREA.--541 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to September 1956, November 1984 to current year.

GAGE.--Water-stage recorder. Crest-stage gage since Jan. 27, 1993. Elevation of gage is 2,560 ft above sea level, from topographic map. October 1950 to September 1956, gage located 0.25 mi downstream; November 1984 to September 1989, 0.5 mi downstream from present site, both at different datum.

REMARKS.--Records fair except for daily discharges less than 2.0 ft<sup>3</sup>/s and estimated daily discharges, which are poor. Flow regulated by reservoirs and many diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,000 ft<sup>3</sup>/s Mar. 12, 1995, gage height, 14.60 ft, from rating curve extended above 2,800 ft<sup>3</sup>/s. No flow at times in 1951, 1953, 1955-56, 1989, and 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 346 ft<sup>3</sup>/s, Nov 8, gage height, 7.42 ft; minimum daily discharge, 0.91 ft<sup>3</sup>/s, Jul 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.1	21	36	21	7.8	8.2	11	3.3	1.2	5.3	2.2
2	8.4	11	22	36	20	5.8	9.6	9.4	12	2.0	4.5	2.4
3	5.3	14	21	32	22	5.7	9.4	9.8	15	1.0	6.6	2.5
4	6.1	13	21	31	20	5.6	10	10	13	.91	2.4	2.1
5	4.7	15	21	32	25	7.1	7.3	7.3	19	1.7	4.2	1.6
6	3.2	19	22	32	19	11	5.7	4.3	12	1.5	3.4	5.4
7	2.4	19	23	33	20	12	5.5	5.4	7.7	1.2	2.8	4.9
8	2.6	52	22	32	19	11	5.6	4.9	6.5	8.1	2.7	4.3
9	8.5	60	24	32	19	10	6.1	4.1	4.4	8.4	3.0	3.0
10	11	21	25	32	26	7.2	5.9	4.2	3.0	15	4.1	2.6
11	11	23	27	30	21	5.8	6.7	2.6	2.5	11	5.9	3.6
12	11	22	e27	26	18	5.3	6.3	3.9	3.7	6.1	5.6	6.5
13	11	23	27	25	20	5.2	6.1	4.0	3.2	9.2	5.0	3.5
14	12	23	27	25	22	5.7	4.9	3.9	2.8	7.6	9.4	2.7
15	11	22	26	26	20	6.1	7.5	2.4	2.3	11	2.2	2.8
16	11	22	27	25	19	8.0	7.6	2.5	2.2	13	4.6	4.0
17	11	22	29	25	18	5.3	6.9	3.1	e1.8	7.5	3.6	3.3
18	14	23	29	25	15	7.0	5.3	3.4	e1.8	7.4	4.2	4.5
19	18	22	25	26	13	4.8	5.2	2.3	e1.8	5.1	3.0	8.1
20	15	21	26	26	13	6.3	5.1	2.4	e1.8	3.1	4.2	6.4
21	13	21	26	26	14	6.3	5.2	2.9	e1.8	2.4	7.6	3.7
22	11	21	27	31	14	8.3	5.1	2.5	e1.7	1.9	3.1	5.9
23	11	21	27	29	13	7.0	12	2.7	1.9	1.7	2.4	10
24	12	21	e28	25	12	6.7	13	3.3	1.3	2.0	3.6	6.1
25	12	21	29	23	11	7.4	11	4.2	1.2	2.5	3.2	4.4
26	13	20	30	23	11	6.4	8.9	3.1	1.1	2.0	3.7	2.7
27	13	20	30	25	10	5.9	7.5	1.9	1.5	2.1	3.7	1.7
28	13	20	30	22	9.1	5.2	8.7	1.8	1.8	1.8	1.5	2.1
29	14	21	33	22	---	5.1	7.9	4.1	1.5	11	5.4	2.3
30	13	21	35	22	---	5.4	11	3.1	1.2	13	7.6	2.6
31	11	---	34	22	---	5.2	---	3.2	---	9.9	7.7	---
TOTAL	324.2	663.1	821	857	484.1	211.6	225.2	133.7	134.8	172.31	136.2	117.9
MEAN	10.5	22.1	26.5	27.6	17.3	6.83	7.51	4.31	4.49	5.56	4.39	3.93
MAX	18	60	35	36	26	12	13	11	19	15	9.4	10
MIN	2.4	9.1	21	22	9.1	4.8	4.9	1.8	1.1	.91	1.5	1.6
AC-FT	643	1320	1630	1700	960	420	447	265	267	342	270	234

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1999, BY WATER YEAR (WY)

	3.62	5.51	6.99	13.9	18.1	38.3	24.4	16.2	11.3	5.57	6.61	4.11
MEAN	3.62	5.51	6.99	13.9	18.1	38.3	24.4	16.2	11.3	5.57	6.61	4.11
MAX	10.5	22.1	26.5	128	136	313	136	80.8	73.5	29.1	38.8	12.7
(WY)	1999	1999	1999	1993	1993	1995	1952	1993	1995	1995	1955	1998
MIN	.22	.59	.91	.82	.79	1.44	1.50	1.09	.31	.36	.055	.29
(WY)	1991	1991	1992	1991	1991	1991	1991	1990	1990	1990	1956	1953

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1951 - 1999

ANNUAL TOTAL	14564.2	4281.11	
ANNUAL MEAN	39.9	11.7	13.2
HIGHEST ANNUAL MEAN			56.0
LOWEST ANNUAL MEAN			1.18
HIGHEST DAILY MEAN	320	60	2910
LOWEST DAILY MEAN	1.1	.91	.00
ANNUAL SEVEN-DAY MINIMUM	2.1	1.4	.00
ANNUAL RUNOFF (AC-FT)	28890	8490	9530
10 PERCENT EXCEEDS	102	26	25
50 PERCENT EXCEEDS	22	8.0	3.9
90 PERCENT EXCEEDS	4.2	2.2	.50

e Estimated

## VIRGIN RIVER BASIN

09413200 VIRGIN RIVER NEAR BLOOMINGTON, UT

LOCATION.--Lat 37°04'14", long 113°34'55", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 6, T. 43 S., R. 15 W., Washington County, Hydrologic Unit 15010010, on left bank 0.2 mi downstream from mouth of Santa Clara River, 0.2 mi upstream from I-15 bridge, and about 1.5 mi northeast of Bloomington.

DRAINAGE AREA.--3,994 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1977 to current year.

REVISED RECORD.--WDR-UT-92-1: Drainage area.

GAGE.--Water-stage recorder. Crest-stage gage since May 9, 1989. Elevation of gage is 2,530 ft above sea level, from topographic map. From May 18, 1992 to Feb 20, 1993 at site 180 ft. upstream at same datum. Prior to Sep 19, 1978 at site 1.5 mi downstream at different datum.

REMARKS.--Records are good except for Nov 14-15, 18, Dec 25, Jan 19, Apr 23, May 18-19, Jun 3, 5, which are fair, and estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,000 ft<sup>3</sup>/s (estimated on basis of slope conveyance) Jan 1, 1989, gage height, 25.70 ft, result of Quail Creek reservoir dike failure; minimum daily discharge, 9.5 ft<sup>3</sup>/s Sep 5, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,100 ft<sup>3</sup>/s, Aug 31, gage height, 7.13 ft; minimum daily discharge, 26 ft<sup>3</sup>/s, Jul 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	243	220	236	208	147	70	316	58	38	173	161
2	76	249	223	235	191	113	72	307	129	28	133	107
3	73	215	224	229	192	96	85	321	280	e28	71	70
4	81	192	224	225	206	85	92	448	212	e27	48	57
5	94	189	228	225	235	90	111	291	331	e26	36	71
6	99	186	222	233	222	81	105	249	250	32	45	87
7	105	180	226	231	209	103	73	208	211	33	47	54
8	83	268	226	225	201	125	94	195	143	136	55	44
9	103	607	237	222	207	118	99	229	84	292	59	59
10	109	262	242	234	408	98	91	232	62	e290	47	57
11	99	222	238	228	361	90	94	191	55	e280	139	107
12	113	237	246	195	211	101	111	196	54	e260	133	93
13	108	231	256	158	218	85	160	190	63	214	74	81
14	118	210	254	149	231	81	151	176	61	173	47	45
15	124	217	250	136	222	76	159	156	58	279	60	55
16	122	224	253	170	208	77	101	144	47	248	110	55
17	115	228	254	166	198	75	109	143	35	101	94	74
18	117	226	243	176	194	64	120	174	36	89	67	74
19	114	222	241	165	192	63	125	251	40	85	49	103
20	113	241	242	157	185	79	87	190	59	195	80	93
21	124	283	240	161	175	79	81	76	40	133	79	65
22	220	225	229	158	175	98	93	64	36	70	97	68
23	185	215	230	152	184	75	138	65	36	36	86	82
24	142	203	e225	169	187	67	230	103	36	35	72	84
25	580	201	245	193	181	66	249	63	35	40	83	70
26	449	189	252	222	183	68	260	49	40	68	54	78
27	362	189	251	250	161	72	247	45	e32	41	78	82
28	215	187	255	215	161	80	267	55	e32	61	59	53
29	196	203	250	212	---	74	250	64	35	493	83	56
30	212	219	248	218	---	64	262	57	31	219	219	70
31	226	---	245	198	---	71	---	68	---	317	876	---
TOTAL	4949	6963	7419	6143	5906	2661	4186	5316	2621	4367	3353	2255
MEAN	160	232	239	198	211	85.8	140	171	87.4	141	108	75.2
MAX	580	607	256	250	408	147	267	448	331	493	876	161
MIN	72	180	220	136	161	63	70	45	31	26	36	44
AC-FT	9820	13810	14720	12180	11710	5280	8300	10540	5200	8660	6650	4470

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1999, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	126	170	182	245	318	411	448	517	193	94.4	101	117										
MAX	322	286	350	695	1642	1124	1335	1839	1146	244	246	422										
(WY)	1984	1984	1984	1989	1980	1995	1993	1983	1983	1984	1982	1998										
MIN	44.4	51.4	71.5	64.7	56.1	48.8	47.2	29.5	22.1	20.5	25.1	31.7										
(WY)	1991	1991	1991	1991	1991	1990	1990	1990	1996	1990	1991	1996										

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1978 - 1999

ANNUAL TOTAL	127195	56139	
ANNUAL MEAN	348	154	243
HIGHEST ANNUAL MEAN			628
LOWEST ANNUAL MEAN			61.0
HIGHEST DAILY MEAN	2530	876	13000
LOWEST DAILY MEAN	36	26	9.5
ANNUAL SEVEN-DAY MINIMUM	49	30	13
ANNUAL RUNOFF (AC-FT)	252300	111400	176100
10 PERCENT EXCEEDS	842	250	550
50 PERCENT EXCEEDS	226	139	140
90 PERCENT EXCEEDS	89	51	33

e Estimated

## VIRGIN RIVER BASIN

177

09413500 VIRGIN RIVER NEAR ST. GEORGE, UT

LOCATION.--Lat 37°00'52", long 113°40'47", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 30, T. 43 S., R. 16 W., Washington County, Hydrologic Unit 15010010, Bureau of Land Management, on right bank immediately upstream from Beaver Dam Mountains Wilderness Area, and 8.0 mi southwest of St. George.

DRAINAGE AREA.--4,123 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to December 1956, October 1991 to current year.

REVISED RECORDS.--WDR UT-92-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 2,400 ft above sea level, from topographic map. October 1950 to December 1956, gage located about 400 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 60,000 ft<sup>3</sup>/s (estimate) Jan 1, 1989, gage height, about 30.0 ft, result of Quail Creek reservoir dike failure.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft<sup>3</sup>/s Aug 25, 1955, gage height 12.70, site and datum then in use; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,890 ft<sup>3</sup>/s, Aug 31, gage height, 6.68 ft; minimum daily discharge, 25 ft<sup>3</sup>/s, Jul 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	280	211	225	194	154	79	223	53	37	192	238
2	83	258	211	224	196	124	71	239	123	36	158	145
3	77	237	213	206	200	96	89	244	214	31	97	104
4	91	217	213	208	217	80	80	348	205	28	63	71
5	110	208	220	200	253	87	95	239	300	25	40	80
6	113	196	214	216	225	87	99	234	225	33	52	104
7	123	e180	210	223	219	102	79	211	211	33	59	66
8	87	e200	202	217	219	122	81	196	159	121	59	51
9	107	e600	208	210	196	106	90	236	92	246	77	58
10	120	e265	227	221	345	82	84	221	76	318	69	66
11	105	e230	214	222	403	83	88	167	65	312	136	104
12	125	e235	219	203	239	86	103	170	71	273	170	121
13	124	e230	222	166	243	79	149	181	67	214	104	100
14	134	e225	228	155	222	72	155	168	72	e203	72	61
15	143	e225	226	132	212	62	148	159	59	e280	67	64
16	146	e230	230	185	224	77	98	158	53	e265	121	65
17	130	e230	231	172	208	88	105	141	40	e120	117	75
18	124	e235	231	176	223	65	126	154	37	e94	97	91
19	118	e230	224	177	212	65	135	231	46	109	69	110
20	116	e255	227	157	178	72	99	204	61	202	89	108
21	138	e280	235	176	181	81	76	91	46	156	95	68
22	219	e240	230	168	185	92	79	67	42	92	111	72
23	190	e220	219	169	184	73	118	64	39	53	108	96
24	161	e210	e210	168	192	63	172	94	40	47	88	93
25	525	208	213	186	169	66	218	65	40	49	100	83
26	591	194	230	209	182	66	233	50	44	77	68	76
27	421	192	215	231	162	70	259	48	33	52	90	93
28	252	196	224	208	158	71	255	56	32	63	71	59
29	236	204	234	203	---	73	218	62	36	450	98	54
30	271	208	226	205	---	57	195	49	34	212	134	65
31	286	---	219	188	---	73	---	60	---	309	916	---
TOTAL	5539	7118	6836	6006	6041	2574	3876	4830	2615	4540	3787	2641
MEAN	179	237	221	194	216	83.0	129	156	87.2	146	122	88.0
MAX	591	600	235	231	403	154	259	348	300	450	916	238
MIN	73	180	202	132	158	57	71	48	32	25	40	51
AC-FT	10990	14120	13560	11910	11980	5110	7690	9580	5190	9010	7510	5240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 55, 1992 - 99, BY WATER YEAR (WY)

	MEAN	88.2	141	165	213	246	323	373	391	113	79.0	120	104
	MAX	179	237	287	519	869	1232	1312	1300	543	232	522	475
	(WY)	1999	1999	1994	1993	1993	1995	1952	1993	1995	1998	1955	1998
	MIN	22.8	65.2	64.5	120	88.1	69.3	38.3	6.86	.000	10.1	4.30	.000
	(WY)	1951	1992	1957	1992	1951	1956	1953	1953	1951	1952	1956	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1951-55, 1992-99
ANNUAL TOTAL	128080	56403	
ANNUAL MEAN	351	155	197
HIGHEST ANNUAL MEAN			472
LOWEST ANNUAL MEAN			73.7
HIGHEST DAILY MEAN	2500	916	5490
LOWEST DAILY MEAN	39	25	.00
ANNUAL SEVEN-DAY MINIMUM	56	32	.00
ANNUAL RUNOFF (AC-FT)	254000	111900	143000
10 PERCENT EXCEEDS	813	236	410
50 PERCENT EXCEEDS	226	148	109
90 PERCENT EXCEEDS	99	59	2.5

e Estimated

## VIRGIN RIVER BASIN

09413900 BEAVER DAM WASH NEAR ENTERPRISE, UT

LOCATION.--Lat 37°28'12", long 114°02'45", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 24, T. 38 S., R. 20 W., Washington County, Hydrologic Unit 15010010, Bureau of Land Management, on left bank 0.4 mi downstream from Nevada-Utah State line and about 19 mi southwest of Enterprise.

DRAINAGE AREA.--58 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,760 ft above sea level, from topographic map.

REMARKS.-- Records good except for estimated daily discharge and daily discharges less than 2.0 ft<sup>3</sup>/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,760 ft<sup>3</sup>/s Feb 24, 1998, gage height, 10.16 ft from floodmarks, from rating curve extended above 70 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 9.56 ft. No flow Aug 8, 10, 1994.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug 30	1745	*284	*6.53	No other peak greater than base discharge.			

Minimum discharge, 0.31 ft<sup>3</sup>/s, Jul 6, gage height, 4.15 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	6.0	4.7	4.5	4.3	3.4	4.1	4.4	2.3	1.6	1.4	8.4
2	2.9	4.6	4.7	4.4	4.3	3.3	4.1	4.1	3.3	1.4	1.1	4.9
3	3.3	4.4	4.6	4.3	4.3	3.4	4.1	4.3	3.4	1.0	1.3	3.6
4	3.2	4.4	4.5	4.2	4.4	3.4	5.1	4.2	3.6	.67	1.2	2.7
5	2.6	4.3	4.5	4.3	4.6	3.3	4.9	4.1	4.6	.52	1.3	1.9
6	2.8	4.4	4.5	4.3	4.5	3.2	4.7	4.1	4.9	.43	1.3	1.3
7	2.9	4.3	4.3	4.4	4.5	3.4	4.8	4.2	4.6	.72	1.2	1.4
8	3.0	5.2	4.3	4.4	4.5	3.5	4.8	3.5	3.3	1.2	.98	1.3
9	2.9	6.4	4.3	4.3	5.2	3.3	4.8	1.9	2.7	1.5	.76	1.1
10	2.9	5.6	4.1	4.3	28	3.3	4.6	2.6	2.5	1.8	.89	1.5
11	3.1	5.9	4.1	4.4	9.2	3.5	4.5	3.2	2.5	2.2	1.0	1.7
12	3.2	5.5	4.1	4.4	5.5	3.5	4.5	3.5	2.5	2.1	1.1	1.5
13	3.2	5.2	4.2	4.3	4.5	3.3	4.6	3.5	2.0	2.2	1.1	1.7
14	2.8	4.9	4.3	4.2	4.0	3.3	4.5	3.5	2.1	2.5	1.0	1.9
15	2.5	4.8	4.2	4.2	3.8	3.3	4.7	3.2	2.2	2.7	.84	1.9
16	3.0	4.7	4.2	4.3	3.6	3.3	4.6	3.3	2.2	2.6	.57	1.4
17	3.3	4.7	4.2	4.2	3.5	3.3	4.6	3.5	2.4	2.4	.69	1.5
18	3.2	4.8	4.3	4.3	3.4	3.3	4.6	3.5	2.3	1.8	.68	1.8
19	3.0	4.8	4.4	4.3	3.3	3.4	4.7	3.4	2.5	1.7	.49	2.8
20	2.9	4.7	4.4	4.3	3.2	3.4	4.8	3.3	2.2	1.8	.43	2.4
21	3.2	4.4	4.2	4.3	3.2	3.4	4.9	3.2	1.6	1.6	.99	2.3
22	4.2	4.3	3.7	4.1	3.2	3.5	4.9	2.8	1.9	1.5	1.2	2.1
23	4.1	4.3	3.9	4.1	3.2	3.6	5.1	1.8	1.9	1.7	1.1	2.2
24	4.0	4.3	e4.1	4.1	3.3	3.7	5.4	2.2	2.0	1.2	1.3	2.3
25	5.3	4.4	4.3	4.2	3.3	3.7	5.2	2.6	2.0	.60	1.5	2.1
26	4.9	4.4	4.4	5.1	3.3	3.7	4.8	2.7	2.0	.54	1.5	1.8
27	6.0	4.5	4.5	4.7	3.3	3.7	4.7	2.5	1.5	.67	1.3	1.6
28	5.2	4.7	4.4	4.4	3.5	3.6	4.6	2.0	1.2	.76	1.2	1.5
29	4.6	5.0	4.4	4.3	---	3.6	4.7	1.9	1.4	.92	1.1	1.3
30	4.8	4.8	4.5	4.3	---	3.6	4.9	2.1	1.4	1.4	37	1.3
31	4.9	---	4.5	4.4	---	3.8	---	2.3	---	1.7	22	---
TOTAL	110.9	144.7	133.8	134.3	138.9	107.0	141.3	97.4	75.0	45.43	89.52	65.2
MEAN	3.58	4.82	4.32	4.33	4.96	3.45	4.71	3.14	2.50	1.47	2.89	2.17
MAX	6.0	6.4	4.7	5.1	28	3.8	5.4	4.4	4.9	2.7	37	8.4
MIN	2.5	4.3	3.7	4.1	3.2	3.2	4.1	1.8	1.2	.43	.43	1.1
AC-FT	220	287	265	266	276	212	280	193	149	90	178	129

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1999, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	2.44	3.48	4.65	14.4	36.2	47.0	23.0	6.49
MAX	3.58	4.82	9.59	55.2	115	128	97.6	14.6
(WY)	1999	1999	1993	1993	1993	1993	1998	1995
MIN	1.56	2.60	2.43	3.61	4.55	3.45	3.48	2.18
(WY)	1997	1997	1992	1994	1996	1999	1996	1996

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1992 - 1999

ANNUAL TOTAL	9175.17	1283.45	12.0
ANNUAL MEAN	25.1	3.52	29.0
HIGHEST ANNUAL MEAN			2.48
LOWEST ANNUAL MEAN			1993
HIGHEST DAILY MEAN	1140	37	1140
LOWEST DAILY MEAN	.97	.43	.00
ANNUAL SEVEN-DAY MINIMUM	1.6	.67	.05
ANNUAL RUNOFF (AC-FT)	18200	2550	8670
10 PERCENT EXCEEDS	73	4.8	18
50 PERCENT EXCEEDS	4.4	3.5	3.5
90 PERCENT EXCEEDS	2.2	1.3	.75

e Estimated

## GREAT SALT LAKE BASIN

10010000 GREAT SALT LAKE AT STATE PARK SALT AIR BEACH BOAT HARBOR, UT

LOCATION.--Lat 40°43'53", long 112°12'46", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 17, T. 1 S., R. 3 W., Salt Lake County, Hydrologic Unit 16020310, at State Park Saltair Beach Boat Harbor on southeast shore of lake, 17.1 mi west of Salt Lake City. (Gage temporarily located 0.4 mi to the southeast, from Apr. 13, 1984 to May 30, 1985, because of problems associated with highwater, then relocated 0.1 mi to the northeast from May 30, 1985 to Aug. 9, 1989 because of highway construction. Gage relocated to boat harbor marina on Aug. 9, 1989).

PERIOD OF RECORD.--September 1875 to December 1899, October 1902 to current year. Records for October 1902 to September 1912 and diagram showing fluctuations of lake from 1851-1950, published in WSP 1314.

REVISED RECORDS.--WSP 1314: 1877. WRD-UT-74-1: 1967-73. WDR-UT-83-1: 1981-82. WDR-UT-95-1: 1984-94.

GAGE.--Water-stage recorder at Boat Harbor since October 1938. Datum at gage since September 15, 1970 is 4,186.80 ft above sea level. October 1938 to April 15, 1967, at datum 4,186.9 ft and April 15, 1967 to September 15, 1970, at datum 4,186.85 ft. Prior to October 1938, staff gages at sites and datums as follows: September 1875 to October 1877 at Black Rock at 4,208.4 ft above sea level, November 1877 to November 1879 at Farmington Bay at 4,206.9 ft above sea level, November 1879 to April 1881 near Black Rock at 4,203.1 ft above sea level, April 1881 to December 1899 at Garfield Landing at 4,198.5 ft above sea level, October 1902 to July 1903, at Midlake on Lucin cutoff of Southern Pacific Railroad, 30 mi west of Ogden, at 4,197.9 ft above sea level, and July 1903 to October 1938 at Saltair at 4,196.9 ft above sea level. Datums since September 15, 1970, from levels run to USGS/National Geodetic Survey Benchmarks C-174 (1970) and E-174 (1970).

REMARKS.--Wind effects may cause substantial changes in hourly elevations, which are shown in the published mean daily elevations after October 1989. Samples for specific gravity and temperature were collected from water surface near the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 4,211.60 ft June 3, 1986, Apr. 1, 15, 1987; minimum, 4,191.35 ft Oct. 15, Nov. 1, 1963. Maximum elevation prior to June 3, 1986, 4,211.6 ft in 1873, computed from traditional data by G. K. Gilbert and E. C. LaRue.

Date	Temperature, water (Deg. C)	Specific Gravity (20.0°C)	Percent Salinity
Oct 1, 1998.....	16.5	1.056	8.5
Sep 29, 1999.....	18.0	1.054	8.2

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4202.3	4202.5	4202.6	4202.7	4203.1	4203.4	4203.6	4203.9	4204.3	4204.4	4203.8	4203.3
2	4202.3	4202.5	4202.6	4202.8	4203.1	4203.4	4203.7	4203.9	4204.1	4204.4	4203.7	4203.3
3	4202.4	4202.5	4202.6	4202.8	4203.1	4203.5	4203.6	4204.0	4204.2	4204.3	4203.7	4203.2
4	4202.4	4202.4	4202.7	4202.8	4203.1	4203.5	4203.7	4204.2	4204.3	4204.3	4203.7	4203.2
5	4202.4	4202.5	4202.6	4202.8	4203.2	4203.4	4203.6	4204.1	4204.4	4204.4	4203.7	4203.2
6	4202.4	4202.5	4202.6	4202.8	4203.1	4203.4	4203.6	4204.0	4204.4	4204.3	4203.6	4203.2
7	4202.4	4202.4	4202.6	4202.8	4203.1	4203.5	4203.6	4204.0	4204.4	4204.2	4203.6	4203.2
8	4202.4	4202.5	4202.6	4202.8	4203.2	4203.4	4203.6	4204.1	4204.6	4204.3	4203.6	4203.2
9	4202.4	4202.6	4202.8	4202.8	4203.1	4203.5	4203.9	4204.2	4204.6	4204.2	4203.6	4203.1
10	4202.5	4202.5	4202.7	4202.8	4203.4	4203.4	4203.7	4204.1	4204.5	4204.2	4203.6	4203.1
11	4202.4	4202.5	4202.6	4202.8	4203.3	4203.5	4203.7	4204.1	4204.5	4204.2	4203.6	4203.1
12	4202.4	4202.5	4202.7	4202.8	4203.2	4203.5	4203.7	4204.1	4204.5	4204.2	4203.5	4203.1
13	4202.4	4202.5	4202.7	4202.8	4203.3	4203.5	4203.7	4204.2	4204.5	4204.1	4203.5	4203.1
14	4202.4	4202.5	4202.7	4202.8	4203.3	4203.5	4203.8	4204.3	4204.5	4204.1	4203.4	4203.1
15	4202.5	4202.5	4202.7	4202.8	4203.3	4203.5	4203.8	4204.3	4204.6	4204.1	4203.5	4203.1
16	4202.6	4202.5	4202.7	4202.9	4203.3	4203.5	4203.7	4204.2	4204.5	4204.0	4203.5	4203.1
17	4202.4	4202.6	4202.7	4202.9	4203.3	4203.5	4203.7	4204.2	4204.5	4204.1	4203.5	4203.1
18	4202.4	4202.5	4202.7	4202.9	4203.3	4203.5	4203.7	4204.2	4204.5	4204.0	4203.5	4203.0
19	4202.4	4202.5	4202.8	4202.9	4203.4	4203.5	4203.7	4204.3	4204.5	4204.0	4203.4	4203.0
20	4202.4	4202.5	4202.8	4202.9	4203.3	4203.5	4203.7	4204.3	4204.5	4204.0	4203.4	4203.0
21	4202.4	4202.5	4202.8	4203.0	4203.4	4203.5	4203.7	4204.3	4204.5	4204.0	4203.4	4203.0
22	4202.4	4202.5	4202.7	4202.9	4203.3	4203.6	4203.8	4204.3	4204.5	4204.0	4203.4	4203.0
23	4202.3	4202.5	4202.7	4203.0	4203.3	4203.6	4203.7	4204.3	4204.5	4204.0	4203.4	4203.0
24	4202.3	4202.5	4202.7	4203.0	4203.3	4203.6	4203.7	4204.3	4204.5	4203.9	4203.4	4203.0
25	4202.4	4202.5	4202.7	4203.0	4203.4	4203.6	4203.7	4204.3	4204.5	4204.0	4203.4	4203.0
26	4202.4	4202.6	4202.7	4203.0	4203.4	4203.6	4203.7	4204.3	4204.5	4203.9	4203.4	4203.0
27	4202.4	4202.6	4202.7	4203.1	4203.4	4203.7	4203.7	4204.3	4204.5	4203.8	4203.4	4203.0
28	4202.4	4202.5	4202.7	4203.1	4203.4	4203.6	4203.8	4204.3	4204.5	4203.8	4203.3	4203.0
29	4202.5	4202.6	4202.7	4203.1	---	4203.6	4203.8	4204.3	4204.4	4203.8	4203.3	4202.9
30	4202.5	4202.6	4202.7	4203.1	---	4203.6	4203.9	4204.4	4204.4	4203.7	4203.2	4202.9
31	4202.5	---	4202.7	4203.1	---	4203.8	---	4204.4	---	4203.8	4203.3	---
MEAN	4202.4	4202.5	4202.7	4202.9	4203.3	4203.5	4203.7	4204.2	4204.5	4204.1	4203.5	4203.1
MAX	4202.6	4202.6	4202.8	4203.1	4203.4	4203.8	4203.9	4204.4	4204.6	4204.4	4203.8	4203.3
MIN	4202.3	4202.4	4202.6	4202.7	4203.1	4203.4	4203.6	4203.9	4204.1	4203.7	4203.2	4202.9

WTR YR 1999 MEAN 4203.4 MAX 4204.6 MIN 4202.3



## GREAT SALT LAKE BASIN

## 10010050 GREAT SALT LAKE AT PROMONTORY POINT, UT

LOCATION.--Lat 41°12'10", long 112°25'33", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 33, T. 6 N., R. 5 W., Box Elder County, Hydrologic Unit 16020310, 2.3 mi east of Saline at the southern most tip of the Promontory Peninsula.

PERIOD OF RECORD.--October 1968 to September 1982, December 1996 to September 1999 (discontinued).

REVISED RECORDS.--WDR UT-75-1: 1968-75.

GAGE.--Water-stage recorder on pier of boat harbor at the southern most tip of the Promontory Peninsula since December 10, 1996. Datum of gage since December 10, 1996 is 4,190.00 ft. above sea level. October 1968 to September 1982, gage located 4.6 miles west of current location, on the southeast end of the Southern Pacific Railroad causeway at a datum of 4,190.13 ft. above sea level. Both datums from levels run to USGS Benchmarks 72-77 FMK 1966.

REMARKS.--Wind effects may cause substantial changes in hourly elevations, which are shown in the published mean daily elevations after December 1996. Samples for specific gravity and temperature were collected from water surface near the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 4,204.0 ft. June 10-21, 24, 1999; minimum, 4,194.30 ft Oct. 1, 15, 1969.

Date	Temperature, water (Deg. C)	Specific Gravity (20.0°C)	Percent Salinity
Oct 14, 1998.....	13.5	1.059	8.8
Feb 17, 1999.....	5.5	1.053	8.0

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4201.8	4201.9	4202.0	4202.2	4202.5	e4202.8	4203.0	4203.3	4203.8	4203.8	4203.2	4202.7
2	4201.8	4201.9	4202.0	4202.2	4202.5	e4202.8	4203.0	4203.4	4203.9	4203.8	4203.2	4202.7
3	4201.7	4201.9	4202.0	4202.2	4202.5	e4202.8	4203.0	4203.4	4203.8	4203.9	4203.2	4202.7
4	4201.8	4201.9	4202.0	4202.2	4202.5	4202.8	4202.9	4203.4	4203.7	4203.7	4203.2	4202.7
5	4201.8	4201.9	4202.1	4202.2	4202.5	4202.8	4203.0	4203.4	4203.9	4203.7	4203.2	4202.7
6	4201.8	4201.9	4202.0	4202.2	4202.6	4202.8	4203.0	4203.5	4203.9	4203.7	4203.2	4202.7
7	4201.8	4201.9	4202.1	4202.2	e4202.6	4202.8	4203.0	4203.5	4203.9	4203.8	4203.1	4202.6
8	4201.8	4201.9	4202.1	4202.2	e4202.6	4202.8	4203.1	4203.4	4203.9	4203.7	4203.1	4202.6
9	4201.8	4201.9	4202.0	4202.2	e4202.6	4202.8	4203.0	4203.5	4203.9	4203.7	4203.1	4202.6
10	4201.8	4202.0	4202.1	4202.2	e4202.6	4202.8	4203.0	4203.5	4204.0	4203.7	4203.1	4202.6
11	4201.8	4201.9	4202.1	4202.2	e4202.6	4202.8	4203.0	4203.5	4204.0	4203.6	4203.0	4202.6
12	4201.8	4201.9	4202.1	4202.3	e4202.6	4202.8	4203.1	4203.5	4204.0	4203.6	4203.0	4202.6
13	4201.8	4202.0	4202.1	4202.3	e4202.6	4202.9	4203.0	4203.5	4204.0	4203.7	4203.0	4202.6
14	4201.8	4201.9	4202.1	4202.3	e4202.6	4202.9	4203.0	4203.6	4204.0	4203.6	4203.0	4202.6
15	4201.7	4202.0	4202.1	4202.3	e4202.6	4202.9	4203.0	4203.6	4204.0	4203.6	4203.0	4202.6
16	4201.7	4202.0	4202.1	4202.3	e4202.6	4202.9	4203.1	4203.6	4204.0	4203.6	4202.9	4202.6
17	4201.8	4202.0	4202.1	4202.3	e4202.7	4202.9	4203.1	4203.7	4204.0	4203.5	4202.9	4202.6
18	4201.8	4202.0	4202.1	4202.3	e4202.7	4202.9	4203.1	4203.7	4204.0	4203.5	4202.9	4202.6
19	4201.8	4202.0	4202.1	4202.3	e4202.7	4202.9	4203.1	4203.6	4204.0	4203.5	4202.9	4202.6
20	4201.7	4202.0	4202.0	4202.4	e4202.7	4202.9	4203.1	4203.7	4204.0	4203.5	4202.9	4202.5
21	4201.8	4202.0	4202.1	4202.4	e4202.7	4202.9	4203.1	4203.7	4204.0	4203.5	4202.9	4202.5
22	4201.8	4202.0	4202.1	4202.4	e4202.7	4202.9	4203.0	4203.7	4203.9	4203.4	4202.9	4202.5
23	4201.8	4202.0	4202.1	4202.4	e4202.7	4202.9	4203.0	4203.7	4203.9	4203.4	4202.9	4202.5
24	4201.8	4202.0	4202.1	4202.4	e4202.7	4202.9	4203.2	4203.7	4204.0	4203.4	4202.9	4202.5
25	4201.8	4202.0	4202.1	4202.4	e4202.7	4203.0	4203.2	4203.7	4203.9	4203.3	4202.9	4202.5
26	4201.8	4202.0	4202.1	4202.5	e4202.7	4202.9	4203.2	4203.7	4203.9	4203.3	4202.8	4202.4
27	4201.8	4202.0	4202.1	4202.4	e4202.8	4202.9	4203.2	4203.7	4203.9	4203.4	4202.8	4202.4
28	4201.9	4202.1	4202.1	4202.5	e4202.8	4202.9	4203.2	4203.7	4203.9	4203.3	4202.8	4202.4
29	4201.8	4202.0	4202.1	4202.5	---	4202.9	4203.3	4203.7	4203.9	4203.3	4202.8	4202.4
30	4201.8	4202.0	4202.2	4202.5	---	4202.9	4203.3	4203.7	4203.9	4203.3	4202.9	4202.4
31	4201.9	---	4202.2	4202.5	---	4202.9	---	4203.8	---	4203.3	4202.7	---
MEAN	4201.8	4202.0	4202.1	4202.3	4202.6	4202.9	4203.1	4203.6	4203.9	4203.6	4203.0	4202.6
MAX	4201.9	4202.1	4202.2	4202.5	4202.8	4203.0	4203.3	4203.8	4204.0	4203.9	4203.2	4202.7
MIN	4201.7	4201.9	4202.0	4202.2	4202.5	4202.8	4202.9	4203.3	4203.7	4203.3	4202.7	4202.4

CAL YR 1998 MEAN 4201.9 MAX 4203.0 MIN 4200.2  
WTR YR 1999 MEAN 4202.8 MAX 4204.0 MIN 4201.7

e Estimated



## GREAT SALT LAKE BASIN

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10010100 GREAT SALT LAKE NEAR SALINE, UT

LOCATION.--Lat 41°15'19", long 112°29'46", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 14, T. 6 N., R. 6 W., Box Elder County, Hydrologic Unit 16020310, 3.4 mi northwest of Saline at the Little Valley boat harbor, 30 mi west of Ogden and 27 mi south of Promontory.

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

REVISED RECORDS.--WDR UT-75-1: 1966-75. WDR UT-83-1: 1966-82, gage datum. WDR UT-96-1: 1990-95, gage datum.

GAGE.--Water-stage recorder on pier of boat harbor. Datum of gage since August 1, 1996 is 4,186.70 ft above sea level. April 1966 to August 1, 1996 at datum 4,189.80 ft. above sea level. Both datums from levels run to USGS Benchmarks 72-77 FMK 1966.

REMARKS.--Wind effects may cause substantial changes in hourly elevations, which are shown in the published mean daily elevations after October 1989. Samples for specific gravity and temperature were collected from water surface near the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 4,210.95 ft Apr. 7-29, 1987; minimum, 4,192.65 ft Oct. 15, Nov. 1, 1966.

Date	Temperature, water (Deg. C)	Specific Gravity (20.0°C)	Percent Salinity
Oct 14, 1998.....	15.5	1.201	26.6
Feb 17, 1999.....	8.5	1.190	25.3
Jun 10.....	18.5	1.183	24.5
Aug 26.....	30.5	1.181	24.3

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4201.4	4201.3	4201.4	4201.5	4202.0	4202.2	4202.4	4202.6	4202.8	4203.0	4202.6	4202.4
2	4201.4	4201.4	4201.4	4201.6	4201.9	4202.1	4202.4	4202.6	4202.7	4203.1	4202.6	4202.3
3	4201.4	4201.4	4201.4	4201.6	4201.9	4202.2	4202.4	4202.7	4202.9	4203.1	4202.7	4202.3
4	4201.5	4201.3	4201.6	4201.6	4201.9	4202.3	4202.4	4202.9	4203.0	4203.1	4202.6	4202.2
5	4201.4	4201.3	4201.5	4201.6	4202.0	4202.2	4202.4	4202.7	4202.9	4203.0	4202.6	4202.1
6	4201.4	4201.4	4201.5	4201.6	4201.9	4202.2	4202.4	4202.6	4202.9	4203.0	4202.5	4202.1
7	4201.4	4201.3	4201.4	4201.6	4201.9	4202.3	4202.4	4202.7	4203.0	4202.9	4202.5	4202.1
8	4201.4	4201.4	4201.5	4201.7	4202.0	4202.2	4202.4	4202.8	4203.1	4203.0	4202.6	4202.1
9	4201.4	4201.4	4201.6	4201.6	4202.0	4202.2	4202.6	4202.8	4203.1	4203.0	4202.5	4202.1
10	4201.5	4201.4	4201.5	4201.6	4202.2	4202.2	4202.4	4202.7	4203.0	4202.9	4202.6	4202.1
11	4201.4	4201.3	4201.4	4201.6	4202.0	4202.3	4202.4	4202.6	4203.0	4202.9	4202.5	4202.1
12	4201.4	4201.3	4201.4	4201.7	4202.0	4202.3	4202.4	4202.6	4203.0	4202.9	4202.5	4202.1
13	4201.4	4201.3	4201.4	4201.7	4202.0	4202.2	4202.5	4202.7	4203.0	4202.9	4202.5	4202.1
14	4201.4	4201.3	4201.5	4201.7	4202.0	4202.2	4202.7	4202.7	4203.1	4202.8	4202.5	4202.1
15	4201.5	4201.3	4201.5	4201.6	4202.0	4202.2	4202.5	4202.8	4203.1	4202.9	4202.6	4202.0
16	4201.5	4201.3	4201.5	4201.7	4202.0	4202.3	4202.4	4202.7	4203.0	4202.7	4202.5	4202.0
17	4201.3	4201.4	4201.5	4201.7	4202.1	4202.3	4202.4	4202.7	4203.1	4202.8	4202.5	4202.0
18	4201.3	4201.4	4201.6	4201.7	4202.1	4202.3	4202.4	4202.7	4203.0	4202.8	4202.4	4202.0
19	4201.3	4201.4	4201.7	4201.7	4202.1	4202.3	4202.4	4202.7	4203.1	4202.8	4202.4	4202.0
20	4201.3	4201.3	4201.6	4201.7	4202.1	4202.2	4202.4	4202.7	4203.1	4202.8	4202.3	4202.0
21	4201.3	4201.4	4201.6	4201.9	4202.2	4202.3	4202.5	4202.8	4203.1	4202.8	4202.4	4202.0
22	4201.3	4201.4	4201.5	4201.8	4202.1	4202.3	4202.5	4202.9	4203.1	4202.8	4202.4	4202.0
23	4201.3	4201.4	e4201.5	4201.8	4202.1	4202.3	4202.3	4202.8	4203.1	4202.8	4202.4	4202.0
24	4201.2	4201.5	e4201.5	4201.9	4202.1	4202.3	4202.4	4202.8	4203.1	4202.8	4202.4	4202.0
25	4201.2	4201.4	e4201.5	4201.9	4202.2	4202.3	4202.4	4202.7	4203.2	4202.8	4202.3	4202.0
26	4201.3	4201.4	4201.5	4201.9	4202.2	4202.3	4202.5	4202.8	4203.1	4202.8	4202.3	4202.0
27	4201.3	4201.4	4201.5	4201.9	4202.1	4202.4	4202.4	4202.8	4203.1	4202.7	4202.3	4202.0
28	4201.3	4201.4	4201.5	4201.9	4202.1	4202.3	4202.6	4202.8	4203.1	4202.7	4202.3	4201.9
29	4201.4	4201.4	4201.5	4201.9	---	4202.3	4202.6	4202.9	4203.0	4202.7	4202.3	4201.9
30	4201.5	4201.4	4201.5	4201.9	---	4202.4	4202.6	4203.0	4203.0	4202.7	4202.2	4201.8
31	4201.4	---	4201.5	4201.9	---	4202.5	---	4202.8	---	4202.6	4202.4	---
MEAN	4201.4	4201.4	4201.5	4201.7	4202.0	4202.3	4202.5	4202.7	4203.0	4202.9	4202.5	4202.1
MAX	4201.5	4201.5	4201.7	4201.9	4202.2	4202.5	4202.7	4203.0	4203.2	4203.1	4202.7	4202.4
MIN	4201.2	4201.3	4201.4	4201.5	4201.9	4202.1	4202.3	4202.6	4202.7	4202.6	4202.2	4201.8

WTR YR 1999 MEAN 4202.2 MAX 4203.2 MIN 4201.2

e Estimated

## BEAR RIVER BASIN

## 10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE

LOCATION.--Lat 40°57'55", long 110°51'10", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 30, T. 3 N., R. 10 E., Summit County, Utah Hydrologic Unit 16010101, on left bank 400 ft downstream from West Fork and 2.8 mi upstream from Utah-Wyoming State line.

DRAINAGE AREA.--172 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1942 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder Elevation of gage is 7,965 ft above sea level, from river-profile map. Prior to Oct. 1, 1986 at datum 3.0 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated slightly by Whitney Reservoir, total capacity, 4,700 acre-ft since 1966. Three diversions above station for irrigation of about 265 acres above and 2,600 acres below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,230 ft<sup>3</sup>/s June 6, 1986, gage height, 4.05 ft; datum then in use; minimum, 6.8 ft<sup>3</sup>/s April 12, 1984, result of upstream ice jam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 29	2330	1,830	6.53	Jun 20	0130	*2,090	*6.73

Minimum daily discharge, 21 ft<sup>3</sup>/s, Feb 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	79	67	56	31	54	60	159	996	835	e210	91
2	68	82	66	55	30	52	60	178	1080	809	e180	125
3	78	76	64	55	21	54	61	180	992	777	e160	161
4	107	62	56	56	24	54	57	149	855	683	e140	140
5	103	74	42	57	41	48	57	131	764	586	e130	111
6	100	75	e34	55	49	54	57	126	739	515	e120	99
7	112	58	e32	53	52	53	57	155	955	504	e120	93
8	110	74	e40	53	53	53	59	229	1110	504	e123	87
9	99	67	e34	53	54	53	60	268	1190	433	e128	83
10	93	71	e30	53	50	52	57	209	1130	378	e130	81
11	87	74	e32	52	58	54	57	179	1010	338	e127	79
12	87	72	38	52	59	53	58	185	1160	305	e122	74
13	84	81	40	51	40	48	63	277	1330	283	e120	70
14	83	78	55	57	30	55	69	269	1400	286	e120	67
15	78	78	62	52	28	56	68	235	1520	292	e120	66
16	84	73	59	50	29	55	67	205	1660	251	e130	64
17	86	74	59	50	26	53	75	197	1760	269	e120	62
18	78	72	59	52	26	57	95	262	1700	220	e110	63
19	84	68	e50	53	37	61	122	355	1710	e220	e98	87
20	84	52	e40	54	50	64	140	398	1730	e230	89	100
21	82	77	e37	55	48	63	123	494	1550	e240	129	76
22	87	72	e32	55	47	61	107	626	1480	e270	95	89
23	85	71	e31	55	48	61	98	822	1420	e220	88	114
24	78	67	e30	55	50	62	96	1230	1340	e180	94	113
25	82	70	e32	55	51	68	96	1520	1280	e175	90	110
26	83	72	e38	55	51	73	102	1410	1230	e160	84	106
27	83	70	e45	55	52	68	128	1290	1050	e150	83	109
28	83	69	56	59	53	61	141	1400	955	e150	86	111
29	79	68	57	69	---	64	154	1590	875	e150	76	110
30	85	68	59	53	---	64	148	1510	824	e150	72	111
31	83	---	57	44	---	62	---	1370	---	e160	134	---
TOTAL	2684	2144	1433	1679	1188	1790	2592	17608	36795	10723	3628	2852
MEAN	86.6	71.5	46.2	54.2	42.4	57.7	86.4	568	1226	346	117	95.1
MAX	112	82	67	69	59	73	154	1590	1760	835	210	161
MIN	68	52	30	44	21	48	57	126	739	150	72	62
AC-FT	5320	4250	2840	3330	2360	3550	5140	34930	72980	21270	7200	5660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1999, BY WATER YEAR (WY)

	MEAN	63.7	54.9	46.9	42.2	40.2	44.0	111	598	880	311	96.6	74.8
MAX	208	106	94.9	72.4	64.3	69.0	316	1044	1990	1105	244	229	
(WY)	1983	1984	1984	1984	1984	1986	1946	1984	1986	1995	1965	1983	
MIN	30.8	32.5	27.7	29.6	25.3	26.0	37.2	162	204	67.4	37.5	23.9	
(WY)	1959	1955	1960	1991	1964	1964	1944	1977	1992	1961	1954	1956	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1943 - 1999
ANNUAL TOTAL	87887	85116	
ANNUAL MEAN	241	233	197
HIGHEST ANNUAL MEAN			335
LOWEST ANNUAL MEAN			81.5
HIGHEST DAILY MEAN	1430	1760	2680
LOWEST DAILY MEAN	29	21	18
ANNUAL SEVEN-DAY MINIMUM	34	31	21
ANNUAL RUNOFF (AC-FT)	174300	168800	142900
10 PERCENT EXCEEDS	728	828	619
50 PERCENT EXCEEDS	83	79	59
90 PERCENT EXCEEDS	38	50	34

e Estimated

## BEAR RIVER BASIN

183

10016900 BEAR RIVER AT EVANSTON, WY

LOCATION.--Lat 41°16'13", long 110°57'47", in NE<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> sec.21, T.15 N., R.120 W., Uinta County, Hydrologic Unit 16010101, on left bank 100 ft downstream from bridge on State Highway 89, in the City of Evanston.

DRAINAGE AREA.--433 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1984 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,730 ft above sea level, from topographic map.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas. U.S. Geological Survey data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	183	560	1490	646	261	94
2	---	---	---	---	---	---	148	504	1430	607	167	87
3	---	---	---	---	---	---	150	690	1430	582	131	138
4	---	---	---	---	---	---	146	689	1220	533	124	171
5	---	---	---	---	---	---	153	526	1130	462	128	122
6	---	---	---	---	---	---	170	407	1010	352	124	92
7	---	---	---	---	---	---	201	397	1210	311	99	69
8	---	---	---	---	---	---	253	461	1270	365	84	58
9	---	---	---	---	---	---	269	631	1280	298	82	56
10	---	---	---	---	---	---	189	540	1210	230	87	52
11	---	---	---	---	---	---	201	439	1020	201	115	52
12	---	---	---	---	---	---	213	438	1040	183	123	49
13	---	---	---	---	---	---	242	762	1200	160	100	49
14	---	---	---	---	---	---	278	886	1310	123	82	47
15	---	---	---	---	---	---	264	701	1410	141	72	43
16	---	---	---	---	---	---	246	567	1580	123	68	37
17	---	---	---	---	---	---	248	484	1790	159	62	37
18	---	---	---	---	---	---	281	498	1780	149	70	46
19	---	---	---	---	---	---	313	682	1670	127	85	53
20	---	---	---	---	---	---	379	783	1700	131	84	84
21	---	---	---	---	---	---	374	951	1500	126	110	77
22	---	---	---	---	---	---	352	1090	1430	103	127	64
23	---	---	---	---	---	---	328	1280	1320	80	106	68
24	---	---	---	---	---	---	318	1710	1210	60	98	65
25	---	---	---	---	---	---	382	2190	1120	45	104	55
26	---	---	---	---	---	---	384	2230	1110	31	99	50
27	---	---	---	---	---	---	546	1940	950	46	96	52
28	---	---	---	---	---	---	616	2060	870	59	105	61
29	---	---	---	---	---	---	537	2180	738	87	104	66
30	---	---	---	---	---	---	610	2150	665	228	99	67
31	---	---	---	---	---	---	---	2030	---	361	93	---
TOTAL	---	---	---	---	---	---	8974	31456	38093	7109	3289	2061
MEAN	---	---	---	---	---	---	299	1015	1270	229	106	68.7
MAX	---	---	---	---	---	---	616	2230	1790	646	261	171
MIN	---	---	---	---	---	---	146	397	665	31	62	37
AC-FT	---	---	---	---	---	---	17800	62390	75560	14100	6520	4090

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1999, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	---	---	---	---	---
MAX	---	---	---	---	---
(WY)	---	---	---	---	---
MIN	---	---	---	---	---
(WY)	---	---	---	---	---
	328	857	885	233	74.5
	602	2469	1890	980	181
	1985	1984	1986	1995	1984
	133	330	121	40.0	16.4
	1995	1990	1992	1994	1988

## SUMMARY STATISTICS

## FOR 1999 WATER YEAR\*

## WATER YEARS 1984 - 1999\*

HIGHEST DAILY MEAN	2230	May 26	3160	May 16 1984
LOWEST DAILY MEAN	31	Jul 26	3.8	Sep 30 1992
INSTANTANEOUS PEAK FLOW	2490	May 26	3680	May 16 1984
INSTANTANEOUS PEAK STAGE	5.88	May 26	7.35	May 16 1984
ANNUAL RUNOFF (AC-FT)	--	--	293500	--
10 PERCENT EXCEEDS	--	--	1140	--
50 PERCENT EXCEEDS	--	--	180	--
90 PERCENT EXCEEDS	--	--	30	--

\* During period of operation.

## BEAR RIVER BASIN

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°26'04", long 111°01'01", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 29, T. 17 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, on right bank 9.3 mi upstream from Woodruff Narrows Dam and 10 mi southeast of Woodruff.

DRAINAGE AREA.--752 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,455 ft above sea level, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion for irrigation of about 43,500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,150 ft<sup>3</sup>/s June 2, 1983, gage height, 6.17 ft; minimum, no flow several days during Aug and Sept 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,130 ft<sup>3</sup>/s, May 27, gage height, 5.37 ft; minimum daily discharge, 1.2 ft<sup>3</sup>/s, Jul 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	90	155	e100	e95	e100	280	819	1850	473	208	45
2	27	76	153	e80	e100	e90	229	609	1550	442	128	37
3	45	82	147	e78	e90	e80	197	645	1580	420	86	46
4	84	78	143	e82	e102	e84	201	848	1450	402	71	120
5	127	69	134	e102	e110	e80	196	777	1360	357	74	96
6	118	105	e110	e104	e90	e96	195	597	1160	301	75	63
7	116	101	e120	e90	e84	e90	220	491	1180	229	66	42
8	136	92	e128	e90	e76	e100	271	447	1350	216	48	30
9	125	98	e129	e100	e68	e100	308	514	1360	226	40	24
10	109	109	e129	e90	e68	e120	289	629	1280	172	42	23
11	98	121	e100	e90	e80	e110	244	556	1230	129	48	40
12	91	116	e120	e90	e76	e130	246	448	918	114	74	40
13	87	95	e111	e88	e80	e145	261	522	1050	101	62	37
14	83	108	e110	e80	e72	e160	293	918	1160	85	45	37
15	85	123	e110	e90	e73	e182	309	928	1180	72	32	33
16	89	130	e110	e88	e80	e192	301	755	1180	73	25	29
17	106	149	e114	e94	e84	219	284	609	1180	56	23	25
18	115	150	e115	e96	e100	249	283	528	1180	94	19	28
19	107	139	e112	e92	e110	303	302	571	1180	55	26	36
20	110	161	e110	e90	e102	369	339	734	1180	45	32	57
21	109	144	e68	e96	e110	425	397	866	1180	43	37	74
22	113	196	e72	e92	e96	440	406	1070	1180	33	57	60
23	120	177	e73	e90	e80	449	422	1200	1190	24	53	68
24	107	185	e68	e94	e84	424	389	1390	1170	12	41	71
25	82	158	e86	e80	e100	444	396	1720	1070	5.5	37	67
26	73	162	e110	e90	e94	520	427	1980	985	3.1	40	57
27	74	181	e100	e70	e90	531	470	2040	888	1.3	37	57
28	73	180	e110	e70	e96	378	727	1890	749	1.2	42	66
29	73	172	e120	e72	---	281	729	1950	629	10	47	72
30	74	170	e110	e74	---	275	778	2070	525	56	47	74
31	94	---	e112	e76	---	307	---	2030	---	176	44	---
TOTAL	2871	3917	3489	2718	2490	7473	10389	31151	35124	4427.1	1706	1554
MEAN	92.6	131	113	87.7	88.9	241	346	1005	1171	143	55.0	51.8
MAX	136	196	155	104	110	531	778	2070	1850	473	208	120
MIN	21	69	68	70	68	80	195	447	525	1.2	19	23
AC-FT	5690	7770	6920	5390	4940	14820	20610	61790	69670	8780	3380	3080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1999, BY WATER YEAR (WY)

	MEAN	76.1	74.9	73.3	69.3	85.2	169	349	826	898	211	53.0	51.7
MAX	437	198	181	147	312	627	671	1957	2564	1191	340	288	
(WY)	1983	1974	1984	1984	1986	1986	1969	1984	1986	1995	1983	1983	
MIN	3.03	6.06	7.21	6.76	13.8	26.8	77.7	104	54.6	4.84	2.26	.49	
(WY)	1965	1989	1989	1989	1993	1977	1977	1977	1992	1988	1988	1988	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1962 - 1999
ANNUAL TOTAL	124566	107309.1	245
ANNUAL MEAN	341	294	583
HIGHEST ANNUAL MEAN			45.1
LOWEST ANNUAL MEAN			1986
HIGHEST DAILY MEAN	2340	2070	3900
LOWEST DAILY MEAN	21	1.2	Jun 2 1983
ANNUAL SEVEN-DAY MINIMUM	30	8.2	Jul 28
ANNUAL RUNOFF (AC-FT)	247100	212800	177400
10 PERCENT EXCEEDS	979	922	727
50 PERCENT EXCEEDS	127	110	86
90 PERCENT EXCEEDS	79	42	10

e Estimated

## 10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'20", long 111°00'50", in NE 1/4 NE 1/4 NW 1/4 sec. 32, T. 18 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, on right bank 1,100 ft downstream from Woodruff Narrows Dam, 1.6 mi upstream from Salt Creek, 5.4 mi upstream from Wyoming-Utah State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA.--784 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,398.96 ft above sea level (levels by Utah Water Resources Division from Bureau of Reclamation bench mark). Prior to Sept. 26, 1962, at site 175 ft upstream at same datum.

REMARKS.--Records good. Flow regulated by Woodruff Narrows Reservoir (station 10020200) beginning January 1962. Diversions for irrigation of about 43,500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,820 ft<sup>3</sup>/s Jun 2, 1983, gage height, 8.26 ft; no flow Jul 4, 5, 1962, Aug 30, 31, Sep 1, 2, 6, 7, 1979, Oct 30, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,400 ft<sup>3</sup>/s, May 30-31, gage height, 7.02 ft; minimum daily discharge, 39 ft<sup>3</sup>/s, Sep 26, 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	46	49	47	48	51	318	804	2240	609	212	148
2	295	46	49	47	48	51	290	720	1850	549	212	148
3	296	46	50	47	48	51	255	685	1690	509	212	148
4	295	46	49	47	48	51	230	781	1570	467	211	148
5	292	47	49	47	48	51	215	773	1450	421	210	148
6	292	47	50	47	48	51	215	677	1280	458	210	148
7	292	46	50	46	48	51	217	581	1200	663	210	148
8	292	47	50	47	48	51	248	514	1260	541	184	148
9	292	48	49	47	48	51	272	514	1300	523	155	148
10	294	48	49	47	48	51	288	571	1270	523	154	148
11	295	48	49	46	48	52	271	560	1210	518	153	148
12	295	49	49	46	48	52	262	508	1060	516	153	148
13	293	49	49	47	48	52	261	567	1040	423	153	148
14	293	50	48	47	49	52	268	771	1120	221	153	148
15	292	50	49	47	49	52	284	845	1230	220	153	148
16	368	50	49	47	49	53	293	770	1350	220	152	148
17	431	51	50	47	50	53	290	669	1510	219	151	148
18	431	51	49	47	50	53	287	585	1710	220	151	146
19	431	51	49	47	50	53	300	560	1760	220	151	146
20	431	50	49	47	50	53	324	638	1700	218	153	107
21	428	50	49	47	50	80	363	735	1680	217	153	41
22	427	50	49	47	50	182	388	878	1540	217	152	40
23	424	50	48	47	50	288	422	1020	1420	216	151	40
24	423	50	48	47	50	354	408	1240	1300	215	151	40
25	419	50	48	47	51	394	421	1620	1190	215	151	40
26	419	50	48	47	51	455	447	1980	1090	215	151	39
27	224	50	48	47	51	509	487	2240	1020	215	151	40
28	47	50	47	48	51	478	621	2200	889	215	149	40
29	46	49	47	48	---	387	691	2210	793	213	148	39
30	46	49	47	48	---	331	759	2300	687	212	148	40
31	46	---	47	48	---	325	---	2340	---	212	148	---
TOTAL	9445	1464	1510	1458	1375	4818	10395	31856	40409	10620	5146	3314
MEAN	305	48.8	48.7	47.0	49.1	155	346	1028	1347	343	166	110
MAX	431	51	50	48	51	509	759	2340	2240	663	212	148
MIN	46	46	47	46	48	51	215	508	687	212	148	39
AC-FT	18730	2900	3000	2890	2730	9560	20620	63190	80150	21060	10210	6570

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1999, BY WATER YEAR (WY)

	MEAN	61.4	56.8	49.1	46.8	49.8	102	295	802	1017	306	83.3	63.2
MAX	425	421	184	153	171	473	891	1828	2437	913	331	278	
(WY)	1983	1983	1983	1985	1971	1972	1985	1984	1983	1975	1983	1983	
MIN	3.89	.12	4.28	4.37	4.71	4.70	.34	27.8	396	20.0	3.91	3.65	
(WY)	1990	1981	1978	1978	1978	1978	1977	1977	1977	1966	1979	1979	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1962 - 1999

ANNUAL TOTAL	130550	121810		
ANNUAL MEAN	358	334		
HIGHEST ANNUAL MEAN			245	
LOWEST ANNUAL MEAN			509	1983
HIGHEST DAILY MEAN	2400	Jun 21	44.3	1977
LOWEST DAILY MEAN	46	Oct 29	3630	Jun 3 1983
ANNUAL SEVEN-DAY MINIMUM	46	Oct 29	.00	Jul 4 1962
ANNUAL RUNOFF (AC-FT)	258900		.07	Nov 26 1980
10 PERCENT EXCEEDS	965		177200	
50 PERCENT EXCEEDS	148		817	
90 PERCENT EXCEEDS	49		45	
			9.3	

## BEAR RIVER BASIN

10023000 BIG CREEK NEAR RANDOLPH, UT

LOCATION.--Lat 41°36'36", long 111°15'12", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 15, T. 10 W., R. 6 E., Rich County, Hydrologic Unit 16010101, on left bank 2.7 mi downstream from main forks and 5.2 mi southwest of Randolph.

DRAINAGE AREA.--52.4 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1939 to September 1944 (fragmentary), October 1949 to September 1970. October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,410 ft above sea level, from topographic map. Mar 1939 to Sep 1944 (fragmentary), at site 0.2 mi downstream at different datum, October 1949 to Sep 1959 at site 200 ft upstream at different datum, Sep 1959 to Sep 1970 at site 300 ft upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 337 ft<sup>3</sup>/s Jul 11, 1957, gage height, 3.75 ft, site and datum then in use; minimum discharge, 0.9 ft<sup>3</sup>/s Aug 4, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 24	0500	*98	*5.92				

Minimum daily discharge, 16 ft<sup>3</sup>/s, Dec 20, 22, Jan 27-28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	23	22	e21	e18	e25	e24	43	57	38	35	31
2	25	23	23	e19	e21	e24	e23	46	58	37	35	31
3	29	23	22	e19	e25	e26	e26	53	54	37	35	33
4	25	23	e21	e21	e26	e25	e26	53	51	36	35	32
5	25	23	e20	e25	e23	e22	e30	48	53	36	35	30
6	24	23	e21	e25	e30	e25	e27	45	49	36	35	30
7	24	24	e22	e22	e27	e23	e29	46	52	36	34	30
8	24	23	e21	e21	e24	e25	e30	52	47	36	34	30
9	24	23	e19	e24	e19	e26	e25	62	46	36	34	30
10	24	23	e21	e22	e19	e26	e25	61	45	36	34	30
11	24	23	e22	e22	e19	e27	e26	58	43	36	34	29
12	24	23	e21	e22	e21	e23	e28	58	42	36	34	29
13	24	23	e20	e18	e23	e25	e30	71	42	36	33	29
14	23	23	e20	e23	e21	e26	e27	73	42	36	32	29
15	24	23	e20	e22	e23	e24	e26	76	42	37	32	29
16	23	23	e20	e23	e21	e26	e28	72	41	37	32	29
17	23	24	e22	e23	e24	e25	e30	70	41	38	32	29
18	23	24	e20	e24	e18	e23	e32	72	41	37	32	29
19	23	24	e18	e22	e19	e30	e31	78	40	36	32	29
20	23	24	e16	e23	e22	e25	e30	82	39	37	32	29
21	23	23	e17	e22	e25	e28	e26	87	39	36	32	28
22	23	23	e16	e21	e28	e26	e27	89	39	36	32	28
23	23	23	e18	e21	e22	e23	e27	92	39	36	32	28
24	23	23	e20	e18	e24	e24	e28	96	39	36	31	28
25	23	23	e24	e17	e18	e30	e28	90	38	36	31	28
26	23	23	e23	e21	e24	e23	e26	83	38	36	31	28
27	23	23	e24	e16	e25	e23	e27	78	38	36	31	28
28	23	23	e26	e16	e26	e30	e27	72	37	37	31	28
29	24	23	e25	e17	---	e27	28	69	37	36	31	28
30	24	23	e24	e18	---	e26	41	65	38	36	32	27
31	23	---	e25	e20	---	e25	---	62	---	36	31	---
TOTAL	739	695	653	648	635	786	838	2102	1307	1127	1016	876
MEAN	23.8	23.2	21.1	20.9	22.7	25.4	27.9	67.8	43.6	36.4	32.8	29.2
MAX	29	24	26	25	30	30	41	96	58	38	35	33
MIN	23	23	16	16	18	22	23	43	37	36	31	27
AC-FT	1470	1380	1300	1290	1260	1560	1660	4170	2590	2240	2020	1740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950-70, 1987-99, BY WATER YEAR (WY)

	12.4	11.4	10.3	9.45	9.40	10.7	16.2	33.3	23.6	17.5	14.6	13.4
MEAN	12.4	11.4	10.3	9.45	9.40	10.7	16.2	33.3	23.6	17.5	14.6	13.4
MAX	26.3	25.9	23.7	23.4	22.7	25.4	42.3	95.4	62.2	40.3	32.8	29.2
(WY)	1952	1987	1987	1987	1999	1999	1951	1952	1952	1950	1999	1999
MIN	2.14	2.84	2.18	2.17	2.63	2.65	3.56	2.85	1.86	1.48	1.29	1.80
(WY)	1993	1993	1991	1991	1991	1991	1991	1992	1992	1961	1992	1992

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1950-70, 1987-99

ANNUAL TOTAL	10975	11422	
ANNUAL MEAN	30.1	31.3	15.2
HIGHEST ANNUAL MEAN			32.1
LOWEST ANNUAL MEAN			3.24
HIGHEST DAILY MEAN	98	96	140
LOWEST DAILY MEAN	13	16	1.0
ANNUAL SEVEN-DAY MINIMUM	14	18	1.1
ANNUAL RUNOFF (AC-FT)	21770	22660	11020
10 PERCENT EXCEEDS	48	46	30
50 PERCENT EXCEEDS	24	27	11
90 PERCENT EXCEEDS	16	21	4.2

e Estimated

BEAR RIVER BASIN

187

10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY

LOCATION.--Lat 41°56'20", long 110°59'05", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 25, T. 23 N., R. 120 W., Lincoln County, Hydrologic Unit 16010102, 800 ft downstream from Pixley Dam, 11 mi south of Cokeville, and 17.5 mi downstream from Twin Creek.

DRAINAGE AREA.--2,032 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1941 to November 1943 (published as Bear River near Cokeville), October 1952 to September 1956, May 1958 to current year (seasonal only). Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,185 ft above sea level, from river-profile map. Oct. 31, 1941 to Nov. 30, 1943, at site 200 ft downstream at different datum.

REMARKS.--Records good. Natural flow of stream affected by diversions for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,300 ft<sup>3</sup>/s Mar 25, 1956; minimum recorded, 0.24 ft<sup>3</sup>/s Apr 26, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,120 ft<sup>3</sup>/s, Jun 9, gage height, 7.66 ft; minimum recorded daily discharge, 132 ft<sup>3</sup>/s, Sep 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	969	812	635	279	153
2	---	---	---	---	---	---	---	981	940	587	272	166
3	---	---	---	---	---	---	---	992	980	522	269	177
4	---	---	---	---	---	---	---	1020	998	407	267	190
5	---	---	---	---	---	---	---	1020	1040	427	265	196
6	---	---	---	---	---	---	---	981	1050	391	279	193
7	---	---	---	---	---	---	---	968	1040	428	283	187
8	---	---	---	---	---	---	---	943	1010	375	279	186
9	---	---	---	---	---	---	---	888	1060	374	275	183
10	---	---	---	---	---	---	---	829	1050	379	259	181
11	---	---	---	---	---	---	---	792	1000	388	240	178
12	---	---	---	---	---	---	---	789	981	461	241	167
13	---	---	---	---	---	---	---	805	969	508	237	162
14	---	---	---	---	---	---	---	850	955	562	230	163
15	---	---	---	---	---	---	---	840	900	619	216	160
16	---	---	---	---	---	---	---	850	868	524	200	160
17	---	---	---	---	---	---	---	871	822	474	187	149
18	---	---	---	---	---	---	---	869	806	450	157	158
19	---	---	---	---	---	---	---	822	803	424	182	174
20	---	---	---	---	---	---	---	673	839	402	181	175
21	---	---	---	---	---	---	---	507	863	370	179	176
22	---	---	---	---	---	---	---	494	879	347	179	184
23	---	---	---	---	---	---	---	474	889	328	179	165
24	---	---	---	---	---	---	---	473	902	307	178	147
25	---	---	---	---	---	---	---	496	908	297	181	139
26	---	---	---	---	---	---	---	578	897	280	182	134
27	---	---	---	---	---	---	---	637	878	259	185	133
28	---	---	---	---	---	---	---	683	840	245	169	134
29	---	---	---	---	---	---	---	709	776	249	154	135
30	---	---	---	---	---	---	---	751	695	275	152	132
31	---	---	---	---	---	---	---	773	---	282	151	---
TOTAL	---	---	---	---	---	---	---	24327	27450	12576	6687	4937
MEAN	---	---	---	---	---	---	---	785	915	406	216	165
MAX	---	---	---	---	---	---	---	1020	1060	635	283	196
MIN	---	---	---	---	---	---	---	473	695	245	151	132
AC-FT	---	---	---	---	---	---	---	48250	54450	24940	13260	9790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1999, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	232	463	545	332	124	89.1
MAX	---	---	---	---	---	---	666	1361	1729	890	471	453
(WY)	---	---	---	---	---	---	1998	1986	1983	1983	1983	1983
MIN	---	---	---	---	---	---	1.06	.87	1.43	5.10	6.26	7.79
(WY)	---	---	---	---	---	---	1991	1977	1977	1977	1977	1977

SUMMARY STATISTICS

WATER YEARS 1966 - 1999

HIGHEST DAILY MEAN	2040	Jun 5 1983
LOWEST DAILY MEAN	.56	May 12 1977
ANNUAL SEVEN-DAY MINIMUM	.62	May 15 1977
10 PERCENT EXCEEDS	879	
50 PERCENT EXCEEDS	149	
90 PERCENT EXCEEDS	15	



## BEAR RIVER BASIN

10032000 SMITHS FORK NEAR BORDER, WY

LOCATION.--Lat 42°17'36", long 110°52'18", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 28, T. 27 N., R. 118 W., Lincoln County, Hydrologic Unit 16010102, on left bank 4.9 mi upstream from Howland Creek, 5.6 mi downstream from Hobble Creek, and 12.4 mi northeast of Border.

DRAINAGE AREA.--165 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1942 to current year.

REVISED RECORDS.--WSP 1734: 1952 (M).

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above sea level, from topographic map. Prior to Oct 16, 1945, at site 1.2 mi downstream at different datum. Oct 16, 1945 to Nov 1986 at site 0.4 mi down-stream at different datum.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. One diversion for irrigation of about 200 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft<sup>3</sup>/s June 4, 1986, gage height, 5.66 ft; minimum, 21 ft<sup>3</sup>/s Mar 29, 1975, Jan 24, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,440 ft<sup>3</sup>/s, May 30, gage height, 3.70 ft; minimum daily discharge, 50 ft<sup>3</sup>/s, Dec 16-17, and 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	87	e64	e72	e58	61	72	537	1010	774	254	158
2	107	87	e68	e74	e56	59	70	497	980	764	249	157
3	120	84	e66	e64	e54	60	69	441	1030	744	244	162
4	114	83	e62	e64	e56	61	66	355	1010	724	242	161
5	107	83	e58	e70	60	60	70	304	1040	690	242	151
6	105	83	e64	e66	65	56	70	278	1020	655	233	146
7	104	80	e70	e66	61	64	71	311	1060	625	224	142
8	102	84	e68	e68	57	60	77	411	1060	603	218	140
9	101	78	e64	e64	59	60	80	417	1030	569	213	138
10	100	80	e62	e60	60	59	75	358	1030	536	212	137
11	98	79	e64	e61	58	59	74	319	990	510	215	135
12	98	79	e66	e64	60	60	80	303	995	486	214	133
13	97	80	e70	61	74	57	89	332	1010	467	207	131
14	96	82	e68	62	75	58	99	315	1030	469	200	130
15	96	78	e62	61	63	59	101	323	1060	489	196	129
16	96	75	e50	64	68	59	103	295	1130	438	193	127
17	94	77	e50	64	62	59	110	286	1120	414	189	126
18	92	78	e52	62	61	59	144	328	1090	391	186	125
19	91	76	e50	62	60	60	195	446	1080	371	183	130
20	91	73	e60	62	59	63	229	532	1070	351	182	131
21	90	76	e76	62	63	67	216	630	1090	334	183	124
22	89	76	e70	61	59	67	202	755	1080	321	182	123
23	91	74	e74	61	58	66	185	878	1060	311	175	121
24	93	e80	e80	60	59	68	174	999	1010	301	172	122
25	92	e78	e74	59	60	73	194	1020	982	293	169	119
26	90	e79	e72	72	61	79	188	1030	946	285	166	117
27	90	e76	e78	61	58	79	196	1040	892	278	165	118
28	91	e76	e64	54	61	74	250	1070	851	274	166	116
29	89	e62	e58	e54	---	72	370	1110	818	275	159	115
30	90	e60	e58	e54	---	74	498	1120	791	271	162	114
31	89	---	e64	e56	---	73	---	1090	---	262	172	---
TOTAL	3009	2343	2006	1945	1705	1985	4417	18130	30365	14275	6167	3978
MEAN	97.1	78.1	64.7	62.7	60.9	64.0	147	585	1012	460	199	133
MAX	120	87	80	74	75	79	498	1120	1130	774	254	162
MIN	89	60	50	54	54	56	66	278	791	262	159	114
AC-FT	5970	4650	3980	3860	3380	3940	8760	35960	60230	28310	12230	7890

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1999, BY WATER YEAR (WY)

MEAN	91.4	78.5	69.7	64.0	61.5	63.0	161	551	645	302	155	110
MAX	156	113	88.4	85.0	82.8	99.4	385	1072	1377	602	242	166
(WY)	1987	1986	1983	1983	1984	1986	1946	1997	1986	1975	1983	1986
MIN	51.0	50.7	45.3	40.1	38.1	39.5	58.6	99.1	96.2	61.4	55.1	52.1
(WY)	1978	1978	1995	1988	1988	1988	1975	1977	1977	1977	1977	1977

## SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

## WATER YEARS 1943 - 1999

ANNUAL TOTAL	72037		90325				
ANNUAL MEAN	197		247			197	
HIGHEST ANNUAL MEAN						324	1986
LOWEST ANNUAL MEAN						71.1	1977
HIGHEST DAILY MEAN	764	Jun 4	1130	Jun 16	2000	Jun 4	1986
LOWEST DAILY MEAN	50	Dec 16	50	Dec 16	32	Dec 6	1993
ANNUAL SEVEN-DAY MINIMUM	56	Dec 14	55	Jan 28	35	Dec 1	1993
ANNUAL RUNOFF (AC-FT)	142900		179200		142400		
10 PERCENT EXCEEDS	561		862		532		
50 PERCENT EXCEEDS	92		97		91		
90 PERCENT EXCEEDS	62		59		59		

e Estimated

## 10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY

LOCATION.--Lat 42°07'36", long 110°58'21", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 28, T. 25 N., R. 119 W., Lincoln County, Hydrologic Unit 16010102, on left bank 1.1 mi upstream from Wyman Dam, 2.8 mi northwest of Cokeville, and 3.8 mi downstream from Smiths Fork.

DRAINAGE AREA.--2,447 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1954 to September 1996, October 1996 to current year. (seasonal).

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,140 ft above sea level, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by diversion for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,620 ft<sup>3</sup>/s Jun 7, 1983, gage height, 8.75 ft; minimum, 31 ft<sup>3</sup>/s Oct 4, 5, 6, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,870 ft<sup>3</sup>/s, Jun 8, gage height, 6.59 ft; minimum daily discharge, 176 ft<sup>3</sup>/s, Mar 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	429	375	435	e215	e200	e200	791	1560	2150	1430	580	341
2	443	350	436	e180	e200	e210	726	1660	2150	1350	572	348
3	446	323	440	e189	e200	e210	708	1640	2460	1260	560	372
4	478	314	446	e195	e208	e220	685	1590	2520	1120	554	398
5	425	321	439	e210	216	e218	658	1560	2620	1070	552	406
6	463	310	383	e240	227	e200	629	1480	2690	1080	562	397
7	429	301	449	e240	228	e190	603	1450	2790	984	559	383
8	495	308	462	e230	233	e185	609	1520	2860	998	557	376
9	473	295	445	e210	223	176	634	1540	2800	906	542	372
10	491	290	480	e200	e210	177	633	1430	2780	882	526	364
11	484	279	422	e190	e212	182	608	1320	2660	864	513	360
12	478	292	347	e200	e212	203	620	1270	2510	895	507	350
13	476	296	309	e220	e215	234	629	1300	2410	957	504	334
14	473	301	e239	e200	e220	270	634	1320	2350	976	513	328
15	475	318	e221	237	e228	308	621	1320	2270	1120	500	325
16	474	328	e210	238	e242	342	593	1300	2170	1030	476	322
17	480	335	e200	228	e250	365	593	1310	2120	938	461	320
18	455	346	e193	233	e210	401	621	1340	2060	887	409	304
19	506	348	e189	238	e230	418	678	1370	1990	847	398	333
20	570	348	e190	235	e210	468	724	1330	1990	811	409	352
21	574	348	e183	231	e220	607	732	1140	2070	778	407	340
22	578	366	e195	231	e194	718	716	1190	2140	728	404	338
23	587	375	e210	234	e200	733	716	1320	2150	697	395	340
24	595	387	e238	241	e209	726	723	1410	2100	658	388	314
25	590	384	e253	e210	e210	799	786	1520	2060	650	388	305
26	593	387	e258	e230	e200	861	870	1620	2000	642	376	290
27	601	393	e260	e200	e198	883	971	1760	1890	620	378	285
28	606	406	e280	e190	e200	844	1100	1840	1760	588	392	285
29	604	420	e250	e218	---	825	1170	1900	1640	558	350	282
30	496	444	e255	e210	---	845	1390	2070	1530	586	341	278
31	414	---	e260	e205	---	830	---	2180	---	592	349	---
TOTAL	15681	10288	9577	6728	6005	13848	22171	46560	67690	27502	14422	10142
MEAN	506	343	309	217	214	447	739	1502	2256	887	465	338
MAX	606	444	480	241	250	883	1390	2180	2860	1430	580	406
MIN	414	279	183	180	194	176	593	1140	1530	558	341	278
AC-FT	31100	20410	19000	13340	11910	27470	43980	92350	134300	54550	28610	20120

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1999, BY WATER YEAR (WY)

	MEAN	225	235	206	187	213	373	703	1020	1277	603	246	209
MAX	755	692	536	344	429	1159	1945	2794	3712	1556	707	658	
(WY)	1983	1983	1983	1984	1986	1986	1985	1984	1983	1983	1983	1983	
MIN	55.6	83.1	96.5	86.2	82.4	116	69.2	115	96.7	71.4	80.1	55.9	
(WY)	1978	1978	1978	1993	1993	1988	1977	1977	1977	1977	1977	1977	

## SUMMARY STATISTICS

## FOR 1999 WATER YEAR

## WATER YEARS 1955 - 1999

ANNUAL TOTAL	250614		
ANNUAL MEAN	687		456
HIGHEST ANNUAL MEAN			1049
LOWEST ANNUAL MEAN			112
HIGHEST DAILY MEAN	2860	Jun 8	5400
LOWEST DAILY MEAN	176	Mar 9	31
ANNUAL SEVEN-DAY MINIMUM	188	Mar 6	36
ANNUAL RUNOFF (AC-FT)	497100		330600
10 PERCENT EXCEEDS	1630		1120
50 PERCENT EXCEEDS	444		236
90 PERCENT EXCEEDS	210		115

e Estimated

## BEAR RIVER BASIN

10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Temperature November 1998 to present.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1998 to September 30, 1999.

INSTRUMENTATION.--Temperature data logger.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 21.3°C, Jul 27, Aug 2, 1999; minimum, 0.0°C, many days during the winter period.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 21.3°C, Jul 27, Aug 2; minimum, 0.0°C, many days during the winter period.

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	3.2	2.0	2.6	.1	.0	.0
2	---	---	---	---	---	---	3.2	1.7	2.6	.1	.0	.0
3	---	---	---	---	---	---	3.2	1.9	2.6	.1	.0	.0
4	---	---	---	---	---	---	2.5	.3	1.6	.1	.0	.0
5	---	---	---	---	---	---	.3	.0	.0	.3	.0	.1
6	---	---	---	---	---	---	.1	.0	.0	.1	.0	.0
7	---	---	---	---	---	---	.1	.0	.0	.3	.0	.0
8	---	---	---	---	---	---	.1	.0	.0	.3	.0	.0
9	---	---	---	---	---	---	.1	.0	.0	.1	.0	.0
10	---	---	---	---	---	---	.1	.0	.0	.1	.0	.1
11	---	---	---	---	---	---	.1	.0	.0	.3	.0	.1
12	---	---	---	---	---	---	.1	.0	.0	.3	.0	.1
13	---	---	---	1.9	.0	.8	.1	.0	.0	.3	.0	.1
14	---	---	---	2.8	.1	1.5	.1	.0	.0	.1	.0	.0
15	---	---	---	2.8	1.6	2.2	.3	.0	.0	.4	.0	.1
16	---	---	---	2.5	.9	1.9	.3	.0	.0	.4	.0	.0
17	---	---	---	3.6	1.7	2.8	.3	.0	.0	.3	.0	.1
18	---	---	---	3.3	1.7	2.7	.1	.0	.0	.3	.0	.1
19	---	---	---	1.9	.8	1.4	.0	.0	.0	.3	.0	.1
20	---	---	---	2.2	.4	1.3	.0	.0	.0	.3	.0	.1
21	---	---	---	2.8	1.1	1.9	.0	.0	.0	.1	.0	.0
22	---	---	---	3.6	2.5	2.9	.0	.0	.0	.4	.0	.1
23	---	---	---	3.5	2.0	2.8	.0	.0	.0	.3	.0	.1
24	---	---	---	3.3	1.7	2.5	.1	.0	.0	.3	.0	.1
25	---	---	---	2.0	.8	1.4	.1	.0	.0	.3	.0	.0
26	---	---	---	2.0	.3	1.2	.1	.0	.0	.1	.0	.0
27	---	---	---	2.4	.4	1.4	.1	.0	.0	.3	.0	.1
28	---	---	---	2.7	1.6	2.1	.1	.0	.0	.1	.0	.0
29	---	---	---	2.4	1.6	2.1	.1	.0	.0	.1	.0	.0
30	---	---	---	3.9	1.9	2.8	.3	.0	.1	.1	.0	.0
31	---	---	---	---	---	---	.1	.0	.0	.1	.0	.0
MONTH	---	---	---	---	---	---	3.2	.0	.3	.4	.0	.0

## BEAR RIVER BASIN

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10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.3	.0	.1	.8	.0	.2	3.9	2.8	3.4	9.4	7.0	8.1
2	.1	.0	.0	.8	.0	.2	4.6	1.9	3.4	9.1	7.8	8.3
3	.3	.0	.1	1.1	.0	.3	4.6	2.7	3.8	8.1	7.2	7.7
4	.1	.0	.0	1.2	.0	.3	5.5	2.8	4.4	7.7	6.6	7.1
5	.4	.0	.1	1.2	.0	.3	5.5	3.6	4.8	7.7	5.6	6.7
6	.1	.0	.0	1.1	.0	.3	7.3	4.4	5.8	9.2	5.8	7.5
7	.3	.0	.1	1.2	.0	.4	7.8	5.0	6.5	11.2	7.8	9.5
8	.3	.0	.1	2.2	.0	.6	8.4	6.0	7.1	11.0	10.0	10.6
9	.4	.0	.1	1.4	.0	.5	7.8	4.7	6.7	10.7	8.7	9.7
10	.3	.0	.0	2.7	.0	.8	6.9	3.2	5.0	9.5	7.3	8.0
11	.1	.0	.0	1.7	.0	.5	7.8	3.9	6.0	9.2	6.1	7.6
12	.1	.0	.0	3.0	.0	.9	9.5	5.5	7.6	9.7	7.3	8.5
13	.1	.0	.0	2.8	.0	.9	10.4	7.0	8.7	10.4	8.3	9.3
14	.3	.0	.1	3.3	.0	1.2	9.7	6.7	8.3	10.5	8.3	9.5
15	.4	.0	.1	3.6	.0	1.4	9.1	5.8	7.5	10.2	8.9	9.5
16	.3	.0	.1	4.1	.0	1.6	8.7	5.3	7.1	10.0	7.8	9.0
17	.3	.0	.1	3.9	.0	1.5	10.0	5.8	7.9	11.3	7.7	9.4
18	.3	.0	.1	3.8	.0	1.5	11.3	7.7	9.5	12.9	10.0	11.4
19	.3	.0	.1	4.1	.0	1.7	12.1	9.1	10.5	13.0	11.3	12.2
20	.3	.0	.0	3.6	.3	1.7	10.5	8.1	9.2	13.8	10.7	12.2
21	.3	.0	.0	2.4	.6	1.3	8.6	6.9	7.7	13.6	11.6	12.8
22	.4	.0	.1	3.2	.4	1.4	7.7	5.2	6.4	14.0	11.2	12.6
23	.4	.0	.1	5.6	.6	3.6	5.2	3.8	4.2	14.4	11.8	13.1
24	.6	.0	.2	6.4	3.3	5.0	6.7	3.0	4.8	14.4	12.1	13.3
25	.6	.0	.1	7.5	4.2	6.1	6.1	5.2	5.5	14.0	11.5	12.1
26	.3	.0	.1	7.5	6.0	6.8	7.2	4.4	5.8	12.9	10.7	11.8
27	.4	.0	.1	6.7	4.7	5.8	8.0	6.3	7.2	14.7	10.4	12.5
28	.6	.0	.2	4.7	3.3	4.1	9.2	7.3	8.3	15.2	11.8	13.6
29	---	---	---	5.8	2.7	4.4	10.4	8.0	9.2	15.1	12.3	13.0
30	---	---	---	6.0	4.4	5.3	10.2	8.0	8.7	13.8	11.2	12.4
31	---	---	---	5.5	3.8	4.2	---	---	---	12.7	10.2	11.0
MONTH	.6	.0	.1	7.5	.0	2.1	12.1	1.9	6.7	15.2	5.6	10.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	13.2	8.9	10.9	16.6	13.2	15.0	20.3	15.7	17.9	17.8	14.6	16.1
2	12.9	11.3	11.9	17.8	15.4	16.6	21.3	16.8	19.0	16.0	14.1	15.1
3	13.0	10.4	11.7	18.4	15.8	17.2	20.2	17.8	19.1	14.1	12.3	12.9
4	12.9	11.9	12.4	18.4	16.3	17.3	19.5	17.0	18.1	14.0	10.7	12.4
5	12.3	11.0	11.8	17.9	15.1	16.5	19.4	17.0	18.3	15.4	11.2	13.2
6	12.7	11.9	12.3	19.2	15.8	17.5	19.7	17.0	18.2	15.8	12.1	14.1
7	13.0	11.0	12.0	19.2	17.1	18.2	20.3	17.0	18.7	15.4	12.6	14.1
8	12.9	11.8	12.5	19.5	17.3	18.4	20.8	16.8	18.9	15.4	11.5	13.5
9	14.1	11.3	12.7	18.6	15.7	17.2	19.9	17.0	18.5	15.7	11.9	13.9
10	14.1	12.6	13.4	19.2	15.7	17.5	18.7	16.3	17.7	16.0	13.5	14.8
11	15.2	12.3	13.7	20.0	16.6	18.2	17.6	15.8	16.8	15.4	12.6	14.1
12	16.3	14.1	15.3	20.5	17.0	18.7	17.0	14.1	15.6	14.9	11.3	13.3
13	17.3	15.2	16.2	20.8	17.8	19.3	18.4	14.7	16.5	14.9	11.3	13.3
14	17.4	15.5	16.6	20.0	17.4	18.7	18.9	14.7	16.8	15.4	11.5	13.6
15	17.9	16.0	17.1	18.2	16.3	17.2	19.2	15.5	17.4	15.7	11.9	14.0
16	17.9	15.4	16.8	17.4	14.7	15.8	18.6	14.6	16.7	15.2	12.1	13.8
17	17.4	15.1	15.8	17.1	13.8	15.4	18.7	14.7	16.8	15.4	12.1	13.8
18	16.6	13.2	14.8	18.6	15.4	16.8	19.5	15.1	17.3	15.4	11.9	13.7
19	16.8	14.7	15.9	17.8	16.0	16.8	19.9	16.0	18.0	14.9	12.6	13.3
20	17.8	14.7	16.3	19.0	15.7	17.2	19.0	16.8	18.2	14.4	10.9	12.6
21	17.4	15.5	16.3	20.0	16.3	18.1	20.3	17.1	18.7	14.6	11.0	12.9
22	17.0	14.6	15.8	20.7	16.8	18.6	20.2	16.5	18.4	14.6	11.3	13.2
23	17.0	14.4	15.8	20.5	16.2	18.3	19.7	16.3	18.2	15.4	12.3	13.8
24	17.3	15.2	16.2	20.8	17.1	18.9	19.0	16.6	18.0	14.6	12.6	13.5
25	17.1	15.7	16.4	20.2	16.3	18.2	20.0	16.0	18.1	14.3	11.0	12.7
26	16.2	14.4	15.4	19.9	15.8	17.9	19.7	16.2	18.0	12.7	9.4	10.5
27	16.6	14.6	15.7	21.3	16.6	18.9	19.0	17.0	18.1	9.7	7.0	8.4
28	16.3	14.1	15.5	21.2	17.8	19.4	19.4	16.0	17.7	9.2	5.6	7.5
29	16.3	14.9	15.7	21.2	18.6	19.7	19.7	16.3	18.0	9.7	5.6	7.7
30	16.0	15.1	15.4	20.0	17.3	18.6	18.2	15.5	17.0	10.7	6.6	8.7
31	---	---	---	19.0	16.6	17.9	17.9	14.6	16.3	---	---	---
MONTH	17.9	8.9	14.6	21.3	13.2	17.7	21.3	14.1	17.8	17.8	5.6	12.8

## BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY

LOCATION.--Lat 42°12'40", long 111°03'11", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 15, T. 14 S., R. 46 E., Bear Lake County, Idaho, Hydrologic Unit 16010102, on left bank 0.2 mi west of Wyoming-Idaho State line, 0.5 mi west of Border, and 2.1 mi upstream from Thomas Fork.

DRAINAGE AREA.--2,486 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1937 to September 1996, October 1996 to current year. (seasonal).

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft above sea level, unadjusted.

