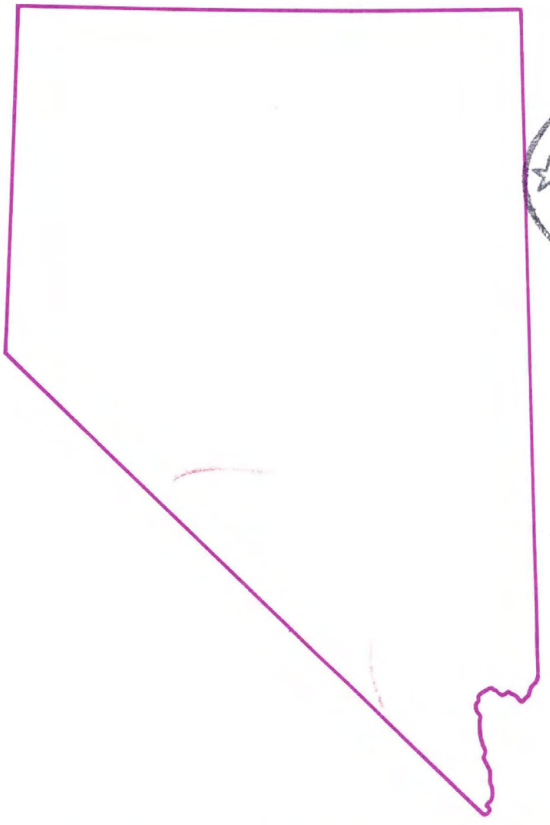
Water Resources Data Nevada Water Year 1989



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NV-89-1
Prepared in cooperation with the State of Nevada
and with other agencies

CALENDAR FOR WATER YEAR 1989

1988

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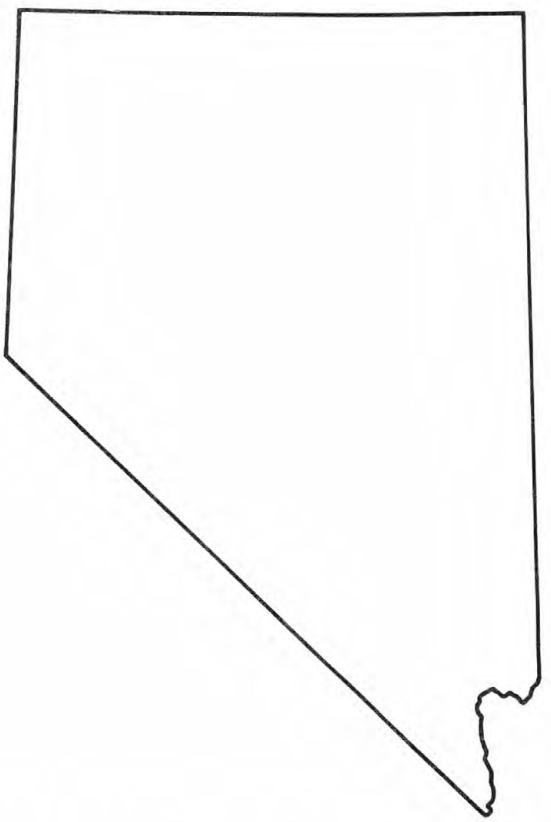
Water Resources Data
Nevada
Water Year 1989

by A. Pupacko, L.C. Van Gordon, J.R. Swartwood, and R.P. Collins



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NV-89-1
Prepared in cooperation with the State of Nevada
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information regarding water-resources investigations
in Nevada, write to:
Nevada District Office Chief, Water Resources Division
U.S. Geological Survey
Room 227, Federal Building
705 North Plaza Street
Carson City, Nevada 89701

1990

PREFACE

This report for Nevada is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface-water and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streams, canals, drains and springs, lakes and reservoirs, and observation wells provide the hydrologic information needed by State, local, and Federal agencies and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by personnel of the U.S. Geological Survey who collected, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The four authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines.

In addition to the authors, U.S. Geological Survey personnel in Nevada who contributed significantly to the collection and preparation of the data in this report were: David J. Bauer, David A. Beck, Joseph D. Bertrand, David E. Blackstun, Robert E. Bostic, Tina L. Ellis, Michael Enright, Nancy A. Fleckenstein, Kerry T. Garcia, Nancy A. Gayman, Gary C. Gortsema, Richard D. Hayes, Daniel E. Hitch, Judy M. Jacoboni, Richard J. LaCamera, Robert M. Moquino, Robert N. Pennington, Alan M. Preissler, Margaret M. Riek, David A. Simpson, Robert A. Swanson, Thomas B. Tucker, Craig L. Westenburg, William J. Whicker, Rhea P. Williams, James L. Wood, and Richard L. Young.

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13. Type of Report & Period Covered
Annual - Oct. 1, 1988 to Sept. 30, 1989

14.

15. Supplementary Notes
Prepared in cooperation with several Federal, State, and local agencies.

16. Abstract (Limit: 200 words)

Water-resources data published herein for the 1989 water year comprise the following records:

- Water discharge for 122 gaging stations on streams, canals, and drains.
- Discharge data for 101 peak-flow stations and miscellaneous sites, and 47 springs.
- Stage and contents for 23 lakes and reservoirs.
- Water-quality data for 36 stream, canal, and drain sites, and 18 wells.
- Precipitation totals for 16 stations.
- Water levels for 22 continuous record wells, and 376 observations wells.

Additional water data, collected at various sites that are not part of the systematic data-collection program, are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Nevada.

17. Document Analysis a. Descriptors
*Nevada, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses.

b. Identifiers/Open-Ended Terms

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CONTENTS

	Page
INTRODUCTION	1
COOPERATION	1
SUMMARY OF HYDROLOGIC CONDITIONS	2
Surface water	2
Surface-water quality	2
Ground water	6
Water use	11
SPECIAL NETWORKS AND PROGRAMS	13
EXPLANATION OF THE RECORDS	13
Station identification numbers	13
Downstream order system	13
Latitude-longitude system	14
Local site numbers	14
Records of stage and water discharge	14
Data collection and computation	14
Data presentation	15
Identifying estimated daily discharge	16
Accuracy of the records	16
Other records available	17
Records of surface-water quality	17
Classification of records	17
Arrangement of records	17
On-site measurements and sample collection	17
Water temperature	17
Sediment	18
Laboratory measurements	18
Data presentation	18
Remark codes	19
Records of ground-water levels	19
Data collection and computation	19
Data presentation	19
Records of ground-water quality	20
Data collection and computation	20
Data presentation	20
ACCESS TO WATSTORE DATA	20
DEFINITION OF TERMS	21
WATER-RELATED REPORTS FOR NEVADA COMPLETED BY THE GEOLOGICAL SURVEY DURING CALENDAR YEAR 1989	27
PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS	29
DISCONTINUED GAGING STATIONS	31
SURFACE-WATER RECORDS	39
Surface-water stations	39
Spring discharge	275
Discharge at partial-record stations and miscellaneous sites	278
Crest-stage partial-record stations	278
Miscellaneous sites	282
Analyses of samples collected at water-quality partial-record stations and miscellaneous sites	288
GROUND-WATER RECORDS	289
Hydrographic areas, State of Nevada	289
Ground-water levels, primary observation wells	291
Ground-water levels, secondary observation wells	300
Quality of ground water	324
GROUND-WATER DATA FOR SMOKE CREEK DESERT	326
NEVADA HIGH-ELEVATION PRECIPITATION NETWORK	328
INDEX	329

ILLUSTRATIONS

Page

Figures 1-5. Graphs showing:

1. Comparison of discharge during water year 1989 with the long-term mean discharge at two representative gaging stations 3
2. Water-surface elevations at Walker and Pyramid Lakes, 1965-89 4
3. Comparison of median dissolved-solids concentrations during water year 1989 with dissolved-solids concentrations for the period of record at selected stations in (A) northern Nevada and (B) southern Nevada 5
4. Dissolved-solids concentration in the Colorado River below Hoover Dam (station 09421500) for the period of record 7
5. Number of well logs submitted to the Nevada State Engineer's Office during 1961-89 8

6. Map showing distribution, by county, of the number and use of wells during calendar year 1989 9
7. Map showing long-term water-level trends in six selected observation wells 10
8. Graph showing monthly water withdrawals for public supply in Las Vegas, Reno, and Carson City, 1980-89 12

9-15. Maps showing data sites listed in this report:

9. Gaging stations 34
10. Gaging stations in west-central Nevada 35
11. Gaging stations in southeastern Nevada 36
12. Surface-water quality sites 37
13. Streamflow partial-record stations 276
14. Streamflow partial-record sites in southeastern Nevada 277
15. Observation wells 290

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

[Letter after station name designates type of data: (d) discharge, (a) altitude or contents, (c) chemical, (b) biological or microbiological, (p) precipitation, (t) water temperature, (s) sediment]

Page

COLORADO RIVER BASIN [PART 9]
Colorado River:
VIRGIN RIVER BASIN
Virgin River at Littlefield, AZ (dct) . . . 39
White River (head of Muddy River):
Pahranagat Wash near Moapa (d) . . . 42
Muddy Spring at L.D.S. Farm near Moapa (d) . . . 44
Pederson Spring near Moapa (d) . . . 45
Warm Springs West near Moapa (d) . . . 46
Muddy River near Moapa (dct) . . . 47
Meadow Valley Wash:
Meadow Valley Wash near Caliente (d) . . . 52
Meadow Valley Wash near Rox (dcts) . . . 53
Muddy River near Glendale (d) . . . 57
Muddy River above Lake Mead near Overton (dcbts) . . . 58
Rogers Spring near Overton Beach (d) . . . 61
LAS VEGAS VALLEY
Lee Canyon near Charleston Park (d) . . . 62
Corn Creek Spring at National Fish and Wildlife Headquarters (d) . . . 63
Las Vegas Creek at Lamb Boulevard near Las Vegas (dp) . . . 64
Las Vegas Wash near Sahara Avenue (dp) . . . 66
Sloan Channel at Charleston Boulevard near Las Vegas (dp) . . . 68
Flamingo Wash near Torrey Pines Drive near Las Vegas (dp) . . . 69
Las Vegas Wasteway near East Las Vegas (d) . . . 70
Las Vegas Wash near Henderson (ct) . . . 71
Las Vegas Wash above Three Kids Wash below Henderson, NV (dct) . . . 73
Lake Mead at Hoover Dam, AZ-NV (a) . . . 76
Colorado River below Hoover Dam, AZ-NV (cbts) . . . 78
Lake Mohave at Davis Dam, AZ-NV (a) . . . 81

THE GREAT BASIN [PART 10]
GREAT SALT LAKE DESERT
Thousand Springs Creek near Wilkins (dc) . . . 82
Thousand Springs Creek below Toano Draw near Shores (dc) . . . 84
Crittenden Springs above Crittenden Reservoir near Montello (ct) . . . 86
Thousand Springs Creek near Montello (dc) . . . 87
STEPTOE AND GOSHUTE VALLEYS
Steptoe Creek near Ely (dcbts) . . . 89
MONITOR VALLEY-DIAMOND VALLEY SYSTEM
Pine Creek near Belmont (d) . . . 92
Mosquito Creek near Belmont (d) . . . 93
Stoneberger Creek near Austin (d) . . . 94
HOT CREEK AND NORTHERN RAILROAD VALLEYS
Sixmile Creek near Warm Springs (d) . . . 95
STONE CABIN VALLEY
Willow Creek near Warm Springs (d) . . . 96
BIG SMOKY VALLEY (NORTHERN PART)
Kingston Creek below Cougar Canyon near Austin (d) . . . 97
South Twin River near Round Mountain (dcbts) . . . 98
PAHRUMP VALLEY
Peak Spring Canyon Creek near Charleston Peak (d) . . . 101

WALKER LAKE BASIN
Walker Lake near Hawthorne (a) . . . 102
Virginia Creek (head of Walker River):
Upper Twin Lake near Bridgeport, CA (a) . . . 103
Lower Twin Lake near Bridgeport, CA (a) . . . 104
East Walker River (continuation of Virginia Creek):
Bridgeport Reservoir near Bridgeport, CA (a) . . . 105
East Walker River near Bridgeport, CA (d) . . . 106
East Walker River above Strosnider ditch, near Mason (d) . . . 107
West Walker River:
West Walker River below Little Walker River, near Coleville, CA (d) . . . 108
West Walker River near Coleville, CA (d) . . . 109
Topaz Lake near Topaz, CA (a) . . . 110
West Walker River at Hoye bridge, near Wellington (d) . . . 111
West Walker River near Hudson (d) . . . 112
Walker River near Wabuska (dcbts) . . . 113

GAGING STATIONS

Page

THE GREAT BASIN--Continued
HUMBOLDT-CARSON SINK BASIN
CARSON RIVER BASIN
East Fork Carson River below Markleeville Creek, near Markleeville, CA (d) 116
East Fork Carson River near Gardnerville (d) 117
Indian Creek near Woodfords, CA (d) 118
Indian Creek at Diamond Valley near Paynesville, CA (d) 119
Pine Nut Creek near Gardnerville (d) 120
Buckeye Creek near Minden (d) 121
West Fork Carson River at Woodfords, CA (d) 122
Fredericksburg Canyon Creek near Fredericksburg, CA (d) 123
Miller Spring near Sheridan, (d) 124
Daggett Creek near Genoa (d) 125
Clear Creek near Carson City (d) 126
Carson River near Carson City (d) 127
North Fork Kings Canyon Diversion near Carson City (d) 128
North Fork Kings Canyon Creek near Carson City (d) 129
Kings Canyon Creek near Carson City (d) 130
Ash Canyon Creek near Carson City (d) 131
Eagle Valley Creek at Carson City (d) 132
Carson River near Fort Churchill (dcbts) 133
Lahontan Reservoir near Fallon (a) 136
Carson River below Lahontan Reservoir, near Fallon (d) 137
Paiute Drain above D-Line Canal near Stillwater (d) 138
D-Line Canal below East Lake near Stillwater (d) 139
T J Drain at Wildlife Entrance near Stillwater (d) 140
Carson River at Tarzyn Road near Fallon (d) 141
HUMBOLDT RIVER BASIN
East Fork Humboldt River:
Marys River above Hot Springs Creek, near Deeth (d) 142
Lamoille Creek near Lamoille (d) 143
Humboldt River near Elko (d) 144
South Fork Humboldt River above Tenmile Creek near Elko (d) 145
Tenmile Creek above South Fork Humboldt River near Elko (d) 146
South Fork Humboldt River above Dixie Creek near Elko (d) 147
Humboldt River near Carlin (dcbts) 149
Humboldt River at Palisade (d) 152
Rock Creek near Battle Mountain (d) 153
Humboldt River at Comus (d) 154
Little Humboldt River:
Little Humboldt River near Paradise Valley (d) 155
Martin Creek near Paradise Valley (d) 156
Humboldt River near Imlay (d) 157
Rye Patch Reservoir near Rye Patch (a) 158
Humboldt River near Rye Patch (d) 159
PYRAMID AND WINNEMUCCA LAKES BASIN
Pyramid Lake near Nixon (a) 160
Upper Truckee River at South Lake Tahoe (dts) 161
Lake Tahoe:
Taylor Creek:
Fallen Leaf Lake near Camp Richardson (a) 166
Taylor Creek near Camp Richardson (d) 167
General Creek near Meeks Bay (dts) 168
Blackwood Creek near Tahoe City (dts) 173
Ward Creek at State Highway 89, near Tahoe Pines (dts) 178
Third Creek near Crystal Bay (dcts) 183
Incline Creek near Crystal Bay (dcts) 187
Marlette Lake near Carson City (a) 192
Marlette Creek near Carson City (d) 193
Glenbrook Creek at Glenbrook (dcts) 194
Logan House Creek near Glenbrook (dcts) 198
Edgewood Creek at Lake Tahoe near Stateline (dcts) 202
Trout Creek near Tahoe Valley (d) 206
Trout Creek at South Lake Tahoe (ts) 207
Lake Tahoe at Tahoe City (a) 211
Truckee River at Tahoe City (d) 212
Donner Creek at Donner Lake, near Truckee (d) 213
Martis Creek at State Highway 267, near Truckee (cts) 214
Martis Creek Lake near Truckee (acts) 216
Martis Creek near Truckee (dcts) 218
Prosser Creek Reservoir near Truckee (a) 222
Prosser Creek below Prosser Creek Dam (d) 223
Little Truckee River:
Independence Creek near Truckee (d) 224
Sagehen Creek near Truckee (dcs) 225
Stampede Reservoir near Truckee (a) 229
Little Truckee River above Boca Dam, near Truckee (d) 230
Boca Reservoir near Truckee (a) 231
Little Truckee River below Boca Dam, near Truckee (d) 232

Page

THE GREAT BASIN--Continued
Truckee River at Farad (d) 233
Truckee River at Reno (d) 234
Truckee River near Sparks (dt) 235
Franktown Creek (head of Steamboat Creek) near Carson City (d) 239
Steamboat Creek:
Washoe Lake near Carson City (a) 240
Little Washoe Lake near Steamboat (a) 241
Galena Creek at Galena State Park (d) 242
Galena Creek near Steamboat (d) 243
Steamboat Creek at Steamboat (d) 244
Truckee River at Vista (dt) 245
Truckee River below Tracy (d) 249
Truckee River at Clark (t) 250
Truckee Canal near Wadsworth (d) 252
Fernley A Drain at Powerline Crossing near Fernley (d) 253
Truckee Canal near Hazen (d) 254
Truckee River below Derby Dam, near Wadsworth (dt) 255
Truckee River near Nixon (dcbts) 259
Truckee River at Marble Bluff Dam (t) 264
BLACK ROCK DESERT BASIN
Quinn River:
McDermitt Creek near McDermitt (d) 267
Kings River near Orovada (d) 268
SUMMIT LAKE VALLEY
Mahogany Creek near Summit Lake (d) 269
HUALAPAI FLAT
South Willow Creek near Gerlach (d) 270
SMOKE CREEK DESERT
Smoke Creek below Reservoir near Smoke Creek (d) 271

SNAKE RIVER BASIN [PART 13]
BRUNEAU RIVER BASIN
Bruneau River at Rowland (d) 272
OWYHEE RIVER BASIN
Wild Horse Reservoir near Gold Creek (a) 273
Owyhee River near Gold Creek (d) 274

x

GROUND-WATER WELLS, BY VALLEY, FOR WHICH RECORDS ARE PUBLISHED

GROUND-WATER LEVELS

Page

PARADISE VALLEY
Well 412910117321001 Local number: 69 N42 E39 25CAC 1 291
CARSON DESERT
Well 392825118470501 Local number: 101 N19 E28 36AABC1 291
EAGLE VALLEY
Well 391126119441901 Local number: 104 N15 E20 04DBDC1 291
Well 391126119441902 Local number: 104 N15 E20 04DBDC2 292
Well 391155119460401 Local number: 104 N15 E20 05BBCA1 292
Well 391155119460402 Local number: 104 N15 E20 05BBCA2 292
Well 391110119470501 Local number: 104 N15 E20 07BBAB1 292
Well 391004119433301 Local number: 104 N15 E20 15BDBA1 293
Well 391004119433302 Local number: 104 N15 E20 15BDBA2 293
Well 391004119444901 Local number: 104 N15 E20 16BCAA1 293
Well 390954119460401 Local number: 104 N15 E20 17BCCD1 294
Well 390958119464301 Local number: 104 N15 E20 18BDDA1 294
Well 390807119450901 Local number: 104 N15 E20 29DAAB1 295
Well 390728119453801 Local number: 104 N15 E20 32BDAA1 295
Well 391205119444901 Local number: 104 N16 E20 33CCDD1 295
PAHRUMP VALLEY
Well 360836115531701 Local number: 162 S21 E54 10ACC 1 296
STEPTOE VALLEY
Well 393310114475001 Local number: 179 N20 E64 32C 2 296
LAS VEGAS VALLEY
Well 361843115161001 Local number: 212 S19 E60 09BCC 1 296
Well 361611115151301 Local number: 212 S19 E60 27BDC 1 297
Well 360846115091401 Local number: 212 S21 E61 04DDBA1 297
Well 360543115101301 Local number: 212 S21 E61 29AACA1 297
Well 360349115100001 Local number: 212 S22 E61 04BCB 1 298

WATER RESOURCES DATA - NEVADA, 1989

Compiled by Alex Pupacko, Lloyd C. VanGordon,
Ronald P. Collins, and James R. Swartwood

INTRODUCTION

Water-resources data published herein for the 1989 water year comprise the following records:

- Water discharge for 122 gaging stations on streams, canals, and drains.
- Discharge data for 101 peak-flow stations and miscellaneous sites, and 47 springs.
- Stage and contents for 23 lakes and reservoirs.
- Water levels for 22 continuous record wells, and 376 observation wells.
- Water-quality data for 36 stream, canal, and drain sites, and 18 wells.
- Precipitation totals for 16 stations.

Additional water data, collected at various sites that are not part of the systematic data-collection program, are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Nevada.

Records of stream discharge and content 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 water year 1960, these water-supply papers were in an annual series; for 1961-70, they were in a 5-year series. Records of water quality 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 through 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted at the libraries of principal cities in the United States, or, if not out of print, they may be purchased from the U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225. For further ordering information, telephone (303) 236-7476.

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

Beginning with the 1975 water year, surface-water, ground-water, and water-quality data have been published annually as official Geological Survey reports on a State basis. These 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 volume is identified as "U.S. Geological Survey Water-Data Report NV-89-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as official water-data reports. The water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. For further ordering information, the Customer Inquiries telephone number is (703) 487-4650.

COOPERATION

The U.S. Geological Survey and organizations of the State of Nevada have had cooperative agreements for the systematic collection of streamflow records since 1909, and for water-quality records since 1951. Organizations that assisted in collecting data through cooperative agreement with the Survey during 1989 are:

Nevada Department of Conservation and Natural Resources, Peter G. Morros, Director.
Division of Water Resources, R. Michael Turnipseed, State Engineer.
Division of Environmental Protection, Lewis H. Dodgion, Administrator.

Nevada Department of Transportation, Garth Dull, State Highway Engineer.

Carson City Public Works Department, Daniel K. O'Brien, Director.

California Department of Water Resources, D. N. Kennedy, Director.

Assistance in the form of funds or services was given by: Corps of Engineers, U.S. Army; Bureau of Indian Affairs, Bureau of Land Management and Bureau of Reclamation, U.S. Department of the Interior; U.S. District Court Watermaster; U.S. Board of Water Commissioners; Washoe County and Washoe County Public Works Department; Clark County Flood Control District; City of Las Vegas; City of Reno; City of Sparks; Walker River Irrigation District; Carson-Truckee Water Conservancy District and Truckee-Carson Irrigation District; Carson Water Sub-Conservancy District; Nevada Power Company; and Sierra Pacific Power Company.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Nevada has no truly large rivers. The largest streams in the State are the Humboldt, Truckee, Carson, Walker, Muddy, Virgin, and Colorado Rivers. The Colorado River, which is by far the largest, forms the boundary between southeastern Nevada and northwestern Arizona. Of the remaining listed rivers, only the Humboldt and Muddy begin and terminate in Nevada.

The larger rivers typically follow the flow pattern of a gaining stream in the well-watered mountain reaches and a losing stream in the lower altitude reaches. Most of Nevada is typified by basin and range topography, and no rivers, except for the Colorado, have direct connection with the ocean. Downstream depletion of flow is caused by irrigation, public use, infiltration, and evapotranspiration. Characteristically, stream discharge is low in late summer, and then increases through the autumn and winter until the snowmelt season in the spring. Maximum discharge for the year normally can be expected in May and June, although floods have occurred from November through March as a result of rain on snow.

Much of Nevada is drained by small streams that are dry most of the year. Typically, such streams respond only to intense precipitation, which generally occurs only a few times a year at the most. In many years, the streams have no flow, and even in relatively wet years, total flow duration in such streams can be measured in hours.

Streams in Nevada had less-than-normal discharge for the 1989 water year. Some streams in northwest Nevada experienced severe drought conditions for the third consecutive year.

In the Humboldt River basin of northern Nevada, streamflow during the 1989 water year was below normal. For the entire year, the total discharge at Palisade (station 10322500) was 92 percent of the mean for the period of record. Monthly and annual mean discharges for water year 1989 and for the period of record (water years 1903-06, 1912, and 1914-89) at the Palisade station are shown in figure 1.

The Carson River flows mostly in Nevada, with its headwaters in the Sierra Nevada of California. During water year 1989, streamflow in the river at Carson City (station 10311000) was 63 percent of the 50-year mean. Monthly and annual mean discharges for water year 1989 and for the period of record (water years 1940-89) at Carson City are shown in figure 1.

The Walker River is formed by the confluence of the East and West Forks in Mason Valley. Both forks originate in the Sierra Nevada, and their discharge is controlled, the East Fork by Bridgeport Reservoir and the West Fork by Topaz Lake. The discharge of the Walker River at Wabuska (station 10301500) for water year 1989 was only 19 percent of the 62-year mean (water years 1904, 1921-35, 1940-41, 1943, 1945-89). The river terminates in Walker Lake, a saline remnant of ancient Lake Lahontan north of Hawthorne. Water-surface elevations for the lake (station 10288500) are shown in figure 2. During the 1989 water year, the lake-surface elevation decreased 4.0 feet, from 3,965.0 to 3,961.0 feet above sea level.

The Truckee River, another major western Nevada stream for which discharge is significantly controlled by reservoirs and regulated lakes in the Sierra Nevada, experienced less-than-normal annual flows for the 1989 water year. At Reno (station 10348000), discharge for the year was 60 percent of the 54-year mean (water years 1913-19, 1931-34, 1947-89). The Truckee River is tributary to Pyramid Lake, a closed-basin water body similar to Walker Lake. Water-surface elevations for Pyramid Lake (station 10336500) steadily receded from 1975 through 1981. In contrast the high discharge in the Truckee River from 1982 through 1984 dramatically raised the lake level, by about 25 feet, as shown in figure 2. Lake levels have steadily decreased since 1986. During the 1989 water year, the lake level decreased 3.0 feet, from 3,810.4 to 3,807.4 feet above sea level.

In southeastern Nevada, the flow of the Colorado River is completely controlled by a sequence of impoundments that includes Hoover and Davis Dams in Nevada. Since 1935, the mean annual discharge of the river below Hoover Dam (station 09421500) has been about 14,000 ft^3/s (cubic feet per second). Mean annual discharge fluctuates on the basis of upstream supply and downstream power and irrigation requirements. During water year 1989, the discharge averaged 12,470 ft^3/s, which was 89 percent of the long-term mean (water years 1935-89). In the Virgin River at Littlefield, Arizona (station 09415000), one of the major tributaries to Lake Mead on the Colorado, discharge during 1989 was 70 percent of the 60-year mean (water years 1930-89).

Surface-Water Quality

The quality of surface water in Nevada varies greatly from place to place, as well as seasonally. Concentrations of dissolved solids are generally higher in the southern part of the state than in the northern part, and are dependent to a large extent upon water discharge. Concentrations usually are greatest during periods of low streamflow, and lowest during periods of high streamflow due to dilution by precipitation or snowmelt runoff.

The ranges of dissolved-solids concentrations for the period of record at stations that are monitored as part of the National Stream Quality Accounting Network (NASQAN) and Hydrologic Bench-Mark Network, are presented in figure 3. Measured concentrations of dissolved solids ranged from 61 to 617 mg/L at stations in the northern part of the state (figure 3A), and from 433 to 4,250 mg/L at stations in the southern part (figure 3B). Median concentrations of dissolved solids for the period of record and for the 1989 water year also are indicated in figure 3.

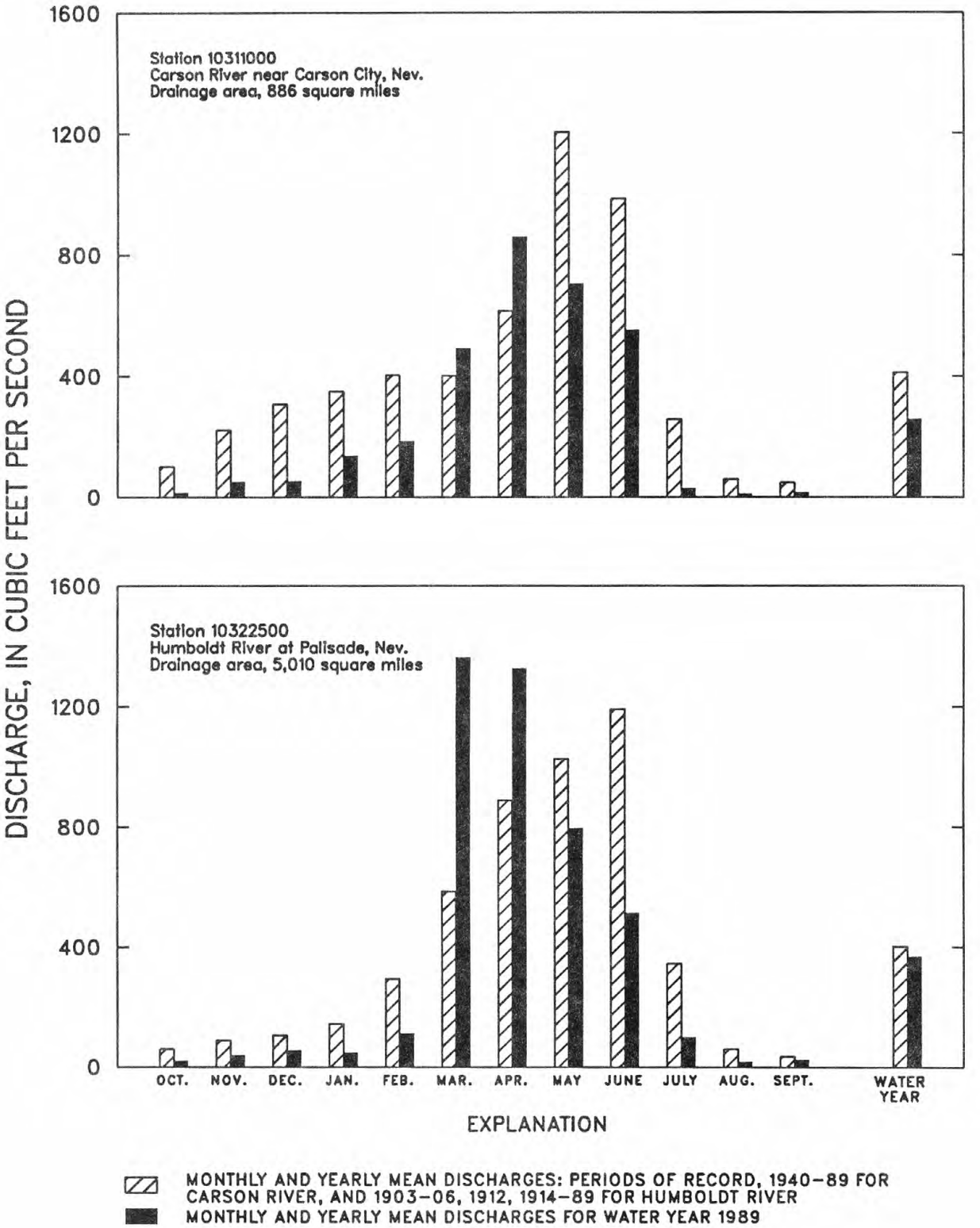

FIGURE 1.–Comparison of discharge during water year 1989 with the long–term mean discharge at two representative gaging stations.

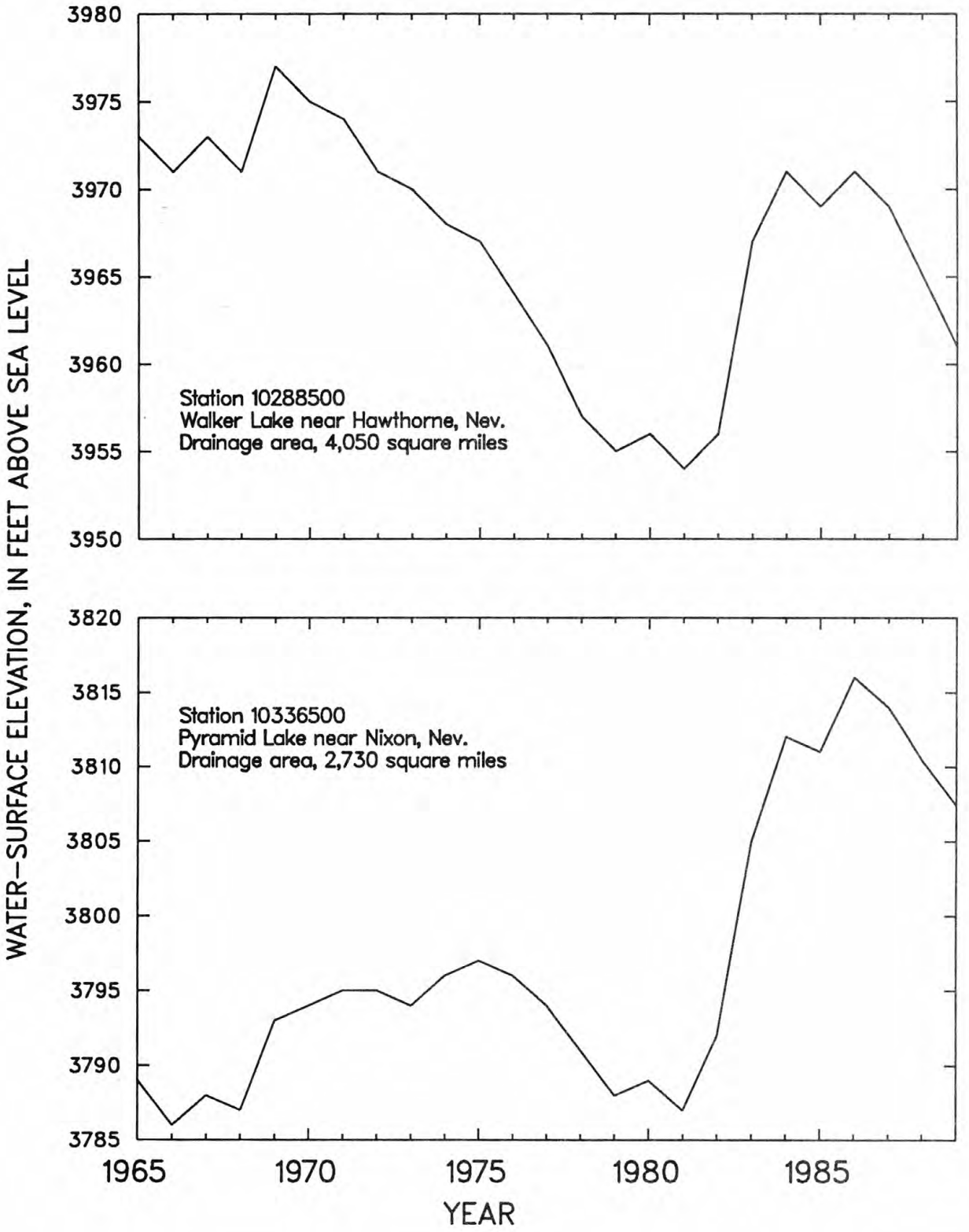

FIGURE 2.--End-of-year water-surface elevation at Walker and Pyramid Lakes, water years 1965-89.

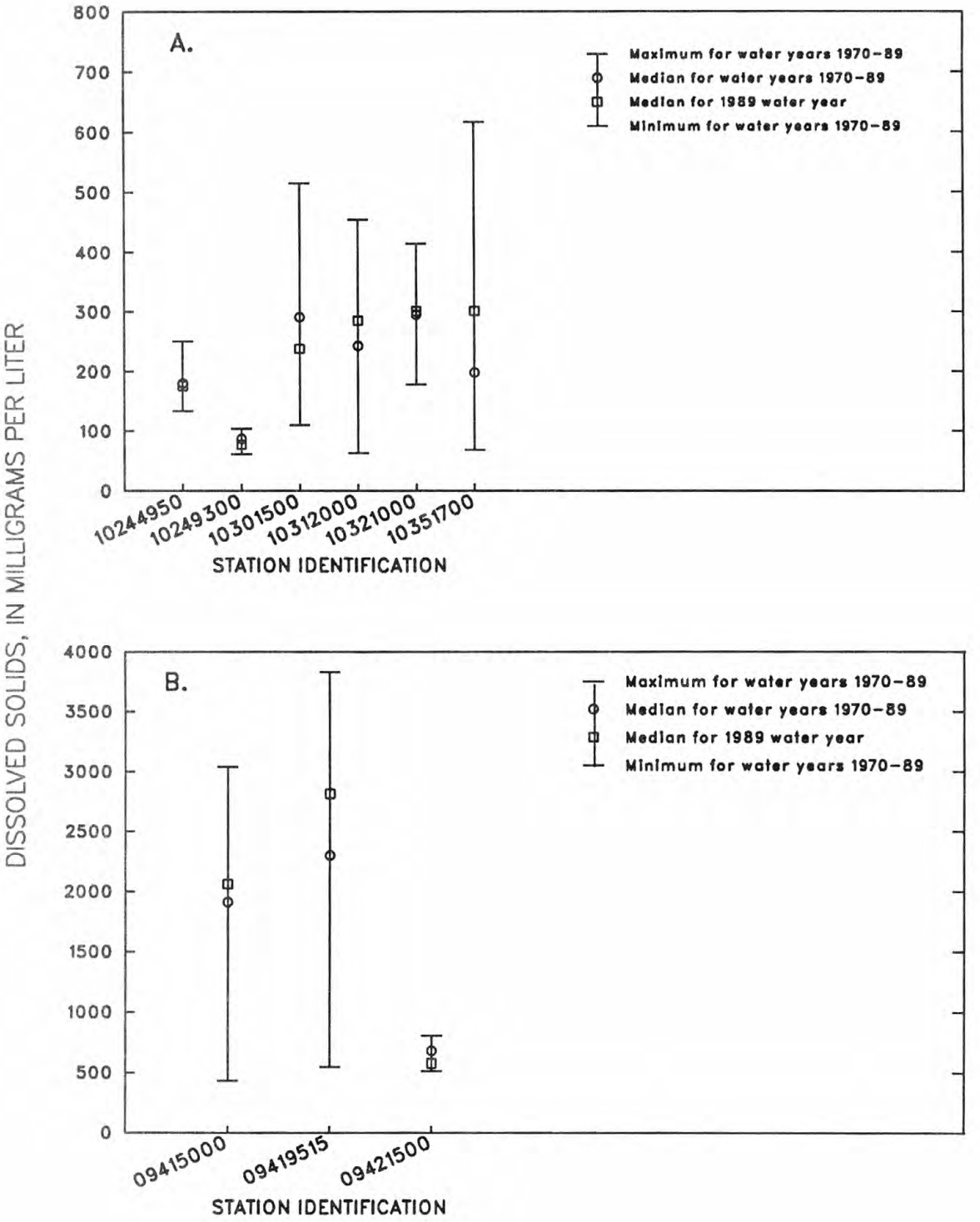

FIGURE 3.--Comparison of median dissolved-solids concentrations during water year 1989 with dissolved-solids concentrations for water years 1970–89 at selected streams in (A) northern Nevada and (B) southern Nevada.

At two northern-Nevada stations, the Carson River near Fort Churchill (station 10312000) and the Truckee River near Nixon (station 10351700), median dissolved-solids concentrations in water year 1989 were, respectively, 134 percent and 192 percent of the median for the period of record. This reflects the drought-induced low streamflows that characterized the northern part of the state during 1989.

At two southern-Nevada stations, the Virgin River at Littlefield (station 09415000) and the Muddy River near Overton (station 09419515), median dissolved-solids concentrations in the 1989 water year were, respectively, 101 percent and 123 percent of the medians for the period of record. During the 1989 water year, discharge at those stations was 67 percent and 43 percent of the mean annual discharge for their respective periods of record.

At the Colorado River below Hoover Dam (station 09421500), the median concentration of dissolved solids in the 1989 water year was 82 percent of the median for the period of record. Annual discharge in water year 1989 was 90 percent of the mean for the period of record (1935-89). Figure 4 shows the changes in dissolved-solids concentrations measured at the Colorado River station since the 1970 water year.

Ground Water

Increased development of ground-water supplies continued in Nevada during water year 1989 as logs of 1,589 wells were submitted to the State Engineer's office. The number of logs submitted annually has steadily increased since 1984 (figure 5). Of the logs submitted in 1989, 64.9 percent were from wells drilled for domestic use (figure 6). The remainder were from wells drilled for exploration (largest number of wells in the category "other" in figure 6), industrial and public supply, and irrigation ("other" also includes a few stock wells). Well drilling during 1989 was concentrated in the northwestern and southern parts of the State, particularly near the cities of Reno and Las Vegas (figure 6). Most wells drilled in these areas were for domestic use. New domestic wells also dominate the drilling in most rural areas. Most of the new irrigation wells were drilled in rural counties in established agricultural areas.

As in the past, most wells were drilled into unconsolidated deposits of sand, gravel, silt, and, less commonly, clay that partly fill the numerous basins in Nevada. Surrounding the basins are mountains underlain by volcanic, igneous, metamorphic, and sedimentary rocks. These consolidated rocks also underlie the unconsolidated deposits in the basins. Some consolidated rocks can yield substantial quantities of water, particularly in parts of eastern and southern Nevada where ground water flows through thick sequences of limestone and dolomite. Locally, fractured volcanic rocks also can yield substantial quantities of water. Water wells, however, are not commonly drilled into consolidated rocks, because most development is in the basins where water is readily obtained from shallow depths in unconsolidated deposits, and because well yields in the consolidated rocks are less predictable.

Ground-water levels fluctuate seasonally and annually in response to changes in withdrawals and climatic conditions that can cause changes in natural recharge to and discharge from the ground-water reservoirs. Water levels also fluctuate in response to both seasonal and long-term changes in climate. Water levels generally rise from late winter to early summer, in response to runoff from melting snow in the surrounding mountains and, particularly in the northern part of the State, to application of surface water for irrigation. Water levels generally decline during the summer to early winter, when recharge is small and ground water is discharged by evapotranspiration. Long-term climatic changes also can affect water-level trends, but the effects occur over a period of years. Superimposed on the natural fluctuations in water levels are changes caused by increasing or decreasing ground-water withdrawals and, in some areas, by recharge from surface irrigation.

Figure 7 shows water-level trends for six selected wells. Three of the wells are near areas of intensive irrigation withdrawals (in Paradise, Pahrump, and Diamond Valleys). Two wells tap aquifers used for public supply (in Carson City and Las Vegas). The well in White River Valley shows water-level trends in a less developed basin.

Water levels in the Paradise Valley well generally have stabilized since 1967, except for seasonal variations.

In the Carson City well, water levels declined in 1989. Precipitation in Carson City generally has been below normal since 1987. In addition the well is on the west side of the city, where declines due to ground-water withdrawals for municipal use have exceeded 50 feet in some places.

The ground-water level in the well in Pahrump Valley declined rapidly in the 1960's in response to irrigation withdrawals. Except for seasonal variations, the water level in the well generally has been stable since 1974. Land use in the area near the well has changed from primarily agricultural to residential since 1974.

The water level in Diamond Valley began a long-term decline that was slow in the mid-1950's and that increased in the early 1970's when electric power became available in the basin and ground-water withdrawals increased. The water level continued to decline in 1989. The well is in an area of ground-water withdrawals for irrigation.

The water level in the White River Valley declined in 1989, following an 8-foot rise between 1982 and 1985 due to wetter-than-normal conditions. The change since 1986 may be a natural decline from elevated levels that developed as a result of the wet years early in the decade. Water levels declined similarly from 1971 to 1978, following wetter-than-average years in 1967-70.

The water level in the Las Vegas Valley well declined rapidly in the 1960's and 1970's as the city's population increased greatly. By 1978, ground-water pumpage had been redistributed and, in part, replaced by use of water from Lake Mead to such an extent that the water-level declines stopped temporarily, and levels rose during 1982-83. In 1989, water levels in the Las Vegas well continued to decline from the level of 1985, probably a result of the very dry water years between 1986 and 1989 in southern Nevada. The well is in the northwest part of the basin several miles from the municipal well field on the west side of the city, and its water level reflects general changes in the principal aquifers on the west side of the basin. Shallow water levels on the east side of the basin have been rising, largely because of recharge from lawn irrigation.

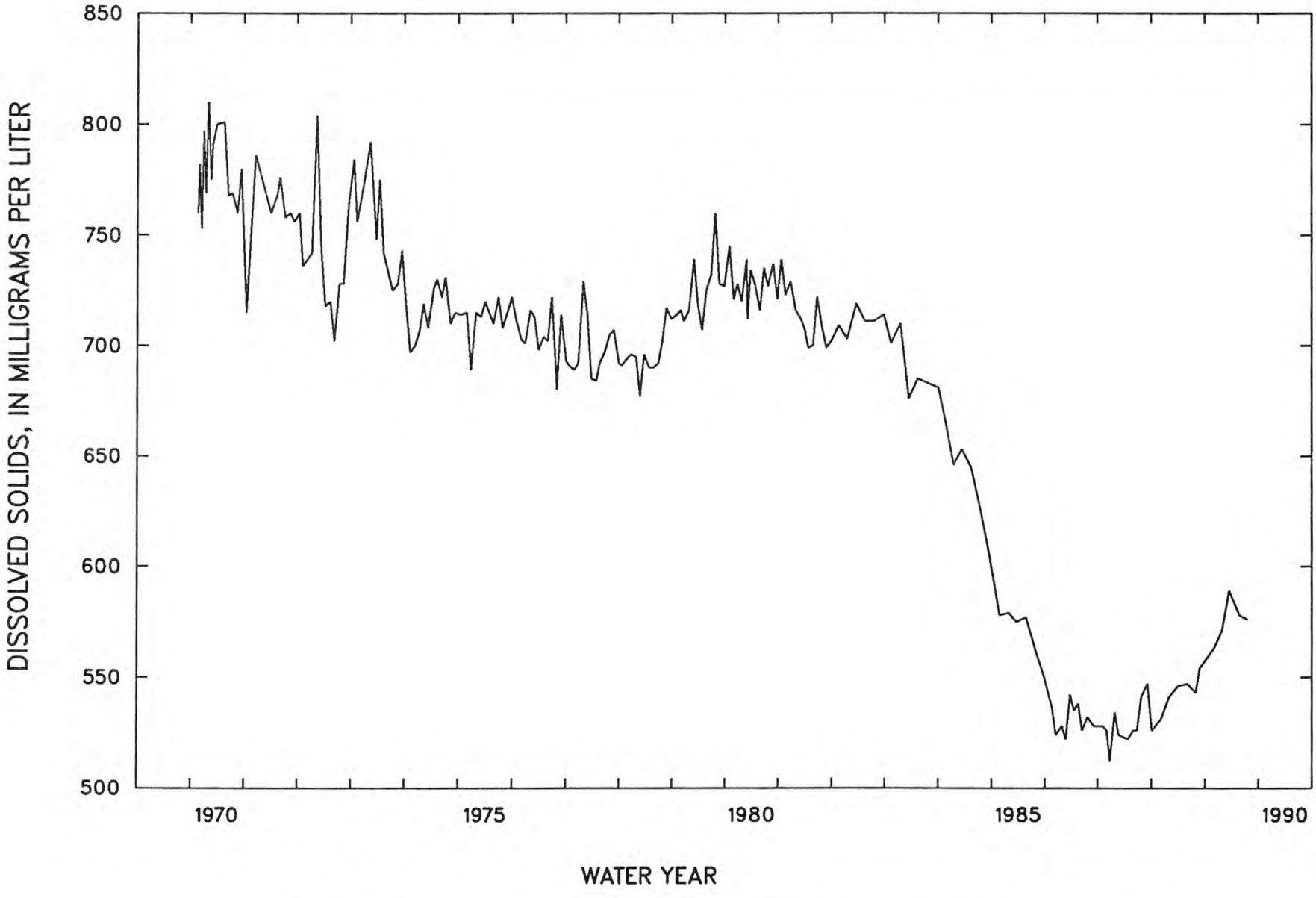

FIGURE 4.--Dissolved-solids concentrations in the Colorado River below Hoover Dam (Station 09421500) for water years 1970-89.

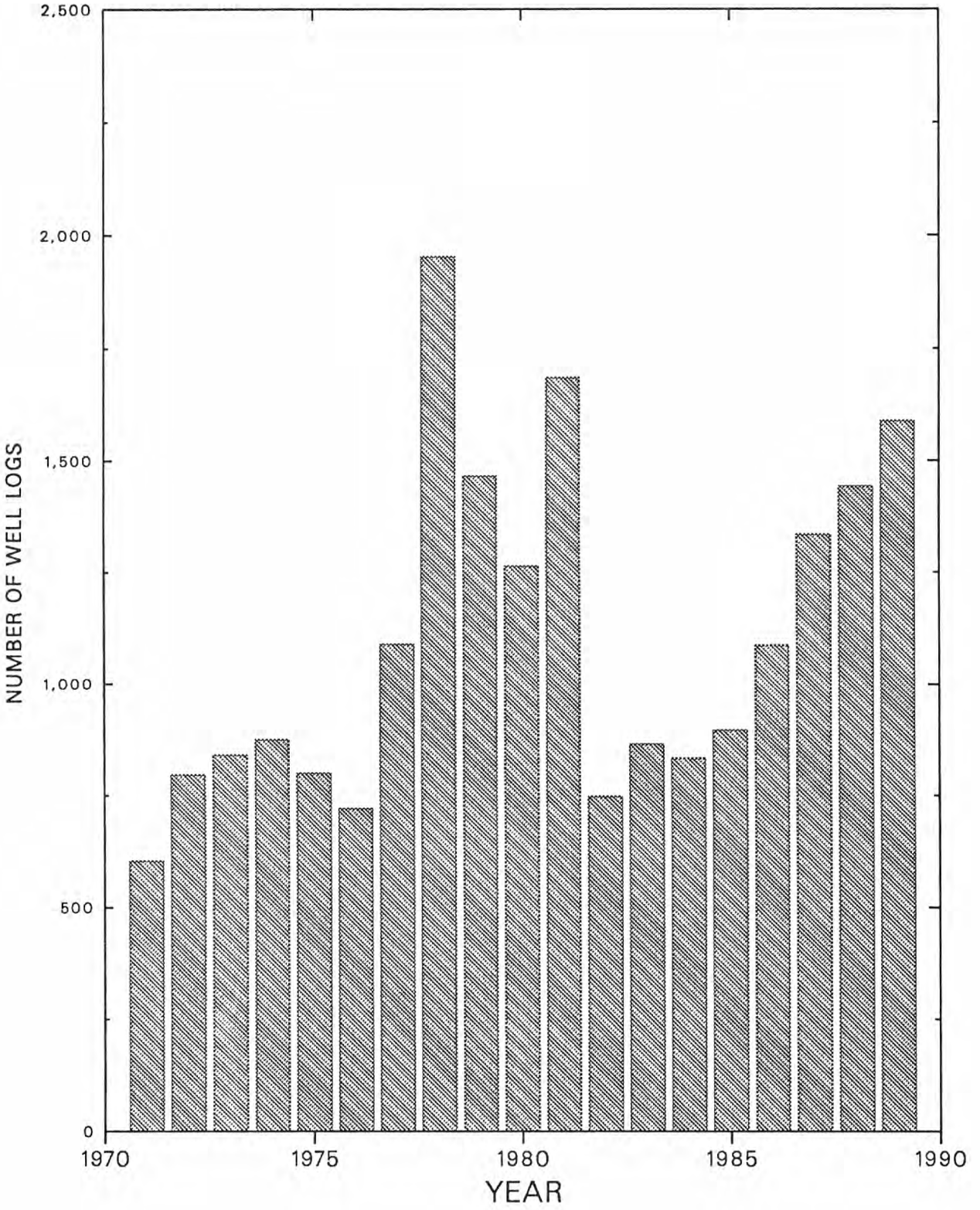

FIGURE 5.--Number of well logs submitted to the Nevada State Engineer's Office during water years 1971–89.

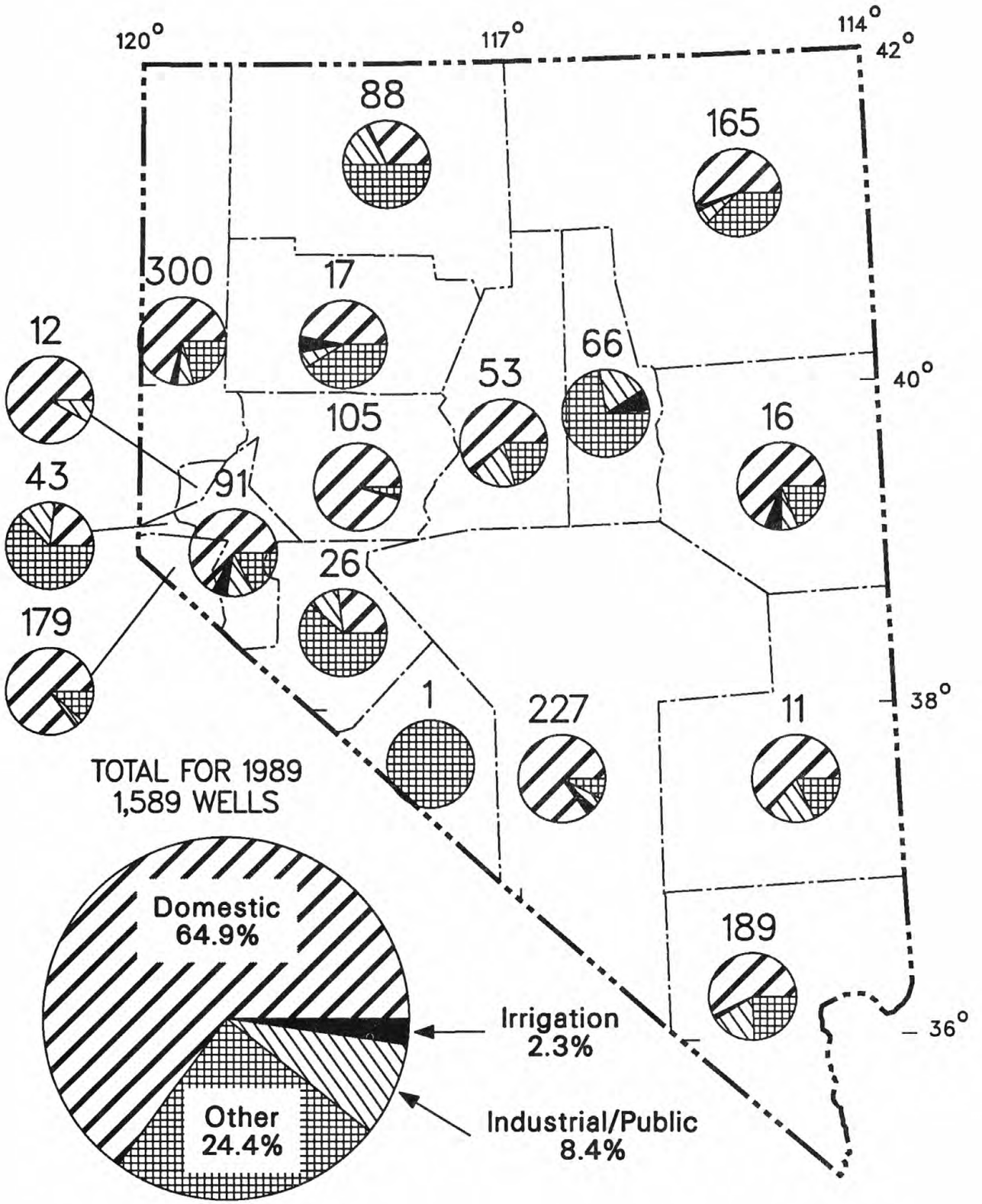

FIGURE 6.--Distribution, by county, of the number and use of wells drilled during water year 1989, on the basis of 1,589 logs submitted to the Nevada State Engineer's Office. The category 'other' includes mostly exploration wells. Above each symbol is the number of logs submitted for the county during 1989.

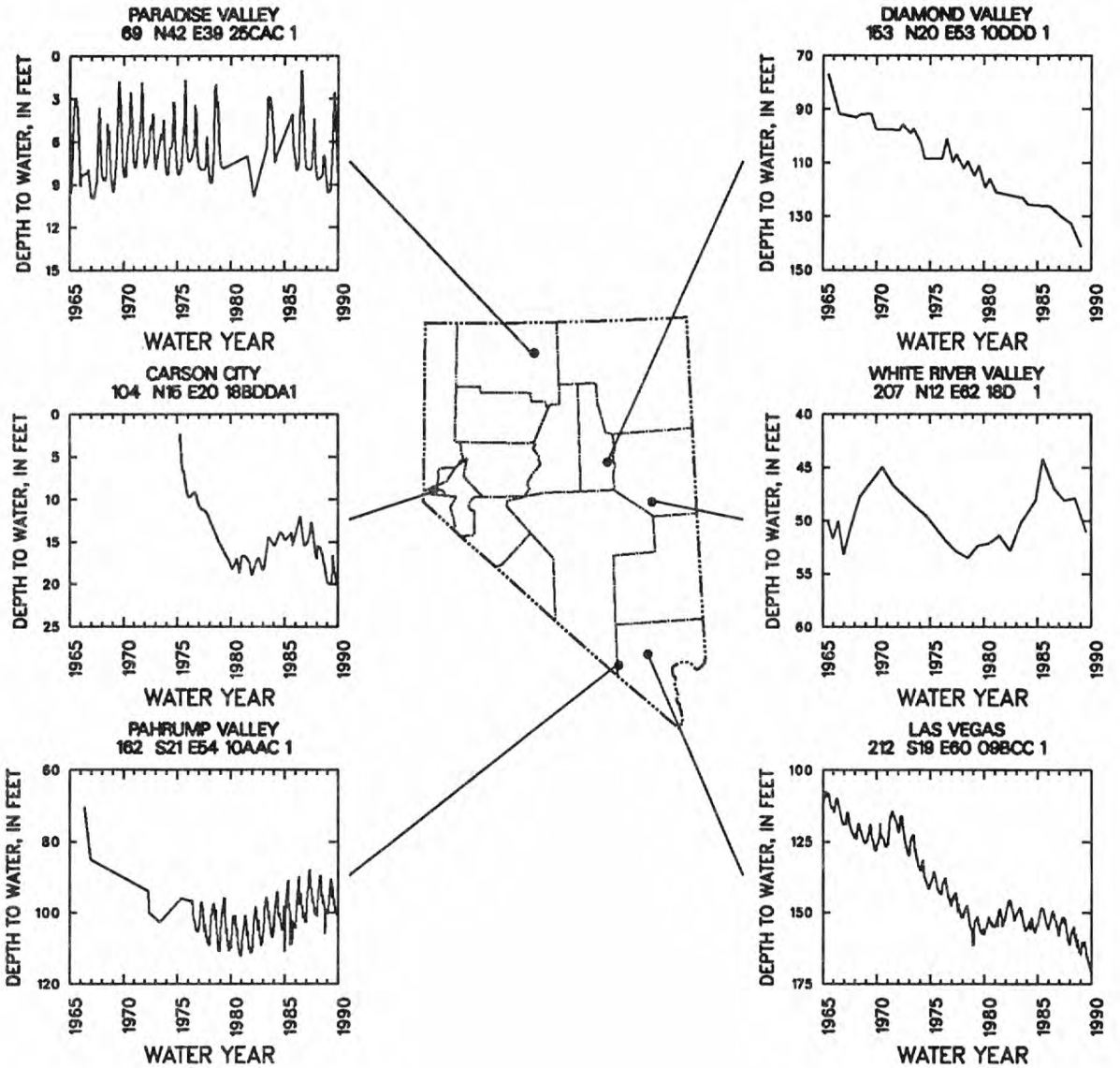

FIGURE 7.--Long-term water-level trends in six selected observation wells.

Water Use

Irrigation is the largest use of water in Nevada. This use accounts for about 90 percent of all surface-water withdrawals. However, public supply is a rapidly growing use of water in the State. This use accounts for nearly 8 percent of all surface-water withdrawals, and the growth rate of public-supply withdrawals nearly parallels the State's population growth.

The three largest population centers in the State are the Las Vegas, Reno, and Carson City metropolitan areas. These areas encompass about 75 percent of the State's population. The quantities of water withdrawn in recent years by the principal public-supply utilities servicing each of these communities are shown in figure 8. In 1985, these three areas accounted for about 85 percent of all the water withdrawn by public-supply utilities in the State.

The primary source of supply for the Las Vegas and Reno areas is surface water; for Carson City, it is ground water. In the Las Vegas area, the Colorado River is the principal source. Las Vegas is becoming increasingly dependent on the river to meet its public-supply needs. In 1974, surface-water and ground-water withdrawals were about equal; by 1988, the surface-water withdrawal was nearly three times the ground-water withdrawal (which has remained relatively constant during this period). In the Reno area, the Truckee River accounts for about 80 percent of the water used for public supply. Winters with below-normal snowpacks, which cause below-normal streamflows for the rest of the year, result in increased ground-water withdrawals and may at times cause restrictions on water use. Ground water is the source for about 70 percent of Carson City's public water supplies. During drought years, this percentage is greater.

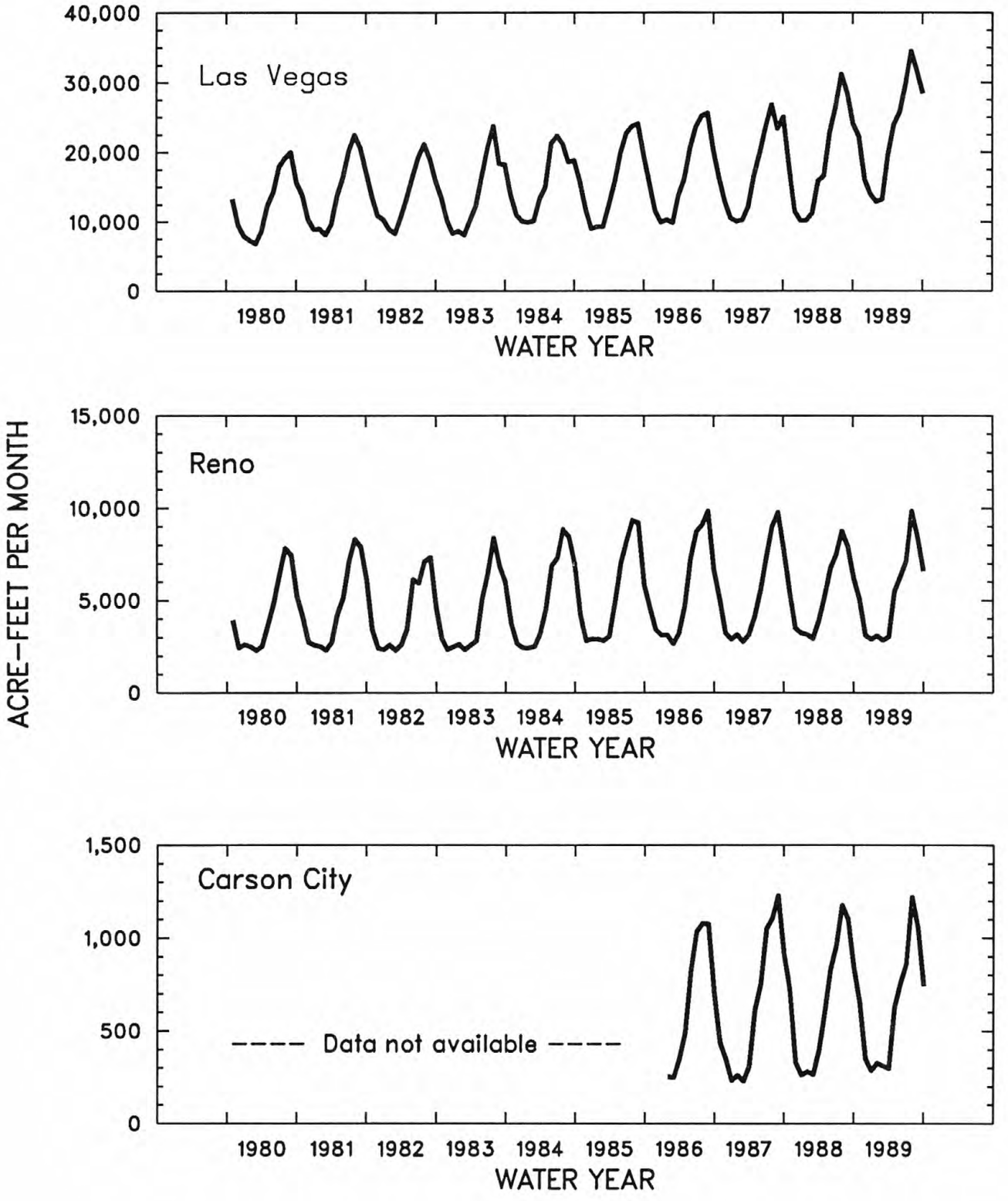

Figure 8.--Monthly water withdrawals for public supply in Las Vegas, Reno, and Carson City, 1980–89.

SPECIAL NETWORKS AND PROGRAMS

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

National Stream-Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 450 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

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

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.

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.

High-Elevation Precipitation Network is a 12-station network for sampling total precipitation in the high mountains of eastern Nevada. The data will be used to estimate snowmelt runoff and ground-water recharge.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1989 water year that began October 1, 1988, and ended September 30, 1989. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 9-15. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports has been in a downstream direction along the main stream. All stations on a tributary entering from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in the list of gaging stations. Each indention represents one rank. This downstream order and system of indention show (1) which stations are on tributaries between any two stations and (2) 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 numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 10351700, which appears just to the left of the station name, includes the 2-digit part number (10) plus the 6-digit downstream-order number (351700). In this report, the records are listed in downstream order by parts. The part number refers to an area the boundaries of which coincide with certain natural drainage lines. Records in this report are for sites in Part 9 (Colorado River basin), Part 10 (The Great Basin), and Part 13 (Snake River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number.

Latitude-Longitude System

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

Local Site Numbers

Local site numbers used in Nevada locate ground-water data sites (wells or springs) by hydrographic areas and by the official rectangular subdivision of the public lands with reference to the Mt. Diablo base line and meridian. Nevada has been divided into 14 hydrographic regions or major basins and approximately 250 individual hydrographic areas or valleys. The classification is used to compile information pertaining to water resources in Nevada. The local site number uses as many as 19 digits to locate the site by hydrographic area, township, range, section, and section subdivision.

The first segment of the local site number specifies the hydrographic area as defined by Rush.[1] The remainder of the number specifies the township north or south of the Mt Diablo base line, the range east of the Mt. Diablo meridian, the section, and the subdivision of the section. Sections are divided into quadrants labeled counterclockwise from upper right as A, B, C, and D. Each quadrant is then similarly subdivided up to as many as three times, depending on the accuracy of available maps; thus each section of about 640 acres may be subdivided into tracts approximately 330 ft on a side containing about 2.5 acres. Lettered quadrants are read from left to right, with the largest subdivision on the left. Sites within the smallest subdivision used are numbered sequen-tially with 1 digit. As an example, a well in Mason Valley (hydrographic area 108) located within the NE1/4NE1/4SW1/4SW1/4 section 6, Township 13 North, Range 26 East, would have the number 108 N13 E26 06CCAA1. A second well within the same 2.5-acre tract would be numbered 108 N13 E26 06CCAA2.

Prior to January 1976, local site numbers in Nevada were published according to the following general format: 13/26-16ab1. The first number was the township north of the base line (if the township was south of the base line, the first number was followed by an "S"). The second number was the range east of the meridian, the third number was the section, and the following letter or letters and number indicated the quarter sections and sequence as defined above.

Records of Stage and Water Discharge

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

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

Data Collection and Computation

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

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with recorders that sample stage values at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

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

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

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[1] Rush, F. E., 1968, Index of hydrographic areas: Nevada Department of Conservation and Natural Resources Information Report 6, 38 p.

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 the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

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

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

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; 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 gage 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 there are published records 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 records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, 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 National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks state-ment 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, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

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

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development. The median of yearly mean discharges also is given under this heading for stations having 10 or more water years of record, if the median differs from the average given by more than 10 percent.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Included 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.

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

REVISIONS.--If a critical error 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 offices whose addresses are 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 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.

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the 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 are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

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.

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

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

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

Other Records Available

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

Records of Surface-Water Quality

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

Classification of records

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

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

Arrangement of Records

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

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the in-situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in-situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Detailed information on collecting, treating, and shipping samples may be obtained from the Nevada District Office.

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 through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative 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, minimum, and mean 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. More detailed records (hourly values) may be obtained from the Nevada District Office whose address is given on the back of the title page of this report.

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 once or twice daily, the water temperatures are taken at about the same time each day. Large streams normally have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

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

Sediment

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

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

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

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

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap A1, A3, and A4.

Data Presentation

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

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

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

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

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station.

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

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

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

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. Extremes, when given, are provided for both the period of record and for the current water year.

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

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

Remark Codes

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

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the 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 perrcent (dominant)
&	Biological organism estimated as dominant

Records of Ground-Water Levels

Data from the basic Statewide network of primary and secondary observation wells are published herein. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local well number. (See the section titled "Station Identification Numbers.")

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by hydrographic area arranged in ascending order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The 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 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 to water of several hundred feet, the error of 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 to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. 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. 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.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed numerically by hydrographic basin and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the offices whose addresses are given on the back of the title page.

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

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.

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

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

Algae are mostly aquatic single-celled, colonial, or 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.

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

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

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. 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 3°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.

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

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^3), and periphyton and benthic organisms in grams per square mile (g/mi^2).

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

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

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

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

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

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

Cubic foot per second per 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 2,445 cubic meters.

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

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.

Dissolved refers to that material in a representative water sample which passes through a 0.45-um 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 specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given 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.

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap 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 ($CaCO_3$).

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

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

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

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

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 (ug/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, ug/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.

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.

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) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

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

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^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a 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 sedimentaiton 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 or sieve
Gravel.....	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic 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 (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{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.

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 [mg C/(m^2,time)] for periphyton and macrophytes and [mg C/(m^3,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 [mg0 /(m^2,time)] for periphyton and macrophytes and [mg0 /(m^3,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.

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.

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).

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^3/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.

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.

Seven-day 10-year low flow ($7\ Q_{1.0}$) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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 about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and 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 emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

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

Surface area of a lake is that area outlined on the latest U.S.G.S. 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 planimetered. All areas shown are those for the stage when the planimetered 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.

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

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

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

Time weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water 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.

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).

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

Water year in 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, 1989, is called the "1989 water year."

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.

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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.

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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.

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

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

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

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

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

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

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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.

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

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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.

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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.

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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.

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DISCONTINUED GAGING STATIONS

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

Station number	Station name	Drainage area (mi^2)	Period of record (water years)
09415060	MESQUITE CA NR MESQUITE, NV	--	1951-55
09415080	BUNKERVILLE CA NR BUNKERVILLE, NV	--	1951-55
09415190	VIRGIN R AT RIVERSIDE, NV	5,890	1970-74
09415230	VIRGIN R AB HALFWAY WASH NR RIVERSIDE, NV	5,980	1977-85
09415510	PRESTON BIG SPRING NR PRESTON, NV	--	1982-85
09415515	WATER CANYON CR NR PRESTON, NV	11.0	1983-88
09415600	PAHRANAGAT VALLEY TR NR HIKO, NV	17.0	1963-77
09415950	MUDDY RIVER POWER DIV NR MOAPA, NV	--	1977-85
09416500	MUDDY R AB MOAPA IND RES NR MOAPA, NV	3,890	1914-18
09417000	MUDDY R AT RR PUMP PLANT NR MOAPA, NV	3,900	1914-17
09417500	MEADOW VALLEY WASH AT EAGLE CANYON, NR URSINE, NV	293	1962-74
09417400	MUDDY R AT WEISER RANCH NR MOAPA, NV	4,360	1915-17
09418000	MEADOW VAL WASH NR PANACA, NV	450	1944-49
09418200	MATHEWS CANYON WASH NR CALIENTE, NV	34.0	1958-84
09418300	PINE CANYON WASH NR CALIENTE, NV	45.0	1958-84
09419500	MUDDY R NR OVERTON, NV	8,180	1913-16, 1947-52
09419650	LAS VEGAS WASH AT N LAS VEGAS, NV	1,300	1962-78
09419800	LAS VEGAS WASH NR BOULDER CITY, NV	2,193	1969-85
1017290880	THOUSAND SPRINGS CREEK NEAR SHORES, NV	--	1985-86
10243240	BAKER C AT NARROWS, NR BAKER, NV	16.4	1947-55
10243250	BAKER C NR BAKER, NV	10.0	1913-15
10243260	LEHMAN C NR BAKER, NV	11.0	1947-55
10243700	CLEVE C NR ELY, NV	31.8	1959-67, 1976-88
10244620	TEELS MARSH TR AT BASALT, NV	1.07	1973
10244720	FRANKLIN R NR ARTHUR, NV	10.3	1964-83
10244745	OVERLAND C NR RUBY VALLEY, NV	9.00	1959-67, 1976-81
10245005	DUCK CREEK NEAR CHERRY CREEK, NV	--	1985-88
10245030	CURRIE SPRING NR CURRIE, NV	--	1983-86
10245040	GOSHUTE CREEK NR CHERRY CREEK, NV	9.67	1982-86
10245445	ILLIPAH CREEK NR HAMILTON, NV	31.5	1983-88
10245800	NEWARK VALLEY TR NR HAMILTON, NV	157	1962-86
10246835	BIG SPRING NR DUCKWATER, NV	--	1970-71
10246846	L CURRANT C NR CURRANT, NV	12.9	1964-81, 1983-86
10246910	UPPER HOT CR RANCH SPRINGS NR WARM SPRINGS, NV	0.07	1967-72
10246920	HOT CREEK RANCH SPRINGS NR WARM SPRINGS, NV	--	1967-72
10246940	MOORES STATION SPRINGS AT MOORES STATION, NV	136	1967-72
10246950	WARM SPRINGS AT WARM SPRINGS, NV	--	1967-72
10247050	HOT CREEK NEAR WARM SPRINGS, NV	1,030	1967-72
10247860	PENOYER VALLEY TR NR TEMPIUTE, NV	1.48	1965-77
10248510	ELDORADO VALLEY TR NR NELSON, NV	1.41	1965-77
10249200	MCCLUSKY CREEK NR AUSTIN, NV	11.6	1978-81
10249411	CAMPBELL C TR NR EASTGATE, NV	2.14	1963-82
10249900	CHIATOVICH C NR DYER, NV	37.3	1960-32
10251220	AMARGOSA R NR BEATTY, NV	470	1963-68
10251980	LOVELL WASH NR BLUE DIAMOND, NV	52.8	1966-77
10293050	E WALKER R BL SWEETWATER C NR BRIDGEPORT, CA	467	1974-82
10294000	E WALKER R AB MASON VAL NR MASON, NV	--	1916-18, 1921-24
10294500	E WALKER R NR YERINGTON, NV	--	1902-08
10295000	E WALKER R NR MASON, NV	1,230	1910-16
10295500	L WALKER R NR BRIDGEPORT, CA	63.1	1944-87
10298000	SARONI CA NR WELLINGTON, NV	--	1920-23
10298500	W WALKER R NR WELLINGTON, NV	521	1918-24
10299100	DESERT C NR WELLINGTON, NV	50.4	1964-69
10300600	WALKER R NR MASON, NV	2,400	1974-84
10301000	WALKER R AT MASON, NV	--	1910-16, 1921-22
10301600	WALKER RIVER AB WEBER RES NR SCHURZ, NV	2,700	1977-82
10302000	WALKER R AT SHURZ, NV	2,850	1913-33
10302010	REESE R CANYON NR SCHURZ, NV	14.0	1966-77
10308800	BRYANT C NR GARDNERVILLE, NV	31.5	1961-69, 1977-82
10309100	E F CARSON R AT MINDEN, NV	392	1974-84

DISCONTINUED GAGING STATIONS--CONTUNUED

Station number	Station name	Drainage area (mi^2)	Period of record (water years)
10310405	CARSON R AT GENOA, NV	570	1974-81
10311250	VICEE CANYON C NR CARSON CITY, NV	1.30	1883, 1983-85
10311400	CARSON R AT DEER RUN RD NR CARSON CITY, NV	958	1979-86
10311500	CARSON R NR EMPIRE, NV	988	1900-07, 1911-23
10311900	BUCKLAND D NR FORT CHURCHILL, NV	--	1962-71
10312210	STILLWATER DIVERSION CANAL NR FALLON, NV	--	1967-81
10312220	STILLWATER SLOUGH CUTOFF DRAIN NR STILLWATER, NV	--	1967-81
10312240	PAIUTE DIVERSION DRAIN NR STILLWATER, NV	--	1967-81
10312260	INDIAN LAKES CANAL NR FALLON, NV	--	1967-81
10312265	INDIAN LAKES CA BL EAST LK NR STILLWATER, NV	--	1978-81
10312270	PAIUTE DRAIN AT WILDLIFE ENT NR STILLWATER, NV	--	1980-81
10312280	CARSON R BL FALLON, NV	--	1967-85
10313000	STARR C NR DEETH, NV	--	1913-24
10315000	MARYS R NR DEETH, NV	355	1902-03, 1912-28
10316000	SECRET C NR HALLECK, NV	35.0	1917-24
10317000	LAMOILLE C NR HALLECK, NV	245	1913-19
10317400	N F HUMBOLDT R NR N FORK, NV	11.0	1965-81
10317420	MAHALA CREEK NR TUSCARORA, NV	4.48	1979-85
10317430	MAHALA CR AT STATE HWY 225 NR TUSCARORA, NV	22.9	1979-82
10317450	GANCE CREEK NR TUSCARORA, NV	6.45	1979-87
10317460	GANCE CR AT STATE HWY 225 NR TUSCARORA, NV	20.2	1979-82
10317500	N F HUMBOLDT R AT DEVILS GATE NR HALLECK, NV	830	1913-21, 1943-82
10318000	N F HUMBOLDT R NR HALLECK, NV	1,020	1898-99, 1904-09, 1911-13
10319000	S F HUMBOLDT R NR LEE, NV	54.0	1945-55
10319500	HUNTINGTON C NR LEE, NV	770	1948-72
10320500	S F HUMBOLDT R NR ELKO, NV	1,310	1896-1909, 1922-32, 1936-73
10321500	SUSIE C NR CARLIN, NV	82.5	1955-58
10322000	MAGGIE C AT CARLIN, NV	400	1913-24
10323000	PINE C NR PALISADE, NV	999	1912-14, 1946-58
10323400	HUMBOLDT R NR DUNPHY, NV	--	1980-83
10323500	HUMBOLDT R NR ARGENTA, NV	7,490	1946-82
10323600	HUMBOLDT R BL SLAVEN DITCH NR ARGENTA, NV	--	1980-83
10325000	HUMBOLDT R AT BATTLE MOUNTAIN, NV	8,870	1896-97, 1921-24, 1945-81
10325500	REESE R NR IONE, NV	53.0	1951-80
10326000	REESE R NR BERLIN, NV	94.0	1913-16
10326700	REESE R NR AUSTIN, NV	1,130	1963-68
10326800	FISH CREEK NR BATTLE MOUNTAIN, NV	64.7	1977-85
10327000	HUMBOLDT R NR VALMY, NV	--	1950-58
10328000	POLE C NR GOLCONDA, NV	10.7	1960-73
10328450	N F L HUMBOLDT R NR PARADISE VALLEY, NV	210	1975-82
10328475	S F L HUMBOLDT R NR PARADISE VALLEY, NV	431	1975-82
10328500	L HUMBOLDT R BL CHIMNEY DM NR PARADISE VALLEY, NV	780	1941-50, 1975-82
10330000	COTTONWOOD C NR PARADISE VALLEY, NV	--	1925-34
10330500	COTTONWOOD C AT PARADISE VALLEY, NV	57.4	1944-51
10330900	HUMBOLDT R NR WINNEMUCCA, NV	14,600	1960-63
10331500	HUMBOLDT R NR ROSE CREEK, NV	15,200	1948-69
10332490	H L I L & P CO FEEDER CA NR MILL CITY, NV	--	1914-31, 1937-38
10332500	H L I L & P CO FEEDER CA NR IMLAY, NV	--	1946-76
10334000	H L I L & P CO OUTLET CA NR HUMBOLDT, NV	--	1914-41
10336000	HUMBOLT R NR LOVELOCK, NV	16,600	1912-27, 1950-59
10336756	EDGEWOOD C TRIB NR DAGGETT PASS, NV	--	1981-83
10336757	TRIB OF EDGEWOOD C TRIB NR TAHOE VILLAGE, NV	--	1981-83
10336758	EDGEWOOD C TR AT HIGHLAND DR NR TAHOE VILLAGE, NV	--	1981-83
10347600	HUNTER C NR RENO, NV	11.5	1961-71, 1978-81
10347800	PEAVINE C NR RENO, NV	2.34	1963-74
10348300	N TRUCKEE DRAIN AT KLEPPE LN NR SPARKS, NV	--	1890, 1976-80
10348500	FRANKTOWN C AT FRANKTOWN, NV	14.0	1948-55, 1957-58
10349700	WHITES C NR STEAMBOAT, NV	8.02	1961-66
10349980	STEAMBOAT C AT KIMLICK LANE NR RENO, NV	--	1976-80
10351350	FERNLEY A-DRAIN NR FERNLEY, NV	--	1968-80
10351650	TRUCKEE R AT WADSWORTH, NV	1,728	1965-86
10353000	E F QUINN R NR MC DERMITT, NV	140	1948-81

DISCONTINUED GAGING STATIONS--CONTINUED

Station number	Station name	Drainage area (mi^2)	Period of record (water years)
10353500	QUINN R NR MC DERMITT, NV	1,100	1948-85
10353650	QUINN R NR DENIO, NV	3,520	1963-67, 1977-81
10353700	LEONARD C NR DENIO, NV	52.0	1960-83
10353790	RED MT C NR GERLACH, NV	30.0	1966-67
10361700	BADGER C TR NR VYA, NV	7.70	1963-72
13175000	OWYHEE R AT MOUNTAIN CITY, NV	350	1913, 1926-48
13175500	OWYHEE R NR OWYHEE, NV	380	1913-26
13176000	OWYHEE RIVER AB CHINA DIVERSION DAM NR OWYHEE, NV	458	1939-84
13176900	JACK C BL SCHOONOVER C NR TUSCARORA, NV	19.8	1962-69
13177000	JACK C NR TUSCARORA, NV	31.0	1913-25
13177200	S F OWYHEE R AT SPANISH RANCH NR TUSCARORA, NV	330	1959-73
13177500	S FK OWYHEE R NR DEEP C, NV	--	1921-24
13177800	S F OWYHEE R NR WHITEROCK, NV	1,080	1955-81
362230116162400	BIG SPRING NR ASH MEADOWS, NV	--	1976-88
362324116163900	JACK RABBIT SPRING NR ASH NEADOWS, NV	--	1976-88
362405116161300	POINT OF ROCKS SPRING NR ASH MEADOWS, NV	--	1976-81, 1983-86
362538116181100	SCHOOL SPRING NR ASH MEADOWS, NV	--	1980-81
362547116183500	MARSH SPRING NR ASH MEADOWS, NV	--	1980-81
362601116182800	SCRUGS SPRING NR ASH MEADOWS, NV	--	1980-81
362924116203000	FAIRBANKS SPRING NR ASH NEADOWS, NV	--	1976-88

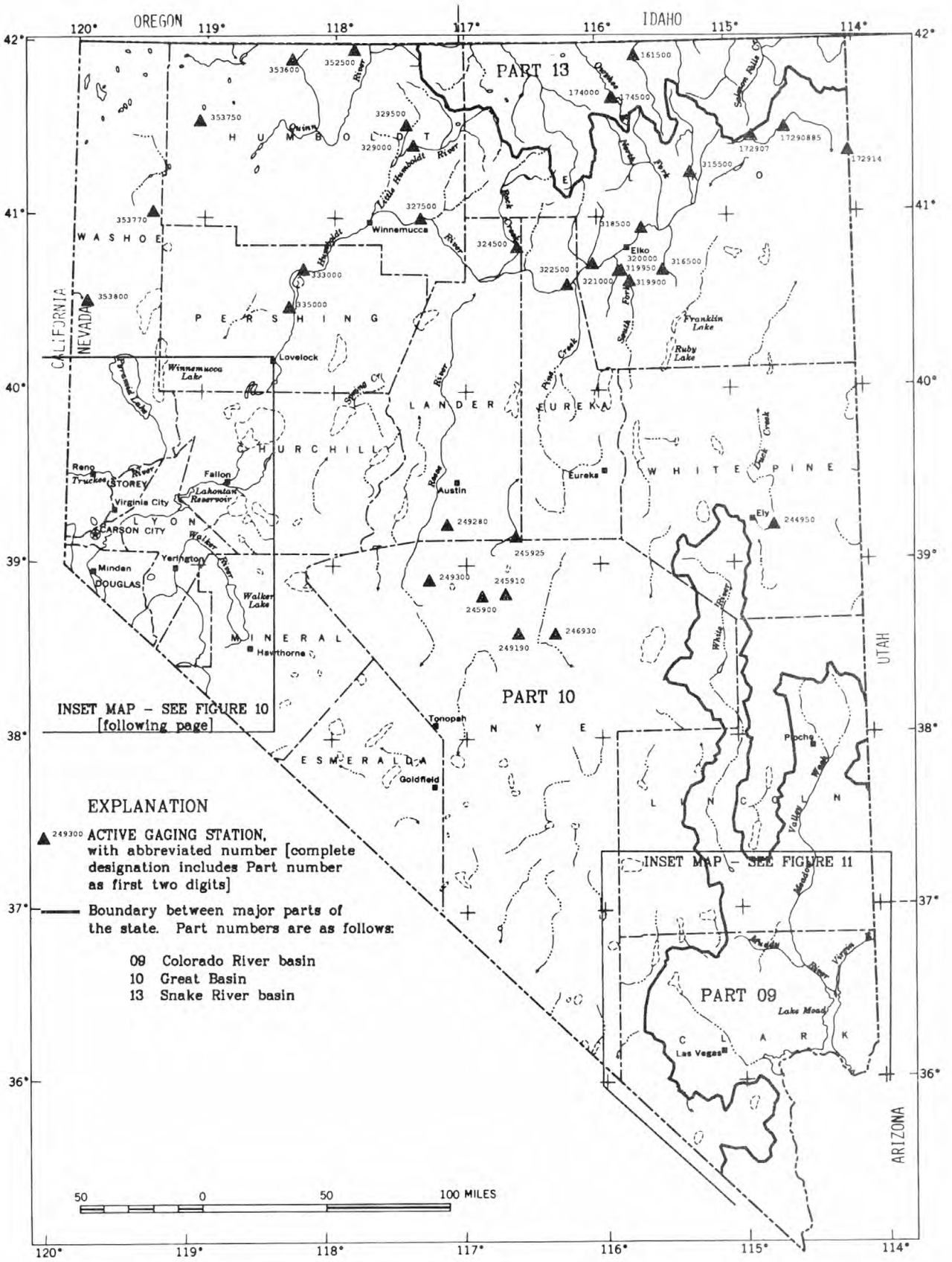


FIGURE 9.– Gaging Stations listed in this report

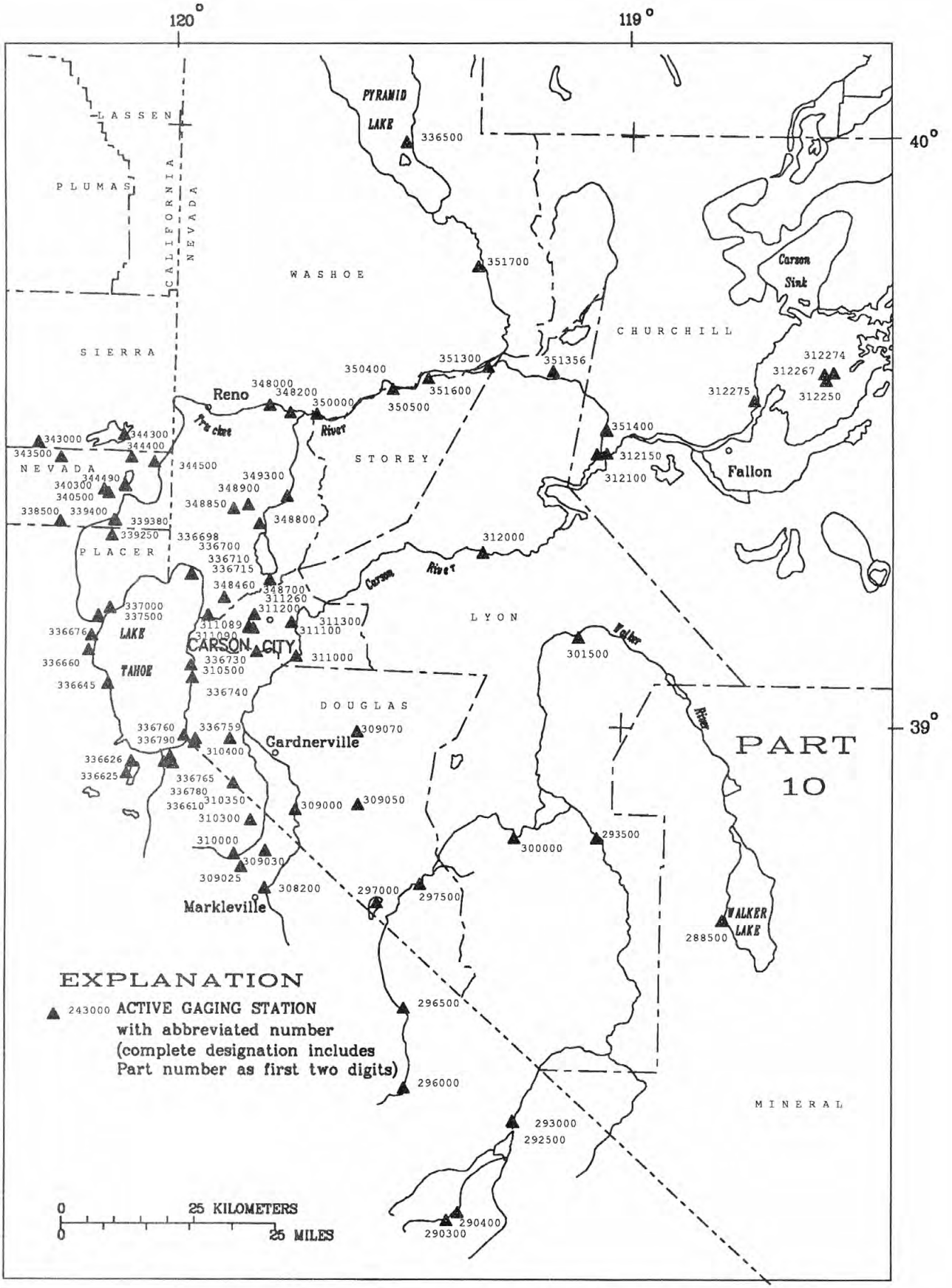


FIGURE 10.- Gaging stations in west-central Nevada.

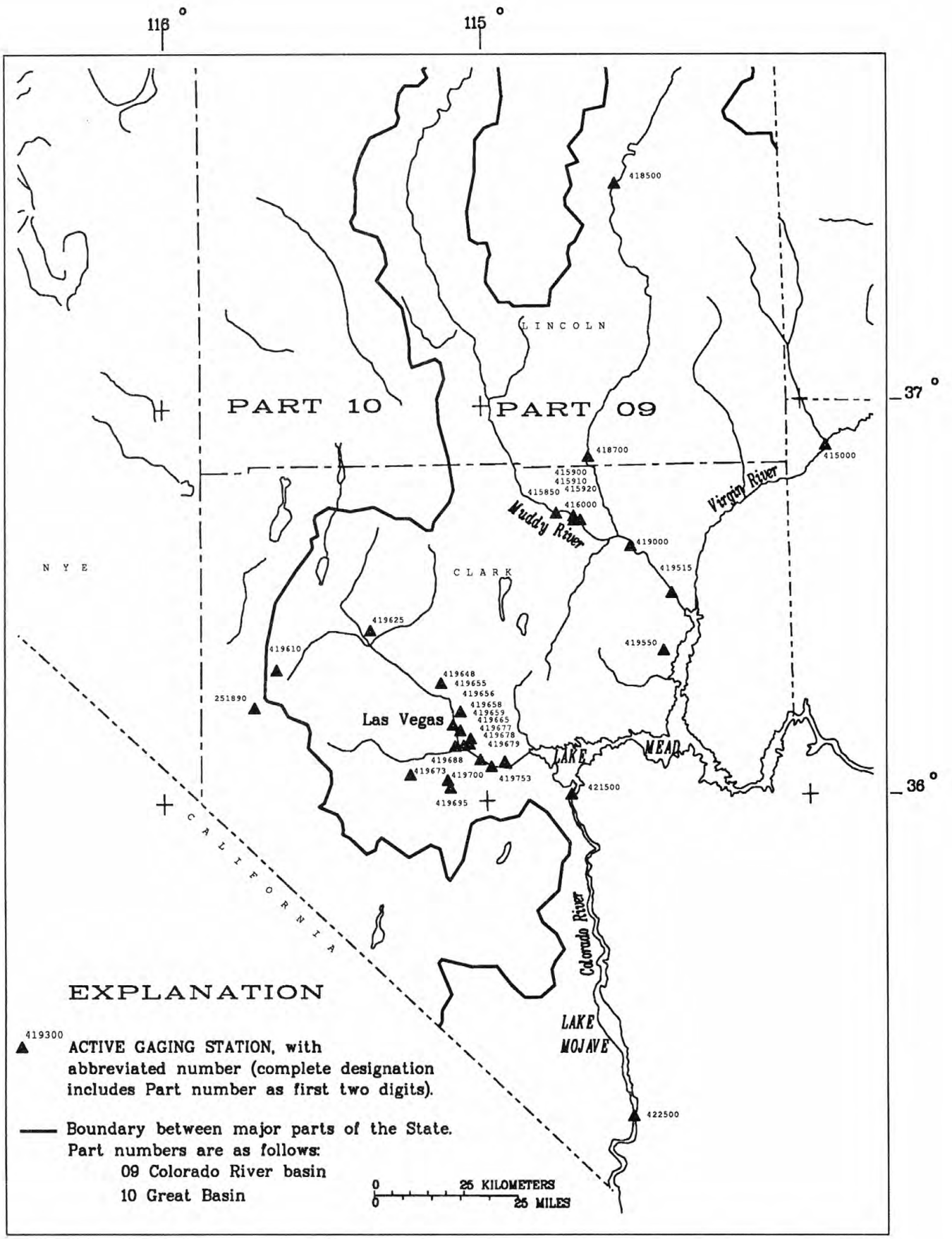


FIGURE 11.–Gaging stations in southeastern Nevada.

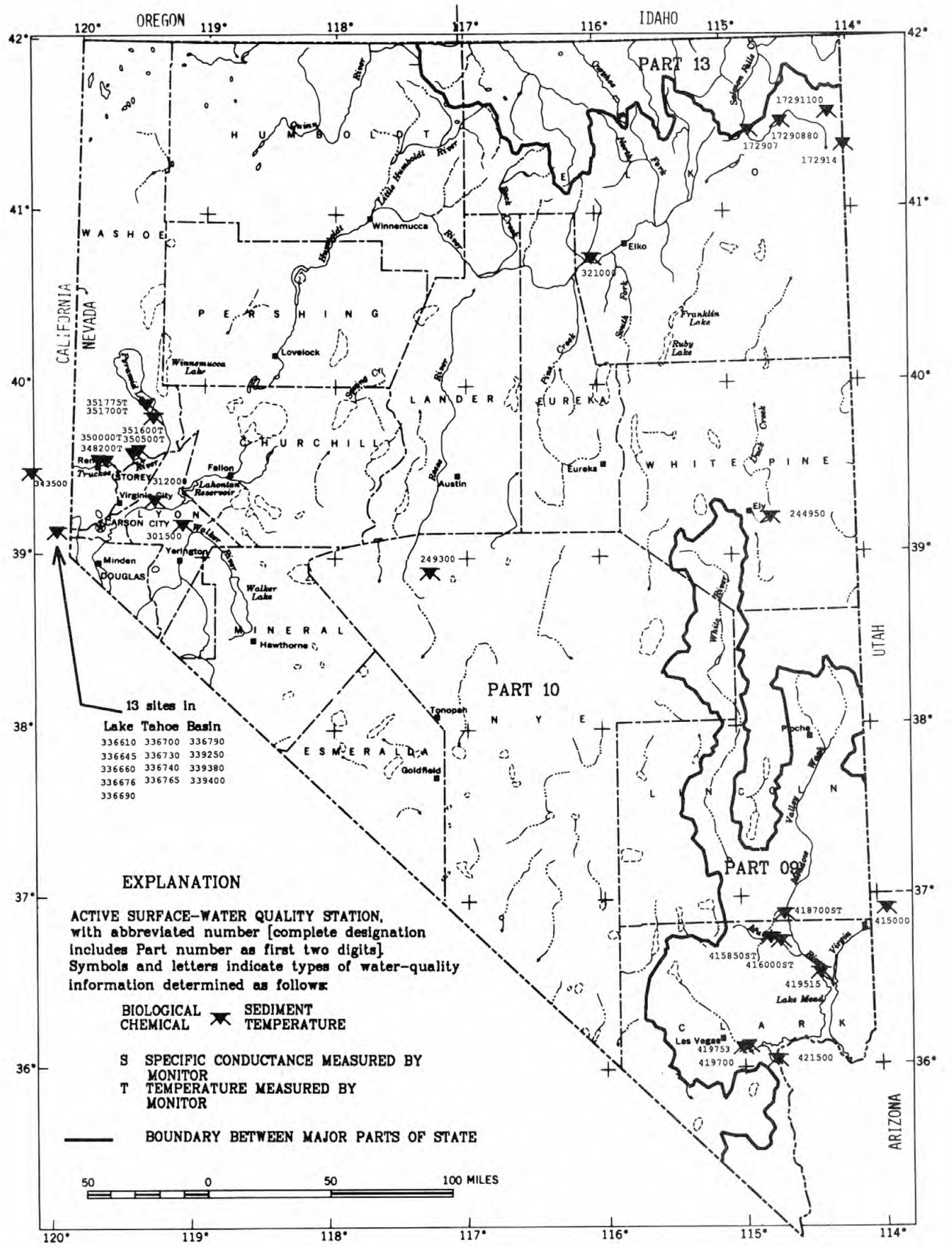


FIGURE 12.--Surface Water-Quality stations listed in this report.

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 36°53'30", long 113°55'25", in SW1/4SW1/4 sec.4, T.40 N., R.15 W., Mohave County, Hydrologic Unit 15010010, on right bank 0.5 mi downstream from Beaver Dam Wash, 0.4 mi upstream from Littlefield, and 36 mi upstream from Lake Mead.

DRAINAGE AREA.--5,090 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 959: 1932. WSP 979: 1930-31, 1933-37. WSP 1313: 1940 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,763.68 ft, above National Geodetic Vertical Datum of 1929. Prior to May 28, 1933, nonrecording gage at site 300 ft upstream, and May 28, 1933, to Nov. 7, 1939, at same site, both at datum 2.53 ft higher. Nov. 8, 1939, to Mar. 31, 1942, nonrecording gage at same site at datum 2.00 ft higher. Apr. 1, 1942, to Sept. 30, 1970, water-stage recorder at same site at same datum. Oct. 1, 1970, to Aug. 7, 1979, at site 300 ft upstream at same datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--60 years, 240 ft³/s, 173,900 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,000 ft³/s, Jan 1, 1989, gage height, 22.37 ft, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow, due to failure of Quail Creek Dam; minimum, 38 ft³/s, May 1, 10, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan 1.	0930	*61,000	22.37				

Minimum daily, 55 ft³/s, May 4, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	111	153	e8420	257	165	156	72	59	63	63	60
2	122	113	159	e430	190	165	87	66	60	62	63	60
3	136	140	163	e420	141	524	79	59	60	60	63	61
4	103	147	162	e415	139	547	85	55	61	60	63	61
5	93	e153	169	e410	160	334	116	56	61	60	63	61
6	90	e158	161	409	147	311	111	56	62	60	63	61
7	110	e153	161	384	120	239	115	55	62	60	63	60
8	106	e149	184	360	122	199	124	56	62	60	64	63
9	97	e137	188	353	158	214	125	57	64	60	68	66
10	115	e124	184	362	263	299	135	57	63	61	83	73
11	143	e117	193	358	271	477	109	58	62	61	85	91
12	187	e116	203	344	276	530	67	57	63	61	81	86
13	182	e119	218	229	283	552	67	58	63	61	74	79
14	150	e122	227	186	234	487	68	58	65	61	73	76
15	129	133	230	181	149	374	76	62	65	61	70	74
16	123	167	231	177	166	205	72	77	66	61	68	76
17	104	171	231	221	284	158	77	67	67	60	77	87
18	107	190	241	294	191	151	77	60	67	60	1030	119
19	95	185	243	295	153	227	76	56	64	63	690	116
20	104	193	237	291	277	282	71	59	60	64	253	99
21	97	187	253	287	272	220	64	59	60	61	131	102
22	110	202	255	282	255	184	64	59	60	62	101	98
23	121	201	264	207	298	173	68	60	60	63	81	99
24	121	193	252	163	282	149	62	59	60	63	71	113
25	115	188	265	159	291	98	61	58	60	63	62	111
26	118	182	264	154	308	97	67	58	60	63	61	101
27	117	177	271	149	312	234	72	58	60	63	61	99
28	133	169	261	137	202	135	87	58	62	63	63	111
29	130	163	261	157	---	100	81	58	63	63	63	179
30	136	153	204	250	---	158	80	58	63	63	62	202
31	117	---	177	256	---	183	---	58	---	63	60	---
TOTAL	3744	4713	6665	16740	6201	8171	2599	1844	1864	1909	3973	2744
MEAN	121	157	215	540	221	264	86.6	59.5	62.1	61.6	128	91.5
MAX	187	202	271	8420	312	552	156	77	67	64	1030	202
MIN	90	111	153	137	120	97	61	55	59	60	60	60
AC-FT	7430	9350	13220	33200	12300	16210	5160	3660	3700	3790	7880	5440

CAL YR 1988 TOTAL 88628 MEAN 242 MAX 2860 MIN 57 AC-FT 175800
WTR YR 1989 TOTAL 61167 MEAN 168 MAX 8420 MIN 55 AC-FT 121300

e Estimated

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948 to current year.

PERIOD OF DAILY RECORD.--
CHEMICAL ANALYSES: July 1949 to September 1969.
SPECIFIC CONDUCTANCE: October 1947 to March 1988.
WATER TEMPERATURE: October 1947 to March 1988.
SEDIMENT DATA: October 1947 to September 1968.

REMARKS.--Streamflow is not completely homogenous chemically from bank to bank. Flow adjacent to north (right) bank is generally somewhat more dilute than average, particularly at times of low streamflow; monthly data collected during June 1975-September 1976 indicate that specific conductance off north bank was 93 to 100 percent of streamwide average (range of discharge, 60-230 ft³/s). This doubtless affects specific conductance of daily samples, which are collected off north bank. Water temperature characteristically shows little or no variation from bank to bank. Much of day-to-day fluctuation in water temperature prior to August 1975 was due to measurement at different times of day (rather than at about the same time each day). Detailed sampling information for period since June 1975 is available from U.S. Geological Survey, Carson City, Nev. Differences in lower limits of accuracy for trace metal concentrations are due to use of an alternate method of analysis for samples having a specific conductance less than 2000 microsiemens, or in the case of lead, to the use of the graphite furnace method.

EXTREMES MEASURED FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 4,650 microsiemens Aug. 21, 1966; minimum, 615 microsiemens May 27, 28, 30, 31, 1983.
WATER TEMPERATURE: Maximum, 33.5°C July 7, 1953; minimum, 2.0°C Jan. 4, 1949, Jan. 4, 1950, Jan. 4, 5, 1971.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
NOV												
30...	1400	164	3000	7.80	18.0	13.0	44	10.0	100	190	200	950
JAN												
24...	1100	158	2600	8.00	11.0	12.0	14	--	--	--	--	1000
MAR												
15...	1415	382	1940	7.80	22.0	15.0	170	10.1	100	440	570	700
APR												
18...	1400	80	3240	7.90	32.0	25.0	30	--	--	K6	80	1100
JUL												
19...	1200	63	3150	8.00	37.0	27.0	0.20	7.5	101	33	50	1400
AUG												
30...	1000	62	3790	7.80	36.5	23.0	0.90	8.0	101	K30	K16	1400

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV												
30...	250	79	300	4	21	372	305	900	390	0.80	22	2270
JAN												
24...	280	79	210	3	19	329	270	860	280	0.60	19	1920
MAR												
15...	190	53	140	2	12	265	217	540	170	0.50	14	1340
APR												
18...	290	90	260	3	20	317	260	980	350	0.80	16	2280
JUL												
19...	360	120	250	3	27	389	319	1100	350	1.0	20	2490
AUG												
30...	370	110	270	3	27	379	311	1100	370	1.0	19	2360

K: NON-IDEAL COLONY COUNT

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV 30...	2150	3.09	--	<0.010	0.360	<0.010	0.030	--	0.30	<0.010	<0.010	<0.010
JAN 24...	1910	2.61	0.610	0.020	0.630	0.230	0.210	0.37	0.60	0.080	0.050	0.030
MAR 15...	1260	1.82	0.510	0.050	0.560	0.160	0.170	0.54	0.70	0.310	0.060	0.070
APR 18...	2170	3.10	0.140	0.010	0.150	0.080	0.090	0.22	0.30	0.020	0.010	<0.010
JUL 19...	2420	3.39	--	<0.010	0.220	0.060	0.080	0.94	1.0	0.770	<0.010	0.010
AUG 30...	2460	3.21	--	<0.010	0.210	0.070	0.070	0.53	0.60	0.010	0.030	<0.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV 30...	<10	11	<100	<10	<1	3	<1	2	30	<5	380	10
JAN 24...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	<10	7	72	<0.5	<1	1	<3	3	5	<5	170	22
APR 18...	30	7	100	<10	1	2	<1	3	20	<5	440	30
JUL 19...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	<10	7	<100	10	<1	3	<1	1	30	1	440	70

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 30...	<0.1	2	4	2	<1.0	3900	4	20	677	300	63
JAN 24...	--	--	--	--	--	--	--	--	130	55	47
MAR 15...	<0.1	<10	1	2	<1.0	2200	<6	5	3230	3330	18
APR 18...	0.2	4	4	1	<1.0	3800	5	<10	161	35	--
JUL 19...	--	--	--	--	--	--	--	--	5	0.85	90
AUG 30...	0.6	5	2	1	<1.0	3900	4	<10	23	3.9	89

09415850 PAHRANAGAT WASH NEAR MOAPA, NV

LOCATION.--Lat 36°43'46", long 114°46'09", in NE1/4SE1/4 sec.12, T.14 S., R.64 E., Clark County, Hydrologic Unit 15010012, on left bank, 2.0 mi downstream of Arrow Canyon Dam, and 9.0 mi northwest of Moapa.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,110. ft, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 578 ft^3/s, July 27, 1988, gage height, 13.48 ft, on basis of indirect measurement of peak flow; no flow most days.

EXTREMES FOR CURRENT PERIOD.--July to September 1988: Maximum discharge, 578 ft^3/s, July 27, gage height, 13.48 ft, on basis of indirect measurement of peak flow; no flow most days.

Water year 1989: Maximum discharge, 72 ft^3/s, July 28, gage height 10.68 ft; no flow most days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	.00	.00
2	---	---	---	---	---	---	---	---	---	---	.00	.00
3	---	---	---	---	---	---	---	---	---	---	.00	.00
4	---	---	---	---	---	---	---	---	---	---	.00	.00
5	---	---	---	---	---	---	---	---	---	---	.00	.00
6	---	---	---	---	---	---	---	---	---	---	.00	.00
7	---	---	---	---	---	---	---	---	---	---	.00	.00
8	---	---	---	---	---	---	---	---	---	---	.00	.00
9	---	---	---	---	---	---	---	---	---	---	.00	.00
10	---	---	---	---	---	---	---	---	---	---	.00	.00
11	---	---	---	---	---	---	---	---	---	---	.00	.00
12	---	---	---	---	---	---	---	---	---	---	.00	.00
13	---	---	---	---	---	---	---	---	---	---	.00	.00
14	---	---	---	---	---	---	---	---	---	---	.00	.00
15	---	---	---	---	---	---	---	---	---	---	.00	.00
16	---	---	---	---	---	---	---	---	---	---	.00	.00
17	---	---	---	---	---	---	---	---	---	---	.00	.00
18	---	---	---	---	---	---	---	---	---	---	.00	.00
19	---	---	---	---	---	---	---	---	---	---	.00	.00
20	---	---	---	---	---	---	---	---	---	---	.00	.00
21	---	---	---	---	---	---	---	---	---	.00	.00	.00
22	---	---	---	---	---	---	---	---	---	.00	.00	.00
23	---	---	---	---	---	---	---	---	---	.00	.00	.00
24	---	---	---	---	---	---	---	---	---	.00	.00	.00
25	---	---	---	---	---	---	---	---	---	.00	.00	.00
26	---	---	---	---	---	---	---	---	---	.00	.00	.00
27	---	---	---	---	---	---	---	---	---	28	.00	.00
28	---	---	---	---	---	---	---	---	---	1.2	.00	.00
29	---	---	---	---	---	---	---	---	---	.00	.00	.00
30	---	---	---	---	---	---	---	---	---	.00	.00	.00
31	---	---	---	---	---	---	---	---	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	---	---	---	0.00	0.00
MEAN	---	---	---	---	---	---	---	---	---	---	.00	.00
MAX	---	---	---	---	---	---	---	---	---	---	.00	.00
MIN	---	---	---	---	---	---	---	---	---	---	.00	.00
AC-FT	---	---	---	---	---	---	---	---	---	---	.0	.0

09415850 PAHRANAGAT WASH NEAR MOAPA, NV--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	e2.0	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.065	.00	.00
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.0	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	.0	.0

WTR YR 1989 TOTAL 2.00 MEAN .005 MAX 2.0 MIN .00 AC-FT 4.0

e Estimated

09415900 MUDDY SPRING AT L.D.S FARM NEAR MOAPA, NV

LOCATION.--Lat 36°43'18", long 114°42'53", in SE1/4NE1/4 sec.16, T.14 S., R.65 E., Clark County, Hydrologic Unit 15010012, on right bank 0.1 mi downstream from L.D.S. mansion, and 6 mi northwest of Moapa.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--August 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,770 ft, from topographic map.

REMARKS.--Records good. Regulation for recreational purposes occurs 0.1 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27 ft³/s, Feb. 1, 1986, gage height, 1.67 ft; minimum daily, 6.6 ft³/s, Oct. 31, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23 ft³/s, May 21, gage height, 1.53 ft; minimum daily, 6.6 ft³/s, Oct. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	6.7	7.1	7.5	7.0	7.0	7.3	7.3	7.3	7.4	7.0	7.1
2	7.6	7.6	7.1	7.1	7.3	7.0	7.5	7.3	7.6	7.4	7.0	7.1
3	7.0	6.7	7.2	7.0	7.3	7.0	7.2	7.3	7.4	7.0	7.0	7.4
4	7.0	6.9	7.4	7.2	7.6	7.3	7.2	7.3	7.7	7.1	7.0	7.6
5	6.9	6.9	7.0	7.2	7.6	7.6	7.2	7.3	7.9	6.9	7.0	7.0
6	6.9	7.4	7.0	7.1	7.6	7.8	7.2	7.6	7.3	7.0	7.3	7.1
7	7.1	6.8	7.0	7.2	7.6	7.4	7.3	7.8	7.3	7.0	7.1	7.2
8	7.5	6.9	7.1	7.1	7.5	7.5	7.3	7.3	7.3	7.3	7.1	7.2
9	7.5	6.9	7.2	7.1	7.1	7.0	7.3	7.2	7.4	7.4	7.2	7.2
10	7.0	6.9	7.8	7.2	7.1	7.0	7.3	7.2	7.3	6.9	7.2	7.6
11	7.0	6.9	7.5	7.0	7.1	7.1	7.3	7.3	7.9	7.0	7.1	7.3
12	7.0	7.0	7.0	7.1	7.5	7.4	7.3	7.3	7.4	7.0	7.7	7.3
13	6.9	7.3	7.1	7.1	7.0	6.9	7.2	7.3	7.4	7.0	7.7	7.4
14	6.9	6.9	7.1	7.2	7.0	7.0	7.3	7.8	7.4	7.0	7.1	7.4
15	6.9	7.0	7.0	7.0	7.0	7.0	7.4	7.3	7.4	7.3	7.1	7.4
16	7.5	7.0	7.0	7.2	7.0	7.0	7.7	7.4	7.4	7.4	7.1	7.3
17	6.8	7.0	7.0	7.2	7.0	7.0	7.2	7.4	7.8	6.8	7.2	7.3
18	6.9	7.0	7.0	7.6	6.9	7.1	7.3	7.3	7.9	6.9	7.2	7.3
19	6.9	7.0	7.0	7.1	7.5	7.4	7.3	7.1	7.4	6.9	7.4	7.3
20	6.8	7.3	7.0	7.2	6.8	7.0	7.4	7.8	7.4	7.0	7.7	7.3
21	6.7	7.0	7.0	7.2	6.9	7.0	7.3	8.3	7.4	7.0	7.2	7.0
22	7.1	7.0	7.0	7.2	6.9	7.0	7.5	7.4	7.4	7.1	7.2	7.0
23	7.2	7.0	7.0	7.2	6.9	7.2	7.8	7.3	7.5	7.3	7.1	7.4
24	6.7	7.0	7.0	7.2	7.2	7.2	7.4	7.3	7.7	6.9	7.1	7.4
25	6.7	7.2	7.0	7.2	6.9	7.2	7.4	7.3	7.9	7.0	7.1	7.0
26	6.7	7.2	7.0	7.2	7.3	7.9	7.3	7.2	7.3	7.0	7.5	7.0
27	6.7	7.2	7.0	7.2	7.0	7.2	7.3	7.3	7.2	7.0	7.6	6.9
28	6.7	8.1	7.1	7.2	7.0	7.2	7.3	7.4	6.9	7.0	7.2	6.9
29	6.7	7.2	7.1	7.4	---	7.2	7.5	7.3	6.9	7.0	7.1	7.0
30	7.1	7.2	7.1	6.9	---	7.2	7.8	7.3	6.9	7.3	7.1	7.0
31	6.6	---	7.5	6.9	---	7.2	---	7.3	---	7.0	7.1	---
TOTAL	216.2	212.2	220.4	222.2	200.6	223.0	220.8	229.0	223.0	219.3	223.5	216.4
MEAN	6.97	7.07	7.11	7.17	7.16	7.19	7.36	7.39	7.43	7.07	7.21	7.21
MAX	7.6	8.1	7.8	7.6	7.6	7.9	7.8	8.3	7.9	7.4	7.7	7.6
MIN	6.6	6.7	7.0	6.9	6.8	6.9	7.2	7.1	6.9	6.8	7.0	6.9
AC-FT	429	421	437	441	398	442	438	454	442	435	443	429

CAL YR 1988 TOTAL 2718.4 MEAN 7.43 MAX 8.7 MIN 6.6 AC-FT 5390
WTR YR 1989 TOTAL 2626.6 MEAN 7.20 MAX 8.3 MIN 6.6 AC-FT 5210

09415910 PEDERSON SPRING NEAR MOAPA, NV

LOCATION.--Lat 36°42'35", long 114°42'54", in NE1/4NE1/4 sec.21, T.14 S., R.65 E., Clark County, Hydrologic Unit 15010012, at U.S. Fish and Wildlife Station, 0.2 mi north of Battleship Wash, 2.0 mi west of State Highway 168, and 5.8 mi northwest of Moapa.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder and 45° V-notch weir. Elevation of gage is 1,800 ft, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 0.25 ft^3/s, July 2, 1988, and Aug. 23, 1989; maximum gage height, 0.58 ft July 2, 1988; minimum daily, 0.18 ft^3/s, many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.25 ft^3/s, Aug. 23, gage height, 0.57 ft; minimum daily, 0.18 ft^3/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.19	.18	.19	.20	.19	.20	.20	.19	.20	.21	.21
2	.19	.19	.18	.19	.20	.20	.20	.20	.19	.20	.21	.21
3	.19	.19	.18	.19	.20	.20	.19	.20	.19	.20	.21	.21
4	.19	.19	.18	.19	.20	.19	.19	.20	.19	.20	.21	.21
5	.19	.18	.18	.18	.19	.19	.19	.20	.19	.20	.21	.21
6	.19	.19	.18	.19	.18	.19	.20	.20	.19	.21	.21	.21
7	.19	.19	.19	.18	.19	.19	.20	.20	.19	.20	.21	.21
8	.19	.19	.18	.18	.18	.19	.20	.21	.20	.20	.21	.21
9	.19	.18	.18	.18	.19	.19	.20	.20	.20	.20	.21	.21
10	.19	.19	.18	.18	.19	.19	.20	.20	.19	.20	.21	.21
11	.19	.19	.18	.18	.19	.19	.20	.20	.19	.20	.21	.20
12	.19	.18	.18	.19	.19	.19	.20	.20	.20	.20	.21	.19
13	.19	.19	.19	.19	.19	.20	.20	.20	.20	.20	.21	.18
14	.19	.19	.19	.19	.19	.19	.20	.20	.20	.20	.21	.18
15	.18	.18	.19	.19	.18	.19	.20	.20	.20	.20	.21	.18
16	.18	.18	.19	.19	.19	.19	.20	.20	.20	.20	.21	.18
17	.18	.19	.19	.19	.19	.19	.20	.20	.19	.20	.21	.18
18	.18	.18	.19	.19	.19	.19	.20	.20	.19	.21	.20	.18
19	.18	.18	.19	.19	.19	.19	.21	.20	.19	.21	.20	.18
20	.18	.18	.19	.19	.19	.19	.21	.20	.19	.21	.21	.18
21	.18	.18	.19	.20	.19	.19	.21	.20	.19	.21	.21	.18
22	.18	.18	.19	.20	.19	.20	.21	.20	.19	.21	.21	.18
23	.18	.19	.18	.20	.19	.20	.21	.20	.19	.21	.22	.18
24	.18	.19	.19	.20	.19	.20	.21	.20	.19	.21	.23	.18
25	.18	.19	.19	.19	.19	.20	.19	.20	.19	.21	.21	.18
26	.19	.18	.18	.19	.19	.19	.19	.19	.19	.21	.21	.18
27	.18	.18	.18	.20	.20	.19	.19	.19	.19	.21	.21	.18
28	.18	.18	.19	.19	.19	.19	.19	.19	.20	.21	.21	.18
29	.18	.18	.19	.19	---	.19	.19	.19	.20	.21	.21	.18
30	.18	.18	.19	.19	---	.19	.19	.19	.20	.21	.21	.18
31	.18	---	.19	.20	---	.20	---	.19	---	.21	.21	---
TOTAL	5.73	5.55	5.75	5.89	5.34	5.97	5.97	6.15	5.80	6.35	6.52	5.73
MEAN	.18	.18	.19	.19	.19	.19	.20	.20	.19	.20	.21	.19
MAX	.19	.19	.19	.20	.20	.20	.21	.21	.20	.21	.23	.21
MIN	.18	.18	.18	.18	.18	.19	.19	.19	.19	.20	.20	.18
AC-FT	11	11	11	12	11	12	12	12	12	13	13	11

CAL YR 1988 TOTAL 73.35 MEAN .20 MAX .24 MIN .18 AC-FT 145
WTR YR 1989 TOTAL 70.75 MEAN .19 MAX .23 MIN .18 AC-FT 140

09415920 WARM SPRINGS WEST NEAR MOAPA, NV

LOCATION.--Lat 36°42'41", long 114°42'48", in SE1/4SE1/4 sec.16, T.14 S., R.65 E., Clark County, Hydrologic Unit 15010012, on left bank at U.S. Fish and Wildlife Station, 0.6 mi upstream from confluence with Muddy River, 1.9 mi west of State Highway 168, and 6.5 mi northwest of Moapa.

PERIOD OF RECORD.--August 1985 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 1,770 ft, from topographic map.

REMARKS.--Records good. Diversion for irrigation and fish hatchery above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.3 ft^3/s, Aug. 2, 1986, gage height, 1.2 ft; minimum daily, 3.0 ft^3/s, Oct. 18-26, 1988.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 5.1 ft^3/s, July 17, gage height, 1.18 ft; minimum daily, 3.0 ft^3/s, Oct. 18-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	3.5	3.5	3.4	3.4	3.4	3.7	3.3	3.5	3.2	3.3	3.6
2	3.5	3.5	3.5	3.4	3.4	3.6	3.6	3.5	3.5	3.3	3.3	3.6
3	3.5	3.5	3.5	3.4	3.4	3.6	3.6	3.5	3.6	3.5	3.3	3.6
4	3.5	3.4	3.5	3.4	3.4	3.1	3.6	3.5	3.6	3.6	3.3	3.6
5	3.5	3.4	3.5	3.4	3.4	3.3	3.6	3.5	3.5	3.5	3.3	3.6
6	3.5	3.5	3.5	3.4	3.3	3.5	3.6	3.5	3.5	3.5	3.3	3.6
7	3.5	3.4	3.5	3.4	3.3	3.5	3.6	3.5	3.5	3.6	3.3	3.6
8	3.5	3.4	3.5	3.3	3.3	3.6	3.5	3.5	3.5	3.5	3.4	3.6
9	3.5	3.4	3.5	3.3	3.3	3.6	3.5	3.5	3.5	3.5	3.5	3.6
10	3.5	3.5	3.5	3.3	3.3	3.3	3.5	3.6	3.5	3.5	3.4	3.5
11	3.5	3.4	3.4	3.3	3.4	3.2	3.5	3.5	3.5	3.5	3.2	3.5
12	3.5	3.4	3.4	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.2	3.5
13	3.5	3.5	3.5	3.3	3.4	3.4	3.5	3.5	3.5	3.4	3.4	3.5
14	3.5	3.5	3.5	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.5	3.5
15	3.5	3.4	3.5	3.3	3.4	3.5	3.5	3.5	3.6	3.5	3.4	3.5
16	3.5	3.4	3.5	3.3	3.4	3.5	3.5	3.5	3.5	3.4	3.4	3.5
17	3.5	3.5	3.5	3.4	3.4	3.5	3.5	3.5	3.5	3.6	3.5	3.5
18	3.0	3.4	3.5	3.3	3.4	3.5	3.5	3.5	3.5	3.6	3.5	3.5
19	3.0	3.4	3.5	3.4	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.6
20	3.0	3.5	3.5	3.4	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.6
21	3.0	3.4	3.5	3.4	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5
22	3.0	3.5	3.5	3.4	3.5	3.5	3.1	3.5	3.5	3.5	3.5	3.6
23	3.0	3.5	3.5	3.4	3.5	3.5	3.2	3.5	3.3	3.6	3.5	3.5
24	3.0	3.5	3.5	3.4	3.5	3.6	3.2	3.6	3.3	3.6	3.6	3.5
25	3.0	3.5	3.5	3.4	3.5	3.5	3.2	3.6	3.4	3.6	3.6	3.5
26	3.0	3.5	3.5	3.4	3.5	3.5	3.2	3.6	3.4	3.6	3.6	3.5
27	3.2	3.4	3.4	3.4	3.5	3.5	3.2	3.6	3.5	3.6	3.6	3.6
28	3.4	3.5	3.4	3.4	3.5	3.5	3.2	3.6	3.3	3.4	3.5	3.5
29	3.4	3.5	3.4	3.4	---	3.5	3.2	3.6	3.1	3.3	3.4	3.5
30	3.4	3.5	3.4	3.4	---	3.6	3.2	3.5	3.2	3.3	3.6	3.6
31	3.4	---	3.4	3.4	---	3.6	---	3.5	---	3.3	3.6	---
TOTAL	103.3	103.7	107.8	104.4	95.4	107.7	103.0	109.0	103.8	108.0	106.5	106.4
MEAN	3.33	3.46	3.48	3.37	3.41	3.47	3.43	3.52	3.46	3.48	3.44	3.55
MAX	3.5	3.5	3.5	3.4	3.5	3.6	3.7	3.6	3.6	3.6	3.6	3.6
MIN	3.0	3.4	3.4	3.3	3.3	3.1	3.1	3.3	3.1	3.2	3.2	3.5
AC-FT	205	206	214	207	189	214	204	216	206	214	211	211

CAL YR 1988 TOTAL 1276.5 MEAN 3.49 MAX 4.1 MIN 3.0 AC-FT 2530
WTR YR 1989 TOTAL 1259.0 MEAN 3.45 MAX 3.7 MIN 3.0 AC-FT 2500

09416000 MUDDY RIVER NEAR MOAPA, NV

LOCATION.--Lat 36°42'40", long 114°41'40", in SE1/4SE1/4 sec.15, T.14 S., R.65 E., Clark County, Hydrologic Unit 15010012, on left bank 0.1 mi upstream from Battleship Wash, 0.8 mi downstream from Home Ranch, 5 mi northwest of Moapa, 9.5 mi upstream from Meadow Valley Wash, and 26 mi upstream from Lake Mead.

DRAINAGE AREA.--3,820 mi², approximately, of which about 40 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1913 to September 1915, April 1916 to September 1918, June 1928 to October 1931, April to July 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for January 1904 to December 1906 (gage heights only), 1908-9 (discharge measurements only), and April to October 1910 not equivalent owing to large difference in drainage area.

REVISED RECORDS.--WSP 1243: 1914 (M). WSP 1343: 1950 (M). WSP 1733: Drainage area.

GAGE.--Water-stage recorder and Cipolletti weir. Elevation of gage is 1,710 ft, from river-profile map. October 21, 1944, to September 30, 1948, water-stage recorder at datum 0.08 ft higher.

REMARKS.--Records good, except for estimated days which are fair. Diversions for irrigation above station. Beginning Oct. 1, 1976, records do not include part-time diversion about 100 ft upstream, for cooling of powerplant downstream. Normal flow originates from springs in reach 0.9 to 2.5 mi upstream from station. Flood peaks may be dampened by Arrow Canyon Dam.