REMARKS.--Records good. Natural flow of stream affected by regulation of upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft<sup>3</sup>/s Jun 7, 1983, gage height, 9.69 ft; minimum, 24 ft<sup>3</sup>/s Apr 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,820 ft<sup>3</sup>/s, Jun 9, gage height, 8.13 ft; minimum daily discharge, 267 ft<sup>3</sup>/s, Sep 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	429	421	---	---	---	---	880	1580	2380	1560	585	339
2	444	390	---	---	---	---	793	1670	2340	1470	571	345
3	499	361	---	---	---	---	761	1750	2460	1380	555	368
4	537	348	---	---	---	---	742	1760	2570	1280	545	395
5	534	347	---	---	---	---	719	1730	2630	1180	538	410
6	532	346	---	---	---	---	698	1680	2690	1210	551	405
7	533	332	---	---	---	---	687	1640	2750	1110	555	391
8	524	331	---	---	---	---	695	1670	2810	1110	550	380
9	527	326	---	---	---	---	748	1740	2820	1030	540	377
10	521	313	---	---	---	---	758	1700	2790	983	528	372
11	512	301	---	---	---	---	716	1610	2760	956	521	366
12	505	304	---	---	---	---	712	1540	2650	961	509	357
13	504	307	---	---	---	---	744	1560	2530	1000	496	341
14	491	315	---	---	---	---	762	1580	2450	1040	515	331
15	501	318	---	---	---	---	718	1600	2380	1180	505	327
16	529	320	---	---	---	---	694	1590	2270	1150	479	321
17	535	320	---	---	---	---	678	1590	2220	1050	460	319
18	538	321	---	---	---	---	707	1590	2170	989	424	307
19	585	320	---	---	---	---	773	1620	2110	974	360	318
20	634	316	---	---	---	---	852	1620	2070	927	380	355
21	645	307	---	---	---	---	895	1460	2110	872	379	344
22	646	314	---	---	---	---	884	1450	2150	810	375	338
23	661	315	---	---	---	---	885	1560	2180	760	376	341
24	671	319	---	---	---	---	881	1650	2160	718	373	316
25	663	313	---	---	---	---	931	1740	2120	685	374	309
26	662	305	---	---	---	---	1030	1840	2070	674	370	290
27	673	304	---	---	---	---	1100	1990	1990	645	370	281
28	676	306	---	---	---	---	1220	2080	1870	606	387	277
29	673	312	---	---	---	---	1240	2130	1760	571	355	273
30	612	327	---	---	---	---	1390	2250	1680	584	338	267
31	477	---	---	---	---	---	---	2350	---	593	344	---
TOTAL	17473	9779	---	---	---	---	25293	53320	69940	30058	14208	10160
MEAN	564	326	---	---	---	---	843	1720	2331	970	458	339
MAX	676	421	---	---	---	---	1390	2350	2820	1560	585	410
MIN	429	301	---	---	---	---	678	1450	1680	571	338	267
AC-FT	34660	19400	---	---	---	---	50170	105800	138700	59620	28180	20150

## BEAR RIVER BASIN

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## 10046000 RAINBOW INLET CANAL NEAR DINGLE, ID

LOCATION.--Lat 42°13'48", long 111°17'43", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 3, T. 14 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, on right bank 1.5 mi west of Dingle and 1.8 mi downstream from headworks at Stewart Dam.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only prior to October 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage datum is 5,922.0 ft above sea level, (by topographic survey). Prior to Oct. 1, 1923, at site 300 ft downstream at different datum; Oct. 1, 1923 to Oct. 27, 1944, at site 0.5 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Canal diverts from Bear River at Stewart Dam in NE<sup>1</sup>/<sub>4</sub> sec. 34, T. 13 S., R. 44 E., for storage in Bear Lake. At times flow in canal is augmented by surplus water from Black Otter Slough entering at the station and by seepage and surplus water from irrigation.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--77 years, 374 ft<sup>3</sup>/s, 271,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,950 ft<sup>3</sup>/s May 27, 1984; no flow Apr 28, 1977 and Oct 1, 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	498	369	e240	e246	e226	880	1460	2090	1590	546	302
2	445	463	373	e254	e249	e239	852	1620	2180	1440	531	306
3	489	412	360	e257	e249	e242	801	1770	2190	1400	522	313
4	540	408	356	e264	e252	e245	775	1890	2250	1330	513	341
5	546	404	360	e256	e249	e248	762	1880	2490	1210	499	357
6	547	392	e308	e253	e235	e244	737	1820	2560	1150	476	370
7	538	392	e246	e249	e232	e243	713	1700	2610	1120	468	367
8	544	384	e253	e256	e225	e256	710	1640	2670	1070	494	370
9	540	356	e260	e252	e225	e256	714	1720	2770	1100	494	366
10	541	380	e270	e248	e234	e262	727	1800	2860	1050	476	361
11	542	377	e274	e251	e247	e269	725	1760	2900	987	471	353
12	539	369	e281	e248	e247	e272	701	1610	2870	914	471	340
13	535	356	e292	e244	e240	e271	699	1580	2800	907	471	340
14	545	365	e292	e251	e220	e263	702	1560	2680	946	471	336
15	546	369	e292	e240	e223	e263	721	1580	2510	1000	480	328
16	552	369	e289	e247	e229	e255	713	1570	2430	1160	471	324
17	562	369	e281	e243	e229	e255	700	1540	2280	1140	453	324
18	568	369	e274	e243	e232	e257	687	1530	2210	1040	445	324
19	569	369	e274	e239	e239	e271	712	1530	2140	958	412	324
20	600	373	e274	e246	e245	e327	759	1540	2090	918	372	336
21	621	369	e274	e246	e248	e364	807	1520	2050	879	380	327
22	607	369	e270	e235	e262	e487	828	1360	2080	840	372	308
23	623	369	e249	e238	e272	e599	820	1380	2110	776	368	315
24	634	373	e274	e245	e276	639	817	1430	2160	720	375	323
25	635	373	e274	e248	e279	659	809	1450	2130	667	368	304
26	631	373	e274	e248	e282	749	849	1530	2100	630	350	278
27	632	365	e260	e251	e286	834	970	1620	2060	585	346	256
28	647	369	e278	e251	e293	846	1050	1750	1970	566	346	253
29	627	369	e278	e250	---	820	1170	1870	1820	590	350	256
30	627	373	e270	e250	---	814	1280	1910	1700	551	333	246
31	577	---	e253	e250	---	875	---	2000	---	551	298	---
TOTAL	17584	11476	8932	7693	6945	12850	24190	50920	69760	29785	13422	9648
MEAN	567	383	288	248	248	415	806	1643	2325	961	433	322
MAX	647	498	373	264	293	875	1280	2000	2900	1590	546	370
MIN	435	356	246	235	220	226	687	1360	1700	551	298	246
AC-FT	34880	22760	17720	15260	13780	25490	47980	101000	138400	59080	26620	19140

CAL YR 1998 TOTAL 276611 MEAN 758 MAX 2560 MIN 246 AC-FT 548700  
WTR YR 1999 TOTAL 263205 MEAN 721 MAX 2900 MIN 220 AC-FT 522100

e Estimated

## BEAR RIVER BASIN

10055500 BEAR LAKE AT LIFTON, NEAR ST. CHARLES, ID

LOCATION.--Lat 42°07'16", long 111°18'52", in NE<sup>1</sup>/<sub>4</sub> sec. 16, T. 15 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, in Lifton pumping plant of Utah Power & Light Co., 3.5 mi east of St. Charles.

DRAINAGE AREA.--435 mi<sup>2</sup>, approximately (does not include Mud Lake drainage).

PERIOD OF RECORD.--October 1903 to June 1906, elevations only, published as "at Fish Haven," January 1921 to current year. Monthly contents only January 1921 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,900 ft Utah Power & Light Co. datum.

REMARKS.--Outflow regulated by gates and pumps at the north end of Bear Lake and by gates in dike at north end of Mud Lake, a shallow interconnected lake. Principal inflow to Bear Lake is from Bear River through Rainbow Inlet Canal (station 10046000) and Dingle Inlet Canals into Mud Lake, from which the inflow can enter into Bear Lake either through the pumping plant or an opening in the dividing causeway. The inflow can be routed directly into the Outlet Canal (station 10059500). Usable capacity of Bear Lake is 1,421,000 acre-ft between elevation 5,902.00 ft, lower limit of pumps, and 5,923.65 ft, upper limit of storage with existing facilities. Water is used for irrigation and power development. Figures herein given represent usable contents.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,423,000 acre-ft Jun 10, 1923, elevation, 5,923.68 ft; no usable contents Nov. 9-19, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,354,000 acre-ft Jul 4-6, elevation, 5,922.69 ft; minimum contents, 1,095,000 acre-ft Mar 26-31, elevation, 5,919.00 ft.

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1264	1229	1175	1139	1136	1122	1097	1141	1241	1352	1337	1290
2	1264	1228	1173	1138	1136	1120	1098	1145	1246	1353	1336	1288
3	1264	1226	1171	1138	1135	1120	1099	1150	1252	1353	1336	1287
4	1264	1224	1169	1137	1134	1119	1099	1156	1255	1354	1335	1285
5	1262	1222	1167	1136	1134	1118	1100	1160	1259	1354	1335	1283
6	1262	1220	1165	1136	1133	1117	1102	1165	1264	1354	1334	1281
7	1260	1219	1164	1135	1132	1116	1102	1171	1270	1353	1333	1278
8	1259	1217	1161	1134	1132	1115	1103	1174	1277	1352	1332	1276
9	1257	1215	1159	1134	1132	1114	1104	1178	1284	1351	1331	1272
10	1255	1213	1158	1133	1132	1113	1106	1181	1291	1351	1329	1269
11	1254	1211	1157	1131	1131	1112	1106	1182	1298	1350	1328	1267
12	1252	1209	1157	1131	1131	1111	1107	1184	1304	1349	1327	1265
13	1252	1207	1156	1131	1131	1110	1108	1186	1306	1349	1325	1263
14	1250	1205	1155	1130	1131	1108	1108	1189	1311	1348	1324	1262
15	1248	1203	1153	1130	1131	1107	1109	1192	1315	1347	1322	1259
16	1245	1201	1152	1130	1131	1106	1110	1194	1317	1347	1320	1258
17	1244	1198	1152	1130	1131	1104	1111	1197	1321	1346	1318	1257
18	1242	1196	1151	1130	1131	1103	1112	1199	1323	1345	1316	1255
19	1241	1194	1150	1130	1131	1102	1112	1201	1327	1344	1315	1254
20	1238	1192	1150	1131	1131	1101	1115	1203	1331	1343	1313	1252
21	1237	1191	1148	1134	1131	1099	1117	1205	1335	1342	1311	1250
22	1236	1189	1148	1135	1131	1099	1118	1207	1338	1342	1309	1248
23	1234	1188	1147	1136	1131	1097	1120	1210	1340	1341	1307	1247
24	1233	1186	1146	1137	1130	1097	1122	1213	1343	1340	1305	1245
25	1232	1184	1145	1138	1129	1096	1125	1215	1345	1340	1303	1244
26	1231	1182	1144	1138	1127	1095	1127	1218	1346	1339	1301	1242
27	1231	1181	1143	1138	1123	1095	1129	1222	1347	1338	1299	1241
28	1231	1180	1143	1138	1122	1095	1130	1225	1349	1337	1297	1239
29	1231	1178	1141	1138	---	1095	1132	1228	1350	1337	1295	1238
30	1230	1177	1141	1137	---	1095	1136	1232	1351	1337	1292	1236
31	1229	---	1140	1136	---	1095	---	1236	---	1337	1291	---
MAX	1264	1229	1175	1139	1136	1122	1136	1236	1351	1354	1337	1290
MIN	1229	1177	1140	1130	1122	1095	1097	1141	1241	1337	1291	1236
(#)	5920.92	5920.17	5919.64	5919.59	5919.39	5919.00	5919.58	5921.01	5922.65	5922.45	5921.80	5921.01
(*)	-37	-52	-37	-4	-14	-27	+41	+100	+115	-14	-46	-55
CAL YR 1998.....(*)	+13											
WTR YR 1999.....(*)	-30											

(#) Elevation, in feet, at end of month.

(\*) Change in contents, in thousands of acre-feet.



## BEAR RIVER BASIN

195

## 10059500 BEAR LAKE OUTLET CANAL NEAR PARIS, ID

LOCATION.--Lat 42°13'00", long 111°20'35", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 8, T. 14 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, on right bank 2,000 ft downstream from headgates (at dike) and 3 mi southeast of Paris.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 5,912.6 ft above sea level, unadjusted.

REMARKS.--Records fair. Flow regulated by Bear Lake (station 10055500).

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--77 years, 417 ft<sup>3</sup>/s, 302,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,080 ft<sup>3</sup>/s Jun 19-21, 1986; minimum daily discharge, 1.0 ft<sup>3</sup>/s for many days in 1937, 1954, 1959, 1961, 1964, 1977-78.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	1080	e1170	e550	e636	e967	613	579	452	1070	1170	988
2	1150	1090	e1170	e557	e640	e980	574	634	455	1070	1150	994
3	1190	1120	e1170	e553	e667	e993	607	582	460	1080	1130	990
4	1210	1130	e1170	e562	e694	e992	601	531	486	1100	1110	1010
5	1200	1160	e1160	e561	e768	e955	588	529	498	1100	1140	1010
6	1190	1160	e1130	e508	e817	e932	580	538	496	1110	1160	1010
7	1170	1160	e1120	e483	e831	e922	580	583	493	1130	1150	998
8	1160	1160	e1100	e449	e836	e938	462	644	498	1200	1160	1000
9	1140	1140	e1070	e438	e768	e1010	376	675	482	1250	1180	996
10	1130	1150	e1010	e423	e776	e1120	378	722	477	1260	1190	992
11	1120	1160	e960	e409	e770	e1120	389	768	477	1270	1170	978
12	1110	1150	e911	e369	e763	e1120	384	762	585	1280	1160	974
13	1100	1140	e861	e290	e769	e1060	386	762	714	1290	1150	967
14	1100	1140	e799	e263	e771	e1020	397	762	667	1290	1130	963
15	1090	1150	e721	e262	e764	e955	377	756	647	1290	1120	956
16	1090	1160	e698	e263	e761	e832	315	752	658	1290	1110	961
17	1100	1170	e683	e263	e763	e843	222	744	706	1320	1090	954
18	1110	1180	e677	e264	e768	e855	200	735	709	1360	1080	957
19	1100	1170	e674	e263	e773	e848	199	732	709	1380	1070	966
20	1100	1160	e674	e262	e770	e845	264	672	692	1370	1040	975
21	1100	1160	e621	e263	e755	e845	320	600	695	1360	1030	859
22	1100	1150	e583	e262	e757	e841	318	614	781	1320	1020	805
23	1100	1160	e558	e263	e762	e809	313	608	934	1280	1020	799
24	1100	1160	e555	e263	e770	690	307	666	944	1270	1020	789
25	1100	1160	e547	e264	e940	676	310	771	987	1260	1030	768
26	1080	1160	e559	e396	e999	665	317	788	1040	1240	1020	544
27	1080	1160	e564	e499	e1040	626	308	605	1040	1230	1010	385
28	1070	1170	e546	e624	e1090	612	311	408	1030	1220	1010	400
29	1070	1170	e558	e628	---	617	318	410	1020	1210	1000	402
30	1080	1170	e555	e632	---	633	390	433	1020	1200	1010	441
31	1090	---	e554	e634	---	632	---	429	---	1190	1010	---
TOTAL	34670	34550	25128	12720	22218	26953	11704	19794	20852	38290	33840	25831
MEAN	1118	1152	811	410	794	869	390	639	695	1235	1092	861
MAX	1210	1180	1170	634	1090	1120	613	788	1040	1380	1190	1010
MIN	1070	1080	546	262	636	612	199	408	452	1070	1000	385
AC-FT	68770	68530	49840	25230	44070	53460	23210	39260	41360	75950	67120	51240

CAL YR 1998 TOTAL 317082.0 MEAN 869 MAX 1550 MIN 5.0 AC-FT 628900  
WTR YR 1999 TOTAL 306550 MEAN 840 MAX 1380 MIN 199 AC-FT 608000

e Estimated

## BEAR RIVER BASIN

10068500 BEAR RIVER AT PESCADERO, ID

LOCATION.--Lat 42°24'06", long 111°21'22", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 6, T. 12 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, on left bank at Pescadero, 400 ft downstream from road bridge, 2 mi downstream from Bennington Creek, and 6.5 mi northwest of Montpelier.

DRAINAGE AREA.--3,705 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to September 1954. June 1969 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorded. Elevation of gage is 5,900 ft above sea level, from topographic map. Prior to Oct 1, 1988 at datum 0.35 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Bear Lake (station 10055500) and diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,280 ft<sup>3</sup>/s Jun 21, 1986; minimum daily, 23 ft<sup>3</sup>/s Mar 14-17, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,570 ft<sup>3</sup>/s, Jul 20; minimum daily discharge, 446 ft<sup>3</sup>/s, Sep 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1250	1240	1350	e680	e700	1120	946	997	913	1340	1290	1100
2	1280	1220	1350	e640	e800	1140	879	1150	951	1330	1270	1110
3	1310	1240	1350	e620	e840	1170	885	1170	958	1360	1250	1120
4	1340	1270	1330	e680	e780	1180	878	1100	951	1420	1220	1130
5	1340	1310	1310	e740	e840	1160	877	1070	1020	1400	1210	1140
6	1330	1320	1290	e740	e900	1100	868	1060	1080	1390	1290	1130
7	1320	1310	1250	e640	e800	1090	884	1090	1100	1380	1270	1120
8	1300	1330	1240	e660	e740	1120	897	1130	1120	1360	1270	1110
9	1280	1310	1230	e700	e700	1180	741	1170	1100	1430	1280	1120
10	1260	1290	1350	e640	e760	1200	695	1190	1090	1460	1330	1120
11	1240	1310	1290	e640	e900	1220	699	1260	1080	1450	1310	1100
12	1240	1300	1130	e640	e860	1220	707	1270	1040	1460	1300	1080
13	1230	1300	1100	e640	e920	1200	714	1280	1250	1450	1290	1080
14	1210	1300	1060	e630	e880	1130	702	1280	1300	1440	1270	1070
15	1200	1300	968	e632	e940	1130	691	1270	1260	1430	1250	1060
16	1180	1310	927	e594	e880	973	661	1270	1190	1410	1230	1060
17	1170	1330	924	e542	e900	940	550	1260	1200	1430	1220	1050
18	1200	1330	946	e563	975	954	480	1250	1190	1470	1200	1060
19	1210	1330	989	e556	950	970	465	1230	1170	1530	1180	1060
20	1210	1320	e600	e539	1020	968	489	1220	1110	e1570	1150	1080
21	1210	1320	e680	e531	1080	991	614	1110	1040	e1560	1130	1070
22	1220	1320	e700	e552	783	1010	650	1110	1060	e1510	1110	939
23	1230	1320	e600	e525	1070	1050	656	1110	1240	e1480	1110	897
24	1240	1320	e700	e508	1020	980	653	1110	1260	e1430	1100	884
25	1250	1320	e680	e474	919	974	650	1250	1260	e1420	1110	861
26	1240	1320	e700	e639	991	1030	648	1310	1350	e1400	1110	790
27	1230	1310	e740	e641	1040	1010	655	1290	1370	e1390	1100	493
28	1230	1320	e720	e720	1080	929	664	992	1370	e1380	1100	447
29	1220	1340	e700	e720	---	904	698	895	1350	e1360	1100	446
30	1230	1340	e680	e700	---	916	764	883	1340	e1330	1120	447
31	1240	---	e720	e680	---	947	---	898	---	1320	1120	---
TOTAL	38640	39200	30604	19406	25068	32906	21360	35675	34713	44090	37290	29174
MEAN	1246	1307	987	626	895	1061	712	1151	1157	1422	1203	972
MAX	1340	1340	1350	740	1080	1220	946	1310	1370	1570	1330	1140
MIN	1170	1220	600	474	700	904	465	883	913	1320	1100	446
AC-FT	76640	77750	60700	38490	49720	65270	42370	70760	68850	87450	73960	57870

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923-54, 1970-99, BY WATER YEAR (WY)

	MEAN	467	477	484	444	400	407	451	580	933	1185	1019	688
MAX	2039	2134	1788	1340	1710	1707	1678	2106	3413	2918	1955	1696	
(WY)	1984	1984	1985	1924	1985	1985	1986	1986	1986	1983	1983	1984	
MIN	35.7	58.0	58.1	36.4	29.8	25.4	84.5	184	340	516	511	43.2	
(WY)	1978	1935	1936	1936	1936	1936	1990	1989	1932	1938	1936	1977	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1923-54, 1970-99

ANNUAL TOTAL	395360	388126		
ANNUAL MEAN	1083	1063		
HIGHEST ANNUAL MEAN			631	
LOWEST ANNUAL MEAN			1733	1984
HIGHEST DAILY MEAN	1690	Jul 14	266	1945
LOWEST DAILY MEAN	391	May 30	4280	Jun 21 1986
ANNUAL SEVEN-DAY MINIMUM	428	May 27	23	Mar 14 1936
ANNUAL RUNOFF (AC-FT)	784200		23	Mar 11 1936
10 PERCENT EXCEEDS	1390		157400	
50 PERCENT EXCEEDS	1170		1340	
90 PERCENT EXCEEDS	656		520	
			78	

e Estimated

## BEAR RIVER BASIN

197

10068500 BEAR RIVER AT PESCADERO, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Miscellaneous temperature and conductance 1967-1968, December 1972-1991, November 1998 to September 30, 1999.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1998 to September 1999.

INSTRUMENTATION.--Temperature data logger November 1998 to September 1999.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 22.8°C, Jul 27, 28, Aug 9, 1999; minimum, 0.0°C, Dec 9-11, 1998.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 22.8°C, Jul 27, 28, Aug 9; minimum, 0.0°C, Dec 9-11.

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	4.5	3.9	4.2	.1	.1	.1
2	---	---	---	---	---	---	4.6	4.2	4.4	.1	.1	.1
3	---	---	---	---	---	---	5.0	4.0	4.4	.1	.1	.1
4	---	---	---	---	---	---	4.4	2.9	3.6	.1	.1	.1
5	---	---	---	---	---	---	2.9	1.2	2.1	.1	.1	.1
6	---	---	---	---	---	---	1.2	.5	.7	.1	.1	.1
7	---	---	---	---	---	---	1.0	.4	.6	.1	.1	.1
8	---	---	---	---	---	---	1.2	.7	.8	.1	.1	.1
9	---	---	---	---	---	---	.9	.0	.3	.1	.1	.1
10	---	---	---	---	---	---	.2	.0	.1	.1	.1	.1
11	---	---	---	---	---	---	.5	.0	.2	.1	.1	.1
12	---	---	---	---	---	---	1.0	.2	.6	.1	.1	.1
13	---	---	---	---	---	---	1.3	.4	.8	.1	.1	.1
14	---	---	---	4.0	2.8	3.4	1.2	.5	.9	.1	.1	.1
15	---	---	---	4.0	3.4	3.7	1.0	.2	.7	.2	.1	.1
16	---	---	---	4.2	3.1	3.6	.9	.1	.4	.2	.1	.1
17	---	---	---	4.5	3.4	4.0	1.0	.1	.5	.2	.1	.1
18	---	---	---	4.3	3.6	4.0	.9	.1	.4	.1	.1	.1
19	---	---	---	3.7	3.1	3.3	.1	.1	.1	.2	.1	.1
20	---	---	---	3.2	2.5	2.8	.2	.1	.1	.2	.1	.1
21	---	---	---	3.4	2.6	2.9	.1	.1	.1	.2	.1	.1
22	---	---	---	3.9	3.2	3.5	.1	.1	.1	.2	.1	.1
23	---	---	---	3.7	2.9	3.3	.1	.1	.1	.4	.1	.2
24	---	---	---	3.9	3.2	3.5	.1	.1	.1	.4	.1	.2
25	---	---	---	3.6	3.0	3.2	.1	.1	.1	.2	.1	.1
26	---	---	---	3.1	2.5	2.8	.1	.1	.1	.2	.1	.1
27	---	---	---	3.6	2.5	3.0	.1	.1	.1	.2	.1	.1
28	---	---	---	3.7	3.1	3.4	.1	.1	.1	.2	.1	.1
29	---	---	---	3.6	3.1	3.4	.1	.1	.1	.1	.1	.1
30	---	---	---	4.5	3.2	3.8	.1	.1	.1	.1	.1	.1
31	---	---	---	---	---	---	.1	.1	.1	.1	.1	.1
MONTH	---	---	---	---	---	---	5.0	.0	.9	.4	.1	.1

## BEAR RIVER BASIN

10068500 BEAR RIVER AT PESCADERO, ID--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	.1	.1	.1	2.9	2.1	2.4	4.0	2.8	3.5	10.8	8.8	9.8
2	.1	.1	.1	2.1	1.0	1.7	5.3	3.2	4.1	10.8	10.2	10.4
3	.1	.1	.1	2.5	1.3	1.8	5.3	3.9	4.6	10.2	9.0	9.7
4	.1	.1	.1	2.3	1.3	1.8	5.7	4.2	4.8	9.0	7.5	8.1
5	.1	.1	.1	2.0	.5	1.2	5.6	4.6	5.0	7.8	6.8	7.4
6	.1	.1	.1	1.3	.5	1.0	6.1	5.1	5.5	9.3	6.8	8.1
7	.1	.1	.1	2.0	1.0	1.4	6.7	5.1	5.9	11.6	9.1	10.2
8	.1	.1	.1	2.3	1.0	1.6	7.5	6.1	6.6	11.0	10.1	10.7
9	.1	.1	.1	2.1	1.3	1.8	6.7	4.6	5.9	10.2	9.2	9.7
10	.1	.1	.1	2.8	1.2	1.8	6.1	3.9	4.9	9.2	8.5	8.8
11	.1	.1	.1	2.6	1.4	1.9	7.6	5.0	6.1	9.9	7.8	8.9
12	.1	.1	.1	2.1	.7	1.3	9.1	6.2	7.5	10.0	9.0	9.6
13	.1	.1	.1	2.8	1.0	1.8	10.2	7.5	8.5	10.0	9.1	9.6
14	.1	.1	.1	3.4	1.5	2.3	8.7	7.2	7.9	10.8	9.0	9.8
15	.1	.1	.1	4.0	2.1	3.0	8.7	6.2	7.4	11.1	9.8	10.5
16	.1	.1	.1	4.3	2.3	3.3	8.5	6.7	7.5	10.8	9.6	10.2
17	.1	.1	.1	4.0	2.0	3.1	10.0	7.0	8.4	11.9	9.0	10.4
18	.1	.1	.1	4.5	2.8	3.7	12.2	8.8	10.4	13.3	10.7	11.9
19	.1	.1	.1	4.8	2.9	3.9	12.5	10.5	11.4	13.3	12.1	12.7
20	.1	.1	.1	4.8	3.1	4.0	11.4	10.1	10.9	14.8	12.2	13.6
21	.1	.1	.1	4.8	3.4	4.2	10.2	8.8	9.4	15.8	14.1	14.9
22	.1	.1	.1	5.4	3.7	4.7	8.8	7.8	8.4	16.6	14.4	15.5
23	.1	.1	.1	5.0	3.2	4.3	7.8	6.6	7.1	17.9	15.3	16.5
24	.9	.1	.3	5.3	2.9	4.2	8.4	5.9	7.1	18.2	16.9	17.5
25	1.5	.5	1.0	5.7	3.7	4.8	7.9	6.8	7.6	17.6	16.4	17.0
26	1.8	.7	1.2	5.4	4.3	4.8	8.4	6.2	7.3	17.1	15.0	16.1
27	1.8	.5	1.2	5.0	3.5	4.3	9.5	8.1	8.7	17.4	15.2	16.4
28	2.5	1.2	1.8	3.7	2.6	3.2	10.8	8.8	9.6	18.7	16.3	17.3
29	---	---	---	5.0	2.8	3.9	10.8	9.5	10.1	17.7	16.2	17.2
30	---	---	---	5.0	4.3	4.5	10.2	9.2	9.8	16.4	14.2	15.6
31	---	---	---	4.3	3.5	4.0	---	---	---	14.2	12.9	13.6
MONTH	2.5	.1	.3	5.7	.5	3.0	12.5	2.8	7.4	18.7	6.8	12.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	14.5	12.4	13.5	18.5	16.1	17.3	22.1	19.8	21.0	19.0	16.9	17.9
2	14.1	13.2	13.8	19.8	17.4	18.6	22.6	20.1	21.4	18.0	16.9	17.3
3	14.5	12.8	13.6	20.5	18.0	19.3	22.5	20.8	21.7	17.1	14.9	16.0
4	14.4	13.1	13.8	20.8	19.2	20.0	22.0	20.3	21.2	15.8	14.2	14.8
5	13.1	12.1	12.5	20.8	18.7	19.7	22.1	20.6	21.4	16.8	14.2	15.5
6	13.0	12.1	12.6	21.5	19.2	20.3	22.5	20.3	21.4	17.5	15.2	16.3
7	14.1	12.4	13.2	21.8	20.5	21.1	22.5	20.3	21.4	17.1	15.3	16.2
8	14.1	12.7	13.4	21.2	19.8	20.6	22.6	20.3	21.6	16.9	14.5	15.8
9	14.7	11.9	13.3	21.3	19.3	20.4	22.8	20.3	21.6	17.1	14.7	15.9
10	15.2	13.9	14.4	21.5	19.3	20.5	22.1	20.6	21.4	16.9	15.5	16.3
11	16.1	13.6	14.9	21.8	19.8	20.8	21.1	19.2	20.1	16.8	15.0	15.9
12	17.7	15.6	16.6	22.1	20.0	21.1	19.3	18.4	18.8	16.4	14.2	15.3
13	19.0	16.9	17.9	22.5	20.6	21.6	20.0	17.9	18.9	16.4	14.1	15.3
14	19.8	18.4	19.0	22.1	21.0	21.4	20.3	18.2	19.4	16.6	14.4	15.6
15	20.6	19.0	19.7	21.2	20.0	20.6	20.1	18.2	19.3	16.9	14.5	15.8
16	21.0	19.5	20.1	20.4	18.9	19.4	20.3	18.0	19.2	17.1	15.0	16.1
17	20.1	19.0	19.7	19.0	17.9	18.5	21.1	18.2	19.7	16.9	15.2	16.1
18	20.1	18.0	19.1	19.8	17.5	18.7	21.8	18.8	20.3	17.2	15.2	16.2
19	20.1	19.0	19.5	20.1	18.5	19.3	21.6	19.5	20.6	16.3	14.8	15.6
20	20.8	18.7	19.7	21.0	18.8	19.9	21.0	19.3	20.2	15.8	13.9	14.8
21	20.2	19.4	19.8	21.3	19.5	20.4	21.0	19.2	20.0	16.3	14.2	15.2
22	20.0	18.5	19.2	21.8	19.8	20.8	21.8	19.3	20.5	16.0	14.2	15.2
23	20.1	17.9	19.1	22.0	19.7	20.9	22.1	19.5	20.8	15.6	14.2	15.1
24	20.5	18.2	19.3	22.0	20.3	21.2	21.2	19.8	20.5	15.8	14.7	15.2
25	20.1	18.8	19.5	22.0	19.8	20.9	21.1	18.8	20.0	15.3	13.6	14.6
26	19.2	17.4	18.4	22.3	19.8	21.1	21.5	18.8	20.2	14.4	11.8	12.9
27	18.8	16.9	18.0	22.8	20.3	21.6	21.3	19.5	20.4	11.8	9.5	10.6
28	18.7	16.6	17.7	22.8	20.8	21.8	21.5	19.3	20.4	10.0	8.1	9.1
29	18.5	17.1	17.9	22.5	21.1	21.9	21.5	19.2	20.3	10.2	8.1	9.0
30	18.0	17.2	17.5	22.0	20.8	21.5	20.6	19.2	19.7	10.7	8.4	9.5
31	---	---	---	22.0	20.5	21.3	19.3	16.8	18.0	---	---	---
MONTH	21.0	11.9	16.9	22.8	16.1	20.4	22.8	16.8	20.4	19.0	8.1	14.8

BEAR RIVER BASIN

199

10075000 BEAR RIVER AT SODA SPRINGS, ID

LOCATION.--Lat 42°36'50", long 111°34'58", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 29, T. 9 S., R. 42 E., Caribou County, Hydrologic Unit 16010202, on left bank 800 ft upstream from Bailey Creek road bridge and 2 mi south of Soda Springs.

DRAINAGE AREA.--3,972 mi<sup>2</sup>.

PERIOD OF RECORD.--May to September 1896, May, June 1898, and October 1953 to current year in reports of Geological Survey. Irrigation season only during 1944-49, 1951-53 in reports of Bear River Hydrometric Data (Geological Survey open-file report).

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,760 ft above sea level, from topographic map. May 25 to Oct 2, 1896, May 22 to Jul 1, 1898, staff gage at different datum. During irrigation season 1944-49, 1950-53, water-stage recorder at site 800 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream effected by upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--46 years, 727 ft<sup>3</sup>/s, 526,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,380 ft<sup>3</sup>/s Jun 9, 15, 1896, gage height, 8.40 ft, datum then in use; minimum discharge, 41 ft<sup>3</sup>/s Nov 16, 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370	1350	1410	e921	e888	e1280	1110	1180	1320	1450	1380	1180
2	1390	1340	1410	e894	e874	e1280	1070	1400	1310	1450	1350	1180
3	1420	1330	1400	e881	e894	e1280	1030	1510	1350	1450	1330	1190
4	1470	1360	1400	e903	e886	1250	1030	1450	1340	1480	1300	1200
5	1460	1380	1380	e905	e892	1240	1030	1360	1380	1500	1280	1210
6	1440	1420	1360	e899	e985	1220	1030	1310	1430	1480	1320	1210
7	1440	1410	1360	e879	e1030	1220	1060	1300	1510	1470	1330	1200
8	1420	1430	e1380	e881	e1010	1160	1130	1330	1510	1450	1320	1180
9	1400	1420	e1220	e910	e1020	1210	1080	1370	1470	1470	1320	1180
10	1380	1390	e1170	e933	e953	1240	912	1390	1420	1510	1350	1180
11	1350	1400	e1180	e927	e959	1260	892	1430	1380	1520	1370	1180
12	1340	1400	e1180	e900	e944	1250	927	1460	1330	1510	1370	1160
13	1340	1390	e1230	e880	e950	1260	978	1510	1410	1510	1350	1150
14	1330	1390	e1020	e889	e957	1210	972	1510	1530	1500	1340	1140
15	1320	1390	e984	e821	e949	1180	922	1510	1530	1500	1310	1130
16	1300	1390	e970	e687	e941	1110	880	1510	1470	1480	1300	1130
17	1270	1400	e914	e616	e955	1020	819	1470	1440	1480	1290	1130
18	1300	1430	e860	e617	e947	1020	728	1450	1440	1500	1270	1120
19	1310	1420	e729	e601	e960	1050	691	1450	1420	1530	1250	1120
20	1310	1410	e574	e596	e952	1060	710	1440	1370	1550	1240	1140
21	1310	1400	e548	e563	e937	1090	794	1400	1300	1540	1220	1140
22	1310	1390	e670	e535	e951	1150	861	1350	1250	1530	1210	1080
23	1340	1390	e880	e524	e950	1200	854	1370	1340	1490	1200	981
24	1340	1400	e1080	e519	e949	1220	839	1400	1430	1450	1190	965
25	1350	1390	e1200	e519	e949	1200	859	1490	1410	1420	1180	942
26	1360	1380	e1200	e514	e1110	1290	872	1650	1450	1400	1170	905
27	1350	1370	e1190	e585	e1200	1290	892	1670	1500	1390	1170	685
28	1340	1380	e1070	e661	e1280	1150	892	1500	1500	1380	1170	486
29	1330	1420	e931	e768	---	1070	948	1310	1480	1380	1160	506
30	1360	1420	e925	e869	---	1080	1030	1310	1460	1390	1180	505
31	1350	---	e919	e876	---	1110	---	1380	---	1390	1200	---
TOTAL	42100	41790	33744	23473	27272	36650	27842	44170	42480	45550	39420	31505
MEAN	1358	1393	1089	757	974	1182	928	1425	1416	1469	1272	1050
MAX	1470	1430	1410	933	1280	1290	1130	1670	1530	1550	1380	1210
MIN	1270	1330	548	514	874	1020	691	1180	1250	1380	1160	486
AC-FT	83510	82890	66930	46560	54090	72700	55220	87610	84260	90350	78190	62490

CAL YR 1998 TOTAL 443411 MEAN 1215 MAX 1700 MIN 360 AC-FT 879500  
WTR YR 1999 TOTAL 435996 MEAN 1195 MAX 1670 MIN 486 AC-FT 864800

e Estimated

## BEAR RIVER BASIN

## 10079000 SODA POINT RESERVOIR AT ALEXANDER, ID

LOCATION.--Lat 42°38'41", long 111°42'44", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 17, T. 9 S., R. 41 E., Caribou County, Hydrologic Unit 16010202, 0.5 mi Southeast of Alexander, 5 mi downstream from Soda Creek.

DRAINAGE AREA.--4,099 mi<sup>2</sup>.

GAGE.--Elevation of gage is 5,600 ft, Utah Power and Light Co. datum.

PERIOD OF RECORD.--October 1924 to current year. Prior to 1986, published in reports of the Bear River Commission.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,610 acre-ft Feb 10, elevation, 5,718.99 ft; minimum contents, 10,550 acre-ft Apr 19-20, elevation, 5,715.64 ft.

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13020	13110	12690	13320	12700	11590	11120	11410	12260	13010	13150	13070
2	12940	13100	12700	13240	13000	11510	11300	12220	12240	13010	13140	13130
3	12880	13070	12700	13070	13020	11610	11230	12650	12130	12980	13120	13170
4	12870	13060	12720	13040	13230	11610	11120	12760	12130	13040	13040	13220
5	12860	13060	12710	13060	13220	11590	10980	12660	12130	13160	12950	13290
6	12950	13180	12640	13150	13280	11470	11030	12450	12240	13280	12850	13370
7	12940	13240	12480	13210	13440	11380	11120	12130	12520	13220	12810	13410
8	12930	13310	12370	13280	13510	11260	11320	11890	12850	13180	12800	13410
9	12780	13370	12410	13340	13580	11470	11380	11700	13120	13100	12770	13370
10	12620	13230	12190	13430	13610	11820	11140	11530	13270	13100	12740	13350
11	12410	13140	12470	13470	13480	11760	11090	11440	13320	13180	13020	13320
12	12210	13040	12950	13460	13070	11670	11020	11350	13230	13230	13120	13270
13	11910	12980	13170	13450	12670	11550	11030	11350	12950	13200	13140	13190
14	11960	12890	12940	13370	12420	11420	11100	11460	12980	13200	13110	13110
15	12690	12780	12870	13420	12590	11200	11130	11550	13090	13160	13070	13040
16	12630	12740	12570	13300	12500	11180	11050	11610	13120	13080	13010	13120
17	12540	12690	12620	13040	12560	10890	10920	11610	13000	13040	12910	13120
18	12510	12640	12770	12810	12610	10900	10650	11530	12880	13040	12900	12970
19	12560	12660	12560	12810	12640	10960	10550	11400	12820	13060	12880	12980
20	12630	12640	11790	12840	12590	11100	10550	11280	12790	13190	12830	12980
21	12700	12580	11180	12830	12560	10960	10690	11320	12590	13270	12810	12960
22	12740	12580	11060	12760	12500	10920	10960	11230	12560	13330	12740	12960
23	12850	12560	11260	12760	12210	10920	11020	11070	12540	13440	12610	12740
24	12810	12530	11530	12660	12250	11140	11050	10970	12950	13470	12590	12580
25	12630	12520	11830	12560	12500	11260	11060	11060	12940	13410	12590	12240
26	12470	12490	12320	12360	12640	11420	11120	11430	12850	13320	12590	11970
27	12340	12510	12840	12590	12100	11520	11210	11530	12900	13290	12580	11600
28	13020	12480	13300	12560	11740	11450	11180	12360	12970	13240	12580	10750
29	13150	12560	13350	12340	---	11090	11180	12380	13020	13150	12560	10850
30	13130	12670	13470	12340	---	10680	11310	12220	13040	13150	12540	11130
31	13110	---	13340	12450	---	10860	---	12260	---	13170	12640	---
MAX	13150	13370	13470	13470	13610	11820	11380	12760	13320	13470	13150	13410
MIN	11910	12480	11060	12340	11740	10680	10550	10970	12130	12980	12540	10750
(#)	5718.49	5718.03	5718.72	5717.80	5717.03	5716.02	5716.54	5717.60	5718.41	5718.55	5718.00	5716.33
(*)	-50	-440	+670	-890	-710	-880	+450	+950	+780	+130	-530	-1510

CAL YR 1998.....(\*) +990

WTR YR 1999.....(\*) -2030

(#) Elevation, in feet, at end of month.

(\*) Change in coontents, in acre-feet.

BEAR RIVER BASIN

201

10079500 BEAR RIVER AT ALEXANDER, ID

LOCATION.--Lat 42°38'42", long 111°41'51", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 17, T. 9 S., R. 41 E., Caribou County, Hydrologic Unit 16010202, on right bank 600 ft downstream from Soda hydroelectric plant of Utah Power & Light Co., 0.5 mi southeast of Alexander, and 5 mi downstream from Soda Creek.

DRAINAGE AREA.--4,099 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1911 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,650 ft above sea level from topographic map.

REMARKS.--Records fair. Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--87 years, 810 ft<sup>3</sup>/s, 586,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,740 ft<sup>3</sup>/s Mar 31, 1911; maximum gage height, 15.95 ft Dec 11, 1919 (backwater from ice); minimum, 14 ft<sup>3</sup>/s Oct 22, 1990.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1470	1450	1610	980	715	1510	1170	1020	1480	1460	1430	1250
2	1470	1450	1610	1000	790	1450	1220	1190	1540	1450	1410	1240
3	1460	1450	1610	954	851	1450	1250	1610	1530	1430	1410	1260
4	1460	1460	1610	927	933	1460	1240	1630	1510	1430	1410	1260
5	1460	1460	1610	928	979	1460	1170	1630	1500	1420	1410	1260
6	1470	1480	1620	928	978	1400	1140	1620	1500	1480	1410	1260
7	1480	1500	1520	929	1010	1390	1140	1600	1500	1500	1410	1280
8	1530	1500	1480	930	1090	1270	1250	1620	1500	1480	1410	1290
9	1560	1600	1420	922	1110	1250	1310	1620	1510	1470	1400	1290
10	1550	1610	1190	959	1110	1380	1130	1610	1510	1480	1310	1310
11	1540	1590	1090	998	1110	1500	1070	1640	1550	1480	1360	1310
12	1600	1590	1180	1010	1100	1500	1070	1650	1630	1510	1420	1300
13	1600	1600	1330	1010	1100	1500	1070	1640	1630	1520	1420	1290
14	641	1560	1270	907	932	1480	1070	1610	1630	1530	1430	1290
15	1430	1560	1200	828	1110	1420	1070	1640	1640	1530	1420	1150
16	1410	1590	1050	829	1080	1390	1070	1660	1650	1510	1420	1290
17	1360	1560	977	778	1090	1260	1060	1650	1680	1500	1380	1230
18	1330	1600	1010	721	1090	1190	933	1640	1630	1500	1360	1210
19	1330	1560	988	698	1100	1190	817	1640	1550	1510	1360	1240
20	1340	1560	852	698	1090	1300	791	1560	1520	1550	1350	1250
21	1340	1590	639	699	1100	1370	791	1540	1390	1560	1350	1250
22	1350	1600	580	700	1090	1370	906	1540	1300	1510	1350	1250
23	1430	1560	580	700	1090	1370	960	1540	1180	1500	1300	1160
24	1520	1560	581	701	1100	1370	949	1520	1430	1510	1270	1210
25	1560	1560	581	670	1110	1360	947	1500	1510	1520	1260	1200
26	1550	1540	582	558	1360	1430	946	1520	1500	1480	1250	1200
27	1140	1520	635	625	1520	1480	991	1530	1490	1470	1260	1190
28	1220	1540	772	688	1510	1480	1020	1540	1490	1470	1250	748
29	1450	1540	850	689	---	1480	1020	1540	1480	1450	1250	473
30	1450	1590	950	689	---	1270	1020	1540	1480	1450	1240	481
31	1450	---	979	690	---	1170	---	1560	---	1460	988	---
TOTAL	43951	46330	33956	25343	30248	42900	31591	48350	45440	46120	41698	35422
MEAN	1418	1544	1095	818	1080	1384	1053	1560	1515	1488	1345	1181
MAX	1600	1610	1620	1010	1520	1510	1310	1660	1680	1560	1430	1310
MIN	641	1450	580	558	715	1170	791	1020	1180	1420	988	473
AC-FT	87180	91900	67350	50270	60000	85090	62660	95900	90130	91480	82710	70260

CAL YR 1998 TOTAL 481139 MEAN 1318 MAX 1920 MIN 580 AC-FT 954300  
WTR YR 1999 TOTAL 471349 MEAN 1291 MAX 1680 MIN 473 AC-FT 934900



## BEAR RIVER BASIN

10080000 BEAR RIVER BELOW GRACE DAM, NEAR GRACE, ID

LOCATION.--Lat 42°35'11", long 111°43'51", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 1, T. 10 S., R. 40 E., Caribou County, Hydrologic Unit 16010202, on left bank 1,000 ft downstream from dam, and 1 mi north of Grace.

DRAINAGE AREA.--4110 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1922 to November 1923 (fragmentary); March 1924 to current year. 1945 to 1950 published in reports on Bear River Hydrometric Data, water year 1946 published in WSP 1060. Prior to 1986, not published, records available from Utah Power & Light Co.

GAGE.--Water-stage recorder. Elevation of gage is 5,550 ft above sea level, from topographic map.

REMARKS.--Records fair.

COOPERATION.--Records collected by Utah Power & Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,390 ft<sup>3</sup>/s Jun 10, 1986, gage height, 6.77 ft; minimum, 0.74 ft<sup>3</sup>/s Feb 2, 1986.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	653	344	446	6.9	17	432	124	1040	415	62	83	70
2	477	350	446	14	14	383	174	773	430	69	59	54
3	357	341	446	16	9.3	373	206	559	418	71	61	67
4	349	342	451	19	11	390	213	577	406	63	66	47
5	345	343	457	20	9.3	396	137	569	406	61	67	51
6	394	364	469	19	8.9	354	104	561	406	63	132	51
7	406	381	418	18	9.9	330	101	528	411	41	67	55
8	475	387	380	18	186	261	185	551	422	41	62	57
9	499	443	339	17	478	193	252	549	416	44	64	62
10	499	468	79	17	432	293	66	548	405	45	81	99
11	493	451	12	16	456	410	33	565	427	49	77	107
12	505	457	55	21	272	411	18	577	484	99	85	84
13	511	457	234	23	35	411	16	575	484	98	106	66
14	44	457	199	14	34	401	15	548	472	142	130	68
15	349	463	124	9.9	39	364	16	572	454	168	113	47
16	329	457	43	9.9	22	329	16	590	437	136	109	47
17	286	457	12	10	13	196	17	588	420	98	99	47
18	264	457	9.4	11	22	128	12	586	356	100	78	42
19	268	451	13	10	27	131	277	585	283	103	70	49
20	273	451	9.9	10	25	220	757	532	292	118	86	60
21	268	451	12	10	26	317	764	512	111	138	85	56
22	264	451	12	9.7	25	313	844	499	37	115	80	55
23	324	446	14	10	24	314	904	497	54	99	74	46
24	418	446	14	9.8	30	314	904	472	47	94	69	45
25	451	446	15	9.8	52	323	910	464	50	93	63	44
26	440	429	17	9.9	204	373	909	446	49	69	56	47
27	91	412	17	11	442	416	940	450	57	61	57	52
28	44	412	19	9.9	437	415	1000	443	71	65	59	24
29	344	418	19	14	---	414	1030	441	16	63	58	10
30	339	434	18	13	---	215	1030	446	22	62	58	13
31	344	---	16	12	---	124	---	444	---	84	61	---
TOTAL	11103	12666	4815.3	418.8	3360.4	9944	11974	17087	8758	2614	2415	1622
MEAN	358	422	155	13.5	120	321	399	551	292	84.3	77.9	54.1
MAX	653	468	469	23	478	432	1030	1040	484	168	132	107
MIN	44	341	9.4	6.9	8.9	124	12	441	16	41	56	10
AC-FT	22020	25120	9550	831	6670	19720	23750	33890	17370	5180	4790	3220

CAL YR 1998 TOTAL 81745.02 MEAN 224 MAX 1010 MIN 2.4 AC-FT 162100  
WTR YR 1999 TOTAL 86777.5 MEAN 238 MAX 1040 MIN 6.9 AC-FT 172100

## BEAR RIVER BASIN

203

## 10086000 ONEIDA NARROWS RESERVOIR AT ONEIDA, ID

LOCATION.--Lat 42°16'34", long 111°44'56", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 23, T. 13 S, R. 40 E., Franklin County, Hydrologic Unit 16010202, 6 mi south of Cleveland.

DRAINAGE AREA.--4,455 mi<sup>2</sup>.

REVISED RECORDS.--WRD UT-74-1, WDR UT-89-1: Drainage area; WDR UT-88-1: 1987.

PERIOD OF RECORD.--October 1914 to current year. Prior to 1986, published in reports of Bear River Commission.

GAGE.--Elevation of gage is 4,800 ft, Utah Power and Light Co. datum.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10480	10400	10640	10060	10310	10310	10540	10480	10540	10740	10320	10250
2	10380	10570	10640	10400	10280	10380	10500	10150	10700	10790	10470	10450
3	10620	10700	10700	10300	10430	10280	10500	10600	10570	10470	10650	10620
4	10480	10470	10570	10260	10260	10260	10540	10540	10260	10570	10640	10480
5	10300	10600	10650	10300	10330	10420	10540	10550	10220	10400	10690	10550
6	9153	10580	10620	10310	10450	10580	10280	10480	10160	10450	10670	10720
7	10080	10620	10750	10310	10570	10010	10280	10500	10400	10470	10430	10570
8	10860	10600	9997	10280	10600	10470	10010	10580	10380	10450	10670	10540
9	10570	10600	10330	10400	10180	10180	10670	10580	10350	10380	10600	10770
10	10570	10650	10350	10280	10430	10180	10370	10570	10260	10470	10580	10520
11	10330	10620	10350	10070	10370	10330	10370	10540	10280	10330	10470	10500
12	9935	10620	10350	10200	10080	10330	10570	10540	10310	10720	10640	10580
13	8961	10580	9444	10280	10500	10180	10670	10600	10400	10480	10550	10540
14	10120	10580	10400	10380	10130	10220	10550	10500	10470	10470	10450	10550
15	10540	10670	10060	10250	10200	9784	10580	10700	10500	10690	10370	10520
16	10370	10600	10220	10150	10250	9866	10600	10550	10620	10480	10470	10480
17	10750	10550	10080	10280	10380	9883	10620	10580	10620	10620	10450	10480
18	10540	10550	10200	10200	10250	9966	10380	10670	10540	10580	10430	10640
19	10480	10570	10250	10330	10310	10160	10380	10520	10460	10670	10400	10350
20	10380	10550	10150	10310	10430	10420	10280	10690	10230	10600	10430	10580
21	10690	10520	10320	10220	10050	10580	10400	10580	10220	10640	10420	10700
22	10500	10480	10320	10220	10130	10010	10520	10470	10060	10540	10350	10520
23	10320	10470	10250	10310	10180	10030	10550	10640	10080	10400	10470	10700
24	9935	10500	10310	10350	10400	10500	10470	10540	10030	10310	10470	10350
25	9702	10580	10310	10300	10430	10580	10540	10500	10300	10370	10450	10540
26	9980	10540	10300	10300	10250	10640	10430	10500	10420	10640	10470	10540
27	9980	10520	10330	10300	10480	10650	10520	10310	10420	10520	10500	10420
28	10250	10600	10310	9475	10400	10580	10470	10100	10300	10480	10550	10500
29	10470	10600	10430	10080	---	10640	10570	9949	10570	10650	10430	10370
30	10380	10570	10280	10210	---	10570	10670	10180	10470	10430	10550	10010
31	10330	---	10430	10330	---	10540	---	10690	---	10400	10620	---
MAX	10860	10700	10750	10400	10600	10650	10670	10700	10700	10790	10690	10770
MIN	8961	10400	9444	9475	10050	9784	10010	9949	10030	10310	10320	10010
(#)	4881.35	4882.02	4881.64	4881.35	4881.54	4881.93	4882.31	4882.36	4881.74	4881.64	4881.98	4880.44
(*)	-210	+240	-140	-100	+70	+140	+130	+20	-220	-70	+220	-610

CAL YR 1998.....(\*) +83

WTR YR 1999.....(\*) -530

(#) Elevation, in feet, at end of month.

(\*) Change in contents, in acre-feet.



## 10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE

LOCATION.--Lat 42°00'47", long 111°55'14", in NE<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 29, T. 16 S., R. 39 E., Franklin County, Idaho, Hydrologic Unit 16010202, on left bank 1,050 ft downstream from inlet canal to Cub River pumps, 1.1 mi downstream from Weston Creek, 1.8 mi upstream from Idaho-Utah State line, and 3.5 mi southeast of Weston.

DRAINAGE AREA.--4,881 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,420 ft above sea level, from topographic map. Prior to Sep 10, 1982 at datum 2.00 ft higher. Sep 10, 1982 to Sep 30, 1985 at datum 10.0 ft lower.

REMARKS.--Records fair except for estimated daily discharges which are poor. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft<sup>3</sup>/s Jun 14, 1984, gage height, 9.20 ft; minimum daily discharge, 48 ft<sup>3</sup>/s May 29, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,640 ft<sup>3</sup>/s, May 4, gage height, 15.41 ft; minimum daily discharge, 105 ft<sup>3</sup>/s, Oct 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	e639	e1880	1550	1040	1950	1560	2100	2470	947	1140	1210
2	921	e895	e1870	1130	993	1850	1560	2140	e2400	1040	1150	1070
3	470	e1050	e1890	1350	1000	1870	1570	2000	e2320	1200	975	1090
4	395	e820	1930	1280	1250	1810	1590	e2580	e2360	929	1100	1280
5	704	e838	1800	1240	1200	1690	1580	e2450	e2250	1080	1040	1220
6	958	e714	1850	1210	1200	1680	1690	2390	e2210	924	1070	1180
7	433	e1230	1780	1250	1320	2060	1530	2290	e2240	981	1180	1330
8	684	e1300	2080	1250	1670	1490	1710	2190	e2320	957	948	1250
9	791	e1640	1660	1170	1730	1810	1220	2270	e2360	940	1050	1120
10	675	e1740	1750	1280	1660	1660	1810	2220	e2460	861	1010	1410
11	720	e1700	1710	1180	1790	1600	1540	2190	e2390	974	1070	1300
12	788	e1760	1700	1250	1540	1810	1320	2170	e2350	716	989	1250
13	980	e1750	1570	1260	1150	1880	1380	2200	e2320	1140	1150	1290
14	387	e1740	1030	1250	e1190	1760	1590	2300	e2310	960	1190	1230
15	e150	e1740	1760	1290	e1220	2040	1450	2120	e2230	938	1200	1250
16	e105	e1730	1420	1290	e1290	1670	1470	2350	e2050	1170	1100	1170
17	e517	e1780	1500	1130	e1370	1690	1480	2220	e1820	1040	1110	1140
18	e635	e1800	1250	1160	e1390	1580	1670	2140	e1940	1100	1090	1170
19	e753	e1810	1210	1080	1470	1400	1440	2290	2010	1010	1040	1340
20	e801	e1830	1250	1170	1600	1400	1390	2140	2020	1100	991	1240
21	e828	e1780	1650	1240	1490	1570	1320	2310	1860	1060	1050	1150
22	e918	e1830	1600	1070	1410	2180	1380	2300	1700	1150	1090	1370
23	e587	e1800	e1760	1000	1410	1850	1430	2130	1400	1130	1020	1210
24	e993	e1810	e1900	1040	1330	1520	1550	2260	1210	1080	990	1420
25	e1130	e1830	e2130	1090	1490	1850	1510	2280	1120	1020	1010	1120
26	e1120	e1820	2230	1090	1600	1890	1650	2320	1140	893	985	1220
27	e855	e1810	2100	1090	1520	1860	1590	2350	1040	1100	981	1270
28	e796	e1770	2050	1060	1850	1870	1710	2350	1430	984	1040	1170
29	e689	e1860	1980	625	---	1790	1780	2310	1010	949	1120	1030
30	e618	e1840	1720	804	---	1840	1940	2150	1180	1300	980	810
31	e1180	---	1300	968	---	1680	---	2210	---	1100	1200	---
TOTAL	22701	46656	53310	35847	39173	54600	46410	69720	57920	31773	33059	36310
MEAN	732	1555	1720	1156	1399	1761	1547	2249	1931	1025	1066	1210
MAX	1180	1860	2230	1550	1850	2180	1940	2580	2470	1300	1200	1420
MIN	105	639	1030	625	993	1400	1220	2000	1010	716	948	810
AC-FT	45030	92540	105700	71100	77700	108300	92050	138300	114900	63020	65570	72020

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1999, BY WATER YEAR (WY)

	MEAN	984	1044	1065	1046	1057	1263	1503	1652	1476	1076	979	1001
MAX	2850	2983	2552	1904	2556	3264	3594	3968	4263	3442	2416	2545	
(WY)	1984	1984	1985	1984	1986	1986	1986	1986	1986	1983	1984	1986	
MIN	250	298	310	412	351	351	403	333	333	393	461	192	
(WY)	1993	1993	1982	1993	1993	1991	1992	1988	1989	1995	1993	1992	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1971 - 1999
ANNUAL TOTAL	551554	527479	
ANNUAL MEAN	1511	1445	1179
HIGHEST ANNUAL MEAN			2728
LOWEST ANNUAL MEAN			505
HIGHEST DAILY MEAN	2610	2580	4830
LOWEST DAILY MEAN	105	105	48
ANNUAL SEVEN-DAY MINIMUM	478	478	69
ANNUAL RUNOFF (AC-FT)	1094000	1046000	854100
10 PERCENT EXCEEDS	2220	2190	2300
50 PERCENT EXCEEDS	1570	1340	965
90 PERCENT EXCEEDS	842	927	334

e Estimated

## BEAR RIVER BASIN

10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1971 to June 1973, November 1990 to September 1991, October 1993 to September 1994, April to September 1996, April to October 1999 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 23 to September 16, 1996, May 1 to June 18, 1999 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.1 °C, July 31, August 15, 1996.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 20.4 °C, June 18.

## WATER-QUALITY DATA, APRIL 1999 to OCTOBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD ARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, KF AGAR (COLS. PER 100 ML) (31673)
APR 20...	1325	1230	741	8.4	10.0	9.5	19	8.8	92	71	60
MAY 24...	1335	2400	605	8.4	23.0	14.2	75	8.2	95	120	63
JUN 23...	1302	1250	600	8.4	21.9	17.7	15	8.4	104	85	32
AUG 09...	1055	1380	732	8.3	25.9	19.9	9.3	7.9	101	180	140
SEP 21...	1220	907	773	8.4	14.2	14.6	4.7	8.3	96	81	100
OCT 06...	0916	1210	800	8.3	9.5	10.5	2.4	7.5	81	57	150
DATE		HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS HCO3 (00440)	UNFLTRD CARB FET FIELD MG/L AS CO3 (00445)		
SEP 21...	300	55	39	45	24	6.5	320	3			
DATE		ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)		
SEP 21...	265	62	55	.23	14	436	.59	1070			
DATE		NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDIMENT, DISCHARGE, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)		
APR 20...	<.010	.301	.050	.61	.073	.010	198	658			
MAY 24...	<.010	.248	.036	.62	.125	.010	76	492			
JUN 23...	<.010	.273	.025	.49	.110	.023	53	179			
AUG 09...	.010	.242	<.020	.57	.130	.021	109	406			
SEP 21...	<.010	.306	<.020	.41	e.041	<.010	35	86			
OCT 06...	<.010	.295	<.020	.37	e.041	<.010	22	72			

e Positive detection, but below stated detection limits.

## BEAR RIVER BASIN

10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
MAY			JUNE			
1	12.8	9.3	11.0	16.9	13.0	14.9
2	12.5	9.6	10.5	16.3	13.3	14.3
3	10.5	9.3	9.8	16.9	13.1	14.9
4	10.8	8.7	9.7	15.8	12.7	13.8
5	11.1	8.2	9.5	13.6	12.7	13.0
6	12.5	8.0	10.2	13.3	11.9	12.7
7	13.3	8.8	11.0	15.5	11.7	13.3
8	12.8	9.3	10.7	15.3	11.7	13.4
9	12.2	9.7	10.9	15.8	11.6	13.6
10	10.7	8.2	9.4	15.5	11.9	13.8
11	12.2	7.9	10.0	16.7	11.9	14.3
12	11.9	8.8	10.5	17.4	12.5	15.0
13	12.1	9.7	10.9	18.3	13.1	15.8
14	12.4	9.3	10.9	18.5	14.1	16.4
15	11.9	9.3	10.3	19.5	14.9	17.3
16	12.5	8.8	10.5	19.5	15.5	17.7
17	13.3	9.0	11.1	18.8	15.8	17.3
18	14.5	10.2	12.3	20.4	16.0	18.0
19	14.2	10.5	12.7	---	---	---
20	15.8	11.0	13.3	---	---	---
21	16.1	12.1	14.2	---	---	---
22	17.2	12.4	14.6	---	---	---
23	18.0	13.3	15.7	---	---	---
24	17.7	13.9	15.9	---	---	---
25	18.0	14.2	16.3	---	---	---
26	17.9	14.5	16.3	---	---	---
27	19.3	14.5	16.8	---	---	---
28	19.5	14.9	17.3	---	---	---
29	18.8	15.6	17.3	---	---	---
30	17.5	14.9	16.0	---	---	---
31	15.0	13.8	14.4	---	---	---
MONTH	19.5	7.9	12.6	---	---	---

## BEAR RIVER BASIN

10102200 CUB RIVER NEAR RICHMOND, UT

LOCATION.--Lat 41°56'37", long 111°50'14", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 21, T. 14 S., R. 1E., Cache County, on left bank 10 ft downstream from highway bridge, 2 miles northwest of Richmond, and 10 miles upstream from mouth.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1962 to September 1963, October 1, 1998 to September 30, 1999.

GAGE.--Water-stage recorder. Elevation of gage is 4,440 ft above sea level, (from topographic map). Prior to Oct 1, 1998, water stage recorder at site approx. 2 miles downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded discharge, 971 ft<sup>3</sup>/s May 27 and 31, 1999, gage height 8.77 ft; minimum daily, 5.0 ft<sup>3</sup>/s Aug 31, 1963, site and gage then in use.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 971 ft<sup>3</sup>/s, May 27 and 31; minimum daily discharge, 34 ft<sup>3</sup>/s, Aug 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	45	47	e67	43	137	177	671	863	154	66	57
2	97	46	50	e63	36	147	168	643	779	139	51	50
3	106	47	50	e52	44	134	155	692	770	117	50	49
4	115	48	52	e47	43	128	151	775	767	94	49	62
5	100	44	e50	e53	48	118	149	638	792	79	49	71
6	100	37	e46	e54	49	113	139	532	770	66	45	75
7	106	38	e46	e56	e81	111	133	465	799	e50	46	86
8	98	42	e46	e55	158	103	176	441	835	e45	42	84
9	91	44	e44	e56	119	105	180	435	822	36	38	74
10	88	41	e42	e57	173	116	165	415	786	43	34	76
11	78	40	e42	e60	128	113	154	381	752	47	43	74
12	79	39	e44	e61	107	113	151	e352	711	47	59	70
13	75	39	e45	e62	106	108	185	e365	677	42	53	71
14	75	40	e45	e58	93	109	e229	373	695	36	54	72
15	78	39	e45	e59	95	116	234	389	735	43	46	72
16	79	39	e44	e60	92	139	223	398	757	48	45	70
17	75	40	e44	e58	103	170	227	370	759	48	44	66
18	72	40	e44	e59	114	177	260	356	726	55	43	67
19	64	39	e43	e61	103	203	305	376	689	52	44	70
20	64	38	e42	e65	91	236	372	423	649	46	40	86
21	68	40	e41	e70	90	307	426	486	615	42	36	89
22	63	40	e40	64	85	337	395	557	591	46	47	87
23	57	39	e41	58	85	302	335	666	524	51	48	83
24	57	39	e43	56	100	296	282	e850	450	48	44	83
25	54	38	e47	51	132	312	263	e900	405	48	39	82
26	48	38	e50	51	135	339	305	e949	353	49	43	80
27	46	39	e65	51	118	309	341	925	309	46	38	79
28	46	42	e62	39	116	252	400	886	264	47	35	76
29	49	47	e64	35	---	210	490	894	217	54	36	75
30	54	48	e67	39	---	189	570	934	186	74	40	69
31	51	---	e68	39	---	182	---	941	---	72	55	---
TOTAL	2324	1235	1499	1716	2687	5731	7740	18478	19047	1864	1402	2205
MEAN	75.0	41.2	48.4	55.4	96.0	185	258	596	635	60.1	45.2	73.5
MAX	115	48	68	70	173	339	570	949	863	154	66	89
MIN	46	37	40	35	36	103	133	352	186	36	34	49
AC-FT	4610	2450	2970	3400	5330	11370	15350	36650	37780	3700	2780	4370

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962-63, 1999, BY WATER YEAR (WY)

	MEAN	57.7	40.3	43.0	43.7	89.4	118	195	496	356	36.9	30.7	46.1
MAX	75.0	41.2	48.4	55.4	96.0	185	258	596	635	60.1	45.2	73.5	
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	
MIN	40.4	39.4	37.7	32.1	82.8	50.8	132	396	182	22.5	19.1	30.9	
(WY)	1963	1963	1963	1963	1963	1963	1963	1963	1963	1962	1963	1963	1962

## SUMMARY STATISTICS

## FOR 1999 WATER YEAR

## WATER YEARS 1962-63, 1999

ANNUAL TOTAL	65928		
ANNUAL MEAN	181	138	
HIGHEST ANNUAL MEAN		181	1999
LOWEST ANNUAL MEAN		94.5	1963
HIGHEST DAILY MEAN	949	949	May 26 1999
LOWEST DAILY MEAN	34	5.0	Aug 10 1963
ANNUAL SEVEN-DAY MINIMUM	39	15	Aug 27 1963
ANNUAL RUNOFF (AC-FT)	130800	99660	
10 PERCENT EXCEEDS	578	353	
50 PERCENT EXCEEDS	74	46	
90 PERCENT EXCEEDS	41	24	

e Estimated



## BEAR RIVER BASIN

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10102200 CUB RIVER NEAR RICHMOND, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--1959, 1967-68, October 1, 1998 to September 30, 1999.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1, 1998 to September 30, 1999.

WATER TEMPERATURES: October 1, 1998 to September 30, 1999.

INSTRUMENTATION.--Conductivity/temperature data logger.

REMARKS.--Records good for temperature, fair for conductivity except for estimated values, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 752 microsiemens, Feb 12, 1999; minimum recorded, 255 microsiemens Apr 20, 1999.

WATER TEMPERATURES: Maximum, 24.4°C, Jul 29, 1999; minimum, 0.0°C, on several days in Dec, Jan and Feb, 1999.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 752 microsiemens, Feb 12; minimum recorded, 255 microsiemens, Apr 20.

WATER TEMPERATURE: Maximum, 24.4°C, Jul 29; minimum, 0.0°C, on several days in Dec, Jan, and Feb.

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	417	367	387	476	460	466	545	540	542	---	---	e518
2	381	362	374	478	465	470	541	525	531	---	---	e522
3	376	368	373	478	467	472	526	515	519	---	---	e526
4	388	369	376	483	472	477	520	498	506	---	---	e530
5	390	379	384	487	470	481	499	485	490	---	---	e536
6	387	374	381	497	480	488	511	494	499	---	---	e549
7	385	369	378	510	485	497	506	493	501	---	---	e542
8	388	374	380	512	495	506	511	501	506	---	---	e547
9	389	375	385	521	502	512	510	495	503	---	---	e547
10	393	380	386	520	507	514	517	505	509	---	---	e548
11	390	382	387	532	513	521	525	513	520	---	---	e549
12	398	382	390	544	532	538	524	516	520	---	---	e564
13	405	395	398	539	520	532	516	507	511	---	---	e598
14	409	403	406	538	518	530	515	505	510	---	---	e600
15	408	402	405	545	523	534	515	506	511	---	---	e602
16	419	404	411	541	521	532	513	504	510	---	---	e607
17	420	415	418	539	530	535	513	504	510	---	---	e616
18	425	415	420	544	530	537	513	500	508	---	---	e625
19	422	415	418	547	530	539	500	490	494	---	---	e634
20	434	420	426	540	527	535	513	497	503	---	---	e643
21	436	430	433	550	535	542	---	---	e518	---	---	e652
22	449	433	439	551	537	546	---	---	e525	684	661	676
23	465	449	459	559	548	554	---	---	e522	695	673	685
24	470	458	464	561	543	552	---	---	e510	678	664	671
25	476	464	469	550	535	543	---	---	e500	685	667	677
26	476	465	470	543	530	537	---	---	e480	688	666	677
27	477	467	473	539	530	536	---	---	e485	670	650	662
28	483	473	477	550	538	544	---	---	e495	678	643	660
29	485	471	480	549	542	546	---	---	e505	706	649	679
30	486	471	479	548	543	545	---	---	e510	741	632	678
31	475	459	466	---	---	---	---	---	e514	719	637	671
MONTH	486	362	419	561	460	522	---	---	509	---	---	606

## BEAR RIVER BASIN

10102200 CUB RIVER NEAR RICHMOND, UT--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	674	620	644	604	535	570	377	368	372	304	288	298
2	634	605	621	535	511	520	399	377	387	311	302	305
3	666	599	625	523	517	520	414	396	402	343	310	326
4	616	598	607	524	516	519	429	410	416	351	338	346
5	606	592	599	518	504	512	440	424	429	348	342	345
6	592	578	584	516	499	508	441	432	436	348	338	343
7	---	---	e589	511	502	508	440	422	432	354	336	343
8	---	---	e650	514	493	503	452	383	416	340	332	334
9	702	621	677	503	491	497	397	382	389	335	330	333
10	632	595	614	502	488	496	394	385	389	339	332	337
11	723	625	676	507	491	497	392	381	385	353	339	347
12	752	692	713	508	494	502	391	372	379	---	---	e351
13	725	656	700	506	485	496	374	330	345	---	---	e350
14	670	623	646	497	476	487	330	302	315	349	335	346
15	623	599	611	485	454	467	307	293	299	362	343	352
16	612	598	603	455	414	428	310	296	302	365	349	359
17	625	604	612	414	378	396	308	292	299	358	349	354
18	676	617	646	410	393	399	302	274	283	351	338	344
19	674	663	667	398	349	363	284	260	271	340	323	330
20	694	663	676	349	316	324	292	255	274	324	309	317
21	698	678	685	323	272	289	292	276	282	314	304	311
22	690	669	681	318	271	295	312	291	302	307	300	304
23	687	675	681	317	298	307	325	312	319	305	300	303
24	707	687	695	319	291	304	343	324	332	---	---	e300
25	714	650	694	317	293	302	346	328	335	---	---	e297
26	661	637	645	310	281	293	333	316	320	---	---	e294
27	637	620	630	305	296	300	316	292	302	296	290	293
28	628	584	608	338	303	318	293	284	289	292	289	291
29	---	---	---	354	338	344	288	278	284	291	286	288
30	---	---	---	365	353	357	290	267	285	290	286	288
31	---	---	---	370	361	364	---	---	---	288	284	286
MONTH	---	---	646	604	271	419	452	255	342	---	---	323
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	292	286	289	378	356	368	513	481	500	462	448	454
2	300	292	298	389	367	377	520	502	507	458	435	447
3	296	291	294	403	389	398	521	508	515	453	427	439
4	297	291	294	422	403	412	518	502	510	469	421	435
5	311	292	301	430	414	422	507	488	499	431	400	410
6	322	311	315	441	429	435	513	499	505	400	378	394
7	327	317	322	---	---	e450	519	503	512	378	356	368
8	317	297	308	486	453	461	526	509	518	369	356	363
9	297	290	293	490	474	482	528	507	519	365	354	360
10	297	287	293	498	488	492	531	501	518	366	354	360
11	295	288	292	504	480	492	531	506	518	363	347	358
12	296	284	291	495	476	485	533	510	521	353	341	349
13	289	281	286	499	461	484	523	500	508	348	338	345
14	285	273	281	483	469	476	524	513	519	346	336	342
15	280	271	276	486	458	477	519	495	508	343	332	338
16	279	270	274	495	483	489	508	497	503	339	326	335
17	281	272	277	512	487	496	502	496	498	335	314	326
18	286	279	283	513	501	505	506	500	503	323	313	318
19	288	281	285	507	495	499	514	506	510	327	311	320
20	292	286	289	514	495	503	519	506	514	323	305	314
21	298	290	295	514	485	497	511	499	507	321	310	316
22	300	294	297	499	486	492	505	498	503	328	315	321
23	305	298	302	504	494	499	500	486	493	332	320	326
24	315	300	309	504	487	494	490	485	488	335	323	329
25	320	309	315	493	482	488	490	462	484	336	325	331
26	322	311	318	507	480	491	497	473	482	337	324	330
27	333	314	325	492	482	485	498	475	488	339	327	334
28	344	326	334	495	478	485	501	481	492	350	337	344
29	348	339	343	484	464	480	486	458	474	352	342	347
30	358	346	352	490	461	478	467	448	461	358	345	353
31	---	---	---	506	486	499	487	451	467	---	---	---
MONTH	358	270	301	---	---	471	533	448	501	469	305	357

e Estimated

## 10102200 CUB RIVER NEAR RICHMOND, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.2	14.2	15.3	8.0	6.6	7.3	6.9	5.9	6.4	---	---	---
2	15.3	13.1	14.1	8.7	6.8	7.6	7.2	5.4	6.1	---	---	---
3	14.1	12.2	12.9	9.4	6.9	7.7	7.0	5.3	5.9	---	---	---
4	12.3	10.0	11.3	7.7	5.6	6.7	5.5	3.1	4.4	---	---	---
5	11.0	8.4	9.6	8.1	6.0	6.9	3.1	.6	1.9	---	---	---
6	11.7	8.3	9.8	6.9	6.0	6.5	2.4	.2	1.1	---	---	---
7	12.6	9.2	10.7	7.5	5.4	6.3	2.6	.3	1.1	---	---	---
8	13.0	9.8	11.2	6.9	5.4	6.0	2.3	.4	1.4	---	---	---
9	12.4	9.8	11.0	6.0	4.8	5.3	2.2	.2	1.0	---	---	---
10	11.7	9.5	10.5	6.1	4.3	4.8	1.6	.0	.5	---	---	---
11	11.2	8.4	9.7	5.9	3.9	4.8	1.8	.0	.7	---	---	---
12	11.3	8.2	9.6	6.5	4.6	5.4	2.4	.4	1.1	---	---	---
13	12.0	9.1	10.4	6.7	4.2	5.3	2.1	.2	.9	---	---	---
14	12.1	9.4	10.7	7.0	4.1	5.3	2.3	.3	1.0	---	---	---
15	10.6	9.3	10.2	6.3	4.5	5.3	2.2	.2	1.0	---	---	---
16	9.3	7.4	8.2	6.4	3.9	5.1	2.2	.1	1.0	---	---	---
17	9.1	6.2	7.6	6.5	4.5	5.4	2.2	.2	1.0	---	---	---
18	9.0	6.5	7.6	6.8	5.2	5.7	2.2	.1	.9	---	---	---
19	9.5	6.5	7.9	6.4	4.4	5.2	1.0	.0	.4	---	---	---
20	9.9	6.8	8.2	5.7	3.5	4.3	.9	.0	.2	---	---	---
21	10.0	7.0	8.3	5.1	4.0	4.6	.7	.0	.3	---	---	---
22	11.1	8.6	9.7	7.2	5.0	5.7	---	---	---	3.9	2.5	3.2
23	11.0	9.4	10.0	7.4	5.4	6.3	---	---	---	3.6	2.6	3.1
24	10.7	8.2	9.4	7.3	5.4	6.4	---	---	---	3.9	2.2	2.8
25	11.6	9.5	10.4	6.3	4.4	5.2	---	---	---	3.5	1.6	2.3
26	12.7	10.1	11.1	5.3	3.5	4.3	---	---	---	2.5	1.4	1.9
27	11.0	9.6	10.4	5.6	3.0	4.2	---	---	---	3.6	1.3	2.2
28	10.6	9.1	9.8	6.1	4.5	5.5	---	---	---	2.8	.3	1.3
29	10.2	8.8	9.4	6.2	5.9	6.0	---	---	---	2.5	.0	.8
30	9.1	7.9	8.7	7.9	5.8	6.6	---	---	---	2.3	.0	.8
31	9.5	6.8	8.0	---	---	---	---	---	---	2.3	.1	1.1
MONTH	16.2	6.2	10.1	9.4	3.0	5.7	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.7	.6	1.8	7.1	5.3	6.3	6.5	4.0	5.2	11.0	7.0	8.9
2	2.2	.1	1.2	6.0	3.7	5.0	7.6	4.5	5.8	10.3	8.2	8.9
3	4.2	1.2	2.3	5.3	4.1	4.6	5.9	4.6	5.5	8.2	7.2	7.7
4	3.0	1.2	2.0	4.8	3.5	4.2	7.1	3.2	5.2	7.6	6.0	6.9
5	3.7	1.1	2.2	5.6	2.5	3.9	6.8	5.4	6.1	8.1	6.0	7.2
6	3.9	1.3	2.4	5.6	2.5	4.0	9.1	5.5	7.1	10.6	6.8	8.7
7	---	---	---	5.6	4.0	4.6	9.9	6.5	8.1	11.9	8.8	10.5
8	---	---	---	5.7	2.7	4.4	8.8	7.4	7.9	11.9	9.0	10.0
9	3.8	1.6	2.6	5.7	3.7	4.7	7.5	4.5	6.3	9.8	7.8	8.8
10	2.0	.5	1.3	6.4	3.0	4.7	7.5	3.2	5.3	8.8	6.2	7.7
11	2.0	.0	.8	5.7	4.2	5.1	9.4	5.3	7.2	10.0	6.1	8.7
12	1.7	.0	.5	6.9	3.2	5.0	11.3	6.7	8.9	10.9	8.5	10.1
13	2.3	.0	.6	8.0	4.2	6.0	11.4	8.6	9.6	---	---	---
14	2.8	.2	1.4	9.0	4.8	6.9	9.5	7.5	8.4	10.7	8.5	9.7
15	3.6	1.1	2.3	9.3	5.9	7.7	8.7	6.7	7.7	10.8	7.3	8.9
16	4.6	2.0	3.3	9.5	6.3	7.7	9.0	6.1	7.5	10.0	6.6	8.0
17	4.7	2.7	3.7	7.8	5.7	6.7	10.2	7.5	8.7	11.7	8.1	9.9
18	3.5	2.1	3.0	8.4	5.6	6.8	10.4	8.6	9.6	13.1	10.4	11.9
19	3.8	1.9	2.9	8.7	6.3	7.4	10.6	9.3	10.1	13.3	11.2	12.2
20	4.0	1.2	2.6	7.7	6.4	7.3	10.6	8.2	9.0	13.2	10.0	11.7
21	3.1	2.2	2.7	8.0	6.5	7.2	8.5	7.0	8.0	13.8	11.0	12.7
22	4.4	1.8	3.1	8.5	5.8	7.3	8.5	6.4	7.1	13.7	10.5	12.4
23	5.7	3.4	4.4	8.1	5.9	7.2	7.4	6.5	6.9	14.2	10.9	12.6
24	7.0	4.1	5.4	8.5	6.5	7.7	9.8	6.2	7.9	---	---	---
25	5.6	3.5	4.6	9.3	7.0	8.3	10.4	7.5	8.7	---	---	---
26	4.5	3.3	3.9	9.5	7.0	7.8	10.4	6.8	8.5	---	---	---
27	5.5	2.2	3.9	7.1	5.5	6.3	10.5	8.8	9.7	---	---	---
28	7.6	4.0	5.8	5.7	4.3	5.1	10.2	8.7	9.5	---	---	---
29	---	---	---	7.2	4.1	5.7	10.3	7.8	9.3	---	---	---
30	---	---	---	7.4	6.1	7.1	10.2	8.0	8.7	---	---	---
31	---	---	---	6.1	4.5	5.5	---	---	---	---	---	---
MONTH	---	---	---	9.5	2.5	6.1	11.4	3.2	7.8	---	---	---

## BEAR RIVER BASIN

10102200 CUB RIVER NEAR RICHMOND, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	17.1	13.2	15.0	23.0	17.5	20.2	19.5	14.9	17.1
2	---	---	---	18.2	14.4	16.1	23.2	18.0	20.5	19.1	15.7	17.0
3	---	---	---	19.8	14.6	17.0	22.2	19.1	20.6	17.5	14.8	16.0
4	---	---	---	20.5	15.1	17.6	23.0	18.6	20.5	18.1	13.8	15.8
5	---	---	---	20.0	14.1	17.0	22.9	18.1	20.4	18.1	14.0	16.0
6	---	---	---	21.2	14.9	18.0	23.3	18.3	20.6	18.4	14.3	16.4
7	---	---	---	---	---	---	22.9	18.3	20.7	18.5	14.6	16.6
8	---	---	---	22.2	16.4	19.2	23.5	17.8	20.7	18.0	14.0	16.0
9	---	---	---	22.4	15.5	18.8	23.8	18.0	20.8	17.3	13.8	15.7
10	11.2	9.5	10.5	22.7	15.9	19.2	22.0	17.6	19.8	17.8	14.4	16.0
11	12.4	8.9	10.5	23.1	16.4	19.8	20.5	17.2	18.4	18.0	14.1	16.0
12	12.8	10.0	11.4	23.4	16.7	20.1	21.1	16.2	18.3	17.4	13.4	15.5
13	13.3	10.4	11.9	23.6	17.2	20.5	21.1	16.9	19.0	17.2	13.1	15.2
14	13.4	10.5	12.1	20.9	17.7	19.1	21.5	16.9	19.3	17.3	13.2	15.3
15	14.0	11.4	12.7	20.3	16.0	18.0	22.1	17.0	19.5	17.6	13.4	15.5
16	13.8	11.6	12.7	20.3	15.9	17.7	21.8	16.2	19.0	17.5	13.6	15.6
17	12.9	11.1	11.7	21.4	16.3	18.7	22.3	16.4	19.3	17.6	13.8	15.8
18	13.4	10.0	11.6	22.3	17.1	19.8	22.6	16.5	19.5	17.7	14.0	15.8
19	12.9	11.0	12.1	23.3	18.0	20.3	21.4	17.4	19.4	17.6	14.8	15.9
20	13.9	10.8	12.4	23.3	18.0	20.6	22.8	17.1	19.8	17.5	14.0	15.6
21	13.4	11.4	12.6	23.2	18.0	20.6	23.3	18.1	20.5	17.3	13.3	15.2
22	13.1	10.8	12.2	22.8	17.5	20.2	23.5	18.2	20.8	17.1	13.1	15.0
23	13.6	10.6	12.2	23.2	17.1	20.1	23.1	18.0	20.5	17.4	13.4	15.4
24	13.8	10.9	12.6	23.4	18.5	20.8	21.2	18.1	19.5	16.9	14.3	15.4
25	14.3	12.0	13.4	22.7	17.1	20.0	22.6	17.1	19.7	16.4	13.3	14.8
26	14.1	11.1	12.4	23.0	17.0	20.0	22.6	17.0	19.8	15.3	12.6	13.8
27	13.2	11.1	12.4	24.1	17.9	21.0	22.0	17.6	19.8	12.8	10.1	11.6
28	13.3	11.4	12.7	24.1	19.4	21.5	21.9	17.6	19.7	12.3	8.8	10.5
29	14.3	13.1	13.6	24.4	19.8	21.5	22.3	16.8	19.4	12.2	8.4	10.2
30	15.9	13.5	14.7	21.6	19.3	20.1	19.2	16.9	18.1	12.6	8.5	10.5
31	---	---	---	21.0	18.3	19.7	19.3	15.4	17.2	---	---	---
MONTH	---	---	---	---	---	---	23.8	15.4	19.7	19.5	8.4	15.0

## BEAR RIVER BASIN

213

## 10105900 LITTLE BEAR RIVER AT PARADISE, UT

LOCATION.--Lat 41°34'32", long 111°51'16" in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec 29, T. 10 N., R. 1 E., Cache County, Hydrologic Unit 16010203, on right bank 1 mi west of Paradise, Utah.

DRAINAGE AREA.--182 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,740 ft above sea level, from topographic map. Prior to Aug 11, 1994, 50 ft upstream at different datum.

REMARKS.--Records good except for estimated days, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft<sup>3</sup>/s May 11, 1998, gage height, 10.23 ft, minimum daily discharge, 4.4 ft<sup>3</sup>/s Feb 10, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 756 ft<sup>3</sup>/s, May 13, gage height, 8.86 ft; minimum daily discharge, 37 ft<sup>3</sup>/s Aug 17-18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	72	140	130	72	113	108	244	372	95	50	51
2	111	71	138	122	71	92	104	253	356	92	46	50
3	129	70	136	77	71	89	102	495	380	89	43	51
4	122	64	136	70	74	98	99	601	346	85	47	59
5	114	68	130	70	73	129	97	517	387	81	48	57
6	112	69	126	70	73	110	98	421	373	77	47	55
7	111	67	126	71	89	92	103	388	504	74	45	50
8	113	70	120	69	136	71	131	424	453	74	44	46
9	111	68	116	69	147	73	123	459	386	71	44	45
10	108	77	98	69	159	73	114	384	367	70	44	44
11	109	154	79	69	116	71	117	333	348	68	47	42
12	108	155	80	69	101	70	115	322	338	67	50	45
13	107	154	78	69	96	70	134	526	330	63	47	47
14	109	154	79	68	97	78	142	432	323	66	43	44
15	118	156	78	71	90	94	132	486	318	72	42	45
16	118	154	72	74	87	111	130	415	308	72	42	48
17	114	154	64	72	95	113	139	342	283	71	37	48
18	114	156	e60	77	86	118	153	337	192	70	37	46
19	113	152	e58	93	85	136	166	397	166	70	47	48
20	114	150	e56	97	81	150	193	416	148	66	48	52
21	115	151	e54	96	81	185	176	465	136	59	49	48
22	115	152	e56	82	78	174	154	488	130	58	47	48
23	115	149	e55	80	78	165	144	551	120	56	47	47
24	114	147	e56	79	85	167	133	616	110	54	48	47
25	116	145	e58	75	91	178	139	620	110	53	49	46
26	115	144	e60	76	96	177	136	607	110	53	49	46
27	116	142	e64	75	88	157	208	587	104	52	48	46
28	117	149	e71	71	95	119	249	534	100	53	49	48
29	120	150	e80	71	---	113	272	502	96	53	48	50
30	125	145	94	74	---	119	335	466	97	52	48	49
31	102	---	135	74	---	116	---	439	---	50	51	---
TOTAL	3535	3709	2753	2429	2591	3621	4446	14067	7791	2086	1431	1448
MEAN	114	124	88.8	78.4	92.5	117	148	454	260	67.3	46.2	48.3
MAX	129	156	140	130	159	185	335	620	504	95	51	59
MIN	102	64	54	68	71	70	97	244	96	50	37	42
AC-FT	7010	7360	5460	4820	5140	7180	8820	27900	15450	4140	2840	2870

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999
MEAN	50.9	51.1	49.7	55.3	58.8	134	267
MAX	114	124	88.8	118	92.5	186	360
(WY)	1999	1999	1997	1999	1999	1998	1998
MIN	16.5	20.6	19.0	17.5	14.8	85.8	148
(WY)	1993	1993	1993	1993	1993	1994	1999

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1993 - 1999
ANNUAL TOTAL	66747	49907	
ANNUAL MEAN	183	137	119
HIGHEST ANNUAL MEAN			172
LOWEST ANNUAL MEAN			54.3
HIGHEST DAILY MEAN	910	May 11	910
LOWEST DAILY MEAN	44	Jan 1	4.4
ANNUAL SEVEN-DAY MINIMUM	47	Jan 1	6.9
ANNUAL RUNOFF (AC-FT)	132400	98990	85980
10 PERCENT EXCEEDS	465	344	353
50 PERCENT EXCEEDS	104	96	60
90 PERCENT EXCEEDS	60	48	20

e Estimated

## BEAR RIVER BASIN

10108400 LOGAN, HYDE PARK &amp; SMITHFIELD CANAL AT HEAD, NEAR LOGAN, UT

LOCATION.--Lat 41°44'35", long 111°45'40", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 31, T. 12 N., R. 2 E., Cache County, Hydrologic Unit 16010203, Cache National Forest, on left bank 487 ft downstream from head and 3.8 mi east of Logan.

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

GAGE.--Water-stage recorder and 8-ft concrete Parshall flume. Datum of gage is 4,858.69 ft above sea level (Bureau of Public Roads bench mark).

REMARKS.--Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--36 years, 22.3 ft<sup>3</sup>/s 16,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 111 ft<sup>3</sup>/s May 23, 1963, May 28, 1966; no flow at times most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	3.7	4.6	3.7	3.5	e.00	e.00	e.00	45	66	49	58
2	28	3.7	4.6	3.5	3.5	e.00	e.00	e.00	45	63	48	51
3	26	3.7	4.6	3.5	3.5	e.00	e.00	e.00	29	62	49	47
4	23	3.7	4.6	3.5	3.7	e.00	e.00	e.00	22	62	50	46
5	21	3.5	4.2	3.5	3.7	e.00	e.00	e.00	22	61	49	45
6	20	3.5	3.9	3.5	3.6	e.00	e.00	e.00	22	60	49	45
7	20	3.4	3.9	3.5	3.5	e.00	e.00	e.00	22	63	54	44
8	19	3.0	3.7	3.5	3.6	e.00	e.00	e.00	22	64	59	44
9	19	3.0	3.7	3.5	3.5	e.00	e.00	e.00	30	63	59	44
10	19	3.0	3.5	3.6	3.5	e.00	e.00	e.00	35	63	51	45
11	19	3.0	3.5	3.7	3.5	e.00	e.00	e.00	31	62	59	44
12	19	3.0	3.5	3.7	3.5	e.00	e.00	e.00	30	60	56	44
13	12	3.3	3.6	3.7	3.5	e.00	e.00	e.00	30	60	56	44
14	.08	3.2	3.7	3.7	3.5	e.00	e.00	e.00	30	59	56	44
15	.08	2.8	3.7	3.7	3.5	e.00	e.00	e.00	29	59	56	44
16	.13	2.6	3.5	3.7	3.6	e.00	e.00	e.00	26	64	56	44
17	.13	2.4	3.5	3.7	3.7	e.00	e.00	e.00	26	62	56	45
18	.15	2.2	3.5	3.7	3.7	e.00	e.00	e.00	27	62	58	44
19	.19	2.1	3.5	3.7	3.7	e.00	e.00	e.00	38	61	58	44
20	.19	1.9	3.5	3.7	3.7	e.00	e.00	e.00	47	61	58	44
21	.21	1.9	3.5	3.7	3.7	e.00	e.00	e.00	47	64	58	44
22	.20	2.0	3.5	3.6	3.6	e.00	e.00	11	50	64	58	44
23	.20	2.8	3.5	3.5	3.5	e.00	e.00	17	53	63	58	45
24	.20	3.1	3.5	3.5	3.6	e.00	e.00	27	54	63	58	45
25	.21	2.8	3.5	3.5	3.8	e.00	e.00	34	53	66	58	45
26	.15	2.5	3.5	3.5	3.7	e.00	e.00	40	56	66	58	45
27	.11	2.4	3.5	3.5	3.7	e.00	e.00	43	58	66	58	45
28	.11	2.2	3.5	3.5	2.4	e.00	e.00	44	59	66	58	45
29	.13	3.6	3.6	3.5	---	e.00	e.00	43	65	63	58	45
30	.13	4.7	3.8	3.5	---	e.00	e.00	40	69	58	59	44
31	1.3	---	3.9	3.5	---	e.00	---	39	---	53	59	---
TOTAL	276.90	88.7	116.1	111.1	99.5	0.00	0.00	338.00	1172	1929	1726	1357
MEAN	8.93	2.96	3.75	3.58	3.55	.000	.000	10.9	39.1	62.2	55.7	45.2
MAX	28	4.7	4.6	3.7	3.8	.00	.00	44	69	66	59	58
MIN	.08	1.9	3.5	3.5	2.4	.00	.00	.00	22	53	48	44
AC-FT	549	176	230	220	197	.00	.00	670	2320	3830	3420	2690

CAL YR 1998 TOTAL 6154.51 MEAN 16.9 MAX 55 MIN .00 AC-FT 12210  
WTR YR 1999 TOTAL 7214.30 MEAN 19.8 MAX 69 MIN .00 AC-FT 14310

e Estimated

## 10109000 LOGAN RIVER ABOVE STATE DAM, NEAR LOGAN, UT

LOCATION.--Lat 41°44'36", long 111°46'55", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 36, T. 12 N., R. 1 E., Cache County, Hydrologic Unit 16010203, on left bank 0.5 mi upstream from State dam, and 2.5 mi east of Logan.

DRAINAGE AREA.--214 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1896 to current year. Published as Logan River near Logan prior to 1913. Records since May 1913 equivalent to earlier records, if records for Utah Power & Light Co.'s tailrace near Logan (station 10108000) are added. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area. WRD UT-96-1:1995, Combined discharge of Logan River Above State Dam and Logan, Hyde Park and Smithfield Canal at Head.

GAGE.--Water-stage recorder. Elevation of gage is 4,680 ft above sea level, from topographic map. Prior to May 7, 1913, nonrecording gage at various sites within 0.5 mi downstream at different datums. May 7, 1913, to Sept. 3, 1938, water-stage recorder at present site at different datums.

REMARKS.--Records good. Flow affected by regulation and diversions above station for power, irrigation, and municipal culinary supply. Utah Power and Light Co. stopped diverting water from river November 1970 at which time the tailrace station (station 10108000) was discontinued. During 1963, site for gaging station for Logan, Hyde Park and Smithfield Canal (station 10108400) was relocated. Records for combined flow since that time are equivalent to previous records. For record of combined flow, see following page.

AVERAGE DISCHARGE.--River only: 86 years (water years 1914-99), 154 ft<sup>3</sup>/s 111,600 acre-ft/yr.  
Combined river and canal: 103 years, 272 ft<sup>3</sup>/s 197,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 2,000 ft<sup>3</sup>/s Mar 21, 1916, gage height, 5.6 ft; minimum, 5.2 ft<sup>3</sup>/s Feb 26, 1986, result of hydro-electric plant testing.  
Combined river and canal: Maximum discharge observed, 2,480 ft<sup>3</sup>/s May 24, 1907; minimum daily, 50 ft<sup>3</sup>/s Jan 21, 1935.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 1,490 ft<sup>3</sup>/s, May 30, gage height, 5.15 ft; minimum daily discharge, 119 ft<sup>3</sup>/s, Feb 2.  
Combined river and canal: Maximum daily discharge, 1470 ft<sup>3</sup>/s May 30; minimum daily discharge, 122 ft<sup>3</sup>/s Feb 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	174	163	142	125	134	173	669	1230	757	322	200
2	183	174	161	137	119	133	167	661	1200	742	315	202
3	199	173	161	132	124	131	165	723	1200	721	309	207
4	191	171	161	131	124	131	163	607	1200	697	302	205
5	185	170	158	138	126	130	160	530	1160	665	296	202
6	183	171	151	137	124	128	159	475	1060	627	293	199
7	181	169	154	136	132	128	163	462	1130	594	283	196
8	179	170	156	135	142	127	176	488	1170	577	272	195
9	177	170	154	133	135	129	180	520	1120	553	267	194
10	175	169	145	133	141	128	170	497	1110	526	272	189
11	172	166	146	132	130	126	169	464	1070	508	270	188
12	171	165	149	131	126	126	181	453	1090	490	272	186
13	175	164	146	131	128	126	224	525	1120	474	261	184
14	183	163	149	131	127	127	254	524	1180	465	256	182
15	e183	164	147	132	128	131	250	546	1210	459	250	180
16	e183	162	146	134	127	136	256	502	1260	444	246	176
17	183	164	147	131	130	141	272	473	1290	427	244	174
18	181	170	148	139	127	144	319	496	1250	419	240	173
19	180	169	145	140	128	152	384	606	1220	409	236	174
20	180	167	134	137	125	163	460	651	1190	398	229	174
21	179	167	122	139	126	176	427	753	1180	386	223	170
22	180	171	122	132	125	178	382	857	1150	371	219	166
23	178	167	123	131	124	180	346	965	1100	363	215	164
24	182	169	134	131	123	189	312	1100	1050	356	213	164
25	183	164	149	129	126	212	324	1110	1010	346	211	162
26	181	162	147	129	126	226	320	1200	974	336	207	160
27	177	162	145	127	124	221	328	1270	920	327	205	160
28	176	167	147	122	125	193	398	1290	865	326	204	157
29	176	172	143	120	---	179	514	1370	812	325	200	156
30	185	166	144	121	---	176	651	1430	781	328	202	155
31	179	---	145	122	---	177	---	1410	---	324	207	---
TOTAL	5601	5032	4542	4095	3567	4778	8447	23627	33302	14740	7741	5394
MEAN	181	168	147	132	127	154	282	762	1110	475	250	180
MAX	199	174	163	142	142	226	651	1430	1290	757	322	207
MIN	171	162	122	120	119	126	159	453	781	324	200	155
AC-FT	11110	9980	9010	8120	7080	9480	16750	46860	66050	29240	15350	10700

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1999, BY WATER YEAR (WY)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	142	134	119	112	110	140	259	589	711	349	190	154																	
MAX	247	213	186	161	205	369	615	1072	1413	691	337	267																	
(WY)	1984	1984	1984	1985	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986
MIN	67.4	71.9	69.0	63.1	61.6	78.9	109	131	113	77.9	63.6	61.1																	
(WY)	1978	1993	1993	1993	1993	1993	1991	1977	1977	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992

e Estimated



## BEAR RIVER BASIN

SUMMARY STATISTICS	10109000 LOGAN RIVER ABOVE STATE DAM, NEAR LOGAN, UT--Continued		FOR 1999 WATER YEAR		WATER YEARS 1971 - 1999	
	FOR 1998 CALENDAR YEAR					
ANNUAL TOTAL	112009		120866		251	
ANNUAL MEAN	307		331		440	1986
HIGHEST ANNUAL MEAN					99.6	1992
LOWEST ANNUAL MEAN					1870	Jun 6 1986
HIGHEST DAILY MEAN	977	Jun 16	1430	May 30	55	Jan 21 1991
LOWEST DAILY MEAN	118	Mar 8	119	Feb 2	58	Sep 24 1992
ANNUAL SEVEN-DAY MINIMUM	121	Mar 5	122	Jan 28	182000	
ANNUAL RUNOFF (AC-FT)	222200		239700		606	
10 PERCENT EXCEEDS	729		887		149	
50 PERCENT EXCEEDS	192		180		85	
90 PERCENT EXCEEDS	128		128			

e Estimated



## BEAR RIVER BASIN

## 10116500 CUTLER RESERVOIR NEAR COLLINSTON, UT

LOCATION.--Lat 41°50'13", long 112°02'51", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 26, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, 2 mi north of Beaver Dam, 6 mi north of Collinston.

DRAINAGE AREA.--6,265 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1927 to current year.

GAGE.--Elevation of gage is 4,000 ft, Utah Power and Light Co. datum.

REMARKS.--New capacity table being used from Oct. 1, 1992.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12260	14670	15380	13960	13270	13960	13620	15380	14310	11600	13270	12930
2	14310	15020	15020	15380	14310	14670	12930	16870	13960	10650	15020	13270
3	16120	13620	13620	15380	15020	13960	13620	18420	13620	9754	14670	11280
4	15020	13620	13960	14670	16120	14670	12260	16490	12260	11600	11600	14310
5	13620	13550	12590	15380	13960	15380	13960	15020	12590	13270	11930	13620
6	14310	14310	15380	14670	14310	15380	13270	14310	13270	11600	13270	12930
7	13960	14310	15380	15380	14310	13960	14310	12930	13270	14670	11930	15020
8	13620	12930	14310	15380	15380	14310	13270	12590	12590	14670	11930	15380
9	14310	14670	14670	14670	15380	13620	13960	11930	12590	14670	12930	15020
10	13960	15020	13960	15380	15380	13270	13960	12930	12590	14670	11280	14310
11	14670	15020	16120	13960	15380	13270	13270	12590	12590	12590	13270	13620
12	14310	15020	16120	15020	13270	13270	13620	12590	11930	12930	13270	13270
13	15020	14310	15380	13620	13960	13620	13270	12590	9467	13960	12590	12590
14	15380	14310	15380	13620	13270	15020	15020	12590	9467	14310	13270	12930
15	15380	14670	13960	14310	14670	13270	14310	13270	11280	14670	13960	12930
16	14310	13620	13960	14310	14310	14310	14310	12590	12730	14670	14670	13960
17	15020	15020	11930	13620	13270	14310	13270	12930	13270	14670	12260	13960
18	13620	14310	15380	14670	14670	13960	15380	13960	13270	12590	11930	13270
19	15380	14310	11930	14670	14670	13270	13960	13620	13270	12930	14310	15380
20	15380	11930	12930	15020	15380	13620	13960	11930	13270	12590	13270	14670
21	15380	15020	12590	15020	16120	14670	13270	13620	13270	16120	12590	15380
22	14310	14670	12590	14310	14670	15020	13960	13960	13270	15380	13960	15020
23	14310	12590	12590	14310	14670	14310	12590	14670	13960	13960	12260	14670
24	12590	16120	12590	13960	15380	13960	12590	15380	12930	12590	14670	14670
25	14670	12930	12930	15380	14670	13960	15380	15380	11930	12590	12930	14670
26	15020	13620	13270	14670	13270	13620	12930	15380	11930	12260	12590	15020
27	14310	13620	13270	13960	15380	13620	12930	14670	10350	14310	12590	15020
28	13960	15380	13620	16120	13960	13960	12930	14670	10970	14310	12590	14310
29	13960	14310	13960	13960	---	13620	15380	11930	11930	14310	11930	15380
30	13960	13270	14670	13960	---	12930	15380	11930	12260	15380	11930	15380
31	15380	---	13960	13270	---	13960	---	14310	---	13960	13960	---
MAX	16120	16120	16120	16120	16120	15380	15380	18420	14310	16120	15020	15380
MIN	12260	11930	11930	13270	13270	12930	12260	11930	9467	9754	11280	11280
(#)	4407.5	4407.2	4407.3	4407.2	4407.3	4407.3	4407.5	4407.35	4407.05	4407.3	4407.3	4407.5
(*)	+380	-2110	+690	-690	+690	0	+1420	-1070	-2050	+1700	0	+1420

CAL YR 1998.....(\*) +1720  
WTR YR 1999.....(\*) +380

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in acre-feet.

## BEAR RIVER BASIN

219

10117000 HAMMOND (EAST SIDE) CANAL NEAR COLLINSTON, UT

LOCATION.--Lat 41°49'51", long 112°03'24", in SE<sup>1</sup>/<sub>4</sub> sec. 27, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on right bank 3,600 ft downstream from Cutler Dam and 4 mi north of Collinston.

PERIOD OF RECORD.--June 1912 to current year. Prior to 1915, published as Hammond Ditch near Collingston. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to May 22, 1914, nonrecording gage at same site and datum.

REMARKS.--Records fair. Canal diverts from east side of Bear River at Cutler Dam for irrigation of about 58,000 acres below station in eastern Box Elder County.

COOPERATION.--Records collected by Utah Power & Light Co.

AVERAGE DISCHARGE.--85 years (water years 1913-81, 1983-99), 52.7 ft<sup>3</sup>/s, 38,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 184 ft<sup>3</sup>/s June 29, 1963, May 2, 1977; no flow at times in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	.00	.00	.00	.00	.00	.00	.00	169	160	162	148
2	105	.00	.00	.00	.00	.00	.00	.00	169	160	163	157
3	101	.00	.00	.00	.00	.00	.00	.00	168	160	166	149
4	103	.00	.00	.00	.00	.00	.00	.00	168	162	165	144
5	105	.00	.00	.00	.00	.00	.00	.00	160	161	164	143
6	97.9	.00	.00	.00	.00	.00	.00	.00	152	162	166	143
7	92.8	.00	.00	.00	.00	.00	.00	.00	152	160	164	145
8	93.2	.00	.00	.00	.00	.00	.00	.00	146	160	166	142
9	92.3	.00	.00	.00	.00	.00	.00	.00	139	163	168	133
10	91.5	.00	.00	.00	.00	.00	.00	.00	138	161	167	128
11	91.9	.00	.00	.00	.00	.00	.00	.00	138	159	164	130
12	91.7	.00	.00	.00	.00	.00	.00	.00	146	161	162	131
13	91.4	.00	.00	.00	.00	.00	.00	69.3	158	162	161	129
14	91.8	.00	.00	.00	.00	.00	.00	113	164	160	160	129
15	93.0	.00	.00	.00	.00	.00	.00	134	175	164	162	130
16	90.6	.00	.00	.00	.00	.00	.00	133	171	152	162	130
17	87.1	.00	.00	.00	.00	.00	.00	134	171	146	160	129
18	86.5	.00	.00	.00	.00	.00	.00	127	171	146	162	130
19	87.0	.00	.00	.00	.00	.00	.00	122	170	145	165	131
20	.00	.00	.00	.00	.00	.00	.00	121	171	147	161	124
21	.00	.00	.00	.00	.00	.00	.00	125	171	146	161	120
22	.00	.00	.00	.00	.00	.00	.00	139	171	147	164	117
23	.00	.00	.00	.00	.00	.00	.00	152	164	148	162	115
24	.00	.00	.00	.00	.00	.00	.00	153	160	148	164	116
25	.00	.00	.00	.00	.00	.00	.00	160	161	147	163	116
26	.00	.00	.00	.00	.00	.00	.00	163	162	147	163	116
27	.00	.00	.00	.00	.00	.00	.00	162	160	149	158	116
28	.00	.00	.00	.00	.00	.00	.00	166	165	149	149	116
29	.00	.00	.00	.00	---	.00	.00	169	161	155	153	114
30	.00	.00	.00	.00	---	.00	.00	171	160	165	153	113
31	.00	---	.00	.00	---	.00	---	171	---	165	150	---
TOTAL	1797.70	0.00	0.00	0.00	0.00	0.00	0.00	2684.30	4831	4817	5010	3884
MEAN	58.0	.0000	.0000	.0000	.0000	.0000	.0000	86.6	161	155	162	129
MAX	105	.00	.00	.00	.00	.00	.00	171	175	165	168	157
MIN	.00	.00	.00	.00	.00	.00	.00	.00	138	145	149	113
AC-FT	3570	.00	.00	.00	.00	.00	.00	5320	9580	9550	9940	7700

CAL YR 1998 TOTAL 22587.70 MEAN 61.9 MAX 169 MIN .00 AC-FT 44800  
WTR YR 1999 TOTAL 23024.00 MEAN 63.1 MAX 175 MIN .00 AC-FT 45670

## BEAR RIVER BASIN

10117500 WEST SIDE CANAL NEAR COLLINSTON, UT

LOCATION.--Lat 41°49'55", 112°03'36", in SW<sup>1</sup>/<sub>4</sub> sec. 27, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on left bank 4,200 ft downstream from Cutler Dam and 4 mi north of Collinston.

PERIOD OF RECORD.--June 1912 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to May 22, 1914, nonrecording gage at same site and datum.

REMARKS.--Records fair. Canal diverts from west side of Bear River at Cutler Dam for irrigation of about 58,000 acres below station in eastern Box Elder County.

COOPERATION.--Records collected by Utah Power & Light Co.

AVERAGE DISCHARGE.--85 years (water years 1913-81, 1983-99), 254 ft<sup>3</sup>/s, 184,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 787 ft<sup>3</sup>/s June 23, 1986; no flow for periods in every year except 1914.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	420	259	118	.00	.00	.00	.00	7.00	764	765	699	594
2	420	219	118	.00	.00	.00	.00	7.00	763	761	704	610
3	414	184	118	.00	.00	.00	.00	7.50	756	760	705	608
4	418	183	118	.00	.00	.00	.00	9.00	751	763	706	603
5	419	182	118	.00	.00	.00	.00	7.50	627	761	704	606
6	420	180	119	.00	.00	.00	.00	4.00	552	760	707	603
7	418	177	102	.00	.00	.00	.00	4.00	550	768	706	613
8	415	178	.00	.00	.00	.00	.00	2.50	484	766	706	606
9	412	179	.00	.00	.00	.00	.00	2.50	505	762	712	608
10	411	176	.00	.00	.00	.00	.00	13.8	554	755	710	608
11	408	175	.00	.00	.00	.00	.00	306	569	751	711	611
12	407	175	.00	.00	.00	.00	.00	485	605	755	702	608
13	357	174	.00	.00	.00	.00	.00	471	606	765	714	606
14	313	173	.00	.00	.00	.00	.00	471	634	761	717	608
15	310	172	.00	.00	.00	.00	.00	423	671	762	717	609
16	311	171	.00	.00	.00	.00	.00	431	701	760	717	606
17	309	172	.00	.00	.00	.00	.00	457	721	759	712	604
18	308	171	.00	.00	.00	.00	.00	457	728	760	719	609
19	308	169	.00	.00	.00	.00	.00	540	731	760	715	606
20	306	169	.00	.00	.00	.00	.00	642	730	769	715	529
21	306	170	.00	.00	.00	.00	.00	707	718	767	715	491
22	305	151	.00	.00	.00	.00	.00	743	726	770	719	491
23	303	118	.00	.00	.00	.00	.00	734	751	749	715	489
24	301	119	.00	.00	.00	.00	.00	730	757	697	715	487
25	302	118	.00	.00	.00	.00	.00	735	760	693	713	488
26	301	118	.00	.00	.00	.00	.00	753	764	696	710	490
27	299	118	.00	.00	.00	.00	.00	756	767	699	713	488
28	297	117	.00	.00	.00	.00	.00	764	768	698	713	488
29	296	117	.00	.00	---	.00	.00	765	766	703	710	483
30	278	118	.00	.00	---	.00	.00	766	767	702	663	455
31	263	---	.00	.00	---	.00	---	766	---	700	576	---
TOTAL	10755	4902	811.00	0.00	0.00	0.00	0.00	12966.80	20546	23097	21860	16905
MEAN	347	163	26.2	.000	.000	.000	.000	418	685	745	705	564
MAX	420	259	119	.00	.00	.00	.00	766	768	770	719	613
MIN	263	117	.00	.00	.00	.00	.00	2.5	484	693	576	455
AC-FT	21330	9720	1610	.00	.00	.00	.00	25720	40750	45810	43360	33530

CAL YR 1998 TOTAL 110441.50 MEAN 303 MAX 759 MIN .00 AC-FT 219100  
WTR YR 1999 TOTAL 111842.80 MEAN 306 MAX 770 MIN .00 AC-FT 221800

## BEAR RIVER BASIN

221

## 10118000 BEAR RIVER NEAR COLLINSTON, UT

LOCATION.--Lat 41°50'03", long 112°03'16", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 27, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on right bank 800 ft downstream from Cutler plant of Utah Power & Light Co., 2,000 ft downstream from Cutler Dam, and 5.5 mi north of Collinston.

DRAINAGE AREA.--6,267 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1889 to current year. Published as "at Collinston" prior to 1900. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,276.13 ft above sea level (levels by Bureau of Reclamation). Prior to Nov 8, 1913, nonrecording gage, and Nov 8, 1913 to Sep 10, 1938, water-stage recorder, at site 0.8 mi downstream at different datums.

REMARKS.--Records fair. Natural flow of stream affected by storage reservoir, power developments and diversions for irrigation.

COOPERATION.--Records collected by Utah Power & Light 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, 12,700 ft<sup>3</sup>/s Feb 20, 1986, gage height, 8.68 ft; minimum daily, 10 ft<sup>3</sup>/s Aug 4-12, 18-23, 1905; practically no flow at 2400 Aug 5, 1920.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2420	2380	2840	2110	1430	2290	3050	4160	5250	1390	1360	1210
2	1210	2270	2600	1990	1520	2670	3060	4770	5170	1390	272	1190
3	2470	2390	2600	2690	1880	2490	2540	5240	5050	1290	854	625
4	2630	2130	2540	2070	2100	1890	2320	5820	4920	399	507	1110
5	2720	2130	2370	2210	1910	3150	2580	5910	4960	465	855	1300
6	1900	2810	2430	1990	1930	3140	2800	5930	5080	690	262	1430
7	2240	2170	2810	2130	2090	2500	2470	5750	5250	187	346	66
8	2440	2260	2590	2290	2370	2670	2760	5510	5310	698	637	1420
9	1820	2270	2370	1470	3020	2840	2330	5140	5310	371	130	1450
10	2060	2680	2570	2310	3140	2550	2800	4760	5300	785	368	1430
11	2410	2410	2150	1690	3310	2500	2460	4380	5300	916	74	1420
12	1890	2420	2340	1780	3300	2570	2490	4180	5220	239	1400	1420
13	2450	2460	2610	2000	2610	2340	2390	4060	4990	25	534	1420
14	2370	2490	2290	1830	1860	2210	2090	4070	4510	980	376	571
15	2700	2500	1940	1720	2680	3030	2830	4210	4150	360	676	666
16	1640	2730	2270	2290	2350	2060	2700	4380	4110	633	301	1210
17	1900	2010	2890	2190	2280	3030	3020	4010	4130	450	1190	1430
18	2290	2920	849	1570	2750	2290	2220	4080	4130	912	177	251
19	1900	2540	1990	2090	2960	2940	3030	4090	4100	905	479	826
20	2100	2640	1470	2180	2490	2320	3020	3950	3860	442	506	1550
21	2180	2020	1460	2470	2130	1860	3160	3850	3650	317	550	1050
22	2130	2560	1380	2240	2680	2530	3330	3850	3400	238	77	1270
23	1720	2710	1370	2090	2340	3020	2870	3860	3180	1200	563	1360
24	2170	2350	1370	2060	1990	3030	3180	4060	2930	200	290	1390
25	2430	2350	1400	1860	2090	3030	2390	4450	2780	1310	265	1390
26	2000	2830	1490	1700	2760	3110	3190	4850	1980	449	668	935
27	2540	2610	1620	2170	1980	3100	3200	5170	1790	140	682	1330
28	2210	2600	1730	1870	2540	3290	2980	5320	1520	836	264	820
29	2200	2600	1790	1440	---	3350	3350	5370	1390	412	476	887
30	2540	1980	2150	1440	---	3170	3760	5220	1390	436	252	1580
31	2060	---	1970	1430	---	2960	---	5080	---	324	688	---
TOTAL	67740	73220	64249	61370	66490	83930	84370	145480	120110	19389	16079	34007
MEAN	2185	2441	2073	1980	2375	2707	2812	4693	4004	625	519	1134
MAX	2720	2920	2890	2690	3310	3350	3760	5930	5310	1390	1400	1580
MIN	1210	1980	849	1430	1430	1860	2090	3850	1390	25	74	66
AC-FT	134400	145200	127400	121700	131900	166500	167300	288600	238200	38460	31890	67450

CAL YR 1998 TOTAL 930915 MEAN 2550 MAX 5850 MIN 88 AC-FT 1846000  
WTR YR 1999 TOTAL 836434 MEAN 2292 MAX 5930 MIN 25 AC-FT 1659000

10126000 BEAR RIVER NEAR CORINNE, UT

LOCATION.--Lat 41°34'35", long 112°06'00", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 30, T. 10 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on right bank 1.2 mi downstream from Salt Creek, 2.0 mi northeast of Corinne, and 2.8 mi downstream from Malad River.

DRAINAGE AREA.--7,029 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1949 to September 1957, October 1963 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,204.6 ft above sea level, unadjusted. Auxiliary nonrecording gage 7,800 ft downstream Jul 27, 1950 to Nov 21, 1955.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,770 ft<sup>3</sup>/s May 19, 1984, gage height, 17.50 ft; minimum daily discharge, 47 ft<sup>3</sup>/s Aug 25, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,190 ft<sup>3</sup>/s, May 7, gage height, 13.63 ft; minimum daily discharge, 416 ft<sup>3</sup>/s, Jul 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1910	2310	2200	2890	1720	2650	3090	3850	5250	1720	961	1210
2	2210	e2200	2760	2780	1590	2620	3100	4290	5420	1710	1280	1440
3	1700	e2250	2620	2780	1750	2920	3020	4830	5440	1710	1020	1440
4	2560	e2420	2640	3260	1960	2440	2780	5330	5360	1490	1240	1210
5	2700	2390	2850	2840	2340	2650	2400	5750	5380	1090	1140	1360
6	2720	2290	2360	2830	2090	3180	2810	5990	5460	1180	1160	1600
7	2300	2690	2670	2770	2200	3210	2680	6020	5600	1180	927	1500
8	2270	2480	2790	2650	2360	2660	2770	5920	5750	736	894	836
9	2610	2340	2720	2650	2830	2820	2740	5720	5790	1290	1030	1430
10	2010	2430	2730	2120	3240	2890	2790	5400	5780	1020	716	1640
11	2190	2600	2580	2370	3370	2740	2690	5070	5800	1230	822	1650
12	2600	2530	2340	2040	3550	2700	2630	4780	5760	1370	643	1620
13	2250	2560	2490	2020	3420	2730	2640	4510	5650	852	1340	1620
14	2450	2570	2820	2100	2870	2440	2460	4390	5370	416	1110	1580
15	2490	2510	2370	2000	2220	2680	2380	4400	4900	1110	989	1190
16	2510	2540	2100	2030	2830	2790	2790	4570	4580	1040	1090	1150
17	1980	2620	2530	2420	2560	2540	2870	4580	4550	1170	1000	1390
18	2080	2500	2470	2200	2720	2950	2890	4460	4400	1120	1380	1570
19	2290	2750	2210	2030	2960	2540	2520	4390	4200	1280	767	884
20	2170	2850	2860	2240	2960	2820	2940	4350	4190	1260	789	1220
21	2320	2490	2680	2430	2740	2430	3020	4160	3990	1100	926	1550
22	2240	2430	e2700	2690	2620	2080	3090	4060	3800	944	1060	1570
23	2350	2670	e2500	2510	2770	2750	3320	4040	3560	841	680	1490
24	2080	2660	e2390	2320	2470	3020	3220	4010	3350	1290	880	1650
25	2090	2610	e2500	2240	2420	3050	2960	4270	3100	904	759	1680
26	2590	2510	2410	2080	2490	3080	2880	4620	2900	1350	930	1410
27	2270	2640	2420	2060	2590	3140	3210	4980	2250	1020	987	1470
28	2430	2810	2530	2230	2420	3130	3330	5210	2150	603	1000	1490
29	2360	2750	2630	2030	---	3340	3150	5320	1850	1120	797	1100
30	2380	2660	2650	1670	---	3360	3430	5380	1740	1070	972	1250
31	2410	---	3040	1730	---	3100	---	5310	---	1000	908	---
TOTAL	71520	76060	79560	73010	72060	87450	86600	149960	133320	35216	30197	42200
MEAN	2307	2535	2566	2355	2574	2821	2887	4837	4444	1136	974	1407
MAX	2720	2850	3040	3260	3550	3360	3430	6020	5800	1720	1380	1680
MIN	1700	2200	2100	1670	1590	2080	2380	3850	1740	416	643	836
AC-FT	141900	150900	157800	144800	142900	173500	171800	297400	264400	69850	59900	83700

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950-57, 1964-99, BY WATER YEAR (WY)

MEAN	1424	1695	1753	1865	1915	2405	2955	3110	2387	785	680	988
MAX	4240	4471	4414	3639	5966	6041	7258	9598	9201	4186	3045	3423
(WY)	1984	1985	1984	1984	1986	1986	1985	1984	1984	1983	1983	1984
MIN	95.6	621	535	620	723	913	638	71.8	77.6	72.3	55.2	62.2
(WY)	1993	1995	1995	1993	1993	1991	1992	1992	1992	1994	1992	1992

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1950-57, 1964-99
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ANNUAL TOTAL	1018853		937153			
ANNUAL MEAN	2791		2568		1828	
HIGHEST ANNUAL MEAN					5050	1984
LOWEST ANNUAL MEAN					435	1992
HIGHEST DAILY MEAN	6140	May 15	6020	May 7	14300	May 19 1984
LOWEST DAILY MEAN	190	Jul 18	416	Jul 14	47	Aug 25 1992
ANNUAL SEVEN-DAY MINIMUM	656	Jul 17	837	Aug 19	50	Aug 22 1992
ANNUAL RUNOFF (AC-FT)	2021000		1859000		1324000	
10 PERCENT EXCEEDS	4770		4480		3760	
50 PERCENT EXCEEDS	2640		2500		1500	
90 PERCENT EXCEEDS	949		1070		138	

e Estimated



## BEAR RIVER BASIN

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10126000 BEAR RIVER NEAR CORINNE, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to September 1981, November 1998 to September 30, 1999.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1974 to September 1981, November 1998 to September 30, 1999.

INSTRUMENTATION.--Temperature data logger.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 30.0°C, Jul 27, 28, 1978; minimum, 0.0°C, many days during the winter period.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.9°C, Jul 28; minimum, 0.0°C, many days in Dec and Jan.

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	6.0	5.6	5.7	.2	.1	.2
2	---	---	---	---	---	---	5.9	5.6	5.7	.2	.0	.1
3	---	---	---	---	---	---	6.0	5.6	5.7	.2	.0	.1
4	---	---	---	---	---	---	5.7	4.3	5.2	.2	.0	.1
5	---	---	---	---	---	---	4.3	3.1	3.8	.2	.2	.2
6	---	---	---	---	---	---	3.1	1.6	2.5	.2	.0	.2
7	---	---	---	---	---	---	1.6	1.0	1.4	.3	.2	.2
8	---	---	---	---	---	---	1.1	.8	1.0	.3	.2	.2
9	---	---	---	---	---	---	1.1	.4	.8	.5	.2	.3
10	---	---	---	---	---	---	.5	.0	.3	1.8	.3	.9
11	---	---	---	---	---	---	.3	.0	.1	2.3	1.6	1.8
12	---	---	---	---	---	---	.3	.0	.1	2.9	1.9	2.3
13	---	---	---	---	---	---	.5	.0	.2	3.2	2.3	2.7
14	---	---	---	---	---	---	.3	.0	.2	3.1	2.6	2.8
15	---	---	---	---	---	---	.7	.0	.3	3.4	2.4	2.9
16	---	---	---	---	---	---	.5	.0	.3	3.2	2.6	2.9
17	---	---	---	---	---	---	.3	.0	.2	3.1	2.6	2.7
18	---	---	---	5.7	5.1	5.4	.2	.0	.1	3.1	2.6	2.8
19	---	---	---	5.2	4.3	4.7	.0	.0	.0	3.5	2.7	3.0
20	---	---	---	4.5	4.1	4.3	.0	.0	.0	3.2	2.9	3.1
21	---	---	---	4.6	4.3	4.4	.0	.0	.0	3.1	2.7	3.0
22	---	---	---	5.1	4.3	4.7	.0	.0	.0	3.1	2.7	2.9
23	---	---	---	5.4	4.8	5.1	.0	.0	.0	2.9	2.4	2.7
24	---	---	---	5.7	5.4	5.5	.0	.0	.0	2.9	2.3	2.5
25	---	---	---	5.6	5.2	5.3	.2	.0	.1	2.3	1.7	2.1
26	---	---	---	5.2	4.2	4.9	.2	.0	.1	1.9	1.3	1.6
27	---	---	---	4.6	4.1	4.5	.2	.0	.1	1.8	1.0	1.3
28	---	---	---	4.8	4.3	4.5	.2	.0	.2	1.5	.8	1.1
29	---	---	---	5.1	4.6	4.9	.2	.0	.2	1.3	.3	.7
30	---	---	---	5.6	5.0	5.3	.2	.0	.2	.5	.0	.3
31	---	---	---	---	---	---	.2	.0	.2	.3	.0	.2
MONTH	---	---	---	---	---	---	6.0	.0	1.1	3.5	.0	1.5

## BEAR RIVER BASIN

10126000 BEAR RIVER NEAR CORINNE, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	1.0	.2	.5	5.9	4.9	5.6	6.9	6.3	6.5	12.0	11.2	11.6
2	1.0	.3	.7	6.0	5.4	5.7	6.8	6.2	6.4	12.0	11.7	11.9
3	1.3	.2	.6	5.7	5.1	5.4	6.9	6.0	6.6	12.0	11.4	11.6
4	1.8	1.0	1.3	5.4	4.5	5.2	7.0	6.2	6.6	11.5	10.5	10.8
5	1.5	1.0	1.2	4.5	3.7	4.1	7.4	6.8	7.2	10.5	9.6	9.9
6	2.7	1.3	1.9	4.3	3.5	3.8	7.6	6.5	7.2	10.0	9.3	9.5
7	3.4	2.3	2.8	4.6	4.0	4.3	8.3	6.9	7.5	12.2	10.0	10.8
8	3.4	2.7	3.1	4.6	4.1	4.4	8.5	7.7	8.2	12.9	12.2	12.4
9	3.2	2.7	2.9	4.9	3.8	4.4	8.8	7.7	8.5	12.9	12.2	12.6
10	3.1	2.4	2.5	4.7	3.8	4.2	8.0	7.4	7.7	12.8	12.0	12.3
11	2.6	1.1	1.9	4.9	4.0	4.5	7.5	6.5	7.0	12.2	10.9	11.3
12	1.3	.8	1.1	4.8	4.0	4.4	8.5	6.9	7.9	12.0	10.9	11.3
13	1.5	.8	1.1	5.2	4.6	4.9	9.9	8.3	9.4	12.8	11.9	12.1
14	1.9	1.2	1.5	6.5	5.2	6.0	10.9	9.7	10.5	12.8	12.2	12.5
15	2.9	1.5	2.2	7.6	6.0	6.8	11.4	9.9	10.4	12.9	12.3	12.6
16	2.7	1.8	2.4	7.6	7.2	7.4	10.3	9.9	10.2	12.9	12.0	12.4
17	3.7	2.5	3.1	8.5	7.6	7.8	10.7	10.1	10.4	12.9	11.9	12.3
18	3.5	2.9	3.3	8.1	7.6	7.8	11.8	10.7	11.2	14.2	12.5	13.0
19	3.1	2.6	2.9	9.6	8.1	8.7	13.7	11.8	12.8	15.4	14.0	14.5
20	3.1	2.4	2.8	9.3	8.3	8.9	13.9	12.8	13.4	16.1	14.6	15.3
21	3.2	2.3	2.9	10.3	9.0	9.6	13.6	12.5	13.0	17.0	15.6	16.1
22	3.2	2.3	2.8	10.8	9.3	10.1	12.6	10.9	11.7	17.8	16.5	17.0
23	2.9	2.6	2.7	10.5	9.9	10.1	11.1	9.3	10.2	18.5	17.2	17.7
24	4.1	2.9	3.6	10.4	9.9	10.1	9.4	9.1	9.3	19.0	18.0	18.4
25	4.8	3.8	4.1	10.7	10.3	10.4	9.7	9.4	9.6	19.3	18.1	18.7
26	5.1	4.0	4.6	11.1	10.3	10.7	10.2	9.6	9.8	19.3	18.5	18.9
27	4.8	4.1	4.5	11.1	9.6	10.3	11.4	10.2	10.8	19.4	18.1	18.8
28	5.6	4.5	4.9	9.6	8.3	9.0	12.0	11.4	11.7	20.1	18.8	19.3
29	---	---	---	8.3	7.3	7.6	11.7	11.4	11.5	20.0	19.3	19.6
30	---	---	---	8.0	7.4	7.7	12.0	11.5	11.8	19.6	18.3	19.0
31	---	---	---	8.0	6.9	7.5	---	---	---	18.3	16.5	17.4
MONTH	5.6	.2	2.5	11.1	3.5	7.0	13.9	6.0	9.5	20.1	9.3	14.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	16.5	15.4	16.0	22.2	19.8	20.8	25.7	23.1	24.3	20.6	18.5	19.4
2	16.4	15.8	16.1	22.6	20.1	21.2	25.1	22.6	23.9	19.8	18.0	18.8
3	15.9	14.8	15.3	22.6	20.4	21.4	24.7	23.4	24.0	18.8	17.3	18.1
4	15.4	14.8	15.1	22.9	20.9	21.8	24.6	22.6	23.6	18.8	16.5	17.7
5	14.8	13.7	14.2	21.7	20.4	21.0	25.1	23.4	24.3	19.4	17.0	18.3
6	13.7	13.1	13.3	23.2	20.9	21.9	25.3	23.2	24.6	19.4	16.9	18.2
7	14.0	12.8	13.4	23.2	21.6	22.5	24.9	23.4	24.2	19.3	17.3	18.2
8	15.0	13.7	14.2	24.1	21.7	22.9	25.1	22.7	24.0	19.8	17.2	18.3
9	15.8	13.9	14.7	24.1	22.1	22.8	25.1	23.6	24.4	19.1	17.2	18.0
10	16.9	15.3	15.9	23.6	21.4	22.6	24.7	23.1	23.8	19.8	17.3	18.4
11	17.5	16.2	16.7	24.3	22.4	23.2	23.2	21.8	22.6	19.9	17.8	18.8
12	18.5	16.5	17.3	24.6	22.4	23.4	23.9	20.6	21.9	19.4	17.5	18.4
13	19.8	17.7	18.5	24.4	22.4	23.4	22.9	20.7	21.8	19.1	16.9	17.9
14	20.2	18.6	19.4	24.0	21.7	22.5	22.9	20.7	21.8	19.1	16.7	17.8
15	21.2	19.4	20.2	23.6	21.4	22.5	23.1	21.4	22.2	18.6	16.7	17.8
16	21.9	20.2	20.9	23.2	22.1	22.6	22.9	21.1	21.9	19.1	17.2	18.3
17	21.8	20.6	21.1	23.2	21.6	22.4	22.9	20.9	22.0	19.3	17.0	18.5
18	21.5	20.2	20.8	23.9	21.7	22.8	23.8	21.2	22.4	19.6	17.5	18.5
19	21.6	20.1	20.7	23.9	21.9	22.9	23.6	21.7	22.7	18.8	17.3	18.2
20	22.1	20.6	21.2	24.3	21.6	23.1	23.9	21.9	23.0	18.8	17.7	18.1
21	22.1	21.1	21.5	25.0	23.1	24.0	24.8	22.4	23.4	18.8	17.0	17.9
22	22.0	20.7	21.2	25.1	23.2	24.1	24.6	23.1	23.9	19.0	16.9	17.8
23	21.7	20.4	20.9	25.3	22.4	23.8	25.5	22.7	24.0	18.8	17.0	17.8
24	21.7	20.6	21.0	25.3	22.7	24.2	24.6	22.9	23.6	18.6	17.0	17.8
25	21.7	20.9	21.3	25.0	22.1	23.4	24.4	22.1	23.2	18.3	16.7	17.5
26	21.2	20.1	20.6	24.6	21.9	23.3	25.0	22.9	23.7	17.2	15.8	16.3
27	20.9	19.8	20.4	25.3	22.2	23.6	24.1	22.2	23.3	16.0	13.6	14.8
28	20.7	19.8	20.1	26.9	23.6	25.1	23.8	22.9	23.4	14.1	12.5	13.3
29	20.9	19.6	20.1	26.2	24.1	25.5	23.9	22.1	23.0	13.6	11.7	12.7
30	21.9	19.6	20.6	25.2	24.3	24.7	22.9	21.0	22.0	13.4	11.9	12.8
31	---	---	---	24.6	23.6	24.1	21.0	19.4	20.1	---	---	---
MONTH	22.1	12.8	18.4	26.9	19.8	23.0	25.7	19.4	23.1	20.6	11.7	17.5

## 10128500 WEBER RIVER NEAR OAKLEY, UT

LOCATION.--Lat 40°44'14", long 111°14'50", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 15, T. 1 S., R. 6 E., Summit County, Hydrologic Unit 16020101, on right bank 1.5 mi downstream from South Fork, 2.2 mi upstream from Weber-Provo diversion canal, and 3.2 mi northeast of Oakley.

DRAINAGE AREA.--162 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1904 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 790: 1934. WSP 1394: 1907-09, 1911-12, 1921-22. WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,640 ft above sea level, from topographic map. Prior to Oct 25, 1933, staff gage at site 0.2 mi downstream at different datum. Oct 25, 1933 to Aug 29, 1955, water-stage recorder at present site at datum 0.5 ft higher. Aug 29, 1955 to Oct 27, 1981 at present site at different datum. Oct 27, 1981 to Jul 21, 1993 at site 0.3 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several small diversions for irrigation above station. Flow slightly regulated by several small lakes on headwaters and a small reservoir on Smith and Morehouse Creek. Total capacity of lakes and reservoir, 10,750 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,170 ft<sup>3</sup>/s Jun 13, 1921, gage height, 9.0 ft, site and datum then in use, from rating curve extended above 2,000 ft<sup>3</sup>/s; minimum observed, 15 ft<sup>3</sup>/s Dec 9, 1977, minimum discharge, 15 ft<sup>3</sup>/s Dec 15, 1990, Feb 27, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 31	0415	1,540	3.44	Jun 17	0140	*2,360	*4.06

Minimum daily discharge, 65 ft<sup>3</sup>/s, Jan 9-11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	86	89	e72	e76	68	109	238	1170	577	199	131
2	128	87	87	e70	e77	67	103	256	1160	541	192	139
3	138	92	85	e70	e78	66	101	292	1100	500	197	169
4	143	89	91	e70	e80	67	97	247	983	453	200	158
5	137	93	82	e70	e77	66	96	218	894	404	200	146
6	152	97	89	e70	e75	67	98	227	856	364	197	137
7	176	91	e85	e68	e75	68	98	293	923	347	188	127
8	174	96	e85	e68	e76	68	104	358	1030	347	186	115
9	169	95	e85	e65	e79	67	104	404	1200	310	183	114
10	165	94	e85	e65	e82	68	97	349	1240	280	182	114
11	162	92	e85	e65	e85	67	95	319	1110	261	177	113
12	158	94	e85	e68	e79	66	97	318	1240	243	171	111
13	156	94	e85	e68	e79	66	105	430	1360	228	163	109
14	156	88	e85	e66	e79	68	113	404	1420	229	158	109
15	155	89	e85	e66	74	71	114	383	1670	230	154	108
16	146	87	e85	e67	78	75	115	349	1870	217	151	107
17	125	90	e83	e67	69	77	125	336	1890	215	148	106
18	122	92	e83	e68	69	81	148	371	1820	198	157	107
19	121	89	e83	e69	68	88	176	439	1700	189	151	112
20	119	86	e82	e70	78	94	212	483	1630	181	162	114
21	116	93	e82	e72	72	98	204	569	1440	176	185	108
22	110	92	e82	e73	68	98	178	687	1320	166	152	105
23	97	89	e82	e73	71	99	166	833	1230	157	146	105
24	94	90	e81	e75	67	102	162	1120	1150	158	144	105
25	96	86	e80	e77	66	113	162	1240	1070	167	139	105
26	95	87	e80	e75	67	116	166	1230	986	165	137	104
27	94	88	e79	e75	66	111	203	1240	856	185	141	104
28	91	89	e77	e74	67	107	236	1300	723	188	141	104
29	88	91	e76	e76	---	105	265	1400	652	197	133	104
30	91	89	e75	e76	---	110	239	1370	612	223	133	103
31	89	---	e74	e75	---	110	---	1440	---	231	144	---
TOTAL	3992	2715	2572	2183	2077	2594	4288	19143	36305	8327	5111	3493
MEAN	129	90.5	83.0	70.4	74.2	83.7	143	618	1210	269	165	116
MAX	176	97	91	77	85	116	265	1440	1890	577	200	169
MIN	88	86	74	65	66	66	95	218	612	157	133	103
AC-FT	7920	5390	5100	4330	4120	5150	8510	37970	72010	16520	10140	6930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1999, BY WATER YEAR (WY)

	MEAN	80.4	70.3	60.9	56.6	56.8	67.7	179	686	925	270	115	86.2
MAX	202	122	105	91.2	86.1	181	515	1279	2178	1486	259	199	199
(WY)	1983	1913	1984	1984	1915	1986	1910	1914	1909	1907	1983	1983	1983
MIN	33.8	37.6	28.8	37.4	35.0	35.9	64.2	170	81.0	41.7	34.4	32.9	32.9
(WY)	1993	1978	1978	1978	1977	1964	1977	1975	1977	1934	1934	1934	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1905 - 1999	
ANNUAL TOTAL	98897		92800			
ANNUAL MEAN	271		254		221	
HIGHEST ANNUAL MEAN					415	
LOWEST ANNUAL MEAN					77.4	
HIGHEST DAILY MEAN	1520	Jun 26	1890	Jun 17	4170	Jun 13 1921
LOWEST DAILY MEAN	63	Jan 5	65	Jan 9	20	Dec 1 1977
ANNUAL SEVEN-DAY MINIMUM	65	Jan 1	66	Jan 9	23	Nov 30 1977
ANNUAL RUNOFF (AC-FT)	196200		184100		160400	
10 PERCENT EXCEEDS	781		767		630	
50 PERCENT EXCEEDS	127		109		80	
90 PERCENT EXCEEDS	70		70		49	
e Estimated						

## WEBER RIVER BASIN

## 10129400 ROCKPORT RESERVOIR NEAR WANSHIP, UT

LOCATION.--Lat 40°47'25", long 111°24'12", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 29, T. 1 N., R. 5 E., Summit County, Hydrologic Unit 16020101, in powerhouse on downstream side of dam on Weber River, 1.2 mi south of Wanship and 1.2 mi up-stream from Silver Creek.

DRAINAGE AREA.--334 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1957 to September 1999 (discontinued).

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Bureau of Reclamation).

REMARKS.--Records fair. Reservoir is formed by earthfill rock-faced dam; storage began in fall of 1956; dam completed March 1957. Usable capacity, 60,860 acre-ft between elevation 5,930 ft (bottom of outlet tunnel) and 6,037 ft (top of spillway) above mean sea level. Dead storage, 1,260 acre-ft. Figures given herein represent usable contents. Water is used for irrigation, domestic, and industrial purposes.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 65,030 acre-ft June 24, 27, 28, 1967 and June 12, 13, 1983, elevation, 6,040.8 ft; minimum observed since storage began, 152 acre-ft Sept. 10, 15, 1959, elevation, 5,931.2 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 62,930 acre-ft, Jun 28, elevation, 6038.6 ft; minimum daily contents, 34,720 acre-ft, Mar 31 and Apr 1, elevation 6,008.8 ft.

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54400	53300	48440	42250	41810	37520	34720	40430	47970	62380	59790	56440
2	54300	53200	48250	42070	41720	37350	34800	40520	47780	62270	59790	56440
3	54300	53000	48060	41900	41550	37270	34870	40860	47680	62050	59790	56340
4	54400	52900	47780	41640	41460	37190	34950	41290	47400	61840	59680	56340
5	54500	52700	47590	41550	41380	37110	35110	41550	47310	61730	59580	56230
6	54500	52500	47400	41550	41290	36950	35190	41810	47120	61620	59580	56230
7	54600	52310	47220	41380	41210	36790	35270	41900	46940	61620	59470	56230
8	54700	52210	46940	41290	41120	36540	35430	42070	46750	61620	59370	56130
9	54700	52110	46750	41210	41030	36380	35500	42340	46840	61620	59150	56130
10	54800	52010	46570	41120	41210	36220	35580	42600	47120	61620	59050	56030
11	54800	51810	46380	41030	41210	36060	35660	42420	47310	61620	58840	55920
12	54800	51620	46200	41030	41120	35900	35740	42340	47310	61620	58730	55820
13	54800	51520	46020	41030	40950	35580	35820	42250	48440	61620	58620	55620
14	54800	51320	45830	41030	40860	35350	35900	42420	49480	61620	58520	55510
15	54800	51130	45650	41030	39840	35430	35980	42510	50260	61620	58420	55310
16	54900	51030	45470	41030	40430	35430	36060	42510	51130	61730	58310	55210
17	54900	50840	45280	41120	40260	35500	36220	42340	52310	61730	58100	55110
18	55010	50740	45100	41210	40100	35500	36380	42160	53300	61400	57990	54900
19	55010	50540	44920	41290	39920	35580	36620	42160	54200	61180	57780	54800
20	54900	50350	44650	41380	39760	35500	36870	42160	55210	60970	57680	54700
21	54800	50160	44380	41460	39500	35500	37270	42250	56440	60970	57580	54600
22	54600	49960	44110	41460	39250	35430	37600	42510	57780	60860	57470	54500
23	54500	49870	43840	41460	39080	35350	37840	42950	59370	60750	57370	54400
24	54600	49680	43480	41550	38750	35190	38090	43310	60860	60650	57260	54300
25	54600	49480	43220	41640	38420	35030	38340	44920	61940	60540	57160	54200
26	54600	49290	43040	41640	38090	34950	38670	44560	62710	60430	57160	54100
27	54000	49200	42950	41720	37840	34870	39000	44380	62820	60330	56950	53900
28	53800	49010	42950	41720	37680	34870	39420	45650	62930	60220	56850	53800
29	53700	48820	42690	41720	---	34800	39920	46290	62710	60110	56750	53700
30	53600	48630	42600	41720	---	34800	40260	46840	62600	60000	56640	53600
31	53400	---	42420	41810	---	34720	---	47400	---	59900	56640	---
TOTAL	1690120	1531240	1406180	1285040	1126840	1110660	1099080	1329700	1592020	1898240	1806070	1656540
MEAN	54520	51040	45360	41450	40240	35830	36640	42890	53070	61230	58260	55220
MAX	55010	53300	48440	42250	41810	37520	40260	47400	62930	62380	59790	56440
MIN	53400	48630	42420	41030	37680	34720	34720	40430	46750	59900	56640	53600
(#)	6029.8	6024.9	6018.1	6017.4	6012.5	6008.8	6015.6	6023.6	6038.6	6036.1	6033.0	6030.0
(*)	-1000	-4770	-6210	-610	-4130	-2960	+5540	+7140	+15200	-2700	-3260	-3040

CAL YR 1998.....(\*) +5150

WTR YR 1999.....(\*) -800

(#) Elevation, in feet, at end of month.

(\*) Change in contents, in acre-feet.

(e) Estimated

## WEBER RIVER BASIN

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## 10129500 WEBER RIVER NEAR WANSHIP, UT

LOCATION.--Lat 40°47'34", Long 111°24'15", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 29, T. 1 N., R. 5 E., Summit County, Hydrologic Unit 16020101, on left bank 0.1 mi downstream from Wanship Dam, 1.2 mi south of Wanship and 1.25 mi upstream from Silver Creek.

DRAINAGE AREA.--335 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to September 1955, April 1957 to September 1960, October 1988 to current year. Monthly discharges only April 1957 to September 1960, published in WSP 1734.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,900 ft above sea level, from topographic map. Nov. 17, 1950, to Sept. 30, 1955, water-stage recorder at site 200 ft upstream at different datum.

REMARKS.--Records good except for winter record which is fair. Flow completely regulated by Wanship Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,340 ft<sup>3</sup>/s May 30, 1951, gage height, 4.73 ft, site and datum then in use; minimum daily, 0.1 ft<sup>3</sup>/s Nov. 17-22, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,330 ft<sup>3</sup>/s, Jun 3, gage height, 3.53 ft; minimum daily discharge, 62 ft<sup>3</sup>/s, Apr 9, 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	201	201	204	129	199	76	154	1240	402	171	177
2	207	201	201	205	163	198	70	159	1310	335	170	179
3	205	201	200	205	159	197	68	193	1330	275	170	183
4	205	204	203	176	160	200	68	215	1210	218	170	183
5	204	201	202	138	161	201	69	215	1140	182	171	181
6	201	201	201	137	161	201	67	214	1140	168	168	178
7	203	201	201	139	161	200	65	184	1140	166	164	177
8	205	201	202	139	162	201	64	215	1090	165	164	179
9	202	201	210	142	169	201	62	222	1140	162	166	179
10	205	201	202	142	216	201	70	295	1140	157	179	177
11	206	201	208	108	210	201	68	333	1060	150	183	179
12	204	204	210	87	210	201	66	331	546	145	180	187
13	204	204	210	83	210	199	66	335	390	153	175	188
14	202	204	210	83	210	198	67	333	654	164	173	192
15	200	205	210	73	210	197	68	336	806	197	173	195
16	201	203	210	71	210	197	68	336	849	195	174	194
17	201	201	209	74	210	200	67	333	917	256	174	192
18	197	201	205	77	210	201	66	333	944	276	194	192
19	198	193	205	89	210	201	65	336	868	224	178	194
20	197	201	205	86	210	200	69	335	702	200	179	197
21	200	201	205	79	210	201	67	336	459	180	181	196
22	200	200	205	79	210	204	66	342	203	168	179	194
23	202	198	205	79	247	205	85	337	135	160	177	194
24	196	198	205	79	258	206	67	342	180	159	178	197
25	196	197	205	77	249	208	62	589	349	163	177	197
26	199	199	207	76	250	173	65	687	599	165	177	200
27	201	197	187	76	232	159	67	425	690	145	181	209
28	201	200	215	78	198	162	71	710	661	177	174	209
29	201	201	211	78	---	152	128	1090	584	182	171	206
30	201	200	207	79	---	146	157	1090	491	173	175	205
31	201	---	205	79	---	119	---	1100	---	174	177	---
TOTAL	6253	6021	6362	3317	5595	5929	2184	12455	23967	6036	5423	5710
MEAN	202	201	205	107	200	191	72.8	402	799	195	175	190
MAX	208	205	215	205	258	208	157	1100	1330	402	194	209
MIN	196	193	187	71	129	119	62	154	135	145	164	177
AC-FT	12400	11940	12620	6580	11100	11760	4330	24700	47540	11970	10760	11330

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1999, BY WATER YEAR (WY)

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
MEAN	164	142	128	82.0	99.0	129	172	288	547	298	224	198
MAX	209	211	258	213	220	279	440	743	1295	846	333	288
(WY)	1994	1998	1958	1997	1997	1997	1958	1997	1995	1995	1989	1958
MIN	23.3	23.2	22.5	23.0	15.8	25.8	30.0	94.1	137	120	175	112
(WY)	1993	1993	1995	1993	1991	1992	1991	1989	1989	1958	1999	1989

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1958 - 1999

ANNUAL TOTAL	104007	89252	
ANNUAL MEAN	285	245	206
HIGHEST ANNUAL MEAN			314
LOWEST ANNUAL MEAN			125
HIGHEST DAILY MEAN	1480	Jun 27	1330
LOWEST DAILY MEAN	27	Jan 15	62
ANNUAL SEVEN-DAY MINIMUM	31	Jan 9	66
ANNUAL RUNOFF (AC-FT)	206300	177000	149300
10 PERCENT EXCEEDS	519	342	342
50 PERCENT EXCEEDS	201	200	186
90 PERCENT EXCEEDS	139	79	26

10130500 WEBER RIVER NEAR COALVILLE, UT

LOCATION.--Lat 40°53'43", long 111°24'04", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 20, T. 2 N., R. 5 E., Summit County, Hydrologic Unit 16020101, on left bank 1.2 mi upstream from high-water line of Echo Reservoir, 1.4 mi south of Coalville, 1.7 mi upstream from Chalk Creek, and 5.5 mi downstream from Silver Creek.

DRAINAGE AREA.--435 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1927 to current year.

REVISED RECORDS.--WSP 1314: 1943 (M). WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,600 ft above sea level, from topographic map. Prior to Mar. 22, 1931, nonrecording gage, Mar 22, 1931 to Jul 18, 1967, water-stage recorder at same site at different datum.

REMARKS.--Records good. Many diversions for irrigation above station. No diversion between station and Echo Reservoir. Records do not include water diverted from Weber River basin through Weber-Provo diversion canal. Flow regulated by several small reservoirs above station, and since Apr 1, 1957, by Rockport Reservoir (see station 10129400).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,190 ft<sup>3</sup>/s May 6, 1952; maximum gage height, 5.08 ft (present datum) May 29, 1951; minimum, 6 ft<sup>3</sup>/s Sep 20, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,320 ft<sup>3</sup>/s, Jun 2-3, gage height, 4.43 ft; minimum daily discharge, 81 ft<sup>3</sup>/s, Jan 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	227	228	226	121	235	103	236	1180	390	167	179
2	216	225	227	226	160	238	92	234	1270	321	164	181
3	236	225	227	227	160	242	88	318	1310	258	162	203
4	249	225	228	227	163	246	86	338	1230	191	163	208
5	246	226	227	227	167	239	84	329	1160	153	165	199
6	237	231	225	201	171	233	84	328	1160	142	165	190
7	231	230	226	160	175	232	83	291	1170	144	158	186
8	231	231	227	162	181	230	87	322	1120	153	152	185
9	227	230	233	162	180	232	83	323	1150	149	156	182
10	227	229	222	162	258	232	91	358	1160	147	164	175
11	227	226	228	135	239	233	88	400	1100	144	168	175
12	225	227	231	103	241	233	86	396	667	143	165	182
13	225	230	232	98	240	232	87	451	380	153	159	180
14	222	231	232	95	237	233	92	443	656	167	153	187
15	218	234	231	88	235	240	92	427	818	206	152	190
16	224	236	230	81	232	261	91	413	870	200	154	190
17	221	241	230	84	234	271	93	402	919	243	156	191
18	219	245	230	91	232	268	99	399	943	298	169	191
19	219	231	226	106	233	271	103	393	887	231	156	194
20	219	227	225	111	230	271	114	385	733	202	162	197
21	219	230	225	100	229	268	118	385	510	174	181	192
22	219	233	225	93	228	264	104	377	242	157	172	190
23	222	233	225	92	255	259	116	380	135	147	166	190
24	217	231	225	94	282	260	99	388	145	144	165	189
25	219	230	227	91	284	264	95	561	294	142	166	192
26	224	230	227	88	284	232	93	747	529	144	166	201
27	229	229	227	87	271	199	127	505	647	125	174	209
28	229	228	227	86	232	195	150	653	630	157	167	215
29	228	228	227	88	---	183	232	1080	557	165	166	216
30	233	229	227	92	---	175	259	1090	472	159	172	215
31	230	---	227	92	---	154	---	1100	---	164	181	---
TOTAL	6994	6908	7054	3975	6154	7325	3219	14452	24044	5713	5086	5774
MEAN	226	230	228	128	220	236	107	466	801	184	164	192
MAX	249	245	233	227	284	271	259	1100	1310	390	181	216
MIN	206	225	222	81	121	154	83	234	135	125	152	175
AC-FT	13870	13700	13990	7880	12210	14530	6380	28670	47690	11330	10090	11450

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1999, BY WATER YEAR (WY)

MEAN	174	154	147	132	135	167	208	337	576	282	184	178
MAX	397	246	400	397	307	615	760	994	1550	815	346	277
(WY)	1985	1986	1984	1984	1985	1986	1986	1986	1983	1995	1983	1958
MIN	26.8	32.0	27.9	23.5	28.1	27.5	31.4	44.3	96.8	89.7	40.6	43.6
(WY)	1993	1962	1978	1978	1981	1981	1981	1959	1977	1958	1961	1960

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1958 - 1999
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ANNUAL TOTAL	111254		96698				
ANNUAL MEAN	305		265			223	
HIGHEST ANNUAL MEAN						485	1986
LOWEST ANNUAL MEAN						71.1	1961
HIGHEST DAILY MEAN	1290	Jun 27	1310	Jun 3		1860	Jun 12 1983
LOWEST DAILY MEAN	46	Jan 10	81	Jan 16		7.0	Apr 20 1977
ANNUAL SEVEN-DAY MINIMUM	51	Jan 9	85	Apr 3		15	May 2 1961
ANNUAL RUNOFF (AC-ET)	220700		191800			161500	
10 PERCENT EXCEEDS	568		406			404	
50 PERCENT EXCEEDS	227		225			176	
90 PERCENT EXCEEDS	163		100			45	

## WEBER RIVER BASIN

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10130500 WEBER RIVER NEAR COALVILLE, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 13, 1998 to April 20, 1999.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 13, 1998 to April 20, 1999.

INSTRUMENTATION.--Temperature data logger.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 13.3°C, Apr 18, 1999; minimum, 0.0°C, Jan 14, 30, 1998 and Feb 2, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 13.3°C, Apr 18; minimum, 0.0°C, Jan 14, 30, and Feb 2.

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	6.8	5.3	6.0	4.5	1.9	3.1
2	---	---	---	---	---	---	7.8	5.2	6.2	3.9	1.2	2.2
3	---	---	---	---	---	---	7.4	4.3	5.6	3.4	.6	1.7
4	---	---	---	---	---	---	5.4	3.9	4.9	3.4	.6	1.7
5	---	---	---	---	---	---	5.3	2.4	3.8	4.2	1.2	2.4
6	---	---	---	---	---	---	4.7	2.1	3.2	4.2	1.0	2.4
7	---	---	---	---	---	---	4.8	2.2	3.3	4.2	1.7	2.6
8	---	---	---	---	---	---	4.7	2.0	3.3	3.6	1.2	2.3
9	---	---	---	---	---	---	4.3	1.9	3.2	4.0	.9	2.3
10	---	---	---	---	---	---	4.0	1.2	2.4	4.7	2.1	3.1
11	---	---	---	---	---	---	4.5	1.7	2.8	4.0	1.2	2.4
12	---	---	---	---	---	---	5.0	2.5	3.4	4.3	1.5	2.8
13	---	---	---	8.2	4.8	6.3	4.8	2.0	3.2	4.3	1.7	2.7
14	---	---	---	8.7	5.0	6.5	4.7	2.3	3.1	2.9	.0	1.5
15	---	---	---	8.8	5.4	6.8	4.5	1.7	2.8	4.3	1.8	2.7
16	---	---	---	8.4	5.1	6.5	4.7	1.8	2.9	3.7	.9	2.4
17	---	---	---	8.1	5.9	6.6	4.7	1.7	2.9	4.0	1.5	2.7
18	---	---	---	7.6	5.5	6.5	3.4	1.8	2.5	3.6	2.6	3.0
19	---	---	---	7.3	4.6	5.8	2.1	.6	1.1	3.4	2.0	2.8
20	---	---	---	7.3	4.0	5.3	1.2	.1	.4	3.4	1.5	2.4
21	---	---	---	7.6	4.8	6.2	1.5	.1	.4	3.6	1.7	2.5
22	---	---	---	7.1	5.8	6.3	2.5	.1	.8	3.4	.2	1.8
23	---	---	---	8.2	5.4	6.5	2.0	.1	.6	3.6	1.0	2.3
24	---	---	---	6.8	4.8	5.9	2.6	.2	1.3	3.4	1.5	2.5
25	---	---	---	7.6	4.5	5.7	3.6	1.8	2.5	4.2	1.2	2.4
26	---	---	---	7.8	4.5	5.9	3.7	2.1	2.8	2.8	.1	1.6
27	---	---	---	7.6	5.1	6.1	4.2	1.8	2.7	3.4	1.5	2.3
28	---	---	---	6.5	5.9	6.1	4.3	2.1	3.1	2.0	.1	.9
29	---	---	---	7.1	5.7	6.2	5.3	2.7	3.6	1.5	.1	.6
30	---	---	---	7.8	5.3	6.2	5.3	2.3	3.3	1.8	.0	.6
31	---	---	---	---	---	---	3.2	2.3	2.7	2.8	.1	1.2
MONTH	---	---	---	---	---	---	7.8	.1	2.9	4.7	.0	2.2



## WEBER RIVER BASIN

10130500 WEBER RIVER NEAR COALVILLE, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	4.0	.7	2.3	5.7	2.3	3.7	9.3	2.1	5.3	---	---	---
2	2.9	.0	1.2	6.4	1.7	3.6	5.9	2.0	4.4	---	---	---
3	5.4	1.5	2.9	5.9	1.8	3.7	7.9	1.8	4.6	---	---	---
4	4.8	1.4	2.9	5.3	2.2	3.5	8.4	2.0	5.1	---	---	---
5	5.0	2.8	3.6	6.1	.7	2.9	7.0	1.5	4.5	---	---	---
6	5.3	1.8	3.3	5.7	1.0	3.1	9.0	3.6	6.1	---	---	---
7	4.0	2.6	3.2	4.2	2.3	3.1	8.8	2.8	6.0	---	---	---
8	4.5	2.8	3.4	6.2	1.5	3.6	10.2	3.2	6.4	---	---	---
9	5.1	2.5	3.7	5.1	2.5	3.4	7.3	4.2	5.5	---	---	---
10	3.4	.7	2.3	6.8	1.7	3.8	9.8	1.8	5.5	---	---	---
11	4.0	.1	1.5	5.3	2.3	3.3	9.5	2.3	6.0	---	---	---
12	4.3	.2	1.7	6.5	2.6	4.0	11.3	3.6	7.6	---	---	---
13	5.1	.6	2.3	7.6	1.5	4.0	12.4	4.0	8.3	---	---	---
14	5.6	1.8	3.2	7.8	2.0	4.4	11.1	3.4	7.4	---	---	---
15	5.3	1.7	3.0	7.6	2.9	4.8	10.5	2.6	6.5	---	---	---
16	5.4	1.2	2.9	8.1	2.3	4.6	10.8	1.8	6.5	---	---	---
17	3.1	2.0	2.6	8.1	1.8	4.3	12.5	2.9	7.8	---	---	---
18	4.7	1.2	2.7	8.4	1.8	4.5	13.3	4.2	8.8	---	---	---
19	4.3	1.9	3.0	8.5	2.0	4.8	13.1	4.8	9.0	---	---	---
20	5.3	.7	2.7	7.3	2.3	4.5	9.4	5.8	6.9	---	---	---
21	3.4	1.6	2.4	8.1	3.2	5.0	---	---	---	---	---	---
22	5.6	1.4	2.9	8.7	2.9	5.1	---	---	---	---	---	---
23	6.1	2.0	3.3	7.8	2.3	4.7	---	---	---	---	---	---
24	6.7	1.8	3.7	9.0	2.5	5.2	---	---	---	---	---	---
25	5.9	2.3	3.5	9.1	2.8	5.6	---	---	---	---	---	---
26	5.6	1.8	3.2	7.8	3.9	5.5	---	---	---	---	---	---
27	6.5	1.4	3.4	7.8	3.5	5.1	---	---	---	---	---	---
28	7.6	2.1	4.2	8.7	2.1	4.9	---	---	---	---	---	---
29	---	---	---	9.3	2.0	5.3	---	---	---	---	---	---
30	---	---	---	7.9	4.3	6.0	---	---	---	---	---	---
31	---	---	---	4.7	3.1	3.9	---	---	---	---	---	---
MONTH	7.6	.0	2.9	9.3	.7	4.3	---	---	---	---	---	---

## 10131000 CHALK CREEK AT COALVILLE, UT

LOCATION.--Lat 40°55'14", long 111°24'03", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 8, T. 2 N., R. 5 E., Summit County, Hydrologic Unit 16020101, on left bank 100 ft downstream from bridge on U.S. Highway 189 in Coalville and 0.3 mi upstream from mouth.

DRAINAGE AREA.--250 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1904, March to November 1905, April 1927 to current year.

REVISED RECORDS.--WSP 1564: 1929. WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,557.6 feet above sea level. Prior to Feb 13, 1931, nonrecording gage at site 100 ft upstream at different datum. Feb 13, 1931 to Oct. 15, 1941, water-stage recorder at site 300 ft upstream at different datum. Oct 16, 1941 to Sep 30, 1987 at datum 3.0 ft lower.

REMARKS.--Records good. Diversions above station used for irrigation of land in the drainage basin above the station. Flow slightly affected by Chalk Creek Reservoir, capacity, 1,600 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft<sup>3</sup>/s May 22, 1993, gage height, 6.89 ft; minimum, less than 1.0 ft<sup>3</sup>/s for several days in 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 25	0200	*974	*5.81				

Minimum discharge, 16 ft<sup>3</sup>/s, Jan 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	46	45	33	42	51	72	255	473	120	64	39
2	46	45	44	31	29	49	64	264	494	113	56	40
3	50	45	43	28	39	49	65	540	520	107	53	51
4	61	43	43	27	37	49	64	446	438	99	56	54
5	58	43	28	30	40	42	64	330	423	94	54	48
6	52	49	26	31	39	41	68	268	359	87	53	47
7	50	39	33	30	50	45	71	279	462	82	51	43
8	51	53	39	29	57	43	98	321	456	80	46	41
9	48	40	41	29	67	45	115	433	419	79	40	39
10	45	49	30	30	74	43	82	351	379	77	42	37
11	44	47	36	30	33	45	81	262	317	74	39	37
12	43	46	38	30	38	46	82	230	298	65	42	36
13	41	43	36	29	44	42	99	605	279	63	41	34
14	41	47	35	26	47	48	126	589	273	73	46	34
15	41	48	34	32	42	53	107	438	261	89	42	33
16	46	46	34	31	42	55	96	368	260	78	35	33
17	46	49	34	32	42	57	101	291	252	78	35	32
18	46	51	33	34	39	58	129	307	235	70	36	36
19	45	46	30	46	39	61	165	414	217	63	32	38
20	45	35	26	43	36	69	190	443	205	66	34	42
21	44	49	25	39	39	77	184	515	192	62	44	39
22	44	54	26	33	38	91	150	560	189	58	40	38
23	44	50	25	36	39	112	130	624	187	58	38	37
24	44	50	24	37	41	108	117	751	180	54	41	34
25	44	44	25	33	45	122	116	826	170	49	40	31
26	44	46	27	28	43	155	129	737	159	43	39	29
27	44	48	29	43	39	143	197	671	149	38	39	27
28	44	47	31	26	48	81	292	686	139	41	39	28
29	44	48	32	22	---	70	388	703	130	44	39	29
30	46	47	33	30	---	80	299	691	125	55	37	29
31	47	---	33	37	---	93	---	635	---	72	40	---
TOTAL	1436	1393	1018	995	1208	2123	3941	14833	8640	2231	1333	1115
MEAN	46.3	46.4	32.8	32.1	43.1	68.5	131	478	288	72.0	43.0	37.2
MAX	61	54	45	46	74	155	388	826	520	120	64	54
MIN	41	35	24	22	29	41	64	230	125	38	32	27
AC-FT	2850	2760	2020	1970	2400	4210	7820	29420	17140	4430	2640	2210

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1999, BY WATER YEAR (WY)

	MEAN	22.0	24.1	21.3	21.0	23.9	40.8	118	288	183	49.1	24.4	22.2
MAX	66.7	60.3	54.2	49.8	94.6	168	378	775	812	194	89.9	69.2	
(WY)	1983	1985	1984	1984	1986	1986	1986	1986	1986	1983	1983	1984	1983
MIN	1.00	4.57	8.52	8.93	11.6	15.9	13.7	6.90	1.70	1.55	1.48	1.00	
(WY)	1935	1935	1940	1961	1940	1964	1934	1934	1934	1934	1934	1934	1934

## SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1928 - 1999

	ANNUAL TOTAL	41730	ANNUAL MEAN	114	40266	110	70.0	197	1986
HIGHEST ANNUAL MEAN								8.66	1934
LOWEST ANNUAL MEAN									
HIGHEST DAILY MEAN	762	Jun 19	826	May 25	1420	May 22	1993		
LOWEST DAILY MEAN	17	Jan 6	22	Jan 29	1.0	Jun 8	1934		
ANNUAL SEVEN-DAY MINIMUM	24	Jan 1	25	Dec 20	1.0	Aug 19	1934		
ANNUAL RUNOFF (AC-FT)	82770		79870		50690				
10 PERCENT EXCEEDS	324		302		190				
50 PERCENT EXCEEDS	49		46		26				
90 PERCENT EXCEEDS	27		31		11				

## WEBER RIVER BASIN

## 10131500 ECHO RESERVOIR AT ECHO, UT

LOCATION.--Lat 40°57'50", long 111°25'55", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 30, T. 3 N., R. 5 E., Summit County, Hydrologic Unit 16020101, near outlet works at left end of Echo Dam on Weber River, 1.1 mi southeast of Echo.

DRAINAGE AREA.--726 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1930 to September 1999 (discontinued).

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,450 ft above sea level (levels by Bureau of Reclamation). Prior to 1932, elevations obtained from mercury gage in valve house and staff gage.

REMARKS.--Records fair. Reservoir is formed by earthfill, rock-faced dam; storage began in October 1930; dam completed in 1931. Capacity, 73,940 acre-ft between elevation 5,450 ft (bottom of outlet tunnel) and 5,560 ft (top of radial gages in spillway) above mean sea level. Dead storage negligible. Figures given herein represent total contents. Water is used for irrigation of the Echo Project.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 75,420 acre-ft Jun 13, 1983, elevation, 5,561.0 ft; no contents Sep 12 to Dec 3, 1931, Sep 24 to Nov 2, 1934, Oct 12 to Nov 21, 1944, Oct 1 to Nov 15, 1954, Sep 11-20, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 73,110 acre-ft, Jun 21, elevation, 5,559.4 ft; minimum daily contents, 31,230 acre-ft Sep 30, elevation, 5,525.1 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42800	51440	62530	61820	58100	59340	51820	60490	63200	71370	53250	39740
2	42950	51820	62520	61850	58010	59370	52160	60260	63690	70970	52850	39350
3	43130	52160	62460	61890	57930	59470	52460	60650	64370	70370	52500	39190
4	43410	52450	62470	61900	57860	59590	52570	61500	64920	69630	52060	39180
5	43710	52790	62370	61870	57790	59640	52670	61510	65390	68720	51620	39070
6	43940	53230	62270	61760	57730	59670	52800	60920	65540	67780	51190	38970
7	44170	53600	62200	61720	57700	59730	53050	60170	65860	66800	50850	38710
8	44350	53960	62160	61620	57690	59680	53230	59360	66120	66000	50390	38520
9	44510	54210	62080	61610	57720	59000	53420	58680	66370	65290	49980	38230
10	44600	54630	62060	61530	57900	58360	53580	58110	66470	64420	49510	37900
11	44710	54970	62030	61470	58000	57640	53720	57370	66610	63650	49120	37560
12	44640	55360	61980	61350	58040	57060	53850	56600	67270	62910	48840	37190
13	44720	55700	61970	61200	58110	56380	54020	56550	68290	62230	48460	36860
14	44740	56070	61930	60990	58170	55710	54320	57390	69210	61660	48150	36500
15	44870	56470	61940	60840	58250	55080	54530	57340	69630	61260	47790	36120
16	45210	56820	61930	60700	58290	54490	54750	56970	70440	60910	47300	35730
17	45550	57300	61920	60490	58360	53890	55140	56600	71310	60540	46770	35300
18	45820	57810	61950	60340	58430	53240	55540	56060	72170	60230	46340	34940
19	46160	58200	61920	60230	58490	52590	55940	55870	72600	59900	45810	34710
20	46430	58670	61920	60150	58510	51930	56490	55630	73000	59640	45360	34350
21	46780	59020	61860	60120	58550	51290	57190	56110	73110	59210	44940	34060
22	47010	59440	61810	59930	58600	50720	57800	56580	73010	58790	44520	33670
23	47340	59810	61780	59790	58680	50510	58330	57170	72710	58260	44040	33460
24	47650	60180	61770	59670	58800	50580	58740	57930	72250	57700	43540	33180
25	47940	60550	61760	59470	58900	50510	59070	58960	71760	57150	43000	32880
26	48290	60900	61690	59320	59090	50610	59430	59790	71520	56450	42580	32410
27	48860	61260	61620	59120	59210	50770	59950	60450	71570	55810	42070	31980
28	49400	61640	61560	58930	59280	50710	60630	60860	71730	55190	41530	31690
29	49920	62020	61640	58680	---	50720	60760	61650	71700	54580	41040	31430
30	50470	62390	61690	58480	---	51040	60690	62400	71660	54050	40510	31230
31	50960	---	61780	58270	---	51450	---	62800	---	53600	40100	---
MAX	50960	62390	62530	61900	59280	59730	60760	62800	73110	71370	53250	39740
MIN	42800	51440	61560	58270	57690	50510	51820	55630	63200	53600	40100	31230
(#)	5543.1	5551.9	5551.4	5548.8	5549.6	5543.5	5550.6	5552.2	5558.4	5545.2	5533.8	5525.1
(*)	+8240	+11430	-610	-3510	+1010	-7830	+9240	+2110	+8860	-18060	-13500	-8870

CAL YR 1998 .....(\*) +1740  
WTR YR 1999 .....(\*) -11490

(#) Elevation, in feet, at end of month.

(\*) Change in contents, in acre-feet.

(e) Estimated

## WEBER RIVER BASIN

233

## 10132000 WEBER RIVER AT ECHO, UT

LOCATION.--Lat 40°58'04", long 111°26'13", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 25, T. 3 N., R. 4 E., Summit County, Hydrologic Unit 16020101, on right bank 0.5 mi downstream from Echo Dam, 150 yards upstream from Echo Creek, 0.75 mi southeast of Echo, Ut.

DRAINAGE AREA.--727 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1927 to September 1960, October 1988 to current year. Monthly discharge only October 1958 to September 1960, published in WSP 1734.

GAGE.--Water-stage recorder. Elevation of gage is 5,440 ft above sea level, from Echo Reservoir elevations. Prior to Apr 18, 1931, staff gage at site 0.3 mi upstream at different datum. Apr 18, 1931 to Mar 23, 1950, water-stage recorder at site 0.1 mi downstream at different datum. Mar 24, 1950 to Sep 30, 1960 water-stage recorder at site 0.25 mi upstream at different datum.

REMARKS.--Records good. Flow regulated by Echo Reservoir (see station 10131500).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,060 ft<sup>3</sup>/s May 13, 1952, gage height 7.34 ft, datum then in use; minimum discharge, 0.15 ft<sup>3</sup>/s Jan 3, 4, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous discharge, 1,540 ft<sup>3</sup>/s, Jun 3, gage height, 4.18 ft; minimum daily discharge, 0.21 ft<sup>3</sup>/s, Mar 31 and Apr 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	78	209	224	218	241	.25	578	1360	654	445	423
2	207	80	261	224	217	241	.21	583	1380	653	433	389
3	211	80	261	224	229	241	56	477	1420	652	418	355
4	191	81	261	225	235	241	112	516	1300	672	452	326
5	177	82	261	225	235	239	103	660	1310	688	458	327
6	178	82	261	227	235	239	59	866	1360	687	437	338
7	177	83	261	229	235	239	47	984	1360	657	422	365
8	197	84	262	218	235	312	112	982	1370	630	434	377
9	217	84	252	211	235	533	107	889	1370	615	452	388
10	223	84	246	211	235	530	108	937	1370	625	451	410
11	239	85	254	212	235	527	108	963	1160	634	426	415
12	239	87	259	212	235	528	108	948	618	567	397	415
13	241	87	259	213	235	529	110	713	210	548	405	422
14	231	88	252	214	235	530	98	742	463	539	398	433
15	119	88	246	214	235	531	105	945	646	492	412	436
16	72	88	246	214	236	530	87	945	644	477	436	436
17	88	89	246	213	236	530	72	937	642	478	456	435
18	88	91	246	212	236	559	53	933	790	480	465	433
19	89	91	246	211	236	575	19	931	800	461	458	436
20	82	90	246	210	235	574	4.7	717	752	447	458	436
21	78	90	246	210	235	573	5.7	653	696	447	458	426
22	78	90	245	210	235	572	6.6	660	592	453	458	405
23	78	89	243	210	236	377	21	665	547	484	463	394
24	79	87	244	210	236	323	85	666	544	483	473	395
25	78	86	243	209	239	350	84	854	629	487	469	401
26	65	87	243	215	239	286	85	996	648	505	468	506
27	50	88	243	218	241	288	87	938	649	507	467	433
28	68	87	232	219	240	307	243	1010	650	505	476	401
29	76	88	224	219	---	179	501	1240	652	503	479	381
30	76	87	224	217	---	18	569	1370	653	492	476	369
31	78	---	224	217	---	.21	---	1360	---	472	454	---
TOTAL	4283	2581	7646	6697	6564	11742.21	3156.46	26658	26585	16994	13854	12106
MEAN	138	86.0	247	216	234	379	105	860	886	548	447	404
MAX	241	91	262	229	241	575	569	1370	1420	688	479	506
MIN	50	78	209	209	217	.21	.21	477	210	447	397	326
AC-FT	8500	5120	15170	13280	13020	23290	6260	52880	52730	33710	27480	24010

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932-58, 1989-99, BY WATER YEAR (WY)

	MEAN	118	95.7	92.5	94.6	113	118	187	547	738	510	428	288
	MAX	297	183	247	296	547	560	580	2158	1682	1037	597	492
	(WY)	1994	1939	1999	1997	1997	1996	1998	1952	1950	1995	1990	1993
	MIN	.45	.43	.29	.43	.42	.75	1.12	27.2	235	176	97.4	23.0
	(WY)	1993	1993	1993	1955	1993	1993	1955	1991	1934	1934	1934	1934

## SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1932-58, 1989-99

	ANNUAL TOTAL	147442.2	138866.67	278	1952
	ANNUAL MEAN	404	380	566	1934
	HIGHEST ANNUAL MEAN			108	7 1952
	LOWEST ANNUAL MEAN			3010	Jan 3 1991
	HIGHEST DAILY MEAN	1910	1420	.17	May 6 1992
	LOWEST DAILY MEAN	9.6	.21	.19	Dec 6 1992
	ANNUAL SEVEN-DAY MINIMUM	23	26		
	ANNUAL RUNOFF (AC-FT)	292500	275400	201600	
	10 PERCENT EXCEEDS	716	703	596	
	50 PERCENT EXCEEDS	339	259	168	
	90 PERCENT EXCEEDS	86	84	3.0	

## WEBER RIVER BASIN

## 10132490 LOST CREEK RESERVOIR NEAR CROYDON, UT

LOCATION.--Lat 41°11'05", long 111°23'59", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 8, T. 5 N., R. 5 E., Morgan County, Hydrologic Unit 16020101, 1.9 mi upstream from Hell Canyon and 8.1 mi northeast of Croydon.

DRAINAGE AREA.--123 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1967 to September 30, 1999 (discontinued).

GAGE.--Indicating float tape in gage house on top of dam until Apr. 29, 1989, water-stage recorder equipped with satellite transmission thereafter. Datum of gage is 5,912.3 ft above sea level, (levels by Bureau of Reclamation).

REMARKS.--Records good except for estimated daily contents, which are fair. Reservoir is formed by earthfill rock-faced dam; active storage began Apr. 22, 1967. Active capacity, 20,010 acre-ft at elevation 6,005.0 ft above mean sea level. Dead storage, 2,500 acre-ft between elevation 5,835.0 ft (streambed at dam axis) and 5,912.3 ft (top of dead storage). Figures given herein represent both dead storage and active contents. Construction on the dam that began in the spring of 1997 made it necessary to drain the reservoir and convert the 2,500 acre-ft, dead storage to usable contents. Water is used for irrigation, fish and wildlife propagation along Lost Creek, and irrigation, municipal, and industrial use below confluence of Lost Creek and Weber River.

COOPERATION.--Gage-height record until Apr. 29, 1989, and capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 21,270 acre-ft, May 30, June 1, 1983; elevation, 6,008.4 ft. Minimum contents, 0 acre-ft during the months September - December, 1997, January, February, August - December 1998. Reservoir drained for necessary construction on the dam.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 19,450 acre-ft Jul 3; minimum contents, 0 acre-ft for months: October through December 18. The reservoir was drained for necessary construction on the dam.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0	.0	.0	365	1090	1850	3090	6050	16030	19380	17190	e14070
2	.0	.0	.0	e382	e1110	e1880	3140	e6360	16240	e19420	17110	14030
3	.0	.0	.0	e400	e1140	e1900	e3180	6660	e16440	19450	17040	13950
4	.0	.0	.0	e418	e1160	e1930	e3220	6960	16640	e19370	16980	13830
5	.0	.0	.0	435	e1180	e1960	3260	7240	16840	e19300	16890	13730
6	.0	.0	.0	e470	e1200	e1990	3300	7460	17020	e19220	16760	13610
7	.0	.0	.0	e504	e1230	e2010	3350	7680	17260	19140	16670	13500
8	.0	.0	.0	e539	1250	2040	3400	7880	17490	e19060	16590	13440
9	.0	.0	.0	e574	e1280	e2070	3440	8180	17640	e19060	16510	13430
10	.0	.0	.0	e608	e1310	e2090	e3490	8520	17820	18980	16460	13430
11	.0	.0	.0	643	e1340	e2120	e3530	8760	17930	18900	16460	13430
12	.0	.0	.0	e664	e1370	e2140	3580	9000	18060	18830	16460	13440
13	.0	.0	.0	e685	e1400	e2170	3650	9360	18200	18750	16460	13270
14	.0	.0	.0	e706	e1430	e2190	3730	9740	18350	18680	16460	13000
15	.0	.0	.0	e726	e1460	2220	3820	10080	18450	18610	16460	12960
16	.0	.0	.0	e747	1490	e2280	3900	10420	18550	18530	16460	12930
17	.0	.0	.0	e768	e1520	e2330	e4000	10710	18630	18460	16040	12900
18	.0	.0	.0	e789	e1560	e2390	e4110	11010	18680	18390	15730	12850
19	.0	.0	e44	810	e1590	e2450	4210	11320	18780	18320	15730	12830
20	.0	.0	e88	e833	e1620	e2510	4320	11660	18840	18240	15570	12800
21	.0	.0	133	e856	e1660	e2560	4480	12060	18910	18160	15390	12760
22	.0	.0	e165	e879	1690	2620	4580	12440	18980	18080	15310	12720
23	.0	.0	e198	e902	e1710	e2690	4650	12880	19040	17990	15230	12690
24	.0	.0	e230	e925	e1740	e2770	e4750	13440	19100	17930	15120	12660
25	.0	.0	e262	948	e1760	e2840	e4850	13910	19140	17860	15030	12620
26	.0	.0	e294	e968	e1780	2920	4950	14260	e19180	17750	14930	12580
27	.0	.0	e327	e989	e1810	e2980	5060	14600	e19220	17630	14790	12540
28	.0	.0	359	e1010	1830	e3050	5260	14940	19260	17530	14640	12500
29	.0	.0	e360	e1030	---	3120	5470	15260	e19290	17440	14470	12460
30	.0	.0	e362	e1050	---	2980	5750	15550	19320	17340	14330	12420
31	.0	---	363	1070	---	3040	---	15790	---	17280	14240	---
MAX	.0	.	363	1070	1830	3120	5750	15790	19320	19450	17190	14070
MIN	.0	.0	.0	365	1090	1850	3090	6050	16030	17280	14240	12420
(#)	5853.7	5853.7	5872.0	5891.9	5904.2	5917.7	5939.0	5984.8	5996.0	5989.3	5979.2	5972.5
(*)	.0	.0	+363	+707	+760	+1210	+2710	+10040	+3530	-2040	-3040	-1820
CAL YR 1998.....(*)			+363									
WTR YR 1999.....(*)			+12420									

(#) Elevation, in feet, at end of month.

(\*) Change in contents, in acre-feet

(e) Estimated

## 10134000 EAST CANYON RESERVOIR NEAR MORGAN, UT

LOCATION.--Lat 40°55'14", long 111°35'59", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 10, T. 2 N., R. 3 E., Morgan County, Hydrologic Unit 16020102, on upstream face of concrete dam on East Canyon Creek, 9.0 mi southeast of Morgan.

DRAINAGE AREA.--144 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1931 to September 1999 (discontinued). October 1931 to September 1937, month-end contents only published in WSP 1314.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Prior to Oct. 1, 1989, elevations determined from direct readings on upstream face of dam on days shown. Datum of gage is 5,577.0 ft above sea level, (levels by Bureau of Reclamation). Prior to Oct 1, 1953, staff gage at site 500 ft east of dam and Oct. 1, 1953 to Sept. 30, 1964, tape gage on upstream face of dam then in use at different datum. Oct. 1, 1964 to Sept. 30, 1965, temporary reference marks at present datum set by Bureau of Reclamation.