AVERAGE DISCHARGE.--39 years (1913-15, 1916-18, 1928-31, 1944-76), 41.5 ft³/s, 32,670 acre-ft/yr, adjusted for flow which bypasses stream due to pump about 100 ft upstream which diverts water part of the time for power-plant cooling.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,100 ft³/s, Sept. 7, 1967, gage height, 12.35 ft; minimum daily, 20 ft³/s, Oct. 13, 1985, and Aug. 21, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49 ft³/s, Dec. 22, gage height, .96 ft; minimum daily, 26 ft³/s, Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	33	39	36	37	34	32	35	36	35	29	34
2	36	31	39	37	37	34	36	38	36	34	30	31
3	33	31	39	33	37	34	35	39	37	32	29	30
4	33	33	39	36	38	34	32	39	36	32	e29	30
5	31	32	39	34	38	33	33	38	36	31	e29	30
6	31	31	39	37	38	34	30	38	36	32	e29	29
7	31	30	39	35	41	35	33	38	35	32	e29	29
8	32	33	39	31	41	36	33	36	35	31	e29	29
9	32	34	37	32	41	34	32	36	34	31	e29	29
10	29	35	40	36	40	33	30	35	34	32	e29	30
11	29	34	43	36	40	29	34	36	35	30	e29	29
12	31	35	42	32	40	31	33	37	34	33	e36	29
13	26	34	42	33	39	31	29	36	33	32	e34	30
14	28	31	41	35	38	32	31	36	33	30	e32	30
15	30	32	38	36	40	32	31	35	33	30	e30	29
16	31	34	37	37	41	33	32	35	33	31	28	29
17	33	34	38	e38	41	32	31	35	33	30	30	32
18	35	36	38	e38	37	32	29	34	33	30	31	31
19	32	35	37	e38	35	33	28	35	32	31	30	32
20	29	37	38	e38	34	32	29	34	33	31	30	32
21	28	35	37	e37	34	32	30	35	33	30	29	31
22	30	36	38	e37	37	31	30	34	33	30	31	30
23	31	38	38	e37	41	32	31	34	32	31	31	31
24	33	38	38	e37	41	32	30	35	31	29	30	31
25	32	38	39	e37	39	33	31	35	33	29	30	32
26	32	38	41	e37	39	35	31	35	33	29	30	34
27	32	38	40	e36	39	35	30	35	31	30	32	33
28	32	38	37	e36	38	33	30	35	31	34	31	33
29	33	31	37	e36	---	33	31	35	31	31	31	31
30	33	35	37	e36	---	33	31	36	33	29	33	31
31	33	---	37	36	---	32	---	35	---	29	34	---
TOTAL	978	1030	1202	1110	1081	1019	938	1109	1008	961	943	921
MEAN	31.5	34.3	38.8	35.8	38.6	32.9	31.3	35.8	33.6	31.0	30.4	30.7
MAX	37	38	43	38	41	36	36	39	37	35	36	34
MIN	26	30	37	31	34	29	28	34	31	29	28	29
AC-FT	1940	2040	2380	2200	2140	2020	1860	2200	2000	1910	1870	1830

CAL YR 1988 TOTAL 13701 MEAN 37.4 MAX 52 MIN 26 AC-FT 27180
WTR YR 1989 TOTAL 12300 MEAN 33.7 MAX 43 MIN 26 AC-FT 24400

e Estimated

09416000 MUDDY RIVER NEAR MOAPA, NV--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1030	950	983	1010	950	967	979	959	966	1030	990	997
2	1040	1010	1020	960	950	956	983	963	972	1010	990	995
3	1060	1020	1040	970	940	950	991	970	982	1050	990	998
4	1070	1050	1060	1030	940	986	1010	983	996	1020	990	1010
5	1070	981	1020	1020	1000	1010	1020	988	1000	1020	1000	1010
6	1030	1010	1020	1010	990	1000	1010	991	1000	1010	990	1000
7	1030	976	1010	1030	990	1000	1010	993	1000	1000	980	990
8	979	958	969	1010	990	1000	1010	967	991	990	980	988
9	971	954	964	1020	990	1000	977	957	966	990	980	988
10	985	964	975	1030	971	1000	1010	961	984	990	980	987
11	983	965	973	1030	975	993	1040	1000	1020	---	---	---
12	984	966	976	1060	1020	1050	1040	1010	1020	---	---	---
13	988	975	981	1050	1030	1040	1020	989	1010	---	---	---
14	997	974	989	1040	1010	1020	1000	978	994	---	---	---
15	987	976	981	1010	985	994	996	969	978	---	---	---
16	997	973	984	995	979	987	981	967	974	---	---	---
17	1000	976	990	1000	985	993	1000	969	980	---	---	---
18	1000	979	992	1010	990	997	999	965	978	---	---	---
19	990	980	989	1010	990	996	974	946	961	---	---	---
20	990	980	984	1030	998	1010	985	959	968	---	---	---
21	990	980	983	1020	997	1010	976	952	963	---	---	---
22	990	980	986	1020	1000	1010	958	943	951	---	---	---
23	1000	980	993	1010	987	998	1030	943	959	---	---	---
24	1020	990	1010	995	978	985	972	957	964	---	---	---
25	1020	1000	1010	1010	995	998	978	964	968	---	---	---
26	1020	1000	1010	1040	1000	1020	978	964	972	---	---	---
27	1010	990	1000	1050	1020	1030	985	969	977	---	---	---
28	1000	990	994	1040	999	1030	992	976	985	---	---	---
29	1020	980	993	1000	942	975	999	983	991	---	---	---
30	1000	960	980	963	937	950	1000	990	994	---	---	---
31	1000	960	972	---	---	---	1000	980	991	---	---	---
MONTH	1070	950	995	1060	937	998	1040	943	982	---	---	---

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	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

09416000 MUDDY RIVER NEAR MOAPA, NV--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	1030	1010	1020
2	---	---	---	---	---	---	---	---	---	1030	1010	1010
3	---	---	---	---	---	---	---	---	---	1030	1010	1010
4	---	---	---	---	---	---	---	---	---	1030	1010	1010
5	---	---	---	---	---	---	---	---	---	1010	1000	1010
6	---	---	---	---	---	---	---	---	---	1010	1000	1010
7	---	---	---	---	---	---	---	---	---	1010	1000	1010
8	---	---	---	---	---	---	---	---	---	1010	1000	1010
9	---	---	---	---	---	---	---	---	---	1020	1000	1010
10	---	---	---	---	---	---	---	---	---	1020	1000	1010
11	---	---	---	---	---	---	---	---	---	1020	1000	1010
12	---	---	---	---	---	---	---	---	---	1020	1000	1010
13	---	---	---	---	---	---	---	---	---	1020	1000	1010
14	---	---	---	---	---	---	---	---	---	1020	1000	1010
15	---	---	---	---	---	---	---	---	---	1020	1000	1010
16	---	---	---	---	---	---	---	---	---	1020	1000	1010
17	---	---	---	---	---	---	---	---	---	1020	1000	1010
18	---	---	---	---	---	---	---	---	---	1010	1000	1010
19	---	---	---	---	---	---	---	---	---	1010	1000	1000
20	---	---	---	930	920	927	---	---	---	1010	990	1000
21	---	---	---	940	930	933	---	---	---	1010	1000	1000
22	---	---	---	940	920	934	---	---	---	1010	1000	1010
23	---	---	---	950	930	935	---	---	---	1010	1000	1010
24	---	---	---	940	920	935	1030	1010	1020	1010	1000	1010
25	---	---	---	940	930	935	1020	1010	1020	1010	1000	1010
26	---	---	---	940	930	935	1030	1020	1020	1020	1000	1010
27	---	---	---	940	920	932	1020	1010	1020	1010	1000	1010
28	---	---	---	---	---	---	1030	1010	1020	1020	1000	1010
29	---	---	---	---	---	---	1030	1010	1020	1010	1000	1010
30	---	---	---	---	---	---	1030	1010	1020	1010	1000	1010
31	---	---	---	---	---	---	1030	1010	1020	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	1030	990	1010

TEMPERATURE, WATER (DEG C.), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	30.5	27.0	28.5	29.0	27.0	28.0	27.0	25.5	26.0	27.0	25.5	26.0
2	30.5	27.0	28.5	29.0	26.5	27.5	27.0	25.5	26.0	27.0	25.5	26.0
3	30.0	27.5	28.5	29.0	27.0	27.5	27.0	25.5	26.0	27.0	25.5	26.0
4	30.0	27.0	28.5	28.5	27.0	27.5	27.0	26.0	26.5	26.5	26.0	26.5
5	29.5	27.0	28.5	28.5	27.0	27.5	27.0	26.0	26.5	27.5	26.5	27.0
6	30.0	27.5	28.5	28.5	26.5	27.5	27.5	25.5	26.5	26.5	25.5	26.0
7	29.5	27.0	28.0	28.0	26.5	27.5	26.5	26.0	26.0	26.5	25.0	25.5
8	29.5	27.0	28.0	28.0	26.5	27.0	26.5	25.5	26.0	26.5	25.0	25.5
9	29.5	27.5	28.0	28.0	26.0	27.0	27.0	25.5	26.0	26.5	25.0	26.0
10	29.5	27.0	28.0	27.5	26.0	26.5	27.5	26.0	26.5	26.5	25.0	26.0
11	29.5	27.0	28.0	27.5	25.5	26.5	27.5	25.5	26.5	---	---	---
12	29.5	28.0	28.5	27.5	25.5	26.0	27.5	25.5	26.5	---	---	---
13	29.0	27.0	28.0	27.5	25.5	26.5	27.5	25.5	26.5	---	---	---
14	29.0	27.5	28.0	26.5	25.0	26.0	27.5	25.5	26.5	---	---	---
15	29.5	26.5	28.0	26.5	25.0	25.5	26.5	25.0	26.0	---	---	---
16	29.5	27.5	28.0	26.5	24.5	25.5	26.5	25.5	26.0	---	---	---
17	29.5	27.0	28.0	26.5	24.5	25.5	27.5	26.0	26.5	---	---	---
18	29.5	26.5	28.0	25.5	25.0	25.0	27.5	26.0	26.5	---	---	---
19	29.5	26.5	28.0	26.0	24.5	25.0	27.0	26.0	26.5	---	---	---
20	29.5	27.5	28.0	26.5	24.0	25.0	27.0	25.5	26.0	---	---	---
21	29.5	27.0	28.0	26.5	24.5	25.5	27.0	25.5	26.5	---	---	---
22	29.0	26.5	27.5	26.5	24.5	25.5	26.5	25.0	25.5	---	---	---
23	29.5	27.0	28.0	26.5	25.0	25.5	26.5	25.5	26.0	---	---	---
24	29.0	27.0	27.5	26.0	25.0	25.5	26.5	25.0	26.0	---	---	---
25	29.0	26.5	27.5	26.0	25.0	25.5	27.0	25.5	26.5	---	---	---
26	29.0	27.0	27.5	26.5	25.0	25.5	26.0	25.0	25.5	---	---	---
27	29.0	26.5	27.5	26.0	24.5	25.5	26.0	24.5	25.0	---	---	---
28	29.0	27.0	28.0	26.5	24.5	25.5	26.0	25.0	25.5	---	---	---
29	29.5	28.0	28.5	26.0	25.0	25.5	26.0	24.5	25.5	---	---	---
30	29.5	27.5	28.0	26.5	25.0	25.5	26.0	25.0	25.5	---	---	---
31	29.5	27.5	28.0	---	---	---	26.5	24.0	25.5	27.0	25.0	26.0
MONTH	30.5	26.5	28.0	29.0	24.0	26.2	27.5	24.0	26.1	---	---	---

09416000 MUDDY RIVER NEAR MOAPA, NV--Continued

TEMPERATURE, WATER (DEG C.), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	27.0	25.0	26.0	28.0	24.5	26.0	29.0	26.0	27.0	29.5	26.0	27.5
2	26.5	26.0	26.0	26.5	25.0	26.0	29.0	25.0	27.0	30.0	25.5	27.5
3	26.5	25.0	26.0	26.0	23.5	25.0	28.5	26.0	27.0	30.5	27.0	28.5
4	25.5	24.0	25.0	27.0	23.5	25.0	29.0	25.5	27.0	31.0	27.5	29.0
5	25.0	23.5	24.5	27.5	24.0	25.5	29.5	26.0	27.5	31.0	27.5	29.0
6	25.5	23.5	24.0	28.5	24.5	26.0	30.0	26.0	27.5	30.5	27.5	28.5
7	25.0	23.5	24.0	27.5	25.5	26.5	30.0	26.0	28.0	30.5	27.0	28.5
8	25.5	24.0	24.5	29.0	25.5	27.0	30.0	26.5	28.0	31.0	27.0	29.0
9	26.0	24.5	25.5	29.0	25.5	27.0	30.0	27.0	28.0	30.0	28.0	28.5
10	27.5	25.5	26.5	29.0	26.0	27.0	30.0	26.0	27.5	29.5	27.0	28.0
11	27.5	25.5	26.5	29.0	25.5	27.0	29.5	27.0	28.0	28.5	26.5	27.5
12	27.0	25.5	26.5	29.5	26.5	27.5	29.5	26.5	27.5	29.0	26.5	27.5
13	27.0	25.0	25.5	29.0	25.0	27.0	30.0	26.5	28.0	28.0	26.5	27.5
14	27.0	24.5	25.5	28.0	25.0	26.5	30.0	26.0	27.5	29.5	26.5	28.0
15	27.0	24.5	25.5	28.5	25.0	26.5	30.0	26.5	28.0	30.0	27.0	28.0
16	27.0	25.0	26.0	28.0	25.0	26.0	30.0	26.5	28.0	30.0	27.5	28.5
17	28.0	25.5	26.0	28.0	25.0	26.5	30.0	27.5	28.5	31.0	27.0	28.5
18	27.5	25.0	26.0	28.5	25.0	26.5	30.5	27.0	28.5	30.5	27.0	28.5
19	28.0	24.5	26.0	29.0	25.0	27.0	30.5	26.5	28.0	30.5	27.0	28.5
20	27.0	25.0	26.0	28.0	25.0	26.0	29.5	27.0	28.0	30.5	27.0	28.5
21	27.5	25.0	26.0	28.5	25.0	26.0	28.5	27.0	28.0	31.0	27.5	29.0
22	27.5	25.0	26.0	28.0	24.0	26.0	29.5	26.5	27.5	30.5	27.5	28.5
23	27.5	25.0	26.5	28.0	25.0	26.5	28.0	26.5	27.0	29.5	27.5	28.0
24	28.0	25.5	26.5	28.5	26.0	27.0	28.0	26.0	26.5	30.5	27.0	28.5
25	28.5	26.0	27.0	27.0	26.0	26.5	28.5	25.5	27.0	30.5	27.0	28.5
26	28.5	25.0	26.5	28.5	26.0	27.0	28.5	25.5	26.5	31.0	27.5	29.0
27	28.0	25.0	26.5	28.5	26.0	27.0	28.0	25.5	26.5	31.0	27.0	28.5
28	28.0	24.5	26.0	29.0	25.5	27.0	29.0	25.5	27.0	30.0	28.0	28.5
29	---	---	---	29.0	26.0	27.5	29.5	26.0	27.5	30.0	27.0	28.0
30	---	---	---	29.0	26.0	27.0	29.0	26.0	27.5	30.0	27.0	28.0
31	---	---	---	29.0	25.5	27.0	---	---	---	30.5	27.0	28.5
MONTH	28.5	23.5	25.8	29.5	23.5	26.5	30.5	25.0	27.5	31.0	25.5	28.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	30.5	27.5	28.5	31.5	27.0	29.0	---	---	---	30.5	27.0	28.5
2	30.5	27.0	28.5	32.0	27.5	29.5	---	---	---	30.5	27.0	28.5
3	30.0	27.0	28.5	32.0	27.5	29.5	---	---	---	31.0	27.0	28.5
4	30.5	27.5	28.5	32.0	27.5	29.5	---	---	---	31.0	27.5	29.0
5	30.0	26.5	28.0	32.5	27.5	29.5	---	---	---	30.5	27.0	28.5
6	30.5	27.0	28.5	32.0	27.5	29.5	---	---	---	30.0	27.0	28.5
7	31.0	27.0	29.0	31.5	27.5	29.5	---	---	---	30.0	27.5	28.5
8	30.5	27.5	29.0	32.0	29.0	30.0	---	---	---	30.0	27.5	28.5
9	30.5	28.0	29.0	31.0	28.5	29.5	---	---	---	30.5	27.0	28.5
10	31.0	28.0	29.0	31.0	28.5	29.5	---	---	---	30.5	27.0	28.5
11	31.0	27.5	29.0	29.5	28.5	29.0	---	---	---	30.5	27.5	28.5
12	31.5	27.5	29.0	31.5	28.0	29.5	---	---	---	30.0	28.0	29.0
13	31.0	27.5	29.0	32.0	28.0	29.5	---	---	---	30.5	27.5	28.5
14	32.0	27.5	29.5	32.0	28.0	29.5	---	---	---	30.5	27.0	28.5
15	31.5	28.0	29.5	31.0	27.5	29.0	---	---	---	30.5	27.0	28.5
16	30.5	28.0	29.0	30.5	28.0	29.0	---	---	---	29.5	27.0	28.5
17	32.0	27.5	29.5	31.5	27.0	29.0	---	---	---	30.0	28.0	29.0
18	32.0	27.5	29.5	32.0	27.5	29.0	---	---	---	29.5	27.5	28.5
19	30.0	28.0	29.0	32.0	28.0	29.5	---	---	---	29.0	27.0	28.0
20	31.5	28.0	29.5	32.0	29.0	30.0	---	---	---	29.5	27.0	28.0
21	30.5	26.5	28.0	31.5	29.0	30.0	---	---	---	30.0	27.5	28.5
22	31.0	27.5	29.0	31.0	29.0	30.0	---	---	---	30.0	28.0	28.5
23	31.5	27.0	29.0	32.0	29.0	30.0	---	---	---	30.5	27.5	28.5
24	31.0	28.0	29.5	32.0	28.5	30.0	30.0	27.0	28.5	30.5	27.5	29.0
25	31.0	28.0	29.0	32.0	29.0	30.0	30.5	27.0	28.5	30.0	28.0	29.0
26	31.5	28.0	29.5	31.5	28.5	30.0	30.5	27.0	28.5	30.0	28.0	29.0
27	30.5	28.0	29.0	32.0	28.5	30.0	30.5	27.5	29.0	30.0	28.0	29.0
28	31.0	28.0	29.0	---	---	---	31.0	27.5	29.0	30.5	27.5	28.5
29	31.5	27.5	29.0	---	---	---	30.5	27.0	28.5	30.0	27.0	28.0
30	31.5	27.0	29.0	---	---	---	30.0	27.5	28.5	29.0	27.0	28.0
31	---	---	---	---	---	---	30.5	27.0	28.5	---	---	---
MONTH	32.0	26.5	29.0	---	---	---	---	---	---	31.0	27.0	28.5

09418500 MEADOW VALLEY WASH NEAR CALIENTE, NV

LOCATION.--Lat 37°33'20", long 114°33'50", in NE1/4 sec.35 T.4 S., R.66 E., Lincoln County, Hydrologic Unit 15010013, on right bank 0.5 mi east of Etna, 4.5 mi southwest of Caliente, and 6 mi downstream from Clover Creek.

DRAINAGE AREA.--1,670 mi².

PERIOD OF RECORD.--January 1951 to September 1960, November 1964 to September 1983, and October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,200 ft, by barometer. Prior to June 16, 1955, at site 1.8 mi downstream at different datum.

REMARKS.--Records good. Several diversions for irrigation above station.

AVERAGE DISCHARGE.--32 years (1952-60, 1966-83, 1985-89), 11.2 ft³/s, 8,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 2,400 ft³/s, Mar. 5, 1978, gage height, 9.41 ft, from floodmarks; no flow July 26-28, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 11	0900	*176	*6.68				

Minimum daily, 0.66 ft³/s, Aug. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.3	2.0	2.9	6.4	7.6	4.1	3.3	3.5	1.0	.93	.89
2	1.3	1.4	2.0	3.0	8.4	7.4	3.8	3.1	3.4	1.0	.96	1.0
3	1.4	1.4	2.0	3.0	8.7	7.5	3.7	3.0	3.4	1.0	.96	.87
4	1.4	1.4	2.0	2.9	8.3	6.3	3.0	3.0	3.5	.91	.90	.96
5	1.4	1.5	2.0	3.4	6.4	6.3	3.0	3.0	3.4	.92	.95	.90
6	1.3	1.5	2.0	4.0	6.8	6.4	3.0	3.0	3.1	.85	.99	.93
7	1.3	1.5	2.1	4.0	6.8	6.1	3.2	2.9	2.4	.86	.97	.98
8	1.3	1.5	2.1	3.8	6.8	5.1	3.4	2.9	2.3	.85	1.0	1.1
9	1.4	1.5	2.1	3.9	6.5	4.6	3.5	2.7	2.3	.85	1.3	1.1
10	1.4	1.7	2.2	4.1	5.7	4.6	3.5	2.1	2.4	.82	1.0	1.1
11	1.4	1.7	2.3	3.9	5.8	4.7	3.2	2.5	2.2	.90	43	1.1
12	1.4	1.7	2.3	3.6	6.7	4.8	3.3	3.1	2.1	.91	8.3	1.2
13	1.4	1.7	2.3	3.8	7.8	5.0	3.1	3.5	1.9	.89	2.2	1.2
14	1.4	2.0	2.4	3.8	8.4	5.0	3.1	3.8	1.7	.89	1.1	1.2
15	1.2	2.0	2.3	3.8	9.6	4.8	3.0	3.9	1.5	1.0	.82	1.2
16	1.3	1.9	2.1	3.7	9.5	4.6	3.1	4.8	1.3	.88	.66	1.3
17	1.3	2.1	2.2	3.7	9.1	4.8	2.8	5.2	1.3	.93	.88	1.4
18	1.2	1.8	2.3	4.0	10	4.9	3.0	4.4	1.2	.86	1.4	1.3
19	1.3	1.6	2.3	4.3	12	4.7	2.9	3.7	1.2	.91	.76	1.3
20	1.3	1.6	2.5	4.3	14	4.6	3.1	3.4	1.2	.92	.67	1.3
21	1.2	1.7	2.8	4.5	13	4.4	3.0	3.4	1.3	.93	.68	1.3
22	1.2	1.7	2.7	4.9	12	4.3	3.0	3.0	1.3	.85	.76	1.3
23	1.2	1.7	2.8	5.0	11	4.0	3.0	2.7	1.3	.88	.90	1.4
24	1.1	1.8	2.9	5.0	10	3.9	3.1	2.9	1.4	.88	.77	1.3
25	1.1	1.8	3.0	5.3	10	4.1	3.1	3.0	1.3	.83	.76	1.4
26	1.1	1.8	2.7	5.3	10	4.6	3.6	3.1	1.3	.80	.78	1.2
27	1.1	1.9	2.9	5.3	9.4	4.8	3.9	3.2	1.2	.83	.79	1.3
28	1.1	2.0	2.9	5.6	8.5	4.6	3.8	3.3	1.1	.86	.82	1.3
29	1.1	2.0	2.9	6.0	---	4.3	3.6	3.3	1.1	.85	.83	1.3
30	1.3	1.8	3.0	6.1	---	4.1	3.5	3.7	1.0	.83	.91	1.3
31	1.3	---	2.9	6.5	---	4.0	---	3.9	---	.91	.91	---
TOTAL	39.4	51.0	75.0	133.4	247.6	156.9	98.4	102.8	57.6	27.60	78.66	35.43
MEAN	1.27	1.70	2.42	4.30	8.84	5.06	3.28	3.32	1.92	.89	2.54	1.18
MAX	1.4	2.1	3.0	6.5	14	7.6	4.1	5.2	3.5	1.0	43	1.4
MIN	1.1	1.3	2.0	2.9	5.7	3.9	2.8	2.1	1.0	.80	.66	.87
AC-FT	78	101	149	265	491	311	195	204	114	55	156	70

CAL YR 1988 TOTAL 1419.33 MEAN 3.88 MAX 37 MIN .69 AC-FT 2820
WTR YR 1989 TOTAL 1103.79 MEAN 3.02 MAX 43 MIN .66 AC-FT 2190

09418700 MEADOW VALLEY WASH NEAR ROX, NV

LOCATION.--Lat 36°52'11", long 114°26'33", T.12 S., R.65 E., Lincoln County, Hydrologic Unit 15010013, on right bank, on downstream side of service road wingwall, 0.5 mi south of Rox, 4.1 mi north of Farrier.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,855 ft, above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 111 ft^3/s, Oct. 13, 1987, gage height, 3.54 ft, from rating curve extended above 10 ft^3/s on basis of slope-conveyance measurement; minimum daily, 0.14 ft^3/s, Aug. 9, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.0 ft^3/s, May 14, gage height, 2.22 ft, minimum daily, 0.24 cfs Aug. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	.90	1.2	1.3	1.3	1.7	1.9	2.3	1.0	.82	.50	.33
2	.52	.91	1.2	1.3	1.3	1.6	1.8	2.4	.97	.82	.46	.34
3	.49	.92	1.2	1.3	1.3	1.6	1.8	2.3	.98	.79	.44	.35
4	.50	.93	1.2	1.4	1.3	1.6	1.8	2.3	.96	.76	.42	.34
5	.51	.93	1.2	1.4	1.3	1.6	1.8	2.3	.94	.74	.40	.34
6	.52	.96	1.2	1.4	1.3	1.7	1.8	2.3	.95	.75	.38	.34
7	.52	.97	1.2	1.3	1.3	1.7	1.8	2.3	.99	.78	.36	.33
8	.52	.98	1.2	1.3	1.3	1.6	1.8	2.3	1.0	.78	.35	.35
9	.50	.99	1.2	1.3	1.4	1.6	1.8	2.4	1.0	.79	.33	.35
10	.50	1.0	1.2	1.3	1.4	1.6	1.7	2.5	1.0	.77	.33	.35
11	.49	1.0	1.2	1.3	1.4	1.6	1.7	2.6	.96	.76	.28	.37
12	.49	1.0	1.2	1.3	1.4	1.6	1.7	2.7	.95	.79	.28	.37
13	.52	1.0	1.2	1.3	1.4	1.7	1.6	2.8	.95	.81	.27	.37
14	.54	1.0	1.2	1.3	1.4	1.7	1.5	2.8	.96	.80	.27	.37
15	.58	1.0	1.2	1.3	1.4	1.7	1.5	2.7	.95	.78	.26	.38
16	.60	1.0	1.3	1.3	1.4	1.7	1.5	2.5	.94	.79	.24	.42
17	.67	1.1	1.3	1.3	1.5	1.7	1.5	2.4	.94	.82	.25	.44
18	.71	1.1	1.3	1.3	1.5	1.7	1.6	2.2	.94	.77	.26	.45
19	.76	1.1	1.3	1.3	1.5	1.7	1.6	2.1	.93	.72	.26	.46
20	.77	1.1	1.3	1.3	1.5	1.7	1.7	2.0	.94	.72	.26	.49
21	.80	1.1	1.3	1.3	1.5	1.7	1.7	1.6	.97	.70	.25	.50
22	.82	1.1	1.3	1.4	1.6	1.8	1.9	1.7	.96	.68	.27	.50
23	.85	1.1	1.3	1.4	1.6	1.8	1.8	1.7	.97	.73	.27	.53
24	.86	1.1	1.3	1.4	1.6	1.8	1.9	1.7	.86	.69	.28	.54
25	.88	1.1	1.3	1.3	1.6	1.8	2.0	1.6	.85	.65	.28	.58
26	.87	1.1	1.3	1.3	1.6	1.8	2.1	1.4	.84	.63	.30	.60
27	.88	1.1	1.3	1.3	1.6	1.8	2.3	1.6	.83	.63	.31	.63
28	.88	1.1	1.3	1.3	1.6	1.8	2.3	1.3	.81	.63	.32	.64
29	.88	1.1	1.3	1.3	---	1.9	2.2	1.1	.80	.61	.33	.66
30	.90	1.1	1.3	1.3	---	1.9	2.3	1.1	.80	.57	.33	.66
31	.90	---	1.3	1.3	---	1.9	---	1.1	---	.52	.32	---
TOTAL	20.75	30.89	38.8	40.9	40.3	53.1	54.4	64.1	27.94	22.60	9.86	13.38
MEAN	.67	1.03	1.25	1.32	1.44	1.71	1.81	2.07	.93	.73	.32	.45
MAX	.90	1.1	1.3	1.4	1.6	1.9	2.3	2.8	1.0	.82	.50	.66
MIN	.49	.90	1.2	1.3	1.3	1.6	1.5	1.1	.80	.52	.24	.33
AC-FT	41	61	77	81	80	105	108	127	55	45	20	27

CAL YR 1988 TOTAL 724.02 MEAN 1.98 MAX 5.4 MIN .45 AC-FT 1440
WTR YR 1989 TOTAL 417.02 MEAN 1.14 MAX 2.8 MIN .24 AC-FT 827

09418700 MEADOW VALLEY WASH NEAR ROX, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1988 to current year.
WATER TEMPERATURE: June to September 1988.

INSTRUMENTATION.--Specific conductance and water-temperature recorder since June 1988, hourly.

REMARKS.--Temperature record not published for the 1989 water year due to instrument malfunction. Specific conductance missing June 7-July 13 due to construction in vicinity of gage.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,800 microsiemens Jan. 5, 1989; minimum, 598 microsiemens Aug. 2, 1988.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,800 microsiemens Jan. 5; minimum 1,210 microsiemens July 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT											
12...	1330	0.53	1330	--	20.0	400	84	47	130	3	10
NOV											
17...	1400	1.0	1660	17.5	12.5	--	--	--	--	--	--
DEC											
13...	1200	1.2	1710	21.5	10.0	490	99	59	190	4	11
JAN											
05...	1600	1.4	2450	10.0	11.0	--	--	--	--	--	--
FEB											
07...	1200	1.3	1580	1.5	5.5	--	--	--	--	--	--
MAR											
23...	1330	1.7	1570	--	13.0	450	89	55	170	4	13
MAY											
31...	1400	1.0	1330	28.0	21.5	430	88	50	150	3	11
JUL											
12...	1100	0.78	1280	--	23.5	--	--	--	--	--	--
AUG											
08...	1200	0.37	1300	--	24.0	--	--	--	--	--	--
SEP											
21...	1215	0.47	1320	31.0	19.5	--	--	--	--	--	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT										
12...	350	82	1.9	50	888	904	1.21	89	0.13	--
NOV										
17...	--	--	--	--	1150	--	--	53	0.14	96
DEC										
13...	430	120	3.0	51	1170	1170	1.59	103	0.33	78
JAN										
05...	--	--	--	--	1740	--	--	92	0.35	89
FEB										
07...	--	--	--	--	1090	--	--	70	0.25	76
MAR										
23...	400	110	2.2	48	1050	1070	1.43	116	0.53	91
MAY										
31...	350	87	2.0	48	913	937	1.24	22	0.06	90
JUL										
12...	--	--	--	--	907	--	--	--	--	--
AUG										
08...	--	--	--	--	849	--	--	--	--	--
SEP										
21...	--	--	--	--	787	--	--	38	0.05	--

09418700 MEADOW VALLEY WASH NEAR ROX, NV--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1300	1280	1290	1390	1330	1370	1700	1680	1690	1740	1700	1720
2	1310	1280	1300	1380	1340	1370	1720	1690	1710	1750	1710	1730
3	1340	1280	1300	1400	1350	1380	1700	1690	1690	1740	1660	1710
4	1320	1280	1310	1400	1320	1380	1700	1680	1690	1970	1710	1760
5	1330	1300	1310	1410	1370	1400	1710	1690	1700	2800	2040	2430
6	1330	1300	1310	1410	1370	1400	1710	1700	1700	2770	2060	2410
7	1340	1280	1310	1410	1380	1390	1720	1690	1710	2060	1820	1940
8	1320	1260	1300	1410	1380	1400	1730	1700	1720	1820	1740	1780
9	1330	1310	1320	1410	1360	1390	1720	1690	1710	1760	1720	1750
10	1340	1290	1320	1420	1400	1420	1710	1690	1700	1740	1710	1730
11	1370	1310	1330	1450	1410	1440	1710	1690	1700	1740	1690	1720
12	1400	1320	1340	1460	1420	1450	1710	1690	1700	1740	1670	1700
13	1350	1310	1320	1480	1430	1460	1710	1690	1700	1680	1640	1660
14	1340	1310	1320	1520	1480	1500	1710	1690	1710	1700	1640	1670
15	1330	1290	1310	1580	1500	1530	1720	1700	1710	1680	1620	1660
16	1370	1300	1320	1720	1600	1680	1710	1680	1700	1670	1610	1650
17	1330	1310	1330	1710	1630	1660	1710	1680	1700	1670	1600	1640
18	1330	1300	1330	1660	1590	1630	1710	1660	1700	1660	1600	1650
19	1330	1300	1320	1630	1600	1620	1710	1680	1700	1660	1610	1640
20	1330	1290	1320	1610	1580	1600	1720	1690	1710	1660	1610	1640
21	1330	1300	1320	1600	1580	1600	1810	1700	1740	1650	1600	1630
22	1320	1300	1310	1630	1590	1610	2150	1820	1980	1640	1610	1640
23	1330	1300	1320	1670	1620	1640	2130	1870	1980	1640	1610	1630
24	1330	1290	1320	1680	1650	1670	1870	1810	1840	1640	1610	1630
25	1320	1290	1320	1660	1650	1660	1830	1780	1800	1640	1600	1620
26	1330	1290	1320	1680	1650	1660	1800	1770	1790	1610	1560	1590
27	1340	1300	1320	1700	1670	1680	1780	1720	1740	1600	1550	1570
28	1350	1310	1330	1690	1680	1680	1730	1710	1720	1600	1570	1590
29	1360	1320	1340	1700	1680	1690	1740	1710	1730	1600	1550	1580
30	1370	1310	1340	1720	1670	1700	1720	1690	1710	1590	1550	1580
31	1390	1360	1370	---	---	---	1720	1680	1700	1600	1550	1580
MONTH	1400	1260	1320	1720	1320	1540	2150	1660	1730	2800	1550	1720
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1610	1520	1590	1570	1530	1550	1580	1540	1560	1400	1360	1380
2	1620	1590	1600	1580	1540	1550	1590	1510	1540	1380	1340	1360
3	1620	1560	1590	1580	1540	1560	1590	1520	1560	1380	1350	1370
4	1600	1530	1570	1560	1500	1530	1580	1500	1530	1390	1360	1380
5	1630	1560	1610	1530	1480	1520	1550	1480	1510	1370	1350	1360
6	1650	1560	1590	1540	1480	1530	1540	1480	1510	1370	1340	1350
7	1600	1550	1580	1540	1510	1540	1540	1480	1500	1360	1330	1340
8	1590	1530	1570	1560	1500	1540	1530	1480	1500	1390	1350	1360
9	1600	1560	1580	1560	1490	1540	1510	1470	1490	1400	1370	1380
10	1610	1570	1600	1560	1510	1540	1720	1450	1570	1380	1350	1360
11	1610	1560	1590	1560	1520	1550	1640	1450	1530	1360	1340	1340
12	1630	1580	1600	1560	1510	1540	1560	1470	1500	1400	1350	1370
13	1630	1590	1620	1560	1510	1540	1480	1390	1430	1390	1340	1360
14	1620	1570	1600	1570	1510	1540	1440	1360	1400	1380	1340	1360
15	1600	1560	1580	1550	1500	1530	1460	1390	1440	1380	1330	1360
16	1620	1550	1580	1560	1520	1540	1470	1390	1430	1350	1320	1340
17	1610	1560	1580	1560	1510	1540	1450	1400	1430	1350	1330	1340
18	1590	1560	1580	1560	1500	1530	1440	1400	1430	1360	1330	1350
19	1600	1560	1580	1560	1500	1540	1430	1380	1400	1360	1340	1360
20	1600	1540	1570	1570	1510	1550	1430	1400	1420	1350	1330	1340
21	1590	1540	1570	1550	1500	1530	1430	1400	1420	1370	1330	1350
22	1580	1550	1560	1560	1500	1530	1430	1380	1400	1390	1340	1360
23	1570	1540	1550	1570	1540	1560	1420	1380	1400	1370	1340	1350
24	1580	1540	1560	1580	1550	1570	1420	1390	1400	1340	1320	1330
25	1580	1540	1560	1580	1560	1570	1420	1390	1410	1320	1300	1320
26	1590	1530	1560	1750	1570	1660	1420	1370	1400	1330	1290	1310
27	1580	1540	1560	1730	1630	1660	1430	1390	1400	1350	1300	1330
28	1570	1530	1550	1650	1600	1620	1430	1380	1400	1330	1310	1320
29	---	---	---	1660	1580	1610	1410	1370	1390	1330	1300	1310
30	---	---	---	1650	1560	1600	1410	1360	1380	1340	1320	1330
31	---	---	---	1590	1540	1560	---	---	---	1350	1310	1330
MONTH	1650	1520	1580	1750	1480	1560	1720	1360	1460	1400	1290	1350

09418700 MEADOW VALLEY WASH NEAR ROX, NV--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1360	1320	1340	---	---	---	1310	1230	1300	1300	1290	1300
2	1360	1320	1330	---	---	---	1300	1290	1300	1330	1300	1310
3	1340	1310	1330	---	---	---	1300	1280	1300	1370	1320	1340
4	1340	1310	1320	---	---	---	1300	1230	1290	1390	1360	1370
5	1330	1300	1320	---	---	---	1300	1280	1290	1410	1380	1390
6	1330	1300	1310	---	---	---	1300	1230	1290	1400	1380	1390
7	---	---	---	---	---	---	1300	1240	1290	1420	1400	1410
8	---	---	---	---	---	---	1320	1280	1300	1430	1410	1420
9	---	---	---	---	---	---	1310	1300	1310	1440	1420	1430
10	---	---	---	---	---	---	1320	1300	1310	1450	1410	1430
11	---	---	---	---	---	---	1310	1300	1300	1410	1350	1360
12	---	---	---	---	---	---	1310	1290	1300	1360	1330	1340
13	---	---	---	1340	1320	1330	1300	1280	1290	1330	1280	1300
14	---	---	---	1340	1320	1330	1300	1270	1290	1320	1260	1300
15	---	---	---	1340	1320	1330	1300	1280	1290	1330	1310	1320
16	---	---	---	1340	1330	1330	1300	1270	1290	1330	1310	1330
17	---	---	---	1330	1310	1320	1290	1270	1280	1310	1270	1300
18	---	---	---	1330	1310	1320	1290	1280	1280	1330	1300	1310
19	---	---	---	1330	1310	1320	1290	1280	1280	1340	1320	1330
20	---	---	---	1330	1310	1320	1290	1270	1280	1340	1320	1330
21	---	---	---	1330	1300	1320	1300	1270	1280	1340	1310	1320
22	---	---	---	1330	1320	1320	1290	1270	1280	1320	1310	1320
23	---	---	---	1330	1310	1320	1280	1270	1280	1320	1310	1310
24	---	---	---	1330	1320	1320	1270	1260	1270	1310	1300	1310
25	---	---	---	1340	1310	1320	1280	1250	1270	1310	1290	1300
26	---	---	---	1320	1300	1310	1280	1270	1270	1310	1300	1310
27	---	---	---	1310	1290	1310	1270	1250	1260	1320	1300	1310
28	---	---	---	1310	1280	1310	1270	1250	1260	1310	1300	1310
29	---	---	---	1310	1280	1310	1280	1260	1270	1320	1290	1310
30	---	---	---	1310	1210	1300	1290	1270	1280	1320	1310	1310
31	---	---	---	1310	1220	1290	1300	1270	1290	---	---	---
MONTH	---	---	---	---	---	---	1320	1230	1290	1450	1260	1340

09419000 MUDDY RIVER NEAR GLENDALE, NV

LOCATION.--Lat 36°38'35", long 114°32'20", in SW1/4 sec.7, T.15 S., R.67 E., Clark County, Hydrologic Unit 15010012, on left bank at the Narrows, 150 ft downstream from Weiser Wash, 2 mi southeast of Glendale, 2.4 mi downstream from Meadow Valley Wash, 4.5 mi northwest of Logandale, and 16 mi upstream from Lake Mead.

DRAINAGE AREA.--6,780 mi², approximately, of which about 3,000 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--January 1904 to December 1906 (gage heights only) and April to October 1910 (published as "near Moapa"), July 1913 to February 1914 (published as "near Logan"), February 1950 to September 1983, and October 1984 to current year.

REVISED RECORDS.--WSP 1243: 1906 (M). WSP 1733: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,460 ft, from river-profile map. Jan. 1, 1904, to Dec. 31, 1906, nonrecording gage just upstream at different datum. Apr. 22, 1910, to Feb. 21, 1914, nonrecording gage and rating flume at lower end of the Narrows, 1.2 mi downstream at different datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--38 years (water years 1951-83, 1985-89), 44.3 ft³/s, 32,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,400 ft³/s, Aug. 10, 1981, gage height, 27.10 ft, from rating curve extended above 7,400 ft³/s on basis of slope-area measurements of peak flow; minimum, 7.6 ft³/s, Sept. 29, 1964, result of temporary storage upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 30 ft, Mar. 26, 1906 (datum then in use), discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 210 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 29	0330	*87	*4.84				

Minimum daily, 20 ft³/s, July 21, Aug. 20, 26, 27 and Sept. 7, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	36	39	39	40	35	28	29	26	28	25	27
2	34	32	39	40	40	33	28	32	26	27	25	24
3	32	30	39	36	40	33	28	35	26	25	24	25
4	28	32	39	38	40	34	28	34	28	26	26	26
5	29	35	39	38	41	35	28	36	28	26	25	25
6	28	33	39	37	41	37	29	37	28	28	21	23
7	28	33	39	40	44	36	29	36	28	22	23	20
8	29	34	39	34	44	33	28	33	27	24	26	25
9	30	35	39	35	44	34	31	30	23	27	26	25
10	28	33	40	37	44	30	28	28	25	24	26	25
11	26	36	40	42	44	27	28	29	26	24	26	26
12	28	38	40	36	43	27	31	32	22	28	22	26
13	27	40	40	36	43	27	28	31	25	25	23	23
14	25	34	41	37	40	27	27	31	26	27	23	24
15	29	28	39	37	40	27	26	31	24	28	26	24
16	30	34	37	39	42	27	24	25	25	28	25	25
17	28	37	37	38	41	27	25	28	23	27	23	29
18	31	38	38	38	39	27	24	24	22	23	29	28
19	29	38	37	37	35	27	24	26	22	24	21	26
20	29	39	39	37	34	27	24	22	22	23	20	23
21	25	39	41	34	32	27	27	23	23	20	21	26
22	26	39	41	34	32	27	25	27	26	23	25	25
23	30	40	42	35	36	28	26	26	26	27	26	20
24	31	40	43	37	39	28	29	28	21	25	23	22
25	31	40	43	38	41	28	26	28	26	25	25	22
26	28	40	43	38	37	28	29	29	29	25	20	24
27	30	40	43	39	39	28	29	29	24	23	20	32
28	31	40	39	40	39	28	29	28	23	31	27	33
29	36	40	39	45	---	28	28	28	22	25	29	29
30	36	40	40	41	---	28	28	25	24	27	27	25
31	38	---	40	43	---	28	---	25	---	25	24	---
TOTAL	924	1093	1233	1175	1114	916	822	905	746	790	752	757
MEAN	29.8	36.4	39.8	37.9	39.8	29.5	27.4	29.2	24.9	25.5	24.3	25.2
MAX	38	40	43	45	44	37	31	37	29	31	29	33
MIN	25	28	37	34	32	27	24	22	21	20	20	20
AC-FT	1830	2170	2450	2330	2210	1820	1630	1800	1480	1570	1490	1500

CAL YR 1988 TOTAL 13032 MEAN 35.6 MAX 64 MIN 22 AC-FT 25850
WTR YR 1989 TOTAL 11227 MEAN 30.8 MAX 45 MIN 20 AC-FT 22270

09419515 MUDDY RIVER ABOVE LAKE MEAD NEAR OVERTON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-1974 and 1979 to current year (published as Muddy River below Overton, sta. no. 09419510, October 1969 to January 1974).

REMARKS.--NASQAN samples collected bi-monthly.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
DEC												
01...	1000	4.5	3200	8.00	16.0	9.5	41	10.8	98	230	620	1000
JAN												
25...	1100	1.5	4340	8.00	9.0	7.5	25	11.6	102	--	--	1400
MAR												
16...	1115	3.6	3850	8.00	23.0	17.0	23	9.8	102	330	920	1200
MAY												
24...	1200	11	2870	8.10	32.0	25.0	180	7.3	94	--	K17000	860
JUL												
20...	1000	8.0	2890	8.20	32.5	26.0	670	6.0	76	5700	15000	970
AUG												
31...	0945	1.1	3300	8.30	36.5	23.0	7.6	8.2	101	200	780	920

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
DEC												
01...	190	130	410	6	23	--	--	1200	280	2.9	46	2700
JAN												
25...	260	190	560	6	32	597	489	1700	400	3.2	42	3500
MAR												
16...	230	150	440	6	29	532	436	1400	330	4.1	49	3110
MAY												
24...	180	99	280	4	13	455	373	880	19	3.0	45	1950
JUL												
20...	190	120	340	5	31	521	427	1000	240	3.4	45	2100
AUG												
31...	170	120	380	5	32	390	320	1100	260	0.90	41	2310

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
DEC												
01...	2540	3.67	0.170	0.010	0.180	0.070	0.090	0.43	0.50	0.140	0.060	0.070
JAN												
25...	3480	4.76	--	<0.010	<0.100	0.130	0.100	0.57	0.70	0.110	0.050	0.030
MAR												
16...	2900	4.23	--	<0.010	0.140	0.070	0.080	0.53	0.60	0.250	0.150	0.180
MAY												
24...	1750	2.65	0.490	0.110	0.600	0.130	0.140	0.37	0.50	0.560	0.160	0.140
JUL												
20...	2230	2.86	0.130	0.020	0.150	0.500	0.340	2.1	2.6	1.00	0.090	0.090
AUG												
31...	2300	3.14	--	<0.010	<0.100	0.040	0.030	0.76	0.80	0.070	0.040	0.020

K: NON-IDEAL COLONY COUNT

09419515 MUDDY RIVER ABOVE LAKE MEAD NEAR OVERTON, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)
DEC 01...	10	66	100	<10	<1	2	<1	2	30	<5	520	140
JAN 25...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 16...	10	10	<100	<10	1	1	<1	2	40	<5	620	220
MAY 24...	<10	50	<100	<10	<1	2	<1	<1	10	<1	440	140
JUL 20...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 31...	<10	36	<100	<10	1	1	<1	3	30	<1	500	50

DATE	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 01...	<0.1	17	5	2	<1.0	4800	7	10	375	4.6	80
JAN 25...	--	--	--	--	--	--	--	--	339	1.4	75
MAR 16...	<0.1	18	1	2	<1.0	5700	11	10	389	3.8	69
MAY 24...	<0.1	17	1	1	<1.0	3600	12	10	1170	35	76
JUL 20...	--	--	--	--	--	--	--	--	2400	52	92
AUG 31...	0.2	22	2	<1	<1.0	3800	13	10	92	0.27	90

09419550 ROGERS SPRING NEAR OVERTON BEACH, NV

LOCATION.--Lat 36°22'36", long 114°26'33", in SE1/4SE1/4 sec.12, T.18 S., R.67 E., Clark County, Hydrologic Unit 15010005, on left bank in Lake Mead National Recreation Area, 14 mi south of Overton, and 6.6 mi southwest of Overton Beach.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--August 1985 to current year.

REMARKS.--Records fair. Minor temporary regulation for recreation upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3.6 ft³/s, July 12, 1987, and May 31, 1988; minimum daily, 1.0 ft³/s, Mar. 3, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.1 ft³/s, Oct. 2; minimum daily, 1.3 ft³/s, Apr. 22-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.6	1.7	1.7	1.9	1.4	1.4	1.4	1.5	1.6	e1.6	1.5
2	1.8	1.6	1.7	1.7	1.9	1.4	1.4	1.4	1.6	1.6	e1.6	1.4
3	1.7	1.6	1.7	1.7	1.9	1.4	e1.4	1.4	1.6	1.6	e1.6	1.5
4	1.7	1.6	1.7	1.8	1.9	1.4	e1.4	1.4	1.6	1.6	e1.6	1.5
5	1.6	1.6	1.7	1.8	1.8	1.4	e1.4	1.4	1.6	1.7	e1.6	1.5
6	1.6	1.6	1.7	1.8	1.8	1.4	e1.4	1.5	1.6	1.7	e1.6	1.5
7	1.6	1.6	1.7	1.8	1.8	1.4	e1.4	1.5	1.6	e1.7	e1.6	1.5
8	1.6	1.6	1.7	1.8	1.8	1.4	e1.4	1.5	1.6	e1.7	1.6	1.5
9	1.6	1.6	1.7	1.7	1.9	1.4	e1.4	1.5	1.6	e1.7	1.5	1.5
10	1.7	1.6	1.7	1.7	1.9	1.4	e1.4	1.5	1.6	e1.7	1.4	1.5
11	1.7	1.6	1.7	1.7	1.9	1.4	e1.4	1.4	1.6	e1.7	1.5	1.5
12	1.7	1.6	1.7	1.7	1.9	1.4	e1.4	1.4	1.6	e1.7	1.4	1.5
13	1.7	1.7	1.7	1.7	1.9	1.4	e1.4	1.5	1.6	e1.7	1.5	1.4
14	1.7	1.7	1.7	1.7	1.9	1.4	e1.4	1.4	1.6	e1.7	1.5	1.4
15	1.6	1.7	1.7	1.7	1.9	1.4	e1.4	1.4	1.6	e1.7	1.5	1.4
16	1.7	1.7	1.7	1.8	1.9	1.4	e1.4	1.4	1.7	e1.7	1.4	1.4
17	1.7	1.7	1.7	1.8	1.9	1.4	e1.4	1.4	1.6	e1.7	1.5	1.4
18	1.7	1.6	1.7	1.8	1.9	1.4	e1.4	1.4	1.7	e1.7	1.4	1.4
19	1.7	1.6	1.7	1.8	1.9	1.4	e1.4	1.4	1.6	e1.7	1.4	1.4
20	1.7	1.6	1.7	1.8	1.9	1.4	e1.4	1.5	1.6	e1.7	1.5	1.4
21	1.7	1.6	1.7	1.9	1.9	1.4	1.4	1.5	1.6	e1.6	1.5	1.4
22	1.7	1.6	1.7	1.9	1.9	1.4	1.3	1.5	1.6	e1.6	1.5	1.5
23	1.7	1.6	1.7	1.9	1.9	1.4	1.3	1.5	1.6	e1.6	1.5	1.6
24	1.6	1.6	1.7	1.9	1.9	1.4	1.3	1.6	1.6	e1.6	1.5	1.5
25	1.6	1.6	1.7	1.8	1.7	1.4	1.3	1.6	1.6	e1.6	1.5	1.5
26	1.6	1.6	1.7	1.7	1.4	1.4	1.3	1.6	1.6	e1.6	1.5	1.4
27	1.6	1.6	1.7	1.8	1.4	1.4	1.3	1.6	1.6	e1.6	1.5	1.4
28	1.7	1.6	1.7	1.8	1.4	1.4	1.3	1.6	1.6	e1.6	1.6	1.4
29	1.7	1.7	1.7	1.8	---	1.4	1.4	1.5	1.6	e1.6	1.5	1.5
30	1.7	1.7	1.7	1.8	---	1.4	1.4	1.5	1.6	e1.6	1.5	1.5
31	1.6	---	1.7	1.8	---	1.4	---	1.5	---	e1.6	1.6	---
TOTAL	51.6	48.7	52.7	55.1	51.1	43.4	41.3	45.7	48.1	51.2	47.0	43.8
MEAN	1.66	1.62	1.70	1.78	1.82	1.40	1.38	1.47	1.60	1.65	1.52	1.46
MAX	1.8	1.7	1.7	1.9	1.9	1.4	1.4	1.6	1.7	1.7	1.6	1.6
MIN	1.6	1.6	1.7	1.7	1.4	1.4	1.3	1.4	1.5	1.6	1.4	1.4
AC-FT	102	97	105	109	101	86	82	91	95	102	93	87

CAL YR 1988 TOTAL 617.4 MEAN 1.69 MAX 2.0 MIN 1.5 AC-FT 1220
WTR YR 1989 TOTAL 579.7 MEAN 1.59 MAX 1.9 MIN 1.3 AC-FT 1150

e Estimated

09419610 LEE CANYON NEAR CHARLESTON PARK, NV

LOCATION.--Lat 36°20'25", long 115°39'00", in NE1/4 sec.35, T.18 S., R.56 E., Clark County, Hydrologic Unit 15010015, in Toiyabe National Forest, on right bank 50 ft above bridge on Deer Creek Springs Road, just south of junction with State Highway 52, and 5.5 mi north of Charleston Park.

DRAINAGE AREA.--9.20 mi².

PERIOD OF RECORD.--Water years 1961-63 (annual maximum), October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,820 ft, from topographic map. Oct. 1, 1960, to Sept. 30, 1963, crest-stage gage at same site and datum. Prior to May 16, 1973, on right bank at datum 0.14 ft higher.

REMARKS.--Records good. No flow exists in this channel except at times of heavy rainfall or rapid snowmelt.

AVERAGE DISCHARGE.--26 years, 0.019 ft³/s, 14 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 880 ft³/s, July 28, 1969, gage height, 3.60 ft, on basis of slope-area measurement of peak flow; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, .02 ft³/s, Mar. 4, gage height, 0.48 ft; no flow most of the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	e.01	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	e.02	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	e.01	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.00	.00	.00	.00	.00	.001	.00	.00	.00	.00	.00	.00
MAX	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	.0	.0	.0	.0	.08	.0	.0	.0	.0	.0	.0

CAL YR 1988 TOTAL 0.96 MEAN .003 MAX .72 MIN .00 AC-FT 1.9
WTR YR 1989 TOTAL 0.04 MEAN .000 MAX .02 MIN .00 AC-FT .08

e Estimated.

09419656 LAS VEGAS CREEK AT LAMB BOULEVARD NEAR LAS VEGAS, NV

LOCATION.--Lat 36°10'53", long 115°04'46", in SE1/4NE1/4 sec.30, T.20 S., R.62 E., Clark County, Hydrologic Unit 15010015 on downstream side of box culvert at Lamb Blvd.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--March 1988 to current year.

GAGE.--Water-stage recorder and recording tipping bucket rain gage with .04 inch increment. Elevation of gage is 1,780 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,070 ft³/s, May 13, 1989, gage height 15.13; no flow most days.

EXTREMES FOR CURRENT PERIOD.--March to September 1988: Maximum discharge 513 ft³/s, August 26, gage height 13.11 ft; no flow most days.

Water year 1989: Maximum discharge, 1,070 ft³/s, May 13, gage height 15.13 ft; no flow most days.

DSCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	.00	.00	e.00	.00	.00	1.1	e.80
2	---	---	---	---	---	.00	.00	e.00	.00	.00	.00	.00
3	---	---	---	---	---	.00	.00	e.00	.00	.00	.00	.00
4	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
5	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
6	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
7	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
8	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
9	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
10	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
11	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
12	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
13	---	---	---	---	---	.00	34	e.20	.00	.00	.00	.00
14	---	---	---	---	---	.00	7.8	.00	.00	.00	.00	.00
15	---	---	---	---	---	.00	13	.00	.00	.00	.00	.00
16	---	---	---	---	---	.00	e.50	.00	.00	.00	.00	.00
17	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	.00	36	.00	e.50	.00	.00	.00
22	---	---	---	---	---	.00	.00	.00	e3.7	3.7	.00	.00
23	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	---	---	---	---	---	.00	.00	.00	.00	.00	8.1	.00
27	---	---	---	---	---	.00	e.00	.00	.00	.00	44	.00
28	---	---	---	---	---	.00	e.00	.00	.00	.00	1.7	.00
29	---	---	---	---	---	.00	e.00	.00	.00	.00	25	.00
30	---	---	---	---	---	.00	e.00	.00	.00	.00	5.4	.00
31	---	---	---	---	---	.00	---	.00	---	7.6	1.6	---
TOTAL	---	---	---	---	---	0.00	91.30	0.20	4.20	11.30	86.90	0.80
MEAN	---	---	---	---	---	.00	3.04	.006	.14	.36	2.80	.027
MAX	---	---	---	---	---	.00	36	.20	3.7	7.6	44	.80
MIN	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
AC-FT	---	---	---	---	---	.0	181	.4	8.3	22	172	1.6
†	---	---	---	---	---	0.00	0.68	0.00	0.08	0.00	1.04	0.00

e Estimated
† Precipitation, in inches

09419656 LAS VEGAS CREEK AT LAMB BOULEVARD NEAR LAS VEGAS, NV--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	e.00	1.7	2.0	.00	.00	.00	.00	.00	e.00	e.00
2	.00	e.00	e.00	1.7	1.9	.00	.00	.00	.00	e.00	e.00	e.00
3	.00	e.00	e.00	1.7	1.8	.00	.00	.00	.00	e.00	e.00	e.00
4	.00	e.00	e.00	51	2.1	.00	.00	.00	.00	e.00	e.00	e.00
5	.00	e.00	e.00	2.5	2.4	.00	.00	.00	.00	e.00	e.00	e.00
6	.00	e.00	e.30	2.2	2.3	.00	.00	.19	.00	e.00	e.00	e.00
7	.00	e.00	e.60	2.0	2.3	.00	.00	.22	.00	e.00	.00	e.00
8	.00	e.00	e.90	1.8	2.3	.00	.00	.00	.00	e.00	34	e.00
9	.00	e.00	1.2	1.7	2.7	.00	.00	.00	.00	e.00	21	e.00
10	.00	e.00	1.2	1.6	2.1	.00	.00	.01	.00	e.00	.39	e.00
11	.00	e.00	1.2	1.7	e1.7	.00	.00	.01	.00	e.00	2.2	e.00
12	.00	e.00	1.2	1.6	e1.3	.00	.00	.00	.00	e.00	.26	e.00
13	.00	e.00	1.2	1.7	e1.0	.00	.00	78	.00	e.00	.30	e.00
14	.00	e.00	1.2	1.7	e.50	.00	.00	29	.00	e.00	.28	e.00
15	.00	e.00	1.2	1.9	e.20	.00	.00	6.9	.00	e.00	.15	e.00
16	.00	e.00	1.2	2.0	.00	.00	.00	3.6	.00	e.00	.24	e.00
17	.00	e.00	1.2	2.0	.00	.00	.00	3.0	.00	e.00	24	e.00
18	.00	e.00	1.2	2.0	.00	.00	.00	2.8	.00	e.00	2.1	e.00
19	.00	e.00	1.2	2.0	.00	.00	.00	e2.2	.00	e.00	1.8	e.00
20	e.00	e.00	1.2	1.9	.00	.00	.00	e1.6	.00	e.00	1.5	e.00
21	e.00	e.00	2.9	1.9	.00	.00	.00	e1.0	.00	e.00	1.4	e.00
22	e.00	e.00	1.4	1.9	.00	.00	.00	e.50	.00	e.00	1.4	e.00
23	e.00	e.00	1.4	2.0	.00	.00	.00	.00	.00	e.00	1.4	e.00
24	e.00	e.00	1.4	1.9	.00	.00	.00	.00	.00	e.00	1.2	e.00
25	e.00	e.00	5.3	1.9	.00	1.6	.00	.00	2.4	e.00	1.0	e.00
26	e.00	e.00	1.8	1.9	.00	e.10	.00	.00	.84	e.00	.48	e.00
27	e.00	e.00	1.8	1.9	.00	.00	.00	.00	.00	e.00	e.00	e.00
28	e.00	e.00	1.7	1.9	.00	.00	.00	.00	.00	e.00	e.00	e.00
29	e.00	e.00	1.7	1.9	---	.00	.00	.00	1.2	e.00	e.00	e.00
30	e.00	e.00	1.8	2.0	---	.00	.00	.00	.73	e.00	e.00	e.00
31	.00	---	1.7	2.0	---	.00	---	.00	---	e.00	e.00	---
TOTAL	0.00	0.00	39.10	107.6	26.60	1.70	0.00	129.03	5.17	0.00	95.10	0.00
MEAN	.00	.00	1.26	3.47	.95	.055	.00	4.16	.17	.00	3.07	.00
MAX	.00	.00	5.3	51	2.7	1.6	.00	78	2.4	.00	34	.00
MIN	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	.0	78	213	53	3.4	.0	256	10	.0	189	.0
†	0.00	0.04	0.04	0.52	0.00	0.00	0.00	0.40	0.08	0.00	0.28	0.00

WTR YR 1989 TOTAL 404.30 MEAN 1.11 MAX 78 MIN .00 AC-FT 802

e Estimated
† Precipitation, in inches

09419658 LAS VEGAS WASH NEAR SAHARA AVENUE NEAR LAS VEGAS, NV

LOCATION.--Lat 36°08'47", long 115°03'07", in SW1/4SE1/4 sec.4, T.21 S., R.62 E., Clark County, Hydrologic Unit 15010015, .5 mi east of Nellis Boulevard on Sahara Avenue where Sahara deadends at the Desert Rose Golf Course. Gage is located on right bank and secured to the north (upstream) side of a wood and concrete footbridge.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--March 1988 to current year.

GAGE.--Water-stage recorder and recording tipping bucket rain gage with .04 inch increment. Elevation of gage is 1,715 ft, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s, May 13, 1989, gage height, 15.34 ft from rating curve; minimum daily, 0.58 ft³/s, Sept. 24, 1989.

EXTREMES FOR CURRENT PERIOD.--March to September 1988: Maximum discharge, 490 ft³/s Aug. 29, gage height 14.33 ft; minimum daily, 0.92 ft³/s, May 26.

Water year 1989: Maximum discharge 1350 ft³/s May 13, gage height, 15.34 ft; minimum daily, 0.58 ft³/s Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	e1.1	1.6	1.2	1.2	.96	14	1.5
2	---	---	---	---	---	e1.1	2.0	1.2	1.2	.96	1.0	1.1
3	---	---	---	---	---	1.0	2.3	1.1	1.1	.96	1.1	1.0
4	---	---	---	---	---	1.1	2.5	1.2	1.2	.96	1.0	1.0
5	---	---	---	---	---	1.1	2.3	1.2	1.1	.96	1.0	.96
6	---	---	---	---	---	.97	2.5	1.4	1.2	1.0	1.0	1.0
7	---	---	---	---	---	.95	2.5	1.4	1.3	1.1	1.0	1.0
8	---	---	---	---	---	.96	2.2	1.5	1.3	1.1	1.0	1.1
9	---	---	---	---	---	1.0	1.7	1.6	1.3	1.0	1.0	1.1
10	---	---	---	---	---	1.5	1.7	1.6	1.3	1.1	1.1	1.1
11	---	---	---	---	---	1.2	1.9	1.6	1.2	1.1	.96	1.1
12	---	---	---	---	---	1.2	1.9	1.6	1.2	1.1	.96	1.1
13	---	---	---	---	---	1.2	62	1.5	1.2	1.0	.97	1.2
14	---	---	---	---	---	1.2	e23	1.6	1.3	1.1	.98	1.2
15	---	---	---	---	---	1.4	e6.0	1.6	1.2	1.1	1.0	1.2
16	---	---	---	---	---	1.4	e1.2	1.7	1.1	1.1	1.1	1.2
17	---	---	---	---	---	1.2	1.1	1.7	1.1	1.1	1.1	1.2
18	---	---	---	---	---	1.2	1.1	1.6	1.1	1.1	1.1	1.2
19	---	---	---	---	---	1.2	1.0	1.5	1.1	1.1	1.1	1.2
20	---	---	---	---	---	1.1	.93	1.7	1.1	1.1	1.4	1.2
21	---	---	---	---	---	1.2	60	1.9	1.1	1.1	1.3	1.3
22	---	---	---	---	---	1.2	2.9	1.7	1.3	1.1	1.3	1.3
23	---	---	---	---	---	1.3	1.0	1.3	.99	1.0	1.3	1.3
24	---	---	---	---	---	1.2	1.0	1.0	.96	1.0	1.3	1.4
25	---	---	---	---	---	1.2	1.0	1.0	.96	1.1	1.3	1.4
26	---	---	---	---	---	1.3	1.0	.92	.96	1.1	1.4	1.3
27	---	---	---	---	---	1.3	1.0	.93	.96	1.1	82	1.4
28	---	---	---	---	---	1.3	1.0	.96	.96	1.1	1.1	1.5
29	---	---	---	---	---	1.3	1.0	1.0	.98	1.1	25	1.5
30	---	---	---	---	---	1.3	1.1	1.1	.96	1.1	58	1.5
31	---	---	---	---	---	1.3	---	1.2	---	1.1	1.1	---
TOTAL	---	---	---	---	---	36.98	192.43	42.51	33.93	32.90	208.97	36.56
MEAN	---	---	---	---	---	1.19	6.41	1.37	1.13	1.06	6.74	1.22
MAX	---	---	---	---	---	1.5	62	1.9	1.3	1.1	82	1.5
MIN	---	---	---	---	---	.95	.93	.92	.96	.96	.96	.96
AC-FT	---	---	---	---	---	73	382	84	67	65	414	73
†	---	---	---	---	---	0.00	0.60	0.00	0.00	0.00	0.36	0.00

e Estimated
† Precipitation, in inches

09419658 LAS VEGAS WASH NEAR SAHARA AVENUE NEAR LAS VEGAS, NV--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	e1.5	e1.2	.93	e.74	.76	1.6	1.2	.64	.76	.70	.60
2	1.6	e1.5	e1.2	.93	e.74	.76	1.6	1.2	.64	.78	.67	.60
3	1.5	e1.5	1.2	.93	.74	.76	1.4	1.2	.65	.81	.67	.61
4	1.6	e1.5	1.2	83	.72	.76	1.2	1.3	.70	.76	.66	.61
5	1.7	e1.5	1.2	e1.4	.72	.76	1.2	1.3	.67	.79	.68	.60
6	1.8	e1.5	1.2	e1.0	.84	.76	1.2	1.4	.67	.79	.69	.60
7	1.8	e1.5	1.2	e.94	2.0	.76	1.2	1.4	.68	.76	.67	.59
8	1.5	e1.5	1.2	e.94	1.6	.76	1.1	1.5	.70	.76	4.5	.65
9	1.7	e1.4	1.0	e.94	.80	.77	.98	1.4	.73	.75	60	.77
10	1.7	e1.4	1.0	e.94	.78	.79	.94	1.5	.74	.74	.83	.64
11	1.6	e1.4	1.0	e.94	.70	.79	.99	1.7	.74	.75	6.8	.64
12	1.5	e1.4	1.1	e.94	.70	.77	1.2	1.9	.75	.76	.60	.66
13	1.5	e1.4	1.1	e.90	.70	.79	1.1	95	.76	.76	.59	.62
14	1.5	e6.0	1.2	e.90	.71	.79	.96	68	.76	.75	.59	.62
15	1.5	e2.2	1.1	e.90	.73	.80	.98	.69	.81	.74	.60	.62
16	1.6	e1.8	1.2	e.90	.74	.83	1.0	.67	.78	.72	.61	.62
17	1.6	e1.6	1.2	e.90	.76	.77	1.1	.65	.76	.73	76	.62
18	1.7	e1.6	1.2	e.84	.76	.86	1.0	.63	.85	.73	2.5	.65
19	e1.7	e1.6	1.2	e.86	.76	1.1	1.1	.61	.82	.76	.59	37
20	e1.7	e1.5	1.2	e.86	.76	1.0	1.1	.64	.77	.73	.60	8.4
21	e1.7	e1.5	1.4	e.86	.76	.88	1.1	.64	.76	.72	.63	.61
22	e1.7	e1.5	1.3	e.82	.77	.98	1.1	.64	.76	.71	.66	.61
23	e1.6	e1.5	1.2	e.82	.76	1.3	1.1	.64	.78	.71	.69	.60
24	e1.6	e1.4	1.2	e.82	.77	1.4	1.1	.62	.79	.72	.72	.58
25	e1.6	e1.4	2.6	e.82	.77	1.5	1.1	.63	.78	.70	.71	.59
26	e1.6	e1.4	1.0	e.78	.76	1.8	1.2	.64	.77	.70	.67	.60
27	e1.6	e1.4	.94	e.78	.76	1.5	1.2	.64	.76	.70	.66	.62
28	e1.6	e1.3	.93	e.78	.76	1.4	1.2	.64	.76	.69	.66	.64
29	e1.6	e1.3	.93	e.78	---	1.1	1.2	.65	.79	.69	.68	.64
30	e1.6	e1.3	.93	e.74	---	1.1	1.3	.64	.78	.70	.62	.63
31	e1.5	---	.93	e.74	---	1.4	---	.64	---	.69	.60	---
TOTAL	50.1	49.3	36.46	109.63	23.11	30.50	34.55	190.91	22.35	22.86	166.85	62.84
MEAN	1.62	1.64	1.18	3.54	.83	.98	1.15	6.16	.74	.74	5.38	2.09
MAX	1.8	6.0	2.6	83	2.0	1.8	1.6	95	.85	.81	76	37
MIN	1.5	1.3	.93	.74	.70	.76	.94	.61	.64	.69	.59	.58
AC-FT	99	98	72	217	46	60	69	379	44	45	331	125
†	0.00	0.04	0.08	0.52	0.04	0.00	0.00	0.36	0.00	0.00	0.08	0.00

WTR YR 1989 TOTAL 799.46 MEAN 2.19 MAX 95 MIN .58 AC-FT 1590

e Estimated
† Precipitation, in inches

09419665 SLOAN CHANNEL AT CHARLESTON BOULEVARD NEAR LAS VEGAS, NV

LOCATION.--Lat 36°09'36", long 115°02'39", in SE1/4SE1/4 sec.33, T.20 S., R.62 E., Clark County, Hydrologic Unit 15010015, on upstream side of box culvert that crosses under Charleston Boulevard, 1.0 mi east of Nellis Boulevard.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1988 to September 1989.

GAGE.--Water-stage recorder and recording tipping bucket rain gage with .04 inch increment. Elevation of gage is 1,730 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172 ft³/s, August 17, 1989, gage height 10.56 ft, on basis of slope-conveyance determination of peak flow; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 172 ft³/s, August 17, 1989, gage height 10.56 ft, on basis of slope-conveyance determination of peak flow; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	e2.0	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e1.5	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e1.0	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	3.5	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	3.3	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	2.00	0.00	0.00	0.00	6.80	0.00	0.00	18.30	0.00
MEAN	.00	.00	.00	.065	.00	.00	.00	.22	.00	.00	.59	.00
MAX	.00	.00	.00	2.0	.00	.00	.00	3.5	.00	.00	14	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	.0	.0	4.0	.0	.0	.0	13	.0	.0	36	.0
†	0.00	0.00	0.04	0.56	0.04	0.00	0.00	0.36	0.00	0.00	0.20	0.00

WTR YR 1989 TOTAL 27.10 MEAN .074 MAX 14 MIN .00 AC-FT 54

e Estimated
† Precipitation, in inches

09419673 FLAMINGO WASH NEAR TORREY PINES DRIVE NEAR LAS VEGAS, NV

LOCATION.--Lat 36°06'00", long 114°00'00", in SE1/4SW1/4 sec.3, T.21 S., R.60 E., Clark County, Hydrologic Unit 15010015, .25 mi north of Tropicana Avenue on Torrey Pines Drive. Gage is located on west (upstream) side of concrete box culvert that crosses under road.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1988 to September 1989.

GAGE.--Water-stage recorder and recording tipping bucket rain gage with .04 inch increment. Elevation of gage is 2,335 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 115 ft^3/s May 13, 1989, gage-height 11.54 ft, from rating extended above 8.4 ft^3/s on basis of slope-conveyance of peak flow; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 115 ft^3/s May 13, gage-height 11.54 ft, from rating extended above 8.4 ft^3/s on basis of slope-conveyance of peak flow; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e.00	.00	.00	e.30	e.30	.63	.00	.00	.00	.00
2	.00	.00	e.00	.00	.00	e.30	e.30	.68	.00	.00	.00	.00
3	.00	.00	e.00	.00	.00	e.30	e.30	.66	.00	.00	.00	.00
4	.00	.00	e.00	2.0	.00	e.30	.31	.66	.00	.00	.00	.00
5	.00	.00	e.00	.00	.00	e.30	.30	.58	.00	.00	.00	.00
6	.00	.00	e.00	.00	.00	e.30	.31	.55	.00	.00	.00	.00
7	.00	.00	e.00	.00	.00	e.30	.29	.57	.00	.00	.13	.00
8	.00	.00	e.00	.00	.00	e.30	.31	.54	.00	.00	.00	.00
9	.00	.00	.00	.00	.10	e.30	.30	.53	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	e.30	.31	.54	.06	.00	.00	.00
11	.00	.00	.00	.00	.00	e.30	.31	.55	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	e.30	.31	.49	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	e.30	.35	3.9	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	e.30	.33	2.6	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	e.30	.40	.71	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	e.30	.35	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	2.6	e.30	.33	.00	.00	.00	e2.0	.00
18	.00	.00	.00	.00	e.30	e.30	.37	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	e.30	e.30	.37	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	e.30	e.30	.37	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	e.30	e.30	.39	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	e.30	e.30	.40	.00	.00	.00	.00	.01
23	.00	.00	.00	.00	e.30	e.30	.40	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	e.30	e.30	.45	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	e.30	e.30	.42	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	e.30	e.30	.42	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	e.30	e.30	.40	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	e.30	e.30	.42	.00	.00	.00	.00	.00
29	.00	e.00	.00	.00	---	e.30	.48	.00	.00	.00	.00	.00
30	.00	e.00	.00	.00	---	e.30	.53	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	e.30	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	2.00	6.00	9.30	10.83	14.19	0.06	0.00	2.13	0.01
MEAN	.00	.00	.00	.065	.21	.30	.36	.46	.002	.00	.069	.000
MAX	.00	.00	.00	2.0	2.6	.30	.53	3.9	.06	.00	2.0	.01
MIN	.00	.00	.00	.00	.00	.30	.29	.00	.00	.00	.00	.00
AC-FT	.0	.0	.0	4.0	12	18	21	28	.1	.0	4.2	.02
†	0.00	0.00	0.04	0.52	0.12	0.00	0.00	0.40	0.00	0.00	0.88	0.00

WTR YR 1989 TOTAL 44.52 MEAN .12 MAX 3.9 MIN .00 AC-FT 88

e Estimated
† Precipitation, in inches

09419679 LAS VEGAS WASTEWAY NEAR EAST LAS VEGAS, NV

LOCATION.--Lat 36°06'22", long 115°01'07", in NW1/4SE1/4 sec.23, T.21 S., R.62 E., Clark County, Hydrologic Unit 15010015, on left bank 500 ft west of Hollywood Blvd., and 1.5 mi northeast of East Las Vegas Civic Center.

PERIOD OF RECORD.--May 1979 to September 1983, November 1983 to May 1984, and September 1984 to current year.

GAGE.--Water-stage recorder. Prior to Apr. 7, 1986, at site 50 ft, upstream at datum 1.2 ft lower. Elevation of gage is 1,640 ft, from topographic map.

REMARKS.--Records fair. Flow regulated by sewage treatment plant.

AVERAGE DISCHARGE.--9 years (1980-83, 1985-89), 111 ft³/s, 80,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 734 ft³/s, July 2, 1980, gage height, 5.15 ft, datum then in use; maximum gage height, 6.64 ft, Aug. 17, 1989; minimum daily, 45 ft³/s, Aug. 22, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 412 ft³/s, Aug. 17, gage height, 6.64 ft; minimum daily, 95 ft³/s, Nov. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	e104	e110	e120	133	144	e148	e135	e140	147	151	e153
2	118	e110	e109	e123	129	146	e146	e132	e148	141	144	e148
3	118	e112	e108	e129	124	149	e140	e132	e147	141	144	e150
4	123	e113	e109	114	132	146	148	e132	e151	140	141	e157
5	101	e110	e114	115	132	144	108	e133	e154	138	142	e160
6	126	e115	e110	115	132	148	143	e140	e143	136	141	e160
7	124	e117	112	115	137	146	138	e140	e154	142	142	175
8	128	e116	117	118	136	144	140	e139	e150	140	234	158
9	128	e119	119	127	143	145	142	e130	e153	137	256	159
10	127	e119	112	123	146	148	144	e132	158	133	165	153
11	124	e120	111	122	149	146	146	e137	156	129	198	e138
12	124	e120	111	132	145	140	146	e133	159	136	174	e150
13	125	e121	113	134	146	140	141	e138	159	134	162	e151
14	e125	e120	112	136	145	137	146	e140	155	136	145	e152
15	e121	e118	e108	136	143	134	146	e140	151	133	151	e154
16	e120	e116	e110	139	144	130	150	e142	154	140	143	157
17	e110	e114	e104	138	143	136	155	e137	158	137	248	157
18	e114	e111	e104	129	143	148	144	e132	158	133	147	173
19	e119	e113	e131	132	142	144	151	e127	160	136	142	192
20	e118	e118	e125	132	143	140	152	117	160	142	155	271
21	e116	e116	e110	136	141	144	152	119	161	143	152	152
22	e120	e137	e106	137	140	148	155	123	162	136	143	144
23	e121	e126	e105	137	133	151	152	119	160	135	151	145
24	e121	e95	e105	133	134	152	162	124	160	136	158	145
25	e121	e123	e104	136	135	146	171	125	161	136	160	128
26	e120	e114	e107	131	133	153	169	137	163	141	160	122
27	e120	e101	e144	131	140	151	162	137	158	149	161	147
28	e121	e103	e130	132	137	154	148	135	155	153	159	166
29	e120	e104	e113	133	---	161	141	135	152	154	159	167
30	e114	e104	e115	135	---	152	e130	145	150	150	e160	163
31	e100	---	109	135	---	151	---	e122	---	158	e158	---
TOTAL	3707	3429	3497	4005	3880	4518	4416	4109	4650	4342	5046	4747
MEAN	120	114	113	129	139	146	147	133	155	140	163	158
MAX	128	137	144	139	149	161	171	145	163	158	256	271
MIN	100	95	104	114	124	130	108	117	140	129	141	122
AC-FT	7350	6800	6940	7940	7700	8960	8760	8150	9220	8610	10010	9420

CAL YR 1988 TOTAL 47479 MEAN 130 MAX 246 MIN 95 AC-FT 94170
WTR YR 1989 TOTAL 50346 MEAN 138 MAX 271 MIN 95 AC-FT 99860

e Estimated

09419700 LAS VEGAS WASH NEAR HENDERSON, NV

LOCATION.--Lat 36°05'20", long 114°59'05", in SE1/4SW1/4 sec.30, T.21 S., R.63 E., Clark County, Hydrologic Unit 15010015, on right bank at upstream end of 4.5-ft pipe culvert on road, 3.5 mi north of Henderson, and 6.0 mi upstream from Lake Mead.

DRAINAGE AREA.--2,125 mi², of which 1,518 mi² contribute directly to surface runoff. Prior to Apr. 4, 1961, 2,179 mi², of which 1,571 mi² contributed directly to surface runoff.

PERIOD OF RECORD.--Water years 1957 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1985 to September 1987.
WATER TEMPERATURE: November 1985 to September 1987.

REMARKS.--Discharge includes sewage effluent and some wastewater from industrial plants. City and County sewage treatment plants implemented chemical removal of phosphorus from effluent during water year 1981. Listed herein, the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) may sometimes exceed the respective total due to unavoidable errors associated with subsampling and sample processing, or limitations on precision and accuracy of the analytical procedure.

COOPERATION.--All water-quality sampling and analyses prior to July 1970, plus nutrient analyses for period July 1970 to September 1972, from U.S. Environmental Protection Agency. Data in addition to those listed under "Period of Record" for January 1964 to June 1970 may exist in files of U.S. Environmental Protection Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 3,150 microsiemens Jan. 5, 1987; minimum daily, 1,470 microsiemens July 23, 1986.
WATER TEMPERATURE: Maximum daily, 29.0°C Aug. 4, 6, 1987; minimum daily, 11.5°C Feb. 11, 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH FIELD, (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
OCT										
04...	1000	128	2150	7.50	28.0	24.0	1.90	1.90	13.0	13.0
NOV										
02...	0915	123	2040	7.50	22.0	22.5	1.50	1.50	15.0	14.0
DEC										
06...	1140	125	2050	7.50	18.5	18.0	1.90	2.00	15.0	15.0
JAN										
12...	1030	134	2060	7.60	7.0	12.0	1.00	0.990	15.0	15.0
FEB										
02...	1015	147	2420	7.70	16.0	14.5	1.60	1.50	13.0	13.0
MAR										
03...	1015	141	2360	7.30	7.5	14.5	1.10	0.940	15.0	15.0
APR										
07...	1045	131	2500	7.40	31.0	22.0	1.10	1.00	16.0	15.0
14...	1115	141	2170	--	31.5	23.0	1.20	1.20	15.0	15.0
21...	1230	138	2000	7.30	31.5	24.0	1.30	1.30	15.0	14.0
28...	0930	122	2320	7.40	20.0	20.0	1.30	1.30	14.0	14.0
MAY										
05...	0900	113	2380	7.40	29.5	23.5	1.10	1.10	14.0	14.0
12...	1015	102	2320	7.40	18.0	19.0	1.20	1.20	14.0	14.0
19...	1100	125	2050	7.50	27.0	22.5	1.30	1.30	14.0	14.0
26...	0915	122	2180	7.60	22.5	19.5	1.10	1.10	12.0	12.0
JUN										
02...	0815	140	2100	7.40	23.0	23.0	1.20	1.10	13.0	15.0
09...	0915	129	2480	7.60	--	--	1.30	1.20	13.0	14.0
15...	0737	124	2230	7.50	27.0	25.0	1.10	1.10	15.0	--
23...	0715	118	2130	7.50	23.0	23.0	0.700	0.760	15.0	--
30...	0730	141	2150	7.50	21.0	23.0	0.800	0.790	14.0	13.0
JUL										
07...	0750	142	2030	7.60	27.0	25.0	0.600	0.610	14.0	14.0
14...	0700	109	2230	7.50	24.5	24.5	0.600	0.610	15.0	12.0
21...	0700	117	2010	7.50	28.0	26.0	0.600	0.570	15.0	13.0
28...	0645	114	2110	7.40	27.0	26.0	0.600	0.620	13.0	13.0
AUG										
04...	0715	130	2090	7.60	23.0	26.0	0.800	0.820	13.0	13.0
11...	0645	132	2020	7.70	23.0	26.0	0.700	0.710	14.0	13.0
18...	0800	163	1830	7.70	24.0	30.0	0.700	<0.100	9.50	9.10
24...	0845	120	2150	7.50	26.5	24.0	0.700	<0.100	14.0	13.0
SEP										
01...	0830	142	2020	7.40	18.0	23.0	0.800	0.770	13.0	13.0
08...	0915	145	3450	7.50	26.5	22.0	0.900	0.840	13.0	12.0
15...	0815	147	2090	7.40	16.0	21.5	0.800	0.760	14.0	13.0
22...	0800	149	2200	7.50	16.0	21.5	1.10	0.950	12.0	12.0
29...	0915	158	2110	7.40	21.0	23.0	0.800	0.670	12.0	12.0

09419700 LAS VEGAS WASH NEAR HENDERSON, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
04...	1.0	1.0	14	14	16	16	0.750	0.670	0.490
NOV									
02...	1.0	2.0	16	16	17	17	0.940	0.670	0.570
DEC									
06...	1.0	1.0	16	16	18	18	0.920	0.520	0.380
JAN									
12...	3.0	0.0	18	15	19	16	0.660	0.410	0.300
FEB									
02...	2.0	2.0	15	15	17	17	0.540	0.330	0.250
MAR									
03...	1.0	0.0	16	13	17	14	0.690	0.390	0.290
APR									
07...	0.0	0.0	15	15	16	16	0.880	0.720	0.590
14...	3.0	0.0	18	15	19	16	0.690	0.540	0.440
21...	1.0	0.0	16	11	17	12	0.830	0.430	0.360
28...	2.0	0.0	16	14	17	15	0.700	0.390	0.320
MAY									
05...	2.0	0.0	16	13	17	14	0.810	0.560	0.470
12...	0.0	0.0	14	14	15	15	0.620	0.490	0.440
19...	0.0	1.0	14	15	15	16	0.830	0.520	0.460
26...	1.0	0.0	13	10	14	11	0.810	0.600	0.470
JUN									
02...	4.0	0.0	17	15	18	16	0.660	0.570	0.460
09...	4.0	0.0	17	14	18	15	0.610	0.560	0.460
15...	1.0	--	16	12	17	13	0.570	0.440	0.380
23...	1.0	--	16	15	17	16	0.820	0.690	0.580
30...	7.0	1.0	21	14	22	15	0.480	0.390	0.330
JUL									
07...	2.0	3.0	16	17	17	18	0.920	0.780	0.610
14...	1.0	2.0	16	14	17	15	0.710	0.630	0.530
21...	0.0	3.0	15	16	16	17	0.820	0.640	0.520
28...	1.0	0.0	14	10	15	11	0.950	0.700	0.630
AUG									
04...	2.0	1.0	15	14	16	15	0.770	0.590	0.530
11...	4.0	6.0	18	19	19	20	0.740	0.560	0.450
18...	0.0	0.0	9.5	5.8	10	--	0.490	0.420	0.330
24...	0.0	0.0	14	3.3	15	--	0.760	0.500	0.430
SEP									
01...	5.0	3.0	18	16	19	17	0.860	0.640	0.500
08...	5.0	5.0	18	17	19	18	0.950	0.690	0.530
15...	0.0	0.0	14	13	15	14	0.870	0.630	0.600
22...	4.0	3.0	16	15	17	16	0.710	0.160	0.150
29...	7.0	2.0	19	14	20	15	0.670	0.120	0.090

09419753 LAS VEGAS WASH ABOVE THREE KIDS WASH BELOW HENDERSON, NV

LOCATION.--Lat 36°05'53", long 114°56'42", in NW1/4NE1/4 sec.28, T.21 S., R.63 E., Clark County, Hydrologic Unit 5010015, in Lake Mead National Recreation Area, on left bank 0.1 mi upstream from Three Kids Wash, 2.7 mi southwest of Northshore Road Bridge, and 3.0 mi northeast of Henderson.

DRAINAGE AREA.--2,180 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,460 ft, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 299 ft^3/s, Aug. 13, 1988, gage height, 6.99 ft; minimum daily, 114 ft^3/s, June 2, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 299 ft^3/s, Aug. 13, gage height, 6.99 ft; minimum daily, 122 ft^3/s, Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	172	151	161	161	161	151	151	161	153	167	171
2	151	156	156	160	161	164	156	151	163	151	163	162
3	148	145	161	162	157	165	158	151	162	156	165	169
4	154	147	164	215	159	177	155	143	160	159	165	168
5	138	150	168	197	169	180	122	145	158	159	164	170
6	160	151	163	171	166	177	151	150	157	157	165	128
7	156	152	153	164	181	162	152	148	161	152	164	168
8	160	150	e155	161	185	159	148	146	157	149	176	161
9	160	152	e158	163	186	158	150	137	161	150	212	159
10	159	151	e159	165	175	159	149	144	160	153	173	158
11	159	152	e160	161	181	159	146	137	161	148	178	158
12	160	153	e160	163	191	153	141	139	163	153	183	156
13	159	152	e160	163	172	151	143	e150	170	157	181	130
14	141	153	e152	172	176	152	149	e153	168	157	168	168
15	141	152	e150	177	177	150	153	e158	160	158	163	166
16	143	151	e155	204	175	150	154	e155	156	159	162	162
17	142	154	150	208	176	156	162	e158	154	158	160	165
18	143	156	153	211	179	158	160	158	148	153	196	148
19	145	158	153	172	172	159	159	152	144	157	167	170
20	143	160	152	178	190	159	167	154	143	159	166	203
21	146	163	143	172	169	164	167	154	136	161	174	173
22	156	155	143	171	162	162	180	157	137	155	171	165
23	162	149	146	169	168	163	177	154	151	156	166	160
24	170	158	147	163	178	163	172	156	146	158	166	161
25	170	152	151	165	168	157	166	158	124	158	169	157
26	165	156	150	170	176	164	160	162	138	157	172	150
27	161	153	147	164	167	158	155	159	147	162	176	161
28	153	155	151	164	160	161	162	159	157	162	176	173
29	154	152	153	162	---	162	166	161	160	165	175	174
30	169	151	156	166	---	164	159	167	152	164	179	174
31	184	---	156	173	---	161	---	134	---	166	180	---
TOTAL	4800	4611	4776	5367	4837	4988	4690	4701	4615	4862	5342	4888
MEAN	155	154	154	173	173	161	156	152	154	157	172	163
MAX	184	172	168	215	191	180	180	167	170	166	212	203
MIN	138	145	143	160	157	150	122	134	124	148	160	128
AC-FT	9520	9150	9470	10650	9590	9890	9300	9320	9150	9640	10600	9700

WTR YR 1989 TOTAL 58477 MEAN 160 MAX 215 MIN 122 AC-FT 116000

e Estimated

09419753 LAS VEGAS WASH ABOVE THREE KIDS WASH BELOW HENDERSON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1988 to current year.
CHEMICAL ANALYSES, SPECIFIC CONDUCTANCES, AND WATER TEMPERATURES: Beginning May to September 1988, weekly; October 1988 to March 1989, monthly; April to September 1989, weekly.

REMARKS.--Discharge includes sewage effluent and wastewater from industrial plants. Listed herein, the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) may sometimes exceed the respective total due to unavoidable errors associated with subsampling and sample processing, or limitations on precision and accuracy of the analytical procedure.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
OCT										
04...	1215	144	2130	7.80	29.0	25.0	2.60	2.60	12.0	11.0
NOV										
02...	1215	160	2200	7.50	28.5	23.0	2.50	2.20	13.0	14.0
DEC										
06...	1315	170	2220	7.60	17.5	18.5	2.30	2.40	14.0	14.0
JAN										
12...	1300	182	2280	7.70	13.0	14.0	1.40	1.40	14.0	15.0
FEB										
02...	1145	159	2610	7.80	16.5	16.0	2.00	2.00	13.0	12.0
MAR										
03...	1245	180	2230	7.40	13.0	17.0	1.70	1.50	13.0	15.0
APR										
07...	1330	158	2490	7.40	31.0	25.0	2.00	1.90	14.0	15.0
14...	1345	161	2240	--	31.0	25.0	1.90	1.80	14.0	13.0
21...	1230	169	2420	7.50	32.0	27.0	1.90	1.90	13.0	13.0
28...	1200	168	2480	7.40	23.0	21.5	2.00	2.00	13.0	13.0
MAY										
05...	1045	148	2660	7.50	29.5	24.5	1.80	1.80	13.0	12.0
12...	1230	130	2520	7.50	23.0	23.0	2.00	1.90	13.0	13.0
19...	1230	158	2200	7.60	28.5	24.5	1.70	1.70	13.0	13.0
26...	1100	154	2480	7.50	25.0	21.0	1.70	1.70	13.0	11.0
JUN										
02...	1015	153	2270	7.60	23.0	23.0	1.70	1.70	11.0	13.0
09...	1115	142	2480	7.70	--	--	2.10	2.00	11.0	12.0
15...	0905	152	--	--	--	--	1.40	1.40	13.0	8.00
23...	0830	146	2440	7.60	36.0	23.0	1.90	1.80	12.0	8.00
30...	0845	130	2300	7.60	29.0	24.0	1.50	1.50	12.0	12.0

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
04...	3.0	1.0	15	12	18	15	0.690	0.590	0.480
NOV									
02...	1.0	0.0	14	14	17	16	0.880	0.610	0.490
DEC									
06...	3.0	0.0	17	14	19	16	1.00	0.450	0.360
JAN									
12...	5.0	3.0	19	18	20	19	0.870	0.330	0.230
FEB									
02...	1.0	1.0	14	13	16	15	0.510	0.310	0.230
MAR									
03...	4.0	0.0	17	15	19	17	0.700	0.340	0.250
APR									
07...	4.0	1.0	18	16	20	18	0.720	0.580	0.470
14...	3.0	0.0	17	13	19	15	0.620	0.490	0.410
21...	3.0	0.0	16	9.4	18	11	0.710	0.430	0.350
28...	1.0	0.0	14	12	16	14	0.690	0.370	0.300
MAY									
05...	1.0	0.0	14	12	16	14	0.750	0.520	0.440
12...	0.0	0.0	13	13	15	15	0.910	0.470	0.420
19...	0.0	0.0	2.6	1.3	4.3	3.0	0.960	0.510	0.460
26...	0.0	--	9.7	--	11	--	0.770	0.550	0.440
JUN									
02...	4.0	0.0	15	13	17	15	0.570	0.770	0.670
09...	4.0	0.0	15	11	17	13	0.550	0.510	0.420
15...	3.0	5.0	16	13	17	14	0.690	0.640	0.550
23...	1.0	3.0	13	11	15	13	0.450	0.420	0.370
30...	2.0	2.0	14	14	15	15	0.440	0.370	0.300

COLORADO RIVER MAIN STEM

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV

LOCATION--Lat 36°00'58", long 114°44'13", in NE1/4SW1/4 sec.3, T.30 N., R.23 W., Gila and Salt River meridian, Mohave-Clark Counties, Hydrologic Unit 15010005, in center of Hoover Dam on Colorado River.

DRAINAGE AREA.--171,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

RESERVOIR-CONTENTS RECORDS

PERIOD OF RECORD.--Contents: February 1935 to current year. Evaporation: March 1952 to current year. Diversions (monthly totals only): to Boulder City area, since October 1935; to Henderson and Las Vegas areas, since April 1942; combined diversions since October 1968. Prior to 1946 published as "at Boulder Dam."

REVISED RECORDS.--WSP 899: 1935-39.

GAGE.--Water-stage indicator read once daily at midnight, with supplementary water-stage recorder. Datum of gage is 0.00 ft to Local Powerhouse datum and is 0.40 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete arch-gravity dam; storage began Feb. 1, 1935; dam completed Mar. 1, 1936. Total capacity (based on 1963-64 resurvey by Coast and Geodetic Survey; capacity table put into use Apr. 1, 1967), 29,755,000 acre-ft, consisting of the following: Dead storage, 2,378,000 acre-ft below gage height 850.0 ft--gage sills in outlet towers; usable contents, 26,159,000 acre-ft between gage heights 895.0 ft and 1,211.4 ft (top of automatic spillway gates in raised position; and uncontrolled storage, 1,218,000 acre-ft between gage heights 1,221.4 ft) and 1,229.0 ft (maximum water surface). Reservoir is used to store water for flood control, irrigation, municipal water supply, and power development. Figures given herein represent usable contents.

DIVERSIONS FROM LAKE MEAD.--Diversions to Boulder City area at dam; diversions to Henderson and Las Vegas areas from intakes 6 mi upstream. Diversions measured by Venturi meters. Water used for municipal and industrial purposes.

COOPERATION.--Records of gage height and contents furnished by Bureau of Reclamation. Records of diversions from Lake Mead furnished by Bureau of Reclamation and Colorado River Commission of Nevada.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,790,000 acre-ft, July 29, 30, 1941 (on basis of original bathymetry), gage height, 1,220.45 ft; maximum gage height, 1,225.85 ft, July 24, 1983 (equivalent to 26,868,000 acre-ft on basis of resurveyed bathymetry of 1963-64); minimum contents (since 1940), 10,695,000 acre-ft, Apr. 26, 1956, gage height, 1,083.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 23,288,000 acre-ft, Feb. 26, gage height, 1,202.55 ft; minimum, 21,404,000 acre-ft, Aug. 25, gage height, 1,189.33 ft.

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

RESERVOIR STORAGE (THOU AC-FT) WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22800	22783	22841	22883	23128	23257	22974	22519	21845	21558	21454	21413
2	22809	22776	22834	22903	23133	23236	22970	22493	21832	21563	21442	21417
3	22812	22772	22832	22894	23131	23238	22954	22464	21831	21557	21436	21432
4	22808	22776	22834	22897	23163	23229	22935	22443	21818	21554	21429	21440
5	22805	22777	22837	22889	23184	23235	22916	22414	21807	21542	21431	21429
6	22809	22779	22826	22889	23178	23232	22907	22393	21787	21535	21439	21417
7	22815	22770	22821	22897	23181	23220	22893	22380	21768	21518	21438	21417
8	22816	22767	22813	22909	23194	23212	22889	22356	21751	21533	21432	21429
9	22819	22763	22806	22913	23212	23197	22886	22323	21733	21535	21429	21440
10	22815	22772	22815	22919	23236	23182	22870	22304	21726	21533	21431	21457
11	22816	22777	22822	22929	23255	23172	22861	22293	21713	21539	21429	21457
12	22805	22786	22824	22939	23276	23160	22844	22272	21701	21539	21439	21453
13	22805	22786	22819	22951	23277	23144	22831	22265	21688	21536	21439	21435
14	22811	22786	22822	22968	23276	23128	22811	22240	21666	21535	21425	21435
15	22818	22780	22822	22989	23267	23105	22800	22220	21652	21531	21424	21436
16	22821	22766	22819	22999	23267	23076	22790	22202	21643	21529	21417	21446
17	22816	22766	22831	23002	23260	23072	22767	22174	21643	21519	21425	21451
18	22811	22773	22838	23002	23267	23067	22741	22148	21643	21507	21420	21461
19	22806	22780	22842	23016	23276	23069	22720	22135	21635	21482	21429	21475
20	22808	22798	22834	23022	23280	23061	22704	22103	21624	21467	21439	21482
21	22815	22809	22828	23038	23273	23051	22681	22090	21603	21456	21432	21486
22	22822	22822	22819	23056	23267	23040	22672	22067	21592	21467	21421	21485
23	22826	22822	22838	23063	23263	23037	22661	22045	21581	21483	21407	21499
24	22829	22832	22854	23066	23264	23026	22638	22011	21588	21474	21409	21511
25	22822	22839	22858	23066	23279	23021	22615	21991	21592	21472	21404	21514
26	22821	22847	22864	23060	23288	23019	22592	21973	21583	21465	21408	21514
27	22815	22839	22865	23066	23285	23009	22567	21956	21567	21458	21420	21518
28	22812	22841	22868	23077	23279	22997	22556	21939	21557	21464	21421	21524
29	22811	22837	22877	23096	---	22979	22540	21919	21556	21465	21413	21528
30	22803	22838	22879	23112	---	22973	22534	21888	21553	21464	21411	21528
31	22793	---	22880	23120	---	22957	---	21859	---	21458	21414	---
MAX	22829	22847	22880	23120	23288	23257	22974	22519	21845	21563	21454	21528
MIN	22793	22763	22806	22883	23128	22957	22534	21859	21553	21456	21404	21413
*	1199.15	1199.46	1199.75	1201.40	1202.49	1200.28	1197.35	1192.59	1190.40	1189.72	1189.40	1190.22
#	-2000	+45000	+42000	+240000	+159000	-322000	-423000	-675000	-306000	-95000	-44000	+114000
##	19220	14710	13180	12900	13480	19300	23730	23190	24550	29050	26390	23560
**	4.8	6.8	4.6	3.5	3.1	e4.2	4.5	5.2	4.9	7.6	9.8	4.8
a	57700	82200	55100	41800	38200	e51000	54300	61300	56700	88200	112600	56000

CAL YR 1988 MAX 24673 MIN 22763 # -1670000 ## 209720 ** 56.3 a 688300
WTR YR 1989 MAX 23288 MIN 21404 # -1270000 ## 243260 ** 63.8 a e755100

* Gage height, in feet, at end of month.
\# Change in contents, in acre-feet.
\## Diversions, in acre-feet.
** Gross evaporation, in inches, from Lake Mead.
a Gross evaporation, in acre-feet, from Lake Mead.
e Estimated

NOTE.--Figures of gross evaporation are based on data obtained on Lake Mead by the U.S. Bureau of Reclamation and at Las Vegas by National Weather Service, and are computed by the Geological Survey. Only the mass-transfer method described in Geological Survey Professional Paper 298 is used. "Gross" denotes the total evaporation from the lake without deduction for precipitation on the lake surface for natural losses that would have occurred in the area now occupied by the lake. Starting February 1976, coefficient to 0.00179.

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 36°00'55", long 114°44'16", in NE1/4SW1/4 sec.3, T.30 N., R.23 W., Gila and Salt River meridian, or SW1/4NE1/4 sec.29, T.22 S., R.65 E., Mount Diablo meridian, Mohave-Clark Counties, Hydrologic Unit 15030101, in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--171,700 mi², approximately, including 3,959 mi² in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year (prior to April 1934, monthly discharge only, published in WSP 1313). Published as "near Willow Beach" 1933-39 and as "below Boulder Dam" 1939-45.

GAGE.--Acoustical velocity meters on each turbine in Hoover Dam. Prior to Nov. 1, 1939, water-stage recorder at site 9 mi downstream at datum 594.8 ft, above National Geodetic Vertical Datum of 1929. Nov. 1, 1939, to June 30, 1958, water-stage recorder at site 0.8 mi downstream at datum 600.35 ft, above National Geodetic Vertical Datum of 1929. July 1, 1958, to Nov. 7, 1979, totalizing flowmeter on each turbine.

REMARKS.--Flow regulated by Hoover Dam on Lake Mead since Feb. 1, 1935. Many diversions above station for irrigation, industrial, and municipal use.

COOPERATION.--Records furnished by Bureau of Reclamation.

AVERAGE DISCHARGE.--55 years (water years 1935-89), 14,050 ft³/s, 10,179,000 acre-ft/yr, unadjusted for storage in Lake Mead.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 50,800 ft³/s, July 29, 1983; no flow at Hoover Dam part of Feb. 10, 1935; minimum daily, 152 ft³/s, Feb. 10, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 21,800 ft³/s, May 31; minimum daily, 4,780 ft³/s, Oct. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7950	8920	9340	7230	9220	14000	12700	16600	17400	12000	12100	13700
2	8090	8230	9260	7660	9550	15500	11900	18900	15700	11500	15300	10800
3	9790	8670	7920	8720	10000	16300	16600	20100	13800	16100	16300	6290
4	9000	8040	8240	9530	7200	12400	18800	18700	12400	12700	16000	10200
5	9510	6310	9060	9470	8350	11000	15400	21600	16100	17700	13800	15900
6	9020	6320	9660	12800	13200	16300	16600	19300	17600	16000	11300	11800
7	8050	9550	9960	9780	11500	14200	16100	15300	15800	16000	14000	9640
8	8450	8480	9860	7720	8270	15500	14300	19700	16900	12600	13200	9800
9	6710	7650	9900	9560	8810	16000	13600	20100	16400	11300	14400	8330
10	9880	6830	8460	8510	8150	16600	16900	15800	14000	18200	14800	6900
11	7960	8960	7890	7820	5950	11600	14900	18200	14200	14800	15900	10900
12	8870	7570	10100	7810	5110	10600	18400	19400	19000	16000	11800	11700
13	8930	7670	10200	7160	8020	15500	17000	14800	17300	17400	14800	12000
14	4780	9830	8200	6160	9400	16000	19200	15700	19300	16600	16800	13600
15	6410	9640	10500	5920	9480	16400	15200	16800	17000	12800	13000	12300
16	8430	10400	10300	7690	10100	15800	13100	16000	18800	11600	15200	8850
17	11700	9070	6910	7780	10900	16400	19900	17100	14500	16200	14700	7370
18	10800	8970	7130	8040	6310	13300	19500	18900	14200	15600	13200	9800
19	10400	8470	9250	7500	7830	11700	17400	19800	18900	20100	10700	7960
20	8940	7880	10700	8500	9660	14700	18300	18100	17500	19400	10600	9610
21	8380	9590	11400	6610	11900	13900	17100	16200	17800	17700	15600	12500
22	6310	9400	9720	5570	10200	14800	12600	19200	18100	11100	14900	13800
23	4960	9650	11000	7720	12100	14900	14000	17700	17400	10800	15200	7760
24	7720	8370	8580	7630	11900	14400	16900	21000	13600	14000	15100	9370
25	8690	9450	8590	8740	9000	12200	18600	18500	12700	12900	15600	12400
26	7680	7790	9670	9260	9670	12700	18900	18500	16700	12500	10800	12900
27	8330	8420	10800	8910	11200	17200	20700	16000	16600	14000	10700	11700
28	9090	9480	9950	7760	13700	14300	19300	16800	15700	15100	15400	14000
29	9380	9720	9280	6320	---	16100	16000	18400	16100	12600	16700	13600
30	9540	8990	9670	9420	---	13700	11700	21600	15800	13300	15900	11500
31	11100	---	8940	12200	---	14700	---	21800	---	15900	15300	---
TOTAL	264850	258320	290440	255500	266680	448700	491600	566600	487300	454500	439100	326980
MEAN	8544	8611	9369	8242	9524	14470	16390	18280	16240	14660	14160	10900
MAX	11700	10400	11400	12800	13700	17200	20700	21800	19300	20100	16800	15900
MIN	4780	6310	6910	5570	5110	10600	11700	14800	12400	10800	10600	6290
AC-FT	525300	512400	576100	506800	529000	890000	975100	1124000	966600	901500	871000	648600

CAL YR 1988 TOTAL 4748930 MEAN 12980 MAX 20600 MIN 4780 AC-FT 9420000
WTR YR 1989 TOTAL 4550570 MEAN 12470 MAX 21800 MIN 4780 AC-FT 9026000

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1940 to current year.

PERIOD OF DAILY RECORD.--
CHEMICAL ANALYSES: October 1939 to September 1944, October 1950 to September 1957, October 1967 to March 1970.
SPECIFIC CONDUCTANCE: October 1939 to July 1957, October 1977 to September 1987.
WATER TEMPERATURE: October 1941 to July 1957, October 1977 to September 1987.

REMARKS.--Samples collected 0.3 mi downstream from gaging station in Hoover Dam powerhouse. Unpublished chemical analyses for period October 1939 to September 1940 available from the U.S. Geological Survey in Tucson, Ariz. NASQAN network samples currently collected bimonthly.

COOPERATION.--Instantaneous-discharge data provided by U.S. Bureau of Reclamation.

EXTREMES MEASURED FOR PERIOD OF DAILY RECORD SINCE OCTOBER 1977.--
SPECIFIC CONDUCTANCE: Maximum, 1,180 microsiemens June 10, 1980; minimum, 787 microsiemens Apr. 20, 1987.
WATER TEMPERATURE: Maximum, 21.5°C July 23, 1983; minimum, 9.0°C Jan. 10, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
NOV												
29...	1400	10300	850	8.00	13.0	12.5	1.0	7.6	72	<2	<2	270
JAN												
23...	1100	18900	897	8.00	14.0	12.0	1.6	8.5	81	--	--	320
MAR												
13...	1115	28300	890	7.90	32.0	11.0	0.50	9.5	86	K2	<2	290
MAY												
23...	1130	19000	920	7.90	27.0	12.0	0.40	9.2	88	<2	K2	290
JUL												
18...	1300	22300	810	8.40	37.0	12.0	0.30	7.8	74	<2	<2	290
AUG												
29...	1030	16700	1020	8.10	29.0	11.0	0.50	10.8	100	<2	<2	290

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV												
29...	67	25	73	2	3.7	173	142	210	58	0.30	9.4	563
JAN												
23...	84	26	74	2	4.0	184	151	230	62	0.30	9.2	571
MAR												
13...	70	27	81	2	3.9	159	130	230	63	0.30	9.4	589
MAY												
23...	70	27	80	2	4.0	162	133	230	64	0.30	9.5	578
JUL												
18...	70	27	81	2	4.1	156	128	230	66	0.30	9.6	576
AUG												
29...	70	27	81	2	4.0	167	137	230	67	0.30	9.4	595

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV												
29...	538	0.77	1.06	0.040	1.10	0.200	0.220	0.60	0.80	0.280	0.140	0.130
JAN												
23...	582	0.78	--	<0.010	0.370	0.040	0.030	0.96	1.0	0.010	0.010	<0.010
MAR												
13...	565	0.80	--	<0.010	0.270	0.030	0.020	0.47	0.50	0.030	0.010	0.020
MAY												
23...	567	0.79	--	<0.010	0.330	0.030	0.020	0.27	0.30	0.010	0.010	<0.010
JUL												
18...	566	0.78	--	<0.010	0.330	0.020	0.010	0.58	0.60	0.020	<0.010	<0.010
AUG												
29...	573	0.81	--	<0.010	0.310	0.020	0.030	0.28	0.30	0.010	0.020	<0.010

K: NON-IDEAL COLONY COUNT

09422500 LAKE MOHAVE AT DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'50", long 114°34'07", in SW1/4SW1/4 sec.18, T.21 N., R.21 W., Gila and Salt River meridian, Mohave County, Hydrologic Unit 15030101, on forebay structure on Arizona side of Davis Dam on Colorado River, 29 mi west of Kingman, Ariz., and 67 mi downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi², approximately, including 3,959 mi² in Great Divide basin in southern Wyoming, which is noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill and rockfill dam; dam completed in April 1949 and storage began Jan. 17, 1950. Usable capacity, 1,810,000 acre-ft between elevations 533.39 ft - lowest point of penstock outlet - and 647.0 ft - top of spillway gates. A small amount of additional storage is available through use of splashboards on the spillway gates. Dead storage, 8,530 acre-ft below elevation 533.39 ft. Lake is used for power development, regulation for irrigation demand, and to satisfy requirements of the Treaty of 1944 with Mexico. Figures given herein represent usable contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,811,000 acre-ft May 24, 1958, May 29, 1963, May 29, 1982; maximum elevation, 647.04 ft May 29, 1963, May 29, 1982; minimum contents (since 1952), 1,168,000 acre-ft Sept. 8, 1953, elevation, 622.15 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,788,000 acre-ft June 17, elevation, 646.22 ft; minimum, 1,376,000 acre-ft Sept. 26, elevation, 630.70 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

630	1,359,000	638	1,564,000
632	1,409,000	641	1,644,000
635	1,486,000	644	1,726,000
		647	1,810,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1506000	1503000	1535000	1608000	1719000	1701000	1638000	1560000	1773000	1768000	1580000	1483000
2	1504000	1503000	1534000	1610000	1721000	1703000	1633000	1560000	1773000	1761000	1576000	1477000
3	1502000	1503000	1531000	1619000	1726000	1706000	1630000	1570000	1773000	1756000	1575000	1467000
4	1499000	1504000	1532000	1630000	1729000	1696000	1634000	1570000	1768000	1745000	1572000	1459000
5	1498000	1501000	1531000	1642000	1736000	1695000	1629000	1578000	1765000	1745000	1567000	1465000
6	1499000	1500000	1530000	1658000	1741000	1698000	1625000	1583000	1768000	1738000	1561000	1466000
7	1496000	1501000	1534000	1668000	1741000	1697000	1620000	1584000	1773000	1734000	1553000	1460000
8	1492000	1499000	1537000	1677000	1735000	1702000	1617000	1592000	1776000	1721000	1545000	1455000
9	1488000	1494000	1537000	1688000	1732000	1704000	1614000	1603000	1776000	1711000	1533000	1449000
10	1491000	1491000	1534000	1697000	1727000	1704000	1607000	1603000	1773000	1708000	1544000	1440000
11	1487000	1492000	1536000	1706000	1717000	1700000	1597000	1611000	1771000	1700000	1542000	1437000
12	1485000	1492000	1537000	1710000	1712000	1699000	1592000	1619000	1773000	1696000	1529000	1432000
13	1482000	1493000	1538000	1715000	1706000	1699000	1591000	1624000	1775000	1696000	1531000	1429000
14	1475000	1497000	1535000	1722000	1704000	1697000	1614000	1630000	1784000	1696000	1535000	1432000
15	1470000	1499000	1540000	1727000	1704000	1701000	1582000	1635000	1784000	1686000	1531000	1430000
16	1469000	1501000	1542000	1733000	1705000	1705000	1576000	1636000	1787000	1674000	1525000	1423000
17	1475000	1504000	1539000	1737000	1706000	1709000	1576000	1644000	1782000	1671000	1520000	1415000
18	1479000	1503000	1540000	1732000	1699000	1708000	1576000	1651000	1780000	1665000	1511000	1409000
19	1485000	1503000	1543000	1727000	1700000	1708000	1570000	1662000	1780000	1669000	1497000	1400000
20	1488000	1505000	1550000	1728000	1696000	1704000	1566000	1669000	1775000	1671000	1491000	1394000
21	1489000	1506000	1556000	1729000	1697000	1697000	1563000	1676000	1780000	1670000	1493000	1391000
22	1488000	1508000	1560000	1726000	1696000	1692000	1555000	1682000	1787000	1656000	1491000	1393000
23	1485000	1509000	1567000	1724000	1698000	1689000	1550000	1689000	1785000	1647000	1493000	1384000
24	1487000	1511000	1570000	1719000	1697000	1677000	1549000	1714000	1778000	1641000	1490000	1384000
25	1490000	1516000	1577000	1723000	1694000	1669000	1550000	1721000	1777000	1630000	1485000	1384000
26	1492000	1516000	1587000	1722000	1696000	1667000	1555000	1726000	1778000	1617000	1475000	1386000
27	1492000	1520000	1591000	1719000	1696000	1666000	1564000	1732000	1781000	1607000	1469000	1386000
28	1490000	1527000	1596000	1720000	1696000	1658000	1568000	1740000	1785000	1599000	1470000	1390000
29	1491000	1532000	1596000	1716000	---	1656000	1571000	1750000	1782000	1589000	1475000	1393000
30	1496000	1536000	1598000	1712000	---	1653000	1563000	1760000	1776000	1591000	1485000	1391000
31	1501000	---	1606000	1715000	---	1645000	---	1771000	---	1590000	1486000	---
MAX	1506000	1536000	1606000	1737000	1741000	1709000	1638000	1771000	1787000	1768000	1580000	1483000
MIN	1469000	1491000	1530000	1608000	1694000	1645000	1549000	1560000	1765000	1589000	1469000	1384000
(*)	635.60	636.91	639.55	643.60	642.89	641.02	637.96	645.60	645.78	638.95	635.02	631.30
(**)	-11000	+35000	+70000	+109000	-19000	-51000	-82000	+208000	+5000	-186000	-104000	-95000

CAL YR 1988 MAX 1789000 MIN 1418000 (**) +104000
WTR YR 1989 MAX 1787000 MIN 1384000 (**) -121000

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

10172907 THOUSAND SPRINGS CREEK NEAR WILKINS, NV

LOCATION.--Lat 41°27'22", long 114°46'51", in SW1/4NW1/4 sec.7, T.41 N., R.64 E., Elko County, Hydrologic Unit 16020307, on left bank 26.5 mi north of Wells.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,750 ft, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 384 ft³/s, Feb. 19, 1986, gage height, 4.35 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 9	2200	*315	*3.98	(a)		108	unknown

(a) Sometime during the period Mar. 19 to May 1.
No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e.03	e.05	e.07	6.0	e64	e48	e9.0	1.1	.00	.00
2	.00	.00	e.03	e.05	e.07	9.7	e60	e47	e7.4	.97	.00	.00
3	.00	.00	e.04	e.05	e.07	12	e58	e48	e6.6	e.83	.00	.00
4	.00	.00	e.05	e.05	e.07	7.9	e56	e52	e6.0	e.64	.00	.00
5	.00	.00	e.05	e.05	e.07	15	e59	e56	e5.4	e.14	.00	.00
6	.00	.00	e.04	e.05	e.07	19	e63	e61	e5.0	e.09	.00	.00
7	.00	.00	e.04	e.05	e.07	41	e70	e68	e4.8	.00	.00	.00
8	.00	.00	e.04	e.05	e.07	88	e86	e70	e4.4	.00	.00	.00
9	.00	e.00	e.04	e.05	e.07	218	e94	e73	e4.2	.00	.00	.00
10	.00	e.00	e.05	e.05	e.07	197	e102	e72	e4.2	.00	.00	.00
11	.00	e.00	e.05	e.05	e.07	140	e100	e70	e4.1	.00	.00	.00
12	.00	e.00	e.05	e.05	e.07	121	e98	e67	e3.9	.00	.00	.00
13	.00	e.00	e.05	e.05	e.07	109	e93	e60	e3.8	e.01	.00	.00
14	.00	e.00	e.05	e.05	e.08	65	e91	e53	e3.2	.11	.00	.00
15	.00	e.00	e.05	e.05	e.10	48	e93	e42	2.9	.00	.00	.00
16	.00	e.00	e.05	e.05	e.12	46	e95	e36	2.7	.00	.00	.00
17	.00	e.00	e.04	e.05	e.14	39	e100	e30	2.8	.00	.00	.00
18	.00	e.00	e.04	e.05	e.20	38	e102	e22	2.6	.00	.00	.00
19	.00	e.00	e.04	e.05	e.40	e37	e105	e19	2.3	.00	.00	.00
20	.00	e.00	e.04	e.06	e.80	e36	e108	e18	2.2	.00	.00	.00
21	.00	e.01	e.04	e.06	e1.8	e35	e107	e16	2.6	.00	.00	.00
22	.00	e.03	e.04	e.06	e2.6	e37	e103	e14	3.1	.00	.00	.00
23	.00	e.10	e.05	e.06	e3.4	e39	e100	e13	3.5	.00	.00	.00
24	.00	e.13	e.05	e.06	e3.8	e42	e92	e12	3.0	.00	.00	.00
25	.00	e.10	e.05	e.06	e4.2	e49	e80	e12	2.8	.00	.00	.00
26	.00	e.09	e.05	e.06	e4.8	e56	e69	e11	2.4	.00	.00	.00
27	.00	e.08	e.05	e.06	5.2	e58	e60	e11	2.0	.00	.00	.00
28	.00	e.07	e.05	e.06	6.6	e59	e56	e10	2.0	.00	.00	.00
29	.00	e.04	e.05	e.06	---	e68	e52	e10	1.6	.00	.00	.00
30	.00	e.03	e.05	e.06	---	e70	e49	e10	1.3	.00	.00	.00
31	.00	---	e.05	e.06	---	e69	---	e9.8	---	.00	.00	---
TOTAL	0.00	0.68	1.40	1.67	35.15	1874.6	2465	1140.8	111.8	3.89	0.00	0.00
MEAN	.00	.023	.045	.054	1.26	60.5	82.2	36.8	3.73	.13	.00	.00
MAX	.00	.13	.05	.06	6.6	218	108	73	9.0	1.1	.00	.00
MIN	.00	.00	.03	.05	.07	6.0	49	9.8	1.3	.00	.00	.00
AC-FT	.0	1.3	2.8	3.3	70	3720	4890	2260	222	7.7	.0	.0

CAL YR 1988 TOTAL 430.17 MEAN 1.18 MAX 9.1 MIN .00 AC-FT 853
WTR YR 1989 TOTAL 5634.99 MEAN 15.4 MAX 218 MIN .00 AC-FT 11180

e Estimated

10172907 THOUSAND SPRINGS CREEK NEAR WILKINS, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUN 12...	1325	3.9	392	26.0	22.5	9.6	137	190	47	18	12

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
JUN 12...	0.4	1.9	32	5.3	0.30	19	230	242	0.31	<0.010	<0.100

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
JUN 12...	0.010	0.59	0.60	0.080	0.070	2.5	5	130	<0.5	<1	1

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 12...	<3	<10	8	<10	10	15	<10	<1	150	<6	9

1017290885 THOUSAND SPRINGS CREEK BELOW TOANO DRAW NEAR SHORES, NV

LOCATION.--Lat 41°30'13", long 114°31'47", in SE1/4 sec.19, T.42 N., R.66 E., Elko County, Hydrologic Unit 16020307, 14 mi east of U.S. Highway 93, and 33 mi north of Wells.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,345 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150 ft³/s, June 27, 1988, gage height, 2.36 ft, from rating curve extended above 1.0 ft³/s on basis of slope-conveyance measurement; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24 ft³/s, Aug. 11, gage height, 1.12 ft, from rating curve extended above 10 ft³/s on basis of slope-conveyance measurement; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e.01	e.00	e.00	e.05	9.7	e3.5	e.33	e.05	e.03	e.02
2	.00	.00	e.01	e.00	e.00	e.05	10	e3.0	e.29	e.05	e.03	e.02
3	.00	.00	e.02	e.00	e.00	e.04	8.0	e2.5	e.28	e.04	e.03	e.02
4	.00	.00	e.02	e.00	e.00	e.03	7.7	e2.4	e.25	e.04	e.03	e.02
5	.00	.00	e.03	e.00	e.00	e.04	7.2	e2.4	e.26	e.04	e.03	e.02
6	.00	.00	e.03	e.00	e.00	e.09	6.6	e2.5	e.28	e.04	e.03	e.02
7	.00	.00	e.03	e.00	e.00	e.18	6.5	e2.9	e.29	e.04	e.03	e.02
8	.00	.00	e.03	e.00	e.00	e.45	6.9	e3.4	e.29	e.03	e.08	e.02
9	.00	.00	e.03	e.00	e.00	e1.0	8.7	e4.4	e.29	e.03	e.03	e.02
10	.00	.00	e.02	e.00	e.00	e2.5	9.9	e5.5	e.31	e.03	e.03	e.02
11	.00	.00	e.02	e.00	e.00	e4.4	10	e5.4	e.31	e.03	e.55	e.02
12	.00	.00	e.02	e.00	e.00	e5.8	10	e4.8	e.29	e.03	e3.1	e.02
13	.00	.00	e.02	e.00	e.00	e6.0	10	e4.0	e.20	e.03	e.12	e.02
14	.00	.00	e.02	e.00	e.00	e6.0	11	e3.1	.17	e.03	e.03	e.02
15	.00	.00	e.02	e.00	e.00	e5.5	8.9	e2.4	.14	e.03	e.03	e.03
16	.00	.00	e.02	e.00	e.00	e5.2	8.2	e1.9	.11	e.03	e.03	e.03
17	.00	.00	e.02	e.00	e.00	e4.8	7.9	e1.4	.11	e.03	e.03	e.03
18	.00	.00	e.02	e.00	e.00	e4.1	7.8	e1.2	.11	e.03	e.03	e.03
19	.00	.00	e.02	e.00	e.00	e3.9	8.3	e1.0	.09	e.03	e.03	e.03
20	.00	.00	e.01	e.00	e.01	e3.6	7.5	e.95	.07	e.03	e.03	e.03
21	.00	.00	e.01	e.00	e.03	e3.5	10	e.92	.06	e.03	e.03	e.04
22	.00	.00	e.01	e.00	e.04	e3.5	10	e.88	.07	e.03	e.03	e.03
23	.00	.01	e.01	e.00	e.06	e3.6	7.7	e.80	.07	e.03	e.03	e.03
24	.00	.01	e.00	e.00	e.06	e3.8	6.5	e.80	.07	e.03	e.03	e.03
25	.00	e.03	e.00	e.00	e.05	e4.1	7.1	e.79	.08	e.03	e.03	e.03
26	.00	e.04	e.00	e.00	e.05	e4.5	6.7	e.74	.09	e.03	e.03	e.03
27	.00	e.03	e.00	e.00	e.05	e6.0	6.1	e.70	.08	e.03	e.03	e.04
28	.00	e.02	e.00	e.00	e.05	e7.0	e5.8	e.60	.06	e.03	e.02	e.04
29	.00	e.01	e.00	e.00	---	e8.5	e5.1	e.50	e.05	e.03	e.02	e.08
30	.00	e.01	e.00	e.00	---	e9.0	e4.2	e.42	e.05	e.03	e.02	e.09
31	.00	---	e.00	e.00	---	e9.8	---	e.39	---	e.03	e.02	---
TOTAL	0.00	0.16	0.45	0.00	0.40	117.03	240.0	66.19	5.15	1.02	4.62	0.90
MEAN	.00	.005	.015	.00	.014	3.78	8.00	2.14	.17	.033	.15	.030
MAX	.00	.04	.03	.00	.06	9.8	11	5.5	.33	.05	3.1	.09
MIN	.00	.00	.00	.00	.00	.03	4.2	.39	.05	.03	.02	.02
AC-FT	.0	.3	.9	.0	.8	232	476	131	10	2.0	9.2	1.8

CAL YR 1988 TOTAL 70.38 MEAN .19 MAX 8.7 MIN .00 AC-FT 140
WTR YR 1989 TOTAL 435.92 MEAN 1.19 MAX 11 MIN .00 AC-FT 865

e Estimated

1017290885 THOUSAND SPRINGS CREEK BELOW TOANO DRAW NEAR SHORES, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUN 13...	1325	0.02	975	9.10	25.5	20.5	12.2	165	280	49	37	94
AUG 09...	1335	0.03	775	9.70	29.5	31.0	13.4	221	--	--	--	--

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
JUN 13...	2	22	157	23	167	260	61	1.1	35	663	660	0.90
AUG 09...	--	--	71	40	120	--	--	--	--	--	--	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
JUN 13...	<0.010	<0.100	0.010	0.49	0.50	0.010	<0.010	14	73	<0.5	<1	1
AUG 09...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 13...	<3	<10	7	<10	170	3	<10	<1	670	<6	42
AUG 09...	--	--	--	--	--	--	--	--	--	--	--

1017291130 CRITTENDEN SPRINGS ABOVE CRITTENDEN RESERVOIR NEAR MONTELLO, NV

LOCATION.--Lat 41°23'33", long 114°10'03", in NE1/4 sec.8, T.42 N., R.69 E., Elko County, Hydrologic Unit 16020307, approximately 1.2 mi above Crittenden Reservoir.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--Water years 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JAN 19...	1515	1.7	390	7.80	0.5	17.0	5.2	65	180	48	15	12
JUN 21...	1350	1.6	398	7.70	18.5	17.5	4.9	62	180	48	15	12

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
JAN 19...	0.4	3.3	190	158	26	16	0.30	22	232	239	0.32	<0.010
JUN 21...	0.4	3.2	188	154	27	15	0.30	22	245	238	0.33	<0.010

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
JAN 19...	0.570	<0.010	<0.20	0.010	0.020	--	1	61	<0.5	<1	3
JUN 21...	0.550	0.010	<0.20	<0.010	0.020	0.3	1	60	<0.5	<1	3

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
JAN 19...	<3	<10	5	<10	14	<1	<10	<1	530	<6	7
JUN 21...	<3	<10	<3	<10	12	<1	<10	1	530	<6	4

10172914 THOUSAND SPRINGS CREEK NEAR MONTELLO, NV

LOCATION.--Lat 41°21'33", long 114°02'50", in SW1/4SE1/4 sec.9, T.40 N., R.70 E., Elko County, Hydrologic Unit 16020307, on left bank 12 mi northeast of Montello.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,670 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 93 ft³/s, Feb. 15, 1986, gage height, 2.81 ft; from rating curve extended above 22 ft³/s; no flow, many days most years.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 25	2200	*2.2	0.88				

No flow, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.07	e.13	e.06	e.07	e.13	.75	e.17	e.06	.02	.00	.00
2	.00	.07	e.11	e.06	e.07	e.17	1.1	e.16	e.06	.01	.00	.00
3	.00	.08	e.12	e.06	e.05	e.15	1.2	e.16	e.06	.01	.00	.00
4	.01	.09	e.13	e.06	e.04	e.12	.62	e.16	e.06	.01	.00	.00
5	.01	.11	e.13	e.06	e.03	e.11	.46	e.16	e.06	.01	.00	.00
6	.01	.11	e.12	e.06	e.03	e.17	.40	e.16	e.06	.00	.00	.00
7	.01	.12	e.11	e.06	e.03	e.35	.40	e.17	e.06	.00	.00	.00
8	.02	.13	e.12	e.06	e.03	e.40	.31	e.18	e.06	.00	.00	.00
9	.02	.12	e.13	e.06	e.03	e.45	.28	e.19	e.06	.00	.00	.00
10	.02	.15	e.12	e.06	e.04	e.56	.27	e.20	e.06	.00	.00	.00
11	.02	.17	e.12	e.06	e.04	e1.1	.31	e.21	e.06	.00	.00	.00
12	.02	.17	e.13	e.06	e.04	e1.0	.27	e.22	e.06	.00	.00	.00
13	.02	.23	e.18	e.06	e.04	e.92	.37	e.21	e.05	e.01	.00	.00
14	.02	.45	e.20	e.06	e.04	.43	.32	e.18	e.05	e.02	.00	.00
15	.02	.27	e.22	e.06	e.04	.31	.27	e.17	e.04	e.01	.00	.00
16	.03	.22	e.11	e.05	e.04	.39	.25	e.15	e.04	.00	.00	.00
17	.03	.24	e.07	e.05	e.04	.37	.21	e.15	e.04	.00	.00	.00
18	.03	.32	e.06	e.05	e.05	.50	.24	e.14	e.03	.00	.00	.00
19	.03	.23	e.07	e.05	e.05	1.2	.38	e.13	e.03	.00	.01	.00
20	.03	.21	e.07	e.05	e.05	.89	.40	e.11	e.02	.00	.00	.00
21	.03	.20	e.06	e.05	e.05	.56	e.42	e.11	.02	.00	.00	.00
22	.03	.24	e.06	e.06	e.06	.70	e.40	e.11	.02	.00	.00	.00
23	.03	.39	e.06	e.06	e.06	.61	e.39	e.10	.03	.00	.00	.00
24	.04	.48	e.06	e.06	e.07	.54	e.33	e.10	.03	.00	.00	e.01
25	.04	.31	e.05	e.05	e.08	1.2	e.30	e.10	.04	.00	.00	e.01
26	.05	e.19	e.05	e.05	e.09	1.6	e.28	e.09	.03	.00	.00	e.01
27	.05	e.17	e.05	e.05	e.09	.92	e.23	e.09	.03	.00	.00	e.01
28	.05	e.17	e.04	e.05	e.10	.76	e.19	e.08	.03	.00	.00	e.01
29	.05	e.18	e.05	e.05	---	.77	e.18	e.08	.02	.00	.00	e.01
30	.06	e.19	e.05	e.06	---	.79	e.18	e.07	.02	.00	.00	e.01
31	.06	---	e.04	e.06	---	.49	---	e.07	---	.00	.00	---
TOTAL	0.84	6.08	3.02	1.75	1.45	18.66	11.71	4.38	1.29	0.10	0.01	0.07
MEAN	.027	.20	.097	.056	.052	.60	.39	.14	.043	.003	.000	.002
MAX	.06	.48	.22	.06	.10	1.6	1.2	.22	.06	.02	.01	.01
MIN	.00	.07	.04	.05	.03	.11	.18	.07	.02	.00	.00	.00
AC-FT	1.7	12	6.0	3.5	2.9	37	23	8.7	2.6	.2	.02	.1

CAL YR 1988 TOTAL 142.89 MEAN .39 MAX 3.2 MIN .00 AC-FT 283
WTR YR 1989 TOTAL 49.36 MEAN .14 MAX 1.6 MIN .00 AC-FT 98

e Estimated

10172914 THOUSAND SPRINGS CREEK NEAR MONTELLO, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JAN 19...	1110	0.05	3780	7.80	1.5	0.5	11.2	92	810	160	100	510
JUN 20...	1220	0.02	3900	8.70	19.0	14.5	10.1	120	740	130	100	580

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
JAN 19...	8	85	630	520	700	680	1.6	54	2590	2600	3.52	0.010
JUN 20...	9	99	560	460	620	710	2.0	66	2530	2590	3.44	<0.010

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
JAN 19...	<0.100	0.100	0.60	0.70	0.050	0.050	4.8	30	72	<2	<3	2
JUN 20...	<0.100	0.030	0.67	0.70	0.070	0.050	9.8	35	67	<2	8	3

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
JAN 19...	<9	<30	20	<30	790	73	50	1	2500	<18	11
JUN 20...	<9	<30	20	<30	870	12	<30	<1	2300	<18	19

10244950 STEPTOE CREEK NEAR ELY, NV
(Hydrologic Bench-Mark Station)

LOCATION.--Lat 39°12'05", long 114°41'15", in SW1/4SW1/4 sec.32, T.16 N., R.65 E., White Pine County, Hydrologic Unit 16060008, in Humboldt National Forest, on left bank 0.1 mi downstream from Clear Creek, 0.8 mi upstream from Cave Creek, and 11 mi east-southeast of Ely.

DRAINAGE AREA.--11.1 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 7,440 ft, from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--23 years, 3.59 ft^3/s, 5,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 85 ft^3/s, July 21, 1985, gage height, 3.11 ft, from rating curve extended above 49 ft^3/s; minimum discharge, 2.0 ft^3/s, Dec. 22, 1966, and Mar. 3, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.6 ft^3/s, Oct. 1, gage height, 1.46 ft, and May 23 and 24, gage height, 1.44 ft; minimum daily, 2.5 ft^3/s, Sept. 28 and 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.0	3.7	3.8	3.4	3.7	3.6	3.7	4.0	3.7	3.0	2.7
2	4.3	4.0	3.8	3.8	3.4	3.8	3.5	3.7	3.9	3.7	3.0	2.7
3	4.2	4.0	3.8	3.8	3.4	3.3	3.4	3.7	4.0	3.7	3.0	2.7
4	4.2	4.0	3.8	3.8	3.4	3.2	3.4	3.7	4.0	3.7	3.0	2.7
5	4.2	4.0	3.8	3.8	3.4	3.4	3.4	3.8	3.9	3.7	3.0	2.7
6	4.2	4.0	3.8	3.8	3.3	3.8	3.4	3.8	3.9	3.6	3.0	2.6
7	4.2	4.0	3.8	3.8	3.2	3.9	3.5	4.0	3.9	3.5	2.9	2.6
8	4.2	3.8	3.8	3.8	3.2	3.9	3.7	4.2	3.8	3.5	3.0	2.7
9	4.2	3.8	3.8	3.8	3.2	4.0	3.8	4.4	4.0	3.5	3.0	2.7
10	4.2	3.8	3.8	3.8	3.2	4.0	3.8	4.4	3.9	3.5	2.9	2.7
11	4.2	3.8	3.8	3.7	3.1	4.0	3.8	4.4	3.9	3.5	3.0	2.6
12	4.2	3.8	3.8	3.6	3.2	4.0	3.8	4.2	3.9	3.5	2.9	2.6
13	4.2	3.8	3.8	3.6	3.2	4.2	3.8	4.1	4.0	3.4	2.9	2.6
14	4.2	3.8	3.8	3.4	3.3	4.1	3.8	4.1	3.9	3.4	2.9	2.6
15	4.2	3.7	3.8	3.4	3.2	4.1	3.8	4.0	4.0	3.3	2.9	2.6
16	4.2	3.7	3.8	3.4	3.2	4.2	3.9	3.9	4.0	3.3	2.9	2.6
17	4.2	3.7	3.8	3.4	3.2	3.8	3.9	3.8	3.9	3.3	2.9	2.7
18	4.2	3.6	3.8	3.4	3.2	3.9	3.8	3.8	3.9	3.3	2.9	2.6
19	4.2	3.7	3.8	3.4	3.2	3.8	3.9	4.0	3.9	3.3	2.9	2.6
20	4.2	3.6	3.8	3.4	3.2	3.6	4.0	4.2	4.0	3.3	2.9	2.7
21	4.0	3.6	3.8	3.4	3.3	3.6	4.0	4.4	3.9	3.3	2.9	2.6
22	4.0	3.6	3.8	3.4	3.4	3.8	4.1	4.4	3.9	3.3	2.8	2.6
23	4.0	3.6	3.8	3.4	3.5	3.8	4.1	4.4	4.0	3.3	2.8	2.6
24	4.0	3.6	3.8	3.4	3.6	3.8	4.0	4.5	4.0	3.2	2.9	2.6
25	4.0	3.7	3.7	3.3	3.7	3.8	4.0	4.4	4.0	3.2	2.9	2.6
26	4.0	3.6	3.8	3.4	3.8	3.8	4.0	4.3	3.9	3.2	2.8	2.6
27	4.0	3.6	3.8	3.4	3.7	3.7	4.0	4.2	3.9	3.1	2.8	2.6
28	4.0	3.6	3.8	3.4	3.6	3.7	4.0	4.2	3.9	3.1	2.7	2.5
29	4.0	3.6	3.8	3.4	---	3.6	3.9	4.3	3.8	3.1	2.7	2.5
30	4.0	3.6	3.8	3.3	---	3.5	3.8	4.3	3.8	3.1	2.7	2.6
31	4.0	---	3.8	3.3	---	3.6	---	4.1	---	3.1	2.7	---
TOTAL	128.4	112.7	117.6	109.8	93.7	117.4	113.9	127.4	117.8	104.7	89.6	78.8
MEAN	4.14	3.76	3.79	3.54	3.35	3.79	3.80	4.11	3.93	3.38	2.89	2.63
MAX	4.5	4.0	3.8	3.8	3.8	4.2	4.1	4.5	4.0	3.7	3.0	2.7
MIN	4.0	3.6	3.7	3.3	3.1	3.2	3.4	3.7	3.8	3.1	2.7	2.5
AC-FT	255	224	233	218	186	233	226	253	234	208	178	156

CAL YR 1988 TOTAL 1985.9 MEAN 5.43 MAX 13 MIN 2.5 AC-FT 3940
WTR YR 1989 TOTAL 1311.8 MEAN 3.59 MAX 4.5 MIN 2.5 AC-FT 2600

10244950 STEPTOE CREEK NEAR ELY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water Year 1967 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1966 to September 1982.

REMARKS.--This gage is currently in the Hydrologic Benchmark (HBM) Network.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum daily, 11.0°C on several days in May 1968, July 31 to Sept. 9, 1969, and July 17, 1979; minimum daily, 2.5°C Dec. 9, 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
NOV												
17...	1130	3.6	332	8.40	4.5	5.0	0.70	9.6	100	K10	K18	180
APR												
07...	1130	4.6	340	8.50	19.0	8.5	0.30	9.3	104	<2	K4	180
JUN												
01...	1530	3.8	305	8.40	10.0	8.0	0.50	8.5	94	<2	K12	170
AUG												
29...	1445	2.8	318	8.60	27.0	10.5	0.60	8.6	102	K20	K32	170

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV											
17...	54	12	1.8	0.1	0.60	205	--	168	7.6	0.80	0.10
APR											
07...	55	11	1.9	0.1	0.50	210	2	175	8.2	0.90	0.10
JUN											
01...	52	10	1.9	0.1	0.50	189	6	166	7.0	0.80	0.10
AUG											
29...	50	11	2.1	0.1	0.60	203	1	168	7.0	0.80	0.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
NOV											
17...	7.0	171	186	0.23	<0.010	0.180	<0.010	<0.010	--	0.20	<0.010
APR											
07...	7.0	180	191	0.24	<0.010	0.130	0.030	0.010	--	<0.20	0.030
JUN											
01...	6.9	178	179	0.24	<0.010	0.100	0.010	<0.010	0.29	0.30	<0.010
AUG											
29...	6.8	145	180	0.20	<0.010	0.100	<0.010	0.010	--	<0.20	0.010

K: NON-IDEAL COLONY COUNT.

10244950 STEPTOE CREEK NEAR ELY, NV--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
NOV 17...	<0.010	0.010	<10	1	39	<0.5	2	1	<3	1	17
APR 07...	<0.010	0.030	40	1	41	<0.5	<1	<1	<3	3	5
JUN 01...	<0.010	<0.010	<10	1	40	<0.5	<1	1	<3	2	7
AUG 29...	<0.010	<0.010	<10	2	42	<0.5	<1	<1	<3	<1	<3

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 17...	<5	5	1	<0.1	<10	3	<1	1.0	79	<6	4
APR 07...	<5	4	1	<0.1	<10	2	<1	<1.0	90	<6	6
JUN 01...	1	5	<1	<0.1	<10	4	<1	<1.0	80	<6	5
AUG 29...	<1	<4	<1	<0.1	<10	<1	<1	<1.0	81	<6	3

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 17...	--	--	--	--	--	--	--	--	9	0.09	--
APR 07...	--	--	--	--	--	--	--	--	15	0.19	92
JUN 01...	1.5	<0.4	1.2	<0.4	0.9	<0.4	0.05	0.43	12	0.12	51
AUG 29...	1.2	<0.4	0.7	<0.4	0.6	<0.4	<0.02	0.57	7	0.05	77

10245900 PINE CREEK NEAR BELMONT, NV

LOCATION.--Lat 38°47'40", long 116°51'13", in NW1/4SE1/4 sec.13, T.11 N., R.45 E., Nye County, Hydrologic Unit 16060005, on right bank 2.9 mi west of Pine Creek Ranch, and 7.2 mi north of Belmont.

DRAINAGE AREA.--12.2 mi².

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage 7,560 ft, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No diversions above station.

AVERAGE DISCHARGE.--12 years, 5.94 ft³/s, 4,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340 ft³/s, May 29, 1983, gage height, 4.66 ft; minimum daily, 0.56 ft³/s, Nov. 20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8.8 ft³/s, June 11, 12, gage height, 1.74 ft; minimum daily, 1.1 ft³/s, Mar. 3, 4 and Aug. 30 to Sept. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.3	1.7	e1.4	1.2	1.3	1.4	4.0	6.1	4.3	1.6	1.1
2	1.9	2.3	1.7	e1.4	1.2	1.4	1.4	3.6	5.9	4.0	1.6	1.1
3	2.0	2.2	1.7	e1.4	1.2	1.1	1.4	3.7	5.8	3.7	1.5	1.1
4	2.0	2.0	1.7	e1.4	1.2	1.1	1.4	3.8	5.9	3.6	1.5	1.1
5	2.0	2.0	1.7	e1.4	e1.2	1.4	1.4	4.1	5.9	3.5	1.5	1.1
6	2.0	2.0	1.8	1.4	1.2	1.4	1.5	4.7	5.8	3.2	1.4	1.1
7	2.0	2.1	1.8	e1.4	1.2	1.6	1.6	5.5	5.5	3.2	1.4	1.1
8	2.0	2.1	1.7	e1.4	1.2	1.7	1.7	6.0	5.8	3.2	1.4	1.1
9	2.0	2.1	1.7	e1.5	1.2	1.7	1.8	6.8	6.6	3.0	1.5	1.1
10	2.1	2.1	1.7	1.6	1.2	1.7	1.8	7.8	7.1	3.0	1.9	1.1
11	2.2	2.2	1.7	1.6	1.2	1.7	1.8	7.8	7.4	3.0	1.8	1.1
12	2.8	2.2	1.7	1.6	1.2	1.6	1.9	7.3	8.3	3.0	1.6	1.1
13	2.6	2.2	1.7	1.6	1.2	1.4	1.9	7.0	7.6	3.0	1.5	1.1
14	2.5	2.2	1.7	1.6	1.2	1.2	2.0	6.6	7.8	2.8	1.5	1.1
15	2.4	1.9	1.5	1.6	1.2	1.4	2.1	6.1	8.0	2.8	1.4	1.1
16	2.3	2.2	1.6	1.6	1.2	1.4	2.5	5.8	8.0	2.5	1.4	1.1
17	2.2	2.4	1.6	1.6	1.2	1.3	3.0	5.5	7.9	2.5	1.4	1.6
18	2.2	1.9	1.6	1.5	1.2	1.4	3.5	5.3	7.6	2.5	1.3	1.6
19	2.2	1.7	1.5	1.5	1.2	1.4	4.0	5.4	7.4	2.4	1.3	1.4
20	2.2	1.8	1.5	1.5	1.2	1.3	4.3	5.9	7.1	2.2	1.3	1.2
21	2.2	1.7	1.5	1.5	1.2	1.2	4.5	6.3	6.9	2.3	1.2	1.2
22	2.3	1.8	1.5	1.5	1.2	1.3	4.9	6.8	6.3	2.2	1.2	1.2
23	2.3	1.8	1.5	1.5	1.2	1.3	5.1	7.4	6.1	2.2	1.2	1.3
24	2.3	1.8	e1.5	1.5	1.3	1.3	5.1	7.6	5.8	2.2	1.2	1.3
25	2.2	1.5	e1.5	1.3	1.3	1.3	5.1	7.6	5.5	2.2	1.2	1.3
26	2.3	1.7	e1.5	1.4	1.3	1.3	4.8	7.4	5.1	2.1	1.2	1.3
27	2.3	1.9	e1.5	1.3	1.3	1.3	4.6	7.1	4.8	1.9	1.2	1.3
28	2.3	2.0	e1.5	1.2	1.2	1.3	4.5	7.1	4.6	1.9	1.2	1.3
29	2.3	1.8	e1.5	1.2	---	1.4	4.2	7.0	4.5	1.9	1.2	1.3
30	2.3	1.7	e1.5	1.2	---	1.4	4.1	6.7	4.3	1.8	1.1	1.3
31	2.3	---	e1.5	1.2	---	1.4	---	6.5	---	1.7	1.1	---
TOTAL	68.6	59.6	49.8	44.8	34.0	43.0	89.3	190.2	191.4	83.8	42.8	36.2
MEAN	2.21	1.99	1.61	1.45	1.21	1.39	2.98	6.14	6.38	2.70	1.38	1.21
MAX	2.8	2.4	1.8	1.6	1.3	1.7	5.1	7.8	8.3	4.3	1.9	1.6
MIN	1.9	1.5	1.5	1.2	1.2	1.1	1.4	3.6	4.3	1.7	1.1	1.1
AC-FT	136	118	99	89	67	85	177	377	380	166	85	72

CAL YR 1988 TOTAL 1673.3 MEAN 4.57 MAX 34 MIN 1.1 AC-FT 3320
WTR YR 1989 TOTAL 933.5 MEAN 2.56 MAX 8.3 MIN 1.1 AC-FT 1850

e Estimated

10245910 MOSQUITO CREEK NEAR BELMONT, NV

LOCATION.--Lat 38°48'22", long 116°40'43", in NW1/4SW1/4 sec.10, T.11 N., R.47 E., Nye County, Hydrologic Unit 16060005, 27.4 mi east of Carvers on State Highway 8A, 59 mi northeast of Tonopah, and 17.9 mi northeast of Belmont.

DRAINAGE AREA.--15.1 mi^2.

PERIOD OF RECORD.--October 1977 to September 1982, October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,200 ft, from topographic map.

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

AVERAGE DISCHARGE.--11 years (1978-82, 1984-89), 2.40 ft^3/s, 1,740 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92 ft^3/s, June 7, 1978, gage height, 3.55 ft; minimum daily, 0.06 ft^3/s, Jan. 25, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.8 ft^3/s, May 31, June 1, 4, 5, gage height, 1.57 ft; minimum daily, 0.16 ft^3/s, Sept. 8.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 29, 1983; discharge, 119 ft^3/s, gage height, 5.00 ft. Runoff from snowmelt.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	.89	.96	.75	.70	.54	1.1	1.5	2.7	1.3	.27	.25
2	.96	.89	.96	.79	.64	.61	1.1	1.4	2.4	1.2	.28	.25
3	.96	.89	.96	.82	.69	.58	1.1	1.4	2.3	1.2	.28	.25
4	.96	.89	.96	.82	.69	.61	1.1	1.4	2.4	1.2	.27	.24
5	.96	.89	.96	.77	.83	.70	1.1	1.4	2.6	1.1	.26	.22
6	.96	.89	.96	.64	e.78	.83	1.2	1.4	2.3	1.0	.24	.22
7	.96	.89	.96	.63	e.78	1.0	1.3	1.4	2.2	.95	.32	.24
8	.96	.84	.96	.66	e.78	1.0	1.5	1.4	2.2	.92	.48	.16
9	.96	.82	.96	.74	.83	1.0	1.5	1.4	2.2	.90	.90	.33
10	.96	.82	.91	.74	.81	1.0	1.5	1.4	2.2	.85	1.3	.32
11	.99	.82	.89	.69	.66	1.0	1.5	1.6	2.2	.82	.93	.32
12	1.7	.82	.89	.69	.63	1.0	1.4	1.7	2.2	.82	.72	.35
13	1.7	.82	.89	.77	.63	1.0	1.3	1.7	2.2	.85	.59	.35
14	1.7	.82	.89	.77	.59	.99	1.3	1.7	2.0	.79	.49	.31
15	1.7	.82	.66	.78	.57	1.0	1.3	1.7	2.0	.69	.46	.30
16	1.7	.82	.69	.85	.57	1.0	1.3	1.7	2.0	.62	.41	.28
17	1.7	.82	.72	.89	.57	.86	1.3	2.0	2.0	.59	.38	.46
18	1.7	.86	.75	.89	.57	1.1	1.3	1.8	2.0	.55	.38	.52
19	1.6	.89	.75	.84	.53	1.0	1.3	1.6	2.0	.51	.41	.53
20	1.5	.89	.75	.82	.46	.90	1.3	1.6	1.9	.49	.40	.51
21	1.3	.89	.76	.82	.42	.97	1.3	1.5	1.9	.59	.43	.51
22	1.3	.89	.75	.80	.40	.96	1.3	1.5	1.9	.54	.39	.47
23	1.3	.89	.75	.66	.39	.96	1.3	1.5	1.8	.44	.35	.44
24	1.2	.89	.75	.56	.42	.96	1.3	1.5	1.8	.44	.32	.42
25	1.1	.89	.75	.69	.52	.93	1.3	1.5	1.8	.49	.39	.42
26	1.0	.89	.75	1.0	.52	.91	1.3	1.6	1.6	.43	.34	.42
27	1.0	.89	e.75	.96	.52	1.0	1.4	1.6	1.6	.33	.35	.42
28	1.0	.89	e.75	.95	.52	1.1	1.5	1.6	1.4	.32	.32	.42
29	.89	.94	e.75	.96	---	1.1	1.5	1.6	1.3	.30	.28	.42
30	.89	.96	e.75	.74	---	1.1	1.6	2.0	1.3	.28	.25	.44
31	.89	---	e.75	.75	---	1.1	---	2.4	---	.26	.27	---
TOTAL	37.46	26.11	25.69	24.24	17.02	28.81	39.6	49.5	60.4	21.77	13.46	10.79
MEAN	1.21	.87	.83	.78	.61	.93	1.32	1.60	2.01	.70	.43	.36
MAX	1.7	.96	.96	1.0	.83	1.1	1.6	2.4	2.7	1.3	1.3	.53
MIN	.89	.82	.66	.56	.39	.54	1.1	1.4	1.3	.26	.24	.16
AC-FT	74	52	51	48	34	57	79	98	120	43	27	21

CAL YR 1988 TOTAL 1063.25 MEAN 2.91 MAX 17 MIN .43 AC-FT 2110
WTR YR 1989 TOTAL 354.85 MEAN .97 MAX 2.7 MIN .16 AC-FT 704

e Estimated

10245925 STONEBERGER CREEK NEAR AUSTIN, NV

LOCATION.--Lat 39°08'24", long 116°36'05", in SE1/4NE1/4 sec.18, T.15 N., R.47 E., Nye County, Hydrologic Unit 16060005, on left bank 2 mi southwest of Monitor Ranch, and 42 mi north of Belmont.

DRAINAGE AREA.--35.6 mi².

PERIOD OF RECORD.--October 1977 to current year.

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

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

AVERAGE DISCHARGE.--12 years, 2.23 ft³/s, 1,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160 ft³/s, July 28, 1984, gage height, 4.06 ft; minimum daily, 0.09 ft³/s, Aug. 30, Sept. 14-16, 19-24, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.1 ft³/s, June 9, gage height, 0.93 ft; minimum daily, 0.09 ft³/s, Aug. 30, Sept. 14-16, 19-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	.55	.33	.20	.28	.27	1.1	2.1	2.3	1.1	.28	.13
2	.60	.53	.3[illegible]	.22	.27	.29	1.0	2.0	2.2	1.1	.29	.13
3	.60	.55	.32	.24	.28	.24	.97	1.9	2.2	1.0	.28	.13
4	.61	.51	.29	.24	.26	.24	1.0	1.9	2.3	.93	.28	.13
5	.61	.55	.27	.24	.21	.27	1.0	1.9	2.2	.89	.28	.13
6	.63	.55	.28	.24	e.21	.34	1.1	1.9	2.1	.83	.28	.13
7	.66	.55	.28	.23	e.21	.32	1.1	1.9	1.9	.79	.28	.13
8	.63	.57	.24	.22	e.21	.34	1.2	2.0	1.9	.76	.33	.13
9	.60	.56	.22	.26	e.21	.37	1.3	2.1	2.6	.73	.71	.13
10	.65	.60	.24	.24	e.20	.37	1.3	2.5	2.4	.71	.65	.13
11	.74	.50	.23	.24	e.20	.35	1.3	2.7	2.4	.70	.32	.13
12	1.1	.50	.24	.20	e.20	.33	1.3	2.7	2.3	.77	.19	.13
13	.71	.55	.24	.23	e.20	.34	1.4	2.5	2.1	.81	.16	.11
14	.55	.54	.24	.24	e.20	.35	1.4	2.6	1.9	.72	.16	.09
15	.49	.36	.22	.24	e.20	.37	1.4	2.6	1.8	.65	.13	.09
16	.45	.40	.23	.24	e.20	.41	1.5	2.5	1.8	.58	.13	.09
17	.45	.41	.21	.24	.20	.45	1.5	2.3	1.8	.54	.13	.11
18	.48	.41	.22	.24	.21	.60	1.6	2.2	1.7	.53	.13	.12
19	.45	.34	.21	.24	.25	.58	1.6	2.3	1.6	.50	.13	.09
20	.47	.34	.22	.24	.24	.52	1.7	2.2	1.6	.52	.13	.09
21	.47	.36	.21	.24	.21	.60	1.8	2.2	1.6	.54	.13	.09
22	.46	.41	.19	.25	.25	.62	1.9	2.1	1.5	.62	.13	.09
23	.48	.46	e.19	.24	.25	.65	2.0	2.1	1.5	.57	.13	.09
24	.49	.33	e.19	.23	.27	.67	2.0	2.1	1.5	.47	.13	.09
25	.51	.32	e.19	.21	.27	.71	1.9	2.2	1.4	.52	.13	.11
26	.50	.36	e.19	.24	.28	.72	2.4	2.2	1.3	.39	.13	.13
27	.53	.35	.19	.25	.28	.88	2.4	2.2	1.3	.34	.13	.13
28	.53	.36	e.20	.24	.27	.88	2.4	2.1	1.3	.34	.13	.13
29	.50	.34	.20	.25	---	.88	2.4	2.1	1.2	.32	.12	.13
30	.50	.36	.20	.26	---	.83	2.2	2.5	1.2	.30	.09	.13
31	.54	---	.20	.26	---	.92	---	2.5	---	.27	.12	---
TOTAL	17.60	13.52	7.22	7.35	6.52	15.71	47.17	69.1	54.9	19.84	6.64	3.47
MEAN	.57	.45	.23	.24	.23	.51	1.57	2.23	1.83	.64	.21	.12
MAX	1.1	.60	.34	.26	.28	.92	2.4	2.7	2.6	1.1	.71	.13
MIN	.45	.32	.19	.20	.20	.24	.97	1.9	1.2	.27	.09	.09
AC-FT	35	27	14	15	13	31	94	137	109	39	13	6.9

CAL YR 1988 TOTAL 401.72 MEAN 1.10 MAX 4.6 MIN .19 AC-FT 797
WTR YR 1989 TOTAL 269.04 MEAN .74 MAX 2.7 MIN .09 AC-FT 534

e Estimated

10246930 SIXMILE CREEK NEAR WARM SPRINGS, NV

LOCATION.--Lat 38°34'30", long 116°18'45", in NE1/4NW1/4 sec.11, T.8 N., R.50 E., Nye County, Hydrologic Unit 16060012, on left bank 26 mi north of Warm Springs.

DRAINAGE AREA.--19 mi^2, approximately.

PERIOD OF RECORD.--September 1967 to June 1968, May 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,300 ft, from topographic map.

REMARKS.--Records fair except for October through March, which are poor.

AVERAGE DISCHARGE.--5 years (1985-1989), 0.93 ft^3/s, 674 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 104 ft^3/s, July 20, 1985, gage height, 3.10 ft, from rating curve extended above 14 ft^3/s on basis of slope-conveyance computation of peak flow; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.0 ft^3/s, Aug. 10, gage height, 1.72 ft,; minimum daily, 0.01 ft^3/s Mar. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	e.23	e.24	e.10	e.19	e.10	.07	.22	.23	.24	.13	.17
2	.26	e.23	e.24	e.11	e.18	e.10	.08	.21	.22	.23	.12	.17
3	.26	e.23	e.24	e.12	e.17	e.09	.08	.21	.24	.23	.11	.17
4	.26	e.23	e.24	e.13	e.17	e.09	.08	.21	.25	.23	.10	.16
5	.26	e.22	e.24	e.13	e.16	e.08	.08	.21	.24	.22	.10	.16
6	.27	e.21	e.24	e.15	e.14	e.07	.08	.21	.22	.22	.09	.16
7	.28	e.20	e.24	e.15	e.12	.07	.08	.21	.23	.22	.08	.17
8	.28	e.20	e.24	e.17	e.10	.02	.09	.20	.23	.22	.12	.18
9	.28	e.20	e.24	e.18	e.10	.01	.10	.25	.24	.23	.20	.17
10	.27	e.20	e.25	e.18	e.10	.01	.10	.30	.24	.23	.40	.17
11	.28	e.20	e.26	e.17	e.10	.03	.11	.40	.24	.25	.31	.19
12	.36	e.20	e.26	e.17	e.10	.03	.12	.31	.23	.25	.25	.19
13	.30	e.20	e.26	e.17	e.10	.06	.12	.35	.22	.23	.22	.18
14	.28	e.20	e.26	e.17	e.10	.05	.12	.33	.21	.21	.20	.17
15	.28	e.20	e.20	e.17	e.10	.06	.12	.32	.19	.20	.20	.17
16	.28	e.20	e.18	e.20	e.10	.08	.12	.29	.19	.20	.19	.17
17	.27	e.20	e.14	e.20	e.10	.05	.13	.28	.19	.19	.20	.20
18	.27	e.21	.13	e.20	e.10	.09	.13	.27	.18	.18	.21	.20
19	.27	e.22	e.12	e.19	e.09	.06	.14	.29	.19	.17	.21	.20
20	.29	e.22	e.11	e.19	e.08	.07	.15	.27	.21	.20	.21	.19
21	.32	e.22	e.10	e.19	e.07	.09	.16	.26	.23	.24	.20	.18
22	.32	.22	e.09	e.19	e.06	.08	.18	.27	.21	.22	.19	.17
23	.33	.24	e.08	e.18	e.06	.11	.19	.27	.21	.21	.21	.17
24	.33	e.24	e.08	e.18	e.07	.09	.22	.27	.25	.21	.21	.17
25	.30	e.24	e.08	e.19	e.08	.18	.25	.24	.26	.18	.21	.17
26	e.26	e.24	e.08	e.20	e.09	.14	.26	.24	.25	.16	.20	.17
27	e.26	e.24	e.08	e.20	e.09	.09	.28	.23	.24	.15	.18	.17
28	e.26	e.24	e.08	e.20	e.09	.10	.27	.23	.25	.15	.18	.16
29	e.23	e.24	e.08	e.20	---	.07	.25	.26	.25	.14	.17	.16
30	e.23	e.24	e.08	e.20	---	.07	.24	.30	.25	.13	.17	.18
31	e.23	---	e.09	e.20	---	.07	---	.25	---	.12	.17	---
TOTAL	8.64	6.56	5.25	5.39	3.01	2.31	4.40	8.16	6.79	6.26	5.74	5.24
MEAN	.28	.22	.17	.17	.11	.075	.15	.26	.23	.20	.19	.17
MAX	.36	.24	.26	.20	.19	.18	.28	.40	.26	.25	.40	.20
MIN	.23	.20	.08	.10	.06	.01	.07	.20	.18	.12	.08	.16
AC-FT	17	13	10	11	6.0	4.6	8.7	16	13	12	11	10

CAL YR 1988 TOTAL 616.99 MEAN 1.69 MAX 18 MIN .08 AC-FT 1220
WTR YR 1989 TOTAL 67.75 MEAN .19 MAX .40 MIN .01 AC-FT 134

e Estimated

10249190 WILLOW CREEK NEAR WARM SPRINGS, NV

LOCATION.--Lat 38°34'35", long 116°35'05", in SE1/4SE1/4 sec.6, T.8 N., R.43 E., Nye County, Hydrologic Unit 16060011, in Toiyabe National Forest, on left bank about 3 mi north of Toiyabe National Forest boundary, and 30 mi northwest of Warm Springs.

DRAINAGE AREA.--16.4 mi².

PERIOD OF RECORD.--October 1977 to current year.

REVISED RECORDS.--1986: daily discharges.

GAGE.--Water-stage recorder. Elevation of gage is 6,800 ft, from topographic map.

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

AVERAGE DISCHARGE.--12 years, 1.42 ft³/s, 1,030 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92 ft³/s, Mar. 31, 1978, gage height, 2.70 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13.0 ft³/s, Aug. 11, gage height, 1.88 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.00	e.06	.01	e.08	e.06	.14	.21	.07	.00	.00	.00
2	e.00	e.00	e.07	e.02	e.04	e.09	.14	.16	.06	.00	.00	.00
3	e.00	e.00	e.05	e.04	e.06	e.07	.14	.16	.06	.00	.00	.00
4	e.00	e.00	.02	e.06	e.03	e.10	.14	.14	.07	.00	.00	.00
5	e.00	e.00	.05	e.06	.01	e.16	.16	.14	.08	.00	.00	.00
6	e.00	e.00	.07	e.05	e.1	e.20	.14	.14	.07	.00	.00	.00
7	e.00	e.00	.00	e.02	e.08	e.23	.12	.14	.06	.00	.00	.00
8	e.00	e.00	.01	e.02	e.08	e.22	.14	.12	.07	.00	.00	.00
9	e.00	e.00	.02	e.05	e.09	e.21	.14	.08	.07	.00	.26	.00
10	e.00	e.00	.05	e.06	e.08	e.22	.16	.12	.16	.00	2.0	.00
11	e.00	e.00	.06	e.04	.08	e.23	.16	.21	.12	.00	2.4	.00
12	e.00	e.00	.06	e.02	.07	e.22	.16	.27	.18	.00	.16	.00
13	e.00	e.00	.02	e.03	.08	e.21	.16	.24	.08	.00	.00	.00
14	e.00	e.00	.06	e.03	e.07	e.22	.14	.24	.05	.00	.00	.00
15	e.00	e.00	.16	e.04	e.06	e.23	.14	.24	.02	.00	.00	.00
16	e.00	e.00	.12	e.05	e.06	e.22	.14	.21	.01	.00	.00	.00
17	e.00	.00	.21	e.05	e.06	e.20	.12	.16	.01	.00	.00	.00
18	e.00	.00	.02	e.06	e.06	e.26	.10	.14	.01	.00	.00	.00
19	e.00	.00	e.02	.07	e.04	e.23	.10	.12	.01	.00	.00	.00
20	e.00	.02	e.02	e.05	e.03	e.21	.10	.12	.00	.00	.00	.00
21	e.00	.04	e.02	e.06	e.02	e.18	.10	.10	.00	.00	.00	.00
22	e.00	.00	e.02	e.06	e.02	e.18	.08	.08	.00	.00	.00	.00
23	e.00	.00	e.02	e.05	e.02	e.18	.10	.07	.00	.00	.00	.00
24	e.00	.01	e.02	e.04	e.02	e.18	.10	.07	.00	.00	.00	.00
25	e.00	.00	e.02	e.01	e.04	e.18	.18	.07	.00	.00	.00	.00
26	e.00	.01	e.02	e.04	e.04	e.16	.24	.07	.00	.00	.00	.00
27	e.00	e.06	e.02	e.1	e.04	e.18	.27	.07	.00	.00	.00	.00
28	e.00	e.04	e.02	e.1	e.04	.18	.24	.06	.00	.00	.00	.00
29	e.00	.02	e.02	e.1	---	.18	.21	.07	.00	.00	.00	.00
30	e.00	e.08	e.02	.10	---	.27	.21	.08	.00	.00	.00	.00
31	e.00	---	e.02	.10	---	.14	---	.08	---	.00	.00	---
TOTAL	0.00	0.28	1.37	1.59	1.50	5.80	4.47	4.18	1.26	0.00	4.82	0.0
MEAN	.00	.009	.044	.051	.054	.19	.15	.13	.042	.00	.16	.00
MAX	.00	.08	.21	.10	.10	.27	.27	.27	.18	.00	2.4	.00
MIN	.00	.00	.00	.01	.01	.06	.08	.06	.00	.00	.00	.00
AC-FT	.0	.6	2.7	3.2	3.0	12	8.9	8.3	2.5	.0	9.6	.0

CAL YR 1988 TOTAL 376.03 MEAN 1.03 MAX 10 MIN .00 AC-FT 746
WTR YR 1989 TOTAL 25.27 MEAN .069 MAX 2.4 MIN .00 AC-FT 50

e Estimated

10249280 KINGSTON CREEK BELOW COUGAR CANYON, NEAR AUSTIN, NV

LOCATION.--Lat 39°12'45", long 117°06'45", in NW1/4 sec.35, T.16 N., R.43 E., Lander County, Hydrologic Unit 16060004, in Toiyabe National Forest, on left bank 1.1 mi downstream from Cougar Canyon, and 19 mi southeast of Austin.

DRAINAGE AREA.--23.4 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,480 ft, from topographic map. Aug. 22, 1975 to June 25, 1985 water-stage recorder 40 ft downstream at different datum.

REMARKS.--Records good. Two diversions above station. Flow affected by storage in Groves Reservoir, capacity, 190 acre-ft about 4 mi upstream since January 1970, when installation was completed by Nevada Department of Fish and Game for fishery enhancement and recreation.

AVERAGE DISCHARGE.--23 years, 9.61 ft³/s, 6,960 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 385 ft³/s, May 28, 1983, gage height, 3.19 ft, on basis of slope-conveyance determination of peak flow; maximum gage height, 3.58 ft, May 18, 1973; minimum, 1.4 ft³/s, Aug. 24, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10 ft³/s, July 31, gage height, 1.68 ft; minimum daily, 4.7 ft³/s, Feb. 6 and 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	7.6	6.7	6.1	6.0	5.7	7.0	7.4	9.3	7.9	6.0	6.8
2	8.6	7.6	6.7	5.9	5.9	5.7	6.9	7.8	9.0	8.0	5.9	6.7
3	8.6	7.4	6.7	5.7	5.7	5.3	6.5	8.0	8.3	7.9	6.0	6.5
4	8.6	7.3	6.5	5.8	5.7	5.3	7.4	8.0	8.3	7.5	6.2	6.5
5	8.6	7.3	6.7	5.8	5.0	5.4	7.5	8.1	8.5	7.9	6.2	6.5
6	8.6	7.3	6.7	5.8	4.7	5.5	8.0	8.2	8.6	7.7	6.2	6.5
7	8.4	7.3	6.5	5.8	4.7	5.5	7.5	8.5	8.6	7.9	6.4	6.5
8	8.3	7.3	6.6	5.7	5.2	5.7	6.9	8.6	8.6	8.0	6.8	6.5
9	8.3	7.3	6.6	6.0	5.9	5.8	7.5	8.5	8.4	8.2	6.5	6.5
10	8.3	7.3	6.5	6.0	5.9	5.8	7.6	8.5	7.9	7.9	6.4	6.5
11	8.3	7.3	6.7	5.9	5.7	6.0	7.0	8.6	7.7	7.7	6.3	6.3
12	8.3	7.1	6.7	5.9	5.7	6.1	7.0	8.6	7.7	7.4	6.2	5.7
13	8.3	7.0	6.6	5.9	5.7	6.2	7.0	8.4	7.5	7.2	6.2	5.7
14	8.3	7.0	6.7	5.7	5.7	6.1	7.0	8.2	8.1	6.8	6.2	5.7
15	8.3	7.0	6.7	5.6	5.8	6.2	7.0	8.2	8.3	6.8	6.3	5.7
16	8.1	7.0	6.8	5.7	5.8	6.5	7.0	8.2	8.1	6.8	6.5	5.7
17	8.0	7.2	6.5	5.7	5.4	6.5	7.1	8.7	8.2	6.9	6.5	6.4
18	8.0	6.9	6.4	5.7	5.4	6.5	7.8	8.5	7.8	6.8	6.5	6.2
19	8.0	7.1	6.5	6.2	5.5	6.5	8.3	8.7	7.7	6.7	6.6	6.2
20	8.0	7.2	6.4	6.2	5.4	6.2	8.3	8.8	7.5	6.2	6.8	6.1
21	8.0	7.4	6.4	6.1	5.4	6.2	8.3	8.8	7.3	6.4	6.7	5.7
22	8.0	7.1	6.4	6.0	5.6	6.2	8.7	8.4	7.1	6.2	6.5	5.7
23	8.0	7.2	6.5	5.9	5.7	6.2	8.2	8.9	7.0	6.2	6.3	5.7
24	8.0	6.9	6.7	6.1	5.7	6.2	7.9	9.3	7.4	6.3	6.5	5.7
25	7.7	7.2	6.6	6.2	5.7	6.4	7.7	9.7	6.8	6.5	6.5	5.7
26	7.6	7.1	6.3	6.5	5.6	6.3	7.7	9.0	7.0	6.3	6.5	5.7
27	7.6	7.1	6.0	6.4	5.7	6.5	7.6	8.8	6.7	6.0	6.6	5.6
28	7.6	6.7	6.2	6.1	5.7	6.8	7.5	8.9	7.0	6.0	6.8	5.7
29	7.6	6.8	6.1	5.9	---	7.1	7.3	8.5	6.9	6.1	6.8	5.7
30	7.6	6.7	6.1	6.1	---	7.2	7.3	8.7	7.4	5.8	6.8	5.4
31	7.6	---	6.3	6.2	---	7.2	---	8.9	---	6.2	6.7	---
TOTAL	251.8	214.7	201.8	184.6	155.9	190.8	224.5	264.4	234.7	216.2	199.4	181.8
MEAN	8.12	7.16	6.51	5.95	5.57	6.15	7.48	8.53	7.82	6.97	6.43	6.06
MAX	8.6	7.6	6.8	6.5	6.0	7.2	8.7	9.7	9.3	8.2	6.8	6.8
MIN	7.6	6.7	6.0	5.6	4.7	5.3	6.5	7.4	6.7	5.8	5.9	5.4
AC-FT	499	426	400	366	309	378	445	524	466	429	396	361

CAL YR 1988 TOTAL 3618.2 MEAN 9.89 MAX 23 MIN 5.0 AC-FT 7180
WTR YR 1989 TOTAL 2520.6 MEAN 6.91 MAX 9.7 MIN 4.7 AC-FT 5000

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV
(Hydrologic Bench-Mark Station)

LOCATION.--Lat 38°53'15", long 117°14'40", in SW1/4NE1/4 sec.22, T.12 N., R.42 E., Nye County, Hydrologic Unit 16060004, in Toiyabe National Forest, on right bank 600 ft upstream from diversion, 3 mi west of State Highway 376, and 15 mi northwest of Round Mountain.

DRAINAGE AREA.--20 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1964 (miscellaneous site), 1965 (low-flow, partial-record site), August 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft, from topographic map.

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

AVERAGE DISCHARGE.--24 years, 6.81 ft³/s, 4,930 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 510 ft³/s, May 29, 1983, gage height, 4.39 ft; minimum, 0.11 ft³/s, Sept. 4, 1972.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 21	2400	*11	*1.88				

Minimum daily, 0.88 ft³/s, Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.2	2.4	e1.9	e2.1	4.2	5.4	6.6	5.7	2.9	1.3	1.0
2	1.5	2.1	2.4	e1.9	e2.0	4.3	5.4	6.4	5.4	2.7	1.3	1.0
3	1.5	2.1	2.3	e1.9	e1.9	4.4	5.4	6.4	6.2	2.3	1.3	.95
4	1.5	2.1	2.3	e1.9	e1.8	4.3	5.4	6.7	6.3	2.2	1.3	.92
5	1.5	2.1	2.3	e1.9	e1.7	4.3	5.5	6.9	6.2	2.1	1.3	.89
6	1.6	2.0	2.2	e1.9	e1.6	4.4	5.8	7.6	5.8	2.0	1.4	.88
7	1.6	2.1	2.0	e1.9	e1.5	5.1	6.3	8.3	5.6	1.9	1.6	.94
8	1.6	2.2	2.0	e1.9	e1.7	5.8	6.9	8.9	5.3	1.8	1.8	1.1
9	1.6	2.2	2.0	e1.9	e1.7	6.3	7.6	9.2	5.5	1.8	2.1	1.1
10	1.6	2.2	2.1	e2.0	e1.8	6.7	8.2	9.7	5.3	1.8	1.8	1.1
11	2.0	2.1	2.2	e2.0	e1.8	7.1	8.8	10	5.1	1.8	1.7	1.2
12	3.7	2.0	2.0	e2.0	e1.8	6.9	8.8	9.3	5.0	1.9	1.6	1.2
13	2.9	2.0	1.9	e1.9	e1.9	6.7	8.7	9.0	4.7	1.9	1.5	1.2
14	2.5	2.3	2.0	e1.8	e1.9	6.4	8.7	8.5	4.5	1.7	1.4	1.2
15	2.2	2.1	e2.0	e1.8	e1.9	6.2	8.7	7.8	4.4	1.6	1.3	1.2
16	2.0	2.0	e2.0	e1.9	e2.0	5.9	8.8	7.4	4.3	1.6	1.2	1.1
17	2.0	2.3	2.0	e1.9	e2.0	5.5	8.8	6.9	4.2	1.5	1.2	2.3
18	2.0	1.9	2.0	e1.9	e2.0	5.4	9.1	6.8	4.0	1.5	1.2	2.4
19	2.0	2.2	2.0	e1.9	e2.1	5.3	9.6	6.8	3.9	1.4	1.2	2.1
20	1.9	2.7	e2.0	e1.9	e2.4	5.1	9.9	6.7	3.8	1.4	1.2	2.0
21	1.9	2.6	e2.1	e1.9	e2.8	4.9	10	6.8	3.8	1.7	1.3	1.9
22	1.9	2.4	e2.1	e1.9	e3.2	4.8	11	6.8	3.7	1.7	1.3	1.8
23	1.9	2.6	e2.1	e1.9	3.6	4.9	10	6.7	3.7	1.8	1.2	1.8
24	1.9	2.3	e2.1	e2.0	3.7	4.8	9.8	6.9	3.7	1.9	1.3	1.7
25	2.0	2.0	e2.1	e2.0	3.9	5.0	9.0	6.8	3.6	1.8	1.3	1.8
26	2.0	2.3	e2.0	e2.1	4.1	4.9	8.7	6.6	3.4	1.6	1.2	1.8
27	2.0	3.2	e2.0	e2.2	4.2	4.8	8.2	6.4	3.4	1.5	1.2	1.9
28	2.0	2.8	e2.0	e2.0	4.3	4.8	7.7	6.3	3.3	1.4	1.1	2.0
29	2.0	2.5	e2.0	e2.0	---	5.0	7.2	6.5	3.1	1.3	1.0	2.0
30	2.1	2.4	e2.0	e2.0	---	5.0	6.8	6.3	3.0	1.3	.96	2.2
31	2.2	---	e2.0	e2.2	---	5.2	---	6.0	---	1.2	1.0	---
TOTAL	60.6	68.0	64.6	60.3	67.4	164.4	240.2	228.0	135.9	55.0	41.56	44.68
MEAN	1.95	2.27	2.08	1.95	2.41	5.30	8.01	7.35	4.53	1.77	1.34	1.49
MAX	3.7	3.2	2.4	2.2	4.3	7.1	11	10	6.3	2.9	2.1	2.4
MIN	1.5	1.9	1.9	1.8	1.5	4.2	5.4	6.0	3.0	1.2	.96	.88
AC-FT	120	135	128	120	134	326	476	452	270	109	82	89

CAL YR 1988 TOTAL 2393.7 MEAN 6.54 MAX 47 MIN 1.3 AC-FT 4750
WTR YR 1989 TOTAL 1230.64 MEAN 3.37 MAX 11 MIN .88 AC-FT 2440

e Estimated

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 1966 to September 1968, January 1970 to September 1977, September 1978 to September 1982.

REMARKS.--This gage is currently in the Hydrologic Benchmark (HBM) Network.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum daily, 18.0°C July 24, 1979; minimum daily, freezing point on several days in many years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV											
16...	1350	2.5	125	7.80	4.0	3.0	0.50	10.4	98	<1	K12
MAR											
29...	1040	5.0	124	8.00	9.5	8.0	0.50	8.9	94	--	<1
MAY											
23...	1605	6.5	91	8.00	15.0	12.0	2.1	8.2	96	K2	23
AUG											
02...	1015	1.4	113	8.30	28.0	12.5	0.50	8.7	102	K6	77

DATE	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV											
16...	57	20	1.7	6.6	0.4	0.80	69	56	6.2	1.6	0.10
MAR											
29...	49	17	1.5	6.2	0.4	0.80	66	54	7.4	1.7	0.20
MAY											
23...	37	13	0.97	5.7	0.4	0.60	50	41	4.0	1.1	0.10
AUG											
02...	45	16	1.3	6.2	0.4	0.80	66	54	5.0	1.2	0.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)
NOV											
16...	21	74	92	0.10	<0.010	<0.100	0.010	<0.010	<0.20	0.010	<0.010
MAR											
29...	18	89	85	0.12	<0.010	<0.100	<0.010	<0.010	<0.20	<0.010	<0.010
MAY											
23...	20	61	70	0.08	--	--	--	--	--	--	--
AUG											
02...	21	84	84	0.11	<0.010	<0.100	<0.010	<0.010	<0.20	<0.010	<0.010

DATE	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NOV											
16...	<0.010	20	3	5	1	<1	1	<3	1	16	<5
MAR											
29...	<0.010	<10	3	5	<0.5	<1	1	<3	1	5	<5
MAY											
23...	--	40	2	4	<0.5	<1	<1	<3	9	19	2
AUG											
02...	<0.010	10	3	4	<0.5	<1	<1	<3	2	8	<1

K: NON-IDEAL COLONY COUNT

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)
NOV 16...	6	4	<0.1	<10	1	<1	1.0	110	<6	10	--
MAR 29...	6	<1	<0.1	<10	4	<1	<1.0	110	<6	<3	--
MAY 23...	6	1	<0.1	<10	<1	<1	<1.0	78	<6	<3	0.4
AUG 02...	8	1	<0.1	<10	1	<1	<1.0	99	<6	5	2.8

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 16...	--	--	--	--	--	--	--	0	0.0	--
MAR 29...	--	--	--	--	--	--	--	4	0.05	95
MAY 23...	1.7	<0.4	<0.4	<0.4	<0.4	0.03	0.60	8	0.14	83
AUG 02...	<0.4	3.3	<0.4	2.6	<0.4	0.08	--	3	0.01	68

10251890 PEAK SPRING CANYON CREEK NEAR CHARLESTON PEAK, NV

LOCATION.--Lat 36°14'40", long 115°43'09", in SW1/4NE1/4 sec.6. T.20 S., R.56 E., Clark County, Hydrologic Unit 16060015, on left bank 200 ft upstream of Carpenter Road, 11 mi east of State Highway 16, and 14.5 mi east of Pahrump.

DRAINAGE AREA.--3.09 mi².

PERIOD OF RECORD.--November 1977 to September 1983, October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,900 ft, from topographic map.

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

AVERAGE DISCHARGE.--10 years (1979-83, 1985-89), 1.91 ft³/s, 1,380 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 228 ft³/s, Aug. 17, 1983, gage height, 8.68 ft; minimum, 0.13 ft³/s, Dec. 16, 17, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.0 ft³/s, Apr. 8, gage height, 7.82 ft; minimum daily, 0.30 ft³/s, July 25, 26 and Aug. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	.68	.55	e.33	e.50	1.1	2.5	1.5	1.1	.38	.31	.33
2	1.2	.68	.55	e.35	e.50	1.2	2.6	1.5	1.1	.40	.31	.32
3	1.2	.68	.55	e.36	e.50	1.0	2.9	1.4	1.1	.51	.33	.33
4	1.2	.67	.55	e.38	e.50	.84	3.0	1.5	.98	.49	.33	.36
5	1.2	.64	.55	e.39	e.50	.76	3.2	1.5	.99	.49	.33	.33
6	1.1	.64	.55	e.38	e.50	.80	3.8	1.5	.96	.51	.32	.33
7	1.0	.64	.55	e.36	e.46	1.2	4.2	1.4	.94	.49	.32	.33
8	1.0	.64	.55	e.33	e.40	1.4	4.6	1.4	.90	.50	.33	.33
9	1.0	.64	.54	e.32	e.35	1.8	4.5	1.4	.90	.50	.35	.33
10	1.0	.64	.51	e.33	e.31	2.1	4.5	1.4	.89	.50	.35	.33
11	1.0	.64	.49	e.34	e.31	2.1	4.4	1.4	.84	.48	.36	.33
12	.98	.64	.48	e.35	e.34	2.3	4.1	1.5	.78	.48	.34	.35
13	.89	.64	.48	e.36	e.35	2.4	4.1	1.4	.78	.46	.33	.35
14	.84	.80	.48	e.36	e.36	2.3	4.0	1.4	.75	.46	.31	.34
15	.74	.68	.48	e.36	e.36	2.2	3.7	1.3	.69	.46	.30	.34
16	.75	.68	.48	e.36	e.35	2.2	3.5	1.3	.68	.52	.30	.35
17	.71	.66	.48	e.36	e.33	2.0	3.3	1.3	.68	.48	.34	e.38
18	.71	.65	.48	e.36	e.33	1.9	3.3	1.2	.68	.45	.33	e.38
19	.73	.64	.48	e.37	e.35	1.8	3.3	1.2	.63	.41	.33	e.38
20	.73	.64	.48	e.38	e.48	1.9	3.3	1.2	.64	.39	.33	e.38
21	.73	.64	e.47	e.40	e.60	1.8	3.1	1.2	.64	.37	.33	e.40
22	.73	.63	e.45	e.42	.98	1.8	2.8	1.2	.60	.36	.32	e.40
23	.73	.59	e.42	e.44	.73	1.7	2.5	1.2	.56	.35	.33	e.40
24	.73	.61	e.40	e.46	.79	1.6	2.4	1.2	.54	.33	.33	e.40
25	.72	.65	e.37	e.48	.82	1.7	2.2	1.2	.55	.30	.33	e.41
26	.73	.67	e.35	e.48	1.0	1.6	2.0	1.1	.52	.30	.32	e.42
27	.71	.64	e.34	e.49	1.1	1.5	1.9	.95	.47	.32	.32	e.42
28	.69	.64	e.33	e.49	1.1	1.4	1.8	1.9	.43	.33	.31	e.42
29	.68	.64	e.32	e.50	---	1.7	1.7	2.2	.43	.32	.30	e.42
30	.68	.62	e.32	e.50	---	1.9	1.6	1.1	.40	.31	.30	e.42
31	.68	---	e.32	e.50	---	2.2	---	1.1	---	.31	.32	---
TOTAL	27.09	19.55	14.35	12.29	15.20	52.20	94.8	42.05	22.15	12.96	10.06	11.01
MEAN	.87	.65	.46	.40	.54	1.68	3.16	1.36	.74	.42	.32	.37
MAX	1.3	.80	.55	.50	1.1	2.4	4.6	2.2	1.1	.52	.36	.42
MIN	.68	.59	.32	.32	.31	.76	1.6	.95	.40	.30	.30	.32
AC-FT	54	39	28	24	30	104	188	83	44	26	20	22

CAL YR 1988 TOTAL 857.10 MEAN 2.34 MAX 15 MIN .32 AC-FT 1700
WTR YR 1989 TOTAL 333.71 MEAN .91 MAX 4.6 MIN .30 AC-FT 662

e Estimated

10288500 WALKER LAKE NEAR HAWTHORNE, NV

LOCATION (REVISED).--Lat 38°40'36", long 118°46'16", in SE1/4SE1/4 sec.27, T.10 N., R.29 E., Mineral County, Hydrologic Unit 16050304, 14.5 mi northwest of Hawthorne.

PERIOD OF RECORD.--August 1928 to current year. Occasional readings prior to August 1928.

DRAINAGE AREA.--4,050 mi^2, approximately.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Coast and Geodetic Survey bench mark at U.S. Army Depot). Prior to Dec. 6, 1978, at site 5.5 mi northwest of Hawthorne, at same datum.

REMARKS.--Elevations determined from reference points referred to U.S.C.G.S. bench mark. Elevations are given to the nearest 0.1 ft and contents to four significant figures in order to reflect trends of change. Any single observation, however, may be affected by wind and seiche movements on the lake surface.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 6,955,000 acre-ft, Mar. 13, 1928, elevation, 4,051.8 ft, U.S. Bureau of Indian Affairs; minimum observed, 2,372,000 acre-ft, Jan. 25, 1982, elevation, 3,952.9 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 4,078.0 ft, adjustment of 1912, was observed Sept. 27, 1908, by Geological Survey (contents, 8,622,000 acre-ft, table now in use).

EXTREMES FOR CURRENT YEAR--Maximum contents observed, 2,806,000 acre-ft, October 5, elevation 3965.0 ft, minimum observed, 2,681,000 acre-ft, elevation 3961.6 ft, September 7.

MONTHEND ELEVATION, IN FEET NGVD, AND CONTENTS AT 2400, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	3,965.0	2,807,000	--
Oct. 31	3,964.9	2,803,000	-4,000
Nov. 30	3,964.6	2,792,000	-11,000
Dec. 31	3,963.9	2,766,000	-26,000
CAL YR 1988	--	--	-149,000
Jan. 31	3,963.7	2,759,000	-7,000
Feb. 28	3,963.6	2,755,000	-4,000
Mar. 31	3,963.5	2,751,000	-4,000
Apr. 30	3,963.3	2,744,000	-7,000
May 31	3,963.2	2,740,000	-4,000
June 30	3,962.8	2,726,000	-14,000
July 31	3,962.3	2,707,000	-19,000
Aug. 31	3,961.7	2,685,000	-22,000
Sept. 30	3,961.0	2,660,000	-25,000
WTR YR 1989	--	--	-147,000

NOTE: Some monthend elevations are interpolated from readings made during the year.

10290300 UPPER TWIN LAKE NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°09'15", long 119°20'58", in NW1/4NE1/4 sec.5, T.3 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at outlet of upper lake dam on Robinson Creek, and 10 mi southwest of Bridgeport.

DRAINAGE AREA.--29.5 mi^2.

PERIOD OF RECORD.--December 1961 to February 1964, September 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,212.86 ft above National Geodetic Vertical Datum of 1929 (project datum of U.S. Indian Irrigation Service).

REMARKS.--Contents regulated by dam at outlet. Figures given herein represent usable contents. Usable contents, 2,070 acre-ft between elevations 7,200 ft, natural rim, and 7,207 ft, spillway crest.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 2,990 acre-ft, July 7, 1983, elevation, 7,209.85 ft; minimum observed, 31 acre-ft, Oct. 27, 1988, elevation, 7,200.11 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--No contents observed Oct. 17, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,710 acre-ft, June 17, elevation, 7,209.00 ft; minimum observed, 31 acre-ft, Oct. 27, elevation, 7,200.11 ft, but may have been lower during periods of missing gage-height record, Oct. 1 to Nov. 22, Dec. 22 to Feb. 28 and Sept. 8-30.

MONTHEND ELEVATION AND CONTENTS, IN FEET NGVD, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,200.38	106	-471
Oct. 31	7,200.42	118	+ 12
Nov. 30	7,202.41	675	+557
Dec. 31	7,204.04	1,140	+465
CAL YR 1988	--	--	-370
Jan. 31	7,205.62	1,630	+490
Feb. 28	7,206.95	2,050	+420
Mar. 31	7,207.68	2,290	+240
Apr. 30	7,207.88	2,350	+ 60
May 31	7,208.20	2,450	+100
June 30	7,208.52	2,560	+110
July 31	7,207.97	2,380	-180
Aug. 31	7,205.29	1,530	-850
Sept. 30	7,203.31	930	-600
WTR YR 1989	--	--	+824

NOTE: Some monthend elevations and contents are interpolated from readings made during the year.

10290400 LOWER TWIN LAKE NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°10'05", long 119°19'33", in NE1/4NE1/4 sec.33, T.4 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at outlet of lower lake dam on Robinson Creek, and 8 mi southwest of Bridgeport.

DRAINAGE AREA.--38.9 mi^2.

PERIOD OF RECORD.--December 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,205.45 ft above National Geodetic Vertical Datum of 1929 (project datum of U.S. Indian Irrigation Service).

REMARKS.--Contents regulated by dam at outlet and by Upper Twin Lake. Figures given herein represent usable contents. Usable contents, 4,010 acre-ft between elevations 7,190 ft, natural rim, and 7,200 ft, spillway crest. One transarea diversion out of Tamarack Creek into Summers Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 5,560 acre-ft, June 19, 1983, elevation, 7,203.58 ft; no contents, Nov. 17, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 4,760 acre-ft, June 23, elevation, 7,201.76 ft, but may have been higher during the period of no gage-height record, June 6-22; minimum observed, 820 acre-ft, Oct. 27, elevation, 7,192.05 ft, but may have been lower during the period of no gage-height record, Oct. 1 to Feb. 27.

MONTHEND ELEVATION AND CONTENTS, IN FEET NGVD, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,192.46	984	--
Oct. 31	7,192.06	824	-160
Nov. 30	7,192.12	848	+ 24
Dec. 31	7,192.12	848	0
CAL YR 1988	--	--	- 52
Jan. 31	7,192.12	848	0
Feb. 28	7,193.78	1,510	+662
Mar. 31	7,197.42	2,970	+1,460
Apr. 30	7,198.20	3,280	+310
May 31	7,199.45	3,780	+500
June 30	7,201.38	4,590	+810
July 31	7,200.48	4,210	-380
Aug. 31	7,196.43	2,570	-1,640
Sept. 30	7,195.14	2,060	-510
WTR YR 1989	--	--	+1,076

Note: Some monthend elevations and contents are interpolated from readings made during the year.

10292500 BRIDGEPORT RESERVOIR NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°19'30", long 119°12'40", in SE1/4NE1/4 sec.34, T.6 N., R.25 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at Bridgeport Dam on East Walker River, and 4.5 mi north of Bridgeport.

DRAINAGE AREA.--358 mi^2.

PERIOD OF RECORD.--March 1926 to current year. Monthend contents only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1180: 1949. WSP 1927: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,466.44 ft above National Geodetic Vertical Datum of 1929 (project datum).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1923. Dam completed in November 1924. Capacity, 42,460 acre-ft between elevations 6,415 ft, approximate elevation of bottom of reservoir, and 6,461 ft, crest of spillway is at elevation 6,460.75 ft; however, there are four siphons that become operative prior to reaching this spillway. Elevation of sill of outlet gate, 6,412 ft. No dead storage. Figures given herein represent total contents. Water is used for irrigation by Walker River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 44,880 acre-ft, June 16, 1974, elevation, 6,460.78 ft; no contents at times in water years 1929, 1930, 1960, 1977, 1988 and 1989.

EXTREMES FOR CURRENT YEAR.--Maximum recorded contents, 20,470 acre-ft, June 27, elevation, 6,450.92 ft, maximum elevation, 6,451.02 ft, June 27, no contents, Oct. 1-31.

Capacity table, (elevation, in feet, and contents, in acre-feet)

6,415	0	6,430	1,130	6,445	11,380
6,420	75	6,435	2,920	6,450	18,780
6,425	334	6,440	6,240	6,451	20,620

RESERVOIR STORAGE (AC-FT) WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e50	2850	e4970	7260	e11310	e14200	e12680	12900	19770	14290	6290
2	e.00	e100	2930	e5040	7330	e11440	e14180	e12500	12930	19790	14120	5980
3	e.00	e150	3020	e5130	7410	e11580	e14180	e12450	13160	19680	14000	5640
4	e.00	e200	3110	e5210	7460	e11730	e14170	e12380	13640	19410	13850	5320
5	e.00	e300	3190	e5290	e7550	e11870	e14210	e12370	14050	19310	13730	5060
6	e.00	e400	3270	e5370	e7640	e12250	e14210	e12330	14360	19300	13610	4660
7	e.00	e500	3350	e5440	e7730	e12480	e14210	e12380	14640	19150	13450	4370
8	e.00	e600	3410	e5520	e7820	e12820	e14240	12440	15060	19060	13420	4060
9	e.00	e700	3480	e5610	e7910	e13190	e14240	e12670	15460	18800	13350	3760
10	e.00	e800	3550	e5690	e7990	e13380	e14270	e12900	15930	18630	13210	3390
11	e.00	e900	3630	e5780	e8080	e13510	e14290	e13200	16500	18440	13070	3050
12	e.00	e1000	3720	e5860	e8180	e13550	14150	e13360	17030	18280	12940	2770
13	e.00	e1100	3790	e5920	e8270	e13610	14090	e13310	17560	18110	12830	2470
14	e.00	e1200	3820	e6000	e8370	e13650	14140	e13280	18020	17970	12640	2260
15	e.00	e1300	3860	e6060	e8460	e13720	14080	e13380	18370	17770	12420	2130
16	e.00	e1400	3930	e6120	e8540	e13760	14000	e13390	18660	17520	12150	2040
17	e.00	e1500	4000	e6190	e8640	e13870	e13990	e13360	18980	17350	11830	1980
18	e.00	e1600	4080	e6250	e8730	e13920	e13990	e13350	19240	17130	11490	1940
19	e.00	e1700	4160	e6320	e8850	e13980	13950	e13280	19420	16950	11190	2040
20	e.00	e1800	4220	e6390	e8920	e14020	13950	e13310	19520	16840	10920	2020
21	e.00	e1900	4280	e6470	e9000	e14080	13790	e13340	19680	16580	10710	1940
22	e.00	e2000	4320	e6550	e9320	e14140	13600	e13430	19850	16330	10310	1860
23	e.00	e2100	4370	e6610	e9930	e14200	13420	e13240	20030	16110	9780	1760
24	e.00	e2200	4480	e6680	e10420	e14230	13260	e13090	20140	15880	9210	1660
25	e.00	e2300	4530	e6750	e10650	e14230	13160	e12970	20250	15720	8770	1570
26	e.00	e2400	e4570	e6820	e10810	e14230	13090	e12940	20310	15570	8350	1430
27	e.00	e2500	e4640	e6870	e10980	e14230	13040	e12970	20290	15370	7990	1280
28	e.00	2590	e4730	e6930	e11140	e14230	12940	12890	20200	15070	7660	1230
29	e.00	2690	e4780	e6970	---	e14210	12830	e12830	19990	14850	7270	1220
30	e.00	2770	e4830	7090	---	e14210	12780	e12970	19920	14640	6970	1210
31	e.00	---	e4870	7200	---	e14200	---	12930	---	14460	6630	---
MAX	.00	2770	4870	7200	11140	14230	14290	13430	20310	19790	14290	6290
MIN	.00	50	2850	4970	7260	11310	12780	12330	12900	14460	6630	1210
#	--	6434.68	6438.22	6441.08	6444.80	6447.14	6446.11	6446.22	6450.62	6447.32	6440.44	6430.31
##	0	+2770	+2100	+2330	+3940	+3060	-1420	+150	+6990	-5460	-7830	-5420

CAL YR 1988 MAX 17890 MIN .00 ## -4130
WTR YR 1989 MAX 20310 MIN .00 ## +1210

\# Elevation, in feet NGVD, at end of month.
Change in contents, in acre-feet.
e Estimated.

10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°19'40", long 119°12'50", in SW1/4NE1/4 sec.34, T.6 N., R.25 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, on right bank 1,500 ft downstream from Bridgeport Reservoir, 5 mi north of Bridgeport, and 10 mi upstream from Sweetwater Creek.

DRAINAGE AREA.--359 mi^2.

PERIOD OF RECORD.--July 1911 to September 1914 (gage heights only), October 1921 to current year.

REVISED RECORDS.--WSP 1927: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft, from topographic map. Prior to Oct. 1, 1921, nonrecording gage at site 0.5 mi upstream at different datum. Oct. 1, 1921, to Feb. 21, 1924, water-stage recorder at site 1 mi downstream at different datum. Feb. 22, 1924, to Sept. 30, 1931, water-stage recorder, and Oct. 1, 1931, to May 25, 1939, nonrecording gage at present site at datum 2.34 ft lower. May 26, 1939, to Nov. 27, 1988, water-stage recorder at datum 2.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of meadow pasturelands near Bridgeport. Flow regulated by Bridgeport Reservoir (10292500).

AVERAGE DISCHARGE.--66 years (1923-24, 1926-89), 146 ft^3/s, 105,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft^3/s, June 19, 1963, gage height, 4.64 ft; maximum gage height, 4.95 ft, Jan. 22, 1943 (top of surge); minimum daily discharge, 0.2 ft^3/s, Nov. 2-29, Dec. 1-22, 25-28, 1955, and Jan. 17-25, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 292 ft^3/s, Aug. 22, gage height, 3.97 ft; minimum daily, 8.8 ft^3/s, Nov. 14, but may have been less during periods of estimated discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	18	11	e13	e15	12	23	95	101	183	100	195
2	32	16	11	e13	e15	11	23	100	102	165	93	189
3	33	15	11	e13	e15	11	23	101	105	166	83	187
4	32	13	11	e13	e15	11	23	101	106	166	90	184
5	33	13	11	e13	e15	11	23	102	109	166	90	184
6	34	13	11	e13	e15	11	31	106	121	162	90	184
7	34	11	11	e13	e15	10	46	109	122	156	99	187
8	33	10	11	e13	e15	10	53	113	118	168	107	184
9	32	11	12	e13	e15	10	60	133	108	176	112	187
10	31	11	12	e13	e15	20	60	159	101	175	118	194
11	33	11	12	e14	e15	37	67	184	97	162	118	190
12	33	10	12	e14	e15	36	84	183	98	154	119	180
13	33	8.9	12	e14	e16	37	85	181	111	153	118	174
14	33	8.8	12	e14	e16	38	75	175	135	154	130	130
15	34	9.6	12	e14	e16	40	76	164	153	154	158	85
16	34	10	12	e14	e16	40	75	168	169	153	173	71
17	35	10	12	e14	e16	40	79	167	180	151	192	71
18	35	10	12	e14	e16	40	86	156	186	151	199	71
19	34	10	12	e14	e16	40	91	156	200	151	206	83
20	36	10	13	e14	e16	40	97	156	206	155	209	105
21	36	11	13	e14	e16	40	99	155	197	162	219	113
22	35	12	13	e14	e16	40	114	156	197	162	264	113
23	35	12	13	e14	e15	44	115	156	201	161	284	109
24	36	12	12	e14	e14	49	108	143	197	154	276	106
25	37	11	11	e14	e13	49	97	130	200	131	265	108
26	38	11	e13	e14	e13	49	92	124	216	116	243	116
27	38	11	e13	e15	e12	49	91	107	232	116	204	110
28	37	11	e13	e15	12	49	91	101	243	113	204	81
29	40	12	e13	e15	---	44	91	101	227	106	204	80
30	41	12	e13	e15	---	32	91	102	205	100	202	93
31	29	---	e13	e15	---	24	---	101	---	100	198	---
TOTAL	1068	344.3	373	429	419	974	2169	4185	4743	4642	5167	4064
MEAN	34.5	11.5	12.0	13.8	15.0	31.4	72.3	135	158	150	167	135
MAX	41	18	13	15	16	49	115	184	243	183	284	195
MIN	29	8.8	11	13	12	10	23	95	97	100	83	71
AC-FT	2120	683	740	851	831	1930	4300	8300	9410	9210	10250	8060

CAL YR 1988 TOTAL 19662.2 MEAN 53.7 MAX 162 MIN 7.4 AC-FT 39000
WTR YR 1989 TOTAL 28577.3 MEAN 78.3 MAX 284 MIN 8.8 AC-FT 56680

e Estimated

10293500 EAST WALKER RIVER ABOVE STROSNIDER DITCH, NEAR MASON, NV

LOCATION.--Lat 38°48'45", long 119°02'50", in NW1/4SW1/4 sec.14, T.11 N., R.26 E., Lyon County, Hydrologic Unit 16050303, on right bank 0.9 mi upstream from head of Strosnider ditch, 12 mi southeast of Mason, and 13.5 mi southeast of Yerington.

DRAINAGE AREA.--1,100 mi², approximately.

PERIOD OF RECORD.--January 1947 to current year (no winter records since 1978).

GAGE.--Water-stage recorder. Datum of gage is 4,574.10 ft, above National Geodetic Vertical Datum of 1929. Prior to Oct. 24, 1957, near present site at datum 0.56 ft higher. Oct. 24, 1957, to Apr. 3, 1974, at site 400 ft downstream at same datum.

REMARKS.--Records fair. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir (station 10292500).

AVERAGE DISCHARGE.--31 years (1948-78), 142 ft³/s, 102,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,820 ft³/s, June 7, 1986, gage height, 7.49 ft, on basis of rating extension above 2,380 ft³/s; minimum daily, 2.3 ft³/s, Mar. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, April to Septmber, 269 ft³/s, Aug. 25, gage height, 3.92 ft; minimum daily, April to September, 25 ft³/s, Apr. 4-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	36	57	68	143	70	136
2	---	---	---	---	---	---	29	57	65	129	72	135
3	---	---	---	---	---	---	26	60	64	112	73	130
4	---	---	---	---	---	---	25	62	74	103	64	127
5	---	---	---	---	---	---	25	62	82	101	63	125
6	---	---	---	---	---	---	25	61	80	97	63	128
7	---	---	---	---	---	---	25	62	85	95	64	134
8	---	---	---	---	---	---	26	66	136	91	72	143
9	---	---	---	---	---	---	35	71	104	93	85	139
10	---	---	---	---	---	---	45	93	100	101	84	138
11	---	---	---	---	---	---	47	117	91	106	86	147
12	---	---	---	---	---	---	47	126	86	100	84	145
13	---	---	---	---	---	---	53	133	76	93	85	135
14	---	---	---	---	---	---	60	132	72	94	87	125
15	---	---	---	---	---	---	56	131	82	99	89	102
16	---	---	---	---	---	---	52	123	93	106	103	90
17	---	---	---	---	---	---	52	117	107	106	110	80
18	---	---	---	---	---	---	52	112	116	108	124	78
19	---	---	---	---	---	---	53	103	126	108	134	83
20	---	---	---	---	---	---	55	104	127	108	142	86
21	---	---	---	---	---	---	61	108	138	130	155	96
22	---	---	---	---	---	---	63	107	136	120	167	106
23	---	---	---	---	---	---	69	100	131	114	214	106
24	---	---	---	---	---	---	78	103	132	112	253	102
25	---	---	---	---	---	---	75	103	134	112	257	98
26	---	---	---	---	---	---	69	95	134	102	252	97
27	---	---	---	---	---	---	64	93	143	89	228	102
28	---	---	---	---	---	---	61	85	163	85	180	99
29	---	---	---	---	---	---	59	76	169	82	166	82
30	---	---	---	---	---	---	57	74	158	78	153	78
31	---	---	---	---	---	---	---	72	---	74	142	---
TOTAL	---	---	---	---	---	---	1480	2865	3272	3191	3921	3372
MEAN	---	---	---	---	---	---	49.3	92.4	109	103	126	112
MAX	---	---	---	---	---	---	78	133	169	143	257	147
MIN	---	---	---	---	---	---	25	57	64	74	63	78
AC-FT	---	---	---	---	---	---	2940	5680	6490	6330	7780	6690

10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER, NEAR COLEVILLE, CA

LOCATION.--Lat 38°22'47", long 119°26'57", in NE1/4SE1/4 sec.9, T.6 N., R.23 E., Mono County, Hydrologic Unit 16050302, in Toiyabe National Forest, on left bank 50 ft downstream from Little Walker River, 160 ft upstream from bridge on U.S. Highway 395, and 13 mi southeast of Coleville.

DRAINAGE AREA.--180 mi², revised.

PERIOD OF RECORD.--April 1938 to current year. Prior to October 1958, published as "below East Fork."

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,591.39 ft, above National Geodetic Vertical Datum of 1929, supplementary adjustment of 1958. Prior to Oct. 1, 1939, at site, 125 ft downstream at datum 1.00 ft higher. Oct. 1, 1939, to Sept. 30, 1969, at present site and datum. Oct. 1, 1969, to July 10, 1987, at site 100 ft downstream at same datum.

REMARKS.--Records good except for periods of estimated daily discharges, which are poor. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poore Lake Reservoir, capacity, 1,200 acre-ft, 7 mi upstream.

AVERAGE DISCHARGE.--51 years, 261 ft³/s, 189,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,220 ft³/s, Nov. 20, 1950, gage height, 8.10 ft, from rating curve extended above 1,900 ft³/s on basis of slope-area measurement of peak flow; minimum, 4.0 ft³/s, Nov. 18, 1948, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed prior to 1938, 5,800 ft³/s, Dec. 11, 1937, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,120 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 8	2300	*1,260	*3.96	June 16	0100	*1,260	3.94

Minimum daily, 20 ft³/s, Oct. 4, 5, 9, 10 and Nov. 6-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e22	21	39	e41	e42	75	222	285	453	388	109	52
2	e21	21	39	e42	e39	71	203	361	540	373	105	50
3	22	21	38	42	e35	61	197	466	958	376	103	49
4	20	21	34	e42	e35	70	206	675	967	375	102	48
5	20	21	33	42	e35	88	255	862	764	359	100	46
6	21	20	35	40	e35	136	337	978	796	333	98	43
7	21	20	34	41	e34	170	416	1070	916	331	100	43
8	21	20	32	e42	e33	317	467	1120	928	348	122	43
9	20	20	e33	e42	e32	301	506	1080	965	342	128	42
10	20	23	e35	e42	e32	243	550	848	1050	301	109	42
11	21	21	38	43	e36	221	570	704	1050	264	102	43
12	21	23	39	e43	e45	190	558	558	1010	249	95	45
13	22	32	35	e42	e45	174	513	491	1090	235	89	40
14	22	32	37	e41	e46	154	588	431	1040	231	84	36
15	23	28	35	41	e45	146	635	430	1010	219	80	35
16	23	29	35	39	e45	141	632	426	1120	202	79	34
17	23	30	35	37	e45	144	599	583	986	190	76	58
18	22	33	36	37	e48	149	659	742	866	193	73	66
19	22	32	34	38	e50	144	689	618	799	199	73	85
20	22	35	36	38	e48	139	737	683	703	196	79	83
21	21	35	28	40	58	135	699	722	635	196	79	87
22	21	37	26	e40	92	146	500	726	601	181	72	83
23	21	55	29	e40	121	155	399	698	645	173	68	74
24	21	43	34	e40	106	156	353	508	598	164	68	67
25	22	39	35	e40	108	158	309	444	504	152	66	62
26	21	39	e39	40	101	145	269	503	511	144	64	57
27	21	43	e41	e41	88	140	253	613	553	142	60	56
28	22	40	e43	e42	79	166	247	632	477	136	58	53
29	22	36	e43	e43	---	199	244	519	426	129	55	95
30	21	37	e42	e45	---	185	251	429	417	121	54	170
31	21	---	40	e44	---	192	---	402	---	115	53	---
TOTAL	663	907	1112	1270	1558	4911	13063	19607	23378	7357	2603	1787
MEAN	21.4	30.2	35.9	41.0	55.6	158	435	632	779	237	84.0	59.6
MAX	23	55	43	45	121	317	737	1120	1120	388	128	170
MIN	20	20	26	37	32	61	197	285	417	115	53	34
AC-FT	1320	1800	2210	2520	3090	9740	25910	38890	46370	14590	5160	3540

CAL YR 1988 TOTAL 43802 MEAN 120 MAX 707 MIN 20 AC-FT 86880
WTR YR 1989 TOTAL 78216 MEAN 214 MAX 1120 MIN 20 AC-FT 155100

e Estimated.

10296500 WEST WALKER RIVER NEAR COLEVILLE, CA

LOCATION.--Lat 38°30'55", long 119°27'15", in NW1/4NE1/4 sec.28, T.8 N., R.23 E., Mono County, Hydrologic Unit 16050302, in Toiyabe National Forest, on left bank 0.2 mi downstream from Rock Creek, and 5 mi southeast of Coleville.

DRAINAGE AREA.--250 mi², revised.

PERIOD OF RECORD.--October 1902 to July 1908 (published as West Fork of Walker River near Coleville, 1903, 1905-8 and as Walker River (West Fork) near Coleville, 1904), March 1909 to September 1910, June 1915 to March 1938, May 1957 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WSP 880: 1917 (runoff in acre-ft). WSP 1514: 1918, 1923. WDR NV-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,520 ft, from topographic map. Prior to July 31, 1908, nonrecording gage at site 0.5 mi upstream at different datum. Mar. 1, 1909, to Aug. 31, 1910, nonrecording gage, and June 18, 1915, to Aug. 15, 1919, water-stage recorder near present site at different datums. Aug. 16, 1919, to Mar. 31, 1938, water-stage recorder at site 1,000 ft upstream at different datum. May 26, 1957, to Sept. 10, 1963, water-stage recorder at site 10 ft downstream at datum 0.38 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poore Lake Reservoir, capacity, 1,200 acre-ft, 17 mi upstream.

AVERAGE DISCHARGE.--60 years (1903-7, 1910, 1916-37, 1958-89), 276 ft³/s, 200,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s Dec. 11, 1937, on basis of slope-area measurement of peak flow; minimum, 5 ft³/s, Dec. 3, 1924, Aug. 27, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,120 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 9	0819	*1150	*3.00	June 17	0800	1120	2.97

Minimum daily, 28 ft³/s, Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	32	45	46	48	88	226	271	402	326	119	57
2	29	32	45	47	43	89	208	332	465	349	113	54
3	29	33	46	45	35	71	201	403	699	303	109	52
4	29	33	43	e45	e35	75	205	604	987	321	108	51
5	29	33	44	46	e35	92	238	734	771	306	106	50
6	30	33	44	e46	e35	139	300	850	770	311	103	48
7	31	33	43	e46	e34	178	366	964	831	302	104	48
8	31	33	41	e46	e33	309	424	1050	858	307	123	48
9	30	33	40	46	e32	327	471	1080	894	296	135	47
10	28	34	42	46	e32	272	512	895	963	266	117	47
11	29	34	42	48	e38	250	535	685	993	270	109	47
12	29	35	42	e46	46	216	530	563	944	243	103	51
13	29	40	43	e44	45	195	466	472	990	235	96	45
14	29	45	40	42	46	170	537	410	985	230	89	42
15	31	35	34	e42	45	162	583	395	922	225	85	40
16	30	37	44	e43	45	160	592	383	1030	211	83	39
17	30	38	44	44	46	151	551	455	970	197	81	56
18	30	38	44	43	48	165	602	634	835	188	79	72
19	29	37	42	42	50	158	637	595	768	192	78	91
20	29	37	44	43	49	152	689	599	703	192	85	87
21	29	37	39	43	52	146	715	647	644	191	87	92
22	29	41	37	44	74	155	515	666	585	186	79	87
23	29	68	44	44	124	165	399	667	598	177	74	80
24	29	53	e43	44	118	166	349	520	588	167	73	72
25	29	51	e44	42	115	169	308	424	502	157	71	66
26	31	45	e45	e43	117	153	276	439	479	145	68	61
27	31	48	e45	e43	102	148	259	522	505	147	65	57
28	31	51	e46	44	91	166	250	579	475	145	63	56
29	31	46	e46	43	---	206	246	504	410	137	60	76
30	31	45	e46	43	---	190	248	422	392	131	58	176
31	32	---	46	45	---	198	---	381	---	123	58	---
TOTAL	922	1190	1333	1374	1613	5281	12438	18145	21958	6976	2781	1895
MEAN	29.7	39.7	43.0	44.3	57.6	170	415	585	732	225	89.7	63.2
MAX	32	68	46	48	124	327	715	1080	1030	349	135	176
MIN	28	32	34	42	32	71	201	271	392	123	58	39
AC-FT	1830	2360	2640	2730	3200	10470	24670	35990	43550	13840	5520	3760

CAL YR 1988 TOTAL 46306 MEAN 127 MAX 677 MIN 28 AC-FT 91850
WTR YR 1989 TOTAL 75906 MEAN 208 MAX 1080 MIN 28 AC-FT 150600

e Estimated

10297000 TOPAZ LAKE NEAR TOPAZ, CA

LOCATION.--Lat 38°41'35", long 119°31'10", in NW1/4NE1/4 sec.33, T.10 N., R.22 E., Douglas County, Hydrologic Unit 16050301, at outlet works of Topaz Lake on West Walker River, and 5.5 mi north of Topaz.

PERIOD OF RECORD.--December 1921 to September 1931 (monthly contents only published in WSP 1734), October 1931 to current year.

GAGE.--Water-stage recorder read once daily. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1978, at datum 4.62 ft higher.

REMARKS.--Topaz Lake, formerly known as Alkali Lake and Topaz Reservoir, was formed by the diversion of water from West Walker River through a feeder canal and the construction of an outlet tunnel through a low saddle in rim of lake. Storage began about December 1921. Usable capacity, 59,440 acre-ft, between elevations 4,967.68 ft (lowest practical elevation for diversion through tunnel) and 5,000.38 ft (3 ft below top of levee). Useable capacity of reservoir was increased from about 45,000 acre-ft to 59,440 acre-ft in October 1937 by an earthfill, rock-faced levee at south end. Figures given herein represent usable contents. There is 65,000 acre-ft of lake volume below the point of controllable storage. Water is used for irrigation in Walker River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 60,680 acre-ft, July 3, 1980, elevation, 5,000.92 ft, present datum; no contents Oct. 31, 1924, Sept. 22, Sept. 24-30, Oct. 1-15, 1960, Aug. 19, 1977, Dec. 23, and Sept. 15 to Nov. 24, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum contents 39,730 acre-ft, June 20, elevation, 4,991.21 ft; no contents, Oct. 1 to Nov. 24.

Capacity table (elevation, in feet, and contents, in acre-feet)

4,967	0	4,980	19,760
4,968	490	4,985	28,310
4,970	3,580	4,990	37,360
4,975	11,520	4,995	47,540

RESERVOIR STORAGE (AC-FT) WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	675	3720	7240	11390	16670	16350	23580	36730	22920	11100
2	.00	.00	782	3830	7020	11820	16800	16140	23630	36330	22390	10690
3	.00	.00	906	3940	7460	11920	16790	16060	24180	35910	21980	10340
4	.00	.00	998	4040	7590	12050	16800	16220	25070	35500	21560	10020
5	.00	.00	1110	4210	7690	12240	16870	16640	25670	35150	21140	9680
6	.00	.00	1200	4290	7770	12470	16980	17250	26260	34800	20700	9280
7	.00	.00	1290	4410	7860	12830	17080	18060	27090	34470	20530	8900
8	.00	.00	1380	4520	7970	13400	17250	18880	28100	34110	20220	8620
9	.00	.00	1490	4750	8130	14150	17400	19770	29290	33720	19940	8340
10	.00	.00	1550	4820	8180	14630	17480	20390	30660	33290	19690	8040
11	.00	.00	1690	4910	8310	15220	17550	20780	32100	32750	19380	7780
12	.00	.00	1780	5040	8430	15610	17570	20850	33490	32120	19030	7540
13	.00	e.00	1890	5190	8560	15940	17470	20800	34910	31490	18730	7400
14	.00	e.00	2080	5260	8670	16190	17470	20700	36080	30870	18380	7230
15	.00	e.00	2030	5370	8800	16340	17570	20680	36940	30310	17960	6940
16	.00	e.00	2090	5480	8910	16440	17750	20700	37940	29780	17630	6720
17	.00	e.00	2220	5570	9070	16470	17860	20870	38820	29290	17130	6550
18	.00	e.00	2330	5680	9180	16570	18000	21460	39370	28760	16720	6450
19	.00	e.00	2400	5790	9340	16650	18180	21790	39650	28240	16340	6310
20	.00	e.00	2560	5900	9490	16690	18470	22190	39690	27720	15940	6200
21	.00	e.00	2620	6040	9620	16690	18720	22540	39610	27250	15550	6100
22	.00	e.00	2710	6180	e9890	16650	18650	22810	39470	26860	15130	5980
23	.00	e.00	2810	6250	e10170	16590	18370	23140	39370	26520	14710	5870
24	.00	e.00	2910	6360	e10440	16570	18210	23170	39270	26220	14310	5710
25	.00	e76	3070	6470	e10720	16570	18080	23050	39050	25930	13950	5620
26	.00	e168	3150	6560	e10990	16590	17850	23000	38820	25590	13530	5440
27	.00	e275	3220	6690	e11270	16590	17570	23170	38620	25230	13190	5320
28	.00	367	3320	6800	e11340	16550	17270	23480	38290	24850	12810	5190
29	.00	474	3440	6910	---	16590	16980	23600	37780	24440	12360	4970
30	.00	567	3570	7040	---	16620	16650	23650	37190	23990	11890	4970
31	.00	---	3610	7190	---	16670	---	23600	---	23460	11470	---
MAX	.00	567	3610	7190	11340	16690	18720	23650	39690	36730	22920	11100
MIN	.00	.00	675	3720	7020	11390	16650	16060	23580	23460	11470	4970
#	4966.87	4968.05	4970.02	4972.30	4974.89	4978.15	4978.14	4982.27	4989.91	4982.19	4974.97	4970.89
##	.00	+567	+3040	+3580	+4150	+5330	-20	+6950	+13590	-13730	-11990	-6500

CAL YR 1988 MAX 19670 MIN .00 ## -5160
WTR YR 1989 MAX 39690 MIN .00 ## +4970

\# Elevation, in feet NGVD, at end of month.
Change in contents, in acre-feet.
e Estimated.

10297500 WEST WALKER RIVER AT HOYE BRIDGE, NEAR WELLINGTON, NV

LOCATION.--Lat 38°43'40", long 119°25'40", in NE1/4SE1/4 sec.17, T.10 N., R.23 E., Douglas County, Hydrologic Unit 16050302, on left bank 20 ft upstream from Hoye Bridge, 2 mi upstream from head of Saroni Canal, and 4 mi southwest of Wellington.

DRAINAGE AREA.--497 mi².

PERIOD OF RECORD.--May to August 1910 (published as West Walker River near Wellington), July 1920 to September 1923, March 1924 to August 1925, October 1925 to September 1932, October 1957 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WDR NV-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,980 ft, from topographic map. May to August 1910, nonrecording gage at same site at different datum. July 1, 1920, to Sept. 30, 1923, water-stage recorder at site 3 mi downstream, 1 mi downstream from Saroni Canal, at different datum, and supplemental nonrecording gage at Saroni Canal 1 mi downstream from head. Mar. 1, 1924, to Sept. 30, 1932, water-stage recorder at site at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by off-channel storage in Topaz Lake (station 10297000), since Jan. 30, 1922. Diversions for irrigation of about 10,500 acres above station. Records include releases from Topaz Lake and all return flow from Antelope Valley.

AVERAGE DISCHARGE.--42 years (1921-23, 1926-32, 1958-89), 247 ft³/s, 179,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,310 ft³/s, July 8, 1983, gage height, 8.75 ft; minimum observed, 4.8 ft³/s, January 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 583 ft³/s, June 30, July 1, gage height, 5.00 ft; minimum daily, 8.8 ft³/s, Dec. 26, but could have been less during period of ice effect Dec. 14 to Feb. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	e21	17	e9.0	e9.4	11	91	302	328	550	264	205
2	35	e22	17	e9.0	e9.4	11	91	305	329	470	277	194
3	34	22	15	e9.0	e9.4	12	92	308	344	451	278	188
4	e34	22	15	e9.0	e9.4	29	94	334	422	447	278	173
5	e34	24	15	e9.0	e9.4	31	93	389	388	447	258	170
6	e33	27	15	e9.0	e9.4	31	109	437	360	431	264	175
7	e33	28	15	e9.0	9.5	31	174	454	351	407	263	178
8	e32	23	16	e9.4	9.7	32	212	485	317	402	291	164
9	e32	23	16	e9.8	10	32	270	519	252	431	253	161
10	e31	23	16	e10	11	33	329	531	250	439	224	158
11	e31	21	16	e10	12	33	358	524	234	442	205	154
12	e30	21	16	e10	12	34	393	515	213	516	199	147
13	e30	22	16	e10	14	33	395	493	236	491	197	137
14	e29	27	e16	e10	13	41	378	451	321	465	196	136
15	e29	21	e16	e10	14	102	369	430	397	444	214	126
16	e28	15	e16	e10	14	121	372	387	449	384	224	126
17	e28	14	e16	e10	15	124	378	349	467	364	243	110
18	e27	12	e16	e11	16	127	396	312	498	345	240	112
19	e27	11	e17	e11	19	129	408	321	532	349	222	121
20	e26	11	e18	e10	17	131	410	352	562	348	219	106
21	e26	11	e17	e10	17	151	430	370	546	328	220	98
22	e25	11	e13	e10	17	162	458	390	538	272	244	95
23	e25	15	e11	e10	16	159	456	396	554	234	209	93
24	e24	16	e10	e10	13	131	376	396	528	229	206	92
25	e24	17	e9.0	e10	12	108	293	397	519	209	202	90
26	e23	17	e8.8	e10	11	108	293	392	517	201	191	89
27	e23	17	e9.0	e9.4	11	108	307	342	517	199	188	88
28	e22	17	e9.0	e9.4	11	106	305	342	540	196	186	86
29	e22	17	e9.0	e9.4	---	106	303	354	556	195	200	87
30	e21	17	e9.4	e9.4	---	88	300	351	576	199	244	104
31	e21	---	e9.0	e10	---	83	---	335	---	243	218	---
TOTAL	873	565	434.2	301.8	350.6	2438	8933	12263	12641	11128	7117	3963
MEAN	28.2	18.8	14.0	9.74	12.5	78.6	298	396	421	359	230	132
MAX	35	28	18	11	19	162	458	531	576	550	291	205
MIN	21	11	8.8	9.0	9.4	11	91	302	213	195	186	86
AC-FT	1730	1120	861	599	695	4840	17720	24320	25070	22070	14120	7860

CAL YR 1988 TOTAL 37847.2 MEAN 103 MAX 407 MIN 8.8 AC-FT 75070
WTR YR 1989 TOTAL 61007.6 MEAN 167 MAX 576 MIN 8.8 AC-FT 121000

e Estimated

10300000 WEST WALKER RIVER NEAR HUDSON, NV

LOCATION.--Lat 38°48'35", long 119°13'35", in SE1/4SW1/4 sec.18, T.11 N., R.25 E., Lyon County, Hydrologic Unit 16050302, on left bank 0.5 mi upstream from Wilson Canyon, and 3 mi southeast of Hudson.

DRAINAGE AREA.--964 mi^2.

PERIOD OF RECORD.--August 1914 to March 1925, January 1947 to current year (no winter records since 1978). August 1914 to May 1921 published as "at Hudson."

GAGE.--Water-stage recorder. Elevation of gage is 4,650 ft, from topographic map. Prior to May 1921, nonrecording gage at site 2.5 mi upstream at different datum. May 1921 to March 1925, water-stage recorder at approximately same site at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by off-channel storage in Topaz Lake (station 10297000) since Jan. 30, 1922. Many diversions above station for irrigation. Station is below return flow from irrigated areas in Smith Valley.

AVERAGE DISCHARGE.--41 years (1914-24, 1947-78), 187 ft^3/s, 135,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft^3/s, Dec. 24, 1955, gage height, 7.42 ft, from floodmarks; minimum, 3.8 ft^3/s, Jan. 22, 1962, but may have been less during periods of ice effect.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 500 ft^3/s, May 11, gage height, unknown; minimum daily during period April to September, 74 ft^3/s, Apr. 6, but may have been less during period of no gage-height record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	79	e280	292	343	122	128
2	---	---	---	---	---	---	85	e280	283	288	130	122
3	---	---	---	---	---	---	85	e285	308	266	136	113
4	---	---	---	---	---	---	83	e320	341	267	167	113
5	---	---	---	---	---	---	84	e350	389	256	163	127
6	---	---	---	---	---	---	74	e390	301	243	164	124
7	---	---	---	---	---	---	92	e410	294	229	187	119
8	---	---	---	---	---	---	150	e430	302	216	177	e120
9	---	---	---	---	---	---	174	e450	202	226	176	e117
10	---	---	---	---	---	---	224	e480	162	231	164	e112
11	---	---	---	---	---	---	256	e500	150	220	150	110
12	---	---	---	---	---	---	e290	e450	115	271	140	105
13	---	---	---	---	---	---	e320	e420	104	264	131	94
14	---	---	---	---	---	---	e325	e370	148	240	124	95
15	---	---	---	---	---	---	e320	e340	237	230	124	88
16	---	---	---	---	---	---	e330	e340	309	182	131	88
17	---	---	---	---	---	---	e340	e300	322	166	133	90
18	---	---	---	---	---	---	e350	e250	351	162	126	87
19	---	---	---	---	---	---	e365	e280	376	175	123	108
20	---	---	---	---	---	---	e370	e290	396	188	131	100
21	---	---	---	---	---	---	e380	e310	402	173	153	92
22	---	---	---	---	---	---	e390	e330	386	161	134	91
23	---	---	---	---	---	---	e400	e335	382	150	128	94
24	---	---	---	---	---	---	e300	308	369	136	131	e95
25	---	---	---	---	---	---	e280	286	355	118	127	e94
26	---	---	---	---	---	---	e280	277	348	109	127	e92
27	---	---	---	---	---	---	e285	245	336	112	126	e93
28	---	---	---	---	---	---	e280	231	337	107	129	e91
29	---	---	---	---	---	---	e280	248	341	104	148	e88
30	---	---	---	---	---	---	e280	281	355	101	139	e94
31	---	---	---	---	---	---	---	278	---	114	130	---
TOTAL	---	---	---	---	---	---	7551	10344	8993	6048	4371	3084
MEAN	---	---	---	---	---	---	252	334	300	195	141	103
MAX	---	---	---	---	---	---	400	500	402	343	187	128
MIN	---	---	---	---	---	---	74	231	104	101	122	87
AC-FT	---	---	---	---	---	---	14980	20520	17840	12000	8670	6120

e Estimated

10301500 WALKER RIVER NEAR WABUSKA, NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 39°09'10", long 119°05'50", in SE1/4NW1/4 sec.20, T.15 N., R.26 E., Lyon County, Hydrologic Unit 16050303, on left bank 600 ft upstream from timber bridge at Julian Ranch, 1.8 mi downstream from Southern Pacific Railroad bridge, 4.6 mi east of Wabuska, and 16 mi upstream from Weber Dam.

DRAINAGE AREA.--2,600 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1902 to December 1904, January 1905 to July 1908 (fragmentary), January 1920 to September 1935, January 1939 to current year. Monthly discharge only for some periods published in WSP 1734.

REVISED RECORDS.--WSP 1314: 1923 (M). WSP 1634: 1904.

GAGE.--Water-stage recorder. Elevation of gage is 4,280 ft, from topographic map. July 22, 1902, to July 31, 1908, nonrecording gage at site 2.5 mi upstream at different datum. Jan. 15, 1920, to Sept. 30, 1929, nonrecording gage or water-stage recorder at several sites near present site at various datums; Oct. 1, 1929, to Sept. 30, 1935, water-stage recorder at site 1.5 mi downstream at different datum. January 1939 to September 1958, non-recording gage on bridge 300 ft downstream at datum 1.19 ft higher.

REMARKS.--Records fair, except estimated daily discharges, which are poor. Many diversions for irrigation above station. Flow regulated by Bridgeport Reservoir (station 10292500) and Topaz Reservoir (station 10297000), combined capacity, 101,900 acre-ft.

AVERAGE DISCHARGE.--64 years (1903-4, 1921-24, 1926-35, 1940-41, 1943, 1945-89), 171 ft³/s, 124,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,280 ft³/s, July 10, 11, 1906, gage height, 5.90 ft, site and datum then in use; no flow at times in 1924, 1925, and 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 176 ft³/s, June 6, gage height, 4.75 ft; minimum daily, 3.6 ft³/s, Nov. 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	14	14	e10	41	29	65	27	45	37	30	35
2	36	12	15	e10	40	23	61	27	44	37	25	34
3	36	11	15	e10	41	22	51	34	37	31	25	35
4	36	8.5	15	e10	37	29	44	23	39	37	32	34
5	37	8.8	17	e10	e27	29	45	24	97	34	41	30
6	36	8.0	16	e10	e23	30	37	19	129	63	31	21
7	32	7.6	14	e10	e20	33	30	25	76	55	32	26
8	35	7.7	14	e10	e21	35	28	27	78	45	36	22
9	36	7.7	14	e10	e23	38	35	47	119	49	49	18
10	36	7.2	14	e10	e25	39	57	52	102	58	52	16
11	37	6.5	15	e11	e27	39	41	76	80	47	66	16
12	37	6.4	16	e12	e27	38	18	96	59	32	61	15
13	37	5.5	15	e13	e27	39	23	96	40	44	59	18
14	38	4.8	14	e15	e27	43	26	80	29	67	58	15
15	37	5.5	18	e19	e27	43	21	54	39	62	49	14
16	36	8.4	18	e24	e28	49	27	63	49	65	46	13
17	e14	9.2	17	e30	e29	51	30	111	69	46	40	14
18	e11	6.5	14	39	e30	48	35	96	59	51	35	16
19	e10	4.8	17	43	e31	41	30	76	82	48	34	17
20	e11	3.6	18	46	e34	42	32	54	70	54	37	18
21	e11	3.6	15	46	37	43	33	47	78	51	35	24
22	e11	3.9	15	47	39	46	31	43	68	44	34	12
23	e11	5.3	e12	38	38	40	36	59	57	45	35	14
24	e10	10	e12	36	35	39	41	59	57	36	35	18
25	8.2	19	e12	34	34	35	35	55	46	45	35	17
26	8.3	19	e11	43	35	32	42	39	37	41	35	17
27	7.7	17	e11	45	33	27	34	44	40	53	34	13
28	6.9	18	e11	44	30	26	32	55	42	46	35	14
29	6.5	14	e10	35	---	31	33	49	41	42	38	11
30	8.4	12	e10	37	---	55	29	40	33	39	43	12
31	13	---	e10	41	---	85	---	44	---	37	44	---
TOTAL	725.0	275.5	439	798	866	1199	1082	1641	1841	1441	1241	579
MEAN	23.4	9.18	14.2	25.7	30.9	38.7	36.1	52.9	61.4	46.5	40.0	19.3
MAX	38	19	18	47	41	85	65	111	129	67	66	35
MIN	6.5	3.6	10	10	20	22	18	19	29	31	25	11
AC-FT	1440	546	871	1580	1720	2380	2150	3250	3650	2860	2460	1150

CAL YR 1988 TOTAL 11935.5 MEAN 32.6 MAX 163 MIN 3.6 AC-FT 23670
WTR YR 1989 TOTAL 12127.5 MEAN 33.2 MAX 129 MIN 3.6 AC-FT 24050

e Estimated

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960 to current year.

PERIOD OF DAILY RECORD.--
CHEMICAL ANALYSES: October 1968 to September 1969.
SPECIFIC CONDUCTANCE: October 1968 to September 1976.
WATER TEMPERATURE: October 1968 to September 1976.

REMARKS.--Inflow from two drainage ditches occasionally enter stream less than a mile above sampling site. Because inflow and streamflow differ in quality, and because the waters do not mix thoroughly above sampling site, flow at site is not homogenous either chemically or thermally when ditches discharge to the stream. This doubtless was responsible for some of the variation shown by daily specific-conductance and temperature data during water years 1969-76. Detailed sampling information is available from U.S. Geological Survey, Carson City, Nev. Pesticide analyses prior to October 1981 from U.S. Environmental Protection Agency. This gage is currently in the NASQAN network.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 792 microsiemens Dec. 12, 1972; minimum daily, 183 microsiemens June 26, 1969.
WATER TEMPERATURE: Maximum daily, 34.5°C July 24, 1975; minimum daily, freezing point on several days during winter months of most years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
NOV												
22...	1045	4.2	554	8.40	6.5	8.0	0.30	10.0	99	K13	110	150
JAN												
25...	1205	32	546	8.20	1.0	0.0	7.4	11.2	89	<2	100	150
MAR												
31...	1200	99	364	8.40	15.5	14.0	65	8.6	98	230	670	100
MAY												
31...	1200	44	322	8.40	21.0	19.0	13	8.3	105	K22	110	88
JUN												
29...	1050	42	312	8.20	27.5	21.0	17	8.0	106	140	440	86
AUG												
29...	1135	40	290	8.30	31.0	21.5	18	8.0	106	110	410	84

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV												
22...	42	10	59	2	4.8	203	2	170	70	23	0.80	25
JAN												
25...	43	10	63	2	5.8	217	--	178	67	20	0.70	21
MAR												
31...	29	7.3	38	2	4.6	145	2	124	39	13	0.60	17
MAY												
31...	25	6.3	32	2	3.7	136	3	116	28	11	0.50	13
JUN												
29...	25	5.7	29	1	4.7	128	--	108	27	10	0.50	17
AUG												
29...	24	5.8	27	1	4.0	127	--	104	26	7.1	0.40	19

K: NON-IDEAL COLONY COUNT

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 22...	326	338	0.44	<0.010	<0.100	0.020	<0.010	0.28	0.30	0.080	0.070	0.060
JAN 25...	344	340	0.47	<0.010	0.130	0.020	0.010	0.18	0.20	0.070	0.060	0.050
MAR 31...	218	225	0.30	<0.010	<0.100	0.070	0.030	0.13	0.20	0.070	0.040	0.010
MAY 31...	183	190	0.25	--	--	--	--	--	--	--	--	--
JUN 29...	176	186	0.24	<0.010	<0.100	0.040	0.010	0.66	0.70	0.090	0.050	0.060
AUG 29...	184	178	0.25	--	--	0.010	--	0.59	0.60	0.130	<0.010	--

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 22...	<10	16	45	<0.5	2	1	<3	1	15	<5	36	120
JAN 25...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 31...	20	13	37	<0.5	<1	1	<3	1	26	<5	35	20
MAY 31...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 29...	20	16	30	<0.5	<1	1	<3	2	16	<1	26	13
AUG 29...	10	14	26	<0.5	<1	1	<3	4	13	9	27	11

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 22...	<0.1	20	2	<1	2.0	400	<6	7	6	0.07	100
JAN 25...	--	--	--	--	--	--	--	--	39	3.4	90
MAR 31...	<0.1	20	2	<1	<1.0	290	<6	14	228	61	91
MAY 31...	--	--	--	--	--	--	--	--	35	4.2	91
JUN 29...	<0.1	10	1	<1	<1.0	260	<6	8	43	4.9	96
AUG 29...	<0.1	<10	1	<1	<1.0	240	<6	9	82	8.9	98

10309000 EAST FORK CARSON RIVER NEAR GARDNERVILLE, NV

LOCATION.--Lat 38°50'50", long 119°42'10", in SW1/4NE1/4 sec.2, T.11 N., R.20 E., Douglas County, Hydrologic Unit 16050201, on left bank 0.1 mi downstream from Horseshoe Bend, 2 mi east of Mud Lake Reservoir, 4.5 mi downstream from Bryant Creek, and 7 mi southeast of Gardnerville.

DRAINAGE AREA.--356 mi^2.

PERIOD OF RECORD.--January 1890 to December 1893, October 1900 to December 1906 (gage heights only August to December 1904 and July 1905 to December 1906), January 1908 to December 1910, June to October 1917, December 1924 to September 1928, June to September 1929, October 1935 to December 1937, and May 1939 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WSP 1214: 1938 (M), 1942-43 (M), 1945 (M). WSP 1514: 1909-10. WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,985.11 ft, above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to May 19, 1939, nonrecording gages at several sites within 2 mi of present site at various datums.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station is above all diversions in Carson Valley. Diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft.

AVERAGE DISCHARGE.--63 years (1891-93, 1908-10, 1925-28, 1935-37, 1939-89), 387 ft^3/s, 280,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft^3/s, Dec. 23, 1955, gage height, 11.88 ft, from rating curve extended above 6,000 ft^3/s on basis of slope-area measurements at gage heights, 9.66 ft and 11.88 ft; minimum observed, 7.8 ft^3/s, Nov. 20, 1977, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 8	1900	1390	3.31	May 8	0200	*1630	*3.58
Apr. 21	0100	1520	3.46	June 3	2100	1440	3.37

Minimum daily, 24 ft^3/s, Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	34	53	e47	e62	185	645	444	535	316	110	82
2	25	33	55	e47	60	215	518	564	587	292	108	80
3	25	34	59	e47	56	176	500	645	1010	283	106	78
4	24	35	54	e47	e54	150	497	873	1210	275	108	78
5	25	36	54	e46	e52	188	574	1040	937	260	106	75
6	26	34	57	e46	e49	420	732	1200	879	243	99	71
7	27	34	56	e46	e47	560	888	1330	915	231	98	76
8	27	34	58	e46	e45	1100	964	1400	1000	226	133	80
9	30	35	50	e46	e43	1010	1000	1370	967	218	146	79
10	30	35	52	e46	e42	700	1030	1300	963	202	105	81
11	31	38	52	e46	e39	650	1090	999	952	190	91	77
12	32	37	53	e46	e38	529	1010	853	895	183	87	78
13	32	44	55	e46	e37	476	908	793	908	170	85	68
14	33	59	51	e45	e35	402	1020	703	871	160	82	60
15	35	40	53	e45	e38	364	1080	673	823	156	80	57
16	35	42	e53	e45	e43	368	1080	630	879	156	79	56
17	34	47	e51	e46	e47	322	1040	754	804	154	77	83
18	34	44	e52	e46	e54	344	1110	906	718	152	93	101
19	33	43	52	e46	e68	409	1140	761	665	149	89	118
20	33	44	55	e46	83	386	1240	779	601	139	107	109
21	34	43	53	e47	87	340	1260	842	549	142	112	92
22	33	50	e53	e48	157	360	896	849	494	140	105	82
23	33	158	e52	e48	288	376	710	841	503	142	99	75
24	34	101	e51	e49	288	405	616	664	470	139	97	68
25	34	73	e50	e50	259	433	530	576	423	135	95	64
26	34	64	e49	e51	295	363	470	593	411	124	92	62
27	34	54	e48	e52	256	334	427	666	465	118	88	59
28	34	64	e47	e54	207	455	399	697	400	114	87	57
29	33	58	e47	e55	---	592	391	618	357	115	84	81
30	34	52	e46	e57	---	482	394	533	338	113	83	148
31	34	---	e46	e58	---	506	---	497	---	108	84	---
TOTAL	967	1499	1617	1490	2829	13600	24159	25393	21529	5545	3015	2375
MEAN	31.2	50.0	52.2	48.1	101	439	805	819	718	179	97.3	79.2
MAX	35	158	59	58	295	1100	1260	1400	1210	316	146	148
MIN	24	33	46	45	35	150	391	444	338	108	77	56
AC-FT	1920	2970	3210	2960	5610	26980	47920	50370	42700	11000	5980	4710

CAL YR 1988 TOTAL 44871 MEAN 123 MAX 557 MIN 17 AC-FT 89000
WTR YR 1989 TOTAL 104018 MEAN 285 MAX 1400 MIN 24 AC-FT 206300

e Estimated

10309000 EAST FORK CARSON RIVER NEAR GARDNERVILLE, NV

LOCATION.--Lat 38°50'50", long 119°42'10", in SW1/4NE1/4 sec.2, T.11 N., R.20 E., Douglas County, Hydrologic Unit 16050201, on left bank 0.1 mi downstream from Horseshoe Bend, 2 mi east of Mud Lake Reservoir, 4.5 mi downstream from Bryant Creek, and 7 mi southeast of Gardnerville.

DRAINAGE AREA.--356 mi².

PERIOD OF RECORD.--January 1890 to December 1893, October 1900 to December 1906 (gage heights only August to December 1904 and July 1905 to December 1906), January 1908 to December 1910, June to October 1917, December 1924 to September 1928, June to September 1929, October 1935 to December 1937, and May 1939 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WSP 1214: 1938 (M), 1942-43 (M), 1945 (M). WSP 1514: 1909-10. WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,985.11 ft above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to May 19, 1939, nonrecording gages at several sites within 2 mi of present site at various datums.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station is above all diversions in Carson Valley. Diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft.

AVERAGE DISCHARGE.--63 years (1891-93, 1908-10, 1925-28, 1935-37, 1939-89), 387 ft³/s, 280,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft³/s, Dec. 23, 1955, gage height, 11.88 ft, from rating curve extended above 6,000 ft³/s on basis of slope-area measurements at gage heights, 9.66 ft and 11.88 ft; minimum observed, 7.8 ft³/s, Nov. 20, 1977, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 8	1900	1390	3.31	May 8	0200	*1630	*3.58
Apr. 21	0100	1520	3.46	June 3	2100	1440	3.37

Minimum daily, 24 ft³/s, Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	34	53	e47	e62	185	645	444	535	316	110	82
2	25	33	55	e47	60	215	518	564	587	292	108	80
3	25	34	59	e47	56	176	500	645	1010	283	106	78
4	24	35	54	e47	e54	150	497	873	1210	275	108	78
5	25	36	54	e46	e52	188	574	1040	937	260	106	75
6	26	34	57	e46	e49	420	732	1200	879	243	99	71
7	27	34	56	e46	e47	560	888	1330	915	231	98	76
8	27	34	58	e46	e45	1100	964	1400	1000	226	133	80
9	30	35	50	e46	e43	1010	1000	1370	967	218	146	79
10	30	35	52	e46	e42	700	1030	1300	963	202	105	81
11	31	38	52	e46	e39	650	1090	999	952	190	91	77
12	32	37	53	e46	e38	529	1010	853	895	183	87	78
13	32	44	55	e46	e37	476	908	793	908	170	85	68
14	33	59	51	e45	e35	402	1020	703	871	160	82	60
15	35	40	53	e45	e38	364	1080	673	823	156	80	57
16	35	42	e53	e45	e43	368	1080	630	879	156	79	56
17	34	47	e51	e46	e47	322	1040	754	804	154	77	83
18	34	44	e52	e46	e54	344	1110	906	718	152	93	101
19	33	43	52	e46	e68	409	1140	761	665	149	89	118
20	33	44	55	e46	83	386	1240	779	601	139	107	109
21	34	43	53	e47	87	340	1260	842	549	142	112	92
22	33	50	e53	e48	157	360	896	849	494	140	105	82
23	33	158	e52	e48	288	376	710	841	503	142	99	75
24	34	101	e51	e49	288	405	616	664	470	139	97	68
25	34	73	e50	e50	259	433	530	576	423	135	95	64
26	34	64	e49	e51	295	363	470	593	411	124	92	62
27	34	54	e48	e52	256	334	427	666	465	118	88	59
28	34	64	e47	e54	207	455	399	697	400	114	87	57
29	33	58	e47	e55	---	592	391	618	357	115	84	81
30	34	52	e46	e57	---	482	394	533	338	113	83	148
31	34	---	e46	e58	---	506	---	497	---	108	84	---
TOTAL	967	1499	1617	1490	2829	13600	24159	25393	21529	5545	3015	2375
MEAN	31.2	50.0	52.2	48.1	101	439	805	819	718	179	97.3	79.2
MAX	35	158	59	58	295	1100	1260	1400	1210	316	146	148
MIN	24	33	46	45	35	150	391	444	338	108	77	56
AC-FT	1920	2970	3210	2960	5610	26980	47920	50370	42700	11000	5980	4710

CAL YR 1988 TOTAL 44871 MEAN 123 MAX 557 MIN 17 AC-FT 89000
WTR YR 1989 TOTAL 104018 MEAN 285 MAX 1400 MIN 24 AC-FT 206300

e Estimated

10309025 INDIAN CREEK NEAR WOODFORDS, CA

LOCATION.--Lat 38°44'54", long 119°48'54", in NE1/4NE1/4 sec.6, T.10 N., R.20 E., Alpine County, Hydrologic Unit 16050201, on right bank 2 mi south of Woodfords.

DRAINAGE AREA.--1.7 mi², approximately.

PERIOD OF RECORD.--May 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,880 ft, from topographic map.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Irrigation above the gage can cause considerable fluctuations. Periodic diversions from Millberry Canyon.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8.9 ft³/s, Mar. 8, 1989, gage height, 1.88 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8.9 ft³/s, Mar. 8, gage height, 1.88 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.02	.03	e.10	e.29	.94	1.2	.11	.05	.00	.00	.00
2	.00	.02	.03	e.10	e.23	1.5	1.3	.11	.05	.00	.00	.00
3	.00	.02	.03	e.10	e.20	1.3	.99	.10	.07	.00	.00	.00
4	.00	.01	.04	e.10	e.20	1.2	.87	.10	.07	.00	.00	.00
5	.00	.01	.05	e.10	e.20	2.2	.80	.09	.07	.00	.00	.00
6	.00	.01	.06	e.10	e.20	1.9	.72	.09	.06	.00	.00	.00
7	.00	.01	.07	e.10	e.20	2.1	.66	.16	.09	.00	.00	.00
8	.00	.01	.07	e.10	e.20	4.6	.60	.50	.16	.00	.00	.00
9	.00	.01	.06	e.26	e.20	2.6	.53	.90	.21	.00	.00	.00
10	.00	.01	.07	e.24	e.20	1.8	.44	.62	.24	.00	.00	.00
11	.00	.01	.07	e.20	e.20	2.4	.41	.94	.27	.00	.00	.00
12	.00	.01	.08	e.20	e.20	1.5	.41	.56	.23	.00	.00	.00
13	.00	.06	.08	e.20	e.20	1.4	.37	.52	.12	.00	.00	.00
14	.00	.07	.08	e.21	e.20	1.1	.32	.54	.09	.00	.00	.00
15	.00	.04	.04	e.21	e.20	.96	.29	.45	.08	.00	.00	.00
16	.00	.04	.06	e.21	e.20	1.1	.29	.29	.07	.00	.00	.00
17	.00	.06	.08	e.21	e.45	1.3	.25	.13	.06	.00	.00	.00
18	.00	.04	.10	e.21	e.90	1.8	.23	.10	.05	.00	.00	.00
19	.00	.03	.11	e.22	e1.5	1.6	.21	.09	.04	.00	.00	.00
20	.00	.04	.11	e.27	e1.3	1.1	.16	.09	.03	.00	.00	.00
21	.00	.05	.13	e.25	e1.0	.98	.17	.09	.02	.00	.00	.00
22	.00	.13	e.10	e.24	e2.0	.92	.17	.08	.01	.00	.00	.00
23	.00	.39	e.10	e.22	e2.7	.80	.20	.08	.00	.00	.00	.00
24	.05	.09	e.10	e.21	2.3	2.4	.28	.08	.00	.00	.00	.00
25	.08	.06	e.10	e.20	2.2	2.3	.21	.08	.00	.00	.00	.00
26	.08	.05	e.10	e.22	1.6	1.4	.17	.07	.00	.00	.00	.00
27	.09	.04	e.10	e.24	1.3	1.2	.16	.06	.00	.00	.00	.00
28	.09	.06	e.10	e.25	1.0	2.0	.15	.06	.00	.00	.00	.00
29	.09	.05	e.10	e.27	---	1.3	.13	.06	.00	.00	.00	.00
30	.03	.04	e.10	e.28	---	1.1	.12	.06	.00	.00	.00	.00
31	.02	---	e.10	e.35	---	1.4	---	.06	---	.00	.00	---
TOTAL	0.53	1.49	2.45	6.17	21.57	50.20	12.81	7.27	2.14	0.00	0.00	0.00
MEAN	.017	.050	.079	.20	.77	1.62	.43	.23	.071	.00	.00	.00
MAX	.09	.39	.13	.35	2.7	4.6	1.3	.94	.27	.00	.00	.00
MIN	.00	.01	.03	.10	.20	.80	.12	.06	.00	.00	.00	.00
AC-FT	1.1	3.0	4.9	12	43	100	25	14	4.2	.0	.0	.0

CAL YR 1988 TOTAL 37.39 MEAN .10 MAX .99 MIN .00 AC-FT 74
WTR YR 1989 TOTAL 104.33 MEAN .29 MAX 4.6 MIN .00 AC-FT 208

e Estimated

10309030 INDIAN CREEK AT DIAMOND VALLEY NEAR PAYNESVILLE, CA

LOCATION.--Lat 38°46'37", long 119°45'53", in NW1/4NE1/4 sec.32, T.11 N., R.20 E., Alpine County, Calif., Hydrologic Unit 16050201, on left bank 1 mi southwest of Paynesville.

DRAINAGE AREA.--16.2 mi², approximately.

PERIOD OF RECORD.--May 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,440 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50 ft³/s, Nov. 23, 1988, gage height, 4.50 ft; minimum daily, 0.29 ft³/s, July 19, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50 ft³/s, Nov. 23, gage height, 4.50 ft; minimum daily, 0.70 ft³/s, Oct 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.75	7.0	14	3.3	e4.0	34	33	31	4.6	4.0	3.1	e2.0
2	e.70	6.9	14	3.2	e3.2	37	33	15	4.3	3.1	3.5	e2.1
3	e.90	6.3	13	3.2	e2.6	33	32	27	8.6	3.4	3.1	e2.2
4	e1.0	4.2	11	3.2	e2.2	34	32	24	5.6	2.4	2.6	e2.1
5	1.3	2.8	11	3.0	e1.5	35	32	23	4.8	2.1	2.5	e2.1
6	2.4	3.2	10	3.0	e1.3	33	32	17	5.0	2.2	2.4	e2.1
7	3.6	3.8	9.4	3.1	e1.4	34	31	21	6.1	2.2	2.3	e2.2
8	4.0	4.4	9.2	3.2	e1.5	40	29	19	4.9	2.1	2.5	e2.3
9	4.3	5.4	8.2	3.1	e1.6	34	21	10	4.2	2.1	2.2	e2.4
10	4.9	6.6	7.9	e3.0	e1.8	32	15	19	4.3	2.2	2.1	e2.5
11	5.6	6.1	7.3	e2.8	e2.1	34	5.4	24	4.7	2.6	2.3	e2.6
12	4.8	7.2	7.3	e2.7	e2.2	32	5.8	23	2.9	2.6	2.7	2.7
13	5.1	14	6.9	e2.8	e2.3	32	7.9	25	2.3	2.5	2.0	2.9
14	5.7	15	6.3	e3.0	e1.9	32	13	30	2.8	2.7	2.3	3.2
15	5.8	16	5.5	3.1	e2.2	31	15	24	2.9	2.6	2.0	3.7
16	5.9	16	e5.2	3.0	e2.8	33	6.3	21	3.5	2.4	2.0	4.2
17	5.8	15	e5.7	2.9	3.5	33	20	24	3.8	2.7	2.0	4.7
18	5.7	e16	e5.6	2.9	4.5	34	27	12	4.0	2.4	2.1	4.8
19	5.5	16	e6.6	2.8	17	34	23	7.1	4.3	2.4	2.0	5.1
20	5.5	16	e6.7	e3.2	13	33	30	10	4.2	2.3	2.1	5.5
21	5.5	17	e6.9	e3.1	12	32	29	9.5	3.5	2.3	2.1	7.2
22	5.4	30	e5.0	e2.9	25	33	23	13	3.8	2.2	2.0	14
23	5.5	39	3.3	e3.1	25	33	22	9.0	3.0	2.2	2.0	11
24	5.5	25	e3.7	e2.4	26	39	23	5.9	2.6	2.1	2.0	11
25	5.6	30	3.8	e2.1	32	40	12	8.7	2.4	2.1	2.2	13
26	5.0	23	3.8	e2.3	32	37	16	12	2.6	2.3	e2.1	14
27	6.2	18	3.7	e2.6	32	36	24	8.8	3.5	2.2	e2.0	16
28	6.3	19	3.6	e2.5	32	38	22	3.2	2.9	2.1	e2.0	17
29	6.3	16	3.6	e2.2	---	36	32	3.7	3.3	2.1	e2.0	25
30	6.4	14	3.5	e2.4	---	34	35	6.0	4.1	2.5	e2.0	23
31	6.8	---	3.4	e3.2	---	33	---	5.0	---	3.2	e2.0	---
TOTAL	143.75	418.9	215.1	89.3	288.6	1065	681.4	490.9	119.5	76.3	70.2	212.6
MEAN	4.64	14.0	6.94	2.88	10.3	34.4	22.7	15.8	3.98	2.46	2.26	7.09
MAX	6.8	39	14	3.3	32	40	35	31	8.6	4.0	3.5	25
MIN	.70	2.8	3.3	2.1	1.3	31	5.4	3.2	2.3	2.1	2.0	2.0
AC-FT	285	831	427	177	572	2110	1350	974	237	151	139	422

CAL YR 1988 TOTAL 2713.49 MEAN 7.41 MAX 39 MIN .29 AC-FT 5380
WTR YR 1989 TOTAL 3871.55 MEAN 10.6 MAX 40 MIN .70 AC-FT 7680

e Estimated

CARSON RIVER BASIN

10309050 PINE NUT CREEK NEAR GARDNERVILLE, NV

LOCATION.--Lat 38°51'34", long 119°34'02", in NE1/2SE1/4 sec.36, T.11 N., R.22 E., Douglas County, Hydrologic Unit 16050201, on right bank 11.5 mi southeast of Gardnerville.

DRAINAGE AREA.--10.14 mi².

PERIOD OF RECORD.--April 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,340 ft, from topographic map.

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

AVERAGE DISCHARGE.--9 years, 1.58 ft³/s, 1,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 165 ft³/s, Mar. 8, 1986, from rating curve extended above 8.0 ft³/s, gage height, 3.70 ft, maximum gage height, 3.97 ft, Feb. 19, 1986; minimum, 0.02 ft³/s, July 9, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.6 ft³/s, Nov. 23, gage height, 3.65 ft; minimum daily, 0.06 ft³/s, Sept. 6, 9-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.77	e.88	e.70	e.66	e1.6	e1.0	e1.3	.77	.53	.12	.08
2	.24	1.1	e.84	e.70	e.68	e1.7	e.94	e1.2	.76	.50	.12	.08
3	.23	1.5	e.80	e.70	e.70	e1.7	e.90	e1.1	.83	.46	.12	.08
4	.22	e1.3	e.74	e.70	e.70	e1.6	e.88	e1.0	.94	.38	.11	.07
5	.23	e1.1	e.70	e.70	e.71	e1.8	e.88	e1.1	.93	.25	.14	.07
6	.23	e1.0	e.70	e.70	e.74	2.1	e.88	1.2	.89	.21	.14	.06
7	.22	e.96	e.70	e.70	e.76	2.0	e.88	.86	.88	.20	.15	.07
8	.20	e.94	e.70	e.70	e.74	2.1	e.88	.76	.91	.22	.33	.07
9	.18	e.93	e.70	e.70	e.72	2.0	e.88	.87	.85	.18	.17	.06
10	.18	e.92	e.70	e.70	e.70	2.0	e.88	.91	.82	.22	.13	.06
11	.18	e.90	e.70	e.70	e.74	1.9	e.86	1.1	.82	.22	.12	.06
12	.21	e.90	e.70	e.70	e.80	1.8	.86	1.0	.78	.22	.11	.15
13	.21	e.90	e.70	e.70	e.84	1.8	.93	1.1	.75	.20	.12	.37
14	.21	e.90	e.72	e.70	e.90	1.8	1.1	1.1	.73	.18	.10	.40
15	.21	e.90	e.74	e.70	e.96	1.8	.85	1.1	.71	.16	.10	.39
16	.20	e.90	e.80	e.70	e1.0	1.6	.79	.95	.68	.15	.12	.48
17	.18	e.90	e.74	e.70	e1.1	1.8	.87	.89	.68	.17	.13	.63
18	.17	e.90	e.72	e.70	e1.2	2.0	.86	.87	.65	.19	.19	.86
19	.17	e.90	e.72	e.68	e1.3	2.1	.81	.88	.62	.18	.20	1.2
20	.18	e.90	e.80	e.64	e1.4	e1.5	.81	.81	.63	.16	.16	.86
21	.18	e1.0	e.90	e.64	e1.5	e1.4	.83	.81	.62	.16	.16	.68
22	.17	e1.4	e.80	e.64	e1.7	e1.3	.89	.79	.62	.14	.15	.58
23	.19	2.4	e.76	e.64	e1.8	e1.3	.97	.81	.65	.13	.16	.48
24	.19	e1.9	e.70	e.64	e1.6	e1.3	1.1	.85	.63	.11	.14	.43
25	.25	e1.2	e.64	e.64	e1.8	e1.5	1.2	.83	.61	.10	.12	.37
26	.28	e.94	e.64	e.64	e1.7	e1.2	1.4	.79	.66	.11	.11	.33
27	.33	e.94	e.64	e.64	e1.6	e1.0	e1.2	.77	.67	.11	.11	.37
28	.39	e.92	e.64	e.64	e1.5	e1.0	e1.2	.76	.61	.11	.09	.55
29	.40	e.90	e.64	e.64	---	e1.0	e1.2	.82	.54	.11	.08	.86
30	.42	e.90	e.64	e.64	---	e1.2	e1.2	.83	.55	.11	.08	.91
31	.45	---	e.64	e.64	---	e1.1	---	.80	---	.12	.08	---
TOTAL	7.37	32.02	22.44	20.96	30.55	50.0	28.93	28.96	21.79	6.29	4.16	11.66
MEAN	.24	1.07	.72	.68	1.09	1.61	.96	.93	.73	.20	.13	.39
MAX	.45	2.4	.90	.70	1.8	2.1	1.4	1.3	.94	.53	.33	1.2
MIN	.17	.77	.64	.64	.66	1.0	.79	.76	.54	.10	.08	.06
AC-FT	15	64	45	42	61	99	57	57	43	12	8.3	23

CAL YR 1988 TOTAL 270.74 MEAN .74 MAX 3.3 MIN .14 AC-FT 537
WTR YR 1989 TOTAL 265.13 MEAN .73 MAX 2.4 MIN .06 AC-FT 526

e Estimated

10309070 BUCKEYE CREEK NEAR MINDEN, NV

LOCATION.--Lat 38°58'59", long 119°34'23", in NE1/4NW1/4 sec.24, T.13 N., R.21 E., Douglas County, Hydrologic Unit 16050201, on left bank 10.5 mi east of Minden.

DRAINAGE AREA.--46.3 mi^2.

PERIOD OF RECORD.--April 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,640 ft, from topographic map.

REMARKS.--Records poor. No diversions above station.

AVERAGE DISCHARGE.--9 years (1981-89), 0.83 ft^3/s, 601 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,070 ft^3/s, Aug. 29, 1984, gage height, 7.81 ft, from rating curve extended above 30 ft^3/s on basis of step-backwater method; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36 ft^3/s, Sept. 18, from rating extended above 30 ft^3/s on basis of step-backwater method, gage height, 4.31 ft; no flow, several days July and August.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.06	.05	.03	.19	.15	.09	.13	.18	.08	.01	.02
2	.05	.06	.05	.03	.04	.43	.09	.11	.19	.06	.00	.02
3	.05	.05	.04	.03	.04	.07	.07	.10	.30	.04	.00	.03
4	.05	.05	.04	.03	.02	.07	.06	.09	6.3	.03	.00	.05
5	.05	.05	.04	.03	e.01	.78	.05	.08	1.1	.03	.03	.04
6	.05	.05	.03	.03	e.01	3.5	.04	.07	.91	.02	.83	.03
7	.05	.05	.04	.03	e.01	.93	.04	.06	.22	.01	.05	.04
8	.06	.05	.04	.03	e.01	2.5	.04	.06	.21	.01	.02	e.08
9	.07	.06	.05	.12	e.00	.58	.04	.25	.15	.01	.02	e.10
10	.08	.05	.04	.03	e.00	.28	.04	.27	.13	.01	.02	e.14
11	.10	.05	.05	.03	e.00	.18	.05	.35	.36	.01	.01	e.14
12	.08	.05	.04	e.06	e.00	.09	.06	.21	.20	.01	.02	e.12
13	.10	.08	.03	.03	e.00	.09	.06	.29	.12	.01	.02	.05
14	.12	.08	.04	.03	.00	.05	.05	.37	.10	.01	.02	.04
15	.13	.06	e.05	e.04	.00	.07	.05	3.2	.09	.01	.02	.04
16	.09	.07	e.04	e.04	.00	.14	.06	.44	.10	.01	.02	.08
17	.07	.10	e.04	e.04	.01	.17	.05	.04	.10	.01	.03	.94
18	.10	.07	e.03	.04	1.6	.67	.06	.03	.09	.01	.02	8.2
19	.10	.06	e.03	.05	1.6	2.1	.05	.04	.07	.01	.01	1.4
20	.07	.06	.03	.09	.28	.20	.05	.05	.08	.00	.02	.26
21	.07	.07	.03	.09	1.1	.11	.06	.05	.10	.00	.02	.19
22	.07	.05	.03	.03	7.2	.09	.11	.05	.10	.00	.02	.17
23	.06	.34	.03	.01	5.0	.09	.14	.06	.09	.01	.02	.15
24	.07	.05	.03	e.02	3.2	.10	.18	.07	.10	.00	.02	.14
25	.07	.04	.03	.02	3.7	.14	.15	.08	.09	.00	.01	.14
26	.06	.04	.03	.06	2.1	.08	.14	.08	.12	.00	.01	.15
27	.07	.04	.03	.07	.60	.07	.15	.11	.14	.01	.03	.17
28	.07	.03	.03	.09	.28	.07	.13	.12	.10	.01	.03	.18
29	.07	.04	.03	.12	---	.06	.14	.20	.09	.01	.03	.23
30	.05	.06	.03	.11	---	.06	.14	.20	.08	.00	.03	.22
31	.06	---	.03	.08	---	.07	---	.18	---	.00	.03	---
TOTAL	2.24	1.97	1.13	1.54	27.00	13.99	2.44	7.44	12.01	0.43	1.42	13.56
MEAN	.072	.066	.036	.050	.96	.45	.081	.24	.40	.014	.046	.45
MAX	.13	.34	.05	.12	7.2	3.5	.18	3.2	6.3	.08	.83	8.2
MIN	.05	.03	.03	.01	.00	.05	.04	.03	.07	.00	.00	.02
AC-FT	4.4	3.9	2.2	3.1	54	28	4.8	15	24	.9	2.8	27

CAL YR 1988 TOTAL 88.57 MEAN .24 MAX 46 MIN .00 AC-FT 176
WTR YR 1989 TOTAL 85.17 MEAN .23 MAX 8.2 MIN .00 AC-FT 169

e Estimated

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CA

LOCATION.--Lat 38°46'10", long 119°49'55", in NW1/4SE1/4 sec.34, T.11 N., R.19 E., Alpine County, Hydrologic Unit 16050201, in Toiyabe National Forest, on left bank 0.3 mi downstream from bridge on State Highway 88-89, 0.6 mi southwest of Woodfords, and 3.8 mi downstream from Willow Creek.

DRAINAGE AREA.--65.4 mi^2.

PERIOD OF RECORD.--October 1900 to May 1907, 1910-11 (fragmentary), October 1938 to current year. January 1890 to March 1892, June 1907 to September 1920 (except parts of 1910-11), at site 0.7 mi downstream; records not equivalent owing to diversions for irrigation. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,754.5 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, nonrecording gage at about the same site at different datum. Oct. 1, 1938, to Nov. 11, 1958, water-stage recorder at same site at datum 1.02 ft lower. Nov. 13, 1958, to Jan. 30, 1963, water-stage recorder at site 150 ft downstream at datum 3.06 ft lower.

REMARKS.--Records good, except for March thru July, which are fair and estimated daily discharges which are poor. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs, total capacity, about 1,500 acre-ft.

AVERAGE DISCHARGE.--58 years (1900-1907, 1938-89), 112 ft^3/s, 81,140 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,890 ft^3/s, Feb. 1, 1963, gage height, 9.0 ft, on basis of slope-area measurement of peak flow; minimum, about 5 ft^3/s, Dec. 28, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 11, 1937, reached a stage of 8.0 ft, present datum, from floodmarks, discharge, 3,500 ft^3/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 20	2400	*629	*3.24	May 7	2300	584	3.16

Minimum daily, 7.3 ft^3/s, Oct. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	9.4	16	20	17	48	321	167	123	64	53	54
2	7.3	9.5	17	20	15	38	270	197	133	57	55	42
3	7.3	9.5	17	20	e14	34	263	219	259	62	48	21
4	7.3	9.8	17	20	e13	43	266	285	238	56	48	17
5	7.3	9.8	17	20	e12	42	309	333	208	51	45	16
6	7.4	10	17	20	e11	73	374	374	187	45	27	16
7	7.6	10	18	e19	e10	122	411	413	216	44	23	15
8	7.6	10	17	e18	e10	234	430	440	199	46	32	15
9	7.7	10	17	20	e10	313	429	398	204	55	31	16
10	7.9	11	17	20	e10	269	443	362	201	40	25	16
11	7.9	11	17	e19	e11	251	457	272	197	48	23	23
12	7.9	12	17	e17	e12	206	395	240	173	46	22	34
13	8.0	14	18	19	e13	166	359	227	179	47	21	39
14	8.2	13	17	19	e14	134	398	197	165	46	28	41
15	8.2	13	e17	19	e15	128	418	194	164	38	51	40
16	8.5	12	16	19	e16	119	408	179	182	36	53	36
17	8.6	11	18	19	e17	110	391	212	158	38	48	36
18	8.5	13	18	19	18	102	390	244	136	60	52	32
19	8.5	13	18	19	18	151	400	197	126	67	60	35
20	8.5	13	18	19	19	146	438	196	115	54	30	30
21	8.8	13	16	19	19	130	455	206	102	71	24	26
22	8.8	16	17	19	26	148	305	208	94	77	22	23
23	8.8	30	17	19	30	155	244	209	96	40	19	21
24	8.8	20	19	18	30	179	214	161	94	31	19	19
25	8.8	24	18	e15	29	164	187	141	88	30	19	19
26	9.0	20	e17	e16	42	124	175	140	84	27	18	18
27	9.2	19	e16	17	54	117	159	152	85	26	18	44
28	9.2	18	19	18	53	321	152	155	80	24	25	53
29	9.2	17	19	17	---	302	152	141	77	24	54	66
30	9.1	15	20	16	---	241	152	129	71	23	56	59
31	9.2	---	20	17	---	292	---	118	---	30	56	---
TOTAL	256.4	416.0	542	576	558	4902	9765	7106	4434	1403	1105	922
MEAN	8.27	13.9	17.5	18.6	19.9	158	325	229	148	45.3	35.6	30.7
MAX	9.2	30	20	20	54	321	457	440	259	77	60	66
MIN	7.3	9.4	16	15	10	34	152	118	71	23	18	15
AC-FT	509	825	1080	1140	1110	9720	19370	14090	8790	2780	2190	1830

CAL YR 1988 TOTAL 14065.0 MEAN 38.4 MAX 146 MIN 6.7 AC-FT 27900
WTR YR 1989 TOTAL 31985.4 MEAN 87.6 MAX 457 MIN 7.3 AC-FT 63440

e Estimated

10310300 FREDERICKSBURG CANYON CREEK NEAR FREDERICKSBURG, CA

LOCATION.--Lat 38°49'38", long 119°47'56", in SE1/4SW1/4 sec.12, T.11 N., R.19 E., Alpine County, Hydrologic Unit 16050201, on left bank 1 mi west of Fredericksburg and 6 mi north of Woodfords.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--December 1988 to September 1989.

GAGE.--Water-stage recorder. Elevation of gage is 5,520 ft, from topographic map.

REMARKS.--Records good, except for estimated daily discharges which are poor. No diversions above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period December to September, 6.5 ft^3/s, May 8, gage height 2.37 ft, from rating curve extended above 5.13 ft^3/s; minimum daily, 1.1 ft^3/s, Dec.6,7, Jan. 11-23, and Feb. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	e1.2	1.4	1.3	1.6	3.4	4.0	3.3	3.0	2.2	2.0
2	---	---	e1.2	1.3	1.3	1.8	3.3	4.2	3.3	3.0	2.2	2.0
3	---	---	e1.2	1.2	1.3	1.6	3.3	4.6	4.0	2.9	2.2	2.0
4	---	---	e1.2	1.2	1.2	1.6	3.4	4.9	4.0	2.8	2.1	2.0
5	---	---	e1.2	1.3	1.1	2.0	3.6	5.0	3.7	2.7	2.1	2.0
6	---	---	e1.1	1.2	1.2	2.8	4.0	5.1	3.7	2.7	2.1	2.1
7	---	---	e1.1	1.2	1.2	2.8	4.4	5.2	3.7	2.7	2.2	2.2
8	---	---	1.2	1.2	1.2	3.5	4.5	5.5	3.6	2.5	2.7	2.2
9	---	---	1.3	1.3	1.2	3.5	4.7	5.7	3.6	2.5	2.3	2.2
10	---	---	1.4	1.2	1.2	3.1	4.9	5.5	3.5	2.5	2.2	2.2
11	---	---	1.2	1.1	1.2	3.1	5.1	5.2	3.5	2.5	2.2	2.2
12	---	---	1.4	1.1	1.2	2.8	4.8	4.9	3.4	2.4	2.2	1.9
13	---	---	1.4	1.1	1.3	2.6	4.6	4.7	3.4	2.4	2.2	1.9
14	---	---	1.4	1.1	1.4	2.6	4.6	4.4	3.4	2.4	2.2	1.9
15	---	---	1.4	1.1	1.4	2.5	4.3	4.4	3.4	2.4	2.2	1.9
16	---	---	1.6	1.1	1.4	2.5	4.6	4.4	3.2	2.4	2.2	2.0
17	---	---	1.6	1.1	1.4	2.5	4.7	4.5	3.2	2.4	2.3	2.3
18	---	---	1.4	1.1	1.4	2.7	4.5	4.4	3.2	2.4	2.2	2.3
19	---	---	1.4	1.1	1.5	3.1	4.6	4.3	3.1	2.4	2.3	2.4
20	---	---	1.4	1.1	1.4	3.0	4.8	4.4	3.2	2.4	2.3	2.2
21	---	---	1.5	1.1	1.6	2.9	4.4	4.5	3.2	2.4	2.2	2.1
22	---	---	1.6	1.1	2.3	2.9	4.4	4.5	3.2	2.4	2.0	2.1
23	---	---	1.6	1.1	2.1	2.8	4.2	4.6	3.1	2.2	2.1	2.1
24	---	---	1.7	1.2	1.8	2.9	4.2	4.4	3.0	2.2	2.1	2.0
25	---	---	1.5	1.2	1.8	2.9	4.2	4.1	2.9	2.2	2.1	1.8
26	---	---	1.4	1.2	1.9	2.9	4.2	3.9	2.9	2.2	2.1	1.8
27	---	---	1.4	1.2	1.8	2.9	3.7	3.8	2.9	2.1	2.0	1.9
28	---	---	1.4	1.2	1.6	3.7	3.7	3.6	2.9	2.2	2.0	1.9
29	---	---	1.4	1.2	---	3.4	3.7	3.7	3.0	2.1	2.0	2.1
30	---	---	1.5	1.2	---	3.3	3.8	3.5	3.0	2.1	2.0	2.0
31	---	---	1.5	1.3	---	3.4	---	3.4	---	2.2	2.1	---
TOTAL	---	---	42.8	36.5	40.7	85.7	126.6	139.3	99.5	75.7	67.3	61.7
MEAN	---	---	1.38	1.18	1.45	2.76	4.22	4.49	3.32	2.44	2.17	2.06
MAX	---	---	1.7	1.4	2.3	3.7	5.1	5.7	4.0	3.0	2.7	2.4
MIN	---	---	1.1	1.1	1.1	1.6	3.3	3.4	2.9	2.1	2.0	1.8
AC-FT	---	---	85	72	81	170	251	276	197	150	133	122

e Estimated

10310350 MILLER SPRING NR SHERIDAN, NV

LOCATION.--Lat 38°52'43", long 119°49'07", in NE1/4NW1/4 sec.26, T.12 N., R.19 E., Douglas County, Hydrologic Unit 16050201, on left bank of spring outflow and 1.25 mi south of Sheridan.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--March to September 1989.

GAGE.--Water-stage recorder. Datum of gage is 4,780 ft, from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, during period March to September, 1.0 ft³/s, Sept. 18, gage height 2.09 ft; maximum gage height, 2.22 ft, Mar. 2, from backwater; minimum daily, 0.28 ft³/s, Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	.44	.51	.65	.43	.43	.34	.32
2	---	---	---	---	---	.53	.51	.61	.45	.42	.33	.34
3	---	---	---	---	---	.46	.51	.59	.56	.44	.31	.35
4	---	---	---	---	---	.46	.51	.59	.58	.47	.31	.35
5	---	---	---	---	---	.47	.51	.53	.48	.47	.31	.36
6	---	---	---	---	---	.48	.51	.52	.50	.47	.31	.38
7	---	---	---	---	---	.52	.51	.53	.52	.46	.31	.40
8	---	---	---	---	---	.56	.51	.53	.50	.45	.38	.40
9	---	---	---	---	---	.52	.51	.56	.49	.45	.31	.39
10	---	---	---	---	---	.55	.51	.51	.49	.46	.28	.40
11	---	---	---	---	---	.54	.52	.50	.48	.45	.30	.44
12	---	---	---	---	---	.50	.54	.48	.47	.39	.31	.44
13	---	---	---	---	---	.51	.57	.46	.46	.36	.32	.43
14	---	---	---	---	---	.53	.60	.48	.44	.37	.32	.43
15	---	---	---	---	---	.55	.61	.48	.46	.35	.31	.43
16	---	---	---	---	---	.58	.66	.43	.48	.36	.32	.45
17	---	---	---	---	---	.53	.66	.43	.48	.36	.33	.50
18	---	---	---	---	---	.57	.65	.41	.47	.35	.34	.62
19	---	---	---	---	---	.54	.64	.45	.47	.34	.34	.54
20	---	---	---	---	---	.46	.62	.45	.45	.33	.34	.50
21	---	---	---	---	---	.49	.64	.43	.44	.33	.32	.46
22	---	---	---	---	---	.51	.65	.43	.43	.38	.32	.45
23	---	---	---	---	---	.53	.69	.46	.44	.38	.32	.45
24	---	---	---	---	---	.60	.71	.47	.43	.38	.34	.49
25	---	---	---	---	---	.57	.69	.48	.42	.38	.33	.49
26	---	---	---	---	---	.54	.69	.43	.43	.38	.32	.49
27	---	---	---	---	---	.51	.69	.42	.43	.38	.31	.48
28	---	---	---	---	---	.53	.74	.42	.42	.38	.30	.43
29	---	---	---	---	---	.51	.74	.46	.42	.38	.31	.45
30	---	---	---	---	---	.51	.66	.47	.42	.38	.33	.40
31	---	---	---	---	---	.51	---	.42	---	.37	.32	---
TOTAL	---	---	---	---	---	16.11	18.07	15.08	13.94	12.30	9.94	13.06
MEAN	---	---	---	---	---	.52	.60	.49	.46	.40	.32	.44
MAX	---	---	---	---	---	.60	.74	.65	.58	.47	.38	.62
MIN	---	---	---	---	---	.44	.51	.41	.42	.33	.28	.32
AC-FT	---	---	---	---	---	32	36	30	28	24	20	26

10310400 DAGGETT CREEK NEAR GENOA, NV

LOCATION.--Lat 38°57'55", long 119°50'55", in SW1/4NE1/4 sec.28, T.13 N., R.19 E., Douglas County, Hydrologic Unit 16050201, on left bank in Haines Canyon, 0.55 mi upstream from Foothill Road, and 3.5 mi south-southwest of Genoa.

DRAINAGE AREA.--3.82 mi^2.

PERIOD OF RECORD.--1964 (miscellaneous site), 1965 (low-flow, partial-record site). October 1965 to September 1983. December 1988 to September 1989.

GAGE.--Water-stage recorder. Elevation of gage is 5,100 ft, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversions above station. Intermittent pumping of effluent from Lake Tahoe basin by Douglas County Sewer Improvement District No. 1, occurred from February 1969 to November 1971.