REMARKS.--Records good, except for estimates, which are fair. Reservoir was formed in 1896 by a 58-ft rockfill dam, capacity, 3,850 acre-ft, which was raised 25 ft in 1900, capacity, 9,000 acre-ft, raised 12 ft more in 1902, capacity, 14,000 acre-ft, was replaced in 1917 by concrete dam which formed a reservoir having a capacity of 25,790 acre-ft (revised), and was replaced in 1966 by present concrete thin-arch dam which forms a reservoir having an active capacity of 48,110 acre-ft between elevation 5,577.0 ft and 5,705.0 ft. Dead storage, 3,090 acre-ft. Figures given herein represent active contents. Water is used for irrigation in Morgan, Davis, and Weber Counties.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 49,840 acre-ft June 1, 1983, elevation, 5,707.5 ft; no contents at times in 1931, 1934, 1937, 1946, 1954, 1961, 1965, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 48,540 acre-ft, Jun 18-19, elevation, 5,705.6 ft; minimum daily contents, 32,640 acre-ft, Oct 16, elevation, 5,679.8 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34860	e33340	e35520	37140	38940	40210	40530	43900	47160	48350	43870	36830
2	34720	e33390	e35590	37190	38980	40240	40600	43920	47270	48330	43640	36690
3	34570	e33450	e35670	37230	39040	40270	40650	44160	47530	48310	43360	36580
4	34450	e33500	e35750	37280	39100	40240	40700	44590	47730	48290	43130	36470
5	34310	e33560	e35820	37330	39170	40110	40750	44740	47880	48270	42910	36360
6	34150	e33650	e35880	37380	39220	40050	40790	44820	47880	48250	42690	36250
7	33970	e33670	e35940	37440	39290	40000	40820	44870	47860	48230	42460	36140
8	33790	e33750	e36000	37490	39390	39900	40880	44890	47820	48190	42230	36030
9	33620	e33830	e36050	37540	39500	39830	40960	44930	47780	48140	41990	35930
10	33430	e33910	e36090	37590	39680	39740	41020	44950	47760	48070	41760	35830
11	33260	e34000	e36140	37640	39800	39660	41080	44890	47730	47970	41540	35730
12	33070	e34060	e36170	37690	39870	39580	41140	44790	47720	47760	41320	35640
13	32910	e34120	e36220	37740	39910	39480	41190	44840	47900	47680	41100	35550
14	32750	e34170	e36280	37780	40040	39400	41260	45030	48100	47610	40860	35470
15	32670	e34250	e36340	37830	40070	39340	41330	45100	48280	47500	40620	35390
16	32640	e34330	e36400	37890	40090	39320	41400	45120	48400	47350	40380	35310
17	32670	e34450	e36440	37950	40100	39330	41470	45070	48480	47200	40120	35270
18	32680	e34560	e36480	38010	40120	39370	41550	44990	48520	47040	39820	35190
19	32690	e34620	e36520	38100	40130	39430	41650	44920	48530	46840	39570	35110
20	32720	e34680	e36580	38180	40080	39510	41790	44860	48510	46590	39320	35040
21	32750	e34730	e36630	38290	40120	39610	42010	44820	48500	46370	39130	34970
22	32790	e34790	e36630	38360	40130	39700	42200	44850	48490	46140	38900	34910
23	32840	e34850	e36630	38420	40130	39790	42340	45080	48480	45910	38670	34850
24	32900	e34940	e36670	38490	40130	39860	42460	45340	48460	45680	38430	34790
25	32950	e35020	e36710	38560	40130	39920	42600	45640	48430	45450	38190	34730
26	33020	e35110	e36750	38620	40130	40010	42710	45970	48390	45210	37940	34680
27	33080	e35200	e36840	38680	40150	40090	42910	46380	48360	44970	37690	34620
28	33140	e35300	e36920	38710	40170	40200	43280	46660	48330	44740	37460	34570
29	e33170	e35390	e36980	38770	---	40280	43580	46820	48380	44520	37260	34530
30	e33280	e35470	e37040	38820	---	40360	43820	46960	48370	44290	37080	34490
31	e33280	---	e37080	38870	---	40440	---	47070	---	44080	36940	---
MAX	34860	35470	37080	38870	40170	40440	43820	47070	48530	48350	43870	36830
MIN	32640	33340	35520	37140	38940	39320	40530	43900	47160	44080	36940	34490
(#)	5681.0	5684.9	5687.7	5690.7	5692.8	5693.2	5698.6	5703.5	5705.4	5699.0	5687.4	5683.2
(*)	-1760	+2190	+1610	+1790	+1300	+270	+3380	+3250	+1300	-4290	-7140	-2450

CAL YR.....(\*) -220  
WTR YR.....(\*) -550

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in acre-feet.  
(e) Estimated

## WEBER RIVER BASIN

## 10134500 EAST CANYON CREEK NEAR MORGAN, UT

LOCATION.--Lat 40°55'21", long 111°36'23", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 10, T. 2 N., R. 3 E., Morgan County, Hydrologic Unit 16020102, on right bank 2,500 ft downstream from East Canyon Dam, 2.4 mi upstream from Sheep Canyon, and 8.7 mi southeast of Morgan.

DRAINAGE AREA.--144 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only prior to October 1937, published in WSP 1314.

GAGE.--Water-stage recorder and Lyman rectangular weir. Elevation of gage is 5,460 ft above sea level, from river-profile map.

REVISED RECORDS.--WSP 1634, WDR UT-77-1: Drainage area.

REMARKS.--Records good. No diversions between station and East Canyon Reservoir (see preceding page), which completely regulates flow.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 872 ft<sup>3</sup>/s May 4, 1952, gage height, 3.49 ft; minimum daily, 0.2 ft<sup>3</sup>/s Dec. 19, 29, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 230 ft<sup>3</sup>/s, May 20-21; minimum daily discharge, 6.2 ft<sup>3</sup>/s, Nov 3, and several days in Feb.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	7.0	7.7	7.0	6.2	41	47	185	192	74	153	98
2	129	6.6	7.6	7.0	6.2	40	47	185	157	71	153	94
3	129	6.2	7.5	7.0	6.2	80	47	185	142	68	152	94
4	129	6.9	7.7	7.0	6.2	98	47	205	142	63	152	87
5	128	7.0	7.7	6.9	6.2	98	47	222	189	60	151	83
6	128	7.0	7.6	6.9	6.2	98	47	222	208	57	151	83
7	128	7.0	7.6	6.9	6.2	98	47	221	208	77	151	83
8	128	7.0	7.7	6.9	6.2	97	47	223	208	81	149	76
9	128	7.0	7.6	6.9	6.2	97	48	222	194	79	149	74
10	128	7.0	7.4	6.6	19	97	48	220	188	98	149	73
11	128	7.0	7.5	6.8	27	99	48	218	188	105	149	67
12	128	7.0	7.7	7.0	27	98	48	220	113	105	149	63
13	128	7.8	7.7	7.0	30	98	49	222	48	103	148	63
14	77	7.8	7.2	7.0	32	98	49	224	52	121	148	63
15	54	7.8	7.2	e7.0	37	99	49	224	76	129	148	63
16	31	7.8	7.2	e7.0	40	96	49	225	107	129	147	63
17	21	8.0	7.2	e7.0	40	93	49	225	127	129	147	63
18	21	7.8	7.4	e7.0	40	94	50	227	138	129	151	63
19	20	7.8	7.3	e7.0	40	94	50	229	139	147	154	63
20	19	7.8	7.2	e7.0	40	94	50	230	133	154	152	58
21	17	7.8	7.6	e7.0	40	94	50	230	131	154	152	56
22	13	7.8	7.8	e7.0	40	94	50	160	128	154	152	53
23	13	7.8	7.8	e7.0	40	94	50	130	122	154	152	52
24	13	7.8	7.8	e7.0	40	93	50	130	117	154	150	52
25	13	7.8	7.0	e7.0	41	94	50	129	109	154	149	46
26	12	7.9	7.0	7.0	41	94	50	143	98	154	149	44
27	11	8.0	6.8	7.0	41	60	50	151	91	154	149	44
28	9.5	8.4	6.9	7.0	41	47	113	171	85	154	131	44
29	8.6	8.4	6.9	7.0	---	47	175	192	81	154	120	40
30	8.2	7.4	6.9	7.0	---	47	186	192	77	153	111	39
31	7.3	---	7.0	6.5	---	47	---	192	---	152	107	---
TOTAL	2036.6	224.4	229.2	215.4	751.8	2618	1787	6154	3988	3670	4525	1944
MEAN	65.7	7.48	7.39	6.95	26.9	84.5	59.6	199	133	118	146	64.8
MAX	129	8.4	7.8	7.0	41	99	186	230	208	154	154	98
MIN	7.3	6.2	6.8	6.5	6.2	40	47	129	48	57	107	39
AC-FT	4040	445	455	427	1490	5190	3540	12210	7910	7280	8980	3860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1999, BY WATER YEAR (WY)

	MEAN	26.2	14.5	15.6	17.9	27.0	46.9	73.3	88.0	102	109	110	69.3
MAX	170	114	210	206	254	337	269	397	378	248	206	172	
(WY)	1969	1970	1984	1984	1985	1986	1948	1952	1983	1964	1975	1983	
MIN	3.66	1.10	1.10	1.26	1.50	1.93	2.68	5.04	7.30	54.5	32.8	6.70	
(WY)	1960	1961	1961	1961	1961	1961	1961	1991	1967	1955	1941	1961	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1938 - 1999

ANNUAL TOTAL	31002.4	28143.4	
ANNUAL MEAN	84.9	77.1	58.4
HIGHEST ANNUAL MEAN			132
LOWEST ANNUAL MEAN			17.8
HIGHEST DAILY MEAN	291	230	768
LOWEST DAILY MEAN	6.2	6.2	1.20
ANNUAL SEVEN-DAY MINIMUM	6.2	6.2	1.1
ANNUAL RUNOFF (AC-FT)	61490	55820	42330
10 PERCENT EXCEEDS	178	158	154
50 PERCENT EXCEEDS	88	57	29
90 PERCENT EXCEEDS	7.0	7.0	4.6

e Estimated



## 10136500 WEBER RIVER AT GATEWAY, UT

LOCATION.--Lat 41°08'13", long 111°49'54", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 27, T. 5 N., R. 1 E., Morgan County, Hydrologic Unit 16020102, on left bank 400 ft downstream from tailrace of Gateway powerplant, 500 ft upstream from Union Pacific Railroad bridge, 1,200 ft downstream from Strawberry Creek, and 3,200 ft east of section house at Gateway.

DRAINAGE AREA.--1,627 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1889 to June 1893, July to December 1893 (gage heights only), August 1894 to September 1899, August to November 1900, January to October 1901, April to June 1903 (gage heights and discharge measurements only), July to August 1919, August 1920 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Uinta" 1889-1903.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,800 ft above sea level, by barometer. Oct 13, 1889 to Jul 11, 1903, nonrecording gage at site 1.2 mi downstream at different datum. Jun 22, 1919 to Oct 22, 1929, water-stage recorder at site 900 ft upstream at different datum. Oct 22, 1929 to Nov 27, 1964, at sites 1,300 ft downstream at different datums. Nov 27, 1964 to Sept. 30, 1996, at present site at datum 10.0 ft lower.

REMARKS.--Records good except for estimated days, which are fair. Many diversions for irrigation above and below station. Water diverted above station by Gateway Canal since July 1957, part of which returns to river above station through tailrace of Gateway hydro-electric powerplant. Flow regulated by Rockport, Echo, Lost Creek, and East Canyon Reservoirs (see stations 10129400, 10131500, 10132490, and 10134000).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,980 ft<sup>3</sup>/s May 31, 1896; minimum recorded, 30 ft<sup>3</sup>/s Dec 26, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,110 ft<sup>3</sup>/s, May 3, gage height, 15.40 ft; minimum daily discharge, 150 ft<sup>3</sup>/s, Oct 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	167	203	316	306	505	347	1820	2110	533	399	422
2	372	165	353	303	295	524	301	1850	2050	529	387	411
3	423	164	369	294	304	518	287	2800	2190	510	351	434
4	442	163	379	324	317	580	377	2220	2060	484	369	426
5	413	164	373	314	336	542	371	2140	2020	507	391	387
6	390	178	358	308	340	519	360	2140	2140	492	400	360
7	381	179	356	306	364	513	284	2310	2520	479	375	355
8	370	191	365	305	520	512	418	2390	2310	470	358	351
9	391	185	373	287	522	731	445	2420	2180	454	363	348
10	386	183	332	284	642	819	413	2270	2110	457	386	345
11	389	180	335	282	467	825	397	2180	1940	449	397	359
12	389	173	360	280	408	831	385	2050	1480	413	371	356
13	381	169	361	279	397	832	397	2620	816	392	385	359
14	372	170	361	276	401	834	417	2190	714	399	380	361
15	315	177	344	283	391	840	402	2430	994	450	346	355
16	247	189	351	295	383	862	377	2260	987	410	353	359
17	213	187	355	298	405	878	411	2120	980	414	350	357
18	213	186	355	314	400	876	452	2080	999	404	372	350
19	211	182	331	397	379	945	520	2120	1050	407	389	364
20	210	174	329	397	372	981	619	2060	939	409	379	395
21	180	177	e325	417	375	1050	683	1940	896	405	376	395
22	177	187	e320	347	370	1020	580	1880	788	380	380	396
23	173	184	e310	328	368	926	512	e2000	683	388	402	369
24	171	180	e320	324	376	762	484	e2100	598	388	392	357
25	170	180	e320	314	398	873	466	2120	584	368	385	329
26	169	176	e320	309	396	889	454	2320	615	383	383	345
27	157	176	325	316	376	771	820	2210	589	383	379	422
28	150	169	326	303	388	716	1200	1970	564	386	382	411
29	170	169	339	292	---	665	1750	2180	552	407	383	398
30	188	179	371	294	---	436	1920	2340	544	419	402	381
31	175	---	333	298	---	363	---	2340	---	425	420	---
TOTAL	8741	5303	10552	9684	10996	22938	16849	67870	39002	13394	11785	11257
MEAN	282	177	340	312	393	740	562	2189	1300	432	380	375
MAX	442	191	379	417	642	1050	1920	2800	2520	533	420	434
MIN	150	163	203	276	295	363	284	1820	544	368	346	329
AC-FT	17340	10520	20930	19210	21810	45500	33420	134600	77360	26570	23380	22330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1999, BY WATER YEAR (WY)

	245	211	225	241	296	516	1004	1557	1154	547	458	363
MEAN	245	211	225	241	296	516	1004	1557	1154	547	458	363
MAX	896	548	1463	1330	1947	2575	3000	4798	4239	1161	828	1196
(WY)	1985	1983	1984	1984	1986	1986	1986	1952	1983	1975	1983	1983
MIN	57.9	58.0	43.6	45.7	49.2	67.8	105	281	293	238	156	62.3
(WY)	1993	1962	1993	1991	1993	1964	1977	1992	1977	1931	1924	1934

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1921 - 1999

ANNUAL TOTAL	271446	228371	
ANNUAL MEAN	744	626	
HIGHEST ANNUAL MEAN			569
LOWEST ANNUAL MEAN			1397
HIGHEST DAILY MEAN	3110	2800	143
LOWEST DAILY MEAN	133	150	7390
ANNUAL SEVEN-DAY MINIMUM	162	166	32
ANNUAL RUNOFF (AC-FT)	538400	453000	35
10 PERCENT EXCEEDS	1750	1980	1360
50 PERCENT EXCEEDS	449	386	361
90 PERCENT EXCEEDS	180	187	102

e Estimated

## WEBER RIVER BASIN

10137500 SOUTH FORK OGDEN RIVER NEAR HUNTSVILLE, UT

LOCATION.--Lat 41°16'07", long 111°40'24", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 12, T. 6 N., R. 2 E., Weber County, Hydrologic Unit 16020102, on right bank 0.5 mi downstream from Magpie Creek, 0.5 mi upstream from Huntsville Mountain Canal, 5.0 mi downstream from Causey Dam, and 5.0 mi east of Huntsville.

DRAINAGE AREA.--137 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1921 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,190 ft above sea level, by barometer. Prior to Aug. 14, 1934, at site 300 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. One small diversion above station. Flow regulated by Causey Reservoir since Jan. 4, 1966.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft<sup>3</sup>/s May 3, 1952, gage height, 5.98 ft; minimum, 9 ft<sup>3</sup>/s Feb. 28, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 968 ft<sup>3</sup>/s, May 25, gage height, 4.56 ft; minimum daily discharge, 42 ft<sup>3</sup>/s, Oct 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	52	56	e51	48	78	155	532	495	142	e92	90
2	77	54	e53	e52	47	88	145	518	486	135	e94	91
3	82	56	e56	e53	48	92	133	649	470	129	e96	91
4	82	56	e58	e52	48	93	130	654	427	124	97	91
5	80	56	e56	e51	49	86	126	596	440	115	98	91
6	79	56	e56	e50	49	85	123	577	419	115	100	90
7	79	55	e54	e49	51	84	118	593	574	e110	98	88
8	80	57	e54	e48	59	82	125	600	544	e106	98	84
9	80	56	e53	e48	61	82	129	613	495	e99	98	85
10	79	56	e52	e47	76	81	127	557	449	e98	97	84
11	79	56	e50	e47	64	81	125	521	406	e98	100	83
12	79	56	e50	e46	61	82	129	507	366	e99	100	84
13	79	56	e52	e46	60	84	146	624	340	e99	99	83
14	78	56	e52	e47	59	92	170	592	320	e100	98	84
15	78	56	e54	e48	58	103	173	586	300	e98	96	79
16	77	56	e54	e49	58	116	172	541	283	e98	94	72
17	77	56	e53	e50	59	129	181	530	268	e97	95	72
18	76	58	e52	e52	59	135	215	561	254	e96	95	73
19	77	56	e51	e54	60	146	269	578	241	e97	93	73
20	76	55	e50	e55	59	153	316	569	229	e98	95	74
21	76	55	e49	e54	61	161	302	675	219	102	96	73
22	74	55	e48	e52	60	158	274	744	209	101	95	73
23	72	55	e48	e51	58	159	247	747	200	101	94	66
24	72	46	e47	e50	57	170	267	726	190	100	e91	59
25	72	43	e47	e49	65	181	272	845	178	98	90	58
26	73	55	e47	e49	65	193	250	815	172	93	90	59
27	72	55	e48	e49	64	187	361	768	166	93	90	54
28	57	56	e49	e52	67	164	522	699	160	e93	86	48
29	42	57	e49	55	---	152	617	669	153	e92	75	46
30	51	56	e50	50	---	156	585	629	146	e91	91	46
31	53	---	e50	47	---	159	---	581	---	e90	91	---
TOTAL	2284	1648	1598	1553	1630	3812	6904	19396	9599	3207	2922	2244
MEAN	73.7	54.9	51.5	50.1	58.2	123	230	626	320	103	94.3	74.8
MAX	82	58	58	55	76	193	617	845	574	142	100	91
MIN	42	43	47	46	47	78	118	507	146	90	75	46
AC-FT	4530	3270	3170	3080	3230	7560	13690	38470	19040	6360	5800	4450

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1999, BY WATER YEAR (WY)

	MEAN	42.9	40.4	43.0	43.5	52.0	96.4	279	440	169	72.3	59.5	49.5
MAX	86.0	94.0	145	108	216	419	704	931	554	149	117	104	
(WY)	1985	1984	1984	1971	1986	1986	1986	1984	1983	1975	1984	1984	
MIN	22.2	19.2	21.0	21.2	17.0	15.7	26.3	37.7	28.4	23.8	23.1	24.2	
(WY)	1978	1978	1978	1977	1977	1977	1977	1934	1934	1934	1934	1934	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1922 - 1999

ANNUAL TOTAL	60626	56797		
ANNUAL MEAN	166	156		
HIGHEST ANNUAL MEAN			116	
LOWEST ANNUAL MEAN			260	1986
HIGHEST DAILY MEAN	876	May 11	845	May 25
LOWEST DAILY MEAN	42	Oct 29	42	Oct 29
ANNUAL SEVEN-DAY MINIMUM	48	Dec 21	47	Jan 8
ANNUAL RUNOFF (AC-FT)	120300		112700	83990
10 PERCENT EXCEEDS	442		500	280
50 PERCENT EXCEEDS	82		85	52
90 PERCENT EXCEEDS	51		50	32

e Estimated

WEBER RIVER BASIN

239

10139000 PINEVIEW RESERVOIR NEAR OGDEN, UT

LOCATION.--Lat 41°15'20", long 111°50'25", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 16, T. 6 N., R. 1 E., Weber County, Hydrologic Unit 16020102, at trashrack at Pineview Dam on Ogden River 3.8 mi west of Huntsville and 6 mi east of Ogden.

DRAINAGE AREA.--311 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1936 to September 1968, October 1989 to September 1999 (discontinued).

GAGE.--Water-stage recorder. Prior to Oct. 1, 1989 elevations determined from direct readings of outside staff gage read once daily. Datum of gage is 4818.0 ft above sea level.

REMARKS.--Reservoir is formed by earth-fill, rock-faced dam; storage began Nov. 16, 1936; capacity, 110,100 acre-ft at elevation 4,900 ft (maximum super storage) above sea level. During September 1939, sills of radial spillway gages were raised 1 ft, thus changing the top of spillway gates from elevation 4,871 to 4,872 ft. During 1957 the storage capacity was increased by raising the crest of the spillway to 4,878 ft and elevation of maximum super storage to 4,900 ft (additional capacity, 65,920 acre-ft). Dead storage negligible. Figures given herein represent total contents. Water is used for irrigation in Weber River basin and Ogden River projects.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 113,600 acre-ft June 19, 20, 21, 1998, of which 3,500 acre-ft was uncontrolled storage, elevation 4901.2 ft minimum, 4 acre-ft, Jan. 10, 1957, elevation, 4,819.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 110,900 acre-ft, Jun 17, elevation 4,900.3 ft; minimum contents, 59,000 acre-ft, Sep 30, elevation, 4,871.1 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71300	70400	74600	80100	84700	85900	82300	98400	104800	108700	89200	69300
2	71300	70400	74700	80300	84600	85900	82700	98300	105500	108200	88500	68900
3	71300	70400	74900	80500	84600	85700	83100	99200	106200	107600	87800	68500
4	71400	70400	75100	80700	84600	85600	83600	100400	106700	106500	87100	68100
5	71300	70300	75300	80900	84600	85300	83900	100500	107200	106200	86400	67700
6	71200	70400	75400	81000	84600	85000	83900	100200	107700	105600	85700	67300
7	71200	70300	75600	81200	84700	84800	83900	99700	108800	104900	85000	66900
8	71100	70400	75700	81400	84900	84500	84300	99200	109200	104100	84300	66500
9	71100	70500	75900	81600	85100	84300	84600	98900	109200	103400	83600	66100
10	71000	70600	76100	81700	85500	84100	84800	98600	109200	102600	82900	65700
11	70900	70800	76200	81900	85700	83800	85000	97800	109200	101800	82200	65300
12	70900	71000	76400	82100	85000	83600	85200	96900	109200	101200	81600	64900
13	70800	71200	76600	82300	85900	83200	85500	96800	109700	100700	81000	64500
14	70700	71400	76800	82400	86100	83000	85800	97100	110300	100100	80400	64100
15	70600	71600	76900	82600	86200	82700	86300	97000	110500	99600	79700	63700
16	70700	71700	77100	82900	86200	82500	86800	96700	110500	99200	79100	63400
17	70700	71900	77300	83100	86400	82300	87300	96200	110600	98700	78400	63000
18	70700	72200	77500	83300	86500	82200	88000	95600	110600	98200	77800	62600
19	70600	72300	77700	83700	86600	82000	88900	95300	110500	97600	77200	62300
20	70600	72500	77800	84100	86500	81900	90000	95400	110400	97000	76600	62000
21	70500	72700	77900	84600	86400	81800	91500	95800	110300	96400	76000	61800
22	70500	72900	78100	84700	86400	81700	92200	96800	110200	95800	75300	61500
23	70500	73100	e78200	84700	86200	81400	92900	98100	110100	95200	74700	61200
24	70500	73200	e78400	84800	86200	81200	93600	99100	110100	94500	74100	60900
25	70400	73400	e78600	84800	86100	81000	94200	99900	110000	93900	73400	60600
26	70400	73600	78700	84800	86000	80900	94800	100600	110000	93200	72700	60300
27	70400	73800	78900	84800	86000	80900	95600	101200	109900	92600	72100	60000
28	70400	74000	79200	84800	85900	81000	96600	101800	109700	91900	71400	59700
29	70400	74200	79500	e84800	---	81100	97800	102700	109500	91200	70800	59400
30	70500	74400	79700	e84700	---	81400	98300	103600	109100	90500	70200	59200
31	70500	---	79900	84700	---	81800	---	104300	---	89800	69800	---
MAX	71400	74400	79900	84800	86600	85900	98300	104300	110600	108700	89200	69300
MIN	70400	70300	74600	80100	84600	80900	82300	95300	104800	89800	69800	59200
(#)	4884.9	4886.6	4888.8	4890.7	4891.2	4889.6	4895.8	4898.0	4899.6	4892.7	4884.6	4879.8
(*)	-800	+3900	+5500	+4800	+1200	-4100	+16500	+6000	+4800	-19300	-20000	-10600

CAL YR 1998.....(\*) +25600  
Wtr yr 1999.....(\*) -12100

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in acre-feet.  
(e) Estimated

## WEBER RIVER BASIN

10140100 OGDEN RIVER BELOW PINEVIEW RESERVOIR, NEAR HUNTSVILLE, UT

LOCATION.--Lat 41°15'16", long 111°51'18", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 17, T. 6 N., R. 1 E., Weber County, Hydrologic Unit 16020102, on left bank 3,000 ft downstream from Pineview Dam, and 5.0 mi west of Huntsville.

DRAINAGE AREA.--323 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,760 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow extensively regulated by Pineview Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,430 ft<sup>3</sup>/s May 5, 1999, gage height, 6.90 ft; maximum gage height, 6.90 ft. May 5, 1999; minimum daily 4.0 ft<sup>3</sup>/s Jan 10, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,370 ft<sup>3</sup>/s, Jun 6-8; minimum daily discharge, 8.3 ft<sup>3</sup>/s, Dec 6, 22-23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	9.3	9.1	9.4	10	90	40	1130	428	148	184	103
2	12	9.3	8.8	9.2	12	163	37	1150	359	173	178	98
3	15	9.4	8.9	9.1	12	247	36	1150	421	215	178	85
4	15	9.3	9.1	9.1	12	e247	34	e1270	419	229	181	86
5	14	9.4	8.6	9.1	12	246	83	e1360	416	228	184	88
6	11	9.6	8.3	9.1	12	245	213	1370	303	231	181	86
7	9.9	9.4	8.6	9.1	13	245	e214	1370	545	229	179	79
8	9.4	9.8	8.7	9.1	15	185	222	e1370	715	232	178	49
9	9.2	9.9	8.8	8.9	15	255	199	1270	677	246	182	60
10	9.3	9.9	8.6	8.9	18	e255	120	1310	642	250	185	65
11	9.2	9.8	8.6	9.1	14	254	118	1330	568	206	180	57
12	9.2	9.7	8.8	9.1	13	e253	111	1320	312	132	158	57
13	9.2	9.7	8.6	9.2	13	e253	93	977	114	124	154	56
14	9.2	9.7	8.6	12	13	e254	66	1080	135	136	167	53
15	9.3	9.7	8.6	16	13	e256	46	1160	176	116	181	46
16	9.2	9.6	8.6	16	e12	e259	45	1160	205	114	171	47
17	9.1	9.7	8.6	16	e13	279	46	1150	218	133	146	47
18	9.1	9.8	8.6	17	35	334	50	1150	214	175	147	45
19	9.1	9.4	8.6	17	79	e369	51	947	226	169	137	44
20	9.1	9.1	8.4	18	87	e397	54	813	228	158	136	37
21	9.1	9.4	8.4	16	87	460	40	641	212	155	155	33
22	9.2	9.6	8.3	9.2	87	522	86	541	144	149	159	35
23	9.2	9.4	e8.3	9.0	e87	e521	112	727	75	157	151	38
24	9.1	9.4	e8.4	9.1	87	523	110	859	54	161	152	31
25	9.5	9.1	e8.4	9.0	87	e526	111	864	46	160	160	24
26	9.4	9.0	8.6	9.2	87	e526	111	928	45	160	163	28
27	9.2	9.1	8.7	9.1	87	401	275	907	50	156	155	26
28	9.3	9.5	9.3	9.0	87	334	436	691	90	174	157	25
29	9.5	9.4	9.3	8.9	---	235	770	576	113	186	162	23
30	9.8	9.4	9.3	8.8	---	134	1060	574	149	186	146	22
31	9.4	---	9.5	8.9	---	87	---	576	---	187	98	---
TOTAL	308.5	284.8	270.0	336.6	1119	9355	4989	31721	8299	5475	5045	1573
MEAN	9.95	9.49	8.71	10.9	40.0	302	166	1023	277	177	163	52.4
MAX	15	9.9	9.5	18	87	526	1060	1370	715	250	185	103
MIN	9.1	9.0	8.3	8.8	10	87	34	541	45	114	98	22
AC-FT	612	565	536	668	2220	18560	9900	62920	16460	10860	10010	3120

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

	MEAN	23.8	14.4	170	80.6	41.2	153	230	374	218	136	141	55.5
MAX	23.8	14.4	170	80.6	41.2	153	230	374	218	136	141	55.5	
(WY)	1993	1989	1992	1997	1997	1997	1998	1999	1998	1991	1991	1995	
MIN	8.44	7.38	6.45	6.01	6.30	7.47	10.5	23.5	32.8	22.8	29.9	15.2	
(WY)	1992	1990	1991	1992	1991	1991	1992	1992	1992	1992	1992	1992	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1989 - 1999

ANNUAL TOTAL	73804.3	68775.9	118	1997
ANNUAL MEAN	202	188	234	1992
HIGHEST ANNUAL MEAN			29.2	1992
LOWEST ANNUAL MEAN			1370	May 6 1999
HIGHEST DAILY MEAN	1190	1370	4.0	Jan 10 1992
LOWEST DAILY MEAN	5.9	8.3	4.2	Jan 10 1992
ANNUAL SEVEN-DAY MINIMUM	7.3	8.4		
ANNUAL RUNOFF (AC-FT)	146400	136400	85750	
10 PERCENT EXCEEDS	645	554	320	
50 PERCENT EXCEEDS	38	79	23	
90 PERCENT EXCEEDS	8.8	9.1	7.5	

e Estimated

## 10141000 WEBER RIVER NEAR PLAIN CITY, UT

LOCATION.--Lat 41°16'42", long 112°05'28", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 8, T. 6 N., R. 2 W., Weber County, Hydrologic Unit 16020102, on upstream side of right highway bridge abutment, on State Highway 40, 1 mi downstream from Fourmile Creek, 1.5 mi south of Plain City, and 6 mi upstream from mouth.

DRAINAGE AREA.--2,081 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1904 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,207.10 ft above sea level. Prior to Aug. 29, 1949, nonrecording gage at same site and datum, and Aug. 30, 1949 to June 22, 1966, water-stage recorder on right bank 50 ft upstream at same datum. Prior to Oct. 1, 1986 at datum 10.0 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Practically entire flow is diverted during summer months for irrigation above station. Flow regulated by Rockport, Echo, Lost Creek, East Canyon, and Pine View Reservoirs; also diversion above station to Willard Bay Reservoir (see stations 10129400, 10131500, 10132490, and 10134000).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft<sup>3</sup>/s May 6, 1952, gage height, 19.01 ft datum then in use; practically no flow during latter part of several summers since 1915.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,530 ft<sup>3</sup>/s, May 3, gage height, 24.18 ft from high water mark; minimum daily discharge, 70 ft<sup>3</sup>/s, Jul 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	376	270	162	523	752	354	2690	1810	74	149	208
2	241	373	389	123	510	867	266	2530	1490	70	131	227
3	392	375	451	111	511	971	198	3220	1720	78	118	231
4	484	372	484	111	525	1030	222	3140	1660	102	98	261
5	453	371	492	131	617	793	251	2930	1620	112	116	233
6	430	408	461	118	586	503	318	2790	1630	110	141	189
7	426	399	458	115	604	499	278	2910	2120	119	139	168
8	439	457	454	112	717	431	353	2990	2260	116	121	139
9	444	391	374	105	745	591	404	3030	2180	100	110	120
10	455	290	241	94	931	750	351	2930	2020	87	122	128
11	449	280	212	94	758	1010	304	2870	1900	114	195	126
12	458	272	233	90	664	1290	277	2730	1320	224	189	122
13	458	264	241	88	631	1290	264	2950	626	150	162	125
14	426	262	242	85	629	1300	405	2710	558	140	173	129
15	397	263	230	90	623	1300	352	2870	714	221	157	173
16	385	281	224	123	609	1330	352	2900	671	166	141	147
17	407	278	232	118	687	1350	287	2700	621	143	140	134
18	401	271	231	104	683	1400	366	2580	572	159	119	130
19	394	261	218	218	681	1420	436	2540	638	160	118	133
20	420	269	188	164	695	1440	489	2400	502	137	105	177
21	392	256	131	454	690	1520	597	2100	432	127	96	169
22	382	e262	187	575	688	1540	535	1800	310	122	103	185
23	378	e258	215	535	680	1370	524	1880	e220	111	110	200
24	374	e262	246	550	684	1140	473	2340	e110	129	116	244
25	383	261	250	525	703	1210	489	2250	87	111	115	225
26	388	257	215	529	710	1270	413	2380	116	109	122	149
27	382	249	221	536	695	1100	656	2440	79	109	136	240
28	347	247	211	516	692	903	1350	2000	85	92	135	273
29	370	240	136	503	---	813	2120	1810	84	102	148	269
30	431	256	175	501	---	539	2610	1950	74	124	200	253
31	394	---	188	504	---	395	---	2020	---	145	238	---
TOTAL	12388	9061	8500	8084	18471	32117	16294	79380	28229	3863	4263	5507
MEAN	400	302	274	261	660	1036	543	2561	941	125	138	184
MAX	484	457	492	575	931	1540	2610	3220	2260	224	238	273
MIN	208	240	131	85	510	395	198	1800	74	70	96	120
AC-FT	24570	17970	16860	16030	36640	63700	32320	157500	55990	7660	8460	10920

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1999, BY WATER YEAR (WY)

	MEAN	257	278	328	353	434	710	1114	1441	839	131	88.5	166
MAX	968	748	1884	1691	2399	3502	3639	6201	4233	661	414	968	
(WY)	1985	1983	1984	1984	1986	1986	1986	1952	1983	1975	1983	1983	
MIN	27.4	20.7	41.8	35.4	40.8	44.5	59.7	15.0	10.3	6.26	3.00	27.4	
(WY)	1989	1962	1989	1989	1989	1977	1988	1961	1961	1961	1961	1956	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1949 - 1999	
ANNUAL TOTAL	291752		226157			
ANNUAL MEAN	799		620		511	
HIGHEST ANNUAL MEAN					1427	
LOWEST ANNUAL MEAN					65.3	
HIGHEST DAILY MEAN	3100		3220		9970	
LOWEST DAILY MEAN	85		70		1.0	
ANNUAL SEVEN-DAY MINIMUM	114		78		1.0	
ANNUAL RUNOFF (AC-FT)	578700		448600		370300	
10 PERCENT EXCEEDS	2230		1840		1390	
50 PERCENT EXCEEDS	382		354		202	
90 PERCENT EXCEEDS	153		112		50	

e Estimated

## WEBER RIVER BASIN

10141000 WEBER RIVER NEAR PLAIN CITY, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to 1993, November 1998 to September 30, 1999.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1975 to September 1981, November 1998 to September 30, 1999.

INSTRUMENTATION.--Temperature data logger.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 29.5°C, Aug 19, 1981; minimum, 0.0°C, Dec 31, 1978, Jan 1, 1979, Jan 31, 1980.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 24.1°C, Jul 24; minimum, 1.0°C, Dec 22, 23, 25, Feb 12.

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	8.6	8.0	8.4	5.7	4.8	5.2
2	---	---	---	---	---	---	8.6	7.4	8.1	5.4	4.3	4.9
3	---	---	---	---	---	---	8.0	6.6	7.3	5.2	3.8	4.3
4	---	---	---	---	---	---	7.1	4.7	6.2	5.1	3.4	4.1
5	---	---	---	---	---	---	4.7	3.4	3.7	5.1	3.5	4.2
6	---	---	---	---	---	---	3.4	2.2	2.6	5.7	4.3	4.9
7	---	---	---	---	---	---	2.9	1.9	2.4	6.2	5.2	5.7
8	---	---	---	---	---	---	2.9	2.1	2.5	5.9	4.8	5.3
9	---	---	---	---	---	---	3.4	2.1	2.6	6.2	4.4	5.2
10	---	---	---	---	---	---	3.2	1.9	2.5	6.9	5.9	6.3
11	---	---	---	---	---	---	2.8	1.5	2.2	7.3	5.5	6.2
12	---	---	---	---	---	---	3.7	2.1	2.8	7.3	6.2	6.6
13	---	---	---	---	---	---	4.1	2.6	3.2	7.3	6.6	6.8
14	---	---	---	---	---	---	4.3	2.9	3.5	6.7	5.7	6.2
15	---	---	---	---	---	---	4.4	3.0	3.7	7.1	6.2	6.5
16	---	---	---	---	---	---	4.3	3.2	3.8	6.5	5.4	6.1
17	---	---	---	---	---	---	4.3	3.0	3.7	6.2	5.1	5.6
18	---	---	---	---	---	---	4.0	2.9	3.4	6.8	5.4	6.0
19	---	---	---	---	---	---	3.1	1.9	2.3	6.7	5.1	5.4
20	---	---	---	---	---	---	2.6	1.1	1.5	6.2	5.1	5.7
21	---	---	---	---	---	---	2.1	1.1	1.7	6.2	3.5	4.6
22	---	---	---	---	---	---	2.7	1.0	1.7	4.4	3.4	3.9
23	---	---	---	---	---	---	1.9	1.0	1.4	4.9	3.8	4.3
24	---	---	---	8.3	7.7	8.1	2.1	1.1	1.6	4.6	3.5	4.1
25	---	---	---	7.7	6.6	7.2	1.9	1.0	1.4	4.8	3.5	4.3
26	---	---	---	7.3	6.2	6.7	2.1	1.5	1.7	4.8	3.7	4.0
27	---	---	---	7.3	6.0	6.7	2.4	1.5	2.0	4.0	2.9	3.5
28	---	---	---	7.9	7.3	7.5	3.2	1.5	2.3	4.0	2.2	3.1
29	---	---	---	8.5	7.7	8.1	5.4	2.9	3.8	3.2	1.5	2.3
30	---	---	---	8.9	8.0	8.5	6.3	3.5	4.9	2.7	1.1	2.0
31	---	---	---	---	---	---	6.0	4.8	5.4	3.0	1.6	2.4
MONTH	---	---	---	---	---	---	8.6	1.0	3.4	7.3	1.1	4.8

## WEBER RIVER BASIN

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10141000 WEBER RIVER NEAR PLAIN CITY, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	4.0	2.7	3.3	7.7	5.7	6.7	6.3	4.6	5.5	9.9	7.9	8.8
2	4.0	2.2	3.2	6.5	4.4	5.5	8.5	4.8	6.5	9.6	8.6	9.0
3	4.8	2.9	3.8	5.9	4.3	5.0	8.0	6.8	7.5	9.3	7.6	8.2
4	4.9	3.8	4.4	5.4	4.4	4.9	9.3	6.2	7.7	7.9	6.9	7.5
5	4.9	4.3	4.7	5.5	3.2	4.3	8.4	6.9	7.8	8.5	6.8	7.6
6	6.1	4.3	5.1	5.5	3.2	4.5	8.9	6.9	7.8	9.9	7.3	8.5
7	6.2	4.8	5.4	5.9	4.3	5.1	10.5	6.6	8.5	10.8	8.6	9.6
8	5.7	4.4	5.1	6.6	3.8	5.3	9.9	7.1	8.5	10.6	9.6	10.1
9	6.0	4.0	4.9	6.0	4.7	5.4	9.3	6.3	7.8	10.5	9.0	9.7
10	5.7	2.6	3.6	6.0	3.7	4.8	8.6	5.1	6.7	9.0	7.7	8.4
11	2.9	1.3	2.2	5.7	4.5	5.0	9.6	6.5	8.0	9.7	7.6	8.5
12	2.9	1.0	2.0	6.3	4.1	5.1	11.2	7.7	9.5	10.0	8.6	9.3
13	3.8	1.5	2.6	6.3	4.6	5.4	12.0	9.4	10.7	11.1	9.6	10.2
14	5.2	2.7	3.9	6.9	4.8	5.8	10.9	8.3	9.9	10.9	9.1	10.0
15	5.2	3.5	4.4	7.1	5.7	6.3	10.6	8.0	9.4	10.3	8.9	9.5
16	5.2	3.4	4.4	7.4	5.4	6.3	10.5	7.6	9.1	10.3	8.2	9.1
17	5.4	4.1	5.0	6.9	5.1	6.0	11.4	8.5	9.9	11.1	8.6	9.8
18	5.4	3.7	4.5	7.3	5.2	6.2	12.6	9.3	11.0	12.0	10.0	11.0
19	4.9	4.1	4.7	7.6	5.5	6.6	12.5	10.5	11.6	11.7	10.6	11.2
20	5.1	3.2	4.3	6.9	5.9	6.5	11.9	9.9	10.8	12.5	10.0	11.2
21	4.9	4.0	4.3	7.4	6.2	6.7	9.9	8.6	9.1	12.5	10.5	11.5
22	5.1	3.0	4.1	7.3	5.9	6.5	8.7	7.4	8.1	13.2	10.3	11.7
23	6.0	4.0	5.0	7.4	5.7	6.6	8.2	6.8	7.4	12.9	11.5	12.2
24	6.6	4.6	5.7	8.2	5.7	6.9	9.4	6.8	8.1	12.8	10.8	11.7
25	6.6	4.9	5.8	8.3	6.3	7.3	9.1	8.6	8.9	12.9	10.9	11.9
26	5.9	4.0	5.0	7.6	6.8	7.2	11.5	8.0	9.6	12.9	11.2	12.0
27	5.9	3.5	4.8	7.1	6.0	6.5	11.4	9.4	10.5	13.6	11.5	12.5
28	7.3	4.4	5.9	7.1	4.8	5.9	9.4	8.5	8.9	13.9	11.9	12.8
29	---	---	---	7.7	5.1	6.4	9.7	8.2	8.9	13.4	12.3	12.8
30	---	---	---	8.3	6.9	7.6	9.7	8.3	8.8	13.7	11.9	12.7
31	---	---	---	7.7	5.7	6.6	---	---	---	13.2	11.5	12.2
MONTH	7.3	1.0	4.4	8.3	3.2	6.0	12.6	4.6	8.8	13.9	6.8	10.4
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	13.1	11.1	12.0	20.1	17.0	18.6	21.2	19.4	20.2	19.3	17.7	18.4
2	12.9	11.4	12.1	21.7	18.5	20.1	21.4	18.1	20.2	19.0	17.8	18.3
3	13.6	10.9	12.0	22.9	19.9	21.2	20.9	20.1	20.4	18.1	16.5	17.6
4	12.9	11.7	12.2	22.6	19.6	21.0	21.6	19.8	20.4	16.9	15.8	16.4
5	12.2	10.8	11.3	21.2	18.5	19.8	21.6	19.8	20.3	17.2	15.6	16.4
6	12.2	11.4	11.6	23.4	17.3	19.3	21.1	19.6	20.2	18.0	16.1	17.1
7	13.6	11.2	12.1	20.3	18.6	19.4	21.1	19.3	20.0	18.1	17.2	17.6
8	13.6	11.9	12.7	20.9	19.0	19.7	21.4	19.4	20.3	18.5	17.2	17.7
9	13.6	11.5	12.6	21.2	18.8	19.8	21.9	19.8	20.6	18.1	17.3	17.6
10	13.4	12.2	12.7	22.1	19.0	20.2	21.7	20.1	20.6	18.6	17.3	17.7
11	14.3	11.9	13.0	22.1	19.1	20.3	20.3	18.1	19.3	18.8	17.5	18.0
12	15.0	12.6	13.8	19.9	18.8	19.4	19.0	17.7	18.2	19.0	17.7	18.1
13	16.2	13.6	15.0	20.7	18.8	19.7	19.8	17.8	18.7	18.6	17.5	17.9
14	16.5	14.2	15.4	20.4	19.4	19.8	20.1	18.3	19.2	18.3	17.2	17.6
15	17.0	14.6	15.9	19.6	17.7	18.6	20.4	18.6	19.4	18.0	16.9	17.5
16	17.0	14.8	16.0	20.1	16.7	18.6	22.2	18.8	20.0	18.5	16.7	17.6
17	16.7	14.8	15.7	19.4	18.1	18.6	20.6	19.1	19.7	18.8	17.0	17.8
18	17.3	14.5	16.0	19.4	17.7	18.6	21.1	19.3	20.0	18.8	17.2	17.9
19	17.7	15.1	16.4	20.4	18.6	19.3	21.6	19.8	20.5	18.5	17.3	17.7
20	18.1	15.3	16.8	20.9	19.0	19.8	22.2	20.4	21.0	17.7	16.7	17.2
21	17.5	15.8	16.4	21.4	19.6	20.3	22.4	19.6	20.9	17.5	16.2	16.9
22	19.0	14.5	16.3	21.9	19.9	20.7	22.6	20.6	21.3	17.5	16.2	16.9
23	17.8	17.0	17.3	22.4	20.1	21.0	22.6	20.6	21.3	17.2	16.1	16.6
24	17.3	16.4	16.9	24.1	19.9	21.4	22.2	20.7	21.1	17.0	16.4	16.7
25	17.3	16.1	16.7	22.1	20.1	20.8	22.4	20.4	21.0	17.0	16.2	16.5
26	17.7	17.2	17.5	22.1	19.9	20.7	21.9	20.1	20.8	16.5	15.0	15.7
27	19.6	15.4	17.5	22.2	20.1	20.9	21.6	20.3	20.8	15.0	13.2	13.9
28	19.0	15.8	17.5	23.2	20.6	21.6	21.4	19.9	20.5	13.4	11.9	12.6
29	18.5	16.4	17.8	23.8	21.6	22.3	21.4	19.8	20.5	13.2	11.5	12.3
30	20.1	16.1	18.0	22.4	21.2	21.8	20.6	19.4	20.3	13.7	11.9	12.7
31	---	---	---	21.6	19.9	20.9	19.6	18.5	19.0	---	---	---
MONTH	20.1	10.8	14.9	24.1	16.7	20.1	22.6	17.7	20.2	19.3	11.5	16.8



## TRIBUTARIES BETWEEN WEBER AND JORDAN RIVERS

10143500 CENTERVILLE CREEK ABOVE DIVERSIONS NEAR CENTERVILLE, UT

LOCATION.--Lat 40°54'59", long 111°51'44", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 8, T. 2N S., R. 1 E., Davis County, Hydrologic Unit 16020102, 1.2 miles east of Centerville. Prior to November 21, 1960, at site 250 ft downstream.

DRAINAGE AREA.--3.15 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1949 to September 1980, May 1, 1999 to September 30, 1999. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. V-notch sharp crested wier since Nov 1960. Elevation of gage 4,860 ft. above sea level. Prior to Nov 21, 1960, at site 250 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 35 ft<sup>3</sup>/s about May 20, 1975; Minimum daily recorded, 0.5 ft<sup>3</sup>/s Mar 16, 1975, and several days in 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21 ft<sup>3</sup>/s, May 25-27, gage height, 1.88 ft; minimum daily discharge, 1.5 ft<sup>3</sup>/s, several days in September.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e13	14	4.0	2.7	1.8
2	---	---	---	---	---	---	---	e14	13	4.0	2.4	1.9
3	---	---	---	---	---	---	---	e16	12	4.5	2.3	1.8
4	---	---	---	---	---	---	---	e15	11	4.4	2.3	1.6
5	---	---	---	---	---	---	---	e15	11	4.5	e2.6	1.6
6	---	---	---	---	---	---	---	e15	10	4.4	e2.3	1.6
7	---	---	---	---	---	---	---	e15	9.7	4.2	2.1	1.5
8	---	---	---	---	---	---	---	e16	8.4	3.7	2.1	1.5
9	---	---	---	---	---	---	---	e17	8.0	3.6	2.1	1.5
10	---	---	---	---	---	---	---	e17	8.1	3.5	2.1	1.5
11	---	---	---	---	---	---	---	e16	8.4	3.4	3.5	1.5
12	---	---	---	---	---	---	---	e16	7.8	3.6	2.6	1.5
13	---	---	---	---	---	---	---	e18	7.5	4.0	e2.2	1.6
14	---	---	---	---	---	---	---	e18	7.2	4.3	2.1	1.6
15	---	---	---	---	---	---	---	e17	6.7	3.9	2.1	1.6
16	---	---	---	---	---	---	---	e17	6.8	4.1	2.1	1.6
17	---	---	---	---	---	---	---	e16	7.0	4.2	2.0	1.6
18	---	---	---	---	---	---	---	16	6.5	4.0	2.0	1.6
19	---	---	---	---	---	---	---	17	6.2	3.9	2.0	1.6
20	---	---	---	---	---	---	---	17	6.0	4.1	2.0	1.6
21	---	---	---	---	---	---	---	17	5.8	3.5	2.0	1.6
22	---	---	---	---	---	---	---	18	5.6	3.0	2.0	1.5
23	---	---	---	---	---	---	---	19	5.4	3.1	2.0	1.5
24	---	---	---	---	---	---	---	19	5.1	3.3	2.0	1.5
25	---	---	---	---	---	---	---	20	5.0	2.6	2.0	1.6
26	---	---	---	---	---	---	---	20	4.9	2.5	1.9	1.6
27	---	---	---	---	---	---	---	20	4.7	2.8	2.0	1.7
28	---	---	---	---	---	---	---	19	4.5	3.2	2.1	1.7
29	---	---	---	---	---	---	---	18	4.4	3.4	2.1	1.8
30	---	---	---	---	---	---	---	17	4.2	3.1	2.1	1.7
31	---	---	---	---	---	---	---	16	---	2.8	1.9	---
TOTAL	---	---	---	---	---	---	---	524	224.9	113.6	67.7	48.3
MEAN	---	---	---	---	---	---	---	16.9	7.50	3.66	2.18	1.61
MAX	---	---	---	---	---	---	---	20	14	4.5	3.5	1.9
MIN	---	---	---	---	---	---	---	13	4.2	2.5	1.9	1.5
AC-FT	---	---	---	---	---	---	---	1040	446	225	134	96

e Estimated

## JORDAN RIVER BASIN

245

10145400 SALT CREEK BELOW NEPHI POWERPLANT DIVERSION, NEAR NEPHI, UT

LOCATION.--Lat 39°43'02", long 111°43'58", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 5, T. 13 S., R. 2 E., Juab County, Hydrologic Unit 16020201, on right bank 5.6 mi east of Nephi, 0.2 mi below confluence with Hopp Creek, 200 ft downstream from Nephi powerplant Diversion Dam, and 115 ft below mouth of Bradley's Canyon.

DRAINAGE AREA.--60.0 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 5,750 ft above sea level, from topographic map.

REMARKS.--Records fair. Flow at gage is extensively regulated by Nephi City at powerplant Diversion Dam 200 ft above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 263 ft<sup>3</sup>/s May 1, 1998, gage height, 6.34 ft; minimum daily, 2.0 ft<sup>3</sup>/s Dec 25-29, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 83 ft<sup>3</sup>/s, May 24, gage height, 5.57 ft; minimum daily discharge, 2.5 ft<sup>3</sup>/s, Mar 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	4.1	4.1	3.3	3.3	3.3	6.7	26	47	23	7.0	14
2	7.5	4.1	4.1	3.3	3.3	3.3	6.5	25	51	21	7.1	13
3	7.5	4.5	4.1	3.3	3.3	3.3	6.5	36	46	21	6.9	13
4	7.5	5.2	4.1	3.2	3.9	3.4	6.5	33	40	19	6.8	11
5	6.6	5.1	4.1	3.2	3.5	3.3	6.7	31	36	16	6.8	11
6	5.5	5.2	4.1	3.1	3.3	3.3	6.8	31	34	14	7.0	11
7	5.2	5.1	4.1	3.1	3.3	3.3	6.9	34	34	13	6.8	10
8	5.1	5.2	4.0	3.5	3.4	3.3	7.1	39	37	13	6.8	10
9	5.1	5.1	3.9	3.7	3.3	3.3	7.1	43	40	11	7.3	11
10	5.1	5.1	3.9	3.5	4.0	3.3	7.1	38	40	9.6	6.6	11
11	5.1	5.1	4.0	3.5	3.4	3.3	7.1	34	40	8.4	6.5	11
12	5.1	4.9	3.9	3.5	3.3	3.3	7.1	32	41	8.3	6.4	11
13	4.9	4.8	3.9	3.5	3.3	3.3	7.1	38	43	8.3	6.4	11
14	4.8	4.8	3.7	3.5	3.3	3.3	7.1	42	45	8.6	7.2	11
15	4.8	4.8	3.7	3.5	3.3	3.0	7.1	39	46	8.5	7.3	11
16	4.9	4.8	3.7	3.4	3.3	2.5	7.1	37	48	8.2	7.3	10
17	4.8	5.2	3.7	3.3	3.3	3.3	7.1	34	45	8.0	7.2	10
18	4.8	5.7	3.7	3.3	3.3	3.9	7.1	33	41	8.0	6.2	10
19	4.8	4.6	3.7	3.4	3.5	4.4	7.1	36	40	7.8	5.9	10
20	4.7	4.6	3.6	3.6	3.5	4.8	8.5	39	39	7.9	6.1	10
21	4.6	4.6	3.5	3.9	3.4	4.8	11	43	41	7.8	6.2	9.8
22	4.6	4.6	3.5	3.3	3.3	4.8	9.5	48	36	7.6	6.0	9.5
23	4.6	4.6	3.5	3.3	3.3	4.3	8.5	52	35	7.1	7.5	9.4
24	4.5	4.5	3.5	3.3	3.3	3.9	8.2	57	34	7.1	9.5	9.5
25	4.7	4.4	3.5	3.3	3.3	3.9	14	68	32	7.1	11	9.2
26	4.6	4.3	3.5	3.3	3.3	3.9	15	61	30	7.2	11	9.1
27	4.7	4.3	3.5	3.3	3.3	3.9	30	65	28	7.2	16	9.8
28	4.5	4.3	3.3	3.3	3.3	3.9	33	67	25	7.2	17	9.5
29	4.3	4.3	3.3	3.3	---	5.3	34	70	24	6.8	15	8.9
30	4.3	4.1	3.3	3.3	---	6.3	29	66	23	6.9	15	8.8
31	4.1	---	3.4	3.3	---	6.5	---	57	---	7.0	15	---
TOTAL	160.8	142.0	115.9	104.6	94.6	119.7	332.5	1354	1141	321.6	264.8	313.5
MEAN	5.19	4.73	3.74	3.37	3.38	3.86	11.1	43.7	38.0	10.4	8.54	10.4
MAX	7.5	5.7	4.1	3.9	4.0	6.5	34	70	51	23	17	14
MIN	4.1	4.1	3.3	3.1	3.3	2.5	6.5	25	23	6.8	5.9	8.8
AC-FT	319	282	230	207	188	237	660	2690	2260	638	525	622

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

	4.82	4.70	3.91	3.51	3.75	12.9	32.8	67.6	51.6	20.7	9.03	8.78
MEAN	4.82	4.70	3.91	3.51	3.75	12.9	32.8	67.6	51.6	20.7	9.03	8.78
MAX	6.73	6.94	6.03	3.92	3.91	28.8	60.6	102	88.6	47.5	10.2	10.4
(WY)	1995	1995	1995	1995	1998	1997	1997	1998	1995	1995	1998	1999
MIN	2.80	3.23	2.30	2.94	3.38	3.46	10.1	20.2	8.42	6.26	6.86	5.84
(WY)	1994	1994	1994	1994	1999	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1993 - 1999
ANNUAL TOTAL	10198.5	4465.0	
ANNUAL MEAN	27.9	12.2	18.7
HIGHEST ANNUAL MEAN			27.9
LOWEST ANNUAL MEAN			6.37
HIGHEST DAILY MEAN	208	May 1	208
LOWEST DAILY MEAN	3.3	Dec 28	2.0
ANNUAL SEVEN-DAY MINIMUM	3.4	Dec 25	2.1
ANNUAL RUNOFF (AC-FT)	20230	8860	13570
10 PERCENT EXCEEDS	81	37	63
50 PERCENT EXCEEDS	7.5	6.4	6.7
90 PERCENT EXCEEDS	3.8	3.3	3.3

## JORDAN RIVER BASIN

10146000 SALT CREEK AT NEPHI, UT

LOCATION.--Lat 39°42'47", long 111°48'13", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 3, T. 13 S., R. 1 E., Juab County, Hydrologic Unit 16020201, on right bank 1.7 mi east of Nephi.

DRAINAGE AREA.--95.6 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1950 to September 1980, August 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,280.00 ft above sea level. Dec. 2, 1950 to Nov. 7, 1952, at a site 0.5 mi downstream at datum 31.96 ft lower. Nov. 7, 1952 to Nov. 10, 1971, at a site 0.5 mi downstream at datum 30.53 ft lower.

REMARKS.--Records good. Flow regulated by Nephi City powerplant diversion dam about 5.0 mi above gage since December, 1984.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 832 ft<sup>3</sup>/s Aug 1, 1968, gage height, 6.43 ft from floodmarks; minimum, 1.1 ft<sup>3</sup>/s Dec 13, 1951, Dec 11, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 103 ft<sup>3</sup>/s, May 25, gage height, 2.46 ft; minimum daily discharge, 5.2 ft<sup>3</sup>/s, Dec 22-24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	8.0	8.4	7.7	6.7	6.3	9.1	29	63	23	8.7	14
2	12	8.0	8.4	7.6	6.6	6.3	8.7	27	69	22	8.7	14
3	12	7.9	8.1	7.6	6.6	6.4	8.8	50	63	21	8.7	14
4	12	8.6	8.0	7.6	6.7	6.5	8.7	44	48	21	8.7	13
5	11	9.2	8.0	7.6	7.7	6.3	8.8	38	41	20	8.7	13
6	10	9.7	7.8	7.4	7.0	6.3	8.9	37	37	17	8.7	13
7	8.8	8.8	8.0	7.3	6.7	6.4	9.0	41	37	15	8.7	12
8	8.4	9.3	8.0	7.6	6.9	6.3	9.8	48	40	15	8.7	12
9	8.4	8.9	8.0	8.0	7.2	6.2	9.6	54	45	14	8.7	12
10	8.2	8.7	7.6	8.0	8.7	6.2	9.4	46	46	12	9.1	12
11	8.0	8.7	7.9	7.8	7.0	6.1	9.2	41	45	11	9.0	12
12	8.0	8.4	7.8	7.6	6.5	6.0	9.1	37	46	11	8.7	12
13	8.0	8.4	7.7	7.6	6.5	6.0	8.9	44	50	10	8.7	12
14	8.0	8.4	7.6	7.6	6.4	6.0	8.7	54	53	10	8.8	12
15	7.9	8.4	7.5	7.6	6.3	6.0	8.7	49	54	10	9.3	12
16	7.6	8.4	7.5	7.6	6.3	5.6	8.8	43	59	10	9.5	12
17	7.6	8.4	7.6	7.6	6.4	5.6	8.7	40	55	9.9	9.5	12
18	7.4	9.6	7.4	7.5	6.3	6.6	8.7	38	47	9.8	8.9	12
19	7.3	8.8	7.7	7.7	6.3	6.9	8.8	42	44	9.7	8.6	12
20	7.3	8.4	7.8	8.1	6.1	7.0	9.5	46	42	9.6	8.5	12
21	7.3	8.4	6.5	9.0	6.1	7.0	12	54	47	9.5	8.7	12
22	7.8	8.4	5.2	7.6	6.3	7.0	12	63	39	9.5	8.7	12
23	8.4	8.4	5.2	7.3	6.3	7.0	10	70	37	9.5	8.7	11
24	8.4	8.5	5.2	7.3	6.6	6.5	10	73	37	9.4	11	11
25	8.9	8.7	5.4	7.3	6.5	6.3	17	87	35	9.3	12	11
26	9.0	8.4	6.0	7.3	6.3	6.3	18	81	32	9.3	12	11
27	8.7	8.4	5.8	7.2	6.3	6.3	30	84	30	9.5	16	11
28	8.4	8.4	5.7	6.9	6.3	6.3	38	87	27	9.2	17	11
29	8.7	8.4	5.8	6.9	---	6.6	40	91	25	8.8	17	12
30	8.7	8.4	7.4	7.0	---	8.1	33	86	24	8.7	16	12
31	8.1	---	7.6	6.8	---	8.7	---	78	---	8.7	15	---
TOTAL	272.3	257.4	222.6	233.7	185.6	201.1	399.9	1702	1317	382.4	319.0	363
MEAN	8.78	8.58	7.18	7.54	6.63	6.49	13.3	54.9	43.9	12.3	10.3	12.1
MAX	12	9.7	8.4	9.0	8.7	8.7	40	91	69	23	17	14
MIN	7.3	7.9	5.2	6.8	6.1	5.6	8.7	27	24	8.7	8.5	11
AC-FT	540	511	442	464	368	399	793	3380	2610	758	633	720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-80, 1993-99, BY WATER YEAR (WY)

	MEAN	10.9	10.4	9.79	9.65	10.6	14.9	44.7	84.3	62.0	28.2	15.6	12.6
MAX	26.0	19.7	16.4	17.0	18.6	30.9	172	276	132	70.8	50.9	32.9	
(WY)	1953	1953	1953	1970	1971	1997	1952	1952	1952	1952	1952	1952	1952
MIN	4.57	5.19	3.66	4.45	4.73	5.79	6.98	12.5	10.1	6.89	5.91	5.43	
(WY)	1978	1978	1994	1994	1995	1994	1961	1977	1994	1994	1993	1977	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1951-80, 1993-99

ANNUAL TOTAL	13362.0	5856.0	
ANNUAL MEAN	36.6	16.0	
HIGHEST ANNUAL MEAN			26.4
LOWEST ANNUAL MEAN			66.1
HIGHEST DAILY MEAN	230	May 2	91
LOWEST DAILY MEAN	5.2	Dec 22	5.2
ANNUAL SEVEN-DAY MINIMUM	5.5	Dec 22	5.5
ANNUAL RUNOFF (AC-FT)	26500		11620
10 PERCENT EXCEEDS	109		43
50 PERCENT EXCEEDS	12		8.7
90 PERCENT EXCEEDS	7.0		6.3
			7.0

## 10146400 CURRANT CREEK NEAR MONA, UT

LOCATION.--Lat 39°48'09", long 111°51'44", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, sec. 6, T. 12 S., R. 1 E., Juab County, Hydrologic Unit 16020201, on left bank 40 ft upstream from bridge crossing, 800 ft downstream from Burraston ponds, 0.5 mi upstream from Mona Reservoir, 1 mi southwest of Mona.

DRAINAGE AREA.--225 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR UT-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,890 ft above sea level, from topographic map. Prior to June 10, 1985, at same site, different datum. Prior to October 1, 1992, at same site, different datum.

REMARKS.--Records good except for estimated days, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 595 ft<sup>3</sup>/s May 14, 1984, gage height, 6.30 ft; maximum gage height, 6.77 ft, May 31, 1983, site and datum then in use; minimum, 1.5 ft<sup>3</sup>/s Nov. 4, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 308 ft<sup>3</sup>/s, May 3, gage height, 6.82 ft; minimum daily discharge, 4.7 ft<sup>3</sup>/s, Aug 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	42	45	73	59	42	31	32	14	9.8	10	11
2	21	43	45	68	50	41	37	33	20	10	9.2	9.2
3	22	52	45	55	51	41	31	186	35	11	9.0	9.0
4	22	43	50	48	51	42	30	212	32	11	9.6	9.0
5	24	40	55	47	63	44	27	57	49	9.7	11	9.1
6	24	60	43	49	66	44	25	36	40	10	11	8.7
7	23	57	42	57	55	44	25	30	35	11	12	8.7
8	23	58	45	61	51	47	46	28	31	12	11	10
9	22	72	45	55	50	44	42	26	23	8.9	10	9.3
10	22	e51	44	54	59	45	35	29	21	6.0	10	11
11	23	e43	40	57	65	48	30	24	21	5.6	11	10
12	23	e43	44	60	61	48	28	20	19	9.0	11	9.4
13	23	e42	49	58	58	45	25	36	17	22	9.8	8.6
14	23	e43	53	54	75	44	22	53	17	22	6.7	8.8
15	23	e40	53	54	77	42	21	43	16	16	11	10
16	25	e39	51	57	57	40	21	35	15	12	10	11
17	33	e39	50	59	56	35	21	35	16	11	9.2	13
18	31	e38	49	57	52	31	19	30	15	10	8.7	15
19	29	39	43	62	49	30	18	26	14	9.8	8.9	13
20	28	42	42	80	44	27	19	24	14	10	8.4	12
21	28	42	42	175	45	25	31	24	14	10	8.2	12
22	32	40	41	78	45	25	42	22	14	9.9	6.6	11
23	33	39	41	57	49	25	31	17	12	8.3	4.7	11
24	33	38	41	56	47	25	31	16	12	9.8	5.5	11
25	43	38	41	55	45	25	113	15	11	9.7	14	11
26	68	44	41	56	42	25	124	17	11	8.7	9.6	11
27	51	47	41	58	41	24	57	19	11	11	8.6	11
28	39	46	44	49	42	23	48	20	11	11	12	11
29	38	47	52	43	---	22	63	20	11	8.8	11	12
30	73	47	59	48	---	21	45	22	10	8.1	9.4	12
31	54	---	58	49	---	20	---	16	---	11	13	---
TOTAL	977	1354	1434	1889	1505	1084	1138	1203	581	333.1	300.1	318.8
MEAN	31.5	45.1	46.3	60.9	53.8	35.0	37.9	38.8	19.4	10.7	9.68	10.6
MAX	73	72	59	175	77	48	124	212	49	22	14	15
MIN	21	38	40	43	41	20	18	15	10	5.6	4.7	8.6
AC-FT	1940	2690	2840	3750	2990	2150	2260	2390	1150	661	595	632

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1999, BY WATER YEAR (WY)

	MEAN	20.9	27.0	28.1	32.0	42.0	51.8	51.9	55.6	35.1	13.8	12.2	14.2
MAX	71.7	75.4	85.4	65.5	104	172	191	319	245	50.4	41.5	41.5	
(WY)	1985	1984	1984	1986	1986	1985	1985	1984	1983	1983	1984	1984	
MIN	6.26	5.22	6.64	9.01	15.1	14.3	9.25	6.16	4.92	4.24	2.98	3.60	
(WY)	1993	1993	1993	1993	1992	1992	1992	1992	1992	1992	1992	1992	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1979 - 1999

ANNUAL TOTAL	15287	12117.0		
ANNUAL MEAN	41.9	33.2		
HIGHEST ANNUAL MEAN			32.0	
LOWEST ANNUAL MEAN			101	1984
HIGHEST DAILY MEAN	179	Mar 28	7.87	1992
LOWEST DAILY MEAN	11	Aug 29	566	May 14 1984
ANNUAL SEVEN-DAY MINIMUM	12	Jul 16	1.5	Nov 4 1992
ANNUAL RUNOFF (AC-FT)	30320	24030	1.8	Nov 4 1992
10 PERCENT EXCEEDS	73	57	70	
50 PERCENT EXCEEDS	38	31	17	
90 PERCENT EXCEEDS	15	9.8	6.9	

e Estimated

## JORDAN RIVER BASIN

10149000 SIXTH WATER CREEK ABOVE SYAR TUNNEL, NEAR SPRINGVILLE, UT

LOCATION.--Lat 40°07'05", long 111°18'50", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 13, T. 8 S., R. 5 E., Utah County, Hydrologic Unit 16020202, on left bank 400ft. upstream from Syar Tunnel.

DRAINAGE AREA.--15 mi<sup>2</sup>.

PERIOD OF RECORD.--October 15, 1998 to September 30, 1999.

GAGE.--Water-stage recorder. Elevation of gage is 6,320 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow includes water diverted from Strawberry Reservoir (capacity, 1,106,500 acre-ft) since June 30, 1973, in Colorado River basin via Strawberry tunnel for irrigation in vicinity of Spanish Fork.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 98 ft<sup>3</sup>/s Nov. 24, 1998, gage height, 4.90 ft; minimum 5.9 ft<sup>3</sup>/s Oct 16, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 98 ft<sup>3</sup>/s, Nov 24, gage height, 4.90 ft; minimum discharge, 5.9 ft<sup>3</sup>/s, Oct 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7.9	31	22	24	24	32	48	52	45	39	42
2	---	7.9	31	e22	e23	24	37	49	52	45	39	43
3	---	8.1	31	e22	24	25	36	53	50	45	40	42
4	---	8.1	31	e23	25	26	36	51	49	44	41	42
5	---	8.0	e31	e26	24	26	36	51	49	44	40	41
6	---	16	e30	25	24	26	36	51	49	44	41	41
7	---	32	e30	24	24	26	37	52	49	46	41	41
8	---	32	e30	24	24	26	37	54	48	45	40	41
9	---	32	e31	25	24	26	37	55	48	44	40	40
10	---	32	e30	24	25	26	39	55	48	43	40	26
11	---	32	e29	24	e24	26	36	55	48	43	41	38
12	---	32	e30	24	e24	26	37	53	48	43	40	36
13	---	32	30	24	e24	27	37	53	48	43	40	38
14	---	32	30	26	24	27	37	56	48	43	40	40
15	e7.2	32	30	24	25	27	37	55	48	43	40	40
16	7.2	32	30	24	27	27	37	55	48	42	40	40
17	7.2	32	30	24	24	27	37	55	48	42	40	40
18	7.2	32	e30	24	24	28	34	55	48	41	40	39
19	7.1	31	e27	24	24	28	30	56	48	41	40	40
20	7.1	31	e25	25	27	29	41	56	48	41	40	40
21	7.0	31	e23	24	24	28	42	57	47	40	41	40
22	7.3	41	e22	24	25	28	41	57	47	40	41	40
23	8.1	68	e22	24	24	29	41	57	46	40	41	40
24	7.8	75	e22	24	25	29	41	56	45	40	42	40
25	8.5	31	e22	24	24	29	42	56	45	39	41	39
26	8.2	31	e22	24	24	29	42	55	46	39	41	39
27	7.9	31	e22	24	26	29	45	55	45	39	42	39
28	7.8	31	23	e23	24	29	46	54	46	39	42	40
29	7.9	31	23	e23	---	29	48	53	45	39	42	39
30	8.3	31	23	e23	---	29	48	53	45	39	43	38
31	8.0	---	23	24	---	29	---	52	---	39	42	---
TOTAL	---	903.0	844	741	684	844	1162	1673	1431	1300	1260	1184
MEAN	---	30.1	27.2	23.9	24.4	27.2	38.7	54.0	47.7	41.9	40.6	39.5
MAX	---	75	31	26	27	29	48	57	52	46	43	43
MIN	---	7.9	22	22	23	24	30	48	45	39	39	26
AC-FT	---	1790	1670	1470	1360	1670	2300	3320	2840	2580	2500	2350

e Estimated

## 10149500 DIAMOND FORK BELOW RED HOLLOW, NEAR THISTLE, UT

LOCATION.--Lat 40°04'43", long 111°24'32", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 32, T. 8 S., R. 5 E., Utah County, Hydrologic Unit 16020202, on right bank 0.5 mi downstream from Red Hollow, 7.0 mi upstream from mouth, and 8 mi northeast of Thistle.

DRAINAGE AREA.--107 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1953 to June 1969, December 1988 to current year. Records for October and November, 1988 provided by Bureau of Reclamation.

GAGE.--Water-stage recorder. Elevation of gage is 5,260 ft above sea level, from topographic map. Prior to Dec. 8, 1988 at site approximately 0.2 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow includes water diverted from Strawberry Reservoir (capacity, 1,106,500 acre-ft) since June 30, 1973, in Colorado River basin via Strawberry tunnel for irrigation in vicinity of Spanish Fork.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft<sup>3</sup>/s July 13, 1954, gage height, 4.71 ft; minimum, 1.5 ft<sup>3</sup>/s Dec. 5, 1959, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 509 ft<sup>3</sup>/s, Jun 29-30, gage height, 2.73 ft; minimum daily discharge, 23 ft<sup>3</sup>/s, several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	23	41	38	41	42	52	104	130	463	354	285
2	92	23	40	37	41	42	56	106	134	471	356	285
3	78	24	40	e38	41	42	57	128	127	406	337	257
4	65	23	41	e38	40	43	57	122	120	393	350	254
5	47	23	e38	e39	42	42	57	118	117	378	351	206
6	33	28	e38	e40	41	42	57	116	114	395	347	203
7	26	41	e37	40	41	43	58	120	111	424	328	199
8	25	44	e37	39	42	42	63	128	108	404	302	179
9	24	43	e39	39	e43	42	64	137	104	406	301	169
10	24	43	e39	39	e43	43	59	134	102	368	324	196
11	24	43	e37	39	e42	42	60	130	99	363	313	220
12	24	42	e36	39	e42	42	61	128	96	378	326	193
13	24	42	e36	39	e41	42	62	141	101	376	314	177
14	24	42	e37	39	e42	43	63	153	150	399	353	176
15	24	43	38	39	41	45	63	145	169	383	361	154
16	24	42	38	39	41	46	63	141	227	378	344	168
17	24	43	38	40	42	47	64	139	288	342	396	168
18	24	43	37	40	41	48	64	140	291	326	445	168
19	24	41	38	41	41	50	58	144	323	334	455	162
20	23	41	e39	41	40	52	79	149	364	294	451	162
21	23	e42	e38	41	41	52	96	153	407	291	416	155
22	23	e41	e38	40	41	51	95	157	408	304	356	147
23	24	e40	e37	40	40	51	96	162	407	281	343	146
24	23	e41	e36	41	41	51	96	168	420	279	338	159
25	26	e42	e36	41	41	54	99	168	429	285	363	170
26	24	42	e37	41	41	53	89	165	458	354	365	169
27	23	42	e38	41	41	50	83	167	426	353	360	170
28	23	42	e38	e40	42	49	90	157	435	389	352	170
29	23	42	39	e39	---	48	108	155	492	408	296	152
30	24	41	38	e40	---	49	103	146	492	402	300	160
31	23	---	38	e41	---	51	---	139	---	396	319	---
TOTAL	1025	1152	1177	1228	1156	1439	2172	4360	7649	11423	10916	5579
MEAN	33.1	38.4	38.0	39.6	41.3	46.4	72.4	141	255	368	352	186
MAX	113	44	41	41	43	54	108	168	492	471	455	285
MIN	23	23	36	37	40	42	52	104	96	279	296	146
AC-FT	2030	2280	2330	2440	2290	2850	4310	8650	15170	22660	21650	11070

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	24.6	38.0	56.1	60.7	61.7	71.6	116	206	286	356	329	177
MAX	49.5	97.7	122	122	122	123	226	304	415	414	389	303
(WY)	1989	1990	1993	1993	1993	1992	1992	1997	1989	1991	1993	1992
MIN	13.5	14.7	17.2	14.9	19.0	29.5	25.7	54.4	203	276	250	117
(WY)	1992	1989	1996	1996	1996	1996	1994	1991	1993	1995	1994	1991

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1989 - 1999

ANNUAL TOTAL	50441	49276		
ANNUAL MEAN	138	135		
HIGHEST ANNUAL MEAN			149	
LOWEST ANNUAL MEAN			124	1992
HIGHEST DAILY MEAN	484	Jul 10	493	Jun 25 1994
LOWEST DAILY MEAN	19	Jan 7	10	Dec 17 1988
ANNUAL SEVEN-DAY MINIMUM	21	Jan 2	11	Dec 3 1988
ANNUAL RUNOFF (AC-FT)	100000	97740	108000	
10 PERCENT EXCEEDS	357	363	369	
50 PERCENT EXCEEDS	62	57	105	
90 PERCENT EXCEEDS	23	37	19	

e Estimated

## JORDAN RIVER BASIN

## 10150500 SPANISH FORK AT CASTILLA, UT

LOCATION.--Lat 40°02'59", long 111°32'50", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 12, T. 9 S., R. 3 E., Utah County, Hydrologic Unit 16020202, on right bank 600 ft upstream from outlet of Cold Springs, 0.9 mi upstream from diversion dam of Bureau of Reclamation, 1.5 mi northwest of Castilla, and 2.8 mi downstream from Diamond Fork.

DRAINAGE AREA.--652 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1889 to December 1890, April 1903 to November 1917, May 1919 to September 1925, January 1933 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Spanish Fork" 1889-90, 1903-08.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,870 ft above sea level, from topographic map. Prior to May 3, 1919, nonrecording gages at various sites 1.5 mi to 2.5 mi downstream from present site at different datums below power canal, which began diverting late in 1908. May 3, 1919, to Apr. 14, 1920, nonrecording gage, Apr. 15, 1920, to Sept. 30, 1925, and Jan. 1, 1933, to Apr. 16, 1940, water-stage recorder, at present site upstream from power canal at datum 2.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several small diversions for irrigation above station. Flow since June 1915 includes water diverted from Strawberry Reservoir, capacity, 1,106,500 acre-ft since June 30, 1973, in Colorado River Basin via Strawberry Tunnel for irrigation in vicinity of Spanish Fork. Flow affected by mudslide and draining of resultant lake about 5 mi upstream Apr. 14 to Sept. 30, 1983.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft<sup>3</sup>/s May 15, 1984, gage height, 11.53 ft; minimum, 5.8 ft<sup>3</sup>/s Dec. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 950 ft<sup>3</sup>/s, May 26, gage height, 5.85 ft; minimum daily discharge, 95 ft<sup>3</sup>/s, Dec 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	136	148	148	134	143	150	276	528	577	460	409
2	224	138	145	138	124	143	151	271	523	587	445	410
3	204	142	145	131	134	142	155	356	531	546	435	385
4	196	137	148	130	130	144	151	367	478	532	446	382
5	176	137	141	133	138	136	149	338	453	519	450	331
6	153	148	118	138	137	135	149	314	468	535	454	321
7	139	157	130	135	144	137	146	307	451	590	451	319
8	133	169	128	131	155	135	160	348	450	586	433	301
9	130	164	142	126	182	136	171	386	512	569	431	288
10	130	165	113	129	217	137	160	372	391	537	443	312
11	130	162	121	127	143	138	161	354	377	532	453	337
12	130	160	137	129	128	138	154	343	318	539	453	313
13	130	160	135	128	139	132	153	397	305	533	426	292
14	129	162	137	124	144	136	157	473	347	515	443	290
15	130	165	136	129	137	141	155	439	363	510	448	272
16	134	162	132	129	134	143	154	420	400	503	437	282
17	134	161	131	131	143	144	155	402	470	469	473	284
18	134	162	132	132	139	145	164	401	488	445	506	285
19	133	153	132	147	139	150	159	428	519	456	522	279
20	132	146	132	145	133	153	188	451	551	418	537	281
21	130	148	108	156	139	154	231	477	572	404	517	270
22	132	151	95	143	136	153	230	532	584	413	470	256
23	133	178	e96	138	133	152	229	583	566	395	458	248
24	132	209	e100	145	139	150	236	642	563	388	444	263
25	144	154	e121	141	156	157	261	680	564	395	478	273
26	146	148	146	141	151	164	244	691	584	452	471	273
27	141	147	147	138	133	156	244	659	567	479	486	276
28	137	148	146	125	138	148	269	653	556	505	495	280
29	140	148	146	107	---	140	318	644	579	529	425	264
30	147	147	136	119	---	143	302	625	588	524	419	269
31	140	---	143	134	---	146	---	574	---	512	446	---
TOTAL	4564	4664	4067	4147	3999	4471	5706	14203	14646	15494	14255	9045
MEAN	147	155	131	134	143	144	190	458	488	500	460	302
MAX	241	209	148	156	217	164	318	691	588	590	537	410
MIN	129	136	95	107	124	132	146	271	305	388	419	248
AC-FT	9050	9250	8070	8230	7930	8870	11320	28170	29050	30730	28270	17940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920-25, 1934-99, BY WATER YEAR (WY)

	110	87.5	80.6	81.7	94.5	136	272	555	466	404	333	205
MEAN	110	87.5	80.6	81.7	94.5	136	272	555	466	404	333	205
MAX	654	480	209	165	264	334	1054	2077	1593	565	525	385
(WY)	1984	1984	1984	1990	1986	1986	1952	1984	1983	1998	1985	1992
MIN	33.5	42.7	40.5	45.4	41.9	53.0	56.7	180	126	101	92.4	59.7
(WY)	1935	1962	1961	1961	1964	1964	1961	1934	1934	1934	1934	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1920-25, 1934-99	
ANNUAL TOTAL	123677		99261			
ANNUAL MEAN	339		272		237	
HIGHEST ANNUAL MEAN					569	
LOWEST ANNUAL MEAN					86.2	
HIGHEST DAILY MEAN	1090		691		3700	
LOWEST DAILY MEAN	90		95		20	
ANNUAL SEVEN-DAY MINIMUM	103		112		27	
ANNUAL RUNOFF (AC-FT)	245300		196900		171500	
10 PERCENT EXCEEDS	674		528		513	
50 PERCENT EXCEEDS	238		162		148	
90 PERCENT EXCEEDS	112		131		60	

e Estimated



## 10154200 PROVO RIVER NEAR WOODLAND, UT

LOCATION.--Lat 40°33'28", long 111°10'05", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 17, T. 3 S., R. 7 E., Summit County, Hydrologic Unit 16020203, on right bank on south side of State Highway 35, 0.3 mi downstream from Twin Pine Bridge, 1.6 mi downstream from South Fork and 3.5 mi southeast of Woodland.

DRAINAGE AREA.--162 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR UT-77-1: Drainage area.

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

REMARKS.--Records good except for estimated daily discharges, which are fair. Records include flow of Duchesne Tunnel, transmountain diversion. Flow also affected by some small irrigation diversions above station and by storage in several small reservoirs at headwaters. Information on these diversions is available from the Provo River Water Commissioner's Report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,040 ft<sup>3</sup>/s June 7, 1986, from rating curve extended above 2,000 ft<sup>3</sup>/s on the basis of slope-area measurement of peak flow, gage height, 7.40 ft; minimum, 16 ft<sup>3</sup>/s Nov. 6, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,520 ft<sup>3</sup>/s, May 29, gage height, 6.30 ft from floodmark inside well; minimum discharge, 41 ft<sup>3</sup>/s, Dec 6,

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	95	81	71	72	79	119	274	1430	611	129	94
2	105	90	80	67	66	75	112	296	1450	559	114	103
3	106	91	75	63	75	75	110	325	1330	482	108	132
4	111	77	83	63	e72	75	101	281	1170	430	110	114
5	113	84	59	68	e72	71	98	252	1070	382	113	103
6	112	90	48	67	e72	72	104	247	1020	359	115	97
7	114	74	61	67	e72	78	101	295	1040	323	106	91
8	112	90	65	66	e73	77	112	380	962	344	101	86
9	106	78	76	66	e78	79	111	439	1080	304	99	88
10	100	92	65	67	83	78	99	373	1030	251	100	85
11	99	91	72	65	68	80	101	329	955	219	103	92
12	96	85	82	65	79	79	104	318	1060	207	105	88
13	92	86	83	64	90	76	116	410	1170	204	97	90
14	94	87	77	62	85	80	136	421	1230	206	92	94
15	94	89	73	67	78	83	134	389	1420	218	89	85
16	95	85	72	67	76	86	133	352	1480	204	86	85
17	97	88	72	68	78	91	147	331	1420	240	85	85
18	93	88	71	69	78	101	184	383	1270	198	83	83
19	93	82	69	68	79	114	231	508	1200	181	77	92
20	93	67	67	71	73	124	281	608	1100	174	83	89
21	90	91	60	73	80	122	260	764	958	177	109	88
22	95	89	57	76	77	121	219	911	865	165	88	89
23	91	84	56	79	81	123	201	1130	913	152	92	79
24	87	83	56	80	78	126	196	1560	1080	143	86	82
25	91	78	60	78	79	147	190	1860	1020	137	88	79
26	96	81	71	77	76	156	198	1930	970	132	82	77
27	98	82	80	76	73	138	251	1920	875	133	94	81
28	93	84	78	63	77	122	271	2090	799	124	99	84
29	92	85	72	63	---	122	320	2220	723	117	86	82
30	94	83	71	74	---	131	290	1980	652	140	90	79
31	92	---	70	75	---	129	---	1890	---	178	116	---
TOTAL	3052	2549	2162	2145	2140	3110	5030	25466	32742	7694	3025	2696
MEAN	98.5	85.0	69.7	69.2	76.4	100	168	821	1091	248	97.6	89.9
MAX	114	95	83	80	90	156	320	2220	1480	611	129	132
MIN	87	67	48	62	66	71	98	247	652	117	77	77
AC-FT	6050	5060	4290	4250	4240	6170	9980	50510	64940	15260	6000	5350

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

	MEAN	74.3	67.3	61.8	60.0	59.4	76.0	195	793	829	261	120	84.0
MAX	155	97.9	97.3	86.9	95.7	198	370	1348	1653	730	255	166	
(WY)	1983	1983	1984	1984	1986	1986	1985	1997	1995	1995	1965	1982	
MIN	41.3	42.3	38.4	36.6	40.1	41.5	69.4	128	113	46.6	26.6	29.0	
(WY)	1989	1993	1977	1977	1977	1977	1975	1977	1992	1992	1992	1992	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1964 - 1999

ANNUAL TOTAL	97790	91811	224	1986
ANNUAL MEAN	268	252	351	1977
HIGHEST ANNUAL MEAN			71.3	1977
LOWEST ANNUAL MEAN			2530	May 28 1979
HIGHEST DAILY MEAN	1710	2220	24	Aug 26 1992
LOWEST DAILY MEAN	48	48	25	Aug 24 1992
ANNUAL SEVEN-DAY MINIMUM	61	61		
ANNUAL RUNOFF (AC-FT)	194000	182100	162200	
10 PERCENT EXCEEDS	817	869	657	
50 PERCENT EXCEEDS	112	93	82	
90 PERCENT EXCEEDS	72	71	47	

e Estimated

## JORDAN RIVER BASIN

10155000 PROVO RIVER NEAR HAILSTONE, UT

LOCATION.--Lat 40°36'03", long 111°19'51", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 36, T. 2 S., R. 5 E., Wasatch County, Hydrologic Unit 16020203, on left bank 0.25 mi downstream of bridge on State Highway 32, 4.5 mi upstream from Ross Creek and Hailstone. Prior to Apr. 8, 1993, at site 1.5 mi downstream.

DRAINAGE AREA.--219 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WDR UT-89-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,220 ft above sea level, from topographic map. Prior to Nov. 20, 1964 at datum 1.00 ft higher. Gage relocated 1.5 mi upstream on Apr. 8, 1993, to a site above the high water line of Jordanelle Reservoir, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Records include flow of Weber-Provo diversion canal and Duchesne Tunnel, a transbasin diversion. Flow also affected by irrigation diversions above station and by storage in several small reservoirs at headwaters. Information on flow of Duchesne Tunnel, and capacities of small reservoirs is available from Provo River Water Commissioner's Report, (total capacity, 10,080 acre-ft).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,100 ft<sup>3</sup>/s Jun 7, 1986, from rating curve extended above 2,500 ft<sup>3</sup>/s; gage height, 9.91 ft from floodmarks at site and datum then in use; minimum, 11 ft<sup>3</sup>/s Aug 20, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,070 ft<sup>3</sup>/s, May 26, gage height, 8.93 ft; minimum daily discharge, 58 ft<sup>3</sup>/s, Aug 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	147	133	e94	e142	121	190	468	1420	750	123	103
2	124	145	131	e92	e137	118	176	497	1400	699	104	117
3	138	145	126	e89	e148	119	176	632	1370	629	95	153
4	149	134	136	e91	e146	122	165	548	1150	560	96	144
5	146	139	e111	e97	e146	114	161	493	997	489	100	129
6	143	151	e98	e98	e146	116	169	480	920	460	105	119
7	145	132	e110	e99	e146	121	163	551	969	411	94	114
8	141	153	e112	e100	e149	114	178	627	862	443	86	112
9	135	136	e122	e101	e156	119	179	694	974	395	80	109
10	131	148	e109	e104	e163	117	161	625	954	334	79	109
11	127	148	e117	e103	e150	124	164	587	927	293	85	114
12	126	143	e125	e105	e145	137	166	577	1180	246	87	112
13	122	140	e125	e105	e141	135	167	679	1300	192	77	110
14	121	143	e117	e105	120	145	189	705	1330	192	72	110
15	122	148	e112	e111	111	157	177	662	1480	209	68	109
16	127	142	e109	e113	111	165	186	610	1600	187	67	105
17	126	146	e108	e115	109	169	199	582	1620	217	63	100
18	122	149	e105	e118	107	178	228	623	1490	180	61	103
19	121	139	e102	e118	110	194	271	747	1420	163	58	107
20	126	125	e98	e123	110	205	329	843	1320	148	64	116
21	159	143	e89	e126	114	204	324	1030	1160	149	94	110
22	162	147	e85	e131	117	194	287	1180	1050	137	81	104
23	150	140	e82	e135	114	196	287	1480	1030	131	73	102
24	140	139	e81	e138	112	196	259	1790	1240	126	72	103
25	148	130	e83	e137	114	220	259	2470	1130	117	67	101
26	154	135	e93	e138	113	234	275	2720	1040	113	67	96
27	155	136	e100	e138	112	210	364	2430	937	112	75	96
28	150	136	e96	e127	118	186	430	2250	863	110	91	97
29	145	136	e91	e128	---	185	525	2410	801	105	75	98
30	155	133	e92	e141	---	199	503	2100	753	117	72	97
31	153	---	e92	e143	---	200	---	1970	---	167	106	---
TOTAL	4289	4228	3290	3563	3607	5014	7307	34060	34687	8581	2537	3299
MEAN	138	141	106	115	129	162	244	1099	1156	277	81.8	110
MAX	162	153	136	143	163	234	525	2720	1620	750	123	153
MIN	121	125	81	89	107	114	161	468	753	105	58	96
AC-FT	8510	8390	6530	7070	7150	9950	14490	67560	68800	17020	5030	6540

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1999, BY WATER YEAR (WY)

	MEAN	89.0	99.6	94.0	89.2	94.9	121	311	1061	981	267	98.4	82.8
MAX	191	170	156	135	228	311	824	1935	2026	856	263	203	
(WY)	1983	1973	1956	1971	1962	1986	1962	1993	1957	1965	1965	1983	
MIN	43.7	59.0	55.4	54.7	55.5	65.4	113	131	102	25.3	20.9	27.2	
(WY)	1955	1977	1977	1977	1977	1977	1961	1977	1992	1961	1992	1960	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1954 - 1999	
ANNUAL TOTAL	116237		114462		283	
ANNUAL MEAN	318		314		445	
HIGHEST ANNUAL MEAN					80.2	
LOWEST ANNUAL MEAN					1962	
HIGHEST DAILY MEAN	1730	Jun 2	2720	May 26	3560	May 22 1993
LOWEST DAILY MEAN	81	Aug 25	58	Aug 19	12	Aug 21 1960
ANNUAL SEVEN-DAY MINIMUM	87	Dec 20	65	Aug 14	14	Jul 25 1961
ANNUAL RUNOFF (AC-FT)	230600		227000		204900	
10 PERCENT EXCEEDS	879		923		825	
50 PERCENT EXCEEDS	140		139		109	
90 PERCENT EXCEEDS	105		94		58	

e Estimated

## JORDAN RIVER BASIN

253

10155300 PROVO RIVER NEAR MIDWAY, UT

LOCATION.--Lat 40°30'25", long 111°26'56", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 1, T. 4 S., R. 4 E., Wasatch County, Hydrologic Unit 16020203, on left bank 150 ft downstream of bridge on State Highway 113, 1.8 miles west of Heber City.