AVERAGE DISCHARGE.--18 years (1966-83), 2.00 ft^3/s, 1,450 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63 ft^3/s, Aug. 5, 1971, gage height, 2.78 ft, from floodmarks, and rating curve extended above 6 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 0.38 ft^3/s, Oct. 9-11, 1979, Aug. 21, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period December to September, 7.4 ft^3/s, Mar. 8, gage height 1.06 ft; minimum daily, 0.50 ft^3/s, Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	e1.2	.96	1.1	1.8	1.1	1.4	1.1	.76	.66	1.0
2	---	---	e1.2	.98	1.1	2.4	1.1	1.3	1.1	.74	.67	.86
3	---	---	e1.2	.97	1.2	1.6	.95	1.3	1.7	.73	.67	.82
4	---	---	e1.2	e.96	1.1	1.4	1.0	1.3	2.3	.71	.67	.73
5	---	---	e1.2	e.96	e1.0	1.8	1.0	1.3	1.3	.69	.65	.78
6	---	---	e1.1	e.96	e.98	2.1	1.4	1.7	1.1	.72	.61	1.0
7	---	---	1.1	.96	e.94	2.3	.84	1.4	1.3	.65	.92	.94
8	---	---	1.1	.96	e.92	4.9	.82	1.2	1.1	.66	1.7	1.0
9	---	---	1.1	1.0	e.90	2.2	.77	1.3	1.1	.70	.90	.83
10	---	---	1.1	1.1	e.90	1.7	.81	1.3	1.1	.70	.84	.99
11	---	---	1.1	.98	e.92	2.1	1.0	1.3	1.0	.84	.86	.77
12	---	---	1.1	.98	e.96	1.5	1.9	1.4	1.0	.67	.84	.76
13	---	---	.99	1.1	e1.0	1.7	3.6	1.4	1.0	.67	.87	.74
14	---	---	.96	1.0	e1.1	1.3	4.3	1.3	1.0	.70	.92	.72
15	---	---	.96	1.0	e1.3	1.1	1.8	1.6	1.0	.65	.88	1.1
16	---	---	1.3	1.1	e1.4	1.5	1.8	1.2	.99	.68	.88	.79
17	---	---	1.1	e.95	1.6	1.1	1.8	1.1	1.0	.68	.92	1.1
18	---	---	1.1	e.94	1.7	1.5	1.7	1.0	1.1	.65	.89	1.8
19	---	---	1.1	e.92	1.8	2.2	1.7	1.1	.97	.64	.88	.84
20	---	---	1.2	e.90	1.6	1.4	1.8	1.0	.97	.62	.90	.62
21	---	---	1.4	e.95	1.7	1.2	2.4	1.0	.95	.62	.82	.52
22	---	---	1.1	1.1	2.1	1.2	1.5	1.0	.95	.62	.86	.57
23	---	---	1.1	1.0	1.7	1.1	1.6	1.2	.94	.63	.88	.65
24	---	---	1.1	e.92	1.9	1.8	1.6	1.1	.89	.61	.95	.51
25	---	---	.90	e.88	2.0	1.9	1.5	1.1	1.1	.60	.92	.56
26	---	---	.87	e.88	1.9	1.3	1.4	1.0	.92	.64	.86	.50
27	---	---	e.88	e.88	1.7	1.1	1.4	1.0	.83	.61	.83	.70
28	---	---	.89	.96	1.6	1.4	1.4	1.1	.86	.60	.82	.72
29	---	---	.89	.96	---	1.1	1.4	1.3	.87	.61	.86	1.9
30	---	---	.98	1.0	---	1.1	1.3	1.1	.81	.64	.98	.54
31	---	---	.97	1.1	---	1.5	---	1.0	---	.66	1.3	---
TOTAL	---	---	33.49	30.31	38.12	52.3	46.69	37.8	32.35	20.70	27.21	25.36
MEAN	---	---	1.08	.98	1.36	1.69	1.56	1.22	1.08	.67	.88	.85
MAX	---	---	1.4	1.1	2.1	4.9	4.3	1.7	2.3	.84	1.7	1.9
MIN	---	---	.87	.88	.90	1.1	.77	1.0	.81	.60	.61	.50
AC-FT	---	---	66	60	76	104	93	75	64	41	54	50

e Estimated

10310500 CLEAR CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°06'50", long 119°45'50", in NE1/4NW1/4 sec.1, T.14 N., R.19 E., on left bank 3 mi upstream from mouth and 3.5 mi southwest of Carson City.

DRAINAGE AREA.--15.5 mi²

PERIOD OF RECORD.--March 1948 to September 1962, occasional low-flow measurements, water years 1963-1988, and annual maximum, water years 1963-1981, January to September, 1989.

GAGE.--Water-stage recorder and sharp crested weir. Elevation of gage is 5,000 ft, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. A few small diversions for irrigation above station.

AVERAGE DISCHARGE.--14 years (water years 1949-62), 5.42 ft³/s, 3,920 acre-feet/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130 ft³/s, Feb. 20, 1968, gage height, 2.15 ft, datum then in use; minimum, 0.1 ft³/s, July 29, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period January to September, 25 ft³/s, March 11, gage height, 1.99 ft; minimum daily, 1.5 ft³/s, July 27 and 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	6.8	8.8	8.3	5.5	3.8	2.5	1.6	1.7
2	---	---	---	---	6.3	11	8.0	5.5	3.8	2.4	1.7	1.8
3	---	---	---	---	e5.8	7.5	11	5.5	4.2	2.4	1.7	1.7
4	---	---	---	---	e5.8	6.4	14	5.7	6.4	2.2	1.7	1.8
5	---	---	---	---	e5.8	7.1	14	5.6	5.4	2.2	1.7	1.8
6	---	---	---	---	e5.2	8.2	15	5.5	4.3	2.1	1.7	1.7
7	---	---	---	---	e4.5	7.9	15	5.2	5.8	2.0	2.2	1.7
8	---	---	---	---	e4.7	15	15	5.2	4.6	2.0	4.0	1.8
9	---	---	---	---	e4.7	10	15	5.4	4.0	2.0	3.1	1.8
10	---	---	---	---	e4.7	9.2	12	6.6	3.8	2.1	2.4	1.8
11	---	---	---	---	e4.8	12	8.8	5.4	3.7	2.6	2.0	1.9
12	---	---	---	---	e5.0	9.2	7.6	5.2	3.5	2.1	2.0	1.9
13	---	---	---	---	e5.0	9.4	7.1	5.5	3.3	2.0	2.0	1.8
14	---	---	---	---	e5.0	8.1	7.3	5.2	3.1	1.8	1.8	1.8
15	---	---	---	---	e5.0	7.6	7.5	6.5	3.1	1.8	1.8	1.8
16	---	---	---	---	e5.6	8.1	7.3	5.4	3.1	1.9	1.9	1.9
17	---	---	---	---	e5.8	8.3	7.2	5.0	3.0	1.9	1.8	3.0
18	---	---	---	e4.4	e6.2	12	7.2	4.7	2.9	1.9	1.9	3.1
19	---	---	---	4.4	e6.6	14	7.1	4.4	2.8	1.8	1.9	3.5
20	---	---	---	4.5	e7.6	9.9	7.2	4.3	2.8	1.7	2.1	2.6
21	---	---	---	4.6	8.2	9.0	7.5	4.3	e2.7	1.9	2.0	2.1
22	---	---	---	4.8	12	8.7	7.2	4.2	e2.7	1.8	e2.0	1.9
23	---	---	---	4.7	13	8.4	6.9	4.2	e2.7	1.8	e1.9	1.8
24	---	---	---	4.5	11	10	6.9	4.2	e2.6	1.7	1.9	1.7
25	---	---	---	e4.5	11	11	6.6	4.7	e2.6	1.7	1.9	1.7
26	---	---	---	e4.8	11	9.0	6.3	3.9	e2.6	1.6	1.8	1.8
27	---	---	---	e5.0	10	8.1	6.1	3.8	e2.6	1.5	1.7	1.8
28	---	---	---	e5.0	9.8	9.1	5.8	3.8	2.6	1.6	1.8	1.8
29	---	---	---	e5.4	---	8.3	5.5	4.1	2.5	1.6	1.7	2.9
30	---	---	---	e5.6	---	7.9	5.5	4.0	2.5	1.6	1.8	2.7
31	---	---	---	e5.6	---	8.4	---	3.9	---	1.5	1.8	---
TOTAL	---	---	---	---	196.9	287.6	265.9	152.4	103.5	59.7	61.3	61.1
MEAN	---	---	---	---	7.03	9.28	8.86	4.92	3.45	1.93	1.98	2.04
MAX	---	---	---	---	13	15	15	6.6	6.4	2.6	4.0	3.5
MIN	---	---	---	---	4.5	6.4	5.5	3.8	2.5	1.5	1.6	1.7
AC-FT	---	---	---	---	391	570	527	302	205	118	122	121

e Estimated

10311000 CARSON RIVER NEAR CARSON CITY, NV

LOCATION.--Lat 39°06'30", long 119°42'40", in SW1/4NW1/4 sec.2, T.14 N., R.20 E., Carson City, Hydrologic Unit 16050201, on left bank 2 mi downstream from Clear Creek, 3 mi upstream from Lloyd Bridge on road to Mexican Dam, and 5 mi southeast of Carson City Post Office.

DRAINAGE AREA.--886 mi².

PERIOD OF RECORD.--May 1939 to current year.

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,620.48 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 23, 1955, water-stage recorder on right bank at datum 1.0 ft higher. Dec. 23, 1955, to Mar. 13, 1956, nonrecording gage at present site at datum 1.0 ft higher. Mar. 14, 1956, to Sept. 30, 1963, water-stage recorder at present site at datum 1.0 ft higher.

REMARKS.--Records fair except for estimated daily discharges and August and September, which are poor. Many diversions above station for irrigation. Flow slightly regulated by several small reservoirs on tributaries.

AVERAGE DISCHARGE.--50 years, 412 ft³/s, 298,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s, Dec. 24, 1955, gage height, 16.0 ft, present datum from floodmarks, from rating curve extended above 6,000 ft³/s on basis of slope-area measurements at gage heights 9.40 ft and 16.0 ft, computation of flow over dam at gage height, 12.40 ft, and float measurement at gage height 10.60 ft, all at present datum; minimum daily, .94 ft³/s, Sept. 1, 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 9	0800	*1,530	*4.38				

Minimum daily, 0.94 ft³/s, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	40	28	116	e230	251	663	328	268	84	14	.94
2	4.8	28	19	117	e170	267	627	319	260	75	15	1.3
3	4.8	23	22	94	110	e280	395	386	307	67	12	1.7
4	4.7	22	36	95	47	e300	284	470	992	69	11	5.4
5	5.7	27	48	156	24	e550	218	665	1070	55	10	5.1
6	6.5	20	61	109	30	e700	426	871	1070	47	6.8	4.6
7	7.5	14	80	e79	17	e980	839	1000	991	41	7.8	2.6
8	7.5	13	77	92	16	1180	1030	1190	1080	39	13	1.2
9	7.4	16	73	187	34	1490	1160	1240	1050	37	21	2.4
10	8.8	18	61	e150	51	1330	1200	1270	999	30	22	3.6
11	9.6	18	53	e120	72	1070	1280	1220	963	32	18	7.0
12	10	21	58	e92	82	865	1250	1070	934	26	11	8.9
13	10	22	58	e100	102	517	1090	921	812	26	9.7	13
14	11	40	62	e98	71	347	1050	822	710	27	12	11
15	13	73	63	e96	85	241	1140	793	617	24	7.7	10
16	12	52	92	e100	127	214	1230	774	558	23	8.2	12
17	13	42	63	e100	92	205	1200	752	562	24	8.2	15
18	12	52	67	e100	136	177	1200	903	484	24	7.0	15
19	8.5	54	72	e105	355	235	1240	854	425	20	9.4	27
20	14	54	71	e110	327	349	1280	757	373	19	12	38
21	17	52	61	e120	186	219	1330	724	323	14	10	36
22	16	56	65	170	177	183	1160	734	261	24	14	33
23	20	96	52	257	443	217	929	670	228	16	7.8	31
24	21	302	28	226	549	243	776	574	209	13	7.1	27
25	23	140	e50	201	445	359	670	416	183	13	14	26
26	18	68	e46	160	463	300	563	354	174	11	12	28
27	21	39	13	e132	432	169	470	352	221	9.1	4.6	28
28	21	28	17	156	320	131	384	369	169	9.2	6.8	27
29	25	42	16	173	---	848	365	372	146	10	4.8	28
30	34	44	34	204	---	624	330	379	121	12	2.4	41
31	43	---	77	237	---	385	---	301	---	13	1.1	---
TOTAL	438.0	1516	1623	4252	5193	15226	25779	21850	16560	933.3	320.4	490.74
MEAN	14.1	50.5	52.4	137	185	491	859	705	552	30.1	10.3	16.4
MAX	43	302	92	257	549	1490	1330	1270	1080	84	22	41
MIN	4.7	13	13	79	16	131	218	301	121	9.1	1.1	.94
AC-FT	869	3010	3220	8430	10300	30200	51130	43340	32850	1850	636	973

CAL YR 1988 TOTAL 24364.2 MEAN 66.6 MAX 332 MIN 4.1 AC-FT 48330
WTR YR 1989 TOTAL 94181.44 MEAN 258 MAX 1490 MIN .94 AC-FT 186800

e Estimated

10311089 NORTH FORK KINGS CANYON DIVERSION NEAR CARSON CITY, NV

LOCATION.--Lat. 39°09'18", long. 119°48'58", in NE1/4NW1/4 sec.23, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, 2.9 mi west of Carson Street off Kings Canyon Road.

DRAINAGE AREA--Not determined.

PERIOD OF RECORD.--March 8 to September, 1989.

GAGE.--Water-stage recorder. Elevation of gage is 5,530 ft, from topographic map.

REMARKS.--Records fair. Periodic regulation for municipal use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period March 8 to September, 2.3 ft'/s, June 29, gage height 2.50 ft; minimum daily, 0.18 ft'/s, April 28-29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.25	.20	.73	.72	.93	.99
2	---	---	---	---	---	---	.25	.20	.66	1.3	.91	.44
3	---	---	---	---	---	---	.25	.21	.51	1.3	.93	.91
4	---	---	---	---	---	---	.25	.22	.78	1.4	.75	.93
5	---	---	---	---	---	---	.25	.23	.80	1.3	.43	.95
6	---	---	---	---	---	---	.25	.22	.80	1.2	.83	.99
7	---	---	---	---	---	---	.25	.23	.84	1.0	.93	1.1
8	---	---	---	---	---	.41	.25	.24	.92	.63	1.1	.94
9	---	---	---	---	---	.25	.22	.26	.90	1.1	1.1	.43
10	---	---	---	---	---	.27	.22	.25	.43	1.1	1.1	.89
11	---	---	---	---	---	.32	.22	.24	.32	1.2	.94	.93
12	---	---	---	---	---	.25	.22	.23	.71	1.1	.66	.97
13	---	---	---	---	---	.32	.22	.25	1.0	1.1	1.0	1.0
14	---	---	---	---	---	.41	.22	.25	.89	.99	1.1	1.0
15	---	---	---	---	---	.41	.22	.27	1.1	.46	1.1	.84
16	---	---	---	---	---	.39	.22	.25	1.2	.77	1.1	.54
17	---	---	---	---	---	.41	.22	.26	.63	1.1	1.1	1.1
18	---	---	---	---	---	.44	.22	.25	1.2	1.1	.95	1.2
19	---	---	---	---	---	.39	.22	.25	1.3	1.2	.57	1.1
20	---	---	---	---	---	.25	.22	.25	1.3	1.2	1.0	.99
21	---	---	---	---	---	.25	.22	.24	1.4	.97	1.1	.98
22	---	---	---	---	---	.25	.22	.24	1.5	.68	1.1	.78
23	---	---	---	---	---	.29	.22	.25	1.2	1.2	1.2	.45
24	---	---	---	---	---	.27	.20	.23	.82	1.2	1.2	.88
25	---	---	---	---	---	.22	.20	.24	1.4	1.3	1.0	1.0
26	---	---	---	---	---	.22	.20	.25	1.6	1.3	.57	1.1
27	---	---	---	---	---	.22	.19	.25	1.9	1.1	1.0	1.0
28	---	---	---	---	---	.27	.18	.25	2.0	.97	1.1	.94
29	---	---	---	---	---	.27	.18	.28	1.8	.61	1.1	1.0
30	---	---	---	---	---	.27	.19	.42	1.1	.90	1.1	.37
31	---	---	---	---	---	.25	---	.61	---	.93	1.1	---
TOTAL	---	---	---	---	---	---	6.64	8.02	31.74	32.43	30.10	26.74
MEAN	---	---	---	---	---	---	.22	.26	1.06	1.05	.97	.89
MAX	---	---	---	---	---	---	.25	.61	2.0	1.4	1.2	1.2
MIN	---	---	---	---	---	---	.18	.20	.32	.46	.43	.37
AC-FT	---	---	---	---	---	---	13	16	63	64	60	53

10311090 NORTH FORK KINGS CANYON CREEK NEAR CARSON CITY, NV

LOCATION.--Lat. 39°09'17" long. 119°48'58" in NE1/4 NW1/4 sec.23, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, 2.9 mi west of Carson Street off Kings Canyon Road.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--March 10 to September, 1989.

GAGE.--Water-stage recorder. Elevation of gage is 5,530 ft, from topographic map.

REMARKS.--Records fair except for period of backwater, May 30 to June 15, and estimated daily discharges, which are poor. Periodic diversions for municipal use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period March to September, 1.9 ft³/s, July 12, gage height, 1.95 ft; maximum gage height, 2.27 ft, July 16, (backwater); minimum daily, 0.33 ft³/s, Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.91	1.0	.98	1.2	.70	e1.0
2	---	---	---	---	---	---	.97	1.0	.92	.45	.69	e1.5
3	---	---	---	---	---	---	.98	1.1	.84	.48	.67	e.90
4	---	---	---	---	---	---	.99	1.1	.98	.49	.91	e.80
5	---	---	---	---	---	---	1.0	1.1	1.0	.50	1.4	e.78
6	---	---	---	---	---	---	1.1	1.1	1.0	.55	.85	e.76
7	---	---	---	---	---	---	1.0	1.1	1.1	.75	.87	e.70
8	---	---	---	---	---	---	1.1	1.1	1.0	1.2	.94	e1.0
9	---	---	---	---	---	---	1.1	1.2	1.0	.87	.84	e1.5
10	---	---	---	---	---	---	.84	1.1	1.1	.87	.87	.76	e.90
11	---	---	---	---	---	---	.90	1.0	1.1	.90	.87	.91	e.64
12	---	---	---	---	---	---	.81	.99	1.1	.70	.76	1.3	.52
13	---	---	---	---	---	---	1.0	1.0	1.1	.58	.67	.86	.53
14	---	---	---	---	---	---	1.3	1.0	1.1	.79	.93	.81	.50
15	---	---	---	---	---	---	1.3	1.0	1.2	.61	1.6	.78	.72
16	---	---	---	---	---	---	1.3	1.0	1.1	.70	1.3	.78	1.1
17	---	---	---	---	---	---	1.3	1.1	1.1	1.3	.98	.79	.56
18	---	---	---	---	---	---	1.5	1.1	1.1	.66	.91	1.0	.57
19	---	---	---	---	---	---	1.7	1.1	1.1	.63	.91	1.4	.56
20	---	---	---	---	---	---	1.2	1.1	1.1	.60	.76	.76	.48
21	---	---	---	---	---	---	.90	1.1	1.1	.60	.87	.76	.46
22	---	---	---	---	---	---	.90	1.0	1.1	.62	1.3	.72	.70
23	---	---	---	---	---	---	.90	.98	1.1	.89	.72	.70	1.1
24	---	---	---	---	---	---	.97	1.0	1.1	1.3	.71	.68	.52
25	---	---	---	---	---	---	.92	1.0	1.1	.57	.70	e1.0	.42
26	---	---	---	---	---	---	.90	1.0	1.1	.57	.68	e1.1	.38
27	---	---	---	---	---	---	.90	.98	1.1	.64	.83	e1.0	.36
28	---	---	---	---	---	---	.98	.98	1.1	.62	.82	e.78	.33
29	---	---	---	---	---	---	.90	.98	1.2	.51	1.3	e.78	.63
30	---	---	---	---	---	---	.90	1.0	.94	.67	.79	e.78	1.0
31	---	---	---	---	---	---	.94	---	.89	---	.75	e.78	---
TOTAL	---	---	---	---	---	---	30.66	33.83	24.15	26.52	27.10	21.92
MEAN	---	---	---	---	---	---	1.02	1.09	.80	.86	.87	.73
MAX	---	---	---	---	---	---	1.1	1.2	1.3	1.6	1.4	1.5
MIN	---	---	---	---	---	---	.91	.89	.51	.45	.67	.33
AC-FT	---	---	---	---	---	---	61	67	48	53	54	43

e Estimated

10311100 KINGS CANYON CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°09'14", long 119°48'24", in NE1/4NE1/4 sec.23, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, 2 mi west of Carson Street off Kings Canyon Road.

DRAINAGE AREA.--4.06 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,180 ft, from topographic map.

REMARKS.--Records good. Diversion for municipal use above station.

AVERAGE DISCHARGE.--13 years (1977-89), 1.91 ft³/s, 1,380 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150 ft³/s, Feb. 19, 1986, on basis of slope-conveyance measurement of peak flow, gage height, 5.44 ft, from flood marks; minimum daily, 0.16 ft³/s, June 12, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6.2 ft³/s, Mar. 11, gage height, 4.12 ft; minimum daily, 0.29 ft³/s, July 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	.52	.55	.78	.68	.93	.86	.69	.41	.46	.34	.34
2	.52	.52	.53	.74	.59	2.3	.86	.67	.41	.30	.35	.43
3	.52	.52	.52	.74	.63	1.4	.86	.67	.46	.31	.35	.31
4	.52	.54	.51	.74	.60	1.1	.86	.67	.50	.32	.38	.32
5	.52	.58	.49	.74	.53	1.1	.86	.66	.45	.31	.47	.33
6	.52	.58	.51	.74	.70	1.1	.86	.64	.43	.32	.36	.33
7	.52	.58	.51	.74	.61	1.1	.86	.62	.44	.36	.38	.34
8	.52	.58	.50	.71	.59	3.4	.87	.64	.46	.48	.46	.35
9	.52	.56	.50	.74	.55	2.0	.89	.68	.47	.42	.45	.42
10	.52	.62	.56	.78	.55	1.2	.86	.66	.53	.41	.42	.37
11	.52	.64	.64	.78	.55	2.0	.86	.54	.64	.42	.42	.32
12	.52	.64	.71	.78	.55	.99	.86	.52	.55	.44	.51	.32
13	.52	.74	.64	.69	.55	.93	.86	.49	.38	.44	.41	.31
14	.52	.86	.61	.71	.54	.82	.86	.52	.48	.43	.33	.32
15	.52	.86	.64	.68	.55	.81	.85	.65	.42	.46	.32	.34
16	.52	.86	.64	.67	.56	.99	.86	.62	.41	.42	.32	.42
17	.52	.86	.64	.69	.57	.96	.84	.55	.56	.34	.32	.41
18	.52	.78	.64	.71	.62	1.8	.82	.55	.35	.34	.34	.40
19	.52	.75	.64	.71	.72	1.7	.82	.55	.37	.34	.42	.40
20	.52	.82	.64	.70	.74	1.0	.82	.54	.37	.33	.34	.40
21	.52	.64	.64	.69	.74	1.0	.82	.51	.37	.34	.31	.38
22	.52	.73	.64	.73	1.3	1.0	.77	.50	.37	.42	.32	.37
23	.52	1.5	.71	.72	2.9	.99	.74	.52	.42	.29	.32	.39
24	.52	1.3	e.71	.69	1.7	1.3	.74	.54	.52	.30	.32	.32
25	.52	.74	.71	.69	1.6	1.2	.74	.55	.34	.31	.35	.32
26	.52	.74	.71	.70	1.2	1.1	.71	.55	.31	.31	.42	.32
27	.52	.71	.74	.69	1.0	.97	.71	.55	.33	.31	.32	.32
28	.52	.62	.74	.64	.91	1.1	.71	.55	.34	.32	.31	.33
29	.52	.55	.74	.65	---	.99	.69	.55	.34	.43	.32	.36
30	.52	.55	.74	.65	---	.93	.68	.54	.35	.37	.32	.44
31	.52	---	.74	.67	---	.86	---	.49	---	.34	.32	---
TOTAL	16.11	21.49	19.44	22.09	23.33	39.07	24.40	17.98	12.78	11.39	11.32	10.73
MEAN	.52	.72	.63	.71	.83	1.26	.81	.58	.43	.37	.37	.36
MAX	.52	1.5	.74	.78	2.9	3.4	.89	.69	.64	.48	.51	.44
MIN	.51	.52	.49	.64	.53	.81	.68	.49	.31	.29	.31	.31
AC-FT	32	43	39	44	46	77	48	36	25	23	22	21

CAL YR 1988 TOTAL 229.08 MEAN .63 MAX 1.5 MIN .24 AC-FT 454
WTR YR 1989 TOTAL 230.13 MEAN .63 MAX 3.4 MIN .29 AC-FT 456

e Estimated

10311200 ASH CANYON CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'35", long 119°48'16", in NW1/4SW1/4 sec.12, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, on left bank 2 mi west of intersection of Carson and Bath Streets.

DRAINAGE AREA.--5.20 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 5,080 ft, from topographic map.

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

AVERAGE DISCHARGE.--13 years (1977-89), 3.65 ft^3/s, 2,640 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58 ft^3/s, Feb. 17, 1986, gage height, unknown, on basis of slope-conveyance measurement of peak flow; minimum daily, 0.78 ft^3/s, Sept. 6, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.5 ft^3/s, Nov. 23, gage height, 1.82 ft; maximum gage height, 2.86 ft, backwater from ice; minimum daily, 1.2 ft^3/s, Oct. 2-4, July 30, Aug. 4-6, and Sept. 3-6, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.5	1.7	1.8	2.0	2.2	3.2	3.0	2.7	1.9	1.3	1.3
2	1.2	1.5	1.7	1.8	1.9	2.6	3.2	3.0	2.7	1.8	1.3	1.3
3	1.2	1.6	1.7	1.8	1.9	2.3	3.1	3.2	2.8	1.8	1.3	1.2
4	1.2	1.6	1.7	1.8	e1.9	2.4	3.1	3.4	3.8	1.7	1.2	1.2
5	1.3	1.6	1.7	1.8	e1.9	2.5	3.3	3.6	3.2	1.7	1.2	1.2
6	1.3	1.6	1.7	1.8	e1.9	3.3	3.7	3.5	2.9	1.7	1.2	1.2
7	1.3	1.6	1.7	1.8	e1.9	3.3	3.8	3.7	3.0	1.6	1.6	1.3
8	1.3	1.6	1.7	e1.8	e1.9	5.2	3.8	3.8	2.8	1.6	2.4	1.3
9	1.3	1.6	1.7	e1.8	e1.9	4.3	3.8	3.9	2.7	1.6	1.7	1.3
10	1.3	1.7	1.7	e1.8	e1.9	3.6	4.0	3.7	2.6	1.7	1.4	1.3
11	1.4	1.7	1.7	e1.8	1.9	3.8	3.9	3.4	2.6	1.6	1.3	1.3
12	1.4	1.6	1.7	e1.8	2.0	3.3	3.6	3.4	2.5	1.6	1.3	1.3
13	1.4	2.0	1.7	e1.8	1.9	3.1	3.6	3.4	2.4	1.6	1.3	1.3
14	1.4	1.8	1.7	1.9	1.9	2.9	3.9	3.3	2.3	1.5	1.3	1.2
15	1.4	1.8	1.7	1.8	1.9	2.7	3.9	3.6	2.3	1.5	1.3	1.2
16	1.4	1.8	1.7	1.9	2.0	2.7	3.8	3.3	2.2	1.5	1.3	1.4
17	1.4	1.8	1.7	1.9	2.0	2.5	3.9	3.3	2.2	1.8	1.4	1.9
18	1.4	1.8	1.7	1.9	2.1	2.8	3.8	3.2	2.1	1.5	1.4	1.9
19	1.4	1.8	1.8	1.9	2.2	3.5	3.9	3.1	2.0	1.4	1.4	2.0
20	1.4	1.8	1.8	1.9	2.1	3.1	4.0	3.1	2.1	1.4	1.5	1.6
21	1.4	1.7	1.8	1.9	2.2	2.9	3.7	3.0	2.1	1.4	1.4	1.5
22	1.5	2.6	1.8	2.0	2.8	3.0	3.4	3.0	2.0	1.4	1.4	1.5
23	1.5	3.6	e1.7	1.9	3.1	3.0	3.2	3.0	2.1	1.4	1.5	1.4
24	1.5	2.0	1.7	1.9	2.9	3.5	3.1	2.9	2.0	1.4	1.5	1.4
25	1.5	1.9	1.6	e1.9	2.9	3.3	3.0	2.8	2.0	1.3	1.4	1.4
26	1.5	1.8	e1.6	e1.9	2.9	3.0	2.9	2.9	2.0	1.3	1.4	1.4
27	1.5	1.8	e1.6	e1.9	2.7	2.8	2.9	2.9	2.0	1.3	1.3	1.5
28	1.5	1.8	e1.7	1.9	2.4	3.4	2.7	2.7	1.9	1.3	1.3	1.5
29	1.5	1.7	1.8	1.9	---	3.1	2.8	2.9	1.9	1.3	1.3	2.0
30	1.5	1.7	1.8	1.9	---	3.0	2.8	2.9	1.9	1.2	1.3	1.8
31	1.5	---	1.8	2.0	---	3.3	---	2.8	---	1.3	1.3	---
TOTAL	43.1	54.4	53.1	57.7	61.0	96.4	103.8	99.7	71.8	47.1	43.2	43.1
MEAN	1.39	1.81	1.71	1.86	2.18	3.11	3.46	3.22	2.39	1.52	1.39	1.44
MAX	1.5	3.6	1.8	2.0	3.1	5.2	4.0	3.9	3.8	1.9	2.4	2.0
MIN	1.2	1.5	1.6	1.8	1.9	2.2	2.7	2.7	1.9	1.2	1.2	1.2
AC-FT	85	108	105	114	121	191	206	198	142	93	86	85

CAL YR 1988 TOTAL 653.62 MEAN 1.79 MAX 3.6 MIN .78 AC-FT 1300
WTR YR 1989 TOTAL 774.4 MEAN 2.12 MAX 5.2 MIN 1.2 AC-FT 1540

e Estimated

10311300 EAGLE VALLEY CREEK AT CARSON CITY, NV

LOCATION.--Lat 39°09'56", long 119°43'23", in SE1/4NW1/4 sec.15, T.15 N. R.20 E., Carson City, Hydrologic Unit 16050201, on left bank 100 ft downstream from North Edmonds Drive, and 1.1 mi south of intersection with Highway 50.

DRAINAGE AREA.--34.4 mi².

PERIOD OF RECORD.--January 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,620 ft, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s, Feb. 19, 1986, gage height, 8.85 ft, from rating curve extended above 620 ft³/s; no flow many days from July to September 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 115 ft³/s, Nov. 23, gage height, 6.21 ft; minimum daily, 0.02 ft³/s, July 15, 16, 24-26, and Sept. 6-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.16	.19	e.79	.92	.43	.28	.23	.15	.05	.03	.03
2	.05	.16	.19	e.78	.38	3.1	.26	.22	.13	.06	.04	.03
3	.06	.16	.20	e.63	e.25	1.4	.25	.22	.48	.05	.05	.03
4	.08	.17	.19	e.66	e.21	.62	.26	.21	18	.06	.06	.03
5	.09	.17	.20	e.62	e.17	.42	.26	.20	3.8	.04	.05	.03
6	.09	.17	.20	e.63	e.14	.42	.24	.19	.47	.06	.06	.02
7	.09	.18	.21	e.40	e.14	.48	.22	.18	2.9	.08	.06	.02
8	.09	.19	.20	e.35	e.15	8.6	.23	.18	1.2	.06	9.1	.02
9	.09	.18	.20	e.44	e.20	1.8	.22	1.7	.51	.06	1.2	.06
10	.09	.18	.20	e.54	e.24	.91	.20	1.2	.19	.06	.14	.08
11	.10	.19	.20	e.45	e.29	5.6	.20	.77	.17	.07	.09	.08
12	.16	.19	.21	e.40	e.34	.93	.23	.28	.16	.07	.06	.08
13	.12	3.7	.21	e.45	e.32	1.8	.20	.61	.14	.05	.04	.08
14	.12	9.0	.21	e.60	e.30	.49	.20	2.2	.12	.03	.04	.07
15	.12	.27	.20	e.90	3.4	.37	.20	11	.10	.02	.03	.08
16	.12	.20	.20	e1.0	6.4	7.2	.19	1.0	.07	.02	.04	.73
17	.12	2.1	.20	e1.0	5.8	1.7	.21	.28	.08	.04	.04	5.8
18	.12	.23	.62	e1.1	6.5	.82	.21	.22	.08	.04	.03	4.2
19	.13	.19	.57	e1.0	7.6	2.7	.21	.18	.06	.05	.03	4.0
20	.13	.18	.28	e1.0	2.7	.65	.21	.19	.11	.04	.03	.17
21	.13	.18	.26	e1.2	1.9	.38	.19	.17	.10	.03	.04	.14
22	.14	.18	.27	e1.3	2.4	.47	.19	.17	.08	.03	.04	.13
23	.13	41	.30	e1.0	3.6	.33	.20	.18	.08	.03	.03	.11
24	.14	6.1	.37	e.35	1.8	1.7	.24	.17	.07	.02	.03	.10
25	.14	4.9	e.28	e.30	1.1	1.4	.27	.20	.09	.02	.03	.08
26	.14	1.2	e.25	e.28	.83	.34	.26	.19	.08	.02	.03	.06
27	.14	.40	e.22	e.27	.42	.30	.24	.16	.07	.03	.03	.08
28	.15	.44	e.20	e.30	.49	.28	.25	.14	.06	.03	.03	.10
29	.15	.21	e.18	e.32	---	.26	.23	.30	.04	.03	.03	2.8
30	.15	.19	e.35	.35	---	.26	.23	.32	.04	.03	.03	.36
31	.16	---	e.63	.41	---	.30	---	.16	---	.03	.03	---
TOTAL	3.59	72.77	8.19	19.82	48.99	46.46	6.78	23.42	29.63	1.31	11.57	19.60
MEAN	.12	2.43	.26	.64	1.75	1.50	.23	.76	.99	.042	.37	.65
MAX	.16	41	.63	1.3	7.6	8.6	.28	11	18	.08	9.1	5.8
MIN	.05	.16	.18	.27	.14	.26	.19	.14	.04	.02	.03	.02
AC-FT	7.1	144	16	39	97	92	13	46	59	2.6	23	39

CAL YR 1988 TOTAL 337.86 MEAN .92 MAX 41 MIN .00 AC-FT 670
WTR YR 1989 TOTAL 292.13 MEAN .80 MAX 41 MIN .02 AC-FT 579

e Estimated

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 39°17'30", long 119°18'40", in SW1/4SE1/4 sec.32, T.17 N., R.24 E., Lyon County, Hydrologic Unit 16050202, on right bank 400 ft downstream from Buckland ditch, 2 mi west of Fort Churchill, and 4.5 mi upstream from Weeks Bridge on U.S. Highway 95 alternate.

DRAINAGE AREA.--1,302 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1911 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1514: 1917; WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,219.70 ft, above National Geodetic Vertical Datum of 1929. Prior to Apr. 25, 1924, nonrecording gage at site 7.8 mi upstream at different datum. Apr. 25, 1924, to Dec. 31, 1933, water-stage recorder at site 8 mi upstream at different datum. Jan. 1, 1934, to Sept. 30, 1957, water-stage recorder at present site at datum 1.36 ft higher (levels by Truckee-Carson Irrigation District). July 8, 1986, water-stage recorder at site 50 ft upstream at datum 5.0 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Many diversions for irrigation above station, including diversions for 720 acres between present site and sites used prior to Jan. 1, 1934. Buckland ditch diverts 400 ft upstream for irrigation downstream from station.

AVERAGE DISCHARGE.--78 years, 374 ft³/s, 271,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,600 ft³/s, Feb. 19, 1986, gage height, 8.35 ft; maximum during some periods in nearly every year since 1923.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 9	2000	*1,360	*6.03				

Minimum daily, no flow many days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.24	90	105	e92	253	536	283	280	97	.08	.03
2	.06	.40	78	e100	e87	231	687	258	254	69	.08	.02
3	.09	.25	74	105	e83	233	568	261	248	56	.06	.03
4	.04	.37	65	110	e78	e220	518	319	406	44	.04	.01
5	.04	.30	69	112	e84	227	455	428	916	37	.05	.01
6	.04	.28	74	e110	e90	210	440	637	953	21	.06	.01
7	.04	.25	76	e105	e97	276	549	859	910	11	.06	.02
8	.04	.31	83	e96	e102	473	725	1080	901	18	.41	.00
9	.04	.29	84	97	e112	1030	808	1260	983	9.2	.12	.00
10	.04	.28	82	109	e120	1160	871	1280	910	7.5	.14	.00
11	.04	.31	82	126	e120	884	872	1260	875	4.0	.08	.00
12	.08	.32	77	e123	e130	806	967	1060	863	4.4	.02	.00
13	.09	.35	78	e120	e130	694	873	909	785	4.1	.01	.00
14	.12	.41	76	122	e130	596	773	806	667	3.6	.02	.00
15	.15	.77	75	e111	e135	499	804	773	603	2.5	.06	.00
16	.10	1.5	78	e107	e150	460	893	767	538	1.9	.06	.00
17	.10	1.8	73	e102	e168	470	944	687	523	1.6	.05	.10
18	.10	3.7	73	e98	e185	424	883	711	501	1.2	.06	.00
19	.14	4.5	79	107	198	436	900	826	446	1.0	.06	.00
20	.14	8.7	88	105	258	490	945	723	404	.68	.07	.00
21	.23	15	89	116	246	509	1000	669	363	.34	.07	.00
22	.22	19	88	112	205	441	1110	640	290	.29	.05	.00
23	.16	26	e86	114	194	440	872	618	241	.33	.03	.00
24	.12	45	86	e109	274	462	716	586	211	.26	.04	.00
25	.13	181	83	e100	312	487	621	500	184	.25	.06	.00
26	.17	157	70	e100	285	533	536	394	148	.25	.04	.00
27	.14	124	42	e100	289	461	458	353	145	.17	.05	.00
28	.13	103	e64	119	281	403	392	340	167	.15	.07	.00
29	.21	87	36	117	---	439	335	366	130	.11	.05	.00
30	.23	88	e72	e103	---	720	303	370	111	.14	.05	.00
31	.25	---	96	e97	---	583	---	361	---	.09	.04	---
TOTAL	3.53	870.33	2366	3357	4635	15550	21354	20384	14956	397.06	2.14	0.23
MEAN	.11	29.0	76.3	108	166	502	712	658	499	12.8	.069	.008
MAX	.25	181	96	126	312	1160	1110	1280	983	97	.41	.10
MIN	.04	.24	36	96	78	210	303	258	111	.09	.01	.00
AC-FT	7.0	1730	4690	6660	9190	30840	42360	40430	29670	788	4.2	.5

CAL YR 1988 TOTAL 19591.56 MEAN 53.5 MAX 234 MIN .00 AC-FT 38860
WTR YR 1989 TOTAL 83875.29 MEAN 230 MAX 1280 MIN .00 AC-FT 166400

e Estimated

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV-Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960 to current year (published as Carson River near Silver Springs, sta. no. 10312020, October 1962 to September 1970).

PERIOD OF DAILY RECORD.--
CHEMICAL ANALYSES: October 1962 to September 1969.
SPECIFIC CONDUCTANCE: October 1962 to June 1970 and February 1972 to September 1982.
WATER TEMPERATURE: October 1962 to June 1970 and February 1972 to September 1982.

REMARKS.--Quarterly water-quality data are collected from river at gage, or from Buckland Ditch, which leaves river 400 ft upstream from gage, depending on discharge. Detailed sampling information is available from U.S. Geological Survey, Carson City, Nev. Discharge data do not include ditch flow. This gage is currently in the NASQAN network.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily; 840 microsiemens Sept. 13, 1973; minimum daily, 81 microsiemens July 3, 1967.
WATER TEMPERATURE: Maximum daily, 29.0°C Aug. 7, 1972; minimum daily, freezing point on many days during winter months of most years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
NOV												
22...	1115	18	620	8.40	17.0	6.0	2.9	11.0	103	72	110	190
MAR												
06...	1300	191	362	8.50	19.0	11.0	3.7	10.8	114	K3	48	110
MAY												
23...	1132	693	134	8.20	13.5	15.0	15	8.6	99	100	250	46
AUG												
29...	1135	4.5	592	8.30	24.0	20.0	1.6	7.0	92	12	180	190

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV												
22...	58	12	53	2	4.8	163	1	135	150	18	0.50	26
MAR												
06...	33	7.5	31	1	3.4	110	2	97	63	13	0.40	20
MAY												
23...	13	3.3	10	0.7	1.8	54	--	44	14	3.2	0.10	18
AUG												
29...	54	13	51	2	5.6	180	--	148	130	14	0.40	28

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV												
22...	419	405	0.57	0.020	<0.100	0.020	0.010	0.48	0.50	0.110	0.090	0.080
MAR												
06...	232	228	0.32	<0.010	<0.100	<0.010	0.010	--	0.50	0.100	0.070	0.050
MAY												
23...	88	91	0.12	<0.010	<0.100	0.020	0.030	0.78	0.80	0.190	0.070	0.060
AUG												
29...	400	386	0.54	<0.010	<0.100	<0.010	<0.010	--	0.30	0.090	0.070	0.070

K: NON-IDEAL COLONY COUNT.

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV-Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)
NOV 22...	<10	5	44	<0.5	1	<1	<3	3	28	<5	37	41
MAR 06...	<10	7	35	<0.5	<1	1	<3	1	89	<5	23	46
MAY 23...	40	5	21	<0.5	<1	<1	<3	3	89	1	10	9
AUG 29...	10	6	58	<0.5	<1	<1	<3	2	7	<1	31	80

DATE	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 22...	<0.1	10	<1	<1	<1.0	600	<6	31	7	0.34	97
MAR 06...	<0.1	<10	2	<1	<1.0	360	<6	<3	12	6.2	88
MAY 23...	<0.1	<10	<1	<1	<1.0	150	<6	4	173	324	50
AUG 29...	<0.1	10	1	<1	<1.0	600	<6	7	12	0.15	64

10312100 LAHONTAN RESERVOIR NEAR FALLON, NV

LOCATION.--Lat 39°27'45", long 119°04'00", in SW1/4SE1/4 sec.33, T.19 N., R.26 E., Churchill County, Hydrologic Unit 16050202, in outlet control house on upstream side of Lahontan Dam on Carson River, 18 mi west of Fallon.

DRAINAGE AREA.--1,799 mi^2, (not including inflow from Truckee Canal).

PERIOD OF RECORD.--January 1917 to current year. Monthly contents only for January 1917 to September 1960, published in WSP 1734.

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Float tape with surface contact detector. Prior to 1956, float tape. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to 1966, at datum 3.73 ft lower (Bureau of Reclamation datum).

REMARKS.--Reservoir is formed by earth and gravel-fill dam, constructed by U.S. Bureau of Reclamation. Storage began sometime between the completion of the dam in June 1915 and the beginning of the period of record, January 1917. Capacity, 295,100 acre-ft between elevations, 4,060.0 ft, invert of outlet conduit, and 4,162.0 ft, spillway crest; includes 91 acre-ft of dead storage below elevation, 4,070 ft. Surface area at spillway elevation, 12,120 acres. Water is used for irrigation of 87,500 acres in Newland Project and for power. Figures given herein represent total contents and are computed from 0800 hour readings, based on capacity table dated 1989. Reservoir stores water from Carson River and from Truckee River via Truckee Canal at Derby Dam. Inflow is regulated by Lake Tahoe (station 10337000), Donner Lake, Prosser Creek (station 10340300), Stampede (station 10344300), Boca (station 10344490), other reservoirs, and Derby Dam. Extensive irrigation above reservoir in Carson and Truckee River basins.

COOPERATION.--Records of daily elevations furnished by Truckee-Carson Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed (20-inch flashboard on weir), 328,600 acre-ft, June 16, 1942, elevation, 4,164.43 ft; minimum observed, 91 acre-ft, Sept. 7-9, 1929, elevation, 4,070.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 214,000 acre-ft, June 16, elevation, 4,153.95 ft; minimum observed, 6,950 acre-ft, Nov. 3, elevation, 4,090.97 ft.

Capacity table (elevation, in feet, contents, in acre-feet)

4,093	8,650	4,115	39,080	4,140	127,800
4,095	10,470	4,120	50,890	4,145	155,400
4,100	15,680	4,125	65,300	4,148	173,800
4,105	21,840	4,130	82,700	4,149	180,300
4,110	29,460	4,135	103,500		

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e12190	e7000	16900	27460	49780	71770	e135400	173000	198700	194600	136100	93380
2	e12320	e6970	17270	27840	49910	73210	e138100	173400	198800	192600	134200	91870
3	12460	6950	e17670	28220	50030	74250	140800	173200	198300	190800	132300	90810
4	12630	7220	e18070	29880	50530	75550	143300	172500	197500	189400	e130400	89790
5	12790	e7420	18470	29130	51030	76850	144900	172000	197800	187700	128600	88770
6	13000	e7630	e18810	29510	51530	78150	146500	171900	199800	e186200	126700	87490
7	13130	7830	19160	e29960	52020	79210	147600	172300	202100	184700	125200	86420
8	e13400	8050	19510	e30400	52380	80320	148500	172900	204100	183400	124000	85350
9	e13680	8260	19760	e30850	52740	82510	149400	174100	205900	180500	e123200	83970
10	13950	8440	e20110	31290	52770	84980	150200	176000	208200	178900	122500	82950
11	13620	e8640	e20460	31750	53100	88260	151200	179200	210200	176800	122600	81410
12	13760	e8840	20810	32220	53920	91540	152100	182100	211900	174200	122100	80590
13	13950	e9050	21180	32690	53740	94820	153300	185200	212600	172700	121600	79520
14	14120	9250	21560	33400	54130	97640	154100	188300	213500	169400	121000	78340
15	e14270	9410	21830	34130	54510	100400	154700	190500	213900	166600	120300	77240
16	e14410	9580	22100	34850	54730	103300	155300	192800	214000	164700	119800	76090
17	14560	9930	e22380	35570	55280	105100	156100	195100	213700	162800	117300	75380
18	14690	10180	e22660	36530	56580	107400	156900	197000	213400	160900	115700	75310
19	14820	e10440	22940	37440	57880	109600	157900	198300	212800	159000	113900	75640
20	15000	e10710	23230	38380	59170	111900	159100	199700	212100	157500	112100	76130
21	15090	10970	23610	39340	60470	114300	160300	200400	e211200	155900	110600	76530
22	15190	11220	23980	40310	61910	111500	161600	200900	210400	154400	109000	76920
23	15470	11490	24430	41280	63310	113700	162900	201300	208500	152700	e107200	77000
24	15330	e12290	e24790	42220	64700	116000	164200	201200	206900	150800	105300	77160
25	11600	e13090	e25140	43130	66100	118300	166100	201300	205300	149200	103700	77040
26	9880	e13880	e25500	44050	67490	120700	168100	201000	203900	147300	102100	76650
27	8000	e14680	25850	44940	68890	123000	169500	199900	202500	145600	100600	77240
28	7080	15480	e26140	45850	70280	125400	170800	199200	e200500	144000	99260	75190
29	e7060	15980	e26430	46750	---	128200	e171500	198500	198500	142100	97900	74520
30	e7040	16430	26710	47660	---	130000	e172300	198600	196400	140100	96440	74040
31	e7020	---	e27090	48660	---	132700	---	198700	---	138100	94930	---
MAX	15470	16430	27090	48660	70280	132700	172300	201300	214000	194600	136100	93380
MIN	7020	6950	16900	27460	49780	71770	135400	171900	196400	138100	94930	74040
#	4091.05	4100.66	4108.57	4119.12	4126.53	4140.93	4147.76	4151.61	4151.29	4141.94	4133.04	4127.63
##	-5040	+9410	+10660	+21570	+21620	+62420	+39600	+26400	-2300	-58300	-43170	-20890

CAL YR 1988 MAX 178200 MIN 6950 ## -71070
WTR YR 1989 MAX 214000 MIN 6950 ## +61980

\# Elevation, in feet NGVD, at end of month.
Change in contents, in acre-feet.
e Estimated.

10312150 CARSON RIVER BELOW LAHONTAN RESERVOIR, NEAR FALLON, NV

LOCATION.--Lat 39°27'50", long 119°02'45", in E1/2SE1/4 sec.34, T.19 N., R.26 E., Churchill County, Hydrologic Unit 16050203, on left bank 1.1 mi downstream from Lahontan Dam, and 15 mi west of Fallon.

DRAINAGE AREA.--1,801 mi² (not counting inflow from Truckee Canal).

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

REVISED RECORDS.--WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,040 ft, from topographic map.

REMARKS.--Records good except for estimated discharges, which are fair, and flows below 10.0 cfs, which are poor. Flow regulated by Lahontan Reservoir (station 10312100), capacity 295,100 acre-ft, and other upstream regulations. One diversion, approximately 2,500 acre-ft per year, between gage and Lahontan Reservoir.

AVERAGE DISCHARGE.--23 years, 551 ft³/s, 399,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,970 ft³/s, June 28, 1983, gage height, 8.05 ft; minimum daily, 0.92 ft³/s, Dec. 7, 8, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,490 ft³/s, June 22, gage height, 6.15 ft; minimum daily, 0.92 ft³/s, Dec. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.7	2.1	1.2	1.4	1.4	1.4	500	823	1010	912	893
2	2.1	1.9	1.7	1.2	1.5	1.6	1.4	663	824	919	907	829
3	1.9	2.2	1.6	1.3	1.8	1.5	210	820	818	921	912	624
4	1.7	2.4	1.0	1.2	1.7	1.3	353	973	665	916	892	558
5	1.7	2.4	1.1	1.2	1.6	1.3	525	976	549	889	907	676
6	1.7	2.3	1.0	1.1	1.5	1.3	635	977	549	913	907	767
7	1.6	2.3	.92	1.1	1.5	1.4	638	979	557	921	907	764
8	1.7	2.4	.92	1.1	1.5	1.4	975	979	551	927	817	761
9	2.2	2.3	.97	1.1	1.5	1.2	1030	971	563	906	692	761
10	1.6	2.3	1.0	1.1	1.5	1.3	1030	584	536	937	e488	709
11	2.1	2.3	1.1	1.0	1.5	1.2	1030	449	612	1100	e558	715
12	2.7	2.3	1.2	.96	1.4	1.1	1070	411	813	1100	e229	752
13	2.1	2.2	1.2	.97	1.3	1.1	1180	338	910	1090	e443	751
14	2.5	2.2	1.2	.95	1.3	1.1	1180	267	1020	1090	e350	752
15	2.6	2.1	1.2	.97	1.3	1.1	1180	267	1000	1020	e350	695
16	2.8	2.1	1.3	1.0	1.3	1.2	1180	269	1090	902	e787	655
17	2.9	2.1	1.3	1.1	1.3	1.4	1180	315	1060	903	e827	456
18	2.9	1.9	1.3	1.1	1.4	1.3	1130	550	943	903	e851	282
19	3.1	1.8	1.3	1.1	1.3	1.2	1000	692	1010	864	918	283
20	3.0	1.8	1.3	1.1	1.4	1.6	937	893	967	833	910	242
21	3.2	1.7	1.3	1.1	1.5	1.8	937	897	944	844	941	207
22	257	1.7	1.3	1.1	1.6	1.8	941	957	1030	883	1040	233
23	569	1.9	1.2	1.2	1.8	1.7	925	1110	1090	950	956	317
24	641	1.7	1.3	1.1	1.6	1.7	690	1110	1010	897	888	322
25	684	1.6	1.3	1.1	1.4	1.5	465	1090	1010	858	886	418
26	683	1.5	1.3	1.1	1.3	1.3	465	1070	979	799	887	533
27	589	1.5	1.2	1.2	1.2	1.4	467	1030	997	814	849	559
28	343	1.4	1.3	1.2	1.2	1.3	467	937	1030	900	803	537
29	272	1.5	1.3	1.1	---	1.4	466	853	1020	983	806	501
30	96	2.1	1.2	1.1	---	1.4	467	819	993	925	824	461
31	1.6	---	1.2	1.1	---	1.4	---	822	---	909	885	---
TOTAL	4183.7	59.6	38.61	34.25	40.6	42.7	22755.8	23568	25963	28826	24329	17013
MEAN	135	1.99	1.25	1.10	1.45	1.38	759	760	865	930	785	567
MAX	684	2.4	2.1	1.3	1.8	1.8	1180	1110	1090	1100	1040	893
MIN	1.6	1.4	.92	.95	1.2	1.1	1.4	267	536	799	229	207
AC-FT	8300	118	77	68	81	85	45140	46750	51500	57180	48260	33750

CAL YR 1988 TOTAL 116262.91 MEAN 318 MAX 991 MIN .92 AC-FT 230600
WTR YR 1989 TOTAL 146854.26 MEAN 402 MAX 1180 MIN .92 AC-FT 291300

e Estimated

10312250 PAIUTE DRAIN ABOVE D-LINE CANAL NR STILLWATER, NV

LOCATION.--Lat 39°35'41", long 118°34'10", in NE1/4SW1/4 sec.13, T.20 N., R.30 E., Churchill County, Hydrologic Unit 16050203, on left bank 1.2 mi above Stillwater Wildlife entrance and 6.8 mi northwest of Stillwater.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--December 1988 to September 1989 (discontinued).

GAGE.--Water-stage recorder.

REMARKS.--Records poor. Flow is irrigation drainage from Newlands Project.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, during period December 10 to September 30, 16 ft³/s, May 21, gage height, 6.66 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	.00	2.1	.43	.00	2.8	6.2	6.2	4.5	4.9
2	---	---	---	.00	1.8	.38	.00	3.6	6.5	6.2	4.5	8.1
3	---	---	---	.00	e1.0	.38	.00	1.9	7.5	5.9	6.0	11
4	---	---	---	.00	e.50	.42	.00	2.9	9.2	7.1	7.8	5.8
5	---	---	---	.00	e.37	.43	.00	5.6	6.6	9.1	7.8	3.2
6	---	---	---	.00	e.30	.45	.00	5.7	4.2	8.3	7.5	2.3
7	---	---	---	.00	e.29	.37	.00	5.0	2.4	7.7	5.5	.35
8	---	---	---	.00	e.27	.39	.00	3.3	.58	9.2	4.9	.05
9	---	---	---	.00	e.26	.29	.20	3.0	1.8	6.5	5.2	.11
10	---	---	.17	.00	e.25	.26	2.1	3.9	2.5	2.7	6.8	.09
11	---	---	.12	.00	e.25	.27	4.1	3.8	.79	1.1	6.7	.12
12	---	---	.17	.00	e.25	.26	4.3	6.1	.71	2.4	5.1	.41
13	---	---	.33	.00	e.26	.20	4.1	6.6	1.8	6.2	3.5	.81
14	---	---	.14	.00	e.27	.18	3.1	6.4	6.4	5.3	2.6	4.9
15	---	---	.00	.00	e.28	.19	1.4	5.4	7.1	3.0	2.3	5.8
16	---	---	.00	2.4	e.29	.13	1.5	7.1	5.9	2.7	1.7	3.0
17	---	---	.00	1.7	e.31	.09	1.9	7.2	3.7	2.4	3.6	3.5
18	---	---	.00	.00	e.32	.15	2.1	9.7	1.7	.58	7.2	3.5
19	---	---	.00	.00	e.33	.16	7.2	12	.61	.15	8.4	3.4
20	---	---	.00	.00	e.35	.04	5.4	14	.54	1.4	10	3.4
21	---	---	.00	.00	e.37	.02	4.8	16	.46	9.0	11	3.2
22	---	---	.00	.00	e.39	.02	5.1	13	.19	7.0	9.2	2.9
23	---	---	.62	.00	e.41	.21	5.4	2.0	.33	5.4	8.8	1.9
24	---	---	.12	.00	e.44	.08	3.9	.84	4.4	3.8	9.2	.94
25	---	---	.00	.00	.46	.06	4.7	3.7	2.3	2.0	8.4	.72
26	---	---	.00	.00	.47	.02	6.1	1.5	.47	.67	4.5	.65
27	---	---	.00	.00	.48	.01	5.0	5.9	.09	.68	2.3	1.3
28	---	---	.00	.18	.44	.0	3.4	6.8	.12	.95	4.8	1.9
29	---	---	.00	2.2	---	.00	3.7	6.5	2.7	2.9	4.6	2.8
30	---	---	.00	2.8	---	.00	3.2	5.7	5.5	2.7	1.4	3.0
31	---	---	.00	2.5	---	.00	---	5.9	---	6.8	3.2	---
TOTAL	---	---	---	11.78	13.51	5.89	82.70	183.84	93.29	136.03	179.0	84.05
MEAN	---	---	---	.38	.48	.19	2.76	5.93	3.11	4.39	5.77	2.80
MAX	---	---	---	2.8	2.1	.45	7.2	16	9.2	9.2	11	11
MIN	---	---	---	.00	.25	.00	.00	.84	.09	.15	1.4	.05
AC-FT	---	---	---	23	27	12	164	365	185	270	355	167

e Estimated

10312267 D-LINE CANAL BELOW EAST LAKE NEAR STILLWATER, NV

LOCATION.--Lat 39°36'19", long 118°34'25", in NE1/4NE1/4 sec.14, T.20 N., R.30 E., Churchill County, Hydrologic Unit 16050203, on left bank 200 ft downstream from East Lake and 7.0 mi northwest of Stillwater.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--March to September 1989 (discontinued). Records equivalent to Indian Lakes Canal below East Lake (10312265) May 1977 to September 1981 (monthly discharge only). Records of daily discharge available in files of U.S. Geological Survey.

GAGE.--Water-stage recorder. Elevation of gage is 3,880 ft, from topographic map.

REMARKS.--Records poor. Flow regulated by control structure on East Lake outlet and many diversions and spillways above station. (Newlands Project).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, during period March to September, 16 ft³/s, April 25, gage height 9.13 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	e.00	.64	.82	.04	.74	.38	.00
2	---	---	---	---	---	e.00	.47	.50	.06	1.0	.09	.00
3	---	---	---	---	---	e.00	.27	.49	.39	.74	.27	.00
4	---	---	---	---	---	e.00	.09	.18	2.0	1.2	1.5	.00
5	---	---	---	---	---	e.00	.0	.01	.57	2.7	1.6	.00
6	---	---	---	---	---	e.00	.00	.00	.04	2.3	1.5	.00
7	---	---	---	---	---	e.00	.00	.00	.0	1.8	.36	.00
8	---	---	---	---	---	e.00	.00	.00	.00	2.6	.08	.00
9	---	---	---	---	---	e.20	.00	.00	.00	1.4	.05	.00
10	---	---	---	---	---	e.40	2.2	.00	.00	.07	.40	.00
11	---	---	---	---	---	e.80	3.7	.00	.00	.00	.43	.00
12	---	---	---	---	---	e1.8	4.4	.00	.00	.00	.07	.00
13	---	---	---	---	---	e3.4	4.7	.00	.00	.12	.01	.00
14	---	---	---	---	---	e2.4	4.6	1.5	.07	.16	.00	.00
15	---	---	---	---	---	e1.7	3.6	3.0	.79	.03	.00	.02
16	---	---	---	---	---	e1.2	4.9	2.6	.37	.00	.00	.30
17	---	---	---	---	---	e.90	5.8	2.0	.08	.00	.00	.91
18	---	---	---	---	---	e.65	4.3	1.3	.0	.00	.00	.88
19	---	---	---	---	---	e.45	1.9	.54	.00	.00	.00	.46
20	---	---	---	---	---	e.32	1.8	.42	.00	.00	.00	.17
21	---	---	---	---	---	e.22	4.2	.89	.00	1.3	.00	.15
22	---	---	---	---	---	.36	5.5	.33	.00	1.2	.00	.39
23	---	---	---	---	---	.23	7.3	.01	.00	.39	.00	.94
24	---	---	---	---	---	.10	3.3	.00	.01	.11	.00	1.5
25	---	---	---	---	---	.01	9.0	.00	.02	.02	.00	1.9
26	---	---	---	---	---	.30	7.9	.00	.00	.00	.00	2.0
27	---	---	---	---	---	.47	3.3	.13	.00	.00	.00	2.1
28	---	---	---	---	---	.75	1.9	.46	.00	.00	.00	2.0
29	---	---	---	---	---	1.1	1.4	.13	.00	.0	.00	1.9
30	---	---	---	---	---	.95	1.1	.06	.09	.02	.00	1.9
31	---	---	---	---	---	.79	---	.04	---	.73	.00	---
TOTAL	---	---	---	---	---	19.50	88.27	15.41	4.53	18.63	6.74	17.52
MEAN	---	---	---	---	---	.63	2.94	.50	.15	.60	.22	.58
MAX	---	---	---	---	---	3.4	9.0	3.0	2.0	2.7	1.6	2.1
MIN	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
AC-FT	---	---	---	---	---	39	175	31	9.0	37	13	35

e Estimated

10312274 TJ DRAIN AT WILDLIFE ENTRANCE NEAR STILLWATER, NV

LOCATION.--Lat 39°36'32", long 118°33'14", in SW1/4SW1/4 sec.7, T.20 N., R.31 E., Churchill County, Hydrologic Unit 16050203, on right bank 6 mi north of Stillwater.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--January to September 1989, (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 3,880 ft, from topographic map.

REMARKS.--Records poor. Flow in canal is return flow from irrigated lands and ground water inflows from Fallon Indian Reservation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period January to September, 11.0 ft^3/s, Sept. 17, 18, gage height, 17.82 ft, from rating curve extended above 9.1 ft^3/s; minimum daily, 0.03 ft^3/s, Apr. 6-9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	e.30	.27	.21	.06	.49	.97	1.9	7.6	1.0
2	---	---	---	e.30	.25	e.20	.06	.83	1.2	1.8	7.2	1.3
3	---	---	---	e.30	e.24	e.20	.07	1.4	2.4	2.9	8.0	2.2
4	---	---	---	e.30	e.23	e.20	.06	.89	5.4	2.6	6.5	1.5
5	---	---	---	e.30	e.23	e.20	.04	2.0	6.3	3.0	8.3	.64
6	---	---	---	e.30	e.23	e.20	.03	1.8	3.9	2.5	8.2	.36
7	---	---	---	e.30	e.23	.19	.03	2.7	.76	1.9	6.8	.24
8	---	---	---	e.30	e.23	.19	.03	2.1	.62	2.5	6.7	.73
9	---	---	---	e.30	e.23	.19	.03	1.7	.49	1.5	5.4	1.1
10	---	---	---	.31	e.23	.18	.38	1.2	.44	.97	7.2	.61
11	---	---	---	e.31	e.23	.19	2.2	1.1	.72	1.5	7.8	.27
12	---	---	---	e.33	e.22	.17	1.8	.89	.58	2.1	5.2	.21
13	---	---	---	e.34	.21	.14	1.7	1.6	.69	1.3	4.0	.56
14	---	---	---	e.35	.19	.13	2.4	1.2	.74	1.1	3.4	2.6
15	---	---	---	.37	.19	.12	2.4	.74	.82	2.2	3.2	9.1
16	---	---	---	.38	.23	.11	3.4	.67	.74	1.7	3.2	7.2
17	---	---	---	.42	e.25	.08	3.1	.62	.79	2.3	5.0	10
18	---	---	---	.40	e.24	.10	1.3	.55	1.8	1.7	5.3	11
19	---	---	---	.38	e.22	.12	.72	.55	.96	1.3	8.0	8.5
20	---	---	---	.38	e.21	.11	.53	.73	1.8	1.2	4.3	2.0
21	---	---	---	.39	e.23	.12	.65	2.0	1.4	1.4	1.9	1.0
22	---	---	---	.39	e.25	.09	.72	1.5	2.7	7.4	5.2	.89
23	---	---	---	.34	.28	.08	.83	.80	2.5	6.3	4.5	.86
24	---	---	---	.31	.28	.08	1.3	1.2	2.5	5.3	1.6	.82
25	---	---	---	e.30	.29	.11	.69	1.0	2.6	3.6	.79	.74
26	---	---	---	e.29	.28	.11	.75	.87	1.9	2.3	1.5	.61
27	---	---	---	e.29	.23	.12	.87	2.7	1.6	1.9	1.8	.60
28	---	---	---	e.29	.21	.11	.74	2.7	1.5	2.1	.89	.48
29	---	---	---	.29	---	.10	.56	1.8	2.2	5.1	.62	.31
30	---	---	---	.29	---	.08	.53	3.0	2.3	6.6	1.1	.63
31	---	---	---	.29	---	.06	---	1.4	---	6.5	1.2	---
TOTAL	---	---	---	10.14	6.61	4.29	27.98	42.73	53.32	86.47	142.40	68.06
MEAN	---	---	---	.33	.24	.14	.93	1.38	1.78	2.79	4.59	2.27
MAX	---	---	---	.42	.29	.21	3.4	3.0	6.3	7.4	8.3	11
MIN	---	---	---	.29	.19	.06	.03	.49	.44	.97	.62	.21
AC-FT	---	---	---	20	13	8.5	55	85	106	172	282	135

e Estimated

10312275 CARSON RIVER AT TARZYN ROAD NEAR FALLON, NV

LOCATION.--Lat 39°33'32", long 118°43'30", in NE1/4NE1/4 sec.33, T.19 N., R.29 E., Churchill County, Hydrologic Unit 16050203, on right bank 4 mi north-northeast of Fallon.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,900 ft, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station (Newlands Project) and by storage in Lahontan Reservoir (station 10312100), capacity, 295,100 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 753 ft³/s, June 4, 1986, gage height, 5.22 ft; minimum daily, 1.3 ft³/s, June 23, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 75 ft³/s, May 10, gage height, 2.27 ft; minimum daily, 2.1 ft³/s, Mar 31, Apr. 1, 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	3.5	4.6	e4.6	4.6	2.6	2.1	2.6	15	5.3	7.1	10
2	4.1	3.3	4.7	e4.8	4.5	2.5	2.2	3.3	14	6.7	6.1	9.4
3	3.9	3.1	4.8	5.1	e4.3	2.4	2.1	3.9	9.6	9.7	39	16
4	3.9	2.8	4.8	5.0	e4.0	2.5	2.2	4.0	12	9.1	26	13
5	3.8	2.9	4.8	5.0	e3.2	2.7	2.3	4.6	25	17	27	14
6	3.8	2.9	4.9	e4.8	e2.8	2.6	2.2	11	6.5	41	17	8.5
7	3.8	2.8	4.8	e4.7	e2.5	2.5	2.3	4.3	14	32	14	15
8	3.8	2.8	4.8	e4.6	e2.6	2.4	5.4	4.6	15	11	9.8	12
9	3.7	2.9	4.6	4.7	e2.8	2.4	4.8	19	6.3	52	8.8	8.5
10	3.6	2.8	4.5	4.9	e3.0	2.2	11	48	14	37	9.8	10
11	3.8	3.1	4.4	e4.4	e3.3	2.2	4.4	12	8.8	32	7.4	8.7
12	3.6	4.0	4.4	e4.3	e3.5	2.2	3.0	9.0	6.2	42	11	7.1
13	3.4	6.3	4.3	e4.3	e3.4	2.3	4.3	9.6	6.9	30	11	6.0
14	3.2	8.2	4.3	e4.3	e3.2	2.3	3.8	8.9	16	28	12	14
15	3.1	4.7	4.2	e4.4	e3.1	2.4	3.3	7.4	30	29	9.7	10
16	3.2	4.3	4.6	e4.6	e2.9	2.4	3.0	7.8	31	19	7.2	8.0
17	3.3	4.1	4.3	4.7	e2.7	2.3	2.9	8.3	47	13	8.0	6.9
18	3.3	4.1	4.4	4.9	e2.6	2.4	4.2	10	32	15	6.3	6.2
19	3.4	4.2	4.6	4.8	e2.5	2.5	3.9	7.2	20	17	6.1	6.3
20	3.3	4.4	4.7	4.6	e2.5	2.7	3.5	5.9	9.8	21	9.9	6.9
21	3.3	4.5	4.4	4.6	e2.5	2.7	3.3	8.7	9.9	29	7.9	6.9
22	3.3	4.4	4.4	4.3	e2.5	3.0	2.7	8.0	8.7	15	12	6.3
23	3.3	4.5	e4.2	3.9	e2.5	2.5	3.0	6.9	7.0	12	11	6.9
24	3.3	4.8	e4.1	3.9	2.5	2.6	5.1	9.9	6.7	11	7.6	7.6
25	3.3	4.7	e4.0	e3.9	2.5	2.4	2.7	8.0	9.5	12	13	11
26	3.3	4.7	e4.0	e3.9	2.6	2.5	2.6	4.4	14	9.8	9.7	7.4
27	3.7	4.8	e4.0	e4.0	2.6	2.4	2.6	7.0	7.9	7.6	11	4.7
28	4.2	4.7	e4.0	4.1	2.6	2.3	2.6	20	8.5	15	9.9	7.1
29	6.1	4.6	e4.1	4.4	---	2.3	6.6	16	5.7	19	11	8.2
30	4.5	4.7	e4.3	5.1	---	2.2	3.7	11	5.7	9.5	17	8.5
31	3.6	---	e4.5	4.7	---	2.1	---	14	---	12	16	---
TOTAL	114.2	123.6	137.5	140.3	84.3	75.5	107.8	305.3	422.7	618.7	379.3	271.1
MEAN	3.68	4.12	4.44	4.53	3.01	2.44	3.59	9.85	14.1	20.0	12.2	9.04
MAX	6.1	8.2	4.9	5.1	4.6	3.0	11	48	47	52	39	16
MIN	3.1	2.8	4.0	3.9	2.5	2.1	2.1	2.6	5.7	5.3	6.1	4.7
AC-FT	227	245	273	278	167	150	214	606	838	1230	752	538

CAL YR 1988 TOTAL 2485.0 MEAN 6.79 MAX 42 MIN 1.3 AC-FT 4930
WTR YR 1989 TOTAL 2780.3 MEAN 7.62 MAX 52 MIN 2.1 AC-FT 5510

e Estimated

10315500 MARYS RIVER ABOVE HOT SPRINGS CREEK, NEAR DEETH, NV

LOCATION.--Lat 41°15'10", long 115°15'20", in NE1/4SE1/4 sec.24, T.39 N., R.59 E., Elko County, Hydrologic Unit 16040101, on right bank 1 mi upstream from Hot Springs Creek, 7 mi north of Cross Ranch, and 13 mi north of Deeth.

DRAINAGE AREA.--415 mi².

PERIOD OF RECORD.--October 1943 to September 1980, October 1981 to current year. Prior to October 1950, published as "below Hot Springs Creek, near Deeth."

GAGE.--Water-stage recorder. Elevation of gage is 5,500 ft, from river-profile map. Prior to Nov. 3, 1950, at site 1.2 mi downstream at different datum. Nov. 3, 1950, to Sept. 30, 1967, water-stage recorder at datum 1.00 ft higher. Oct. 1, 1967, to Sept. 8, 1982, at site 200 ft downstream at datum, 0.33 ft higher.

REMARKS.--Records fair except for periods of estimated daily discharges, which are poor. Several diversions for irrigation of 7,150 acres, Humboldt Decree, above station.

AVERAGE DISCHARGE.--45 years (1944-80, 1982-89), 68.3 ft³/s, 49,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,210 ft³/s, Feb. 12, 1962, gage height, 7.63 ft, from rating curve extended above 1,000 ft³/s on basis of slope-area measurement of peak flow; no flow for part of each day Aug. 27-30, Sept. 2-5, 1967.

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

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Mar. 14	0400	232	3.50	May 11	2400	367	4.25
Apr. 23	1600	*500	*4.95				

Minimum daily, 1.3 ft³/s, Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.7	e4.3	11	12	14	32	234	201	97	24	2.0	1.4
2	e2.5	e4.3	11	13	14	45	231	183	86	23	2.0	1.4
3	e2.5	e4.4	11	13	14	40	225	181	83	19	2.0	1.4
4	e2.5	e4.5	11	13	13	34	211	190	86	17	1.9	1.4
5	e2.6	e4.6	11	13	14	32	192	205	93	15	1.9	1.4
6	e2.7	e4.7	11	13	15	75	194	234	91	14	1.9	1.3
7	e2.9	e4.8	12	13	16	68	229	257	95	12	1.9	1.4
8	e2.9	e4.9	12	13	16	78	276	283	93	10	1.9	1.4
9	e3.1	e4.9	12	14	15	110	324	337	93	8.9	2.0	1.5
10	e3.1	e5.0	13	13	15	125	367	344	100	7.6	1.9	1.5
11	e3.1	e5.0	14	12	14	160	381	360	100	7.1	1.9	1.5
12	e3.2	e5.0	15	13	15	193	386	356	94	6.7	1.8	1.5
13	e3.3	e5.0	15	14	15	214	384	316	86	7.1	1.8	1.5
14	e3.3	e5.0	15	13	15	219	381	269	73	6.6	1.8	1.5
15	e3.3	e5.0	13	14	15	177	380	233	65	6.3	1.7	1.5
16	e3.3	e5.2	13	14	15	152	377	215	58	5.6	1.6	1.5
17	e3.3	e5.2	12	14	15	141	396	194	56	5.3	1.6	1.7
18	e3.4	e5.2	13	14	16	130	408	177	53	4.9	1.6	1.6
19	e3.5	e5.2	13	14	16	138	426	169	49	4.4	1.7	1.5
20	e3.6	e5.4	14	14	16	150	453	164	41	3.8	1.7	1.5
21	e3.8	e6.0	14	14	16	129	460	157	41	3.6	1.6	1.5
22	e3.9	e8.0	14	14	18	123	470	155	38	3.4	1.6	1.5
23	e3.9	e8.3	14	13	20	130	492	154	37	3.4	1.5	1.5
24	e4.0	12	14	14	21	153	477	156	37	3.2	1.7	1.6
25	e4.2	11	13	14	23	167	406	148	34	3.2	1.7	1.6
26	e4.2	11	12	14	27	186	336	146	32	2.9	1.6	1.6
27	e4.2	10	13	14	28	202	297	133	32	2.7	1.5	1.6
28	e4.2	10	12	14	28	199	260	118	30	2.6	1.5	1.6
29	e4.2	11	13	14	---	202	237	108	28	2.4	1.6	1.6
30	e4.2	11	13	14	---	242	216	105	26	2.3	1.4	1.7
31	e4.2	---	13	14	---	230	---	103	---	2.1	1.5	---
TOTAL	105.8	195.9	397	419	479	4276	10106	6351	1927	240.1	53.8	45.2
MEAN	3.41	6.53	12.8	13.5	17.1	138	337	205	64.2	7.75	1.74	1.51
MAX	4.2	12	15	14	28	242	492	360	100	24	2.0	1.7
MIN	2.5	4.3	11	12	13	32	192	103	26	2.1	1.4	1.3
AC-FT	210	389	787	831	950	8480	20050	12600	3820	476	107	90

CAL YR 1988 TOTAL 9691.1 MEAN 26.5 MAX 155 MIN 1.3 AC-FT 19220
WTR YR 1989 TOTAL 24595.8 MEAN 67.4 MAX 492 MIN 1.3 AC-FT 48790

e Estimated

10316500 LAMOILLE CREEK NEAR LAMOILLE, NV

LOCATION.--Lat 40°41'27", long 115°28'32", in NE1/4 sec.6, T.32 N., R.58 E., Elko County, Hydrologic Unit 16040101, in Humboldt National Forest, on left bank 600 ft upstream from Lamoille Creek bridge, at mouth of canyon, upstream from McDermott ditch, and 3 mi south of Lamoille.

DRAINAGE AREA.--26 mi², approximately.

PERIOD OF RECORD.--May 1915 to June 1923, October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 6,240 ft, from topographic map. Prior to Oct. 1, 1943, nonrecording gages at various sites nearby at different datums. Oct. 1 to Jan. 16, 1975, water-stage recorder at site 600 ft downstream at datum 4.28 ft lower.

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

AVERAGE DISCHARGE.--53 years (1916-22, 1944-89), 44.6 ft³/s, 32,310 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 838 ft³/s, June 3, 1986, gage height, 6.08 ft, from indirect measurement of peak flow above 260 ft³/s, but may have been exceeded in June 1917, when gage washed out; minimum, 0.10 ft³/s, Feb. 24, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 310 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 9	2000	*342	*4.66				

Minimum daily, 2.7 ft³/s, Oct. 27 to Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	2.7	e3.5	4.1	e4.2	6.8	24	79	104	90	20	6.2
2	3.2	2.7	3.5	4.4	e4.2	7.5	24	88	116	88	19	6.0
3	2.9	3.2	3.6	4.2	e4.2	e7.6	24	94	133	88	17	5.8
4	2.9	2.9	3.5	4.1	e4.2	e8.4	23	109	144	86	16	5.6
5	2.9	2.9	3.5	4.2	e4.2	e9.7	24	125	145	82	15	5.3
6	2.9	3.0	3.8	4.1	e4.2	14	26	165	154	78	14	5.2
7	2.9	3.0	3.9	4.1	e4.2	18	31	216	186	75	13	5.1
8	2.9	2.9	3.8	4.1	e4.3	21	38	253	201	74	22	5.4
9	2.9	3.0	4.2	4.6	e4.3	26	44	290	213	73	27	5.0
10	2.9	2.9	3.8	4.0	e4.3	25	49	290	230	67	20	4.9
11	2.9	2.9	3.7	4.6	e4.3	24	55	207	214	61	18	4.9
12	2.9	3.4	3.8	4.3	e4.3	24	60	148	199	62	16	4.8
13	2.9	3.7	4.0	4.5	4.4	24	63	128	197	60	15	4.8
14	2.9	3.8	3.8	4.7	4.4	23	69	115	206	56	15	4.6
15	2.9	3.2	e2.8	4.3	4.3	22	75	108	220	54	13	4.5
16	2.9	3.1	e2.8	4.5	4.3	22	86	99	201	51	12	4.3
17	2.9	3.3	e2.9	4.5	4.5	22	94	99	170	46	11	6.7
18	2.9	3.4	e3.3	4.4	4.6	22	107	109	169	44	11	5.5
19	2.9	e3.2	e3.6	4.3	4.7	22	123	114	158	43	10	4.9
20	2.8	e3.2	e3.8	4.3	4.6	21	129	123	132	42	9.7	4.7
21	2.8	3.2	e4.0	4.3	4.6	21	137	136	112	42	9.4	4.5
22	2.8	3.5	4.0	e4.3	4.7	22	134	161	105	40	8.9	4.3
23	2.8	4.7	4.0	e4.3	5.6	22	122	159	97	37	8.9	4.3
24	2.8	3.7	4.0	e4.3	5.6	22	106	131	88	35	9.7	4.3
25	2.8	e3.3	4.0	e4.3	6.0	23	94	120	85	32	8.8	4.1
26	2.8	e3.3	4.0	e4.3	6.8	22	84	113	90	30	8.2	4.0
27	2.7	e3.4	4.1	e4.3	6.5	22	78	121	94	28	7.6	4.0
28	2.7	e3.4	4.3	e4.3	6.6	23	73	128	94	26	7.3	4.0
29	2.7	e3.5	4.0	e4.2	---	24	72	123	96	24	6.8	3.8
30	2.7	e3.5	4.0	e4.2	---	23	74	113	94	22	6.4	4.5
31	2.7	---	4.3	e4.2	---	25	---	102	---	21	6.4	---
TOTAL	88.9	97.9	116.3	133.3	133.1	619.0	2142	4366	4447	1657	402.1	145.8
MEAN	2.87	3.26	3.75	4.30	4.75	20.0	71.4	141	148	53.5	13.0	4.86
MAX	3.3	4.7	4.3	4.7	6.8	26	137	290	230	90	27	6.7
MIN	2.7	2.7	2.8	4.0	4.2	6.8	23	79	85	21	6.4	3.8
AC-FT	176	194	231	264	264	1230	4250	8660	8820	3290	798	289

CAL YR 1988 TOTAL 9560.6 MEAN 26.1 MAX 253 MIN 2.5 AC-FT 18960
WTR YR 1989 TOTAL 14348.4 MEAN 39.3 MAX 290 MIN 2.7 AC-FT 28460

e Estimated

10318500 HUMBOLDT RIVER NEAR ELKO, NV

LOCATION.--Lat 40°56'10", long 115°37'25", in SE1/4NE1/4 sec.11, T.35 N., R.56 E., Elko County, Hydrologic Unit 16040101, on right bank 1 mi southwest of Ryndon, 1.5 mi upstream from Jackson Creek, 5 mi downstream from North Fork, and 10 mi northeast of Elko.

DRAINAGE AREA.--2,800 mi², approximately.

PERIOD OF RECORD.--June 1895 to October 1902, October 1944 to current year.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,142.32 ft, above National Geodetic Vertical Datum of 1929. June 1895 to October 1902, nonrecording gage at site 11 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of 95,800 acres, above station.

AVERAGE DISCHARGE.--52 years (1896-1902, 1945-89), 262 ft³/s, 189,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft³/s, Mar. 4, 1983, gage height, 12.18 ft; no flow for many days in August and September 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1220 ft³/s, Mar. 11,12, gage height, 4.54 ft, minimum daily, 1.2 ft³/s, Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	4.5	e26	e13	e25	e250	799	538	328	118	3.5	1.5
2	1.2	4.7	e26	e14	e24	e310	813	456	311	104	3.2	1.5
3	1.5	4.9	e26	e15	e23	e350	816	404	295	89	2.9	1.5
4	1.8	5.0	e25	e15	e23	260	817	390	282	79	2.7	1.5
5	2.0	5.0	e25	e16	e23	266	812	373	288	69	2.6	1.5
6	2.2	5.3	e25	e17	e23	362	783	382	318	59	2.6	1.4
7	2.3	5.3	e24	e18	e23	760	743	402	351	50	2.5	1.4
8	2.5	5.3	e23	e19	e24	769	733	450	376	52	2.6	1.4
9	2.6	5.6	e22	e20	e25	854	735	591	436	45	2.6	1.4
10	2.7	5.9	e21	e21	e26	1030	744	676	515	34	2.7	1.4
11	2.8	6.2	e19	e21	e27	1200	750	745	551	25	2.6	1.4
12	2.9	6.7	18	e22	e28	1220	767	853	527	21	2.5	1.4
13	3.0	7.6	e18	e22	e29	1200	773	871	462	21	2.4	1.4
14	3.2	8.3	e18	e22	e30	1170	775	816	432	19	2.3	1.4
15	3.2	8.8	e18	e22	e30	995	780	770	408	18	e2.1	1.4
16	3.4	9.1	e18	e22	e31	863	775	775	397	15	e2.0	1.4
17	3.5	9.9	e18	e22	e32	814	775	735	372	12	e1.9	2.2
18	3.5	9.8	18	e22	e34	756	779	660	336	11	1.9	2.3
19	3.5	9.3	18	e22	e37	735	778	540	303	9.9	1.9	2.4
20	3.6	8.4	18	e22	e41	796	786	469	265	9.3	1.9	2.4
21	3.8	9.9	17	e22	e44	825	789	428	241	8.8	1.8	e2.3
22	3.8	15	e16	e22	e49	774	787	397	219	8.7	1.8	e2.1
23	3.8	20	e16	e22	e55	753	796	376	207	8.2	1.8	e2.0
24	3.8	25	e15	e22	e65	787	803	375	194	7.8	1.8	e2.0
25	3.9	27	e14	e23	e80	782	812	407	179	7.1	1.8	e2.0
26	4.0	28	e13	e23	e100	821	808	422	168	6.6	1.8	e1.9
27	4.0	31	e13	e24	e140	905	781	417	161	5.9	1.7	e1.9
28	4.0	32	e13	e24	e190	969	732	392	149	5.2	1.6	e1.9
29	4.2	30	e13	e25	---	901	672	365	140	4.9	1.6	e1.9
30	4.3	e28	e13	e25	---	904	613	342	128	4.3	1.6	e1.9
31	4.3	---	e13	e25	---	844	---	336	---	3.9	1.6	---
TOTAL	96.5	381.5	580	644	1281	24225	23126	16153	9339	931.6	68.3	52.1
MEAN	3.11	12.7	18.7	20.8	45.7	781	771	521	311	30.1	2.20	1.74
MAX	4.3	32	26	25	190	1220	817	871	551	118	3.5	2.4
MIN	1.2	4.5	13	13	23	250	613	336	128	3.9	1.6	1.4
AC-FT	191	757	1150	1280	2540	48050	45870	32040	18520	1850	135	103

CAL YR 1988 TOTAL 29613.7 MEAN 80.9 MAX 650 MIN 1.1 AC-FT 58740
WTR YR 1989 TOTAL 76878.0 MEAN 211 MAX 1220 MIN 1.2 AC-FT 152500

e Estimated

10319900 SOUTH FORK HUMBOLDT RIVER ABOVE TENMILE CREEK NEAR ELKO, NV

LOCATION.--Lat 40°37'42", long 115°43'44", in NE1/4SW1/4 sec.25, T.32 N., R.55 E., Elko County, Hydrologic Unit 16040103, on right bank 5 mi above South Fork Dam, and 19.5 mi southeast of Elko.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--February to September 1989.

GAGE.--Water-stage recorder. Elevation of gage is 5,280 ft, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period February to September, 608 ft^3/s, May 10, 11, gage height, 3.71 ft; minimum daily, 5.3 ft^3/s, Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	e21	95	169	147	205	93	8.1	5.7
2	---	---	---	---	e20	115	163	154	204	87	8.3	5.5
3	---	---	---	---	e19	95	160	168	219	83	8.3	5.3
4	---	---	---	---	e18	69	148	181	238	77	10	5.6
5	---	---	---	---	e17	79	137	227	247	73	9.5	5.7
6	---	---	---	---	e17	213	137	265	257	67	8.7	5.8
7	---	---	---	---	e17	302	151	331	284	60	7.5	5.6
8	---	---	---	---	e17	281	183	415	328	54	8.4	6.2
9	---	---	---	---	17	322	218	507	338	51	14	6.8
10	---	---	---	---	17	318	235	574	347	45	14	6.3
11	---	---	---	---	18	300	257	545	334	41	13	6.4
12	---	---	---	---	18	267	262	484	310	40	9.8	6.5
13	---	---	---	---	18	244	257	382	310	37	8.6	6.5
14	---	---	---	---	20	213	262	325	e300	34	8.6	6.9
15	---	---	---	---	23	185	255	300	e296	34	8.5	6.4
16	---	---	---	---	22	166	256	276	e286	32	10	6.2
17	---	---	---	---	23	150	273	247	280	31	10	6.2
18	---	---	---	---	26	146	305	226	260	31	11	8.3
19	---	---	---	---	30	165	340	216	228	27	11	5.9
20	---	---	---	---	34	160	353	219	211	22	10	6.0
21	---	---	---	---	39	145	367	231	183	24	8.6	6.0
22	---	---	---	---	45	147	386	256	169	26	8.0	7.6
23	---	---	---	---	75	150	372	287	153	22	7.6	8.0
24	---	---	---	---	102	148	329	261	136	16	9.2	8.2
25	---	---	---	---	130	156	292	235	127	15	9.7	8.4
26	---	---	---	---	140	192	248	223	127	14	9.9	8.0
27	---	---	---	---	147	213	220	228	124	14	9.0	8.0
28	---	---	---	---	113	187	198	237	112	13	7.9	8.3
29	---	---	---	---	---	174	181	235	105	12	7.1	8.4
30	---	---	---	---	---	156	164	223	97	11	5.8	9.8
31	---	---	---	---	---	157	---	206	---	10	5.7	---
TOTAL	---	---	---	---	1203	5710	7278	8811	6815	1196	285.8	204.5
MEAN	---	---	---	---	43.0	184	243	284	227	38.6	9.22	6.82
MAX	---	---	---	---	147	322	386	574	347	93	14	9.8
MIN	---	---	---	---	17	69	137	147	97	10	5.7	5.3
AC-FT	---	---	---	---	2390	11330	14440	17480	13520	2370	567	406

e Estimated

10319950 TENMILE CREEK ABOVE SOUTH FORK HUMBOLDT RIVER NEAR ELKO, NV

LOCATION.--Lat 40°41'17", long 115°47'23", in SW1/4NW1/4 sec.4, T.32 N., R.55 E., Elko County, Hydrologic Unit 16040103, on right bank, 1,000 ft upstream from confluence of South Fork Humboldt River, 0.5 mi northwest of South Fork Dam and 10 mi south of Elko.

DRAINAGE AREA.--Not determined.

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

GAGE.--Water-stage recorder. Datum of gage is 5,200 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period March to September, 55 ft³/s, Mar. 9, gage height, 1.92 ft, but may have been higher during period of frozen intakes Mar. 1-8; minimum daily, 0.15 ft³/s, Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	e9.1	11	2.4	e1.7	1.1	e.53	.35
2	---	---	---	---	---	e20	11	2.5	e1.5	1.2	e.50	.35
3	---	---	---	---	---	e15	11	2.5	e1.5	1.3	e.49	.29
4	---	---	---	---	---	e11	11	2.6	e1.6	.98	e.48	.23
5	---	---	---	---	---	e8.0	8.9	2.6	e1.8	.82	e.46	.26
6	---	---	---	---	---	e29	7.9	2.9	e2.1	.82	e.45	.24
7	---	---	---	---	---	e38	7.2	2.9	e2.4	.73	e.46	.50
8	---	---	---	---	---	e48	6.8	2.5	e2.7	.71	e.48	.60
9	---	---	---	---	---	50	6.8	2.8	e2.7	.81	e.49	.52
10	---	---	---	---	---	38	6.9	e3.5	e2.6	.97	e.49	.60
11	---	---	---	---	---	27	6.9	e4.2	e2.4	.98	e.48	.50
12	---	---	---	---	---	21	6.9	e4.8	e2.2	.97	e.46	.95
13	---	---	---	---	---	17	6.8	e4.9	e2.0	.93	e.44	1.1
14	---	---	---	---	---	13	6.6	e4.8	e1.9	.94	e.43	.77
15	---	---	---	---	---	9.8	6.2	e4.6	e1.8	.92	e.42	.80
16	---	---	---	---	---	e8.5	6.0	4.3	e1.7	.84	e.41	.73
17	---	---	---	---	---	e7.0	5.1	4.4	1.7	.85	e.40	.75
18	---	---	---	---	---	e6.0	5.4	e4.0	1.6	.84	e.38	.89
19	---	---	---	---	---	e6.5	5.1	e3.6	1.5	.95	e.37	.89
20	---	---	---	---	---	e7.4	4.6	e3.3	1.3	1.0	.37	.78
21	---	---	---	---	---	e5.9	3.3	e3.2	1.4	1.0	.22	.84
22	---	---	---	---	---	e5.1	3.7	e3.5	1.4	1.2	e.21	.89
23	---	---	---	---	---	e5.2	3.9	e3.5	1.4	1.1	.21	.77
24	---	---	---	---	---	e5.1	4.3	e3.4	1.5	.91	.40	.70
25	---	---	---	---	---	e5.3	4.6	e3.2	1.6	.65	.39	.64
26	---	---	---	---	---	e5.7	3.9	e2.9	1.6	e.61	.20	.78
27	---	---	---	---	---	12	3.4	e2.8	1.6	e.61	.21	.80
28	---	---	---	---	---	13	2.8	e2.4	1.6	e.60	.15	.79
29	---	---	---	---	---	11	2.9	e2.2	1.5	e.60	.28	.71
30	---	---	---	---	---	10	3.0	e2.1	1.4	e.59	.30	1.1
31	---	---	---	---	---	9.9	---	e2.0	---	e.58	.45	---
TOTAL	---	---	---	---	---	477.5	183.9	101.3	53.7	27.11	12.01	20.12
MEAN	---	---	---	---	---	15.4	6.13	3.27	1.79	.87	.39	.67
MAX	---	---	---	---	---	50	11	4.9	2.7	1.3	.53	1.1
MIN	---	---	---	---	---	5.1	2.8	2.0	1.3	.58	.15	.23
AC-FT	---	---	---	---	---	947	365	201	107	54	24	40

e Estimated

10320000 SOUTH FORK HUMBOLDT RIVER ABOVE DIXIE CREEK, NEAR ELKO, NV

LOCATION.--Lat 40°41'06", long 115°48'45", in NW1/4SW1/4 sec.5, T.32 N., R.55 E., Elko County, Hydrologic Unit 16040103, on left bank 1.5 mi upstream from Dixie Creek, 10.5 mi south of Elko.

DRAINAGE AREA.--1,150 mi², approximately.

PERIOD OF RECORD.--October 1948 to September 1982, July 1988 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,140 ft, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of 32,900 acres above station.

AVERAGE DISCHARGE.--35 years,(1949-1982, 1989), 116 ft³/s, 84,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,100 ft³/s, Jan. 12, 1979, gage height 6.80 ft; minimum daily, 0.10 ft³/s, Sept. 9, 1959.

EXTREMES FOR CURRENT PERIOD.--July to September 1988: Maximum discharge, 24 ft³/s, July 14, gage height, 2.54 ft; minimum daily, 1.7 ft³/s, Sept. 15, 16.

Water year 1989: Maximum discharge, 484 ft³/s, May 11, 12, gage height, 3.77 ft; minimum daily, 2.1 ft³/s, Oct 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	5.4	2.7
2	---	---	---	---	---	---	---	---	---	---	4.9	2.7
3	---	---	---	---	---	---	---	---	---	---	4.6	2.9
4	---	---	---	---	---	---	---	---	---	---	4.3	2.5
5	---	---	---	---	---	---	---	---	---	---	4.9	2.3
6	---	---	---	---	---	---	---	---	---	---	6.0	2.7
7	---	---	---	---	---	---	---	---	---	---	6.3	2.8
8	---	---	---	---	---	---	---	---	---	---	7.1	2.9
9	---	---	---	---	---	---	---	---	---	---	7.0	2.9
10	---	---	---	---	---	---	---	---	---	---	6.8	3.0
11	---	---	---	---	---	---	---	---	---	---	6.5	3.1
12	---	---	---	---	---	---	---	---	---	---	12	3.4
13	---	---	---	---	---	---	---	---	---	---	20	3.4
14	---	---	---	---	---	---	---	---	---	23	19	3.0
15	---	---	---	---	---	---	---	---	---	20	17	1.7
16	---	---	---	---	---	---	---	---	---	18	13	1.7
17	---	---	---	---	---	---	---	---	---	17	8.6	2.8
18	---	---	---	---	---	---	---	---	---	17	3.4	3.3
19	---	---	---	---	---	---	---	---	---	16	3.1	3.5
20	---	---	---	---	---	---	---	---	---	15	3.3	3.7
21	---	---	---	---	---	---	---	---	---	14	2.9	3.7
22	---	---	---	---	---	---	---	---	---	12	3.0	3.8
23	---	---	---	---	---	---	---	---	---	11	2.9	3.7
24	---	---	---	---	---	---	---	---	---	10	2.7	3.7
25	---	---	---	---	---	---	---	---	---	9.2	2.8	3.6
26	---	---	---	---	---	---	---	---	---	8.8	2.7	3.4
27	---	---	---	---	---	---	---	---	---	8.1	2.6	3.6
28	---	---	---	---	---	---	---	---	---	7.3	2.7	3.7
29	---	---	---	---	---	---	---	---	---	6.8	2.4	3.7
30	---	---	---	---	---	---	---	---	---	6.1	2.4	3.7
31	---	---	---	---	---	---	---	---	---	5.7	2.6	---
TOTAL	---	---	---	---	---	---	---	---	---	---	192.9	93.6
MEAN	---	---	---	---	---	---	---	---	---	---	6.22	3.12
MAX	---	---	---	---	---	---	---	---	---	---	20	3.8
MIN	---	---	---	---	---	---	---	---	---	---	2.4	1.7
AC-FT	---	---	---	---	---	---	---	---	---	---	383	186

10320000 SOUTH FORK HUMBOLDT RIVER ABOVE DIXIE CREEK, NEAR ELKO, NV--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	8.9	19	17	e18	133	171	145	166	96	9.7	14
2	2.1	9.1	18	18	e18	140	174	131	149	97	6.4	12
3	5.8	9.4	18	13	e17	98	175	144	151	86	6.3	12
4	11	9.4	18	8.5	e16	14	168	149	151	77	6.3	12
5	11	9.6	17	19	e16	12	158	162	188	77	6.2	12
6	11	9.5	18	21	e16	39	151	176	226	78	6.2	13
7	7.8	9.9	18	18	e16	45	155	179	262	62	6.2	14
8	7.9	10	18	18	e16	46	171	292	294	50	6.7	14
9	8.0	10	18	18	e20	46	198	372	305	50	7.2	14
10	8.3	10	18	18	e28	29	223	415	306	41	7.0	15
11	8.4	10	18	13	e24	19	245	459	306	33	7.0	15
12	8.4	11	18	3.9	e22	15	258	456	267	51	7.0	15
13	8.5	12	18	3.8	e22	117	263	392	243	95	7.0	16
14	8.3	15	16	3.9	e23	313	263	310	241	64	7.3	15
15	8.3	20	15	5.5	e23	323	264	288	231	30	7.3	15
16	8.3	19	16	8.3	e24	332	263	255	251	30	7.1	16
17	8.5	19	18	e14	e25	348	272	206	251	30	9.4	18
18	8.5	18	18	e17	e28	351	296	180	251	30	12	17
19	8.6	19	16	e18	e30	259	325	175	229	29	13	17
20	8.4	19	16	e18	e33	302	350	184	189	26	13	17
21	8.5	19	17	e18	e36	297	363	184	150	20	14	17
22	8.7	21	13	e18	e40	306	375	186	135	18	14	16
23	8.8	21	e17	e18	e45	310	375	226	136	18	14	16
24	8.8	20	e17	e18	e55	305	279	235	136	18	14	16
25	e8.8	19	e17	e18	e90	292	208	203	136	19	15	16
26	e8.8	19	e16	e18	e130	e285	237	180	109	17	15	15
27	8.9	23	e15	e18	e138	254	195	178	93	15	15	15
28	9.2	19	e15	e18	e145	211	172	180	94	13	15	15
29	9.2	30	e15	e18	---	189	165	182	94	13	15	14
30	9.2	18	15	e18	---	176	163	167	95	13	15	14
31	8.9	---	16	e18	---	166	---	193	---	13	15	---
TOTAL	258.5	466.8	522	471.9	1114	5772	7075	7184	5835	1309	319.3	447
MEAN	8.34	15.6	16.8	15.2	39.8	186	236	232	194	42.2	10.3	14.9
MAX	11	30	19	21	145	351	375	459	306	97	15	18
MIN	2.1	8.9	13	3.8	16	12	151	131	93	13	6.2	12
AC-FT	513	926	1040	936	2210	11450	14030	14250	11570	2600	633	887

WTR YR 1989 TOTAL 30774.5 MEAN 84.3 MAX 459 MIN 2.1 AC-FT 61040

e Estimated

10321000 HUMBOLDT RIVER NEAR CARLIN, NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 40°43'40", long 116°00'30", in SE1/4SE1/4 sec.21, T.33 N., R.53 E., Elko County, Hydrologic Unit 16040101, on right bank 1.0 mi downstream from Tonka Creek, 5 mi upstream from Susie Creek, 5.5 mi east of Carlin, and 15 mi southwest of Elko.

DRAINAGE AREA.--4,310 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,931.91 ft, above National Geodetic Vertical Datum of 1929 (levels by Nevada State Highway Department).

REMARKS.--Records good except for estimated daily discharges, which are poor. Many diversions for irrigation of about 143,000 acres, above station.

AVERAGE DISCHARGE.--46 years, 389 ft³/s, 281,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,250 ft³/s, May 17, 1984, gage height, 10.04 ft; maximum gage height, 10.21 ft, Feb. 14, 1962; minimum, 0.1 ft³/s, Aug. 16, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 28, 1910, estimated to have reached 15,000 ft³/s, based on reported stage and comparison with Humboldt River at Palisade.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,630 ft³/s, Mar. 14, gage height, 4.82 ft; minimum daily, 5.4 ft³/s, Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e10	15	76	e25	e30	350	1090	776	510	190	14	14
2	e10	16	71	e25	e29	440	1070	671	467	182	10	12
3	e10	18	70	e24	e28	514	1130	621	458	171	11	11
4	e11	17	70	e24	e27	344	1100	576	442	145	11	11
5	e11	15	76	e25	e27	312	1080	543	426	133	10	11
6	e12	14	68	e26	e28	500	1030	544	496	126	7.9	11
7	e11	14	65	e27	e28	728	955	549	544	122	6.9	13
8	e9.7	15	67	e27	e30	959	948	598	644	102	7.1	13
9	e9.8	16	64	e28	e31	1150	988	777	695	93	8.7	15
10	e10	16	60	e29	e33	1180	1060	941	753	92	11	13
11	e10	16	60	e28	e34	1250	1140	1090	806	82	11	11
12	e10	17	56	e27	e35	1390	1160	1180	813	67	7.2	12
13	e10	19	52	e26	e36	1350	1180	1250	762	82	6.4	12
14	e11	20	50	e25	e37	1610	1180	1200	710	103	5.9	13
15	e11	24	49	e25	e38	1570	1180	1160	664	74	5.4	15
16	e11	30	62	e25	e39	1370	1180	1070	637	50	7.8	16
17	e11	34	54	e26	e41	1240	1140	1040	631	47	11	18
18	e11	35	54	e26	e44	1230	1160	907	604	45	11	21
19	11	34	53	e26	e48	1050	1190	818	545	43	15	17
20	11	33	48	e26	e54	1110	1230	e700	506	40	16	16
21	11	34	50	e27	e62	1200	1240	e680	421	36	17	15
22	11	37	48	e27	e76	1160	1260	e610	360	34	17	16
23	11	49	42	e26	e110	1110	1270	e600	336	28	18	16
24	12	61	e39	e26	e180	1120	1260	e620	326	26	18	16
25	12	55	e35	e27	e260	1180	1110	e600	312	24	18	17
26	12	50	e30	e28	e280	1200	1190	e600	294	23	18	14
27	12	46	e25	e29	e300	1240	1110	e590	250	20	16	15
28	13	50	e24	e30	328	1260	1010	e580	241	17	14	17
29	13	65	e23	e31	---	1270	926	e580	221	15	14	14
30	14	78	e23	e31	---	1140	849	e580	205	15	15	16
31	15	---	e24	e31	---	1170	---	e550	---	19	17	---
TOTAL	347.5	943	1588	833	2293	32697	33416	23601	15079	2246	376.3	431
MEAN	11.2	31.4	51.2	26.9	81.9	1055	1114	761	503	72.5	12.1	14.4
MAX	15	78	76	31	328	1610	1270	1250	813	190	18	21
MIN	9.7	14	23	24	27	312	849	543	205	15	5.4	11
AC-FT	689	1870	3150	1650	4550	64850	66280	46810	29910	4450	746	855

CAL YR 1988 TOTAL 50012.2 MEAN 137 MAX 777 MIN 5.8 AC-FT 99200
WTR YR 1989 TOTAL 113850.8 MEAN 312 MAX 1610 MIN 5.4 AC-FT 225800

e Estimated

10321000 HUMBOLDT RIVER NEAR CARLIN, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-1952, 1962 to current year (published as Humboldt River at Carlin, sta. no. 10321000, October 1965 to September 1968).

PERIOD OF DAILY RECORD.--
CHEMICAL ANALYSES: October 1965 to September 1968.
SPECIFIC CONDUCTANCE: October 1965 to September 1968; May 1981 to September 1983.
WATER TEMPERATURE: May 1981 to September 1983.

REMARKS.--NASQAN Samples are collected bi-monthly.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 677 microsiemens Dec. 21, 22, 1966; minimum daily, 193 microsiemens Feb. 16, 1982.
WATER TEMPERATURE: Maximum daily, 29.0°C July 26, 28, 29, 1968; minimum daily, freezing point on some days during winter months of most years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
NOV												
29...	1235	64	547	8.60	0.5	0.5	13	12.4	102	K20	K83	190
JAN												
26...	1200	29	615	8.50	<-5.0	0.0	68	14.9	121	K5	--	220
APR												
08...	1240	905	395	8.30	21.5	14.5	50	8.4	99	K16	64	130
MAY												
31...	1630	524	378	8.20	21.0	17.0	12	7.6	94	K36	64	140
JUL												
31...	1545	19	530	8.70	33.5	24.5	3.6	9.1	133	170	K10	160
AUG												
28...	1300	15	445	8.50	23.0	23.5	4.0	9.4	133	K4	110	150

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV												
29...	53	13	52	2	7.8	258	7	223	44	22	0.50	28
JAN												
26...	64	14	51	2	8.9	320	4	270	36	17	0.30	30
APR												
08...	36	9.2	29	1	5.8	162	2	136	35	15	0.30	28
MAY												
31...	42	9.0	27	1	5.2	203	--	166	21	8.9	0.30	28
JUL												
31...	44	13	47	2	8.7	--	--	--	43	20	0.70	23
AUG												
28...	41	12	36	1	8.0	216	6	188	27	14	0.50	21

K: NON-IDEAL COLONY COUNT.

10321000 HUMBOLDT RIVER NEAR CARLIN, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
NOV 29...	355	358	0.48	0.620	0.010	0.630	<0.010	0.040	--	0.40	0.040	0.090
JAN 26...	340	383	0.46	--	<0.010	<0.100	0.040	0.030	0.16	0.20	0.020	<0.010
APR 08...	246	240	0.33	--	<0.010	<0.100	0.050	0.040	0.65	0.70	0.140	0.100
MAY 31...	271	242	0.37	--	<0.010	<0.100	0.040	<0.010	0.46	0.50	0.050	0.020
JUL 31...	321	320	0.44	--	<0.010	<0.100	<0.010	<0.010	--	0.50	0.060	0.060
AUG 28...	271	272	0.37	--	<0.010	<0.100	<0.010	0.010	--	0.30	0.020	<0.010

DATE	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
NOV 29...	0.090	10	8	100	<0.5	<1	1	<3	1	16	<5	47
JAN 26...	0.010	--	--	--	--	--	--	--	--	--	--	--
APR 08...	<0.010	60	7	67	<0.5	<1	<1	<3	8	47	<5	17
MAY 31...	0.040	20	5	69	<0.5	<1	1	<3	4	13	1	20
JUL 31...	<0.010	--	--	--	--	--	--	--	--	--	--	--
AUG 28...	<0.010	<10	8	98	<0.5	<1	1	<3	1	6	<1	43

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 29...	11	<0.1	<10	5	<1	<1.0	490	<6	3	165	29	--
JAN 26...	--	--	--	--	--	--	--	--	--	--	--	--
APR 08...	7	<0.1	<10	6	<1	<1.0	230	<6	6	236	577	80
MAY 31...	6	<0.1	<10	2	<1	<1.0	250	<6	5	84	119	90
JUL 31...	--	--	--	--	--	--	--	--	--	76	3.9	72
AUG 28...	8	<0.1	<10	<1	<1	<1.0	440	<6	4	27	1.1	87

10322500 HUMBOLDT RIVER AT PALISADE, NV

LOCATION.--Lat 40°36'25", long 116°12'05", in SE1/4SE1/4 sec.35, T.32 N., R.51 E., Eureka County, Hydrologic Unit 16040101, on right bank 0.2 mi downstream from Southern Pacific Railroad bridge, 0.5 mi downstream from Palisade, and 0.8 mi upstream from Pine Creek.

DRAINAGE AREA.--5,010 mi², approximately.

PERIOD OF RECORD.--October 1902 to October 1906, and July 1911 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WSP 1514, 1903-4, 1912, 1914.

GAGE.--Water-stage recorder. Datum of gage is 4,825.55 ft, above National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1939, nonrecording gages (water-stage recorder Apr. 22 to June 3, 1935) at several sites within 0.5 mi of present site at various datums.

REMARKS.--Records good. Diversion for irrigation of 148,000 acres of hay and pastureland above station.

AVERAGE DISCHARGE.--82 years (1903-6, 1912-89), 402 ft³/s, 291,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,870 ft³/s, May 18, 1984, gage height, 10.08 ft; minimum, 2.0 ft³/s, Aug. 25-28, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 17 ft, present datum, about Feb. 28, 1910, from photographs and written statements of resident witnesses; discharge, about 17,000 ft³/s, from rating curve extended above 7,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,260 ft³/s, Mar. 9, gage height, 5.72 ft; minimum daily, 9.1 ft³/s, Aug. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	25	55	e48	e44	453	1390	846	534	e250	30	27
2	18	25	54	e47	e44	586	1320	772	507	e241	21	19
3	18	e27	58	e47	e44	683	1430	710	492	e229	16	18
4	18	e27	58	e48	e43	498	1390	655	475	e200	16	17
5	19	e28	57	e49	e43	428	1330	618	457	e180	16	16
6	19	e28	61	e50	e43	720	1270	604	485	e170	15	16
7	20	e28	71	e50	e44	1130	1200	581	522	e162	13	19
8	22	e28	64	e50	e44	1370	1200	597	610	e145	13	21
9	22	e28	62	e49	e45	1830	1260	749	673	e126	15	20
10	20	e28	69	e49	e46	1990	1340	894	724	e120	21	26
11	20	e28	64	e50	e47	1880	1400	1060	770	e112	19	22
12	21	e28	63	e49	43	1940	1430	1160	779	e104	16	17
13	21	e29	60	e47	43	1860	1430	1250	752	e109	12	18
14	21	e30	59	e47	44	1900	1420	1270	708	e138	10	18
15	21	e33	e62	e46	45	1860	1410	1220	662	e115	9.5	19
16	22	e36	e61	e47	44	1670	1410	1140	623	e79	9.1	20
17	22	e39	58	e48	47	1500	1380	1120	620	e63	10	27
18	22	37	57	e48	49	1460	1370	976	605	e59	13	33
19	22	44	e59	e49	59	1330	1400	894	541	e57	14	34
20	22	43	e57	e49	66	1340	1430	791	523	e53	16	31
21	22	44	e55	e50	71	1380	1430	711	491	e49	18	30
22	22	48	e52	e50	102	1390	1430	662	415	e47	18	27
23	23	52	e50	e49	175	1340	1440	623	373	e43	21	29
24	23	72	e50	e47	304	1330	1440	649	358	e38	26	28
25	23	70	e50	e45	298	1400	1290	633	341	e34	30	27
26	24	62	e50	e43	371	1490	1310	615	323	e33	30	31
27	24	53	e48	e42	466	1540	1210	614	282	e32	30	25
28	24	52	e50	e42	441	1530	1120	609	265	e31	23	23
29	25	52	e48	e43	---	1540	1020	581	261	29	20	26
30	26	51	e50	e45	---	1430	908	566	261	26	20	27
31	25	---	e50	e44	---	1430	---	534	---	28	20	---
TOTAL	669	1175	1762	1467	3155	42228	39808	24704	15432	3102	560.6	711
MEAN	21.6	39.2	56.8	47.3	113	1362	1327	797	514	100	18.1	23.7
MAX	26	72	71	50	466	1990	1440	1270	779	250	30	34
MIN	18	25	48	42	43	428	908	534	261	26	9.1	16
AC-FT	1330	2330	3490	2910	6260	83760	78960	49000	30610	6150	1110	1410

CAL YR 1988 TOTAL 54378 MEAN 149 MAX 806 MIN 12 AC-FT 107900
WTR YR 1989 TOTAL 134773.6 MEAN 369 MAX 1990 MIN 9.1 AC-FT 267300

e Estimated

10324500 ROCK CREEK NEAR BATTLE MOUNTAIN, NV

LOCATION.--Lat 40°49'30", long 116°34'45", in SW1/4SE1/4 sec.17, T.34 N., R.48 E., Eureka County, Hydrologic Unit 16040106, on left bank at mouth of canyon, and 22 mi northeast of Battle Mountain.

DRAINAGE AREA.--875 mi², approximately.

PERIOD OF RECORD.--March to July 1896, March 1918 to September 1925 (fragmentary October 1923 to April 1925), March 1927 to May 1929 (fragmentary), October 1945 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1214: 1950 (M); WSP 1714: 1959; WDR NV-76-1: 1971 (P), 1974 (P).

GAGE.--Water-stage recorder. Elevation of gage is 4,600 ft, estimated from nearby U.S. Coast and Geodetic Survey bench mark. Prior to Mar. 26, 1918, nonrecording gage at site about 11 mi upstream at different datum. Mar. 26, 1918, to Oct. 28, 1970, water-stage recorder at site 0.4 mi upstream, at the following datums: at different datum Mar. 26, 1918, to Jan. 3, 1946; at datum 9.45 ft higher Jan. 4, 1946; to July 23, 1964; at datum 7.35 ft higher July 23, 1964, to Oct. 31, 1968; and at datum 6.34 ft higher Nov. 1, 1968, to Oct. 28, 1970.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Several diversions for irrigation of 4,380 acres, in valleys upstream. Station is above all diversions in Boulder Flat and below tributaries. Flow slightly affected by small reservoir in Squaw Valley, 30 mi upstream, and by Willow Creek Reservoir, usable capacity, 18,000 acre-ft.

AVERAGE DISCHARGE.--49 years (1919-23, 1946-89), 41.5 ft³/s, 30,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s, Feb. 11, 1962, gage height, 6.89 ft, from rating curve extended above 2,500 ft³/s on basis of slope-area measurement of peak flow; no flow at times in July to October most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 27	--	474	3.95	Mar. 7	0500	*1,230	*5.22
Mar. 27	1400	520	4.04				

No flow Aug. 6,7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.91	2.7	5.7	e2.5	e2.6	243	313	37	12	1.9	.02	1.3
2	.94	2.7	6.4	e2.5	e2.7	256	298	30	11	1.7	.02	1.2
3	.96	3.0	6.5	e2.4	e2.7	697	295	24	11	1.7	.02	1.3
4	.96	3.2	5.2	e2.4	e2.7	376	304	19	11	1.7	.01	1.4
5	.96	3.3	5.5	e2.4	e2.7	121	257	15	12	1.5	.01	1.4
6	.98	3.2	4.8	e2.4	e2.8	605	230	14	13	1.3	.01	1.3
7	1.0	2.8	4.8	e2.4	e2.8	1080	233	15	15	1.2	.00	1.8
8	.99	2.9	e4.8	e2.4	e2.8	967	240	16	17	1.0	.12	2.2
9	1.0	3.4	e4.8	e2.4	e2.8	959	256	22	17	.88	.31	2.6
10	1.0	3.5	e4.8	e2.4	e2.8	1030	275	37	13	.74	.55	2.7
11	1.0	3.8	e4.8	e2.4	e2.9	885	259	57	9.7	.63	.62	2.2
12	1.0	3.3	4.8	e2.4	e2.9	665	253	62	8.0	.75	.98	2.0
13	1.1	3.9	e4.6	e2.4	e2.9	515	236	56	7.3	.84	1.1	1.9
14	1.1	4.5	e4.5	e2.4	e2.9	362	216	51	6.3	.79	.98	1.7
15	1.1	4.4	e4.3	e2.4	e2.9	261	202	45	5.0	.58	1.0	1.9
16	1.1	4.1	e4.0	e2.3	e3.0	211	187	43	3.9	.50	.69	1.8
17	1.1	4.8	3.7	e2.3	e3.0	187	176	40	3.6	.44	.74	2.8
18	1.2	4.9	4.6	e2.2	e3.1	152	167	33	3.2	.42	.80	4.1
19	1.1	4.2	e5.2	e2.2	e3.2	161	159	27	2.9	.38	.86	4.0
20	1.2	3.7	5.6	e2.2	e3.3	223	150	19	3.0	.33	.84	3.5
21	1.2	3.8	5.6	e2.1	e4.5	152	139	16	3.5	.39	.96	2.6
22	1.3	4.3	e5.0	e2.1	e8.0	135	129	14	3.7	.53	1.1	2.2
23	1.2	7.0	e4.3	e2.1	e16	144	120	11	3.8	.38	1.0	2.1
24	1.5	9.5	e3.8	e2.2	e35	138	111	7.8	4.3	.36	1.3	2.0
25	2.0	8.1	e3.3	e2.3	e200	146	99	8.2	5.1	.33	1.4	2.0
26	2.1	7.1	e3.1	e2.3	e290	304	79	7.8	5.1	.28	1.3	1.9
27	2.2	5.9	e2.9	e2.4	e410	456	e60	7.8	5.3	.21	1.4	1.9
28	2.4	5.5	e2.8	e2.5	e300	368	e52	8.1	4.5	.18	1.4	1.9
29	2.5	5.4	e2.7	e2.5	---	353	e45	9.2	3.0	.15	1.4	1.8
30	2.6	5.8	e2.6	e2.6	---	349	e40	9.6	2.3	.09	1.3	3.2
31	2.6	---	e2.5	e2.6	---	312	---	11	---	.04	1.3	---
TOTAL	42.30	134.7	138.0	73.1	1321.0	12813	5580	772.5	225.5	22.22	23.54	64.7
MEAN	1.36	4.49	4.45	2.36	47.2	413	186	24.9	7.52	.72	.76	2.16
MAX	2.6	9.5	6.5	2.6	410	1080	313	62	17	1.9	1.4	4.1
MIN	.91	2.7	2.5	2.1	2.6	121	40	7.8	2.3	.04	.00	1.2
AC-FT	84	267	274	145	2620	25410	11070	1530	447	44	47	128

CAL YR 1988 TOTAL 2088.21 MEAN 5.71 MAX 132 MIN .00 AC-FT 4140
WTR YR 1989 TOTAL 21210.56 MEAN 58.1 MAX 1080 MIN .00 AC-FT 42070

e Estimated

10327500 HUMBOLDT RIVER AT COMUS, NV

LOCATION.--Lat 40°59'33", long 117°19'00", in SE1/4 sec.14, T.36 N., R.41 E., Humboldt County, Hydrologic Unit 16040105, on left bank at Comus siding of Southern Pacific Railrooad, 1.0 mi upstream from Kelly Creek, 9 mi northeast of Golconda, and 32 mi northwest of Battle Mountain.

DRAINAGE AREA.--12,100 mi², approximately.

PERIOD OF RECORD.--October 1894 to December 1909, September 1910 to September 1926, October 1945 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Golconda" prior to October 1917.

REVISED RECORDS.--WSP 1514: 1921-22, 1926. WSP 1314: 1904, 1907-8, 1911-13, 1916-17.

GAGE.--Water-stage recorder. Datum of gage is 4,359.9 ft, above National Geodetic Vertical Datum of 1929 (from Soil Conservation Service reference mark). Prior to Sept. 25, 1917, nonrecording gages at several sites about 10 mi downstream at different datums. Sept. 25, 1917, to June 30, 1923, and May 23, 1925, to May 31, 1926, nonrecording gages at several sites within 0.5 mi of present site at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Many diversions above station for irrigation, 206,000 acres, additional acreage not covered by decree.

AVERAGE DISCHARGE.--75 years, 335 ft³/s, 242,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,900 ft³/s, Apr. 24, 1984, gage height, 12.25 ft, no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,600 ft³/s, Apr. 3, gage height, 7.86 ft; minimum daily, 0.15 ft³/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.20	.15	e7.2	e8.5	385	1490	1120	570	324	4.8	e3.7
2	.15	.23	.15	e7.3	e8.6	407	1550	1060	546	309	4.6	e3.5
3	.17	.23	.15	e7.4	e8.6	414	1590	978	540	298	e4.3	e3.4
4	.19	.20	5.5	e7.4	e7.8	427	1560	926	534	282	e4.0	e3.3
5	.19	.19	12	e7.4	e7.4	496	1540	874	526	270	e3.8	e3.2
6	.19	.21	15	e7.5	e7.4	537	1510	804	519	240	e3.7	e3.3
7	.19	.19	16	e7.5	e7.5	509	1500	726	504	224	e3.6	e3.4
8	.19	.19	30	e7.5	e7.8	517	1480	685	473	197	e3.5	e3.6
9	.19	.19	29	e9.0	e8.2	605	1450	664	460	175	e3.6	e3.8
10	.19	.19	29	e8.8	e8.5	658	1410	654	449	159	e3.9	e4.0
11	.17	.19	37	e8.4	e8.8	681	1370	639	453	148	e4.0	e4.0
12	.15	.19	40	e8.1	e8.8	688	1340	684	468	138	e3.8	e3.8
13	.15	.19	40	e7.8	e8.7	703	1330	743	482	129	e3.5	e3.4
14	.19	.19	30	e7.6	e8.4	727	1320	769	497	133	e3.2	e3.3
15	.19	.19	16	e8.0	e8.0	758	1300	783	510	128	e3.0	e3.4
16	.19	.20	19	e8.2	e8.8	788	1310	801	531	118	e2.8	e3.6
17	.19	.19	27	e8.2	e9.8	816	1330	819	531	111	e2.8	e3.7
18	.18	.19	23	e8.1	e11	852	1340	819	512	101	e3.0	e3.9
19	.15	.19	20	e8.1	18	926	1340	825	490	93	e3.2	e4.5
20	.17	.19	e18	e8.1	25	1050	1310	837	473	85	e3.3	e4.4
21	.19	.19	e17	e8.4	38	1150	1290	829	446	75	e3.5	e4.3
22	.19	.19	e17	e8.6	55	1220	1270	805	437	60	e3.7	e4.2
23	.19	.23	e15	e8.4	86	1260	1250	762	427	45	e3.5	e4.1
24	.19	.19	e9.4	e7.7	138	1270	1240	719	419	30	e3.8	e4.1
25	.19	.19	e7.7	e7.2	173	1290	1260	688	435	23	e4.0	e3.8
26	.20	.19	e6.2	e7.0	225	1300	1270	667	419	19	e4.1	e3.6
27	.20	.18	e6.0	e7.0	324	1310	1250	655	395	15	e3.8	e3.4
28	.19	.18	e5.9	e7.2	383	1330	1230	636	376	12	e3.7	e3.3
29	.19	.15	e6.1	e7.4	---	1340	1200	620	358	9.8	e3.9	e3.2
30	.19	.15	e6.2	e7.7	---	1360	1160	611	342	7.9	e3.7	e3.1
31	.19	---	e6.7	e8.0	---	1400	---	603	---	6.2	e3.6	---
TOTAL	5.64	5.77	510.15	242.2	1617.6	27174	40790	23805	14122	3964.9	113.7	110.3
MEAN	.18	.19	16.5	7.81	57.8	877	1360	768	471	128	3.67	3.68
MAX	.20	.23	40	9.0	383	1400	1590	1120	570	324	4.8	4.5
MIN	.15	.15	.15	7.0	7.4	385	1160	603	342	6.2	2.8	3.1
AC-FT	11	11	1010	480	3210	53900	80910	47220	28010	7860	226	219

CAL YR 1988 TOTAL 38386.92 MEAN 105 MAX 534 MIN .15 AC-FT 76140
WTR YR 1989 TOTAL 112461.26 MEAN 308 MAX 1590 MIN .15 AC-FT 223100

e Estimated

10329000 LITTLE HUMBOLDT RIVER NEAR PARADISE VALLEY, NV

LOCATION.--Lat 41°24'55", long 117°22'22", in NW1/4SE1/4 sec.20, T.41 N., R.41 E., Humboldt County, Hydrologic Unit 16040109, on right bank 3.5 mi downstream from Bull Head Ranch, and 9.5 mi southeast of Paradise Valley.

DRAINAGE AREA.--1,030 mi^2, approximately.

PERIOD OF RECORD.--October 1921 to June 1928 (fragmentary), October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 4,470 ft, from river-profile map. Prior to Nov. 21, 1946, water-stage recorder at site 1 mi downstream at different datum. Nov. 21, 1946, to Aug. 16, 1972, at site 250 ft upstream at datum 2.21 ft higher.

REMARKS.--Records good except for estimated daily discharges, and periods Feb. 19-20 and May 11-June 7, which are poor. Flow regulated by Chimney Dam Reservoir, capacity, 35,000 acre-ft, 10 mi upstream, since 1974. Diversions for irrigation of 4,450 acres, Little Humboldt Decree, above station. Station is above all diversions in Paradise Valley.

AVERAGE DISCHARGE.--51 years (1922-23, 1924-27, 1943-89), 25.9 ft^3/s, 18,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,380 ft^3/s, Jan. 21, 1969, gage height, 8.40 ft; minimum, 0.46 ft^3/s, Aug. 25, 1973, probably result of temporary blockage upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 87 ft^3/s, Feb. 20, gage height, 1.58 ft; minimum daily, 5.6 ft^3/s, Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e7.6	6.6	7.0	11	11	9.2	7.1	40	73	45	25	23
2	e7.6	6.5	7.0	11	9.6	16	7.1	40	72	45	24	22
3	e7.6	7.4	e7.3	11	9.2	13	7.6	45	75	45	24	22
4	e7.6	6.8	e7.5	11	9.2	9.6	7.1	46	77	45	24	22
5	e7.6	6.7	e7.8	11	8.7	9.9	6.7	46	77	43	24	22
6	e7.7	6.7	e8.1	11	8.7	20	6.6	48	71	42	24	22
7	e7.7	6.5	e8.3	10	8.7	16	6.5	51	58	42	24	23
8	e7.7	6.5	e8.5	10	8.7	13	6.4	52	53	41	24	21
9	e7.7	6.7	8.7	11	8.7	14	6.2	53	52	41	24	21
10	e7.7	6.7	8.7	12	8.6	10	6.2	58	51	41	24	21
11	e7.7	6.7	8.7	11	8.5	9.3	6.0	62	51	40	24	21
12	e7.7	6.7	8.5	10	8.3	8.6	6.2	65	50	40	23	20
13	e7.7	6.7	8.5	10	8.3	8.4	6.0	68	49	41	23	20
14	e7.7	6.7	8.3	10	8.4	7.8	6.0	70	48	37	23	20
15	e7.7	6.7	7.9	9.7	8.3	7.8	5.9	72	47	32	23	16
16	e7.8	6.7	7.8	9.8	8.3	7.8	5.9	73	45	30	23	16
17	e7.8	6.7	7.8	9.7	8.9	7.6	5.9	74	44	29	23	17
18	e7.8	6.7	8.1	9.5	14	7.9	5.9	73	43	30	23	16
19	e7.8	6.7	8.2	9.2	45	8.3	5.8	73	42	30	23	16
20	7.8	6.7	8.5	9.2	66	7.9	5.6	74	42	29	23	16
21	7.8	6.7	8.6	9.3	27	e7.9	24	75	43	28	23	16
22	7.6	6.7	8.9	9.5	16	e7.9	30	75	44	27	23	11
23	7.5	6.7	8.8	9.9	18	e7.9	30	74	46	27	23	8.7
24	7.4	6.7	9.5	9.3	13	7.9	32	74	47	29	23	8.5
25	7.2	6.8	9.7	9.1	11	8.1	32	75	47	41	23	8.3
26	7.3	7.0	9.7	8.7	11	8.1	32	75	47	41	23	8.2
27	7.1	6.9	10	8.7	10	7.7	32	75	47	41	23	8.1
28	7.0	7.0	10	8.7	9.4	7.4	38	74	46	39	23	8.0
29	6.7	7.0	11	8.6	---	7.2	40	74	46	25	23	7.8
30	6.7	7.0	11	8.6	---	7.0	40	74	45	25	22	10
31	6.5	---	11	8.6	---	7.0	---	73	---	25	23	---
TOTAL	232.8	202.6	269.4	306.1	390.5	296.2	456.7	2001	1578	1116	724	491.6
MEAN	7.51	6.75	8.69	9.87	13.9	9.55	15.2	64.5	52.6	36.0	23.4	16.4
MAX	7.8	7.4	11	12	66	20	40	75	77	45	25	23
MIN	6.5	6.5	7.0	8.6	8.3	7.0	5.6	40	42	25	22	7.8
AC-FT	462	402	534	607	775	588	906	3970	3130	2210	1440	975

CAL YR 1988 TOTAL 4171.9 MEAN 11.4 MAX 41 MIN 6.0 AC-FT 8270
WTR YR 1989 TOTAL 8064.9 MEAN 22.1 MAX 77 MIN 5.6 AC-FT 16000

e Estimated

10329500 MARTIN CREEK NEAR PARADISE VALLEY, NV

LOCATION.--Lat 41°32'00", long 117°25'40", in SE1/4NW1/4 (revised) sec.12, T.42 N., R.40 E., Humboldt County Hydrologic Unit 16040109, on left bank 0.6 mi upstream from Humboldt County Recreation Park, and 7 mi northeast of Paradise Valley.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1514: 1925-27 (M), 1930 (M), 1933 (M), 1938 (M), 1940, 1945.

GAGE.--Water-stage recorder. Elevation of gage is 4,700 ft, from extension of river-profile map. Prior to Oct. 22, 1946, water-stage recorder at several sites within 400 ft of present site at different datums.

REMARKS.--Records good. Diversion for irrigation of 40 acres, above station.

AVERAGE DISCHARGE.--68 years, 34.5 ft³/s, 25,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,000 ft³/s, Jan. 21, 1943, gage height, 11.1 ft, site and datum then in use, on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s, Feb. 6, 1945.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 26	1800	293	2.27	Mar. 24	2000	225	2.02
Mar. 2	0900	278	2.22	Apr. 9	0100	232	2.05
Mar. 8	2100	*1,120	*4.23	May 11	0100	212	1.97

Minimum daily, 6.0 ft³/s, Aug. 14-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	7.6	10	11	13	78	130	78	56	17	6.1	6.4
2	6.2	7.9	11	11	14	203	131	84	58	16	6.1	6.4
3	6.2	9.0	11	11	14	84	123	90	64	15	6.2	6.4
4	6.2	8.2	10	10	11	55	105	101	71	14	6.1	6.4
5	6.2	8.0	9.7	11	e8.4	68	106	118	76	13	6.1	6.4
6	6.2	8.2	11	10	e7.0	377	128	130	80	12	6.1	6.4
7	6.3	8.4	11	10	e6.4	443	161	151	76	11	6.1	7.2
8	6.4	8.7	11	9.7	e6.5	552	195	168	71	10	6.6	7.4
9	6.3	8.7	11	12	e8.5	575	211	175	68	9.7	7.1	7.1
10	6.3	9.5	11	12	12	470	197	195	66	9.6	6.6	7.1
11	6.4	9.2	11	10	14	387	197	180	61	9.6	6.4	6.8
12	6.7	9.1	11	9.2	14	305	177	148	56	9.3	6.1	6.8
13	6.8	10	11	8.6	14	225	167	129	53	9.1	6.1	6.8
14	6.8	11	11	12	12	153	169	114	50	8.9	6.0	6.9
15	6.8	10	6.3	9.1	11	123	182	104	48	8.4	6.0	6.8
16	6.8	9.9	9.5	11	13	119	194	98	48	8.3	6.0	6.8
17	6.8	11	11	11	13	95	194	96	44	8.2	6.1	7.9
18	6.8	9.6	11	11	13	88	193	100	39	8.0	6.1	8.0
19	6.8	8.4	11	10	14	94	204	95	35	7.7	6.2	7.5
20	6.9	9.4	12	10	14	79	202	91	33	7.3	6.3	7.4
21	6.9	9.7	11	10	13	80	201	88	30	7.2	6.5	7.2
22	6.9	12	10	13	16	109	192	87	28	7.0	6.4	7.2
23	7.0	61	10	13	29	107	160	88	26	6.9	6.6	7.1
24	7.1	36	12	7.9	50	160	139	84	25	6.6	6.7	7.2
25	7.1	22	12	8.9	82	197	124	78	23	6.5	7.0	7.3
26	7.1	17	8.8	10	176	157	106	74	22	6.3	6.7	7.3
27	7.2	13	7.4	11	121	134	94	67	21	6.2	6.4	7.4
28	7.3	14	8.2	11	83	141	86	66	21	6.2	6.4	7.4
29	7.4	12	9.2	11	---	140	80	64	20	6.1	6.3	7.5
30	7.4	11	10	12	---	120	78	61	18	6.1	6.2	8.4
31	7.5	---	12	12	---	130	---	58	---	6.1	6.4	---
TOTAL	209.0	389.5	322.1	329.4	802.8	6048	4626	3260	1387	283.3	196.0	212.9
MEAN	6.74	13.0	10.4	10.6	28.7	195	154	105	46.2	9.14	6.32	7.10
MAX	7.5	61	12	13	176	575	211	195	80	17	7.1	8.4
MIN	6.2	7.6	6.3	7.9	6.4	55	78	58	18	6.1	6.0	6.4
AC-FT	415	773	639	653	1590	12000	9180	6470	2750	562	389	422

CAL YR 1988 TOTAL 3997.5 MEAN 10.9 MAX 61 MIN 4.1 AC-FT 7930
WTR YR 1989 TOTAL 18066.0 MEAN 49.5 MAX 575 MIN 6.0 AC-FT 35830

e Estimated

10333000 HUMBOLDT RIVER NEAR IMLAY, NV

LOCATION.--Lat 40°41'30", long 118°12'10", in SW1/4SE1/4 sec.25, T.33 N., R.33 E., Pershing County, Hydrologic Unit 16040108, on right bank 1 mi upstream from Callahan bridge, and 4 mi northwest of Imlay.

DRAINAGE AREA.--15,700 mi², approximately.

PERIOD OF RECORD.--June 1935 to December 1941, April 1945 to current year. Monthly discharge only October to December 1941, published in WSP 1314.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,130 ft, from Geological Survey vertical-angle bench mark. Prior to Apr. 28, 1945, at site 1 mi downstream at different datum. Apr. 28, 1945, to Aug. 20, 1947, at present site at datum 1 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Humboldt-Lovelock Irrigation, Light and Power Co.'s feeder canal diverts water at times from river above station to Pitt-Taylor Reservoirs. Flow affected by many diversions above station for irrigation.

AVERAGE DISCHARGE.--50 years, 274 ft³/s, 198,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,270 ft³/s, May 27, 1984, gage height, 13.20 ft; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,020 ft³/s, Apr. 9, gage height, 7.38 ft; minimum daily, 6.6 ft³/s, Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	10	13	e20	e26	144	760	976	399	207	45	14
2	6.8	10	14	e19	e22	e210	746	977	417	192	43	14
3	6.9	11	15	e20	e18	e220	767	955	424	189	35	14
4	6.9	11	17	e19	e17	e230	814	930	422	196	29	14
5	6.9	10	15	e18	e16	e240	872	894	458	188	28	14
6	6.8	11	17	e17	e18	e250	910	845	440	166	26	14
7	6.8	10	17	e17	e25	e300	939	806	277	150	24	14
8	6.9	10	13	e17	e32	365	985	726	223	145	26	14
9	6.9	10	15	e20	e39	404	1020	677	205	133	28	14
10	6.9	11	17	e20	e44	345	995	568	224	123	28	13
11	6.9	12	16	e23	50	367	978	490	231	116	25	13
12	7.7	12	16	e22	53	415	979	480	226	110	23	12
13	8.4	12	16	e22	56	459	975	497	219	105	21	12
14	8.5	12	17	e21	60	513	960	493	200	102	20	12
15	8.3	12	14	e21	62	567	969	498	192	97	19	12
16	8.4	13	15	e20	60	605	996	506	182	94	18	14
17	8.5	13	18	e20	60	626	1020	435	173	92	18	13
18	8.9	13	21	e20	64	656	1010	579	191	89	18	14
19	8.8	12	26	e20	69	687	1010	581	225	91	17	14
20	9.2	14	25	e20	72	703	1010	575	226	90	17	13
21	9.1	13	29	e20	74	722	1010	570	259	75	16	13
22	9.2	14	28	e19	79	770	1010	570	281	68	15	12
23	9.2	15	e26	e18	84	802	953	575	272	64	15	12
24	9.5	17	e23	e17	86	819	919	576	232	61	e15	12
25	9.4	17	e18	e18	90	764	941	586	227	59	e15	12
26	9.6	16	e15	e19	94	752	958	579	257	56	e15	12
27	9.5	16	e14	e20	80	772	966	567	239	53	e15	12
28	9.6	15	e15	e21	88	793	972	569	239	52	e14	13
29	9.8	15	e16	e22	---	813	957	561	263	50	e14	13
30	9.9	14	e18	e25	---	821	964	510	236	48	e14	14
31	10	---	e20	e28	---	795	---	404	---	47	e14	---
TOTAL	256.8	381	559	623	1538	16929	28365	19555	8059	3308	670	393
MEAN	8.28	12.7	18.0	20.1	54.9	546	945	631	269	107	21.6	13.1
MAX	10	17	29	28	94	821	1020	977	458	207	45	14
MIN	6.6	10	13	17	16	144	746	404	173	47	14	12
AC-FT	509	756	1110	1240	3050	33580	56260	38790	15990	6560	1330	780

CAL YR 1988 TOTAL 30947.0 MEAN 84.6 MAX 479 MIN 4.5 AC-FT 61380
WTR YR 1989 TOTAL 80636.8 MEAN 221 MAX 1020 MIN 6.6 AC-FT 159900

e Estimated

10334500 RYE PATCH RESERVOIR NEAR RYE PATCH, NV

LOCATION--Lat 40°28'15", long 118°18'30", in NW1/4NE1/4 sec.18, T.30 N., R.33 E., Pershing County, Hydrologic Unit 16040108, at control works on left end of Rye Patch Dam on Humboldt River, and 2 mi northwest of Rye Patch.

DRAINAGE AREA.--16,100 mi², approximately.

PERIOD OF RECORD.--February 1936 to current year.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Staff gage on dam read daily. Datum of gage is National Geodetic Vertical Datum of 1929 (Southern Pacific Railroad datum).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam; storage began Feb. 20, 1936. Capacity, 194,300 acre-ft between elevations, 4,072.5 ft, sill of trashrack structure, and 4,136.0 ft, top of spillway gates (since June 1976). Dead storage negligible. Elevation of spillway (gate sill) is 4,119 ft. Figures given herein represent usable contents and are based on capacity table No. 2, developed by U.S. Bureau of Reclamation, in use since Oct. 1, 1971. Water is used for irrigation in the Lovelock area. Daily contents below 4,116.0 ft were not published unless actual surveyed observation was obtained.

COOPERATION.--Records of daily elevation furnished by Pershing County Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 196,900 acre-ft, Apr. 9, 1946, elevation, 4,134.62 ft, capacity table then in use; maximum elevation, 4,135.9 ft, July 27 to Aug. 3, 1983, and July 11-15, 1984; no contents, Aug. 7-11, 1955, May 12 to June 13, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 67,340 acre-ft, June 5-13, elevation, 4,122.6 ft; minimum observed, 7,350 acre-ft, Nov. 13, elevation, 4,101.4 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

4,101	7,050	4,120	53,200
4,106	11,520	4,122	63,800
4,110	17,000	4,123	69,700
4,115	31,700	4,125	82,700

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	40990	55750	66160	59400	47600	---
2	---	---	---	---	---	---	41850	56260	66160	58850	47150	---
3	---	---	---	---	---	---	42280	56770	66750	58300	46250	---
4	---	---	---	---	---	---	43140	57280	66750	57280	45350	---
5	---	---	---	---	---	---	44450	57790	67340	56260	44900	---
6	---	---	---	---	---	---	45350	57790	67340	54730	44000	---
7	---	---	---	---	---	---	46250	58300	67340	54220	43570	---
8	---	---	---	---	---	---	47150	58850	67340	53710	43140	---
9	---	---	---	---	---	15330	48050	59400	67340	53200	42710	---
10	---	---	---	---	---	---	48500	59950	67340	52730	42280	---
11	---	---	---	---	---	---	49440	59950	67340	52730	41850	---
12	---	---	---	---	---	---	49910	60500	67340	52260	41420	---
13	---	7350	---	---	---	---	50380	60500	67340	52260	40990	---
14	---	---	---	---	---	---	50850	61050	66750	51790	40990	---
15	---	---	---	---	---	---	51320	61600	66750	51790	40560	---
16	---	---	---	---	---	---	52260	61600	66160	51320	39700	---
17	9520	---	---	---	---	---	52730	62150	66160	51320	38880	---
18	---	---	---	---	---	---	53200	62150	65570	51320	38060	---
19	---	---	---	---	---	---	53710	62700	65570	50850	37240	---
20	---	---	---	---	---	---	53710	62700	64980	50850	36420	---
21	---	---	---	---	---	---	54220	63250	64980	50850	35600	---
22	---	---	---	---	---	---	54220	63800	64390	50850	---	---
23	---	---	---	---	---	---	54220	63800	63800	50380	---	---
24	---	---	---	---	---	---	54730	64390	63250	50380	---	---
25	---	---	---	---	---	---	54730	64390	62700	49910	---	20440
26	---	---	---	---	---	---	54730	64980	62150	49440	---	---
27	---	---	---	---	---	35210	54730	64980	61600	49440	---	---
28	---	---	---	---	e14470	36830	55240	64980	61050	48970	---	---
29	---	---	---	---	---	38060	55240	65570	60500	48970	---	---
30	---	e8220	---	---	---	39700	55750	65570	59950	48500	---	19960
31	e8300	---	e10000	e12200	---	40560	---	65570	---	48500	e30560	---
MAX	---	---	---	---	---	---	55750	65570	67340	59400	---	---
MIN	---	---	---	---	---	---	40990	55750	59950	48500	---	---
#	4102.6	4102.5	4104.5	4106.6	4108.4	4117.2	4120.5	4122.3	4121.3	4119.0	4114.7	4114.4
##	-3780	-80	+1780	+2200	+2270	+26090	15190	+9820	-5620	-11450	-17940	-10600

CAL YR 1988 MAX 83410 MIN 7350 ## -48850
WTR YR 1989 MAX 67340 MIN 7350 ## +7880

\# Elevation, in feet NGVD, at end of month.
Change in contents, in acre-feet.
e Estimated

Note: Some monthend elevations are interpolated from readings made during the month.

10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV

LOCATION.--Lat 40°28'00", long 118°18'20", in SE1/4NE1/4 sec.18, T.30 N., R.33 E., Pershing County, Hydrologic Unit 16040108, on left bank 1,000 ft downstream from Rye Patch Dam, and 1.5 mi northwest of Rye Patch.

DRAINAGE AREA.--16,100 mi^2, approximately.

PERIOD OF RECORD.--January 1896 to June 1898, June 1899 to December 1909, September 1910 to June 1917, September 1917 to September 1922, September 1924 to September 1930 (fragmentary), October 1930 to September 1932, October 1935 to September 1941, October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314. Prior to October 1975, published as "near Oreana."

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,068.53 ft, above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to Oct. 1, 1935, water-stage recorder or nonrecording gages at several sites about 7 mi downstream at different datum. Oct. 1, 1935, to Oct. 13, 1945, water-stage recorder at site 0.5 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow completely regulated by Rye Patch Reservoir, capacity 194,300 acre-ft since June 1976. Many diversions above station for irrigation.

AVERAGE DISCHARGE.--75 years (1899-1909, 1910-16, 1917-22, 1930-32, 1935-41, 1943-89), 246 ft^3/s, 178,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,960 ft^3/s, May 28, 1984, gage height, 13.65 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 771 ft^3/s, June 28, gage height, 3.05 ft; minimum daily, 0.37 ft^3/s, Nov. 15 to Mar. 29, and Sept. 22-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	32	e.37	e.37	e.37	e.37	63	606	356	734	307	224
2	126	68	e.37	e.37	e.37	e.37	116	582	370	722	304	168
3	126	69	e.37	e.37	e.37	e.37	174	573	230	658	349	160
4	126	68	e.37	e.37	e.37	e.37	200	541	213	572	348	151
5	126	68	e.37	e.37	e.37	e.37	240	535	202	493	326	148
6	126	68	e.37	e.37	e.37	e.37	271	478	204	491	318	189
7	91	46	e.37	e.37	e.37	e.37	277	441	235	493	274	232
8	82	25	e.37	e.37	e.37	e.37	297	439	224	419	328	176
9	107	47	e.37	e.37	e.37	e.37	346	395	206	354	298	164
10	107	90	e.37	e.37	e.37	e.37	374	292	223	327	210	124
11	107	105	e.37	e.37	e.37	e.37	424	253	223	341	157	77
12	81	115	e.37	e.37	e.37	e.37	473	229	200	176	128	49
13	52	65	e.37	e.37	e.37	e.37	487	187	192	118	117	90
14	40	e.40	e.37	e.37	e.37	e.37	473	165	232	102	138	170
15	39	e.37	e.37	e.37	e.37	e.37	484	190	268	83	307	245
16	38	e.37	e.37	e.37	e.37	e.37	442	203	300	187	348	204
17	38	e.37	e.37	e.37	e.37	e.37	451	214	302	217	365	123
18	74	e.37	e.37	e.37	e.37	e.37	538	224	325	125	412	63
19	86	e.37	e.37	e.37	e.37	e.37	648	220	399	93	445	60
20	95	e.37	e.37	e.37	e.37	e.37	696	165	433	88	452	52
21	106	e.37	e.37	e.37	e.37	e.37	713	152	503	102	423	e6.0
22	99	e.37	e.37	e.37	e.37	e.37	709	170	551	117	415	e.37
23	73	e.37	e.37	e.37	e.37	e.37	709	273	490	116	285	e.37
24	59	e.37	e.37	e.37	e.37	e.37	732	291	419	140	183	e.37
25	70	e.37	e.37	e.37	e.37	e.37	746	325	538	130	208	e55
26	87	e.37	e.37	e.37	e.37	e.37	747	358	613	116	174	100
27	80	e.37	e.37	e.37	e.37	e.37	745	363	601	103	188	104
28	48	e.37	e.37	e.37	e.37	e.37	737	295	721	109	226	130
29	47	e.37	e.37	e.37	---	e.37	664	231	747	139	188	133
30	23	e.37	e.37	e.37	---	168	611	218	732	173	200	115
31	e.42	---	e.37	e.37	---	209	---	280	---	253	215	---
TOTAL	2486.42	872.32	11.47	11.47	10.36	387.73	14587	9888	11252	8291	8636	3513.11
MEAN	80.2	29.1	.37	.37	.37	12.5	486	319	375	267	279	117
MAX	127	115	.37	.37	.37	209	747	606	747	734	452	245
MIN	.42	.37	.37	.37	.37	.37	63	152	192	83	117	.37
AC-FT	4930	1730	23	23	21	769	28930	19610	22320	16450	17130	6970

CAL YR 1988 TOTAL 53336.41 MEAN 146 MAX 574 MIN .37 AC-FT 105800
WTR YR 1989 TOTAL 59946.88 MEAN 164 MAX 747 MIN .37 AC-FT 118900

e Estimated

10336500 PYRAMID LAKE NEAR NIXON, NV

LOCATION.--Lat 39°59'05", long 119°30'00", in NE1/4NW1/4 sec.3 T.24 N., R.22 E., Washoe County, Hydrologic Unit 16050103, in Pyramid Lake Indian Reservation, 0.25 mi north of the Pyramid, 1.6 mi northeast of Anaho Island, and 13 mi northwest of Nixon.

DRAINAGE AREA.--2,730 mi^2.

PERIOD OF RECORD.--1867-1925 (occasional elevations in some years), June 1926 to current year (occasional elevations in each year).

REVISED RECORDS.--WSP 880: 1934-38 (bench mark). WSP 1090: 1926 (M). WDR NV-67-1: 1966.

GAGE.--Nonrecording gage. Datum of gage is 3,940.29 ft, above National Geodetic Vertical Datum of 1929 (U.S. Coast and Geodetic Survey Bench Mark N-21), supplementary adjustment of 1956. Prior to January 1934, elevations were determined from Bench Mark No. 1 of General Lake Office using elevation of 3,882.26 ft, adjustment of 1912; to convert these records to present datum, add 0.81 ft. January 1934 to September 1955, elevations were determined from Bench Mark N-21 using elevations of 3,940.04 ft, datum of 1929; to convert these records to present datum, add 0.25 ft. October 1955 to August 1968, nonrecording gages along southwest lake shore at present datum.

REMARKS.--Truckee Canal diverts water out of the basin to Lahontan Reservoir (station 10312100). Elevations are given to the nearest 0.1 ft and contents to four significant figures in order to reflect trends of change. Any single observation, however, may be affected by wind and seiche movements on the lake surface. Elevations published in WSP 1314 for 1867 and 1871 (3,875.9 and 3,884.9 ft, respectively) have been revised to 3,867 and 3,876 ft, respectively, on the basis the data and conclusions of Hardman and Venstrom (American Geophysical Union Transactions, 1941, p. 71-90), and Harding (University of California Archives Report 16, 1965).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 3,877.9 ft in 1891 (see REMARKS paragraph); minimum observed, 3,783.9 ft, Feb. 6, and Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 22,880,000 acre-ft, elevation 3810.3, Oct. 4; minimum contents observed, 22,590,000 acre-ft, elevation, 3807.7 ft., Sept. 1.

MONTHEND ELEVATION, IN FEET NGVD, AND TOTAL CONTENTS, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	3,810.4	22,890,000	--
Oct. 31	3,810.0	22,850,000	-40,000
Nov. 30	3,809.6	22,800,000	-50,000
Dec. 31	3,809.2	22,760,000	-40,000
CAL YR 1988	--	--	-420,000
Jan. 31	3,809.1	22,750,000	-10,000
Feb. 28	3,809.1	22,750,000	0
Mar. 31	3,809.0	22,740,000	-10,000
Apr. 30	3,809.1	22,750,000	+10,000
May 31	3,809.0	22,740,000	-10,000
June 30	3,808.7	22,700,000	-40,000
July 31	3,808.2	22,640,000	-60,000
Aug. 31	3,807.7	22,590,000	-50,000
Sept. 30	3,807.4	22,550,000	-40,000
WTR YR 1989	--	--	-340,000

NOTE.--Monthend elevations are interpolated from readings made during the month.

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA

LOCATION.--Lat 38°55'22", long 119°59'23", in NW 1/4 SE 1/4 sec.4, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, near center of bridge span on downstream side of U.S. Highway 50 bridge, 1.0 mi northeast of South Lake Tahoe Post Office, and 1.4 mi upstream from Lake Tahoe.

DRAINAGE AREA.--54.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1971 to September 1974, October 1976 to June 1977, October 1977 to June 1978, March 1980 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 6,229.04 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 26, 1984, at datum 2.00 ft higher.

REMARKS.--Records fair except those for October to February and August to September, which are poor. Two small dams may cause slight regulation at times. Some small diversions for domestic use upstream from station. Echo Lake conduit (station 11434500) diverts from Echo Lake, capacity 1,900 acre-ft, to South Fork American River basin.

AVERAGE DISCHARGE.--12 years (water years 1972-74, 1981-89), 108 ft³/s, 78,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft³/s, Mar. 8, 1986, gage height, 9.08 ft; maximum gage height, 10.12 ft, present datum, Feb. 16, 1982; minimum daily, 0.94 ft³/s, Oct. 5, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 8	1830	*595	*6.02	Apr. 21	0445	477	5.48
Mar. 19	1400	313	4.67	May 8	0315	551	5.80
Mar. 28	1930	437	5.28	June 5	0130	439	5.23

Minimum daily, 0.94 ft³/s, Oct. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.6	5.9	e26	e19	e19	e62	277	153	184	62	9.1	e5.9
2	e1.1	6.5	e25	e19	e20	e60	231	178	204	58	9.5	5.7
3	e1.0	7.9	e25	e19	e20	e57	220	198	337	56	9.7	e5.6
4	e.95	7.6	e24	e19	e20	e55	178	268	367	53	9.5	e5.3
5	e.94	e5.4	e24	e20	e21	e100	183	344	353	50	10	e5.1
6	1.0	e6.0	e23	e20	e21	e230	222	393	270	48	11	e4.9
7	e1.1	e5.5	e23	e21	e22	314	271	435	268	44	12	e4.8
8	e1.2	e4.7	e22	e21	e23	516	296	488	264	44	16	e4.8
9	e1.3	3.8	20	e22	e24	451	313	466	283	42	16	e4.8
10	e1.5	e4.3	19	e22	e25	301	328	398	278	38	11	e4.8
11	e1.7	5.5	19	e23	e25	345	347	293	285	36	10	e4.8
12	1.9	7.4	19	e23	e26	228	312	246	273	35	9.5	e4.8
13	2.1	11	19	e23	e26	181	284	230	256	32	e9.0	e9.0
14	2.3	13	e19	e23	e27	145	314	190	220	26	e8.4	e6.1
15	2.2	9.0	e19	e23	e26	123	329	188	197	25	e8.1	e6.3
16	2.7	e8.8	e18	e23	e25	117	332	210	221	23	e8.0	e8.0
17	2.5	e8.7	e18	e23	e23	123	328	237	210	21	e7.9	e29
18	2.5	e8.6	e18	e22	e24	149	337	272	186	21	e7.8	e23
19	2.7	e8.7	18	e22	e25	278	361	214	176	21	e7.7	e18
20	2.8	e8.9	e17	e22	e23	167	390	204	153	20	e7.5	e14
21	3.0	9.7	e17	e22	e25	134	426	218	135	19	e7.4	e11
22	3.0	17	e17	e22	e30	128	341	219	118	18	e7.3	e9.5
23	3.4	48	e18	e22	e92	123	267	221	112	17	e7.1	e8.5
24	3.9	38	e18	22	e88	212	234	176	107	15	e7.0	e7.6
25	4.1	e33	e18	22	e85	196	205	153	102	15	e6.9	e6.8
26	4.6	e32	e18	e21	e79	140	174	157	99	14	e6.8	e6.3
27	4.4	e30	e19	e21	e73	118	165	201	99	13	e6.7	e5.9
28	4.7	e29	e19	e21	e67	298	156	242	91	12	e6.6	e5.6
29	4.4	e28	e19	e20	---	274	154	223	68	11	e6.5	8.5
30	5.1	e27	e19	e20	---	190	153	185	63	9.9	e6.1	14
31	5.0	---	e19	e20	---	235	---	163	---	9.0	e6.0	---
TOTAL	80.69	438.9	616	662	1004	6050	8128	7763	5979	907.9	272.1	258.4
MEAN	2.60	14.6	19.9	21.4	35.9	195	271	250	199	29.3	8.78	8.61
MAX	5.1	48	26	23	92	516	426	488	367	62	16	29
MIN	.94	3.8	17	19	19	55	153	153	63	9.0	6.0	4.8
AC-FT	160	871	1220	1310	1990	12000	16120	15400	11860	1800	540	513

CAL YR 1988 TOTAL 10851.79 MEAN 29.6 MAX 139 MIN .94 AC-FT 21520
WTR YR 1989 TOTAL 32159.99 MEAN 88.1 MAX 516 MIN .94 AC-FT 63790

e Estimated.

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972-74, 1978, 1980 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1981 to September 1983.
WATER TEMPERATURE: October 1971 to June 1974, October 1977 to June 1978, March 1980 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1971 to June 1974, October 1977 to June 1978, March 1980 to current year.

REMARKS.--Sediment samples were collected during most days where a water temperature is published.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum daily mean, 312 mg/L, Dec. 29, 1973; minimum daily mean, 0 mg/L, several days during most years.
SEDIMENT LOAD: Maximum daily, 781 tons, Mar. 8, 1986; minimum daily, 0 ton, several days during most years.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily mean, 241 mg/L, Mar. 8; minimum daily mean, 0 mg/L, many days.
SEDIMENT LOAD: Maximum daily, 337 tons, Mar. 8; minimum daily, 0 ton, many days.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	4.5	---	10.0	---	---	---	---
2	---	---	---	---	---	1.0	3.5	---	8.5	---	---	---
3	---	7.0	---	---	---	---	2.0	---	---	---	---	---
4	11.0	---	---	1.0	1.0	---	---	10.5	---	---	16.0	---
5	---	---	---	---	---	1.5	3.0	---	7.5	---	---	17.0
6	---	---	---	---	---	2.0	---	---	---	---	---	---
7	---	---	.5	---	---	2.0	---	10.0	10.0	13.5	---	---
8	---	---	---	---	---	2.0	---	---	---	---	---	17.5
9	---	3.5	1.0	---	---	2.0	---	---	14.0	---	16.0	---
10	---	5.0	---	---	.0	6.0	6.5	5.0	---	18.0	---	---
11	---	---	---	.0	---	4.0	---	---	---	---	---	---
12	---	---	---	---	1.0	2.0	---	10.0	14.0	---	---	14.0
13	---	5.0	---	---	---	1.5	9.0	---	---	---	---	---
14	---	1.0	---	1.0	.0	1.5	---	---	11.0	---	---	17.0
15	8.0	---	---	---	---	---	3.5	8.0	---	---	---	---
16	---	---	---	---	---	---	---	---	14.0	---	15.0	---
17	---	---	---	.0	---	---	8.0	6.0	---	16.0	---	13.0
18	---	---	---	---	---	4.0	---	---	---	---	20.5	12.0
19	---	3.0	1.5	---	---	4.0	4.0	11.0	---	---	---	---
20	11.5	---	---	---	---	---	---	---	14.5	---	---	---
21	---	---	---	---	---	---	---	6.5	---	---	---	12.5
22	---	4.5	---	---	1.0	---	---	7.0	---	---	---	---
23	10.0	1.0	---	1.0	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	2.0	---	---	---	---	---
25	---	---	---	---	---	3.5	---	10.5	---	18.0	13.5	---
26	---	---	1.0	---	---	---	2.0	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	.0	---	---	---	4.0	---	---	11.0	---	---	11.5
29	---	3.0	---	---	---	5.0	---	---	---	---	---	---
30	---	---	---	.5	---	2.0	---	---	---	---	---	9.5
31	7.5	---	---	---	---	2.0	---	6.0	---	20.5	13.5	---

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	e1.6	3	.01	5.9	0	.00	e26	3	.21
2	e1.1	3	.01	6.5	0	.00	e25	3	.20
3	e1.0	3	.01	7.9	1	.02	e25	3	.20
4	e.95	4	.01	7.6	1	.02	e24	3	.19
5	e.94	4	.01	e5.4	1	.01	e24	4	.26
6	1.0	4	.01	e6.0	1	.02	e23	5	.31
7	e1.1	4	.01	e5.5	2	.03	e23	6	.37
8	e1.2	3	.01	e4.7	2	.03	e22	7	.42
9	e1.3	2	.01	3.8	2	.02	20	8	.43
10	e1.5	0	.00	e4.3	2	.02	19	7	.36
11	e1.7	0	.00	5.5	2	.03	19	6	.31
12	1.9	0	.00	7.4	3	.06	19	5	.26
13	2.1	0	.00	11	22	.65	19	4	.21
14	2.3	0	.00	13	6	.21	e19	3	.15
15	2.2	0	.00	9.0	2	.05	e19	3	.15
16	2.7	0	.00	e8.8	1	.02	e18	3	.15
17	2.5	1	.01	e8.7	0	.00	e18	3	.15
18	2.5	1	.01	e8.6	0	.00	e18	3	.15
19	2.7	2	.01	e8.7	0	.00	18	3	.15
20	2.8	2	.02	e8.9	0	.00	e17	3	.14
21	3.0	2	.02	9.7	0	.00	e17	3	.14
22	3.0	1	.01	17	12	.55	e17	3	.14
23	3.4	1	.01	48	97	15	e18	3	.15
24	3.9	1	.01	38	68	7.7	e18	3	.15
25	4.1	1	.01	e33	10	.89	e18	3	.15
26	4.6	1	.01	e32	10	.86	e18	3	.15
27	4.4	0	.00	e30	10	.81	e19	3	.15
28	4.7	0	.00	e29	10	.78	e19	3	.15
29	4.4	0	.00	e28	6	.45	e19	3	.15
30	5.1	0	.00	e27	3	.22	e19	3	.15
31	5.0	0	.00	---	---	---	e19	4	.21
TOTAL	80.69	---	0.21	438.9	---	28.45	616	---	6.46
		JANUARY			FEBRUARY			MARCH	
1	e19	4	.21	e19	3	.15	e62	---	e4.3
2	e19	4	.21	e20	3	.16	e60	---	e3.9
3	e19	4	.21	e20	3	.16	e57	---	e3.4
4	e19	4	.21	e20	3	.16	e55	---	e3.0
5	e20	4	.22	e21	3	.17	e100	---	e13
6	e20	3	.16	e21	3	.17	e230	---	e95
7	e21	3	.17	e22	3	.18	314	154	131
8	e21	2	.11	e23	3	.19	516	241	337
9	e22	2	.12	e24	3	.19	451	120	146
10	e22	1	.06	e25	3	.20	301	35	28
11	e23	1	.06	e25	3	.20	345	77	72
12	e23	2	.12	e26	3	.21	228	40	25
13	e23	3	.19	e26	3	.21	181	20	9.8
14	e23	4	.25	e27	3	.22	145	12	4.7
15	e23	3	.19	e26	3	.21	123	6	2.0
16	e23	2	.12	e25	3	.20	117	5	1.6
17	e23	1	.06	e23	3	.19	123	5	1.7
18	e22	1	.06	e24	3	.19	149	21	8.4
19	e22	2	.12	e25	3	.20	278	57	43
20	e22	2	.12	e23	3	.19	167	13	5.9
21	e22	3	.18	e25	3	.20	134	5	1.8
22	e22	3	.18	e30	---	e.75	128	5	1.7
23	e22	3	.18	e92	---	e11	123	5	1.7
24	22	4	.24	e88	---	e10	212	36	23
25	22	4	.24	e85	---	e9.0	196	39	21
26	e21	5	.28	e79	---	e7.5	140	33	12
27	e21	5	.28	e73	---	e6.3	118	7	2.2
28	e21	4	.23	e67	---	e5.3	298	47	50
29	e20	4	.22	---	---	---	274	13	9.6
30	e20	3	.16	---	---	---	190	10	5.1
31	e20	3	.16	---	---	---	235	29	24
TOTAL	662	---	5.32	1004	---	53.80	6050	---	1090.8

e Estimated.

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	277	30	22	153	8	3.3	184	6	3.0
2	231	20	12	178	14	6.7	204	12	6.6
3	220	10	5.9	198	20	11	337	44	40
4	178	4	1.9	268	40	29	367	39	39
5	183	8	4.0	344	50	46	353	28	27
6	222	16	9.6	393	63	67	270	10	7.3
7	271	21	15	435	65	76	268	15	11
8	296	26	21	488	100	132	264	10	7.1
9	313	31	26	466	70	88	283	17	13
10	328	44	39	398	36	39	278	11	8.3
11	347	48	45	293	15	12	285	14	11
12	312	38	32	246	32	21	273	12	8.8
13	284	33	25	230	23	14	256	8	5.5
14	314	46	39	190	9	4.6	220	8	4.8
15	329	54	48	188	8	4.1	197	4	2.1
16	332	51	46	210	9	5.1	221	14	8.4
17	328	40	35	237	23	15	210	13	7.4
18	337	44	40	272	28	21	186	12	6.0
19	361	80	78	214	12	6.9	176	11	5.2
20	390	89	94	204	11	6.1	153	11	4.5
21	426	68	78	218	16	9.4	135	11	4.0
22	341	19	17	219	12	7.1	118	11	3.5
23	267	12	8.7	221	11	6.6	112	10	3.0
24	234	10	6.3	176	5	2.4	107	10	2.9
25	205	8	4.4	153	4	1.7	102	10	2.8
26	174	7	3.3	157	6	2.5	99	10	2.7
27	165	7	3.1	201	15	8.1	99	10	2.7
28	156	7	2.9	242	24	16	91	10	2.5
29	154	7	2.9	223	11	6.6	68	10	1.8
30	153	8	3.3	185	7	3.5	63	9	1.5
31	---	---	---	163	5	2.2	---	---	---
TOTAL	8128	---	768.3	7763	---	673.9	5979	---	253.4
		JULY			AUGUST			SEPTEMBER	
1	62	8	1.3	9.1	4	.10	e5.9	0	.00
2	58	7	1.1	9.5	3	.08	5.7	0	.00
3	56	6	.91	9.7	3	.08	e5.6	0	.00
4	53	6	.86	9.5	3	.08	e5.3	0	.00
5	50	6	.81	10	3	.08	e5.1	0	.00
6	48	7	.91	11	3	.09	e4.9	2	.03
7	44	6	.71	12	4	.13	e4.8	4	.05
8	44	5	.59	16	5	.22	e4.8	7	.09
9	42	4	.45	16	6	.26	e4.8	7	.09
10	38	3	.31	11	4	.12	e4.8	7	.09
11	36	3	.29	10	4	.11	e4.8	7	.09
12	35	3	.28	9.5	4	.10	e4.8	6	.08
13	32	4	.35	e9.0	4	.08	e9.0	6	.15
14	26	4	.28	e8.4	4	.08	e6.1	6	.10
15	25	5	.34	e8.1	4	.08	e6.3	6	.10
16	23	5	.31	e8.0	4	.08	e8.0	5	.11
17	21	5	.28	e7.9	4	.08	e29	6	.47
18	21	5	.28	e7.8	3	.06	e23	6	.37
19	21	5	.28	e7.7	3	.06	e18	3	.15
20	20	5	.27	e7.5	2	.04	e14	1	.04
21	19	5	.26	e7.4	2	.04	e11	0	.00
22	18	5	.24	e7.3	1	.02	e9.5	0	.00
23	17	5	.23	e7.1	1	.02	e8.5	0	.00
24	15	5	.20	e7.0	0	.00	e7.6	0	.00
25	15	5	.20	e6.9	0	.00	e6.8	0	.00
26	14	5	.19	e6.8	0	.00	e6.3	0	.00
27	13	5	.18	e6.7	0	.00	e5.9	0	.00
28	12	5	.16	e6.6	0	.00	e5.6	0	.00
29	11	4	.12	e6.5	0	.00	8.5	5	.10
30	9.9	4	.11	e6.1	0	.00	14	10	.22
31	9.0	4	.10	e6.0	0	.00	---	---	---
TOTAL	907.9	---	12.90	272.1	---	2.09	258.4	---	2.33
YEAR	32159.99		2897.96						

e Estimated.

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUPENDED SEDIMENT, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
MAR									
06...	1125	261	2.5	281	198	62	80	96	100
07...	1115	286	1.5	128	99	56	--	--	--
08...	1145	551	1.5	373	555	41	--	--	--

10336625 FALLEN LEAF LAKE NEAR CAMP RICHARDSON, CA

LOCATION.--Lat 38°54'00", long 120°04'14", in NE 1/4 SW 1/4 sec.11, T.12 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, Eldorado National Forest, 200 ft north of Cathedral Creek, 1.5 mi south of Fallen Leaf Dam, 2.9 mi southwest of Camp Richardson, and 3.7 mi west of South Lake Tahoe Post Office.

DRAINAGE AREA.--16.7 mi².

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1973, published as "near Tahoe Valley."

GAGE.--Water-stage recorder. Datum of gage is 6,372.30 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Lake levels regulated by a concrete dam at the outlet constructed in 1934. Regulation is for maintenance of lake level and enhancement of fishery.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 5.85 ft, Jan. 13, 1980; minimum, 1.49 ft, Jan. 23, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.53 ft, June 4; minimum, 1.99 ft, Nov. 11.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 24:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.86	2.17	2.77	3.02	2.53	2.66	2.88	2.52	4.26	4.27	4.05	3.68
2	2.84	2.13	2.77	3.01	2.52	2.86	2.91	2.54	4.31	4.26	4.03	3.67
3	2.83	2.15	2.76	3.01	2.63	2.85	2.86	2.59	4.51	4.25	4.02	3.66
4	2.81	2.13	2.76	3.00	2.62	2.84	2.82	2.72	4.53	4.23	4.01	3.65
5	2.80	2.10	2.76	3.08	2.60	2.91	2.79	2.87	4.45	4.21	4.00	3.62
6	2.78	2.08	2.75	3.07	2.57	3.15	2.83	3.02	4.40	4.21	4.00	3.58
7	2.76	2.06	2.74	3.07	2.55	3.42	2.89	3.18	4.42	4.21	4.02	3.58
8	2.73	2.03	2.72	3.06	2.54	3.77	2.93	3.28	4.41	4.22	4.07	3.57
9	2.72	2.01	2.71	3.05	2.53	3.76	3.00	3.33	4.41	4.22	4.07	3.55
10	2.70	2.01	2.71	3.07	2.51	3.63	3.06	3.30	4.40	4.23	4.06	3.55
11	2.67	1.99	2.70	3.06	2.50	3.56	3.12	3.24	4.39	4.24	4.05	3.54
12	2.65	2.01	2.70	3.05	2.50	3.43	3.13	3.24	4.40	4.24	4.04	3.53
13	2.62	e2.14	2.70	3.04	2.48	3.30	3.14	3.29	4.44	4.25	4.03	3.52
14	2.60	e2.17	2.69	3.02	2.48	3.14	3.17	3.28	4.45	4.25	4.02	3.51
15	2.57	e2.18	2.68	3.00	2.46	3.01	3.22	3.29	4.44	4.24	4.01	3.50
16	2.54	e2.20	2.67	2.98	2.44	2.97	3.25	3.33	4.45	4.22	4.00	3.55
17	2.52	e2.20	2.66	2.96	2.43	2.87	3.29	3.44	4.43	4.23	3.98	3.57
18	2.48	e2.20	2.66	2.92	2.44	2.91	3.31	3.60	4.37	4.24	3.97	3.65
19	2.47	e2.18	2.66	2.87	2.45	2.92	3.37	3.71	4.32	4.25	3.95	3.64
20	2.44	e2.17	2.74	2.84	2.44	2.85	3.41	3.82	4.31	4.25	3.94	3.64
21	2.42	e2.17	2.74	2.80	2.44	2.76	3.49	3.94	4.30	4.25	3.93	3.64
22	2.40	e2.38	2.82	2.75	2.50	2.70	3.37	4.04	4.29	4.24	3.89	3.64
23	2.38	e2.63	2.83	2.72	2.53	2.67	3.25	4.15	4.30	4.23	3.86	3.64
24	2.37	e2.74	2.97	2.68	2.55	2.77	3.13	4.16	4.30	4.23	3.85	3.62
25	2.34	e2.75	2.98	2.65	2.58	2.79	2.99	4.16	4.30	4.23	3.84	3.61
26	2.32	e2.75	2.98	2.62	2.60	2.70	2.87	4.18	4.31	4.22	3.83	3.56
27	2.30	e2.75	2.99	2.60	2.62	2.67	2.77	4.22	4.31	4.20	3.82	3.54
28	2.27	e2.76	2.98	2.58	2.62	2.82	2.68	4.27	4.31	4.19	3.80	3.53
29	2.25	e2.76	2.98	2.55	---	2.84	2.62	4.29	4.29	4.16	3.75	3.58
30	2.23	2.77	3.01	2.54	---	2.82	2.55	4.28	4.28	4.12	3.71	3.57
31	2.21	---	3.02	2.52	---	2.89	---	4.25	---	4.08	3.70	---
MEAN	2.54	2.29	2.79	2.88	2.52	3.01	3.04	3.53	4.37	4.22	3.95	3.59
MAX	2.86	2.77	3.02	3.08	2.63	3.77	3.49	4.29	4.53	4.27	4.07	3.68
MIN	2.21	1.99	2.66	2.52	2.43	2.66	2.55	2.52	4.26	4.08	3.70	3.50

CAL YR 1988 MEAN 3.07 MAX 4.48 MIN 1.87
WTR YR 1989 MEAN 3.23 MAX 4.53 MIN 1.99

e Estimated.

10336626 TAYLOR CREEK NEAR CAMP RICHARDSON, CA

LOCATION.--Lat 38°55'18", long 120°03'37", in NE 1/4 NW 1/4 sec.2, T.12 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, Eldorado National Forest, on left bank 0.1 mi downstream from Fallen Leaf Lake outlet and 1.4 mi southwest of Camp Richardson.

DRAINAGE AREA.--16.7 mi^2.

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1973, published as "near Tahoe Valley."

GAGE.--Water-stage recorder. Datum of gage is 6,361.08 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good except discharges less than 2 ft^3/s, which are poor. Flow regulated by Fallen Leaf Lake (station 10336625).

AVERAGE DISCHARGE (unadjusted).--21 years, 45.8 ft^3/s, 33,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,530 ft^3/s, Jan. 14, 1980, gage height, 6.33 ft; minimum daily, 0.13 ft^3/s, Sept. 12, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 274 ft^3/s, June 4, gage height, 4.57 ft; minimum daily, 0.13 ft^3/s, Sept. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	9.6	11	10	20	24	113	79	68	30	2.7	1.4
2	3.6	9.6	11	10	20	36	112	79	71	30	3.2	1.2
3	3.8	9.6	11	10	20	41	110	82	140	29	2.9	.78
4	3.9	9.5	11	10	23	39	103	91	241	29	2.6	.52
5	3.9	9.4	11	10	22	40	99	106	250	22	2.8	.48
6	3.8	9.6	11	10	21	57	100	128	179	20	2.7	.53
7	3.8	9.6	11	10	19	88	106	152	146	16	2.4	.59
8	3.8	9.6	11	10	19	178	114	184	145	4.9	2.5	.46
9	3.8	9.6	11	10	18	258	123	201	144	3.0	2.3	.43
10	4.0	9.9	11	10	18	242	130	200	144	2.6	2.2	.30
11	7.3	9.8	11	10	17	228	134	158	143	2.2	2.2	.30
12	10	9.8	11	10	16	204	140	97	106	2.9	2.2	.13
13	12	9.9	10	11	15	179	140	78	90	3.5	2.0	.69
14	11	9.9	10	13	15	149	142	80	93	3.1	1.8	1.9
15	11	9.9	10	16	14	127	148	74	109	2.6	1.5	1.8
16	11	9.9	10	15	13	119	157	64	109	2.3	1.6	1.8
17	11	10	10	25	13	110	163	54	107	1.9	2.7	2.3
18	11	10	10	34	13	106	168	25	101	1.8	3.8	7.3
19	11	9.9	10	33	14	109	175	26	85	2.0	3.6	10
20	11	9.9	10	31	13	104	203	29	60	2.2	3.1	9.1
21	10	9.9	10	29	13	96	237	36	53	2.1	3.1	6.8
22	10	10	10	27	14	89	229	44	41	2.8	3.0	5.1
23	10	11	10	26	18	85	201	52	41	3.7	3.0	2.6
24	10	11	11	25	19	91	174	56	40	3.2	2.4	2.3
25	9.9	11	11	24	21	99	147	56	41	2.8	2.3	3.6
26	9.9	11	11	23	22	94	125	56	36	2.5	2.0	2.5
27	9.9	11	11	22	23	87	109	59	31	2.3	2.1	1.9
28	9.9	11	11	20	23	95	98	65	31	2.0	2.3	1.7
29	9.9	11	11	19	---	105	90	68	30	2.0	2.3	5.0
30	9.9	11	11	18	---	102	84	69	30	1.8	2.2	6.3
31	9.6	---	10	17	---	104	---	69	---	1.8	1.7	---
TOTAL	253.3	302.9	329	548	496	3485	4174	2617	2905	238.0	77.2	79.81
MEAN	8.17	10.1	10.6	17.7	17.7	112	139	84.4	96.8	7.68	2.49	2.66
MAX	12	11	11	34	23	258	237	201	250	30	3.8	10
MIN	3.6	9.4	10	10	13	24	84	25	30	1.8	1.5	.13
AC-FT	502	601	653	1090	984	6910	8280	5190	5760	472	153	158

CAL YR 1988 TOTAL 4516.72 MEAN 12.3 MAX 122 MIN .84 AC-FT 8960
WTR YR 1989 TOTAL 15505.21 MEAN 42.5 MAX 258 MIN .13 AC-FT 30750

10336645 GENERAL CREEK NEAR MEEKS BAY, CA

LOCATION.--Lat 39°03'07", long 120°07'03", in NE 1/4 NE 1/4 sec.20, T.14 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, on right bank 200 ft upstream from State Highway 89, 0.4 mi upstream from Lake Tahoe, and 1.1 mi north of Meeks Bay.

DRAINAGE AREA.--7.44 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,250.38 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except ice periods and summer months which are poor. No known diversion or regulation upstream from station.

AVERAGE DISCHARGE.--9 years, 18.3 ft³/s, 13,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 765 ft³/s, Dec. 20, 1981, gage height, 5.43 ft, from rating curve extended above 180 ft³/s on basis of computation of flow through culvert; minimum daily, 0.48 ft³/s, Aug. 26, 1988.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 20	2300	160	2.38	May 17	2230	104	2.05
May 7	2115	*201	*2.60				

Minimum daily, 0.53 ft³/s, Aug. 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	1.1	1.4	e1.9	e2.1	7.1	57	36	29	2.9	.96	.65
2	.61	1.3	1.4	e1.9	e2.1	7.8	49	51	31	2.7	.92	.66
3	.62	1.7	1.4	e1.9	e2.1	11	47	65	48	2.5	.88	.61
4	.67	1.5	1.4	e1.9	e2.1	7.4	40	103	40	2.3	.81	.60
5	.68	1.4	1.4	e1.9	e2.1	6.5	46	119	40	2.2	.74	.62
6	.71	1.6	1.4	e1.9	e2.1	24	66	115	31	2.0	.65	.64
7	.75	1.5	1.4	e1.9	e2.1	33	88	127	32	1.9	.87	.72
8	.82	1.5	1.4	e1.9	e2.1	59	94	119	30	1.8	1.3	.71
9	.84	1.6	1.4	e1.9	e2.4	82	96	92	27	1.6	.78	.63
10	.84	1.8	1.4	e1.9	2.8	77	107	68	23	1.6	.66	.59
11	.85	1.7	1.4	e1.9	1.8	71	105	52	20	1.7	.66	.74
12	1.0	1.7	1.4	e1.9	1.6	51	87	52	17	1.6	.61	.81
13	.96	2.7	1.4	e1.9	1.5	38	82	49	15	1.6	.56	.73
14	.93	1.6	e1.4	e1.9	1.4	30	99	44	13	1.5	.53	.74
15	.93	1.3	e1.4	e1.9	1.3	25	102	45	12	1.4	.53	.74
16	.84	1.2	1.4	1.9	1.2	22	97	54	11	1.4	.56	.96
17	.80	1.2	1.4	2.1	1.2	21	100	70	9.4	1.5	.56	1.7
18	.71	1.2	1.4	e2.1	1.3	20	102	70	8.0	1.5	.59	1.2
19	.66	1.2	1.4	e2.1	1.5	32	106	49	6.9	1.4	.58	1.4
20	.66	1.2	e1.5	e2.1	1.4	30	114	51	6.1	1.3	.60	.84
21	.66	1.2	e1.5	e2.1	1.5	24	113	57	5.5	1.3	.68	.71
22	.68	2.8	1.5	e2.1	3.2	23	66	56	5.0	1.3	.66	.64
23	.66	4.8	1.9	e2.1	7.0	23	45	52	4.7	1.4	.83	.61
24	.67	1.7	e1.9	e2.1	9.1	36	37	34	4.4	1.4	.84	.61
25	.67	2.0	e1.9	e2.1	8.4	33	31	30	4.0	1.3	.72	.75
26	.71	1.7	e1.9	e2.1	10	25	28	34	3.8	1.1	.66	.90
27	.85	1.6	e1.9	e2.1	9.7	22	26	43	3.5	1.0	.64	.96
28	.93	1.5	e1.9	e2.1	8.1	49	26	42	3.3	.94	.62	1.1
29	.93	1.5	e1.9	e2.1	---	49	27	33	3.1	.93	.62	1.5
30	.99	1.4	e1.9	e2.1	---	40	30	28	3.0	.91	.65	1.2
31	1.0	---	e1.9	e2.1	---	52	---	26	---	.87	.63	---
TOTAL	24.25	50.2	48.2	61.9	93.2	1030.8	2113	1866	489.7	48.85	21.90	25.27
MEAN	.78	1.67	1.55	2.00	3.33	33.3	70.4	60.2	16.3	1.58	.71	.84
MAX	1.0	4.8	1.9	2.1	10	82	114	127	48	2.9	1.3	1.7
MIN	.61	1.1	1.4	1.9	1.2	6.5	26	26	3.0	.87	.53	.59
AC-FT	48	100	96	123	185	2040	4190	3700	971	97	43	50

CAL YR 1988 TOTAL 1808.62 MEAN 4.94 MAX 37 MIN .48 AC-FT 3590
WTR YR 1989 TOTAL 5873.27 MEAN 16.1 MAX 127 MIN .53 AC-FT 11650

e Estimated.

10336645 GENERAL CREEK NEAR MEEKS BAY, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to September 1983.
WATER TEMPERATURE: October 1980 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1980 to current year.

REMARKS.--Sediment samples were collected during most days where a water temperature is published.

COOPERATION.--Selected sediment samples and water-temperature observations provided by University of California at Davis.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum daily mean, 266 mg/L, Dec. 20, 1981; minimum daily mean, 0 mg/L, many days during most years.
SEDIMENT LOAD: Maximum daily, 457 tons, Dec. 20, 1981; minimum daily, 0 ton, many days during most years.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily mean, 15 mg/L, May 7; minimum daily mean, 0 mg/L, many days.
SEDIMENT LOAD: Maximum daily, 6.5 tons, May 7; minimum daily, 0 ton, many days.

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	2.5	6.5	10.0	---	---	---
2	---	6.5	---	---	---	---	---	---	---	---	10.0	---
3	---	---	---	---	---	---	---	6.0	---	---	---	11.0
4	10.0	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	1.5	---	---	---	12.0
6	---	---	---	.0	---	.5	---	---	8.0	---	---	---
7	---	---	---	---	---	.0	1.5	4.0	---	---	---	---
8	---	---	---	---	---	.0	4.0	2.5	---	---	13.0	---
9	---	---	1.0	---	.0	.5	---	---	11.0	---	---	---
10	5.0	5.0	---	.0	.0	---	1.0	4.0	---	10.0	---	---
11	---	---	---	---	---	1.0	---	---	---	---	---	---
12	---	---	---	---	---	2.0	3.5	5.0	9.0	---	---	10.5
13	---	4.0	---	---	---	.5	---	---	11.0	---	---	---
14	---	2.0	---	---	---	---	4.0	---	---	---	---	10.0
15	---	---	---	---	---	---	---	---	15.0	---	---	---
16	---	---	---	---	---	---	2.5	6.0	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	8.0
18	---	---	---	.0	---	---	---	2.5	---	---	---	9.0
19	---	---	1.0	.0	---	---	1.0	---	---	---	---	8.0
20	---	---	1.0	---	.5	---	4.0	7.5	11.5	---	---	---
21	---	---	---	---	---	---	---	---	---	17.5	---	---
22	---	2.0	---	---	1.0	---	---	7.5	---	---	12.5	---
23	---	.0	---	---	---	---	---	---	---	---	---	---
24	5.5	---	---	---	.5	2.0	---	---	---	---	---	---
25	4.5	---	---	---	1.0	---	---	---	---	---	---	10.0
26	---	---	---	---	---	---	1.5	7.5	---	---	---	---
27	---	---	---	---	---	---	---	5.0	---	---	---	---
28	---	1.0	---	---	---	2.0	1.5	---	---	---	---	---
29	---	---	---	---	---	.5	---	---	---	---	---	---
30	---	---	---	.0	---	---	---	---	9.5	---	---	---
31	---	---	---	---	---	---	---	---	---	16.0	---	---

10336645 GENERAL CREEK NEAR MEEKS BAY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.62	2	.00	1.1	2	.01	1.4	0	.00
2	.61	2	.00	1.3	2	.01	1.4	0	.00
3	.62	2	.00	1.7	1	.00	1.4	0	.00
4	.67	2	.00	1.5	1	.00	1.4	0	.00
5	.68	2	.00	1.4	1	.00	1.4	0	.00
6	.71	2	.00	1.6	1	.00	1.4	0	.00
7	.75	2	.00	1.5	1	.00	1.4	0	.00
8	.82	1	.00	1.5	1	.00	1.4	0	.00
9	.84	1	.00	1.6	1	.00	1.4	0	.00
10	.84	1	.00	1.8	1	.00	1.4	0	.00
11	.85	1	.00	1.7	1	.00	1.4	0	.00
12	1.0	1	.00	1.7	1	.00	1.4	0	.00
13	.96	1	.00	2.7	2	.01	1.4	0	.00
14	.93	1	.00	1.6	1	.00	e1.4	0	.00
15	.93	1	.00	1.3	1	.00	e1.4	0	.00
16	.84	1	.00	1.2	1	.00	1.4	0	.00
17	.80	2	.00	1.2	1	.00	1.4	0	.00
18	.71	2	.00	1.2	1	.00	1.4	0	.00
19	.66	2	.00	1.2	1	.00	1.4	0	.00
20	.66	2	.00	1.2	1	.00	e1.5	1	.00
21	.66	2	.00	1.2	1	.00	e1.5	0	.00
22	.68	2	.00	2.8	3	.02	1.5	0	.00
23	.66	2	.00	4.8	5	.06	1.9	0	.00
24	.67	2	.00	1.7	2	.01	e1.9	0	.00
25	.67	0	.00	2.0	1	.01	e1.9	0	.00
26	.71	0	.00	1.7	1	.00	e1.9	0	.00
27	.85	0	.00	1.6	0	.00	e1.9	0	.00
28	.93	1	.00	1.5	0	.00	e1.9	0	.00
29	.93	1	.00	1.5	0	.00	e1.9	0	.00
30	.99	1	.00	1.4	0	.00	e1.9	0	.00
31	1.0	1	.00	---	---	---	e1.9	0	.00
TOTAL	24.25	---	0.00	50.2	---	0.13	48.2	---	0.00
		JANUARY			FEBRUARY			MARCH	
1	e1.9	0	.00	e2.1	1	.01	7.1	2	.04
2	e1.9	0	.00	e2.1	1	.01	7.8	2	.04
3	e1.9	0	.00	e2.1	1	.01	11	2	.06
4	e1.9	0	.00	e2.1	1	.01	7.4	2	.04
5	e1.9	0	.00	e2.1	1	.01	6.5	3	.05
6	e1.9	0	.00	e2.1	1	.01	24	7	.45
7	e1.9	0	.00	e2.1	1	.01	33	7	.62
8	e1.9	0	.00	e2.1	1	.01	59	14	2.4
9	e1.9	0	.00	e2.4	3	.02	82	10	2.2
10	e1.9	0	.00	2.8	1	.01	77	6	1.2
11	e1.9	0	.00	1.8	1	.00	71	4	.77
12	e1.9	0	.00	1.6	1	.00	51	3	.41
13	e1.9	0	.00	1.5	1	.00	38	2	.21
14	e1.9	0	.00	1.4	1	.00	30	2	.16
15	e1.9	1	.01	1.3	1	.00	25	2	.13
16	1.9	1	.01	1.2	1	.00	22	2	.12
17	2.1	1	.01	1.2	1	.00	21	2	.11
18	e2.1	1	.01	1.3	1	.00	20	2	.11
19	e2.1	1	.01	1.5	1	.00	32	3	.26
20	e2.1	1	.01	1.4	1	.00	30	2	.16
21	e2.1	1	.01	1.5	1	.00	24	2	.13
22	e2.1	1	.01	3.2	1	.01	23	2	.12
23	e2.1	1	.01	7.0	2	.04	23	2	.12
24	e2.1	1	.01	9.1	3	.07	36	3	.29
25	e2.1	1	.01	8.4	2	.05	33	2	.18
26	e2.1	1	.01	10	2	.05	25	2	.13
27	e2.1	1	.01	9.7	2	.05	22	2	.12
28	e2.1	1	.01	8.1	2	.04	49	4	.53
29	e2.1	1	.01	---	---	---	49	3	.40
30	e2.1	1	.01	---	---	---	40	3	.32
31	e2.1	1	.01	---	---	---	52	5	.70
TOTAL	61.9	---	0.17	93.2	---	0.42	1030.8	---	12.58

e Estimated.

10336645 GENERAL CREEK NEAR MEEKS BAY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARG (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	57	3	.46	36	2	.19	29	1	.08
2	49	3	.40	51	3	.41	31	1	.08
3	47	3	.38	65	5	.88	48	1	.13
4	40	3	.32	103	9	2.5	40	2	.22
5	46	3	.37	119	10	3.2	40	2	.22
6	66	5	.89	115	8	2.5	31	1	.08
7	88	7	1.7	127	15	6.5	32	1	.09
8	94	6	1.5	119	13	4.2	30	1	.08
9	96	6	1.6	92	4	.99	27	1	.07
10	107	7	2.0	68	4	.73	23	1	.06
11	105	4	1.1	52	3	.42	20	1	.05
12	87	4	.94	52	3	.42	17	1	.05
13	82	4	.89	49	2	.26	15	1	.04
14	99	5	1.3	44	1	.12	13	0	.00
15	102	5	1.4	45	1	.12	12	0	.00
16	97	6	1.6	54	3	.44	11	0	.00
17	100	7	1.9	70	4	.76	9.4	0	.00
18	102	6	1.7	70	3	.57	8.0	0	.00
19	106	6	1.7	49	3	.40	6.9	1	.02
20	114	7	2.2	51	3	.41	6.1	1	.02
21	113	4	1.2	57	2	.31	5.5	1	.01
22	66	2	.36	56	2	.30	5.0	1	.01
23	45	1	.12	52	1	.14	4.7	1	.01
24	37	1	.10	34	1	.09	4.4	1	.01
25	31	1	.08	30	1	.08	4.0	1	.01
26	28	1	.08	34	1	.09	3.8	1	.01
27	26	1	.07	43	2	.23	3.5	1	.01
28	26	1	.07	42	2	.23	3.3	1	.01
29	27	1	.07	33	1	.09	3.1	1	.01
30	30	1	.08	28	1	.08	3.0	1	.01
31	---	---	---	26	1	.07	---	---	---
TOTAL	2113	---	26.58	1866	---	27.73	489.7	---	1.39
		JULY			AUGUST			SEPTEMBER	
1	2.9	1	.01	.96	2	.01	.65	2	.00
2	2.7	1	.01	.92	2	.00	.66	2	.00
3	2.5	1	.01	.88	2	.00	.61	4	.01
4	2.3	1	.01	.81	2	.00	.60	2	.00
5	2.2	1	.01	.74	2	.00	.62	2	.00
6	2.0	1	.01	.65	2	.00	.64	2	.00
7	1.9	1	.01	.87	2	.00	.72	2	.00
8	1.8	1	.00	1.3	2	.01	.71	2	.00
9	1.6	1	.00	.78	2	.00	.63	2	.00
10	1.6	1	.00	.66	2	.00	.59	2	.00
11	1.7	1	.00	.66	2	.00	.74	2	.00
12	1.6	1	.00	.61	2	.00	.81	2	.00
13	1.6	1	.00	.56	2	.00	.73	2	.00
14	1.5	1	.00	.53	2	.00	.74	2	.00
15	1.4	1	.00	.53	2	.00	.74	2	.00
16	1.4	2	.01	.56	2	.00	.96	2	.01
17	1.5	2	.01	.56	2	.00	1.7	2	.01
18	1.5	2	.01	.59	2	.00	1.2	4	.01
19	1.4	2	.01	.58	2	.00	1.4	4	.02
20	1.3	2	.01	.60	2	.00	.84	2	.00
21	1.3	2	.01	.68	2	.00	.71	2	.00
22	1.3	2	.01	.66	3	.01	.64	2	.00
23	1.4	2	.01	.83	2	.00	.61	2	.00
24	1.4	2	.01	.84	2	.00	.61	2	.00
25	1.3	2	.01	.72	2	.00	.75	3	.01
26	1.1	2	.01	.66	2	.00	.90	2	.00
27	1.0	2	.01	.64	2	.00	.96	2	.01
28	.94	2	.01	.62	2	.00	1.1	2	.01
29	.93	2	.01	.62	2	.00	1.5	2	.01
30	.91	2	.00	.65	2	.00	1.2	2	.01
31	.87	2	.00	.63	2	.00	---	---	---
TOTAL	48.85	---	0.21	21.90	---	0.03	25.27	---	0.11
YEAR	5873.27		69.35						

10336645 GENERAL CREEK NEAR MEEKS BAY, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR						
07...	1240	35	0.0	13	1.2	42
MAY						
07...	2125	199	4.0	37	20	28

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA

LOCATION.--Lat 39°06'27", long 120°09'40", in NW 1/4 NE 1/4 sec.36, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, on right bank 300 ft upstream from bridge on State Highway 89, 1,000 ft upstream from Lake Tahoe, and 4.6 mi south of Tahoe City.

DRAINAGE AREA.--11.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 6,234.59 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1960, to Sept. 30, 1964, at datum 10.25 ft lower and Oct. 1, 1964, to Aug. 27, 1970, at datum 12 ft lower, at site 400 ft downstream.

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

AVERAGE DISCHARGE.--29 years, 37.6 ft³/s, 27,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s, Dec. 22 or 24, 1964, on basis of computation of flow through culvert; maximum gage height, 9.90 ft, site and datum then in use, Dec. 22, 1964; minimum discharge, 0.30 ft³/s, Sept. 19, 1968.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 8	1800	251	2.66	May 7	2030	*291	*2.87
Apr. 20	2200	209	2.51				

Minimum daily, 1.5 ft³/s, Oct. 1-9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	e2.3	e6.5	e6.1	e6.6	19	102	65	84	26	4.0	2.8
2	1.5	e2.4	e6.4	e6.1	e6.7	26	89	77	93	24	4.0	2.9
3	1.5	e3.2	6.4	e6.1	e6.8	31	94	94	117	22	4.0	2.9
4	1.5	2.8	6.0	e6.0	e6.8	27	86	131	110	21	3.8	2.6
5	1.5	2.6	5.9	e6.0	e6.8	23	93	172	106	19	3.9	2.6
6	1.5	3.1	5.9	e6.0	e6.8	63	114	187	108	18	3.8	2.6
7	1.5	3.0	5.9	e5.9	e6.7	114	134	219	114	17	4.6	2.6
8	1.5	2.9	5.9	e5.9	e6.6	206	147	216	107	16	6.8	2.6
9	1.5	2.9	5.9	e5.9	e6.6	180	153	178	112	15	5.6	2.6
10	1.6	3.7	5.9	e5.9	e6.5	140	169	150	104	14	4.6	2.6
11	1.7	3.4	5.9	e5.8	e6.4	142	166	126	100	13	4.1	3.2
12	1.9	3.6	5.9	5.8	e6.4	107	145	116	97	12	3.6	2.9
13	1.9	6.7	e5.8	e5.8	e6.3	82	138	106	91	11	3.4	2.6
14	1.9	4.5	e5.7	5.8	e6.2	65	154	97	85	11	3.2	2.6
15	1.9	3.3	e5.7	e5.8	e6.1	57	165	95	87	10	3.1	2.6
16	1.9	3.4	5.7	6.1	5.8	58	163	103	83	9.5	3.0	3.1
17	1.9	3.6	5.9	5.9	5.9	47	168	123	72	9.0	2.8	7.6
18	1.9	3.1	6.1	5.7	6.2	45	169	127	64	8.5	2.8	9.1
19	1.9	3.1	6.1	5.7	6.7	62	174	109	59	8.2	2.7	10
20	1.9	3.1	e6.1	6.1	6.0	57	184	110	53	7.7	2.7	6.8
21	1.9	3.1	e6.1	6.1	6.1	49	193	117	48	7.1	2.8	4.8
22	1.9	7.7	e6.1	6.1	13	48	138	119	44	6.8	2.5	4.0
23	e1.9	47	e6.1	6.1	16	49	109	111	44	6.3	2.5	3.7
24	e1.9	19	e6.1	6.1	16	67	91	87	42	5.8	2.6	3.4
25	e1.9	12	e6.1	6.1	16	69	79	77	39	5.6	2.6	3.4
26	e1.9	9.4	e6.1	7.2	20	53	69	81	36	5.1	2.5	3.3
27	e1.9	8.0	e6.1	7.1	20	48	64	92	36	4.8	2.3	3.1
28	e2.0	7.7	e6.1	7.1	20	108	61	93	35	4.6	2.3	3.1
29	e2.0	7.1	e6.1	6.4	---	99	59	81	31	4.4	2.6	4.0
30	e2.0	e6.8	e6.1	6.4	---	82	60	71	29	4.2	2.5	3.7
31	e2.1	---	e6.1	6.7	---	104	---	76	---	4.2	2.8	---
TOTAL	55.3	194.5	186.7	189.8	256.0	2327	3730	3606	2230	350.8	104.5	113.8
MEAN	1.78	6.48	6.02	6.12	9.14	75.1	124	116	74.3	11.3	3.37	3.79
MAX	2.1	47	6.5	7.2	20	206	193	219	117	26	6.8	10
MIN	1.5	2.3	5.7	5.7	5.8	19	59	65	29	4.2	2.3	2.6
AC-FT	110	386	370	376	508	4620	7400	7150	4420	696	207	226

CAL YR 1988 TOTAL 4812.0 MEAN 13.1 MAX 65 MIN 1.4 AC-FT 9540
WTR YR 1989 TOTAL 13344.4 MEAN 36.6 MAX 219 MIN 1.5 AC-FT 26470

e Estimated.

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975-78, 1980 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1980 to September 1983.
WATER TEMPERATURE: October 1974 to June 1978 (1977-78 storm season only), October 1979 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to June 1978 (1977-78 storm season only), October 1979 to current year.

REMARKS.--Sediment samples were collected during most days where a water temperature is published.

COOPERATION.--Selected sediment samples and water-temperature observations provided by University of California at Davis.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum daily mean, 1,200 mg/L, Jan. 13, 1980; minimum daily mean, 0 mg/L, many days during most years.
SEDIMENT LOAD: Maximum daily, 2,710 tons, Mar. 8, 1986; minimum daily, 0 ton, many days during most years.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily mean, 169 mg/L, Mar. 8; minimum daily mean, 0 mg/L, many days.
SEDIMENT LOAD: Maximum daily, 97 tons, Mar. 8; minimum daily, 0 ton, many days.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	3.5	9.0	11.0	---	---	---
2	---	7.5	1.0	---	---	.0	---	---	---	---	11.0	---
3	---	6.5	---	---	---	---	---	8.0	---	---	---	16.0
4	9.0	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	1.0	---	2.0	---	---	---	---
6	---	---	---	.0	---	1.5	4.5	---	9.5	---	---	---
7	---	---	---	---	---	1.0	3.0	4.5	---	---	14.5	---
8	---	---	---	---	.0	.5	7.5	2.5	---	---	13.5	8.5
9	---	---	---	.5	---	3.0	---	4.0	10.0	---	---	---
10	6.0	6.0	---	---	.0	2.0	2.0	6.0	---	10.0	---	---
11	---	---	1.0	---	---	2.5	---	---	---	---	---	---
12	---	---	---	---	---	4.0	4.5	7.0	4.5	12.0	---	---
13	---	2.0	---	---	---	3.5	---	---	12.5	---	---	---
14	---	1.0	---	---	---	---	5.5	---	13.5	---	---	10.0
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	4.0	6.0	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	8.5
18	---	---	---	---	---	---	---	2.0	---	---	---	9.5
19	---	---	1.5	---	---	---	2.0	---	---	---	---	9.5
20	---	---	---	.0	2.0	1.5	6.0	9.5	10.0	---	---	---
21	---	---	---	---	---	---	3.5	---	---	21.0	---	---
22	---	2.5	.0	---	1.0	---	---	6.5	---	---	17.0	---
23	---	2.5	---	---	4.5	---	---	---	---	---	---	---
24	5.0	2.0	---	---	3.0	3.5	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	10.0
26	---	---	---	---	---	---	3.5	---	---	---	---	---
27	---	---	---	---	---	---	---	3.0	---	---	---	---
28	---	---	---	---	---	3.0	---	---	---	---	---	---
29	---	---	---	---	---	1.0	---	---	---	---	---	11.0
30	---	---	---	2.0	---	---	---	---	7.5	---	---	---
31	---	---	---	.5	---	---	---	10.5	---	---	---	---

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	1.5	1	.00	e2.3	2	.01	e6.5	1	.02
2	1.5	1	.00	e2.4	3	.02	e6.4	1	.02
3	1.5	1	.00	e3.2	3	.03	6.4	1	.02
4	1.5	1	.00	2.8	2	.02	6.0	1	.02
5	1.5	1	.00	2.6	2	.01	5.9	1	.02
6	1.5	1	.00	3.1	3	.03	5.9	1	.02
7	1.5	1	.00	3.0	2	.02	5.9	0	.00
8	1.5	1	.00	2.9	2	.02	5.9	0	.00
9	1.5	1	.00	2.9	2	.02	5.9	0	.00
10	1.6	2	.01	3.7	3	.03	5.9	0	.00
11	1.7	1	.00	3.4	2	.02	5.9	0	.00
12	1.9	1	.01	3.6	3	.03	5.9	0	.00
13	1.9	1	.01	6.7	4	.07	e5.8	0	.00
14	1.9	1	.01	4.5	2	.02	e5.7	0	.00
15	1.9	1	.01	3.3	2	.02	e5.7	0	.00
16	1.9	1	.01	3.4	2	.02	5.7	0	.00
17	1.9	1	.01	3.6	2	.02	5.9	0	.00
18	1.9	1	.01	3.1	2	.02	6.1	0	.00
19	1.9	1	.01	3.1	2	.02	6.1	0	.00
20	1.9	1	.01	3.1	2	.02	e6.1	0	.00
21	1.9	1	.01	3.1	2	.02	e6.1	1	.02
22	1.9	1	.01	7.7	7	.15	e6.1	2	.03
23	e1.9	1	.01	47	24	3.5	e6.1	2	.03
24	e1.9	2	.01	19	6	.31	e6.1	1	.02
25	e1.9	1	.01	12	1	.03	e6.1	0	.00
26	e1.9	1	.01	9.4	1	.03	e6.1	0	.00
27	e1.9	1	.01	8.0	1	.02	e6.1	0	.00
28	e2.0	2	.01	7.7	1	.02	e6.1	0	.00
29	e2.0	2	.01	7.1	1	.02	e6.1	0	.00
30	e2.0	2	.01	e6.8	1	.02	e6.1	0	.00
31	e2.1	2	.01	---	---	---	e6.1	0	.00
TOTAL	55.3	---	0.21	194.5	---	4.59	186.7	---	0.22
		JANUARY			FEBRUARY			MARCH	
1	e6.1	0	.00	e6.6	1	.02	19	2	.10
2	e6.1	0	.00	e6.7	1	.02	26	7	.49
3	e6.1	0	.00	e6.8	1	.02	31	5	.42
4	e6.0	0	.00	e6.8	2	.04	27	4	.29
5	e6.0	0	.00	e6.8	2	.04	23	11	1.1
6	e6.0	0	.00	e6.8	2	.04	63	28	4.9
7	e5.9	0	.00	e6.7	2	.04	114	62	21
8	e5.9	1	.02	e6.6	3	.05	206	169	97
9	e5.9	1	.02	e6.6	3	.05	180	63	31
10	e5.9	1	.02	e6.5	3	.05	140	20	7.6
11	e5.8	1	.02	e6.4	3	.05	142	20	7.7
12	5.8	1	.02	e6.4	3	.05	107	12	3.5
13	e5.8	1	.02	e6.3	3	.05	82	7	1.5
14	5.8	1	.02	e6.2	3	.05	65	4	.70
15	e5.8	2	.03	e6.1	2	.03	57	4	.62
16	6.1	2	.03	5.8	2	.03	58	4	.63
17	5.9	2	.03	5.9	2	.03	47	2	.25
18	5.7	2	.03	6.2	2	.03	45	2	.24
19	5.7	2	.03	6.7	2	.04	62	4	.67
20	6.1	2	.03	6.0	2	.03	57	4	.62
21	6.1	2	.03	6.1	2	.03	49	3	.40
22	6.1	2	.03	13	11	.39	48	2	.26
23	6.1	2	.03	16	4	.17	49	2	.26
24	6.1	2	.03	16	3	.13	67	9	1.6
25	6.1	2	.03	16	4	.17	69	2	.37
26	7.2	2	.04	20	2	.11	53	2	.29
27	7.1	2	.04	20	2	.11	48	2	.26
28	7.1	2	.04	20	2	.11	108	30	10
29	6.4	2	.03	---	---	---	99	9	2.4
30	6.4	2	.03	---	---	---	82	4	.89
31	6.7	1	.02	---	---	---	104	13	3.7
TOTAL	189.8	---	0.67	256.0	---	1.98	2327	---	200.76

e Estimated.

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	102	6	1.7	65	5	.88	84	4	.91
2	89	6	1.4	77	4	.83	93	5	1.3
3	94	4	1.0	94	8	2.0	117	7	2.2
4	86	4	.93	131	15	5.3	110	5	1.5
5	93	6	1.5	172	24	13	106	4	1.1
6	114	11	3.9	187	28	15	108	4	1.2
7	134	16	6.3	219	58	41	114	3	.92
8	147	19	7.8	216	48	29	107	3	.87
9	153	20	8.8	178	16	7.7	112	4	1.2
10	169	24	11	150	9	3.6	104	3	.84
11	166	13	5.8	126	4	1.4	100	3	.81
12	145	6	2.3	116	3	.94	97	5	1.3
13	138	7	2.6	106	3	.86	91	5	1.2
14	154	11	4.6	97	3	.79	85	5	1.1
15	165	12	5.3	95	4	1.0	87	5	1.2
16	163	13	5.7	103	6	1.7	83	5	1.1
17	168	10	4.5	123	10	3.3	72	4	.78
18	169	11	5.0	127	8	2.7	64	4	.69
19	174	12	5.6	109	5	1.5	59	3	.48
20	184	15	7.5	110	6	1.8	53	2	.29
21	193	14	7.3	117	6	1.9	48	2	.26
22	138	6	2.2	119	5	1.6	44	2	.24
23	109	5	1.5	111	5	1.5	44	2	.24
24	91	5	1.2	87	5	1.2	42	2	.23
25	79	5	1.1	77	5	1.0	39	2	.21
26	69	5	.93	81	5	1.1	36	2	.19
27	64	5	.86	92	6	1.5	36	2	.19
28	61	5	.82	93	4	1.0	35	2	.19
29	59	4	.64	81	3	.66	31	2	.17
30	60	4	.65	71	4	.77	29	2	.16
31	---	---	---	76	6	1.2	---	---	---
TOTAL	3730	---	110.43	3606	---	147.73	2230	---	23.07
		JULY			AUGUST			SEPTEMBER	
1	26	2	.14	4.0	2	.02	2.8	1	.01
2	24	2	.13	4.0	2	.02	2.9	1	.01
3	22	2	.12	4.0	2	.02	2.9	1	.01
4	21	2	.11	3.8	2	.02	2.6	1	.01
5	19	2	.10	3.9	2	.02	2.6	1	.01
6	18	2	.10	3.8	2	.02	2.6	1	.01
7	17	2	.09	4.6	3	.04	2.6	1	.01
8	16	2	.09	6.8	4	.07	2.6	1	.01
9	15	3	.12	5.6	1	.02	2.6	1	.01
10	14	4	.15	4.6	1	.01	2.6	1	.01
11	13	5	.18	4.1	1	.01	3.2	1	.01
12	12	5	.16	3.6	1	.01	2.9	1	.01
13	11	4	.12	3.4	1	.01	2.6	1	.01
14	11	4	.12	3.2	1	.01	2.6	1	.01
15	10	3	.08	3.1	1	.01	2.6	1	.01
16	9.5	3	.08	3.0	1	.01	3.1	3	.03
17	9.0	2	.05	2.8	1	.01	7.6	5	.10
18	8.5	2	.05	2.8	1	.01	9.1	6	.15
19	8.2	1	.02	2.7	1	.01	10	3	.08
20	7.7	1	.02	2.7	1	.01	6.8	2	.04
21	7.1	1	.02	2.8	1	.01	4.8	2	.03
22	6.8	1	.02	2.5	1	.01	4.0	1	.01
23	6.3	1	.02	2.5	1	.01	3.7	1	.01
24	5.8	1	.02	2.6	1	.01	3.4	1	.01
25	5.6	1	.02	2.6	1	.01	3.4	1	.01
26	5.1	1	.01	2.5	1	.01	3.3	1	.01
27	4.8	1	.01	2.3	1	.01	3.1	1	.01
28	4.6	1	.01	2.3	1	.01	3.1	1	.01
29	4.4	2	.02	2.6	1	.01	4.0	3	.03
30	4.2	2	.02	2.5	1	.01	3.7	1	.01
31	4.2	2	.02	2.8	1	.01	---	---	---
TOTAL	350.8	---	2.22	104.5	---	0.47	113.8	---	0.69
YEAR	13344.4		493.04						

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV										
23...	0955	59	2.5	40	6.4	51	--	--	--	--
23...	1025	59	2.5	37	5.9	64	--	--	--	--
MAR										
07...	1310	130	1.0	111	39	47	65	82	97	100
MAY										
03...	1850	113	2.0	25	7.6	76	--	--	--	--
07...	2015	281	4.5	158	120	45	--	--	--	--
08...	0730	209	2.5	26	15	45	--	--	--	--

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA

LOCATION.--Lat 39°07'56", long 120°09'24", in NW 1/4 SE 1/4 sec.24, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, Tahoe National Forest, on right bank 165 ft downstream from State Highway 89 bridge, 2.1 mi north of Tahoe Pines, and 2.6 mi southwest of Tahoe City.

DRAINAGE AREA.--9.70 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,230 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for flows below 1 ft³/s and estimated discharges, which are fair. Minor diversion for local water supply upstream from station.

AVERAGE DISCHARGE.--17 years, 27.1 ft³/s, 19,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,800 ft³/s, Dec. 19, 1981, gage height, 8.05 ft, from rating curve extended above 800 ft³/s; no flow for many days during 1977-78, 1981, 1988.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 23	2330	(a)	*5.83	Apr. 20	1900	162	5.59
Mar. 8	1845	137	5.47	May 7	1845	*213	5.80

(a) Backwater from ice.

Minimum daily, 0.16 ft³/s, Oct. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.55	3.9	3.3	e3.2	10	71	53	55	18	1.7	.78
2	e.16	.78	4.4	3.3	2.6	11	65	62	63	17	1.6	.73
3	.17	e1.1	4.2	3.2	2.9	10	72	75	79	15	1.6	.74
4	e.19	e.95	3.7	3.3	2.9	9.3	62	101	77	14	1.5	.72
5	.20	.81	3.9	3.0	3.1	14	67	123	74	13	1.5	.70
6	e.22	1.0	4.1	3.5	3.1	43	80	130	76	12	1.4	.71
7	.25	.94	e4.0	3.3	3.1	68	92	152	80	11	2.2	.66
8	.28	.78	4.0	3.1	3.0	113	101	150	78	11	4.4	.75
9	.32	.83	e4.0	3.1	3.1	107	106	129	84	10	2.9	.72
10	.35	2.5	e4.0	3.2	3.1	81	118	111	80	9.3	2.2	.71
11	.46	2.6	e4.0	3.2	3.0	90	117	95	78	8.6	1.9	1.2
12	.52	5.1	e4.0	3.0	2.9	64	103	87	76	7.9	1.7	1.4
13	.53	12	e4.0	3.0	2.8	49	100	82	72	7.2	1.6	1.0
14	.57	5.0	e4.0	3.0	2.7	39	113	75	67	6.7	1.5	.91
15	.57	3.4	e4.0	3.0	2.7	35	121	77	67	6.2	1.3	.86
16	.61	2.8	3.9	3.0	2.7	34	120	82	63	6.0	1.2	1.2
17	.6.	2.4	3.5	3.0	2.8	30	125	94	55	5.5	1.1	9.5
18	.63	1.9	3.3	3.0	2.9	28	125	93	50	5.2	1.1	6.8
19	.59	1.8	3.3	2.8	2.8	38	129	81	46	4.9	1.1	6.1
20	.57	1.7	3.4	2.9	2.7	34	134	83	40	4.5	1.0	3.7
21	.54	1.6	e3.4	3.0	2.9	30	139	86	35	4.0	1.2	2.6
22	.50	9.8	e3.4	3.0	e8.5	30	99	86	32	3.7	.98	2.2
23	.54	41	e3.4	3.0	e16	31	76	79	32	3.6	1.1	2.0
24	.57	14	e3.4	3.0	e15	47	63	63	30	3.2	1.3	1.8
25	.57	8.1	e3.4	3.0	e14	44	55	57	28	2.9	1.1	1.7
26	.57	6.6	e3.4	3.0	e14	34	47	61	27	2.6	1.0	1.6
27	.56	e6.0	e3.4	3.0	13	31	44	67	26	2.3	.96	1.5
28	.52	5.4	e3.4	3.0	11	72	44	64	24	2.2	.86	1.5
29	.52	e5.0	3.3	3.0	---	62	44	57	22	2.1	.79	2.7
30	.52	e4.5	3.3	3.0	---	51	45	49	20	2.0	.72	2.6
31	.53	---	3.3	e3.0	---	73	---	51	---	1.8	.75	---
TOTAL	13.92	150.94	114.7	95.2	152.5	1412.3	2677	2655	1636	223.4	45.26	60.09
MEAN	.45	5.03	3.70	3.07	5.45	45.6	89.2	85.6	54.5	7.21	1.46	2.00
MAX	.63	41	4.4	3.5	16	113	139	152	84	18	4.4	9.5
MIN	.16	.55	3.3	2.8	2.6	9.3	44	49	20	1.8	.72	.66
AC-FT	28	299	228	189	302	2800	5310	5270	3250	443	90	119

CAL YR 1988 TOTAL 3166.57 MEAN 8.65 MAX 41 MIN .00 AC-FT 6280
WTR YR 1989 TOTAL 9236.31 MEAN 25.3 MAX 152 MIN .16 AC-FT 18320

e Estimated.

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-78, 1980 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to September 1983.
WATER TEMPERATURE: October 1972 to June 1978 (storm season only for water years 1977-78), October 1979 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to June 1978 (storm season only for water years 1977-78), October 1979 to current year.

REMARKS.--Sediment samples were collected during most days where a water temperature is published.

COOPERATION.--Selected sediment samples and water-temperature observations provided by University of California at Davis.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum daily mean, 1,510 mg/L, Dec. 19, 1981; minimum daily mean, 0 mg/L, many days during each year.
SEDIMENT LOAD: Maximum daily, 3,720 tons, Dec. 19, 1981; minimum daily, 0 ton, many days during each year.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily mean, 214 mg/L, Sept. 17; minimum daily mean, 0 mg/L, many days.
SEDIMENT LOAD: Maximum daily, 27 tons, Mar 8; minimum daily, 0 ton, many days.

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	2.0	8.5	10.0	---	---	---
2	---	6.5	.0	---	---	.0	---	---	---	---	---	---
3	---	5.0	---	---	---	---	---	8.0	---	---	---	17.0
4	9.0	---	---	---	---	---	---	---	---	---	---	---
5	---	7.0	---	---	---	.0	---	2.0	---	---	---	17.5
6	---	---	---	.0	---	.0	4.5	---	11.0	---	---	---
7	---	---	---	---	---	.0	2.0	4.0	---	---	---	---
8	---	---	---	---	---	.5	7.0	2.5	---	---	14.5	---
9	---	4.5	---	---	.0	2.0	---	4.5	9.0	---	---	---
10	8.0	4.0	---	---	---	1.5	1.5	5.5	---	11.5	---	---
11	---	---	.0	.0	.0	1.5	---	---	---	---	---	---
12	---	5.0	---	---	---	3.5	4.0	5.5	4.0	14.0	---	13.5
13	---	4.0	---	---	---	4.0	---	---	12.5	---	---	---
14	---	.5	---	---	---	---	4.0	---	13.0	---	---	10.5
15	---	---	---	---	---	.0	---	---	---	---	---	---
16	---	---	.0	---	---	---	---	5.5	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	10.0
18	---	---	---	---	---	---	---	2.5	---	---	---	9.5
19	---	---	---	---	---	---	2.0	---	---	---	---	7.0
20	---	---	---	.0	.5	2.0	4.0	8.5	11.5	---	---	---
21	---	---	---	---	---	---	4.5	---	---	21.0	---	---
22	---	.0	---	---	.0	---	---	6.5	---	---	18.5	---
23	---	.0	---	---	.0	---	---	---	---	---	---	---
24	4.0	.0	---	---	.0	2.0	---	---	---	---	---	---
25	---	.5	---	---	.0	---	---	---	---	---	---	9.5
26	---	---	---	---	---	---	3.0	---	---	---	---	---
27	---	---	---	---	---	---	---	3.0	---	---	---	---
28	---	---	---	---	---	2.5	1.5	---	---	---	---	---
29	---	---	---	---	---	1.0	---	---	---	---	---	10.5
30	---	---	.0	---	---	---	---	---	10.0	---	---	---
31	---	---	---	.5	---	---	---	10.5	---	---	---	---

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.16	0	.00	.55	1	.00	3.9	1	.01
2	e.16	0	.00	.78	4	.01	4.4	1	.01
3	.17	0	.00	e1.1	7	.02	4.2	1	.01
4	e.19	0	.00	e.95	1	.00	3.7	1	.01
5	.20	0	.00	.81	0	.00	3.9	1	.01
6	e.22	0	.00	1.0	1	.00	4.1	1	.01
7	.25	0	.00	.94	1	.00	e4.0	1	.01
8	.28	0	.00	.78	2	.00	4.0	1	.01
9	.32	0	.00	.83	3	.01	e4.0	1	.01
10	.35	0	.00	2.5	3	.02	e4.0	1	.01
11	.46	1	.00	2.6	2	.01	e4.0	1	.01
12	.52	1	.00	5.1	8	.11	e4.0	1	.01
13	.53	1	.00	12	6	.19	e4.0	1	.01
14	.57	1	.00	5.0	6	.08	e4.0	1	.01
15	.57	1	.00	3.4	3	.03	e4.0	1	.01
16	.61	1	.00	2.8	1	.01	3.9	1	.01
17	.63	1	.00	2.4	1	.01	3.5	1	.01
18	.63	1	.00	1.9	1	.01	3.3	1	.01
19	.59	1	.00	1.8	1	.00	3.3	1	.01
20	.57	1	.00	1.7	1	.00	3.4	1	.01
21	.54	1	.00	1.6	3	.01	e3.4	1	.01
22	.50	1	.00	9.8	16	.77	e3.4	1	.01
23	.54	1	.00	41	23	2.9	e3.4	1	.01
24	.57	1	.00	14	8	.30	e3.4	1	.01
25	.57	1	.00	8.1	4	.09	e3.4	1	.01
26	.57	1	.00	6.6	2	.04	e3.4	1	.01
27	.56	1	.00	e6.0	1	.02	e3.4	1	.01
28	.52	1	.00	5.4	1	.01	e3.4	1	.01
29	.52	1	.00	e5.0	1	.01	3.3	1	.01
30	.52	1	.00	e4.5	1	.01	3.3	1	.01
31	.53	1	.00	---	---	---	3.3	1	.01
TOTAL	13.92	---	0.00	150.94	---	4.67	114.7	---	0.31
		JANUARY			FEBRUARY			MARCH	
1	3.3	1	.01	e3.2	1	.01	10	1	.03
2	3.3	0	.00	2.6	1	.01	11	1	.03
3	3.2	0	.00	2.9	1	.01	10	1	.03
4	3.3	0	.00	2.9	1	.01	9.3	1	.03
5	3.0	0	.00	3.1	1	.01	14	7	.26
6	3.5	0	.00	3.1	1	.01	43	24	2.8
7	3.3	0	.00	3.1	1	.01	68	30	5.5
8	3.1	0	.00	3.0	1	.01	113	84	27
9	3.1	0	.00	3.1	1	.01	107	29	8.4
10	3.2	1	.01	3.1	1	.01	81	7	1.5
11	3.2	1	.01	3.0	1	.01	90	6	1.5
12	3.0	1	.01	2.9	1	.01	64	3	.52
13	3.0	1	.01	2.8	1	.01	49	3	.40
14	3.0	1	.01	2.7	1	.01	39	2	.21
15	3.0	1	.01	2.7	1	.01	35	2	.19
16	3.0	1	.01	2.7	1	.01	34	2	.18
17	3.0	1	.01	2.8	1	.01	30	2	.16
18	3.0	1	.01	2.9	1	.01	28	2	.15
19	2.8	1	.01	2.8	1	.01	38	6	.62
20	2.9	1	.01	2.7	2	.01	34	4	.37
21	3.0	1	.01	2.9	2	.02	30	3	.24
22	3.0	1	.01	e8.5	4	.09	30	2	.16
23	3.0	1	.01	e16	9	.39	31	1	.08
24	3.0	1	.01	e15	3	.12	47	5	.63
25	3.0	1	.01	e14	5	.19	44	2	.24
26	3.0	1	.01	e14	1	.04	34	2	.18
27	3.0	1	.01	13	1	.04	31	1	.08
28	3.0	1	.01	11	1	.03	72	9	1.7
29	3.0	1	.01	---	---	---	62	2	.33
30	3.0	1	.01	---	---	---	51	2	.28
31	e3.0	1	.01	---	---	---	73	6	1.2
TOTAL	95.2	---	0.23	152.5	---	1.12	1412.3	---	55.00

e Estimated.

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	71	3	.58	53	1	.14	55	1	.15
2	65	3	.53	62	2	.33	63	2	.34
3	72	2	.39	75	2	.40	79	2	.43
4	62	3	.50	101	3	.82	77	2	.42
5	67	3	.54	123	5	1.7	74	2	.40
6	80	4	.86	130	4	1.4	76	3	.62
7	92	5	1.2	152	35	18	80	3	.65
8	101	6	1.6	150	21	8.5	78	3	.63
9	106	6	1.7	129	5	1.7	84	4	.91
10	118	7	2.2	111	7	2.1	80	3	.65
11	117	6	1.9	95	6	1.5	78	3	.63
12	103	3	.83	87	5	1.2	76	4	.82
13	100	4	1.1	82	3	.66	72	3	.58
14	113	6	1.8	75	1	.20	67	3	.54
15	121	6	2.0	77	3	.62	67	3	.54
16	120	4	1.3	82	4	.89	63	3	.51
17	125	5	1.7	94	4	1.0	55	2	.30
18	125	5	1.7	93	4	1.0	50	2	.27
19	129	6	2.1	81	2	.44	46	2	.25
20	134	7	2.5	83	3	.67	40	2	.22
21	139	8	3.0	86	3	.70	35	2	.19
22	99	2	.53	86	3	.70	32	2	.17
23	76	1	.21	79	3	.64	32	2	.17
24	63	1	.17	63	2	.34	30	2	.16
25	55	1	.15	57	1	.15	28	2	.15
26	47	1	.13	61	1	.16	27	2	.15
27	44	1	.12	67	0	.00	26	2	.14
28	44	0	.00	64	0	.00	24	2	.13
29	44	0	.00	57	0	.00	22	2	.12
30	45	0	.00	49	1	.13	20	2	.11
31	---	---	---	51	1	.14	---	---	---
TOTAL	2677	---	31.34	2655	---	46.23	1636	---	11.35
		JULY			AUGUST			SEPTEMBER	
1	18	2	.10	1.7	3	.01	.78	1	.00
2	17	2	.09	1.6	3	.01	.73	1	.00
3	15	2	.08	1.6	3	.01	.74	2	.00
4	14	2	.08	1.5	2	.01	.72	2	.00
5	13	2	.07	1.5	1	.00	.70	1	.00
6	12	2	.06	1.4	1	.00	.71	3	.01
7	11	2	.06	2.2	1	.01	.66	1	.00
8	11	2	.06	4.4	2	.02	.75	1	.00
9	10	2	.05	2.9	1	.01	.72	1	.00
10	9.3	2	.05	2.2	1	.01	.71	1	.00
11	8.6	1	.02	1.9	1	.01	1.2	2	.01
12	7.9	1	.02	1.7	1	.00	1.4	2	.01
13	7.2	0	.00	1.6	1	.00	1.0	2	.01
14	6.7	0	.00	1.5	1	.00	.91	2	.00
15	6.2	0	.00	1.3	1	.00	.86	2	.00
16	6.0	0	.00	1.2	1	.00	1.2	3	.01
17	5.5	0	.00	1.1	1	.00	9.5	214	7.9
18	5.2	0	.00	1.1	1	.00	6.8	8	.15
19	4.9	0	.00	1.1	1	.00	6.1	5	.08
20	4.5	1	.01	1.0	1	.00	3.7	2	.02
21	4.0	2	.02	1.2	1	.00	2.6	2	.01
22	3.7	3	.03	.98	1	.00	2.2	2	.01
23	3.6	3	.03	1.1	1	.00	2.0	2	.01
24	3.2	3	.03	1.3	1	.00	1.8	2	.01
25	2.9	3	.02	1.1	1	.00	1.7	2	.01
26	2.6	3	.02	1.0	1	.00	1.6	2	.01
27	2.3	3	.02	.96	1	.00	1.5	2	.01
28	2.2	3	.02	.86	1	.00	1.5	2	.01
29	2.1	3	.02	.79	1	.00	2.7	5	.04
30	2.0	3	.02	.72	1	.00	2.6	3	.02
31	1.8	3	.01	.75	1	.00	---	---	---
TOTAL	223.4	---	0.99	45.26	---	0.10	60.09	---	8.34
YEAR	9236.31		159.68						

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
NOV									
22...	2300	28	0.0	49	3.7	72	--	--	--
23...	0855	65	0.0	26	4.6	58	--	--	--
MAR									
07...	1405	87	0.5	45	11	60	74	86	100
APR									
20...	1035	110	4.0	4	1.2	45	--	--	--
MAY									
07...	1920	210	4.0	98	56	52	--	--	--
22...	1845	102	6.5	6	1.7	54	--	--	--
SEP									
17...	0620	15	9.0	1260	51	100	--	--	--
17...	0725	15	10.0	1690	68	100	--	--	--

10336698 THIRD CREEK NEAR CRYSTAL BAY, NV

LOCATION.--Lat 39°14'26", long 119°56'41", in SW1/4NE1/4 sec.22, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank 50 ft upstream from bridge on Lakeshore Boulevard, 600 ft upstream from mouth, and 3 mi east of Crystal Bay.

DRAINAGE AREA.--6.05 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to September 1973, February to September 1975, and October 1977 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 5,234.03 ft, above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. One transmountain diversion to Washoe Valley.

AVERAGE DISCHARGE.--16 years (1970-73, 1978-89), 8.34 ft³/s, 6,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150 ft³/s, June 18, 1982, gage height, 3.40 ft; maximum gage height, 3.77 ft, Jan. 23, 1973, backwater from ice; minimum discharge, 0.66 ft³/s, Oct. 13, 14, 16-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 25	0730	Ice jam	*3.28	May 8	1730	*43	2.73
Apr. 20	2045	32	2.61	June 4	1130	40	2.70

Minimum daily, 1.4 ft³/s, Oct. 4,5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.6	2.3	2.8	3.0	5.7	5.9	12	13	4.0	1.8	1.9
2	1.5	1.6	2.4	2.7	e2.7	e5.7	7.3	14	14	3.8	1.8	1.8
3	1.5	1.6	2.4	2.7	e2.6	e5.7	8.5	17	18	3.6	1.8	1.8
4	1.4	1.5	2.3	2.8	e2.6	e5.7	7.7	23	27	3.5	1.8	1.8
5	1.4	1.5	2.4	e2.7	e2.6	5.7	6.8	26	20	3.2	1.8	1.7
6	1.5	1.5	2.4	e2.7	e2.6	7.4	8.1	24	20	3.1	1.8	1.7
7	1.5	1.5	2.4	e2.6	e2.6	8.6	9.3	29	20	3.0	2.6	1.8
8	1.5	1.6	2.3	e2.5	e2.6	11	9.9	33	21	2.9	4.4	1.8
9	1.5	1.6	2.3	2.5	e2.6	7.9	11	29	20	2.7	3.0	2.0
10	1.6	1.6	2.4	e2.5	e2.6	6.9	12	24	20	2.7	3.9	1.9
11	1.6	1.6	2.4	e2.5	2.6	8.4	13	20	17	2.7	2.1	1.9
12	1.7	1.5	2.5	e2.5	2.6	6.8	13	18	16	2.6	2.1	1.9
13	1.7	2.0	2.5	e2.5	2.6	6.5	13	16	16	2.5	2.0	1.8
14	1.7	1.9	2.5	e2.5	2.6	5.5	13	15	15	2.5	2.0	1.8
15	1.7	1.9	e2.5	e2.5	2.5	5.3	15	15	15	2.4	1.9	1.8
16	1.7	1.9	e2.4	2.5	2.4	5.5	16	16	14	2.4	2.8	2.4
17	1.7	1.9	2.4	2.5	2.4	5.4	16	20	12	2.3	1.8	3.6
18	1.7	1.9	2.5	2.5	2.5	5.8	18	20	11	2.3	1.9	4.2
19	1.6	1.9	2.4	2.6	2.6	7.3	21	18	10	2.2	1.8	3.3
20	1.7	1.9	2.5	2.7	2.5	6.6	24	20	8.9	2.1	2.5	2.5
21	1.7	1.9	e2.5	2.6	2.5	6.4	25	21	8.3	2.1	1.9	2.2
22	1.7	4.7	e2.5	2.6	6.2	6.3	18	21	7.9	2.1	1.9	2.1
23	1.7	4.6	e2.5	2.4	8.6	6.0	16	20	7.6	2.1	1.9	2.0
24	1.7	2.4	e2.6	e2.4	8.0	8.9	14	15	6.3	2.0	2.0	2.0
25	1.6	2.3	e2.6	e2.4	7.5	7.8	13	14	5.8	2.0	1.9	2.1
26	1.7	2.2	e2.6	e2.5	6.5	6.3	11	16	5.6	2.0	1.9	2.1
27	1.7	2.2	e2.6	2.5	6.1	5.8	11	17	5.5	1.9	1.8	2.1
28	1.7	2.2	e2.7	2.5	5.8	6.9	10	16	5.2	1.9	1.8	2.1
29	1.6	2.2	e2.7	2.6	---	6.2	10	13	4.5	1.9	1.8	4.1
30	1.5	2.2	2.7	2.9	---	6.0	10	12	4.2	1.9	1.8	2.6
31	1.6	---	3.0	3.1	---	6.2	---	12	---	1.9	1.9	---
TOTAL	49.9	60.9	77.2	80.3	103.0	206.2	386.5	586	388.8	78.3	66.2	66.8
MEAN	1.61	2.03	2.49	2.59	3.68	6.65	12.9	18.9	13.0	2.53	2.14	2.23
MAX	1.7	4.7	3.0	3.1	8.6	11	25	33	27	4.0	4.4	4.2
MIN	1.4	1.5	2.3	2.4	2.4	5.3	5.9	12	4.2	1.9	1.8	1.7
AC-FT	99	121	153	159	204	409	767	1160	771	155	131	132

CAL YR 1988 TOTAL 986.5 MEAN 2.70 MAX 7.8 MIN 1.1 AC-FT 1960
WTR YR 1989 TOTAL 2150.1 MEAN 5.89 MAX 33 MIN 1.4 AC-FT 4260

e Estimated

10336698 THIRD CREEK NEAR CRYSTAL BAY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to 1973, 1978-1984 and 1988 to current year.

REMARKS.--In November 1987, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Listed herein, the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) may sometimes exceed the respective total due to unavoidable errors associated with subsampling and sample processing, or limitations on precision and accuracy of the analytical procedure.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
OCT										
11...	1020	1.6	82	--	12.5	9.5	--	--	--	--
25...	1045	1.8	82	7.80	12.5	8.5	9.0	96	--	--
NOV										
13...	1130	2.8	88	--	--	--	--	--	--	--
22...	2030	7.0	96	--	--	--	--	--	--	--
28...	1425	3.7	85	7.80	3.0	4.5	10.1	97	0.002	0.001
DEC										
23...	1510	E2.5	64	7.30	-1.0	0.0	11.3	97	--	--
JAN										
04...	1310	E2.6	78	--	3.0	1.5	--	--	--	--
17...	1325	E2.0	75	--	2.0	1.5	--	--	--	--
30...	1350	2.9	78	7.70	4.0	4.0	10.2	97	--	--
FEB										
14...	1255	E2.5	80	--	1.0	1.0	--	--	--	--
22...	1445	8.3	107	--	3.5	3.0	--	--	--	--
22...	1613	7.0	--	--	--	--	--	--	--	--
22...	2015	4.9	99	--	2.5	2.5	--	--	--	--
27...	1345	4.2	96	7.80	6.0	5.5	9.8	98	--	--
MAR										
07...	1625	8.0	101	--	6.0	5.0	--	--	--	--
08...	1310	8.9	100	--	4.5	4.0	--	--	--	--
08...	1740	8.9	90	--	4.5	3.5	--	--	--	--
24...	1105	7.2	106	7.50	5.0	3.5	10.4	99	--	--
APR										
06...	1630	8.0	83	--	14.5	10.5	--	--	--	--
06...	2325	10	66	--	4.0	4.5	--	--	--	--
11...	2350	14	48	--	4.5	4.0	--	--	--	--
18...	2110	26	35	--	8.0	4.0	--	--	--	--
19...	0040	25	36	--	5.0	3.5	--	--	--	--
27...	1430	10	54	8.20	9.0	6.0	9.6	97	--	--

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)
OCT										
11...	--	<0.006	--	0.004	--	--	0.06	--	--	--
25...	--	<0.016	--	<0.004	--	--	0.11	--	--	--
NOV										
13...	--	0.066	--	0.010	--	--	0.80	--	--	--
22...	--	0.066	--	0.002	--	--	0.80	--	--	--
28...	<0.010	<0.010	0.003	<0.002	0.09	--	0.10	0.20	--	--
DEC										
23...	0.008	0.009	0.005	0.003	0.11	0.08	0.12	0.09	0.13	0.09
JAN										
04...	--	0.010	--	0.001	--	--	0.08	--	--	--
17...	--	0.010	--	0.002	--	--	0.06	--	--	--
30...	0.017	0.013	0.003	0.003	0.09	0.05	0.10	0.05	0.11	0.06
FEB										
14...	--	0.018	--	0.004	--	--	0.06	--	--	--
22...	--	0.058	--	0.008	--	--	2.0	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	0.059	--	0.005	--	--	0.64	--	--	--
27...	--	0.051	0.002	--	0.16	--	0.16	--	--	--
MAR										
07...	--	0.054	--	0.001	--	--	1.0	--	--	--
08...	--	0.073	--	0.001	--	--	0.77	--	--	--
08...	--	0.072	--	0.004	--	--	1.5	--	--	--
24...	0.097	0.045	0.021	0.006	1.5	0.16	1.6	0.17	1.7	0.21
APR										
06...	--	0.064	--	0.004	--	--	0.23	--	--	--
06...	--	0.090	--	0.005	--	--	0.41	--	--	--
11...	--	0.042	--	0.003	--	--	0.43	--	--	--
18...	0.030	0.026	0.006	0.005	1.7	0.17	1.7	0.17	1.7	0.20
19...	0.027	0.029	0.004	0.005	0.84	0.16	0.84	0.16	0.87	0.19
27...	--	--	--	--	--	--	0.17	--	--	--

10336698 THIRD CREEK NEAR CRYSTAL BAY, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT									
11...	0.017	--	--	0.011	320	--	2	0.01	--
25...	0.026	--	--	0.010	420	--	3	0.01	--
NOV									
13...	0.045	--	--	0.030	3200	--	22	0.17	--
22...	0.052	--	--	0.018	2900	--	77	1.5	--
28...	0.024	0.008	0.004	0.011	440	--	3	0.03	--
DEC									
23...	0.021	0.017	0.007	0.007	510	220	8	--	--
JAN									
04...	0.021	--	--	0.008	450	--	4	--	--
17...	0.019	--	--	0.007	430	--	4	--	--
30...	0.020	0.019	0.012	0.008	560	250	6	0.05	--
FEB									
14...	0.030	--	--	0.008	380	--	2	--	95
22...	0.414	--	--	0.012	26000	--	557	12	96
22...	--	--	--	--	--	--	208	3.9	96
22...	0.117	--	--	0.018	4200	--	105	1.4	95
27...	0.039	--	--	0.011	1000	--	14	0.15	--
MAR									
07...	0.189	--	--	0.026	9200	--	226	4.9	83
08...	0.172	--	--	0.018	5800	--	214	5.1	87
08...	0.232	--	--	0.021	7700	--	380	9.1	77
24...	0.424	0.027	0.059	0.021	12000	80	857	17	37
APR									
06...	0.059	--	--	0.011	2500	--	359	7.8	11
06...	0.080	--	--	0.009	3000	--	509	14	10
11...	0.080	--	--	0.009	2300	--	283	11	15
18...	0.175	0.022	0.013	0.010	7400	75	515	36	30
19...	0.100	0.022	0.011	0.007	3600	220	197	13	38
27...	--	--	--	--	590	--	12	0.32	--

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
MAY										
05...	1045	27	37	--	13.0	5.5	--	--	--	--
09...	1435	30	42	7.70	9.5	6.5	9.7	100	--	--
09...	1535	--	--	--	--	--	--	--	--	--
09...	2050	34	28	--	7.5	5.0	--	--	--	--
19...	1320	21	38	--	12.0	7.0	--	--	--	--
26...	1310	15	38	7.60	17.5	9.5	9.1	100	--	--
JUN										
02...	1255	13	37	--	18.0	10.5	--	--	--	--
04...	1135	40	34	--	8.5	7.0	--	--	--	--
04...	1510	32	30	--	13.5	9.5	--	--	--	--
15...	1350	14	35	7.80	18.5	14.0	8.1	99	--	--
JUL										
07...	1350	2.7	61	7.90	23.0	16.0	7.8	98	0.025	0.012
20...	1240	2.0	69	--	24.5	17.0	--	--	--	--
AUG										
03...	1300	1.8	71	8.00	21.0	14.5	7.8	96	--	--
07...	1355	3.2	117	--	15.5	14.0	--	--	--	--
08...	1100	6.0	73	--	13.5	13.0	--	--	--	--
08...	1425	5.3	73	--	24.5	22.0	--	--	--	--
08...	1445	5.3	--	--	--	--	--	--	--	--
08...	1605	4.5	55	--	16.0	14.5	--	--	--	--
16...	0900	2.6	81	8.50	18.0	12.0	8.6	100	--	--
SEP										
11...	1610	1.5	76	--	13.0	11.5	--	--	--	--
17...	1820	2.1	80	--	7.0	9.5	--	--	--	--
29...	1435	8.3	69	--	12.0	10.5	--	--	--	--

PYRAMID AND WINNEMUCCA LAKES BASIN

10336698 THIRD CREEK NEAR CRYSTAL BAY, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
MAY										
05...	--	--	--	--	--	--	--	0.26	--	--
09...	--	--	0.024	0.015	0.002	1.7	0.15	1.8	0.15	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	0.017	--	0.001	--	--	0.20	--	--
19...	--	--	0.010	--	0.005	--	--	0.31	--	--
26...	--	--	0.008	0.011	0.004	0.14	0.09	0.15	0.09	--
JUN										
02...	--	--	0.007	--	0.002	--	--	0.11	--	--
04...	--	--	0.019	--	0.003	--	--	1.8	--	--
04...	--	--	0.011	--	0.003	--	--	0.30	--	--
15...	--	--	0.005	--	0.00	--	--	0.16	--	--
JUL										
07...	<0.001	0.037	<0.027	0.007	0.002	0.09	0.05	0.10	0.05	0.13
20...	--	--	0.019	--	0.010	--	--	0.13	--	--
AUG										
03...	--	--	0.009	--	0.002	--	--	0.10	--	--
07...	--	--	0.049	--	0.005	--	--	2.8	--	--
08...	--	--	0.032	--	0.003	--	--	1.3	--	--
08...	--	--	0.023	--	0.003	--	--	1.2	--	--
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	0.035	--	0.004	--	--	4.6	--	--
16...	--	--	0.013	0.008	0.005	0.16	0.05	0.17	0.05	--
SEP										
11...	--	--	0.007	--	0.004	--	--	0.08	--	--
17...	--	--	0.012	--	0.002	--	--	0.21	--	--
29...	--	--	0.009	--	0.002	--	--	0.39	--	--

DATE	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY										
05...	--	--	--	--	--	810	--	33	2.4	--
09...	0.18	0.522	0.033	0.068	0.026	13000	200	134	11	34
09...	--	--	--	--	--	--	--	167	--	65
09...	--	0.051	--	--	0.009	920	--	65	6.0	--
19...	--	0.035	--	--	0.008	540	--	14	0.79	--
26...	0.10	0.028	0.017	0.007	0.004	540	250	8	0.32	--
JUN										
02...	--	0.023	--	--	0.007	440	--	7	0.24	--
04...	--	0.691	--	--	0.027	19000	--	893	96	46
04...	--	0.089	--	--	0.011	2400	--	130	11	37
15...	--	0.027	--	--	0.008	540	--	12	0.44	--
JUL										
07...	--	0.035	0.031	0.011	0.010	430	200	5	0.04	--
20...	--	0.051	--	--	0.014	430	--	4	0.02	--
AUG										
03...	--	0.050	--	--	0.011	360	--	3	0.01	--
07...	--	0.546	--	--	0.045	14000	--	471	4.1	100
08...	--	0.476	--	--	0.033	10000	--	323	5.2	99
08...	--	0.612	--	--	0.031	11000	--	153	2.2	97
08...	--	--	--	--	--	--	--	2680	38	100
08...	--	1.88	--	--	0.044	100000	--	3770	46	100
16...	0.06	0.045	0.040	0.017	0.013	1300	110	44	0.31	81
SEP										
11...	--	0.051	--	--	0.012	470	--	4	0.02	--
17...	--	0.047	--	--	0.016	870	--	14	0.08	--
29...	--	0.115	--	--	0.019	2900	--	61	1.4	100

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV

LOCATION.--Lat 39°14'25", long 119°56'38", in SW1/4NE1/4 sec.22, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank 500 ft upstream from culvert on Lakeshore Boulevard, 1,000 ft upstream from mouth, just below confluence with major tributary, and 3 mi east of Crystal Bay.

DRAINAGE AREA.--7.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to September 1975, November 1987 to September 1989 (low flow, partial-record site only, October 1966 to September 1969, October 1973 to February 1975).

GAGE.--Water-stage recorder. Elevation of gage is 6,246.90 ft, above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regular diversion above station. Possibly some light pumping or diversion of water for construction or irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 87 ft^3/s, Jan. 21, 1970, gage height, 2.60 ft; maximum gage height, 3.42 ft, Dec. 7, 1972, backwater from ice; minimum daily, 0.87 ft^3/s, July 20, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 42 ft^3/s, June 4, gage height, 2.27 ft; minimum daily, 1.2 ft^3/s, Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.5	2.5	2.2	e2.5	4.0	6.8	7.4	6.3	3.9	2.7	2.4
2	1.4	1.6	2.4	2.2	e2.5	4.2	6.5	7.6	6.2	3.8	2.7	2.4
3	1.4	1.6	2.3	2.4	e2.5	3.6	6.9	8.3	7.2	3.7	2.7	2.4
4	1.3	1.5	2.4	2.4	e2.5	3.8	7.8	9.3	15	3.6	2.7	2.4
5	1.3	1.5	2.4	e2.4	e2.5	4.0	8.9	10	8.5	3.5	2.6	2.3
6	1.3	1.6	2.4	e2.3	e2.5	6.3	11	9.9	7.5	3.4	2.6	2.3
7	1.3	1.6	2.4	2.3	e2.5	7.5	11	11	7.4	3.4	3.5	2.5
8	1.3	1.6	2.3	e2.3	2.5	12	13	11	7.2	3.3	5.4	2.5
9	1.3	1.7	2.3	2.3	2.4	9.4	13	12	7.1	3.2	3.3	2.7
10	1.3	1.8	2.3	2.3	2.4	8.7	14	10	6.6	3.2	3.0	2.5
11	1.3	1.9	2.4	e2.3	2.4	9.6	12	9.5	6.4	3.2	2.9	2.6
12	1.4	2.0	2.4	2.3	2.5	7.5	11	9.0	6.2	3.1	2.8	2.6
13	1.4	2.5	2.4	2.3	2.3	6.9	11	8.6	5.9	3.1	2.8	2.4
14	1.4	2.3	2.3	2.3	2.5	5.7	13	8.3	5.7	3.1	2.7	2.4
15	1.4	2.3	2.4	e2.3	2.6	5.6	13	9.6	5.5	3.0	2.6	2.4
16	1.3	2.3	2.3	2.3	2.7	5.5	13	8.5	5.6	3.0	2.5	3.4
17	1.3	2.2	2.2	2.4	2.6	5.0	13	8.6	5.4	3.1	2.5	5.6
18	1.3	2.4	2.3	2.5	2.6	5.3	14	8.4	5.0	3.0	2.6	6.2
19	1.4	2.3	2.2	2.6	2.7	6.3	14	7.7	4.8	2.9	2.6	4.6
20	1.4	2.4	2.2	2.6	2.7	5.9	14	7.6	4.7	2.8	2.6	3.4
21	1.3	2.3	e2.2	2.5	2.8	6.1	12	7.7	4.6	2.8	2.7	3.1
22	1.3	4.2	e2.2	2.4	5.1	6.4	10	7.7	4.5	2.8	2.5	2.9
23	1.4	5.5	e2.2	2.5	4.6	6.1	9.4	7.9	4.5	2.8	2.6	2.8
24	1.4	3.0	e2.2	2.4	4.5	9.0	8.6	7.5	4.4	2.7	2.7	2.8
25	1.4	2.7	e2.2	2.6	4.7	8.3	8.0	7.2	4.3	2.7	2.6	2.7
26	1.4	2.5	e2.2	2.4	5.0	6.4	7.3	7.2	4.3	2.7	2.5	2.7
27	1.4	2.5	e2.2	2.5	4.7	6.2	7.1	7.1	4.2	2.7	2.5	2.8
28	1.5	2.5	e2.2	2.5	4.2	8.6	6.8	6.8	4.1	2.7	2.4	2.7
29	1.4	2.5	e2.2	e2.5	---	7.6	6.7	7.0	4.0	2.7	2.4	4.6
30	1.4	2.5	2.2	e2.5	---	7.4	6.9	6.6	4.0	2.7	2.4	3.2
31	1.4	---	2.3	e2.5	---	7.5	---	6.4	---	2.7	2.4	---
TOTAL	42.0	68.8	71.1	74.3	86.0	206.4	309.7	261.4	177.1	95.3	85.5	90.3
MEAN	1.35	2.29	2.29	2.40	3.07	6.66	10.3	8.43	5.90	3.07	2.76	3.01
MAX	1.5	5.5	2.5	2.6	5.1	12	14	12	15	3.9	5.4	6.2
MIN	1.2	1.5	2.2	2.2	2.3	3.6	6.5	6.4	4.0	2.7	2.4	2.3
AC-FT	83	136	141	147	171	409	614	518	351	189	170	179

CAL YR 1988 TOTAL 855.83 MEAN 2.34 MAX 5.5 MIN .87 AC-FT 1700
WTR YR 1989 TOTAL 1567.9 MEAN 4.30 MAX 15 MIN 1.2 AC-FT 3110

e Estimated

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to 1973, 1978 to 1979 and 1988 to current year.

REMARKS.--In November 1987, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Supplemental water-quality data were collected during drought-related low flows in September. Listed herein, the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) may sometimes exceed the respective total due to unavoidable errors associated with subsampling and sample processing, or limitations on precision and accuracy of the analytical procedure.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
OCT											
11...	1420	1.2	82	--	13.0	9.0	--	--	--	--	--
25...	1315	1.4	80	7.80	17.0	8.5	9.0	96	--	--	--
NOV											
13...	1315	4.0	90	--	--	--	--	--	--	--	--
22...	2220	8.4	104	--	--	--	--	--	--	--	--
28...	1230	2.4	86	7.70	6.0	3.0	10.6	98	0.009	0.016	0.004
DEC											
23...	1140	7.3	81	7.50	0.0	0.0	11.2	96	--	--	--
JAN											
04...	1130	E2.6	97	--	3.0	2.0	--	--	--	--	--
17...	1135	E2.5	88	--	2.5	1.0	--	--	--	--	--
30...	1115	3.1	95	7.70	5.5	2.5	10.8	99	--	--	--
FEB											
14...	1100	E2.5	102	--	1.5	1.5	--	--	--	--	--
22...	1610	9.5	120	--	3.5	2.5	--	--	--	--	--
22...	2150	8.0	112	--	3.5	2.0	--	--	--	--	--
22...	2151	8.0	112	--	3.5	2.0	--	--	--	--	--
27...	1130	6.0	113	7.70	6.5	3.0	10.7	100	--	--	--
MAR											
07...	1500	11	117	--	8.0	5.0	--	--	--	--	--
08...	1145	15	116	--	5.0	3.5	--	--	--	--	--
08...	1615	22	108	--	4.5	3.5	--	--	--	--	--
08...	1940	17	109	--	4.0	3.0	--	--	--	--	--
24...	1330	17	116	7.50	7.0	4.5	10.1	99	--	--	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
OCT										
11...	--	--	0.007	--	0.005	--	--	0.08	--	--
25...	--	--	<0.017	--	<0.005	--	--	0.12	--	--
NOV										
13...	--	--	0.149	--	0.036	--	--	1.0	--	--
22...	--	--	0.112	--	0.002	--	--	1.0	--	--
28...	0.003	0.013	0.019	0.006	0.005	0.13	0.20	0.14	0.20	0.15
DEC										
23...	--	0.025	0.025	0.005	0.002	0.19	0.09	0.19	0.10	0.22
JAN										
04...	--	--	0.031	--	0.001	--	--	0.14	--	--
17...	--	--	0.045	--	0.004	--	--	0.06	--	--
30...	--	0.053	0.041	0.005	0.003	0.09	0.06	0.10	0.06	0.15
FEB										
14...	--	--	0.040	--	0.007	--	--	0.09	--	--
22...	--	--	0.070	--	0.010	--	--	0.89	--	--
22...	--	--	0.074	--	0.009	--	--	0.31	--	--
22...	--	--	--	--	--	--	--	--	--	--
27...	--	--	0.090	0.003	--	0.18	--	0.19	--	--
MAR										
07...	--	--	0.078	--	0.001	--	--	0.55	--	--
08...	--	--	0.074	--	0.005	--	--	0.59	--	--
08...	--	--	0.083	--	0.003	--	--	1.7	--	--
08...	--	--	0.063	--	0.003	--	--	0.81	--	--
24...	--	0.069	0.048	0.021	0.008	0.63	0.19	0.65	0.20	0.72

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT										
11...	--	0.023	--	--	0.012	440	--	4	0.01	--
25...	--	0.032	--	--	0.010	490	--	4	0.01	--
NOV										
13...	--	0.092	--	--	0.053	5300	--	104	1.1	--
22...	--	0.054	--	--	0.015	5200	--	120	2.7	--
28...	0.22	0.030	0.012	0.008	0.013	570	--	2	0.01	--
DEC										
23...	0.12	0.027	0.019	0.009	0.007	740	290	15	0.31	--
JAN										
04...	--	0.035	--	--	0.011	850	--	6	--	--
17...	--	0.023	--	--	0.007	420	--	3	--	--
30...	0.11	0.024	0.018	0.015	0.008	560	180	8	0.07	--
FEB										
14...	--	0.030	--	--	0.010	520	--	4	--	92
22...	--	0.246	--	--	0.018	8900	--	189	4.8	96
22...	--	0.099	--	--	0.019	2700	--	--	--	--
22...	--	--	--	--	--	--	--	54	1.2	97
27...	--	0.038	--	--	0.011	880	--	16	0.26	--
MAR										
07...	--	0.152	--	--	0.018	3500	--	100	2.9	79
08...	--	0.111	--	--	0.018	2800	--	72	2.9	83
08...	--	0.331	--	--	0.018	9800	--	396	23	78
08...	--	0.137	--	--	0.021	3800	--	219	10	33
24...	0.25	0.146	0.033	0.064	0.021	2900	130	128	6.0	73

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH, FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
APR									
06...	1445	9.9	90	--	17.5	9.0	--	--	--
06...	2000	17	68	--	7.0	6.0	--	--	--
06...	2105	15	68	--	5.0	5.0	--	--	--
11...	1615	12	67	--	18.5	8.0	--	--	--
11...	2000	16	62	--	12.0	5.5	--	--	0.074
11...	2205	14	62	--	9.0	4.5	--	--	--
18...	1655	16	50	7.70	17.0	8.5	9.2	98	0.063
18...	1935	18	46	--	10.5	6.5	--	--	--
18...	2300	16	48	--	6.0	5.0	--	--	--
27...	1140	6.0	60	--	15.0	4.0	--	--	--
MAY									
05...	0930	1.9	51	--	11.0	5.5	--	--	--
09...	1900	14	44	--	9.5	7.0	--	--	--
19...	1215	10	51	--	11.0	6.0	--	--	--
26...	1050	6.0	50	7.50	13.0	6.0	9.5	96	--
JUN									
02...	1125	6.0	52	--	16.0	--	--	--	--
04...	1255	23	46	--	13.5	8.5	--	--	--
15...	1145	5.3	54	7.80	19.5	11.0	8.7	99	--
JUL									
07...	1105	3.8	60	7.80	20.0	11.0	8.8	99	--
20...	1100	3.2	63	--	24.5	13.0	--	--	--
AUG									
03...	1110	3.1	65	7.80	19.0	9.5	9.0	99	--
07...	1240	5.0	75	--	14.5	12.0	--	--	--
07...	1525	3.8	118	--	17.0	12.5	--	--	--
08...	1230	9.0	75	--	15.5	12.0	--	--	--
15...	0935	3.4	66	8.00	15.0	9.0	8.8	95	--

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN DISSOLVED (MG/L AS N)
APR									
06...	0.107	--	0.007	--	--	0.36	--	--	--
06...	0.114	--	0.010	--	--	1.5	--	--	--
06...	0.097	--	0.009	--	--	1.1	--	--	--
11...	0.083	--	0.003	--	--	0.32	--	--	--
11...	0.073	0.005	0.006	0.82	0.16	0.83	0.17	0.90	0.24
11...	0.080	--	0.004	--	--	0.50	--	--	--
18...	0.068	0.007	0.007	0.66	0.18	0.66	0.19	0.73	0.25
18...	0.058	--	0.008	--	--	1.1	--	--	--
18...	0.061	--	0.007	--	--	0.78	--	--	--
27...	--	--	--	--	--	0.16	--	--	--
MAY									
05...	--	--	--	--	--	0.23	--	--	--
09...	0.038	--	0.026	--	--	0.48	--	--	--
19...	0.034	--	0.006	--	--	0.19	--	--	--
26...	0.026	0.008	0.007	0.12	0.11	0.13	0.12	--	0.14
JUN									
02...	0.017	--	0.002	--	--	0.10	--	--	--
04...	0.026	--	0.005	--	--	1.1	--	--	--
15...	0.017	--	0.001	--	--	0.19	--	--	--
JUL									
07...	0.016	0.010	0.003	0.10	0.09	0.11	0.09	--	0.11
20...	0.027	--	0.009	--	--	0.16	--	--	--
AUG									
03...	0.020	--	0.002	--	--	0.09	--	--	--
07...	0.031	--	0.025	--	--	1.9	--	--	--
07...	0.034	--	0.005	--	--	1.1	--	--	--
08...	0.026	--	0.004	--	--	1.3	--	--	--
15...	0.029	0.013	0.002	0.13	0.06	0.15	0.06	--	0.09

DATE	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR									
06...	0.091	--	--	0.013	2600	--	60	1.6	83
06...	0.343	--	--	0.012	10000	--	523	24	54
06...	0.200	--	--	0.011	6200	--	250	10	58
11...	0.102	--	--	0.012	2700	--	121	3.9	49
11...	0.147	0.023	0.018	0.013	3900	150	257	11	35
11...	0.104	--	--	0.012	2700	--	191	7.2	34
18...	0.112	0.027	0.017	0.013	2900	280	827	36	7
18...	0.187	--	--	0.012	5900	--	226	11	58
18...	0.099	--	--	0.012	2500	--	225	9.7	25
27...	--	--	--	--	770	--	83	1.3	--
MAY									
05...	--	--	--	--	860	--	107	0.54	--
09...	0.089	--	--	0.014	1800	--	108	4.1	--
19...	0.069	--	--	0.012	650	--	20	0.56	--
26...	0.026	0.025	0.007	0.005	620	230	8	0.13	--
JUN									
02...	0.024	--	--	0.009	440	--	6	0.10	--
04...	0.236	--	--	0.027	7000	--	337	21	56
15...	0.031	--	--	0.012	480	--	10	0.14	--
JUL									
07...	0.052	0.042	0.015	0.008	550	270	6	0.06	--
20...	0.045	--	--	0.015	740	--	5	0.05	--
AUG									
03...	0.096	--	--	0.010	590	--	4	0.03	--
07...	0.411	--	--	0.050	9900	--	77	1.0	95
07...	0.280	--	--	0.040	6400	--	130	1.3	99
08...	0.400	--	--	0.038	7800	--	284	6.9	94
15...	0.104	0.091	0.014	0.009	670	250	6	0.05	91

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
SEP								
11...	1700	2.2	72	13.0	10.5	0.011	0.002	0.12
17...	1915	3.1	77	7.0	6.0	0.022	0.002	0.21
29...	1550	6.2	67	13.5	9.5	0.007	0.002	0.43

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
SEP							
11...	--	0.032	0.010	560	3	0.02	--
17...	0.050	--	0.020	870	7	0.05	--
29...	0.181	--	0.018	3600	967	16	100

10336710 MARLETTE LAKE NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'22", long 119°54'15", in SW1/4SE1/4 sec.12, T.15 N., R.18 E., Washoe County, Hydrologic Unit 16050101, in Toiyabe National Forest, on west shore, about 1,000 ft upstream from left side of dam on Marlette Creek, and 7.5 mi west of Carson City.

DRAINAGE AREA.--2.86 mi².

PERIOD OF RECORD.--November 1973 to current year.

REVISED RECORDS.--WDR NV-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (spillway elevation furnished in written communication from Walter Reid, 1971).

REMARKS.--Lake is formed by earthfill dam across the outlet of a small natural lake (at one time called Goodwin Lake) on Marlette Creek, built in 1873 to provide water for fluming lumber from Spooner Summit to Carson City. The dam was built higher in 1876 and used to divert water by flume and siphon to Virginia City, until the flume was abandoned prior to 1963. The dam was raised to its present elevation in 1959. Present capacity, 11,780 acre-ft at spillway; elevation, 7,838.0 ft. Figures given herein represent total contents. Stored water is used for spawning Cutthroat Trout and in dry years is pumped over the mountain to the Hobart system for municipal and domestic use outside the basin in Virginia City and Carson City. Lake freezes over in winter.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded contents, 12,320 acre-ft, Feb. 19, 1986, elevation, 7,839.23 ft; minimum, 10,970 acre-ft, Nov. 10-13, 1976, elevation, 7,835.8 ft.

EXTREMES FOR CURRENT YEAR.--Maximum recorded contents, 12,010 acre-ft, Mar. 26, elevation, 7,838.52 ft, but may have been higher during period of intermittent record, Nov. 2 to June 7; minimum recorded, 11,120 acre-ft, Nov. 14-22, elevation, 7.836.55 ft, but may have been lower during period of intermittent record, Nov. 2 to June 7.

Capacity table (elevation, in feet, and contents, in acre-feet)

7,836	11,030	7,838	11,790
7,837	11,410	7,839	12,220

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11240	11140	e11300	e11570	e11680	e11800	e11990	e11940	e11920	11820	11670	11540
2	11240	e11140	e11300	e11570	e11680	e11810	e11990	e11940	e11920	11820	11670	11540
3	11230	e11140	e11300	e11580	e11680	e11810	e11980	e11940	e11930	11810	11660	11540
4	11230	e11140	e11300	e11590	e11690	e11810	e11980	e11930	e11940	11810	11660	11530
5	11220	e11150	e11300	e11590	e11700	e11810	e11970	e11940	e11940	11810	11660	11520
6	11220	e11150	e11300	e11590	e11700	e11810	e11970	e11950	e11940	11810	11650	11510
7	11220	e11150	e11300	e11590	e11710	e11830	e11970	e11960	11940	11800	11650	11510
8	11210	e11150	e11300	e11590	e11710	e11900	e11970	e11980	11940	11800	11680	11510
9	11210	e11140	e11290	e11590	e11720	e11920	e11970	e11990	11940	11790	11680	11500
10	11210	e11140	e11290	e11600	e11730	e11920	e11970	e11990	11940	11790	11670	11500
11	11200	e11140	e11280	e11600	e11740	e11930	e11970	e11990	11930	11790	11670	11490
12	11200	e11130	e11280	e11600	e11740	e11930	e11970	e11990	11930	11780	11660	11490
13	11200	e11130	e11280	e11600	e11760	e11930	e11970	e11970	11910	11780	11660	11480
14	11190	e11120	e11270	e11600	e11770	e11930	e11970	e11970	11910	11770	11660	11480
15	11190	e11120	e11270	e11610	e11770	e11930	e11970	e11980	11900	11760	11650	11470
16	11190	e11120	e11270	e11610	e11780	e11940	e11970	e12000	11890	11760	11640	11490
17	11190	e11120	e11280	e11610	e11780	e11940	e11970	e12000	11890	11760	11640	11500
18	11180	e11120	e11280	e11620	e11780	e11940	e11970	e11970	11880	11760	11630	11520
19	11180	e11120	e11280	e11620	e11780	e11940	e11970	e11970	11870	11760	11630	11520
20	11170	e11120	e11280	e11620	e11790	e11940	e11970	e11960	11850	11750	11620	11520
21	11170	e11120	e11280	e11630	e11790	e11940	e11970	e11960	11850	11750	11620	11520
22	11170	e11120	e11450	e11630	e11790	e11950	e11970	e11950	11850	11740	11600	11510
23	11170	e11160	e11470	e11640	e11790	e11950	e11980	e11950	11850	11740	11600	11520
24	11170	e11200	e11510	e11640	e11790	e11950	e11980	e11940	11840	11730	11600	11510
25	11170	e11250	e11520	e11650	e11790	e11980	e11980	e11920	11840	11730	11590	11500
26	11160	e11290	e11530	e11650	e11800	e12010	e11960	e11920	11840	11720	11580	11490
27	11160	e11300	e11540	e11660	e11800	e12000	e11960	e11920	11840	11720	11580	11500
28	11160	e11300	e11540	e11660	e11800	e12000	e11950	e11920	11830	11710	11570	11500
29	11160	e11300	e11550	e11660	---	e12000	e11950	e11920	11830	11700	11560	11520
30	11150	e11300	e11550	e11670	---	e11990	e11950	e11920	11820	11700	11550	11510
31	11140	---	e11560	e11670	---	e11990	---	e11920	---	11680	11550	---
MAX	11240	11300	11560	11670	11800	12010	11990	12000	11940	11820	11680	11540
MIN	11140	11120	11270	11570	11680	11800	11950	11920	11820	11680	11550	11470
#	7836.29	7836.70	7837.40	7837.69	7838.03	7838.48	7838.38	7838.31	7838.08	7837.71	7837.37	7837.26
##	-100	+160	+260	+110	+130	+190	-40	-30	-100	-140	-130	-40

CAL YR 1988 MAX 11930 MIN 11120 ## -50
WTR YR 1989 MAX 12010 MIN 11120 ## +270

\# Elevation, in feet NGVD, at end of month.
Change in contents, in acre-feet.
e Estimated.

10336715 MARLETTE CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'20", long 119°54'25", in SE1/4SW1/4 sec.12, T.15 N., R.18 E., Washoe County, Hydrologic Unit 16050101, in Toiyabe National Forest, on left bank about 300 ft below dam on Marlette Lake (station 10336710), 0.7 mi upstream from Marlette Reservoir, and 7 mi west of Carson City.

DRAINAGE AREA.--2.86 mi².

PERIOD OF RECORD.--October 1973 to current year.

REVISED RECORDS.--WDR NV-80-1.

GAGE.--Water-stage recorder. Elevation of gage is 7,760 ft, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Marlette Lake (station 10336710).

AVERAGE DISCHARGE.--16 years, 2.79 ft³/s, 2,020 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70 ft³/s, Feb. 20, 1986, gage height, 3.20 ft, from rating curve extended above 26 ft³/s; no flow July 12-15, 1975, and Aug. 31, 1988, to Sept. 5, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 10 ft³/s, Mar. 26, gage height unknown; minimum daily, 0.01 ft³/s, July 28 to Aug. 1 and Aug. 31 to Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.11	.10	e.10	e.10	e.10	e8.3	e4.1	e2.4	.08	.01	.01
2	.12	.10	.10	e.10	e.10	e.13	e8.3	e3.7	e2.4	.07	.02	.01
3	.10	.08	.10	e.10	e.10	e.13	e8.6	e3.7	e3.0	.07	.03	.01
4	.10	.07	.10	e.10	e.10	e.13	e7.5	e3.3	e4.1	.07	.04	.01
5	.10	.08	.10	e.10	e.10	e.16	e7.1	e4.1	e4.1	.07	.04	.01
6	.10	.07	.10	e.10	e.10	e.16	e7.1	e5.0	e4.1	.06	.05	.01
7	.09	.07	e.10	e.10	e.10	e.35	e6.7	e5.9	e4.1	.05	.05	.01
8	.07	.07	e.10	e.10	e.10	e1.9	e6.7	e7.9	3.4	.07	.05	.02
9	.06	.08	e.10	e.10	e.10	e2.6	e6.3	e8.3	3.2	.05	.06	.04
10	.06	.10	e.10	e.10	e.10	e2.6	e6.3	e8.6	3.0	.05	.05	.07
11	.06	.09	e.10	e.10	e.10	e2.8	e6.3	e8.3	2.8	.04	.05	.11
12	.05	.10	e.10	e.10	e.10	e3.0	e6.3	e8.3	2.6	.04	.05	.08
13	.05	.10	e.10	e.10	e.10	e3.0	e6.3	e6.7	2.4	.04	.04	.05
14	.05	.10	e.10	e.10	e.10	e3.3	e6.3	e6.7	2.0	.04	.04	.06
15	.05	.10	e.10	e.10	e.10	e3.3	e6.3	e7.5	2.0	.04	.06	.04
16	.05	.12	e.10	e.10	e.10	e3.7	e6.3	e9.4	1.8	.03	.06	.04
17	.05	.13	e.10	e.10	e.10	e3.7	e6.3	e9.8	1.5	.03	.05	.04
18	.07	.13	e.10	e.10	e.10	e3.7	e7.1	e6.7	1.4	.03	.04	.04
19	.06	.13	e.10	e.10	e.10	e3.7	e7.1	e6.3	1.4	.03	.03	.05
20	.05	.13	e.10	e.10	e.10	e4.1	e7.1	e5.9	1.1	.03	.03	.04
21	.05	.13	e.10	e.10	e.10	e4.1	e7.1	e5.5	1.1	.03	.03	.04
22	.05	.12	e.10	e.10	e.10	e4.5	e7.1	e4.5	.69	.02	.03	.04
23	.07	.10	e.10	e.10	e.10	e4.5	e7.5	e4.1	.67	.02	.03	.03
24	.07	.10	e.10	e.10	e.10	e4.5	e7.5	e2.4	.55	.02	.03	.04
25	.07	.10	e.10	e.10	e.10	e7.5	e7.5	e2.4	.37	.02	.03	.04
26	.06	.10	e.10	e.10	e.10	e10	e5.5	e2.4	.33	.02	.03	.04
27	.06	.10	e.10	e.10	e.10	e9.8	e5.5	e2.4	.40	.02	.03	.06
28	.08	.10	e.10	e.10	e.10	e9.4	e5.0	e2.4	.35	.01	.02	.07
29	.09	.10	e.10	e.10	---	e9.0	e4.5	e2.4	.19	.01	.02	.05
30	.10	.10	e.10	e.10	---	e8.6	e4.5	e2.4	.18	.01	.02	.06
31	.09	---	e.10	e.10	---	e8.6	---	e2.4	---	.01	.01	---
TOTAL	2.25	3.01	3.10	3.10	2.80	123.06	200.0	163.5	57.63	1.18	1.13	1.22
MEAN	.073	.10	.10	.10	.10	3.97	6.67	5.27	1.92	.038	.036	.041
MAX	.12	.13	.10	.10	.10	10	8.6	9.8	4.1	.08	.06	.11
MIN	.05	.07	.10	.10	.10	.10	4.5	2.4	.18	.01	.01	.01
AC-FT	4.5	6.0	6.1	6.1	5.6	244	397	324	114	2.3	2.2	2.4

CAL YR 1988 TOTAL 200.13 MEAN .55 MAX 3.3 MIN .00 AC-FT 397
WTR YR 1989 TOTAL 561.98 MEAN 1.54 MAX 10 MIN .01 AC-FT 1110

e Estimated

10336730 GLENBROOK CREEK AT GLENBROOK, NV

LOCATION.--Lat 39°05'15", long 119°56'20", in SW1/4NE1/4SE1/4 sec.10, T.14 N., R.18 E., Douglas County, Hydrologic Unit 16050101, on left bank 50 ft upstream from culvert, and 100 ft upstream from mouth at Glenbrook.

DRAINAGE AREA.--4.07 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1971 to September 1975, November 1987 to present.

GAGE.--Water-stage recorder. Elevation of gage is 6,240 ft, from topographic map. Prior to November 16, 1987, at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow may be affected by pumping or diverting for irrigation above station.