DRAINAGE AREA.--268 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,490 ft above sea level, from topographic map.

REMARKS.--Records good. Flow also affected by irrigation diversions above station and by storage in, and releases from Jordanelle Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,040 ft<sup>3</sup>/s May 28, 1999, gage height 5.98 ft; minimum daily discharge, 19 ft<sup>3</sup>/s May 2, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,040 ft<sup>3</sup>/s, May 28, gage height, 5.98 ft; minimum daily discharge, 122 ft<sup>3</sup>/s, Apr 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	139	132	127	147	153	140	152	1840	526	211	190
2	246	139	132	127	147	153	137	151	1730	524	210	190
3	250	136	132	127	148	153	135	183	1450	515	210	192
4	252	135	133	126	148	153	135	195	1210	516	205	192
5	254	135	131	127	149	153	134	199	1130	513	196	190
6	255	135	131	130	148	152	135	192	1120	507	197	187
7	257	135	130	132	150	152	135	177	1120	511	208	189
8	260	138	131	133	158	153	135	168	1030	512	211	184
9	260	135	130	135	171	153	136	165	984	516	206	179
10	260	136	130	136	192	153	135	164	972	523	208	179
11	260	138	130	137	163	151	135	164	966	515	202	179
12	268	141	130	137	158	151	135	161	975	503	196	177
13	273	137	130	138	155	151	126	167	973	494	209	177
14	221	135	130	138	156	150	125	162	975	396	217	178
15	172	134	130	139	155	148	130	159	862	301	236	187
16	154	135	129	141	154	148	172	160	799	278	286	208
17	141	136	128	140	156	148	197	163	803	274	231	224
18	141	137	127	142	154	148	202	188	805	268	197	228
19	137	136	127	145	153	148	195	305	811	263	185	230
20	133	135	127	145	153	148	170	634	818	263	180	230
21	132	136	132	145	153	149	147	789	647	222	187	237
22	134	137	128	142	153	151	123	792	528	198	188	234
23	139	136	129	141	153	151	122	797	514	197	189	233
24	137	137	129	143	153	150	127	818	521	192	190	232
25	141	135	128	142	153	145	129	1140	524	189	190	231
26	139	132	130	141	153	142	132	1670	519	192	190	230
27	139	132	130	141	153	142	137	1930	510	195	190	226
28	144	132	131	140	153	142	148	2000	528	196	188	221
29	151	132	131	143	---	135	158	1970	527	196	187	211
30	147	132	130	144	---	131	155	1940	521	201	191	212
31	140	---	127	145	---	135	---	1900	---	209	190	---
TOTAL	5984	4068	4025	4269	4339	4592	4322	19755	26712	10905	6281	6157
MEAN	193	136	130	138	155	148	144	637	890	352	203	205
MAX	273	141	133	145	192	153	202	2000	1840	526	286	237
MIN	132	132	127	126	147	131	122	151	510	189	180	177
AC-FT	11870	8070	7980	8470	8610	9110	8570	39180	52980	21630	12460	12210

CAL YR 1998 TOTAL 93420 MEAN 256 MAX 899 MIN 122 AC-FT 185300  
WTR YR 1999 TOTAL 101409 MEAN 278 MAX 2000 MIN 122 AC-FT 201100

## JORDAN RIVER BASIN

10155400 SPRING CREEK NEAR HEBER, UT

LOCATION.--Lat 40°30'31", long 111°26'19", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 36, T. 3 S., R. 4 E., Wasatch county, Hydrologic Unit 16020203, on left bank 260 ft upstream from state highway 113, 5000 ft upstream from mouth, and .8 mi west of Heber.

DRAINAGE AREA.--60.8 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 5500 ft above sea level, from topographic map.

REMARKS.--Records fair. Small diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 336 ft<sup>3</sup>/s Feb. 10, 1999, from rating extended by computation of flow from contracted opening, gage height 3.49 ft; minimum daily discharge, 3.9 ft<sup>3</sup>/s Apr 13, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 336 ft<sup>3</sup>/s, Feb 10, from rating extended by computation of flow from contracted opening; gage height 3.49 ft; minimum daily discharge, 3.9 ft<sup>3</sup>/s, Apr 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	27	19	17	17	18	15	34	78	29	38	e26
2	36	28	19	16	17	18	13	29	86	24	29	e26
3	38	29	19	16	17	18	12	54	84	25	32	e28
4	40	27	21	16	17	18	12	49	67	29	34	e28
5	38	26	19	16	18	17	12	42	68	28	32	e27
6	36	27	18	16	19	16	11	36	69	30	34	e27
7	36	26	17	17	22	17	9.4	34	75	30	31	e27
8	35	29	17	17	40	17	9.8	34	74	36	30	e26
9	35	29	17	17	118	17	9.9	34	72	34	30	e30
10	34	28	16	17	85	18	9.7	33	63	44	39	e30
11	35	27	16	17	23	18	9.2	34	64	28	46	e32
12	34	22	17	17	19	17	7.1	34	59	29	37	e32
13	32	21	17	17	19	17	3.9	38	54	24	33	e28
14	39	21	17	17	24	17	4.1	35	53	25	24	e31
15	36	23	17	18	22	17	5.8	34	56	27	22	e29
16	31	24	17	18	20	17	9.2	33	55	27	19	e28
17	31	26	17	18	23	17	8.6	31	55	28	18	e28
18	31	25	16	20	21	17	7.9	31	51	27	23	e28
19	31	22	16	31	21	17	7.9	32	46	26	26	e27
20	35	20	15	19	19	17	11	33	45	20	32	e27
21	34	19	15	19	18	17	15	37	41	25	34	e26
22	30	19	e15	18	17	17	20	38	35	26	33	e25
23	30	19	e15	18	18	16	22	40	33	31	29	e25
24	31	18	e15	19	19	17	24	55	32	29	27	e26
25	34	18	e15	18	18	17	21	63	28	23	e27	e27
26	33	20	e16	16	17	18	20	72	31	27	e25	e24
27	32	20	e16	18	16	17	22	78	33	31	e24	e24
28	31	20	e16	17	17	16	24	78	29	35	e25	e24
29	29	21	17	18	---	15	35	81	24	34	e22	e25
30	32	20	17	17	---	14	38	78	31	39	e25	e31
31	28	---	17	17	---	14	---	77	---	46	e26	---
TOTAL	1042	701	521	552	721	523	429.5	1411	1591	916	906	822
MEAN	33.6	23.4	16.8	17.8	25.8	16.9	14.3	45.5	53.0	29.5	29.2	27.4
MAX	40	29	21	31	118	18	38	81	86	46	46	32
MIN	28	18	15	16	16	14	3.9	29	24	20	18	24
AC-FT	2070	1390	1030	1090	1430	1040	852	2800	3160	1820	1800	1630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1999, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999
MEAN	22.4	20.6	16.6	16.1	19.5	24.7
MAX	33.6	23.4	19.2	17.8	25.8	33.0
(WY)	1999	1999	1996	1999	1999	1997
MIN	13.3	15.6	13.4	13.4	16.0	16.9
(WY)	1995	1995	1994	1994	1998	1999

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1994 - 1999

	1998	1999	1994-1999
ANNUAL TOTAL	10753	10135.5	
ANNUAL MEAN	29.5	27.8	26.5
HIGHEST ANNUAL MEAN			30.0
LOWEST ANNUAL MEAN			18.6
HIGHEST DAILY MEAN	103	118	131
LOWEST DAILY MEAN	12	3.9	3.9
ANNUAL SEVEN-DAY MINIMUM	13	6.7	5.1
ANNUAL RUNOFF (AC-FT)	21330	20100	19200
10 PERCENT EXCEEDS	52	41	49
50 PERCENT EXCEEDS	26	25	21
90 PERCENT EXCEEDS	15	16	13

e Estimated

## 10155500 PROVO RIVER NEAR CHARLESTON, UT

LOCATION.--Lat 40°29'03", long 111°27'46", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 11, T. 4 S., R. 4 E., Wasatch County, Hydrologic Unit 16020203, on left bank 1,000 ft upstream from Snake Creek and 1.5 mi northeast of Charleston.

DRAINAGE AREA.--350 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1938 to Sept. 1950, Oct. 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,460 ft above sea level, from topographic map. Prior to Oct. 1991 at different sites and datums.

REMARKS.--Records good. Records include flow of Weber-Provo diversion canal and Duchesne Tunnel, a transbasin diversion. Flow affected, by Jordanelle Reservoir, capacity 329,000 acre-ft, irrigation diversions above station and by several small reservoirs at headwaters. Information on flow of Duchesne Tunnel, and capacities of small reservoirs is available from Provo River Water Commissioner's Report (total capacity, 10,080 acre-ft).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,280 ft<sup>3</sup>/s May 22, 1993, gage height, 6.29 ft; minimum, 13 ft<sup>3</sup>/s Oct 24, 1940, Oct 7, 1948 at site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,200 ft<sup>3</sup>/s, May 26, 28, gage height, 6.11 ft; minimum daily discharge, 150 ft<sup>3</sup>/s, Apr 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	230	e205	189	199	207	185	259	2110	525	261	247
2	342	229	e205	188	200	205	181	245	2030	513	249	250
3	347	229	204	188	201	204	179	325	1710	502	258	258
4	356	224	207	185	201	205	179	320	1370	507	259	257
5	355	222	206	183	205	201	178	311	1260	511	245	252
6	353	221	202	185	206	200	179	291	1240	516	248	248
7	351	219	200	188	211	201	178	273	1240	534	257	246
8	350	223	199	188	247	200	176	263	1140	558	262	242
9	350	222	199	189	327	201	177	261	1090	570	256	239
10	348	222	197	192	370	201	174	249	1070	587	263	240
11	348	221	197	192	236	202	171	242	1040	553	266	245
12	354	220	196	192	220	199	169	240	1030	540	255	259
13	358	219	197	193	215	199	157	263	1030	530	271	263
14	326	217	197	192	225	199	150	252	1030	427	273	268
15	283	217	196	193	224	199	159	244	928	330	284	275
16	262	216	196	194	217	198	218	253	849	315	330	289
17	246	215	197	194	223	197	241	253	853	298	285	303
18	245	219	196	198	219	196	247	270	851	290	250	300
19	241	217	195	232	218	197	234	380	847	290	238	301
20	241	213	193	215	212	197	196	692	852	286	231	303
21	241	210	193	214	209	199	181	849	667	249	242	306
22	239	210	192	204	207	200	169	838	522	226	245	299
23	238	e206	188	203	207	199	175	832	496	236	243	296
24	237	e206	189	206	210	198	190	867	496	227	243	294
25	241	e206	189	202	211	197	193	1220	505	220	242	293
26	240	e205	191	199	208	195	202	1850	504	226	243	292
27	240	e205	191	197	204	195	221	2080	498	230	243	288
28	240	e205	192	197	206	193	242	2100	518	234	241	284
29	243	e205	192	198	---	186	277	2090	521	235	236	275
30	242	e205	192	198	---	181	274	2110	525	251	242	277
31	233	---	189	198	---	182	---	2090	---	264	248	---
TOTAL	9029	6478	6082	6086	6238	6133	5852	22812	28822	11780	7909	8189
MEAN	291	216	196	196	223	198	195	736	961	380	255	273
MAX	358	230	207	232	370	207	277	2110	2110	587	330	306
MIN	233	205	188	183	199	181	150	240	496	220	231	239
AC-FT	17910	12850	12060	12070	12370	12160	11610	45250	57170	23370	15690	16240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

	MEAN	88.3	118	118	127	138	166	261	653	599	177	84.4	87.5
	MAX	291	216	219	400	513	386	710	1243	1255	519	280	294
	(WY)	1999	1999	1997	1997	1997	1997	1946	1993	1993	1995	1998	1998
	MIN	21.4	60.5	66.0	71.8	81.9	86.7	57.6	314	41.0	23.5	18.5	16.8
	(WY)	1941	1940	1995	1994	1994	1994	1995	1940	1992	1992	1992	1992

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1939 - 1999

	ANNUAL TOTAL	123367	125410	
	ANNUAL MEAN	338	344	
	HIGHEST ANNUAL MEAN			218
	LOWEST ANNUAL MEAN			355
	HIGHEST DAILY MEAN	1050	2110	91.3
	LOWEST DAILY MEAN	159	150	14
	ANNUAL SEVEN-DAY MINIMUM	162	165	15
	ANNUAL RUNOFF (AC-FT)	244700	248800	158100
	10 PERCENT EXCEEDS	657	555	539
	50 PERCENT EXCEEDS	241	236	115
	90 PERCENT EXCEEDS	170	191	35

e Estimated

## JORDAN RIVER BASIN

10156000 SNAKE CREEK NEAR CHARLESTON, UT

LOCATION.--Lat 40°29'07", long 111°27'59", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 11, T. 4 S., R. 4 E., Wasatch County, Hydrologic Unit 16020203, on right bank 700 ft upstream from mouth and 1.5 mi northeast of Charleston.

DRAINAGE AREA.--31.8 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1938 to October 1950, May 1993 to current year. Monthly discharge only, September 1938 to September 1945, published in WSP 1413.

GAGE.--Water-stage recorder. Elevation of gage is 5,435 ft above sea level, from topographic map. Prior to 1993 at different datum.

REMARKS.-- Records good, except for estimated days, which are fair. Some diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 146 ft<sup>3</sup>/s Jun 14, 1995, gage height, 2.46 ft, maximum gage height 3.63 ft, Mar 23, 1996; minimum, 19 ft<sup>3</sup>/s May 1, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 88 ft<sup>3</sup>/s, Feb 10, gage height, 3.02 ft; minimum daily discharge, 39 ft<sup>3</sup>/s, Mar 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	64	58	55	47	50	48	48	73	63	47	48
2	66	64	57	55	46	50	47	49	77	59	48	49
3	67	65	58	55	46	50	46	58	79	61	50	51
4	70	59	58	55	46	50	46	53	75	59	47	51
5	70	58	58	54	46	48	46	53	73	53	48	51
6	71	58	56	54	47	48	45	51	76	50	51	51
7	68	59	56	53	48	49	46	54	77	54	48	51
8	68	64	58	53	52	48	46	53	75	49	47	50
9	70	64	59	51	59	46	47	52	74	48	48	55
10	69	64	58	51	69	43	46	51	73	49	47	55
11	67	63	58	50	56	43	46	51	e72	48	46	57
12	66	62	59	51	51	44	46	51	e71	51	52	58
13	66	62	60	50	51	45	45	58	e71	54	57	54
14	63	62	58	50	53	45	49	59	e70	55	56	57
15	64	64	57	50	53	46	47	58	e69	47	55	56
16	64	63	56	50	52	47	45	59	e68	47	49	55
17	62	64	57	50	54	46	43	59	e67	46	47	55
18	61	63	56	52	53	44	41	59	e67	48	46	55
19	60	62	56	56	53	44	40	61	e66	46	44	55
20	61	62	e55	53	52	44	46	63	e65	43	49	55
21	63	62	e54	54	52	43	45	66	65	42	55	54
22	63	62	e55	52	51	43	47	65	65	44	49	54
23	62	62	e53	52	51	42	53	74	65	43	48	54
24	61	62	e53	53	51	43	51	77	72	47	47	55
25	64	61	e53	50	50	42	48	71	67	48	47	57
26	64	60	e52	50	50	40	51	71	66	54	46	54
27	63	61	e52	50	49	39	51	76	61	52	45	54
28	62	62	e50	50	49	40	54	76	57	56	46	54
29	63	62	e50	50	---	40	53	78	66	54	44	56
30	65	60	52	48	---	45	50	77	63	60	47	62
31	64	---	55	46	---	46	---	73	---	54	48	---
TOTAL	2014	1860	1727	1603	1437	1393	1414	1904	2085	1584	1504	1623
MEAN	65.0	62.0	55.7	51.7	51.3	44.9	47.1	61.4	69.5	51.1	48.5	54.1
MAX	71	65	60	56	69	50	54	78	79	63	57	62
MIN	60	58	50	46	46	39	40	48	57	42	44	48
AC-FT	3990	3690	3430	3180	2850	2760	2800	3780	4140	3140	2980	3220

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-50, 1994-99, BY WATER YEAR (WY)

	MEAN	47.5	48.1	44.3	42.5	42.1	45.9	46.7	55.7	60.5	45.3	41.0	42.1
MAX	65.0	62.9	55.7	51.7	55.0	52.1	57.8	87.5	86.8	59.4	57.5	62.3	
(WY)	1999	1946	1999	1999	1945	1945	1945	1943	1995	1995	1998	1998	
MIN	35.5	33.8	36.2	35.4	33.6	36.2	36.3	38.6	35.5	26.3	28.5	29.6	
(WY)	1940	1940	1940	1941	1941	1940	1941	1994	1994	1994	1940	1939	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1939-50, 1994-99

ANNUAL TOTAL	20644	20148	
ANNUAL MEAN	56.6	55.2	46.8
HIGHEST ANNUAL MEAN			55.2
LOWEST ANNUAL MEAN			36.2
HIGHEST DAILY MEAN	79	79	113
LOWEST DAILY MEAN	41	39	24
ANNUAL SEVEN-DAY MINIMUM	42	41	25
ANNUAL RUNOFF (AC-FT)	40950	39960	33890
10 PERCENT EXCEEDS	67	67	59
50 PERCENT EXCEEDS	56	54	45
90 PERCENT EXCEEDS	45	46	36

e Estimated

## JORDAN RIVER BASIN

257

10157500 DANIELS CREEK AT CHARLESTON, UT

LOCATION.--Lat 40°27'39", long 111°28'19", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 22, T. 4 S., R. 4 E., Wasatch County, Hydrologic Unit 16020203, on left bank 3 ft above capacity elevation of Deer Creek Reservoir, 200 ft downstream from culvert on State Highway 113 in old town of Charleston and 3.5 mi south of Midway.

DRAINAGE AREA.--50.1 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 5,420 ft above sea level, from topographic map.

REMARKS.--Records good except estimated daily discharges, which are fair. Small transbasin diversions from Strawberry River Basin drain into Daniels Creek. Flow also affected by irrigation diversions above station and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 274 ft<sup>3</sup>/s May 23, 1995, gage height 3.92 ft; no flow several days in July and August 1994, September 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 109 ft<sup>3</sup>/s, May 26, gage height, 2.92 ft; minimum daily discharge, 0.29 ft<sup>3</sup>/s, Apr 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	3.5	1.7	e2.0	e1.4	1.0	3.1	34	49	12	22	9.8
2	11	3.2	1.5	e1.9	e1.1	1.0	1.6	34	50	17	21	13
3	11	3.6	e1.3	e.80	e.67	.99	.96	51	58	14	22	15
4	12	4.2	e1.2	e.60	e.87	1.0	.69	50	57	12	25	22
5	12	4.4	e1.2	e.50	e1.6	1.1	.80	44	57	11	23	23
6	12	4.3	e1.3	e.90	e1.6	1.1	.42	41	54	5.6	19	21
7	12	3.8	e1.4	e1.0	e1.4	.97	.29	41	52	5.8	20	21
8	11	3.7	e1.6	e.96	e.70	.94	.47	44	47	8.6	21	18
9	11	3.5	e1.6	e.92	e.60	.86	.53	49	38	8.8	25	17
10	12	3.5	e.90	e.90	e.60	.84	1.8	45	33	6.6	19	17
11	12	3.6	e.90	e.90	e.68	.81	4.5	45	30	13	21	12
12	12	3.3	e1.3	e.96	e.72	.82	4.9	47	20	9.8	19	14
13	12	3.2	1.5	e1.1	e.76	.82	6.4	53	25	9.3	27	12
14	12	3.0	1.5	e1.2	1.0	.74	4.8	69	33	15	25	13
15	12	3.4	1.4	e1.3	2.3	.70	4.2	60	32	15	27	14
16	10	3.6	1.4	1.3	2.4	.71	11	57	30	15	25	15
17	10	3.5	1.3	1.4	2.9	.72	8.7	51	38	16	20	15
18	8.9	4.0	1.1	1.4	2.6	.71	11	45	35	15	21	7.3
19	6.4	3.5	e.70	2.1	2.4	.65	7.3	53	33	16	21	2.7
20	4.2	3.1	e.60	1.8	1.7	.50	6.9	59	25	17	18	2.2
21	4.8	3.0	e.54	1.7	1.4	.30	16	62	28	16	22	2.7
22	6.2	3.0	e.50	1.5	1.3	.30	15	63	27	20	20	13
23	5.3	2.6	e.50	1.5	1.0	.46	13	63	28	23	25	11
24	4.8	2.0	e.54	1.5	1.0	.62	20	85	27	24	23	13
25	4.9	1.9	e.56	1.4	1.0	.65	15	76	22	25	24	16
26	5.9	1.8	e.60	e1.3	1.0	.73	16	79	15	19	22	15
27	5.7	1.9	e.70	e1.3	1.0	.96	22	68	19	16	19	14
28	5.4	1.9	e.80	e1.4	1.0	.67	29	62	21	17	15	13
29	4.6	1.9	e.90	e.90	---	.73	40	69	18	18	15	13
30	4.8	1.9	e1.3	e.60	---	.51	37	63	13	22	15	13
31	4.1	---	e1.6	e.70	---	.80	---	55	---	20	14	---
TOTAL	272.0	93.8	33.94	37.74	36.70	23.71	303.36	1717	1014	462.5	655	407.7
MEAN	8.77	3.13	1.09	1.22	1.31	.76	10.1	55.4	33.8	14.9	21.1	13.6
MAX	12	4.4	1.7	2.1	2.9	1.1	40	85	58	25	27	23
MIN	4.1	1.8	.50	.50	.60	.30	.29	34	13	5.6	14	2.2
AC-FT	540	186	67	75	73	47	602	3410	2010	917	1300	809

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1999, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	1994	1995	1996	1997	1998	1999
MEAN	5.79	3.49	2.53	2.91	3.19	3.04	17.0	69.1	43.1	8.85	10.7	8.11
MAX	9.38	4.61	4.10	5.00	5.07	5.61	32.1	99.9	110	16.0	21.1	13.6
(WY)	1994	1996	1996	1994	1994	1997	1997	1995	1995	1999	1999	1999
MIN	2.95	2.09	1.09	1.12	1.31	.76	10.1	26.2	6.38	.24	1.65	3.14
(WY)	1995	1995	1999	1998	1999	1999	1999	1994	1994	1994	1994	1994

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1994 - 1999

ANNUAL TOTAL	6021.24	5057.45	
ANNUAL MEAN	16.5	13.9	14.9
HIGHEST ANNUAL MEAN			21.2
LOWEST ANNUAL MEAN			6.79
HIGHEST DAILY MEAN	112	85	244
LOWEST DAILY MEAN	.50	.29	.00
ANNUAL SEVEN-DAY MINIMUM	.55	.50	.01
ANNUAL RUNOFF (AC-FT)	11940	10030	10770
10 PERCENT EXCEEDS	51	41	44
50 PERCENT EXCEEDS	6.5	6.4	4.9
90 PERCENT EXCEEDS	.96	.72	1.2

e Estimated



## JORDAN RIVER BASIN

10159500 PROVO RIVER BELOW DEER CREEK DAM, UT

LOCATION.--Lat 40°24'12", long 111°31'44", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 7, T. 5 S., R. 4 E., Wasatch County, Hydrologic Unit 16020203, on right bank 200 ft upstream from Deer Creek, 1,000 ft downstream from Deer Creek Dam, and 4.1 mi northeast of Vivian Park.

DRAINAGE AREA.--547 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area. WDR UT-81-1: 1980.

GAGE.--Water-stage recorder. Elevation of gage is 5,260 ft above sea level, from topographic map.

REMARKS.--Records fair including estimated days. Flow regulated by Deer Creek Reservoir and by small lakes at headwaters that serve as reservoirs. Small transmountain diversions from Strawberry River drain into Daniels Creek. Flow also affected by irrigation diversions above station and water diverted to Provo River by Weber-Provo diversion canal and Duchesne Tunnel, a transbasin diversion. Information is available for these stations from the Provo River Water Commissioner's Report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft<sup>3</sup>/s Jun 3, 1983, gage height, 9.11 ft; no flow Feb 2, 3, 1957, Nov 12, 19, 1961, when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,240 ft<sup>3</sup>/s, Jun 1, 11, gage height, 5.95 ft; minimum daily discharge, 192 ft<sup>3</sup>/s, Apr 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e450	344	370	370	281	256	261	245	1220	559	559	473
2	e460	307	370	369	281	256	261	248	1210	571	561	471
3	e460	234	370	365	282	255	260	258	1190	620	581	451
4	e450	234	373	365	281	256	260	258	1160	632	581	438
5	e440	233	368	369	282	257	260	278	1120	632	573	440
6	e440	230	365	368	282	261	260	304	1100	630	565	444
7	e457	229	367	366	282	263	262	363	1100	622	568	446
8	457	230	369	364	323	263	265	390	1160	613	576	450
9	456	229	373	362	292	263	265	391	1170	599	588	440
10	456	229	369	362	303	262	265	437	1180	610	590	447
11	456	229	365	363	284	260	263	493	1220	618	582	456
12	459	229	363	361	280	260	258	548	1210	617	577	454
13	463	228	363	360	281	260	258	605	1180	620	586	456
14	484	227	369	338	277	261	263	634	1140	603	577	460
15	546	227	370	293	276	263	265	659	966	574	578	456
16	399	229	368	271	273	261	265	664	852	568	577	453
17	376	227	366	271	275	260	266	690	776	567	523	453
18	376	246	368	274	272	263	272	716	686	570	499	450
19	370	307	370	277	270	264	275	752	581	565	483	449
20	372	357	368	276	270	264	263	869	558	547	481	423
21	359	369	372	279	268	265	228	929	559	506	482	405
22	351	370	371	274	267	265	213	944	572	540	487	391
23	353	368	371	270	265	267	213	951	579	533	492	381
24	354	370	374	273	264	267	223	980	564	538	497	380
25	347	372	367	271	261	265	247	990	566	550	493	380
26	344	370	365	289	256	267	237	1020	569	568	518	379
27	343	370	369	300	256	266	218	1040	577	583	538	379
28	341	370	371	298	257	265	192	1090	583	577	518	372
29	344	371	371	291	---	267	202	1150	589	576	506	377
30	347	370	371	271	---	268	242	1170	574	567	489	376
31	345	---	372	275	---	271	---	1180	---	559	486	---
TOTAL	12655	8705	11438	9835	7741	8141	7482	21246	26511	18034	16711	12830
MEAN	408	290	369	317	276	263	249	685	884	582	539	428
MAX	546	372	374	370	323	271	275	1180	1220	632	590	473
MIN	341	227	363	270	256	255	192	245	558	506	481	372
AC-FT	25100	17270	22690	19510	15350	16150	14840	42140	52580	35770	33150	25450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1999, BY WATER YEAR (WY)

	MEAN	213	180	219	212	223	248	321	603	827	510	426	350
MAX	490	509	508	615	772	1146	1202	1200	1613	927	575	581	
(WY)	1984	1983	1983	1997	1997	1986	1986	1984	1983	1965	1986	1986	
MIN	75.6	.80	67.0	57.3	53.1	42.8	75.5	199	304	178	120	75.6	
(WY)	1962	1963	1993	1989	1981	1961	1961	1977	1977	1961	1961	1961	

SUMMARY STATISTICS

	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1954 - 1999
ANNUAL TOTAL	168427	161329	361
ANNUAL MEAN	461	442	361
HIGHEST ANNUAL MEAN			641
LOWEST ANNUAL MEAN			148
HIGHEST DAILY MEAN	1350	1220	2240
LOWEST DAILY MEAN	122	192	.00
ANNUAL SEVEN-DAY MINIMUM	160	219	.40
ANNUAL RUNOFF (AC-FT)	334100	320000	261800
10 PERCENT EXCEEDS	716	633	612
50 PERCENT EXCEEDS	373	370	314
90 PERCENT EXCEEDS	322	258	89

e Estimated

## 10163000 PROVO RIVER AT PROVO, UT

LOCATION.--Lat 40°14'16", long 111°41'55", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 3, T. 7 S., R. 2 E., Utah County, Hydrologic Unit 16020203, on left bank 1,300 ft downstream from bridge on State Highway 114, 2.1 mi west of Provo, and 2.1 mi upstream from mouth.

DRAINAGE AREA.--673 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1903 to June 1905, May 1933 to September 1934, January 1937 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "at San Pedro, Los Angeles and Salt Lake Railroad bridge, near Provo" 1903-04, and as "at Rio Grande Western Railroad bridge, near Provo" 1905.

REVISED RECORDS.--WSP 1564: 1904, 1934. WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,510 ft above sea level, from topographic map. May 1903 to June 1905, nonrecording gages at site 0.8 mi upstream at different datums. May 1933 to September 1934, non-recording gage at present site at different datum. January 1937 to November 1938, water-stage recorder at site 1,000 ft upstream at different datum. November 1938 to August 1957, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Records fair, except for estimated days, which are poor. Station is below all diversions. At times entire flow is diverted above station for irrigation. Flow regulated by Deer Creek Reservoir, Jordanelle Reservoir, and small lakes at headwaters that serve as reservoirs. Small transmountain diversions from Strawberry River drain into Daniels Creek. Flow affected by Weber-Provo diversion canal and Duchesne Tunnel, a transbasin diversion. Certain diversions for industrial use which reach Provo Bay, an arm of Utah Lake, are made above station; however, part of this flow is used for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,520 ft<sup>3</sup>/s May 6, 1952, gage height, 6.37 ft, datum then in use; no flow for several periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,140 ft<sup>3</sup>/s Jun 2, gage height 6.17 ft; minimum daily discharge, 8.7 ft<sup>3</sup>/s Aug 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	271	440	379	334	298	277	289	210	858	56	8.9	125
2	281	426	377	324	294	250	290	208	964	56	8.7	149
3	284	303	375	315	288	245	288	356	1020	59	9.5	168
4	292	289	394	311	280	259	285	319	1020	57	22	162
5	316	281	389	317	307	270	273	322	1020	57	19	147
6	337	282	379	317	310	310	270	312	1010	50	22	142
7	347	272	374	316	297	321	280	324	984	66	34	136
8	345	296	371	311	295	319	309	333	994	93	37	140
9	347	343	376	313	296	324	300	332	995	77	40	144
10	345	344	374	314	326	331	297	344	956	61	36	144
11	343	320	374	313	293	319	293	391	921	57	39	139
12	331	297	370	303	270	293	275	409	902	56	43	124
13	296	284	366	282	260	292	258	501	866	52	46	109
14	270	248	359	285	250	302	246	454	824	60	51	110
15	357	243	355	245	250	300	242	415	703	75	50	108
16	433	247	343	219	243	296	229	442	571	71	49	92
17	451	245	340	215	255	297	228	450	437	74	42	95
18	453	242	337	216	254	304	225	478	334	67	43	97
19	439	294	343	298	275	308	173	520	190	67	35	106
20	435	334	336	311	297	311	139	609	101	56	28	111
21	432	356	340	346	296	313	125	651	66	38	31	121
22	408	355	356	312	310	317	111	686	52	22	44	116
23	398	349	331	295	308	307	109	668	55	10	46	108
24	392	349	329	293	305	306	122	657	66	13	37	128
25	410	347	344	286	315	303	144	658	61	20	26	130
26	413	357	375	290	301	304	147	692	61	16	e33	134
27	398	359	377	284	299	306	173	712	59	22	e46	116
28	393	360	378	293	295	287	191	758	56	19	e60	89
29	430	376	380	282	---	288	204	837	53	13	e72	80
30	460	387	350	282	---	295	209	876	57	10	e86	86
31	438	---	324	281	---	284	---	879	---	9.4	e100	---
TOTAL	11545	9625	11195	9103	8067	9238	6724	15803	16256	1459.4	1244.1	3656
MEAN	372	321	361	294	288	298	224	510	542	47.1	40.1	122
MAX	460	440	394	346	326	331	309	879	1020	93	100	168
MIN	270	242	324	215	243	245	109	208	52	9.4	8.7	80
AC-FT	22900	19090	22210	18060	16000	18320	13340	31350	32240	2890	2470	7250

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

	MEAN	146	209	255	247	258	279	310	325	367	50.5	22.9	53.7
MAX	512	585	574	629	818	1257	1345	1396	1571	390	210	278	
(WY)	1984	1983	1983	1997	1986	1986	1986	1986	1986	1983	1983	1986	
MIN	10.9	25.6	39.4	24.7	35.5	40.9	24.3	2.22	2.33	.68	1.12	1.56	
(WY)	1961	1963	1993	1989	1989	1961	1961	1961	1977	1946	1960	1960	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1944 - 1999	
ANNUAL TOTAL	124831		103915.5			
ANNUAL MEAN	342		285		209	
HIGHEST ANNUAL MEAN					553	
LOWEST ANNUAL MEAN					41.5	
HIGHEST DAILY MEAN	1160	Jun 20	1020	Jun 3	2420	May 6 1952
LOWEST DAILY MEAN	20	Jul 22	8.7	Aug 2	.10	Aug 25 1992
ANNUAL SEVEN-DAY MINIMUM	38	Jul 17	11	Jul 28	.46	Jul 24 1946
ANNUAL RUNOFF (AC-FT)	247600		206100		151800	
10 PERCENT EXCEEDS	597		445		425	
50 PERCENT EXCEEDS	350		293		147	
90 PERCENT EXCEEDS	83		50		6.5	

e Estimated

## JORDAN RIVER BASIN

10164500 AMERICAN FORK ABOVE UPPER POWERPLANT, NEAR AMERICAN FORK, UT

LOCATION.--Lat 40°26'52", long 111°40'53", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 26, T. 4 S., R. 2 E., Utah County, Hydrologic Unit 16020201, on left bank 600 ft downstream from Rock Creek, 1,000 ft upstream from intake for upper power-plant of Utah Power & Light Co., 4.0 mi upstream from mouth of canyon, and 6.7 mi northeast of American Fork.

DRAINAGE AREA.--51.1 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1927 to current year. Monthly discharge only January 1927 to September 1945, published in WSP 1314.

REVISED RECORDS.--WSP 1634 Drainage area. WRD-UT-96-1: 1995.

GAGE.--Water-stage recorder. Elevation of gage is 5,950 ft above sea level, from topographic map. Prior to Sept. 8, 1965, at same site at different datum. Sept. 8, 1965 to Nov. 20, 1967, at site 300 ft upstream.

REMARKS.--Records fair. Flow regulated by Silver Lake Flat Reservoir (constructed 1971) and Tibble Reservoir; total capacity, 1,260 acre-ft.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--72 years, 57.2 ft<sup>3</sup>/s, 41,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined, occurred July 30, 1953, gage height, 9.20 ft, from floodmark; minimum, 1.1 ft<sup>3</sup>/s Dec 20, 1976 (result of freezeup).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44.7	36.9	33.4	28.6	25.7	23.0	38.7	76.3	199	167	70.4	37.4
2	44.9	35.6	33.4	28.7	23.8	22.0	38.8	82.4	216	164	68.8	38.6
3	46.4	35.6	33.5	27.8	24.6	22.0	38.8	107	212	165	67.3	39.8
4	48.0	34.4	34.7	27.9	24.5	22.7	40.1	95.6	191	159	67.6	38.5
5	45.4	34.3	30.5	29.0	24.4	20.9	41.5	91.3	175	145	66.1	37.2
6	44.2	35.4	25.7	29.0	23.4	20.8	41.6	80.9	165	126	64.6	36.0
7	44.4	33.1	26.7	29.1	25.1	21.6	40.4	79.0	165	124	63.1	34.8
8	43.2	35.2	26.8	28.2	25.0	21.5	43.0	96.1	180	135	60.0	34.8
9	42.1	34.0	29.8	28.1	25.8	21.4	41.8	108	189	120	58.6	34.7
10	42.2	32.9	27.9	28.0	28.6	20.5	44.5	103	189	108	58.9	33.6
11	41.1	32.8	29.0	27.9	22.1	21.2	50.3	94.3	192	101	60.8	33.5
12	41.3	32.7	32.1	27.8	21.3	20.3	50.3	94.0	201	94.5	56.2	33.5
13	41.4	32.7	33.3	27.7	23.6	20.2	49.0	115	215	90.4	54.9	32.4
14	41.6	32.6	32.3	27.6	24.4	21.0	52.0	117	214	90.8	53.6	32.3
15	41.8	33.7	32.4	27.5	23.4	22.6	50.6	112	207	88.9	52.3	32.3
16	40.4	32.5	31.4	28.3	23.4	23.3	52.2	107	249	85.0	52.5	32.3
17	40.3	32.4	31.5	27.3	24.1	25.9	52.3	102	260	81.2	52.8	32.2
18	40.3	33.5	31.6	28.1	23.2	27.7	55.5	106	233	77.5	51.5	31.1
19	39.0	32.3	31.7	29.0	23.1	31.7	60.4	113	226	75.9	50.0	31.1
20	38.9	30.3	31.8	28.9	21.3	34.9	65.7	128	229	74.3	49.9	32.1
21	37.6	33.6	29.8	28.8	22.9	35.9	65.8	156	225	70.8	51.3	31.0
22	37.5	33.7	28.8	26.7	21.9	34.6	65.9	174	211	69.2	48.4	31.0
23	37.5	32.7	28.9	27.6	21.8	33.4	66.0	213	204	67.7	46.9	29.9
24	36.2	33.8	29.0	27.5	21.7	34.6	62.7	234	200	73.6	44.1	29.9
25	39.8	33.9	30.1	26.4	21.7	37.0	61.1	199	193	77.8	42.7	29.8
26	38.5	34.0	29.2	27.3	22.4	38.2	59.5	198	179	76.1	42.7	28.8
27	37.2	34.1	29.2	26.2	21.5	37.1	66.5	211	167	76.4	40.1	29.7
28	36.0	34.2	28.3	23.4	22.2	34.9	79.9	232	172	74.8	37.6	29.7
29	37.1	34.3	28.4	23.3	---	33.8	82.0	272	172	75.1	36.4	28.7
30	40.7	34.4	28.5	25.0	---	37.3	78.1	279	166	73.5	38.7	29.6
31	36.9	---	29.6	25.8	---	38.6	---	249	---	73.8	38.7	---
TOTAL	1266.6	1011.6	939.3	852.5	656.9	860.6	1635.0	4424.9	5996	3081.3	1647.5	986.3
MEAN	40.9	33.7	30.3	27.5	23.5	27.8	54.5	143	200	99.4	53.1	32.9
MAX	48	37	35	29	29	39	82	279	260	167	70	40
MIN	36	30	26	23	21	20	39	76	165	68	36	29
AC-FT	2510	2010	1860	1690	1300	1710	3240	8780	11890	6110	3270	1960

CAL YR 1998 TOTAL 33127.5 MEAN 90.8 MAX 332 MIN 21 AC-FT 65710  
WTR YR 1999 TOTAL 23358.5 MEAN 64.0 MAX 279 MIN 20 AC-FT 46330

## JORDAN RIVER BASIN

261

10166430 WEST CANYON CREEK NEAR CEDAR FORT, UT

LOCATION.--Lat 40°24'19", long 112°05'59", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 7, T. 5 S., R. 2 W., Utah County, Hydrologic Unit 16020201, on right bank 100 ft upstream from a right bank diversion, 540 ft downstream from 6 ft culvert, and 5.3 mi north of Cedar Fort.

DRAINAGE AREA.--26.8 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1965 to October 1975, October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,620 ft above sea level, from topographic map. Prior to July 21, 1993 at site 700 ft upstream at different datum.

REMARKS.--Records are poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,660 ft<sup>3</sup>/s Aug. 28, 1971, gage height, 7.50 ft from slope-area measurement; minimum, 0.02 ft<sup>3</sup>/s Jan. 17, 22, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 23 ft<sup>3</sup>/s, May 24-27; minimum daily discharge, 1.2 ft<sup>3</sup>/s, Mar 18, 20-21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.6	2.5	e1.5	e1.6	1.4	1.3	e9.9	e19	9.9	6.1	4.1
2	e3.7	3.2	2.5	e1.5	e1.5	1.3	1.3	e10	20	9.9	6.3	4.1
3	e3.6	3.2	2.4	e1.5	e1.5	1.4	1.4	e12	19	9.9	6.9	3.9
4	e3.6	3.2	e2.3	e1.5	e1.5	1.4	1.3	e12	16	9.9	6.6	3.7
5	e3.5	2.6	e2.2	e1.5	e1.4	1.5	1.4	e11	17	9.5	6.6	3.4
6	e3.5	2.6	e2.2	e1.6	e1.5	1.4	1.4	e11	15	9.5	6.3	3.0
7	e3.5	2.6	e2.2	e1.6	e1.5	1.3	1.5	e11	14	9.5	6.1	2.9
8	3.5	2.6	e2.2	1.5	e1.5	1.3	1.6	e12	13	9.1	6.1	2.9
9	3.5	2.6	e2.1	1.5	e1.5	1.3	1.8	e13	14	8.8	5.8	2.9
10	3.5	2.6	e1.9	1.4	e1.5	1.4	1.8	e14	14	8.8	5.3	2.9
11	3.5	2.5	e1.9	1.5	e1.4	1.3	1.9	e14	14	8.1	5.6	2.9
12	3.5	2.4	e1.8	1.5	e1.5	1.3	2.0	e14	15	7.8	5.6	2.8
13	3.5	e2.5	e1.8	1.5	1.5	1.3	e2.1	e15	15	7.8	5.8	2.8
14	3.5	e2.6	e1.7	1.5	1.4	1.3	e2.1	e16	17	7.5	5.3	2.8
15	3.7	e2.4	e1.7	1.5	1.4	1.3	e2.1	e16	17	7.2	5.1	2.5
16	3.5	e2.4	e1.7	1.5	1.4	1.3	e2.2	e17	16	6.9	4.9	2.5
17	3.4	e2.5	e1.7	1.5	1.4	1.3	e2.2	e17	16	6.6	4.7	2.5
18	3.4	e2.4	e1.6	1.6	1.4	1.2	e2.4	e16	15	6.6	4.7	2.4
19	3.2	e2.4	e1.6	1.6	1.4	1.3	e2.6	e16	15	6.3	4.5	2.4
20	3.0	e2.4	e1.6	1.6	1.7	1.2	e3.2	e18	15	6.1	4.3	2.4
21	3.0	e2.4	e1.6	1.6	1.4	1.2	e3.9	e19	14	6.1	4.1	2.1
22	3.0	e2.4	e1.5	1.5	1.4	1.3	e4.1	e18	13	5.8	4.1	2.1
23	3.0	e2.4	e1.5	1.5	1.4	1.3	e4.7	e21	13	5.8	3.7	2.1
24	3.0	e2.4	e1.5	1.5	1.4	1.3	e4.7	e23	12	5.8	3.5	2.0
25	3.2	e2.4	e1.5	1.5	1.4	1.3	e5.6	e23	12	5.6	3.5	2.0
26	3.4	2.4	e1.5	1.6	1.4	1.3	e5.3	e23	11	5.3	3.5	2.1
27	3.2	2.4	e1.6	e1.6	1.4	1.3	e6.9	e23	10	5.3	3.5	2.0
28	3.2	2.4	e1.6	e1.6	1.4	1.3	e9.1	e22	9.9	5.3	3.7	1.9
29	3.9	2.5	e1.6	e1.5	---	1.3	e9.5	e21	9.9	5.6	3.9	2.0
30	4.3	2.5	e1.5	e1.5	---	1.3	e9.5	e21	9.9	5.6	3.9	2.0
31	3.6	---	e1.5	e1.6	---	1.4	---	e20	---	5.8	3.9	---
TOTAL	106.1	77.5	56.5	47.4	40.7	40.8	100.9	508.9	430.7	227.7	153.9	80.1
MEAN	3.42	2.58	1.82	1.53	1.45	1.32	3.36	16.4	14.4	7.35	4.96	2.67
MAX	4.3	3.6	2.5	1.6	1.7	1.5	9.5	23	20	9.9	6.9	4.1
MIN	3.0	2.4	1.5	1.4	1.4	1.2	1.3	9.9	9.9	5.3	3.5	1.9
AC-FT	210	154	112	94	81	81	200	1010	854	452	305	159

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966-75, 1987-99, BY WATER YEAR (WY)

MEAN	1.40	1.15	.77	.61	.59	1.16	4.66	14.5	12.6	5.49	2.89	1.65
MAX	4.16	3.40	2.05	1.53	1.56	3.59	17.4	44.2	29.0	21.2	8.90	4.47
(WY)	1996	1996	1996	1999	1987	1996	1969	1973	1995	1975	1975	1975
MIN	.17	.17	.10	.062	.057	.11	.11	3.05	1.63	.66	.26	.21
(WY)	1993	1991	1993	1991	1991	1990	1991	1990	1992	1992	1992	1989

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1966-75, 1987-99

ANNUAL TOTAL	2879.29	1871.2	
ANNUAL MEAN	7.89	5.13	3.97
HIGHEST ANNUAL MEAN			8.65
LOWEST ANNUAL MEAN			.89
HIGHEST DAILY MEAN	32	May 3	85
LOWEST DAILY MEAN	.40	Jan 21	.03
ANNUAL SEVEN-DAY MINIMUM	.42	Jan 19	.05
ANNUAL RUNOFF (AC-FT)	5710	3710	2880
10 PERCENT EXCEEDS	23	14	12
50 PERCENT EXCEEDS	3.5	2.8	1.3
90 PERCENT EXCEEDS	.50	1.4	.23

e Estimated

## JORDAN RIVER BASIN

10167800 LITTLE COTTONWOOD CREEK AT CRESTWOOD PARK AT SALT LAKE CITY, UT

LOCATION.--Lat 40°36'52", long 111°50'32", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 28, T. 2S., R. 1E., Salt Lake County, on left bank 10 feet upstream from pedestrian bridge on the west side of Crestwood Park.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1, 1998 to September 30, 1999.

GAGE.--Water-stage recorder. Elevation of gage is 4,530 ft above sea level (from topographic map).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated. Diversions for irrigation and return flow from irrigation canals. Stage record from SL County Engineering.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 426 ft<sup>3</sup>/s June 23, 1999, gage height, 2.63 ft; minimum daily discharge, 0.07 ft<sup>3</sup>/s Jan. 3, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 426 ft<sup>3</sup>/s, Jun 23, gage height, 2.63 ft; minimum daily discharge, 0.07 ft<sup>3</sup>/s, Jan 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	7.4	2.3	e1.2	4.6	.44	7.2	27	188	174	.59	3.7
2	8.9	3.4	2.8	e.15	8.4	3.4	5.3	33	235	246	1.1	4.2
3	11	2.1	2.5	.07	.69	7.7	4.3	55	237	218	1.7	6.1
4	19	.42	1.1	.11	.78	4.3	3.2	34	179	127	.93	4.1
5	7.9	1.8	1.2	.23	1.8	1.4	2.7	34	153	97	2.5	3.7
6	3.5	5.0	.46	31	.48	.87	2.5	23	129	70	2.3	3.7
7	3.1	1.1	1.2	.66	.48	.91	7.9	15	149	75	.35	1.8
8	2.9	3.3	1.1	.41	.79	.83	3.5	22	177	93	1.5	1.8
9	2.9	1.4	1.2	.40	.38	1.5	4.8	34	176	58	1.4	1.4
10	2.4	2.1	.39	.34	3.5	2.9	3.4	27	172	42	3.2	1.3
11	1.2	1.0	.52	.34	1.0	3.4	3.2	22	178	77	7.6	1.3
12	.98	.76	.61	.34	.88	2.9	2.8	18	202	18	1.6	.85
13	.96	.66	.51	.34	1.1	1.0	2.7	50	243	13	1.3	.81
14	.66	.66	.49	.34	2.3	.86	2.9	48	275	33	.62	.85
15	23	.66	.36	.34	.95	.83	3.1	35	319	29	.81	1.2
16	22	5.7	.28	.34	.81	7.3	4.2	29	359	12	.65	.87
17	19	.68	1.5	.36	1.1	1.4	3.3	22	343	6.7	.97	.69
18	15	.63	.39	2.8	1.3	1.4	5.4	20	332	3.6	1.2	.85
19	9.2	.79	.34	2.2	.45	1.3	2.9	31	329	2.3	3.5	2.4
20	64	5.0	.31	.64	.42	1.4	17	49	326	1.2	7.9	2.1
21	7.9	1.1	e.30	4.5	1.1	1.8	12	63	287	3.0	11	1.6
22	.41	10	e.31	1.3	.61	5.7	12	92	253	2.1	2.6	1.1
23	.31	6.9	e.32	1.4	.23	1.9	8.1	143	264	3.1	2.3	1.2
24	.22	2.0	e.32	2.6	.22	1.7	8.1	255	256	.63	2.3	1.2
25	.46	.61	e.33	1.0	.14	26	7.5	250	240	1.9	2.1	.70
26	.41	1.3	e.33	1.0	.30	33	5.2	241	213	3.9	2.1	.78
27	.22	5.2	e.34	1.4	.30	1.9	24	261	183	2.1	2.0	1.3
28	.22	14	e.34	.74	1.3	1.1	36	282	153	1.5	1.8	1.7
29	2.1	15	e.35	.56	---	.72	39	338	144	3.6	1.8	.50
30	4.1	2.4	e.37	.59	---	1.2	32	348	149	2.8	6.9	.88
31	.58	---	e.40	.69	---	53	---	254	---	4.3	9.4	---
TOTAL	244.43	103.07	23.27	58.39	36.41	174.06	276.2	3155	6843	1424.73	86.02	54.68
MEAN	7.88	3.44	.75	1.88	1.30	5.61	9.21	102	228	46.0	2.77	1.82
MAX	64	15	2.8	31	8.4	53	39	348	359	246	11	6.1
MIN	.22	.42	.28	.07	.14	.44	2.5	15	129	.63	.35	.50
AC-FT	485	204	46	116	72	345	548	6260	13570	2830	171	108

WTR YR 1999 TOTAL 12479.26 MEAN 34.2 MAX 359 MIN .07 AC-FT 24750

e Estimated

10167800 LITTLE COTTONWOOD CREEK AT CRESTWOOD PARK AT SALT LAKE CITY, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1998 to September 30, 1999.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1999 to September 30, 1999.

WATER TEMPERATURE: October 1998 to September 30, 1999.

INSTRUMENTATION.--Temperature data logger installed October 1998; Temperature/conductivity data logger installed February 1999.

REMARKS.--Records fair except where estimated, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 8,500 microsiemens, Mar 10, 1999; minimum recorded, 99 microsiemens, Jun 15, 23, 24, and Aug 20, 1999.

WATER TEMPERATURES: Maximum recorded, 27.8°C, Jul 24, 1999; minimum, 0.0°C, many days during winter period.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 8,500 microsiemens, Mar 10; minimum recorded, 99 microsiemens, Jun 15, 23, 24, and Aug 20.

WATER TEMPERATURES: Maximum recorded, 27.8°C, Jul 24; minimum, 0.0°C, many days during winter period.

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	1010	548	861	4120	377	1870	---	---	---
2	---	---	---	548	398	462	2370	578	1070	---	---	---
3	---	---	---	512	381	441	837	480	640	---	---	---
4	---	---	---	841	385	573	480	356	400	---	---	---
5	---	---	---	669	478	602	411	327	373	---	---	---
6	---	---	---	664	594	631	422	336	375	---	---	---
7	---	---	---	705	629	672	578	172	374	---	---	---
8	---	---	---	698	640	676	405	286	370	---	---	---
9	---	---	---	1440	679	786	679	275	464	---	---	---
10	---	---	---	8500	826	3440	553	337	394	---	---	---
11	---	---	---	3100	884	1590	374	332	354	---	---	---
12	---	---	---	2210	665	1200	366	330	349	---	---	---
13	---	---	---	726	618	672	373	324	350	---	---	---
14	---	---	---	650	573	615	359	295	327	---	---	---
15	---	---	---	625	550	591	334	201	298	255	182	239
16	---	---	---	609	338	424	329	298	317	272	253	263
17	---	---	---	479	391	449	361	264	323	275	257	267
18	1030	503	730	465	398	434	391	188	325	272	247	259
19	891	781	836	457	376	414	362	267	326	257	233	243
20	979	772	899	429	350	393	---	---	---	233	201	221
21	1190	783	893	492	343	391	---	---	---	213	188	201
22	1870	818	1310	481	335	383	---	---	---	207	181	196
23	1160	963	1030	392	326	359	---	---	---	193	159	183
24	1010	945	975	428	314	358	---	---	---	171	153	162
25	1000	947	977	468	345	422	---	---	---	173	154	165
26	1110	1000	1030	426	383	404	---	---	---	176	150	166
27	1030	836	919	470	388	438	---	---	---	166	143	156
28	951	446	706	421	387	406	---	---	---	159	137	149
29	---	---	---	474	387	414	---	---	---	149	133	142
30	---	---	---	531	374	435	---	---	---	145	133	140
31	---	---	---	407	245	376	---	---	---	155	137	147
MONTH	---	---	---	8500	245	655	---	---	---	---	---	---

## JORDAN RIVER BASIN

10167800 LITTLE COTTONWOOD CREEK AT CRESTWOOD PARK AT SALT LAKE CITY, UT--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	168	149	159	127	105	117	435	302	364	266	183	244
2	160	132	148	118	105	112	476	266	359	260	204	242
3	157	141	152	121	106	112	336	274	295	251	195	226
4	170	156	164	124	109	117	384	300	332	251	230	240
5	200	170	176	129	115	123	406	275	312	258	223	249
6	184	171	181	136	125	129	424	293	317	304	227	258
7	178	150	168	162	121	130	499	366	423	371	252	294
8	158	139	152	155	112	124	504	265	313	344	272	290
9	154	139	147	134	121	127	313	267	286	329	283	300
10	152	139	146	151	131	138	339	217	270	341	287	312
11	152	132	146	199	133	140	249	115	218	381	287	321
12	144	124	137	e191	e141	e157	342	238	301	434	314	356
13	138	117	129	177	159	166	387	275	314	460	299	367
14	132	112	124	e173	e122	e157	454	314	383	442	310	358
15	125	99	116	199	131	151	491	302	367	391	294	338
16	117	104	111	180	157	167	472	327	377	386	318	357
17	118	105	112	204	169	187	409	309	342	496	303	386
18	118	103	111	334	192	227	410	241	343	496	317	382
19	118	102	110	342	216	248	254	211	230	453	240	326
20	120	102	110	393	232	303	280	99	230	337	304	319
21	117	103	111	307	189	236	284	198	249	368	312	337
22	125	107	115	334	246	279	274	219	245	381	307	352
23	144	99	114	343	202	241	336	228	261	407	312	353
24	121	99	112	425	300	363	351	224	260	383	303	337
25	118	105	111	467	174	355	286	242	257	457	317	361
26	130	107	116	394	201	277	289	239	259	492	319	367
27	124	110	118	343	223	305	295	238	265	354	290	326
28	129	113	121	394	289	335	293	256	274	374	297	326
29	128	113	121	411	184	307	296	262	278	449	336	372
30	126	111	118	424	197	295	342	126	264	451	303	342
31	---	---	---	342	184	261	280	205	244	---	---	---
MONTH	200	99	132	467	105	206	504	99	298	496	183	321

e Estimated

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	8.5	5.6	7.2	7.9	6.2	6.9	2.1	.2	1.0
2	---	---	---	8.2	6.8	7.4	7.1	4.5	6.1	1.5	e.0	e.4
3	---	---	---	8.8	4.9	6.8	6.5	3.1	4.8	.6	e.0	e.1
4	---	---	---	7.7	3.2	5.2	5.9	1.3	3.9	.5	e.0	e.1
5	---	---	---	9.0	4.0	6.0	2.9	e.0	e1.2	2.9	e.0	e.9
6	---	---	---	5.9	3.1	4.4	1.5	e.0	e.3	4.6	e.0	e2.1
7	---	---	---	5.7	2.6	4.0	2.3	e.0	e.5	4.0	1.8	2.7
8	---	---	---	4.9	2.9	4.2	2.9	e.0	e.8	4.0	.8	2.1
9	---	---	---	3.8	.7	2.6	1.6	e.0	e.4	4.0	.0	1.6
10	---	---	---	4.2	1.2	2.6	.4	e.0	e.0	6.3	2.3	3.7
11	---	---	---	5.2	2.4	3.5	1.0	e.0	e.1	4.6	.2	2.3
12	---	---	---	4.9	1.0	2.7	2.0	e.0	e.7	4.0	1.3	2.6
13	---	---	---	5.6	1.3	3.0	2.4	e.0	e.6	4.5	1.5	2.6
14	---	---	---	6.2	1.6	3.6	2.9	e.0	e1.0	3.4	.0	1.3
15	---	---	---	7.6	3.1	4.8	2.6	e.0	e.8	5.9	2.1	3.5
16	---	---	---	6.2	2.9	4.5	2.6	e.0	e.8	5.7	1.2	3.1
17	---	---	---	8.8	4.6	6.3	1.0	e.0	e.3	5.6	2.6	3.9
18	---	---	---	7.6	4.2	5.9	2.4	e.0	e.6	6.0	3.8	4.7
19	---	---	---	6.0	2.2	4.1	.4	e.0	e.1	5.7	2.7	4.2
20	---	---	---	3.7	.5	2.1	.5	e.0	e.1	6.2	2.9	4.3
21	---	---	---	7.1	2.1	4.7	.0	e.0	e.0	5.0	.8	2.3
22	---	---	---	6.3	4.7	5.9	.0	e.0	e.0	4.5	.4	2.1
23	---	---	---	7.6	3.8	5.5	.0	e.0	e.0	6.3	2.0	3.4
24	---	---	---	7.6	4.1	6.2	.0	e.0	e.0	2.5	1.6	2.1
25	---	---	---	7.6	2.9	4.7	.0	e.0	e.0	4.2	1.0	2.2
26	---	---	---	7.6	2.6	4.7	.2	e.0	e.0	3.2	1.2	2.4
27	---	---	---	8.0	4.0	6.0	1.3	.2	.8	3.2	.2	1.5
28	11.6	6.5	9.2	6.8	5.6	6.4	2.0	.7	1.4	.7	e.0	e.0
29	11.6	8.0	9.7	7.1	5.4	6.1	3.5	1.0	2.0	.5	e.0	e.0
30	9.0	8.2	8.6	7.9	5.4	6.5	4.3	.7	2.2	.7	e.0	e.1
31	10.0	7.7	8.7	---	---	---	2.9	.8	1.7	3.2	e.0	e.9
MONTH	---	---	---	9.0	.5	4.9	7.9	.0	1.2	6.3	.0	2.1



10167800 LITTLE COTTONWOOD CREEK AT CRESTWOOD PARK AT SALT LAKE CITY, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	.5	e.0	e.1	---	---	---	5.9	.1	3.0	---	---	---
2	2.1	e.0	e.3	---	---	---	9.3	1.2	5.0	---	---	---
3	4.5	e.0	e1.3	---	---	---	10.0	2.5	5.9	---	---	---
4	4.8	.2	2.1	---	---	---	9.7	3.3	6.2	---	---	---
5	3.5	1.5	2.7	---	---	---	9.0	3.1	6.0	---	---	---
6	5.9	1.0	3.2	---	---	---	11.0	5.0	7.7	---	---	---
7	7.6	3.8	5.1	---	---	---	12.9	4.9	8.1	---	---	---
8	6.7	4.6	5.5	---	---	---	14.0	6.0	9.3	---	---	---
9	9.1	4.0	6.2	---	---	---	8.9	2.8	5.5	---	---	---
10	7.0	.0	1.8	---	---	---	10.7	1.2	5.5	---	---	---
11	2.3	e.0	e.3	7.4	3.2	4.5	11.2	3.2	7.0	---	---	---
12	1.2	e.0	e.2	7.6	2.8	4.5	13.0	5.2	9.1	---	---	---
13	2.3	e.0	e.3	10.4	1.3	5.3	15.5	6.2	10.6	---	---	---
14	3.7	.0	1.5	11.7	2.4	6.6	14.0	5.9	9.6	---	---	---
15	6.0	.2	2.5	13.6	5.1	8.6	13.4	4.6	8.5	8.2	5.6	6.7
16	6.0	.4	2.6	11.1	5.3	7.8	13.3	3.7	8.3	10.5	4.3	7.0
17	---	---	---	11.8	3.4	7.1	15.8	4.9	10.0	13.5	3.7	8.3
18	---	---	---	12.8	3.6	7.7	15.7	7.8	11.5	15.2	6.3	10.2
19	---	---	---	13.9	4.7	8.7	17.3	9.2	12.9	11.2	6.0	8.5
20	---	---	---	12.1	5.8	8.7	---	---	---	11.9	5.3	8.2
21	---	---	---	13.7	6.8	9.6	---	---	---	11.2	5.3	7.7
22	---	---	---	12.3	6.3	8.9	---	---	---	12.2	5.7	8.0
23	---	---	---	12.1	5.0	8.3	---	---	---	10.9	5.7	7.5
24	---	---	---	14.0	5.0	9.1	---	---	---	9.6	5.5	7.0
25	---	---	---	13.7	5.6	7.7	---	---	---	9.4	5.5	6.8
26	---	---	---	9.9	5.0	6.5	---	---	---	10.4	5.3	7.1
27	---	---	---	11.8	4.8	7.1	---	---	---	10.2	5.4	7.1
28	---	---	---	11.6	2.7	6.5	---	---	---	10.2	5.3	7.1
29	---	---	---	13.8	2.7	7.8	---	---	---	9.2	5.7	6.7
30	---	---	---	12.4	6.9	9.0	---	---	---	8.8	5.3	6.6
31	---	---	---	7.3	.3	4.8	---	---	---	8.1	5.2	6.2
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	10.1	5.2	7.0	13.7	7.3	9.8	27.4	14.3	19.9	18.6	11.8	15.1
2	8.5	5.4	6.3	12.5	7.4	9.6	25.9	14.9	19.9	16.5	12.3	14.7
3	9.1	5.3	6.7	12.5	8.3	10.1	19.5	16.3	17.9	14.9	11.1	12.4
4	7.8	5.1	6.4	13.6	8.1	10.4	24.5	15.4	18.9	15.8	9.5	12.2
5	7.2	5.1	6.0	13.8	7.5	10.3	21.5	14.2	17.2	17.2	9.1	12.5
6	8.2	5.8	7.0	14.9	8.0	11.2	22.2	13.7	17.4	18.5	9.3	13.4
7	10.4	6.2	7.9	15.7	10.1	11.8	26.7	14.3	19.6	18.4	10.9	14.0
8	10.5	5.8	7.6	14.4	9.4	11.6	24.5	14.8	18.7	18.1	9.3	13.3
9	10.1	5.0	7.2	15.1	8.6	11.6	24.6	14.4	18.8	17.6	10.4	13.7
10	9.7	5.3	7.1	15.2	8.7	11.6	18.1	13.5	16.0	18.5	12.6	15.2
11	10.9	5.3	7.5	15.1	8.4	11.4	17.4	12.8	14.3	20.2	11.9	15.2
12	11.1	5.4	7.6	18.5	9.7	13.7	23.1	12.2	16.7	19.6	10.4	14.2
13	11.1	5.5	7.6	19.0	11.0	14.6	23.9	13.7	17.9	19.9	9.9	14.4
14	10.7	5.9	7.7	16.3	11.0	13.2	25.3	15.0	19.2	18.3	12.0	14.6
15	10.8	6.2	7.8	16.5	9.9	12.7	25.0	15.8	19.4	19.4	10.6	14.4
16	9.5	6.2	7.4	15.8	11.2	12.7	26.0	13.8	19.2	20.1	11.0	14.9
17	9.8	6.5	7.6	19.9	12.0	15.5	25.6	15.6	19.4	20.4	11.4	15.2
18	10.9	5.9	7.8	22.6	12.8	17.2	27.1	14.8	19.8	19.6	11.5	15.0
19	11.0	6.4	8.1	21.6	14.1	16.9	22.1	14.1	17.4	16.2	12.9	14.5
20	11.3	6.1	8.1	26.9	14.3	19.3	23.6	15.0	18.4	17.7	10.6	13.6
21	10.0	6.9	8.0	24.2	14.5	18.9	19.9	13.9	16.5	18.4	10.2	13.6
22	11.9	6.3	8.5	24.2	14.8	19.1	22.5	14.3	17.8	18.4	10.1	13.8
23	11.3	6.4	8.4	23.9	14.1	18.7	21.9	14.2	17.8	17.3	11.1	13.8
24	11.9	6.1	8.4	27.8	16.6	20.7	20.1	15.2	17.2	17.4	10.8	13.5
25	11.6	6.8	8.7	26.6	14.5	19.3	23.1	14.4	17.8	18.0	10.6	13.9
26	11.9	6.1	8.6	24.2	14.6	18.1	22.1	13.9	17.4	15.3	9.4	12.1
27	12.1	6.5	8.8	24.5	14.4	18.5	19.7	14.8	17.2	13.0	6.5	9.2
28	12.5	6.3	8.9	24.0	15.8	19.7	21.9	14.6	17.4	10.7	5.2	7.9
29	12.5	6.8	9.2	22.7	15.6	19.3	23.0	14.0	17.8	13.3	5.0	8.7
30	13.0	7.2	9.6	23.2	14.2	18.7	24.4	15.4	18.3	14.2	6.0	9.7
31	---	---	---	24.8	13.3	17.7	17.2	13.7	15.2	---	---	---
MONTH	13.0	5.0	7.8	27.8	7.3	15.0	27.4	12.2	17.9	20.4	5.0	13.3

e Estimated

## JORDAN RIVER BASIN

10168000 LITTLE COTTONWOOD CREEK AT JORDAN RIVER NEAR SALT LAKE CITY, UT

LOCATION.--Lat 40°39'51", long 111°53'53", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 12, T. 2S., R. 1W., Salt Lake County, on right bank 10 feet upstream from 300 W. bridge, and 3000 feet upstream from mouth.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1980 to 1984, 1987-88, October 1, 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,255 ft above sea level, (from topographic map). Previous records published by the U.S.G.S. from water stage recorder at site approx. 1000 feet downstream at different datum. Additional discharge records available from Salt Lake County Engineering.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated. Diversions for irrigation and return flow from irrigation canals. Stage record from SL County Engineering.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 898 ft<sup>3</sup>/s June 1, 1984; minimum daily, .46 ft<sup>3</sup>/s Feb 21, 1981, datum and gage then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 412 ft<sup>3</sup>/s, May 30, gage height, 3.53 ft; minimum daily discharge, 2.5 ft<sup>3</sup>/s, Dec 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	10	6.1	8.4	8.7	e2.6	27	54	216	174	e8.8	12
2	31	8.9	6.1	e4.6	6.4	4.2	16	79	263	248	e10	16
3	58	18	6.2	e4.0	5.6	6.5	16	167	260	223	e6.0	21
4	62	7.2	7.0	e4.2	6.1	12	e10	78	218	134	e9.0	9.7
5	44	10	6.9	e4.5	11	e6.2	e8.0	71	189	109	e14	13
6	40	29	6.1	e30	5.9	e4.2	e6.7	54	152	74	e11	17
7	40	8.0	e5.8	e6.0	4.4	e3.4	28	46	160	84	e4.0	12
8	40	14	e5.6	e4.5	5.7	e3.0	20	51	200	106	e4.6	8.0
9	39	9.6	e5.6	e4.0	4.1	e3.9	13	68	208	73	e4.2	7.2
10	39	10	e4.8	e3.5	13	9.5	8.6	57	199	56	e5.4	6.0
11	36	8.0	e5.0	e3.5	7.8	12	e7.0	48	192	82	24	5.1
12	38	7.6	e5.1	e3.5	6.1	11	e5.0	43	235	40	16	5.1
13	35	6.7	e5.0	e3.5	5.2	e5.4	e4.4	100	268	22	12	5.1
14	36	6.3	e4.8	e3.5	6.2	e4.5	4.0	74	289	39	8.0	5.1
15	67	6.5	e4.4	e3.5	5.7	e4.0	4.4	69	325	40	7.1	5.7
16	39	8.2	e4.0	e3.5	4.7	e8.4	4.1	57	357	33	7.6	6.8
17	26	5.7	e4.5	e4.0	6.5	e4.9	4.0	51	337	e26	8.2	7.7
18	20	5.4	e3.0	e8.7	5.9	e4.5	18	45	329	e20	11	6.9
19	e16	e3.0	e2.8	15	5.2	e4.2	27	62	328	e17	9.7	11
20	e65	e5.0	e2.6	6.4	5.1	e4.0	60	74	333	e13	43	6.5
21	e18	e5.2	e2.5	23	6.9	e5.1	46	87	301	e10	29	7.0
22	e12	e8.0	e2.6	e6.5	7.2	e7.7	36	126	259	e14	14	7.4
23	e10	8.3	e2.7	e6.0	5.4	e5.1	33	171	264	e19	14	6.6
24	e8.0	6.3	e2.8	e11	e4.1	e4.8	36	270	260	e5.0	9.7	6.8
25	e10	e5.3	e3.0	e5.5	e2.8	e18	43	256	243	e7.6	6.6	6.1
26	e6.0	e4.0	e3.2	6.0	e3.0	38	32	251	218	e10	5.9	6.1
27	e4.4	e4.5	e3.4	8.0	e2.6	10	90	267	189	e7.4	8.0	6.1
28	e4.1	13	e3.6	e5.8	e3.8	9.0	81	291	168	e4.7	13	6.8
29	e10	15	e3.8	e5.1	---	8.4	77	340	159	e8.2	9.5	6.2
30	31	7.7	e4.0	e5.2	---	8.4	62	355	162	e7.0	19	6.5
31	8.1	---	e10	e5.5	---	62	---	285	---	e7.8	21	---
TOTAL	922.6	264.4	143.0	216.4	165.1	294.9	827.2	4047	7281	1713.7	373.3	252.5
MEAN	29.8	8.81	4.61	6.98	5.90	9.51	27.6	131	243	55.3	12.0	8.42
MAX	67	29	10	30	13	62	90	355	357	248	43	21
MIN	4.1	3.0	2.5	3.5	2.6	2.6	4.0	43	152	4.7	4.0	5.1
AC-FT	1830	524	284	429	327	585	1640	8030	14440	3400	740	501

WTR YR 1999 TOTAL 16501.1 MEAN 45.2 MAX 357 MIN 2.5 AC-FT 32730

e Estimated

## 10168000 LITTLE COTTONWOOD CREEK AT JORDAN RIVER NEAR SALT LAKE CITY, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1979 to August 1982, 1987 to 1988, October 1998 to September 30, 1999.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1998 to September 30, 1999.

WATER TEMPERATURES: October 1998 to September 30, 1999.

INSTRUMENTATION.--Temperature/conductivity data logger.

REMARKS.--Temperature records good, specific conductivity records fair except for estimates, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 15,100 microsiemens, Jan 27, 1999; minimum recorded, 184 microsiemens, Oct 30, 1998.

WATER TEMPERATURES: Maximum recorded, 24.5°C, Jul 23, 1999; minimum recorded, 0.1°C, Dec 21, 24, 1998.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 15,100 microsiemens, Jan 27; minimum recorded, 184, microsiemens, Oct 30.

WATER TEMPERATURES: Maximum recorded, 24.5°C, Jul 23; minimum recorded, 0.1°C, Dec 21, 24.

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1080	802	918	960	500	758	916	833	865	2380	1470	1630
2	1070	715	820	717	617	663	946	902	927	1520	1410	1460
3	1090	392	774	801	226	494	920	747	791	1440	1300	1390
4	820	579	730	1050	801	956	1620	797	1040	1420	1250	1370
5	1090	820	979	1130	460	1070	2870	1010	2230	1370	1260	1320
6	1090	1060	1070	2280	221	1030	6990	2450	4110	1350	439	872
7	1080	1020	1040	1530	1190	1360	2450	1870	2070	1090	530	814
8	1060	1030	1040	1320	498	919	1990	1440	1630	1280	1090	1170
9	1060	1040	1050	1370	1080	1210	2770	1690	2150	1310	1220	1280
10	1090	1040	1050	8370	1050	2320	7580	2350	5420	1340	1240	1300
11	1100	1080	1090	8240	2580	3370	4310	1760	2610	1360	1260	1320
12	1110	1060	1090	2620	1810	2060	1960	1620	1790	1360	1250	1320
13	1160	1110	1150	1810	1360	1530	1670	1330	1480	1360	1250	1320
14	1170	1130	1150	1360	1240	1300	1420	1260	1350	1360	1250	1320
15	1160	525	971	1270	1190	1230	1350	1240	1310	1360	1240	1320
16	665	604	644	1220	571	962	1320	1230	1290	1370	1260	1330
17	616	532	578	1100	668	940	1320	1160	1260	1360	1260	1320
18	591	559	572	1150	1090	1110	1170	1030	1090	1380	449	1270
19	584	311	563	1240	1130	1180	2150	1140	1310	721	269	577
20	817	286	501	1240	777	1090	2150	1400	1590	1080	721	928
21	561	---	e510	1000	699	803	1940	1430	1540	6560	310	1810
22	---	---	e600	1140	560	954	e2040	---	e1600	6360	3440	4210
23	---	---	e700	673	499	579	e1780	---	e1500	6560	2430	3700
24	---	---	e800	923	673	745	1550	1390	1470	4520	1990	2660
25	---	---	e850	1160	923	1050	1390	1270	1330	2130	1620	1920
26	---	---	e950	1190	1120	1150	1270	1240	1250	3570	1970	2430
27	---	---	e1100	1170	803	1020	1320	1270	1310	15100	2860	6060
28	1160	1060	1110	803	481	578	1320	1250	1290	11400	4470	5950
29	1220	354	1150	486	450	470	1330	1270	1300	4480	3000	3780
30	509	184	361	837	468	650	1380	1320	1360	3000	1990	2300
31	866	509	706	---	---	---	2380	1280	1480	1990	1600	1760
MONTH	---	---	859	8370	221	1120	7580	---	1670	15100	269	1970

## JORDAN RIVER BASIN

10168000 LITTLE COTTONWOOD CREEK AT JORDAN RIVER NEAR SALT LAKE CITY, UT--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	10600	1590	4250	1350	1210	1280	2510	422	1500	816	773	798
2	7390	3710	5770	1260	1010	1190	2490	829	1600	819	318	728
3	3710	1780	2540	1010	641	873	1170	765	967	541	291	383
4	1860	1680	1790	1210	647	812	1060	952	1030	728	531	657
5	2040	1440	1710	1020	647	868	1070	973	1020	761	644	707
6	1900	1400	1510	1100	1020	1040	1150	984	1040	894	760	844
7	1600	1440	1510	1200	1100	1160	1250	262	955	973	869	933
8	1500	1060	1300	1230	1150	1190	772	298	510	942	745	856
9	1420	1320	1360	1230	966	1180	1300	552	773	745	479	670
10	7750	1200	3560	2540	809	1380	966	718	852	767	712	742
11	4910	2920	4030	2830	1000	1880	815	703	755	828	750	784
12	3230	2750	2990	1320	994	1140	925	799	880	907	828	857
13	2870	2070	2460	1310	1020	1110	977	860	934	848	371	536
14	2180	1690	1940	1230	1150	1190	1000	929	972	632	537	606
15	1710	1530	1610	1230	1130	1200	986	870	910	717	453	627
16	1730	1580	1670	1250	626	962	994	931	970	817	690	747
17	3300	1720	2040	943	532	734	1030	910	965	936	812	845
18	2200	1700	1960	1330	889	1120	1180	791	986	926	723	887
19	1710	1460	1540	1300	692	1180	1180	1140	1160	795	650	709
20	1570	1490	1530	1040	718	881	1150	285	847	683	505	617
21	1750	1240	1490	1330	887	1220	964	411	747	573	481	532
22	1550	1180	1470	1930	680	1070	958	786	894	593	455	530
23	1540	1310	1420	1030	779	960	990	850	953	470	322	425
24	1390	1320	1360	1070	991	1030	996	425	940	396	290	342
25	1410	1370	1390	1100	405	897	840	425	709	298	250	282
26	1410	1350	1390	584	411	474	1020	689	902	314	255	286
27	1580	1400	1480	949	479	731	998	295	579	316	261	290
28	1420	1330	1390	1240	949	1120	722	388	586	300	196	265
29	---	---	---	1290	865	1190	713	387	619	222	189	206
30	---	---	---	1320	1230	1280	777	639	730	272	192	245
31	---	---	---	1330	381	816	---	---	---	331	262	289
MONTH	10600	1060	2090	2830	381	1070	2510	262	910	973	189	588

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	403	295	332	353	218	296	1100	1040	1080	989	882	961
2	314	208	273	266	219	247	1110	1080	1100	956	606	766
3	263	207	241	245	196	229	1090	1040	1070	791	506	693
4	293	257	272	341	199	284	1100	1040	1080	831	760	795
5	282	258	263	399	273	343	1120	1030	1080	944	756	866
6	275	254	265	491	340	415	1190	1040	1090	1010	833	915
7	275	242	261	510	299	449	1100	1030	1080	1030	995	1010
8	344	239	301	483	329	415	1120	1060	1100	1040	976	1010
9	346	287	315	628	471	544	1140	1060	1090	1040	996	1020
10	344	291	315	768	563	659	1110	993	1070	1040	769	846
11	325	278	303	654	309	447	1040	360	858	959	891	920
12	383	288	347	970	374	793	1130	795	1020	1010	959	983
13	359	298	335	1010	924	967	1130	1030	1090	1030	996	1020
14	333	284	309	1000	376	785	1120	1040	1100	1240	1030	1140
15	315	260	293	834	425	638	1140	1040	1110	1190	1050	1140
16	290	259	274	973	699	854	1130	1040	1100	1180	1090	1150
17	305	264	283	1010	836	936	1110	1010	1080	1210	1140	1190
18	323	272	297	1040	959	997	1070	988	1040	1290	1140	1220
19	318	277	300	1040	965	1010	1040	964	1010	1300	831	1080
20	318	273	294	1040	969	1000	1030	198	866	1160	1040	1120
21	309	268	284	1070	974	1020	982	582	795	1190	1110	1160
22	302	254	284	1080	1010	1050	1110	927	1070	1200	1170	1190
23	329	212	274	1050	952	1020	1120	1050	1090	1240	1170	1230
24	267	212	243	1080	1020	1040	1280	1020	1180	1230	1170	1200
25	284	224	260	1080	996	1030	1290	1080	1230	1190	1130	1170
26	287	243	266	1140	990	1060	1270	1150	1240	1200	1070	1160
27	305	236	272	1140	980	1070	1230	1090	1180	1190	1130	1180
28	319	251	293	1080	1010	1040	1220	749	1110	1190	1060	1130
29	355	284	317	1100	1060	1080	1150	1060	1110	1180	1080	1160
30	344	277	306	1100	1010	1040	1140	656	1030	1190	1130	1180
31	---	---	---	1090	978	1040	882	626	755	---	---	---
MONTH	403	207	289	1140	196	768	1290	198	1060	1300	506	1050

e Estimated

## 10168000 LITTLE COTTONWOOD CREEK AT JORDAN RIVER NEAR SALT LAKE CITY, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.0	15.0	15.8	10.1	9.1	9.6	9.1	8.1	8.6	5.2	2.2	3.8
2	16.0	13.0	14.2	10.1	9.1	9.4	9.1	8.1	8.8	4.2	2.2	3.3
3	15.0	12.0	13.7	9.1	7.1	8.6	9.1	6.1	7.5	4.2	2.2	3.1
4	13.0	11.0	11.4	9.1	7.1	8.1	8.1	4.1	6.4	4.2	2.2	3.1
5	12.0	10.0	10.8	9.1	7.1	8.5	5.1	3.1	3.9	5.2	3.2	4.1
6	13.0	10.0	11.1	8.1	5.1	5.9	4.1	2.1	3.3	4.2	.2	3.4
7	14.0	11.0	12.0	7.1	5.1	6.0	4.1	3.1	3.5	5.2	4.2	4.7
8	14.0	11.0	12.6	7.1	6.1	6.5	4.1	3.1	3.6	5.2	4.2	4.8
9	14.0	11.0	12.5	6.1	5.1	5.6	4.1	3.1	3.6	5.2	4.2	4.7
10	14.0	12.0	12.7	7.1	4.1	5.1	3.1	1.1	2.1	7.2	5.2	6.1
11	13.0	11.0	11.9	7.1	6.1	6.5	4.1	1.1	2.8	6.2	5.2	5.8
12	14.0	11.0	11.9	7.1	5.1	6.1	5.1	3.1	3.9	7.2	5.2	6.1
13	14.0	11.0	12.5	8.1	5.1	6.5	5.1	3.1	3.8	7.2	5.2	5.9
14	14.1	11.0	12.4	8.1	6.1	7.1	5.1	3.1	4.0	6.2	4.2	5.1
15	12.1	11.1	12.1	9.1	7.1	8.1	5.1	3.1	4.1	7.2	5.2	6.3
16	12.1	10.1	10.5	9.1	6.1	7.2	5.1	3.1	3.8	7.2	6.2	6.6
17	12.1	10.1	10.7	9.1	7.1	8.0	5.1	3.1	4.1	7.2	6.2	6.4
18	11.1	8.1	10.0	9.1	8.1	8.2	4.1	3.1	3.7	7.2	6.2	6.7
19	11.1	9.1	10.2	8.1	6.1	7.2	3.1	2.1	2.3	6.2	5.2	5.7
20	14.2	8.1	11.5	7.1	5.1	5.9	2.1	.1	.9	7.2	5.2	6.1
21	12.2	10.2	11.3	8.1	5.1	6.1	.1	.1	.1	7.2	3.2	3.9
22	13.2	11.2	12.4	9.1	7.1	8.1	---	---	e.3	5.2	3.2	4.1
23	---	---	e12.0	9.1	6.1	7.4	---	---	e.4	6.2	4.2	5.1
24	---	---	e12.3	8.1	7.1	8.1	1.1	.1	.6	5.2	3.2	4.0
25	---	---	e12.1	9.1	6.1	7.4	2.1	1.1	1.6	5.6	3.2	4.3
26	---	---	e12.1	9.1	7.1	7.8	3.1	1.1	2.4	5.3	4.5	4.9
27	---	---	e12.0	9.1	7.1	8.3	5.1	3.1	3.7	5.0	3.3	4.0
28	12.1	11.1	11.7	9.1	8.1	8.2	6.2	4.1	5.3	3.9	1.4	2.8
29	12.1	10.1	11.5	8.1	7.1	7.6	6.2	5.2	5.7	4.1	1.1	2.7
30	10.1	9.1	9.8	9.1	7.1	8.0	6.2	4.2	5.6	4.3	1.7	3.1
31	11.1	9.1	10.3	---	---	---	5.2	2.2	4.8	5.4	3.0	4.1
MONTH	---	---	11.9	10.1	4.1	7.4	---	---	3.7	7.2	.2	4.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.7	1.6	3.5	9.7	7.7	8.7	6.8	2.6	4.5	13.7	8.8	11.1
2	4.0	.4	2.2	9.7	5.8	7.9	9.1	3.6	6.0	13.1	10.2	11.6
3	6.8	2.7	4.6	8.9	5.9	7.2	9.1	3.9	6.5	11.4	8.8	9.6
4	6.5	4.8	5.7	7.2	4.1	6.0	10.6	5.3	7.8	9.7	7.4	8.4
5	6.3	4.4	5.3	7.2	2.6	4.8	8.7	5.7	7.4	10.0	6.1	7.9
6	7.2	4.6	5.8	8.2	3.7	6.0	10.7	6.8	8.7	12.8	7.2	9.9
7	8.0	5.9	6.8	7.3	5.6	6.5	11.5	7.0	8.9	15.8	9.8	12.6
8	7.6	6.6	7.1	7.8	4.6	6.4	12.5	6.6	9.2	16.1	12.4	14.0
9	9.1	6.5	7.6	7.8	5.3	6.8	9.4	4.8	6.9	13.7	9.9	11.4
10	7.3	1.8	3.6	8.5	3.1	5.7	10.4	3.7	6.8	11.7	7.7	9.5
11	4.3	1.1	2.4	7.3	4.7	6.1	11.4	4.9	8.2	12.9	6.9	9.7
12	4.6	.6	2.5	8.6	4.2	6.0	13.5	7.6	10.5	14.1	9.7	11.6
13	5.3	1.2	3.3	9.5	3.9	6.7	14.6	8.7	11.5	13.0	10.5	12.0
14	7.0	3.3	5.0	10.5	5.6	8.2	13.3	8.7	11.0	12.8	8.8	10.7
15	7.0	3.6	5.3	11.7	7.8	9.8	12.8	7.3	10.0	12.2	9.4	10.6
16	7.0	3.9	5.5	12.0	7.6	9.9	13.1	6.7	9.9	12.7	8.1	10.2
17	7.0	5.5	6.3	11.2	6.4	8.9	14.6	8.0	11.3	14.4	8.9	11.5
18	6.2	4.4	5.5	11.9	6.7	9.5	16.6	10.2	13.1	16.5	11.5	13.9
19	7.5	5.4	6.4	12.8	7.6	10.5	16.3	11.6	13.7	14.7	10.9	12.9
20	7.3	4.1	5.9	11.9	8.6	10.5	13.7	11.4	12.6	15.1	9.6	12.3
21	6.8	3.7	5.7	12.8	8.5	10.7	11.9	9.4	10.8	13.9	9.1	11.3
22	6.9	2.7	4.8	13.4	9.0	10.9	11.7	8.5	10.1	14.7	9.4	11.7
23	8.1	5.1	6.7	11.9	7.7	10.0	11.1	8.6	9.8	13.2	8.3	10.3
24	9.4	5.4	7.5	13.3	7.9	10.8	11.8	8.9	10.2	11.6	7.0	9.0
25	9.0	6.3	7.6	15.2	6.9	11.0	11.6	9.5	10.5	11.3	7.2	8.7
26	8.1	5.3	6.6	10.3	6.3	7.5	13.8	9.1	11.1	12.2	7.2	9.2
27	8.5	4.1	6.4	10.5	6.3	8.1	12.3	11.0	11.6	12.2	7.6	9.4
28	10.4	6.6	8.6	10.6	5.9	8.3	11.6	10.0	10.7	12.1	7.4	9.1
29	---	---	---	12.9	6.3	9.4	12.1	8.6	10.2	10.5	7.5	8.5
30	---	---	---	10.7	8.6	9.7	11.4	9.0	10.2	10.5	7.3	8.5
31	---	---	---	9.2	3.8	6.5	---	---	---	10.0	7.2	8.4
MONTH	10.4	.4	5.5	15.2	2.6	8.2	16.6	2.6	9.7	16.5	6.1	10.5

## JORDAN RIVER BASIN

10168000 LITTLE COTTONWOOD CREEK AT JORDAN RIVER NEAR SALT LAKE CITY, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	12.0	7.7	9.4	16.1	10.5	13.0	23.3	19.0	21.0	19.9	16.9	18.4
2	10.3	7.0	8.7	14.6	10.1	12.2	23.6	19.8	21.6	19.7	17.7	18.5
3	10.5	6.6	8.1	14.7	10.6	12.5	22.3	21.1	21.5	17.7	13.4	16.4
4	9.7	6.8	8.1	15.9	11.0	13.2	23.0	20.2	21.4	17.9	14.6	16.2
5	8.9	6.6	7.4	16.3	11.0	13.6	22.8	19.9	21.1	18.9	14.4	16.6
6	9.6	6.8	8.2	18.1	12.5	15.1	22.7	19.5	20.9	19.4	15.0	17.3
7	12.2	7.4	9.4	21.1	15.8	17.3	22.6	19.6	21.0	19.2	16.0	17.6
8	12.1	8.0	9.8	18.3	13.7	16.1	22.7	19.1	20.9	18.7	14.9	16.8
9	11.9	7.6	9.5	19.7	15.4	17.5	23.2	19.3	21.2	18.4	15.5	17.0
10	11.6	7.7	9.5	20.8	16.5	18.6	22.0	19.8	20.4	20.0	16.9	18.1
11	12.6	7.5	9.7	18.7	13.7	16.6	21.1	18.7	19.4	19.3	16.7	18.0
12	13.6	8.4	10.6	22.7	16.0	19.6	21.7	17.5	19.5	18.4	15.6	17.0
13	13.5	8.6	10.6	23.5	19.2	21.0	21.9	18.3	20.0	18.8	15.3	17.0
14	12.9	8.6	10.3	22.0	16.8	19.9	21.5	18.5	19.8	18.9	16.3	17.5
15	13.0	8.9	10.5	20.3	14.9	17.6	21.7	18.6	20.0	18.8	16.0	17.4
16	11.8	8.6	9.8	20.5	18.3	19.2	21.9	17.7	19.7	19.1	15.9	17.5
17	12.0	8.9	10.1	22.1	19.4	20.5	22.6	19.2	20.6	19.5	16.0	17.7
18	13.3	8.7	10.6	23.1	19.5	21.0	23.3	18.8	20.9	19.5	16.1	17.8
19	13.4	9.3	10.9	22.5	19.9	20.9	22.8	20.3	21.4	18.1	17.1	17.5
20	13.7	9.1	10.9	23.5	19.1	21.0	23.8	20.5	21.7	18.3	15.7	16.9
21	12.3	10.0	10.9	23.7	19.6	21.5	23.0	18.7	20.9	18.3	15.4	16.8
22	14.0	9.1	11.1	23.5	19.6	21.5	23.5	19.4	21.4	18.3	15.1	16.7
23	13.4	9.4	11.1	24.5	19.8	21.9	24.1	20.1	22.0	18.3	16.1	17.1
24	13.7	8.5	10.7	23.4	20.1	21.7	22.7	20.4	21.5	18.2	15.6	16.9
25	13.6	9.5	11.2	23.2	18.9	21.0	22.9	19.7	21.2	18.6	15.9	17.1
26	13.7	9.0	11.1	22.9	18.6	20.8	22.9	19.5	21.2	17.6	14.7	15.7
27	13.9	9.1	11.2	23.3	20.5	21.7	22.0	19.9	20.9	14.7	12.6	13.4
28	14.5	9.1	11.5	24.1	20.3	22.0	23.1	19.6	20.9	13.3	11.4	12.3
29	15.1	10.0	12.3	22.6	20.8	21.8	22.6	19.1	20.8	13.9	10.8	12.2
30	15.5	10.5	12.7	22.2	20.4	21.2	22.6	19.7	21.0	14.8	11.4	12.9
31	---	---	---	22.3	19.8	20.8	20.7	17.7	19.0	---	---	---
MONTH	15.5	6.6	10.2	24.5	10.1	18.8	24.1	17.5	20.8	20.0	10.8	16.6

e Estimated

## JORDAN RIVER BASIN

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## 10168300 TAILRACE AT STAIRS PLANT NEAR SALT LAKE CITY, UT

LOCATION.--Lat 40°37'26", long 111°45'05", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 20, T. 2 S., R. 2 E., Salt Lake County, Hydrologic Unit 16020204 on left bank at Stairs plant, 14 mi southeast of Salt Lake City.

DRAINAGE AREA.--49.2 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1925 to current year. Prior to 1986, not published, records available from Utah Power & Light Co.

GAGE.--Water-stage recorder. Elevation of gage is 5,460 ft above sea level, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 26.8 ft<sup>3</sup>/s, 19,420 acre-ft/yr.

COOPERATION.--Records collected by Utah Power & Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78 ft<sup>3</sup>/s July 1, 1954; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	30	26	21	21	25	32	52	50	50	46	41
2	38	30	26	20	15	25	30	52	50	50	42	42
3	41	30	25	10	21	25	30	51	50	50	45	47
4	43	30	23	15	21	24	29	48	50	50	44	48
5	42	30	21	20	21	23	28	51	47	50	45	46
6	42	31	14	20	21	23	27	51	45	50	45	43
7	41	30	25	20	22	23	27	48	33	45	44	43
8	32	32	24	20	23	23	29	51	51	49	44	43
9	39	31	25	19	19	23	30	51	51	45	43	43
10	39	31	20	19	18	22	30	51	51	40	23	44
11	42	31	23	19	23	22	29	51	51	44	35	43
12	25	30	24	20	19	22	30	51	51	50	47	41
13	21	29	23	19	24	22	33	51	50	48	45	41
14	40	29	24	19	24	22	38	51	47	49	46	41
15	38	30	23	19	24	23	36	51	51	51	44	42
16	32	29	23	20	23	24	36	51	51	51	44	41
17	30	29	23	19	22	26	31	51	51	48	44	41
18	29	29	23	20	23	27	42	51	51	45	43	40
19	28	28	23	20	22	28	47	51	51	42	42	40
20	28	27	23	21	21	32	50	48	51	45	49	36
21	28	28	11	20	22	35	51	50	50	53	52	34
22	27	28	11	22	23	35	51	50	50	53	50	34
23	27	26	12	20	22	35	41	44	51	53	49	34
24	27	22	12	21	22	35	50	50	50	53	48	32
25	30	27	17	21	23	39	48	50	51	53	42	32
26	31	27	21	21	23	40	48	50	51	51	39	31
27	29	27	21	21	23	40	51	50	50	52	39	30
28	29	28	21	16	23	36	50	50	50	49	40	31
29	29	28	20	20	---	34	53	47	50	47	40	34
30	31	27	20	20	---	34	52	50	50	47	42	35
31	31	---	21	21	---	33	---	50	---	47	41	---
TOTAL	1025	864	648	603	608	880	1159	1554	1486	1510	1342	1173
MEAN	33.1	28.8	20.9	19.5	21.7	28.4	38.6	50.1	49.5	48.7	43.3	39.1
MAX	43	32	26	22	24	40	53	52	51	53	52	48
MIN	21	22	11	10	15	22	27	44	33	40	23	30
AC-FT	2030	1710	1290	1200	1210	1750	2300	3080	2950	3000	2660	2330

CAL YR 1998 TOTAL 13027.62 MEAN 35.7 MAX 55 MIN .62 AC-FT 25840  
WTR YR 1999 TOTAL 12852 MEAN 35.2 MAX 53 MIN 10 AC-FT 25490



## JORDAN RIVER BASIN

## 10170500 SURPLUS CANAL AT SALT LAKE CITY, UT

LOCATION.--Lat 40°43'37", long 111°55'33", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 14, T. 1 S., R. 1 W., Salt Lake County, Hydrologic Unit 16020204, near right bank on upstream side of diversion dam at head of canal, and 250 ft downstream from highway bridge over Jordan River on 2100 South Street.

PERIOD OF RECORD.--December 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,223.93 ft above sea level. Prior to Oct. 22, 1952, at site 350 ft downstream, and Oct. 22, 1952 to Sept. 30, 1966, at site 400 ft downstream at different datum, Sept. 30, 1966 to Oct. 1, 1989 at datum 10.0 ft lower.

REMARKS.--Records fair except for estimated days which are poor. Flow regulated by diversion structure at station. Canal was built to bypass floodwater of Jordan River around Salt Lake City residential and industrial area (see station 10170490 for records of combined flow of Jordan River and Surplus Canal). Several diversions for irrigation and waterfowl ponds below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft<sup>3</sup>/s June 1, 1984, gage height, 8.91 ft, datum then in use. No flow Jan. 21 to Feb. 28, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,330 ft<sup>3</sup>/s, Jun 5, gage height, 14.67 ft; minimum daily discharge, 94 ft<sup>3</sup>/s, Sep 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	490	190	1120	1040	1020	1080	1240	1230	1690	1090	308	340
2	514	173	1090	968	1000	1060	1120	1240	1720	1150	310	398
3	690	275	1080	954	1010	1090	1070	2120	2000	1200	290	535
4	787	202	1210	962	1030	1050	1070	1610	1770	1090	310	425
5	671	774	1100	968	1090	1050	1050	1400	2010	960	395	348
6	599	1060	1050	998	1050	1070	1080	1280	1700	885	392	335
7	560	1090	1010	970	1060	1080	1100	1230	1670	991	329	270
8	542	1310	1090	987	1080	1050	1410	1240	1680	1030	309	241
9	533	1210	1010	1020	1050	1090	1270	1260	1620	905	291	230
10	542	1240	1120	1010	1080	1120	1140	1240	1580	846	275	212
11	512	1240	1030	1010	1030	1090	1180	1200	1530	874	393	218
12	545	1130	885	1010	1090	1050	1180	1180	1560	831	406	209
13	533	1020	888	1020	1090	1060	1150	1410	1620	793	329	196
14	540	1160	891	1030	1090	1080	1090	1270	1660	866	290	181
15	722	1150	874	1050	1090	1090	1030	1300	1690	711	280	204
16	851	1130	878	1050	1110	1090	1010	1220	1800	578	289	135
17	388	1070	905	1050	1120	1040	1020	1240	1830	614	277	94
18	258	893	891	1060	1080	1050	1010	1240	1690	546	279	101
19	211	1110	829	1230	1090	1070	992	1250	1650	505	258	139
20	233	1140	844	1110	1070	1070	1170	1270	1620	485	347	138
21	181	1150	778	1290	1120	1090	1360	1320	1570	451	500	125
22	161	1150	818	1050	1100	1060	1150	1370	1510	424	268	147
23	155	1120	875	1070	1100	1050	1100	1420	1400	379	259	192
24	159	1120	e891	1090	1100	1040	1140	1760	1380	332	230	184
25	165	1070	e871	1050	1100	1060	1340	1850	1370	322	230	183
26	166	1110	909	1090	1090	1080	1320	1860	1280	361	223	167
27	142	1110	907	1140	1090	1030	1770	1880	1270	337	236	190
28	141	1150	918	1070	1090	1000	1500	1910	1170	322	301	213
29	155	1170	922	1040	---	1030	1500	2050	1120	385	314	211
30	377	1150	923	983	---	1040	1330	2140	1140	322	345	231
31	218	---	985	996	---	1110	---	2030	---	319	378	---
TOTAL	12741	29867	29592	32366	30120	33020	35892	46020	47300	20904	9641	6792
MEAN	411	996	955	1044	1076	1065	1196	1485	1577	674	311	226
MAX	851	1310	1210	1290	1120	1120	1770	2140	2010	1200	500	535
MIN	141	173	778	954	1000	1000	992	1180	1120	319	223	94
AC-FT	25270	59240	58700	64200	59740	65500	71190	91280	93820	41460	19120	13470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

	MEAN	280	294	311	340	405	445	512	632	695	379	278	284
MAX	1473	1616	1740	1806	1804	1882	2749	3042	3299	2158	1651	1364	1364
(WY)	1984	1984	1984	1984	1984	1984	1986	1986	1984	1983	1983	1986	1986
MIN	66.1	68.8	49.7	30.8	.000	55.9	44.8	74.7	44.4	69.6	50.6	77.7	77.7
(WY)	1962	1944	1944	1956	1963	1945	1961	1961	1961	1961	1961	1961	1961

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1944 - 1999

ANNUAL TOTAL	403300	334255		
ANNUAL MEAN	1105	916		
HIGHEST ANNUAL MEAN			404	1984
LOWEST ANNUAL MEAN			69.6	1961
HIGHEST DAILY MEAN	3030	2140	4250	Jun 1 1984
LOWEST DAILY MEAN	141	94	.00	Jan 21 1963
ANNUAL SEVEN-DAY MINIMUM	155	126	.00	Jan 21 1963
ANNUAL RUNOFF (AC-FT)	799900	663000	292800	
10 PERCENT EXCEEDS	1760	1410	1070	
50 PERCENT EXCEEDS	1110	1050	204	
90 PERCENT EXCEEDS	403	230	81	

e Estimated

## 10171000 JORDAN RIVER AT SALT LAKE CITY, UT

LOCATION.--Lat 40°44'01", long 111°55'21", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 14, T. 1 S., R. 1 W., Salt Lake County, Hydrologic Unit 16020204, on right bank at 1700 South Street and about 1000 West, Salt Lake City, 4,000 ft downstream from diversion structure at head of Surplus Canal, and 1.7 mi downstream from Mill Creek.

DRAINAGE AREA.--3,438 mi<sup>2</sup> includes 255 mi<sup>2</sup> closed basin in Cedar Valley.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1942 to current year.

REVISED RECORDS.--WDR UT-88-1: 1987 (combined flow).

GAGE.--Water-stage recorder. Datum of gage is 4,220.08 ft above sea level. Prior to July 1, 1976 at site 3,200 ft upstream at same datum.

REMARKS.--Records fair except for estimated days, which are poor. Flow completely regulated since reconstruction in May 1952 of Surplus Canal diversion dam 4,000 ft upstream. Flow affected by regulation at Utah Lake, Deer Creek Reservoir, other storage and regulation, and importation of water from other basins. Many diversions above station for irrigation, industrial, and municipal water supplies. For records of Surplus Canal see station 10170500. For records of combined flow, see following page.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 449 ft<sup>3</sup>/s Aug. 20, 1986, gage height, 4.41 ft; maximum gage height, 5.75 ft June 26, 1952; no flow May 10, 24, 1952. May 21, 22, 1962, Sept. 21, 1963, May 14 to June 1, 1964, and Sept. 6, 7, 1965 entire flow diverted to Surplus Canal. Maximum daily combined discharge (Jordan River and Surplus Canal), 4,510 ft<sup>3</sup>/s June 1, 1984; minimum daily, 89 ft<sup>3</sup>/s June 23, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 203 ft<sup>3</sup>/s, Nov 6; minimum daily discharge, 33 ft<sup>3</sup>/s, May 18. Maximum daily combined discharge during year (Jordan River and Surplus Canal), 3,200 ft<sup>3</sup>/s Jun 17; minimum daily discharge, 316 ft<sup>3</sup>/s Oct 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	148	181	176	172	168	175	134	56	156	135	160
2	162	148	181	170	168	167	165	152	63	158	138	164
3	166	151	182	169	168	168	164	152	61	158	140	178
4	163	143	189	169	169	167	163	68	60	154	148	163
5	e154	177	184	169	177	165	162	82	e63	149	e153	157
6	e159	203	180	170	170	165	162	75	e60	149	e153	155
7	e165	183	179	166	168	166	170	73	e58	157	152	151
8	e164	e193	181	165	169	165	180	71	e56	153	150	149
9	e166	e183	178	165	164	168	177	77	55	147	150	148
10	e165	183	179	171	168	171	167	70	94	141	149	147
11	e166	182	174	171	162	170	165	68	116	139	159	147
12	e167	181	169	170	162	167	165	69	116	143	166	146
13	e166	180	169	168	162	166	165	105	115	152	161	145
14	159	182	169	165	163	167	163	71	114	145	157	143
15	174	e184	170	165	162	167	162	86	112	121	155	145
16	176	e186	169	165	164	167	160	82	115	122	157	139
17	160	185	170	163	173	165	161	76	122	125	156	134
18	156	177	173	167	170	165	161	33	129	122	156	134
19	153	184	170	172	169	166	161	43	130	117	154	136
20	155	186	171	165	169	167	179	46	e134	114	160	138
21	152	186	170	182	172	167	e180	49	e142	114	170	139
22	150	183	169	175	e172	168	e182	39	e149	119	154	140
23	148	181	171	175	e169	166	e183	52	151	134	154	144
24	144	179	e170	177	168	166	e185	62	149	152	151	144
25	143	178	e170	174	169	166	e186	54	155	147	151	143
26	156	178	171	174	168	166	e187	52	163	138	151	141
27	165	179	170	177	168	165	188	68	161	121	152	143
28	161	181	170	174	168	162	155	67	158	120	155	145
29	159	182	169	171	---	163	145	51	156	126	156	145
30	166	182	168	167	---	163	140	55	157	133	159	146
31	152	---	177	167	---	172	---	56	---	139	161	---
TOTAL	4954	5348	5393	5274	4703	5161	5058	2238	3370	4265	4763	4409
MEAN	160	178	174	170	168	166	169	72.2	112	138	154	147
MAX	176	203	189	182	177	172	188	152	163	158	170	178
MIN	143	143	168	163	162	162	140	33	55	114	135	134
AC-FT	9830	10610	10700	10460	9330	10240	10030	4440	6680	8460	9450	8750

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

	MEAN	159	147	145	147	151	138	121	112	143	156	153	161
MAX	253	223	230	292	274	258	253	251	210	258	253	242	245
(WY)	1985	1986	1986	1985	1985	1952	1952	1989	1991	1984	1983	1985	
MIN	78.7	64.9	75.2	54.2	66.6	58.3	31.3	25.5	56.0	68.3	68.3	63.5	
(WY)	1964	1964	1993	1993	1993	1962	1986	1964	1995	1961	1963	1963	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1944 - 1999
ANNUAL TOTAL	57251	54936	
ANNUAL MEAN	157	151	144
HIGHEST ANNUAL MEAN			223
LOWEST ANNUAL MEAN			92.3
HIGHEST DAILY MEAN	212	203	337
LOWEST DAILY MEAN	105	33	.00
ANNUAL SEVEN-DAY MINIMUM	117	46	.00
ANNUAL RUNOFF (AC-FT)	113600	109000	104600
10 PERCENT EXCEEDS	178	179	195
50 PERCENT EXCEEDS	157	162	144
90 PERCENT EXCEEDS	130	91	93
e Estimated			

## JORDAN RIVER BASIN

10171000 JORDAN RIVER AT SALT LAKE CITY, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1974 to September 1994, October 1998 to September 30, 1999.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1978, October 1980 to September 1981, October 1998 to September 30, 1999.

WATER TEMPERATURES: April 1975 to September 1978, October 1980 to September 1981, October 1998 to September 30, 1999.

INSTRUMENTATION.--Temperature/conductivity data logger.

REMARKS.--Records good for temperature, fair for conductivity.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,330 microsiemens, Mar 29, 1977; minimum, 536 microsiemens, Jun 25, 1978.

WATER TEMPERATURES: Maximum, 28.0°C, Aug 29, 30, 1975; minimum, 0.5°C, Jan 2, 3, 1976.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,740 microsiemens, Feb 1; minimum recorded, 694 microsiemens, May 3.

WATER TEMPERATURE: Maximum recorded, 24.0°C, Jul 28; minimum, 1.1°C, Dec 23, 24.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	1530	1450	1490	1320	1280	1300	1470	1380	1410
2	---	---	---	1500	1290	1410	1340	1290	1300	1380	1320	1350
3	---	---	---	1440	975	1250	1340	1310	1330	1370	1260	1340
4	---	---	---	1550	1420	1480	1410	1320	1340	1370	1330	1350
5	1240	1120	1190	1680	1250	1450	1530	1410	1480	1370	1340	1360
6	1250	1220	1230	1360	1030	1190	1500	1390	1440	1370	1290	1340
7	1250	1210	1230	1350	1280	1300	1400	1360	1380	1380	1350	1360
8	1270	1220	1240	1350	1150	1250	1390	1360	1380	1380	1360	1370
9	1280	1250	1260	1350	1230	1280	1560	1380	1440	1400	1360	1370
10	1300	1240	1270	1450	1260	1360	1580	1430	1500	1380	1340	1360
11	1320	1260	1290	1440	1320	1360	1440	1390	1420	1380	1350	1360
12	1310	1260	1290	1320	1290	1300	1400	1350	1380	1390	1360	1370
13	1330	1280	1300	1330	1300	1320	1370	1330	1350	1380	1360	1370
14	1320	1290	1310	1330	1300	1320	1370	1340	1350	1390	1360	1380
15	1320	1120	1270	1330	1280	1310	1380	1360	1370	1390	1360	1380
16	1320	1130	1230	1360	1310	1330	1380	1340	1360	1400	1370	1380
17	1410	1280	1340	1420	1340	1360	1350	1310	1330	1390	1360	1370
18	1440	1360	1400	---	---	---	1340	1320	1330	1370	1230	1350
19	1440	1370	1410	---	---	---	1380	1330	1360	1350	1210	1300
20	1470	1210	1370	---	---	---	1400	1350	1380	1350	1320	1340
21	1470	1210	1390	---	---	---	1470	1360	1400	1550	1220	1390
22	1530	1420	1470	---	---	---	1440	1380	1410	1600	1360	1470
23	1550	1460	1500	---	---	---	1400	1370	1390	1390	1330	1350
24	1570	1460	1520	---	---	---	1400	1370	1390	1490	1360	1440
25	1560	1440	1510	---	---	---	1390	1360	1380	1480	1380	1420
26	1490	1390	1460	---	---	---	1380	1350	1370	1480	1370	1410
27	1540	1430	1490	---	---	---	1370	1340	1360	1690	1440	1540
28	1540	1430	1490	---	---	---	1390	1350	1370	1600	1340	1450
29	1600	1330	1520	1320	1280	1290	1380	1340	1360	1340	1290	1310
30	1380	951	1170	1320	1280	1300	1360	1330	1350	1300	1260	1270
31	1520	1380	1440	---	---	---	1430	1320	1360	1260	1200	1220
MONTH	---	---	---	---	---	---	1580	1280	1380	1690	1200	1370

## JORDAN RIVER BASIN

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10171000 JORDAN RIVER AT SALT LAKE CITY, UT--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	1740	1210	1470	1290	1260	1280	1500	1170	1350	1300	1250	1270
2	1660	1320	1440	1300	1280	1290	1430	1310	1350	1300	978	1230
3	---	---	---	1300	1270	1290	1430	1320	1350	1020	694	856
4	---	---	---	1350	1290	1300	1330	1290	1310	1240	1020	1170
5	---	---	---	1330	1300	1310	1330	1310	1320	1290	1200	1240
6	---	---	---	1320	1290	1300	1330	1280	1310	1280	1230	1260
7	---	---	---	1340	1300	1310	1310	983	1260	1320	1230	1270
8	---	---	---	1320	1290	1300	1280	983	1220	1280	1230	1250
9	---	---	---	1310	1290	1300	1420	1210	1300	1270	1160	1200
10	---	---	---	1400	1290	1350	1420	1300	1340	1230	1190	1210
11	---	---	---	1400	1300	1330	1310	1270	1290	1220	1200	1210
12	---	---	---	1370	1330	1340	1320	1280	1300	1240	1200	1220
13	---	---	---	1360	1310	1340	1330	1290	1310	1230	984	1070
14	---	---	---	1310	1240	1270	1320	1270	1290	1180	1140	1150
15	---	---	---	1260	1230	1240	1360	1290	1310	1190	1100	1160
16	---	---	---	1260	1240	1250	1360	1310	1330	1210	1170	1180
17	---	---	---	1290	1250	1270	1340	1300	1330	1260	1180	1210
18	---	---	---	1290	1260	1280	1340	1290	1310	1270	1230	1250
19	1360	1330	1340	1300	1260	1280	1330	1290	1300	1270	1220	1240
20	1360	1320	1340	1300	1280	1290	1310	1040	1220	1230	1170	1200
21	1370	1300	1320	1300	1270	1290	1260	988	1140	1180	1120	1140
22	1390	1340	1370	1300	1280	1290	1270	1230	1250	1130	1060	1090
23	1360	1310	1330	1290	1260	1280	1280	1250	1270	1090	950	1000
24	1330	1290	1310	1290	1250	1270	1290	1240	1260	950	830	887
25	1320	1290	1300	1290	1240	1260	1260	1090	1190	933	826	871
26	1340	1280	1300	1260	1200	1230	1280	1170	1240	918	862	889
27	1290	1260	1270	1280	1200	1240	1230	857	1060	937	868	897
28	1290	1250	1270	1280	1240	1260	1180	969	1120	910	815	870
29	---	---	---	1270	1240	1250	1200	1010	1130	884	803	849
30	---	---	---	1300	1260	1270	1260	1160	1210	884	819	847
31	---	---	---	1320	1120	1250	---	---	---	941	826	864
MONTH	---	---	---	1400	1120	1280	1500	857	1270	1320	694	1100
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	1020	926	963	1040	937	992	1460	1380	1420	1320	1260	1290
2	967	895	929	1020	898	944	1480	1410	1440	1300	1110	1250
3	968	871	916	1010	917	957	1490	1420	1460	1180	940	1090
4	1040	936	964	1070	965	1010	1480	1410	1450	1230	1120	1180
5	1060	869	976	1110	1000	1050	1480	1320	1390	1240	1180	1200
6	1030	952	987	1140	1050	1090	1430	1310	1360	1260	1180	1220
7	1040	939	993	1140	945	1090	1510	1420	1460	1260	1190	1220
8	1040	954	993	1080	978	1030	1490	1410	1460	1290	1230	1260
9	1010	945	979	1120	1040	1070	1470	1400	1430	1280	1220	1250
10	1020	938	985	1170	1090	1120	1490	1430	1460	1280	1220	1260
11	1010	956	984	1170	1080	1120	1480	1360	1440	1290	1220	1260
12	1000	920	959	1210	1080	1150	---	---	---	1260	1200	1240
13	975	898	932	1220	1160	1190	---	---	---	1250	1190	1230
14	942	861	901	1210	1040	1170	---	---	---	1270	1190	1240
15	919	847	878	1180	1070	1120	---	---	---	1260	1190	1230
16	871	802	837	1200	1130	1160	---	---	---	1230	1180	1210
17	881	806	842	1200	1130	1170	---	---	---	1240	1180	1210
18	896	814	851	1230	1130	1180	---	---	---	1260	1220	1230
19	898	816	852	1260	1200	1220	---	---	---	1250	1160	1210
20	889	806	840	1270	1210	1240	---	---	---	1220	1160	1180
21	894	792	837	1290	1240	1260	---	---	---	1230	1200	1220
22	910	830	866	1310	1250	1280	---	---	---	1280	1220	1240
23	904	825	860	1330	1270	1290	---	---	---	1320	1280	1300
24	942	831	880	1330	1270	1300	---	---	---	---	---	---
25	961	856	902	1350	1300	1320	1420	1340	1380	---	---	---
26	976	880	920	1340	1280	1310	1430	1370	1400	---	---	---
27	999	901	938	1390	1310	1340	1400	1340	1380	---	---	---
28	1060	929	983	1370	1310	1350	1380	1320	1360	1360	1290	1340
29	1060	970	1010	1370	1280	1330	1350	1280	1310	1350	1290	1330
30	1050	975	1010	1420	1340	1380	1350	1240	1310	1350	1290	1320
31	---	---	---	1450	1380	1410	1280	1160	1230	---	---	---
MONTH	1060	792	926	1450	898	1180	---	---	---	---	---	---

## JORDAN RIVER BASIN

10171000 JORDAN RIVER AT SALT LAKE CITY, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	14.0	12.0	12.9	9.1	8.1	8.2	6.1	4.1	4.8
2	---	---	---	14.0	13.0	13.1	9.1	8.1	8.3	5.1	3.1	4.3
3	---	---	---	13.0	10.0	12.1	8.1	7.1	7.8	5.0	3.1	3.9
4	---	---	---	13.0	10.0	11.8	8.1	6.1	7.1	5.0	3.0	4.2
5	14.0	12.0	13.2	12.0	9.0	10.2	6.2	6.1	6.1	5.0	4.0	4.7
6	14.0	12.0	13.2	10.0	8.0	8.8	6.2	4.2	5.0	6.0	4.0	4.9
7	15.0	12.0	13.9	9.0	8.0	8.6	5.2	4.2	4.9	6.0	5.0	5.6
8	15.0	13.0	14.3	9.0	8.0	8.3	5.2	4.2	4.3	6.0	5.0	5.5
9	15.0	13.0	14.3	8.0	7.0	7.6	4.2	3.2	4.1	6.0	4.0	5.3
10	15.0	13.0	14.4	8.0	6.0	7.2	4.2	2.2	3.1	7.0	5.0	5.8
11	15.0	12.0	13.8	8.0	7.0	7.0	4.2	2.2	3.3	6.0	5.0	5.8
12	15.0	12.0	13.9	8.0	6.0	6.8	5.2	3.2	4.2	7.0	6.0	6.5
13	15.0	13.0	14.2	7.0	6.0	6.7	5.2	3.2	4.4	7.0	6.0	6.5
14	15.0	13.0	14.3	8.0	6.0	7.1	5.2	4.2	4.8	6.0	5.0	5.8
15	15.0	13.0	13.4	8.0	7.0	7.5	5.2	4.2	4.9	7.0	6.0	6.5
16	13.0	12.0	12.1	8.0	7.0	7.7	5.2	4.2	4.8	7.0	6.0	6.6
17	14.0	11.0	12.6	9.0	7.0	7.9	5.2	4.2	4.7	7.0	6.0	6.8
18	14.0	12.0	13.0	---	---	---	5.2	4.2	4.7	7.0	6.0	6.7
19	14.0	12.0	13.2	---	---	---	4.2	3.2	3.8	7.0	6.0	6.8
20	14.0	12.0	13.4	---	---	---	3.2	2.2	2.8	7.0	6.0	6.8
21	15.0	12.0	13.7	---	---	---	3.2	1.2	2.0	7.0	6.0	6.2
22	16.0	13.0	14.7	---	---	---	2.2	1.2	1.8	6.0	5.0	5.9
23	16.0	14.0	14.9	---	---	---	2.1	1.1	1.6	6.0	5.0	5.6
24	15.0	13.0	14.4	---	---	---	3.1	1.1	1.8	6.0	5.0	5.2
25	15.0	14.0	14.7	---	---	---	3.1	2.1	2.5	6.0	5.0	5.2
26	16.0	14.0	14.9	---	---	---	4.1	2.1	3.2	6.0	5.0	5.0
27	15.0	14.0	14.6	---	---	---	4.1	3.1	3.6	5.0	4.0	4.5
28	15.0	13.0	14.3	---	---	---	5.1	4.1	4.5	5.0	3.0	3.6
29	15.0	14.0	14.2	8.1	7.1	7.9	5.1	4.1	4.6	4.0	2.0	3.3
30	14.0	12.0	12.6	9.1	7.1	8.1	5.1	4.1	4.7	4.0	2.0	3.4
31	14.0	12.0	13.1	---	---	---	5.1	4.1	4.7	5.0	3.0	4.1
MONTH	---	---	---	---	---	---	9.1	1.1	4.4	7.0	2.0	5.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	5.0	3.0	4.5	9.0	7.0	8.0	9.0	7.0	8.1	14.0	11.0	12.6
2	5.0	3.0	3.7	9.0	7.0	7.8	10.0	8.0	9.0	14.0	12.0	12.9
3	---	---	---	8.0	7.0	7.6	10.0	8.0	8.7	13.0	11.0	11.2
4	---	---	---	8.0	7.0	7.4	10.0	8.0	9.0	12.0	10.0	10.9
5	---	---	---	8.0	5.0	6.5	10.0	8.0	8.6	12.0	10.0	11.0
6	---	---	---	8.0	6.0	7.1	9.9	8.0	9.0	14.0	10.0	11.8
7	---	---	---	8.0	7.0	7.5	9.9	7.9	9.1	15.0	11.0	13.2
8	---	---	---	8.0	6.0	7.1	10.9	7.9	9.3	15.0	13.0	14.3
9	---	---	---	8.0	7.0	7.1	9.9	7.9	8.7	14.0	12.0	13.0
10	---	---	---	8.0	6.0	7.1	10.0	7.0	8.5	12.9	10.0	11.7
11	---	---	---	8.0	7.0	7.6	10.0	8.0	9.1	13.9	9.9	11.8
12	---	---	---	8.0	6.0	7.2	12.0	9.0	10.4	13.9	10.9	12.8
13	---	---	---	9.0	6.0	7.3	12.0	9.0	10.9	14.9	12.9	13.8
14	---	---	---	9.0	7.0	8.1	12.0	10.0	11.2	15.0	12.0	13.7
15	---	---	---	10.0	8.0	9.2	12.0	9.0	10.8	14.0	12.0	13.3
16	---	---	---	11.0	9.0	10.1	12.0	9.0	10.7	14.0	11.0	12.8
17	---	---	---	11.0	9.0	10.1	13.0	9.0	11.2	---	---	---
18	---	---	---	11.0	8.0	9.9	15.0	11.0	12.9	15.9	12.9	14.6
19	6.0	5.0	5.7	12.0	9.0	10.6	15.0	12.0	13.7	15.9	13.9	15.3
20	6.0	4.0	5.5	12.0	10.0	11.0	14.0	12.0	12.8	16.9	13.9	15.5
21	6.0	5.0	5.4	13.0	10.0	11.4	12.0	11.0	11.6	16.9	14.9	16.0
22	6.0	4.0	5.2	13.1	10.1	11.9	12.0	10.0	11.2	17.9	14.9	16.4
23	7.0	5.0	5.8	13.1	10.1	11.8	12.0	10.0	10.6	16.9	13.9	15.8
24	7.0	5.0	6.2	13.1	10.1	12.1	13.0	10.0	11.4	15.9	13.9	15.1
25	7.0	6.0	6.7	14.1	11.1	12.8	12.0	11.0	11.6	15.9	13.9	15.0
26	7.0	6.0	6.6	13.1	12.1	12.6	14.0	10.0	12.0	15.9	12.9	14.7
27	8.0	5.0	6.6	13.1	11.1	12.0	14.0	12.0	12.7	16.9	13.9	15.5
28	9.0	6.0	7.4	12.1	10.1	11.2	13.0	12.0	12.1	16.9	13.9	15.5
29	---	---	---	12.1	9.1	11.0	13.0	11.0	12.1	16.9	13.9	15.1
30	---	---	---	12.1	10.0	11.1	13.0	11.0	11.7	15.9	12.9	14.5
31	---	---	---	11.0	8.0	9.5	---	---	---	14.9	12.9	14.0
MONTH	---	---	---	14.1	5.0	9.4	15.0	7.0	10.6	---	---	---

## JORDAN RIVER BASIN

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10171000 JORDAN RIVER AT SALT LAKE CITY, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.9	12.9	14.4	21.0	17.0	19.3	23.0	19.0	21.2	20.0	18.0	19.2
2	15.9	12.9	13.9	21.0	17.0	19.4	23.0	20.0	21.7	20.0	19.0	19.1
3	14.9	11.9	13.4	21.0	18.0	19.5	22.0	21.0	21.2	19.0	17.0	17.6
4	14.9	12.9	13.6	21.0	17.0	19.1	23.0	20.0	21.1	19.0	16.0	17.5
5	13.9	11.9	13.0	21.0	17.0	18.9	22.0	20.0	20.8	19.0	16.0	17.9
6	14.9	12.9	13.9	22.0	18.0	20.0	22.0	19.0	20.5	20.0	17.0	18.6
7	16.9	13.9	15.0	22.0	20.0	20.6	22.0	20.0	21.0	20.0	17.0	18.8
8	15.9	13.9	15.2	22.0	19.0	20.6	22.0	20.0	21.1	20.0	17.0	18.5
9	15.9	12.9	15.0	22.0	19.0	20.7	23.0	20.0	21.5	19.0	17.0	18.3
10	15.9	13.9	14.9	22.0	19.0	20.9	22.0	20.0	20.8	20.0	17.0	18.8
11	16.9	12.9	15.3	22.0	19.0	20.8	20.0	19.0	19.6	20.0	18.0	19.1
12	17.9	13.9	15.9	23.0	19.0	21.2	---	---	---	20.0	17.0	18.6
13	17.9	13.9	16.1	23.0	20.0	21.9	---	---	---	20.0	17.0	18.6
14	17.9	14.9	16.3	23.0	20.0	21.0	---	---	---	20.0	17.0	18.9
15	18.0	15.0	16.6	22.0	19.0	20.1	---	---	---	20.0	17.0	18.8
16	18.0	15.0	16.2	21.0	19.0	19.7	---	---	---	20.0	17.0	18.8
17	18.0	15.0	16.5	21.0	19.0	19.9	---	---	---	20.0	17.0	18.9
18	19.0	15.0	16.9	22.0	19.0	20.6	---	---	---	20.0	17.0	18.9
19	19.0	15.0	17.4	21.0	20.0	20.6	---	---	---	19.0	16.9	18.0
20	19.0	16.0	17.5	23.0	19.0	20.9	---	---	---	18.9	15.9	17.8
21	19.0	16.0	17.5	23.0	20.0	21.4	---	---	---	19.9	16.9	18.2
22	19.0	16.0	17.6	22.0	20.0	21.5	---	---	---	18.9	16.9	18.2
23	19.0	16.0	17.7	23.0	20.0	21.5	---	---	---	18.9	16.9	18.2
24	19.0	16.0	17.5	23.0	21.0	21.8	---	---	---	---	---	---
25	19.0	16.0	17.7	23.0	20.0	21.3	23.0	20.0	21.4	---	---	---
26	19.0	16.0	17.6	23.0	20.0	21.3	23.0	20.0	21.5	---	---	---
27	20.0	16.0	17.8	23.0	20.0	21.8	22.0	21.0	21.4	---	---	---
28	20.0	16.0	18.1	24.0	20.0	22.0	22.0	20.0	20.9	15.9	12.9	14.9
29	20.0	17.0	18.7	23.0	21.0	22.2	23.0	19.0	21.1	15.9	12.9	14.7
30	21.0	17.0	18.9	22.0	21.0	21.4	22.0	20.0	20.8	16.9	13.9	15.4
31	---	---	---	22.0	20.0	21.0	21.0	19.0	19.8	---	---	---
MONTH	21.0	11.9	16.2	24.0	17.0	20.7	---	---	---	---	---	---

## JORDAN RIVER BASIN

10170490 JORDAN RIVER AT SALT LAKE CITY, UT

Combined discharge, in cubic feet per second, of Jordan River and Surplus Canal

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	652	338	1300	1220	1190	1250	1420	1360	1750	1250	443	500
2	676	321	1270	1140	1170	1230	1280	1390	1780	1310	448	562
3	856	426	1260	1120	1180	1260	1230	2270	2060	1360	430	713
4	950	345	1400	1130	1200	1220	1230	1680	1830	1240	458	588
5	825	951	1280	1140	1270	1220	1210	1480	2070	1110	548	505
6	758	1260	1230	1170	1220	1240	1240	1360	1760	1030	545	490
7	725	1270	1190	1140	1230	1250	1270	1300	1730	1150	481	421
8	706	1500	1270	1150	1250	1220	1590	1310	1740	1180	459	390
9	699	1390	1190	1180	1210	1260	1450	1340	1680	1050	441	378
10	707	1420	1300	1180	1250	1290	1310	1310	1670	987	424	359
11	678	1420	1200	1180	1190	1260	1340	1270	1650	1010	552	365
12	712	1310	1050	1180	1250	1220	1340	1250	1680	974	572	355
13	699	1200	1060	1190	1250	1230	1320	1520	1740	945	490	341
14	699	1340	1060	1200	1250	1250	1250	1340	1770	1010	447	324
15	896	1330	1040	1220	1250	1260	1190	1390	1800	832	435	349
16	1030	1320	1050	1220	1270	1260	1170	1300	1920	700	446	274
17	548	1260	1080	1210	1290	1200	1180	1320	1950	739	433	228
18	414	1070	1060	1230	1250	1220	1170	1270	1820	668	435	235
19	364	1290	999	1400	1260	1240	1150	1290	1780	622	412	275
20	388	1330	1020	1280	1240	1240	1350	1320	1750	599	507	276
21	333	1340	948	1470	1290	1260	1540	1370	1710	565	670	264
22	311	1330	987	1220	1270	1230	1330	1410	1660	543	422	287
23	303	1300	1050	1240	1270	1220	1280	1470	1550	513	413	336
24	303	1300	1060	1270	1270	1210	1320	1820	1530	484	381	328
25	308	1250	1040	1220	1270	1230	1530	1900	1520	469	381	326
26	322	1290	1080	1260	1260	1250	1510	1910	1440	499	374	308
27	307	1290	1080	1320	1260	1200	1960	1950	1430	458	388	333
28	302	1330	1090	1240	1260	1160	1660	1980	1330	442	456	358
29	314	1350	1090	1210	---	1190	1640	2100	1280	511	470	356
30	543	1330	1090	1150	---	1200	1470	2200	1300	455	504	377
31	370	---	1160	1160	---	1280	---	2090	---	458	539	---
TOTAL	17698	35201	34984	37640	34820	38250	40930	48270	50680	25163	14404	11201
MEAN	571	1173	1129	1214	1244	1234	1364	1557	1689	812	465	373
MAX	1030	1500	1400	1470	1290	1290	1960	2270	2070	1360	670	713
MIN	302	321	948	1120	1170	1160	1150	1250	1280	442	374	228
AC-FT	35100	69820	69390	74660	69070	75870	81180	95740	100500	49910	28570	22220



10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT  
(Hydrologic bench mark station)

LOCATION.--Lat 40°46'48", long 111°48'19", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 35, T. 1 N., R. 1 E., Salt Lake County, Hydrologic Unit 16020204, on right bank 0.4 mi upstream from dam forming Red Butte Reservoir, and 1.7 mi north-east of Fort Douglas.

DRAINAGE AREA.--7.25 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. Figures of monthly discharge for January 1942 to September 1963, collected by Corps of Engineers, U.S. Army, available in files of Salt Lake City District Office, Geological Survey.

GAGE.--Water-stage recorder. Elevation of gage is 5,400 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105 ft<sup>3</sup>/s May 28, 1983, maximum gage height, 3.81 ft May 17, 1984; minimum, 0.17 ft<sup>3</sup>/s Nov 20, 1992, possible ice jam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 3	1700	*23	*2.17				

Minimum daily discharge, 1.8 ft<sup>3</sup>/s, Dec 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.1	2.8	2.4	2.5	3.4	5.3	18	13	5.8	e3.4	2.7
2	3.4	3.1	2.8	2.4	2.5	3.4	5.1	18	13	5.7	e3.4	2.9
3	3.7	3.1	2.8	2.4	2.4	3.5	5.0	22	12	5.5	e3.4	3.1
4	3.9	3.0	2.8	2.4	2.4	3.5	4.9	22	12	5.3	3.4	3.0
5	3.6	3.0	2.7	2.3	2.5	3.4	4.8	21	12	5.3	3.4	2.8
6	3.5	3.2	2.6	2.3	2.5	3.4	4.9	21	11	5.2	3.4	2.7
7	3.4	3.1	2.6	2.3	2.6	3.4	5.1	21	11	5.2	3.3	2.7
8	3.4	3.2	2.6	2.3	2.8	3.4	6.0	21	10	5.1	3.2	2.7
9	3.4	3.1	2.6	2.3	3.3	3.4	6.3	22	10	5.0	3.1	2.6
10	3.4	3.0	2.5	2.3	e3.3	3.4	6.5	21	9.9	4.9	3.1	2.6
11	3.4	2.9	2.5	2.3	e3.2	3.4	6.7	20	9.5	4.8	e3.2	2.6
12	3.3	2.9	2.5	2.3	3.1	3.4	7.8	20	9.2	4.7	3.1	2.6
13	3.2	2.9	2.5	2.3	3.1	3.4	9.3	22	8.9	4.6	3.0	2.5
14	3.2	3.0	2.5	2.3	3.1	3.5	10	21	8.6	4.7	2.9	2.5
15	3.3	3.1	2.5	2.3	3.0	3.7	10	21	8.4	4.6	2.9	2.5
16	3.3	3.0	2.4	2.4	e3.0	4.0	8.5	20	8.2	4.6	2.9	2.5
17	3.2	3.0	2.4	2.3	e3.0	4.2	8.2	19	8.0	4.5	2.8	2.5
18	3.2	3.0	2.4	2.5	e2.9	4.5	8.3	19	7.8	4.4	2.8	2.4
19	3.2	2.9	2.4	2.6	e2.9	4.9	8.5	18	7.6	4.3	2.8	2.5
20	3.1	2.8	2.1	2.6	e2.8	5.4	11	18	e7.5	4.2	2.9	2.5
21	3.0	2.8	1.8	2.5	e2.8	5.9	14	18	e7.0	4.1	2.9	2.4
22	3.1	3.0	2.3	2.6	e2.7	5.9	13	17	7.1	4.0	2.8	2.4
23	3.1	3.0	2.2	2.6	e2.8	5.9	12	16	6.9	3.9	2.7	2.4
24	3.1	3.0	e2.2	2.5	e2.8	5.9	11	16	6.7	3.9	2.7	2.4
25	3.1	2.9	e2.3	2.4	2.9	6.2	11	16	6.6	e3.8	2.7	2.4
26	3.2	2.8	e2.4	2.5	2.9	6.3	11	16	6.5	e3.8	2.6	2.4
27	3.1	2.8	2.4	2.5	2.9	6.2	15	15	6.3	e3.7	2.6	2.5
28	3.1	2.9	2.4	2.7	3.1	5.8	18	15	6.2	e3.5	2.6	2.5
29	3.1	2.9	2.4	2.3	---	5.6	20	14	6.1	3.5	2.6	2.5
30	3.3	2.8	2.4	2.4	---	5.5	20	14	6.0	3.5	2.7	2.5
31	3.1	---	2.5	2.4	---	5.5	---	14	---	3.5	2.7	---
TOTAL	101.8	89.3	76.3	74.7	79.8	139.3	287.2	576	263.0	139.6	92.0	77.3
MEAN	3.28	2.98	2.46	2.41	2.85	4.49	9.57	18.6	8.77	4.50	2.97	2.58
MAX	3.9	3.2	2.8	2.7	3.3	6.3	20	22	13	5.8	3.4	3.1
MIN	3.0	2.8	1.8	2.3	2.4	3.4	4.8	14	6.0	3.5	2.6	2.4
AC-FT	202	177	151	148	158	276	570	1140	522	277	182	153

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999		
MEAN	2.00	2.06	1.95	1.98	2.42	4.68	9.47	13.6	7.12	3.54	2.28	1.92																										
MAX	3.86	3.53	3.37	3.46	7.00	12.8	22.2	50.5	29.7	9.22	5.77	4.10																										
(WY)	1984	1984	1984	1971	1986	1983	1986	1983	1983	1983	1983	1983																										
MIN	.68	.93	.91	.83	1.00	1.06	1.79	1.55	.95	.60	.44	.47																										
(WY)	1991	1991	1964	1964	1964	1964	1990	1990	1992	1990	1990	1990																										

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1964 - 1999

ANNUAL TOTAL	2687.8	1996.3	
ANNUAL MEAN	7.36	5.47	4.42
HIGHEST ANNUAL MEAN			12.5
LOWEST ANNUAL MEAN			1.12
HIGHEST DAILY MEAN	33	22	95
LOWEST DAILY MEAN	1.8	1.8	.38
ANNUAL SEVEN-DAY MINIMUM	2.1	2.2	.39
ANNUAL RUNOFF (AC-FT)	5330	3960	3200
10 PERCENT EXCEEDS	18	13	10
50 PERCENT EXCEEDS	3.8	3.2	2.5
90 PERCENT EXCEEDS	2.4	2.4	1.1

e Estimated

## JORDAN RIVER BASIN

10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT--Continued  
(Hydrologic bench mark station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1964 to September 1995, October 1998 to September 30, 1999.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: April 1964 to September 1978, October 1998 to September 30, 1999.

INSTRUMENTATION.--Temperature Recorder April 1975 to September 1978, October 1998 to September 30, 1999.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum 24.0°C, Jul 29, 31, Aug 1, 3, 4, 1969; minimum, 0.0°C, many days during winter period of most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 14.3°C, Jul 24; minimum, 0.0°C, many days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	7.6	5.4	6.5	6.6	4.9	5.8	2.9	1.7	2.3
2	---	---	---	6.8	5.8	6.3	5.9	4.0	5.0	1.8	.5	1.2
3	---	---	---	5.8	3.8	5.0	5.6	3.4	4.5	1.0	.0	.3
4	---	---	---	5.2	2.7	3.9	5.5	1.1	3.3	.8	.0	.2
5	---	---	---	6.0	3.7	4.7	1.5	.0	.9	2.4	.6	1.6
6	---	---	---	4.1	.0	1.8	1.0	.0	.3	2.6	1.1	1.9
7	---	---	---	4.0	1.8	2.9	1.3	.0	.5	3.0	1.9	2.5
8	---	---	---	4.0	2.4	3.3	2.3	.3	1.3	2.3	1.0	1.6
9	---	---	---	3.5	1.5	2.4	1.8	.3	1.0	2.3	.8	1.5
10	---	---	---	3.7	2.0	2.8	.7	.0	.1	3.8	2.2	2.9
11	---	---	---	4.3	2.6	3.3	1.3	.0	.6	3.2	1.8	2.5
12	---	---	---	3.5	1.5	2.5	2.4	1.1	1.7	3.0	2.1	2.6
13	---	---	---	4.0	1.9	2.9	2.6	1.5	1.9	3.5	1.9	2.6
14	---	---	---	4.6	2.6	3.4	3.2	1.8	2.4	2.4	.7	1.6
15	---	---	---	5.4	3.7	4.3	2.6	1.1	1.9	4.0	2.3	2.9
16	---	---	---	4.9	3.0	4.0	2.4	.8	1.6	3.4	2.1	2.7
17	---	---	---	5.2	4.1	4.6	2.6	1.1	1.8	3.4	2.1	2.7
18	---	---	---	4.8	3.3	4.1	2.6	1.0	1.9	3.7	3.0	3.4
19	---	---	---	4.0	2.3	3.0	1.0	.0	.2	3.7	2.7	3.1
20	---	---	---	3.2	1.5	2.2	.2	.0	.1	3.7	2.6	3.1
21	---	---	---	4.9	2.6	4.0	.7	.2	.4	2.6	.0	.6
22	9.3	6.6	7.9	5.4	4.4	4.9	.7	.3	.6	2.3	.7	1.5
23	8.8	6.6	7.7	6.3	4.0	5.1	.3	.2	.3	3.0	1.8	2.4
24	8.3	5.4	6.8	5.7	3.1	4.9	.3	.2	.2	2.4	1.6	2.0
25	9.3	7.6	8.2	5.4	2.7	3.9	1.9	.3	1.0	2.7	1.8	2.2
26	9.1	7.7	8.3	6.0	3.4	4.5	2.6	1.9	2.3	2.3	1.0	1.7
27	8.8	6.6	7.7	6.5	3.8	5.1	3.0	2.4	2.6	2.3	.6	1.4
28	7.9	5.9	7.0	5.9	5.4	5.6	3.2	2.4	2.8	.6	.0	.0
29	8.0	6.3	7.2	5.9	5.2	5.5	3.8	2.9	3.3	.3	.0	.2
30	6.8	6.2	6.5	6.3	4.8	5.5	4.1	2.7	3.2	1.1	.0	.5
31	7.6	5.2	6.6	---	---	---	3.4	1.9	2.7	2.9	.9	1.9
MONTH	---	---	---	7.6	.0	4.1	6.6	.0	1.8	4.0	.0	1.9

## JORDAN RIVER BASIN

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10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.9	.3	1.1	5.1	3.1	3.9	3.8	.0	1.6	9.9	4.3	6.3
2	1.6	.0	.6	5.2	1.5	3.1	4.8	1.3	2.9	7.9	5.1	6.2
3	2.9	1.5	1.9	4.8	2.4	3.5	5.6	.7	3.1	5.8	3.4	4.6
4	3.4	1.5	2.5	4.3	1.5	3.0	7.1	1.8	3.7	5.1	3.5	4.4
5	2.9	1.8	2.4	3.2	.0	1.3	4.8	1.6	3.3	8.0	3.7	5.2
6	4.0	1.9	2.8	5.1	.8	2.7	6.0	3.5	4.6	9.4	3.8	5.9
7	3.8	2.9	3.3	4.5	2.6	3.5	7.4	1.5	4.3	10.8	4.6	7.0
8	4.1	2.6	3.4	4.6	1.6	3.0	6.8	1.1	3.6	10.5	5.7	7.5
9	5.1	2.9	4.0	4.5	.7	3.1	4.1	.0	1.9	7.6	4.7	6.0
10	2.9	.2	.9	4.3	.5	2.2	6.0	1.5	3.2	7.7	4.1	5.3
11	.7	.0	.2	4.9	2.4	3.3	6.8	1.8	3.9	9.3	3.5	5.7
12	1.3	.2	.5	4.8	2.2	3.1	8.0	3.2	5.1	9.1	4.9	6.7
13	2.7	.2	1.3	6.2	1.1	3.3	9.0	3.5	5.5	9.4	6.1	7.2
14	4.0	1.9	2.8	6.9	2.1	4.1	8.0	3.0	4.9	9.9	5.2	7.0
15	3.2	.8	2.0	7.4	3.4	4.9	7.9	2.9	4.6	8.0	4.8	6.0
16	3.7	.8	2.1	7.4	2.7	4.6	8.3	2.4	4.7	8.5	4.8	6.1
17	3.0	2.4	2.7	7.1	2.1	4.1	9.6	3.2	5.7	10.6	4.3	6.8
18	3.2	1.0	2.3	7.9	2.6	4.7	10.6	4.3	6.6	11.4	5.6	7.8
19	3.5	1.5	2.7	8.5	3.2	5.2	10.2	4.8	6.8	9.9	6.0	7.7
20	2.7	.0	1.3	7.4	3.5	5.2	6.2	5.0	5.7	11.9	5.9	8.2
21	3.4	.8	2.0	7.4	3.7	5.2	6.5	4.3	5.2	10.8	6.5	8.3
22	3.2	.8	1.8	7.7	3.5	5.0	6.2	3.8	5.0	12.9	6.6	9.1
23	5.1	1.9	3.2	7.9	3.0	5.0	6.2	3.8	4.9	12.3	7.6	9.3
24	5.6	1.8	3.3	8.8	3.0	5.4	8.0	4.0	5.6	11.4	7.9	9.3
25	4.6	2.3	3.2	9.1	3.5	5.9	6.0	4.4	5.1	12.0	7.7	9.2
26	4.3	1.1	2.3	6.9	4.1	5.3	9.1	4.1	6.3	12.5	7.4	9.3
27	4.6	.8	2.4	6.0	2.7	4.3	6.9	5.5	6.0	11.7	7.6	9.1
28	6.3	2.4	3.8	6.9	1.9	3.9	7.1	5.4	6.0	12.5	7.4	9.4
29	---	---	---	8.2	2.3	4.8	9.0	5.1	6.3	10.6	7.9	9.0
30	---	---	---	6.8	3.9	5.4	8.0	4.9	6.0	11.1	7.6	8.9
31	---	---	---	3.9	.7	2.9	---	---	---	9.6	7.2	8.1
MONTH	6.3	.0	2.2	9.1	.0	4.0	10.6	.0	4.7	12.9	3.4	7.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	10.3	6.6	8.3	13.3	8.8	10.8	13.9	10.0	11.6	12.3	9.6	10.9
2	8.8	7.4	8.0	13.6	9.3	11.2	14.0	10.3	11.9	11.2	9.9	10.7
3	10.8	6.9	8.4	13.9	10.2	11.8	12.3	11.1	11.7	10.0	9.0	9.4
4	9.1	6.8	7.9	13.9	10.2	11.6	13.6	10.8	11.9	10.6	7.4	8.9
5	8.2	6.5	7.3	13.3	9.0	10.9	13.1	10.5	11.6	11.1	7.7	9.3
6	9.0	7.3	8.0	13.9	9.4	11.4	14.0	10.5	11.9	12.0	8.3	10.0
7	11.7	7.6	9.1	12.6	10.3	11.5	14.0	10.3	12.0	11.2	8.3	9.7
8	10.8	7.1	8.7	13.6	10.2	11.6	13.9	10.3	11.9	11.1	7.3	9.0
9	10.9	6.5	8.5	13.4	9.3	11.1	14.0	10.5	12.1	11.2	8.5	9.8
10	10.3	7.3	8.6	12.9	9.3	11.0	12.3	10.8	11.6	12.0	9.6	10.6
11	11.5	6.8	8.8	13.7	9.4	11.3	11.3	10.3	10.8	12.0	9.3	10.3
12	12.0	7.1	9.1	13.7	9.4	11.4	12.8	9.3	10.8	11.1	7.9	9.4
13	12.5	7.7	9.7	13.3	9.9	11.4	13.7	9.9	11.5	11.1	7.6	9.2
14	12.3	8.3	10.0	12.2	10.3	11.0	13.6	10.2	11.8	11.5	8.6	10.0
15	12.8	8.8	10.4	13.3	9.9	11.3	14.0	11.2	12.3	11.4	8.3	9.7
16	12.3	9.3	10.4	11.5	10.0	10.5	13.3	9.6	11.3	11.4	8.5	9.9
17	12.6	9.0	10.4	12.8	9.9	11.2	13.7	10.5	11.8	11.7	8.6	10.1
18	12.8	8.5	10.4	13.6	9.9	11.5	13.9	10.3	11.8	11.5	8.6	10.0
19	13.3	9.0	10.7	12.6	10.2	11.2	13.6	10.9	12.1	10.8	9.6	10.1
20	13.3	8.8	10.7	14.0	9.9	11.7	14.2	11.1	12.3	11.2	8.3	9.7
21	12.2	9.3	10.4	14.0	10.2	11.8	14.0	10.9	12.3	11.1	8.0	9.4
22	12.8	8.6	10.3	13.7	10.3	11.8	14.2	10.9	12.3	10.9	7.7	9.2
23	12.5	8.5	10.2	14.2	10.0	11.8	14.2	11.1	12.4	11.1	8.6	9.8
24	12.6	8.5	10.3	14.3	10.5	12.0	13.1	11.2	12.1	11.4	8.8	10.0
25	12.8	9.1	10.6	13.4	9.6	11.4	14.0	10.8	12.2	11.2	8.2	9.7
26	12.5	8.3	10.1	13.6	9.6	11.3	13.4	10.5	11.9	10.0	6.6	8.2
27	12.3	8.3	10.1	14.2	10.5	12.1	13.3	11.2	12.1	7.1	4.8	5.9
28	12.5	8.0	10.0	14.2	10.8	12.3	13.3	10.8	12.0	7.1	4.3	5.6
29	12.5	8.3	10.2	13.7	11.4	12.5	13.9	10.8	12.1	7.7	4.1	5.9
30	12.9	8.8	10.5	13.1	11.2	12.1	13.3	11.2	12.2	8.8	5.2	6.9
31	---	---	---	13.4	10.8	11.7	12.8	10.8	11.9	---	---	---
MONTH	13.3	6.5	9.5	14.3	8.8	11.5	14.2	9.3	11.9	12.3	4.1	9.2

## 10172700 VERNON CREEK NEAR VERNON, UT

LOCATION.--Lat 39°58'46", long 112°22'46", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 2, T. 10 S., R. 5 W., Tooele County, Hydrologic Unit 16020304, on right bank 6.6 mi upstream from confluence with Dutch Creek forming Faust Creek and 8.3 mi southeast of Vernon.

DRAINAGE AREA.--25.0 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above sea level, from AMS topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 825 ft<sup>3</sup>/s Aug. 27, 1972, gage height, 5.70 ft, based on slope-area measurement; minimum daily, 0.41 ft<sup>3</sup>/s Nov. 20, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 25	1100	12	1.23	Sep 19	1400	*23	*1.40
Jul 7	2045	17	1.34				

Minimum daily discharge, 2.9 ft<sup>3</sup>/s, Jul 24-28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	6.2	6.0	5.4	5.0	e4.7	e4.7	5.8	5.0	3.8	3.4	3.7
2	6.4	6.8	5.8	5.0	4.7	e4.7	e4.7	6.0	5.6	3.7	3.3	3.6
3	6.5	6.2	5.8	5.0	4.7	e4.7	e4.7	8.6	5.7	3.7	3.4	3.6
4	6.6	6.2	6.0	5.0	4.7	e4.7	e4.7	8.2	5.4	3.7	3.3	3.7
5	6.6	6.2	6.0	5.4	4.7	e4.7	e4.7	7.8	5.8	3.7	3.3	3.5
6	6.5	6.4	5.8	5.0	4.7	e4.7	e4.7	7.3	5.4	3.7	3.3	3.5
7	6.4	6.3	5.8	5.0	4.7	e4.7	e4.7	6.9	5.3	4.9	3.3	3.5
8	6.2	6.4	5.8	5.0	4.8	e4.7	e4.7	6.6	5.0	4.0	3.3	3.5
9	6.2	6.2	5.8	5.0	5.2	e4.7	e4.7	7.0	4.9	3.7	3.3	3.5
10	6.2	6.2	5.8	5.0	5.4	e4.7	e4.7	7.0	4.7	3.6	3.4	3.5
11	6.2	6.2	5.5	5.0	5.0	e4.7	e4.7	6.9	4.7	3.6	3.6	3.5
12	6.2	6.2	5.4	5.0	5.0	e4.7	e4.7	6.6	4.6	3.5	3.5	3.6
13	6.2	6.2	5.4	5.0	5.0	e4.7	e4.7	6.8	4.4	3.5	3.3	3.6
14	6.3	6.3	5.4	5.0	5.0	e4.7	4.7	6.6	4.4	3.6	3.3	3.7
15	6.6	6.2	5.4	5.0	5.0	e4.7	4.7	6.6	4.4	3.7	3.3	3.7
16	6.6	6.2	5.4	5.0	5.0	e4.7	4.7	6.6	4.5	3.5	3.3	3.7
17	6.5	6.2	5.4	5.0	5.0	e4.7	4.7	6.2	4.7	3.6	3.3	3.5
18	6.3	6.2	5.4	5.0	5.0	e4.7	4.7	6.0	4.7	3.4	3.3	3.5
19	6.4	6.2	5.4	5.0	5.0	e4.7	4.7	5.8	4.6	3.2	3.4	4.6
20	6.3	6.0	5.4	5.1	4.9	e4.7	4.7	5.8	4.3	3.1	3.6	3.9
21	6.3	5.8	5.4	5.5	5.0	e4.7	4.7	5.8	4.0	3.0	3.5	3.7
22	6.4	6.1	e5.2	5.2	4.8	e4.7	4.7	5.8	4.3	3.0	3.6	3.5
23	6.2	6.1	e4.8	5.0	4.7	e4.7	4.7	5.8	4.2	3.0	3.6	3.6
24	6.2	6.0	e4.4	5.0	e4.7	e4.7	4.7	5.8	3.9	2.9	3.5	3.7
25	7.2	6.2	e4.0	5.0	e4.7	e4.7	4.7	5.8	3.7	2.9	3.6	3.5
26	6.9	5.8	e4.2	5.0	e4.7	e4.7	4.7	5.6	3.8	2.9	3.7	3.6
27	6.6	5.8	e4.3	5.0	e4.7	e4.7	4.7	5.4	3.8	2.9	3.7	3.7
28	6.4	6.0	e4.8	5.0	e4.7	e4.7	5.1	5.4	3.8	2.9	3.7	3.7
29	6.6	6.2	5.4	4.9	---	e4.7	5.6	5.4	3.8	3.1	3.6	3.7
30	6.7	6.1	5.4	5.0	---	e4.7	5.8	5.3	3.7	3.5	4.0	3.7
31	6.6	---	5.4	5.0	---	e4.7	---	5.0	---	3.5	3.9	---
TOTAL	199.8	185.1	166.0	156.5	136.5	145.7	143.4	196.2	137.1	106.8	107.6	109.3
MEAN	6.45	6.17	5.35	5.05	4.88	4.70	4.78	6.33	4.57	3.45	3.47	3.64
MAX	7.2	6.8	6.0	5.5	5.4	4.7	5.8	8.6	5.8	4.9	4.0	4.6
MIN	6.2	5.8	4.0	4.9	4.7	4.7	4.7	5.0	3.7	2.9	3.3	3.5
AC-FT	396	367	329	310	271	289	284	389	272	212	213	217

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1999, BY WATER YEAR (WY)

MEAN	3.13	3.06	2.94	2.91	2.98	3.46	5.83	6.90	4.38	3.44	3.13	3.10
MAX	9.08	8.89	7.93	7.92	7.65	9.30	21.6	40.0	19.3	12.3	10.1	9.61
(WY)	1984	1985	1985	1985	1985	1985	1983	1983	1983	1983	1983	1983
MIN	1.06	1.20	1.23	1.08	1.32	1.42	1.42	1.20	1.20	1.05	1.01	1.11
(WY)	1960	1960	1960	1961	1961	1961	1961	1961	1961	1961	1961	1959

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1959 - 1999

ANNUAL TOTAL	2824.2	1790.0	
ANNUAL MEAN	7.74	4.90	3.77
HIGHEST ANNUAL MEAN			12.0
LOWEST ANNUAL MEAN			1.26
HIGHEST DAILY MEAN	68	8.6	70
LOWEST DAILY MEAN	2.8	2.9	.84
ANNUAL SEVEN-DAY MINIMUM	2.9	2.9	.93
ANNUAL RUNOFF (AC-FT)	5600	3550	2730
10 PERCENT EXCEEDS	13	6.3	7.4
50 PERCENT EXCEEDS	6.2	4.7	2.6
90 PERCENT EXCEEDS	3.2	3.5	1.5

e Estimated

## 10172765 CLOVER CREEK ABOVE BIG HOLLOW, NEAR CLOVER, UT

LOCATION.--Lat 40°20'06", long 112°31'39", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 33, T. 5 S., R. 6 W., Tooele County, Hydrologic Unit 16020304, on left bank 60 ft south of State Highway 199 at milepost 15.9, and 4.6 mi west of St. John.

DRAINAGE AREA.--6.71 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1984 to current year.

GAGE.--Water-stage recorder and sharp crested weir. Elevation of gage is 5,660 ft above sea level, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47 ft<sup>3</sup>/s June 6, 1995, gage height, 2.26 ft; minimum daily discharge, 0.74 ft<sup>3</sup>/s Jan. 5, 1993.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peak of Aug 13, 1965, 87.0 ft<sup>3</sup>/s from crest stage gage located upstream and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24 ft<sup>3</sup>/s, May 26, gage height, 1.89 ft; minimum daily discharge, 2.5 ft<sup>3</sup>/s, several days in Feb and Mar.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	5.4	4.4	3.5	2.9	2.7	3.6	11	16	10	7.2	5.1
2	6.9	5.4	4.1	3.5	2.9	2.7	3.5	9.9	15	10	7.1	5.1
3	6.9	5.1	4.0	3.5	2.9	2.7	3.3	10	14	9.7	6.9	5.1
4	6.9	5.1	4.0	3.5	2.9	2.7	3.2	11	14	9.4	6.9	5.1
5	6.9	5.1	4.0	3.5	2.9	2.7	3.2	11	13	9.2	6.9	5.1
6	6.8	5.1	4.0	3.3	2.9	2.7	3.2	11	13	9.0	6.5	5.1
7	6.6	5.1	4.0	3.2	2.9	2.7	3.1	12	18	9.0	6.0	5.1
8	6.6	5.1	4.0	3.2	2.9	2.6	2.9	13	20	9.1	5.9	5.0
9	6.6	5.1	4.0	3.2	2.9	2.5	2.9	16	18	8.8	5.7	4.8
10	6.6	4.8	4.0	3.2	2.9	2.5	2.9	15	17	8.6	5.9	4.8
11	6.5	4.8	4.0	3.2	2.9	2.5	2.9	14	15	8.2	6.0	4.8
12	6.3	4.8	4.0	3.2	2.9	2.6	2.9	12	15	8.1	6.0	4.8
13	6.3	4.7	4.0	3.2	2.9	2.5	3.3	12	14	7.8	6.0	4.5
14	6.3	4.5	4.0	3.2	2.9	2.5	4.7	13	15	7.8	6.0	4.4
15	6.3	4.5	4.0	3.2	2.9	2.6	4.7	13	15	7.7	6.0	4.3
16	6.3	4.5	4.0	3.2	2.8	2.7	4.5	12	16	7.5	6.0	4.3
17	6.3	4.5	4.0	3.2	2.7	3.0	4.7	11	15	7.5	5.9	4.3
18	6.3	4.5	4.0	3.2	2.7	3.5	5.5	11	14	7.4	5.7	4.3
19	6.3	4.8	4.0	3.2	2.7	4.0	6.8	11	14	7.5	5.7	4.3
20	6.3	4.8	4.0	3.2	2.7	4.5	7.1	12	13	7.5	5.7	4.2
21	6.3	4.8	4.0	3.2	2.5	4.3	6.8	13	13	7.7	5.9	4.0
22	6.2	4.8	4.0	3.2	2.6	4.3	6.0	15	12	7.5	5.9	4.0
23	6.0	4.7	3.9	3.2	2.5	4.1	5.4	18	12	7.2	5.7	4.0
24	5.9	4.5	3.7	3.2	2.5	4.0	5.1	21	12	7.0	5.7	4.0
25	5.7	4.5	3.7	3.2	2.6	4.3	5.0	21	12	6.9	5.7	4.0
26	5.7	4.5	3.7	3.2	2.7	4.5	4.9	21	11	6.9	5.4	4.0
27	5.6	4.5	3.7	3.1	2.6	4.4	8.3	22	11	6.9	5.3	4.0
28	5.4	4.5	3.7	2.9	2.7	4.0	13	20	11	6.9	5.3	4.0
29	5.4	4.5	3.7	2.9	---	3.7	13	22	10	6.9	5.3	4.0
30	5.4	4.5	3.7	2.9	---	3.5	13	21	10	7.2	5.3	3.9
31	5.4	---	3.7	2.9	---	3.6	---	19	---	7.4	5.1	---
TOTAL	193.9	143.5	122.0	99.5	77.8	101.6	159.4	453.9	418	248.3	184.6	134.4
MEAN	6.25	4.78	3.94	3.21	2.78	3.28	5.31	14.6	13.9	8.01	5.95	4.48
MAX	6.9	5.4	4.4	3.5	2.9	4.5	13	22	20	10	7.2	5.1
MIN	5.4	4.5	3.7	2.9	2.5	2.5	2.9	9.9	10	6.9	5.1	3.9
AC-FT	385	285	242	197	154	202	316	900	829	493	366	267

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1999, BY WATER YEAR (WY)

	MEAN	2.88	2.39	2.01	1.86	2.00	3.68	5.66	10.9	11.3	7.35	5.08	3.65
MAX	6.25	4.78	3.94	3.21	3.65	7.47	11.2	21.3	27.7	22.4	13.9	7.97	
(WY)	1999	1999	1999	1999	1986	1986	1998	1998	1998	1998	1998	1998	
MIN	1.00	1.02	.82	.84	.86	.90	1.83	1.89	2.28	1.64	1.32	1.04	
(WY)	1991	1993	1993	1993	1991	1991	1990	1990	1992	1990	1990	1990	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1986 - 1999

ANNUAL TOTAL	4005.8	2336.9	
ANNUAL MEAN	11.0	6.40	4.91
HIGHEST ANNUAL MEAN			10.5
LOWEST ANNUAL MEAN			1.51
HIGHEST DAILY MEAN	38	22	44
LOWEST DAILY MEAN	2.2	2.5	.74
ANNUAL SEVEN-DAY MINIMUM	2.2	2.5	.78
ANNUAL RUNOFF (AC-FT)	7950	4640	3560
10 PERCENT EXCEEDS	25	13	12
50 PERCENT EXCEEDS	6.9	5.0	2.9
90 PERCENT EXCEEDS	2.5	2.9	1.1

## TOOELE VALLEY

10172800 SOUTH WILLOW CREEK NEAR GRANTSVILLE, UT

LOCATION.--Lat 40°29'47", long 112°34'25", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 6, T. 4 S., R. 6 W., Tooele County, Hydrologic Unit 16020304, on right bank 200 ft upstream from Forest Service Guard Station, 1.7 mi above Wasatch National Forest boundary, 9.2 mi southwest of Grantsville, and 14.8 mi west of Tooele.

DRAINAGE AREA.--4.19 mi<sup>2</sup>. Area at crest-stage gage site, 3.26 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1963 to current year. Annual maximum only, July 1960 to July 1963, at crest-stage gage site.

REVISED RECORDS.--WDR UT-83-1: 1982.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,360 ft above sea level, from topographic map. Prior to July 23, 1963, crest-stage gage only, at site 1.4 mi upstream at different datum.

REMARKS.--Records good. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 118 ft<sup>3</sup>/s July 24, 1998, gage height, 2.45 ft from rating extended above 75 ft<sup>3</sup>/s by slope-conveyance methods; minimum daily discharge, 1.4 ft<sup>3</sup>/s Jan. 5, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft<sup>3</sup>/s and maximum(\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 16	1910	54	1.85				

Minimum daily discharge, 4.0 ft<sup>3</sup>/s several days in Jan, Feb and Mar.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	6.3	5.2	4.0	4.0	4.0	5.2	7.9	28	15	6.5	4.6
2	6.5	6.3	5.1	4.0	4.0	4.0	4.8	8.0	24	14	6.5	4.6
3	6.5	6.3	5.0	4.0	4.0	4.1	4.8	8.6	25	14	6.4	4.4
4	6.5	6.3	5.0	4.0	4.0	4.1	4.8	8.4	24	14	6.2	4.4
5	6.5	6.3	5.0	4.0	4.0	4.1	4.8	7.8	26	14	5.9	4.4
6	6.5	6.3	5.0	4.0	4.0	4.1	4.7	6.9	26	13	6.0	4.4
7	6.5	6.3	5.0	4.0	4.0	4.1	4.6	7.2	28	13	5.8	4.4
8	6.5	6.2	4.9	4.0	4.0	4.1	4.6	7.7	28	12	5.8	4.4
9	6.3	6.0	4.8	4.0	4.0	4.1	4.6	7.7	31	11	5.8	4.4
10	6.3	6.0	4.8	4.0	4.0	4.1	4.6	7.7	33	10	5.7	4.3
11	6.3	6.0	4.8	4.0	4.0	4.1	4.5	8.5	29	10	5.6	4.3
12	6.3	6.0	4.8	4.0	4.0	4.1	4.4	7.5	32	9.8	5.6	4.3
13	6.3	6.0	4.8	4.0	4.0	4.1	4.4	8.6	33	9.5	5.6	4.1
14	6.3	5.8	4.5	4.0	4.0	4.1	4.4	9.3	34	9.4	5.6	4.1
15	6.3	5.8	4.4	4.0	4.0	4.1	4.3	11	38	9.0	5.6	4.1
16	6.3	5.8	4.3	4.0	4.0	4.1	4.3	20	40	8.8	5.6	4.1
17	6.3	5.6	4.3	4.0	4.0	4.1	4.3	18	29	8.5	5.6	4.1
18	6.3	5.6	4.3	4.0	4.0	4.1	4.4	20	30	8.2	5.4	4.1
19	6.3	5.6	4.3	4.0	4.0	4.1	4.6	19	32	8.0	5.4	4.1
20	6.3	5.6	4.1	4.0	4.0	4.2	5.3	21	26	7.5	5.4	4.1
21	6.3	5.6	4.1	4.0	4.0	4.5	5.4	23	25	7.3	5.4	4.1
22	6.3	5.6	4.1	4.0	4.0	4.8	5.7	24	24	7.0	5.3	4.0
23	6.3	5.6	4.1	4.0	4.0	4.8	6.1	22	23	6.7	5.2	3.8
24	6.3	5.6	4.1	4.0	4.0	4.8	5.8	25	21	6.8	5.2	3.8
25	6.3	5.4	4.1	4.0	4.0	4.8	5.8	24	23	6.8	5.2	3.8
26	6.4	5.4	4.2	4.0	4.0	5.2	5.8	25	20	6.8	5.0	3.8
27	6.3	5.4	4.3	4.0	4.0	5.2	6.5	27	22	6.8	4.9	3.8
28	6.3	5.4	4.3	4.0	4.0	5.2	7.7	28	22	6.8	5.0	3.8
29	6.3	5.4	4.2	4.0	---	4.9	9.1	27	20	6.7	5.0	3.8
30	6.3	5.4	4.1	4.0	---	4.8	8.7	26	17	6.5	4.9	3.8
31	6.3	---	4.1	4.0	---	5.1	---	27	---	6.5	4.7	---
TOTAL	197.0	174.9	140.1	124.0	112.0	136.0	159.0	498.8	813	293.4	171.8	124.2
MEAN	6.35	5.83	4.52	4.00	4.00	4.39	5.30	16.1	27.1	9.46	5.54	4.14
MAX	6.5	6.3	5.2	4.0	4.0	5.2	9.1	28	40	15	6.5	4.6
MIN	6.3	5.4	4.1	4.0	4.0	4.0	4.3	6.9	17	6.5	4.7	3.8
AC-FT	391	347	278	246	222	270	315	989	1610	582	341	246

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

MEAN	3.71	3.44	3.07	2.99	2.97	3.73	6.49	16.4	20.3	10.1	5.38	4.24
MAX	7.59	6.57	5.79	5.61	5.84	7.13	12.0	40.0	46.0	24.6	12.6	9.54
(WY)	1984	1985	1985	1984	1984	1986	1986	1984	1984	1984	1984	1982
MIN	1.71	1.70	1.64	1.50	1.54	1.53	2.42	4.38	4.00	2.55	1.91	1.71
(WY)	1991	1991	1991	1991	1991	1991	1967	1977	1992	1992	1992	1992

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1964 - 1999

ANNUAL TOTAL	4272.0	2944.2	6.91
ANNUAL MEAN	11.7	8.07	14.9
HIGHEST ANNUAL MEAN			3.03
LOWEST ANNUAL MEAN			84
HIGHEST DAILY MEAN	50 Jun 14	40 Jun 16	1.4 Jun 1 1984
LOWEST DAILY MEAN	3.8 Feb 2	3.8 Sep 23	1.5 Jan 5 1993
ANNUAL SEVEN-DAY MINIMUM	3.8 Feb 17	3.8 Sep 23	1.5 Dec 24 1990
ANNUAL RUNOFF (AC-FT)	8470	5840	5010
10 PERCENT EXCEEDS	32	22	16
50 PERCENT EXCEEDS	6.4	5.4	4.0
90 PERCENT EXCEEDS	4.0	4.0	2.2

## 10172952 DUNN CREEK NEAR PARK VALLEY, UT

LOCATION.--Lat 41°51'31", long 113°19'35", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 15, T. 13 N., R. 13 W., Box Elder County, Hydrologic Unit 16020308, on right bank 150 ft upstream from diversion structure, 200 ft downstream from confluence of left hand and right hand forks, and 2.9 mi north of Park Valley.

DRAINAGE AREA.--8.72 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1971 to September 1973, October 1976 to current year.

REVISED RECORDS.--WDR UT-99-1: 1998, daily values.

GAGE.--Water-stage recorder. Elevation of gage is 6,250 ft above sea level, from topographic map. Prior to Aug. 26, 1982 at site 110 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversion for flood-flows, located approximately 300 ft upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 150 ft<sup>3</sup>/s May 28, 1983; minimum discharge, 0.14 ft<sup>3</sup>/s Mar 17, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 81 ft<sup>3</sup>/s, May 26, gage height, 2.93 ft; minimum daily discharge, 1.4 ft<sup>3</sup>/s, Dec 22-23, Jan 3-4, Mar 11.

 DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.7	2.0	e1.5	2.2	1.9	2.3	9.3	23	12	5.5	2.8
2	2.9	2.8	2.0	e1.5	2.1	1.8	2.7	9.1	23	12	5.3	2.8
3	3.5	2.5	1.9	e1.4	2.3	1.8	2.5	8.9	21	12	5.0	2.8
4	3.1	2.4	1.8	e1.4	2.1	1.8	2.4	8.3	16	12	4.4	2.8
5	3.0	2.5	1.5	e1.5	2.0	1.6	2.4	8.0	15	11	4.3	2.6
6	3.0	2.3	1.9	1.6	2.0	1.6	2.4	7.9	e16	11	4.2	2.5
7	2.9	2.3	1.9	1.7	2.0	1.6	2.5	8.0	e19	11	4.1	2.4
8	2.9	2.6	1.8	1.8	2.0	1.6	2.8	8.0	e23	11	4.1	2.4
9	2.8	2.2	e1.7	1.8	e1.9	1.6	2.5	8.1	e28	10	4.0	2.3
10	2.9	2.4	e1.7	1.9	e1.8	1.5	2.6	8.3	e31	9.7	4.1	2.3
11	2.8	2.5	e1.8	1.8	e1.9	1.4	2.7	8.4	30	9.2	4.4	2.2
12	2.7	2.5	e1.9	1.9	2.0	1.5	3.2	8.5	31	8.9	4.2	2.2
13	2.6	2.4	1.9	1.8	1.9	1.6	3.6	9.1	35	8.7	3.8	2.2
14	2.6	2.5	1.9	1.8	2.0	2.0	3.3	8.9	40	8.8	3.6	2.1
15	2.4	2.4	1.8	1.9	1.9	2.2	3.1	9.3	42	8.6	3.6	2.0
16	2.7	2.4	1.8	1.9	1.7	2.4	3.2	8.8	37	8.7	3.4	2.0
17	2.9	2.5	1.9	1.8	e1.7	2.4	3.6	8.7	34	8.5	3.3	2.0
18	2.9	2.4	1.5	1.9	e1.6	2.7	3.8	8.9	29	8.2	3.2	2.2
19	2.9	2.2	1.6	2.0	e1.7	3.2	3.8	9.8	27	8.0	3.2	2.2
20	2.9	2.1	e1.7	2.0	e1.7	3.2	3.9	12	27	7.8	3.1	2.2
21	2.9	2.3	e1.5	1.7	e1.6	3.5	3.8	16	26	7.7	3.3	2.1
22	3.0	2.2	e1.4	e1.9	e1.5	3.1	3.6	22	22	7.8	3.2	2.0
23	3.0	2.2	e1.4	e2.0	1.6	3.3	4.1	33	19	7.5	3.0	2.0
24	2.8	2.2	e1.5	e2.0	1.7	3.6	4.0	50	17	7.3	3.0	2.0
25	2.9	2.1	e1.5	e2.0	1.6	3.6	4.2	51	16	7.4	2.9	1.9
26	2.8	2.0	e1.5	e1.9	1.6	3.5	4.5	59	15	7.3	2.8	2.1
27	2.4	2.0	e1.6	e1.9	1.5	3.0	4.9	36	15	7.0	2.7	2.2
28	2.7	2.0	e1.6	e1.8	1.6	2.7	7.4	25	13	6.6	2.7	2.2
29	2.8	2.1	e1.7	e2.0	---	2.6	7.5	48	13	6.7	2.6	2.2
30	2.7	2.1	e1.7	2.1	---	2.5	11	49	13	6.1	3.1	2.2
31	2.7	---	e1.6	2.2	---	2.5	---	29	---	5.8	2.9	---
TOTAL	88.0	69.8	53.0	56.4	51.2	73.3	114.3	594.3	716	274.3	113.0	67.9
MEAN	2.84	2.33	1.71	1.82	1.83	2.36	3.81	19.2	23.9	8.85	3.65	2.26
MAX	3.5	2.8	2.0	2.2	2.3	3.6	11	59	42	12	5.5	2.8
MIN	2.4	2.0	1.4	1.4	1.5	1.4	2.3	7.9	13	5.8	2.6	1.9
AC-FT	175	138	105	112	102	145	227	1180	1420	544	224	135

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972-73, 1977-99, BY WATER YEAR (WY)

	1972	1973	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	1.92	1.61	1.33	1.28	1.40	2.50	5.44	18.9	20.3	7.52	3.51	2.21													
MAX	3.64	2.45	2.09	2.04	2.82	6.33	16.4	38.1	57.3	17.9	8.45	4.58													
(WY)	1985	1983	1983	1980	1986	1986	1986	1986	1983	1983	1984	1984													
MIN	.77	.75	.64	.59	.62	.85	1.15	3.40	3.13	1.25	.76	.61													
(WY)	1993	1995	1995	1995	1995	1977	1991	1977	1992	1994	1992	1994													

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1972-73, 1977-99

ANNUAL TOTAL	3319.2	2271.5	
ANNUAL MEAN	9.09	6.22	
HIGHEST ANNUAL MEAN			5.68
LOWEST ANNUAL MEAN			12.0
HIGHEST DAILY MEAN	60	Jun 3	150
LOWEST DAILY MEAN	1.2	Jan 1	.32
ANNUAL SEVEN-DAY MINIMUM	1.2	Jan 12	.42
ANNUAL RUNOFF (AC-FT)	6580	4510	4110
10 PERCENT EXCEEDS	28	15	13
50 PERCENT EXCEEDS	3.0	2.7	2.1
90 PERCENT EXCEEDS	1.4	1.7	.98

e Estimated



## SEVIER LAKE BASIN

10173450 MAMMOTH CREEK ABOVE WEST HATCH DITCH, NEAR HATCH, UT

LOCATION.--Lat 37°37'19", long 112°30'58", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 3, T. 37 S., R. 6 W., Garfield County, Hydrologic Unit 16030001, on left bank 0.5 mi upstream from West Hatch ditch diversion, 2 mi upstream from Spring Hollow, 4.5 mi upstream from mouth, and 5 mi southwest of Hatch.

DRAINAGE AREA.--105 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,300 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. One small diversion for irrigation upstream of station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 838 ft<sup>3</sup>/s June 19, 1983, gage height, 5.13 ft, from rating curve extended above 640 ft<sup>3</sup>/s, minimum recorded, 0.06 ft<sup>3</sup>/s Dec. 25, 1977, Jan. 1, 22, 1978, result of ice jam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 23	0130	*334	*3.64	No other peak greater than base discharge.			
Minimum daily discharge, 13.0 ft <sup>3</sup> /s, Dec 23-25.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	35	28	e17	e17	17	21	28	163	58	38	e40
2	41	34	27	e16	e17	17	20	28	176	55	36	e35
3	40	33	27	e17	e17	17	21	36	175	55	36	e32
4	40	32	27	e17	20	17	21	34	181	54	36	e30
5	40	32	e27	e18	20	17	20	32	170	54	35	e30
6	40	32	e26	e18	20	17	19	30	185	50	35	e30
7	40	32	e26	e20	20	17	18	37	197	49	e33	e25
8	39	33	e26	e20	20	17	18	55	192	51	e32	e25
9	37	e31	e26	e20	24	17	19	72	179	53	e31	25
10	36	e30	e26	e20	e22	17	18	81	169	51	e30	e25
11	36	e30	e26	e20	e20	17	18	86	159	51	e32	e25
12	36	32	e27	e20	e18	17	18	93	146	48	e32	e25
13	35	e30	e26	e20	e18	17	17	124	138	48	e30	e27
14	34	31	e26	e20	e18	17	17	182	131	49	e30	e30
15	35	31	e26	e18	e18	17	17	219	123	49	e30	e30
16	36	31	e25	e18	e18	17	17	207	116	46	e30	e32
17	36	31	e25	e18	e18	17	17	191	108	43	e30	e30
18	36	31	e24	e18	e18	16	18	213	102	42	e29	e30
19	35	e28	e23	e18	19	16	23	232	97	40	e29	e30
20	35	e27	e22	e18	e17	17	31	235	93	39	e29	e27
21	38	e28	e18	e18	18	17	34	257	90	38	e31	e27
22	39	29	e15	e18	e18	17	35	275	87	37	e34	e26
23	36	29	e13	e17	e18	18	34	280	84	36	e30	e28
24	35	28	e13	21	e18	18	31	259	80	36	e30	e26
25	39	28	e13	20	18	17	28	230	75	35	e30	e25
26	41	28	e14	20	18	18	27	219	72	35	e30	e25
27	39	28	e15	21	17	19	29	215	68	35	e30	e25
28	37	28	e16	e17	17	20	32	209	65	40	e30	e25
29	37	28	e17	e17	---	19	32	200	63	45	e30	e24
30	37	28	e18	e17	---	20	30	186	60	48	e34	e22
31	36	---	e18	e17	---	22	---	175	---	42	e38	---
TOTAL	1162	908	686	574	521	543	700	4720	3744	1412	990	836
MEAN	37.5	30.3	22.1	18.5	18.6	17.5	23.3	152	125	45.5	31.9	27.9
MAX	41	35	28	21	24	22	35	280	197	58	38	40
MIN	34	27	13	16	17	16	17	28	60	35	29	22
AC-FT	2300	1800	1360	1140	1030	1080	1390	9360	7430	2800	1960	1660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	21.4	17.8	14.0	11.8	11.5	13.1	28.7	174	177	61.4	33.7	26.3
MAX	56.8	44.5	34.9	24.2	23.0	24.7	75.4	373	616	284	105	65.1
(WY)	1984	1984	1984	1984	1973	1973	1985	1969	1983	1983	1983	1983
MIN	4.35	3.98	4.39	2.91	3.36	4.28	6.19	9.69	12.5	10.3	7.60	5.64
(WY)	1978	1978	1978	1978	1978	1991	1991	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1965 - 1999
ANNUAL TOTAL	28257.0	16796	
ANNUAL MEAN	77.4	46.0	49.4
HIGHEST ANNUAL MEAN			112
LOWEST ANNUAL MEAN			9.99
HIGHEST DAILY MEAN	483	280	720
LOWEST DAILY MEAN	7.0	13	1.1
ANNUAL SEVEN-DAY MINIMUM	7.1	14	1.9
ANNUAL RUNOFF (AC-FT)	56050	33310	35770
10 PERCENT EXCEEDS	270	104	119
50 PERCENT EXCEEDS	35	30	19
90 PERCENT EXCEEDS	8.6	17	7.5

e Estimated

## 10174500 SEVIER RIVER AT HATCH, UT

LOCATION.--Lat 37°39'04", long 112°25'46", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 28, T. 36 S., R. 5 W., Garfield County, Hydrologic Unit 16030001, on right bank 15 ft upstream of county road bridge, 0.2 mi east of Hatch, and 2.8 mi downstream from Mammoth Creek.

DRAINAGE AREA.--340 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1911 to September 1928, June 1939 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Hatchtown" 1911 and as "near Hatch" 1912.

REVISED RECORDS.--WSP 960: 1939-40. WSP 1284: 1916. WSP 1564: Drainage area.

GAGE.--Water-stage recorder. Crest-stage gage since Nov. 9, 1995. Elevation of gage is 6,870 ft above sea level, from river-profile map. Prior to Aug. 23, 1914, at sites about 2 mi upstream. Aug. 23, 1914 to Aug. 22, 1978 at various sites within 300 feet of current site, different datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Some diversions for irrigation upstream of station. No regulation since Hatchtown Dam failed in 1914.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined, occurred May 25, 1914, when Hatchtown Dam failed; maximum recorded, 1,490 ft<sup>3</sup>/s May 26, 1922, gage height, 5.25 ft, datum then in use; minimum daily, 10 ft<sup>3</sup>/s for several days in 1912 when water was stored in Hatchtown Reservoir. Minimum natural daily discharge, 21 ft<sup>3</sup>/s Sept. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 23	0345	*384	*2.04				
Minimum daily discharge, 61 ft <sup>3</sup> /s, Apr 17, 18.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	109	98	e75	e70	71	72	89	231	109	97	99
2	100	108	96	e72	e72	70	71	87	248	106	93	89
3	97	106	95	e73	74	70	71	98	255	106	93	84
4	101	105	95	e76	74	71	74	105	267	106	93	82
5	102	105	94	81	75	71	72	99	249	107	92	81
6	101	103	e90	82	73	70	70	96	256	104	91	78
7	102	103	e85	82	73	70	67	97	274	107	87	70
8	100	108	e85	80	77	70	68	110	266	108	85	70
9	98	106	e85	79	90	69	73	131	250	113	83	67
10	100	104	e85	81	e105	68	72	147	236	112	83	68
11	100	106	e85	82	e90	69	71	158	228	117	88	69
12	99	106	88	83	e78	68	68	163	218	113	86	70
13	99	103	88	e76	e75	67	67	183	209	117	83	72
14	98	107	89	e76	e75	67	67	240	199	119	82	79
15	100	107	88	e78	e75	67	66	281	189	115	83	80
16	108	106	88	81	77	68	65	282	181	110	82	83
17	108	105	89	82	78	68	61	267	176	107	78	80
18	107	104	88	83	79	69	61	282	168	104	79	82
19	105	101	89	83	78	69	68	302	162	101	77	80
20	103	97	91	83	74	69	76	305	160	99	79	74
21	112	98	e75	83	74	69	78	309	156	96	84	75
22	123	98	e70	e75	72	69	80	331	154	93	91	73
23	111	98	e70	e75	72	67	84	342	149	89	83	76
24	106	97	e70	80	72	66	86	327	142	86	82	73
25	123	97	e70	79	72	66	85	305	136	87	81	71
26	127	96	e70	78	71	66	86	293	129	86	81	69
27	127	95	e75	77	70	68	85	290	126	86	82	69
28	116	98	83	e70	70	68	91	283	120	90	81	69
29	112	102	84	e70	---	68	95	274	116	96	79	68
30	116	100	84	e69	---	68	93	260	114	101	85	66
31	113	---	84	e69	---	70	---	245	---	99	96	---
TOTAL	3321	3078	2626	2413	2135	2126	2243	6781	5764	3189	2639	2266
MEAN	107	103	84.7	77.8	76.2	68.6	74.8	219	192	103	85.1	75.5
MAX	127	109	98	83	105	71	95	342	274	119	97	99
MIN	97	95	70	69	70	66	61	87	114	86	77	66
AC-FT	6590	6110	5210	4790	4230	4220	4450	13450	11430	6330	5230	4490

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915-28, 1940-99, BY WATER YEAR (WY)

	MEAN	76.8	74.7	68.5	62.8	66.2	76.0	129	340	270	122	91.5	79.7
MAX	246	149	150	128	130	159	465	1012	1071	430	228	167	
(WY)	1917	1917	1922	1923	1922	1916	1916	1922	1983	1983	1983	1922	
MIN	36.8	36.9	36.2	37.1	36.6	38.5	44.0	40.8	44.2	38.1	30.4	28.3	
(WY)	1978	1978	1957	1991	1978	1957	1957	1977	1977	1977	1977	1977	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1915-28, 1940-99

ANNUAL TOTAL	64653	38581		
ANNUAL MEAN	177	106		
HIGHEST ANNUAL MEAN			122	
LOWEST ANNUAL MEAN			313	1922
HIGHEST DAILY MEAN	738	342	1430	May 26 1922
LOWEST DAILY MEAN	56	61	.00	Jul 31 1927
ANNUAL SEVEN-DAY MINIMUM	60	65	23	Aug 30 1977
ANNUAL RUNOFF (AC-FT)	128200	76530	88150	
10 PERCENT EXCEEDS	451	171	235	
50 PERCENT EXCEEDS	106	87	76	
90 PERCENT EXCEEDS	61	69	45	
e Estimated				

## SEVIER LAKE BASIN

10183500 SEVIER RIVER NEAR KINGSTON, UT

LOCATION.--Lat 38°12'22", long 112°12'25", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 16, T. 30 S., R. 3 W., Piute County, Hydrologic Unit 16030001, on left bank 1,000 ft upstream of bridge on State Highway 62, 1.1 mi west of Kingston, and 1.9 mi upstream of East Fork Sevier River.