AVERAGE DISCHARGE.--5 years (1972-75, 1989), 1.5 ft³/s, 1,090 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25 ft³/s, May 14, 1975, gage height, 2.32 ft; minimum daily, 0.08 ft³/s, August 27, 1988, and September 3-7, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5.0 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 3	2115	Ice jam	*1.99	Mar. 8	0830	*5.7	1.73

Minimum daily, 0.11 ft³/s, Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.45	.51	.81	e.50	1.0	2.2	1.8	.93	.34	.16	.17
2	.18	.39	.47	.83	e.45	.95	2.1	1.8	.93	.25	.32	.15
3	.16	.41	.46	.86	e.40	.86	2.0	1.9	1.1	.18	.13	.14
4	.11	.37	.44	.86	e.37	.77	2.1	2.1	1.4	.25	.14	.15
5	.16	.34	.40	.86	e.35	.82	2.3	2.1	1.4	.23	.17	.16
6	.19	.33	.40	.55	e.34	1.2	2.5	2.1	1.2	.24	.31	.15
7	.31	.32	.39	.52	e.38	2.0	2.6	2.1	1.3	.23	.48	.18
8	.17	.36	.39	.52	e.41	4.4	2.8	2.0	1.2	.21	.98	.23
9	.18	.47	.41	.51	e.45	3.2	2.8	2.0	1.1	.20	.73	.20
10	.19	.49	.40	e.49	e.52	2.7	3.3	1.9	1.0	.20	.49	.19
11	.19	.50	.37	.48	.58	2.9	3.0	1.7	1.0	.20	.25	.21
12	.21	.54	.35	.48	.61	2.4	2.5	1.6	1.0	.20	.22	.19
13	.18	.55	.34	.46	.61	2.3	2.7	1.6	.85	.19	.23	.16
14	.20	.48	.31	.47	.61	1.9	2.6	1.5	.91	.17	.23	.16
15	.27	.44	.26	.45	.61	1.7	2.5	1.8	.76	.16	.30	.17
16	.27	.56	.28	.45	.62	1.7	2.5	1.6	.66	.18	.53	.24
17	.27	.56	.31	.45	.63	1.6	2.5	1.4	.63	.16	.15	.68
18	.27	.44	.34	.47	.71	2.0	2.5	1.3	.58	e.15	.15	.45
19	.27	.49	.45	.47	.77	2.7	2.5	1.3	.50	e.16	.16	.48
20	.27	.42	.53	.47	.76	2.3	2.5	1.3	.47	.16	.18	.39
21	.27	.44	.53	.47	.82	2.0	2.5	1.1	.42	.15	.28	.47
22	.27	.80	e.53	.49	1.2	1.9	2.3	1.0	.46	.14	.17	.39
23	.27	1.1	.53	.47	1.4	1.9	2.1	1.1	.41	.16	.21	.35
24	.27	.73	e.60	.48	1.4	2.5	1.9	1.1	.40	.15	.45	.36
25	.27	.61	e.66	e.49	1.3	2.5	1.8	1.0	.32	.15	.27	.43
26	.32	.49	.69	e.49	1.3	2.1	1.7	.96	.31	.15	.38	.39
27	.28	.33	.68	e.49	1.2	2.0	1.7	.90	.33	.15	.39	.38
28	.33	.49	.75	e.49	1.0	2.3	1.7	.82	.28	.13	.19	.45
29	.37	.55	.78	.49	---	2.3	1.7	.78	.33	.18	.27	.61
30	.38	.52	.83	.53	---	2.2	1.7	.89	.34	.16	.14	.35
31	.44	---	.83	.53	---	2.2	---	.90	---	.22	.17	---
TOTAL	7.75	14.97	15.22	16.88	20.30	63.30	69.6	45.45	22.52	5.80	9.23	9.03
MEAN	.25	.50	.49	.54	.72	2.04	2.32	1.47	.75	.19	.30	.30
MAX	.44	1.1	.83	.86	1.4	4.4	3.3	2.1	1.4	.34	.98	.68
MIN	.11	.32	.26	.45	.34	.77	1.7	.78	.28	.13	.13	.14
AC-FT	15	30	30	33	40	126	138	90	45	12	18	18

CAL YR 1988 TOTAL 197.96 MEAN .54 MAX 1.3 MIN .08 AC-FT 393
WTR YR 1989 TOTAL 300.05 MEAN .82 MAX 4.4 MIN .11 AC-FT 595

e Estimated

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

REMARKS.--In November 1987, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Listed herein, the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) may sometimes exceed the respective total due to unavoidable errors associated with subsampling and sample processing, or limitations on precision and accuracy of the analytical procedure.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT										
12...	1502	0.20	539	--	14.5	9.0	--	--	--	0.003
25...	1050	0.28	550	8.00	8.0	6.5	9.2	94	--	<0.020
NOV										
13...	1050	0.54	622	--	6.0	5.0	--	--	--	0.061
13...	1400	0.62	662	--	4.0	4.5	--	--	--	0.013
22...	2005	0.78	654	--	7.0	4.0	--	--	--	<0.010
29...	1107	0.56	567	8.00	1.5	1.0	11.8	103	--	<0.011
DEC										
20...	1055	0.46	527	8.00	3.0	1.5	11.2	101	0.012	0.009
JAN										
06...	0947	0.61	510	--	-6.0	0.5	--	--	--	0.006
20...	1035	0.46	495	8.00	-5.0	1.0	11.5	101	--	0.012
FEB										
07...	1030	0.46	543	--	-15.0	0.0	--	--	0.011	0.008
22...	1040	1.0	490	7.90	8.5	2.0	11.4	103	--	0.023
22...	1705	1.5	--	--	--	--	--	--	--	0.033
22...	2025	1.4	--	--	--	--	--	--	--	0.039
MAR										
07...	1530	2.2	634	--	5.0	4.5	--	--	--	0.045
08...	0640	4.0	576	--	5.0	2.0	--	--	--	0.056
08...	0800	5.3	592	--	5.5	2.0	--	--	--	0.078
08...	1345	4.8	588	--	7.0	2.0	--	--	--	0.110
23...	1440	1.8	626	8.20	9.5	6.0	10.8	110	0.031	0.029

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)
OCT										
12...	--	0.004	--	--	0.10	--	--	--	0.039	--
25...	--	0.006	--	--	0.13	--	--	--	0.044	--
NOV										
13...	--	0.033	--	--	0.50	--	--	--	0.081	--
13...	--	0.044	--	--	0.90	--	--	--	0.093	--
22...	--	0.022	--	--	0.50	--	--	--	0.050	--
29...	--	0.007	--	--	<0.10	--	--	--	0.025	--
DEC										
20...	0.024	0.006	0.06	0.08	0.08	0.08	0.10	0.09	0.020	0.020
JAN										
06...	--	0.014	--	--	0.08	--	--	--	0.029	--
20...	--	0.007	--	--	0.13	--	--	--	0.022	--
FEB										
07...	0.008	0.001	0.06	0.06	0.07	0.06	0.08	0.07	0.022	0.019
22...	--	0.019	--	--	0.23	--	--	--	0.037	--
22...	--	0.006	--	--	0.45	--	--	--	0.073	--
22...	--	0.005	--	--	0.29	--	--	--	0.066	--
MAR										
07...	--	0.001	--	--	0.35	--	--	--	0.067	--
08...	--	0.001	--	--	1.3	--	--	--	0.271	--
08...	--	0.001	--	--	2.3	--	--	--	0.551	--
08...	--	0.001	--	--	0.72	--	--	--	0.177	--
23...	0.007	0.004	0.18	0.14	0.19	0.15	0.22	0.17	0.034	0.032

10336730 GLENBROOK CREEK AT GLENBROOK, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO TOTAL (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT									
12...	--	0.014	--	--	680	--	4	0.00	--
25...	--	0.017	--	--	700	--	4	0.00	--
NOV									
13...	--	0.062	--	--	1000	--	10	0.01	--
13...	--	0.087	--	--	3500	--	43	0.07	--
22...	--	0.013	--	--	1700	--	21	0.05	--
29...	--	0.011	--	--	440	--	2	0.00	--
DEC									
20...	0.010	0.007	0.01	0.01	440	310	6	0.01	--
JAN									
06...	--	0.009	--	--	500	--	4	0.01	--
20...	--	0.009	--	--	330	--	2	0.00	--
FEB									
07...	0.012	0.011	0.02	0.01	330	210	2	0.00	91
22...	--	0.010	--	--	940	--	8	0.02	--
22...	--	0.012	--	--	3700	--	50	0.20	--
22...	--	0.012	--	--	1900	--	30	0.11	--
MAR									
07...	--	0.004	--	--	1700	--	27	0.16	75
08...	--	0.013	--	--	9500	--	267	2.9	64
08...	--	0.013	--	--	25000	--	529	7.5	75
08...	--	0.010	--	--	5500	--	324	4.2	30
23...	0.012	0.010	0.01	0.01	280	65	6	0.03	91

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
APR										
06...	1020	2.3	452	--	10.5	4.5	--	--	--	0.008
06...	1915	2.6	435	--	12.0	8.5	--	--	--	0.006
14...	1300	2.2	333	--	17.5	9.5	--	--	--	0.007
19...	1220	2.2	295	8.30	19.0	10.0	9.0	100	0.011	0.008
27...	1100	1.6	390	--	6.5	4.5	--	--	--	--
27...	1110	1.6	390	--	6.5	4.5	--	--	--	--
MAY										
05...	1230	--	291	--	17.5	11.0	--	--	--	--
11...	0940	1.7	305	--	6.0	5.0	--	--	--	0.009
18...	0950	1.4	323	--	8.0	6.5	--	--	--	0.010
24...	1120	1.0	347	8.10	6.0	6.0	9.8	99	--	0.007
JUN										
01...	1030	0.91	353	--	10.0	7.0	--	--	--	0.009
15...	1033	0.72	439	8.20	16.5	13.0	8.0	95	--	0.017
JUL										
06...	1220	0.29	502	--	14.0	10.0	--	--	--	0.025
20...	1230	0.18	564	8.10	21.0	16.0	7.4	93	--	0.037
AUG										
07...	1330	0.48	545	--	17.5	14.0	--	--	--	0.007
08...	1300	1.3	548	--	15.5	12.5	--	--	--	0.013
18...	0820	0.10	551	7.90	10.0	10.0	8.3	92	--	0.036
30...	1350	0.14	550	8.20	29.0	11.5	7.8	90	--	0.021
SEP										
17...	1745	0.35	572	--	7.0	9.0	--	--	--	0.013
29...	1528	1.5	515	--	13.5	9.5	--	--	--	0.007

10336730 GLENBROOK CREEK AT GLENBROOK, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)
APR										
06...	--	0.004	--	--	0.11	--	--	--	0.023	--
06...	--	0.004	--	--	0.17	--	--	--	0.034	--
14...	--	0.003	--	--	0.19	--	--	--	0.023	--
19...	0.010	0.006	0.25	0.19	0.26	0.20	0.28	0.20	0.024	0.018
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	0.25	--	--	--	--	--
MAY										
05...	--	--	--	--	0.20	--	--	--	--	--
11...	--	0.003	--	--	0.20	--	--	--	0.021	--
18...	0.004	0.005	0.16	0.14	0.16	0.14	--	0.15	0.038	0.040
24...	0.014	0.003	0.15	0.16	0.16	0.16	--	0.17	0.020	0.020
JUN										
01...	--	0.007	--	--	0.10	--	--	--	0.025	--
15...	0.031	0.023	0.20	0.14	0.23	0.17	--	0.18	0.030	0.028
JUL										
06...	--	0.008	--	--	0.18	--	--	--	0.067	--
20...	--	0.020	--	--	0.20	--	--	--	0.066	--
AUG										
07...	0.030	0.007	0.43	0.23	0.46	0.24	--	0.25	0.137	0.082
08...	--	0.006	--	--	1.9	--	--	--	0.116	--
18...	0.013	0.011	0.19	0.17	0.20	0.18	--	0.21	0.073	0.053
30...	--	0.003	--	--	0.19	--	--	--	0.083	--
SEP										
17...	--	0.001	--	--	0.36	--	--	--	0.091	--
29...	--	0.002	--	--	0.39	--	--	--	0.072	--

DATE	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO TOTAL (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR									
06...	--	0.007	--	--	370	--	4	0.03	--
06...	--	0.008	--	--	750	--	12	0.08	--
14...	--	0.006	--	--	410	--	--	--	--
19...	0.008	0.005	0.01	0.01	440	170	--	--	--
27...	--	--	--	--	--	--	8	0.03	94
27...	--	--	--	--	520	--	--	--	--
MAY									
05...	--	--	--	--	350	--	3	--	--
11...	--	0.010	--	--	340	--	4	0.02	--
18...	0.011	0.012	0.01	0.01	190	160	3	0.01	--
24...	0.010	0.006	0.01	0.01	480	95	5	0.01	--
JUN									
01...	--	0.005	--	--	320	--	3	0.01	--
15...	0.023	0.017	0.02	0.01	410	130	5	0.01	--
JUL									
06...	--	0.021	--	--	430	--	4	0.00	--
20...	--	0.024	--	--	550	--	6	0.00	--
AUG									
07...	0.024	0.034	0.00	0.00	1200	76	19	0.02	95
08...	--	0.031	--	--	9500	--	137	0.47	--
18...	0.027	0.016	0.04	0.02	980	110	11	0.00	--
30...	--	0.016	--	--	980	--	7	0.00	--
SEP									
17...	--	0.022	--	--	1000	--	10	0.01	--
29...	--	0.025	--	--	1200	--	17	0.07	92

10336740 LOGAN HOUSE CREEK NEAR GLENBROOK, NV

LOCATION.--Lat 39°04'00", long 119°56'04", in NW1/4NW1/4 sec.23, T.14 N., R.18 E., Douglas County, Hydrologic Unit 16050101, Toiyabe National Forest, on right bank 0.1 mi downstream from unnamed tributary, 0.3 mi upstream from U.S. Highway 50, and 1.6 mi south of Glenbrook.

DRAINAGE AREA.--2.08 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,640 ft, from topographic map.

REMARKS.--Records good except periods of estimated daily discharges, which are poor. One small diversion 50 ft upstream from station for domestic use.

AVERAGE DISCHARGE.--6 years (1984-1989), 0.60 ft³/s, 435 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6.4 ft³/s, Apr. 22, 1986; gage height, 4.60 ft; no flow many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 18	0115	*4.1	*4.48				

No flow October 1, 2 and 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.09	.15	.12	.18	.23	.30	.68	.19	.04	.03	.01
2	.00	.10	.15	.12	.17	.23	.26	.67	.18	.04	.03	.02
3	.00	.09	.15	.13	e.17	.18	.23	.73	.29	.05	.04	.01
4	.01	.08	.14	.13	e.17	.18	.33	.79	.45	.05	.02	.01
5	.01	.09	.13	.14	e.15	.24	.50	.78	.45	.05	.04	.02
6	.01	.09	.13	.13	e.11	.46	.65	.73	.28	.04	.03	.02
7	.01	.09	.13	.13	e.09	.42	.73	.71	.34	.03	.07	.02
8	.01	.09	.12	.13	e.09	.95	.94	.63	.30	.03	.14	.02
9	.02	.09	.12	.14	e.09	.73	.97	.65	.23	.03	.07	.02
10	.03	.10	.12	.13	e.09	.63	1.2	.60	.18	.03	.06	.02
11	.06	.09	.12	.12	e.10	.58	1.3	.58	.15	.04	.07	.03
12	.05	.12	.13	.13	e.14	.49	1.1	.51	.12	.05	.07	.02
13	.04	.16	.14	.16	e.16	.46	1.1	.50	.12	.04	.06	.02
14	.04	.15	.12	.15	e.18	.36	1.6	.44	.09	.04	.05	.02
15	.04	.13	.13	.16	.20	.36	1.7	.54	.11	.04	.06	.02
16	.03	.12	e.12	.17	.21	.33	1.5	.44	.10	.04	.05	.03
17	.04	.13	e.11	.17	.23	.29	1.5	.38	.08	.04	.05	.12
18	.04	.12	.10	.18	.21	.29	1.5	.33	.07	.04	.05	.08
19	.06	.12	.10	.18	.21	.38	1.4	.30	.08	.04	.07	.11
20	.07	.13	.10	.17	.20	.37	1.3	.29	.07	.04	.10	.06
21	.07	.12	.10	.14	.23	.34	1.1	.26	.07	.03	.10	.05
22	.08	.20	.10	.12	.39	.36	.89	.25	.06	.03	.05	.05
23	.07	.37	.10	.11	.37	.34	.82	.31	.06	.03	.04	.05
24	.06	.24	e.10	.13	.37	.31	.64	.28	.06	.04	.04	.04
25	.07	.21	.10	.16	.35	.28	.56	.23	.03	.03	.03	.03
26	.06	.18	.10	.15	.35	.21	.50	.23	.04	.02	.02	.03
27	.06	.18	.10	.16	.33	.21	.50	.21	.05	.02	.02	.03
28	.06	.19	.11	.16	.27	.36	.49	.20	.05	.02	.02	.03
29	.06	.17	.11	.16	---	.39	.53	.25	.05	.02	.02	.11
30	.07	.15	.12	.17	---	.36	.60	.23	.04	.02	.02	.09
31	.07	---	.13	.20	---	.35	---	.21	---	.02	.01	---
TOTAL	1.30	4.19	3.68	4.55	5.81	11.67	26.74	13.94	4.39	1.08	1.53	1.19
MEAN	.042	.14	.12	.15	.21	.38	.89	.45	.15	.035	.049	.040
MAX	.08	.37	.15	.20	.39	.95	1.7	.79	.45	.05	.14	.12
MIN	.00	.08	.10	.11	.09	.18	.23	.20	.03	.02	.01	.01
AC-FT	2.6	8.3	7.3	9.0	12	23	53	28	8.7	2.1	3.0	2.4

CAL YR 1988 TOTAL 65.96 MEAN .18 MAX .76 MIN .00 AC-FT 131
WTR YR 1989 TOTAL 80.07 MEAN .22 MAX 1.7 MIN .00 AC-FT 159

e Estimated

10336740 LOGAN HOUSE CREEK NEAR GLENBROOK, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

REMARKS.--In November 1987, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Listed herein, the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) may sometimes exceed the respective total due to unavoidable errors associated with subsampling and sample processing, or limitations on precision and accuracy of the analytical procedure.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT										
12...	1112	0.06	144	--	7.0	5.5	--	--	--	0.004
25...	1337	0.06	138	8.20	17.0	6.0	9.8	101	--	<0.004
NOV										
13...	1208	0.11	152	--	3.5	4.0	--	--	--	<0.010
29...	1423	0.15	128	8.20	0.0	1.0	11.6	102	--	0.009
DEC										
20...	1350	0.11	128	8.20	-1.0	1.5	11.6	107	0.015	0.014
JAN										
06...	1106	0.11	134	--	-8.0	0.5	--	--	--	0.021
20...	1313	0.15	127	8.40	1.0	1.0	11.8	105	--	0.016
FEB										
07...	1235	0.24	133	--	-15.0	0.5	--	--	0.034	0.030
22...	1353	0.36	120	8.30	6.5	2.0	11.4	105	--	0.024
22...	1740	0.51	--	--	--	--	--	--	--	0.029
22...	2100	0.51	--	--	--	--	--	--	--	0.032
MAR										
07...	1745	0.36	124	--	2.0	2.0	--	--	--	0.026
08...	1035	1.0	117	--	4.0	2.0	--	--	--	0.026
23...	1140	0.32	128	8.30	7.0	2.5	11.4	107	0.016	0.015

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)
OCT										
12...	--	<0.004	--	--	0.12	--	--	--	<0.009	--
25...	--	<0.002	--	--	0.09	--	--	--	<0.019	--
NOV										
13...	--	0.005	--	--	0.30	--	--	--	0.003	--
29...	--	0.004	--	--	<0.08	--	--	--	0.012	--
DEC										
20...	0.003	0.002	0.07	0.07	0.07	0.07	0.09	0.08	0.013	0.009
JAN										
06...	--	0.002	--	--	0.10	--	--	--	0.013	--
20...	--	0.003	--	--	0.13	--	--	--	0.014	--
FEB										
07...	0.011	0.001	0.15	0.12	0.16	0.12	0.20	0.15	0.016	0.014
22...	--	0.003	--	--	0.30	--	--	--	0.037	--
22...	--	0.002	--	--	0.39	--	--	--	0.034	--
22...	--	0.003	--	--	0.33	--	--	--	0.030	--
MAR										
07...	--	<0.002	--	--	0.22	--	--	--	0.027	--
08...	--	0.002	--	--	0.94	--	--	--	0.056	--
23...	0.002	0.003	0.19	0.13	0.19	0.13	0.20	0.14	0.037	0.031

10336740 LOGAN HOUSE CREEK NEAR GLENBROOK, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO TOTAL (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT									
12...	--	0.004	--	--	50	--	1	0.00	--
25...	--	<0.002	--	--	50	--	3	0.00	--
NOV									
13...	--	<0.001	--	--	160	--	5	0.00	--
29...	--	<0.004	--	--	140	--	1	0.00	--
DEC									
20...	0.001	0.001	0.00	0.00	--	--	1	0.00	--
JAN									
06...	--	0.003	--	--	--	--	2	0.00	--
20...	--	0.003	--	--	160	--	1	0.00	--
FEB									
07...	0.006	0.004	0.01	0.01	140	38	5	0.00	85
22...	--	0.007	--	--	350	--	12	0.01	--
22...	--	0.005	--	--	540	--	15	0.02	88
22...	--	0.007	--	--	270	--	8	0.01	--
MAR									
07...	--	0.003	--	--	190	--	5	0.00	--
08...	--	0.007	--	--	1400	170	41	0.11	96
23...	0.004	0.005	0.01	0.01	60	19	2	0.00	93

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
APR											
06...	1200	0.77	114	--	12.5	3.0	--	--	--	--	--
06...	1820	1.5	112	--	10.5	3.5	--	--	--	--	--
06...	2100	1.6	110	--	4.5	2.0	--	--	--	--	--
14...	1135	1.1	98	--	16.0	3.5	--	--	--	--	--
14...	1500	1.6	94	--	14.0	4.0	--	--	--	--	--
14...	1740	2.4	89	--	14.0	4.0	--	--	--	--	--
15...	0730	1.4	88	--	2.0	2.5	--	--	--	--	--
19...	1000	0.85	83	8.10	12.0	4.0	10.2	99	--	--	--
19...	1610	1.4	86	8.20	18.5	5.0	10	99	--	--	--
19...	1835	1.8	81	8.20	14.0	5.0	9.8	98	--	--	--
20...	0940	0.85	87	8.10	9.5	4.0	10.2	99	--	--	--
27...	1350	0.47	104	--	4.0	2.5	--	--	--	--	--
MAY											
05...	1330	0.63	105	--	17.0	8.0	--	--	--	--	--
11...	1100	0.51	107	--	5.0	4.5	--	--	--	--	--
18...	1115	0.36	117	--	8.0	5.0	--	--	--	--	--
24...	1423	0.31	121	8.20	7.5	6.0	9.3	95	--	--	--
JUN											
01...	0945	0.21	125	--	9.0	4.5	--	--	--	--	--
15...	1343	0.13	145	8.30	20.5	12.0	8.3	98	--	--	--
JUL											
06...	1410	0.03	148	--	25.0	8.0	--	--	--	--	--
20...	1340	0.02	155	8.30	24.0	11.5	8.2	95	--	--	--
AUG											
07...	1730	0.06	155	--	18.0	11.0	--	--	--	--	--
08...	1200	0.18	144	--	14.0	10.5	--	--	--	--	--
23...	1045	0.05	149	8.30	12.5	9.0	8.1	89	--	--	--
30...	1041	0.05	150	8.30	21.0	7.5	9.2	98	0.025	0.013	0.004
SEP											
17...	1700	0.05	158	--	7.0	7.0	--	--	--	--	--
29...	1414	0.13	147	--	10.0	7.0	--	--	--	--	--

10336740 LOGAN HOUSE CREEK NEAR GLENBROOK, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)
APR										
06...	--	--	0.020	--	0.004	--	--	0.27	--	--
06...	--	--	0.023	--	0.003	--	--	1.7	--	--
06...	--	--	0.021	--	0.004	--	--	1.3	--	--
14...	--	--	0.009	--	0.003	--	--	0.38	--	--
14...	--	--	0.009	--	0.003	--	--	0.48	--	--
14...	--	--	0.010	--	0.003	--	--	0.90	--	--
15...	--	--	0.009	--	0.003	--	--	0.41	--	--
19...	--	0.008	0.008	0.005	0.006	0.33	0.23	0.34	0.23	0.35
19...	--	0.008	0.008	0.004	0.005	0.42	0.20	0.43	0.21	0.44
19...	--	0.010	0.008	0.005	0.005	0.69	0.20	0.70	0.21	0.71
20...	--	0.008	0.007	0.004	0.004	0.29	0.23	0.29	0.24	0.30
27...	--	--	--	--	--	--	--	0.24	--	--
MAY										
05...	--	--	--	--	--	--	--	0.25	--	--
11...	--	--	0.005	--	0.004	--	--	0.21	--	--
18...	--	--	0.008	0.004	0.003	0.18	0.14	0.19	0.14	--
24...	--	--	0.006	--	0.003	--	--	0.15	--	--
JUN										
01...	--	--	0.008	--	0.004	--	--	0.13	--	--
15...	--	--	0.011	0.002	0.001	0.20	0.12	0.20	0.12	--
JUL										
06...	--	--	0.012	--	0.003	--	--	0.08	--	--
20...	--	--	0.019	--	0.003	--	--	0.09	--	--
AUG										
07...	--	--	0.002	0.003	0.004	0.15	0.10	0.15	0.10	--
08...	--	--	0.003	--	0.003	--	--	0.26	--	--
23...	--	--	0.015	0.002	0.002	0.14	0.06	0.15	0.06	--
30...	0.003	0.029	0.016	0.010	0.001	--	--	<0.16	<0.20	--
SEP										
17...	--	--	0.004	--	0.002	--	--	0.15	--	--
29...	--	--	0.003	--	0.002	--	--	0.17	--	--

DATE	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR										
06...	--	0.031	--	--	0.010	240	--	6	0.01	--
06...	--	0.076	--	--	0.008	3000	--	83	0.34	96
06...	--	0.067	--	--	0.008	2700	--	75	0.32	92
14...	--	0.018	--	--	0.004	230	--	10	0.03	73
14...	--	0.028	--	--	0.004	410	--	20	0.09	73
14...	--	0.039	--	--	0.004	1300	--	21	0.13	73
15...	--	0.018	--	--	0.004	230	--	21	0.08	96
19...	0.24	0.019	0.017	0.005	0.004	260	80	9	0.02	--
19...	0.22	0.023	0.019	0.004	0.002	570	80	15	0.06	76
19...	0.22	0.034	0.019	0.004	0.003	880	80	26	0.13	89
20...	0.24	0.021	0.014	0.005	0.004	240	80	5	0.01	--
27...	--	--	--	--	--	70	--	3	0.00	--
MAY										
05...	--	--	--	--	--	120	--	4	0.01	--
11...	--	0.017	--	--	0.004	100	--	3	0.00	--
18...	0.15	0.044	0.030	0.003	0.003	150	120	4	0.00	--
24...	--	0.019	--	--	0.002	120	--	2	0.00	--
JUN										
01...	--	0.020	--	--	0.004	80	--	2	0.00	--
15...	0.13	0.018	0.016	0.004	0.004	30		2	0.00	--
JUL										
06...	--	0.034	--	--	0.005	80	--	1	0.00	--
20...	--	0.041	--	--	0.006	140	--	3	0.00	--
AUG										
07...	0.11	0.069	0.038	0.004	0.003	140	76	3	0.00	86
08...	--	0.081	--	--	0.005	200	--	4	0.00	--
23...	0.08	0.051	0.048	0.004	0.003	250	--	5	0.00	--
30...	--	0.046	0.001	0.001	0.003	700	--	2	0.00	--
SEP										
17...	--	0.029	--	--	0.005	120	--	4	0.00	--
29...	--	0.025	--	--	0.002	190	--	5	0.00	96

10336765 EDGEWOOD CREEK AT LAKE TAHOE NR STATELINE, NV

LOCATION.--Lat 38°58'05", long 119°56'54", in NE1/4NW1/4 sec.27, T.13 N., R.18 E., Douglas County, Hydrologic Unit 16050101, on right bank 800 ft above mouth, on Edgewood golf course at Stateline.

DRAINAGE AREA.--5.50 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to September 1989. Miscellaneous discharge measurements made 1984-1985.

GAGE.--Water-stage recorder. Elevation of gage is 6,240 ft, from topographic map.

REMARKS.--Records fair. Flow is periodically regulated for commercial use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period, April to September, 35 ft³/s, Sept. 18, gage height 5.31 ft; minimum daily, 0.39 ft³/s, June 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	2.7	.99	.57	.85	.64
2	---	---	---	---	---	---	---	2.3	1.2	.61	.96	.69
3	---	---	---	---	---	---	---	2.8	3.0	.67	.73	.69
4	---	---	---	---	---	---	---	2.0	3.7	.57	.67	.62
5	---	---	---	---	---	---	---	2.3	3.3	.58	.68	.88
6	---	---	---	---	---	---	---	1.9	3.1	.79	.86	.58
7	---	---	---	---	---	---	---	1.2	2.9	.52	1.1	.67
8	---	---	---	---	---	---	---	1.3	2.8	.53	5.7	.72
9	---	---	---	---	---	---	---	2.2	1.9	.56	3.0	.70
10	---	---	---	---	---	---	---	3.2	1.8	.58	2.3	.66
11	---	---	---	---	---	---	---	3.2	1.6	.65	2.0	.61
12	---	---	---	---	---	---	8.0	3.3	.83	.72	.69	.52
13	---	---	---	---	---	---	4.4	3.2	.87	.83	.69	.53
14	---	---	---	---	---	---	3.0	3.2	.84	.82	1.2	.55
15	---	---	---	---	---	---	3.2	3.8	.72	.69	1.6	.55
16	---	---	---	---	---	---	4.1	3.2	.60	.72	.55	.73
17	---	---	---	---	---	---	3.6	3.0	.73	.78	.59	2.8
18	---	---	---	---	---	---	3.4	2.5	.85	.81	.50	7.9
19	---	---	---	---	---	---	3.3	.88	.78	.79	.63	5.1
20	---	---	---	---	---	---	3.4	.79	.86	.66	.68	2.6
21	---	---	---	---	---	---	4.4	.84	.39	.66	.78	2.4
22	---	---	---	---	---	---	4.3	.73	.40	.76	.78	2.7
23	---	---	---	---	---	---	4.6	.89	.41	.72	.79	1.6
24	---	---	---	---	---	---	4.5	2.4	.43	.79	.71	.92
25	---	---	---	---	---	---	4.1	2.1	.42	1.1	.57	.50
26	---	---	---	---	---	---	3.9	1.5	.56	1.1	.45	.50
27	---	---	---	---	---	---	3.8	1.3	.50	1.3	.46	1.4
28	---	---	---	---	---	---	3.7	1.2	1.3	1.2	.50	.55
29	---	---	---	---	---	---	3.4	1.4	.76	.94	.57	4.5
30	---	---	---	---	---	---	3.2	2.5	.52	.78	.59	3.3
31	---	---	---	---	---	---	---	1.4	---	.61	.60	---
TOTAL	---	---	---	---	---	---	---	65.23	39.06	23.41	32.78	47.11
MEAN	---	---	---	---	---	---	---	2.10	1.30	.76	1.06	1.57
MAX	---	---	---	---	---	---	---	3.8	3.7	1.3	5.7	7.9
MIN	---	---	---	---	---	---	---	.73	.39	.52	.45	.50
AC-FT	---	---	---	---	---	---	---	129	77	46	65	93

10336765 EDGEWOOD CREEK AT LAKE TAHOE NR STATELINE, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1984 to 1985 and 1988 to current year.

REMARKS.--In Dec. 1988, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Listed herin, the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) may sometimes exceed the respective total due to unavoidable errors associated with subsampling and sample processing. or limitation on precision and accuracy of the analytical procedure.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
DEC											
20...	1020	2.3	92	7.60	3.5	2.0	10.2	93	--	--	--
JAN											
06...	1115	3.3	118	--	-1.0	1.0	--	--	--	--	--
20...	1015	2.9	120	7.70	4.0	3.0	10.1	94	--	--	--
FEB											
10...	1245	3.3	239	--	8.0	1.5	--	--	--	--	--
22...	1220	5.8	186	7.30	5.0	3.0	8.8	82	0.084	0.043	0.008
22...	1330	8.5	--	--	5.0	3.0	--	--	--	--	--
22...	1530	8.9	--	--	5.0	3.0	--	--	--	--	--
MAR											
07...	1325	6.4	196	--	9.0	5.0	--	--	--	--	--
08...	0915	17	145	--	7.5	4.0	--	--	--	--	--
08...	1200	5.0	145	--	5.5	4.5	--	--	--	--	--
24...	0920	10	125	7.50	4.5	5.0	9.9	98	--	--	--
APR											
06...	1230	3.2	121	--	14.0	15.0	--	--	--	--	--
06...	1315	4.5	139	--	17.0	13.0	--	--	--	--	--
06...	1740	4.3	147	--	15.0	12.0	--	--	--	--	--
13...	1105	5.0	119	--	10.0	10.5	--	--	--	--	--
13...	1400	4.1	122	--	13.0	13.0	--	--	--	--	--
13...	1650	2.2	135	--	17.5	13.5	--	--	--	--	--
14...	0710	3.6	122	--	3.0	9.0	--	--	--	--	--
20...	0740	4.3	119	8.70	8.0	13.0	8.1	97	--	--	--
20...	1500	3.2	116	--	17.5	15.5	--	--	--	--	--
20...	1920	2.1	127	--	12.0	13.5	--	--	--	--	--
21...	0515	3.9	120	--	9.0	10.0	--	--	--	--	--
27...	1710	3.7	134	--	8.5	10.5	--	--	--	--	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)
DEC											
20...	--	0.038	0.036	0.073	0.005	0.10	0.10	0.18	0.10	0.21	0.14
JAN											
06...	--	--	0.054	--	0.048	--	--	0.16	--	--	--
20...	--	--	0.036	--	0.025	--	--	0.08	--	--	--
FEB											
10...	--	0.082	0.086	0.011	0.025	0.28	0.22	0.29	0.25	0.37	0.33
22...	0.006	0.092	0.049	0.028	0.048	0.51	--	0.53	<0.20	0.63	--
22...	--	--	0.057	--	0.089	--	--	1.8	--	--	--
22...	--	--	0.050	--	0.122	--	--	1.1	--	--	--
MAR											
07...	--	--	0.049	0.040	--	0.52	--	0.56	--	--	--
08...	--	--	0.034	--	0.002	--	--	1.2	--	--	--
08...	--	--	0.039	--	0.002	--	--	0.98	--	--	--
24...	--	0.055	0.038	0.053	0.025	0.65	0.31	0.70	0.34	0.76	0.37
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	0.020	--	0.003	--	--	0.25	--	--	--
06...	--	--	0.021	--	0.004	--	--	0.25	--	--	--
13...	--	--	0.010	--	0.003	--	--	0.28	--	--	--
13...	--	--	0.015	--	0.003	--	--	0.27	--	--	--
13...	--	--	0.017	--	0.003	--	--	0.26	--	--	--
14...	--	--	0.016	--	0.003	--	--	0.22	--	--	--
20...	--	0.012	0.008	0.004	0.004	0.26	0.16	0.27	0.17	0.28	0.17
20...	--	--	0.011	--	0.005	--	--	0.31	--	--	--
20...	--	--	0.011	--	0.005	--	--	0.29	--	--	--
21...	--	--	0.010	--	0.005	--	--	0.26	--	--	--
27...	--	--	--	--	--	--	--	0.28	--	--	--

10336765 EDGEWOOD CREEK AT LAKE TAHOE NR STATELINE, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO TOTAL (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC											
20...	0.034	0.034	0.026	0.013	0.03	0.02	840	500	3	0.02	--
JAN											
06...	0.042	--	--	0.015	--	--	870	--	10	0.09	--
20...	0.085	--	--	0.064	--	--	460	--	3	0.02	--
FEB											
10...	0.069	0.061	0.034	0.020	0.04	0.03	670	230	115	1.0	--
22...	0.100	0.035	0.030	0.019	0.09	--	250	240	58	0.91	80
22...	0.283	--	--	0.018	--	--	5500	--	275	6.3	91
22...	0.163	--	--	0.036	--	--	3100	--	112	2.7	77
MAR											
07...	0.088	--	--	0.022	--	--	1400	--	34	0.58	--
08...	0.162	--	--	0.030	--	--	3300	--	87	4.0	--
08...	0.160	--	--	0.030	--	--	2700	--	63	0.85	--
24...	0.136	0.035	0.032	0.028	0.17	0.03	1800	250	236	6.6	99
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
06...	0.048	--	--	0.018	--	--	560	--	5	0.06	--
06...	0.044	--	--	0.015	--	--	600	--	8	0.09	--
13...	0.035	--	--	0.005	--	--	320	--	5	0.06	--
13...	0.033	--	--	0.004	--	--	360	--	13	0.15	--
13...	0.041	--	--	0.009	--	--	430	--	51	0.30	--
14...	0.035	--	--	0.007	--	--	340	--	5	0.05	--
20...	0.034	0.026	0.008	0.005	0.02	0.01	570	190	4	0.05	--
20...	0.046	--	--	0.010	--	--	550	--	3	0.03	--
20...	0.047	--	--	0.010	--	--	550	--	5	0.03	--
21...	0.046	--	--	0.006	--	--	550	--	4	0.04	--
27...	--	--	--	--	--	--	500	--	4	0.04	--

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
MAY									
05...	1445	2.5	130	--	15.5	19.0	--	--	--
09...	1450	1.9	126	--	13.5	15.0	--	--	0.014
09...	1620	3.1	148	--	12.5	15.0	--	--	0.035
19...	1030	0.98	135	--	8.0	12.0	--	--	0.012
26...	1415	1.8	129	9.50	16.5	16.0	11.0	141	0.010
JUN									
02...	1200	1.2	133	--	18.0	16.5	--	--	0.010
04...	1230	3.2	121	--	14.0	15.0	--	--	0.013
04...	1620	12	114	--	7.0	14.5	--	--	0.032
04...	2000	7.8	98	--	10.0	13.5	--	--	0.037
20...	1005	0.89	126	9.70	17.0	18.5	8.4	113	0.008
JUL									
06...	1310	0.82	125	--	21.5	19.5	--	--	0.013
AUG									
04...	1100	0.76	114	9.70	18.0	17.5	8.1	106	0.004
07...	1545	0.93	123	--	19.5	19.0	--	--	0.005
08...	1020	7.8	91	--	14.0	16.5	--	--	0.058
22...	0945	0.85	111	--	18.5	17.0	6.6	86	0.007
SEP									
11...	1530	0.71	110	--	14.0	16.0	--	--	0.007
17...	1545	3.0	101	--	11.0	14.5	--	--	0.019
29...	1415	9.5	86	--	14.5	14.0	--	--	0.044

10336765 EDGEWOOD CREEK AT LAKE TAHOE NR STATELINE, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
MAY									
05...	--	--	--	--	0.30	--	--	--	--
09...	--	0.004	--	--	0.23	--	--	0.044	--
09...	--	0.074	--	--	0.80	--	--	0.102	--
19...	--	0.006	--	--	0.22	--	--	0.070	--
26...	--	0.002	--	0.12	0.24	0.12	0.13	0.042	0.022
JUN									
02...	--	0.002	--	--	0.23	--	--	0.042	--
04...	--	0.003	--	--	0.24	--	--	0.036	--
04...	--	0.006	--	--	0.49	--	--	0.085	--
04...	--	0.003	--	--	0.65	--	--	0.096	--
20...	0.014	0.002	0.25	0.16	0.27	0.16	0.17	0.073	0.054
JUL									
06...	--	0.004	--	--	0.30	--	--	0.073	--
AUG									
04...	--	0.004	--	--	0.30	--	--	0.058	--
07...	0.004	0.002	0.44	0.33	0.44	0.33	0.33	0.102	0.064
08...	--	0.032	--	--	0.71	--	--	0.088	--
22...	0.016	0.004	0.37	0.29	0.38	0.29	0.30	0.063	0.052
SEP									
11...	--	0.002	--	--	0.34	--	--	0.059	--
17...	--	0.001	--	--	0.53	--	--	0.057	--
29...	--	0.004	--	--	0.55	--	--	0.060	--

DATE	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO TOTAL (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO DIS. (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY									
05...	--	--	--	--	520	--	5	0.03	--
09...	--	0.013	--	--	610	--	9	0.05	--
09...	--	0.052	--	--	870	--	25	0.21	88
19...	--	0.012	--	--	550	--	12	0.03	--
26...	0.010	0.008	0.02	0.01	410	320	3	0.02	--
JUN									
02...	--	0.012	--	--	320	--	10	0.03	--
04...	--	0.008	--	--	320	--	3	0.02	--
04...	--	0.030	--	--	820	--	24	0.78	83
04...	--	0.032	--	--	1000	--	35	0.73	--
20...	0.015	0.015	0.03	0.02	490	240	2	0.01	--
JUL									
06...	--	0.025	--	--	390	--	3	0.01	--
AUG									
04...	--	0.019	--	--	360	--	2	0.00	--
07...	0.034	0.034	0.00	0.00	360	240	4	0.01	81
08...	--	0.030	--	--	490	--	25	0.53	--
22...	0.023	0.021	0.02	0.02	530	310	2	0.00	94
SEP									
11...	--	0.019	--	--	380	--	3	0.00	--
17...	--	0.024	--	--	470	--	3	0.02	--
29...	--	0.013	--	--	670	--	9	0.23	97

10336780 TROUT CREEK NEAR TAHOE VALLEY, CA

LOCATION.--Lat 38°55'12", long 119°58'17", in NW 1/4 SE 1/4 sec.3, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank 5 ft upstream from Martin Avenue Bridge, 500 ft upstream from Heavenly Valley Creek, and 1.8 mi east of Tahoe Valley.

DRAINAGE AREA.--36.7 mi².

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and sharp-crested weir in culvert at bridge. Datum of gage is 6,241.57 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except estimated daily discharges, which are fair. Minor diversions for local water supply upstream from station.

AVERAGE DISCHARGE.--29 years, 37.3 ft³/s, 27,020 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 535 ft³/s, Feb. 1, 1963, gage height, 11.14 ft, from rating curve extended above 250 ft³/s on basis of computation of peak flow (weir formula); no flow for part of Sept. 11, 1966.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 3	1330	*93	*7.21				

Minimum daily, 4.3 ft³/s, Oct. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	4.6	e8.8	8.0	e8.7	16	50	40	48	38	14	11
2	4.8	4.9	e8.7	e8.0	e9.0	14	46	41	49	35	14	11
3	e5.0	6.7	e8.5	e8.0	e9.3	e14	49	42	75	33	13	10
4	e5.1	5.8	8.5	e8.0	e9.8	e14	46	48	73	32	13	9.9
5	e5.1	5.8	e8.3	e8.3	e10	14	46	56	72	31	13	9.7
6	5.1	5.7	e8.3	e8.6	e10	22	52	62	65	29	13	9.5
7	5.2	5.7	e8.3	e9.0	e11	27	55	66	69	29	15	9.6
8	5.1	6.4	8.5	e9.5	e11	45	57	73	69	28	26	10
9	4.8	6.7	e8.5	e10	e11	46	57	76	69	27	21	9.6
10	4.5	7.0	8.6	e11	e11	39	59	72	72	25	18	9.6
11	5.1	9.7	e8.6	11	e12	44	60	65	71	24	16	9.7
12	5.3	8.0	e8.6	e12	e13	36	58	60	70	23	14	11
13	5.6	11	8.6	e12	e14	30	56	60	70	22	14	9.4
14	5.6	8.3	e8.5	e13	e14	25	59	54	70	21	13	9.2
15	5.5	7.7	e8.5	e13	e13	24	61	53	70	20	12	8.9
16	4.9	7.7	e8.4	e14	e12	22	61	52	70	20	12	9.5
17	e5.1	9.0	e8.4	e14	e12	24	61	54	67	20	13	21
18	e5.2	8.3	e8.3	e14	e12	24	63	58	63	20	15	19
19	e5.2	8.5	8.3	e14	e12	38	65	54	59	20	12	21
20	e5.2	8.7	8.1	e14	e12	35	66	55	55	19	12	18
21	e5.2	9.0	e8.0	e13	e12	28	66	58	53	18	13	15
22	e5.2	15	e8.1	e13	e13	27	58	58	52	17	12	15
23	e5.1	22	e8.3	e12	14	28	52	60	50	18	12	14
24	5.2	13	e8.3	e12	15	35	51	53	49	17	12	14
25	5.5	12	e8.4	e11	15	41	48	52	46	17	12	13
26	5.5	e10	e8.4	e10	16	35	45	52	44	16	12	13
27	5.5	8.7	e8.4	e9.9	17	30	41	53	45	15	11	13
28	5.5	9.7	8.5	e9.6	17	43	41	53	43	15	11	13
29	4.4	e9.5	8.6	e9.3	---	46	41	52	40	15	11	19
30	4.3	e9.1	8.6	e8.8	---	41	40	52	38	14	11	17
31	4.6	---	8.3	e8.5	---	44	---	49	---	14	11	---
TOTAL	160.8	264.2	261.2	336.5	345.8	951	1610	1733	1786	692	421	382.6
MEAN	5.19	8.81	8.43	10.9	12.3	30.7	53.7	55.9	59.5	22.3	13.6	12.8
MAX	7.4	22	8.8	14	17	46	66	76	75	38	26	21
MIN	4.3	4.6	8.0	8.0	8.7	14	40	40	38	14	11	8.9
AC-FT	319	524	518	667	686	1890	3190	3440	3540	1370	835	759

CAL YR 1988 TOTAL 3472.8 MEAN 9.49 MAX 22 MIN 2.5 AC-FT 6890
WTR YR 1989 TOTAL 8944.1 MEAN 24.5 MAX 76 MIN 4.3 AC-FT 17740

e Estimated.

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA

LOCATION.--Lat 38°55'56", long 119°58'40", in SE 1/4 NW 1/4 sec.3, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, near center of bridge span on downstream side of U.S. Highway 50 bridge, 1.2 mi upstream from Lake Tahoe, and 1.9 mi northeast of South Lake Tahoe Post Office.

PERIOD OF RECORD.--Water years 1972-74, 1989.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1971 to June 1974, October 1988 to September 1989.

REMARKS.--Sediment samples were collected during most days where a water temperature is published. Discharge record used to compute sediment based on sum of stations 10336780 Trout Creek near Tahoe Valley and 10336785 Heavenly Valley Creek near Tahoe Valley. See schematic diagram of Truckee River basin.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum daily mean, 300 mg/L, Jan. 15, 1974; minimum daily mean, 0 mg/L, Oct. 15, 1973 and many days in 1988 and 1989.
SEDIMENT LOAD: Maximum daily, 52 tons, Jan. 15, 1974; minimum daily, 0 ton, Oct. 15, 1973 and many days in 1988 and 1989.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily mean, 28 mg/L, Mar. 8; minimum daily mean, 0 mg/L, on many days.
SEDIMENT LOAD: Maximum daily, 3.4 tons, Mar. 8; minimum daily, 0 ton, on many days.

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	1.5	7.5	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	1.0	.5	---	---	13.5	10.0	---	11.0	---
5	10.5	---	---	---	---	2.0	4.0	---	7.0	---	---	12.0
6	---	---	---	---	---	2.0	---	---	---	---	---	---
7	---	---	---	---	---	2.0	---	---	---	10.5	---	---
8	---	---	---	---	---	2.0	---	---	9.5	---	---	---
9	---	---	1.5	---	---	2.0	---	---	---	---	11.5	---
10	---	5.0	---	---	---	6.5	---	---	---	13.0	---	---
11	---	---	---	---	---	7.0	10.5	---	---	---	---	---
12	---	---	---	---	1.0	3.0	---	11.0	13.5	---	---	---
13	---	6.0	---	---	---	2.5	---	---	---	---	---	---
14	---	---	---	.5	---	1.5	---	---	13.0	---	---	12.0
15	8.5	3.0	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	10.5	---
17	---	---	---	---	---	---	---	7.0	---	11.0	---	9.5
18	---	---	---	---	---	5.0	---	---	---	---	---	9.0
19	---	3.0	---	---	---	3.0	4.5	---	---	---	---	---
20	---	---	.0	---	---	---	5.0	---	14.5	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	1.0	---	7.5	12.0	---	---	---	---
23	10.5	1.5	---	1.0	---	---	---	---	---	---	---	---
24	---	---	---	---	---	4.0	---	---	---	---	---	---
25	---	---	---	---	---	---	---	10.0	---	12.5	9.0	---
26	---	---	1.0	---	---	---	3.0	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	5.0	---	---	9.5	---	---	---
29	---	2.0	---	---	---	2.0	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	8.0
31	8.0	---	---	---	---	4.0	---	6.0	---	---	---	---

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	7.4	4	.08	4.6	1	.01	e8.8	3	.07
2	4.8	4	.05	4.9	1	.01	e8.7	2	.05
3	e5.0	4	.05	6.7	1	.02	e8.5	2	.05
4	e5.1	4	.06	5.8	1	.02	8.5	2	.05
5	e5.1	4	.06	5.8	1	.02	e8.3	1	.02
6	5.1	4	.06	5.7	1	.02	e8.3	1	.02
7	5.2	4	.06	5.7	1	.02	e8.3	1	.02
8	5.1	4	.06	6.4	1	.02	8.5	0	.00
9	4.8	3	.04	6.7	1	.02	e8.5	0	.00
10	4.5	3	.04	7.0	1	.02	8.6	0	.00
11	5.1	3	.04	9.7	3	.08	e8.6	0	.00
12	5.3	3	.04	8.0	1	.02	e8.6	0	.00
13	5.6	2	.03	11	4	.12	8.6	0	.00
14	5.6	2	.03	8.3	5	.11	e8.5	0	.00
15	5.5	2	.03	7.7	2	.04	e8.5	0	.00
16	4.9	2	.03	7.7	1	.02	e8.4	0	.00
17	e5.1	2	.03	9.0	1	.02	e8.4	0	.00
18	e5.2	1	.01	8.3	1	.02	e8.3	0	.00
19	e5.2	1	.01	8.5	1	.02	8.3	0	.00
20	e5.2	1	.01	8.7	1	.02	8.1	0	.00
21	e5.2	1	.01	9.0	1	.02	e8.0	0	.00
22	e5.2	1	.01	15	8	.32	e8.1	0	.00
23	e5.1	1	.01	22	18	1.1	e8.3	0	.00
24	5.2	1	.01	13	4	.14	e8.3	0	.00
25	5.5	1	.01	12	3	.10	e8.4	1	.02
26	5.5	1	.01	e10	3	.08	e8.4	2	.05
27	5.5	1	.01	8.7	3	.07	e8.4	1	.02
28	5.5	1	.01	9.7	3	.08	8.5	0	.00
29	4.4	1	.01	e9.5	3	.08	8.6	0	.00
30	4.3	1	.01	e9.1	3	.07	8.6	0	.00
31	4.6	1	.01	---	---	---	8.3	0	.00
TOTAL	160.8	---	0.93	264.2	---	2.71	261.2	---	0.37
		JANUARY			FEBRUARY			MARCH	
1	8.0	0	.00	e8.7	0	.00	16	3	.13
2	e8.0	0	.00	e9.0	0	.00	14	5	.19
3	e8.0	0	.00	e9.3	0	.00	e14	5	.19
4	e8.0	0	.00	e9.8	0	.00	e14	3	.11
5	e8.3	0	.00	e10	0	.00	14	4	.15
6	e8.6	0	.00	e10	0	.00	22	12	.71
7	e9.0	0	.00	e11	0	.00	27	11	.80
8	e9.5	0	.00	e11	0	.00	45	28	3.4
9	e10	0	.00	e11	0	.00	46	17	2.1
10	e11	0	.00	e11	0	.00	39	6	.63
11	11	0	.00	e12	0	.00	44	9	1.1
12	e12	0	.00	e13	0	.00	36	9	.87
13	e12	0	.00	e14	0	.00	30	9	.73
14	e13	0	.00	e14	0	.00	25	8	.54
15	e13	0	.00	e13	0	.00	24	7	.45
16	e14	0	.00	e12	0	.00	22	6	.36
17	e14	0	.00	e12	0	.00	24	5	.32
18	e14	0	.00	e12	0	.00	24	7	.45
19	e14	0	.00	e12	0	.00	38	19	1.9
20	e14	0	.00	e12	0	.00	35	5	.47
21	e13	0	.00	e12	0	.00	28	5	.38
22	e13	0	.00	e13	3	.11	27	5	.36
23	e12	0	.00	14	3	.11	28	5	.38
24	e12	0	.00	15	3	.12	35	7	.66
25	e11	0	.00	15	3	.12	41	4	.44
26	e10	0	.00	16	3	.13	35	3	.28
27	e9.9	0	.00	17	3	.14	30	3	.24
28	e9.6	0	.00	17	3	.14	43	10	1.2
29	e9.3	0	.00	---	---	---	46	15	1.9
30	e8.8	0	.00	---	---	---	41	6	.66
31	e8.5	0	.00	---	---	---	44	9	1.1
TOTAL	336.5	---	0.00	345.8	---	0.87	951	---	23.20

e Estimated.

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	50	---	e.75	40	---	e.47	48	---	e.69
2	46	---	e.63	42	---	e.52	49	---	e.72
3	49	---	e.72	43	---	e.54	75	---	e3.3
4	46	---	e.63	49	---	e.72	73	---	e3.2
5	46	---	e.63	57	---	e.99	73	---	e3.2
6	52	---	e.82	63	---	e1.2	65	---	e2.5
7	55	---	e.92	68	---	e1.5	70	---	e2.9
8	57	---	e.99	75	---	e1.8	70	---	e2.9
9	57	---	e.99	77	---	e1.9	70	---	e2.9
10	59	---	e1.1	73	---	e1.7	73	---	e3.2
11	60	---	e1.1	66	---	e1.4	72	---	e3.1
12	58	---	e1.0	61	---	e1.1	71	---	e3.0
13	56	---	e.96	61	---	e1.1	72	---	e3.1
14	59	---	e1.1	55	---	e.92	72	---	e3.1
15	61	---	e1.1	54	---	e.89	72	---	e3.1
16	61	---	e1.1	53	---	e.85	72	---	e3.1
17	61	---	e1.1	55	---	e.92	69	---	e2.8
18	64	---	e1.3	59	---	e1.1	65	---	e2.5
19	66	---	e1.4	55	---	e.92	61	---	e2.2
20	67	---	e1.4	56	---	e.96	57	---	e1.9
21	67	---	e1.4	59	---	e1.1	54	---	e1.7
22	59	---	e1.1	59	---	e1.1	53	---	e1.7
23	53	---	e.85	61	---	e1.1	51	---	e1.6
24	52	---	e.82	53	---	e.85	50	---	e1.5
25	49	---	e.72	52	---	e.82	47	---	e1.3
26	45	---	e.60	52	---	e.82	45	---	e1.2
27	41	---	e.49	53	---	e.85	46	---	e1.3
28	41	---	e.49	53	---	e.85	45	---	e1.2
29	41	---	e.49	52	---	e.82	41	---	e1.0
30	40	---	e.47	52	---	e.82	39	---	e.91
31	---	---	---	49	---	e.72	---	---	---
TOTAL	1618	---	27.17	1757	---	31.35	1820	---	66.82
		JULY			AUGUST			SEPTEMBER	
1	39	8	.84	14	3	.11	11	3	.09
2	36	8	.78	14	3	.11	11	3	.09
3	34	7	.64	13	3	.11	10	3	.08
4	33	7	.62	13	3	.11	9.9	2	.05
5	32	7	.60	13	3	.11	9.7	2	.05
6	29	6	.47	13	3	.11	9.5	2	.05
7	29	6	.47	15	---	e.14	9.6	2	.05
8	28	6	.45	26	---	e.41	10	2	.05
9	27	5	.36	21	5	.28	9.6	2	.05
10	25	5	.34	18	3	.15	9.6	1	.03
11	24	5	.32	16	3	.13	9.7	1	.03
12	23	5	.31	14	3	.11	11	1	.03
13	22	5	.30	14	3	.11	9.4	1	.03
14	21	4	.23	13	3	.11	9.2	1	.02
15	20	4	.22	12	3	.10	8.9	1	.02
16	20	4	.22	12	3	.10	9.5	2	.05
17	20	4	.22	13	3	.11	21	4	.23
18	20	4	.22	15	3	.12	19	0	.00
19	20	4	.22	12	3	.10	21	0	.00
20	19	4	.21	12	3	.10	18	0	.00
21	18	4	.19	13	3	.11	15	0	.00
22	17	4	.18	12	3	.10	15	0	.00
23	18	4	.19	12	3	.10	14	0	.00
24	17	4	.18	12	4	.13	14	0	.00
25	17	4	.18	12	6	.19	13	0	.00
26	16	4	.17	12	5	.16	13	0	.00
27	15	4	.16	11	5	.15	13	0	.00
28	15	4	.16	11	4	.12	13	0	.00
29	15	4	.16	11	4	.12	19	7	.36
30	14	3	.11	11	4	.12	17	6	.28
31	14	3	.11	11	4	.12	---	---	---
TOTAL	697	---	9.83	421	---	4.15	382.6	---	1.64
YEAR	9015.1		169.04						

e Estimated.

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR						
06...	1205	22	3.5	9	0.53	60
07...	1135	27	3.0	8	0.58	83
APR						
26...	1050	40	3.0	5	0.54	73

10337000 LAKE TAHOE AT TAHOE CITY, CA

LOCATION.--Lat 39°10'51", long 120°07'06", in NE 1/4 NE 1/4 sec.5, T.15 N., R.17 E., Placer County, Hydrologic Unit 16050101, on U.S. Coast Guard pier at Lake Forest, 1.1 mi northeast of Tahoe City, and 1.8 mi northeast of Lake Tahoe outlet dam on Truckee River at Tahoe City.

DRAINAGE AREA.--506 mi², at lake outlet.

PERIOD OF RECORD.--April 1900 to current year. Monthend elevations only for October 1943 to September 1957, published in WSP 1734. Prior to October 1961, published as "at Tahoe."
CHEMICAL DATA: Water year 1969, bimonthly; 1978, biannually; 1979, annually.

REVISED RECORDS.--WDR CA-78-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,220.00 ft above U.S. Bureau of Reclamation datum, 6,218.86 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1957, nonrecording gages at several sites near outlet of lake at same datum. Oct. 1, 1957, to May 8, 1958, water-stage recorder on left wingwall of dam at outlet of lake at same datum. May 9, 1958, to Sept. 30, 1968, water-stage recorder on pier, 1,000 ft east of dam at lake outlet.

REMARKS.--Lake levels regulated by a 17-gate concrete dam at outlet of lake; storage began about 1874. Monthly figures given represent usable contents. Usable capacity, 744,600 acre-ft between elevations 6,223 ft, natural rim of lake, and 6,229.1 ft, maximum permissible elevation by Federal Court decree. Lake elevations are referred to U.S. Bureau of Reclamation datum because that datum is used as the official reference point by all local, State, and Federal agencies. There are minor diversions for domestic purposes, irrigation, and power.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 6,231.26 ft, July 14, 15, 17, 18, 1907; minimum, 6,221.74 ft, Dec. 26, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 6,224.88 ft, June 20; minimum, 6,222.66 ft, Nov. 11.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on topographic information available in April 1959)

6,223	0	6,227	486,800
6,224	121,400	6,228	609,300
6,225	243,000	6,229.1	744,600
6,226	364,800		

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 24:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.09	2.81	2.90	e2.90	2.83	2.87	3.76	4.24	4.58	4.75	4.31	3.88
2	3.09	2.79	2.90	e2.91	2.81	2.97	3.79	4.29	4.63	4.76	4.30	3.88
3	3.09	2.81	2.90	2.91	2.90	2.96	3.79	4.26	4.67	4.75	4.28	3.87
4	3.07	2.79	2.89	2.91	2.90	2.98	3.81	4.30	4.71	4.74	4.27	3.85
5	3.07	2.80	2.89	2.96	2.89	3.00	3.83	4.31	4.71	4.72	4.26	3.85
6	3.05	2.77	2.89	2.95	2.89	3.03	3.83	4.34	4.74	4.72	4.25	3.83
7	3.05	2.72	2.89	2.96	2.84	3.07	3.86	4.36	4.78	4.71	4.35	3.77
8	3.04	2.75	2.85	2.95	2.84	3.14	3.88	4.39	4.79	4.69	4.33	3.77
9	3.03	2.75	2.84	2.93	2.85	3.19	3.89	4.41	4.80	4.67	4.31	3.77
10	3.01	2.72	2.84	2.94	2.84	3.22	3.91	4.43	4.81	4.66	4.28	3.75
11	3.02	2.66	2.84	2.98	2.84	3.28	3.94	4.45	4.81	4.65	4.26	3.76
12	3.00	2.68	2.84	2.96	2.83	3.29	3.96	4.46	4.82	4.65	4.28	3.73
13	2.98	2.80	2.83	2.90	2.83	3.35	3.97	4.47	4.84	4.63	4.23	3.71
14	2.96	2.79	2.84	2.89	2.82	3.34	3.98	4.49	4.84	4.62	4.23	3.71
15	2.97	2.76	2.79	2.89	2.82	3.33	4.00	4.52	4.83	4.59	4.21	3.69
16	2.95	2.76	2.77	2.89	2.82	3.41	4.02	4.53	4.86	4.59	4.19	3.73
17	2.96	2.76	2.76	2.89	2.80	3.42	4.05	4.53	4.85	4.56	4.18	3.77
18	2.95	2.75	2.76	2.89	2.82	3.50	4.08	4.53	4.84	4.56	4.16	3.80
19	2.94	2.75	2.75	2.88	2.82	3.52	4.08	4.56	4.81	4.56	4.15	3.78
20	2.94	2.74	2.78	2.88	2.82	3.52	4.09	4.54	4.88	4.55	4.14	3.77
21	2.92	2.71	2.79	2.87	2.83	3.52	4.11	4.54	4.82	4.53	4.12	3.76
22	2.93	2.85	2.83	2.85	2.87	3.53	4.18	4.54	4.80	4.52	4.09	3.76
23	2.92	2.95	e2.85	2.86	2.85	3.56	4.18	4.57	4.83	4.51	4.06	3.73
24	2.91	2.94	e2.87	2.85	2.83	3.63	4.22	4.56	4.81	4.50	4.06	3.72
25	2.90	2.93	e2.87	2.84	2.85	3.67	4.22	4.56	4.81	4.50	4.02	3.71
26	2.88	2.93	e2.87	2.83	2.86	3.67	4.22	4.56	4.83	4.46	4.02	3.67
27	2.87	2.92	e2.87	2.83	2.86	3.67	4.24	4.57	4.80	4.45	4.00	3.65
28	2.86	2.92	e2.86	2.83	2.86	3.69	4.24	4.55	4.79	4.42	3.98	3.64
29	2.85	2.91	e2.86	2.82	---	3.71	4.25	4.56	4.77	4.41	3.94	3.66
30	2.85	2.91	e2.86	2.81	---	3.73	4.24	4.57	4.74	4.38	3.93	3.66
31	2.83	---	e2.88	2.80	---	3.76	---	4.57	---	4.37	3.92	---
MEAN	2.97	2.80	2.84	2.89	2.84	3.37	4.02	4.47	4.79	4.59	4.16	3.75
MAX	3.09	2.95	2.90	2.98	2.90	3.76	4.25	4.57	4.88	4.76	4.35	3.88
MIN	2.83	2.66	2.75	2.80	2.80	2.87	3.76	4.24	4.58	4.37	3.92	3.64
#	0	0	0	0	0	92300	150600	190700	211400	166400	111700	80100
##	-12100	0	0	0	0	+92300	+58300	+40100	+20700	-45000	-54700	-31600

CAL YR 1988 MEAN 4.02 MAX 4.99 MIN 2.66 ## -228400
WTR YR 1989 MEAN 3.63 MAX 4.88 MIN 2.66 ## +68000

Usable contents, in acre-feet, at end of month.
Change in contents, in acre-feet.
e Estimated.
NOTE.--Add 6,220 ft to obtain elevation, U.S. Bureau of Reclamation datum, at 2400 hours.

10337500 TRUCKEE RIVER AT TAHOE CITY, CA

LOCATION.--Lat 39°09'59", long 120°08'36", in NE 1/4 NW 1/4 sec.7, T.15 N., R.17 E., Placer County, Hydrologic Unit 16050102, on left bank 510 ft downstream from dam at outlet of Lake Tahoe at Tahoe City.

DRAINAGE AREA.--507 mi².

PERIOD OF RECORD.--July 1895 to February 1896, March 1900 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Prior to October 1961, published as "at Tahoe."
CHEMICAL DATA: Water years 1978 to 1981, monthly.

REVISED RECORDS.--WDR CA-78-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,216.59 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 12, 1912, nonrecording gage at site 370 ft upstream at different datum. Nov. 12, 1912, to Sept. 30, 1937, nonrecording gage; Oct. 1, 1937, to Aug. 21, 1957, water-stage recorder at datum 2.26 ft higher; and Aug. 22, 1957, to July 10, 1960, at datum 2.42 ft higher; all at site 270 ft upstream.

REMARKS.--Records good except those for Oct. 21 to Mar. 8, which are poor, and Mar. 9 to Apr. 3, which are fair. Flow completely regulated by dam at outlet of Lake Tahoe (station 10337000), 510 ft upstream. There are several diversions for irrigation, power, and domestic water supply. In addition, sewer effluent is pumped from the Lake Tahoe basin.

AVERAGE DISCHARGE (unadjusted).--89 years (water years 1901-89), 258 ft³/s, 186,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,630 ft³/s, June 19, 1969, gage height, 9.32 ft; no flow for parts of many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 399 ft³/s, July 25, gage height, 4.22 ft; minimum daily, 0.02 ft³/s, Nov. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	e.03	.46	.21	.79	1.5	48	36	36	231	340	176
2	5.6	e.03	.33	.19	.57	1.4	60	36	36	226	333	172
3	5.6	e.03	.29	.22	.66	e1.2	60	36	36	247	328	167
4	5.1	e.03	.19	.23	.48	e1.0	50	37	38	266	323	164
5	4.6	e.03	.18	.16	e.31	e.80	31	37	37	265	317	157
6	4.2	e.03	.21	.18	e.16	.80	34	37	37	275	315	141
7	3.8	e.03	e.50	.16	e.07	.80	35	37	37	302	315	139
8	3.4	e.03	e1.2	.15	e.10	3.3	34	37	37	302	339	136
9	3.4	e.03	e.30	.16	e.10	7.2	34	37	36	301	341	129
10	3.0	e.03	e.20	.21	e.10	6.8	34	37	36	309	330	129
11	2.7	e.05	e.20	.22	e.10	11	34	37	36	330	324	124
12	2.4	e.17	e.20	.24	e.10	14	34	36	36	332	312	120
13	1.8	e.29	e.20	.27	e.10	14	34	36	36	331	308	115
14	1.6	e.58	e.20	.27	e.10	15	34	36	36	334	303	112
15	1.2	e1.0	e.20	.29	e.15	17	35	37	36	346	294	108
16	1.2	e.06	e.20	.36	e.30	27	34	36	36	359	290	107
17	1.2	e.03	e.23	.50	e.40	30	34	36	35	355	279	123
18	.97	e.02	e.23	.43	e.50	35	35	37	35	357	273	127
19	.97	e.07	e.21	.47	e.60	41	34	37	36	369	268	132
20	.81	e.32	e.20	.47	e.70	44	34	37	36	369	260	129
21	e.60	e.56	e.20	.45	e.80	42	35	36	36	368	254	123
22	e.40	e1.5	e.20	.53	e1.1	49	33	36	54	367	241	120
23	e.20	e2.0	e.20	.55	e1.2	44	33	36	134	366	228	118
24	e.15	.55	e.20	.49	e1.3	58	32	36	135	364	218	115
25	e.12	.61	e.20	.48	1.6	54	32	36	135	384	219	109
26	e.10	.41	e.20	.57	3.2	51	32	36	124	393	213	101
27	e.06	.29	e.20	.47	2.2	51	33	36	109	391	207	96
28	e.05	.47	e.20	.25	1.7	57	33	37	109	386	203	90
29	e.04	.36	e.20	.30	---	54	34	37	133	379	192	94
30	e.03	.48	e.20	.46	---	53	35	37	205	366	185	94
31	e.03	---	e.20	.62	---	36	---	36	---	352	178	---
TOTAL	61.43	10.12	8.13	10.56	19.49	821.80	1094	1131	1898	10322	8530	3767
MEAN	1.98	.34	.26	.34	.70	26.5	36.5	36.5	63.3	333	275	126
MAX	6.1	2.0	1.2	.62	3.2	58	60	37	205	393	341	176
MIN	.03	.02	.18	.15	.07	.80	31	36	35	226	178	90
AC-FT	122	20	16	21	39	1630	2170	2240	3760	20470	16920	7470

CAL YR 1988	TOTAL 46591.88	MEAN 127	MAX 403	MIN .02	AC-FT 92410
WTR YR 1989	TOTAL 27673.53	MEAN 75.8	MAX 393	MIN .02	AC-FT 54890

e Estimated.

10338500 DONNER CREEK AT DONNER LAKE, NEAR TRUCKEE, CA

LOCATION.--Lat 39°19'25", long 120°14'00", in SW 1/4 NW 1/4 sec.17, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, in Donner Memorial State Park, on left bank 10 ft downstream from bridge on Donner Memorial State Park road, 0.2 mi downstream from outlet of Donner Lake, 0.7 mi upstream from Cold Creek, and 2.5 mi west of Truckee.

DRAINAGE AREA.--14.3 mi^2.

PERIOD OF RECORD.--November 1909 to August 1910, January 1929 to October 1935, January 1936 to March 1938, July to October 1938, January 1939 to February 1943, June 1943 to December 1953, May 1955 to December 1957, October 1958 to current year. Monthly discharge only prior to October 1958, published in WSP 1314 and 1734.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,924.40 ft above National Geodetic Vertical Datum of 1929. Nov. 1, 1909, to Aug. 31, 1910, nonrecording gage at different datum. January 1929 to December 1957, water-stage recorder at same site at unknown datum.

REMARKS.--Records good except for December and January, which are fair. Flow completely regulated by dam at outlet of Donner Lake (station 11338400), 0.2 mi upstream.

AVERAGE DISCHARGE (unadjusted).--52 years (water years 1930-35, 1937, 1940-42, 1944-52, 1956-57, 1959-89), 35.0 ft^3/s, 25,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 707 ft^3/s, Feb. 19, 1986; gage height, 4.83 ft; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 300 ft^3/s, May 8, gage height, 3.95 ft; minimum daily, 0.84 ft^3/s, Sept. 29, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	44	42	18	5.0	24	141	38	45	4.5	5.8	5.6
2	30	40	36	17	4.4	6.5	141	13	29	4.4	5.5	4.8
3	29	37	32	11	4.4	6.3	140	12	6.6	4.5	5.4	4.2
4	31	32	28	7.8	4.4	6.3	145	11	6.1	4.7	5.4	3.8
5	34	28	25	13	26	6.7	153	81	5.6	4.7	5.0	3.9
6	33	25	23	15	36	7.1	153	212	27	4.6	5.1	3.9
7	32	23	19	15	30	11	154	235	62	4.7	5.1	4.2
8	30	20	19	14	30	43	156	281	62	4.5	5.1	4.4
9	29	19	18	12	27	137	157	249	61	4.4	4.5	4.7
10	29	18	17	6.2	23	186	159	198	61	4.3	4.1	4.7
11	29	16	15	5.1	23	196	164	145	61	4.0	4.1	4.5
12	28	16	14	3.2	22	197	165	112	60	3.9	4.1	4.4
13	28	20	14	6.4	21	198	166	112	54	3.4	4.1	4.3
14	27	23	13	26	21	190	123	111	49	3.4	4.1	4.4
15	26	21	12	29	20	180	62	74	49	3.5	3.9	4.4
16	26	20	11	28	19	173	64	48	30	3.3	4.0	4.5
17	25	20	11	27	18	166	65	37	16	3.0	3.7	4.1
18	23	18	11	25	17	158	66	23	16	3.3	3.6	3.9
19	20	16	10	24	18	153	52	38	10	3.2	3.5	6.1
20	19	15	11	23	18	131	29	65	4.3	3.3	3.4	5.2
21	18	13	14	21	18	114	29	65	3.6	3.3	3.3	2.0
22	17	19	16	7.2	20	97	28	65	2.9	3.3	3.3	1.7
23	15	47	18	19	25	66	28	64	2.4	3.0	3.5	1.7
24	13	53	22	20	28	73	50	64	3.4	3.1	9.7	1.9
25	13	52	24	19	31	86	76	63	5.8	4.6	9.2	1.8
26	37	48	23	19	34	86	75	62	5.2	6.1	3.6	1.9
27	63	45	23	18	34	86	75	61	5.1	6.1	3.4	e1.0
28	67	41	23	17	36	88	75	61	4.8	6.0	3.2	e.90
29	62	37	23	16	---	90	75	61	4.7	5.8	4.5	e.84
30	56	41	21	16	---	90	74	52	4.6	5.8	5.8	e.84
31	50	---	18	14	---	111	---	45	---	5.8	5.6	---
TOTAL	968	867	606	511.9	613.2	3162.9	3040	2758	757.1	132.5	144.6	104.58
MEAN	31.2	28.9	19.5	16.5	21.9	102	101	89.0	25.2	4.27	4.66	3.49
MAX	67	53	42	29	36	198	166	281	62	6.1	9.7	6.1
MIN	13	13	10	3.2	4.4	6.3	28	11	2.4	3.0	3.2	.84
AC-FT	1920	1720	1200	1020	1220	6270	6030	5470	1500	263	287	207

CAL YR 1988 TOTAL 4451.9 MEAN 12.2 MAX 67 MIN 1.4 AC-FT 8830
WTR YR 1989 TOTAL 13665.78 MEAN 37.4 MAX 281 MIN .84 AC-FT 27110

e Estimated.

10339250 MARTIS CREEK AT STATE HIGHWAY 267, NEAR TRUCKEE, CA

LOCATION.--Lat 39°18'08", long 120°07'13", in SW 1/4 SW 1/4 sec.20, T.17 N., R.17 E., Placer County, Hydrologic Unit 16050102, 4.0 mi southeast of Truckee. Water-quality samples are collected 10 ft upstream from State Highway 267.

DRAINAGE AREA.--25.8 mi^2.

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October to November 1974, August 1975 to September 1988.

REVISED RECORDS.--WDR CA-80-3: Drainage area.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE WATER WH FET FIELD MG/L AS HCO3
OCT 04...	1000	3.3	157	7.90	6.5	2.7	620	9.6	96	93
APR 18...	1010	32	91	7.70	6.0	2.5	620	10.2	101	46
JUN 13...	1000	e7.5	137	7.60	12.5	1.9	620	8.5	98	78
AUG 02...	1100	2.4	138	8.00	12.0	3.7	615	8.4	97	91

DATE	CAR-BONATE WATER WH FET FIELD MG/L AS CO3	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT 04...	0	76	0.100	<0.010	--	0.30	0.40	0.020	0.020	<1
APR 18...	0	37	<0.100	0.030	0.27	0.30	--	0.020	<0.010	2
JUN 13...	0	64	<0.100	0.020	0.28	0.30	--	0.040	0.030	3
AUG 02...	0	75	<0.100	<0.010	--	0.60	--	0.030	0.030	4

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 04...	1	460	250	<5	<5	<4	50	23	20	<3
APR 18...	1	300	140	<5	<5	<4	20	12	--	--
JUN 13...	<1	750	580	2	1	<4	40	36	10	<3
AUG 02...	1	770	490	1	1	<4	40	25	<10	<3

e Estimated.

10339250 MARTIS CREEK AT STATE HIGHWAY 267, NEAR TRUCKEE, CA--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
04...	1000	3.3	6.5	4	0.04	--
APR						
18...	1010	32	6.0	6	0.52	81
JUN						
13...	1000	e7.5	12.5	2	0.04	--
AUG						
02...	1100	2.4	12.0	4	0.03	--

e Estimated.

10339380 MARTIS CREEK LAKE NEAR TRUCKEE, CA

LOCATION.--Lat 39°19'38", long 120°06'48", in NE 1/4 NW 1/4 sec.17, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, in control house at Martis Creek Dam, 2.0 mi upstream from mouth, and 3.5 mi east of Truckee.

DRAINAGE AREA.--39.6 mi^2.

WATER-CONTENT RECORDS

PERIOD OF RECORD.--March to May 1972 (occasional readings only), June 1972 to current year.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by rolled-earthfill dam. Storage began Oct. 7, 1971. Usable capacity, 19,600 acre-ft between elevations 5,780 ft, bottom of intake tower, and 5,838 ft, crest of spillway. Dead contents, below elevation 5,780 ft, 775 acre-ft. Figures given herein, including extremes, represent total contents. Reservoir is used for flood control, enhancement of fishery, and recreation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 7,700 acre-ft, May 11, 12, 1980, elevation, 5,815.16 ft; minimum since reservoir first filled, 768 acre-ft, Aug. 24, 1977, elevation, 5,779.88 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 947 acre-ft, Mar. 11, elevation, 5,782.56 ft; minimum, 777 acre-ft, July 27 to Aug. 2, elevation, 5,780.03 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table dated September 1975 provided by U.S. Army Corps of Engineers)

5,779	716	5,800	3,260
5,780	775	5,810	5,880
5,785	1,140	5,820	9,720
5,790	1,650		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	782	784	789	789	788	823	836	806	790	782	777	798
2	783	785	789	788	789	821	838	805	790	782	777	798
3	782	785	789	788	791	811	834	805	794	782	778	798
4	782	785	788	788	790	807	833	806	801	781	779	798
5	782	784	788	790	788	833	835	806	796	781	779	803
6	782	785	788	789	786	853	838	806	794	781	779	811
7	782	785	788	789	786	864	841	805	807	781	784	800
8	783	786	787	788	786	900	841	805	802	779	790	791
9	782	786	787	789	787	886	840	808	796	779	786	789
10	783	786	787	789	787	865	839	806	792	779	784	787
11	784	787	787	788	788	897	837	804	790	780	782	788
12	784	787	787	787	789	861	833	802	789	780	781	788
13	784	799	787	785	789	851	830	801	788	780	781	787
14	784	795	786	787	788	839	828	801	787	779	781	787
15	784	795	786	788	787	833	827	805	786	779	780	787
16	784	795	787	788	789	833	825	801	785	779	780	794
17	784	795	787	788	789	832	823	798	785	779	780	797
18	784	788	788	788	791	850	821	795	784	780	780	804
19	784	787	788	789	792	859	820	795	783	779	781	799
20	784	787	789	789	792	838	819	794	783	779	783	795
21	784	788	789	788	793	831	827	793	783	779	787	792
22	784	811	789	789	808	827	819	791	784	779	790	791
23	784	829	788	789	833	827	820	795	784	779	794	792
24	784	806	789	789	839	877	816	794	784	779	797	792
25	784	798	788	788	846	877	812	793	783	778	798	790
26	784	793	788	788	844	852	809	792	783	778	798	789
27	785	791	788	788	833	841	808	790	782	777	797	789
28	784	790	788	788	824	846	808	790	782	777	797	790
29	784	789	787	788	---	840	808	792	782	777	796	795
30	784	789	788	788	---	837	807	792	782	777	797	794
31	784	---	789	789	---	842	---	790	---	777	798	---
MAX	785	829	789	790	846	900	841	808	807	782	798	811
MIN	782	784	786	785	786	807	807	790	782	777	777	787
#	5780.15	5780.22	5780.22	5780.22	5780.78	5781.05	5780.51	5780.25	5780.11	5780.03	5780.37	5780.31
##	+2	+5	0	0	+35	+18	-35	-17	-8	-5	+21	-4

CAL YR 1988 MAX 829 MIN 776 ## +3
WTR YR 1989 MAX 900 MIN 777 ## +12

\# Elevation, in feet NGVD, at end of month.
Change in contents, in acre-feet.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BICARBONATE WATER WH FET FIELD MG/L AS HCO3	CARBONATE WATER WH FET FIELD MG/L AS CO3
OCT 04...	1405	157	9.50	15.5	2.4	620	10.1	125	51	21
APR 18...	1130	94	7.80	15.5	2.8	620	9.0	111	47	0
JUN 13...	1300	117	9.00	20.5	1.0	620	9.5	130	53	9
AUG 02...	1250	137	9.80	20.5	1.9	620	10.5	144	27	27

DATE	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)
OCT 04...	77	<0.100	0.020	0.48	0.50	0.030	0.030	6	2
APR 18...	39	<0.100	0.060	0.44	0.50	0.030	<0.010	3	1
JUN 13...	59	<0.100	0.010	0.59	0.60	0.020	0.010	5	1
AUG 02...	68	<0.100	<0.010	--	0.80	0.030	0.020	3	1

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 04...	160	25	--	<5	<4	40	3	30	<3
APR 18...	290	150	30	<5	<4	20	3	<10	<3
JUN 13...	200	110	16	2	<4	10	4	10	<3
AUG 02...	160	34	1	1	<4	30	5	<10	<3

SUSPENDED SEDIMENT CONCENTRATION, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	TEMPERATURE WATER (DEG C)	SEDIMENT, SUSPENDED (MG/L)
JUN 13...	1300	20.5	0
AUG 02...	1250	20.5	4

10339400 MARTIS CREEK NEAR TRUCKEE, CA

LOCATION.--Lat 39°19'44", long 120°07'00", in NE 1/4 NW 1/4 sec.17, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank 0.2 mi downstream from Martis Creek Lake Dam, 1.8 mi upstream from mouth, and 3.5 mi east of Truckee.

DRAINAGE AREA.--39.9 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,730 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 10, 1972, at site 1.0 mi downstream at different datum.

REMARKS.--Records good except January and February, which are fair. Low and medium flow may be regulated and high flow completely regulated by Martis Creek Lake (station 10339380) since Oct. 7, 1971.

AVERAGE DISCHARGE (unadjusted).--31 years, 26.2 ft³/s, 18,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s, Feb. 1, 1963, gage height, 6.16 ft, site and datum then in use; minimum, 1.1 ft³/s, July 19, 20, 1961. Maximum discharge since construction of Martis Creek Lake Dam in 1971, 663 ft³/s, Feb. 28, 1986, gage height, 5.66 ft; maximum gage height, 6.01 ft, Apr. 2, 1974; minimum daily, 0.20 ft³/s, Nov. 9-14, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 264 ft³/s, Mar. 11, gage height, 4.05 ft; minimum daily, 0.40 ft³/s, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.3	9.1	8.2	8.2	37	67	21	9.6	5.7	3.6	4.2
2	5.0	5.3	9.0	8.2	8.2	44	60	20	9.3	5.7	3.7	4.3
3	5.0	5.4	9.2	8.2	8.2	33	60	19	11	5.5	3.8	4.3
4	4.9	5.3	8.8	8.2	8.2	24	54	20	15	5.2	3.9	4.3
5	4.8	5.4	8.7	8.2	8.2	26	55	20	16	5.1	4.0	2.2
6	4.9	5.5	7.2	8.2	8.2	75	59	20	13	5.0	4.0	.40
7	4.9	5.6	8.7	8.2	8.2	100	64	20	15	4.8	4.6	9.9
8	5.0	5.6	8.6	8.2	8.2	152	66	20	21	4.8	7.0	8.4
9	5.0	5.8	8.5	8.2	e8.2	163	67	20	16	4.6	7.0	5.8
10	5.0	6.1	8.4	8.3	e8.2	127	64	21	13	4.3	5.8	5.2
11	5.1	6.4	8.3	8.3	e8.2	203	61	20	11	4.6	5.1	5.1
12	5.5	6.6	8.3	8.2	e8.1	133	55	18	10	4.5	4.7	5.2
13	5.6	11	8.4	8.2	e8.1	96	49	17	9.2	4.5	4.6	5.0
14	5.6	13	8.2	8.2	e8.1	72	46	17	8.4	4.4	4.4	5.0
15	5.4	7.9	7.7	8.2	8.1	58	44	19	8.2	4.4	4.3	5.0
16	5.3	7.2	7.8	8.2	8.6	55	42	18	7.8	4.2	4.2	5.4
17	5.3	7.4	8.2	8.2	9.1	52	39	16	7.8	4.2	4.3	11
18	5.3	6.8	8.9	8.2	11	56	37	14	7.4	4.4	4.4	11
19	5.3	6.4	8.6	8.2	12	102	35	13	7.2	4.4	4.5	15
20	5.3	6.0	8.7	8.2	12	76	34	12	6.9	4.3	3.9	9.5
21	5.3	6.1	8.8	8.2	12	55	35	12	6.9	4.1	3.3	7.4
22	5.1	12	9.0	8.2	18	48	39	11	6.8	4.1	3.4	6.5
23	5.1	76	8.7	8.2	35	44	32	11	6.7	4.0	3.7	5.8
24	5.1	36	9.9	8.2	51	109	32	12	6.7	4.0	3.9	6.2
25	5.2	20	8.7	7.9	57	144	28	12	6.6	3.9	4.8	6.0
26	5.3	15	8.5	7.7	63	107	24	11	6.5	3.9	4.8	5.4
27	5.3	11	8.5	7.7	54	76	22	10	6.2	3.8	4.6	5.2
28	5.3	11	8.5	7.7	44	71	22	9.5	5.9	3.8	4.6	5.3
29	5.3	10	8.5	7.7	---	73	22	9.8	5.9	3.7	4.3	6.5
30	5.1	9.2	8.5	7.7	---	63	21	11	5.8	3.7	4.0	7.9
31	5.1	---	8.4	7.8	---	64	---	10	---	3.7	4.2	---
TOTAL	160.4	340.3	265.3	251.2	509.3	2538	1335	484.3	286.8	137.3	137.4	188.40
MEAN	5.17	11.3	8.56	8.10	18.2	81.9	44.5	15.6	9.56	4.43	4.43	6.28
MAX	5.6	76	9.9	8.3	63	203	67	21	21	5.7	7.0	15
MIN	4.8	5.3	7.2	7.7	8.1	24	21	9.5	5.8	3.7	3.3	.40
AC-FT	318	675	526	498	1010	5030	2650	961	569	272	273	374

CAL YR 1988 TOTAL 3084.5 MEAN 8.43 MAX 76 MIN 3.4 AC-FT 6120
WTR YR 1989 TOTAL 6633.70 MEAN 18.2 MAX 203 MIN .40 AC-FT 13160

e Estimated.

10339400 MARTIS CREEK NEAR TRUCKEE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1974 to current year.

INSTRUMENTATION.--Digital water-temperature recorder since October 1974.

REMARKS.--No temperature record Jan. 21-25, Feb. 2 to Mar. 2. Water temperature is affected by regulation from Martis Creek Lake Dam. Unpublished chemical-quality, water temperature, and sediment data prior to October 1974, available at U.S. Geological Survey office in Carson City, NV.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 24.0 °C, on several days in 1977 and 1979; minimum recorded, 0.0 °C, Feb. 16, 17, 1982.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 22.5 °C, July 23-28; minimum recorded, 1.0 °C, Jan. 31, Feb. 1, Mar. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE WATER WH FET FIELD MG/L AS HCO3
OCT										
04...	1310	4.9	158	9.50	14.5	2.0	620	9.9	120	89
APR										
18...	1320	38	74	7.80	13.5	3.0	620	9.0	107	48
JUN										
13...	1145	10	120	8.70	17.0	1.2	620	9.2	118	62
AUG										
02...	1510	3.6	136	9.40	21.5	3.1	620	8.5	119	47

DATE	CAR-BONATE WATER WH FET FIELD MG/L AS CO3	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT										
04...	--	73	<0.100	0.020	0.58	0.60	0.030	0.030	2	1
APR										
18...	0	39	<0.100	0.020	0.38	0.40	0.020	<0.010	3	1
JUN										
13...	5	59	<0.100	0.010	0.39	0.40	0.020	0.020	3	<1
AUG										
02...	17	67	<0.100	0.020	0.48	0.50	0.030	0.020	5	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT									
04...	150	37	<5	<5	<4	60	17	20	<3
APR									
18...	320	100	<5	<5	<4	20	4	<10	7
JUN									
13...	230	130	1	1	<4	20	8	<10	<3
AUG									
02...	250	47	1	1	<4	50	14	<10	<3

PYRAMID AND WINNEMUCCA LAKES BASIN

10339400 MARTIS CREEK NEAR TRUCKEE, CA--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.5	11.5	9.0	15.0	12.0	20.0	15.5	21.5	15.5	19.0	14.0
2	8.0	7.5	11.5	10.0	15.0	12.5	20.0	15.5	21.0	15.0	19.0	13.5
3	8.5	7.0	12.0	10.0	15.5	13.0	20.0	15.5	21.0	15.0	19.0	13.5
4	9.0	7.5	15.0	11.0	15.5	14.0	20.0	15.5	21.0	15.5	19.0	14.0
5	11.0	8.5	15.0	12.5	16.5	14.0	20.5	15.5	21.0	15.5	20.0	13.5
6	13.0	9.5	15.0	13.0	18.0	14.5	20.5	15.5	21.0	15.5	16.0	11.5
7	11.5	10.0	16.0	13.0	17.0	15.0	20.5	16.0	18.0	16.5	17.0	10.5
8	13.0	9.5	16.5	14.0	18.0	15.5	20.5	16.0	19.0	17.0	18.0	14.5
9	12.0	10.0	15.0	14.5	17.5	15.5	21.0	16.0	20.0	17.5	18.0	14.0
10	13.0	10.5	15.5	13.5	18.5	15.5	21.5	16.0	20.0	17.0	18.5	14.0
11	13.0	10.0	14.5	13.0	18.5	15.5	21.0	16.0	20.5	16.5	16.5	13.5
12	12.5	10.5	14.5	13.0	19.0	16.0	21.0	16.0	20.5	16.0	17.5	13.0
13	13.0	10.5	14.0	12.5	19.0	16.0	21.5	16.5	21.0	15.5	17.5	12.5
14	13.5	10.5	13.5	12.0	19.5	16.0	21.5	16.0	20.5	15.5	18.0	13.0
15	13.0	11.0	13.5	12.0	20.0	16.5	21.5	16.0	20.5	15.0	18.0	13.0
16	13.0	11.5	14.0	12.0	20.0	16.5	21.5	16.0	20.5	15.5	16.5	14.0
17	14.0	11.5	15.0	12.5	20.0	16.5	21.5	16.5	20.0	15.5	16.0	14.0
18	14.5	12.0	15.0	13.0	20.0	16.0	22.0	16.5	20.0	15.0	14.0	13.5
19	14.0	12.0	15.0	12.5	20.5	16.5	22.0	17.0	20.0	15.5	15.0	13.0
20	14.5	12.5	15.0	12.0	19.5	16.0	22.0	17.0	19.5	15.0	15.5	12.5
21	13.5	11.5	15.5	13.0	19.0	15.5	22.0	17.0	19.5	14.0	16.0	12.5
22	12.0	11.0	16.0	13.0	19.5	15.0	22.0	17.0	20.0	14.5	16.5	12.5
23	11.0	10.0	15.0	12.5	20.0	15.5	22.5	17.0	18.5	15.0	16.5	12.5
24	10.0	9.5	14.0	12.5	19.5	15.5	22.5	17.0	20.5	15.0	16.5	13.0
25	10.0	9.0	14.5	12.0	19.5	15.5	22.5	17.0	19.0	14.5	16.5	13.5
26	9.0	8.0	15.5	12.0	19.5	15.5	22.5	17.0	19.0	14.5	16.5	12.5
27	9.0	7.5	16.0	12.5	19.5	16.5	22.5	16.5	19.0	14.0	16.5	12.5
28	9.5	7.5	15.0	12.5	20.0	16.0	22.5	16.5	19.0	14.0	16.5	13.0
29	10.0	8.0	14.5	12.0	20.0	16.0	22.0	16.5	19.0	14.0	15.0	13.0
30	10.5	9.0	14.0	12.0	20.0	16.0	22.0	16.5	19.0	14.0	15.5	13.0
31	---	---	15.0	11.5	---	---	21.5	16.5	19.0	13.5	---	---
MONTH	14.5	7.0	16.5	9.0	20.5	12.0	22.5	15.5	21.5	13.5	20.0	10.5

10339400 MARTIS CREEK NEAR TRUCKEE, CA--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
04...	1310	4.9	14.5	4	0.05	--
APR						
18...	1320	38	13.5	8	0.82	70
JUN						
13...	1145	10	17.0	2	0.05	--
AUG						
02...	1510	3.6	21.5	6	0.06	--

10340300 PROSSER CREEK RESERVOIR NEAR TRUCKEE, CA

LOCATION.--Lat 39°22'46", long 120°08'12", in NW 1/4 SW 1/4 sec.30, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, in control house on Prosser Creek Dam on Prosser Creek, 1.4 mi upstream from mouth, and 4.2 mi northeast of Truckee.

DRAINAGE AREA.--50.3 mi².

PERIOD OF RECORD.--January 1963 to current year. January 1963 to September 1987 (monthend elevations and contents only). Prior to October 1976, published as "near Boca."

GAGE.--Nonrecording gage read three times weekly. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REVISED RECORDS.--WDR CA-76-3: 1975. WDR CA-79-3: Drainage area.

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Jan. 30, 1963. Usable capacity, 28,641 acre-ft between elevations 5,660.6 ft, top of inactive contents, and 5,741.2 ft, crest of spillway. Inactive contents, 1,201 acre-ft, includes 83 acre-ft dead contents below elevation 5,637.0 ft. Figures given represent total contents at 0800 hours. Reservoir is used for flood control, enhancement of fishery, and recreation.

COOPERATION.--Gage readings and capacity table were provided by U.S. Bureau of Reclamation, not rounded to U.S. Geological Survey standards.

EXTREMES (at 0800) FOR PERIOD OF RECORD.--Maximum contents, 32,269 acre-ft, June 1, 1973, elevation, 5,744.33 ft; minimum since reservoir first filled, 66 acre-ft, Oct. 10-12, 1983, elevation, 5,635.75 ft.

EXTREMES (at 0800) FOR CURRENT YEAR.--Maximum contents observed, 25,590 acre-ft, June 28, 29, elevation, 5,735.23 ft; minimum observed, 3,822 acre-ft, Oct. 7, elevation, 5,680.17 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table dated August 1962, provided by U.S. Bureau of Reclamation)

5,630	17	5,680	3,791	5,720	16,643
5,640	143	5,690	5,901	5,730	22,220
5,650	491	5,700	8,636	5,740	28,949
5,660	1,148	5,710	12,147	5,750	37,046
5,670	2,230				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	7585	8137	---	17178	22864	---	---	18996
2	---	3926	5491	---	---	---	---	16984	22971	---	25081	---
3	3833	---	---	6754	7648	7990	16120	16902	---	25475	24954	---
4	---	3950	---	6790	---	---	16150	17045	---	---	24728	---
5	3828	---	5621	---	---	---	16229	17323	23727	25454	---	18618
6	---	---	---	6883	7753	7814	16324	---	23971	---	---	18531
7	3822	3983	5700	---	7793	---	16518	---	24185	25421	24204	18440
8	---	---	---	---	7820	8664	16588	19056	24329	---	24142	18348
9	---	4002	5782	6966	7848	---	16694	19716	24420	---	24081	---
10	---	---	---	---	7904	11200	16826	20299	---	25475	---	---
11	3826	4033	---	7022	---	---	16994	20782	---	---	24036	18206
12	3837	---	5887	---	---	---	17101	21183	24676	25481	---	18196
13	---	---	---	7076	8013	13889	17132	---	24741	---	---	18196
14	3850	4155	5962	---	8045	---	17178	---	24780	25475	23920	18196
15	---	---	---	---	8013	14745	---	22220	24881	---	23882	18196
16	---	4209	6030	---	8036	14944	---	22567	25014	---	23830	---
17	3865	---	---	7176	8036	14996	17520	22548	---	25414	23592	---
18	---	4244	---	7204	---	---	17609	22597	---	25414	23350	18309
19	3872	---	6133	---	---	---	17671	22622	25200	25414	---	18413
20	---	---	---	7248	8051	15272	17750	---	25200	---	---	18472
21	3878	4277	6214	---	8063	15334	17862	---	25180	25407	22487	18499
22	---	---	---	---	8013	15239	18010	22536	25308	---	22171	18515
23	---	4592	6298	7342	7972	15149	17899	22530	25468	---	21843	---
24	3889	---	---	7370	8016	15135	17735	22474	---	25374	21528	---
25	---	5095	---	7392	---	---	17473	22394	---	---	21219	18413
26	3898	---	---	---	---	---	17209	22294	25543	25334	20264	18358
27	---	---	6458	7447	8155	15434	17194	---	25577	---	---	18309
28	3909	5309	---	---	8205	15406	17199	---	25590	25294	---	18206
29	---	---	6566	---	---	15605	---	22610	25590	---	19949	18127
30	---	5403	---	7520	---	15677	---	22715	25583	---	19626	---
31	3916	---	---	7548	---	15721	---	22765	---	25247	19305	---

10340500 PROSSER CREEK BELOW PROSSER CREEK DAM, NEAR TRUCKEE, CA

LOCATION.--Lat 39°22'24", long 120°07'50", in NW 1/4 NE 1/4 sec.31, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank 300 ft downstream from Station Creek, 0.5 mi downstream from Prosser Creek Dam, 0.9 mi upstream from mouth, and 4.2 mi northeast of Truckee.

DRAINAGE AREA.--52.9 mi².

PERIOD OF RECORD.--October 1902 to June 1903 (gage heights only), October 1942 to December 1950, June 1951 to current year. Prior to October 1976, published as "near Boca." Monthly discharge only for October 1942 to December 1950, published in WSP 1734. Records for April 1889 to November 1890, published in the 11th and 12th Annual Reports, Part 2, have been found to be unreliable and should not be used.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,602.31 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). See WSP 2127 for history of changes prior to September 1956. October 1956 to May 1976, water-stage recorder at site 0.8 mi downstream at datum 29.69 ft lower.

REMARKS.--Records good. Flow regulated by Prosser Creek Reservoir (station 10340300) since Jan. 31, 1963.

AVERAGE DISCHARGE (adjusted for change in contents in Prosser Creek Reservoir since 1963).--46 years (water years 1943-50, 1952-89), 88.7 ft³/s, 64,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (water years 1943-89).--Maximum discharge, 4,560 ft³/s, Dec. 23, 1955, gage height, 10.13 ft, present datum, from rating curve extended above 910 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 11.0 ft from floodmarks, present datum, Nov. 20, 1950; minimum discharge, 0.4 ft³/s, July 18, 1961, result of work on dam upstream. Maximum discharge since construction of Prosser Creek Dam in 1963, 1,790 ft³/s, Feb. 20-22, 1986, gage height, 6.66 ft, from rating curve extended above 880 ft³/s on basis of valve setting at Prosser Creek Dam; minimum daily, 0.02 ft³/s, Jan. 2, 1975, result of temporary closing of Prosser Creek Dam for spillway maintenance.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 329 ft³/s, Apr. 18-22, 25, gage height, 4.19 ft; minimum daily, 4.7 ft³/s, Dec. 31 to Jan. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	5.2	5.0	4.7	9.0	104	206	226	71	78	49	92
2	7.0	5.5	5.0	4.7	9.2	105	211	254	71	78	75	49
3	6.8	5.4	5.0	4.7	9.2	103	225	132	71	67	93	48
4	6.9	5.4	5.0	4.7	8.8	103	215	134	71	58	92	48
5	6.7	5.5	4.9	5.2	8.9	107	216	121	70	58	92	48
6	6.7	5.5	5.0	7.0	e8.8	110	217	10	70	58	91	48
7	6.1	5.4	5.0	7.7	e8.6	93	275	9.9	104	51	91	49
8	4.8	5.4	5.0	7.7	e8.4	18	312	9.9	129	37	72	39
9	4.9	5.4	5.0	7.8	8.3	20	314	9.8	128	37	41	32
10	4.9	5.5	5.2	7.7	8.5	18	315	9.9	128	37	31	32
11	5.0	5.5	5.4	7.7	8.2	22	316	9.9	128	38	30	19
12	4.9	5.6	5.4	7.7	8.3	18	317	10	128	38	30	10
13	5.0	6.4	5.4	8.0	8.3	19	319	10	127	38	30	10
14	5.0	5.8	5.4	8.3	18	18	320	10	112	38	28	10
15	5.0	5.6	5.6	7.9	23	79	321	10	99	38	31	10
16	5.0	8.1	5.8	9.0	24	150	322	126	99	39	83	11
17	5.0	9.5	5.8	9.5	24	162	322	182	100	32	120	11
18	5.0	9.4	6.1	9.3	24	159	324	182	100	26	135	11
19	5.1	8.9	5.8	9.5	25	144	324	182	100	26	145	10
20	5.0	8.9	5.9	9.4	24	152	326	183	100	27	145	10
21	5.1	9.1	5.8	9.1	38	219	325	183	51	27	154	10
22	5.2	11	e5.8	9.2	67	206	324	182	15	27	160	26
23	5.2	14	e5.8	9.5	67	225	324	183	50	26	158	36
24	5.0	10	5.6	9.5	67	264	323	175	78	27	157	37
25	5.0	7.7	5.4	9.3	68	257	323	148	78	27	154	37
26	5.0	5.1	e5.4	9.1	69	261	207	121	78	24	159	37
27	4.9	5.0	e5.2	8.8	67	241	129	70	77	22	154	46
28	5.1	5.1	5.0	8.3	92	225	130	70	78	18	153	53
29	5.0	5.1	4.8	8.5	---	221	130	70	78	14	154	39
30	5.0	5.1	4.8	8.6	---	219	130	71	78	13	154	9.6
31	5.2	---	4.7	8.8	---	228	---	71	---	35	157	---
TOTAL	167.6	205.1	165.0	246.9	809.5	4270	8062	3165.4	2667	1159	3218	927.6
MEAN	5.41	6.84	5.32	7.96	28.9	138	269	102	88.9	37.4	104	30.9
MAX	7.1	14	6.1	9.5	92	264	326	254	129	78	160	92
MIN	4.8	5.0	4.7	4.7	8.2	18	129	9.8	15	13	28	9.6
AC-FT	332	407	327	490	1610	8470	15990	6280	5290	2300	6380	1840

CAL YR 1988 TOTAL 12229.8 MEAN 33.4 MAX 256 MIN 4.7 AC-FT 24260 MEAN a 29.1 AC-FT a 21140
WTR YR 1989 TOTAL 25063.1 MEAN 68.7 MAX 326 MIN 4.7 AC-FT 49710 MEAN a 88.4 AC-FT a 63990

a Adjusted for change in contents in Prosser Creek Reservoir.
e Estimated.

10343000 INDEPENDENCE CREEK NEAR TRUCKEE, CA

LOCATION.--Lat 39°27'24", long 120°17'10", in SW 1/4 NW 1/4 sec.35, T.19 N., R.15 E., Sierra County, Hydrologic Unit 16050102, on left bank 0.4 mi downstream from Independence Lake outlet and 10.5 mi northwest of Truckee.

DRAINAGE AREA.--8.10 mi².

PERIOD OF RECORD.--November 1902 to September 1907, November 1909 to June 1910, August 1968 to current year.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,920 ft (revised) above National Geodetic Vertical Datum of 1929, from topographic map. July 1, 1904, to June 30, 1910, nonrecording gage 75 ft downstream from Independence Lake outlet; prior to July 1, 1904, nonrecording gage 600 ft downstream at approximately same datum.

REMARKS.--Records good except for estimated discharges, which are fair, and discharges less than 0.5 ft³/s, which are poor. Flow regulated by Independence Lake (station 10342900).

AVERAGE DISCHARGE (unadjusted).--26 years (water years 1903-7, 1969-89), 26.4 ft³/s, 19,130 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 291 ft³/s, Dec. 20, 1981, gage height, 6.12 ft; no flow Sept. 28 to Nov. 10, 1905, June 1, 1906.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 85 ft³/s, June 9, gage height, 3.71 ft; minimum daily, 0.20 ft³/s, several days during November.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	.76	1.2	e4.7	e3.7	3.8	2.2	2.4	2.4	19	2.0	17
2	3.5	1.6	1.2	e4.7	e3.7	e4.2	1.9	2.4	2.4	19	2.3	17
3	2.8	2.6	1.4	e4.7	e3.7	4.0	1.9	2.4	2.9	19	2.4	17
4	1.8	3.7	1.4	e4.7	e3.6	3.8	2.1	2.5	3.9	19	2.2	17
5	1.8	3.1	6.8	e4.7	e3.6	3.9	2.5	2.5	4.3	18	2.2	17
6	1.7	2.5	7.4	e4.7	e3.6	4.1	3.0	2.3	4.1	18	2.2	17
7	1.8	2.1	7.0	e4.7	e3.6	4.1	3.5	2.0	3.9	18	2.2	17
8	2.0	1.1	6.6	e4.4	e3.6	4.5	3.9	1.9	35	18	2.3	17
9	1.7	2.6	6.5	e4.4	e3.5	5.2	4.1	1.9	78	17	2.0	17
10	1.7	3.9	5.9	e4.4	e3.5	5.5	4.5	1.8	83	17	2.0	17
11	1.8	3.1	e6.0	e4.4	e3.5	8.0	4.3	1.4	81	16	2.0	16
12	1.7	2.2	e6.0	e4.4	3.4	7.0	4.1	1.2	79	15	2.2	16
13	1.8	1.7	e6.0	e4.4	3.4	6.1	4.1	1.7	78	15	2.0	16
14	1.7	1.0	e5.5	e4.0	3.6	5.6	4.4	1.5	77	15	1.9	16
15	1.7	.64	4.8	e4.0	3.7	5.2	4.7	1.9	68	15	2.0	16
16	1.6	.34	4.7	e4.0	3.7	5.0	4.8	1.3	60	13	2.2	17
17	1.7	.20	4.7	e4.0	3.8	4.7	4.6	1.0	56	12	2.2	17
18	1.7	.20	4.7	e4.0	3.7	4.7	4.6	.81	51	11	2.2	17
19	1.7	.20	4.5	e4.0	3.7	4.7	4.5	.68	49	9.3	2.0	16
20	1.7	.20	e4.5	e3.8	3.7	4.7	4.8	.62	42	8.2	2.0	16
21	1.6	.20	4.4	3.7	3.9	4.7	4.7	.54	38	5.2	1.9	16
22	1.6	2.0	4.4	3.8	4.1	4.8	3.4	2.0	29	3.1	1.9	16
23	1.6	.27	4.4	3.6	3.8	5.0	2.6	2.7	24	2.7	1.8	16
24	1.6	.20	4.4	3.4	3.7	5.1	2.2	2.2	24	2.3	1.7	16
25	1.6	.20	4.4	3.4	5.6	5.2	1.9	1.9	24	2.0	1.6	16
26	1.6	.20	4.7	3.4	3.7	5.0	1.5	1.8	24	2.0	1.6	16
27	1.5	.67	4.7	3.5	3.7	5.1	1.3	2.1	24	2.3	1.4	15
28	1.5	1.2	e4.7	3.6	3.7	5.6	1.4	2.6	22	2.4	1.4	15
29	1.4	1.1	e4.7	3.6	---	5.7	1.5	2.6	19	2.3	1.3	15
30	1.4	1.1	e4.7	3.7	---	3.8	1.9	2.6	19	2.2	1.2	15
31	.78	---	e4.7	3.7	---	2.1	---	2.4	---	2.0	8.0	---
TOTAL	55.88	40.88	147.0	126.5	104.5	150.9	96.9	57.65	1107.9	340.0	66.3	489
MEAN	1.80	1.36	4.74	4.08	3.73	4.87	3.23	1.86	36.9	11.0	2.14	16.3
MAX	3.8	3.9	7.4	4.7	5.6	8.0	4.8	2.7	83	19	8.0	17
MIN	.78	.20	1.2	3.4	3.4	2.1	1.3	.54	2.4	2.0	1.2	15
AC-FT	111	81	292	251	207	299	192	114	2200	674	132	970

CAL YR 1988 TOTAL 5539.09 MEAN 15.1 MAX 149 MIN .20 AC-FT 10990
WTR YR 1989 TOTAL 2783.41 MEAN 7.63 MAX 83 MIN .20 AC-FT 5520

e Estimated.

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA
(Hydrologic bench-mark station)

LOCATION.--Lat 39°25'54", long 120°14'13", in NE 1/4 NE 1/4 sec.7, T.18 N., R.16 E., Nevada County, Hydrologic Unit 16050102, on left bank 2.2 mi upstream from bridge on State Highway 89 and 7.5 mi north of Truckee.

DRAINAGE AREA.--10.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1953 to current year.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,320 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 2, 1953, nonrecording gage at site 100 ft upstream at different datum.

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

AVERAGE DISCHARGE.--36 years, 12.7 ft³/s, 9,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 765 ft³/s, Feb. 1, 1963, gage height, 4.64 ft from floodmarks, from rating curve extended above 160 ft³/s on basis of slope-area measurement at gage height 4.28 ft; minimum, 0.6 ft³/s, Aug. 8, 1960, Aug. 7, 1961, result of temporary regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	0630	60	2.70	Apr. 10	1800	*70	*2.83
Mar. 8	1645	62	2.76				

Minimum daily, 1.6 ft³/s, Oct. 1-10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.8	3.1	2.4	3.2	6.1	29	23	12	5.2	2.1	1.9
2	1.6	1.9	3.0	2.4	3.2	6.2	29	24	12	4.9	2.1	1.9
3	1.6	2.0	3.0	2.4	3.3	5.4	29	26	16	4.6	2.2	1.8
4	1.6	1.9	2.9	2.4	3.6	5.1	31	29	21	4.4	2.2	1.8
5	1.6	1.8	2.9	2.4	3.3	6.4	34	31	19	4.1	2.1	1.8
6	1.6	2.1	2.9	2.5	2.9	11	40	32	17	4.0	2.1	1.8
7	1.6	2.0	2.9	2.5	2.9	18	44	34	25	3.8	2.9	1.8
8	1.6	2.0	2.9	2.5	3.0	47	47	35	21	3.6	6.1	1.8
9	1.6	2.0	2.8	2.5	2.9	50	49	35	18	3.5	3.5	1.7
10	1.6	2.4	2.8	2.6	2.9	41	53	32	17	3.6	2.8	1.9
11	2.0	2.1	2.8	2.6	2.9	48	52	29	16	3.5	2.5	1.9
12	2.1	2.3	2.8	2.6	2.9	32	48	27	14	3.4	2.3	2.2
13	1.9	4.1	2.8	2.6	2.9	24	47	27	14	3.3	2.3	2.0
14	1.8	2.9	2.7	2.8	2.9	19	50	25	13	3.2	2.2	1.8
15	1.8	2.4	2.7	2.8	2.9	17	52	28	12	3.1	2.1	1.8
16	1.8	2.3	2.6	2.8	2.9	16	51	24	12	3.0	2.1	2.3
17	1.7	2.4	2.6	2.9	3.0	13	50	23	11	3.0	2.1	5.0
18	1.7	2.3	2.6	3.0	3.1	12	49	22	9.8	2.9	2.2	5.1
19	1.7	2.3	2.6	3.0	3.1	15	49	20	9.0	2.8	2.2	4.2
20	1.7	2.3	2.6	3.0	3.0	14	50	19	8.5	2.7	2.2	2.8
21	1.7	2.3	2.9	3.0	3.4	13	54	18	8.1	2.6	2.3	2.4
22	1.7	8.7	2.7	3.0	6.7	15	43	18	7.6	2.6	2.1	2.2
23	1.7	28	2.8	3.0	9.0	15	37	21	7.3	2.5	2.3	2.2
24	1.7	7.4	2.6	3.0	8.2	24	34	18	6.9	2.5	2.6	2.1
25	1.7	5.0	2.6	3.0	8.1	22	31	16	6.6	2.4	2.3	2.0
26	1.7	4.1	2.4	3.0	8.9	17	27	15	6.3	2.3	2.1	2.0
27	1.7	3.7	2.4	2.9	7.6	17	24	15	6.2	2.3	2.0	2.0
28	1.7	3.6	2.4	2.9	6.6	27	23	14	5.9	2.2	2.0	1.9
29	1.7	3.4	2.4	2.9	---	25	22	14	5.6	2.2	1.9	2.6
30	1.7	3.2	2.4	3.0	---	24	21	13	5.4	2.1	1.9	2.4
31	1.8	---	2.4	3.0	---	30	---	12	---	2.1	1.9	---
TOTAL	53.0	114.7	84.0	85.4	119.3	635.2	1199	719	363.2	98.4	73.7	69.1
MEAN	1.71	3.82	2.71	2.75	4.26	20.5	40.0	23.2	12.1	3.17	2.38	2.30
MAX	2.1	28	3.1	3.0	9.0	50	54	35	25	5.2	6.1	5.1
MIN	1.6	1.8	2.4	2.4	2.9	5.1	21	12	5.4	2.1	1.9	1.7
AC-FT	105	228	167	169	237	1260	2380	1430	720	195	146	137

CAL YR 1988 TOTAL 1165.0 MEAN 3.18 MAX 28 MIN 1.5 AC-FT 2310
WTR YR 1989 TOTAL 3614.0 MEAN 9.90 MAX 54 MIN 1.6 AC-FT 7170

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to 1975 and 1981 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1969 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)
AUG 26...	1040	1.6	11.0	1.6	<0.4	3.2	<0.4	2.7	<0.4	0.03

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 08...	1020	1.9	144	7.80	4.5	1.7	605	10.5	102	K2	32
FEB 07...	1210	2.9	134	7.90	0.0	2.3	605	11.6	100	K8	K2
MAY 16...	0945	23	62	7.50	6.0	0.70	605	9.8	99	K1	K2
SEP 26...	0945	2.0	130	8.20	6.5	0.70	605	9.8	101	K6	270

DATE	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)
NOV 08...	59	0	15	5.3	6.5	18	0.4	2.4	83	68	0.80
FEB 07...	51	0	13	4.5	6.0	20	0.4	2.2	78	64	1.3
MAY 16...	24	0	6.0	2.1	2.9	20	0.3	0.80	37	30	<1.0
SEP 26...	55	0	14	4.9	6.7	20	0.4	2.3	75	61	<1.0

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
NOV 08...	0.50	<0.10	32	92	104	0.13	<0.001	0.011	0.030	0.005	<0.20
FEB 07...	0.40	0.10	30	89	97	0.12	0.004	0.082	0.002	<0.002	0.50
MAY 16...	0.30	<0.10	22	37	--	--	0.006	<0.010	0.028	0.017	0.40
SEP 26...	0.70	<0.10	32	100	--	--	<0.001	0.014	0.137	0.007	<0.20

K: NON-IDEAL COLONY COUNT.

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)
NOV 08...	0.014	0.010	0.005	40	<1	24	0.7	<1	<1	<3
FEB 07...	0.022	0.018	0.008	70	<1	24	<0.5	<1	3	<3
MAY 16...	0.013	0.009	0.003	60	<1	11	<0.5	<1	2	<3
SEP 26...	0.024	0.022	0.010	30	<1	25	<0.5	<1	<1	<3

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)
NOV 08...	1	61	<5	<4	4	<0.1	<10	1	<1	<1.0
FEB 07...	1	79	<5	<4	3	<0.1	<10	<1	<1	<1.0
MAY 16...	1	40	<1	<4	2	<0.1	<10	<1	<1	<1.0
SEP 26...	1	74	<1	<4	3	<0.1	<10	1	<1	<1.0

DATE	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
NOV 08...	150	<6	3	1.1	<0.4	2.8	<0.4	2.3	<0.4	<0.02	0.62
FEB 07...	140	<6	7	--	--	--	--	--	--	--	--
MAY 16...	71	<6	3	0.7	<0.4	0.8	<0.4	0.6	<0.4	<0.02	0.05
SEP 26...	160	<6	<3	--	--	--	--	--	--	--	--

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SEDI-MENT, SUS-PENDED (MG/L)
MAY 31...*	1200	3.00	0.90	67	7.90	9.0	610	9.0	97	1
31...*	1205	4.50	0.95	67	7.90	9.0	610	9.0	97	2
31...*	1210	7.00	1.00	67	7.90	9.0	610	9.0	97	2
31...*	1215	10.0	1.05	67	7.90	9.0	610	9.0	97	2
31...*	1220	12.0	1.00	67	7.90	9.0	610	9.0	97	3
SEP 22...*	1115	0.40	0.65	132	8.20	7.5	610	9.9	103	0
22...*	1120	1.40	0.60	130	8.20	7.5	610	9.9	103	0
22...*	1125	2.20	0.65	129	8.20	7.5	610	9.9	103	0
22...*	1130	4.00	0.60	129	8.20	7.5	610	9.9	103	0
22...*	1135	5.20	0.65	130	8.20	7.5	610	9.9	103	0

* Instantaneous streamflow at the time of cross-sectional measurement: May 31, 12 ft³/s; Sept. 22, 2.4 ft³/s.

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV						
08...	1020	1.9	4.5	0	0.0	--
FEB						
07...	1210	2.9	0.0	7	0.05	--
MAY						
16...	0945	23	6.0	2	0.12	78
31...	1225	12	9.0	2	0.06	--
SEP						
22...	1140	2.4	7.5	0	0.0	--
26...	0945	2.0	6.5	0	0.0	--

10344300 STAMPEDE RESERVOIR NEAR TRUCKEE, CA

LOCATION.--Lat 39°28'14", long 120°06'11", in SE 1/4 NE 1/4 sec.29, T.19 N., R.17 E., Sierra County, Hydrologic Unit 16050102, Tahoe National Forest, in control house near base of spillway of Stampede Dam on Little Truckee River, 0.2 mi upstream from Worn Mill Canyon, and 11.0 mi northeast of Truckee.

DRAINAGE AREA.--136 mi^2.

PERIOD OF RECORD.--August 1969 to current year. August 1969 to September 1977 (monthend elevations and contents only). October 1977 to September 1987 (daily contents). Prior to October 1976, published as "near Boca."

GAGE.--Nonrecording gage read three times weekly. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Aug. 1, 1969. Total capacity, 226,500 acre-ft at elevation 5,948.7 ft, spillway crest. Inactive contents, 5,010 acre-ft, includes 660 acre-ft dead contents below elevation 5,798.3 ft. Figures given here, including extremes, represent total contents at 0800 hours. Reservoir is used for flood control, municipal water supply, enhancement of fishery, and recreation.

COOPERATION.--Records and capacity table were provided by U.S. Bureau of Reclamation, not rounded to U.S. Geological Survey standards.

EXTREMES (at 0800) FOR PERIOD OF RECORD.--Maximum contents, 254,493 acre-ft, June 1, 1983, elevation, 5,956.55 ft; minimum since reservoir first filled, 30,772 acre-ft, Jan. 31, Feb. 1, 1978, elevation, 5,853.60 ft.

EXTREMES (at 0800) FOR CURRENT YEAR.--Maximum contents observed, 104,176 acre-ft, June 13, elevation, 5,904.69 ft; minimum observed, 59,151 acre-ft, Nov. 11, elevation, 5,879.28 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table dated July 1971, provided by U.S. Bureau of Reclamation)

5,850	27,915	5,880	60,185	5,910	115,865	5,940	197,630
5,860	36,470	5,890	76,008	5,920	140,141	5,950	231,005
5,870	47,204	5,900	94,535	5,930	167,355	5,960	267,386

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	61087	62192	---	95961	100755	---	---	98674
2	---	59652	60301	---	---	---	---	96041	100817	---	100630	---
3	60853	---	---	60606	---	62400	79635	96221	---	102592	100584	---
4	---	59523	---	60635	---	---	80240	96382	---	---	100464	---
5	60751	---	60301	---	---	---	80991	96664	101462	102592	---	98429
6	---	---	---	---	61219	62385	81675	---	---	102613	---	98388
7	60678	59408	60315	---	61219	---	82708	---	101963	102592	100237	98388
8	---	---	---	---	61219	63447	83750	98144	102319	---	---	98245
9	---	59208	60301	60795	61248	64600	84856	98715	102760	---	100485	---
10	---	---	---	---	61395	66468	85879	99289	103147	102487	---	---
11	60460	59151	---	60868	---	---	87041	99824	---	102466	100340	98164
12	60417	---	60286	---	---	---	88348	99968	103921	102361	---	98225
13	---	---	---	60868	61395	71090	89226	---	104176	102403	---	98062
14	60272	59237	60431	---	61395	---	90052	---	104133	102361	100051	98021
15	---	---	---	---	61395	72310	---	100196	---	---	---	98001
16	---	59237	60214	---	61409	---	---	100237	104048	---	99906	---
17	60272	---	---	60897	61424	73193	92364	100609	---	102026	---	---
18	---	59237	---	60897	---	---	93012	100858	---	102047	99742	98144
19	60243	---	60228	---	---	---	93742	101066	103392	102026	---	98225
20	---	---	---	60897	61512	73898	94416	---	103329	---	---	98164
21	60142	59194	60228	---	61542	73898	95261	---	103055	101984	99597	98144
22	---	---	---	---	61600	74016	95920	101358	102928	---	---	98123
23	---	59781	60272	60984	61733	74050	96181	101337	102364	---	99412	---
24	60026	---	---	60984	61881	74388	96443	101108	102482	101942	99351	---
25	---	60214	---	60999	---	---	96463	101212	---	101754	99227	98082
26	59925	---	---	---	---	---	96342	101462	102718	101566	---	98021
27	---	---	60431	60999	62043	75614	96322	---	102718	---	---	98042
28	59609	60272	---	---	62118	75751	96081	---	102760	101274	99022	97920
29	---	---	60489	---	---	76177	---	100983	102739	---	99022	97981
30	---	60315	---	60999	---	76694	---	100796	102739	---	98838	---
31	59681	---	---	61028	---	77422	---	100692	---	100962	98817	---

10344400 LITTLE TRUCKEE RIVER ABOVE BOCA RESERVOIR, NEAR TRUCKEE, CA

LOCATION.--Lat 39°26'09", long 120°05'00", in SW 1/4 SW 1/4 sec.3, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank 1 mi upstream from Boca Reservoir, 1.5 mi upstream from Dry Creek, 3.0 mi downstream from Stampede Dam, and 5.5 mi northeast of Truckee.

DRAINAGE AREA.--146 mi².

PERIOD OF RECORD.--June 1903 to October 1910, September 1939 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Published as "at Pine Station", June 1903 to December 1907, as "at Starr," January 1908 to October 1910, and as "near Boca," September 1939 to September 1976.

REVISED RECORDS.--WSP 1564: 1903-4, 1906-7, 1910, drainage area at site used in 1903-7.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,618.67 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). June 1903 to October 1910, nonrecording gages at different sites and datums.

REMARKS.--Records excellent except estimated discharges, which are good. Flow regulated by Independence Lake (station 10342900), one transbasin diversion to Sierra Valley, and Stampede Reservoir (station 10344300) since 1969.

AVERAGE DISCHARGE (adjusted for change in contents in Stampede Reservoir since 1969).--57 years (water years 1904-10, 1940-89), 190 ft³/s, 137,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft³/s, Feb. 1, 1963, gage height, 9.00 ft, from rating curve extended above 1,600 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.30 ft³/s, Sept. 16-21, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 382 ft³/s, June 15, gage height, 1.86 ft; minimum daily, 27 ft³/s, many days in October and November.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e27	27	30	e29	31	116	44	217	197	55	32	34
2	e27	27	30	29	32	123	42	211	202	54	32	34
3	e27	27	29	29	33	121	43	216	200	49	31	34
4	e28	27	29	e29	33	130	44	276	203	35	32	34
5	30	27	29	e29	34	131	44	276	201	33	32	32
6	29	27	29	e29	e34	142	45	276	186	31	32	30
7	27	27	29	e29	e33	154	45	276	184	31	32	30
8	27	27	29	e29	e34	184	44	276	140	31	33	30
9	27	27	29	29	e34	176	43	278	125	31	31	30
10	27	27	29	29	e33	167	42	221	151	31	33	30
11	28	27	29	e29	32	186	42	218	151	32	34	30
12	28	27	29	e29	31	170	64	276	182	32	34	30
13	27	29	29	e29	32	164	141	276	260	32	34	30
14	27	28	28	e29	34	157	225	276	285	32	33	30
15	27	28	e28	e29	34	155	234	278	300	32	33	30
16	27	30	e28	e29	31	156	234	232	329	32	33	32
17	27	30	28	e29	31	175	234	196	329	32	34	34
18	27	30	28	e29	32	206	238	196	329	32	35	34
19	27	29	28	e29	33	210	244	225	267	30	35	36
20	28	30	29	e29	33	233	242	246	218	30	35	37
21	27	30	e29	e29	38	249	244	246	218	32	35	36
22	27	33	e29	29	54	246	246	246	216	32	35	37
23	27	42	e29	29	57	247	247	246	154	32	35	37
24	27	33	e29	29	84	262	260	202	60	32	35	37
25	27	31	e29	e29	117	269	343	169	58	32	35	35
26	27	29	e29	e29	118	257	311	203	57	32	35	35
27	27	29	e29	e29	118	254	285	271	57	32	35	36
28	27	29	e29	e29	116	253	250	272	53	32	34	37
29	27	30	e29	e29	---	193	222	267	56	32	34	38
30	27	30	e29	e29	---	77	222	260	55	32	34	37
31	27	---	e29	e29	---	46	---	223	---	32	35	---
TOTAL	846	874	895	899	1356	5609	4964	7547	5423	1049	1042	1006
MEAN	27.3	29.1	28.9	29.0	48.4	181	165	243	181	33.8	33.6	33.5
MAX	30	42	30	29	118	269	343	278	329	55	35	38
MIN	27	27	28	29	31	46	42	169	53	30	31	30
AC-FT	1680	1730	1780	1780	2690	11130	9850	14970	10760	2080	2070	2000

CAL YR 1988 TOTAL 28040 MEAN 76.6 MAX 660 MIN 26 AC-FT 55620 MEAN a 40.7 AC-FT a 29560
WTR YR 1989 TOTAL 31510 MEAN 86.3 MAX 343 MIN 27 AC-FT 62500 MEAN a 137 AC-FT a 99530

a Adjusted for change in contents in Stampede Reservoir.
e Estimated.

10344490 BOCA RESERVOIR NEAR TRUCKEE, CA

LOCATION.--Lat 39°23'20", long 120°05'43", in NE 1/4 NW 1/4 sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, in control house at Boca Dam on Little Truckee River, 1,800 ft upstream from mouth, and 6.3 mi northeast of Truckee.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--December 1938 to current year. Prior to October 1976 published as "at Boca." Monthend contents only for December 1938 to September 1957, published in WSP 1734.

REVISED RECORDS.--WSP 1634: Drainage area.

GAGE.--Pressure gage with mercury column read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1938. Usable capacity, 40,868 acre-ft between elevations 5,521 ft, outlet sill, and 5,605 ft, top of spillway gates. Elevation of spillway (gate open) is 5,589.01 ft. Dead contents, 241 acre-ft. Records, including extremes, represent usable contents at 0800 hours. Water is used for irrigation in the State of Nevada and for power development.

COOPERATION.--Records and capacity table were provided by U.S. Bureau of Reclamation; not rounded to U.S. Geological Survey standards.

EXTREMES (at 0800) FOR PERIOD OF RECORD.--Maximum contents, 41,440 acre-ft, Dec. 23, 1955, elevation, 5,605.55 ft; minimum, 37 acre-ft, Mar. 4-9, 1955, elevation, 5,521.65 ft.

EXTREMES (at 0800) FOR CURRENT YEAR.--Maximum contents, 40,868 acre-ft, June 21-23, Aug. 9-11, elevation, 5,605.00 ft; minimum, 10,242 acre-ft, Jan. 30, elevation, 5,563.20 ft.

Capacity table (elevation, in feet, and contents in acre-feet)
(Based on table dated November 1970, provided by U.S. Bureau of Reclamation)

5,548	4,352	5,570	13,768
5,552	5,636	5,580	20,002
5,556	7,112	5,590	27,488
5,560	8,778	5,600	36,128
5,565	11,119	5,605	40,868

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11497	12404	14392	16326	10386	13158	29218	37053	40139	40429	40575	38652
2	11547	12457	14450	16419	10434	13461	29386	37053	40235	40381	40575	38272
3	11598	12484	14508	16480	10482	13768	29554	37099	40284	40381	40624	37895
4	11675	12511	14565	16542	10530	14078	29723	37006	40381	40381	40673	37520
5	11726	12564	14623	16604	10579	14364	29892	37006	40478	40381	40673	37146
6	11778	12617	14681	16667	10627	14681	30062	37006	40575	40381	40673	36589
7	11829	12671	14739	16729	10773	15032	30232	37520	40673	40381	40722	36174
8	11881	12724	14798	16822	10921	15808	30360	38036	40575	40381	40819	35761
9	11933	12778	14856	16885	10946	16604	30488	38557	40575	40381	40868	35169
10	11959	12832	14915	16948	10970	17295	30574	39080	40478	40381	40868	34492
11	12011	12859	14973	16979	11020	18001	30703	39416	40381	40429	40868	33956
12	12089	12886	15032	16854	11094	18556	30832	39512	40332	40429	40673	33511
13	12141	12995	15091	16667	11144	19121	31004	39560	40187	40429	40478	33026
14	12167	13104	15150	16295	11194	19559	31351	39608	40090	40478	40235	32457
15	12194	13158	15209	15898	11244	20002	30807	39704	40139	40478	40139	31850
16	12246	13213	15268	15507	11294	20416	32283	39752	40187	40527	39993	31264
17	12299	13268	15328	15120	11370	20835	32719	39800	40284	40527	39993	30832
18	12351	13323	15387	14739	11446	21258	33246	39704	40429	40478	39993	30232
19	12404	13378	15447	14335	11522	21936	33733	39560	40575	40429	39993	29808
20	12457	13433	15507	13965	11624	22480	34224	39608	40722	40429	39993	29428
21	12511	13489	15567	13572	11726	23068	34672	39608	40868	40429	39993	28926
22	12564	13628	15627	13213	11726	23664	35124	39608	40868	40429	39945	28470
23	12511	13824	15687	12832	11752	24268	35579	39608	40868	40429	39945	28141
24	12484	13965	15777	12457	11778	24918	36036	39608	40819	40429	39916	27488
25	12404	14050	15868	12063	12037	25812	36404	39752	40770	40478	39897	27003
26	12299	14107	15929	11701	12351	26603	36867	39897	40722	40478	39800	26523
27	12272	14163	15990	11320	12617	27164	36913	39945	40673	40478	39656	25969
28	12272	14220	16051	10970	12886	27813	36867	39945	40624	40527	39512	25499
29	12299	14278	16112	10603	---	28429	36913	39993	40575	40527	39320	25034
30	12325	14335	16173	10242	---	28718	37006	40042	40478	40527	39080	24496
31	12351	---	16234	10314	---	29051	---	40090	---	40575	38861	---
MAX	12564	14335	16234	16979	12886	29051	37006	40090	40868	40575	40868	38652
MIN	11497	12404	14392	10242	10386	13158	29218	37006	40090	40381	38861	24496
#	5567.40	5571.00	5574.20	5563.35	5568.40	5591.90	5600.95	5604.20	5604.60	5604.70	5602.92	5586.20
##	+905	+1984	+1899	-5920	+2572	+16165	+7955	+3084	+388	+97	-1714	-14365

CAL YR 1988 MAX 16234 MIN 4400 # +6415
WTR YR 1989 MAX 40868 MIN 10242 ## +13050

Elevation, in feet, at end of month.
Change in contents, in acre-feet.

10344500 LITTLE TRUCKEE RIVER BELOW BOCA DAM, NEAR TRUCKEE, CA

LOCATION.--Lat 39°23'13", long 120°05'40", in NE 1/4 NW 1/4 sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on right bank 800 ft upstream from mouth, 1,000 ft downstream from Boca Dam, and 6.2 mi northeast of Truckee.

DRAINAGE AREA.--173 mi².

PERIOD OF RECORD.--April to October 1890 (monthly discharge only), January 1911 to September 1915, January 1939 to current year. Prior to October 1976 published as "at Boca." Monthly discharge only for January 1939 to September 1957, published in WSP 1734.

REVISED RECORDS.--WDR CA-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Jan. 1, 1911, to Sept. 30, 1915, nonrecording gage at site 650 ft downstream at different datum. January 1939 to September 1957, records computed from daily log of rated settings of needle valve in dam, and from computed flow over spillway.

REMARKS.--Records good except for October to February, which are fair. Flow regulated by Boca Reservoir (station 10344490); Independence Lake (station 10332900); one transmountain diversion to Sierra Valley, and Stampede Reservoir (station 10344300), since 1969.

AVERAGE DISCHARGE (unadjusted).--54 years (water years 1912-15, 1940-89), 189 ft³/s, 136,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft³/s, Dec. 24, 1955, from records of Washoe County Water Conservation District; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 379 ft³/s, Sept. 20, gage height, 3.14 ft; minimum daily, 0.45 ft³/s, Oct. 1-21, Mar. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.45	e1.1	e.48	e.49	e.62	.55	1.3	191	154	51	9.8	173
2	e.45	e.80	e.48	e.49	e.58	.62	1.3	191	154	51	6.1	238
3	e.45	e.50	e.48	e.49	e.49	.47	1.4	254	155	50	13	233
4	e.45	e.48	e.48	e.49	e.49	.45	1.7	289	156	24	36	227
5	e.45	e.48	e.48	e.49	e.49	.48	1.9	252	156	17	35	241
6	e.45	e.48	e.48	e.49	e.49	.55	2.6	87	156	15	23	248
7	e.45	e.48	e.48	e.49	e.49	.60	2.8	1.7	202	14	23	241
8	e.45	e.48	e.48	e.49	e.49	.87	2.9	2.5	170	14	22	268
9	e.45	e.48	e.48	e.49	e.49	.83	2.9	2.9	137	14	40	287
10	e.45	e.48	e.48	e.49	e.49	.78	2.8	3.4	173	14	57	281
11	e.45	e.48	e.48	e63	e.49	.89	2.9	140	173	14	93	315
12	e.45	e.48	e.48	e108	e.49	.73	3.2	227	201	13	116	315
13	e.45	e.48	e.48	e166	e.49	.72	3.4	227	304	13	115	305
14	e.45	e.48	e.48	e200	e.49	.61	4.0	227	276	13	104	297
15	e.45	e.48	e.48	e200	e.49	.54	4.3	228	246	13	99	314
16	e.45	e.48	e.48	e200	e.49	.60	5.5	228	247	14	62	317
17	e.45	e.48	e.48	e200	e.49	.48	7.0	227	249	14	31	294
18	e.45	e.48	e.49	e200	e.49	.52	8.6	226	250	14	30	268
19	e.45	e.48	e.49	e200	e.49	.58	11	226	161	14	29	243
20	e.45	e.48	e.49	e200	e.49	.64	11	225	113	14	29	251
21	e.45	e.48	e.49	e200	e31	.63	12	225	167	14	28	268
22	31	e.48	e.49	e200	e56	.62	12	225	195	14	28	267
23	57	e.48	e.49	e200	e56	.61	12	225	138	13	29	265
24	70	e.48	e.49	e200	e28	.78	47	139	84	13	28	263
25	86	e.48	e.49	e200	.62	.79	118	65	83	12	73	275
26	73	e.48	e.49	e200	.58	.72	225	168	83	13	103	282
27	39	e.48	e.49	e200	.57	.81	294	222	83	12	102	281
28	24	e.48	e.49	e200	.58	1.0	233	222	83	12	102	278
29	24	e.48	e.49	e200	---	1.1	191	223	78	12	101	276
30	29	e.48	e.49	e75	---	1.2	191	224	51	13	101	275
31	21	---	e.49	e.62	---	1.3	---	179	---	12	100	---
TOTAL	463.45	15.36	15.02	3617.52	183.37	22.07	1417.5	5572.5	4878	540	1767.9	8086
MEAN	14.9	.51	.48	117	6.55	.71	47.2	180	163	17.4	57.0	270
MAX	86	1.1	.49	200	56	1.3	294	289	304	51	116	317
MIN	.45	.48	.48	.49	.49	.45	1.3	1.7	51	12	6.1	173
AC-FT	919	30	30	7180	364	44	2810	11050	9680	1070	3510	16040

CAL YR 1988 TOTAL 25303.64 MEAN 69.1 MAX 382 MIN .27 AC-FT 50190
WTR YR 1989 TOTAL 26578.69 MEAN 72.8 MAX 317 MIN .45 AC-FT 52720

e Estimated.