DRAINAGE AREA.--1,131 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1914 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Sept. 20, 1918. Elevation of gage is 5,980 ft above sea level, from river-profile map. Prior to Sept. 20, 1918, at site 1 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Many irrigation diversions upstream of station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,000 ft<sup>3</sup>/s (including estimated flow of 360 ft<sup>3</sup>/s in overflow channel bypassing station), Mar. 4, 1938, gage height, 5.20 ft from rating curve extended above 600 ft<sup>3</sup>/s; minimum daily discharge, 1.6 ft<sup>3</sup>/s July 24, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 502 ft<sup>3</sup>/s, Oct 27, gage height, 2.38 ft; minimum daily discharge, 17 ft<sup>3</sup>/s, Jul 4, 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	261	225	e211	e170	e175	68	49	144	23	62	93
2	110	254	217	e205	e170	175	58	31	161	19	36	86
3	116	251	213	e195	e170	176	59	44	179	23	29	82
4	130	243	216	e180	e170	173	59	55	193	17	32	80
5	108	239	207	e180	e180	174	50	46	246	18	42	67
6	103	235	204	e185	e180	168	44	48	243	17	42	41
7	108	227	191	e185	e175	166	42	49	201	19	37	39
8	99	230	191	e185	e180	168	45	49	172	32	32	36
9	92	241	198	e180	e180	170	43	48	143	33	25	34
10	96	228	191	e180	e200	162	45	58	128	24	25	36
11	88	240	188	e180	e200	157	39	65	88	20	27	49
12	93	256	194	e180	e180	162	37	73	81	22	31	52
13	82	246	202	e180	e185	154	34	79	67	22	31	48
14	76	248	203	e180	e180	154	36	98	61	24	33	53
15	81	265	201	e180	e180	152	33	146	45	32	26	56
16	108	256	201	e180	e175	150	28	211	46	25	23	58
17	134	252	203	e180	e175	137	25	211	47	26	24	66
18	130	243	203	e180	e175	132	24	201	38	31	27	68
19	e130	232	205	e180	e180	131	22	182	39	32	40	83
20	e160	224	208	e180	e175	119	22	191	45	32	85	108
21	e180	221	205	e180	e175	109	24	197	45	32	108	109
22	237	223	e190	e180	e175	103	25	189	38	30	97	95
23	248	224	e180	e175	e180	100	24	181	34	33	69	90
24	212	220	e180	e180	e180	88	26	192	34	22	47	94
25	228	216	e180	e180	e180	85	28	189	29	22	48	76
26	289	220	e180	e180	e180	73	30	173	28	21	39	70
27	430	220	e180	e180	e175	75	31	181	25	20	29	63
28	343	222	e190	e170	e175	77	35	178	25	21	41	67
29	276	235	e190	e170	---	74	54	168	24	25	36	78
30	302	230	e207	e170	---	86	53	157	24	29	38	79
31	285	---	e207	e170	---	86	---	154	---	128	115	---
TOTAL	5175	7102	6150	5621	5000	4111	1143	3893	2673	874	1376	2056
MEAN	167	237	198	181	179	133	38.1	126	89.1	28.2	44.4	68.5
MAX	430	265	225	211	200	176	68	211	246	128	115	109
MIN	76	216	180	170	170	73	22	31	24	17	23	34
AC-FT	10260	14090	12200	11150	9920	8150	2270	7720	5300	1730	2730	4080

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1999, BY WATER YEAR (WY)

	MEAN	85.2	132	146	135	156	171	155	226	158	49.0	52.1	61.9
MAX	319	237	252	218	259	330	507	1154	1140	321	315	232	
(WY)	1917	1984	1984	1984	1924	1921	1916	1922	1983	1995	1916	1921	
MIN	6.90	29.6	34.3	45.0	74.7	65.5	16.3	8.73	7.44	4.89	5.36	7.01	
(WY)	1961	1932	1932	1932	1932	1957	1963	1959	1974	1971	1960	1960	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1915 - 1999
ANNUAL TOTAL	70009	45174	
ANNUAL MEAN	192	124	127
HIGHEST ANNUAL MEAN			359
LOWEST ANNUAL MEAN			49.4
HIGHEST DAILY MEAN	878	430	1560
LOWEST DAILY MEAN	33	17	1.6
ANNUAL SEVEN-DAY MINIMUM	35	19	2.9
ANNUAL RUNOFF (AC-FT)	138900	89600	91960
10 PERCENT EXCEEDS	364	222	228
50 PERCENT EXCEEDS	164	128	113
90 PERCENT EXCEEDS	67	26	12

e Estimated

## 10189000 EAST FORK SEVIER RIVER NEAR KINGSTON, UT

LOCATION.--Lat 38°11'47", long 112°08'49", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 13, T. 30 S., R. 3 W., Piute County, Hydrologic Unit 16030002, on right bank, about 2,200 ft upstream from bridge on State Highway 22, 2.3 mi east of Kingston, 4.7 mi upstream from mouth, and 10 mi downstream from Otter Creek Reservoir.

DRAINAGE AREA.--1,207 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1913 to current year.

REVISED RECORDS.--WSP 750: 1931-32. WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,160 ft above sea level, from river-profile map. Prior to Apr 29, 1914, staff gage at site 0.8 mi upstream at different datum. Apr 29, 1914 to Jun 2, 1939, water-stage recorder 4,700 ft downstream at different datum. Jun 3, 1939 to Jul 29, 1970, water-stage recorder 3,200 ft downstream at different datum. Jul 30, 1970 to Jul 12, 1983, water-stage recorder 760 ft downstream at same datum. Jul 12, 1983 to Apr 6, 1999, about 700 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream for irrigation and storage in Otter Creek Reservoir (capacity 52,700 acre-feet) 10 mi upstream; some flow regulated by reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,030 ft<sup>3</sup>/s, May 12, 1941, gage height, 5.05 ft from rating curve extended above 1,500 ft<sup>3</sup>/s, datum then in use; minimum, 1.0 ft<sup>3</sup>/s Jan 25, 1976, gage height, 0.52 ft, datum then in use, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 424 ft<sup>3</sup>/s, Jul 30-31, gage height, 5.94 ft; minimum daily discharge, 12 ft<sup>3</sup>/s, Nov 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	17	19	e17	21	68	56	92	141	349	362	272
2	23	17	19	e17	e22	125	56	179	145	349	368	253
3	18	17	19	e17	e23	89	57	263	73	364	366	241
4	17	18	20	e17	e23	137	58	267	64	364	362	225
5	15	19	19	e17	e21	127	59	262	54	367	364	210
6	15	16	e18	e19	e20	139	e47	261	50	368	397	195
7	14	16	e18	e19	e22	126	50	260	46	370	385	181
8	15	12	e18	e18	e22	127	55	258	44	373	377	166
9	16	13	e18	e18	e24	120	54	273	42	378	383	152
10	17	16	e18	e20	22	121	56	265	46	375	372	133
11	18	13	e18	e20	e23	121	56	227	50	375	369	121
12	19	14	e18	e19	e22	106	55	261	55	371	374	106
13	21	17	e18	e17	e24	64	53	225	51	374	368	96
14	25	19	e17	e19	e28	72	63	213	54	395	355	79
15	19	20	e16	e20	e32	103	66	197	51	392	341	43
16	19	20	e17	e20	e35	115	69	200	49	387	357	41
17	18	19	e18	e20	40	115	65	210	51	383	336	42
18	19	18	e18	e20	35	116	59	210	50	380	329	40
19	20	19	e18	e20	37	108	69	210	80	378	327	47
20	20	18	e18	e20	36	97	97	201	271	377	319	47
21	22	18	e14	e20	37	97	82	176	281	332	321	45
22	26	18	e14	e20	35	96	89	146	274	110	311	37
23	24	19	e14	e20	43	91	89	140	298	373	305	39
24	21	18	e15	e20	49	42	89	145	379	362	295	43
25	23	18	e15	e20	54	95	87	145	377	365	286	41
26	24	18	e16	21	55	97	91	147	365	367	277	40
27	24	18	e16	22	47	97	84	144	368	328	276	42
28	22	18	e17	21	49	97	86	142	368	322	283	36
29	19	18	e18	e20	---	97	96	143	365	360	266	41
30	17	19	e19	e20	---	97	94	134	361	374	278	42
31	16	---	e19	e21	---	54	---	135	---	371	275	---
TOTAL	609	520	539	599	901	3156	2087	6131	4903	11133	10384	3096
MEAN	19.6	17.3	17.4	19.3	32.2	102	69.6	198	163	359	335	103
MAX	26	20	20	22	55	139	97	273	379	395	397	272
MIN	14	12	14	17	20	42	47	92	42	110	266	36
AC-FT	1210	1030	1070	1190	1790	6260	4140	12160	9730	22080	20600	6140

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1999, BY WATER YEAR (WY)

	MEAN	36.4	26.8	22.3	22.1	26.5	40.2	75.8	166	149	167	137	85.0
MAX	241	151	128	156	146	171	398	1109	551	365	335	242	
(WY)	1923	1985	1939	1939	1986	1983	1942	1922	1983	1915	1999	1917	
MIN	9.12	8.97	8.25	7.00	7.19	11.7	15.0	28.4	28.0	31.3	18.0	18.4	
(WY)	1962	1965	1973	1960	1977	1956	1935	1945	1957	1936	1934	1934	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1914 - 1999
ANNUAL TOTAL	36261	44058	
ANNUAL MEAN	99.3	121	79.8
HIGHEST ANNUAL MEAN			201
LOWEST ANNUAL MEAN			33.5
HIGHEST DAILY MEAN	509	397	1740
LOWEST DAILY MEAN	11	12	5.5
ANNUAL SEVEN-DAY MINIMUM	11	14	5.5
ANNUAL RUNOFF (AC-FT)	71920	87390	57790
10 PERCENT EXCEEDS	223	365	210
50 PERCENT EXCEEDS	73	54	34
90 PERCENT EXCEEDS	16	17	13

e Estimated

## SEVIER LAKE BASIN

10191500 SEVIER RIVER BELOW PIUTE DAM, NEAR MARYSVALE, UT

LOCATION.--Lat 38°19'41", long 112°11'13", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 34, T. 28 S., R. 3 W., Piute County, Hydrologic Unit 16030003, on left bank 0.25 mi downstream of Piute Dam and 8.5 mi south of Marysvale.

DRAINAGE AREA.--2,441 mi<sup>2</sup>.

PERIOD OF RECORD.--May to August 1911, May 1912 to current year.

GAGE.--Water-stage recorder. Concrete control since April 23, 1979. Elevation of gage is 5,920 ft above sea level, from topographic map. Prior to May 4, 1912 nonrecording gage near present site at different datum. May 4, 1912 to Mar 31, 1935 water-stage recorder 0.1 mi downstream at different datum. Apr 1, 1935 to Apr 22, 1979 water-stage recorder 0.25 mi downstream. Datum lowered 0.2 ft Apr 7, 1936 and 0.5 ft Feb 26, 1970. Apr 23, 1979 to Sep 30, 1985 at datum 10.00 ft higher.

REMARKS.-- Records good. Flow regulated by Piute Reservoir, capacity 71,830 acre-feet.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft<sup>3</sup>/s May 23, 24, 1922, gage height, 4.45 ft site and datum then in use; practically no flow at times when reservoir gates are closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 927 ft<sup>3</sup>/s, Jun 28, gage height, 12.79 ft; minimum daily discharge, 19 ft<sup>3</sup>/s, Jun 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	247	220	271	189	51	177	146	37	643	415	427
2	27	247	234	273	78	49	131	96	67	665	420	394
3	47	247	244	276	58	49	84	181	92	703	431	384
4	68	247	238	285	58	49	58	123	76	690	430	379
5	56	247	238	327	58	49	31	140	184	672	435	374
6	56	149	202	338	58	49	39	167	306	583	435	355
7	56	27	47	338	55	49	97	176	305	554	461	331
8	56	21	88	338	51	83	122	177	272	467	481	350
9	55	114	242	338	52	280	137	170	199	325	449	339
10	47	367	242	338	53	281	132	210	167	361	493	333
11	47	295	241	338	51	260	116	297	144	351	510	332
12	66	294	240	338	51	229	137	311	52	280	402	319
13	85	302	238	338	51	229	156	328	19	280	546	317
14	92	352	238	338	53	229	189	335	36	266	488	312
15	92	354	238	337	55	229	235	350	58	201	463	264
16	79	347	238	316	55	229	272	329	73	203	458	215
17	68	351	238	296	55	229	280	332	247	252	493	190
18	68	371	242	296	55	206	300	367	186	271	526	134
19	49	380	254	296	55	176	340	413	257	284	554	75
20	47	379	261	283	55	165	406	392	370	316	546	79
21	47	379	262	275	55	109	426	373	505	351	476	131
22	47	379	261	274	55	110	422	387	527	395	458	152
23	47	377	261	272	55	110	394	328	563	488	430	165
24	47	370	261	272	55	110	354	261	567	468	397	165
25	48	289	261	275	54	121	290	261	560	481	434	165
26	49	225	261	276	55	155	240	253	585	489	429	165
27	49	225	261	276	55	141	204	247	607	503	412	163
28	49	226	259	268	53	108	201	148	716	512	397	161
29	49	226	240	256	---	92	190	154	653	517	405	161
30	75	222	238	242	---	130	182	113	620	503	435	161
31	159	---	271	208	---	184	---	41	---	475	475	---
TOTAL	1871	8256	7259	9192	1683	4540	6342	7606	9050	13549	14184	7492
MEAN	60.4	275	234	297	60.1	146	211	245	302	437	458	250
MAX	159	380	271	338	189	281	426	413	716	703	554	427
MIN	27	21	47	208	51	49	31	41	19	201	397	75
AC-FT	3710	16380	14400	18230	3340	9010	12580	15090	17950	26870	28130	14860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

	MEAN	89.4	58.0	38.3	37.5	87.3	112	212	379	348	422	360	201
MAX	302	286	460	383	597	417	550	1017	1862	643	577	493	
(WY)	1984	1984	1985	1984	1984	1983	1984	1983	1983	1983	1985	1949	
MIN	14.3	7.06	2.37	1.56	1.76	3.12	6.09	41.9	14.6	182	83.2	28.2	
(WY)	1987	1997	1979	1951	1951	1971	1952	1957	1957	1961	1956	1956	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1944 - 1999

ANNUAL TOTAL	108469.2	91024	196	
ANNUAL MEAN	297	249	498	1983
HIGHEST ANNUAL MEAN			100	1956
LOWEST ANNUAL MEAN			2470	Jun 4 1983
HIGHEST DAILY MEAN	680	May 23		
LOWEST DAILY MEAN	6.0	Jan 11	19	Jun 13
ANNUAL SEVEN-DAY MINIMUM	6.1	Jan 6	47	Oct 19
ANNUAL RUNOFF (AC-FT)	215100	180500	141900	
10 PERCENT EXCEEDS	565	471	504	
50 PERCENT EXCEEDS	291	244	115	
90 PERCENT EXCEEDS	8.7	52	4.6	

## 291

LOCATION.--Lat 38°34'45", long 112°17'22", in NW¼NW¼SW¼ sec. 31, T. 25 S., R. 4 W., Sevier County, Hydrologic Unit 16030003, on left bank, on State Highway 4, 1.8 mi west of Sevier, 2.3 mi upstream from mouth, and 17.2 mi southwest of Richfield.

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Slight regulation from several small reservoirs at headwaters, total combined capacity about 1,000 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 144 ft<sup>3</sup>/s, May 30, gage height, 2.70 ft; minimum daily discharge, 5.6 ft<sup>3</sup>/s, Dec 6.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	20	17	18	17	18	22	50	128	54	26	23
2	19	20	17	14	11	19	19	48	130	51	24	21
3	20	20	17	12	17	20	24	70	118	49	e30	19
4	23	18	18	12	16	21	23	72	111	46	e26	19
5	21	20	11	14	17	19	21	65	107	43	e30	18
6	21	20	5.6	16	16	19	23	59	100	41	e34	17
7	20	19	e9.0	17	17	20	23	61	94	45	e30	17
8	20	20	e10	17	18	18	22	73	96	68	e26	16
9	19	18	e9.0	14	19	18	25	91	104	58	e26	16
10	19	17	e8.5	16	22	17	22	85	108	47	e26	17
11	19	22	9.9	17	11	18	26	78	108	43	e30	18
12	18	21	13	17	12	17	27	75	104	43	e26	16
13	18	18	13	15	18	15	27	84	105	43	e30	15
14	18	20	15	13	21	20	27	102	107	44	e26	17
15	18	21	14	17	18	20	25	100	109	41	e30	18
16	19	20	14	17	17	21	24	93	115	37	e26	17
17	20	20	14	16	18	22	25	88	115	33	e23	17
18	19	19	15	17	18	24	27	89	113	31	17	17
19	19	17	17	18	17	27	29	95	110	30	18	16
20	19	13	15	17	15	29	35	93	105	29	20	17
21	20	20	9.7	18	18	30	38	96	99	27	22	16
22	21	20	7.8	15	15	26	39	103	94	26	19	15
23	20	18	e8.0	17	16	26	38	112	86	25	20	15
24	19	18	e8.5	18	17	23	42	118	81	24	19	15
25	27	18	e8.5	17	18	24	46	117	77	23	20	15
26	27	17	e9.5	16	17	24	52	116	74	23	19	14
27	25	18	e8.5	15	16	25	60	120	68	25	19	14
28	21	18	e10	11	17	23	60	128	63	25	19	14
29	21	18	e10	9.8	---	22	65	134	58	29	17	15
30	23	18	e14	14	---	23	58	137	55	30	19	15
31	21	---	18	18	---	23	---	134	---	29	24	---
TOTAL	633	566	374.5	482.8	469	671	994	2886	2942	1162	741	499
MEAN	20.4	18.9	12.1	15.6	16.8	21.6	33.1	93.1	98.1	37.5	23.9	16.6
MAX	27	22	18	18	22	30	65	137	130	68	34	23
MIN	18	13	5.6	9.8	11	15	19	48	55	23	17	14
AC-FT	1260	1120	743	958	930	1330	1970	5720	5840	2300	1470	990

MEAN	13.5	12.6	11.0	10.9	13.6	23.3	55.1	133	111	40.1	18.6	14.0
MAX	26.8	21.6	19.4	21.4	35.3	48.5	197	481	322	135	51.4	30.5
(WY)	1985	1985	1967	1984	1984	1986	1984	1984	1983	1995	1984	1984
MIN	6.62	7.30	4.29	4.50	5.86	10.1	10.9	21.9	21.1	8.01	4.74	4.20
(WY)	1960	1978	1978	1978	1978	1964	1963	1977	1959	1959	1977	1959

ANNUAL TOTAL	21674.2			12420.3				
ANNUAL MEAN	59.4			34.0			38.1	
HIGHEST ANNUAL MEAN							96.2	1984
LOWEST ANNUAL MEAN							12.0	1977
HIGHEST DAILY MEAN	265	Jun 3		137	May 30		633	May 24 1984
LOWEST DAILY MEAN	5.6	Dec 6		5.6	Dec 6		1.8	Jan 26 1979
ANNUAL SEVEN-DAY MINIMUM	8.6	Dec 21		8.6	Dec 21		2.4	Aug 29 1978
ANNUAL RUNOFF (AC-FT)	42990			24640			27610	
10 PERCENT EXCEEDS	170			93			95	
50 PERCENT EXCEEDS	22			20			16	
90 PERCENT EXCEEDS	14			14			7.9	

e Estimated



## SEVIER LAKE BASIN

10205000 SEVIER RIVER NEAR SIGURD, UT

LOCATION.--Lat 38°52'24", long 111°57'12", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 19, T. 22 S., R. 1 W., Sevier County, Hydrologic Unit 16030003, on left bank 200 ft downstream from county road bridge, 0.5 mi downstream from Rocky Ford Dam, 2.3 mi northeast of Sigurd, and 5.0 mi upstream from Lost Creek.

DRAINAGE AREA.--3,375 mi<sup>2</sup>.

PERIOD OF RECORD.--July to September 1912, July 1914 to current year. Prior to October 1938, published as "near Vermillion."

REVISED RECORDS.--WSP 1394: 1927-28, 1947.

GAGE.--Water-stage recorder. Elevation of gage is 5,180 ft from topographic map. Jul 15, to Sep 23, 1912, nonrecording gage 0.3 mi downstream at different datum. Jul 31, 1914 to Apr 19, 1917, nonrecording gage and Apr 20, 1917 to Sept 30, 1934, water-stage recorder at present site at datum 1.5 ft higher, Oct 1, 1934 to Oct 1, 1990, at datum 3.5 ft higher.

REMARKS.--Records good except for discharges less than 5 ft<sup>3</sup>/s, which are poor. Flow regulated by Rocky Ford Reservoir (capacity 1,700 acre-feet) 0.5 mi upstream. During irrigation season practically entire flow through Rocky Ford Dam is diverted above station for irrigation below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,400 ft<sup>3</sup>/s, May 30, 1922, gage height, 9.6 ft, present datum, from rating curve extended above 600 ft<sup>3</sup>/s on basis of maximum discharge for other Sevier River stations; practically no flow (seepage only) at times when Rocky Ford Reservoir gates are closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 502 ft<sup>3</sup>/s, Nov 17-18, gage height, 6.70 ft; minimum daily discharge, 3.4 ft<sup>3</sup>/s, Jun 29-30, Jul 4-5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	172	398	354	424	107	151	95	40	3.5	85	31
2	70	242	396	420	405	110	144	79	28	3.5	64	56
3	70	283	397	435	368	120	114	65	11	3.5	43	68
4	75	298	400	437	295	139	81	89	18	3.4	37	68
5	79	307	405	437	254	164	71	172	25	3.4	38	68
6	79	314	403	442	250	177	61	148	24	3.7	42	97
7	87	318	398	464	238	179	49	83	48	6.9	48	123
8	93	318	353	474	228	179	36	71	136	18	45	108
9	93	302	240	477	222	279	27	69	200	48	23	84
10	93	211	282	481	222	299	20	61	194	189	6.5	70
11	93	279	346	482	214	312	19	55	156	152	11	55
12	93	322	373	484	191	345	19	53	120	134	22	58
13	93	323	382	485	200	372	18	43	62	106	41	64
14	92	325	388	484	204	301	16	38	50	74	16	71
15	100	326	389	484	202	281	18	44	32	73	17	83
16	203	326	389	485	197	295	22	45	35	62	21	101
17	251	409	390	488	196	296	27	45	39	37	30	140
18	235	499	394	488	197	289	27	36	36	21	24	119
19	166	489	398	489	203	276	24	26	38	20	12	93
20	149	488	405	491	195	124	21	16	25	24	7.6	89
21	133	488	408	495	195	129	18	16	18	25	6.3	94
22	133	492	344	495	198	176	24	16	10	40	7.6	92
23	141	495	288	492	196	172	49	10	7.7	22	14	86
24	138	491	e260	486	196	164	94	8.1	4.9	13	33	109
25	139	488	e240	483	144	174	140	11	5.0	11	56	152
26	153	488	225	478	98	185	165	19	4.1	15	58	172
27	160	475	226	471	101	195	164	27	3.7	37	44	157
28	158	448	227	465	103	223	147	20	3.6	77	21	120
29	145	421	232	457	---	214	103	27	3.4	79	18	102
30	144	403	264	447	---	176	104	40	3.4	88	22	119
31	150	---	296	434	---	162	---	40	---	88	21	---
TOTAL	3878	11240	10536	14484	6136	6614	1973	1567.1	1380.8	1480.9	934.0	2849
MEAN	125	375	340	467	219	213	65.8	50.6	46.0	47.8	30.1	95.0
MAX	251	499	408	495	424	372	165	172	200	189	85	172
MIN	70	172	225	354	98	107	16	8.1	3.4	3.4	6.3	31
AC-FT	7690	22290	20900	28730	12170	13120	3910	3110	2740	2940	1850	5650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1999, BY WATER YEAR (WY)

	MEAN	88.7	119	136	140	170	171	132	134	137	35.9	35.8	54.0
MAX	304	700	591	505	693	634	836	1468	2002	367	192	335	335
(WY)	1917	1917	1985	1984	1984	1984	1984	1922	1983	1983	1920	1985	1985
MIN	15.0	34.6	35.4	45.4	57.9	42.7	4.44	2.87	1.47	.88	1.06	.59	.59
(WY)	1952	1957	1957	1964	1935	1935	1972	1925	1953	1954	1963	1956	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1915 - 1999
ANNUAL TOTAL	84418.2	63072.8	
ANNUAL MEAN	231	173	113
HIGHEST ANNUAL MEAN			482
LOWEST ANNUAL MEAN			38.7
HIGHEST DAILY MEAN	630	499	2370
LOWEST DAILY MEAN	5.9	3.4	.00
ANNUAL SEVEN-DAY MINIMUM	7.7	3.4	.00
ANNUAL RUNOFF (AC-FT)	167400	125100	82090
10 PERCENT EXCEEDS	490	439	240
50 PERCENT EXCEEDS	160	120	78
90 PERCENT EXCEEDS	28	18	2.7

e Estimated



## SEVIER LAKE BASIN

293

10205030 SALINA CREEK NEAR EMERY, UT

LOCATION.--Lat 38°54'43", long 111°31'47", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 12, T. 22 S., R. 3 E., Sevier County, Hydrologic Unit 16030003, on right bank, 2.5 mi upstream from Soil Conservation Service retention dam, 15.3 mi west of Emery, and 18.4 mi east of Salina.

DRAINAGE AREA.--51.8 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 7,000 ft above sea level, from topographic map. Prior to June 9, 1971, at site 300 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion above station. Slight regulation from small reservoirs at headwaters.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 740 ft<sup>3</sup>/s July 27, 1989, gage height, 5.85 ft present datum from rating curve extended above 150 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum discharge, 0.80 ft<sup>3</sup>/s Nov. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 150 ft<sup>3</sup>/s, May 26, gage height, 4.18 ft; minimum daily discharge, 6.0 ft<sup>3</sup>/s, Dec 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	12	9.7	e7.0	e9.0	8.9	9.9	21	66	20	15	13
2	17	12	9.3	e7.5	e9.0	8.9	10	27	64	19	15	12
3	17	12	9.3	e7.5	e9.0	8.9	9.7	29	54	18	15	12
4	18	11	9.3	e7.5	e9.0	8.9	9.4	24	51	e18	14	12
5	16	11	e9.0	e7.5	e9.0	8.6	9.5	22	51	19	14	12
6	13	11	e8.0	e8.0	9.0	8.4	9.5	23	53	18	14	12
7	13	11	e8.5	e8.0	8.6	8.3	9.3	33	50	19	14	12
8	13	11	e9.0	e8.0	8.4	8.3	9.4	37	46	19	14	12
9	13	11	e9.5	e8.5	8.4	8.3	9.5	38	43	18	13	12
10	13	12	e9.0	e8.5	8.6	8.7	13	35	41	18	17	12
11	13	12	e8.5	e8.5	e9.0	8.9	9.7	30	40	18	14	12
12	13	12	e9.0	e8.0	e9.0	8.8	9.9	29	39	18	11	12
13	13	13	e9.0	e8.0	e9.5	9.1	11	34	38	18	12	12
14	13	11	e10	e8.0	e9.5	8.7	14	40	36	18	11	12
15	13	11	e9.5	e8.5	9.4	8.7	13	38	37	18	12	12
16	13	11	e9.5	e8.5	10	9.0	12	36	34	17	12	12
17	13	11	e9.5	8.6	8.9	10	13	34	33	17	12	12
18	13	11	e9.5	8.3	8.7	11	18	40	33	17	13	12
19	13	11	e9.0	8.3	8.6	12	22	46	32	17	13	12
20	13	12	e9.0	8.3	e9.0	13	23	52	29	17	13	12
21	14	12	e8.0	e8.0	8.9	13	21	64	28	17	14	11
22	13	12	e6.0	e8.0	e9.0	12	17	73	27	17	13	11
23	13	11	e6.5	e8.0	e9.0	12	17	88	26	15	13	11
24	13	11	e6.5	e8.0	9.2	10	16	104	26	16	13	12
25	14	11	e7.0	e8.0	9.1	11	16	113	25	17	13	12
26	14	11	e6.5	e8.0	8.9	13	19	108	24	15	12	11
27	14	10	e7.0	e8.0	9.5	12	25	111	22	17	12	11
28	13	10	e7.0	e9.0	9.0	11	25	100	21	15	12	11
29	12	10	e7.5	e10	---	11	22	91	21	15	12	11
30	13	10	e7.5	e10	---	12	20	81	20	16	18	11
31	12	---	e7.0	e9.5	---	12	---	70	---	16	14	---
TOTAL	423	337	259.6	255.5	252.2	314.4	442.8	1671	1110	537	414	353
MEAN	13.6	11.2	8.37	8.24	9.01	10.1	14.8	53.9	37.0	17.3	13.4	11.8
MAX	18	13	10	10	10	13	25	113	66	20	18	13
MIN	12	10	6.0	7.0	8.4	8.3	9.3	21	20	15	11	11
AC-FT	839	668	515	507	500	624	878	3310	2200	1070	821	700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

MEAN	10.1	8.37	7.16	6.56	6.44	7.62	15.2	68.1	46.7	17.6	14.0	11.7
MAX	18.9	16.0	14.1	13.6	10.8	16.0	51.6	275	162	50.3	34.4	25.4
(WY)	1985	1985	1985	1985	1985	1988	1985	1984	1983	1983	1983	1984
MIN	3.57	3.24	3.33	2.58	2.49	4.25	5.31	5.12	3.70	4.67	4.09	3.55
(WY)	1978	1978	1978	1977	1977	1977	1964	1977	1977	1977	1977	1977

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1964 - 1999

ANNUAL TOTAL	7033.2	6369.5	
ANNUAL MEAN	19.3	17.5	18.4
HIGHEST ANNUAL MEAN			53.0
LOWEST ANNUAL MEAN			4.58
HIGHEST DAILY MEAN	97	May 21	434
LOWEST DAILY MEAN	4.1	Mar 6	1.5
ANNUAL SEVEN-DAY MINIMUM	4.5	Mar 6	1.7
ANNUAL RUNOFF (AC-FT)	13950	12630	13300
10 PERCENT EXCEEDS	46	34	35
50 PERCENT EXCEEDS	13	12	9.6
90 PERCENT EXCEEDS	5.0	8.4	5.2

e Estimated

## SEVIER LAKE BASIN

## 10215900 MANTI CREEK BELOW DUGWAY CREEK, NEAR MANTI, UT

LOCATION.--Lat 39°15'33", long 111°34'45", in NE<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> sec. 9, T. 18 S., R. 3 E., Sanpete County, Hydrologic Unit 16030004, on right bank 200 ft downstream from a side road bridge 0.6 mi upstream from upper powerplant, 2.3 mi east of cattle guard at Manti-LaSal National Forest boundary, and 3.5 mi east of Manti.

DRAINAGE AREA.--26.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1964 to September 1974; October 1978 to current year.

REVISED RECORDS.--WRD UT-81-1: 1979, 1980(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,500 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Records do not include flow diverted around station in an 8-inch pipeline, for culinary water for the city of Manti, and generation of power at the upper powerplant. Records include flow of a small transmountain diversion from San Rafael River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 705 ft<sup>3</sup>/s Jun 28, 1995, gage height, 5.49 ft; minimum, 0.9 ft<sup>3</sup>/s Nov 3, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 252 ft<sup>3</sup>/s, May 28, gage height, 4.93 ft; minimum daily discharge, 4.0 ft<sup>3</sup>/s, Dec 22, Jan 20, Feb 12 and 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.1	7.3	e5.5	e4.5	5.7	9.8	20	180	59	16	13
2	11	9.4	6.8	e5.5	e4.5	5.4	11	21	173	54	14	13
3	12	8.8	6.6	e5.5	e4.5	5.5	11	32	155	49	15	13
4	12	7.3	6.7	e5.5	e4.5	5.4	10	23	139	45	15	13
5	11	8.1	5.7	e6.0	e4.5	4.9	11	18	123	42	15	13
6	11	8.3	e5.0	e6.0	e5.0	4.7	10	22	117	39	14	13
7	11	9.5	e5.0	e6.0	5.0	4.6	11	34	133	41	14	13
8	10	8.6	e5.5	e6.0	5.3	4.8	11	50	145	39	13	13
9	10	8.7	e6.0	e6.5	e5.0	4.7	9.9	50	152	34	13	13
10	10	8.9	e5.5	e6.5	e4.5	4.9	12	34	146	30	22	13
11	9.6	9.0	e5.0	e6.5	e4.5	4.6	11	28	144	29	24	13
12	9.1	8.7	e5.5	e6.0	e4.0	4.7	9.8	28	151	25	16	13
13	8.7	8.7	e5.5	e6.0	e4.5	5.3	10	42	150	24	14	13
14	8.7	9.2	e6.0	e5.5	e4.5	5.9	11	57	153	29	13	13
15	8.8	8.5	e5.5	e6.0	e5.0	5.8	11	48	160	28	13	21
16	9.1	8.4	e5.5	e6.0	4.9	6.0	11	41	151	27	13	13
17	9.6	8.3	e5.5	e6.0	4.8	6.5	12	36	144	26	14	13
18	10	8.3	e5.5	e5.0	4.8	7.3	18	47	138	28	13	13
19	9.8	8.4	e5.5	e5.0	4.9	8.6	25	60	128	25	13	13
20	9.6	7.8	e5.0	e4.0	4.6	9.3	32	68	116	22	14	e6.7
21	10	7.8	e4.5	e4.0	4.6	9.0	30	86	108	19	14	e6.7
22	10	7.8	e4.0	e4.5	4.6	8.7	25	103	101	18	14	e6.7
23	11	7.5	e4.5	e5.0	4.6	8.9	24	133	97	17	13	e6.7
24	9.3	7.5	e5.0	e5.0	5.0	8.3	21	164	89	17	13	e6.7
25	12	7.4	e5.0	e4.5	5.1	9.6	20	178	83	16	14	e6.7
26	14	7.4	e5.0	e4.5	4.9	11	24	199	77	16	13	e6.7
27	12	7.4	e5.0	e4.5	5.0	10	29	208	71	18	14	e6.7
28	11	7.4	e5.5	e5.0	5.3	9.6	30	219	67	17	13	e6.7
29	10	7.4	e5.5	e5.0	---	9.9	29	219	63	19	13	e6.7
30	11	7.4	e5.0	e5.5	---	11	21	206	61	21	25	e6.7
31	9.6	---	e5.0	e5.0	---	11	---	195	---	18	13	---
TOTAL	321.9	247.0	168.6	167.5	132.9	221.6	510.5	2669	3715	891	457	328.7
MEAN	10.4	8.23	5.44	5.40	4.75	7.15	17.0	86.1	124	28.7	14.7	11.0
MAX	14	9.5	7.3	6.5	5.3	11	32	219	180	59	25	21
MIN	8.7	7.3	4.0	4.0	4.0	4.6	9.8	18	61	16	13	6.7
AC-FT	638	490	334	332	264	440	1010	5290	7370	1770	906	652

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

	MEAN	8.58	6.83	5.33	4.85	4.72	6.23	18.4	98.9	140	45.3	17.1	11.0
MAX	18.6	12.5	9.85	8.79	8.46	12.3	87.4	232	317	183	42.3	26.0	
(WY)	1984	1985	1984	1984	1984	1986	1985	1984	1983	1995	1983	1995	
MIN	4.32	3.77	3.35	3.05	3.13	3.22	5.46	47.1	32.2	11.9	5.75	4.47	
(WY)	1990	1993	1979	1981	1967	1991	1967	1990	1966	1966	1966	1966	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1965 - 1999
ANNUAL TOTAL	13618.1	9830.7	
ANNUAL MEAN	37.3	26.9	30.6
HIGHEST ANNUAL MEAN			61.0
LOWEST ANNUAL MEAN			14.1
HIGHEST DAILY MEAN	241	219	547
LOWEST DAILY MEAN	4.0	4.0	2.4
ANNUAL SEVEN-DAY MINIMUM	4.6	4.5	2.6
ANNUAL RUNOFF (AC-FT)	27010	19500	22190
10 PERCENT EXCEEDS	139	79	82
50 PERCENT EXCEEDS	10	10	8.6
90 PERCENT EXCEEDS	5.0	5.0	4.2

e Estimated

## SEVIER LAKE BASIN

295

10217000 SEVIER RIVER BELOW SAN PITCH RIVER, NEAR GUNNISON, UT

LOCATION.--Lat 39°09'19", long 111°52'37", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 14, T. 19 S., R. 1 W., Sanpete County, Hydrologic Unit 16030003, on left bank 1,000 ft downstream from San Pitch River and 3.2 mi west of Gunnison.

DRAINAGE AREA.--4,921 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1912 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,025 ft above sea level, from topographic map. Prior to Apr 30, 1914, non-recording gage, and Apr 30, 1914 to Oct 4, 1917, recording gage at site 0.5 mi upstream. Oct 4, 1917 to Oct 28, 1938 near present site (right bank) at datum 0.36 ft higher. Oct 28, 1938 to Apr 10, 1986 at same site and present datum. Apr 16, 1986 to Jun 6, 1989 recording gage at site approximately 0.8 mi downstream.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by reservoirs and many diversions for irrigation above station. Most of flow diverted above station during irrigation season.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,400 ft<sup>3</sup>/s May 29, 1984; minimum, 5.6 ft<sup>3</sup>/s Jul 17-21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,150 ft<sup>3</sup>/s, Jun 7, gage height, 7.10 ft; minimum daily discharge, 65 ft<sup>3</sup>/s, Jul 4-5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	327	633	e550	852	305	e210	270	802	69	147	123
2	231	353	627	e600	801	299	e205	258	762	68	140	121
3	231	421	625	e620	783	306	198	292	744	66	128	151
4	242	438	627	e630	716	316	182	e350	699	65	101	161
5	270	448	628	e630	651	334	150	e800	802	65	98	163
6	268	482	608	e630	625	351	134	e700	880	80	101	164
7	271	487	595	e690	622	359	125	e600	1030	105	105	183
8	274	490	589	e700	618	364	107	479	1030	111	107	195
9	275	490	552	e700	626	366	115	485	991	113	101	184
10	268	462	465	e710	647	458	109	444	1030	115	98	169
11	260	388	501	e710	583	462	108	416	924	169	148	163
12	258	486	539	769	552	471	108	355	747	157	126	158
13	256	522	602	774	567	469	108	316	679	158	118	161
14	254	552	616	773	596	481	108	467	570	157	117	163
15	254	563	620	779	588	418	106	500	529	144	100	185
16	263	571	617	786	562	409	149	439	437	138	91	198
17	342	611	618	796	554	409	138	381	347	123	90	235
18	357	643	620	803	547	380	147	361	363	116	92	266
19	348	643	623	814	543	352	152	401	368	107	93	252
20	295	643	639	841	532	349	165	384	334	100	88	236
21	305	645	640	862	520	229	168	440	265	106	91	272
22	298	669	e600	849	514	237	182	506	245	105	97	250
23	302	672	e550	853	507	243	180	550	218	106	87	243
24	309	679	e500	864	505	239	191	674	195	99	93	253
25	311	679	e440	864	491	228	226	692	145	86	96	279
26	340	695	e440	867	367	241	281	655	94	86	120	303
27	365	698	e440	869	340	254	324	757	87	81	128	302
28	340	688	e440	920	302	249	e400	867	77	94	130	291
29	329	662	e440	989	---	263	e420	892	71	127	112	267
30	326	640	e450	934	---	e246	321	861	69	136	110	263
31	328	---	e490	872	---	e230	---	825	---	149	122	---
TOTAL	9008	16747	17374	24048	16111	10317	5517	16417	15534	3401	3375	6354
MEAN	291	558	560	776	575	333	184	530	518	110	109	212
MAX	365	698	640	989	852	481	420	892	1030	169	148	303
MIN	231	327	440	550	302	228	106	258	69	65	87	121
AC-FT	17870	33220	34460	47700	31960	20460	10940	32560	30810	6750	6690	12600

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1999, BY WATER YEAR (WY)

	195	240	271	280	339	362	281	385	404	124	108	135
MEAN	195	240	271	280	339	362	281	385	404	124	108	135
MAX	783	760	1028	868	1141	1443	1670	3606	4308	1624	591	499
(WY)	1984	1984	1984	1984	1984	1984	1984	1984	1983	1983	1983	1983
MIN	27.1	56.0	96.7	100	97.2	74.0	70.7	56.5	41.0	25.7	16.2	17.2
(WY)	1935	1935	1932	1935	1935	1935	1966	1961	1940	1960	1934	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1918 - 1999
ANNUAL TOTAL	178373	144203	
ANNUAL MEAN	489	395	260
HIGHEST ANNUAL MEAN			1346
LOWEST ANNUAL MEAN			86.5
HIGHEST DAILY MEAN	2150	1030	5400
LOWEST DAILY MEAN	67	65	6.0
ANNUAL SEVEN-DAY MINIMUM	71	68	6.6
ANNUAL RUNOFF (AC-FT)	353800	286000	188100
10 PERCENT EXCEEDS	806	765	487
50 PERCENT EXCEEDS	397	347	190
90 PERCENT EXCEEDS	104	106	60

e Estimated

## SEVIER LAKE BASIN

10219000 SEVIER RIVER NEAR JUAB, UT

LOCATION.--Lat 39°22'29", long 112°02'20", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 35, T. 16 S., R. 2 W., Juab County, Hydrologic Unit 16030005, on right bank 0.5 mi downstream from Sevier Bridge Dam and 11.6 mi southwest of Juab.

DRAINAGE AREA.--5,165 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1911 to current year.

GAGE.--Water-stage recorder and rubble masonry control since Apr. 16, 1914. Elevation of gage is 4,940 ft above sea level, by barometer. Prior to Apr. 16, 1914, staff gage 500 ft upstream at different datum. Apr. 16, 1914 to Apr. 7, 1938, water-stage recorder at present site and datum. Apr. 8, 1938 to Mar. 31, 1942, water-stage recorder at site 1,300 ft upstream at different datum. Apr. 1, 1942 to June 15, 1961, water-stage recorder on left bank same site and datum. Since June 16, 1961 water-stage recorder on right bank at different datum.

REMARKS.--Records good except for estimated days, which are fair. Flow regulated by Sevier Bridge Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,190 ft<sup>3</sup>/s June 25, 1983, gage height, 10.90 ft; no flow many days during April, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,280 ft<sup>3</sup>/s, Aug 19, gage height, 8.03 ft; minimum daily discharge, 8.5 ft<sup>3</sup>/s, Oct 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	206	927	153	764	e303	73	504	709	889	293	225
2	69	259	926	153	683	e227	13	470	658	775	293	204
3	9.9	258	924	153	681	223	13	303	580	568	293	205
4	9.6	150	912	155	650	216	13	304	462	529	294	192
5	9.9	12	823	129	617	205	13	304	559	513	293	125
6	10	12	792	85	615	205	13	301	805	645	292	87
7	10	12	672	88	616	206	13	391	869	667	293	74
8	58	13	508	88	613	206	13	547	866	668	293	38
9	97	12	616	89	613	207	13	552	724	669	374	14
10	145	12	613	91	623	208	12	554	744	668	535	13
11	181	12	613	92	544	208	12	551	878	666	537	13
12	178	12	533	92	451	210	12	550	894	665	535	13
13	175	12	385	93	449	210	12	552	631	664	528	67
14	84	12	385	93	448	352	12	553	506	664	527	165
15	8.7	12	385	94	377	518	13	505	637	580	526	164
16	8.7	366	385	e376	299	377	13	402	729	335	526	164
17	8.7	788	385	e805	299	178	13	402	793	333	557	164
18	8.7	791	386	e805	299	153	13	402	791	330	799	142
19	8.7	792	386	e805	299	292	13	403	789	329	1250	122
20	8.6	900	388	e805	362	430	116	419	668	330	1230	121
21	8.7	808	389	e805	599	431	260	452	664	314	1230	121
22	8.5	801	389	e805	599	431	261	453	663	293	951	121
23	24	802	389	e805	599	431	259	452	663	293	340	121
24	37	802	389	e805	597	429	259	540	636	293	266	103
25	38	802	389	e805	598	431	258	711	639	294	339	90
26	38	836	389	802	548	430	256	720	653	293	347	90
27	38	890	389	808	360	433	256	674	735	293	424	90
28	38	932	355	807	360	430	256	732	732	293	448	88
29	38	928	260	805	---	427	257	739	753	293	447	88
30	68	928	186	806	---	429	370	707	847	293	375	88
31	172	---	157	808	---	305	---	710	---	294	287	---
TOTAL	1743.7	13172	15625	14105	14562	9741	3110	15859	21277	14733	15722	3312
MEAN	56.2	439	504	455	520	314	104	512	709	475	507	110
MAX	181	932	927	808	764	518	370	739	894	889	1250	225
MIN	8.5	12	157	85	299	153	12	301	462	293	266	13
AC-FT	3460	26130	30990	27980	28880	19320	6170	31460	42200	29220	31180	6570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1999, BY WATER YEAR (WY)

	MEAN	62.5	37.2	39.8	64.7	70.6	124	305	730	608	542	371	167
MAX	640	439	757	1295	1184	1535	1783	3135	4178	3293	1599	737	
(WY)	1923	1999	1986	1984	1984	1983	1984	1983	1983	1983	1983	1923	
MIN	1.00	.60	.45	.76	.94	1.01	2.00	305	138	65.4	25.0	1.34	
(WY)	1961	1965	1965	1965	1965	1965	1965	1941	1995	1964	1934	1934	1961

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1912 - 1999

ANNUAL TOTAL	156524.9	142961.7	
ANNUAL MEAN	429	392	
HIGHEST ANNUAL MEAN			261
LOWEST ANNUAL MEAN			1322
HIGHEST DAILY MEAN	1700	Jun 18	94.2
LOWEST DAILY MEAN	2.3	Jan 12	4920
ANNUAL SEVEN-DAY MINIMUM	2.4	Jan 11	.00
ANNUAL RUNOFF (AC-FT)	310500	283600	.00
10 PERCENT EXCEEDS	898	805	189400
50 PERCENT EXCEEDS	419	366	762
90 PERCENT EXCEEDS	4.0	13	40
			2.0

e Estimated

## SEVIER LAKE BASIN

297

## 10224000 SEVIER RIVER NEAR LYNNDYL, UT

LOCATION.--Lat 39°28'55", long 112°23'35", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 27, T. 15 S., R. 5 W., Millard County, Hydrologic Unit 16030005, on right bank 1.6 mi downstream from highway bridge and 3.5 mi southwest of Lynndyl.

DRAINAGE AREA.--5,966 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1914 to October 1919, October 1942 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to Oct. 1, 1979 at site 80 ft upstream. Prior to Apr. 23, 1991 at site 80 ft downstream. Elevation of gage is 4,660 ft above sea level, by barometer.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Sevier Bridge Reservoir about 35 mi upstream (see station 10218500). Several diversions for irrigation between reservoir and station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,020 ft<sup>3</sup>/s June 15-17, 1983; minimum discharge, 2.4 ft<sup>3</sup>/s Jan 26, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,160 ft<sup>3</sup>/s, Aug 23, gage height, 7.76 ft; minimum discharge, 32 ft<sup>3</sup>/s, Apr 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	154	749	e280	850	424	423	336	614	663	227	321
2	137	219	750	e250	827	419	240	516	588	768	239	263
3	145	277	751	e240	738	e373	143	567	579	705	236	240
4	87	287	752	e190	731	e315	99	423	506	516	230	216
5	58	282	747	e180	725	e261	91	249	445	461	237	177
6	56	158	689	e165	683	e261	88	210	429	427	221	168
7	62	100	645	e170	677	e261	89	304	748	521	245	132
8	59	94	596	171	674	e261	94	314	881	561	266	124
9	55	94	400	168	676	e261	95	520	901	571	267	110
10	84	90	e400	167	688	e261	95	539	806	582	266	73
11	121	87	e410	166	672	e261	91	504	768	599	455	64
12	181	85	e410	166	640	e261	90	516	873	590	487	57
13	202	84	e420	166	532	e261	88	530	920	575	461	57
14	206	82	e420	166	522	e261	85	551	753	609	460	44
15	203	81	e430	166	517	e563	82	558	552	646	456	74
16	120	80	428	168	478	e563	71	536	599	615	454	149
17	81	131	427	208	300	512	78	442	646	381	402	143
18	75	542	427	710	275	289	81	412	732	339	388	124
19	72	598	427	788	268	246	80	395	728	342	474	120
20	70	602	437	814	264	256	66	372	713	321	855	103
21	70	650	e435	835	267	435	42	333	610	308	1060	118
22	71	666	e432	836	565	447	162	338	558	302	1120	117
23	70	631	e430	844	630	438	246	327	530	288	1090	123
24	69	633	e425	844	637	439	263	322	498	291	432	123
25	84	632	e420	846	641	443	288	354	460	288	309	111
26	110	634	e420	849	639	451	304	552	459	281	314	94
27	109	653	e410	848	627	450	304	657	482	274	329	102
28	102	704	e400	845	458	448	301	624	578	256	361	102
29	99	741	e380	845	---	448	305	644	574	238	386	105
30	106	748	e350	846	---	440	307	687	587	232	403	101
31	108	---	e320	848	---	438	---	654	---	204	392	---
TOTAL	3206	10819	15137	14785	16201	11447	4791	14286	19117	13754	13522	3855
MEAN	103	361	488	477	579	369	160	461	637	444	436	128
MAX	206	748	752	849	850	563	423	687	920	768	1120	321
MIN	55	80	320	165	264	246	42	210	429	204	221	44
AC-FT	6360	21460	30020	29330	32130	22710	9500	28340	37920	27280	26820	7650

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1999, BY WATER YEAR (WY)

	MEAN	65.3	74.7	75.7	99.3	127	189	303	594	550	463	311	109
MAX	516	469	728	1218	1134	1514	2087	3243	4702	2842	1644	497	
(WY)	1985	1985	1986	1984	1984	1983	1984	1984	1983	1983	1983	1984	
MIN	22.7	22.6	10.2	6.16	7.23	11.2	25.9	287	116	180	64.0	20.5	
(WY)	1968	1958	1963	1963	1978	1975	1952	1957	1964	1961	1965	1961	

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR			FOR 1999 WATER YEAR			WATER YEARS 1943 - 1999		
ANNUAL TOTAL	145666			140920					
ANNUAL MEAN	399			386					
HIGHEST ANNUAL MEAN							248		
LOWEST ANNUAL MEAN							1369		
HIGHEST DAILY MEAN	1620			1120			5020		
LOWEST DAILY MEAN	22			42			4.5		
ANNUAL SEVEN-DAY MINIMUM	22			66			4.9		
ANNUAL RUNOFF (AC-FT)	288900			279500			179300		
10 PERCENT EXCEEDS	801			734			643		
50 PERCENT EXCEEDS	420			361			75		
90 PERCENT EXCEEDS	28			88			19		

e Estimated

## BEAVER RIVER BASIN

10234500 BEAVER RIVER NEAR BEAVER, UT

LOCATION.--Lat 38°16' 50", long 112°34' 03", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 18, T. 29 S., R. 6 W., Beaver County, Hydrologic Unit 16030007, on left bank, 0.3 mi upstream of diversion, 0.6 mi downstream of Baker Canyon, and 4.2 mi east of Beaver.

DRAINAGE AREA.--91.0 mi<sup>2</sup>.

PERIOD OF RECORD.--June to September 1906, March 1914 to current year.

REVISED RECORDS.--WDR UT-80-1: 1979.

GAGE.--Water-stage recorder. Crest-stage gage since May 25, 1989. Elevation of gage is 6,200 ft above sea level, from topographic map. Prior to Mar. 30, 1914, nonrecording gage, and Mar. 30, 1914 to Oct. 15, 1937, water-stage recorder, at site 0.1 mi downstream at different datum. Oct. 16, 1937 to Mar. 20, 1959, at site 0.2 mi upstream at different datum. Mar. 21, 1959 to Mar. 21, 1978 at site 0.5 mi upstream at different datum. Mar. 21, 1978 to May 30, 1983, at site 0.2 mi upstream at different datum. July 15, 1983 to June 21, 1985 at present site at datum 1.0 ft higher.

REMARKS.--Records good except discharges greater than 100 ft<sup>3</sup>/s, which are fair, and estimated daily discharges, which are poor. No diversion for irrigation upstream of station. Water diverted upstream of station for power generation is returned to stream upstream of station. Slight regulation by powerplants and several small headwater reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft<sup>3</sup>/s July 22, 1936, gage height, 7.27 ft, datum then in use, from rating curve extended above 500 ft<sup>3</sup>/s; minimum daily, 7.2 ft<sup>3</sup>/s Dec. 19, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 27	2145	321	2.12	Jul 8	0700	*434	*2.33

Minimum daily discharge, 20.0 ft<sup>3</sup>/s, Dec 24-28, Feb 21, 24-28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	33	28	23	21	21	27	36	207	83	61	31
2	33	33	27	e22	e22	22	25	38	204	80	61	34
3	33	31	27	e22	22	22	27	44	161	80	64	33
4	35	30	27	e22	21	22	26	39	149	77	62	32
5	34	30	e27	e22	22	22	25	44	144	74	65	31
6	33	30	e27	22	22	22	25	43	140	73	64	30
7	33	30	e27	22	21	22	25	53	141	86	61	30
8	32	31	e27	21	21	22	25	74	144	149	61	26
9	31	30	e26	e21	21	22	24	88	149	95	59	28
10	31	e30	e26	e21	23	21	25	84	151	85	60	26
11	30	30	e26	21	e22	22	24	78	151	80	70	29
12	28	30	e26	21	e22	22	25	81	145	78	60	26
13	28	32	e25	21	e22	23	24	94	145	77	56	26
14	29	31	e25	e21	21	22	27	109	151	82	46	29
15	30	31	e25	21	21	23	28	113	172	82	46	28
16	31	31	e25	21	21	23	28	107	190	79	45	27
17	31	31	26	22	21	24	30	107	187	74	44	28
18	31	30	26	22	21	26	36	125	177	71	44	27
19	32	29	26	22	21	28	43	127	160	72	44	28
20	31	e28	e25	22	e21	30	47	117	150	78	53	33
21	33	e28	e23	22	20	30	43	139	144	78	60	27
22	33	30	e22	e22	e21	28	38	163	136	76	50	26
23	33	29	e21	e22	e21	29	35	193	124	74	49	26
24	31	29	e20	22	20	26	34	201	112	73	47	26
25	38	28	e20	22	20	29	34	170	100	70	47	25
26	36	28	e20	22	20	31	34	172	93	71	47	25
27	34	28	e20	22	20	31	42	209	87	69	47	25
28	33	28	e20	e22	20	30	45	229	83	65	45	25
29	33	29	e22	e22	---	29	42	217	86	71	43	25
30	36	27	22	e22	---	31	39	223	85	71	44	25
31	34	---	22	21	---	31	---	222	---	61	46	---
TOTAL	1003	895	756	673	591	786	952	3739	4268	2434	1651	837
MEAN	32.4	29.8	24.4	21.7	21.1	25.4	31.7	121	142	78.5	53.3	27.9
MAX	38	33	28	23	23	31	47	229	207	149	70	34
MIN	28	27	20	21	20	21	24	36	83	61	43	25
AC-FT	1990	1780	1500	1330	1170	1560	1890	7420	8470	4830	3270	1660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1999, BY WATER YEAR (WY)

	MEAN	23.8	21.8	19.5	18.3	18.9	22.7	53.7	170	155	64.3	37.5	26.2
	MAX	41.5	47.0	37.7	27.0	27.9	44.9	117	409	638	198	98.0	63.3
	(WY)	1915	1984	1984	1942	1984	1916	1943	1984	1983	1983	1983	1983
	MIN	13.3	11.7	9.95	9.96	11.4	12.9	18.6	25.7	24.1	14.9	11.8	10.7
	(WY)	1978	1978	1977	1977	1977	1977	1975	1977	1934	1977	1977	1977

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1915 - 1999

ANNUAL TOTAL	30012	18585	
ANNUAL MEAN	82.2	50.9	52.7
HIGHEST ANNUAL MEAN			119
LOWEST ANNUAL MEAN			16.1
HIGHEST DAILY MEAN	494	229	884
LOWEST DAILY MEAN	14	20	7.2
ANNUAL SEVEN-DAY MINIMUM	17	20	8.4
ANNUAL RUNOFF (AC-FT)	59530	36860	38190
10 PERCENT EXCEEDS	224	124	119
50 PERCENT EXCEEDS	33	30	25
90 PERCENT EXCEEDS	20	21	15
e Estimated			



LOCATION.--Lat 38°15'13", long 112°45'56", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 28, T. 29 S., R. 8 W., Beaver County, Hydrologic Unit 16030007, on right upstream wingwall of bridge on State Highway 21, 2.0 mi upstream from Indian Creek, and 1.6 mi east of Adamsville.

PERIOD OF RECORD.--December 1913 to current year. Monthly discharge only, October 1936 to October 1937, published in WSP 1314.

GAGE.--Water-stage recorder. Crest-stage gage since Nov 23, 1994. Elevation of gage is 5,550 ft above sea level, from topographic map. Prior to Sep 15, 1936 water-stage recorder, Sep 15, 1936 to Oct 15, 1937 nonrecording gage, and Oct 16, 1937 to Mar 19, 1970 water-stage recorder about 1.7 mi downstream. Mar 20, 1970 to Jul 25, 1979 water-stage recorder 400 ft downstream. Sites prior to Jul 26, 1979 at different datums. Jul 26, 1979 to Feb 5, 1992 water-stage recorder 50 ft upstream at same datum.

REMARKS.--Records good except for daily discharges between May 10 to Aug 2, which are fair, and discharges less than 2.0 ft<sup>3</sup>/s and estimated daily discharges, which are poor. One small diversion between station and Minersville Reservoir. Many diversions for irrigation upstream of station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,870 ft<sup>3</sup>/s Jun 6, 1995, gage height 5.52 ft, from rating curve extended above 1,000 ft<sup>3</sup>/s; no flow during summer months some years when gage was 1.7 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 139 ft<sup>3</sup>/s, Jul 8, gage height, 4.57 ft; minimum daily discharge, 1.6 ft<sup>3</sup>/s, Aug 10, 16, and 17.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	62	54	59	48	41	30	16	47	7.6	e2.2	7.1
2	32	65	54	e55	e45	41	23	13	47	7.0	e2.0	5.1
3	32	62	53	e53	e45	41	20	20	42	5.4	1.9	4.7
4	41	61	53	e53	45	39	22	24	33	4.5	2.7	4.2
5	40	61	51	e54	49	38	20	19	39	11	5.6	7.9
6	38	60	e47	e56	49	38	14	15	34	7.2	6.2	6.2
7	37	60	e45	57	48	38	7.6	13	29	3.9	2.8	4.5
8	37	62	e46	55	47	39	11	9.1	22	e53	2.4	4.1
9	35	63	49	e52	46	38	12	8.3	20	e25	1.8	4.7
10	39	63	e48	e50	e48	37	17	7.2	22	e18	1.6	5.0
11	44	67	e46	54	e45	38	17	6.4	23	13	4.3	4.8
12	44	70	51	55	e45	39	18	7.0	21	e9.3	5.9	4.2
13	47	67	e50	e50	e47	38	16	6.6	17	e7.6	2.4	4.2
14	46	66	e50	e52	52	38	11	7.8	20	e7.6	1.9	6.5
15	48	64	e50	54	48	36	7.0	8.4	23	e7.0	1.8	9.8
16	53	62	e50	54	47	39	3.8	12	31	e6.5	1.6	12
17	54	61	e50	57	46	39	4.0	12	41	e5.5	1.6	18
18	52	58	e50	58	45	40	3.9	14	45	e5.2	1.7	17
19	52	57	e50	56	45	41	3.6	16	38	e4.9	1.8	27
20	51	56	50	57	44	41	3.9	12	35	e4.6	2.2	32
21	53	56	53	58	43	42	5.8	9.3	28	e4.4	2.5	21
22	57	58	e45	e50	45	42	9.7	18	33	e4.2	1.9	17
23	55	57	e42	e50	46	42	8.7	24	32	e3.9	2.7	15
24	53	56	e42	54	44	41	11	31	12	e3.7	4.2	14
25	73	56	e42	52	43	39	14	29	9.0	e3.5	2.9	13
26	62	56	e45	51	42	39	17	25	7.8	e3.3	3.9	12
27	59	56	e48	50	42	39	12	29	7.2	e3.1	9.3	11
28	57	55	e52	e48	41	37	9.3	66	6.2	e2.9	14	11
29	58	56	57	e48	---	37	14	62	5.8	e2.7	9.7	11
30	62	54	59	e50	---	35	16	55	9.5	e2.6	7.4	12
31	60	---	58	50	---	36	---	53	---	e2.3	12	---
TOTAL	1502	1807	1540	1652	1280	1208	382.3	648.1	779.5	250.4	124.9	326.0
MEAN	48.5	60.2	49.7	53.3	45.7	39.0	12.7	20.9	26.0	8.08	4.03	10.9
MAX	73	70	59	59	52	42	30	66	47	53	14	32
MIN	31	54	42	48	41	35	3.6	6.4	5.8	2.3	1.6	4.1
AC-FT	2980	3580	3050	3280	2540	2400	758	1290	1550	497	248	641

MEAN	19.6	41.3	41.4	39.3	43.1	43.3	30.8	75.1	84.3	16.4	15.0	11.4
MAX	66.9	70.1	62.7	65.6	65.5	85.8	144	622	1113	134	136	49.6
(WY)	1984	1983	1985	1969	1930	1916	1984	1984	1983	1983	1936	1936
MIN	.000	18.0	18.9	19.1	21.5	22.3	1.93	.32	.000	.000	.000	.000
(WY)	1932	1991	1991	1973	1935	1935	1935	1934	1934	1934	1931	1924

ANNUAL TOTAL	24674		11500.2				
ANNUAL MEAN	67.6		31.5			38.3	
HIGHEST ANNUAL MEAN						180	1983
LOWEST ANNUAL MEAN						9.83	1977
HIGHEST DAILY MEAN	270	Jun 27	73	Oct 25		1700	Jun 19 1983
LOWEST DAILY MEAN	10	Jul 18	1.6	Aug 10		.00	May 7 1924
ANNUAL SEVEN-DAY MINIMUM	17	Jul 16	1.8	Aug 14		.00	Aug 7 1924
ANNUAL RUNOFF (AC-FT)	48940		22810			27770	
10 PERCENT EXCEEDS	162		57			60	
50 PERCENT EXCEEDS	49		37			30	
90 PERCENT EXCEEDS	28		4.1			.72	

e Estimated



## BEAVER RIVER BASIN

10239000 BEAVER RIVER AT ROCKY FORD DAM, NEAR MINERSVILLE, UT

LOCATION.--Lat 38°13'03", long 112°50'22", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 11, T. 30 S., R. 9 W., Beaver County, Hydrologic Unit 16030007, on right bank, 0.5 mi downstream from Rocky Ford Dam, and 4.8 mi east of Minersville.

DRAINAGE AREA.--535 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1913 to September 1936, April 1937 to current year.

REVISED RECORDS.--WSP 1564: 1920, 1924. WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Nov 12, 1916. Elevation of gage is 5,400 ft above sea level, from topographic map. Prior to Jun 1, 1916, at site 1,500 ft upstream at different datum.

REMARKS.--Records good. One small diversion between dam and station. Flow regulated by Minersville Reservoir (prior to 1968 published as Rockyford Reservoir). Numerous diversions for irrigation and municipal use upstream from reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,220 ft<sup>3</sup>/s Jun 12, 1983, gage height, 4.74 ft, from rating curve extended above 600 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum daily, 1.3 ft<sup>3</sup>/s Oct 24, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 342 ft<sup>3</sup>/s, Sep 21, gage height, 2.54 ft; minimum daily discharge, 10 ft<sup>3</sup>/s, Oct 9-11, Mar 20-25, Apr 16-19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	13	81	63	47	32	81	106	145	101	104
2	11	13	13	81	63	47	33	81	106	136	96	101
3	11	12	13	82	63	47	29	82	106	122	91	90
4	11	12	14	81	63	48	29	82	102	144	46	83
5	11	13	24	81	63	47	27	77	84	152	64	87
6	11	13	33	81	46	47	27	76	81	182	119	97
7	11	13	33	81	25	47	27	77	98	189	114	96
8	11	13	32	81	25	47	25	81	98	208	112	104
9	10	13	32	67	24	47	17	91	84	210	110	126
10	10	13	31	41	24	47	12	90	69	213	109	131
11	10	13	32	41	23	47	11	93	73	191	108	129
12	11	13	31	41	23	47	11	103	73	184	106	134
13	11	12	30	41	18	47	12	105	73	187	105	148
14	11	12	30	36	12	47	15	107	82	208	104	149
15	11	12	30	21	11	45	12	106	83	216	105	171
16	11	12	30	19	12	28	10	103	78	207	105	175
17	11	12	30	18	11	28	10	93	78	194	104	170
18	11	12	30	18	12	26	10	91	85	189	101	167
19	11	12	30	28	42	11	10	90	88	158	101	203
20	11	12	30	78	48	10	11	94	96	138	100	301
21	11	12	30	87	49	10	39	105	96	122	100	328
22	11	12	30	84	48	10	40	102	97	120	98	325
23	11	12	30	84	47	10	38	100	121	112	98	314
24	11	12	29	84	47	10	55	100	134	107	97	266
25	12	12	29	84	47	10	66	100	133	105	96	100
26	12	12	30	84	47	12	65	99	134	102	96	51
27	11	12	33	84	47	15	69	98	144	100	96	49
28	11	13	44	84	47	30	77	107	146	97	96	50
29	12	13	66	84	---	35	81	107	148	111	96	50
30	12	13	85	75	---	34	81	107	151	114	107	51
31	13	---	82	64	---	31	---	106	---	108	105	---
TOTAL	345	373	1029	1996	1050	1014	981	2934	3047	4771	3086	4350
MEAN	11.1	12.4	33.2	64.4	37.5	32.7	32.7	94.6	102	154	99.5	145
MAX	13	13	85	87	63	48	81	107	151	216	119	328
MIN	10	12	13	18	11	10	10	76	69	97	46	49
AC-FT	684	740	2040	3960	2080	2010	1950	5820	6040	9460	6120	8630

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915-36, 1938-99, BY WATER YEAR (WY)

	MEAN	12.0	10.2	11.3	12.5	12.3	15.9	29.0	97.7	110	85.0	66.6	36.3
MAX	57.8	51.8	97.8	121	55.8	76.7	196	457	926	215	143	145	
(WY)	1938	1984	1942	1984	1985	1983	1984	1984	1983	1983	1986	1999	
MIN	2.85	3.19	2.67	2.95	3.54	4.69	5.98	27.8	21.0	7.84	7.61	4.59	
(WY)	1977	1978	1978	1978	1978	1978	1997	1977	1919	1919	1919	1956	

## SUMMARY STATISTICS

## FOR 1998 CALENDAR YEAR

## FOR 1999 WATER YEAR

## WATER YEARS 1915-36, 1938-99

ANNUAL TOTAL	25787.6	24976	
ANNUAL MEAN	70.7	68.4	41.1
HIGHEST ANNUAL MEAN			163
LOWEST ANNUAL MEAN			12.6
HIGHEST DAILY MEAN	400	328	1210
LOWEST DAILY MEAN	9.0	10	1.3
ANNUAL SEVEN-DAY MINIMUM	9.0	10	1.5
ANNUAL RUNOFF (AC-FT)	51150	49540	29810
10 PERCENT EXCEEDS	155	134	103
50 PERCENT EXCEEDS	30	55	14
90 PERCENT EXCEEDS	11	11	4.8

LOCATION.--Lat 37°40'20", long 113°02'02", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 13, T. 36 S., R. 11 W., Iron County, Hydrologic Unit 16030006, on right bank, 1.2 mi east of Cedar City, and 3.7 mi downstream from the mouth of Right Hand Creek.

PERIOD OF RECORD.--May to September 1915 (gage heights and discharge measurements only), October 1915 to July 1916, September 1916 to July 1918, September 1918 to November 1919, May 1935 to September 1937, April 1938 to current year. Records prior to November 1919 exclude flow of power canal; records would be equivalent if flow in canal were added.

GAGE.--Water-stage recorder. Crest-stage gage since Aug 1, 1989. Concrete control since Jul 1972, rebuilt Jul 29, 1988. Elevation of gage is 6,000 ft above sea level, from topographic map. Prior to Mar 30, 1939, nonrecording gages and Mar 30, 1939 to May 14, 1945, water-stage recorder at several sites about 0.5 mi upstream at various datums. May 15, 1945 to Oct 10, 1951, May 4 to Jul 2, 1952, water-stage recorder at site 2 mi upstream at different datum. Jul 3, 1952 to Nov 17, 1967, water-stage recorder at site 600 ft upstream at different datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft<sup>3</sup>/s Jul 23, 1969, gage height, 11.67 ft from flood-mark, based on slope-area measurement of Jul 16, 1967 and applied to site and datum now in use; minimum, 0.3 ft<sup>3</sup>/s Nov 5, 14, 17, 26, 1959, Feb 17, 1960, Feb 24, 1961.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jul 28	1745	*539	*6.81				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

MEAN	12.6	11.6	10.3	9.99	11.8	18.1	55.5	146	71.8	22.9	17.4	14.2
MAX	38.4	24.1	21.3	17.7	18.6	39.5	140	489	428	69.9	59.7	46.8
(WY)	1973	1988	1984	1984	1947	1995	1985	1973	1983	1983	1968	1998
MIN	6.17	5.95	5.78	6.41	7.40	9.10	17.1	19.0	11.6	7.61	5.94	6.33
(WY)	1991	1978	1991	1951	1960	1951	1975	1977	1989	1959	1960	1956

## CEDAR VALLEY, IRON COUNTY

SUMMARY STATISTICS		10242000 COAL CREEK NEAR CEDAR CITY, UT--Continued		WATER YEARS 1939 - 1999	
	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		
ANNUAL TOTAL	23876.1		11843		
ANNUAL MEAN	65.4		32.4		33.6
HIGHEST ANNUAL MEAN					86.0
LOWEST ANNUAL MEAN					11.4
HIGHEST DAILY MEAN	444	May 21	217	May 22	1080
LOWEST DAILY MEAN	7.5	Jan 6	11	Dec 22	2.1
ANNUAL SEVEN-DAY MINIMUM	8.3	Jan 2	11	Sep 4	2.5
ANNUAL RUNOFF (AC-FT)	47360		23490		24360
10 PERCENT EXCEEDS	208		62		76
50 PERCENT EXCEEDS	24		20		13
90 PERCENT EXCEEDS	10		12		7.8

e Estimated

## DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1999

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Date	Measurements Discharge (ft <sup>3</sup> /s)
BEAR RIVER BASIN						
10113500 Blacksmith Fork	Bear River	Lat 41°37'25", long 111°44'17"263 above UP& L Co's Dam near Hyrum		1913-96	05-06-99	460
WEBER RIVER BASIN						
10132500 Lost Creek	Weber River	Lat 41°10'35", long 111°24'20"133 Morgan County, 9.5 mi north- east of Croydon.		1922* 1942-67* 1988-89 1993-98	10-02-98 04-07-99 06-29-99 08-23-99	17.0 7.71 12.5 64.9
SEVIER LAKE BASIN						
391523111371600 Manti Creek	Sevier River	Lat 39°15'23", long 111°37'16" Sanpete County Above diversion			02-08-99	6.38
		Below diversion			02-08-99	0.08
CEDAR VALLEY						
373744113075901 Shurtz Creek	Tributary to Cedar Valley, nr Hamilton FortIron County	Lat 37°37'44", long 113°07'59"			07-15-99	0.59
VIRGIN RIVER BASIN						
3658541135903 Beaver Dam Wash	Virgin River	Lat 36°58'54", long 113°59'03" Mojave County, AZ approx. 5.7 mi NNW of Beaver Dam, AZ and about 0.25 mi downstream of Welcome Creek			10-26-98 11-23-98 02-10-99 04-12-99 06-22-99 08-10-99 10-13-99	5.33 4.24 5.11 4.06 1.32 0.74 0.51 (WY '00)

Operated as a continuous gaging station.

## WEBER RIVER BASIN

403846111192601 INDIAN HOLLOW NEAR KAMAS, UT

LOCATION.--Lat 40°38'46", long 111°19'26", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 13, T. 2 S., R. 5 E., Summit County; Hydrologic Unit 16020101, on left bank on north side of State Highway 248, 2.4 mi west of Kamas.

DRAINAGE AREA.--4.29 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,457 ft above sea level, from topographic survey.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19 ft<sup>3</sup>/s May 3, gage height, 8.81 ft; minimum daily discharge, .04 cfs, Sep 9-15, 17-21, 24-28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.13	e.12	e.13	e.06	e.08	e.60	2.2	4.9	1.6	.32	.14	.06
2	e.13	e.12	e.13	e.06	e.08	e.60	1.9	5.4	1.9	.31	.14	.06
3	e.14	e.11	e.11	e.06	e.08	e.70	1.8	13	1.9	.28	.13	.05
4	e.14	e.11	e.09	e.06	e.09	e.79	1.7	11	1.7	.25	.13	.05
5	e.14	e.12	e.06	e.06	e.09	e.89	1.6	11	1.6	.24	.13	.05
6	e.13	e.11	e.06	e.06	e.11	e1.0	1.6	9.3	1.6	.25	.13	.05
7	e.13	e.12	e.06	e.06	e.13	e1.2	1.7	9.7	1.5	.25	.13	.05
8	e.13	e.11	e.06	e.06	e.18	e1.3	1.9	7.7	1.3	.25	.11	.05
9	e.13	e.12	e.06	e.06	e.18	e1.4	2.0	6.3	1.3	.25	.11	.04
10	e.13	e.11	e.06	e.07	e.19	e1.5	1.9	5.1	1.3	.25	.10	.04
11	e.13	e.12	e.06	e.07	e.15	e1.7	1.8	4.4	1.2	.25	.10	.04
12	e.13	e.12	e.06	e.07	e.15	e1.9	1.9	3.9	1.1	.25	.10	.04
13	e.13	e.12	e.06	e.07	e.16	e2.2	2.2	5.5	1.0	.25	.10	.04
14	e.13	e.12	e.06	e.07	e.17	e2.4	2.5	4.4	.99	.24	.10	.04
15	e.13	e.13	e.06	e.07	e.17	e2.7	2.4	4.1	.95	.24	.10	.04
16	e.13	e.13	e.06	e.08	e.18	e2.9	2.3	3.7	.90	.24	.09	.05
17	e.12	e.14	e.06	e.08	e.20	2.9	2.2	3.4	.87	.23	.09	.04
18	e.12	e.15	e.06	e.08	e.21	3.6	2.4	3.3	.82	.23	.09	.04
19	e.12	e.14	e.06	e.08	e.22	4.2	2.6	3.1	.76	.21	.09	.04
20	e.12	e.13	e.06	e.08	e.23	4.4	2.9	2.8	.69	.21	.08	.04
21	e.12	e.13	e.06	e.08	e.25	4.5	2.9	2.6	.66	.21	.08	.04
22	e.12	e.13	e.06	e.08	e.28	4.1	2.5	2.4	.64	.21	.08	.05
23	e.12	e.14	e.06	e.09	e.31	3.9	2.3	2.2	.59	.21	.08	.05
24	e.12	e.14	e.06	e.09	e.34	4.3	2.3	2.1	.55	.20	.07	.04
25	e.13	e.14	e.06	e.09	e.39	4.8	2.2	2.0	.48	.19	.07	.04
26	e.13	e.14	e.06	e.09	e.44	3.9	2.2	2.0	.42	.19	.07	.04
27	e.12	e.14	e.06	e.08	e.49	3.1	2.7	1.9	.40	.17	.07	.04
28	e.12	e.14	e.07	e.08	e.51	2.4	3.4	1.8	.38	.18	.07	.04
29	e.13	e.14	e.07	e.07	---	2.3	5.5	1.8	.35	.16	.07	.05
30	e.13	e.14	e.07	e.08	---	2.5	5.6	1.7	.33	.15	.07	.05
31	e.13	---	e.07	e.08	---	2.4	---	1.7	---	.15	.07	---
TOTAL	3.96	3.83	2.12	2.27	6.06	77.08	73.1	144.2	29.78	7.02	2.99	1.35
MEAN	.13	.13	.068	.073	.22	2.49	2.44	4.65	.99	.23	.096	.045
MAX	.14	.15	.13	.09	.51	4.8	5.6	13	1.9	.32	.14	.06
MIN	.12	.11	.06	.06	.08	.60	1.6	1.7	.33	.15	.07	.04
AC-FT	7.9	7.6	4.2	4.5	12	153	145	286	59	14	5.9	2.7

WTR YR 1999 TOTAL 353.76 MEAN .97 MAX 13 MIN .04 AC-FT 702

e Estimated

HYDROLOGIC DATA AT UNION PACIFIC RAILROAD CAUSEWAY  
GREAT SALT LAKE BASIN

STATION NUMBER	STATION NAME	DATE	(CFS) DISCHARGE SOUTH TO NORTH	(CFS) DISCHARGE NORTH TO SOUTH
10010020	GSL UPR N CAUSEWAY BREACH AT LAKESIDE, UT	10/27/98	1350	152
		03/10/99	2580	194
		06/23/99	3370	180
		08/28/99	1390	317
10010030	GSL UPR N CAUSEWAY WEST CULVERT	10/14/98	0	0
		01/16/99	0	0
		03/10/99	0	0
		06/10/99	0	0
		06/23/99	0	0
		08/28/99	0	105
10010040	GSL UPR N CAUSEWAY EAST CULVERT	10/14/98	0	297
		03/10/99	0	185
		06/23/99	0	400
		08/28/99	0	167

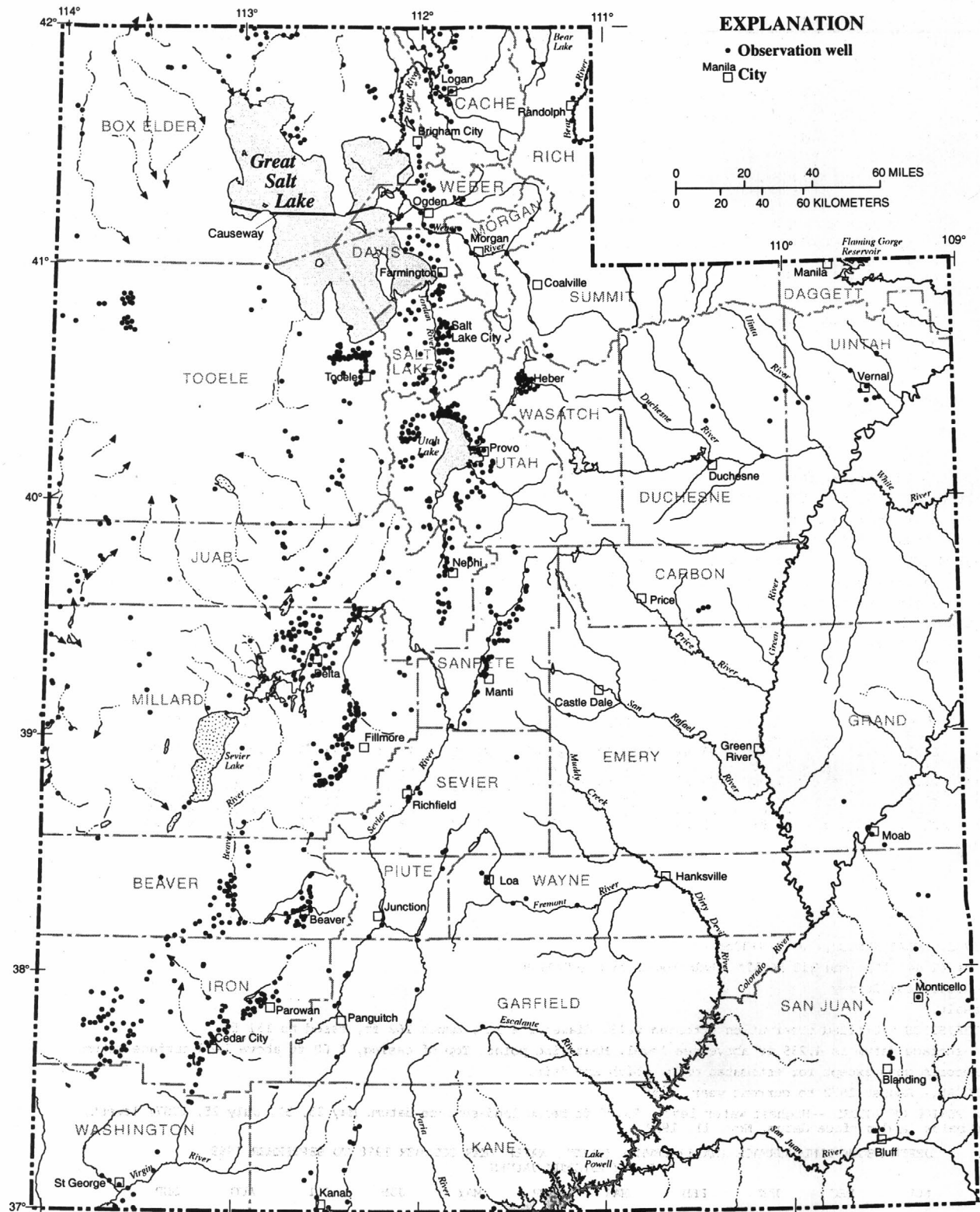


Figure 10. Locations of observation wells in Utah where data were obtained on ground-water levels.



## BEAVER COUNTY

382020112585901. LOCAL NUMBER, (C-28-10)28cdd-1.

LOCATION.--Lat 38°20'20", Long 112°58'59", Hydrologic Unit 16030007.

Owner: Wiseman.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter 16 in., hole depth 360 ft, cased to 60 ft.

DATUM.--Elevation of land-surface datum is 5,019 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good except for estimated days, which are fair.

PERIOD OF RECORD.--April 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.99 ft below land-surface datum, Sep. 30, Oct. 1, 1984; lowest, 69.98 ft below land-surface datum, September 9, 1997.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.85	47.54	46.24	45.62	45.10	44.71	44.26	50.86	58.56	59.60	55.57	55.16
10	49.43	47.15	46.18	45.53	44.96	44.60	44.22	53.08	57.71	59.85	56.62	53.56
15	48.92	46.92	46.03	45.43	44.98	44.52	44.21	55.33	55.33	60.11	57.39	52.08
20	48.57	46.74	45.80	45.31	44.93	44.46	46.63	57.35	55.33	59.13	58.36	50.49
25	48.14	46.56	45.79	45.25	44.79	44.39	46.73	e58.5	57.45	56.06	58.99	49.28
EOM	47.83	46.39	45.62	45.18	44.81	44.25	47.60	59.03	58.81	55.00	57.53	48.56

e Estimated

## BOX ELDER COUNTY

414236112101201. LOCAL NUMBER, (B-11-3)10abb-4.

LOCATION.--Lat 41°42'36", long 112°10'12", Hydrologic Unit 16010204.

Owner: Rocky Mountain Packing Company.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 705 ft, cased to 437 ft.

DATUM.--Land-surface datum is 4,318 ft above sea level. Measuring point: Top of casing, 0.50 ft above land-surface datum.

REMARKS.--Records good except for estimated days which are fair.

PERIOD OF RECORD.--October 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.00 ft below land-surface datum, July 27, Sep. 12, 1984; lowest, 25.77 ft below land-surface datum, May 19, 20, 1993.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.34	21.22	21.30	21.72	21.99	22.30	22.67	22.99	23.16	22.90	22.62	22.17
10	21.31	21.20	21.39	21.78	21.97	22.33	22.74	23.06	23.11	22.93	22.54	e22.16
15	21.24	21.26	21.49	21.85	22.15	22.44	22.92	23.14	23.11	22.87	22.45	e22.11
20	21.27	21.24	21.49	21.84	22.14	22.52	23.02	23.18	23.04	22.82	22.42	e22.05
25	21.25	21.25	21.60	21.83	22.22	22.57	22.99	23.22	23.01	22.76	22.35	e22.00
EOM	21.22	21.26	21.64	21.98	22.26	22.65	23.00	23.23	22.99	22.67	22.25	e21.94

e Estimated

414411112543701. LOCAL NUMBER, (B-12-9)30cda-1.

LOCATION.--Lat 41°44'11", long 112°54'37", Hydrologic Unit 16020309.

Owner: U.S. Geological Survey.

AQUIFER.--Basalt.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 162 ft, cased to 131 ft.

DATUM.--Land-surface datum is 4,239 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Records good except for estimated days, which are fair.

PERIOD OF RECORD.--August 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.08 ft below land-surface datum, May 25, 31, July 25, 1987; lowest, 25.86 ft below land-surface datum, Nov. 11, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	e25.48	25.47	25.43	25.40	25.29	25.20	25.11	25.04	24.93	25.02	25.10	25.25
10	e25.49	25.50	25.46	25.37	25.26	25.18	25.11	25.00	24.95	25.02	25.13	25.27
15	25.50	25.47	25.43	25.34	e25.25	25.15	25.08	24.97	24.94	25.02	25.16	25.28
20	25.52	25.46	25.39	e25.32	25.23	25.12	25.06	24.96	24.94	25.04	25.16	25.33
25	25.50	25.46	25.39	e25.31	25.18	25.12	25.04	24.94	24.94	25.08	25.19	25.35
EOM	25.50	25.45	25.36	25.30	25.19	25.11	25.03	24.93	e24.98	25.09	25.20	25.40

e Estimated

## BOX ELDER COUNTY--Continued

415703112514501. LOCAL NUMBER, (B-14-9)9add-1.

LOCATION.--Lat 41°57'03", long 112°51'45", Hydrologic Unit 16020309.

Owner: Cyprus Farms Inc.

AQUIFER.--Basalt.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 20 in., depth 400 ft, cased to 395 ft.

DATUM.--Land-surface datum is 4,384 ft above sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 160.12 ft below land-surface datum, April 16, 1988; lowest, 188.51 ft below land-surface datum, September 27, 1999.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	173.84	169.86	168.32	167.02	166.41	166.10	166.14	165.45	173.18	175.66	177.43	186.19
10	172.93	169.60	168.29	167.06	166.22	166.02	166.01	165.93	170.67	176.76	177.40	186.95
15	172.37	170.68	168.03	166.83	166.27	165.84	165.91	166.77	170.29	177.22	182.81	187.39
20	171.83	170.37	167.59	166.54	166.35	165.80	165.54	169.50	170.87	177.69	185.37	187.90
25	170.97	169.39	167.43	166.63	166.04	165.83	165.46	171.86	172.75	178.21	186.55	188.18
EOM	170.45	168.70	166.98	166.50	166.17	166.66	165.37	173.09	174.18	176.91	184.72	184.94

## IRON COUNTY

375241112471001. LOCAL NUMBER, (C-34-8)5bca-1.

LOCATION.--Lat 37°52'41", long 112°47'20", Hydrologic Unit 16030006.

Owner: Paragonah Canal Company.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 420 ft.

DATUM.--Elevation of land-surface datum is 5,802 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--September 1935 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.45 ft below land-surface datum, June 26, 1949; lowest, 56.20 ft below land-surface datum, Apr. 14, 1995.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	47.35	47.39	47.40	47.72	47.88	48.04	48.07	48.18	47.84	47.35	46.88	46.37
10	47.20	47.49	47.55	47.72	47.68	48.00	48.11	48.05	47.79	47.44	47.08	46.14
15	47.00	47.45	47.68	47.74	47.75	48.01	48.13	48.02	47.45	47.37	46.88	45.88
20	47.14	47.56	47.59	47.64	47.84	47.91	47.95	48.02	47.32	47.12	46.77	46.15
25	46.95	47.47	47.89	47.70	47.75	47.97	47.97	47.92	47.34	47.14	46.54	45.90
EOM	47.47	47.40	47.65	47.69	48.03	47.92	48.06	47.96	47.27	47.10	46.40	45.85

374252113391801. LOCAL NUMBER, (C-35-16)33bcc-1.

LOCATION.--Lat 37°42'52", long 113°39'18", Hydrologic Unit 16030006.

OWNER.--Charles F. Twitchell

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused irrigation water-table well, diameter 16 in., cased to 160 ft.

DATUM.--Elevation of land-surface datum is 5,175.11 ft above sea level. Measuring point: Top of casing, 0.55 ft above land-surface datum.

REMARKS.--There are several nearby pumped wells. Records good.

PERIOD OF RECORD.--September 1947 to 1953, 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.06 ft below land-surface datum, Sept. 11, 1947; lowest, 127.86 ft below land-surface datum, Aug. 29, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	124.87	122.82	121.70	120.70	119.61	118.95	118.07	118.85	122.99	125.30	125.74	127.79
10	124.36	122.73	121.62	120.43	119.32	118.76	117.93	119.71	122.77	126.05	126.26	127.79
15	123.97	122.46	121.49	120.19	119.29	118.52	117.86	120.49	122.38	126.39	127.23	127.33
20	123.82	122.27	121.19	119.97	119.25	118.39	117.64	121.25	122.06	125.62	127.77	126.98
25	123.39	122.12	121.05	119.82	119.01	118.36	117.95	122.24	122.71	125.43	127.79	126.66
EOM	123.24	121.93	120.66	119.72	119.02	118.06	118.36	122.97	123.99	125.58	127.80	126.31

## IRON COUNTY--Continued

374132113063601. LOCAL NUMBER, (C-36-11)8aab-1.

LOCATION.--Lat 37°41'32", long 113°06'36", Hydrologic Unit 16030006.

Owner: Cedar City Corporation.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., cased to 220 ft.

DATUM.--Land-surface datum is 5,563 ft above sea level. Measuring point: Top of 8-in casing, 5.2 ft above land-surface datum.

REMARKS.--Records good except for period between Feb. 19 and Mar. 16 when partial days were recorded, which are fair, and estimated days, which are poor.

PERIOD OF RECORD.--September 1935 to December 1943, March 1945 to March 1973, April 1978 to September 1987, and November 16, 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.67 ft below land-surface datum, Sept 27, 1943; lowest, 100.08 ft below land-surface datum, Sept 10, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	78.47	75.17	73.11	70.79	70.18	72.03	81.15	89.54	91.60	e95.0
10	---	---	77.67	74.81	72.58	70.64	70.16	73.00	81.96	90.69	92.83	e95.0
15	---	---	77.08	74.36	72.39	70.42	70.35	73.68	83.94	91.47	94.11	e94.9
20	---	80.61	76.36	73.96	72.11	70.30	71.04	74.52	85.28	92.64	e95.2	e94.9
25	---	80.03	76.03	73.65	71.54	70.29	71.47	75.64	86.94	91.97	e95.1	e94.9
31	---	79.36	75.35	73.31	71.15	70.09	71.87	79.61	88.31	90.63	e95.1	e94.8

e Estimated

373735113393801. LOCAL NUMBER, (C-36-16)29daa-1.

LOCATION.--Lat 37°37'35", long 113°39'38", Hydrologic Unit 16030006.

Owner: George Gardner.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 14 in., cased to 380 ft.

DATUM.--Land-surface datum is 5,233.36 ft above sea level. Measuring point: Top of casing, 1.50 ft above land-surface datum.

REMARKS.--Records good except for estimated days, which are fair. There are several nearby pumped wells.

PERIOD OF RECORD.--October 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 167.63 ft below land-surface datum, Apr. 12, 1990; lowest, 196.03 ft below land-surface datum, Aug. 27, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	187.31	185.20	184.05	183.05	181.84	e181.1	180.38	181.98	185.60	191.28	193.93	193.45
10	186.72	185.26	184.16	182.87	181.60	e181.0	180.29	183.38	185.88	189.81	194.53	190.28
15	186.32	184.80	183.71	182.56	181.52	e180.9	180.19	184.61	184.40	189.31	192.43	189.43
20	186.23	184.77	183.31	182.30	181.64	180.67	182.53	188.15	187.87	187.67	192.75	189.10
25	185.69	184.57	183.47	182.17	181.19	180.56	180.27	188.86	189.65	190.20	192.21	188.82
EOM	185.68	184.37	182.92	181.98	181.33	180.16	180.81	189.95	191.89	189.25	195.07	188.30

e Estimated

## JUAB COUNTY

393143111523301. LOCAL NUMBER, (C-15-1)12aba-1.

LOCATION.--Lat 39°31'43", long 111°52'33", Hydrologic Unit 16030005.

Owner: R. C. Mangelson.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled stock artesian well, diameter 6 in., depth 117 ft, cased to 117 ft.

DATUM.--Land-surface datum is 5,196.90 ft above sea level. Measuring point: Top of casing, 1.50 ft above land-surface datum.

REMARKS.--Records good except for estimated days, which are fair.

PERIOD OF RECORD.--August 1935 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.41 ft below land-surface datum, May 21, 1985; lowest recorded, 71.51 ft below land-surface datum, Aug. 27, 1993.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.83	57.34	56.98	e56.65	56.36	56.23	55.57	55.70	56.01	57.36	57.37	57.05
10	57.69	57.35	57.02	56.63	56.28	56.06	55.68	55.58	56.15	57.56	57.55	56.94
15	57.78	57.24	56.88	56.54	56.34	55.92	55.72	55.49	56.24	57.71	57.53	56.92
20	57.91	57.23	56.70	56.41	56.36	55.83	55.67	55.50	56.32	57.56	57.59	56.91
25	57.64	57.17	56.74	56.40	56.21	55.75	55.67	55.72	56.36	57.38	57.58	56.78
EOM	57.53	57.08	e56.68	56.39	56.28	55.55	55.67	55.94	56.75	57.31	57.11	56.90

e Estimated

## KANE COUNTY

370915112341301. LOCAL NUMBER, (C-42-6)18cca-1

LOCATION.--Lat 37°09'15", long 112°34'13", Hydrologic Unit 15010003.

Owner: Kanab City.

AQUIFER.--Navajo Sandstone.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 10 in., open hole from 18 ft to 560 ft.

DATUM.--Land-surface datum is 5,630.00 ft above sea level. Measuring point: Top of casing, 1.6 ft above land-surface datum.

REMARKS.--Records good. Previously reported as 19baa-1, 370901112335001.

PERIOD OF RECORD.--February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 160.51 ft below land-surface datum, Jan. 18, 1988; lowest, 167.40 ft below land-surface datum, Apr. 8, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	164.23	164.03	164.02	164.41	164.13	164.12	164.31	164.38	164.35	164.51	164.43	164.49
10	164.11	164.24	164.51	164.37	163.93	164.17	164.46	164.30	164.40	164.65	164.37	164.44
15	163.81	164.21	164.35	164.19	164.16	164.14	164.58	164.29	164.43	164.39	164.49	164.48
20	164.26	164.38	163.80	163.98	164.32	164.31	164.19	164.41	164.35	164.45	164.54	164.56
25	164.01	164.32	164.45	164.00	164.17	164.27	164.32	164.47	164.31	164.47	164.44	164.46
EOM	164.09	164.29	163.96	164.15	164.39	163.93	164.31	164.42	164.35	164.39	164.37	164.52

370650112331002. LOCAL NUMBER, (C-42-6)32cba-2.

LOCATION.--Lat 37°06'50", long 112°33'10", Hydrologic Unit 15010003.

Owner: Kanab City.

AQUIFER.--Navajo Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., cased to 230 ft.

DATUM.--Elevation of land-surface datum is 5,180.00 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Record is good except for estimates, which are fair. Formerly published as 370523112334702, (C-42-6)30dcc-2.

PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 53.30 ft below land-surface datum, Apr. 25, 1986; lowest, 70.91 ft below land-surface datum, Sept. 14, 1999, but may have been lower during estimated period from Sept. 16 to Sept. 30, 1999.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	67.97	68.64	69.71	70.01	68.89	70.02	70.25	69.16	70.24	70.27	69.70	70.77
10	67.67	68.91	69.81	70.08	69.20	69.44	70.33	69.38	69.66	70.41	70.05	70.82
15	67.46	69.08	69.88	70.02	69.52	69.15	70.39	69.24	69.31	70.49	70.33	70.89
20	67.58	69.28	69.89	69.40	69.81	69.64	70.35	69.67	69.25	70.56	70.54	e70.8
25	67.99	69.46	69.57	69.07	69.97	69.94	69.81	69.95	69.70	70.34	70.64	e70.6
EOM	68.41	69.93	69.88	68.75	70.09	70.14	69.42	70.21	70.00	69.76	70.70	e70.4

e Estimated

## MILLARD COUNTY

393046112231301. LOCAL NUMBER, (C-15-5)15dad-1.

LOCATION.--Lat 39°30'46", long 112°23'13", Hydrologic Unit 16030005.

Owner: Anaconda Copper Co.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 1,190 ft, cased to 1,115 ft, perforated 860-1,050 ft.

DATUM.--Elevation of land-surface datum is 4,780 ft above sea level. Measuring point: Top of 12-in casing, 2.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.03 ft below land-surface datum, Apr. 2, 1986; lowest, 174.62 ft below land-surface datum, Aug. 24, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	108.22	108.12	108.20	107.71	107.32	107.03	106.57	106.55	106.62	106.70	106.84	106.95
10	108.10	108.34	108.43	107.63	106.99	106.83	106.73	106.66	106.75	106.59	106.69	106.93
15	108.09	108.30	108.12	107.52	107.20	106.79	106.86	106.54	106.57	106.52	106.83	107.05
20	108.12	108.51	107.88	107.39	107.15	106.75	106.58	106.59	106.68	106.73	106.96	107.00
25	108.10	108.54	107.93	107.25	106.91	106.70	106.66	106.73	106.66	106.65	106.83	106.77
EOM	108.30	108.22	107.56	107.27	107.04	106.60	106.68	106.64	106.65	106.78	106.95	106.72

## MILLARD COUNTY--Continued

393020112362201. LOCAL NUMBER, (C-15-7)23bac-1.

LOCATION.--Lat 39°30'20", long 112°36'22", Hydrologic Unit 16030007.

Owner: U.S. Geological Survey.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 182 ft.

DATUM.--Elevation of land-surface datum is 4,629 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.57 ft below land-surface datum, Mar. 3, 1989; lowest, 15.91 ft below land-surface datum, Oct. 16, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.12	9.02	8.97	8.83	8.50	8.36	8.34	8.24	8.32	8.61	8.82	8.98
10	9.20	9.02	9.01	8.77	8.44	8.37	8.36	8.26	8.34	8.70	8.83	8.97
15	9.16	8.98	8.96	8.70	8.48	8.33	8.38	8.24	8.38	8.72	8.82	8.98
20	9.18	9.02	8.84	8.59	8.47	8.35	8.32	8.28	8.42	8.76	8.89	8.98
25	9.05	9.02	8.88	8.58	8.34	8.37	8.30	8.31	8.45	8.79	8.90	8.96
ECM	9.08	9.00	8.78	8.53	8.38	8.30	8.30	8.33	8.54	8.82	8.92	8.96

390623113084101. LOCAL NUMBER, (C-20-12)1aac-1.

LOCATION.--Lat 39°06'23", long 113°08'41", Hydrologic Unit 16030009.

Owner: U.S. Geological Survey.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 2 in., hole depth 150 ft, perforated 127 to 145 ft.

DATUM.--Elevation of land-surface datum is 4,543.77 ft above sea level. Measuring point: Top of inside steel casing, 1.0 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--Aug. 1980-82, 1984, 1986-92, 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.10 ft below land-surface datum, April 1, 1999; lowest, 56.79 ft below land-surface datum, July 22, 1982.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19, 1997	55.41	JUL 28, 1998	55.27	JAN 07, 1999	55.25
JAN 21, 1998	55.39	AUG 12, 1998	55.33	APR 01, 1999	55.10
MAR 10, 1998	55.29	SEP 08, 1998	55.23	MAY 12, 1999	55.22
APR 21, 1998	55.27	OCT 05, 1998	55.37	JUN 22, 1999	55.22
MAY 27, 1998	55.28	NOV 17, 1998	55.20	JUL 07, 1999	55.24

385844112245801. LOCAL NUMBER, (C-21-5)21aba-1.

LOCATION.--Lat 38°58'44", long 112°24'58", Hydrologic Unit 16030005.

Owner: Delyle Carling.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., hole depth 246 ft, cased to 220 ft.

DATUM.--Elevation of land-surface datum is 4,744.44 ft above sea level. Measuring point: Top of casing, 2.45 ft above land-surface datum. Casing extended 1.95 ft, May 6, 1998.

REMARKS.--Record is good except for estimated record, which is poor.

PERIOD OF RECORD.--May 1929 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.96 ft above land-surface datum, Feb. 24, 1949; lowest, 83.02 ft below land-surface datum, July 20, 1965.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.83	e28.2	28.45	28.36	27.98	28.03	28.27	30.22	30.55	29.63	29.41	30.06
10	e27.8	e28.3	28.48	28.38	27.78	27.93	28.74	30.19	29.86	29.37	29.33	30.07
15	e27.9	e28.4	28.49	28.27	27.69	27.80	29.37	e31.0	29.68	29.02	29.51	29.97
20	e28.0	e28.4	28.44	28.15	27.94	27.83	30.86	31.67	29.46	28.77	29.92	30.04
25	e28.1	e28.5	28.48	28.08	27.85	27.89	29.94	31.64	29.88	28.58	30.20	29.92
ECM	e28.1	28.54	28.18	28.12	28.00	27.88	30.40	31.72	29.71	28.95	29.94	29.91

e Estimated

## MILLARD COUNTY--Continued

384906112330601. LOCAL NUMBER, (C-23-6)17baa-1.

LOCATION.--Lat 38°49'06", long 112°33'06", Hydrologic Unit 16030008.

Owner: Brandon George

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 18 in., drilled to depth of 262 ft, cased to 140 ft.

DATUM.--Elevation of land-surface datum is 4,710 ft above sea level. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Records good except for estimated days, which are poor.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.20 ft below land-surface datum, Mar. 3, 1989; lowest, 54.03 ft below land-surface, Sept. 6, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.48	37.33	36.95	36.64	36.25	36.07	35.83	35.84	38.54	40.21	40.38	41.01
10	38.19	37.33	36.98	36.56	36.13	35.99	35.88	36.36	38.42	40.25	40.16	41.28
15	37.94	37.21	36.91	36.45	36.19	35.88	35.85	36.86	39.69	41.37	40.59	40.20
20	37.82	37.19	36.71	36.35	36.19	35.87	36.04	e37.20	39.19	41.27	41.04	39.66
25	37.62	37.14	36.75	36.32	36.02	35.87	35.87	e37.70	40.52	40.78	40.81	39.06
EOM	37.55	37.03	36.53	36.26	36.08	35.83	35.80	e38.20	40.65	41.49	41.01	38.80

e Estimated

## SALT LAKE COUNTY

403916111575901. LOCAL NUMBER, (C-2-1)9ccc-1.

LOCATION.--Lat 40°39'16", long 111°57'59", Hydrologic Unit 16020204.

Owner: Salt Lake County Conservancy District.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled artesian unused public supply well, diameter 16 in., depth 795 ft, perforated 187-372 ft.

DATUM.--Elevation of land-surface datum is 4,461 ft above sea level. Measuring point: Top of casing, 2.10 ft above land-surface datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.75 ft below land-surface datum, Oct. 25, 1971; lowest, 86.80 ft below land-surface datum, July 25, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.50	57.22	57.17	57.08	57.08	57.26	57.49	57.66	57.83	57.91	57.58	57.29
10	57.40	57.22	57.25	57.09	57.08	57.29	57.58	57.71	57.85	57.86	57.50	57.27
15	57.33	57.19	57.19	57.06	57.15	57.27	57.68	57.69	57.86	57.77	57.44	57.26
20	57.41	57.24	57.06	57.01	57.21	57.36	57.63	57.79	57.86	57.72	57.45	57.25
25	57.32	57.27	57.08	57.05	57.14	57.43	57.66	57.86	57.87	57.70	57.38	57.19
EOM	57.32	57.21	56.98	57.06	57.24	57.40	57.65	57.88	57.89	57.64	57.29	57.17

## SAN JUAN COUNTY

375243109191301. LOCAL NUMBER, (D-33-24)30dab-1.

LOCATION.--Lat 37°52'43", long 109°19'13", Hydrologic Unit 14080203.

Owner: A. E. C.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused well, diameter 10 in., depth 319 ft.

DATUM.--Land-surface datum is 6,916 ft above sea level. Measuring Point: Top of casing, 0.60 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 159.69 ft below land-surface datum, Jan. 17, 1996; lowest, 202.89 ft below land-surface datum, July 25, 1958.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	161.36	161.04	160.90	161.15	160.93	160.71	160.78	160.76	160.83	161.27	161.14	160.93
10	161.29	160.99	161.15	161.17	161.12	160.65	160.87	160.74	161.08	161.33	161.07	160.83
15	161.17	161.16	161.21	161.02	160.89	160.86	161.00	160.69	161.06	161.12	e161.09	e160.86
20	161.37	161.23	160.71	160.77	160.82	160.84	160.66	160.87	161.06	161.28	161.07	160.84
25	161.16	161.17	161.21	160.82	160.85	160.73	160.72	161.12	161.15	161.32	160.97	160.79
EOM	161.10	161.12	160.86	160.91	160.93	160.52	160.75	160.95	161.03	161.11	160.92	160.86

e Estimated



## SAN JUAN COUNTY--Continued

375050109034801. LOCAL NUMBER, (D-34-26)4dad-1.

LOCATION.--Lat 37°50'50", long 109°03'48", Hydrologic Unit 14080203.

Owner: State of Utah.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 100 ft.

DATUM.--Elevation of land-surface datum is 6,725 ft above sea level. Measuring point: Top of 3 in. pipe housing, 4.83 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--November 1946-51, 1953-92, 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 25.84 ft below land-surface datum, Apr 13, 1983; lowest, 45.41 ft below land-surface datum, Oct 30, 1953.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	33.94	34.78	34.73	33.73	34.48	34.72	34.52
10	---	---	---	---	---	34.08	34.78	34.52	34.70	34.51	34.67	34.43
15	---	---	---	---	---	34.23	33.91	34.29	36.04	34.57	34.69	34.37
20	---	---	---	---	---	34.43	35.05	34.13	35.02	34.63	34.75	34.34
25	---	---	---	---	33.90	34.65	35.00	33.97	34.58	34.70	34.69	34.25
ECM	---	---	---	---	33.96	34.77	34.93	33.84	34.46	34.74	34.60	34.21

373830109283201. LOCAL NUMBER, (D-36-22)22daa-1.

LOCATION.--Lat 37°38'30", long 109°28'32", Hydrologic Unit 14080201.

Owner: Joseph L. Nielson.

AQUIFER.--Dakota Sandstone.

WELL CHARACTERISTICS.--Drilled stock artesian well, diameter 7 in., depth 140 ft.

DATUM.--Elevation of land-surface datum is 6,200 ft above sea level. Measuring point: Top of 7 in. casing, 1.00 ft above land-surface datum.

REMARKS.--Records fair.

PERIOD OF RECORD.--October 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.51 ft below land-surface datum, Sept. 20, 1988; lowest, 57.23 ft below land-surface datum, Oct. 20, 1960.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.20	43.75	43.36	43.56	43.29	43.30	43.57	43.90	44.15	44.26	43.88	43.46
10	44.16	43.81	43.78	43.58	43.02	43.45	43.76	43.91	44.18	44.45	43.74	43.31
15	43.77	43.81	43.70	43.36	43.31	43.48	43.99	43.97	44.30	44.18	43.78	43.34
20	44.20	43.93	43.07	43.10	43.47	43.70	43.75	44.15	44.29	44.18	43.73	43.35
25	43.96	43.81	43.66	43.17	43.35	43.64	43.83	44.32	44.10	44.14	43.57	43.20
ECM	43.93	43.70	43.13	43.26	43.65	43.24	43.88	44.23	44.11	43.90	43.44	43.28

## SUMMIT COUNTY

403725111155201. LOCAL NUMBER, (D-2-6)28aab-3.

LOCATION.--Lat 40°37'25", long 111°15'52", Hydrologic Unit 16020101.

Owner: Peterson.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 8 in., depth 85 ft, perforated 65-85 ft.

DATUM.--Land-surface datum is 6580 ft above sea level. Measuring point: Top of PVC casing, 2.0 ft above land-surface datum.

REMARKS.--Records good, except for estimated record which is poor.

PERIOD OF RECORD.--November 1998 to September 1999.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.21 ft below land-surface datum, August 26, 1999; lowest, 35.45 ft below land-surface datum, April 19-21.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	31.25	33.49	34.66	34.42	34.32	33.05	e29.16	e26.20	e25.50	27.10
10	---	---	31.80	33.85	34.55	34.37	34.82	31.48	29.83	e27.61	25.72	27.38
15	---	---	32.04	34.16	e33.97	34.34	35.20	31.14	29.86	28.51	27.33	27.77
20	---	---	32.30	e34.31	34.14	32.80	35.45	30.49	29.37	e22.70	27.85	28.13
25	---	30.43	32.84	e34.41	34.39	32.98	35.20	e27.54	29.35	e23.70	22.58	28.47
ECM	---	30.87	33.14	34.52	34.61	33.64	34.77	e28.42	e24.80	e24.60	26.11	28.97

e Estimated



## GROUND-WATER LEVELS

## TOOELE COUNTY

404023112154001. LOCAL NUMBER, (C-2-4)2ddb-1.

LOCATION.--Lat 40°40'23", long 112°15'40", Hydrologic Unit 16020304.

Owner: Mike Spivey.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 6 in., depth 161 ft.

DATUM.--Elevation of land-surface datum is 4,275 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--April 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.42 ft below land-surface datum, November 8, 9, 1998; lowest, 37.67 ft. below land-surface datum, April 20, 21, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.60	31.43	31.48	31.89	32.34	32.83	33.40	33.93	34.29	34.43	34.55	34.60
10	31.55	31.43	31.53	31.95	32.43	32.91	33.51	34.00	34.31	34.47	34.56	34.60
15	31.51	31.43	31.59	32.02	32.52	33.00	33.62	34.07	34.33	34.49	34.56	34.61
20	31.50	31.43	31.65	32.10	32.60	33.09	33.72	34.12	34.36	34.51	34.57	34.62
25	31.45	31.46	31.73	32.17	32.69	33.18	33.80	34.18	34.38	34.53	34.58	34.63
EOM	31.44	31.47	31.81	32.28	32.74	33.30	33.87	34.26	34.42	34.55	34.59	34.64

401312112442301. LOCAL NUMBER, (C-7-8)10cbd-1.

LOCATION.--Lat 40°13'12", long 112°44'23", Hydrologic Unit 16020305.

Owner: Dugway Proving Ground.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 175 ft, cased to 175 ft, perforated 115-175 ft.

DATUM.--Elevation of land-surface datum is 4,833.44 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good. Land-surface datum adjusted to levels surveyed this year.

PERIOD OF RECORD.--November 1946 to March 1947, January 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 73.32 ft below land-surface datum, Jan. 26, 1951; lowest, 93.67 ft below land-surface datum, Oct. 15, 1966.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	77.27	76.61	76.16	75.75	75.37	75.22	74.86	74.83	74.90	75.95	76.67	77.38
10	77.05	76.61	76.20	75.67	75.31	75.09	74.96	74.72	74.97	76.11	76.86	77.37
15	76.94	76.47	76.12	75.55	75.29	74.97	74.89	74.63	75.04	76.14	76.98	77.42
20	76.98	76.39	75.90	75.44	75.28	74.96	74.77	74.65	75.16	76.26	77.18	77.62
25	76.82	76.36	75.85	75.37	75.10	74.93	74.77	74.77	75.36	76.45	77.19	77.63
EOM	76.82	76.19	75.72	75.34	75.20	74.86	74.78	74.84	75.62	76.57	77.26	77.58

## UINTAH COUNTY

403158109372201. LOCAL NUMBER, (D-3-20)25abc-2.

LOCATION.--Lat 40°31'58", long 109°37'22", Hydrologic Unit 14060002.

Owner: H. T. Peltier.

AQUIFER.--Glacial outwash.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 43 ft, cased to 42 ft.

DATUM.--Land-surface datum is 5,992 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--May 1965 to August 1966, March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.97 ft below land-surface datum, July 5, 1966; lowest, 8.88 ft below land-surface datum, Sept. 7, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.08	5.80	5.94	5.96	5.90	5.67	5.84	5.44	5.92	6.43	6.66	6.43
10	6.13	5.86	6.02	5.96	5.85	5.48	5.91	5.96	5.96	6.39	6.77	6.64
15	6.17	5.86	6.05	5.96	5.80	5.45	6.07	6.00	5.95	6.43	6.84	6.81
20	6.08	5.93	6.02	5.94	5.77	5.59	6.11	6.22	5.91	6.44	6.96	6.80
25	5.98	5.95	5.99	5.92	5.74	5.65	5.50	5.89	6.08	6.61	6.85	6.83
EOM	5.95	5.93	5.96	5.92	5.72	5.81	5.53	5.75	6.25	6.63	6.80	6.87

## UTAH COUNTY

401818112014501. LOCAL NUMBER, (C-6-2)14aba-1.

LOCATION.--Lat 40°18'18", long 112°01'45", Hydrologic Unit 16020201.

Owner: Coop Security Corp.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused irrigation artesian well, diameter 16 in., depth 1,258 ft, cased to 1,254 ft.

DATUM.--Land-surface datum is 4,865.70 ft above sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records good except for estimated days which are fair.

PERIOD OF RECORD.--December 1954 to April 1955, March 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 107.80 ft below land-surface datum, May 3-4, 1999; lowest, 141.41 ft below land-surface datum, Aug. 15, 1965.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	e108.45	108.29	108.22	108.23	108.03	108.03	107.94	107.86	108.06	108.23	108.22	108.32
10	108.42	108.29	108.35	108.21	107.96	107.98	107.98	107.93	108.17	108.33	108.19	e108.32
15	108.36	108.32	108.31	108.15	108.06	107.96	108.06	107.90	108.20	108.24	108.23	108.31
20	108.45	108.31	108.14	108.00	108.05	107.99	107.99	108.02	108.19	108.21	108.30	108.33
25	108.38	108.30	108.24	108.04	107.98	107.97	107.89	108.06	108.19	108.24	108.27	108.31
EOB	108.32	108.23	108.14	108.04	108.06	107.90	107.87	108.13	108.23	108.24	108.28	108.39

e Estimated

402333111513401. LOCAL NUMBER, (D-5-1)8dcc-1.

LOCATION.--Lat 40°23'33", long 111°51'34", Hydrologic Unit 16020201.

Owner: Lehi Irrigation Co.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused irrigation artesian well, diameter 14 in., depth 240 ft, cased to 240 ft, perforated at 85, 105, 165, and 200 ft.

DATUM.--Elevation of land-surface datum is 4,555.03 ft above sea level. Measuring point: Top of recorder platform, 3.40 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping. Records good.

PERIOD OF RECORD.--September 1935 to December 1936, April 1947, March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.07 ft above land-surface datum, Apr. 10, 1983, 1984; lowest, 35.29 ft below land-surface datum, Aug. 31, 1963.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.62	11.76	11.31	11.07	10.66	10.21	11.03	10.74	13.37	17.48	16.44	16.50
10	12.59	11.70	11.19	11.23	10.51	10.36	10.75	10.76	13.10	16.26	19.09	17.85
15	12.60	11.46	10.94	10.98	10.56	10.30	11.85	11.02	13.89	16.71	17.92	17.44
20	13.10	11.30	10.54	10.75	10.55	10.90	13.56	11.77	14.82	15.28	20.08	17.93
25	13.56	11.19	10.81	10.67	10.40	11.32	11.90	12.52	15.84	15.74	20.95	17.12
EOB	12.29	10.97	10.84	10.66	10.36	11.86	11.03	13.32	16.89	15.82	19.08	16.17

## WASATCH COUNTY

403146111272701. LOCAL NUMBER, (D-3-4)26dba-1.

LOCATION.--Lat 40°31'46", long 111°27'27", Hydrologic Unit 16020203.

Owner: Leroy Kohler.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 48 in., depth 19 ft.

DATUM.--Elevation of land-surface datum is 5,580 ft above sea level. Measuring point: Top of wood covering well, 11.60 ft below land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1966, July 1988 to August 1989, April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.22 ft below land-surface datum, July 06, 1989; lowest, 17.16 ft below land-surface datum Feb. 07, 1989.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	12.84	FEB 23, 1999	15.02	JUN 22, 1999	13.20
NOV 25, 1998	13.83	MAR 22, 1999	15.57	JUL 20, 1999	12.79
DEC 28, 1998	15.06	APR 20, 1999	15.57	AUG 30, 1999	12.42
FEB 02, 1999	14.49	MAY 18, 1999	14.09	SEP 22, 1999	12.69

## WASATCH COUNTY--Continued

403403111253501. LOCAL NUMBER, (D-3-5)7cdb-1.

LOCATION.--Lat 40°34'03", long 111°25'35", Hydrologic Unit 16020203.

Owner: Glade Givens.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 4 in., depth 88 ft.

DATUM.--Elevation of land-surface datum is 5,759 ft above sea level. Measuring point: So. edge of opening above well at east corner, 3.65 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--September 1966 to September 1968, July 1988 to July 1989, April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.05 below land-surface datum, June 28, 1993; lowest, 23.89 ft below land-surface datum, Mar. 20, 1967.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	4.58	FEB 23, 1999	4.48	JUN 22, 1999	4.04
NOV 25, 1998	4.37	MAR 22, 1999	4.12	JUL 20, 1999	4.19
DEC 28, 1998	5.44	APR 20, 1999	4.86	AUG 30, 1999	4.64
FEB 02, 1999	5.26	MAY 18, 1999	2.67	SEP 22, 1999	4.99

403325111254601. LOCAL NUMBER, (D-3-5)18cba-1.

LOCATION.--Lat 40°33'25", long 111°25'46", Hydrologic Unit 16020203.

Owner: North Orem LDS Stake.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--

DATUM.--Elevation of land-surface datum is 5,700 ft above sea level. Measuring point: Top of plug hole in cap, 2.50 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--October 1988 to August 1989, April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.33 ft below land-surface datum, June 22, 1998; lowest, 28.24 ft below land-surface datum, Aug. 02, 1989.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, NOVEMBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	12.58	FEB 23, 1999	15.40	JUN 22, 1999	12.30
NOV 25, 1998	14.88	MAR 22, 1999	16.40	JUL 20, 1999	12.11
DEC 28, 1998	16.45	APR 20, 1999	19.98	AUG 30, 1999	13.20
FEB 02, 1999	16.77	MAY 18, 1999	15.69	SEP 22, 1999	14.09

403305111251901. LOCAL NUMBER, (D-3-5)18dcc-1.

LOCATION.--Lat 40°33'05", long 111°25'19", Hydrologic Unit 16020203.

Owner: Hugh Smith.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 8 in., depth 243 ft.

DATUM.--Elevation of land-surface datum is 5,695 ft above sea level. Measuring point: Top of plug hole in cap, 2.95 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--August 1988 to August 1989, April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 86.74 ft below land-surface datum, Sept. 22, 1999; lowest, 99.62 ft below land-surface datum, Apr. 11, 1994.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	95.04	FEB 23, 1999	93.93	JUN 22, 1999	88.07
NOV 25, 1998	95.29	MAR 22, 1999	94.00	JUL 20, 1999	87.27
DEC 28, 1998	95.23	APR 20, 1999	97.34	AUG 30, 1999	88.46
FEB 02, 1999	94.82	MAY 18, 1999	91.72	SEP 22, 1999	86.74

## WASATCH COUNTY--Continued

403243111252701. LOCAL NUMBER, (D-3-5)19bdd-2.

LOCATION.--Lat 40°32'43", long 111°25'27", Hydrologic Unit 16020203.

Owner: Melvin C. Cummings.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 5 in., depth 120 ft.

DATUM.--Elevation of land-surface datum is 5,654 ft above sea level. Measuring point: Top of casing, 1.50 ft above land-surface datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.66 ft below land-surface datum, May 10, 1994; lowest, 25.64 ft below land-surface datum, Feb. 23, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	18.37	FEB 23, 1999	21.80	JUN 22, 1999	18.16
NOV 25, 1998	20.31	MAR 22, 1999	22.94	JUL 20, 1999	18.07
DEC 28, 1998	21.91	APR 20, 1999	23.10	AUG 30, 1999	16.81
FEB 02, 1999	22.72	MAY 18, 1999	18.03	SEP 22, 1999	18.49

403127111240301. LOCAL NUMBER, (D-3-5)29cac-1.

LOCATION.--Lat 40°31'27", long 111°24'03", Hydrologic Unit 16020203.

Owner: Leslie North.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Dug domestic water-table well, diameter 4 ft, depth 15 ft, rock lined.

DATUM.--Elevation of land-surface datum is 5,608 ft above sea level. Measuring point: Top of concrete platform, 1.0 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--October 1936 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.18 ft below land-surface datum, Sept. 13, 1974; lowest, 11.14 ft below land-surface datum, Mar. 31, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 1998	7.80	FEB 24, 1999	9.01	JUN 23, 1999	4.15
NOV 25, 1998	7.79	MAR 23, 1999	9.49	JUL 20, 1999	2.30
DEC 28, 1998	9.04	APR 26, 1999	10.42	AUG 30, 1999	3.68
FEB 02, 1999	9.48	MAY 18, 1999	9.52	SEP 22, 1999	4.89

403149111255601. LOCAL NUMBER, (D-3-5)30bcc-1.

LOCATION.--Lat 40°31'49", long 111°25'56", Hydrologic Unit 16020203.

Owner: U.S. Geological Survey.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in., depth 6.5 ft.

DATUM.--Elevation of land-surface datum is 5,594 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--December 1988 to August 1989, April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.21 ft below land-surface datum, June 28, 1993; lowest, 3.10 ft below land-surface datum, Oct. 24, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	2.61	FEB 23, 1999	1.22	JUN 22, 1999	1.99
NOV 25, 1998	2.35	MAR 22, 1999	2.63	JUL 20, 1999	1.25
DEC 28, 1998	2.80	APR 26, 1999	1.59	AUG 30, 1999	.64
FEB 02, 1999	2.08	MAY 18, 1999	1.47	SEP 22, 1999	2.06

## WASATCH COUNTY--Continued

403004111280301. LOCAL NUMBER, (D-4-4)2bcd-1.

LOCATION.--Lat 40°30'04", long 111°28'03", Hydrologic Unit 16020203.

Owner: Clark Partridge.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 6 in., depth 105 ft.

DATUM.--Elevation of land-surface datum is 5,500 ft above sea level. Measuring point: Top of hole in casing, 5.02 ft below land-surface datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.91 ft below land-surface datum, June 05, 1995; lowest, 52.22 ft below land-surface datum, Mar. 22, 1999.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	49.62	FEB 23, 1999	50.88	JUN 22, 1999	47.53
NOV 25, 1998	50.72	MAR 22, 1999	52.22	JUL 20, 1999	47.52
DEC 28, 1998	51.37	APR 26, 1999	49.99	AUG 31, 1999	47.76
FEB 02, 1999	51.47	MAY 18, 1999	49.82		

402937111283501. LOCAL NUMBER, (D-4-4)3dcd-1.

LOCATION.--Lat 40°29'37", long 111°28'35", Hydrologic Unit 16020203.

Owner: Pride Lane Farm.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--

DATUM.--Elevation of land-surface datum is 5,475 ft above sea level. Measuring point: Top of casing, 0.41 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1988 to August 1989, May 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.12 ft below land-surface datum, July, 05 1995; lowest, 14.19 ft below land-surface datum, Mar. 24, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	11.91	FEB 23, 1999	13.32	JUN 22, 1999	10.64
NOV 25, 1998	12.84	MAR 22, 1999	13.53	JUL 20, 1999	10.34
DEC 28, 1998	13.47	APR 20, 1999	13.92	AUG 31, 1999	10.20
FEB 02, 1999	13.94	MAY 18, 1999	12.56	SEP 22, 1999	9.65

402902111282001. LOCAL NUMBER, (D-4-4)10daa-1.

LOCATION.--Lat 40°29'02", long 111°28'20", Hydrologic Unit 16020203.

Owner: U.S. Geological Survey.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in., depth 65 ft.

DATUM.--Elevation of land-surface datum is 5,430 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--November 1988 to August 1989, May 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.81 ft below land-surface datum, June 28, 1993; lowest, 3.99 ft below land-surface datum, Aug. 02, 1994.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	2.91	FEB 23, 1999	3.27	JUN 22, 1999	1.39
NOV 25, 1998	2.99	MAR 22, 1999	3.52	JUL 20, 1999	1.87
DEC 28, 1998	3.40	APR 20, 1999	3.63	AUG 31, 1999	3.11
FEB 02, 1999	3.34	MAY 18, 1999	3.27	SEP 22, 1999	3.20

## WASATCH COUNTY--Continued

402842111263101. LOCAL NUMBER, (D-4-4)12dcc-1.

LOCATION.--Lat 40°28'42", long 111°26'31", Hydrologic Unit 16020203.

Owner: Heber Valley Special Services Dist.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--

DATUM.--Elevation of land-surface datum is 5,545 ft above sea level. Measuring point: Top of concrete walkway at land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--September 1949 to October 1950, July 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.00 ft below land-surface datum, July 03, 1950; lowest, 70.31 ft below land-surface datum, Mar. 14, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	45.66	FEB 23, 1999	63.66	JUN 22, 1999	47.03
NOV 25, 1998	54.71	MAR 22, 1999	65.24	JUL 20, 1999	45.01
DEC 28, 1998	60.07	APR 26, 1999	59.44	AUG 31, 1999	43.07
FEB 02, 1999	63.03	MAY 18, 1999	48.91	SEP 22, 1999	47.14

402742111281501. LOCAL NUMBER, (D-4-4)23bbb-2.

LOCATION.--Lat 40°27'42", long 111°28'15", Hydrologic Unit 16020203.

Owner: Shirley Lewis.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 36 in., depth 25 ft.

DATUM.--Elevation of land-surface datum is 5,426 ft above sea level. Measuring point: Top of timber over well, .82 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1988 to August 1989, May 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.68 ft below land-surface datum, June 28, 1993; lowest, 23.37 ft below land-surface datum, Feb. 07, 1989.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	15.70	FEB 23, 1999	18.81	JUN 22, 1999	7.04
NOV 25, 1998	16.84	MAR 22, 1999	19.84	JUL 20, 1999	8.10
DEC 28, 1998	19.41	APR 26, 1999	16.99	AUG 31, 1999	13.40
FEB 02, 1999	20.47	MAY 18, 1999	15.55	SEP 22, 1999	15.1

402937111214901. LOCAL NUMBER, (D-4-5)3dcc-1.

LOCATION.--Lat 40°29'37", long 111°21'49", Hydrologic Unit 16020203.

Owner: Brad Baird.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 6 in., depth 75 ft.

DATUM.--Elevation of land-surface datum is 5,880 ft above sea level. Measuring point: Top of casing, 1.60 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1988 to August 1989, June 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.88 ft below land-surface datum, June 26, 1997; lowest, 35.42 ft below land-surface datum, Jan. 10, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	25.21	FEB 24, 1999	24.93	JUN 23, 1999	16.76
NOV 30, 1998	30.53	MAR 23, 1999	20.82	JULY 20, 1999	14.00
DEC 28, 1998	33.13	APR 20, 1999	23.88	AUG 30, 1999	16.34
FEB 03, 1999	32.75	MAY 18, 1999	20.43	SEP 29, 1999	20.56

## WASATCH COUNTY--Continued

402946111233901. LOCAL NUMBER, (D-4-5)4ccb-1.

LOCATION.--Lat 40°29'46", long 111°23'39", Hydrologic Unit 16020203.

Owner: Dan Giles.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 6 in., depth 217 ft.

DATUM.--Elevation of land-surface datum is 5,700 ft above sea level. Measuring point: Top of plug hole in cap 1.75 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--February 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 98.45 ft below land-surface datum, Aug. 25, 1998; lowest, 153.64 ft below land-surface datum, Mar. 24, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	122.39	FEB 24, 1999	152.95	JUN 23, 1999	120.07
NOV 30, 1998	131.80	MAR 23, 1999	153.32	JUL 20, 1999	107.55
DEC 29, 1998	141.93	APR 20, 1999	149.27	AUG 30, 1999	105.15
FEB 03, 1999	150.65	MAY 18, 1999	140.27	SEP 29, 1999	117.13

402842111223601. LOCAL NUMBER, (D-4-5)4ddd-1.

LOCATION.--Lat 40°28'42", long 111°22'36", Hydrologic Unit 16020203.

Owner: Tressa McDonald Mair.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--

DATUM.--Elevation of land-surface datum is 5,798 ft above sea level. Measuring point: Top of door covering well, 0.1 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1939, September 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.88 ft below land-surface datum, June 22, 1998; lowest, 47.12 ft below land-surface datum, Mar. 19, 1973.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	29.00	FEB 24, 1999	38.00	JUN 23, 1999	14.59
NOV 30, 1998	28.72	MAR 23, 1999	32.73	JUL 20, 1999	12.19
DEC 29, 1998	34.35	APR 20, 1999	26.99	AUG 30, 1999	20.59
FEB 03, 1999	41.87	MAY 18, 1999	16.24	SEP 29, 1999	24.95

403022111240801. LOCAL NUMBER, (D-4-5)5abb- 1.

LOCATION.--Lat 40°30'22", long 111°24'08", Hydrologic Unit 16020203.

Owner: Heber City Corporation.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 12 in., depth 375 ft.

DATUM.--Elevation of land-surface datum is 5,640 ft above sea level. Measuring point: Top of hole in cap 1.85 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--January 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.99 ft below land-surface datum, Sept. 21, 1998; lowest 42.05 ft below land-surface datum, July 20, 1999.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	14.57	FEB 24, 1999	22.03	JUN 22, 1999	32.75
NOV 25, 1998	17.40	MAR 23, 1999	22.93	JUL 20, 1999	42.05
DEC 28, 1998	19.42	APR 26, 1999	23.40	AUG 30, 1999	35.17
FEB 02, 1999	22.07	MAY 18, 1999	35.84	SEP 22, 1999	16.91



## WASATCH COUNTY--Continued

403003111255801. LOCAL NUMBER, (D-4-5)6bcc-2.

LOCATION.--Lat 40°30'03", long 111°25'58", Hydrologic Unit 16020203.

Owner: Erma Moulton.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--

DATUM.--Elevation of land-surface datum is 5,530 ft above sea level. Measuring point: Top of casing, 1.50 ft above land-surface datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.00 ft below land-surface datum, July 19, 1996; lowest, 37.48 ft below land-surface datum, Mar. 14, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	16.32	FEB 23, 1999	31.99	JUN 22, 1999	21.53
NOV 25, 1998	20.84	MAR 22, 1999	34.14	JUL 20, 1999	13.17
DEC 28, 1998	25.88	APR 20, 1999	35.20	AUG 30, 1999	11.19
FEB 02, 1999	30.32	MAY 18, 1999	27.78	SEP 22, 1999	13.66

402856111252701. LOCAL NUMBER, (D-4-5)7cad-1.

LOCATION.--Lat 40°28'56", long 111°25'27", Hydrologic Unit 16020203.

Owner: Heber City Corp. (Airport)

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 6 in., depth 155 ft.

DATUM.--Elevation of land-surface datum is 5,615 ft above sea level. Measuring point: Top of well cover, 8.0 ft below land-surface datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 60.23 ft below land-surface datum, Aug. 10, 1995; lowest, 117.45 ft below land-surface datum, Mar. 14, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	73.12	FEB 23, 1999	105.87	JUN 22, 1999	84.23
NOV 30, 1998	85.01	MAR 22, 1999	109.49	JUL 20, 1999	73.73
DEC 28, 1998	93.48	APR 26, 1999	110.94	AUG 30, 1999	66.86
FEB 02, 1999	102.19	MAY 18, 1999	100.14	SEP 22, 1999	70.78

402857111245601. LOCAL NUMBER, (D-4-5)7dad-1.

LOCATION.--Lat 40°28'57", long 111°24'56", Hydrologic Unit 16020203.

Owner: Wayne Foy.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 6 in., depth 160 ft.

DATUM.--Elevation of land-surface datum is 5,660 ft above sea level. Measuring point: Top of casing, 1.95 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--January 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.59 ft below land-surface datum, Aug. 24, 1998; lowest, 140.84 ft below land-surface datum, Apr. 26, 1999.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	98.46	FEB 23, 1999	134.46	JUN 22, 1999	107.55
NOV 30, 1998	111.34	MAR 22, 1999	138.41	JUL 20, 1999	96.96
DEC 28, 1998	120.61	APR 26, 1999	140.84	AUG 30, 1999	90.60
FEB 02, 1999	130.31	MAY 18, 1999	130.67	SEP 22, 1999	95.03

## WASATCH COUNTY--Continued

402904111225801. LOCAL NUMBER, (D-4-5)9dbb-1.

LOCATION.--Lat 40°29'04", long 111°22'58", Hydrologic Unit 16020203.

Owner: Ernest Blodgett.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 8 in., depth 320 ft.

DATUM.--Elevation of land-surface datum is 5,770 ft above sea level. Measuring point: Top of casing, 1.4 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--February 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 148.50 ft below land-surface datum, July 29, 1997; lowest, 211.09 ft below land-surface datum, May 18, 1999.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 1998	159.63	FEB 24, 1999	165.58	JUL 20, 1999	151.47
NOV 30, 1998	164.16	MAR 23, 1999	164.39	AUG 30, 1999	153.04
DEC 29, 1998	165.66	APR 26, 1999	199.92	SEP 29, 1999	189.30
FEB 03, 1999	165.90	MAY 18, 1999	211.09		

402840111213801. LOCAL NUMBER, (D-4-5)15aab-1.

LOCATION.--Lat 40°28'40", long 111°21'38", Hydrologic Unit 16020203.

Owner: Doyle Sweat.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 6 in., depth 150 ft.

DATUM.--Elevation of land-surface datum is 5,900 ft above sea level. Measuring point: Lip of plug hole, 1.06 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1988 to May 1990, May 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.00 ft below land-surface datum, May 28, 1990; lowest, 22.62 ft below land-surface datum, Aug. 02, 1994.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	21.15	FEB 24, 1999	20.67	JUN 23, 1999	17.77
NOV 30, 1998	22.08	MAR 23, 1999	19.98	JUL 20, 1999	18.38
DEC 28, 1998	21.48	APR 22, 1999	20.97	AUG 31, 1999	18.92
FEB 03, 1999	21.65	MAY 18, 1999	19.43	SEP 29, 1999	17.63

402839111221101. LOCAL NUMBER, (D-4-5)15bab-1.

LOCATION.--Lat 40°28'39", long 111°22'11", Hydrologic Unit 16020203.

Owner: Theon Sweat.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 6 in., depth 165 ft.

DATUM.--Elevation of land-surface datum is 5,850 ft above sea level. Measuring point: Lip of access hole, 5.90 ft below land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1988 to August 1989, May 1993 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 120.72 ft below land-surface datum, June 19, 1996; lowest, 137.37 ft below land-surface datum, Apr. 21, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, NOVEMBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	124.95	FEB 24, 1999	132.68	JUN 23, 1999	127.43
NOV 30, 1998	130.91	MAR 23, 1999	131.99	JUL 20, 1999	126.77
DEC 28, 1998	132.00	APR 20, 1999	131.92	AUG 31, 1999	127.22
FEB 03, 1999	133.38	MAY 18, 1999	130.83	SEP 29, 1999	122.98

## WASATCH COUNTY--Continued

402840111232201. LOCAL NUMBER (D-4-5)16bab-1.

LOCATION.--Lat 40°28'40", long 111°23'22", Hydrologic Unit 16020203.

Owner: Randy Wade.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--

DATUM.--Elevation of land-surface datum is 5,780 ft above sea level. Measuring point: Top of casing, 0.55 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--February 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 184.65 ft below land-surface datum, Aug. 21, 1997; lowest, 239.29 ft below land-surface datum, Mar. 27, 1997.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 1998	197.66	FEB 24, 1999	232.78	JUL 20, 1999	196.85
NOV 30, 1998	212.17	MAR 23, 1999	235.10	AUG 30, 1999	188.69
DEC 29, 1998	222.03	APR 26, 1999	236.64	SEP 29, 1999	196.91
FEB 03, 1999	229.84	MAY 18, 1999	233.02		

402750111232701. LOCAL NUMBER, (D-4-5)16ccd-1.

LOCATION.--Lat 40°27'50", long 111°23'27", Hydrologic Unit 16020203.

Owner: Blaine Webster.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Diameter 8 in., depth 150 ft.

DATUM.--Elevation of land-surface datum is 5,850 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--October 1988 to August 1989, May 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 75.93 ft below land-surface datum, Sept. 25, 1996; lowest, 100.56 ft below land-surface datum, Apr. 21, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	91.80	FEB 23, 1999	94.52	JUN 22, 1999	90.29
NOV 30, 1998	98.68	MAR 22, 1999	94.49	JUL 20, 1999	91.37
DEC 28, 1998	96.19	APR 26, 1999	80.04	AUG 30, 1999	88.66
FEB 02, 1999	100.37	MAY 18, 1999	80.70	SEP 22, 1999	86.95

402810111241601. LOCAL NUMBER (D-4-5)17caa-1.

LOCATION.--Lat 40°28'10", long 111°24'16", Hydrologic Unit 16020203.

Owner: Dennis Tack.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.-- Diameter 6 in., depth 265 ft.

DATUM.--Elevation of land-surface datum is 5,770 ft above sea level. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--January 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 210.49 ft below land-surface datum, Aug. 24, 1998; lowest, 253.75 ft below land-surface datum, Apr. 26, 1999.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	219.77	FEB 23, 1999	248.59	JUN 22, 1999	237.16
NOV 30, 1998	229.47	MAR 22, 1999	251.51	JUL 20, 1999	228.55
DEC 28, 1998	239.08	APR 26, 1999	253.75	AUG 30, 1999	222.28
FEB 02, 1999	245.32	MAY 18, 1999	249.53	SEP 22, 1999	223.15

## WASATCH COUNTY--Continued

402813111253701. LOCAL NUMBER (D-4-5)18cab-1.

LOCATION.--Lat 40°28'13", long 111°25'37", Hydrologic Unit 16020203.

Owner: Susan Miller.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.-- Diameter 6 in., depth 206 ft.

DATUM.--Elevation of land-surface datum is 5,660 ft above mean sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--April 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 125.15 ft below land-surface datum, July 28, 1998; lowest, 159.93 ft below land-surface datum, Mar. 22, 1999.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1998 TO SEPTEMBER 1999

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1998	135.06	FEB 23, 1999	157.77	JUL 20, 1999	135.44
NOV 30, 1998	146.58	APR 22, 1999	159.93	AUG 30, 1999	135.43
DEC 28, 1998	153.22	MAY 18, 1999	138.33	SEP 22, 1999	137.48
FEB 02, 1999	156.35	JUN 22, 1999	133.12		

## WASHINGTON COUNTY

370640113223201. LOCAL NUMBER (C-42-14)25abb-1.

LOCATION.--Lat 37°06'40", long 113°22'32", Hydrologic Unit 15010008.

Owner: Terracor.

AQUIFER.--Navajo Sandstone.

WELL CHARACTERISTICS.--Drilled unused hole, 16 in. surface casing set to 4 ft depth, 8 in. hole to 720 ft.

DATUM.--Elevation of land-surface datum is 3,010 ft above sea level. Measuring point: Top of slot in side of casing, 1.20 ft above land-surface datum.

REMARKS.-- Record is good except estimated water levels, which are poor.

PERIOD OF RECORD.--December 1995 to May 1997, January 15, 1998 to October 1999 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 67.15 ft below land-surface datum, Feb 9, Mar 3 and 15, 1999; lowest, 68.75 ft below land-surface datum, Feb. 3, 1996.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	67.65	67.36	67.44	67.50	67.37	67.40	67.53	e67.4	67.43	67.36	67.21	67.27
10	67.45	67.59	67.67	67.46	67.15	67.31	e67.5	e67.5	67.33	67.39	67.23	67.22
15	67.33	67.42	67.51	67.33	67.27	67.15	e67.4	e67.5	67.26	67.28	67.32	67.25
20	67.53	67.58	67.30	67.22	67.50	67.23	67.24	e67.4	67.22	67.27	67.32	67.39
25	67.35	67.58	67.55	67.23	67.26	67.28	e67.4	67.41	67.22	67.31	67.24	67.24
EOM	67.60	67.54	67.19	67.27	67.39	67.16	e67.4	67.39	67.20	67.22	67.22	67.21

e Estimated

## WEBER COUNTY

411544111461001. LOCAL NUMBER, (A-6-2)18bad-1.

LOCATION.--Lat 41°15'44", long 111°46'10", Hydrologic Unit 16020102.

Owner: U.S. Bureau of Reclamation.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 155 ft, perforated 105-115 ft, 125-145 ft.

DATUM.--Land-surface datum is 4,924 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Records good, except for estimated record which is poor.

PERIOD OF RECORD.--January 1956 to March 1966, October 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.93 ft below land-surface datum, June 5, 1985; lowest, 34.96 ft below land-surface datum, Nov. 30, 1956.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.42	18.72	18.29	17.98	17.12	e16.35	16.00	13.22	13.24	15.18	18.74	19.56
10	19.42	18.62	17.75	17.66	e17.60	e16.30	15.90	13.76	9.63	16.14	18.29	20.61
15	20.57	18.89	18.74	17.46	e17.51	e16.60	16.56	15.01	10.80	16.41	17.82	20.84
20	19.19	18.68	17.65	16.58	e17.10	16.41	16.26	14.67	13.31	15.60	19.70	20.64
25	18.61	18.39	17.72	16.27	e16.74	17.11	15.33	15.71	14.24	17.63	20.33	20.17
EOM	18.83	18.31	18.95	16.95	e16.58	16.49	13.98	14.90	14.17	18.53	20.04	20.46

e Estimated

## WEBER COUNTY--Continued

411348112013601. LOCAL NUMBER, (B-6-2)26ada-1.

LOCATION.--Lat 41°13'48", long 112°01'36", Hydrologic Unit 16020102.

Owner: Amalgamated Sugar Company.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 16 in., depth 595 ft, cased to 400 ft.

DATUM.--Land-surface datum is 4,275 ft above sea level. Measuring point: Top of casing, 0.10 ft below land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--August 1935 to December 1950, January 1953 to October 1961, February 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.50 ft above land-surface datum, Mar. 11, 1937; lowest, 19.67 ft. below land-surface datum, Sept. 2, 3, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.83	11.04	9.55	8.95	8.85	8.45	8.61	8.30	8.58	9.75	12.82	14.62
10	12.81	10.74	9.43	9.17	8.74	8.57	8.51	8.49	8.59	10.23	13.36	14.82
15	12.53	10.49	9.24	9.24	8.74	8.75	8.54	8.52	8.69	10.63	13.70	14.99
20	12.22	10.25	8.98	9.14	8.68	8.80	8.53	8.51	8.77	11.09	13.93	15.12
25	11.81	10.02	8.87	9.04	8.54	8.76	8.52	8.52	8.98	11.58	14.10	15.26
EOB	11.38	9.77	8.79	8.95	8.51	8.68	8.39	8.55	9.38	12.22	14.37	15.42

## MOHAVE COUNTY, ARIZONA

365725113582601. LOCAL NUMBER, (B-41-16)13ada-1 (Gila and Salt River Base Line &amp; Meridian).

LOCATION.--Lat 36°57'25", long 113°58'26", Hydrologic Unit 15010010.

Owner: Arizona State Land Dept.

AQUIFER.--Channel Fill.

WELL CHARACTERISTICS.--Drilled unused well, diameter 16 in., hole and well depth 176 ft.

DATUM.--Elevation of land-surface datum is 2,022 ft above sea level. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Records fair except for estimates, which are poor.

PERIOD OF RECORD.--January 12, 1998 to October 13, 1999 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.07 ft above land-surface datum, Jan 15, 1998; lowest, 42.93 ft below land-surface datum, Sep 30, 1999.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	42.54	42.57	42.70	42.76	42.80	e42.8	e42.8	e42.8	e42.8	42.83	42.86	42.86
10	42.55	42.60	42.72	42.77	42.80	e42.8	e42.8	e42.8	e42.8	42.84	42.86	42.88
15	42.56	42.63	42.73	42.77	e42.8	e42.8	e42.8	e42.8	e42.8	42.83	42.86	42.88
20	42.58	42.64	42.74	42.78	e42.8	e42.8	e42.8	e42.8	e42.8	42.84	42.85	42.89
25	42.59	42.62	42.74	42.78	e42.8	e42.8	e42.8	e42.8	42.83	42.84	42.86	42.90
EOB	42.57	42.69	42.75	42.80	e42.8	e42.8	e42.8	e42.8	42.83	42.85	42.85	42.91

e Estimated

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

STATION NUMBER	LOCAL IDENT- I- FIER	GEO- LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA, MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
BEAVER COUNTY										
383101112365301	(C-26- 7)26cac- 1	100VLFL	250.00	07-12-99	580	7.8	15.0	250	77	14
382924112592901	(C-28-10) 5add- 1	100VLFL	305.00	07-21-99	900	7.5	19.0	260	64	25
382336112592601	(C-28-10) 8add- 2	100VLFL	200.00	07-21-99	800	7.4	16.0	260	65	23
382019112591701	(C-28-10)28ccc- 1	100VLFL	316.00	08-16-99	1340	7.5	16.0	590	130	66
382313113020901	(C-28-11)12dbc- 2	100VLFL	460.00	07-21-99	2120	7.2	18.0	710	180	63
382020113015701	(C-28-11)25dcd- 1	100VLFL	431.00	07-21-99	1010	7.2	21.0	410	110	30
381625112412901	(C-29- 7)19bcd- 1	100VLFL	256.00	07-12-99	475	7.3	13.0	--	--	--
381516112422201	(C-29- 8)25cac- 1	100VLFL	250.00	07-12-99	305	7.8	20.0	--	--	--
381435112471401	(C-29- 8)31add- 1	100VLFL	310.00	07-12-99	720	7.6	15.5	260	73	20
381835113000001	(C-29-10) 5cdd- 2	100VLFL	95.00	07-21-99	980	7.3	15.0	450	140	28
381714113003401	(C-29-10)18daa- 1	100VLFL	298.00	07-21-99	490	7.2	15.0	190	56	13
381901113014101	(C-29-11) 1add- 1	100VLFL	64.00	08-16-99	980	7.4	16.0	--	--	--
381743113015601	(C-29-11)12ddc-1	100ALVM	--	07-21-99	350	8.2	21.0	--	--	--
381700113033401	(C-29-11)14cdb- 1	100VLFL	--	07-21-99	490	7.7	19.0	--	--	--
381543113035501	(C-29-11)27aad- 1	100VLFL	204.00	07-21-99	790	7.4	16.0	290	87	17
BOX ELDER COUNTY										
412214112023301	(B- 7- 2) 2cba- 5	100VLFL	342.00	08-10-99	450	7.6	13.5	--	--	--
412405112022501	(B- 8- 2)26bcd- 1	100VLFL	118.00	09-01-99	200	7.5	14.5	35	7.0	4.2
413057112023901	(B- 9- 2)15daa- 1	100VLFL	465.00	09-01-99	630	8.6	16.5	--	--	--
413452113543701	(B-10-18)21aab- 1	100VLFL	62.00	07-14-99	1040	--	12.5	--	--	--
413300113543001	(B-10-18)33aaa- 1	100VLFL	84.00	07-14-99	1560	7.8	12.0	540	150	38
413240113543801	(B-10-18)33adc- 1	100VLFL	94.00	07-14-99	1300	--	12.5	--	--	--
413808113542501	(B-11-18)33ada- 1	100VLFL	59.00	07-14-99	970	--	13.0	--	--	--
413806113543401	(B-11-18)33adb- 1	100VLFL	200.00	07-14-99	920	8.0	11.0	320	86	26
413758113551501	(B-11-18)33bdc- 1	100VLFL	232.00	07-14-99	1250	--	17.5	--	--	--
414406112173601	(B-12- 4)34bbd- 1	100VLFL	306.00	07-12-99	2250	7.1	17.5	630	140	67
414722113070101	(B-12-11) 8aab- 1	--	224.00	07-14-99	2560	--	16.0	--	--	--
414710113071601	(B-12-11) 8abb- 1	--	275.00	07-13-99	2580	7.7	14.0	--	--	--
415800112462601	(B-14- 8) 5cdd- 1	--	180.00	07-12-99	2490	--	17.5	--	--	--
415828112472601	(B-14- 8) 6acd- 1	--	460.00	07-12-99	--	--	--	--	--	--
415847112532901	(B-14- 9) 5baa- 1	100VLFL	405.00	07-12-99	1560	--	20.0	--	--	--
415847112540401	(B-14- 9) 5bbb- 1	100VLFL	300.00	07-12-99	1020	7.9	19.0	360	110	24
415754112551301	(B-14- 9) 7bbb- 1	--	608.00	07-12-99	1180	7.9	20.0	390	110	29
415703112513501	(B-14- 9)16aaa- 1	--	400.00	07-13-99	2740	--	16.0	--	--	--
415637112513401	(B-14- 9)16daa- 1	--	400.00	07-13-99	1050	--	16.5	--	--	--
415637112544101	(B-14- 9)18bdd- 1	--	400.00	07-13-99	2740	--	17.0	--	--	--
415608112551201	(B-14- 9)19bbb- 1	--	350.00	07-13-99	1870	--	15.5	--	--	--
415726112573301	(B-14-10)11cbb- 1	--	395.00	07-13-99	580	--	22.0	--	--	--
415636112564301	(B-14-10)14acd- 1	--	350.00	07-13-99	2250	--	20.0	--	--	--
415654112573301	(B-14-10)14bbc- 1	100VLFL	840.00	07-13-99	1340	--	24.5	--	--	--
415850112481201	(B-15- 8)31ccc- 1	--	550.00	07-12-99	1850	7.7	21.5	--	--	--
415939112562201	(B-15-10)36bbb- 1	100VLFL	613.00	07-12-99	500	8.0	16.5	--	--	--
DAVIS COUNTY										
405535111525101	(A- 2- 1) 7aba- 4	100VLFL	450.00	07-28-99	280	7.8	19.5	--	--	--
410340112030001	(B- 4- 2)27aba- 1	--	304.00	07-28-99	620	8.1	14.5	--	--	--
410354112135201	(B- 4- 3)19caa- 1	--	430.00	08-10-99	1320	8.1	--	170	49	12
410830111585101	(B- 5- 1)29bdc- 1	--	627.00	09-08-99	610	7.6	11.0	240	68	18
DUCHESE COUNTY										
402130110231301	U(C- 1- 4)31bbb- 1	--	--	07-14-99	840	7.7	11.5	--	--	--
402119110204201	U(C- 1- 4)33bdb- 1	--	--	07-14-99	3990	6.8	14.5	--	--	--
402103110235601	U(C- 1- 5)36caa- 1	--	--	07-14-99	331	8.2	15.0	--	--	--
401919109593201	U(C- 2- 1) 9dad- 1	123DCRV	740.00	07-14-99	740	9.4	15.5	--	--	--
401819110041601	U(C- 2- 2)14ddb- 1	--	465.00	07-14-99	400	8.1	16.5	--	--	--
402011110260901	U(C- 2- 5) 3bdd- 1	--	--	07-14-99	435	7.9	16.0	--	--	--

GEOLOGICAL UNIT (AQUIFER)

100VLFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.

110ALVM - ALLUVIUM, QUATERNARY AGE.

111ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.

122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED ALKA- LITY (CAO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED (SUM OF TUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
BEAVER COUNTY												
21	2.6	154	24	83	.21	42	363	1.40	E.030	<10	3.7	48
68	2.8	113	110	150	.28	27	510	--	--	<10	<3.0	183
66	3.4	167	140	73	.63	40	513	--	--	<10	<3.0	216
58	5.0	124	300	210	.43	40	889	3.10	<.050	38	<3.0	--
173	20	199	290	370	2.2	57	1270	--	--	<30	65	376
55	5.3	137	230	110	.53	39	671	1.10	<.050	<30	<9.0	120
--	--	--	--	--	--	--	--	2.09	E.037	--	--	--
63	5.6	302	45	39	.75	48	483	1.99	.110	<10	E1.7	141
32	5.2	311	96	77	.28	39	599	--	--	<10	<3.0	108
19	3.6	133	47	40	.38	37	296	--	--	E7.8	<3.0	54
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45	5.9	145	73	110	.42	46	491	3.22	<.050	<10	<3.0	118
BOX ELDER COUNTY												
26	4.2	76	9.6	7.7	<.10	15	123	.656	.121	12	4.1	33
91	9.3	277	140	250	.25	43	894	1.02	E.046	<10	<3.0	195
66	7.8	327	62	69	.39	40	556	.517	E.039	<10	<3.0	199
183	4.9	186	110	520	.24	21	1170	3.02	<.050	<30	<12	79
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37	11	133	25	210	.24	53	560	2.28	<.050	<10	<3.0	50
51	12	138	24	260	.28	59	629	.602	<.050	E5.2	<3.0	60
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DAVIS COUNTY												
189	3.9	145	9.4	300	.62	37	684	<.050	E.042	57	98	118
28	2.6	286	11	20	<.10	13	332	<.050	.061	31	8.6	71
DUCHESNE COUNTY												
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GEOLOGICAL UNIT (AQUIFER)--CONTINUED

123 DCRV - DUCHESNE RIVER FORMATION, OLIGOCENE AGE.  
 124UINT - UINAH FORMATION, EOCENE AGE.  
 220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.  
 220JRSC - JURASSIC SYSTEM, JURASSIC AGE.



QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

STATION NUMBER	LOCAL IDENT- I- FIER	GEO- LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA, MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
DUCHESNE COUNTY--Continued										
401611110251502	U(C- 2- 5)35bab- 1	--	120.00	07-14-99	980	9.3	13.5	--	--	--
401030110225701	U(C- 3- 4)31cab- 1	112OTSH	70.00	07-13-99	730	7.5	16.5	--	--	--
401012110292101	U(C- 3- 5)31dcd- 1	124UINT	200.00	07-13-99	510	8.6	22.0	--	--	--
401124110305501	U(C- 3- 6)25cab- 1	--	120.00	07-13-99	880	9.5	15.0	--	--	--
IRON COUNTY										
375257112483501	(C-33- 8)31ccc- 1	100VLFL	450.00	07-12-99	460	7.6	15.5	--	--	--
375320112510003	(C-33- 9)35acd- 3	100VLFL	880.00	08-24-99	455	7.7	14.5	--	--	--
375147112530001	(C-34- 9) 9bca- 1	--	--	08-24-99	660	7.0	12.0	340	72	39
374834113384301	(C-34-16)28dcc- 2	100VLFL	148.00	07-12-99	1070	7.6	13.0	420	130	25
374753113464601	(C-34-17)32cca- 1	220NVJO	306.00	07-12-99	590	7.5	20.0	--	--	--
374619113053101	(C-35-11) 9dba- 1	100VLFL	--	07-12-99	650	--	18.5	--	--	--
374550113040601	(C-35-11)11ccc- 1	100VLFL	450.00	07-12-99	920	7.5	15.0	--	--	--
374248113075201	(C-35-11)31dbd- 1	100VLFL	298.00	07-13-99	800	7.8	14.5	420	85	50
374649113305801	(C-35-15) 3dcc- 3	--	316.00	07-12-99	2550	7.6	14.0	1100	250	113
374623113381301	(C-35-16) 9add- 1	100VLFL	150.00	08-10-99	530	7.6	13.0	--	--	--
374412113384503	(C-35-16)21dcc- 3	100VLFL	300.00	08-10-99	415	7.2	14.0	--	--	--
374105113085001	(C-36-12)12dba- 1	100VLFL	600.00	08-23-99	550	7.7	14.5	290	56	37
374209113322203	(C-36-15) 4bad- 3	220NVJO	320.00	07-12-99	740	7.8	22.0	--	--	--
374014113391101	(C-36-16) 9bcd- 2	100VLFL	--	08-10-99	450	7.4	15.0	--	--	--
373854113411501	(C-36-16)19abb- 1	100VLFL	352.00	08-10-99	470	7.4	12.0	--	--	--
373656113415201	(C-36-17)36aad- 1	220NVJO	363.00	07-13-99	485	7.5	11.0	--	--	--
373542113122401	(C-37-12) 9acc- 1	100VLFL	186.00	07-13-99	375	7.9	16.5	150	51	6.4
373409113095501	(C-37-12)23abd- 1	100VLFL	250.00	07-13-99	640	7.4	17.5	270	62	27
		100VLFL	250.00	08-21-99	670	--	15.5	--	--	--
373236113111401	(C-37-12)34abb- 1	100VLFL	190.00	07-13-99	790	7.0	11.0	--	--	--
JUAB COUNTY										
395233113421601	(C-11-17)12dcd- 1	100VLFL	526.00	07-08-99	540	--	18.0	--	--	--
394545111531001	(C-12- 1)24baa- 1	100VLFL	66.00	07-21-99	1300	7.5	12.5	--	--	--
394215111530501	(C-13- 1) 1cdd- 1	--	150.00	07-21-99	970	--	11.5	--	--	--
393313111524001	(C-14- 1)36adb- 1	100VLFL	359.00	07-22-99	1120	--	13.0	--	--	--
393401112421801	(C-14- 8)25ccc- 1	--	553.00	03-08-99	1950	--	13.0	--	--	--
393122111550501	(C-15- 1)10acc- 1	--	350.00	07-22-99	1750	--	15.5	--	--	--
395245111502501	(D-11- 1) 9bbb- 2	100VLFL	70.00	07-20-99	500	7.7	12.0	--	--	--
395212111502201	(D-11- 1) 9cbc- 1	100VLFL	401.00	07-20-99	455	--	13.0	--	--	--
395110111502101	(D-11- 1)16ccb- 1	100VLFL	384.00	07-20-99	510	--	12.5	--	--	--
394848111500201	(D-11- 1)33cab- 1	--	452.00	07-20-99	485	--	11.5	--	--	--
394323111515501	(D-12- 1)31cac- 1	--	--	07-21-99	1050	--	12.5	--	--	--
394225111495701	(D-13- 1) 4cca- 1	100VLFL	371.00	07-21-99	1390	7.2	11.5	--	--	--
394226111501601	(D-13- 1) 5dda- 1	100VLFL	336.00	07-21-99	1460	--	11.5	--	--	--
394225111502201	(D-13- 1) 5ddb- 1	100VLFL	344.00	07-21-99	1550	--	11.5	--	--	--
394226111502101	(D-13- 1) 5ddb- 3	100VLFL	350.00	07-21-99	1550	--	11.5	--	--	--
394137111515001	(D-13- 1) 7dbc- 1	--	210.00	07-19-99	1460	7.2	12.1	--	--	--
393400111511501	(D-14- 1)30add- 1	100VLFL	312.00	07-21-99	840	--	13.0	--	--	--
		100VLFL	312.00	07-21-99	--	--	--	--	--	--
KANE COUNTY										
371739112200201	R(C-40- 4)32bad- 1	100VLFL	135.00	07-14-99	1120	7.4	12.0	530	95	70
370843112340602	(C-42- 6)19bdc- 2	220NVJO	250.00	07-14-99	260	8.3	14.0	--	--	--
MILLARD COUNTY										
392948112195102	(C-15- 4)19ccc- 2	--	63.10	03-09-99	9580	--	14.0	--	--	--
392859112154601	(C-15- 4)26dcc- 1	100VLFL	660.00	07-22-99	780	7.3	16.0	340	90	27
392801112342301	(C-15- 6)31ccc- 1	--	195.00	03-11-99	580	--	13.5	--	--	--
393058112403701	(C-15- 7)18caa- 1	--	795.00	03-08-99	1150	--	18.0	--	--	--
392819112352901	(C-15- 7)36cbb- 1	--	420.00	03-11-99	520	--	15.0	--	--	--

## GEOLOGICAL UNIT (AQUIFER)

100VLFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.  
110ALVM - ALLUVIUM, QUATERNARY AGE.  
111ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.  
122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.

CONTINUED - (SEE OTHER PAGES FOR DATA)

THIS INFORMATION IS UNCLASSIFIED  
DATE 08-01-2001 BY 60322 UCBAW/STP  
EXEMPT FROM GDS  
DATE 08-01-2001 BY 60322 UCBAW/STP

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- SIUM (K) (MG/L)	ALKA- LINITY (CACO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
DUCHESNE COUNTY--Continued												
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IRON COUNTY												
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11	3.0	274	46	19	.12	29	383	--	--	<10	<3.0	--
35	9.2	128	100	210	.55	59	653	1.90	<.050	<10	<3.0	97
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9.9	2.2	140	270	16	.27	20	543	2.00	--	E8.9	<3.0	50
156	9.8	123	760	390	.39	58	1820	2.58	<.050	<30	E8.2	478
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8.9	2.1	144	130	14	.34	24	362	--	--	<10	<3.0	28
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14	3.4	135	11	26	.20	52	251	1.06	<.050	<10	<3.0	48
35	1.4	163	110	36	.10	19	401	2.96	--	<10	<3.0	92
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JUAB COUNTY												
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KANE COUNTY												
43	7.7	317	320	11	.48	9.9	744	.281	<.050	<10	<3.0	119
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MILLARD COUNTY												
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34	1.5	167	120	73	.12	13	459	--	--	<10	<3.0	49
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## GEOLOGICAL UNIT (AQUIFER) --CONTINUED

123 DCRV - DUCHESNE RIVER FORMATION, OLIGOCENE AGE.  
124UINT - UINTAH FORMATION, EOCENE AGE.  
220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.  
220JRSC - JURASSIC SYSTEM, JURASSIC AGE.

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

STATION NUMBER	LOCAL IDENT- I- FIER	GEO- LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA,MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
MILLARD COUNTY--Continued										
392938112411201	(C-15- 8)25aaa- 1	100VLFL	285.00	03-11-99	910	--	12.5	--	--	--
392614112335101	(C-16- 6) 7dbc- 1	--	104.00	03-11-99	535	--	13.5	--	--	--
392650112345101	(C-16- 7) 1dcd- 1	100VLFL	132.00	03-16-99	590	--	14.0	--	--	--
392558112345301	(C-16- 7) 12dcd- 4	--	180.00	03-11-99	520	--	14.0	--	--	--
392558112345302	(C-16- 7) 12dcd- 5	--	704.00	03-11-99	405	--	15.0	--	--	--
391716112314501	(C-17- 6) 33dcc- 1	--	217.00	03-10-99	395	--	15.5	--	--	--
391951112415401	(C-17- 8) 13cdd- 1	--	150.00	03-10-99	840	--	13.0	--	--	--
391234112233701	(C-18- 5) 34adb- 3	100VLFL	512.00	07-07-99	2330	7.2	16.5	1100	230	126
3917141123300301	(C-18- 6) 2bbb- 2	100VLFL	246.00	03-10-99	620	--	15.0	--	--	--
391553112332601	(C-18- 6) 8cbb- 1	100VLFL	260.00	03-10-99	420	--	16.0	--	--	--
391623112412601	(C-18- 8) 1ddd- 1	100VLFL	605.00	03-10-99	2380	--	17.5	--	--	--
391420112412001	(C-18- 8) 24ada- 2	100VLFL	601.00	03-10-99	3530	--	17.0	--	--	--
390758112194601	(C-19- 4) 29bcd- 1	100VLFL	390.00	07-07-99	810	7.3	15.5	420	91	47
390629113575801	(C-19-19) 34dac- 1	--	--	07-08-99	415	--	11.5	--	--	--
390628112201401	(C-20- 4) 6aca- 1	100VLFL	506.00	07-07-99	1780	7.4	14.0	740	170	74
385939112272303	(C-21- 5) 7cdd- 3	--	--	07-07-99	1310	7.3	14.0	480	110	53
385714112264701	(C-21- 5) 29cbc- 1	100VLFL	900.00	07-07-99	2410	7.0	20.0	--	--	--
390045112281201	(C-21- 6) 1ddb- 1	112PVNT	105.00	07-07-99	1810	7.3	13.5	620	140	66
385026112261001	(C-23- 5) 5acd- 1	100VLFL	353.00	07-07-99	635	7.7	16.0	--	--	--
384953112325101	(C-23- 6) 8abd- 1	100VLFL	200.00	07-06-99	6210	7.1	17.0	1800	450	169
384856112315701	(C-23- 6) 16bad- 1	100VLFL	130.00	07-06-99	3640	7.3	16.0	--	--	--
384829112315901	(C-23- 6) 16cda- 1	112PVNT	205.00	07-06-99	3050	7.3	15.5	740	200	60
PIUTE COUNTY										
381440111584001	(C-29- 2) 35bad- 1	122BRHD	197.00	07-20-99	430	7.6	19.0	190	53	14
381003112010301	(C-30- 2) 28bdc- 1	--	135.00	07-20-99	410	7.8	15.0	180	44	16
SALT LAKE COUNTY										
404045111594201	(C- 2- 1) 6abc- 4	100VLFL	440.00	07-14-99	455	7.5	15.5	--	--	--
		100VLFL	440.00	07-14-99	2530	7.4	18.5	--	--	--
403637112005201	(C- 2- 2) 25cdd- 1	100VLFL	308.00	07-14-99	1030	7.4	15.0	330	71	37
403533111570701	(C- 3- 1) 4aac- 1	110VLFL	491.00	07-14-99	1070	7.3	16.0	390	96	36
403408111543201	(C- 3- 1) 12ccb- 1	100VLFL	118.00	07-14-99	910	7.6	20.0	--	--	--
402721111550801	(C- 4- 1) 23ddb- 1	100VLFL	262.00	07-14-99	930	7.8	16.0	270	58	30
404506111523301	(D- 1- 1) 7abd- 6	100VLFL	130.00	07-15-99	1270	7.4	14.0	560	130	54
404253111530901	(D- 1- 1) 19cdb-17	100VLFL	500.00	07-15-99	1050	7.4	14.0	--	--	--
404040111503301	(D- 2- 1) 4acb- 1	100VLFL	230.00	07-15-99	1390	7.6	14.0	--	--	--
403332111485001	(D- 2- 1) 35bbb- 1	100VLFL	238.00	07-15-99	350	8.1	19.0	--	--	--
403252111522501	(D- 3- 1) 19ada- 1	100VLFL	177.00	07-14-99	1650	7.3	17.0	--	--	--
403116111524801	(D- 3- 1) 31abb- 1	100VLFL	138.00	07-14-99	455	7.5	15.5	--	--	--
SAN JUAN COUNTY										
371716109325501	(D-40-22) 30bbb- 1	220JRSC	825.00	03-02-99	800	8.8	18.0	--	--	--
371621109211001	(D-40-23) 27baa- 1	220JRSC	672.00	03-02-99	3100	7.6	19.0	--	--	--
SANPETE COUNTY										
390819111530701	(C-19- 1) 23cac- 1	110ALVM	--	07-19-99	2420	7.2	14.0	730	120	106
392740111345301	(D-16- 3) 4aaa- 1	100VLFL	160.00	08-04-99	1120	7.4	11.0	360	76	40
SEVIER COUNTY										
385910111512101	(C-21- 1) 13abd- 1	--	291.00	07-19-99	740	8.0	18.0	140	30	16
384757112002201	(C-23- 2) 15dcb- 4	--	75.00	07-19-99	750	7.6	12.0	360	76	42
384641112034601	(C-23- 2) 30baa- 2	--	75.00	07-19-99	780	7.3	15.5	--	--	--
383140111522001	(C-26- 1) 23ddb- 1	100VLFL	200.00	07-20-99	200	8.2	13.0	--	--	--

[illegible]

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

STATION NUMBER	LOCAL IDENT- I- FIER	GEO- LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA, MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)
TOOELE COUNTY										
403629112174801	(C- 2- 4)33bdd- 1	100VLFL	421.00	07-13-99	835	--	15.5	--	--	--
403600112245501	(C- 2- 5)33dba- 2	100VLFL	154.00	07-14-99	2530	--	16.5	--	--	--
403611112241201	(C- 2- 5)34bca- 3	100VLFL	320.00	07-14-99	2780	--	24.0	--	--	--
403555112230302	(C- 2- 5)35cbd- 2	100VLFL	601.00	07-14-99	5920	--	28.0	--	--	--
403140112445001	(C- 3- 8)28adc- 1	--	396.00	07-09-99	525	--	14.0	--	--	--
403126112444501	(C- 3- 8)28ddb- 1	--	241.00	07-09-99	365	7.9	17.5	100	30	7.5
402525112251502	(C- 4- 5)32cca- 2	100VLFL	210.00	06-30-99	2040	7.3	13.0	560	150	46
402320112252501	(C- 5- 5)17aad- 1	100vfl1	20.00	06-30-99	1680	7.4	16.0	430	97	45
402211112254601	(C- 5- 5)20acc- 2	100vfl1	245.00	06-30-99	4390	7.2	12.0	1000	170	148
402208112251902	(C- 5- 5)20daa- 2	--	34.50	07-07-99	26700	6.7	14.5	15000	3400	1570
402124112270601	(C- 5- 5)30bda- 2	110vfl1	21.00	07-07-99	2640	7.0	12.0	820	220	62
402113112270501	(C- 5- 5)30bdd- 1	--	--	12-03-98	2210	7.4	10.0	620	170	48
		110vfl1	--	07-07-99	2690	7.1	10.5	790	220	60
402024112254601	(C- 5- 5)32dbb- 2	100VLFL	112.00	07-07-99	1470	7.4	10.5	530	150	35
402050112330201	(C- 5- 6)32bba-S1	--	--	06-30-99	330	7.5	7.5	160	51	7.9
402023112290501	(C- 5- 6)35dba- 2	100vfl1	115.00	06-30-99	1180	7.3	13.5	440	140	23
400849112263901	(C- 8- 5)6ddb- 1	--	534.00	07-01-99	660	--	16.0	--	--	--
400745112263101	(C- 8- 5)7ddd- 2	--	547.00	07-01-99	550	--	16.0	--	--	--
400418112271701	(C- 8- 5)31ccd- 5	100VLFL	60.00	07-13-99	1040	7.5	13.0	480	150	27
UTAH COUNTY										
401730111594501	(C- 6- 1)18cdd- 1	--	265.00	06-30-99	790	7.4	27.5	--	--	--
401729112052701	(C- 6- 2)17dcc- 1	100VLFL	600.00	07-01-99	395	--	18.0	--	--	--
401734112052601	(C- 6- 2)17dcc- 2	100VLFL	595.00	07-01-99	435	--	10.5	--	--	--
401607112023401	(C- 6- 2)26cbb- 1	100VLFL	505.00	06-22-99	670	7.9	12.0	--	--	--
401600112023401	(C- 6- 2)26cbc- 1	--	--	06-22-99	680	--	13.0	--	--	--
401610112053101	(C- 6- 2)29bdd- 1	100VLFL	150.00	07-01-99	455	7.8	9.5	--	--	--
400315111572001	(C- 9- 1)4ccc- 1	100VLFL	756.00	07-07-99	1330	7.9	14.5	--	--	--
395956111572101	(C- 9- 1)28ccb- 1	--	802.00	07-07-99	1380	7.8	19.0	--	--	--
395854111561201	(C- 9- 1)34ccc- 1	100VLFL	650.00	07-07-99	1660	--	18.0	--	--	--
395848111571801	(C-10- 1)4bbb- 1	100VLFL	882.00	07-07-99	3320	--	19.0	--	--	--
395339111581800	(C-10- 1)32ccc- 1	100VLFL	507.00	07-07-99	2130	--	20.0	--	--	--
395326111585001	(C-11- 1)6abc- 1	100VLFL	679.00	07-07-99	600	--	20.0	--	--	--
402259111525201	(D- 5- 1)18cab- 2	100VLFL	618.00	07-12-99	285	8.1	19.0	120	26	13
402145111531101	(D- 5- 1)19ccc- 1	110ALVM	150.00	07-12-99	460	8.2	16.0	--	--	--
402103111461601	(D- 5- 2)30ccb- 2	--	225.00	07-09-99	800	7.4	13.0	--	--	--
401801111442501	(D- 6- 2)17aca- 1	100VLFL	200.00	07-09-99	560	7.8	16.0	--	--	--
401414111435301	(D- 7- 2)4cbb- 2	100VLFL	144.00	07-09-99	540	--	13.0	--	--	--
401021111362701	(D- 7- 3)33baa- 6	100VLFL	138.00	07-08-99	530	--	13.0	--	--	--
400041111472101	(D- 9- 1)26aab- 1	100VLFL	340.00	07-08-99	760	--	13.1	--	--	--
400019111471001	(D- 9- 1)26add- 1	100VLFL	200.00	07-08-99	650	--	12.0	--	--	--
400120111452001	(D- 9- 2)19acb- 1	100VLFL	311.00	07-08-99	660	--	14.0	--	--	--
WASATCH COUNTY										
402842111263101	(D- 4- 4)12dcc- 1	100VLFL	--	07-27-99	420	7.0	12.0	190	54	14
402937111214901	(D- 4- 5)3dcc- 1	100VLFL	75.00	07-27-99	475	7.0	16.5	220	72	9.4
402946111233901	(D- 4- 5)4ccb- 1	100VLFL	217.00	07-21-99	385	7.0	15.5	170	53	8.7
402842111223601	(D- 4- 5)4ddd- 1	--	52.00	07-21-99	310	7.1	13.5	130	42	6.0
403003111255801	(D- 4- 5)6bcc- 2	--	--	07-27-99	470	7.6	20.5	220	53	22
402904111225801	(D- 4- 5)9dbb- 1	--	--	07-27-99	440	7.1	14.5	200	59	13
402840111232201	(D- 4- 5)16bab- 1	--	--	07-27-99	630	7.2	15.5	300	82	23
402750111232701	(D- 4- 5)16ccd- 1	100VLFL	150.00	08-24-99	450	7.6	17.5	210	52	20
402813111253701	(D- 4- 5)18cab- 1	--	206.00	08-24-99	570	7.4	18.5	260	69	22
WASHINGTON COUNTY										
373456113423501	(C-37-17)12bdc- 2	--	290.00	08-10-99	550	7.4	11.5	230	73	13
371305113470401	(C-41-17)17bdb- 1	--	626.00	08-10-99	470	7.7	18.5	--	--	--

GEOLOGICAL UNIT (AQUIFER)

100VLFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.  
110ALVM - ALLUVIUM, QUATERNARY AGE.  
111ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.  
122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.

UNSATURATED (UNSATURATED) FLOW

100VLFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.  
110ALVM - ALLUVIUM, QUATERNARY AGE.  
111ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.  
122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED ALKA- LINIT- Y (CACO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
TOOELE COUNTY												
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34	2.5	75	11	50	<.10	15	195	.342	<.050	110	3.8	65
189	1.8	215	120	440	<.10	16	1110	3.63	<.050	<30	<12	72
155	24	199	210	280	2.3	42	983	1.26	<.050	<10	76	388
521	21	252	460	1000	.65	35	2550	.500	.062	34	98	561
2300	22	145	1600	10000	.24	34	19300	<.050	E.033	<200	9340	<320
193	1.5	223	56	670	.27	24	1380	1.78	<.050	<30	<9.0	198
207	1.3	280	91	520	.28	26	1250	2.68	<.050	50	E8.0	248
240	1.2	255	96	650	.25	21	1450	1.96	<.050	110	E6.8	246
102	1.4	324	73	240	.23	18	824	1.03	<.050	47	28	109
5.2	.42	162	4.0	5.5	<.10	6.2	178	.207	<.050	<10	<3.0	21
39	1.3	160	23	250	.10	12	587	1.73	<.050	E9.2	<3.0	44
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48	2.3	121	37	300	<.10	17	662	1.36	<.050	E5.4	<3.0	--
UTAH COUNTY												
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16	1.8	120	7.6	18	.35	16	172	.278	<.050	<10	E1.7	31
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WASATCH COUNTY												
7.8	1.2	179	18	9.4	<.10	21	239	1.41	<.050	<10	<3.0	44
6.9	3.6	201	5.5	12	<.10	38	289	4.72	.086	<10	<3.0	32
7.4	2.3	145	13	15	<.10	37	222	--	--	<10	<3.0	35
7.7	2.0	93	11	12	<.10	27	163	--	--	<10	<3.0	34
8.5	1.1	196	27	12	<.10	12	253	--	--	<10	<3.0	25
9.7	2.1	192	17	8.4	<.10	28	257	1.21	E.037	<10	<3.0	39
14	1.5	284	21	15	<.10	27	367	2.84	<.050	<10	<3.0	51
10	1.0	186	23	15	.14	13	249	.810	<.050	E5.9	3.1	31
12	1.2	220	12	35	<.10	13	306	2.06	<.050	E6.7	4.2	32
WASHINGTON COUNTY												
28	4.9	227	15	24	.16	42	357	4.32	.067	<10	<3.0	81
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GEOLOGICAL UNIT (AQUIFER)--CONTINUED

123 DCRV - DUCHESNE RIVER FORMATION, OLIGOCENE AGE.  
 124UINT - UINFAH FORMATION, EOCENE AGE.  
 220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.  
 220JRSC - JURASSIC SYSTEM, JURASSIC AGE.

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

STATION NUMBER	LOCAL IDENT- I- FIER	GEO- LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA, MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
WASHINGTON COUNTY--Continued										
370517113310402	(C-42-15) 34dba- 2	--	265.00	07-13-99	5300	6.9	18.0	2100	550	174
WAYNE COUNTY										
382717111365601	(D-27- 3) 19aaa- 1	--	285.00	07-19-99	260	8.3	17.5	--	--	--
381902111321101	(D-29- 3) 1cab- 1	110ALVM	433.00	07-19-99	260	8.3	17.5	--	--	--
WEBER COUNTY										
411153112064601	(B- 5- 2) 6bdd- 4	100VLFL	303.00	07-28-99	465	8.0	16.5	140	34	14
412011112041401	(B- 7- 2) 16dcd- 2	100VLFL	1176.00	08-10-99	355	8.1	25.0	68	20	4.2
411824112060601	(B- 7- 2) 32bbb- 1	100VLFL	546.00	08-10-99	2500	8.0	18.5	--	--	--
411821112034601	(B- 7- 2) 34bbb- 2	100VLFL	517.00	08-10-99	1760	7.8	18.0	--	--	--



[illegible]

STATION NUMBER & LOCAL IDENTIFI FIER	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)
401012110292101 U(C- 3- 5)31dcd- 1	JUL 13...	1310	200.00	510	8.6	22.0	-113.3	-14.55
401030110225701 U(C- 3- 4)31cab- 1	JUL 13...	1415	70.00	730	7.5	16.5	-120.0	-16.20
401124110305501 U(C- 3- 6)25cab- 1	JUL 13...	1205	120.00	880	9.5	15.0	-141.3	-18.72
401611110251502 U(C- 2- 5)35bab- 1	JUL 14...	1005	120.00	980	9.3	13.5	-131.1	-17.55
401819110041601 U(C- 2- 2)14ddb- 1	JUL 14...	1430	465.00	400	8.1	16.5	-135.0	-18.04
401919109593201 U(C- 2- 1)9dad- 1	JUL 14...	1515	740.00	740	9.4	15.5	-126.8	-17.20
402011110260901 U(C- 2-5)3bdd- 1	JUL 14...	1045	---	435	7.9	16.0	-117.7	-15.81
402103110235601 U(C- 1- 5)36caa- 1	JUL 14...	1125	---	331	8.2	15.0	-120.8	-16.49
402119110204201 U(C- 1- 4)33bdb- 1	JUL 14...	1250	---	3990	6.8	14.5	-107.8	-13.72
402130110231301 U(C- 1- 4)31bbb- 1	JUL 14...	1205	---	840	7.7	11.5	-116.7	-15.74

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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer
<i>Area</i>		
acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer
<i>Volume</i>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per second
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per second
	$4.381 \times 10^{-2}$	cubic meter per second
<i>Mass</i>		
ton (short)	$9.072 \times 10^{-1}$	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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