10346000 TRUCKEE RIVER AT FARAD, CA

LOCATION.--Lat 39°25'41", long 120°01'59", in SE 1/4 NE 1/4 sec.12, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank 0.5 mi upstream from Mystic Canyon, 0.7 mi downstream from Farad powerplant, 2.5 mi north of Floriston, and 3.5 mi upstream from California-Nevada State line.

DRAINAGE AREA.--932 mi².

PERIOD OF RECORD.--March to October 1890 (monthly discharge only), September 1899 to current year. Monthly discharge only for January 1944 to July 1957, published in WSP 1734. Published as "near Boca", March to October 1890, "at or near Nevada-California State line," September 1899 to August 1912, and as "at Iceland" August 1912 to December 1937.
CHEMICAL DATA: Water years 1951-61, 1964-81. Published as Truckee River at Floriston (station 10345900) January 1964 to September 1971.
BIOLOGICAL DATA: Water years 1975-77.
SPECIFIC CONDUCTANCE: Water years 1964-80.
SUSPENDED SEDIMENT: Water years 1974, 1978.
WATER TEMPERATURE: Water years 1964-81.

REVISED RECORDS.--WSP 1714: Drainage area. WDR CA-88-3: 1906-07 (monthly runoff).

GAGE.--Water-stage recorder. Datum of gage is 5,153.21 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). See WSP 2127 for history of changes prior to Aug. 26, 1957.

REMARKS.--Records good except estimated discharges, which are fair. Flow regulated by Lake Tahoe, Donner Lake, Martis Creek Lake, Independence Lake, Prosser Creek, Stampede, and Boca Reservoirs (stations 10337000, 10339380, 10340300, 10344300, and 10344490), and by several powerplants.

AVERAGE DISCHARGE.--90 years (water years 1900-89), 812 ft³/s, 588,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s, Nov. 21, 1950, gage height, 14.5 ft, present datum, from floodmarks, from slope-area measurement of peak flow; minimum, 28 ft³/s, Dec. 18, 1930.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,770 ft³/s, Mar. 11, gage height, 4.97 ft; minimum daily, 61 ft³/s, Oct. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	93	129	e125	112	365	977	814	650	533	471	500
2	72	81	124	e124	94	376	909	886	681	523	468	510
3	72	80	124	e118	76	332	939	851	751	514	490	503
4	73	79	112	115	79	301	904	1000	824	508	495	494
5	76	76	108	102	85	297	912	1150	810	492	496	496
6	77	73	107	95	102	503	984	1120	774	484	481	498
7	75	72	105	118	121	729	1150	1050	931	500	493	489
8	73	68	100	113	121	1150	1250	1150	950	491	529	494
9	71	66	98	107	158	1380	1300	1090	886	486	492	511
10	71	66	95	81	182	1150	1350	903	924	476	473	509
11	72	69	92	77	182	1400	1390	889	906	490	500	514
12	73	68	91	136	179	965	1260	911	912	496	533	518
13	72	87	93	171	179	761	1190	895	999	491	523	491
14	71	117	89	220	179	603	1230	833	933	486	501	483
15	71	91	80	253	179	569	1180	820	879	492	492	488
16	70	83	92	255	178	611	1170	848	870	503	491	501
17	69	86	95	255	177	559	1150	977	802	500	496	558
18	68	82	89	255	173	550	1160	1020	766	492	500	509
19	66	80	85	261	162	664	1170	939	669	497	504	512
20	66	77	85	266	148	629	1150	961	567	498	501	479
21	61	76	83	262	156	585	1240	985	548	494	499	480
22	73	88	85	331	268	616	1050	986	513	490	496	477
23	96	694	76	353	368	596	903	984	546	488	483	485
24	101	363	97	361	397	812	866	830	546	485	480	481
25	132	238	98	350	362	966	935	657	534	483	518	486
26	132	184	97	357	393	818	914	719	527	505	542	486
27	119	155	e99	356	391	733	880	764	507	500	536	486
28	130	138	e108	353	375	879	822	793	497	493	526	492
29	111	133	e118	351	---	930	764	748	477	482	516	500
30	122	125	e127	245	---	842	760	712	478	463	503	465
31	103	---	e125	110	---	896	---	657	---	463	495	---
TOTAL	2611	3788	3106	6676	5576	22567	31859	27942	21657	15298	15523	14895
MEAN	84.2	126	100	215	199	728	1062	901	722	493	501	496
MAX	132	694	129	361	397	1400	1390	1150	999	533	542	558
MIN	61	66	76	77	76	297	760	657	477	463	468	465
AC-FT	5180	7510	6160	13240	11060	44760	63190	55420	42960	30340	30790	29540

CAL YR 1988 TOTAL 119153 MEAN 326 MAX 755 MIN 61 AC-FT 236300
WTR YR 1989 TOTAL 171498 MEAN 470 MAX 1400 MIN 61 AC-FT 340200
e Estimated

10348000 TRUCKEE RIVER AT RENO, NV

LOCATION.--Lat 39°31'53", long 119°47'07", in NW1/4NW1/4 sec.7, T.19 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 400 ft downstream from Kietzke Lane bridge, 0.5 mi downstream from Scott Island, 1.5 mi east of Reno Post Office, 5 mi upstream from Steamboat Creek, and at mi 59.07, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,067 mi^2.

PERIOD OF RECORD.--July 1906 to September 1921, June 1925 to September 1926, January 1930 to December 1935, January to December 1943, January 1946 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,431.97 ft, above National Vertical Datum of 1929 (levels by Corps of Engineers). July 1906 to September 1946, nonrecording gage at site 1 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor, and days below 25 ft^3/s, which are fair. Flow regulated by Lake Tahoe (station 10337000), Martis Creek Lake (station 10339380), Prosser Creek (station 10340300), Stampede (station 10344300), and Boca (station 10344490) Reservoirs, Donner and Independence Lakes, and by several powerplants. Many diversions above station.

AVERAGE DISCHARGE.--63 years (1907-21, 1926, 1931-34, 1947-89), 704 ft^3/s, 510,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,800 ft^3/s, Dec. 23, 1955; maximum gage height, 13.83 ft, Nov. 21, 1950; no flow Sept. 12, 14-24, 26-30, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,990 ft^3/s, Mar. 11, gage height, 5.74 ft; minimum daily, 15 ft^3/s, Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	84	137	e84	122	421	1170	630	445	289	231	262
2	37	54	129	e90	108	440	1050	724	462	291	208	284
3	31	40	130	e98	e100	413	1080	673	523	282	228	276
4	30	48	123	e110	e95	349	1040	826	759	261	236	272
5	17	49	118	e150	e100	332	1030	968	750	251	259	269
6	20	49	118	e142	e110	489	1060	1050	645	237	233	273
7	23	35	111	e138	e120	794	1190	882	749	264	267	268
8	40	45	111	e120	e145	1300	1290	1010	877	273	429	276
9	42	27	96	e90	e175	1670	1340	1030	729	238	327	287
10	41	30	98	e85	e195	1520	1350	850	781	219	290	290
11	30	32	84	82	e190	1690	1410	756	740	228	251	291
12	31	43	80	185	e170	1390	1310	809	702	226	290	320
13	34	65	84	297	e150	1120	1230	792	801	228	287	287
14	41	102	83	460	e140	918	1250	755	770	223	280	282
15	41	84	81	416	e160	802	1200	733	663	228	257	266
16	51	72	84	395	e180	880	1190	681	681	234	236	307
17	47	76	117	352	e180	814	1180	832	600	242	249	413
18	44	68	106	346	e170	790	1190	902	559	245	262	406
19	29	63	100	333	e150	922	1170	806	501	263	275	407
20	15	60	97	334	e125	949	1150	807	368	266	270	371
21	33	59	95	329	156	812	1210	829	340	232	270	377
22	40	71	96	329	301	844	1140	842	296	233	279	343
23	57	896	e90	313	459	807	953	854	307	229	271	344
24	79	472	e88	318	497	1020	859	738	315	230	276	338
25	91	265	e82	306	443	1270	945	499	308	230	266	340
26	91	198	e76	308	467	1120	910	507	303	238	319	347
27	72	165	e74	311	462	982	828	595	291	230	307	322
28	91	137	e73	310	417	1020	747	633	279	232	281	324
29	103	134	e72	303	---	1170	627	603	272	222	277	350
30	97	146	e74	288	---	1040	611	556	267	214	275	349
31	94	---	e77	128	---	1020	---	492	---	207	271	---
TOTAL	1532	3669	2984	7550	6087	29108	32710	23664	16083	7485	8457	9541
MEAN	49.4	122	96.3	244	217	939	1090	763	536	241	273	318
MAX	103	896	137	460	497	1690	1410	1050	877	291	429	413
MIN	15	27	72	82	95	332	611	492	267	207	208	262
AC-FT	3040	7280	5920	14980	12070	57740	64880	46940	31900	14850	16770	18920

CAL YR 1988 TOTAL 85192 MEAN 233 MAX 896 MIN 15 AC-FT 169000
WTR YR 1989 TOTAL 148870 MEAN 408 MAX 1690 MIN 15 AC-FT 295300

e Estimated

10348200 TRUCKEE RIVER NEAR SPARKS, NV

LOCATION.--Lat 39°31'11", long 119°44'27", in SW1/4NW1/4NE1/4 sec.16, T.19 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 400 ft upstream from McCarren Boulevard bridge, 1 mi south of Southern Pacific Railroad in Sparks, 2.5 mi upstream from Steamboat Creek, and at mi 56.15, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,070 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,382.41 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers Benchmark).

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Tahoe (station 10337000), Martis Creek Lake (station 10339380), Prosser Creek (station 10340300), Stampede (station 10344300) and Boca (station 10344490) Reservoirs, Donner and Independence Lakes, and by several powerplants. Many diversions above station.

AVERAGE DISCHARGE.--12 years, 822 ft³/s, 595,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s, Feb. 17, 1986, gage height, 15.22 ft; minimum, 2.0 ft³/s, Nov. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,570 ft³/s, Mar. 11, gage height, 7.43 ft; minimum daily, 8.6 ft³/s, Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	80	126	e79	96	346	1210	528	387	219	171	209
2	30	52	115	e88	83	367	1060	626	406	223	154	234
3	21	31	116	e97	83	343	1100	580	476	215	170	223
4	24	40	110	e100	92	278	1040	726	732	204	179	223
5	12	43	105	e110	84	265	1030	895	733	194	203	221
6	12	41	105	e90	68	405	1050	1020	618	174	176	221
7	13	27	100	e85	69	737	1220	804	718	198	220	216
8	33	36	100	e82	112	1420	1370	950	839	213	417	227
9	36	18	87	e85	172	1980	1420	994	704	179	310	237
10	36	20	90	e80	191	1750	1440	780	733	164	271	236
11	23	21	74	74	193	2010	1530	684	689	172	221	245
12	21	37	67	135	166	1530	1390	736	657	166	267	288
13	24	56	75	240	155	1130	1280	718	765	168	246	241
14	34	92	72	e400	132	853	1270	691	743	162	226	238
15	32	82	71	e350	152	724	1200	660	609	169	207	217
16	42	66	70	e340	192	839	1240	614	629	175	186	258
17	39	71	114	e310	184	730	1270	796	548	190	199	384
18	42	62	92	e305	184	716	1270	862	501	186	211	379
19	22	56	88	e295	153	876	1210	785	464	208	223	383
20	8.6	53	88	e290	135	868	1130	778	310	207	217	348
21	20	51	85	e280	113	726	1240	784	281	171	217	356
22	32	60	83	e270	234	786	1130	799	243	175	233	317
23	45	944	111	268	403	758	884	817	242	174	229	321
24	75	457	90	264	425	1020	789	713	258	173	233	314
25	88	242	122	257	367	1360	883	448	251	174	214	303
26	89	180	118	258	392	1130	847	444	245	181	269	322
27	68	145	e110	262	382	955	743	533	245	172	257	298
28	86	125	e93	258	341	1020	648	570	227	177	241	294
29	98	118	e90	252	---	1210	525	554	212	169	245	320
30	92	125	e80	244	---	1040	512	520	200	159	221	320
31	91	---	e75	104	---	1010	---	453	---	154	218	---
TOTAL	1325.6	3431	2922	6352	5353	29182	32931	21862	14665	5665	7051	8393
MEAN	42.8	114	94.3	205	191	941	1098	705	489	183	227	280
MAX	98	944	126	400	425	2010	1530	1020	839	223	417	384
MIN	8.6	18	67	74	68	265	512	444	200	154	154	209
AC-FT	2630	6810	5800	12600	10620	57880	65320	43360	29090	11240	13990	16650

CAL YR 1988 TOTAL 70046.0 MEAN 191 MAX 944 MIN 7.4 AC-FT 138900
WTR YR 1989 TOTAL 139132.6 MEAN 381 MAX 2010 MIN 8.6 AC-FT 276000

e Estimated

10348200 TRUCKEE RIVER NEAR SPARKS, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1988 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 1988 to current year.

REMARKS.--Temperature record fair except October to April, which is good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum 26.0°C June 24, 1988 and July 18-21, 1989; minimum 0.0°C many days during winter.

EXTREMES FOR CURRENT PERIOD.--June to September 1988: Maximum daily water temperature 26.0°C, June 24; minimum daily 10.5°C, September 21.

Water Year 1989: Maximum daily water temperature 26.0°C, July 18-21; minimum daily 0.0°C.

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	24.0	16.0	19.5	24.0	18.0	21.0	20.5	16.0	18.0
2	---	---	---	23.5	17.0	20.0	23.0	18.0	20.5	20.5	16.0	18.5
3	---	---	---	23.5	17.0	20.0	23.5	17.5	20.5	21.0	16.5	18.5
4	---	---	---	20.5	16.5	18.5	23.0	17.0	20.0	20.0	16.0	18.0
5	---	---	---	20.0	14.5	17.5	22.0	18.5	20.0	20.0	16.0	18.0
6	---	---	---	22.5	15.0	18.5	21.5	17.0	19.5	19.5	16.0	17.5
7	---	---	---	23.0	15.5	19.0	22.5	17.0	19.5	19.0	15.0	17.0
8	---	---	---	24.5	16.5	20.5	22.5	16.5	19.5	19.0	15.0	17.0
9	---	---	---	25.0	18.0	21.0	24.5	17.0	20.5	19.0	15.0	16.5
10	19.5	12.5	16.0	25.0	18.5	21.5	24.0	16.5	20.0	18.0	14.0	16.0
11	17.5	14.0	16.0	23.5	18.0	20.5	22.0	16.0	19.0	16.5	13.5	15.0
12	21.0	13.5	17.0	24.0	16.5	20.0	20.0	14.5	17.5	15.5	12.0	13.5
13	22.0	15.0	18.5	24.0	17.0	20.5	21.0	16.0	18.0	17.0	11.0	14.0
14	22.5	16.5	19.0	24.0	16.5	20.5	21.0	15.0	18.0	17.5	11.5	15.0
15	22.0	17.0	19.5	25.0	17.5	21.0	21.0	14.5	18.0	20.5	13.5	16.5
16	22.5	16.5	19.0	25.0	17.5	21.0	23.0	15.5	19.0	19.0	13.0	16.0
17	23.0	16.0	19.5	25.0	18.0	21.5	21.0	16.0	18.5	18.0	12.5	15.0
18	24.5	17.0	20.5	25.5	18.5	22.0	20.0	16.0	18.0	17.5	11.5	14.0
19	24.0	17.5	21.0	25.0	17.5	21.5	20.5	16.5	18.5	13.5	11.0	12.0
20	24.5	18.0	21.0	24.5	17.5	21.0	20.5	16.5	18.5	15.5	11.0	13.0
21	24.5	18.0	21.0	24.5	17.5	21.0	22.0	16.5	19.0	17.5	10.5	14.0
22	24.5	18.5	21.5	23.5	18.0	20.5	21.0	16.5	18.5	16.5	12.5	14.5
23	24.5	18.0	21.0	23.0	17.0	20.0	21.0	17.0	19.0	18.0	14.0	16.0
24	26.0	19.0	22.0	23.0	17.5	20.0	22.0	17.5	19.5	20.0	13.5	16.5
25	22.0	19.5	20.5	23.0	18.0	20.5	22.0	17.0	19.5	19.5	13.5	16.5
26	23.5	17.5	20.0	22.0	18.0	19.5	21.5	17.0	19.0	19.5	12.5	16.5
27	23.5	17.0	20.0	20.5	17.5	19.0	21.5	16.5	19.0	18.0	13.0	15.0
28	23.0	16.5	20.0	23.5	17.0	20.0	21.0	17.0	19.0	18.0	12.0	14.5
29	22.0	15.0	18.5	24.5	18.5	21.5	20.5	17.0	18.5	18.5	12.0	15.0
30	22.5	15.0	19.0	23.0	19.5	21.0	20.0	16.0	18.0	20.0	12.5	16.0
31	---	---	---	23.5	18.0	20.5	20.5	16.0	18.0	---	---	---
MONTH	---	---	---	25.5	14.5	20.3	24.5	14.5	19.1	21.0	10.5	15.8

10348200 TRUCKEE RIVER NEAR SPARKS, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	13.5	16.5	13.0	9.0	11.0	3.0	.5	1.5	.0	.0	.0
2	19.0	13.5	16.0	11.0	9.5	10.5	2.5	.0	1.5	.0	.0	.0
3	20.0	13.5	16.5	13.5	9.5	11.0	3.0	.5	2.0	.0	.0	.0
4	18.5	13.0	15.5	13.0	8.5	10.5	3.0	.5	2.0	.0	.0	.0
5	18.0	13.0	15.0	12.0	8.5	10.5	3.5	1.0	2.5	.0	.0	.0
6	18.5	12.5	16.0	12.5	9.5	10.5	4.0	2.0	3.0	.0	.0	.0
7	18.0	12.5	15.5	10.0	8.0	9.0	3.5	1.5	2.5	.0	.0	.0
8	18.5	12.5	15.5	8.0	6.0	7.5	3.0	.5	2.0	.0	.0	.0
9	18.0	12.0	14.5	6.0	4.0	5.0	3.5	1.0	2.0	.0	.0	.0
10	17.0	11.5	14.5	7.5	5.5	6.0	3.0	.5	2.0	.0	.0	.0
11	14.5	12.0	13.5	7.0	3.5	5.0	3.0	.5	2.0	.0	.0	.0
12	15.5	10.0	12.5	7.5	5.0	6.0	4.0	.5	2.0	.0	.0	.0
13	13.5	11.0	12.5	9.0	6.5	7.5	3.5	1.0	2.5	.0	.0	.0
14	15.0	9.0	12.0	7.0	4.0	5.5	3.0	.5	1.5	.0	.0	.0
15	15.5	9.5	12.5	7.0	3.5	5.0	1.0	.0	.0	.0	.0	.0
16	16.5	10.5	13.0	6.5	4.0	5.0	1.0	.0	.0	.0	.0	.0
17	17.0	11.0	13.5	5.5	3.0	4.5	1.0	.0	.5	.0	.0	.0
18	17.0	11.0	14.0	5.0	2.0	3.5	1.5	.0	.5	.0	.0	.0
19	16.5	11.5	14.0	5.5	2.5	4.0	2.0	.5	1.0	.0	.0	.0
20	15.5	11.0	13.5	6.0	2.5	4.0	1.5	.0	1.0	.0	.0	.0
21	16.0	10.5	13.5	4.0	2.5	3.5	1.5	.0	.5	.0	.0	.0
22	15.5	10.5	13.0	6.5	4.0	5.0	.5	.0	.0	3.5	.0	1.5
23	15.5	10.5	12.5	7.0	1.5	5.0	.0	.0	.0	2.5	1.0	2.0
24	14.0	10.0	12.0	2.5	.0	1.5	.0	.0	.0	2.5	.5	1.5
25	13.5	9.5	11.5	4.0	1.5	3.0	.0	.0	.0	1.0	.0	.5
26	13.0	9.5	11.5	4.0	2.0	3.0	.0	.0	.0	1.0	.0	.5
27	13.0	10.0	11.5	3.5	1.5	3.0	.0	.0	.0	1.5	.0	.5
28	12.5	9.5	11.0	5.0	2.0	3.5	.0	.0	.0	2.0	.0	1.0
29	12.5	9.0	10.5	4.0	1.5	3.0	.0	.0	.0	3.0	.0	1.5
30	12.0	8.5	10.0	3.0	1.0	2.5	.0	.0	.0	3.5	.5	2.0
31	11.5	8.0	10.0	---	---	---	.0	.0	.0	4.5	.5	2.5
MONTH	20.0	8.0	13.3	13.5	.0	5.8	4.0	.0	1.0	4.5	.0	.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.0	1.5	3.5	6.5	3.0	5.0	7.5	5.0	6.5	13.5	8.0	11.0
2	2.5	.0	1.0	7.5	3.0	5.5	10.0	6.0	7.0	13.5	9.5	11.0
3	.0	.0	.0	4.5	1.0	3.0	9.0	5.5	7.0	14.0	9.5	12.0
4	.0	.0	.0	2.5	1.0	1.5	9.5	6.0	7.5	14.5	10.0	12.0
5	.0	.0	.0	6.5	1.5	3.5	10.0	6.5	8.0	15.0	10.0	12.5
6	.0	.0	.0	8.5	6.0	7.5	10.0	6.5	8.5	15.0	11.0	12.0
7	.0	.0	.0	8.0	5.5	6.5	10.0	6.5	8.5	15.5	11.0	12.5
8	.0	.0	.0	5.5	4.5	5.0	10.0	6.5	8.5	14.5	11.0	13.0
9	.0	.0	.0	6.0	3.5	5.0	10.0	6.5	8.5	13.5	10.0	11.5
10	.0	.0	.0	6.5	4.0	5.0	10.0	7.0	8.5	12.5	8.0	10.0
11	.0	.0	.0	7.0	5.0	5.5	9.5	6.5	8.0	11.5	8.0	10.0
12	.0	.0	.0	7.0	4.5	5.0	9.5	6.5	8.0	13.5	10.0	11.5
13	.0	.0	.0	6.5	4.0	5.0	10.0	6.5	8.5	13.0	10.0	11.0
14	.0	.0	.0	6.0	3.0	4.5	10.0	7.0	9.0	13.0	8.0	10.0
15	.0	.0	.0	8.0	3.5	6.0	10.5	7.0	9.0	14.0	9.5	11.0
16	.0	.0	.0	6.0	3.0	5.0	10.5	7.0	9.0	15.0	9.5	12.0
17	.0	.0	.0	5.0	2.0	4.0	10.5	7.5	9.5	15.0	10.0	12.5
18	.0	.0	.0	7.0	4.5	5.5	10.5	7.5	9.5	14.0	10.0	11.5
19	4.5	.0	2.0	7.5	4.5	6.0	12.0	7.5	10.0	13.0	7.5	10.5
20	5.5	1.5	4.0	7.5	4.5	6.0	10.5	9.0	10.0	15.0	10.5	12.5
21	6.5	3.5	5.5	7.5	4.5	6.5	10.5	7.0	9.0	15.5	10.0	13.0
22	8.0	5.0	6.5	8.0	5.0	6.5	8.0	5.0	6.5	15.5	10.5	12.5
23	8.5	3.5	6.0	7.5	5.5	7.0	8.0	5.0	6.0	12.5	9.5	11.0
24	9.0	4.0	6.0	8.0	5.5	7.0	7.5	4.0	5.5	12.0	7.5	10.0
25	8.0	3.5	5.5	7.0	5.0	5.5	8.0	5.0	6.5	14.5	7.5	11.5
26	8.0	4.5	6.5	7.0	4.0	5.5	7.5	5.0	6.0	16.0	10.0	13.0
27	7.0	4.0	5.5	8.0	4.5	6.5	10.0	5.0	7.0	15.5	12.0	14.0
28	7.0	3.0	5.0	10.0	6.5	8.0	11.0	5.5	8.5	15.0	10.0	12.5
29	---	---	---	8.0	6.0	7.0	11.5	6.0	9.0	13.0	10.0	11.0
30	---	---	---	9.5	6.0	7.5	11.5	8.5	10.0	14.5	7.5	11.0
31	---	---	---	10.0	6.5	8.0	---	---	---	16.0	10.0	13.0
MONTH	9.0	.0	2.0	10.0	1.0	5.6	12.0	4.0	8.1	16.0	7.5	11.7

10348200 TRUCKEE RIVER NEAR SPARKS, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.5	10.5	14.5	20.5	14.5	17.5	21.0	15.0	18.0	21.0	15.0	17.5
2	18.0	12.0	15.0	21.0	14.5	18.0	21.5	14.5	18.0	21.0	14.5	17.5
3	17.5	14.0	15.5	22.5	15.0	18.5	23.0	15.5	19.0	21.0	15.0	18.0
4	15.0	12.0	13.5	23.0	15.5	19.0	23.5	16.0	19.5	21.0	15.5	18.0
5	17.0	10.5	13.5	22.5	15.5	19.0	23.5	16.0	20.0	21.0	14.5	18.0
6	18.0	12.0	15.0	23.0	15.5	19.5	23.5	17.5	20.5	20.0	15.0	17.5
7	15.5	14.0	15.0	23.0	15.5	20.0	21.0	18.5	20.0	19.5	13.0	16.5
8	15.5	12.0	13.5	22.5	17.5	20.0	19.5	17.5	18.0	20.0	13.0	17.0
9	17.5	12.0	15.0	23.0	16.0	19.5	23.0	16.0	19.5	20.5	15.0	17.5
10	17.5	14.0	15.5	23.0	15.5	19.0	23.0	17.5	20.5	20.0	15.5	17.5
11	17.5	14.0	16.0	23.0	15.5	19.5	24.5	18.5	20.5	18.0	15.0	16.5
12	19.0	14.0	16.0	23.0	17.5	20.0	23.5	17.5	20.5	18.0	13.0	16.0
13	19.0	14.5	16.5	24.5	16.5	20.5	23.5	16.0	20.0	18.0	12.0	15.5
14	19.0	14.5	16.5	24.5	15.5	20.5	23.5	16.5	20.0	20.0	13.0	16.5
15	19.0	14.5	16.5	23.0	15.5	19.5	23.0	15.5	19.5	20.0	15.0	17.5
16	17.5	14.5	16.0	22.5	15.5	19.0	23.5	15.5	19.5	18.0	15.0	17.0
17	19.0	14.0	16.0	23.0	15.5	19.5	21.5	16.0	19.0	16.0	15.0	15.5
18	19.0	15.0	16.5	26.0	17.5	21.5	22.5	15.5	19.0	15.0	12.0	13.0
19	17.5	14.5	16.5	26.0	19.5	22.5	22.5	15.5	19.0	16.0	11.5	14.0
20	18.0	12.5	15.5	26.0	20.0	22.5	20.5	15.5	18.5	17.5	12.0	14.5
21	17.5	12.0	15.5	26.0	18.5	22.5	21.5	15.5	18.5	17.5	12.5	14.5
22	17.5	12.0	17.0	24.5	18.0	21.5	21.0	15.5	18.5	17.5	13.0	14.0
23	21.0	15.0	18.0	25.5	17.5	21.5	20.5	15.5	17.5	17.5	13.0	14.5
24	21.0	15.0	17.5	25.5	18.0	22.0	20.0	12.5	16.5	18.0	13.0	14.5
25	21.0	15.0	18.0	25.5	17.5	21.5	20.5	13.0	17.5	17.5	12.5	15.0
26	21.0	15.0	18.0	25.0	17.5	21.0	20.5	15.0	17.5	16.0	11.0	14.0
27	22.5	17.0	19.0	24.5	16.0	20.5	20.5	15.0	18.0	15.5	10.5	13.5
28	20.0	15.5	17.5	23.0	16.0	20.0	21.5	15.5	18.0	16.0	12.0	13.5
29	21.0	15.5	18.0	23.0	16.5	20.0	21.0	15.5	18.0	15.0	12.0	13.5
30	21.0	14.5	17.5	23.5	15.5	19.5	19.5	13.0	16.5	14.5	10.0	12.5
31	---	---	---	23.0	15.5	19.5	20.5	14.5	17.0	---	---	---
MONTH	22.5	10.5	16.1	26.0	14.5	20.1	24.5	12.5	18.8	21.0	10.0	15.7
YEAR	26.0	.0	10.0									

10348460 FRANKTOWN CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°12'12", long 119°52'17", in NW1/4SW1/4SE1/4 sec.32, T.16 N., R.19 E., Washoe County, Hydrologic Unit 16050102, in Toiyabe National Forest, on right bank 300 ft upstream from Red House diversion dam, 0.2 mi upstream from Red House, and 6.1 mi northwest of Carson City.

DRAINAGE AREA.--3.24 mi^2.

PERIOD OF RECORD.--June 1974 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,380 ft, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges which are poor. Flow regulated by Hobart Reservoir, and by pumping from Marlette Lake (station 10336710) during dry years.

AVERAGE DISCHARGE.--15 years, 3.63 ft^3/s, 2,630 acre-ft/yr.

CORRECTIONS.--The maximum discharge for water year 1982 is 49 ft^3/s, Apr. 12, 1982, gage height, 2.60 ft; the previously published figure was not the maximum.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89 ft^3/s, Feb. 16, 1986, gage height, 3.64 ft, from rating curve extended above 20 ft^3/s and on basis of slope-conveyance measurement of peak flow; minimum daily, 0.48 ft^3/s, Sept. 9-11, and Sept. 13-17, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25 ft^3/s, Nov. 13, gage height, 2.03 ft, maximum gage height, Dec. 22, 2.82 ft, backwater from ice; minimum daily, 0.78 ft^3/s, Mar. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.2	.98	e1.7	e1.9	1.7	1.7	2.6	4.0	e1.1	1.1	1.6
2	1.6	1.2	1.3	1.7	e1.7	e1.7	1.5	3.1	3.9	e1.1	1.2	1.6
3	1.6	1.2	1.3	1.7	e1.4	e1.9	1.3	3.7	4.8	e1.1	1.2	1.6
4	1.5	1.2	1.3	1.6	e1.2	2.3	1.9	4.4	4.0	e1.1	1.2	1.6
5	1.4	1.2	1.3	e1.6	e1.1	2.2	3.1	4.6	e3.5	e1.1	1.2	1.6
6	1.4	1.2	.90	e1.6	e1.0	4.4	4.9	4.5	e3.0	e1.1	1.1	1.6
7	1.4	1.2	1.2	e1.6	e1.2	5.6	6.0	4.7	e3.1	e1.1	1.2	1.6
8	1.4	1.2	1.2	1.6	e1.3	6.1	5.6	5.2	e3.3	e1.1	1.3	1.6
9	1.4	1.2	1.2	1.6	e1.3	5.9	5.9	5.3	2.9	e1.1	1.2	1.6
10	1.4	1.2	1.5	e1.6	e1.3	4.4	6.9	4.7	2.5	e1.1	1.2	1.6
11	1.4	1.2	1.6	e1.5	e1.4	3.0	7.6	3.4	2.3	e1.1	1.2	1.6
12	1.3	1.2	1.5	1.5	e1.5	2.1	6.5	3.0	2.1	e1.1	1.2	1.6
13	1.3	5.7	1.5	1.5	e1.5	2.5	6.6	3.4	1.7	1.1	1.2	1.7
14	1.3	11	1.3	1.4	e1.5	1.4	9.6	2.8	1.5	1.1	1.2	1.8
15	1.3	.80	1.3	1.5	e1.5	1.3	14	3.0	1.4	1.0	1.2	1.8
16	1.4	1.9	1.4	1.5	e1.6	4.2	11	3.1	1.4	1.0	1.1	1.8
17	1.4	2.8	1.4	1.5	e1.7	1.9	5.9	3.6	1.3	.97	1.3	2.1
18	1.4	1.2	1.7	1.7	e1.8	1.1	6.4	6.4	1.2	1.0	1.6	2.0
19	1.4	1.3	1.6	1.8	e1.9	1.2	6.2	6.4	1.3	1.0	1.8	2.3
20	1.4	1.3	e1.5	1.8	2.0	.81	6.4	6.2	1.5	.97	1.8	2.2
21	1.4	1.2	e1.4	1.8	2.1	.79	5.4	6.2	e1.2	.94	1.8	2.2
22	1.3	1.7	e1.4	1.8	2.9	.93	3.7	6.1	e1.2	.92	1.7	2.1
23	1.3	7.9	e1.4	1.9	3.0	.99	2.9	6.3	e1.2	.94	1.6	2.1
24	1.3	6.4	e1.4	1.9	2.3	1.3	2.4	4.5	e1.2	.95	1.6	2.1
25	1.3	1.2	e1.5	1.8	2.4	1.5	1.7	3.9	e1.2	.96	1.6	2.1
26	1.3	1.2	1.7	1.8	3.3	1.0	1.5	4.6	e1.1	1.1	1.6	2.1
27	1.3	1.2	1.7	1.8	2.1	.78	1.4	4.8	e1.1	1.3	1.6	2.1
28	1.3	.98	1.7	1.9	1.8	1.6	1.4	4.3	e1.1	1.1	1.6	2.1
29	1.3	1.1	1.7	1.9	---	1.5	1.7	4.7	e1.1	1.1	1.6	2.4
30	1.3	1.0	e1.7	2.0	---	1.4	1.9	4.6	e1.1	1.1	1.6	2.2
31	1.2	---	e1.7	2.0	---	1.9	---	4.2	---	1.1	1.6	---
TOTAL	42.4	64.28	44.28	52.6	49.7	69.40	143.0	138.3	62.2	32.85	43.4	56.4
MEAN	1.37	2.14	1.43	1.70	1.77	2.24	4.77	4.46	2.07	1.06	1.40	1.88
MAX	1.6	11	1.7	2.0	3.3	6.1	14	6.4	4.8	1.3	1.8	2.4
MIN	1.2	.80	.90	1.4	1.0	.78	1.3	2.6	1.1	.92	1.1	1.6
AC-FT	84	127	88	104	99	138	284	274	123	65	86	112

CAL YR 1988 TOTAL 650.37 MEAN 1.78 MAX 11 MIN .80 AC-FT 1290
WTR YR 1989 TOTAL 798.81 MEAN 2.19 MAX 14 MIN .78 AC-FT 1580

e Estimated

10348700 WASHOE LAKE NEAR CARSON CITY, NV

LOCATION.--Lat 39°14'09", long 119°14'09", in NW1/4SE1/4 sec.19, T.16 N., R.20 E., Washoe County, Hydrologic Unit 16050102, at Washoe Lake State Park, and about 4.75 mi north of Carson City.

DRAINAGE AREA.--83.8 mi², including Little Washoe Lake.

PERIOD OF RECORD.--April 1963 to September 1982, July 1988 to January 1989, July and August, 1989, (monthly observations only), October 1982 to June 30, 1988, February 19, 1989 to July 17, 1989 and September 1-30, 1989.

GAGE.--Water-stage recorder. Datum of gage is 5,020.00 ft, National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1982, nonrecording gage at different site but same datum.

REMARKS.--Lake is formed by a natural basin whose natural rim falls below the control works on Little Washoe Lake allowing storage regulation. Total capacity 55,700 acre-ft between elevations 5,017.5 ft and 5,032.0 ft. Figures given herein represent total contents including Scripps Wildlife Management Area Marsh. Two transarea diversions enter the lakes, one from Galena Creek and one from Third Creek into Ophir Creek. Franktown Creek is diverted into the Virginia City-Carson City pipeline and during dry years additional water is pumped from Marlette Lake into Hobart Reservoir and released into Franktown Creek for diversion into the Virginia City-Carson City pipeline at Red House.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 5,031.97 ft, Mar. 13, 1986; minimum observed, 5,021.8 ft, Dec. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 5,025.12 ft, Mar. 30, Apr. 9; minimum, 5,022.49 ft, Sept. 30.

Capacity table (elevation, in feet, and volume, in acre-feet)

5,022	7,000	5,028	32,000
5,023	10,000	5,029	37,400
5,026	21,700	5,030	43,300
5,027	26,600		

GAGE HEIGHT (FEET) WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	5024.04	5024.93	5024.95	5024.70	5024.22	---	5022.78
2	---	---	---	---	---	5024.20	5025.07	5024.93	5024.66	5024.19	---	5022.73
3	---	---	---	---	---	5024.12	5025.00	5024.93	5024.63	5024.17	---	5022.72
4	---	5022.94	---	---	---	5024.15	5025.06	5024.94	5024.81	5024.17	---	5022.71
5	---	---	---	---	---	5024.15	5025.03	5024.93	5024.81	5024.12	---	5022.68
6	---	---	---	---	---	5024.19	5025.03	5024.94	5024.82	5024.09	---	5022.67
7	---	---	---	---	---	5024.22	5025.02	5024.91	5024.82	5024.08	---	5022.64
8	---	---	---	---	---	5024.28	5025.09	5024.91	5024.82	5024.04	---	5022.63
9	---	---	---	5023.41	---	5024.33	5025.12	5024.92	5024.80	5024.00	---	5022.60
10	---	---	---	---	---	5024.35	5024.98	5024.93	5024.80	5023.99	---	5022.60
11	---	---	---	---	---	5024.46	5025.07	5024.96	5024.80	5023.95	---	5022.58
12	---	---	---	---	---	5024.54	5025.04	5024.89	5024.80	5023.95	---	5022.55
13	5023.10	---	---	---	---	5024.47	5025.00	5024.91	5024.75	5023.95	---	5022.55
14	---	---	---	---	---	5024.51	5024.97	5024.94	5024.71	5023.98	---	5022.53
15	---	---	---	---	---	5024.45	5025.01	5024.97	5024.70	5023.94	---	5022.52
16	---	---	---	---	---	5024.60	5025.03	5024.97	5024.68	5023.94	---	5022.57
17	---	---	---	---	---	5024.55	5025.02	5024.92	5024.64	5023.94	---	5022.50
18	---	---	---	---	---	5024.62	5025.01	5024.94	5024.61	---	---	5022.59
19	---	---	---	---	5023.77	5024.69	5025.03	5024.93	5024.58	---	---	5022.56
20	---	---	---	---	5023.82	5024.71	5024.98	5024.91	5024.54	---	---	5022.56
21	---	---	---	---	5023.86	5024.74	5024.98	5024.89	5024.52	---	---	5022.55
22	---	---	---	---	5023.87	5024.77	5024.95	5024.81	5024.50	---	---	5022.55
23	---	---	---	---	5023.93	5024.66	5024.93	5024.82	5024.45	---	---	5022.54
24	---	---	---	---	5023.93	5024.80	5024.95	5024.81	5024.45	---	---	5022.49
25	---	---	---	---	5023.99	5024.90	5024.98	5024.79	5024.45	---	---	5022.53
26	---	---	---	---	5024.01	5024.88	5024.97	5024.77	5024.37	---	---	5022.49
27	---	---	---	---	5024.04	5025.02	5024.98	5024.73	5024.33	---	---	5022.49
28	---	---	---	---	5024.04	5024.97	5024.97	5024.70	5024.29	---	---	5022.50
29	---	---	---	---	---	5025.04	5024.97	5024.72	5024.22	---	---	5022.51
30	---	e5023.12	---	---	---	5025.12	5024.94	5024.72	5024.25	---	---	5022.49
31	e5022.97	---	e5023.34	e5023.61	---	5024.98	---	5024.70	---	e5023.58	e5022.81	---
MAX	---	---	---	---	---	5025.12	5025.12	5024.97	5024.82	---	---	5022.78
MIN	---	---	---	---	---	5024.04	5024.93	5024.70	5024.22	---	---	5022.49
#	9910	10360	11010	11970	13550	17210	17050	16100	14350	11860	9430	8470
##	-850	+450	+650	+960	+1580	+3660	-160	-950	-1750	-2490	-2430	-960

CAL YR 1988 MAX 5027.13 MIN 5022.97 ## -12570
WTR YR 1989 MAX 5025.12 MIN 5022.49 ## -2290

\# Useable contents, in acre-feet, at end of month.
Change in contents, in acre-feet.
e Estimated.

10348800 LITTLE WASHOE LAKE NEAR STEAMBOAT, NV

LOCATION.--Lat 39°19'45", long 119°48'00", in NE1/4NW1/4 sec.24, T.17 N., R.19 E., Washoe County, Hydrologic Unit 16050102, at outlet (head of Steamboat Creek), and 5.5 mi southwest of Steamboat.

DRAINAGE AREA.--83.8 mi^2.

PERIOD OF RECORD.--April 1963 to September 1970, October 1982 to current year (monthly observations only), October 1970 to September 1982 (daily elevations).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. From October 1970 to September 1982, recording gage at same site and datum.

REMARKS.--Lake is formed by a natural basin supplemented by a control works downstream from the natural rim which provides storage regulation for both Little Washoe Lake and Washoe Lake. See additional remarks under "Washoe Lake (station 10348700)."

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 5,031.8 ft, Apr. 1, 1986; no contents Sept. 13 to Dec. 3, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 5,026.7 ft, Feb. 28; minimum, 5,022.7 ft, Oct. 31.

MONTHEND ELEVATION, IN FEET NGVD, AND CONTENTS, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	5,023.0	50	--
Oct. 31	5,022.7	38	-12
Nov. 30	5,023.9	118	+80
Dec. 31	5,025.5	250	+132
CAL YR 1988	--	--	-150
Jan. 31	5,026.4	340	+90
Feb. 28	5,026.7	370	+30
Mar. 31	5,026.6	360	-10
Apr. 30	5,026.2	320	-40
May 31	5,025.8	280	-40
June 30	5,025.1	210	-70
July 31	5,024.3	148	-62
Aug. 31	5,023.6	95	-53
Sept. 30	5,022.9	46	-49
WTR YR 1989	--	--	-4

NOTE: Monthend elevations are interpolated from readings made during the month.

10348850 GALENA CREEK AT GALENA STATE PARK, NV

LOCATION.--Lat 39°21'16", long 119°51'27", in SE1/4NW1/4 sec.9, T.17 N., R.19 E., Washoe County, Hydrologic Unit 16050102, on right bank at Galena State Park, west of Highway 27, and 3.5 mi northwest of Washoe City.

DRAINAGE AREA.--7.69 mi².

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,320 ft, from topographic map.

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

AVERAGE DISCHARGE.--5 years, 10.4 ft³/s, 7,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78 ft³/s, June 3, 1986, gage height, 1.63 ft, from rating curve extended above 60 ft³/s; minimum daily, 2.9 ft³/s, Aug. 24, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 20	1800	50	1.48	June 10	2000	*54	*1.48
May 9	1600	40	1.43				

Minimum daily, 3.3 ft³/s, Oct. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.6	4.8	6.1	4.7	4.6	3.9	9.0	e14	20	10	e7.5	4.2
2	e3.4	5.2	5.4	4.7	e4.5	3.9	8.7	e16	23	9.7	e7.3	4.2
3	e3.3	5.7	5.5	4.7	e4.4	e4.3	9.1	e18	28	9.3	e7.3	4.2
4	e3.5	5.9	5.1	4.7	e4.3	e4.8	11	e21	36	9.2	e7.2	4.2
5	3.5	5.8	5.1	e4.8	4.2	e6.1	13	e24	31	9.5	e7.0	4.0
6	3.6	5.8	5.4	e4.8	e4.2	e5.9	16	e26	32	e11	e7.4	4.0
7	3.6	5.9	5.1	4.7	e4.2	e5.6	18	e29	30	e12	e8.8	4.4
8	3.7	5.9	5.1	4.7	4.1	e9.6	19	e33	31	e12	e11	4.5
9	3.7	5.9	5.5	4.7	4.1	7.5	19	e31	31	e11	e8.6	4.7
10	3.8	6.3	5.1	4.6	4.1	6.3	27	e35	34	e11	e8.0	5.3
11	3.8	6.1	5.2	e4.7	3.9	6.9	25	29	37	e10	e7.6	5.4
12	4.0	6.7	5.1	e4.6	3.8	6.0	21	28	35	e10	e7.3	5.1
13	4.3	5.9	5.4	4.1	3.6	5.6	22	23	33	e9.8	e7.2	4.9
14	4.1	5.7	5.5	4.3	e3.6	6.0	25	26	31	e9.5	e7.0	4.8
15	4.2	6.9	e5.4	4.0	3.6	5.4	26	21	31	e9.0	e6.9	4.7
16	4.4	6.7	e5.3	4.1	e3.6	6.0	26	20	28	e9.4	e6.7	6.1
17	4.4	6.7	5.1	4.0	3.5	5.9	27	27	26	e9.4	6.5	8.7
18	4.4	7.1	5.0	4.0	3.5	5.4	29	23	23	e9.0	6.2	6.4
19	4.4	7.3	4.9	4.1	3.5	5.7	40	23	21	e8.9	5.9	7.8
20	4.4	6.8	4.8	4.1	3.5	5.7	41	26	19	e8.7	6.1	7.2
21	4.4	6.7	e5.1	4.1	3.9	5.9	32	27	18	e8.3	6.1	6.0
22	4.4	9.2	5.3	4.1	7.0	6.2	24	27	17	e8.0	5.8	5.7
23	4.4	12	5.1	4.1	5.4	6.7	23	26	16	e8.0	6.0	5.5
24	4.5	8.0	e5.1	e4.1	5.1	7.6	e21	21	13	e8.0	6.7	5.3
25	4.6	6.8	e5.1	e4.1	5.2	7.0	e20	21	13	e8.0	6.0	5.2
26	4.7	6.4	5.0	4.0	5.2	6.6	e17	24	13	e7.8	5.0	5.2
27	4.7	6.1	4.8	3.9	4.6	7.1	e15	25	12	e7.6	4.1	5.3
28	4.7	5.7	4.8	4.1	4.6	9.9	e14	23	12	e7.7	4.1	5.4
29	4.7	5.6	4.7	4.0	---	8.5	e14	20	11	e7.5	4.0	7.4
30	4.6	6.2	4.8	4.2	---	8.3	e14	19	11	e7.5	4.0	5.9
31	4.7	---	e4.8	4.5	---	9.4	---	19	---	e7.6	4.1	---
TOTAL	128.5	195.8	159.7	134.3	119.8	199.7	625.8	745	716	284.4	203.4	161.7
MEAN	4.15	6.53	5.15	4.33	4.28	6.44	20.9	24.0	23.9	9.17	6.56	5.39
MAX	4.7	12	6.1	4.8	7.0	9.9	41	35	37	12	11	8.7
MIN	3.3	4.8	4.7	3.9	3.5	3.9	8.7	14	11	7.5	4.0	4.0
AC-FT	255	388	317	266	238	396	1240	1480	1420	564	403	321

CAL YR 1988 TOTAL 2113.6 MEAN 5.77 MAX 14 MIN 2.9 AC-FT 4190
WTR YR 1989 TOTAL 3674.1 MEAN 10.1 MAX 41 MIN 3.3 AC-FT 7290

e Estimated

10348900 GALENA CREEK NEAR STEAMBOAT, NV

LOCATION.--Lat 39°21'43", long 119°49'37", in SW1/4SW1/4 sec.2, T.17 N., R.19 E., Washoe County, Hydrologic Unit 16050102, on right bank 1 mi upstream from Jones Creek, 3.5 mi upstream from mouth, 4.5 mi west-southwest of Steamboat, and 12 mi south of Reno.

DRAINAGE AREA.--8.5 mi², approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,592.0 ft above National Geodetic Vertical Datum of 1929, supplementary adjustment of 1956. Prior to Oct. 8, 1965, at same site at datum 3.00 ft higher.

REMARKS.--Records good except for winter months and estimated daily discharges, which are poor. Two small diversions above station, one for irrigation and one diverts to Little Washoe Lake (station 10348800) during winter months.

AVERAGE DISCHARGE.--28 years, 9.45 ft³/s, 6,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,670 ft³/s, Aug. 15, 1965, gage height not determined, on basis of slope-area measurement of peak flow; no flow for parts of many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 20	1800	33	3.39	June 10	2000	34	3.41
May 8	1800	*37	*3.44				

Minimum daily, 0.05 ft³/s, Dec. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	2.2	e.14	.13	e.21	e.40	.61	13	19	13	7.1	5.5
2	3.2	2.1	.14	.13	e.20	e.51	.62	14	19	12	6.8	5.4
3	3.2	2.2	e.13	.15	e.18	e.60	.59	16	21	12	6.8	5.3
4	3.3	2.1	.12	.15	e.14	e.47	.45	19	27	12	6.7	5.2
5	3.4	2.1	.12	.16	e.10	.63	.36	22	24	11	6.7	5.0
6	3.3	2.3	.06	.22	e.09	.61	.32	23	26	11	6.5	5.3
7	3.3	2.4	.10	.23	e.08	.57	.27	27	25	11	7.8	5.8
8	3.3	2.3	.12	.21	e.08	1.5	.25	28	25	11	10	5.8
9	3.2	2.4	.07	.22	e.08	.83	.21	27	25	10	7.9	5.9
10	3.1	2.4	.08	.22	e.08	.68	.16	23	26	11	7.3	6.5
11	3.3	2.5	.08	.21	e.09	3.2	.15	21	27	10	7.1	6.4
12	3.2	2.7	.08	e.20	e.10	1.9	.14	20	26	10	6.8	6.2
13	3.1	3.0	.07	e.16	e.14	1.7	.11	19	26	9.7	6.7	5.9
14	3.1	2.3	.07	e.20	e.18	1.6	.10	18	23	9.7	6.2	5.7
15	3.1	3.1	e.07	e.21	e.20	1.2	.65	18	23	9.1	5.9	5.6
16	3.0	2.1	e.07	.21	e.21	1.2	15	19	22	9.0	5.9	6.4
17	2.9	.46	e.06	.21	.22	1.6	24	21	21	9.2	5.7	8.6
18	2.9	.41	.05	.21	.26	1.8	25	21	20	9.1	5.6	7.6
19	2.8	.56	.06	.21	.32	1.4	26	20	19	8.8	5.7	7.9
20	2.8	.43	.09	.21	.29	1.1	26	21	18	8.6	5.7	7.8
21	2.7	.36	.08	.19	.27	.96	21	22	17	7.9	5.8	7.2
22	2.6	.36	e.09	.22	3.6	.87	17	22	16	7.8	5.8	6.8
23	2.5	1.8	e.11	.25	1.6	.86	16	22	17	7.7	5.8	6.3
24	2.5	.39	.12	.23	1.4	2.7	15	20	16	7.7	6.1	6.1
25	2.4	.22	.14	e.22	1.5	1.6	14	20	15	7.7	6.0	6.1
26	2.5	.31	.14	e.22	1.2	1.2	13	20	15	7.4	5.8	6.1
27	2.4	.24	.13	e.21	.83	1.0	13	21	14	7.2	5.5	6.3
28	2.4	.14	.12	e.21	e.51	1.1	12	20	14	7.3	5.5	6.3
29	2.3	e.14	.09	e.21	---	.88	12	19	14	7.1	5.4	8.0
30	2.3	e.14	.10	.21	---	.74	12	19	13	7.1	5.3	7.2
31	2.2	---	.12	e.21	---	.71	---	18	---	7.0	5.5	---
TOTAL	89.5	44.16	3.02	6.23	14.16	36.12	265.99	633	613	289.1	197.4	190.2
MEAN	2.89	1.47	.097	.20	.51	1.17	8.87	20.4	20.4	9.33	6.37	6.34
MAX	3.4	3.1	.14	.25	3.6	3.2	26	28	27	13	10	8.6
MIN	2.2	.14	.05	.13	.08	.40	.10	13	13	7.0	5.3	5.0
AC-FT	178	88	6.0	12	28	72	528	1260	1220	573	392	377

CAL YR 1988 TOTAL 1119.89 MEAN 3.06 MAX 10 MIN .05 AC-FT 2220
WTR YR 1989 TOTAL 2381.88 MEAN 6.53 MAX 28 MIN .05 AC-FT 4720

e Estimated

10349300 STEAMBOAT CREEK AT STEAMBOAT, NV

LOCATION.--Lat 39°22'40", long 119°44'33", in SE1/4SW1/4 sec.33, T.18 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 250 ft upstream from Steamboat ditch, 0.2 mi southwest of Steamboat Post Office, and 11 mi southeast of Reno.

DRAINAGE AREA.--123 mi^2.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,600 ft, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Many diversions for irrigation above station. Flow partly regulated by Washoe Lake (station 10348700).

AVERAGE DISCHARGE.--28 years, 20.5 ft^3/s, 14,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,600 ft^3/s, Feb. 17, 1986, gage height, 6.79 ft, from rating curve extended above 954 ft^3/s on basis of slope-area measurement of peak flow; minimum, no flow Sept. 9-15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 66 ft^3/s, June 4, gage height, 2.12 ft, minimum daily, 0.14 ft^3/s, Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.37	2.5	3.6	6.1	2.3	2.7	2.6	7.9	2.6	.49	.77
2	.16	.49	2.4	3.4	3.7	3.0	2.6	4.0	10	3.2	.24	.62
3	.38	.37	2.3	3.4	3.6	3.1	2.6	5.5	16	3.2	.24	.45
4	.15	.72	2.3	3.3	3.6	2.9	2.5	7.1	44	2.3	.47	.32
5	.42	.69	2.3	3.5	e3.3	3.1	2.3	11	27	2.7	.49	.26
6	.27	.38	2.3	3.7	e3.1	3.0	1.6	10	22	2.3	.46	.24
7	.27	.35	2.3	3.5	e3.0	2.8	1.5	10	30	1.8	1.3	.28
8	.40	.45	2.3	3.4	e3.0	3.0	1.4	16	26	1.9	6.0	.41
9	.36	1.1	2.3	4.0	e3.0	3.1	1.4	17	22	1.3	3.2	.44
10	.39	1.5	2.3	4.6	e3.0	3.0	1.4	16	22	1.5	1.8	.45
11	.73	1.8	2.6	3.9	e3.0	4.0	1.5	12	25	1.4	1.6	.48
12	1.3	2.1	2.7	3.5	e3.1	3.4	1.9	10	20	1.1	1.7	.79
13	.96	4.2	2.4	3.5	e3.2	3.3	1.6	11	17	.79	1.5	1.0
14	1.2	4.0	1.9	3.6	e3.4	3.5	1.8	11	16	.66	1.0	1.0
15	.43	3.5	2.4	3.6	3.4	3.4	1.6	17	15	.52	.72	.60
16	.17	3.9	2.6	3.6	3.8	4.1	4.4	12	12	.39	.44	.78
17	.17	3.2	2.8	3.6	3.8	3.9	11	14	11	.30	.39	3.2
18	.15	2.3	3.0	3.7	9.3	3.5	6.6	13	11	.39	.47	2.2
19	.14	1.9	3.0	3.8	8.7	3.9	6.0	13	8.9	1.3	.54	2.9
20	.16	1.7	3.0	3.8	5.1	3.5	9.3	13	8.6	1.1	.60	1.9
21	.19	1.6	3.0	3.9	4.5	3.4	12	11	7.5	.91	.75	2.0
22	.20	1.8	3.0	5.6	8.7	3.3	7.4	11	8.0	.75	.57	1.5
23	.23	20	2.9	4.8	8.9	3.1	6.7	10	5.2	.60	.52	1.5
24	.26	5.9	e2.8	4.1	5.5	4.9	7.6	10	8.0	.66	.57	1.4
25	.26	4.6	e2.7	3.6	4.5	4.5	6.9	9.4	8.7	.51	.82	1.5
26	.27	3.8	e2.7	3.6	3.9	4.1	5.8	9.0	7.1	.43	.75	1.0
27	.33	2.9	2.7	3.6	3.8	3.9	3.7	11	6.0	.44	.51	1.3
28	.57	2.3	3.0	3.5	3.4	3.6	3.3	11	5.0	.66	.46	1.4
29	.39	2.3	3.0	3.5	---	3.3	2.5	11	4.2	.52	.47	2.4
30	.23	2.3	3.4	3.7	---	3.3	2.4	10	3.0	.44	.47	2.5
31	.34	---	3.8	4.9	---	3.0	---	9.1	---	.43	.60	---
TOTAL	11.63	82.52	82.7	117.8	125.4	106.2	124.0	337.7	434.1	37.10	30.14	35.59
MEAN	.38	2.75	2.67	3.80	4.48	3.43	4.13	10.9	14.5	1.20	.97	1.19
MAX	1.3	20	3.8	5.6	9.3	4.9	12	17	44	3.2	6.0	3.2
MIN	.14	.35	1.9	3.3	3.0	2.3	1.4	2.6	3.0	.30	.24	.24
AC-FT	23	164	164	234	249	211	246	670	861	74	60	71

CAL YR 1988 TOTAL 631.40 MEAN 1.73 MAX 20 MIN .01 AC-FT 1250
WTR YR 1989 TOTAL 1524.88 MEAN 4.18 MAX 44 MIN .14 AC-FT 3020

e Estimated

10350000 TRUCKEE RIVER AT VISTA, NV

LOCATION.--Lat 39°31'05", long 119°40'58", in NW1/4NE1/4 sec.13, T.19 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 800 ft downstream from Southern Pacific Raiload bridge, 0.9 mi southeast of Vista, 1.5 mi downstream from Steamboat Creek, 4 mi southeast of Sparks, and at mi 52.23, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,431 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1899 to December 1907, January 1932 to December 1954, October 1958 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734.

REVISED RECORDS.--WSP 1634: 1904. WSP 1734: 1907 (M). WDR NV-75-1: 1963 (M). WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,368.59 ft, above National Geodetic Vertical Datum of 1929, supplementary adjustment of 1956. Prior to Apr. 16, 1907, nonrecording gages at several sites in vicinity of present site at various datums. May to December 1907 reference point on railroad bridge. January 1932 to December 1954, October 1958 to Aug. 17, 1959, water-stage recorder at site 1,200 ft upstream at datum 5.59 ft higher.

REMARKS.--Records fair. Flow regulated by Lake Tahoe (station 10337000), Prosser Creek (station 10340300), Stampede (station 10344300), and Boca (station 10344490) Reservoirs, and other lakes, combined capacity 1,070,000 acre-ft. Several powerplants and many diversions above station.

AVERAGE DISCHARGE.--61 years, 836 ft³/s, 605,700 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (revised), 18,900 ft³/s, Feb. 1, 1963, gage height, 16.76 ft, from rating curve extended above 5,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 7.0 ft³/s, Aug. 26, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height known, 17.04 ft from floodmarks, December 1955, at site and datum used 1958-59, discharge about 15,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,140 ft³/s, Nov. 23, gage height, 5.92 ft; minimum daily, 51 ft³/s, Nov. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	146	193	167	e132	369	1110	531	434	314	245	272
2	76	130	172	150	e125	383	992	632	445	320	230	305
3	72	75	175	148	e117	379	1030	583	508	316	239	285
4	76	81	167	131	e110	302	976	716	853	294	254	285
5	68	94	162	158	e105	276	949	870	885	289	285	295
6	64	95	163	140	99	406	982	1000	742	256	253	299
7	64	76	158	125	99	718	1120	806	809	275	308	277
8	77	80	159	118	111	1170	1260	928	1030	290	629	294
9	84	68	151	142	136	1630	1310	994	830	250	448	314
10	86	56	161	174	147	1440	1330	843	856	230	367	312
11	82	51	144	123	150	1600	1410	718	793	239	300	311
12	81	75	143	136	141	1300	1310	773	761	237	346	366
13	81	97	147	256	135	938	1210	778	832	234	319	312
14	85	158	146	414	115	716	1200	751	817	225	304	306
15	86	142	143	434	118	595	1150	808	693	236	285	277
16	91	124	132	450	144	693	1140	673	713	238	257	329
17	88	139	183	434	152	635	1120	825	637	262	267	539
18	95	121	176	437	166	596	1110	877	591	252	277	568
19	81	111	171	436	224	716	1090	802	558	301	297	565
20	70	109	173	441	200	775	1070	796	405	304	289	485
21	73	105	160	440	143	631	1150	802	372	248	290	476
22	85	110	160	445	255	678	1090	816	338	264	308	428
23	92	1210	156	395	509	669	865	830	332	263	295	428
24	123	675	155	378	475	835	781	751	356	267	305	427
25	132	362	160	362	402	1210	868	486	351	267	279	404
26	142	275	138	349	422	1050	842	452	357	289	336	431
27	130	227	126	361	416	875	757	556	366	279	320	402
28	136	204	135	358	370	874	667	591	331	281	304	397
29	166	184	160	344	---	1110	539	615	310	264	311	439
30	154	184	180	334	---	963	519	580	293	245	291	459
31	169	---	192	173	---	914	---	516	---	224	287	---
TOTAL	2981	5564	4941	8953	5718	25446	30947	22699	17598	8253	9525	11287
MEAN	96.2	185	159	289	204	821	1032	732	587	266	307	376
MAX	169	1210	193	450	509	1630	1410	1000	1030	320	629	568
MIN	64	51	126	118	99	276	519	452	293	224	230	272
AC-FT	5910	11040	9800	17760	11340	50470	61380	45020	34910	16370	18890	22390

CAL YR 1988 TOTAL 101658 MEAN 278 MAX 1210 MIN 51 AC-FT 201600
WTR YR 1989 TOTAL 153912 MEAN 422 MAX 1630 MIN 51 AC-FT 305300

e Estimated

10350000 TRUCKEE RIVER AT VISTA, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--June 1988 to current year.
WATER TEMPERATURE: June 1988 to current year.

INSTRUMENTATION.--Water temperature recorder.

REMARKS.--No record for the period June 23 to Sept. 30, 1989 due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 25.5°C July 17, 1988; minimum recorded, 0.5°C, Jan. 26, 27, 1989.

EXTREMES FOR CURRENT PERIOD.--June to September 1988: Maximum recorded water temperature 25.5°C July 17; minimum recorded, 13.5°C September 12 and 13.

Water year 1989: Maximum recorded water temperature, 21.5°C June 22, but presumably higher during instrument malfunction; minimum 0.5°C, Jan. 26, 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	23.0	17.5	20.5	24.0	19.0	22.0	21.5	16.5	19.0
2	---	---	---	23.5	18.0	21.0	23.0	19.0	21.0	21.5	17.5	19.5
3	---	---	---	23.0	18.0	20.5	24.0	18.0	21.0	21.5	17.5	19.5
4	---	---	---	21.0	17.5	19.5	23.0	19.0	21.0	21.0	17.0	19.0
5	---	---	---	20.0	16.5	18.5	23.0	19.0	21.0	21.0	16.5	19.0
6	---	---	---	22.0	16.0	19.0	22.0	18.0	20.5	21.0	16.5	19.0
7	---	---	---	22.5	17.0	20.0	23.0	18.0	20.5	20.0	15.5	18.0
8	---	---	---	24.5	18.5	21.5	23.0	18.0	20.5	20.0	15.5	18.0
9	---	---	---	25.0	19.0	22.0	23.0	19.0	21.0	20.0	16.0	18.0
10	---	---	---	24.5	20.0	22.5	23.0	19.0	21.0	19.5	15.5	17.5
11	---	---	---	23.0	19.5	21.5	22.0	18.0	20.5	18.0	14.5	16.0
12	---	---	---	23.5	17.5	20.5	20.0	16.0	18.5	16.5	13.5	15.0
13	---	---	---	24.0	18.5	21.5	21.0	16.0	18.5	18.0	13.5	15.5
14	---	---	---	24.0	18.5	21.0	21.0	17.0	19.0	18.5	14.5	17.0
15	22.0	17.5	20.0	24.5	19.0	22.0	21.0	17.0	19.0	21.0	15.5	18.0
16	22.0	17.0	20.0	25.0	19.5	22.5	22.0	17.0	19.5	21.0	17.5	19.0
17	23.0	17.0	20.0	25.5	19.5	22.5	22.0	18.0	20.0	19.5	15.5	17.5
18	24.0	18.0	21.0	25.0	20.5	23.0	21.0	16.0	18.5	18.5	14.5	16.5
19	23.0	19.0	21.5	25.0	19.5	22.5	21.0	17.0	19.0	16.5	14.5	15.5
20	23.5	19.0	21.5	25.0	19.5	22.5	21.5	17.0	19.5	19.5	14.5	16.0
21	23.5	18.5	21.0	24.5	20.0	22.5	22.5	17.5	20.0	19.5	15.5	17.0
22	24.5	19.5	22.0	23.5	20.0	22.0	22.0	17.5	20.0	21.5	16.5	19.0
23	24.5	19.0	22.0	23.5	19.0	21.5	22.5	18.0	20.5	22.5	16.5	19.0
24	24.5	20.0	22.5	23.5	19.0	21.5	23.0	18.5	20.5	20.5	16.5	19.0
25	23.5	20.0	21.0	23.0	20.0	21.5	23.5	18.0	20.5	22.5	16.5	19.5
26	23.5	18.0	20.5	22.0	19.0	20.5	22.5	18.5	20.5	20.5	17.0	19.0
27	23.0	17.5	20.5	22.0	18.5	20.5	22.5	17.5	20.0	20.5	16.5	18.5
28	22.5	18.0	20.5	24.0	18.0	20.5	22.5	18.5	20.5	19.5	15.5	17.5
29	21.5	16.0	19.0	25.0	19.0	22.0	21.5	18.5	20.0	20.0	15.5	18.0
30	22.5	16.5	19.5	24.0	21.0	22.0	20.5	17.5	19.0	21.0	15.5	18.0
31	---	---	---	24.0	19.0	21.5	21.5	17.5	19.0	---	---	---
MONTH	---	---	---	25.5	16.0	21.3	24.0	16.0	20.1	22.5	13.5	17.9

10350000 TRUCKEE RIVER AT VISTA, NV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.0	16.0	18.0	15.0	12.5	13.5	6.0	4.0	5.0	6.0	4.0	4.5
2	20.0	16.0	18.0	14.5	13.0	14.0	6.0	4.0	5.0	6.0	4.0	4.5
3	21.0	16.0	18.5	15.5	13.5	14.0	6.0	4.0	5.0	6.5	4.0	5.0
4	20.0	16.0	18.0	15.5	13.5	14.5	6.0	5.0	5.5	7.0	4.0	4.5
5	20.5	16.0	18.0	14.5	12.5	14.0	6.5	5.0	5.5	5.0	4.0	4.5
6	21.0	16.0	18.0	15.5	13.5	14.0	7.0	5.0	6.0	5.5	4.0	4.5
7	21.0	16.5	18.5	14.5	12.5	13.5	6.5	5.0	6.0	5.5	4.0	5.0
8	19.5	15.5	17.5	13.5	11.0	12.0	6.0	5.0	5.5	6.5	3.5	5.0
9	19.5	15.5	17.5	12.5	10.5	11.0	7.0	5.0	6.0	6.5	4.5	5.5
10	18.5	15.0	17.0	12.5	11.0	12.0	6.5	5.0	6.0	5.0	4.0	4.5
11	17.5	16.0	16.5	12.0	10.5	11.0	7.0	5.0	6.0	6.5	3.5	4.5
12	18.0	14.0	16.0	12.5	11.0	11.5	8.0	5.0	6.5	8.0	2.5	5.0
13	16.5	15.0	16.0	12.0	11.0	11.5	7.0	5.0	6.0	4.0	2.0	3.0
14	17.5	14.0	15.5	11.5	8.0	9.5	6.5	5.0	5.5	3.0	1.5	2.5
15	18.5	14.0	16.0	9.5	7.0	8.0	4.5	3.0	4.0	3.0	1.5	2.0
16	18.0	14.5	16.5	9.5	7.5	9.0	7.0	3.5	5.0	3.0	1.5	2.0
17	18.5	15.0	17.0	9.0	6.0	7.5	5.0	3.0	4.0	3.0	2.0	2.5
18	18.5	15.0	17.0	8.5	7.0	8.0	5.5	4.0	4.5	3.0	2.0	2.5
19	18.5	15.5	17.5	9.0	7.5	8.5	6.0	4.0	5.0	3.0	1.5	2.0
20	19.5	15.5	17.5	9.5	8.0	8.5	5.5	4.0	5.0	3.0	1.5	2.0
21	18.5	15.5	17.0	9.5	8.0	8.5	5.0	4.0	4.5	2.5	1.5	2.0
22	18.5	15.0	16.5	9.5	8.0	9.0	5.5	3.5	4.5	4.5	2.0	3.0
23	18.5	14.5	16.5	10.0	3.0	7.0	5.5	3.5	4.0	4.5	3.5	4.0
24	16.0	13.5	15.0	4.0	1.0	2.0	5.5	3.0	4.0	4.0	2.5	3.5
25	15.5	13.5	14.5	6.0	3.0	4.0	5.0	3.0	4.0	3.5	1.5	2.5
26	15.5	12.0	14.5	6.5	4.0	5.0	5.5	3.0	4.0	2.5	.5	2.0
27	16.0	13.5	14.5	6.5	4.5	5.5	6.0	3.0	4.0	3.0	.5	2.0
28	15.0	12.5	14.0	7.0	5.0	6.0	6.0	3.5	4.5	3.5	1.0	2.5
29	15.0	12.0	13.5	7.0	5.0	6.0	5.0	3.5	4.0	4.0	1.5	3.0
30	14.5	10.5	13.0	6.0	5.0	5.5	5.5	3.0	4.0	5.0	2.5	3.5
31	14.5	11.5	13.0	---	---	---	5.5	3.5	4.0	6.5	4.5	5.5
MONTH	21.0	10.5	16.3	15.5	1.0	9.5	8.0	3.0	4.9	8.0	.5	3.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.5	6.0	6.5	8.0	5.0	6.5	9.0	7.0	8.0	14.5	10.0	12.0
2	6.0	4.0	5.0	8.0	5.5	7.0	10.5	7.0	8.5	13.5	11.0	12.5
3	5.0	3.0	4.0	5.5	2.5	4.0	10.5	6.5	8.0	15.0	11.0	12.5
4	4.5	2.5	3.5	4.5	2.5	3.5	11.5	7.5	9.5	15.0	11.5	13.0
5	5.0	2.0	3.0	7.0	3.5	5.0	12.0	8.5	10.5	15.0	12.0	14.0
6	5.5	1.0	3.0	9.5	7.0	8.0	13.0	9.5	11.0	14.5	10.5	13.0
7	5.5	2.0	3.5	9.0	7.0	8.0	12.5	9.5	11.0	15.5	12.0	13.5
8	4.5	2.0	3.0	7.5	5.5	6.5	12.5	9.0	11.0	15.5	13.0	14.0
9	4.5	2.5	3.5	7.5	4.5	5.5	12.0	9.5	10.5	13.5	11.0	12.5
10	5.0	2.5	3.5	7.5	5.0	6.0	12.5	9.5	11.0	12.5	9.5	10.5
11	5.0	2.5	3.5	7.0	5.5	6.5	11.5	9.0	10.0	13.0	9.5	11.0
12	5.5	2.5	3.5	7.5	5.0	6.0	11.5	8.5	10.0	14.0	10.0	12.0
13	5.5	2.5	3.5	7.5	5.5	6.5	12.0	8.5	10.0	13.0	10.5	11.5
14	6.0	2.5	4.0	7.0	4.0	5.5	13.0	9.5	11.0	13.0	10.0	11.5
15	6.0	2.5	4.0	8.5	5.0	6.5	13.0	9.5	11.0	14.0	10.5	12.0
16	5.0	3.0	4.0	7.5	6.0	6.5	12.5	9.5	11.0	16.0	11.0	13.0
17	4.5	3.0	3.5	6.5	4.0	5.0	13.5	10.0	11.5	16.0	11.5	14.0
18	5.0	3.0	4.0	7.5	5.5	6.5	13.0	10.0	11.5	14.5	10.0	12.5
19	6.5	2.5	4.5	8.0	6.0	7.0	13.0	10.0	11.5	14.0	10.0	12.0
20	7.5	4.5	6.0	8.0	6.0	7.0	12.5	10.5	11.5	15.5	10.5	13.0
21	8.5	6.5	7.5	8.0	6.5	7.0	12.0	10.0	11.0	16.0	10.0	13.0
22	9.5	7.0	8.5	9.5	6.5	8.0	9.5	7.0	8.0	15.5	11.0	13.0
23	8.5	4.5	6.5	8.5	7.5	8.0	9.0	7.0	8.0	13.5	9.5	12.0
24	9.0	5.5	7.0	9.0	7.0	8.5	8.0	5.5	7.0	12.5	8.5	10.5
25	8.0	5.0	6.5	9.0	6.5	7.5	8.5	6.0	7.5	15.5	9.5	12.0
26	9.0	6.0	7.5	8.0	5.5	6.5	8.5	6.0	7.5	17.5	10.5	14.0
27	8.0	5.5	7.0	9.0	6.0	7.5	10.5	6.0	8.5	17.5	11.5	14.5
28	7.5	4.5	6.5	10.5	7.5	9.0	12.0	5.5	9.5	15.5	12.0	13.5
29	---	---	---	9.5	7.0	8.5	12.5	8.0	10.5	13.5	10.0	11.5
30	---	---	---	10.0	7.0	8.5	12.0	10.0	11.0	15.5	9.5	12.0
31	---	---	---	10.5	8.5	9.0	---	---	---	17.5	11.5	14.0
MONTH	9.5	1.0	4.9	10.5	2.5	6.8	13.5	5.5	9.9	17.5	8.5	12.6

10350000 TRUCKEE RIVER AT VISTA, NV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

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

10350400 TRUCKEE RIVER BELOW TRACY, NV

LOCATION.--Lat 39°33'52", long 119°31'02", in NW1/4NE1/4 sec.33, T.20 N., R.22 E., Washoe County, Hydrologic Unit 16050102, on left bank on upstream side of bridge, 200 ft downstream from Tracy powerplant, 13 mi east of Sparks, and at mi 40.62, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,590 mi².

PERIOD OF RECORD.--May 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,238.15 ft, above National Geodetic Vertical Datum of 1929 (levels by S.E.A. Engineers, Sparks, Nev.).

REMARKS.--Records good except for estimated daily discharges, and late June and July, which are fair. Flow regulated by Lake Tahoe (station 10337000), Prosser Creek (station 10340300), Stampede (station 10344300) and Boca (station 10344490) Reservoirs, other lakes, powerplants, and many diversions for irrigation.

AVERAGE DISCHARGE.--17 years, 901 ft³/s, 672,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s, Feb. 19, 1986, from rating curve extended above 8,800 ft³/s, gage height, 15.2 ft, from floodmarks; minimum, 22 ft³/s, Oct. 24, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,040 ft³/s, Nov. 24, gage height, 6.81 ft; minimum daily, 73 ft³/s, Nov. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	124	201	166	171	414	1060	569	485	325	244	310
2	96	116	188	151	162	409	999	651	491	350	251	323
3	93	91	183	154	151	438	1000	629	542	336	244	318
4	91	84	184	141	e120	372	974	721	823	309	258	312
5	89	86	176	156	e125	338	959	853	952	313	269	319
6	79	89	173	154	e115	398	971	985	822	278	262	318
7	77	86	174	140	e125	650	1050	810	827	293	257	313
8	81	77	168	138	e145	1020	1160	900	1080	336	535	307
9	90	83	155	140	e185	1580	1190	950	901	317	473	330
10	94	74	155	173	e195	1450	1200	871	912	282	362	335
11	93	73	148	151	171	1510	1270	734	853	301	308	338
12	88	74	144	127	173	1400	1200	790	817	316	323	367
13	88	83	143	208	167	1100	1120	787	863	308	309	344
14	90	112	145	290	152	970	1100	763	881	306	301	329
15	93	123	136	327	148	879	1070	833	757	313	292	318
16	96	109	127	342	172	917	1050	708	770	320	274	328
17	98	104	158	330	191	909	1030	820	714	327	278	496
18	101	102	166	333	197	860	1040	862	658	314	291	521
19	94	96	161	332	255	918	1020	812	638	324	312	537
20	82	91	159	337	258	967	993	800	479	340	304	478
21	74	90	156	337	202	880	1040	800	430	274	307	456
22	87	88	148	341	235	899	1040	811	381	265	309	421
23	92	275	152	345	532	898	860	820	353	258	312	411
24	111	1280	154	334	512	959	789	786	382	261	316	409
25	121	460	152	321	456	1180	831	560	384	249	304	391
26	127	320	144	313	457	1090	835	481	383	267	337	405
27	122	257	e145	321	459	956	782	578	418	265	332	394
28	115	231	e146	320	424	925	707	611	361	262	329	392
29	135	207	147	314	---	1090	595	642	333	256	327	401
30	126	196	152	316	---	995	567	631	311	246	319	437
31	132	---	176	211	---	948	---	568	---	242	311	---
TOTAL	3038	5281	4916	7763	6655	28319	29502	23136	19001	9153	9650	11358
MEAN	98.0	176	159	250	238	914	983	746	633	295	311	379
MAX	135	1280	201	345	532	1580	1270	985	1080	350	535	537
MIN	74	73	127	127	115	338	567	481	311	242	244	307
AC-FT	6030	10470	9750	15400	13200	56170	58520	45890	37690	18150	19140	22530

CAL YR 1988 TOTAL 112332 MEAN 307 MAX 1280 MIN 65 AC-FT 222800
WTR YR 1989 TOTAL 157772 MEAN 432 MAX 1580 MIN 73 AC-FT 312900

e Estimated

10350500 TRUCKEE RIVER AT CLARK, NV

LOCATION--Lat 39°33'56", long 119°29'08", in SE1/4SW1/4 sec.46, T.20 N., R.22 E., Storey County, Hydrologic Unit 16050102, on left bank about 250 ft downstream from Clark Bridge, about 2 mi downstream from cooling pond outlet at Tracy powerplant, and approximately 0.2 mi west of Clark. Prior to Jan. 16, 1985, at site about 200 ft upstream on right bank.

DRAINAGE AREA.--1,600 mi², approximately.

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1983 to September 1988.
WATER TEMPERATURE: June 1972 to September 1977; June 1978 to current year.

INSTRUMENTATION.--Specific-conductance recorder from October 1983 to September 1988, hourly. Temperature recorder from June 1972 to September 1977, continuous; June 1978 to February 1980, four times per hour; March 1980 to May 1982, two times per hour; June 1982 to current year, hourly.

REMARKS.--Period of no record, Oct. 1 to Nov. 14, due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 626 microsiemens Sept. 25, 1988; minimum, 62 microsiemens Feb. 17, 1986.
WATER TEMPERATURE: Maximum recorded, 29.5°C June 4, 1977 (temperature presumably higher during period of recorder malfunction in June 1977); minimum, freezing point on several days during winter months of some years.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 27.5°C July 19; minimum, 0.0°C several days Dec., Jan., and Feb.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	5.5	3.0	4.5	3.0	2.0	2.5
2	---	---	---	---	---	---	5.0	3.0	4.5	4.0	2.0	3.0
3	---	---	---	---	---	---	5.5	3.5	4.5	4.0	2.5	3.0
4	---	---	---	---	---	---	5.5	3.0	4.5	3.5	2.0	3.0
5	---	---	---	---	---	---	6.0	4.0	5.0	3.5	1.5	2.5
6	---	---	---	---	---	---	6.0	4.5	5.5	3.0	1.0	2.0
7	---	---	---	---	---	---	5.5	4.0	4.5	3.5	1.5	2.5
8	---	---	---	---	---	---	5.5	4.0	5.0	3.0	1.0	2.0
9	---	---	---	---	---	---	5.5	3.5	4.5	5.5	3.0	4.5
10	---	---	---	---	---	---	5.5	3.5	4.5	4.5	2.5	4.0
11	---	---	---	---	---	---	5.5	3.5	4.5	2.5	1.0	2.0
12	---	---	---	---	---	---	6.0	4.0	5.0	2.5	.00	1.5
13	---	---	---	---	---	---	6.0	4.0	5.0	3.0	1.0	2.0
14	---	---	---	---	---	---	5.0	3.5	4.5	2.5	1.0	2.0
15	---	---	---	8.0	6.5	7.0	3.5	.5	1.5	2.5	.00	1.5
16	---	---	---	6.5	5.5	6.0	2.5	.5	1.5	3.0	.00	1.5
17	---	---	---	6.0	4.5	5.5	4.5	1.5	3.0	3.0	.00	1.5
18	---	---	---	6.5	4.5	5.5	4.5	3.0	3.5	3.0	.5	2.0
19	---	---	---	7.5	5.0	6.0	4.0	3.0	3.5	3.0	.5	2.0
20	---	---	---	8.0	5.0	6.5	4.0	3.0	3.5	2.5	.00	1.5
21	---	---	---	6.5	5.5	6.0	3.5	2.0	3.0	3.0	.00	2.0
22	---	---	---	8.5	6.0	7.5	3.0	2.0	2.5	3.5	1.5	2.5
23	---	---	---	8.0	4.0	6.5	2.5	.5	1.5	4.0	2.0	3.0
24	---	---	---	3.5	2.0	2.5	3.0	1.0	2.0	3.5	2.0	2.5
25	---	---	---	5.5	2.0	4.0	2.5	.5	1.5	3.0	.5	2.0
26	---	---	---	5.5	3.0	4.5	1.0	.00	.5	2.5	.00	1.5
27	---	---	---	6.0	3.0	5.0	.00	.00	.00	3.0	.00	1.5
28	---	---	---	6.5	4.5	5.5	.00	.00	.00	3.5	.5	2.0
29	---	---	---	6.5	4.0	5.5	1.0	.00	.5	4.5	.5	2.5
30	---	---	---	6.0	3.5	5.0	3.0	.5	1.5	5.5	1.5	3.5
31	---	---	---	---	---	---	3.5	2.0	2.5	5.5	2.0	4.0
MONTH	---	---	---	---	---	---	6.0	.0	3.2	5.5	.0	2.4

10350500 TRUCKEE RIVER AT CLARK, NV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.0	4.5	5.5	8.5	5.0	6.5	9.0	7.0	8.0	15.0	10.5	12.5
2	5.0	3.0	4.0	9.0	5.0	7.0	8.5	7.0	7.5	15.5	12.5	13.5
3	3.5	2.0	2.5	6.0	3.5	4.5	9.5	7.0	8.5	16.5	12.0	14.0
4	1.5	.0	1.0	4.0	2.5	3.0	11.5	8.0	9.5	17.0	13.5	15.0
5	.5	.0	.0	6.5	3.0	4.5	12.5	9.0	11.0	17.0	14.0	15.5
6	.0	.0	.0	10.0	5.5	7.5	13.5	10.0	12.0	15.5	14.0	15.0
7	.0	.0	.0	10.0	7.5	8.5	13.0	10.5	12.0	16.5	13.0	15.0
8	.0	.0	.0	8.0	6.0	7.5	13.0	10.0	11.5	16.5	14.0	15.5
9	.0	.0	.0	7.0	4.5	6.0	13.0	10.0	11.5	15.5	13.0	14.0
10	1.5	.0	.5	7.5	5.5	6.5	13.0	10.0	11.5	13.5	11.0	12.5
11	4.5	2.0	3.5	7.5	6.0	7.0	12.0	9.5	11.0	12.5	10.5	11.5
12	5.0	2.5	4.0	8.0	5.0	6.5	11.5	9.0	10.5	15.0	11.5	13.0
13	5.0	2.5	3.5	8.0	5.5	6.5	12.5	9.0	10.5	14.0	12.0	13.0
14	4.0	1.0	2.5	7.0	4.5	5.5	13.5	10.0	11.5	14.5	11.5	12.5
15	4.5	1.0	3.0	8.5	5.0	6.5	13.5	10.0	12.0	15.0	11.5	13.0
16	6.0	3.0	4.5	7.0	5.5	6.5	13.5	10.5	12.0	17.0	12.5	14.5
17	5.0	3.0	4.0	6.5	4.0	5.0	14.0	10.5	12.5	17.0	14.5	15.5
18	6.0	3.0	4.5	8.0	5.0	6.5	14.0	11.0	12.5	15.0	13.0	14.0
19	5.5	4.0	5.0	9.0	6.5	7.5	13.5	11.0	12.5	14.5	11.5	13.0
20	8.0	3.0	6.0	8.5	6.0	7.0	13.5	11.5	12.5	16.0	12.0	14.0
21	8.0	4.5	6.5	7.5	6.0	7.0	13.0	11.0	11.5	16.5	13.0	14.5
22	9.5	6.5	8.0	10.0	6.5	8.0	10.5	7.5	9.0	16.0	13.0	14.5
23	8.5	6.0	7.5	9.0	7.5	8.0	9.5	7.0	8.0	14.5	11.5	13.0
24	8.5	6.0	7.5	10.0	7.5	8.5	7.5	6.5	7.5	13.0	11.0	12.0
25	8.5	6.5	7.5	8.5	6.5	7.5	9.0	6.0	7.5	16.0	11.0	13.0
26	10.5	5.5	8.0	8.0	5.5	6.5	9.0	7.0	8.0	18.0	12.5	15.0
27	9.5	6.5	8.0	8.5	6.0	7.0	11.0	6.5	8.5	18.0	14.5	16.0
28	9.0	5.5	7.0	10.5	7.5	9.0	12.5	9.0	10.5	15.5	13.0	14.5
29	---	---	---	10.5	7.0	9.0	13.5	9.5	11.0	13.5	12.5	13.0
30	---	---	---	10.5	7.0	9.0	12.0	11.0	11.5	15.0	11.5	13.0
31	---	---	---	9.5	8.0	9.0	---	---	---	17.5	13.0	15.0
MONTH	10.5	.0	4.1	10.5	2.5	6.9	14.0	6.0	10.4	18.0	10.5	13.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.5	14.5	16.5	23.0	17.0	20.0	22.5	17.0	19.5	22.0	16.5	19.5
2	20.5	15.5	18.0	23.5	17.5	20.5	22.5	16.5	19.5	22.0	16.5	19.5
3	19.5	17.0	18.0	24.0	18.0	21.0	23.0	17.5	20.5	22.5	16.5	19.5
4	17.0	15.0	16.5	24.0	18.0	21.0	24.0	18.0	21.0	23.0	16.5	20.0
5	17.5	14.0	15.5	24.0	18.5	21.5	24.0	18.5	21.5	22.5	17.0	20.0
6	19.0	16.0	17.5	24.0	18.5	21.5	25.5	19.0	22.5	21.5	16.5	19.0
7	20.0	16.5	18.0	24.5	19.5	22.0	24.0	21.0	22.0	20.0	15.5	18.0
8	17.5	15.0	16.5	25.0	20.0	22.5	20.5	19.0	20.0	21.0	15.5	18.5
9	19.0	16.0	17.5	23.0	19.0	21.5	23.5	18.5	20.5	21.5	16.0	19.0
10	20.0	16.5	18.0	23.5	18.0	21.0	24.5	19.5	22.0	21.5	16.5	19.0
11	20.0	17.5	18.5	24.5	19.0	21.5	25.0	19.5	22.0	21.0	16.5	18.5
12	21.0	17.5	19.0	23.5	20.0	22.0	24.5	19.0	22.0	20.0	15.5	18.0
13	21.0	18.0	19.5	25.0	20.0	22.5	25.0	18.5	21.5	19.5	14.5	17.0
14	21.0	17.5	19.0	25.0	20.0	22.5	24.5	18.5	21.5	20.5	14.5	17.5
15	21.0	18.5	19.5	23.5	19.5	21.5	24.5	18.0	21.5	21.5	15.5	18.5
16	20.5	15.5	18.5	23.0	18.0	20.5	24.5	17.5	21.0	20.0	17.0	18.5
17	21.0	17.0	18.5	24.5	18.5	21.5	23.5	18.0	21.0	18.5	16.0	17.5
18	21.5	17.5	19.5	26.0	20.0	23.0	23.5	17.5	20.5	16.0	13.5	15.0
19	20.5	17.5	19.0	27.5	21.5	24.5	24.0	18.0	21.0	17.0	13.0	14.5
20	20.5	16.5	18.0	27.0	21.5	24.5	22.5	18.5	20.5	18.0	14.0	16.0
21	20.0	15.0	17.5	25.5	21.0	23.5	23.5	17.5	20.5	18.5	15.0	16.5
22	22.5	16.0	19.0	24.5	20.5	22.5	23.0	18.0	20.5	18.5	15.0	16.5
23	22.0	17.0	19.5	25.5	21.0	23.5	21.0	16.5	18.5	18.5	14.5	16.5
24	22.5	17.0	20.0	26.0	20.5	23.5	21.0	15.5	18.5	19.0	15.0	17.0
25	23.5	17.5	20.5	26.0	20.5	23.5	21.5	15.5	19.0	19.0	15.5	17.0
26	23.5	18.5	21.0	25.5	20.0	22.5	22.5	16.5	19.5	17.5	15.0	16.0
27	23.0	18.5	20.5	24.5	19.0	22.0	23.0	16.5	19.5	18.0	14.0	16.0
28	22.0	18.5	20.0	24.5	18.5	21.5	23.5	17.5	20.5	17.0	14.0	15.5
29	22.5	16.5	19.5	24.0	19.0	21.5	22.0	17.5	20.0	16.0	14.5	15.0
30	23.0	16.5	19.5	23.0	18.0	20.5	21.5	16.0	18.5	16.0	13.5	14.5
31	---	---	---	22.0	17.5	20.0	22.0	16.0	19.0	---	---	---
MONTH	23.5	14.0	18.6	27.5	17.0	22.0	25.5	15.5	20.5	23.0	13.0	17.4

10351300 TRUCKEE CANAL NEAR WADSWORTH, NV

LOCATION.--Lat 39°36'25", long 119°18'35", in NW1/4NE1/4 sec.17, T.20 N., R.24 E., Storey County, Hydrologic Unit 16050102, on left bank at upstream end of Tunnel No. 3, 2 mi southwest of Wadsworth, and at mile 22.85, upstream from terminal weir at Lahontan Reservoir.

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

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

GAGE.--Water-stage recorder. Elevation of gage is 4,200 ft, from topographic map. Since Feb. 13, 1967, auxiliary water-stage recorder on left bank 0.3 mi downstream from base gage.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is regulated by Derby Dam (including two wasteways between gage and Derby Dam) and many reservoirs, powerplants, and diversions above Derby Dam.

AVERAGE DISCHARGE.--23 years, 267 ft^3/s, 193,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 955 ft^3/s, June 10, 1970; no flow at times in some years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	121	110	172	109	435	922	606	464	265	216	267
2	74	118	101	148	132	426	908	616	431	272	228	262
3	77	110	102	144	144	458	920	589	462	263	222	271
4	73	102	102	138	136	418	895	671	594	239	253	261
5	75	103	106	135	104	368	901	779	756	232	258	265
6	69	107	158	147	e101	384	893	856	709	208	265	257
7	64	104	172	137	e103	570	899	808	660	205	256	258
8	61	71	173	134	e98	722	920	830	757	210	372	252
9	70	56	173	127	e102	777	908	874	749	223	475	274
10	76	48	174	150	e108	778	909	865	746	239	338	280
11	77	32	179	155	e120	802	911	745	729	225	256	283
12	74	29	177	128	e160	784	910	751	706	224	225	295
13	72	43	169	162	e189	800	907	763	711	221	266	298
14	72	86	110	212	e174	809	907	762	748	215	275	281
15	75	132	111	257	153	780	908	793	681	203	291	287
16	76	128	151	251	168	779	907	730	651	204	262	282
17	79	124	158	247	204	800	906	758	628	215	253	366
18	77	126	185	245	214	768	905	824	576	222	271	371
19	83	122	181	246	255	788	896	811	570	219	279	414
20	75	118	170	249	280	821	888	770	477	238	276	375
21	68	116	165	252	249	789	900	763	400	217	280	348
22	70	114	157	256	237	779	909	763	363	201	273	330
23	81	260	153	259	394	786	887	765	335	204	279	310
24	79	561	154	255	460	796	816	757	345	216	279	308
25	96	361	153	245	445	833	813	603	341	205	270	299
26	102	228	153	236	435	819	847	483	338	216	279	298
27	105	148	129	239	452	820	817	531	355	229	279	328
28	103	120	126	244	445	829	736	568	324	221	278	344
29	104	109	140	242	---	856	657	601	294	224	274	324
30	118	108	163	241	---	893	607	606	276	228	275	380
31	121	---	182	205	---	920	---	540	---	226	268	---
TOTAL	2509	4005	4637	6258	6171	22387	26109	22181	16176	6929	8571	9168
MEAN	80.9	133	150	202	220	722	870	716	539	224	276	306
MAX	121	561	185	259	460	920	922	874	757	272	475	414
MIN	61	29	101	127	98	368	607	483	276	201	216	252
AC-FT	4980	7940	9200	12410	12240	44400	51790	44000	32090	13740	17000	18180

CAL YR 1988 TOTAL 95009 MEAN 260 MAX 584 MIN 29 AC-FT 188500
WTR YR 1989 TOTAL 135101 MEAN 370 MAX 922 MIN 29 AC-FT 268000

e Estimated

10351356 FERNLEY A DRAIN AT POWERLINE CROSSING NEAR FERNLEY, NV

LOCATION.--Lat 39°36'07", long 119°09'59", in SW1/4NW1/4 sec.15, T.20 N., R.25 E., Lyon County, Hydrologic Unit 16050104, on left bank 2.8 mi east of Fernley.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--February 1989 to September 1989 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 4,070 ft, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is return flow from land irrigated by Truckee Canal and releases to Fernley Wildlife Management Area.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period February to September, 4.6 ft^3/s, Sept. 9, gage height, 1.05 ft; minimum daily, .01 ft^3/s, Feb. 12-15 and June 16, 17, 22 and 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	e1.0	.31	.11	.15	.07	1.9	.55	1.6
2	---	---	---	---	e.60	e.28	.10	.26	.04	1.5	1.1	.98
3	---	---	---	---	e.45	.26	.09	.09	.03	1.0	.65	1.6
4	---	---	---	---	e.32	.23	.07	.07	1.0	.37	.48	1.8
5	---	---	---	---	e.25	.25	.07	.05	1.1	.13	.34	2.6
6	---	---	---	---	e.20	.32	.07	.05	.43	.09	.29	1.9
7	---	---	---	---	e.14	.36	.07	.13	.14	.15	.92	3.7
8	---	---	---	---	e.10	.32	.07	2.5	.10	.15	2.2	3.0
9	---	---	---	---	e.06	.28	.07	2.8	.07	.13	3.5	3.6
10	---	---	---	---	e.04	.26	.07	.91	.66	1.2	3.0	1.3
11	---	---	---	---	e.02	.21	.06	.18	2.1	2.4	1.2	1.1
12	---	---	---	---	e.01	.19	.06	.09	2.2	.99	.71	1.1
13	---	---	---	---	e.01	.18	.06	.66	.36	.47	.92	.94
14	---	---	---	---	e.01	.15	.06	.20	.11	.34	2.3	.94
15	---	---	---	---	e.01	.15	.05	.09	.04	.20	.66	2.3
16	---	---	---	---	e.02	.16	.04	.06	.01	.76	.49	1.4
17	---	---	---	---	e.03	.15	.03	.05	.01	3.0	.44	1.7
18	---	---	---	---	e.05	.14	.03	.10	.36	2.2	.41	2.2
19	---	---	---	---	e.09	.14	.02	.14	.63	.88	.84	1.9
20	---	---	---	---	e.16	.13	.28	.21	.15	.60	.72	1.3
21	---	---	---	---	e.25	.12	.54	.39	.03	.37	.67	1.1
22	---	---	---	---	.91	.13	.92	1.3	.01	.25	.66	.97
23	---	---	---	---	1.7	.14	2.2	.22	.01	.28	.73	.94
24	---	---	---	---	1.9	.14	1.5	.67	.03	1.6	.78	1.3
25	---	---	---	---	1.0	.13	2.2	1.9	.02	.51	2.4	1.8
26	---	---	---	---	.75	.12	.44	.42	.05	.33	3.3	2.2
27	---	---	---	---	.55	.11	.16	.20	1.5	.22	1.7	1.8
28	---	---	---	---	.37	.12	.13	1.5	1.7	.20	2.2	1.7
29	---	---	---	---	---	.12	.10	2.1	1.3	.19	1.2	1.2
30	---	---	---	---	---	.11	.09	.47	.44	.20	1.4	1.5
31	---	---	---	---	---	.11	---	.16	---	.19	2.9	---
TOTAL	---	---	---	---	11.00	5.82	9.76	18.12	14.70	22.80	39.66	51.47
MEAN	---	---	---	---	.39	.19	.33	.58	.49	.74	1.28	1.72
MAX	---	---	---	---	1.9	.36	2.2	2.8	2.2	3.0	3.5	3.7
MIN	---	---	---	---	.01	.11	.02	.05	.01	.09	.29	.94
AC-FT	---	---	---	---	22	12	19	36	29	45	79	102

e Estimated

10351400 TRUCKEE CANAL NEAR HAZEN, NV

LOCATION.--Lat 39°29'56", long 119°02'29", in SW1/4NE1/4 sec.23, T.19 N., R.26 E., Churchill County, Hydrologic Unit 16050203, on left bank 500 ft downstream from Bango check dam, and 4.5 mi southwest of Hazen.

PERIOD OF RECORD.--October 1966 to current year. Records since Oct. 1, 1980, equivalent if records for the KX lateral are added to flow past station.

GAGE.--Water-stage recorder. Datum of gage is 4,166.53 ft, above Bureau of Reclamation datum. Since Oct. 1, 1980, at site 500 ft downstream from Bango check dam. From Mar. 17, 1972, to Sept. 30, 1980, gage on left bank 0.1 mi downstream from Hazen check dam and auxiliary water-stage recorder 20 ft upstream from KX lateral diversion canal. Oct. 1, 1967, to Mar. 17, 1972, auxiliary water-stage recorder on right bank, approximately 6 mi downstream from base gage.

REMARKS.--Records fair except for October to May, which are poor. Flow regulated by Derby Dam, diversions, and spillways between Derby Dam and station.

AVERAGE DISCHARGE.--23 years, 198 ft³/s, 143,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 916 ft³/s, Feb. 3, 1967; no flow at times in some years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	102	175	173	206	407	835	541	429	104	62	184
2	43	98	178	157	111	415	824	511	389	116	72	148
3	52	100	168	150	121	404	819	501	381	151	60	160
4	53	93	167	150	130	406	819	523	444	141	53	178
5	52	88	144	144	119	375	815	645	677	133	54	194
6	49	86	95	156	112	347	836	670	670	114	66	185
7	44	77	129	165	115	432	839	695	600	90	57	164
8	41	68	142	137	102	645	832	673	640	80	116	168
9	40	69	142	131	112	769	863	725	648	79	412	182
10	49	67	138	131	112	759	869	757	641	70	320	198
11	54	65	137	144	128	760	878	728	641	68	207	218
12	56	64	134	141	155	775	869	675	657	48	147	215
13	51	64	129	129	175	724	792	692	651	32	121	241
14	51	62	118	171	164	721	806	697	644	52	147	213
15	52	71	89	288	158	723	800	688	614	70	141	217
16	56	107	82	309	148	704	779	694	553	55	128	147
17	58	102	92	301	181	745	806	636	488	65	86	263
18	60	101	108	293	175	731	791	727	406	88	91	445
19	63	99	130	299	198	723	760	714	429	65	92	439
20	69	91	135	293	242	755	719	629	385	70	98	428
21	100	88	129	298	235	741	695	646	274	111	163	392
22	97	97	128	300	215	730	692	654	205	56	164	365
23	96	212	123	304	326	741	730	664	163	39	143	327
24	102	454	126	306	474	733	747	630	165	83	160	319
25	97	435	129	298	473	776	711	533	199	67	167	313
26	95	318	129	289	439	757	741	343	180	53	142	283
27	93	254	126	281	434	750	740	352	164	67	182	246
28	85	215	112	287	430	763	670	414	151	64	169	280
29	46	196	111	288	---	785	614	491	127	77	141	228
30	69	174	116	284	---	777	538	544	148	73	178	293
31	93	---	143	280	---	833	---	492	---	71	148	---
TOTAL	2010	4117	4004	7077	5990	20706	23229	18884	12763	2452	4287	7633
MEAN	64.8	137	129	228	214	668	774	609	425	79.1	138	254
MAX	102	454	178	309	474	833	878	757	677	151	412	445
MIN	40	62	82	129	102	347	538	343	127	32	53	147
AC-FT	3990	8170	7940	14040	11880	41070	46070	37460	25320	4860	8500	15140

CAL YR 1988 TOTAL 76690 MEAN 210 MAX 493 MIN 36 AC-FT 152100
WTR YR 1989 TOTAL 113152 MEAN 310 MAX 878 MIN 32 AC-FT 224400

10351600 TRUCKEE RIVER BELOW DERBY DAM, NEAR WADSWORTH, NV

LOCATION.--Lat 39°35'05", long 119°26'25", in NW1/4SE1/4 sec.19, T.20 N., R.23 E., Storey County, Hydrologic Unit 16050102, on right bank 1,500 ft downstream from Derby Dam, 3.2 mi downstream from Clark, 9 mi southwest of Wadsworth, and at mi 34.49, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,676 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1909 to December 1910, January to December 1916, January 1918 to July 1958, October 1958 to current year. Monthly discharge only for some periods, published in WSP 1734.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,200 ft, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Lake Tahoe (station 10337000), Prosser Creek (station 10340300), Stampede (station 10344300) and Boca (station 10344490) Reservoirs, other lakes, powerplants, many diversions for irrigation, and by Derby Dam. Truckee Canal diverts water at Derby Dam out of basin to Lahontan Reservoir.

AVERAGE DISCHARGE.--70 years (1918-57, 1958-89), 386 ft³/s, 279,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s, Feb. 1, 1963, gage height, 14.26 ft, from rating curve extended above 1,500 ft³/s on basis of slope-area measurement of peak flow; no flow Aug. 8-11, 1924, Sept. 1-7, 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft³/s, Nov. 23, gage height, 4.67 ft; minimum daily, 5.5 ft³/s, Dec. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	14	9.7	16	13	19	194	51	126	28	36	28
2	14	14	8.0	16	12	17	145	117	88	41	36	29
3	13	13	7.7	16	12	e16	136	111	44	41	35	30
4	12	12	7.1	15	12	15	128	53	69	39	35	28
5	12	13	6.4	15	e12	14	96	83	122	38	35	27
6	12	e13	6.4	15	e12	15	118	128	55	37	34	27
7	12	e13	6.0	15	e12	79	187	60	54	36	34	26
8	13	14	6.0	15	e11	272	300	63	192	35	40	26
9	13	14	6.0	14	e10	843	355	107	59	35	44	26
10	14	14	5.8	13	e10	735	367	73	68	35	79	27
11	14	14	5.6	13	e10	712	427	64	48	35	106	27
12	15	13	5.5	13	e10	733	371	66	44	35	106	27
13	15	14	27	14	e11	320	293	70	45	35	106	27
14	15	14	96	16	e11	148	272	71	46	35	63	26
15	15	13	24	19	e12	66	246	70	42	35	30	26
16	15	9.4	26	20	e13	76	230	51	39	35	30	26
17	15	8.4	23	18	e14	81	211	52	38	36	29	35
18	16	8.4	23	17	e15	45	215	52	35	37	29	41
19	15	8.7	22	17	e16	70	206	55	33	37	29	46
20	14	8.4	21	16	e17	132	175	59	27	38	30	38
21	14	8.8	20	16	e20	60	200	60	22	36	30	34
22	14	9.1	20	16	23	57	217	69	20	36	31	32
23	14	343	20	16	56	63	68	65	20	36	30	31
24	14	352	19	17	47	95	63	73	20	37	30	31
25	14	39	18	16	32	427	61	48	20	38	30	30
26	15	18	18	16	27	351	64	35	20	39	30	29
27	15	14	18	16	27	184	67	37	24	38	31	30
28	14	11	17	16	22	118	54	44	26	38	31	55
29	14	11	21	16	---	312	52	44	24	38	30	61
30	15	11	20	16	---	100	46	61	24	37	29	68
31	14	---	18	15	---	70	---	80	---	36	28	---
TOTAL	435	1062.2	551.2	489	499	6245	5564	2072	1494	1132	1296	994
MEAN	14.0	35.4	17.8	15.8	17.8	201	185	66.8	49.8	36.5	41.8	33.1
MAX	16	352	96	20	56	843	427	128	192	41	106	68
MIN	12	8.4	5.5	13	10	14	46	35	20	28	28	26
AC-FT	863	2110	1090	970	990	12390	11040	4110	2960	2250	2570	1970

CAL YR 1988 TOTAL 9128.4 MEAN 24.9 MAX 352 MIN 5.5 AC-FT 18110
WTR YR 1989 TOTAL 21833.4 MEAN 59.8 MAX 843 MIN 5.5 AC-FT 43310

e Estimated

10351600 TRUCKEE RIVER BL DERBY DAM NR WADSWORTH, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 1988 to current year.

INSTRUMENTATION.--Water-temperature recorder.

REMARKS.--Periods of missing record due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 28.0°C July 19, 1989; minimum recorded, 0.0°C, many days in winter.

EXTREMES FOR CURRENT PERIOD.--June to September 1988: Maximum recorded water temperature, 27.5°C July 23; minimum recorded, 10.0°C September 11.

Water year 1989: Maximum recorded water temperature 28.0°C July 19; minimum recorded 0.0°C on many days in winter.

TEMPERATURE, WATER (DEG.C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	25.0	19.0	21.5	26.0	21.0	23.0	24.0	14.0	21.0
2	---	---	---	25.0	19.5	22.0	25.0	20.5	22.5	24.0	14.0	21.0
3	---	---	---	24.5	20.0	22.0	25.0	20.5	22.5	24.0	13.0	21.0
4	---	---	---	22.5	19.0	20.5	25.5	20.5	22.5	23.0	13.0	20.5
5	---	---	---	22.5	17.5	20.0	24.0	21.0	22.5	23.0	12.5	19.5
6	---	---	---	23.5	18.0	20.5	25.0	19.0	22.0	22.5	12.5	19.0
7	---	---	---	24.5	18.5	21.5	25.5	19.0	22.0	22.5	12.0	18.0
8	---	---	---	25.5	14.0	22.5	25.5	19.5	22.5	22.0	12.5	18.0
9	---	---	---	26.5	21.0	23.5	25.0	20.0	22.5	21.5	12.0	17.0
10	---	---	---	26.5	21.5	24.0	26.0	20.0	22.5	21.5	10.5	16.5
11	---	---	---	25.0	21.5	23.0	24.5	19.5	21.5	18.0	10.0	15.0
12	---	---	---	25.0	19.5	22.5	24.0	12.5	20.0	17.5	12.5	15.0
13	---	---	---	26.0	20.5	23.0	22.5	12.5	20.0	18.0	12.5	15.0
14	---	---	---	26.0	20.5	23.0	22.5	12.5	18.5	19.0	12.0	15.5
15	---	---	---	27.0	21.0	23.5	22.5	12.0	18.0	20.0	11.0	17.0
16	---	---	---	27.0	21.5	24.0	23.5	12.0	19.5	20.0	10.5	16.5
17	24.5	18.0	21.0	27.5	22.0	24.5	24.0	19.0	21.0	19.0	10.5	15.5
18	26.0	19.5	22.5	27.5	22.5	25.0	23.5	13.5	20.5	17.0	10.5	14.0
19	26.5	20.0	23.0	27.5	22.0	24.5	23.5	12.0	20.5	14.5	10.5	12.5
20	27.5	21.5	24.0	27.5	22.0	24.5	24.0	13.5	20.5	15.5	11.0	13.5
21	26.0	21.0	23.5	27.5	22.0	24.5	24.5	14.0	21.0	18.0	12.0	14.5
22	27.0	22.0	24.0	26.5	21.5	23.5	24.5	19.0	21.5	19.5	12.5	15.5
23	27.0	20.0	24.0	27.5	21.5	24.0	25.0	19.0	22.0	20.0	12.5	16.5
24	27.5	22.5	25.0	26.0	21.0	23.0	25.5	20.0	22.5	20.5	15.0	17.5
25	24.0	21.0	23.0	26.0	21.5	23.0	25.5	20.0	22.5	21.0	15.0	17.5
26	25.5	20.0	22.5	25.0	21.0	22.5	25.0	20.0	22.5	20.0	15.0	17.5
27	24.5	20.0	22.0	23.5	19.5	21.0	25.0	11.0	21.5	19.0	11.0	16.0
28	24.0	19.0	21.5	26.0	19.0	22.0	24.5	11.0	21.5	18.5	13.0	16.0
29	23.0	12.0	20.0	27.0	20.5	23.5	24.5	20.0	22.0	18.5	13.5	16.0
30	23.0	18.0	20.5	25.5	22.0	24.0	24.0	11.0	21.0	19.0	12.5	16.0
31	---	---	---	26.0	21.0	23.5	24.0	14.0	21.0	---	---	---
MONTH	---	---	---	27.5	14.0	22.9	26.0	11.0	21.4	24.0	10.0	16.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN

10351600 TRUCKEE RIVER BL DERBY DAM NR WADSWORTH, NV--Continued

TEMPERATURE, WATER (DEG.C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.0	14.0	17.0	14.0	9.5	11.5	6.0	1.5	3.0	2.0	.0	1.5
2	20.5	14.5	17.5	12.5	10.0	11.0	5.5	1.5	3.0	2.5	.0	1.5
3	20.5	14.5	17.5	13.5	9.5	10.5	5.5	2.0	3.5	3.0	1.0	2.0
4	21.5	14.0	17.0	13.5	8.5	10.5	6.0	1.5	3.0	2.5	.5	1.5
5	20.5	12.5	16.0	---	---	---	6.5	2.0	3.5	2.0	.5	1.5
6	19.0	12.5	15.5	---	---	---	6.5	2.5	3.5	2.5	.5	1.0
7	18.5	12.0	15.5	---	---	---	6.0	2.0	3.5	3.0	.5	1.5
8	18.5	12.5	15.5	9.0	---	---	5.5	1.5	3.0	2.5	.0	1.0
9	18.5	13.0	15.5	8.0	5.0	6.5	6.0	2.0	3.5	4.5	1.0	2.5
10	17.5	13.0	15.0	9.0	5.5	7.0	5.0	2.0	3.0	4.5	1.5	3.0
11	16.5	13.0	15.0	8.0	4.5	6.0	6.0	2.0	3.0	3.0	.5	1.0
12	16.5	11.5	13.5	9.0	5.5	7.0	6.5	2.0	3.0	2.0	.0	.5
13	15.5	12.0	13.5	10.0	6.5	7.5	5.5	2.0	4.0	1.5	.0	.5
14	---	---	---	9.0	5.0	6.0	5.0	1.5	4.0	2.0	.5	1.0
15	---	---	---	7.5	---	---	3.5	.0	1.5	1.5	.0	.5
16	---	---	---	---	---	---	1.0	.0	.5	2.0	.0	1.0
17	---	---	---	---	---	---	2.5	1.0	2.0	2.5	.0	1.0
18	---	---	---	---	---	---	4.5	2.5	3.0	2.5	.5	1.0
19	---	---	---	---	---	---	4.5	2.5	3.5	2.5	.5	1.0
20	---	---	---	---	---	---	4.0	2.5	3.0	2.5	.0	1.0
21	---	---	---	---	---	---	3.0	1.0	2.0	2.5	.0	1.0
22	---	---	---	---	---	---	3.5	.5	2.0	4.0	.0	2.5
23	---	---	---	---	---	---	2.0	.0	1.0	2.5	.0	2.0
24	---	---	---	---	---	---	2.0	.0	1.0	3.0	1.0	1.5
25	---	---	---	---	---	---	2.5	.0	1.0	3.0	.0	1.0
26	---	---	---	---	---	---	1.0	.0	.0	2.5	.0	1.0
27	---	---	---	---	---	---	.5	.0	.0	3.0	.0	1.0
28	---	---	---	---	---	---	.0	.0	.0	3.5	.0	1.5
29	15.0	9.5	12.0	---	---	---	.0	.0	.0	3.5	.5	2.0
30	14.0	9.0	11.0	6.5	---	---	.5	.0	.0	4.5	1.0	2.5
31	14.0	8.0	11.0	---	---	---	1.0	.0	.5	5.5	1.0	3.0
MONTH	---	---	---	---	---	---	6.5	.0	2.2	5.5	.0	1.4

DAY	FEBRUARY MAX	FEBRUARY MIN	FEBRUARY MEAN	MARCH MAX	MARCH MIN	MARCH MEAN	APRIL MAX	APRIL MIN	APRIL MEAN	MAY MAX	MAY MIN	MAY MEAN
1	7.5	2.0	4.5	11.0	4.5	7.5	9.0	7.5	8.5	16.5	10.0	13.0
2	4.0	1.0	2.0	9.5	4.5	7.0	10.0	7.0	8.0	15.5	11.5	13.5
3	3.0	.5	2.0	8.5	2.5	5.0	10.5	7.5	9.0	17.5	12.0	14.5
4	1.5	.0	.5	4.5	2.0	3.5	12.5	8.5	10.5	18.5	13.0	15.5
5	1.0	.0	.0	7.0	3.0	5.0	14.0	9.5	11.5	18.0	13.5	15.5
6	1.0	.0	.0	10.5	6.0	8.0	14.5	11.0	12.5	16.0	14.0	15.0
7	.5	.0	.0	11.0	8.0	9.5	14.0	11.0	12.5	17.5	13.5	15.5
8	.0	.0	.0	9.0	7.0	8.0	13.5	10.5	12.0	17.0	14.0	15.5
9	.5	.0	.0	7.5	5.5	6.5	13.5	10.5	12.0	15.5	12.5	14.0
10	.5	.0	.0	8.5	6.0	7.0	13.5	10.5	12.0	14.0	11.5	12.5
11	.5	.0	.0	8.5	6.5	7.5	13.0	10.5	11.5	15.0	11.0	12.5
12	.5	.0	.0	8.0	5.5	7.0	12.5	9.5	11.0	16.5	12.0	14.0
13	1.0	.0	.5	8.0	5.5	7.0	12.5	9.0	11.0	16.5	13.5	14.5
14	1.5	.0	.5	7.5	5.0	6.0	13.5	10.5	12.0	16.5	12.0	13.5
15	1.5	.0	.5	9.5	5.5	7.5	14.0	10.5	12.5	16.5	12.0	14.0
16	2.5	1.0	1.5	8.0	5.5	7.0	14.0	11.0	12.5	19.0	13.0	16.0
17	4.0	2.5	3.5	7.5	5.0	6.0	14.5	11.5	13.0	19.5	14.5	17.0
18	5.0	2.5	---	8.0	5.5	7.0	14.5	11.5	13.0	17.5	13.0	15.0
19	7.5	3.5	5.0	10.0	6.5	8.0	13.5	11.5	12.5	17.0	12.0	14.0
20	8.0	2.5	5.0	9.0	6.0	7.5	14.0	11.5	12.5	18.0	12.0	15.0
21	8.5	4.5	6.5	9.0	6.5	7.5	13.0	10.5	12.0	18.5	13.0	16.0
22	10.5	5.5	7.5	11.0	6.5	8.5	11.0	8.0	9.5	18.0	13.5	15.5
23	10.0	7.0	8.0	10.0	7.5	8.5	11.0	7.0	8.5	16.5	10.5	13.5
24	9.5	5.5	7.5	11.0	7.5	9.0	8.5	6.5	7.5	15.0	10.5	12.5
25	10.0	6.0	8.0	9.0	6.5	8.5	8.5	5.5	7.5	18.0	10.5	14.0
26	11.0	6.0	8.0	8.5	6.0	7.0	10.0	6.5	8.0	20.0	12.0	16.0
27	11.0	5.5	8.0	9.0	6.5	7.5	10.5	7.0	8.5	20.0	14.0	16.5
28	10.5	5.0	7.5	11.5	8.0	9.5	13.5	8.0	10.5	18.0	13.5	15.5
29	---	---	---	11.0	8.5	9.5	14.5	9.0	11.5	15.5	12.0	13.0
30	---	---	---	11.5	8.0	9.5	13.0	10.5	11.5	17.0	11.0	13.5
31	---	---	---	10.5	8.0	9.5	---	---	---	19.5	12.0	16.0
MONTH	11.0	.0	---	11.5	2.0	7.5	14.5	5.5	10.8	20.0	10.0	14.6

10351600 TRUCKEE RIVER BL DERBY DAM NR WADSWORTH, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.5	13.5	17.5	24.0	17.5	20.5	23.0	17.0	20.0	22.5	17.5	19.5
2	22.0	15.5	---	24.5	18.0	21.0	23.0	17.5	20.0	22.5	17.0	19.5
3	21.0	17.0	18.5	25.0	18.5	21.5	24.0	18.0	20.5	22.5	17.5	20.0
4	20.0	16.0	17.5	25.0	18.5	21.5	24.5	18.5	21.5	23.0	17.5	20.5
5	19.0	15.0	16.5	25.0	19.0	21.5	24.5	19.0	21.5	22.5	---	---
6	21.5	15.5	18.5	25.0	18.5	22.0	25.0	19.0	22.5	21.0	17.0	18.5
7	22.0	17.0	19.0	25.5	20.0	22.5	23.5	20.5	---	20.0	16.0	18.0
8	18.5	16.0	17.0	25.5	20.5	23.0	21.0	18.5	20.0	21.5	16.0	18.5
9	21.0	16.0	18.5	24.5	20.0	22.0	24.0	18.5	21.0	22.0	17.0	19.5
10	21.5	16.5	19.0	25.0	18.5	21.5	25.0	19.0	22.0	22.0	17.5	---
11	22.0	17.5	19.0	25.5	19.0	22.0	25.5	19.5	22.0	21.0	17.5	19.5
12	23.5	17.5	20.0	24.0	20.5	22.5	24.5	19.0	22.0	20.5	16.0	18.5
13	23.5	18.0	20.5	26.5	20.0	23.0	25.0	18.5	21.5	20.0	14.5	17.5
14	23.0	17.5	20.0	26.5	20.0	23.0	25.0	18.5	21.5	20.5	15.0	18.0
15	22.5	18.0	20.0	24.5	20.0	22.0	24.5	18.0	21.5	21.5	16.0	19.0
16	22.5	16.5	19.0	24.0	18.5	21.0	24.5	17.5	21.5	19.5	18.0	19.0
17	23.0	16.5	19.5	25.5	19.0	22.5	23.5	18.0	20.5	18.5	16.0	17.5
18	24.0	17.0	20.0	27.5	21.0	24.0	24.0	18.0	20.5	16.5	14.0	15.5
19	22.5	16.5	19.5	28.0	22.0	24.5	24.5	17.5	21.5	17.0	12.5	15.0
20	21.5	16.0	18.5	27.5	22.5	25.0	22.5	19.0	20.5	18.5	13.0	16.0
21	21.5	15.0	18.0	27.0	22.0	24.0	24.0	17.5	20.5	19.5	14.0	16.5
22	23.5	16.0	20.0	25.0	21.5	23.5	23.0	18.0	---	19.5	14.0	16.5
23	23.0	17.0	19.5	27.0	21.5	24.0	21.5	16.0	---	19.5	14.0	17.0
24	24.0	17.0	20.0	26.5	21.5	24.0	21.5	16.0	18.5	19.5	14.5	17.0
25	25.0	18.0	21.0	27.0	21.0	24.0	22.0	16.5	19.0	19.0	15.5	17.0
26	24.5	18.5	21.0	26.0	21.5	23.5	22.5	17.5	20.0	18.0	14.0	16.0
27	22.5	18.5	20.5	25.5	20.0	22.5	23.0	17.0	20.0	18.5	13.5	16.0
28	22.5	18.0	20.0	24.5	19.5	22.0	23.5	18.0	20.5	16.5	13.5	15.5
29	23.5	17.0	20.0	24.0	20.0	22.0	22.5	17.5	20.0	16.0	13.5	14.5
30	23.0	16.5	19.5	23.5	19.0	21.0	21.5	16.5	19.0	16.5	12.5	14.5
31	---	---	---	22.5	18.0	20.0	22.0	17.0	19.5	---	---	---
MONTH	25.0	13.5	---	28.0	17.5	22.5	25.5	16.0	---	23.0	---	---

10351700 TRUCKEE RIVER NEAR NIXON, NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 39°46'40", long 119°20'10", in SW1/4NW1/4 sec.18, T.22 N., R.24 E., Washoe County, Hydrologic Unit 16050103, in Pyramid Lake Indian Reservation, on right bank 1.0 mi upstream from Numana Dam, 4 mi south of Nixon, and at mi 9.42, upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,827 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year. Records kept by Federal Court Watermaster April to June 1926, May 1928 to Sept. 1957 at site 1.0 mi downstream (Truckee River below Pyramid Dam, near Nixon, Nev.) not equivalent, but would be equivalent by adding flow of Indian Canal, both of which are available in files of Federal Court Watermaster. Currently, these records are kept only at times of diversion to the canal. At other times, the records are equivalent.

REVISED RECORDS.--WDR NV-83-1: 1980 (monthly runoff).

GAGE.--Water-stage recorder. Elevation of gage is 3,940 ft, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Tahoe (station 10337000), Prosser Creek (station 10340300), Stampede (station 10344300) and Boca (station 10344490) Reservoirs, other lakes, powerplants, and many diversions for irrigation. Truckee Canal often diverts much of the flow at Derby Dam, about 25 mi upstream, out of basin to Lahontan Reservoir. Several diversions for irrigation between station and Truckee Canal. One irrigation canal diverts between station and mouth of river.

AVERAGE DISCHARGE.--32 years, 550 ft³/s, 398,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,300 ft³/s, Feb. 19, 1986, from rating curve extended above 12,000 ft³/s, gage height, 13.01 ft; minimum daily, 8.1 ft³/s, July 7, 1960.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Flood of Dec. 24, 1955, reached a stage of 14.1 ft, from floodmarks, discharge, 14,000 ft³/s, by flow-over-dam measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft³/s, Mar. 12, gage height, 5.17 ft; minimum daily, 15 ft³/s, June 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	34	39	47	40	46	128	63	59	30	38	35
2	28	34	38	46	38	42	214	63	52	31	41	40
3	27	31	38	44	e36	e41	144	151	48	37	39	41
4	19	32	36	43	e35	e40	166	97	59	41	39	40
5	18	34	35	42	34	41	139	70	88	44	36	34
6	20	34	34	41	e34	39	117	83	95	50	27	27
7	22	35	33	42	e33	39	147	106	114	41	30	28
8	25	33	33	41	33	125	243	66	102	42	37	30
9	28	36	33	42	e33	568	327	108	175	39	46	22
10	29	36	33	42	e34	738	348	169	90	41	46	25
11	30	36	33	41	e34	567	377	130	94	41	73	21
12	30	37	33	e41	e34	906	401	155	82	35	90	23
13	32	36	33	e40	e34	440	337	192	76	29	94	37
14	32	35	48	39	e34	264	274	193	78	24	91	41
15	32	35	e49	e43	e35	142	275	189	67	17	65	41
16	32	35	e50	45	e35	97	236	177	60	24	49	40
17	32	35	50	43	35	116	229	166	52	29	43	45
18	33	33	51	43	35	94	213	170	47	36	42	47
19	29	32	51	42	37	76	208	170	43	44	37	57
20	28	31	50	41	38	115	196	168	47	49	40	60
21	28	31	48	41	37	131	173	151	55	43	38	55
22	34	31	48	41	36	80	242	138	54	39	41	50
23	34	55	47	41	36	84	157	135	37	39	40	48
24	33	506	51	41	60	86	86	128	34	35	39	45
25	35	158	49	e40	63	258	77	70	35	40	42	43
26	35	73	48	e39	54	409	76	58	30	41	45	43
27	34	55	56	39	48	250	69	52	24	42	41	46
28	32	47	46	40	49	164	67	53	16	38	44	47
29	31	43	e47	40	---	203	63	55	15	37	46	91
30	35	40	48	40	---	256	58	59	29	42	43	68
31	35	---	48	40	---	124	---	60	---	38	35	---
TOTAL	920	1723	1336	1290	1084	6581	5787	3645	1857	1158	1457	1270
MEAN	29.7	57.4	43.1	41.6	38.7	212	193	118	61.9	37.4	47.0	42.3
MAX	35	506	56	47	63	906	401	193	175	50	94	91
MIN	18	31	33	39	33	39	58	52	15	17	27	21
AC-FT	1820	3420	2650	2560	2150	13050	11480	7230	3680	2300	2890	2520

CAL YR 1988 TOTAL 14190 MEAN 38.8 MAX 506 MIN 11 AC-FT 28150
WTR YR 1989 TOTAL 28108 MEAN 77.0 MAX 906 MIN 15 AC-FT 55750

e Estimated

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1988 to current year.

INSTRUMENTATION.--Water-temperature monitor since July 1988, hourly.

REMARKS.--Samples are collected quarterly at this gage as part of the NASQAN network.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum daily, 27.5°C, July 29 and Aug. 9, 1988; minimum daily 0.0°C on many days during winter.

EXTREMES FOR CURRENT PERIOD.--July to September 1988: Maximum recorded water temperature, 27.5°C July 29 and August 9; minimum, 11.0°C September 11.

Water year 1989: Maximum water temperature, 26.5°C, July 19-25; minimum 0.0°C on many days during winter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
NOV												
30...	1145	39	870	8.20	7.5	4.5	9.0	12.3	108	K8	K150	230
MAR												
22...	1235	79	494	8.50	16.0	11.5	16	12.0	128	K2	35	120
MAY												
31...	1220	61	570	8.80	20.0	17.0	6.4	10.6	126	K7	410	150
AUG												
11...	1235	87	707	8.60	30.0	24.0	4.4	9.6	132	72	130	180

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV												
30...	54	22	91	3	7.2	157	129	110	130	0.10	24	527
MAR												
22...	28	11	47	2	4.1	85	75	48	65	0.10	19	264
MAY												
31...	35	15	58	2	5.2	106	100	73	72	0.10	17	339
AUG												
11...	42	18	70	2	8.0	144	122	99	86	0.20	18	423

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
NOV												
30...	516	0.72	0.540	0.010	0.550	<0.010	<0.010	0.20	0.050	0.020	<0.010	<10
MAR												
22...	270	0.36	0.130	0.110	0.240	0.010	0.020	<0.20	0.040	0.010	0.010	30
MAY												
31...	336	0.46	--	<0.010	<0.100	<0.010	<0.010	<0.20	0.030	0.020	0.020	<10
AUG												
11...	342	0.58	--	<0.010	<0.100	0.020	<0.010	<0.20	0.050	0.020	0.020	<10

K: NON-IDEAL COLONY COUNT.

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV											
30...	5	86	<0.5	<1	<1	<3	2	11	<5	56	100
MAR											
22...	6	48	<0.5	<1	<1	<3	1	40	<5	25	55
MAY											
31...	8	55	<0.5	<1	<1	<3	2	24	1	30	25
AUG											
11...	11	68	<0.5	<1	<1	<3	6	14	1	32	29

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV											
30...	<0.1	<10	6	<1	<1.0	510	<6	<3	20	2.1	100
MAR											
22...	<0.1	<10	2	<1	1.0	270	<6	28	15	3.2	99
MAY											
31...	<0.1	<10	2	<1	<1.0	350	<6	3	21	3.5	99
AUG											
11...	<0.1	<10	7	<1	<1.0	440	<6	<3	16	3.8	99

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	27.0	22.0	24.5	26.0	21.0	23.5
2	---	---	---	---	---	---	24.5	21.0	23.0	26.0	21.0	23.5
3	---	---	---	---	---	---	25.0	20.5	23.0	25.5	21.0	23.0
4	---	---	---	---	---	---	25.5	19.5	22.5	24.5	20.5	22.5
5	---	---	---	---	---	---	25.0	22.5	24.0	23.5	20.0	22.0
6	---	---	---	---	---	---	25.5	20.0	22.5	24.0	20.0	22.0
7	---	---	---	---	---	---	25.5	20.5	22.5	23.5	19.0	21.5
8	---	---	---	---	---	---	27.0	21.5	24.0	22.5	18.0	20.5
9	---	---	---	---	---	---	27.5	22.5	25.0	23.0	19.0	21.0
10	---	---	---	---	---	---	27.0	21.5	24.0	23.0	17.5	20.5
11	---	---	---	---	---	---	25.5	22.0	23.5	19.0	14.0	16.5
12	---	---	---	---	---	---	25.0	19.5	22.0	17.5	13.0	15.5
13	---	---	---	---	---	---	22.5	19.5	21.5	18.0	13.0	15.5
14	---	---	---	---	---	---	23.5	18.5	21.0	19.0	13.5	16.5
15	---	---	---	---	---	---	22.5	18.0	20.5	20.5	15.5	18.0
16	---	---	---	---	---	---	24.0	18.5	21.0	20.0	15.5	18.0
17	---	---	---	---	---	---	24.5	20.0	22.0	18.0	14.5	16.5
18	---	---	---	---	---	---	24.0	18.5	21.5	16.0	11.5	14.0
19	---	---	---	---	---	---	24.5	19.0	22.0	14.5	11.0	12.5
20	---	---	---	---	---	---	24.0	19.5	22.0	14.5	11.5	13.0
21	---	---	---	---	---	---	24.5	19.5	22.0	16.0	11.5	14.0
22	---	---	---	---	---	---	24.0	19.5	22.0	18.0	13.0	15.5
23	---	---	---	---	---	---	26.0	20.5	23.0	19.0	13.5	16.5
24	---	---	---	---	---	---	26.5	22.0	24.5	20.0	15.0	17.5
25	---	---	---	---	---	---	26.0	21.0	24.0	20.0	16.0	18.0
26	---	---	---	---	---	---	25.0	20.5	23.0	19.0	14.5	17.0
27	---	---	---	25.0	21.5	23.0	25.0	20.0	22.5	18.0	15.0	16.5
28	---	---	---	26.5	20.0	23.0	25.5	20.5	23.5	18.0	13.5	16.0
29	---	---	---	27.5	22.0	24.5	26.5	21.5	24.0	19.0	14.0	17.0
30	---	---	---	26.0	23.0	24.5	25.0	20.5	23.0	19.5	15.0	17.5
31	---	---	---	26.5	22.5	24.5	26.0	21.0	23.5	---	---	---
MONTH	---	---	---	---	---	---	27.5	18.0	22.8	26.0	11.0	18.0

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.0	15.0	18.0	14.0	10.5	12.5	5.5	3.0	4.5	.5	.5	.5
2	20.0	16.0	18.5	13.0	11.5	12.0	5.5	2.5	4.5	.5	.5	.5
3	20.0	16.0	18.0	14.5	10.5	12.5	5.5	4.0	4.5	1.0	.5	.5
4	19.0	16.5	18.0	14.0	10.5	12.5	5.0	2.5	4.0	2.0	1.0	1.5
5	19.5	15.5	17.5	12.5	9.5	11.5	6.0	3.0	4.5	1.5	.5	1.0
6	19.0	15.0	17.0	12.5	10.0	11.5	6.0	4.0	5.0	2.0	.5	1.0
7	18.5	14.0	16.5	10.0	8.0	9.0	5.5	3.5	5.0	1.5	.5	1.5
8	18.5	14.0	16.5	8.0	7.0	7.5	5.5	3.0	4.5	1.0	.0	.5
9	18.0	14.5	16.5	7.5	5.5	6.5	5.0	2.5	4.0	4.0	1.5	2.5
10	17.5	13.5	16.0	8.5	6.0	7.5	5.0	2.5	4.0	4.0	1.0	3.0
11	16.0	14.0	15.5	7.5	5.5	6.5	5.0	2.5	4.0	1.5	.0	.5
12	15.5	11.0	13.5	7.5	6.0	7.0	5.0	2.5	4.0	.5	.0	.0
13	15.0	13.0	14.0	9.5	7.0	8.0	6.0	3.5	4.5	.5	.0	.0
14	16.0	12.0	14.0	8.5	7.0	7.5	5.0	2.5	4.0	1.5	.0	.5
15	16.0	12.0	14.0	8.0	6.0	7.0	2.5	.5	1.5	1.0	.0	.5
16	16.5	12.5	14.5	7.0	5.5	6.5	2.0	.5	1.0	1.5	.0	1.0
17	17.5	13.5	15.5	7.0	5.0	6.0	2.5	1.0	2.0	2.0	.0	1.0
18	17.0	13.0	15.5	6.0	3.0	4.5	4.5	2.0	3.0	2.5	.0	1.5
19	18.0	14.0	16.0	7.0	4.0	5.5	4.0	3.0	3.5	3.0	.0	2.0
20	17.0	13.5	15.5	7.5	4.5	6.0	3.5	2.5	3.0	2.5	.5	2.0
21	16.0	12.0	14.5	6.0	4.5	5.0	3.0	1.5	2.5	3.0	1.5	2.5
22	16.5	13.0	15.0	8.0	5.0	6.5	3.0	2.0	2.5	3.5	2.0	2.5
23	15.5	11.5	14.0	8.0	5.5	7.5	2.5	.5	1.5	3.5	2.0	2.5
24	15.0	11.5	13.5	5.5	4.5	5.0	1.5	.5	1.0	3.0	.5	1.5
25	15.0	11.0	13.5	6.0	4.0	5.0	2.0	.5	1.5	1.5	.0	.5
26	14.5	11.0	13.0	6.0	4.0	5.0	1.0	.5	.5	2.0	.0	1.0
27	14.5	11.5	13.0	6.0	3.5	5.0	.5	.5	.5	2.5	.0	1.5
28	14.0	11.5	13.0	7.5	5.0	6.0	.5	.5	.5	3.0	.5	2.0
29	14.5	11.0	13.0	6.5	4.0	5.5	.5	.5	.5	4.0	.5	2.5
30	14.0	10.5	12.5	6.0	3.0	5.0	.5	.5	.5	4.5	1.0	3.0
31	13.0	9.0	11.5	---	---	---	.5	.5	.5	5.0	2.0	3.5
MONTH	20.0	9.0	15.1	14.5	3.0	7.4	6.0	.5	2.8	5.0	.0	1.4

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.0	3.5	5.0	10.0	6.5	8.5	12.0	9.5	11.0	---	---	---
2	4.0	1.0	2.5	10.0	7.0	9.0	12.5	9.0	10.5	---	---	---
3	2.5	.0	1.5	6.5	1.5	4.5	14.5	8.0	11.5	---	---	---
4	.0	.0	.0	4.5	2.0	3.0	---	---	---	---	---	---
5	.5	.0	.0	6.5	3.0	4.5	---	---	---	---	---	---
6	.5	.0	.0	11.0	6.5	9.0	---	---	---	---	---	---
7	.0	.0	.0	12.5	9.5	11.0	---	---	---	---	---	---
8	.0	.0	.0	11.5	9.5	10.5	---	---	---	---	---	---
9	.0	.0	.0	10.0	7.5	9.0	---	---	---	---	---	---
10	.0	.0	.0	10.5	6.5	8.5	---	---	---	---	---	---
11	.0	.0	.0	10.5	7.0	9.0	---	---	---	---	---	---
12	.0	.0	.0	10.0	6.5	8.5	---	---	---	---	---	---
13	.0	.0	.0	10.0	6.5	8.0	---	---	---	17.0	14.0	15.5
14	.0	.0	.0	10.5	5.5	8.0	---	---	---	18.0	13.0	15.5
15	.0	.0	.0	12.0	6.0	9.0	---	---	---	19.0	13.0	16.0
16	.5	.0	.0	10.5	7.5	9.0	---	---	---	20.0	15.0	17.5
17	2.0	.5	1.0	10.0	6.0	8.0	---	---	---	22.0	16.0	18.5
18	4.5	2.0	3.0	10.5	8.0	9.0	---	---	---	19.5	15.5	17.5
19	6.5	4.0	5.0	11.5	9.0	10.0	---	---	---	19.0	12.0	15.5
20	7.5	4.0	6.0	11.5	6.5	9.0	---	---	---	20.5	15.0	17.5
21	7.5	5.5	7.0	11.0	7.5	9.5	---	---	---	20.0	16.0	18.0
22	9.5	5.5	7.5	13.5	8.0	10.5	---	---	---	19.5	16.0	18.0
23	10.0	6.5	8.5	12.0	9.5	11.0	---	---	---	18.5	16.0	17.0
24	11.0	6.5	9.0	15.5	10.0	12.5	---	---	---	18.5	16.0	17.5
25	9.5	7.0	8.5	13.5	8.5	11.0	---	---	---	22.5	18.0	21.5
26	11.0	7.0	9.0	11.5	7.0	9.0	---	---	---	22.5	22.0	22.0
27	10.5	6.5	9.0	11.5	7.5	9.5	---	---	---	22.5	22.0	22.0
28	10.0	6.0	8.5	15.0	9.0	12.0	---	---	---	22.5	21.0	22.0
29	---	---	---	14.5	9.5	12.0	---	---	---	22.5	21.0	21.5
30	---	---	---	15.0	9.5	12.5	---	---	---	21.5	20.0	20.5
31	---	---	---	14.0	11.0	12.0	---	---	---	21.5	20.0	20.5
MONTH	11.0	.0	3.2	15.5	1.5	9.2	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.5	18.5	20.0	22.5	20.0	21.0	23.5	21.5	22.0	22.0	20.0	21.0
2	20.5	19.0	19.5	23.0	20.0	21.5	23.5	20.5	22.0	21.5	20.5	21.0
3	21.0	20.0	20.5	23.5	20.5	22.0	23.5	20.5	22.5	21.5	20.0	21.0
4	20.5	19.0	20.0	23.5	21.0	22.5	23.5	21.5	23.0	22.0	20.0	21.0
5	20.5	19.0	19.5	24.5	21.0	23.0	23.5	22.0	23.0	22.5	20.5	21.5
6	21.0	19.0	20.0	24.5	21.5	23.0	24.5	22.0	23.5	22.5	20.0	21.0
7	23.5	19.0	21.0	25.0	22.0	23.5	24.0	22.0	23.0	21.5	19.0	20.0
8	22.5	18.5	20.0	25.0	23.0	24.0	22.5	21.0	21.5	20.5	19.0	20.0
9	22.5	20.0	21.5	24.5	22.0	23.5	23.5	20.5	22.0	21.0	19.0	20.0
10	23.0	20.0	21.5	23.5	20.5	22.0	25.5	23.0	24.0	21.5	19.0	20.5
11	23.0	21.0	22.0	24.5	21.0	23.0	25.5	23.0	24.5	21.5	20.0	21.0
12	24.5	22.0	23.0	24.0	21.5	23.0	25.0	23.0	24.0	21.5	19.0	20.0
13	24.5	22.0	23.5	24.5	21.0	22.5	24.5	22.0	23.5	20.5	18.5	19.5
14	24.5	22.0	23.0	24.5	22.0	23.5	24.5	22.0	23.5	20.0	18.0	19.5
15	24.5	23.0	23.5	24.5	22.0	23.5	24.5	22.0	23.5	21.0	18.5	19.5
16	23.5	21.0	22.0	24.0	21.5	23.0	24.5	22.5	23.5	21.0	19.5	20.0
17	23.5	20.5	22.0	25.0	21.5	23.5	23.5	22.5	23.0	20.0	18.5	19.0
18	24.0	21.5	22.5	25.5	23.0	24.5	23.5	21.5	22.5	19.0	17.5	18.0
19	24.0	22.0	23.0	26.5	23.5	25.0	23.5	21.5	23.0	17.5	16.5	17.0
20	23.5	20.0	21.0	26.5	24.0	25.5	23.5	22.0	23.0	18.5	16.5	17.5
21	21.5	18.0	19.5	26.5	24.5	25.5	24.5	22.0	23.5	19.0	17.0	18.0
22	22.5	19.0	21.0	26.5	24.0	25.0	24.0	22.0	23.0	19.0	17.0	18.0
23	22.0	20.0	21.0	26.5	23.5	25.0	23.5	22.0	22.5	19.0	17.0	18.5
24	22.5	20.0	21.0	26.5	24.5	25.5	22.0	19.5	20.5	19.0	17.5	18.5
25	23.5	20.5	21.5	26.5	23.5	25.0	21.5	19.5	21.0	19.0	17.5	18.5
26	23.5	22.0	22.5	25.5	23.5	25.0	22.5	20.0	21.0	18.5	16.5	17.5
27	22.5	21.0	22.0	25.5	22.5	24.0	22.5	20.5	21.5	17.5	16.5	17.0
28	22.5	20.0	21.5	24.5	22.5	23.5	22.5	20.5	21.5	17.5	16.0	17.0
29	22.5	19.5	21.0	24.5	22.5	23.5	22.5	21.0	22.0	17.5	16.0	16.5
30	22.5	20.0	21.5	24.5	22.5	24.0	22.5	20.0	21.0	16.5	15.0	15.5
31	---	---	---	24.5	22.5	23.0	21.5	19.0	20.5	---	---	---
MONTH	24.5	18.0	21.4	26.5	20.0	23.6	25.5	19.0	22.5	22.5	15.0	19.1

10351775 TRUCKEE RIVER AT MARBLE BLUFF DAM

LOCATION.--Lat 39°51'20", long 119°23'32", Washoe County, Hydrologic Unit 16050103, in Pyramid Lake Indian Reservation, on right bank of inflow to Pyramid Lake, and 9.42 mi downstream from Nixon gage, and 13 mi northwest of Nixon, Nevada.

DRAINAGE AREA.--2,730 mi².

PERIOD OF RECORD.--Water years 1988 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1988 to current year.

REMARKS.--Periods of missing record due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 30.5°C July 29, 31 and August 1, 1988; minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT PERIOD.--July to September 1988: Maximum water temperature, 30.5°C July 29,31 and August 1; minimum, 11.5°C September 18.

Water year 1989: Maximum water temperature, 30.0°C July 24; minimum, 0.0° on many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	30.5	21.0	25.0	28.0	20.0	23.5
2	---	---	---	29.0	19.0	23.5	28.0	20.0	23.5	28.0	19.0	23.5
3	---	---	---	28.5	19.0	23.0	27.0	19.0	23.0	27.5	18.5	23.0
4	---	---	---	26.0	17.5	21.5	28.5	18.5	23.5	26.0	19.0	22.5
5	---	---	---	25.5	17.0	21.0	25.5	21.5	23.0	26.5	18.5	22.5
6	---	---	---	25.5	17.5	21.5	28.5	19.0	23.0	26.5	19.5	22.5
7	---	---	---	27.5	18.0	22.5	28.0	18.5	23.0	26.0	18.0	21.5
8	---	---	---	28.0	19.5	23.5	29.5	19.5	24.5	26.0	18.0	22.0
9	---	---	---	28.5	20.0	24.0	29.5	20.5	24.5	25.5	18.0	21.5
10	---	---	---	29.0	20.5	24.0	29.5	20.0	24.0	24.0	13.0	18.5
11	---	---	---	27.5	19.5	23.0	27.0	19.5	22.0	22.0	12.5	17.0
12	---	---	---	28.0	18.0	23.0	26.5	17.0	21.5	21.5	13.0	17.0
13	---	---	---	29.0	20.0	24.0	27.0	17.0	21.5	22.0	13.0	17.5
14	---	---	---	29.0	19.0	23.5	25.0	17.0	20.5	23.5	14.0	18.5
15	---	---	---	29.0	19.5	24.0	25.0	16.5	20.5	23.5	15.5	19.0
16	---	---	---	28.0	20.0	24.0	27.5	17.5	22.5	22.5	15.0	18.0
17	---	---	---	29.0	20.5	24.5	26.5	18.5	22.0	20.0	13.0	16.5
18	---	---	---	29.0	20.5	25.0	26.5	18.0	22.0	19.5	11.5	15.0
19	---	---	---	29.5	20.5	24.5	27.5	18.0	22.5	15.0	12.5	13.5
20	---	---	---	29.5	20.0	24.5	27.0	19.0	23.0	16.5	12.0	14.0
21	---	---	---	29.0	20.5	24.5	27.5	19.0	23.0	19.5	12.5	15.5
22	---	---	---	28.5	21.5	24.5	27.5	19.0	23.0	21.0	13.0	17.0
23	---	---	---	28.0	20.5	24.0	28.0	19.5	23.5	21.0	13.5	17.5
24	---	---	---	27.5	21.0	23.5	29.0	20.0	24.0	21.5	15.0	18.0
25	---	---	---	28.5	21.5	24.5	27.5	19.5	23.5	21.5	15.0	18.0
26	---	---	---	27.5	21.0	23.5	27.0	20.0	23.5	21.5	14.5	17.5
27	---	---	---	29.0	20.0	23.5	27.0	19.5	23.5	20.0	14.5	17.0
28	---	---	---	30.0	19.0	24.5	28.5	20.0	24.0	20.5	13.5	17.0
29	---	---	---	30.5	21.0	25.5	28.5	20.0	24.0	20.5	14.0	17.5
30	---	---	---	29.0	21.5	24.5	28.5	18.5	24.0	21.0	13.5	17.5
31	---	---	---	30.5	21.0	25.0	29.0	20.0	24.0	---	---	---
MONTH	---	---	---	---	---	---	30.5	16.5	23.1	28.0	11.5	18.6

10351775 TRUCKEE RIVER AT MARBLE BLUFF DAM--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.0	14.0	17.5	15.0	10.5	12.5	6.0	2.5	4.5	.5	.0	.0
2	20.5	14.5	17.5	12.5	11.5	12.0	6.0	2.5	4.5	1.0	.0	.5
3	21.0	14.5	17.5	14.5	11.0	12.5	5.5	2.5	4.0	1.0	.0	.5
4	19.5	14.0	17.0	14.5	10.5	12.5	5.5	1.5	4.0	1.0	.0	.5
5	20.0	14.5	17.0	13.0	10.0	12.0	6.0	2.5	4.0	1.5	.0	.5
6	20.5	13.5	17.0	12.5	10.5	11.5	6.0	3.0	4.5	2.0	.0	.5
7	20.0	14.5	17.0	10.5	8.5	9.5	7.0	3.0	5.0	1.5	.0	.5
8	20.0	13.5	16.5	9.0	7.5	8.5	6.0	2.5	4.5	1.5	.0	.5
9	19.5	13.5	16.5	8.0	6.5	7.5	6.0	2.5	4.5	4.0	.5	2.0
10	19.0	12.5	16.0	9.0	7.0	8.0	6.0	2.5	4.5	2.5	.0	1.5
11	16.5	13.5	15.0	8.0	5.5	7.0	5.5	2.0	4.0	1.5	.0	.5
12	18.0	11.5	14.5	8.5	6.5	7.5	6.0	2.5	4.0	1.5	.0	.5
13	16.5	13.0	14.5	10.0	7.0	8.5	6.0	2.5	4.5	1.0	.0	.5
14	17.5	11.5	14.5	7.5	6.0	6.5	4.5	2.0	3.5	2.5	.0	1.0
15	17.5	11.0	14.5	8.0	5.5	7.0	2.5	.5	1.5	2.0	.0	.5
16	18.0	12.0	15.0	8.0	6.0	7.0	3.0	.0	1.5	2.0	.0	1.0
17	18.5	12.5	15.5	6.5	4.5	5.5	2.5	.0	1.5	2.5	.0	1.0
18	18.5	12.5	15.5	7.0	3.5	5.0	4.0	.5	2.0	3.5	.0	1.5
19	18.5	13.0	16.0	7.5	4.0	5.5	3.5	2.0	2.5	3.5	.0	1.5
20	18.0	12.0	15.0	8.0	4.5	6.0	3.0	2.0	2.5	3.5	.0	1.5
21	17.5	12.0	15.0	5.5	4.0	5.0	3.0	.0	1.5	4.5	1.5	3.0
22	17.5	12.0	15.0	9.0	5.0	6.5	3.0	1.0	2.0	6.5	1.5	4.0
23	17.0	11.5	14.0	8.0	4.5	7.0	2.5	.0	1.5	3.5	1.0	2.0
24	16.5	11.0	14.0	6.0	3.0	4.5	2.5	.0	1.5	3.0	.0	1.0
25	16.5	11.0	13.5	6.0	4.0	5.0	2.0	.0	1.0	3.0	.0	1.0
26	16.0	11.0	13.5	6.5	3.5	4.5	1.0	.0	.0	3.5	.0	1.5
27	16.0	11.0	13.5	6.5	3.0	4.5	.0	.0	.0	3.0	.0	1.0
28	15.0	11.0	13.0	7.5	4.0	5.5	.5	.0	.0	4.0	.0	1.5
29	15.5	10.5	13.0	6.5	2.5	4.5	.0	.0	.0	4.5	.0	2.5
30	15.0	9.5	12.5	6.5	2.5	4.5	.5	.0	.0	5.5	.5	3.0
31	14.5	9.5	12.5	---	---	---	.5	.0	.0	6.0	1.0	3.5
MONTH	21.0	9.5	15.1	15.0	2.5	7.4	7.0	.0	2.5	6.5	.0	1.3

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.0	3.5	5.0	12.0	6.0	9.5	13.5	9.0	11.0	20.0	12.5	15.5
2	5.0	.5	3.0	11.0	7.0	9.0	12.0	9.5	10.5	21.5	14.5	17.5
3	2.5	.0	1.0	8.0	2.0	5.0	15.0	9.0	11.5	22.5	15.5	18.5
4	.5	.0	.0	6.0	3.0	4.5	16.5	9.5	13.0	24.0	16.5	20.0
5	.5	.0	.0	7.0	3.5	5.0	18.5	11.0	14.5	25.5	17.5	21.0
6	.0	.0	.0	10.0	5.5	7.5	20.0	11.5	15.5	23.5	18.5	21.5
7	.0	.0	.0	11.5	8.0	9.5	20.5	12.5	16.5	25.0	18.5	21.5
8	.0	.0	.0	11.5	9.5	10.5	20.0	14.0	17.0	23.5	18.5	21.0
9	.0	.0	.0	11.5	9.0	10.0	19.0	14.5	16.5	21.0	17.5	19.0
10	.0	.0	.0	10.5	7.5	9.5	17.5	14.0	15.5	17.0	14.0	15.5
11	.0	.0	.0	11.0	8.5	10.0	17.0	12.5	15.0	18.5	12.0	14.5
12	.5	.0	.5	10.5	8.0	9.5	17.0	13.0	15.0	18.0	13.0	15.5
13	.5	.0	.5	10.0	7.5	8.5	17.0	12.5	15.0	17.0	14.0	15.5
14	.5	.0	.5	10.5	7.0	8.5	18.5	14.5	16.0	18.0	13.0	15.5
15	.5	.0	.0	12.5	7.5	9.5	19.0	14.5	16.5	19.0	13.0	16.0
16	1.0	.0	.5	11.5	7.0	9.0	20.0	15.0	17.0	20.0	15.0	17.5
17	1.5	.0	.5	11.0	6.5	8.5	21.0	16.0	18.0	22.0	16.0	18.5
18	3.0	.0	1.5	10.5	7.5	9.0	21.5	16.0	18.5	19.0	15.0	17.5
19	5.5	1.0	3.5	12.5	8.0	10.0	20.0	16.0	18.0	19.0	12.0	15.5
20	7.0	1.0	4.0	13.0	6.5	9.5	20.0	15.0	17.5	20.0	15.0	17.5
21	7.5	3.5	5.5	11.5	7.5	10.0	19.5	14.5	17.0	20.0	16.0	18.0
22	9.0	4.0	6.5	15.0	7.5	11.0	15.5	11.5	13.5	19.5	16.0	18.0
23	10.5	4.5	7.5	12.5	9.0	11.0	14.5	11.0	12.5	18.5	16.0	17.0
24	11.0	5.5	8.5	15.0	9.5	11.5	12.0	9.0	10.5	18.5	16.0	17.5
25	11.0	7.0	9.0	13.0	10.0	11.5	12.0	7.5	10.0	22.5	18.0	21.5
26	13.0	7.5	10.0	11.5	7.5	9.5	14.0	8.0	11.0	22.5	22.0	22.0
27	12.5	6.5	9.5	12.0	8.5	10.0	18.0	9.5	13.0	22.5	22.0	22.0
28	12.0	6.0	9.0	15.0	10.0	12.0	19.0	11.5	14.5	22.5	21.0	21.5
29	---	---	---	16.0	10.5	12.5	18.0	12.0	15.0	22.0	21.0	21.5
30	---	---	---	14.5	10.5	12.5	17.5	14.0	15.5	21.0	20.0	20.5
31	---	---	---	14.5	11.0	12.5	---	---	---	21.5	20.0	20.5
MONTH	13.0	.0	3.1	16.0	2.0	9.5	21.5	7.5	14.7	25.5	12.0	18.5

10352500 McDERMITT CREEK NEAR McDERMITT, NV

LOCATION.--Lat 41°58'00", long 117°50'01", in SE1/4SE1/4 sec.8, T.47 N., R.37 E., Humboldt County, Hydrologic Unit 16040201, on left bank approximately 100 feet upstream from highway bridge, and 6.5 mi southwest of McDermitt.

DRAINAGE AREA.--225 mi².

PERIOD OF RECORD.--October 1948 to September 1984, March 1985 to current year.

REVISED RECORDS.--WSP 1214: 1949-50 (P).

GAGE.--Water-stage recorder. Elevation of gage is 4,545 ft, from topographic map. October 1948 to May 11, 1972, at site approximately 500 ft upstream from highway bridge on left bank. May 11, 1972, to April 1983, at site approximately 800 ft, upstream from highway bridge on right bank at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. One diversion for about 1,500 acres above station.

AVERAGE DISCHARGE.--40 years (1949-84, 1986-89), 33.8 ft³/s, 24,490 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,970 ft³/s, about Feb. 1, 1963, gage height, 8.64 ft; in gage well, from rating curve extended above 250 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 8.70 ft about Mar. 17, 1983; no flow for several days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 9	2200	*1,000	*6.40	Apr. 9	0300	294	4.44
Mar. 25	2100	374	4.72	May 10	2200	237	4.22

Minimum daily, 1.9 ft³/s, Oct. 22-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	2.5	e7.1	e5.6	e7.4	57	212	84	20	11	2.2	3.9
2	3.3	2.7	e7.2	e5.6	e7.2	e55	204	82	20	11	2.2	4.2
3	2.9	3.2	e7.4	e5.7	e7.2	e52	176	82	21	11	2.6	4.9
4	2.9	3.7	e7.5	e5.6	e7.4	e48	159	79	32	10	3.2	4.6
5	3.2	3.9	e7.4	e5.6	e7.4	e54	170	90	36	9.7	3.1	4.2
6	3.3	4.0	e7.7	e5.5	e7.6	235	209	91	42	9.8	3.0	4.0
7	3.3	4.1	e7.8	e5.7	e7.6	399	236	100	37	9.0	2.8	4.6
8	3.4	4.5	8.2	e5.9	e7.8	412	253	114	30	8.3	3.0	4.9
9	3.5	4.8	8.9	e6.1	e7.8	649	256	131	29	8.1	3.4	4.3
10	3.7	5.2	9.7	e6.3	e7.9	639	230	210	28	8.2	3.6	4.4
11	3.7	5.8	9.7	e6.4	e7.8	564	229	192	25	7.8	3.4	4.2
12	3.8	5.6	10	e6.6	e7.9	513	210	142	25	7.6	3.0	3.9
13	3.9	5.7	10	e6.6	e8.0	371	194	113	24	7.7	2.8	3.7
14	3.9	6.2	9.6	e6.7	e8.4	247	190	96	22	7.2	2.7	3.6
15	3.8	6.8	e9.6	e6.8	e8.6	209	197	84	19	6.5	2.6	3.7
16	3.8	6.8	e8.8	e6.8	e8.9	220	203	67	21	6.2	2.5	3.5
17	3.9	7.0	e8.1	e7.0	e9.3	176	197	58	21	5.6	2.5	4.9
18	4.0	e6.2	e7.6	e7.0	e10	158	189	52	19	5.6	2.6	5.5
19	3.5	e6.2	e7.2	e7.2	e11	167	187	47	17	5.3	2.8	5.0
20	2.3	6.6	e6.7	e7.3	e13	127	181	43	15	4.8	2.9	4.5
21	2.0	e6.6	e6.4	e7.4	e16	123	177	36	16	4.4	3.2	4.2
22	1.9	6.8	e6.1	e7.4	e20	164	172	34	16	3.9	3.2	4.1
23	1.9	e7.4	e5.8	e7.4	e30	186	161	30	15	3.8	3.1	4.1
24	1.9	e8.2	e5.5	e7.4	e45	234	157	32	15	3.3	3.3	4.1
25	1.9	e8.6	e5.3	e7.3	e74	349	152	34	16	3.0	3.3	4.1
26	2.0	8.6	e4.9	e7.3	e69	270	136	37	16	2.9	3.4	4.1
27	2.1	e8.4	e4.8	e7.4	e64	227	116	30	14	2.7	3.5	4.1
28	2.1	e8.3	e5.0	e7.5	62	252	105	29	14	2.5	3.4	4.3
29	2.2	e8.0	e5.2	e7.6	---	246	97	31	13	2.5	3.5	4.2
30	2.2	e7.2	e5.3	e7.6	---	201	88	28	12	2.4	3.6	4.2
31	2.2	---	e5.4	e7.5	---	214	---	23	---	2.3	3.8	---
TOTAL	91.6	179.6	225.9	207.8	548.2	7818	5443	2301	650	194.1	94.2	128.0
MEAN	2.95	5.99	7.29	6.70	19.6	252	181	74.2	21.7	6.26	3.04	4.27
MAX	4.0	8.6	10	7.6	74	649	256	210	42	11	3.8	5.5
MIN	1.9	2.5	4.8	5.5	7.2	48	88	23	12	2.3	2.2	3.5
AC-FT	182	356	448	412	1090	15510	10800	4560	1290	385	187	254

CAL YR 1988 TOTAL 2302.63 MEAN 6.29 MAX 28 MIN .02 AC-FT 4570
WTR YR 1989 TOTAL 17881.4 MEAN 49.0 MAX 649 MIN 1.9 AC-FT 35470

e Estimated

BLACK ROCK DESERT

10353600 KINGS RIVER NEAR OROVADA, NV

LOCATION.--Lat 41°54'25", long 118°18'30", in SW1/4SE1/4 sec.31, T.47 N., R.33 E., Humboldt County, Hydrologic Unit 16040201, on left bank 2.8 mi downstream from Little Creek, 5 mi upstream from Kings River Ranch, and 36 mi northwest of Orovada.

DRAINAGE AREA.--20.5 mi^2.

PERIOD OF RECORD.--October 1962 to September 1968 and October 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,680 ft, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion or regulation above station.

AVERAGE DISCHARGE.--19 years (1963-68, 1977-89), 6.88 ft^3/s, 4,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 770 ft^3/s, Feb. 1, 1963, gage height, 4.00 ft, from rating curve extended above 24 ft^3/s on basis of estimate by slope-area method; no flow Aug. 9, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45 ft^3/s, Mar. 9,11, gage height, 2.69 ft and 2.70 ft, respectively; minimum daily, 0.66 ft^3/s, Oct. 3-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	1.2	e1.8	e1.4	e1.9	e12	24	14	11	4.3	.93	1.1
2	.67	1.5	e1.8	e1.4	e1.9	e12	23	14	11	4.0	1.0	1.1
3	.66	1.7	e1.7	e1.4	e1.9	e12	22	14	12	3.7	1.0	1.1
4	.66	1.5	e1.8	e1.4	e1.9	13	22	15	14	3.5	.98	1.0
5	.67	1.5	e1.7	e1.4	e1.9	15	22	16	16	3.3	.92	.97
6	.67	1.6	e1.7	e1.4	e1.9	21	24	18	15	3.1	.87	1.1
7	.71	1.6	e1.6	e1.5	e1.9	25	28	19	14	2.9	.99	1.3
8	.72	1.9	e1.6	e1.5	e1.9	28	34	20	13	2.8	1.3	1.2
9	.70	1.8	e1.6	e1.6	e2.0	39	34	21	12	2.7	2.3	1.1
10	.70	2.3	e1.5	e1.6	e2.0	37	32	26	12	2.6	2.0	1.1
11	.77	2.0	e1.5	e1.7	e2.0	38	30	24	11	2.4	1.2	1.0
12	.90	2.0	e1.5	e1.7	e2.0	37	29	22	10	2.2	1.0	1.0
13	.93	2.2	e1.6	e1.8	e2.0	33	28	21	10	2.1	.88	1.0
14	.94	2.1	e1.6	e1.9	e2.0	28	28	20	10	2.0	.84	.97
15	.92	1.8	e1.6	e1.9	e2.0	26	27	18	11	1.9	.82	.93
16	.92	2.0	e1.6	e2.0	e2.1	25	26	18	10	1.9	.85	.94
17	.90	2.0	e1.6	e2.1	e2.2	23	26	18	9.1	1.9	.87	2.5
18	.92	e2.1	e1.7	e2.1	e2.3	22	25	19	8.5	1.8	1.0	1.8
19	.96	e2.4	e1.7	e2.1	e2.5	21	24	18	8.2	1.6	1.1	1.3
20	1.0	2.7	e1.6	e2.1	e2.8	19	24	17	7.6	1.5	1.1	1.1
21	1.0	e2.8	e1.6	e2.1	3.5	19	23	17	6.5	1.3	1.1	1.0
22	1.0	2.8	e1.5	e2.0	4.7	19	22	16	6.1	1.3	1.0	.96
23	1.1	6.7	e1.5	e1.9	7.8	19	21	16	6.4	1.2	1.7	.93
24	1.1	4.2	e1.4	e1.8	9.8	20	21	15	6.0	1.2	1.6	.89
25	1.1	e3.5	e1.3	e1.8	12	23	20	14	5.8	1.1	1.5	.87
26	1.1	e2.7	e1.3	e1.9	17	24	19	13	5.5	1.1	1.3	.89
27	1.1	e2.3	e1.2	e2.0	13	24	18	12	5.3	1.0	1.2	.89
28	1.2	e2.1	e1.3	e2.0	13	24	17	12	5.2	1.0	1.1	.94
29	1.2	e2.0	e1.3	e2.0	---	24	16	12	4.8	.99	1.0	1.0
30	1.2	e1.9	e1.3	e2.0	---	24	15	12	4.7	.97	1.0	1.3
31	1.2	---	e1.4	e2.0	---	24	---	11	---	.94	1.2	---
TOTAL	28.30	68.9	47.9	55.5	121.9	730	724	522	281.7	64.30	35.65	33.28
MEAN	.91	2.30	1.55	1.79	4.35	23.5	24.1	16.8	9.39	2.07	1.15	1.11
MAX	1.2	6.7	1.8	2.1	17	39	34	26	16	4.3	2.3	2.5
MIN	.66	1.2	1.2	1.4	1.9	12	15	11	4.7	.94	.82	.87
AC-FT	56	137	95	110	242	1450	1440	1040	559	128	71	66

CAL YR 1988 TOTAL 860.52 MEAN 2.35 MAX 9.7 MIN .38 AC-FT 1710
WTR YR 1989 TOTAL 2713.43 MEAN 7.43 MAX 39 MIN .66 AC-FT 5380

e Estimated

10353750 MAHOGANY CREEK NEAR SUMMIT LAKE, NV

LOCATION.--Lat 41°32'42", long 119°00'34", in SE1/4NE1/4 sec.21, T.42 N., R.26 E., Humboldt County, Hydrologic Unit 16040202, on right bank 2.8 mi northeast of Summit Lake, and 75 mi north of Gerlach.

DRAINAGE AREA.--13.3 mi^2, approximately.

PERIOD OF RECORD.--July 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,080 ft, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13.0 ft^3/s, May 10, 1989, gage height, 4.46 ft, maximum gage height, 4.88 ft, Jan. 18, 1988, backwater from ice; minimum daily, 0.66 ft^3/s, Aug. 5, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13.0 ft^3/s, May 10, gage height, 4.46 ft, maximum gage height, 4.68 ft, Dec. 16, backwater from ice; minimum daily, 1.0 ft^3/s, several days in Dec., Jan., and Feb.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.2	1.4	e1.0	1.3	1.4	2.8	3.6	5.0	2.8	1.4	1.2
2	1.1	1.2	1.3	e1.0	e1.3	1.2	2.6	3.6	4.7	2.8	1.4	1.2
3	1.1	1.2	1.2	e1.0	1.3	1.6	2.6	3.6	4.5	2.8	1.4	1.2
4	1.1	1.3	1.2	e1.0	e1.2	e1.7	2.7	3.6	5.0	2.7	1.4	1.2
5	1.1	1.3	1.2	e1.0	e1.1	1.8	2.9	3.7	5.3	2.7	1.3	1.2
6	1.1	1.3	1.3	e1.1	e1.0	2.8	3.3	3.9	5.3	2.7	1.3	1.2
7	1.1	1.3	1.3	e1.1	e1.0	2.4	3.6	4.2	5.0	2.5	1.4	1.3
8	1.1	1.3	1.3	e1.1	e1.0	2.7	3.9	4.5	5.0	2.4	1.5	1.2
9	1.1	1.3	1.3	e1.1	e1.1	3.2	3.8	6.1	5.0	2.2	1.5	1.2
10	1.1	1.4	1.3	e1.1	e1.1	3.1	3.9	11	4.7	2.2	1.5	1.2
11	1.1	1.4	1.2	e1.1	1.2	3.1	3.8	9.3	5.0	2.2	1.4	1.2
12	1.1	1.4	1.3	e1.1	1.2	2.8	3.8	8.8	5.0	2.1	1.3	1.2
13	1.1	1.4	1.3	e1.1	1.2	2.6	3.9	8.3	5.0	2.0	1.3	1.2
14	1.1	1.4	1.2	e1.1	1.2	2.3	4.0	8.2	4.7	2.0	1.2	1.2
15	1.1	1.4	e1.1	e1.1	1.2	2.3	4.1	8.0	4.7	1.9	1.2	1.1
16	1.1	1.4	e1.1	e1.2	1.1	2.2	4.2	7.5	4.7	2.0	1.2	1.1
17	1.1	1.4	1.2	e1.2	1.2	2.1	4.3	6.5	5.0	1.9	1.3	1.5
18	1.1	1.4	1.2	e1.2	1.2	2.1	4.1	6.5	4.7	1.9	1.3	1.4
19	1.1	1.3	1.1	1.2	1.2	2.0	4.0	6.5	4.5	1.8	1.3	1.3
20	1.1	1.5	1.1	1.2	1.2	1.9	3.8	6.8	4.3	1.8	1.3	1.3
21	1.1	1.4	1.1	1.2	1.2	2.0	4.1	6.2	4.3	1.7	1.3	1.3
22	1.1	1.5	e1.1	1.2	1.9	2.1	4.1	6.5	4.3	1.7	1.3	1.3
23	1.1	1.6	e1.1	e1.2	1.8	2.1	3.7	6.5	3.8	1.6	1.8	1.3
24	1.1	1.5	e1.1	e1.2	1.7	2.0	3.8	6.5	3.8	1.6	1.5	1.3
25	1.1	1.5	e1.1	e1.2	1.6	2.4	3.8	6.5	3.6	1.6	1.4	1.3
26	1.5	1.5	e1.0	1.2	1.6	2.4	3.7	6.5	3.4	1.6	1.3	1.3
27	1.4	1.4	e1.0	e1.2	1.4	2.4	3.6	5.8	3.4	1.5	1.3	1.3
28	1.4	1.5	e1.0	1.2	1.4	2.4	3.6	5.8	3.4	1.4	1.3	1.3
29	1.4	1.4	e1.0	1.3	---	2.5	3.5	5.8	3.2	1.4	1.2	1.4
30	1.2	1.4	e1.0	1.3	---	2.5	3.6	5.6	3.2	1.4	1.2	1.4
31	1.2	---	e1.1	1.3	---	2.7	---	5.0	---	1.4	1.3	---
TOTAL	35.6	41.5	36.2	35.5	35.9	70.8	109.6	190.9	133.5	62.3	41.8	37.8
MEAN	1.15	1.38	1.17	1.15	1.28	2.28	3.65	6.16	4.45	2.01	1.35	1.26
MAX	1.5	1.6	1.4	1.3	1.9	3.2	4.3	11	5.3	2.8	1.8	1.5
MIN	1.1	1.2	1.0	1.0	1.0	1.2	2.6	3.6	3.2	1.4	1.2	1.1
AC-FT	71	82	72	70	71	140	217	379	265	124	83	75

CAL YR 1988 TOTAL 580.40 MEAN 1.59 MAX 4.6 MIN .66 AC-FT 1150
WTR YR 1989 TOTAL 831.4 MEAN 2.28 MAX 11 MIN 1.0 AC-FT 1650

e Estimated

10353770 SOUTH WILLOW CREEK NEAR GERLACH, NV

LOCATION.--Lat 41°01'00", long 119°21'00", in E1/2 sec.11, T.36 N., R.23 E., Washoe County, Hydrologic Unit 16040203, on left bank 150 ft east of State Highway 34, and 25 mi north of Gerlach.

DRAINAGE AREA.--31 mi^2, approximately.

PERIOD OF RECORD.--Water years 1963-73 (annual maximum), August 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,500 ft, approximately (from topographic map). July 1, 1963, to Aug. 16, 1973, operated as a crest-stage gage only, at datum 1.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion or regulation above station.

AVERAGE DISCHARGE.--16 years (1974-89), 0.97 ft^3/s, 703 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,730 ft^3/s, Jan. 31, 1963, gage height, 7.30 ft, on basis of slope-area measurement of peak flow; no flow many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of unknown date reached a stage of 9.4 ft, present datum, from floodmarks, estimated discharge, 3,100 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21 ft^3/s, Feb. 25, gage height, 1.26 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	e.11	2.8	.24	.10	.10	.16	.00	.00
2	.00	.00	.00	.00	e.10	3.5	.24	.10	.10	.13	.00	.00
3	.00	.00	.00	.00	e.07	2.1	.24	.10	.10	.10	.00	.00
4	.00	.00	.00	.00	e.05	.83	.24	.10	.10	.10	.00	.00
5	.00	.00	.00	.00	e.05	.74	.24	.10	.09	.10	.00	.00
6	.00	.00	.00	.00	e.05	2.3	.24	.10	.31	.10	.00	.00
7	.00	.00	.00	.00	e.04	5.0	.21	.10	1.3	.10	.00	.00
8	.00	.00	.00	.00	e.04	3.6	.16	.10	1.4	.09	.00	.00
9	.00	.00	.00	.00	e.04	4.7	.16	.10	.62	.06	.00	.00
10	.00	.00	.00	.00	e.04	2.4	.16	.10	.29	.04	.00	.00
11	.00	.00	.00	.00	e.04	1.3	.16	.10	.16	.0	.00	.00
12	.00	.00	.00	.0	e.04	.94	.16	.10	.16	.0	.00	.00
13	.00	.00	.00	.0	e.04	.69	.16	.10	.16	.0	.00	.00
14	.00	.00	.00	.0	e.04	.46	.16	.10	.23	.0	.00	.00
15	.00	.00	.00	.0	e.04	.37	.16	.10	.33	.0	.00	.00
16	.00	.00	.00	.0	e.08	.36	.16	.10	.35	.0	.00	.00
17	.00	.00	.00	.01	e.10	.38	.16	.10	.24	.0	.00	.00
18	.00	.00	.00	.01	e.12	.36	.16	.10	.33	.0	.00	.00
19	.00	.00	.00	.01	e.14	.31	.16	.10	.40	.0	.00	.00
20	.00	.00	.00	.02	.17	.24	.13	.10	.36	.0	.00	.00
21	.00	.00	.00	.04	.58	.24	.10	.10	.30	.0	.00	.00
22	.00	.00	.00	.17	.67	.24	.10	.10	.24	.0	.00	.00
23	.00	.00	.00	.27	2.4	.24	.10	.10	.24	.0	.00	.00
24	.00	.00	.00	.17	5.3	.32	.10	.10	.16	.0	.00	.00
25	.00	.00	.00	e.10	9.4	.36	.10	.10	.22	.0	.00	.00
26	.00	.00	.00	e.08	8.8	.30	.10	.10	.24	.0	.00	.00
27	.00	.00	.00	e.07	6.5	.24	.10	.10	.22	.0	.00	.00
28	.00	.00	.00	e.06	3.4	.24	.10	.10	.16	.00	.00	.00
29	.00	.00	.00	e.06	---	.24	.10	.10	.16	.00	.00	.00
30	.00	.00	.00	e.11	---	.24	.10	.10	.16	.00	.00	.00
31	.00	---	.00	.16	---	.24	---	.10	---	.00	.00	---
TOTAL	0.00	0.00	0.00	1.34	38.45	36.28	4.70	3.10	9.23	0.98	0.00	0.00
MEAN	.00	.00	.00	.043	1.37	1.17	.16	.10	.31	.032	.00	.00
MAX	.00	.00	.00	.27	9.4	5.0	.24	.10	1.4	.16	.00	.00
MIN	.00	.00	.00	.00	.04	.24	.10	.10	.09	.00	.00	.00
AC-FT	.0	.0	.0	2.7	76	72	9.3	6.1	18	1.9	.0	.0

CAL YR 1988 TOTAL 35.67 MEAN .097 MAX 1.2 MIN .00 AC-FT 71
WTR YR 1989 TOTAL 94.08 MEAN .26 MAX 9.4 MIN .00 AC-FT 187

e Estimated

10353800 SMOKE CREEK BELOW RESERVOIR NEAR SMOKE CREEK, NV

LOCATION.--Lat 40°30'33", long 119°52'24", in NE1/4NW14 Sec.5, T.30N., R.19E., Washoe County, Hydrologic Unit 16040203, on left bank 11.2 miles south of Buffalo Creek Ranch, and 38.1 miles southwest of Gerlach, Nevada.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--December 15, 1988 to September 1989.

GAGE.--Water-stage recorder. Elevation of gage is 3,980 ft from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period December to September, 845 ft³/s, Feb. 24, gage height 6.65 ft; no flow many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge 2,270 ft³/s, February 1986, gage height 9.00 ft., from slope area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	e2.9	e8.7	38	9.6	4.1	4.5	.22	.00	.00
2	---	---	---	2.7	e6.0	45	9.2	3.6	3.8	.18	.00	.00
3	---	---	---	3.7	e3.8	47	9.1	3.3	3.2	.11	.00	.00
4	---	---	---	4.9	e3.0	30	7.7	3.2	2.7	.04	.00	.00
5	---	---	---	e5.2	e1.9	24	7.4	3.0	3.9	.01	.00	.00
6	---	---	---	e5.5	e1.7	30	7.1	2.8	3.6	.00	.00	.00
7	---	---	---	e5.7	e1.5	54	6.5	2.8	4.9	.00	.00	.00
8	---	---	---	e6.0	e1.7	58	6.0	2.5	12	.00	.00	.00
9	---	---	---	e6.1	e2.2	68	5.6	2.8	5.2	.00	.00	.00
10	---	---	---	e6.0	e2.5	37	5.3	5.0	3.8	.00	.00	.00
11	---	---	---	e5.8	e2.7	24	4.7	5.8	2.6	.00	.00	.00
12	---	---	---	e5.8	e2.7	18	4.6	4.6	2.0	.00	.00	.00
13	---	---	---	e8.0	e2.7	16	4.3	4.1	1.5	.00	.00	.00
14	---	---	---	e7.0	e2.7	14	4.2	3.9	1.2	.00	.00	.00
15	---	---	e2.3	e6.2	e2.7	13	4.0	3.6	1.0	.00	.00	.00
16	---	---	e2.2	e6.9	e5.6	14	2.9	3.1	1.1	.00	.00	.00
17	---	---	e2.3	e7.6	e5.0	15	2.4	2.7	.93	.00	.00	.00
18	---	---	e2.4	e7.6	e5.0	14	2.8	2.0	.72	.00	.00	.00
19	---	---	e2.5	e7.6	e6.0	13	2.7	1.8	.50	.00	.00	.00
20	---	---	e2.5	6.7	e10	11	2.7	1.8	.38	.00	.00	.00
21	---	---	e2.4	5.8	e18	10	2.9	1.7	.28	.00	.00	.00
22	---	---	e2.1	7.0	e30	10	2.8	1.6	.23	.00	.00	.00
23	---	---	e1.8	5.5	38	10	3.5	1.5	.18	.00	.00	.00
24	---	---	e2.0	e5.5	278	11	4.0	1.5	.17	.00	.00	.00
25	---	---	e2.3	e5.5	243	16	4.6	1.7	.18	.00	.00	.00
26	---	---	e1.8	e6.0	165	25	4.7	1.7	.19	.00	.00	.00
27	---	---	e1.6	e6.8	94	22	5.1	1.7	.20	.00	.00	.00
28	---	---	e1.6	e6.4	53	16	4.7	3.2	.22	.00	.00	.00
29	---	---	e1.9	e7.4	---	13	4.2	5.3	.24	.00	.00	.00
30	---	---	e3.5	e8.8	---	11	3.9	5.7	.24	.00	.00	.00
31	---	---	e3.0	e11	---	9.8	---	5.1	---	.00	.00	---
TOTAL	---	---	---	193.6	997.1	736.8	149.2	97.2	61.66	0.56	0.0	0.0
MEAN	---	---	---	6.25	35.6	23.8	4.97	3.14	2.06	.018	.00	.00
MAX	---	---	---	11	278	68	9.6	5.8	12	.22	.00	.00
MIN	---	---	---	2.7	1.5	9.8	2.4	1.5	.17	.00	.00	.00
AC-FT	---	---	---	384	1980	1460	296	193	122	1.1	.0	.0

e Estimated

13161500 BRUNEAU RIVER AT ROWLAND, NV

LOCATION.--Lat 41°56'00", long 115°40'25", in NW1/4SE1/4 sec.29, T.47 N., R.56 E., Elko County, Hydrologic Unit 17050102, Humboldt National Forest, on left bank 2 mi upstream from McDonald Creek, and 0.5 mi south of Rowland.

DRAINAGE AREA.--382 mi². Area at crest-stage site, 380 mi².

PERIOD OF RECORD.--June 1913 to September 1918 (published as "near Rowland"), water years 1962-66 (annual maximum), October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,500 ft, from topographic map. June 1913 to September 1918, nonrecording gage at different site and datum. October 1961 to September 1966, crest-stage gage at site 3 mi upstream at different datum.

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

AVERAGE DISCHARGE.--28 years (1914-18, 1967-89), 122 ft³/s, 88,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,140 ft³/s, May 14, 1984, gage height, 12.01 ft; minimum daily, 2.5 ft³/s, Sept. 18, 1981.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 11	0400	622	5.59	Apr. 9	0700	*887	*6.46
Mar. 29	0700	568	5.39	May 10	2300	458	4.97

Minimum daily, 5.1 ft³/s, Aug. 15-25, but may have been lower during period of missing gage-height record, July 30 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	13	e23	e26	e27	103	456	280	e126	e32	e6.5	e5.6
2	7.0	13	e29	e26	e27	132	456	282	e115	e31	e6.3	e5.7
3	6.9	18	e27	e26	e27	e84	418	286	e110	e28	e6.1	e5.9
4	6.9	17	e21	e26	e27	e59	380	317	e112	e26	e5.9	e6.0
5	7.3	15	28	e26	e27	e103	407	346	e118	e24	e5.8	e6.1
6	8.2	14	27	e26	e27	157	520	355	e121	e23	e5.7	e6.3
7	8.4	14	25	e26	e27	204	611	382	e122	e22	e5.6	e6.4
8	8.4	14	25	e26	e27	249	751	400	e123	e21	e5.6	e6.6
9	8.6	14	25	e27	e27	422	823	411	e124	e20	e5.5	e6.7
10	8.7	14	28	e27	e27	565	712	437	e125	e19	e5.4	e6.8
11	9.2	15	28	e27	e27	525	694	416	e125	e19	e5.4	e7.0
12	9.3	15	27	e27	e27	525	645	357	e120	e18	e5.3	e7.2
13	9.3	17	29	e27	e27	504	636	314	e105	e18	e5.3	e7.3
14	9.3	21	28	e27	e28	378	634	286	e95	e17	e5.2	e7.5
15	9.3	18	18	e27	e28	315	671	272	e84	e17	e5.1	e7.6
16	9.5	17	e19	e27	e28	302	703	256	e78	e16	e5.1	e7.7
17	9.5	18	e22	e27	e29	264	669	238	e73	e16	e5.1	e7.8
18	9.6	e16	e23	e27	e30	259	688	232	e70	e15	e5.1	e7.8
19	9.8	e12	e24	e27	e31	257	712	220	e64	e15	e5.1	e7.8
20	10	e11	e25	e27	e34	228	706	214	e55	13	e5.1	e7.9
21	11	e15	e25	e27	e36	228	694	206	e53	14	e5.1	e8.0
22	11	24	e25	e27	e36	253	674	204	e50	17	e5.1	e8.0
23	11	54	e25	e27	59	299	543	204	e49	17	e5.1	e8.2
24	12	51	e25	e27	67	337	509	e200	e48	15	e5.1	e8.2
25	12	37	e25	e27	71	370	422	e195	e46	11	e5.1	e8.4
26	12	e34	e26	e27	101	403	370	e190	e43	8.7	e5.2	e8.6
27	12	e15	e26	e27	108	400	339	e180	e41	8.2	e5.2	e8.7
28	12	e14	e26	e27	104	446	309	e160	e39	7.7	e5.3	e8.8
29	12	e15	e26	e27	---	543	292	e140	e37	7.3	e5.3	e9.0
30	12	e20	e26	e27	---	494	282	e138	e34	e7.0	e5.5	e9.4
31	12	---	e26	e27	---	484	---	e132	---	e6.7	e5.6	---
TOTAL	301.4	585	782	829	1141	9892	16726	8250	2505	529.6	167.8	223.0
MEAN	9.72	19.5	25.2	26.7	40.7	319	558	266	83.5	17.1	5.41	7.43
MAX	12	54	29	27	108	565	823	437	126	32	6.5	9.4
MIN	6.9	11	18	26	27	59	282	132	34	6.7	5.1	5.6
AC-FT	598	1160	1550	1640	2260	19620	33180	16360	4970	1050	333	442

CAL YR 1988 TOTAL 18846.3 MEAN 51.5 MAX 231 MIN 3.6 AC-FT 37380
WTR YR 1989 TOTAL 41931.8 MEAN 115 MAX 823 MIN 5.1 AC-FT 83170

e Estimated

13174000 WILD HORSE RESERVOIR NEAR GOLD CREEK, NV

LOCATION.--Lat 41°41'15", long 115°50'37", in NE1/4NW1/4 sec.25, T.44 N., R.54 E., Elko County, Hydrologic Unit 17050104, in Humboldt National Forest, at Wild Horse Dam on Owyhee River, 8 mi west of Gold Creek, and 13 mi southeast of Mountain City.

DRAINAGE AREA.--209 mi².

PERIOD OF RECORD.--March 1938 to current year. Monthend contents for some periods, published in WSP 1317.

CORRECTIONS.--Drainage area figure for 1980 through 1988 water years was published incorrectly.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Indian Affairs).

REMARKS.--Reservoir is formed by concrete-arch dam; storage began Mar. 18, 1938. New dam completed in June 1969, capacity, 71,500 acre-ft between elevations 6,138.50 ft, sill of outlet gate, and 6,205 ft spillway crest. No dead storage. Water is used for irrigation on Duck Valley project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents recorded, 80,020 acre-ft, May 15, 1984, elevation, 6,207.68 ft; minimum observed, no contents at times in each year (1938-41), 1964-65, 1968-69.

EXTREMES FOR CURRENT YEAR.--Maximum contents recorded, 58,310 acre-ft, May 27, elevation, 6,200.35 ft; minimum 10,460 acre-ft, Nov. 3, elevation, 6,172.48 ft.

Capacity table (elevation, in feet, and contents, in acre-ft)

6,172	10,040	6,184	24,390	6,194	43,010
6,174	11,860	6,186	27,630	6,196	47,520
6,176	13,900	6,188	31,110	6,198	52,310
6,178	16,170	6,190	34,820	6,200	57,390
6,180	18,670	6,192	38,780	6,202	62,780
6,182	21,400				

MONTHEND ELEVATION, IN FEET NGVD, AND CONTENTS AT 2400, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	6,172.98	10,900	--
Oct. 31	6,172.53	10,500	-400
Nov. 30	6,173.18	11,090	+590
Dec. 31	6,173.67	11,550	+460
CAL YR 1988	--	--	-9,800
Jan. 31	6,174.20	12,060	+510
Feb. 28	6,174.92	12,770	+710
Mar. 31	6,186.63	28,710	+15,940
Apr. 30	6,198.59	53,780	+25,070
May 31	6,200.25	58,050	+4,270
June 30	6,196.86	49,540	-8,510
July 31	6,191.59	37,950	-11,590
Aug. 31	6,187.64	30,470	-7,480
Sept. 30	6,185.74	27,200	- 3,720
WTR YR 1989	--	--	+16,300

NOTE: Some monthend elevations and contents are interpolated from readings made during the month.

13174500 OWYHEE RIVER NEAR GOLD CREEK, NV

LOCATION.--Lat 41°41'20", long 115°50'38", in NE1/4NW1/4 sec.25, T.44 N., R.54 E., Elko County, Hydrologic Unit 17050104, in Humboldt National Forest, on left bank 500 ft downstream from Wild Horse Dam, 0.1 mi upstream from Beaver Creek, 8 mi west of Gold Creek, and 12 mi southeast of Mountain City.

DRAINAGE AREA.--209 mi².

PERIOD OF RECORD.--March to November 1916, April 1917 to September 1925, October 1936 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1317: 1939-42 (M).

GAGE.--Water-stage recorder. Datum of gage is 6,118.75 ft, Bureau of Reclamation datum. Prior to Oct. 1, 1936, at site 0.3 mi upstream at different datum. Nov. 17, 1936, to Oct. 18, 1967, at site 0.1 mi upstream at different datum. Oct. 19, 1967, to Sept. 30, 1971, temporary gage, 250 ft downstream at different datum, while new dam was being constructed 300 ft downstream from old dam.

REMARKS.--Records fair. Small diversions for irrigation above station. Flow regulated by Wildhorse Reservoir, capacity, 71,660 acre-ft, 0.1 mi upstream beginning Mar. 18, 1938.

AVERAGE DISCHARGE.--61 years (1918-25, 1937-89), 46.1 ft³/s, 33,400 acre-ft/yr, unadjusted for storage or diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,819 ft³/s, May 5, 1922, gage height, 10.11 ft, site and datum then in use; no flow at times when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 169 ft³/s, June 15, gage height, 1.96 ft; minimum daily, 0.8 ft³/s, May 7-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.0	e2.3	2.3	2.3	2.0	2.4	1.0	96	161	164	69
2	2.0	6.8	e2.3	2.3	2.3	2.0	2.4	1.0	96	160	164	69
3	2.0	7.9	2.3	2.3	2.3	2.0	2.4	1.0	96	159	164	69
4	2.0	2.5	2.3	2.3	2.3	2.0	2.4	1.0	96	161	164	69
5	2.0	2.6	2.3	2.3	2.3	2.0	2.4	1.0	96	161	163	69
6	2.0	2.6	2.3	2.3	e2.2	2.0	2.4	.92	96	161	163	69
7	2.0	2.6	2.3	2.3	e2.2	2.0	2.4	.80	96	162	163	69
8	2.0	2.7	2.3	2.3	2.2	2.0	2.4	.80	107	162	122	69
9	2.0	2.7	2.3	2.3	2.2	2.0	2.4	.80	114	161	97	69
10	2.0	2.7	2.3	2.3	2.2	2.0	2.6	.80	114	162	97	69
11	6.6	2.7	2.3	2.3	2.2	2.0	2.9	.80	114	161	97	68
12	12	2.6	2.3	2.3	2.2	2.0	2.9	.80	114	161	97	68
13	10	2.6	2.3	2.3	2.2	2.3	2.9	.80	114	161	97	68
14	11	2.6	2.3	2.3	2.2	2.4	2.9	.80	114	161	97	68
15	11	2.6	2.3	2.3	2.2	2.4	2.9	.80	140	160	97	68
16	11	2.6	2.3	2.3	2.2	2.4	2.9	.80	167	161	96	68
17	11	2.7	2.3	2.3	2.2	2.4	2.9	.80	163	161	96	68
18	11	2.6	2.3	2.3	2.0	2.4	2.9	.80	163	161	96	68
19	11	2.6	2.3	2.3	2.0	2.4	2.9	.80	163	161	96	33
20	11	2.6	2.3	2.3	2.0	2.4	2.9	.80	163	160	95	14
21	11	2.6	2.3	2.3	2.0	2.4	2.9	.80	161	161	95	14
22	11	2.6	2.3	2.3	2.0	2.4	2.9	.80	161	161	94	14
23	11	2.6	2.3	2.3	2.0	2.4	2.9	.80	161	162	95	14
24	11	2.6	2.3	2.3	2.0	2.4	2.9	.80	161	161	77	14
25	11	2.6	2.3	2.3	2.0	2.4	2.9	.80	161	161	54	14
26	11	2.5	2.3	2.3	2.0	2.4	2.9	.80	161	161	54	14
27	11	e2.4	2.3	2.3	2.0	2.4	2.7	.80	161	161	54	14
28	11	e2.4	2.3	2.3	2.0	2.4	1.5	.80	161	162	62	14
29	11	e2.4	2.3	2.3	---	2.4	1.0	.80	160	163	71	14
30	11	e2.3	2.3	2.3	---	2.4	1.0	42	160	164	69	14
31	7.5	---	2.3	2.3	---	2.4	---	96	---	164	69	---
TOTAL	243.1	85.3	71.3	71.3	59.9	69.5	76.8	162.32	4030	4999	3219	1421
MEAN	7.84	2.84	2.30	2.30	2.14	2.24	2.56	5.24	134	161	104	47.4
MAX	12	7.9	2.3	2.3	2.3	2.4	2.9	96	167	164	164	69
MIN	2.0	1.0	2.3	2.3	2.0	2.0	1.0	.80	96	159	54	14
AC-FT	482	169	141	141	119	138	152	322	7990	9920	6380	2820

CAL YR 1988 TOTAL 11407.72 MEAN 31.2 MAX 128 MIN .70 AC-FT 22630
WTR YR 1989 TOTAL 14508.52 MEAN 39.7 MAX 167 MIN .80 AC-FT 28780

e Estimated

	SPRING NUMBER	SITE IDENTIFICATION	SPRING NAME	OWNER	USE[1]	LAND SURFACE ELEVATION (FEET)	DISCHARGE DATE	DISCHARGE FT^3/S	DISCHARGE MEASUREMENT METHOD[2]
139	N19 E50 16BCCA1	393133116212201	BARTINE RANCH	EUREKA RANCH CO	I	6102	03/13/89	0.38	C
139	N19 E50 16BCCC1	393129116212901	BARTINE RANCH	EUREKA RANCH CO	I	6102	03/13/89	0.18	C
139	N19 E50 17ADDC1	393127116213501	BARTINE RANCH	EUREKA RANCH CO	I	6102	03/13/89	0.38	C
153	N23 E54 03DBD 1	395415115524301	THOMPSON RANCH SPRING	T M THOMPSON	I	5840	03/13/89	0.49	C
153	N24 E52 23DAC 1	395628116042801	SHIPLEY HOT SPRING	GUY WEATHERLY	I	5812	03/13/89	8.24	C
155A	N16 E53 08BCBB1	391637116021801	FISH CREEK SPRINGS		I	6100	03/13/89	9.36	C
173B	N08 E55 14BCBB1	383256115453301	HAY CORRAL	FISH CREEK RANCH	I	4770	03/15/89	1.11	C
173B	N08 E55 15AAAA1	383323115454401	NORTH SPRING	FISH CREEK RANCH	I	4805	03/15/89	0.67	C
173B	N08 E55 15ACBD1	383311115461501	BIG SPRING	FISH CREEK RANCH	I	4820	03/15/89	0.29	C
173B	N08 E55 15ADDB1	383259115460301	REYNOLDS SPRINGS	FISH CREEK RANCH	I	4770	03/15/89	0.85	C
173B	N08 E57 11DDB 1	383346115313801	BLUE EAGLE SPRINGS	HOWARD SHARP	I	4765	03/15/89	4.23	C
173B	N12 E56 05ABCB1	385552115421001	LITTLE WARM SPRING		I	5590	03/15/89	1.78	C
173B	N13 E56 32BACD1	385650115421301	BIG WARM SPRINGS		I	5605	03/15/89	15.6	C
179	N16 E63 29AAAA1	391345114535501	MURRY SPRINGS	CITY OF ELY	P	6600	03/14/89	7.35	C
179	N18 E64 21BDDC1	392502114464901	MCGILL SPRINGS	KENNECOTT COPPER	I	6100	03/13/89	11.8	C
179	N19 E63 05CDC 1	393108114562301	CAMBELLS EMBAYMENT	WILLIAM G DAVIDSON	I	6100	03/13/89	6.46	C
183	N10 E65 34CDAD1	383953114005801	GEYSER SPRING		I	6480	03/16/89	1.29	C
203	S02 E68 04BADD1	374827114225101	PANACA SPRING		I	4770	02/28/89	1.11	C
207	N06 E60 25BDAD1	382105115104801	MOON RIVER SPRINGS	DON HUTCHINGS	I	5220	03/14/89	5.12	C
207	N06 E61 18AADA1	382259115090801	HOT CREEK SPRING	WHIPPLE BROS	I	5225	03/14/89	8.91	C
207	N07 E62 28ABDC1	382624115004001	BUTTERFIELD SPRINGS	WHIPPLE BROS	I	5320	03/14/89	3.12	C
207	N07 E62 33BCAB1	382526115011401	FLAG SPRING 1		I	5290	03/14/89	3.12	C
207	N07 E62 33BCCB1	382522115012001	FLAG SPRING 2		I	5280	03/14/89	2.90	C
207	N07 E62 33BCCC1	382517115012001	FLAG SPRING 3		I	5290	03/14/89	2.01	C
207	N09 E61 32DABC1	383540115081801	MORMON SPRING	DON ELDRIGDE	I	5295	03/14/89	0.67	C
207	N09 E62 19DB 1	383726115025101	EMIGRANT SPRINGS		I	5480	03/14/89	1.34	C
207	N11 E62 04AABA1	385158115000401	LUND SPRINGS	LUND IRRIG CO	I	5500	03/14/89	4.46	C
207	N12 E61 02ACAB1	385540115045701	PRESTON BIG SPRING	PRESTON & LUND IRRIG	I	5700	03/14/89	9.36	C
207	N12 E61 02DBCB1	385542115045801	INDIAN RANCH SPRING		I	5720	03/14/89	0.51	C
207	N12 E61 12BDAD1	385507114574801	COLD SPRINGS	LUND IRRIG CO	I	6020	03/14/89	3.34	C
207	N12 E61 12DBDD1	385530115044601	NICHOLAS SPRINGS	LUND IRRIG CO	I	5700	03/14/89	0.67	C
207	N12 E61 12DCCD1	385539115045702	ARNOLDSON SPRING	PRESTON IRRIG	I	5700	03/14/89	3.34	C
209	S05 E60 10ADBB1	373155115135801	CRYSTAL SPRINGS		I	3810	02/28/89	4.23	C
209	S06 E61 06BBBB1	372749115113401	ASH SPRINGS		I	3615	02/27/89	17.8	C
219	S14 E65 16ABDD1	364319114425501	MUDDY RIVER 18	LDS FARM	I	1620	02/06/89	6.68	C
219	S14 E65 16ACA 1	364317114425801	MUDDY RIVER 4		I	1620	02/06/89	0.06	C
219	S14 E65 16ACCA1	364311114430401	MUDDY RIVER 2	LDS CHURCH	I	1620	02/06/89	0.08	C
219	S14 E65 16ACCD1	364310114430401	MUDDY RIVER 1	LDS CHURCH	I	1620	02/06/89	0.13	C
219	S14 E65 16BCA 1	364314114433001	MUDDY RIVER 6	LDS CHURCH	I	1650	02/08/89	0.25	C
219	S14 E65 16BDBD1	364314114432401	MUDDY RIVER 5	LDS CHURCH	I	1650	02/06/89	2.67	C
219	S14 E65 21AAAB1	364238114424401	MUDDY RIVER 16	WARM SPRINGS LEIS PK	I	1620	02/14/89	0.36	C
219	S14 E65 21AABB1	364235114425201	MUDDY RIVER 11	USF&WS	I	1650	02/08/89	0.69	C
219	S14 E65 21AABB2	364237114425401	MUDDY RIVER 12	USF&WS	I	1650	02/08/89	0.16	C
219	S14 E65 21AABB3	364236114425401	MUDDY RIVER 13	USF&WS	I	1650	02/08/89	0.29	C
219	S14 E65 21AABB4	364235114425401	MUDDY RIVER 14	USF&WS	I	1650	02/08/89	0.33	C
230	S17 E50 15ABDA1	362835116192101	ROGERS SPRING		I	2280	05/10/89	1.18	F
230	S18 E50 03ADBA1	362502116192301	CRYSTAL POOL		I	2200	05/10/89	6.02	F

[1]Uses: I, irrigation: P, public supply.
[2]Measurement method: C, current meter: F, flume.

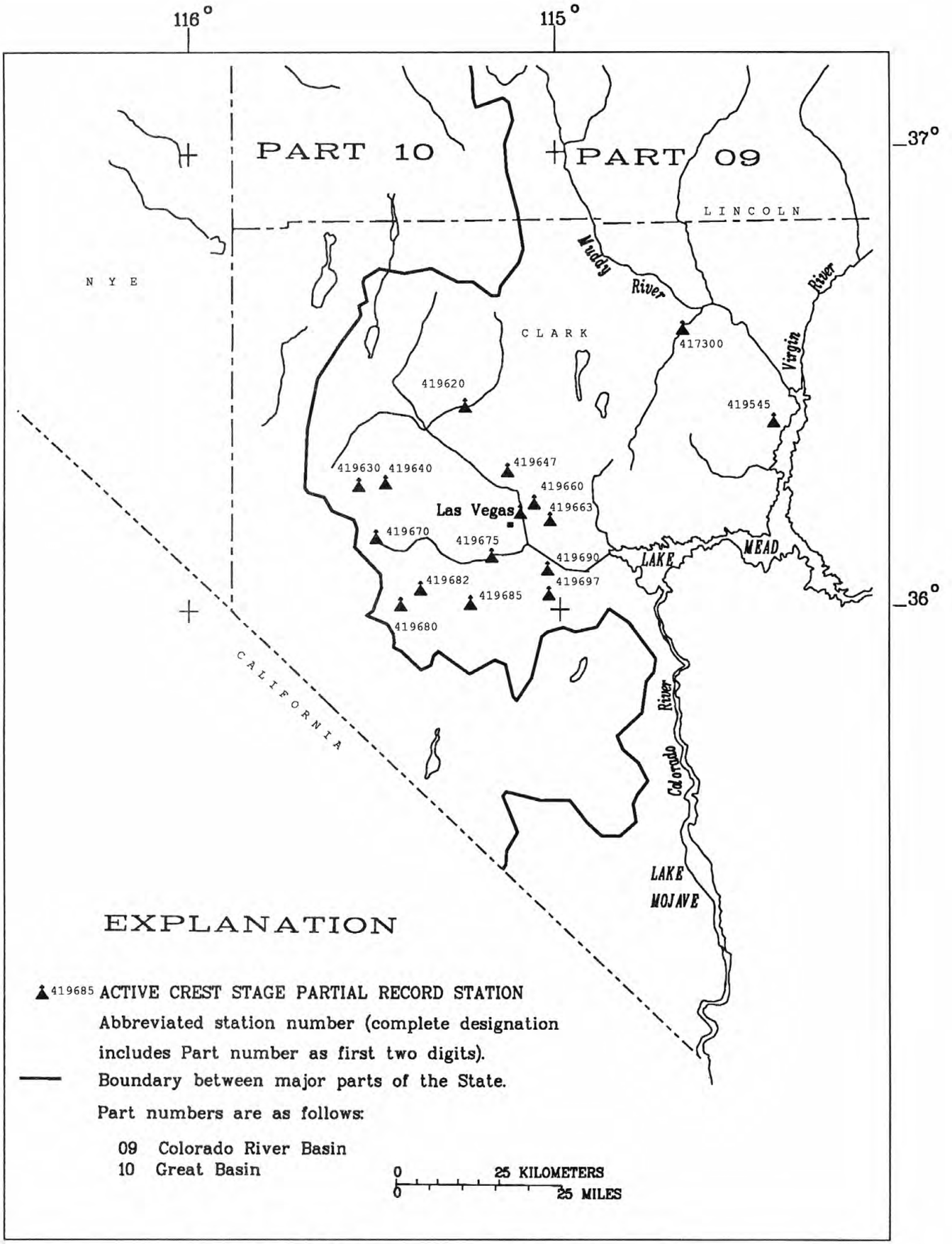


FIGURE 14.–Crest–stage gages in southeastern Nevada.

Crest-Stage Partial-Record Stations

The following table contains annual maximum discharges at crest-stage stations during water year 1989. A crest-stage gage is a device that registers the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge values determined on the basis of current-meter or indirect measure- ments. The date of maximum discharge, which is usually determined by comparison with data for nearby continuous-record stations or weather records, or by local inquiry, is not always certain. Only the maximum discharge for each water year is given below. Information on peaks of lesser magnitude may have been obtained but is not published herein. "Period of record" indicates the water years for which the annual maximums have been determined.

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Colorado River basin					
09417300	California Wash near Moapa, Nev.	Lat 36°36'37", long 114°39'37", in SE1/4SE1/4 sec.24, T.15 S., R.65 E., Clark County, Hydrologic Unit 15010012, 1.6 miles northwest of Byron Interchange on Interstate 15.	--	1987-89	07-28-89	34.99	E60
09419545	Valley of Fire Wash near Overton, Nev.	Lat 36°24'18", long 114°25'05", in SE1/4SW1/4 sec.32, T.17 S., R.68 E., Clark County, Hydrologic Unit 15010005, on North Shore Road, 1.1 miles west of Fire Bay.	--	1984, 1987-89	08-17-89	43.29	E30
09419620	Mormon Wells Wash near Las Vegas, Nev.	Lat 36°26'45", long 115°15'10", in NE1/4SW1/4 sec.27, T.17 S., R.60 E., Clark County, above Mormon Wells Road crossing, 6 miles east of Corn Creek Springs Headquarters of U.S. Fish and Wildlife Service, 20 miles north of Las Vegas.	A115	1962-87, 1987-89	08-14-89	--	E150
09419630	Telephone Canyon near Charleston Park, Nev.	Lat 36°16'20", long 115°32'30", in SE1/4NW1/4 sec.25, T.19 S., R.57 E., Clark County, at culvert on State Highway 157, 5.8 miles east of Charleston Park.	7.20	1962, 1987-89	1989	--	<.01
09419640	Kyle Canyon near Charleston Park, Nev.	Lat 36°16'40", long 115°28'10", in SE1/4SW1/4 sec.22, T.19 S., R.58 E., Clark County, 650 feet below culvert on State Highway 157, 10 miles east of Charleston Park.	35.9	1961, 1987-89	1989	--	<.01
09419647	Las Vegas Wash tributary near North Las Vegas, Nev.	Lat 36°18'10", long 115°08'20", in NW1/4NE1/4 sec.15, T.19 S., R.61 E., Clark County, 0.5 mile southwest of end of road in Nellis Air Force Base Ground Gunnery Range, 7.5 miles north of North Las Vegas.	A62	1963-84, 1987-89	08-14-89	--	E230
09419650	Las Vegas Wash at North Las Vegas, Nev.	Lat 36°12'40", long 115°06'20", in SW1/4NE1/4 sec.13, T.20 S., R.61 E., Clark County, on right bank 100 feet upstream from U.S. Highway 91, 3.5 miles northeast of Fremont Street in Las Vegas.	E720	1963-78, 1983, 1987-89	08-17-89	--	E150
09419660	Las Vegas Wash tributary near Nellis Air Force Base, Nev.	Lat 36°11'55", long 115°04'05", in NW1/4NE1/4 sec.8, T.20 S., R.62 E., Clark County, at culvert on Alternate U.S. Highway 91 and 93, 1.5 miles southwest of Nellis Air Force Base.	18.1	1961, 1987-89	08-17-89	--	E4.0
09419663	Las Vegas Wash tributary south of Nellis Air Force Base, Nev.	Lat 36°11'40", long 115°01'30", near section line common to secs. 22 and 23, T.20 S., R.62 E., Clark County, 0.1 mile south of Lake Mead Boulevard, 3.7 miles south of main gage of Nellis Air Force Base.	A1.2	1963-81, 1983, 1987-89	1989	--	0
09419670	Red Rock Wash near Blue Diamond, Nev.	Lat 36°09'30", long 115°29'45", in NE1/4NW1/4 sec.4, T.21 S., R.58 E., Clark County, 0.2 mile southeast of Willow Spring, 9.3 miles northwest of Blue Diamond.	8.09	1962, 1987-89	1989	--	0

A APPROXIMATE.

E ESTIMATED.

Crest-Stage Partial-Record Stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Colorado River basin--Continued					
09419675	Flamingo Wash at Las Vegas, Nev.	Lat 36°06'39", long 115°12'12", in SW1/4NW1/4 sec.19, T.21 S., R.61 E., Clark County, at Decatur Boulevard in Las Vegas.	A86	1966-81, 1985, 1987-89	05-13-89	2.21	E130
09419680	Cottonwood Valley near Blue Diamond, Nev.	Lat 36°00'35", long 115°25'50", in NE1/4NW1/4 sec.25, T.22 S., R.58 E., Clark County, at culverts on Cottonwood Valley Road, 3 miles southwest of Blue Diamond.	18.3	1961, 1987-89	08-14-89	--	E0.5
09419682	Oak Creek Wash near Blue Diamond, Nev.	Lat 36°02'41", long 115°22'38", in SW1/4SW1/4 sec.9, T.22 S., R.59 E., Clark County, Hydrologic Unit 15010015, 1.4 miles east of Blue Diamond, on Blue Diamond Boulevard.	--	1987-89	1989	--	0
09419685	Bird Spring Wash near Arden, Nev.	Lat 36°00'44", long 115°14'33", in NW1/4NW1/4 sec.26, T.22 S., R.60 E., Clark County, Hydrologic Unit 15010015, 0.5 mile southwest of Arden.	--	1987-89	1989	--	<.01
09419690	Duck Creek at Whitney, Nev.	Lat 36°05'09", long 115°02'00", in NE1/4NE1/4 sec.34, T.21 S., R.62 E., Clark County, at culvert on U.S. Highways 93, 95, and 466, 0.7 mile southeast of Whitney.	239	1961-81, 1984, 1987-89	08-08-89	--	E280
09419697	Las Vegas Wash tributary near Henderson, Nev.	Lat 36°01'53", long 115°01'49", in NE1/4SE1/4 sec.15, T.22 S., R.62 Clark County, at culvert on State Highway 41, 2.5 miles west of downtown Henderson.	1.17	1967-81, 1984, 1987-89	1989	--	0
		Great Salt Lake Desert					
10172909	Burnt Creek near Shores, Nev.	Lat 41°33'35", long 114°29'35", Elko County, at culvert 16 miles east of Shores, 40 miles northeast of Wells.	10.5	1969-78, 1981, 1987-89	08-09-89	--	E450
1017291100	Crittenden Creek above Crittenden Reservoir near Montello, Nev.	Lat 41°33'04", long 114°09'48", in SE1/4NW1/4SW1/4 sec.5, T.42 N., R.69 E., Elko County, 2 miles above Crittenden Dam.	--	--	06-89	2.79	E2.5
1017291190	Thousand Springs Creek below Crittenden Creek near Montello, Nev.	Lat 41°26'48", long 114°11'01" in NW1/4SE1/4SE1/4 sec.7, T.41 N., R.69 E., Elko County, at culvert on road, 13 miles north of Montello.	--	--	1989	--	0
		Dixie Valley basin					
10244360	Dixie Valley tributary near Eastgate, Nev.	Lat 39°17'30", long 117°59'00", in SE1/4 sec.36, T.17 N., R.35 E., Churchill County, at culvert on U.S. Highway 50, 6 miles west of Eastgate.	A11	1961-87, 1989	08-02-89	--	E5
		Steptoe Valley					
10245080	Nelson Creek tributary near Currie, Nev.	Lat 40°18'00", long 114°46'20" in SE1/4 sec.17, T.28 N., R.64 E., Elko Co., at culvert on former U.S. highway 93. 2.5 miles NW of Currie.	A0.7	1961-87 1989	06-89	1.52	E1.5

A APPROXIMATE.

E ESTIMATED.

Crest-Stage Partial-Record Stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Monitor Valley-Diamond Valley system					
10246000	Garden Pass Creek tributary near Eureka, Nev.	Lat 39°49'00", long 116°09'52", Eureka County, at culver on State Highway 278, 24 miles northwest of Eureka.	2.12	1962, 1987-89	08-89	--	E 2.0
		Stone Cabin and Ralston Valleys					
10249180	Saulsbury Wash near Tonopah, Nev.	Lat 38°07'30", long 116°48'30", in SE1/4SW1/4 sec.10, T.3 N., R.46 E., Nye County, at culvert on U.S. Highway 6, 23 miles east of Tonopah.	A 56	1962-81, 1985, 1989	1989	--	0
		Ione and Big (Tonopah Flat) Smokey Valleys					
10249620	Big Smoky Valley tributary near Tonopah, Nev.	Lat 38°01'52", long 117°13'"52, in SW1/4NE1/4 sec.14, T.2 N., R.42 E., Esmeralda County, at culvert on U.S. Highway 95, 2.5 miles south of Tonopah.	2.39	1961-81, 1988-89	1989	--	0
		Carson River basin					
10311450	Brunswick Canyon near New Empire, Nev.	Lat 39°10'20", long 119°41'10", in NW1/4NE1/4 sec.13, T.15 N., R.20 E., Carson City, 0.3 mile upstream from mouth, 2.5 miles east of New Empire.	12.7	1966-78, 1980, 1987-89	06-06-89	--	.01
10312012	Adrian Valley tributary near Wabuska, Nev.	Lat 39°12'55", long 119°12'25", in NE1/4SE1/4 sec.31, T.16 N., R.25 E., Lyon County, at culvert on former Alternate U.S. Highway 95, 4.8 miles northwest of Wabuska.	5.75	1968-81, 1987-89	1989	--	0
10312015	Adrian Valley tributary near Weeks, Nev.	Lat 39°13'45", long 119°13'40", in NW1/4NW1/4 sec.30, T.16 N., R.25 E., Lyon County, at abandoned culvert on former Alternate U.S. Highway 95, 4.6 miles southeast of Weeks.	0.12	1968-81, 1987-89	09-89	--	E .02
10312050	Lahontan Reservoir tributary near Sivler Springs, Nev.	Lat 39°22'40", long 119°19'00", in SE1/4SW1/4 sec.32, T.18 N., R.24 E., Lyon County, at culvert on private road, 0.3 mile south of U.S. Highway 50, 5.5 miles southwest of Silver Springs.	4.39	1962-78, 1981, 1987-89	1989	--	0
		Humboldt River basin					
10319470	Willow Creek tributary near Jiggs, Nev.	Lat 40°30'47", long 115°39'42", in SW1/4NW1/4 sec.3, T.30 N., R.56 E., Elko County, at culvert on State Highway 288, 6 miles north of Jiggs.	0.82	1962-79, 1982, 1987-89	08-89	--	.01
10322980	Cole Creek near Palisade, Nev.	Lat 40°35'05", long 116°08'55", in SE1/4NE1/4 sec.7, T.31 N., R.52 E., Eureka County, at culvert on State Highway 278, 3.2 miles southeast of Palisade.	11.4	1962-83, 1986-89	02-28-89	1.47	4.83

A APPROXIMATE.

E ESTIMATED.

Crest-Stage Parial-Record Stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Humboldt River basin--Continued					
10328240	Humboldt River tributary near Bliss, Nev.	Lat 40°59'55", long 117°39'30", in SE1/4NE1/4 sec.14, T.36 N., R. 38 E., Humboldt County, at culvert on Interstate Highway 80, 5 miles northeast of Winnemucca.	[A]1.9	1968-78, 1980, 1987-89	03-89	--	6.3
10336080	Humboldt Slough tributary near Bradys Hot Springs, Nev.	Lat 39°51'05", long 118°55'40", in NE1/4NE1/4 sec.22, T.23 N., R.27 E., Churchill County, at culvert on U.S. Highway 40 and 95, 6.5 miles northeast of Bradys Hot Springs.	11.0	1962-81, 1984-85, 1987-89	1989	--	0
		Pyramid and Winnemucca Lakes basin					
10351850	Pyramid Lake tributary near Nixon, Nev.	Lat 39°51'30", long 119°28'32", in SW1/4SE1/4 sec.14, T.23 N., R.22 E., Washoe County, at bridge on former Southern Pacific Railroad right-of-way, 6.5 miles west of Nixon.	1.94	1968-79, 1981-89	1989	--	0
		Black Rock Desert basin					
10353520	Eagle Creek near Orovada, Nev.	Lat 41°39'05", long 117°46'40", in SW1/4NE1/4 sec.35, T.44 N., R.37 E., Humboldt County, at culvert on U.S. Highway 95, 5.6 miles north of Orovada.	3.44	1962-78, 1980-89	1989	--	0
10353730	Dry Creek near Gerlach, Nev.	Lat 40°43'43", long 119°27'07", in SE1/4NE1/4 sec.23, T.33 N., R.23 E., Washoe County, 1 mile north of State Highway 447, 7.5 miles west of Gerlach.	3.50	1968-82, 1988-89	02-24-89	--	2.0
10353795	Squaw Creek near Gerlach, Nev.	Lat 40°47'52", long 119°30'54", in SE1/4SW1/4 sec.29, T.34 N., R.22 E., Washoe County, 1.5 miles southeast of Fisk Ranch and 15 miles west of Gerlach.	39.1	1989	02-24-89	12.72	1,450
10353798	Buffalo Creek near Gerlach, Nev.	Lat 40°37'40", long 119°27'05", in NE1/4NE1/4 sec.25, T.32 N., R.19 E., Washoe County, 2.5 miles upstream old Heller Ranch and 31 miles southwest of Gerlach.	46.5	1989	02-24-89	16.38	850

[A] APPROXIMATE.

Miscellaneous Sites--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
Humboldt River basin--Continued						
Humboldt R above Marys Creek at Carlin	----	---- Lat 40°42'24", long 116°06'30", in NE1/4NE1/4 sec.34, T.33 N., R.52 E., Elko County, Hydrologic Unit 16040101, approx. 0.4 mi south of Carlin.	--	----	11-21-88	49.7
10322150 Marys Creek at Carlin	Humboldt River	Lat 40°42'38", long 116°07'30", in SE1/4SE1/4 sec.28, T.33 N., R.52 E., Elko County, Hydrologic Unit 16040101, approx. 0.2 mi southeast of Carlin.	--	----	11-21-88 5-12-89	4.06 3.44
Humboldt River below Marys Creek at Carlin	----	---- Lat 40°42'06", long 116°07'40", in NE1/4SE1/4 sec.33, T.33 N., R.52 E., Elko County, Hydrologic Unit 16040101, approx. 1.0 mi southeast of Carlin.	--	----	11-21-88	45.9
10322400 Humboldt R above Palisade Canyon near Carlin	----	---- Lat 40°38'54", long 116°09'28", in SW1/4NW1/4 sec.20, T.32 N., R.52 E., Elko County, Hydrologic Unit 16040101, approx. 6.0 mi southeast of Carlin.	--	----	11-21-88	62.0
Pyramid and Winnemucca Lakes Basin						
10348480 McCrays Canyon near Carson City	Franktown Creek	Lat 39°12'13", long 119°52'48, in SW1/4SW1/4 sec.32, T.16 N., R.19 E., Washoe, County, Hydrologic Unit 16050101, 0.5 mi upstream from mouth and 6.5 mi northwest of Carson City.	0.64	1974-1981 1985-1988	6- 8-89 7-13-89	1.52 0.26
10348855 Browns Creek Diversion at Galena State Park nr Washoe City	Browns Creek	Lat 39°21'16", long 119°51'18", in SE1/4NE1/4 sec.9, T.17 N., R.19 E., Washoe County, Hydrologic Unit 16050102, on left bank, 30 ft upstream culvert at Highway 27, 3.2 mi northwest of Washoe City.	--	1984-1988	10- 5-88 10-14-88 1-10-89 2- 8-89 3- 9 89 4- 5-89 5- 8-89 5-18-89 6- 1-89 6- 5-89 6-23-89 8-17-89	0.0 0.0 3.56 3.82 7.88 7.02 0.0 0.0 0.0 0.0 0.0 0.0
10348300 North Truckee Drain	Truckee River	Lat 39°31'30", long 119°42'18", in NE1/4SW1/4 sec.11, T.19 N., R.20 E., at Kleppe Lane bridge, 0.26 mi above confluence with Truckee R.	--	1980	8- 7-89 8- 6-89	28.0 32.0
10349990 Steamboat Creek	Truckee River	Lat 39°30'47", long 119°41'50", in SW1/4NW1/4 sec.14, T.19 N., R.20 E., at Kimlick Lane bridge, 0.75 mi above confluence with Truckee R.	--	1980	8- 7-89 9- 6-89	23.4 30.4
+10350000 Truckee River at Vista	Pyramid Lake	Lat 39°31'05", long 119°42'11", in NW1/4NE1/4 sec.13, T.19 N., R.20 E., 0.9 mi southeast of Vista and 1.5 mi downstream from Steamboat Creek.	--	1899-1907 1933-1955 1958-1989	9- 6-89	301
10350050 Truckee River	Pyramid Lake	Lat 39°30'36", long 119°38'52", in SE1/4SE1/4 sec.17, T.19 N., R.21 E., at Lockwood bridge.	--	1980	8- 7-89 9- 6-89	299 311
10350200 Truckee River at Patrick	Pyramid Lake	Lat 39°32'49", long 119°34'59", in SW1/4NW1/4 sec.1, T.20 N., R.21 E., at bridge on McCarren Ranch.	--	1980	9- 7-89	307
+10340400 Truckee River below Tracy	Pyramid Lake	Lat 39°33'52", long 119°31'02", in NW1/4NE1/4 sec.33, T.20 N., R.22 E., at road bridge, at Tracy Power Plant.	--	1972-1989	9- 7-89	317

* Operated as a low-flow partial-record site.
\+ Operated as a continuous record station.
++ Operated as a crest-stage partial-record station.
A Approximately.

Miscellaneous Sites--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
Pyramid and Winnemucca Lakes Basin--Continued						
10350500 Truckee River at Clark	Pyramid Lake	Lat 39°33'55", long 119°29'02", in SE1/4SW1/4 sec.26, T.20 N., R.22 E., at old U.S. 40 bridge.	--	1980	9- 7-89	315
10351010 FWM 65: Truckee Canal	Lahontan Reservoir	Lat 39°35'08", long 119°26'53", in SW1/4NW1/4 sec.20, T.19 N., R.22 E., at Federal Watermaster Gage approx. 1.2 mi downstream of Derby Dam.	--	1980	9- 7-89	278
+10351600 Truckee River below Derby Dam	Pyramid Lake	Lat 39°35'05", long 119°26'25", in NW1/4SE1/4 sec.19, T.20 N., R.23 E., 0.4 mi downstream Derby Dam.	--	1909-1910 1916-1918 1989	11-15-88 9- 7-89	10.2 26.2
10351619 Truckee River	Pyramid Lake	Lat 39°35'28", long 119°21'59", in NW1/4NE1/4 sec.23, T.20 N., R.23 E., at road bridge at Painted Rock Exit.	--	1980	11-15-88 9- 8-89	14.9 35.0
Truckee River	Pyramid Lake	Lat 39°37'04", long 119°17'31", in SE1/4NE1/4 sec.9, T.20 N., R.24 E., 300 ft upstream Interstate 80 highway bridge, 3 mi west of Fernley.	--	--	9- 8-89	32.5
10351648 Truckee River	Pyramid Lake	Lat 39°37'55", long 119°16'54", in SW1/4NW1/4 sec.3, T.20 N., R.24 E., at old U.S. 40 highway bridge.	--	1980	9- 8-89	13.8
10351650 Truckee River	Pyramid Lake	Lat 39°38'23", long 119°16'54", in SW1/4SW1/4 sec.34, T.21 N., R.24 E., 1.5 mi downstream of old U.S. 40 highway bridge.	--	1980	11-15-88	18.0
Truckee River	Pyramid Lake	Lat 39°40'10", long 119°16'23", in SW1/4SE1/4 sec.22, T.21 N., R.24 E., above S Bar S Ranch diversion dam	--	1980	11-15-88 9-11-89	24.1 21.4
10351690 Truckee River	Pyramid Lake	Lat 39°44'14", long 119°19'24", in NE1/4NE1/4 sec.31, T.22 N., R.24 E., 1.1 mi downstream of Numana Hatchery, at Dead Ox Wash.	--	1980	11-15-88 9-11-89	33.7 11.7
10351750 Truckee River	Pyramid Lake	Lat 39°49'45", long 119°21'36", in SE1/4SE1/4 sec.26, T.23 N., R.23 E., upstream side of highway bridge on Hwy 447 at Nixon.	--	1980	11-15-88 9-12-89	33.2 4.90
10351775 Truckee River	Pyramid Lake	Lat 39°51'20", long 119°23'32", in SE1/4SW1/4 sec.15, T.23 N., R.23 E., upstream of Marble Bluff Dam.	--	1980	11-15-88 9-12-89	34.4 5.06
Smoke Creek Desert Basin						
Squaw Creek below Squaw Valey Reservoir	---- ----	Lat 40°49'18", long 119°32'02", in NE1/4NW1/4 sec.19, T.34 N., R.22 E., 0.1 mi downstream of Squaw Valley Reservoir.	--	----	7-11-88 1-18-89	0.40 1.09
10353795 Squaw Creek near Gerlach	---- ----	Lat 40°47'53"52", long 119°30'54", in SE1/4SW1/4 sec.29, T.34 N., R.22 E., 2.0 mi downstream of Squaw Valley Reservoir.	--	----	7-11-88 1-17-89	1.03 2.29
Squaw Creek at Smoke Creek Desert Road	---- ----	Lat 40°43'38", long 119°30'02", in NE1/4SW1/4 sec.21, T.33 N., R.22 E., 7.0 mi downsream of Squaw Valley Reservoir.	--	----	7-11-88 1-17-89	0.0 0.0

* Operated as a low-flow partial-record site.
\+ Operated as a continuous record station.
++ Operated as a crest-stage partial-record station.
A Approximately.

Miscellaneous Sites--Continued

Stream	Tributary to		Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
						Date	Discharge (ft^3/s)
Smoke Creek Desert Basin--Continued							
Buffalo Creek	----	----	Lat 40°44'03", long 119°50'06", in NW1/4NE1/4 sec.22, T.33, N., R.19 E., approx. 0.1 mi downstream of South Fork Wash.	--	----	7-11-88 1-18-89	0.08 2.31
Buffalo Creek	----	----	Lat 40°41'48", long 119°49'20", in NW1/4SW1/4 sec.35, T.33 N., R.19 E., Approx. 2.5 mi downstream of South Fork Wash.	--	----	7-11-88 1-18-89	0.06 2.82
10353798 Buffalo Creek near Gerlach	----	----	Lat 40°37'40", long 119°47'05", in SE1/4NE1/4 sec.25, T.33 N., R.19 E., 2.3 mi downstream of Chimney Rock Canyon.	--	----	7-11-88 1-18-89	0.0 3.00
Big Spring near Observation Peak	----	----	Lat 40°45'22", long 120°07'21", in NW1/4NW1/4 sec.1, T.33 N, R.16 E., confluence of Smoke Creek.	--	----	7-11-89	1.53
Wagon Tire Spring	----	----	Lat 40°44'27", long 120°06'20", in NW1/4NW1/4 sec.12, T.33 N., R.16 E., approx. 1.1 mi downstream of Big Spring.	--	----	7-11-89	0.03
No Name Spring	----	----	Lat 41°40'15", long 120°07'00", in SE1/4SW1/4 sec.25, T.33 N., R.16 E., 100 ft. above confluence of Sage Hen Spring, approx. 5.0 mi south of Big Spring.	--	----	7-11-89	0.76
Sage Hen Spring near Shinn Ranch	----	----	Lat 40°41'09", long 120°07'00", in NE1/4NW1/4 sec.36, T.33 N., R.16 E., approx. 5.0 mi from confluence of Big Spring.	--	----	7-10-89	0.44
No Name Spring	----	----	Lat 40°39'30", long 120°04'30", in SE1/4SW1/4 sec.5, T.32 N., R.17 E., 1.5 mi southeast of Shinn Ranch.	--	----	7-11-89	0.48
Smoke Creek above Al Shinn Canyon	----	----	Lat 40°39'02", long 120°01'55", in SE1/4NW1/4 sec.10, T.32 N., R.17 E., above confluence of Al Shinn Canyon.	--	----	7-11-89	5.32
No Name Spring	----	----	Lat 40°38'53", long 120°02'00", in NW1/4SE1/4 sec.10, T.32 N., R.17 E., 1.5 mi northeast of Cherry Mountain.	--	----	7-11-89	0.0
Al Shinn Canyon	----	----	Lat 40°39'06", long 120°01'52", in SE1/4NE1/4 sec.10, T.32 N., R.17 E., 100 ft upstream confluence of Smoke Creek.	--	----	7-11-89	0.48
No Name Spring	----	----	Lat 40°37'31", long 120°00'55", in SW1/4SE1/4 sec.14, T.32 N., R.17 E., 1.15 mi northwest of Hostetter and Johnson Spring.	--	----	7-11-89	0.24
Hostetter and Johnson spring	----	----	Lat 40°36'57", long 120°00'50", in SW1/4SE1/4 sec.23, T.32 N., R.17 E., 1.0 mi southwest of Smoke Creek Reservoir.	--	----	7-11-89	seeps
Smoke Creek Reservoir Outflow	----	----	Lat 40°37'32", long 119°59'49", in NW1/4NE1/4 sec.24, T.32 N., R.17 E., at outflow from Smoke Creek Reservoir.	--	----	7-11-89	3.50
Chimney Canyon	----	----	Lat 40°37'38", long 119°59'34", in SE1/4SE1/4 sec.13, T.32 N., R.17 E., at outlet at Smoke Ck Reservoir.	--	----	7-11-89	[e]0.1
Rush Creek	----	----	Lat 40°33'28", long 119°58'14", in SE1/4SE1/4 sec.7, T.31 N., R.18 E., 3.3 mi southwest of Smoke Ck Ranch.	--	----	7-12-89	0.59

* Operated as a low-flow partial-record site.
\+ Operated as a continuous record station.
++ Operated as a crest-stage partial-record station.
[A] Approximately.
[e] Estimated.

Miscellaneous Sites--Continued

Stream	Tributary to		Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
						Date	Discharge (ft^3/s)
Smoke Creek Desert Basin--Continued							
Smoke Creek	----	----	Lat 40°33'09", long 119°56'27", in SW1/4NW1/4 sec.16, T.31 N., R.18 E., at Smoke Creek Station Ruins.	--	----	7-12-88 1-18-89 7-12-89	0.40 6.03 1.72
Smoke Creek	----	----	Lat 40°32'06", long 119°54'39", in SE1/4NW1/4 sec.23 T.31 N., R.18 E., 3.0 mi downstream of Smoke Creek Station Ruins.	--	----	7-12-88 7-12-89	0.62 1.79
10353800 Smoke Ck below Reservoir near Smoke Creek	----	----	Lat 40°30'33", long 119°52'34", in NE1/4NW1/4 sec.5, T.30 N., R.19 E., approx. 11.2 mi south of Buffalo Creek Ranch.	--	----	7-12-88 1-19-89 7-12-89	0.13 7.64 0.0
Smoke Creek	----	----	Lat 40°29'21", long 119°49'46", in SW1/4NE1/4, sec.3, T.30 N., R.19 E., 100 ft below bridge on State Route 447	--	----	7-12-88 1-19-89 7-12-89	0.36 4.15 0.55

* Operated as a low-flow partial-record site.
\+ Operated as a continuous record station.
++ Operated as a crest-stage partial-record station.
A Approximately.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Water-quality partial-record stations are particular sites where chemical-quality, biological and/or sediment data are collected systematically over a period of years for use in hydrologic analyses. These data are collected usually less than quarterly. Samples collected at sites other than gaging stations and partial-record stations are referred to as miscellaneous sites.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH, FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
09423050	COLORADO R LAGOON NORTH OF RIVIERA, ARIZ (LAT 35 07 23N LONG 114 36 42W)								
NOV 23...	0925	870	8.30	13.5	13.5	260	62	26	73
09423060	COLORADO R BL LAGOON NORTH OF RIVIERA, ARIZ (LAT 35 07 15N LONG 114 37 44W)								
NOV 23...	0905	890	8.00	13.5	14.5	260	63	26	77

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
09423050	COLORADO R LAGOON NORTH OF RIVIERA, ARIZ (LAT 35 07 23N LONG 114 36 42W)							
NOV 23...	2	3.7	230	62	7.2	536	0.73	<0.100
09423060	COLORADO R BL LAGOON NORTH OF RIVIERA, ARIZ (LAT 35 07 15N LONG 114 37 44W)							
NOV 23...	2	3.6	230	62	8.4	549	0.75	0.180

1-NORTHWEST REGION

1. Pueblo V.
2. Continental Lake V.
3. Gridley Lake V.
4. Virgin V.
5. Sage Hen V.
6. Guano V.
7. Swan Lake V.
8. Massacre Lake V.
9. Long V.
10. Macy Flat
11. Coleman V.
12. Mosquito V.
13. Warner V.
14. Surprise V.
15. Boulder V.
16. Duck Lake V.

2-BLACK ROCK DESERT REGION

17. Pilgrim Flat
18. Painter Flat
19. Dry V.
20. Sano V.
21. Smoke Creek Desert
22. San Emidio Desert
23. Granite Basin
24. Hualapai Flat
25. High Rock Lake V.
26. Mud Meadow
27. Summit Lake V.
28. Black Rock Desert
29. Pine Forest V.
30. Kings River V.
    (A) Rio King Subarea
    (B) Sod House Subarea
31. Desert V.
32. Silver State V.
33. Quinn River V.
    (A) Orovada Subarea
    (B) McDermitt Subare

3-SNAKE RIVER BASIN

34. Little Owyhee River Area
35. South Fork Owyhee River Area
36. Independence V.
37. Owyhee River Area
38. Bruneau River Area
39. Jarbidge River Area
40. Salmon Falls Creek Area
41. Goose Creek Area

4-HUMBOLDT RIVER BASIN

42. Marys River Area
43. Starr V. Area
44. North Fork Area
45. Lamoille V.
46. South Fork Area
47. Huntington V.
48. Dixie Creek --
    Tenmile Creek Area
49. Elko Segment
50. Susie Creek Area
51. Maggie Creek Area
52. Marys Creek Area
53. Pine V.
54. Crescent V.
55. Carico Lake V.
56. Upper Reese River V.
57. Antelope V.
58. Middle Reese River V.
59. Lower Reese River V.
60. Whirlwind V.
61. Boulder Flat
62. Rock Creek V.
63. Willow Creek V.
64. Clovers Area
65. Pumpernickel V.
66. Kelly Creek Area
67. Little Humboldt V.
68. Hardscrabble Area
69. Paradise V.
70. Winnemucca Segment
71. Grass V.
72. Imlay Area
73. Lovelock V.
    (A) Oreana Subarea
74. White Plains

5-WEST CENTRAL REGION

75. Bradys Hot Springs Area
76. Fernley Area
77. Fireball V.
78. Granite Springs V.
79. Kumiva V.

6-TRUCKEE RIVER BASIN

80. Winnemucca Lake V.
81. Pyramid Lake V.
82. Dodge Flat
83. Tracy Segment
84. Warm Springs V.
85. Spanish Springs V.
86. Sun V.
87. Truckee Meadows
88. Pleasant V.
89. Washoe V.
90. Lake Tahoe Basin
91. Truckee Canyon Segment

7-WESTERN REGION

92. Lemmon V.
    (A) Western Part
    (B) Eastern Part
93. Antelope V.
94. Bedell Flat
95. Dry V.
96. Newcomb Lake V.
97. Honey Lake V.
98. Skedaddle Creek V.
99. Red Rock V.
100. Cold Spring V.
    (A) Long V.

8-CARSON RIVER BASIN

101. Carson Desert
    (A) Packard V.
102. Churchill V.
103. Dayton V.
104. Eagle V.
105. Carson Valley

9-WALKER RIVER BASIN

106. Antelope V.
107. Smith V.
108. Mason V.
109. East Walker Area
110. Walker Lake V.
    (A) Schurz Subarea
    (B) Lake Subarea
    (C) Whisky Flat --
    Hawthorne Subarea

10-CENTRAL REGION

111. Alkali V. (Mineral)
    (A) Northern Part
    (B) Southern Part
112. Mono V.
113. Huntoon V.
114. Teels Marsh V.
115. Adobe V.
116. Queen V.
117. Fish Lake V.
118. Columbus Salt Marsh V.
119. Rhodes Salt Marsh V.
120. Garfield Flat
121. Soda Spring V.
    (A) Eastern Part
    (B) Western Part
122. Gabbs V.
123. Rawhide Flats
124. Fairview V.
125. Stingaree V.
126. Cowkick V.
127. Eastgage V. Area
128. Dixie V.
129. Buena Vista V.
130. Pleasant V.
131. Buffalo V.
132. Jersey V.
133. Edwards Creek V.
134. Smith Creek V.
135. Ione V.
136. Monte Cristo V.
137. Big Smoky V.
    (A) Tonopah Flat
    (B) Northern Part
138. Grass V.
139. Kobeh V.
140. Monitor V.
    (A) Northern Part
    (B) Southern Part
141. Ralston V.
142. Alkali Spring V. (Esmeralda)
143. Clayton V.
144. Lida V.
145. Stonewall Flat
146. Sarcobatus Flat
147. Gold Flat
148. Cactus Flat
149. Stone Cabin V.
150. Little Fish Lake V.
151. Antelope V. (Eureka & Nye)
152. Stevens Basin
153. Diamond V.
154. Newark V.
155. Little Smoky V.
    (A) Northern Part
    (B) Central Part
    (C) Southern Part
156. Hot Creek V.
157. Kawich V.
158. Emigrant V.
    (A) Groom Lake V.
    (B) Papoose Lake V.
159. Yucca Flat
160. Frenchman Flat
161 Indian Springs V.
162. Pahrump V.
163. Mesquite V. (Sandy V.)
164. Ivanpah V.
    (A) Northern Part
    (B) Southern Part
165. Jean Lake V.
166. Hidden V. (South)
167. Eldorado V.
168. Three Lakes V. (Northern Part)
169. Tikapoo V. (Tickaboo V.)
    (A) Northern Part
    (B) Southern Part
170. Penoyer V. (Sand Spring V.)
171. Coal V.
172. Garden V.
173. Railroad V.
    (A) Southern Part
    (B) Northern Part
174. Jakes V.
175. Long V.
176. Ruby V.
177. Clover V.
178. Butte V.
    (A) Northern Part (Round V.)
    (B) Southern Part
179. Steptoe V.
180. Cave V.
181. Dry Lake V.
182. Delamar V.
183. Lake V.
184. Spring V.
185. Tippett V.
186. Antelope V. (White Pine & Elko)
    (A) Southern Part
    (B) Northern Part
187. Goshute V.
188. Independence V. (Pequop V.)

11-GREAT SALT LAKE BASIN

189. Thousand Springs V.
    (A) Herrill Siding--Brush Creek Area
    (B) Toano--Rock Spring Area
    (C) Rocky Butte Area
    (D) Montello--Crittenden Creek Area
    (Montello V.)
190. Grouse Creek V.
191. Pilot Creek V.
192. Great Salt Lake Desert
193. Deep Creek V.
194. Pleasant V.
195. Snake V.
196. Hamlin V.

12-ESCALANTE DESERT

197. Escalante Desert

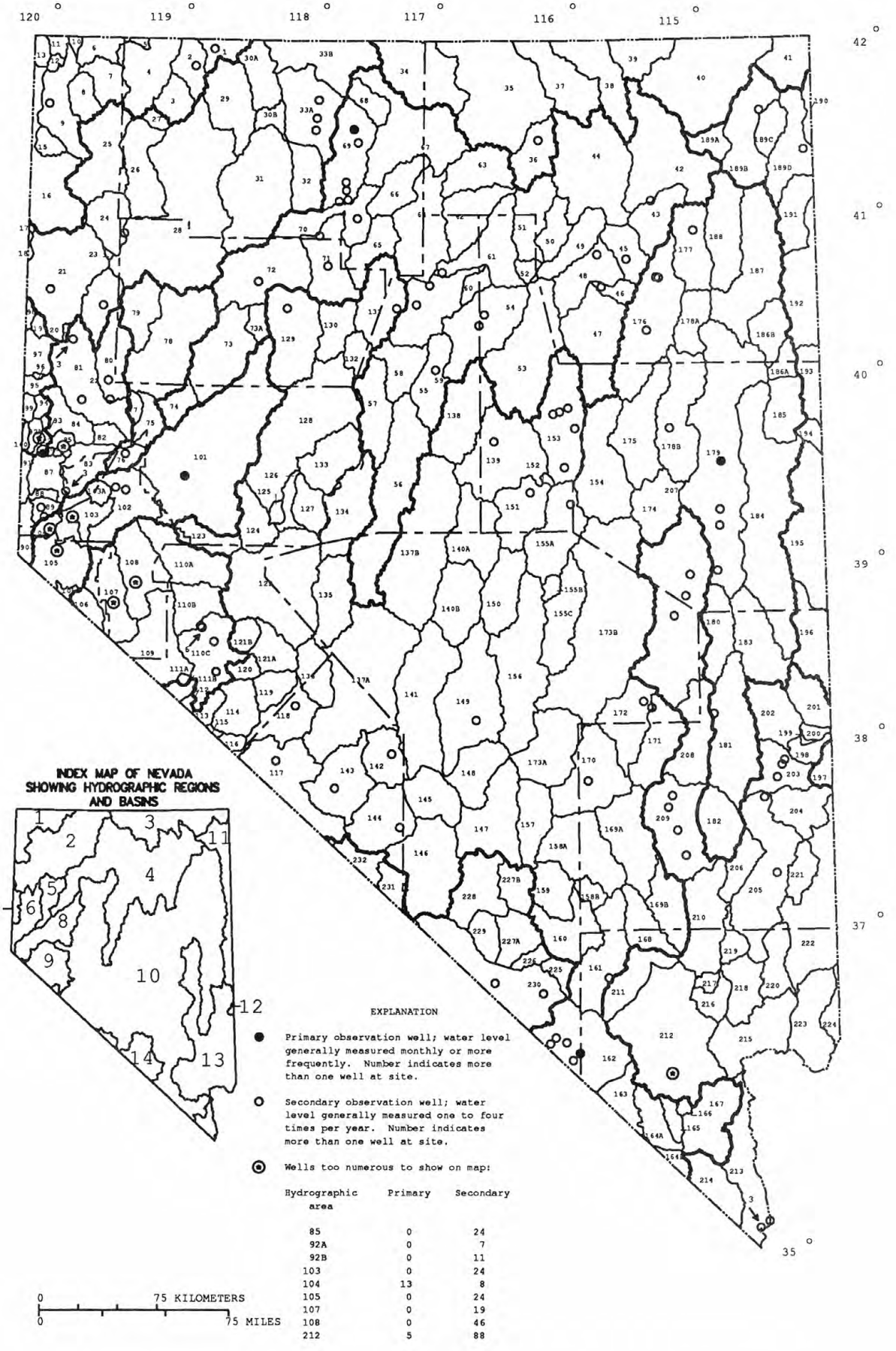
13-COLORADO RIVER BASIN

198. Dry V.
199. Rose V.
200. Eagle V.
201. Spring V.
202. Patterson V.
203. Panaca V.
204. Clover V.
205. Lower Meadow Valley Wash
206. Kane Springs V.
207. White River V.
208. Pahroc V.
209. Pahranagat V.
210. Coyote Spring V.
211. Three Lakes V. (Southern Part)*
212. Las Vegas V.
213. Colorado V.
214. Piute V.
215. Black Mountains Area
216. Garnet V. (Dry Lake V.)*
217. Hidden V. (North)*
218. California Wash
219. Muddy River Springs Area (Upper Moapa V.)
220. Lower Moapa V.
221. Tule Desert
222. Virgin River V.
223. Gold Butte Area
224. Greasewood Basin

*Noncontributing part of the Colorado River Basin

14-DEATH VALLEY BASIN

225. Mercury V.
226. Rock V.
227. Fortymile Canyon
    (A) Jackass Flats
    (B) Buckboard Mesa
228. Oasis V.
229. Crater Flat
230. Amargosa Desert
231. Grapevine Canyon
232. Oriental Wash



Hydrographic area	Primary	Secondary
85	0	24
92A	0	7
92B	0	11
103	0	24
104	13	8
105	0	24
107	0	19
108	0	46
212	5	88

FIGURE 15.–Observation wells listed in this report.

PARADISE VALLEY

412910117321001. Local number, 69 N42 E39 25CAC1.
LOCATION.--Lat 41°29'10", long 117°32'10", Hydrologic Unit 16040109, in Humboldt County.
Owner: R. Day and T. Boggio.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Dug unused well, diameter 6 ft, depth 17.4 ft, cased with iron.
DATUM.-- Elevation of land-surface datum is 4,523 ft. Measuring point: Top of concrete floor, 5.2 ft below land-surface datum.
REMARKS.-- In Paradise Valley.
PERIOD OF RECORD.--1945 to current year.
REVISED RECORDS.--WDR-NV-86-1: 1984-85.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.80 ft below land-surface datum, Sept. 23, 1955; lowest measured, 11.03 ft below land-surface datum, Nov. 16, 1961.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.63	9.83	9.53	9.37	9.15	7.60	4.46	2.16	2.23	4.16	6.74	7.95
10	9.67	9.84	9.50	9.35	9.14	6.35	2.89	1.98	2.86	4.71	6.97	8.07
15	9.71	9.84	9.47	9.34	9.13	4.55	2.46	2.32	3.41	5.19	7.21	8.19
20	9.74	9.80	9.42	9.33	8.95	3.92	2.90	2.80	3.48	5.64	7.40	8.28
25	9.78	9.58	9.40	9.29	8.17	3.95	3.27	3.05	2.93	6.03	7.58	8.38
EOM	9.81	9.57	9.39	9.25	8.03	4.25	3.34	1.75	3.54	6.45	7.79	8.46

WATER YEAR 1989 HIGHEST 1.74 JUNE 1 LOWEST 9.86 NOV. 12-13

CARSON DESERT

392825118470501. Local number, 101 N19 E28 36AABC1.
LOCATION.--Lat 39°28'25", long 118°47'05", Hydrologic Unit 16050203, in Churchill County.
Owner: City of Fallon.
AQUIFER.--Volcanic rocks of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 14 in., depth 813 ft, cased to 540 ft, perforated 505 to 540 ft.
DATUM.--Elevation of land-surv=face datum is 3,962 ft. Measuring point: Edge of recorder shelf, 0.31 ft above ladn-surface datum.
REMARKS.--Mori Well.
PERIOD OF RECORD.--1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.30 ft below land-surface datum, Oct. 29, 1972; lowest measured, 45.90 ft below land-surface datum, Aug. 7, 8, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	45.11	44.66	44.00	43.57	43.37	43.37	43.78	44.41	44.42	45.16	45.84	45.71
10	45.05	44.52	43.94	43.55	43.41	43.35	44.08	44.48	44.47	45.32	45.77	e45.65
15	44.91	44.37	43.84	43.55	43.42	43.34	44.16	44.25	44.62	45.48	45.64	e45.55
20	44.85	44.28	43.73	43.53	43.41	43.39	44.27	44.27	44.79	45.57	45.68	e45.49
25	44.79	44.10	43.63	43.46	43.41	43.54	44.22	44.35	44.96	45.65	45.68	e45.40
EOM	44.74	44.07	43.61	43.41	43.40	43.68	44.24	44.38	45.07	45.76	45.68	e45.30

WATER YEAR 1989 HIGHEST 43.33 MAR. 11, 13, 16 LOWEST 45.90 AUG. 7,8
e Estimated

EAGLE VALLEY

391126119441901. Local number, 104 N15 E20 04DBDC1.
LOCATION.--Lat 39°11'26", long 119°44'19", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--.Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 89 ft, cased to 89 ft, perforated 68 to 88 ft.
DATUM.--Elevation of land-surface datum is 4,682 ft. Measuring point: Top of casing, 0.3 ft above land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.10 ft below land-surface datum, July 14, 1986; lowest measured, 24.87 ft below land-surface datum, Jan. 6, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	19.46	DEC 6	19.53	FEB 13	19.42	APR 3	19.29	JUNE 1	19.23	AUG 1	19.03
NOV 8	19.46	JAN 4	19.07	MAR 7	18.99	MAY 2	19.26	JULY 3	19.07	SEPT 6	18.90

WATER YEAR 1989 HIGHEST 18.90 SEPT. 06 LOWEST 19.53 DEC. 06

391126119441902. Local number, 104 N15 E20 04DBDC2.
LOCATION.--Lat 39°11'26", long 119°44'19", Hydrologic Unit 16050201, in Carson City.
Owner: U.S. Geological Survey.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 33 ft, cased to 33 ft, perforated 30 to 32 ft.
DATUM.--Elevation of land-surface datum is 4,682 ft. Measuring point: Top of casing, which is at land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.90 ft below land-surface datum, July 14, 1986; lowest measured, 30.01 ft below land-surface datum, July 25, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	19.44	DEC 6	19.72	FEB 13	19.56	APR 3	19.45	JUNE 1	19.35	AUG 1	19.05
NOV 8	19.65	JAN 4	19.59	MAR 7	19.55	MAY 2	19.38	JULY 3	19.15	SEPT 6	18.94

WATER YEAR 1989 HIGHEST 18.94 SEPT. 06 LOWEST 19.72 DEC. 06

391155119460401. Local number, 104 N15 E20 05BBCA1.
LOCATION.--Lat 39°11'55", long 119°46'04", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 102 ft, cased to 102 ft, perforated 82 to 102 ft.
DATUM.--Elevation of land-surface datum is 4,737 ft. Measuring point: Top of casing, 0.7 ft above land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.38 ft below land-surface datum, Feb. 12, 1975; lowest measured, 51.37 ft below land-surface datum, June 24, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	35.61	DEC 6	30.55	FEB 13	28.18	APR 3	25.61	JUNE 1	33.82	AUG 1	31.91
NOV 8	31.61	JAN 4	27.58	MAR 7	27.56	MAY 2	31.89	JULY 3	35.64	SEPT 6	37.24

WATER YEAR 1989 HIGHEST 25.61 APR. 03 LOWEST 37.24 SEPT. 06

391155119460402. Local number, 104 N15 E20 05BBCA2.
LOCATION.--Lat 39°11'55", long 119°46'04", Hydrologic Unit 16050201, in Carson City.
Owner: U.S. Geological Survey.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 62 ft, cased to 62 ft.
DATUM.--Elevation of land-surface datum is 4,737 ft. Measuring point: Top of casing, which is at land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.97 ft below land-surface datum, Feb. 17, 1978; lowest measured, 46.80 ft below land-surface datum, Aug. 7, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	42.05	JAN 4	31.29	MAR 7	31.33	JUN 1	38.92	SEPT 6	43.40		
NOV 8	45.61	FEB 7	31.41	APR 3	28.83	JULY 3	42.09				
DEC 6	35.66	13	32.05	MAY 2	36.75	AUG 1	46.58				

WATER YEAR 1989 HIGHEST 28.83 APR. 03 LOWEST 46.58 AUG. 01

391110119470501. Local number, 104 N15 E20 07BBAB1.
LOCATION.--Lat 39°11'10", long 119°47'05", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 150 ft, cased to 150 ft.
DATUM.--Elevation of land-surface datum is 4,800 ft. Measuring point: Hole in casing cap 0.5 ft below land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.74 ft below land-surface datum, April 21, 1975; lowest measured, 94.50 ft below land-surface datum, Sept. 6, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	90.37	DEC 6	90.33	FEB 13	87.61	APR 3	88.38	JUNE 1	90.90	AUG 1	93.67
NOV 8	91.36	JAN 4	89.89	MAR 7	87.37	MAY 2	90.05	JULY 2	92.36	SEPT 6	94.50

WATER YEAR 1989 HIGHEST 87.37 MAR. 07 LOWEST 94.50 SEPT. 06

391004119433301. Local number, 104 N15 E20 15BDBA1.
LOCATION.--Lat 39°10'04", long 119°43'33", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 105 ft, cased to 105 ft, perforated 85 to 105 ft.
DATUM.--Elevation of land-surface datum is 4,620 ft. Measuring point: Top of casing, 4.2 ft above land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.36 ft below land-surface datum, March 21, 1986; lowest measured, 13.99 ft below land-surface datum, May 16, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	8.67	DEC 6	8.53	FEB 13	8.28	APR 3	8.10	JUNE 1	7.80	AUG 1	9.08
NOV 8	8.57	JAN 4	8.47	MAR 7	8.11	MAY 2	8.46	JULY 3	8.80	SEPT 6	9.08

WATER YEAR 1989 HIGHEST 7.80 JUNE 01 LOWEST 9.08 AUG. 01, SEPT. 06

391004119433302. Local number, 104 N15 E20 15BDBA2.
LOCATION.--Lat 39°10'04", long 119°43'33", Hydrologic Unit 16050201, in Carson City.
Owner: U. S. Geological Survey.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 20 ft, cased to 20 ft, perforated 18 to 20 ft.
DATUM.--Elevation of land-surface datum is 4,620 ft. Measuring point: Top of casing, 4.0 ft above land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.05 ft below land-surface datum, March 21, 1986; lowest measured, 10.78 ft below land-surface datum, July 25, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	4.47	DEC 6	4.52	FEB 13	4.56	APR 3	4.52
NOV 8	4.49	JAN 4	4.53	MAR 7	4.56	MAY 2	4.95

WATER YEAR 1989 HIGHEST 4.47 OCT. 04 LOWEST 4.95 MAY 02

EAGLE VALLEY--Continued

391004119444901. Local number, 104 N15 E20 16BCAA1.
LOCATION.--Lat 39°10'04", long 119°44'49", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 105 ft, cased to 105 ft, perforated 82 to 102 ft.
DATUM.--Elevation of land-surface datum is 4,641 ft. Measuring point: Top of casing, 0.1 ft below land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.76 ft below land-surface datum, March 23, 1983; lowest measured, 15.50 ft below land-surface datum, Aug. 7, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	12.66	DEC 6	10.02	APR 3	5.26	JUNE 1	7.53	AUG 1	13.80
NOV 8	13.20	MAR 7	7.40	MAY 2	7.29	JULY 3	8.99	SEPT 6	15.32

WATER YEAR 1989 HIGHEST 5.26 APR. 03 LOWEST 15.32 SEPT. 06

390954119460401. Local number, 104 N15 E20 17BCCD1.
LOCATION.--Lat 39°09'54", long 119°46'04", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 102 ft, cased to 102 ft, perforated 82 to 102 ft.
DATUM.--Elevation of land-surface datum is 4,680 ft. Measuring point: Top of casing, which is at land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1961, 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.90 ft below land-surface datum, April 11, 1983; lowest measured, 27.45 ft below land-surface datum, July 24, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	23.14	DEC 6	22.17	FEB 13	20.92	APR 3	19.63	JUNE 1	20.46	AUG 1	24.18
NOV 8	22.47	JAN 4	21.36	MAR 7	20.83	MAY 2	20.42	JULY 3	20.89	SEPT 6	24.55

WATER YEAR 1989 HIGHEST 19.63 APR. 03 LOWEST 24.55 SEPT. 06

390958119464301. Local number, 104 N15 E20 18BDDA1.
LOCATION.--Lat 39°09'58", long 119°46'43", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 102 ft, cased to 102 ft, perforated 82 to 102 ft.
DATUM.--Elevation of land-surface datum is 4,739 ft. Measuring point: Top of casing, 0.1 ft below land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.34 ft below land-surface datum, Jan. 1, 1975; lowest measured, 20.11 ft below land-surface datum, Sept. 6, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	19.79	JAN 4	19.87	APR 3	16.59	JULY 3	18.81	SEPT 13	19.89
NOV 8	19.94	FEB 13	19.92	MAY 2	17.42	AUG 1	19.83		
DEC 6	19.89	MAR 7	19.69	JUNE 1	18.55	SEPT 6	20.11		

WATER YEAR 1989 HIGHEST 16.59 APR. 03 LOWEST 20.11 SEPT. 06

390807119450901. Local number, 104 N15 E20 29DAAB1.
LOCATION.--Lat 39°08'07", long 119°45'09", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 105 ft, cased to 105 ft, perforated 80 to 100 ft.
DATUM.--Elevation of land-surface datum is 4,698 ft. Measuring point: Top of casing, 0.7 ft below land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.70 ft below land-surface datum, March 12, 1975; lowest measured, 54.33 ft below land-surface datum, Aug. 1, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	50.76	DEC 6	45.72	FEB 13	46.32	APR 3	45.37	JUNE 1	46.99	AUG 1	54.33
NOV 8	50.06	JAN 4	44.61	MAR 7	44.55	MAY 2	49.23	JULY 3	50.88	SEPT 6	52.22

WATER YEAR 1989 HIGHEST 44.55 MAR. 07 LOWEST 54.33 AUG. 01

390728119453801. Local number, 104 N15 E20 32BDAA1.
LOCATION.--Lat 39°07'28", long 119°45'38", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 105 ft, cased to 105 ft, perforated 82 to 102 ft.
DATUM.--Elevation of land-surface datum is 4,720 ft. Measuring point: Top of casing, 0.1 ft below land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.03 ft below land-surface datum, Feb. 12, 1975; lowest measured, 46.01 ft below land-surface datum, July 3, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	43.44	DEC 6	40.51	FEB 13	40.25	APR 3	40.03	JUNE 1	41.45	AUG 1	44.54
NOV 8	42.41	JAN 4	40.49	MAR 7	39.83	MAY 2	42.36	JULY 3	46.01	SEPT 6	44.47

WATER YEAR 1989 HIGHEST 39.83 MAR. 07 LOWEST 46.01 JULY 03

391205119444901. Local number, 104 N16 E20 33CCDD1.
LOCATION.--Lat 39°12'05", long 119°44'49", Hydrologic Unit 16050201, in Carson City.
Owner: Nevada-DWR.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused observation well, diameter 2 in., depth 118 ft, cased to 118 ft, perforated 94 to 118 ft.
DATUM.--Elevation of land-surface datum is 4,732 ft. Measuring point: Top of casing, which is at land-surface datum.
REMARKS.--Measurements supplied by Office of Nevada State Engineer and U.S. Geological Survey personnel.
PERIOD OF RECORD.--1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.10 ft below land-surface datum, March 21, 1986; lowest measured, 49.24 ft below land-surface datum, Sept. 17, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	46.34	JAN 4	46.60	APR 3	46.50	JULY 3	46.49	SEPT 13	46.67
NOV 8	46.51	FEB 13	46.66	MAY 2	46.47	AUG 1	46.53		
DEC 6	46.63	MAR 7	46.57	JUNE 1	46.49	SEPT 6	46.64		

WATER YEAR 1989 HIGHEST 46.34 OCT. 04 LOWEST 46.67 SEPT. 13

PAHRUMP VALLEY

360836115531701. Local number, 162 S21 E54 10ACC1.
LOCATION.--Lat 36°08'36", long 115°53'17", Hydrologic Unit 16060015, in Clark County.
Owner: E. S. Bowman.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 14 in., depth 800 ft, cased to 472 ft, perforated 100 to 450 ft.
DATUM.--Elevation of land-surface datum is 2,885 ft. Measuring point: Edge of recorder shelf, 1.2 ft above land-surface datum.
REMARKS.--State Engineer Well No. 22, measurements supplied by Office of the Nevada State Engineer.
PERIOD OF RECORD.--1944, 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.34 ft below land-surface datum, Oct. 13, 1944; lowest measured, 112.70 ft below land-surface datum, Nov. 7, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	100.41	99.20	94.91	91.98	90.86	91.67	93.13	97.84	---	99.81	100.34	98.96
10	99.99	98.56	94.51	91.56	91.95	95.52	94.14	97.19	99.03	99.74	99.29	100.84
15	100.08	97.13	94.37	91.46	91.61	95.90	94.16	96.39	99.13	99.52	100.12	100.63
20	99.50	96.03	93.26	91.08	91.67	93.48	---	96.82	99.24	99.80	100.34	100.76
25	100.19	95.04	92.79	90.80	91.67	93.05	---	96.94	99.80	99.96	100.78	100.32
EOM	100.10	95.56	92.30	90.84	91.67	93.12	---	97.36	99.80	100.02	100.43	100.60

WATER YEAR 1989 HIGHEST 90.80 JAN 25 LOWEST 100.84 SEPT. 10

STEPTOE VALLEY

393310114475001. Local number, 179 N20 E64 32C2
LOCATION.--Lat 39°33'10" long 114°47'50", Hydrologic Unit 16060008, in White Pine County.
Owner: U.S. Geological Survey.
AQUIFER.--Alluvium of Quaternary age.
of Quaternary age.
WELL CHARACTERISTICS.--Drilled test well, diameter 10 in., depth 110 ft, cased to 122 ft, perforated 20 to 120 ft.
DATUM.--Elevation of land-surface datum is 6,037 ft. Measuring point: Top of casiong, 1.0 ft above land-surface datum.
REMARKS.--In Steptoe Valley.
PERIOD OF RECORD.--1918, 1949-57, 1959, 1961 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.03 ft below land-surface datum, May 5, 1988; lowest measured, 17.87 ft below land-surface datum, Dec. 17, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.17	7.79	7.47	7.18	6.97	6.65	6.48	6.61	6.77	7.60	8.35	8.62
10	8.11	7.73	7.43	7.14	6.92	6.58	6.46	6.65	6.85	7.77	8.42	8.63
15	8.03	7.69	7.38	7.11	6.89	6.54	6.47	6.56	6.92	7.88	8.46	8.58
20	7.96	7.63	7.33	7.07	6.85	6.53	6.51	6.60	7.12	8.02	8.52	8.52
25	7.91	7.56	7.28	7.04	6.77	6.47	6.55	6.72	7.26	8.11	8.54	8.41
EOM	7.85	7.53	7.23	6.98	6.69	6.46	6.56	6.80	7.41	8.25	8.59	8.33

WATER YEAR 1989 HIGHEST 6.44 APR. 10 LOWEST 8.64 SEPT. 7-11

LAS VEGAS VALLEY

361843115161001. Local number 212 S19 E60 09BCC1.
LOCATION.--Lat 36°18'43", long 115°16'10", Hydrologic Unit 15010015, in Clark County.
Owner: J. P. Goumond.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 830 ft, cased to 140 ft.
DATUM.--Elevation of land-surface datum is 2,510 ft. Measuring point: Top of casing, 0.5 ft above land-surface datum.
REMARKS.--State Engineer Well No. 427, measurements supplied by Office of Nevada State Engineer.
PERIOD OF RECORD.--1944 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.65 ft below land-surface datum, June 3, 1944; lowest measured, 170.34 ft below land-surface, Sept. 20, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	164.80	161.94	160.52	161.26	161.04	161.80	164.12	165.70	166.55	167.52	168.56	169.25
10	164.80	160.98	160.56	161.36	160.55	162.15	164.70	165.60	166.68	167.67	169.08	169.80
15	164.01	161.27	161.72	161.86	160.54	162.39	164.20	165.69	166.87	168.14	169.24	170.20
20	163.55	160.50	161.72	161.32	160.51	162.20	165.03	165.84	167.10	168.38	169.25	170.34
25	163.00	160.62	161.59	161.25	160.30	162.27	165.00	166.26	167.39	168.28	169.25	169.77
EOM	163.19	160.55	161.32	161.20	160.33	163.52	165.14	165.83	167.50	168.74	169.25	170.12

WATER YEAR 1989 HIGHEST 160.30 FEB. 25 LOWEST 170.34 SEPT. 20

360349115100001. Local number, 212 S22 E61 04BCB1.
LOCATION.--Lat 36°03'49", long 115°10'00", Hydrologic Unit 15010015, in Clark County.
Owner: Fitzpatrick.
AQUIFER.--Alluvium of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 8 in., depth 355 ft above land-surface datum.
DATUM.--Elevation of land-surface datum is 2,224.91 ft. Measuring point: Top of casing, 0.8 ft above land-surface datum.
REMARKS.--State Engineer Well No. 189, measurements supplied by Office of Nevada State Engineer.
PERIOD OF RECORD.--1938 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.40 ft below land-surface datum, Jan. 25, 1939; lowest measured, 170.34 ft below land-surface datum, Aug. 21, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	166.35	DEC 09	165.36	FEB 06	164.21	MAR 27	164.77	MAY 22	166.35	AUG 01	167.97
10	162.33	12	165.20	14	163.78	APR 03	164.89	29	166.68	07	168.65
17	166.25	27	164.70	21	164.15	10	165.31	JUN 05	166.78	21	170.34
24	166.13	JAN 03	164.52	28	164.12	17	165.65	12	167.05	28	170.30
NOV 07	165.99	09	164.35	MAR 06	164.45	24	165.63	19	169.20	SEP 05	168.40
14	165.78	17	164.23	13	164.63	MAY 01	165.86	26	167.61	11	168.45
21	165.85	23	163.75	15	164.64	08	166.23	JUL 05	168.50	18	168.20
28	165.30	30	164.15	20	164.92	15	166.06	24	168.17	25	167.95

WATER YEAR 1989 HIGHEST 162.33 OCT. 10 LOWEST 170.34 AUG. 21

County codes: 003, Clark; 005, Douglas; 007, Elko; 009, Esmeralda; 011, Eureka; 013, Humboldt; 015, Lander; 017, Lincoln; 019, Lyon; 021, Mineral; 023, Nye; 027, Pershing; 029, Storey; 031, Washoe; 033, White Pine.
Independent City code: 510, Carson City.
Water-use codes: C, commercial; F, fire; H, domestic; I, irrigation; N, industrial; P, public supply; R, recreation; S, stock; U, unused.
Geologic-unit codes: 110LSVG, Quaternary Las Vegas Formation; 110VLFL, Quaternary valley fill, undifferentiated; 111FLDP, Holocene flood-plain deposits; 121MDCK, Pliocene Muddy Creek Formation; 122ALTA, Miocene ALTA Formation.
Aquifer codes: A, artesian; U, unknown; W, watertable.

	LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
1	N47 E30 15CDCD1	415800118370001	PINE FOREST FARM	13	I	110VLFL	U	200.
2	N45 E28 10CAB 1	415000118440001	ALDER CREEK RANCH	13	S	110VLFL	U	48.
9	N43 E19 33BB 1	413630119520001		31	S	110VLFL	U	70.
21	N31 E19 26B 1	403200119490001	USBLM	31	S	110VLFL	U	111.
22	N30 E23 29B 1	402700119250001		31	U	110VLFL	U	109.
24	N35 E24 32DDC 2	405208119161502	USGS	27	U	110VLFL	A	66.
32	N42 E37 32AAAC1	412854117495001	E F RUNOW	13	I	110VLFL	U	250.
33A	N42 E37 04BDCA1	413300117494001	DONALD MORRIS	13	I	110VLFL	U	360.
33A	N44 E37 33AAAA1	412934117483001	ALBISU	13	I	110VLFL	U	550.
36	N41 E52 28AADA2	412534116072602	ELLISON	7	U	110VLFL	U	200.
42	N37 E59 25BCBC1	410400115164001	MARBLE RANCH	7	H	110VLFL	W	14.
45	N33 E58 19ADDD1	404350115281001	H CONRAD	7	H	110VLFL	W	16.
46	N31 E56 16ADDA1	403400115400001		7	S	110VLFL	U	193.
48	N33 E56 08CAAD1	404521115395801	MOFAT	7	H	110VLFL	W	12.
54	N29 E48 03BDCB1	402450116324001	DEAN RANCH	11	S	110VLFL	A	53.
54	N29 E48 29CACC2	402100116352001	BEOWAWE FARMS	11	I	110VLFL	U	300.
55	N26 E45 28CBAC1	400540116550001	HENRY FILIPPINI	15	S	110VLFL	U	16.
59	N30 E44 18ADBD1	402831117034201	COPPER CANYON MINING CO	15	I	110VLFL	U	264.
59	N31 E44 01DACA1	403520117181101	USGS	15	U	110VLFL	U	52.
61	N32 E45 11DACC1	403920116520001	USGS	15	U	110VLFL	U	197.
69	N37 E38 24ACC 1	410415117384701	USGS	13	U	110VLFL	W	38.
69	N37 E39 15CBC 1	410448117344901	USGS	13	U	110VLFL	W	30.
69	N38 E39 09CCAB1	411056117354901	DWIGHT C VEDDER	13	S	110VLFL	U	58.
69	N38 E39 28CDDD1	410806117353501	W G LONG	13	I	110VLFL	U	256.
69	N41 E40 30AABB1	412421117303301	SHELTON SCHOOL	13	U	110VLFL	W	27.
70	N36 E40 30AACA1	405810117302801	DIAMOND S RANCH	13	U	110VLFL	U	101.
71	N33 E38 32BABB1	404138117441501	USBLM GUTHRIE WELL	27	U	110VLFL	W	54.
71	N35 E37 34AACC2	405130117480002		13	U	110VLFL	U	83.
72	N32 E33 33AAAA1	403620118153001	C & C CAMPBELL	27	I	110VLFL	U	288.
76	N20 E25 18CCC 1	393539119133001	JOE GARBARINO	19	U	110VLFL	U	28.
76	N20 E25 18CCC 2	393539119133002	JOE GARBARINO	19	U	110VLFL	U	155.
80	N24 E23 36CBA 1	395422119210701	W J CERESOLA	31	U	110VLFL	U	73.
80	N25 E23 23CDBA1	400100119220001		31	U	110VLFL	W	12.
81	N24 E22 31CCC 2	395357119333401	USBIA	31	U	110VLFL	U	226.
81	N27 E21 09BDA 1	401352119380201	USGS	31	U	110VLFL	U	47.
81	N27 E21 16ABD 1	401245119374401	USGS	31	U	110VLFL	U	44.
81	N28 E21 33CCD 1	401443119381201	USGS	31	U	110VLFL	U	60.

Depths, diameter, and elevation: Depths are referenced to land-surface datum (LSD). Well depth, perforated interval, and elevation are rounded to nearest foot. Well diameter is rounded to nearest inch. Elevation is that of LSD, with reference to sea level.
Period of record: Interval shown spans period from earliest measurement to latest measurement, and may include intervals with no record.
Water levels: Levels above LSD are listed as negative values.

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
16.		4380.	1968-	40.67	03/11/86	56.80	05/01/69	49.77	04/05/89
8.		4230.	1968-	3.49	03/11/86	13.76	03/22/77	6.60	04/05/89
6.		5200.	1968-	10.22	03/13/72	14.66	04/10/79	13.73	05/16/89
6.		4000.	1966-	37.91	09/15/66	55.31	07/14/88	53.63	03/15/89
6.		4013.	1966-	45.20	04/09/69	54.64	05/31/89	54.64	05/31/89
2.		4031.	1967-	-2.25	06/14/67	16.07	05/15/89	16.07	05/15/89
16.	150.- 250.	4200.	1971-	46.06	04/10/85	78.11	04/29/71	54.58	04/05/89
16.		4235.	1973-	88.02	03/18/74	108.39	03/23/77	97.38	04/05/89
16.	175.- 545.	4280.	1972-	105.69	04/06/78	144.57	04/06/82	129.68	04/04/89
2.		5700.	1970-	45.25	04/16/86	47.78	04/16/81	46.67	04/17/89
48.		5350.	1938-	0.32	04/28/64	20.80	02/26/45	3.25	04/12/89
48.		5950.	1934-	0.09	04/28/46	18.00	11/01/40	10.28	04/10/89
6.		5650.	1964-	70.78	04/02/86	90.92	03/17/70	76.14	04/12/89
42.		5500.	1944-	4.30	06/28/58	11.48	09/12/60	6.56	04/12/89
8.		4740.	1973-	-1.38	04/04/89	0.66	03/25/85	-1.38	04/04/89
14.		4800.	1958-	54.07	04/12/88	69.28	09/28/66	56.47	04/04/89
10.		5100.	1965-	4.47	05/06/85	7.88	04/06/87	6.78	04/04/89
12.		4609.	1947-	5.25	03/16/51	6.91	03/29/82	6.19	04/04/89
2.		4557.	1964-	29.81	04/13/71	32.48	05/28/64	30.70	04/04/89
6.		4520.	1949-	4.08	07/10/52	10.88	10/04/61	7.33	04/04/89
1.		4317.	1960-	19.20	11/14/72	28.22	11/19/75	23.34	04/05/89
1.	28.- 30.	4326.	1968-	22.77	04/18/72	29.18	11/03/81	27.49	04/05/89
10.	20.- 75.	4317.	1968-	8.10	11/08/77	29.80	09/03/81	28.30	04/05/89
16.		4317.	1968-	9.86	04/18/72	26.44	11/21/81	25.76	04/05/89
8.		4414.	1970-	0.69	04/23/71	9.01	11/12/81	2.27	04/05/89
6.		5200.	1949-	20.17	09/01/58	46.10	03/15/64	34.64	04/18/89
6.		4432.	1939-	28.40	07/24/46	39.46	03/28/79	32.29	04/18/89
10.		4301.	1946-	17.68	05/16/46	29.00	03/28/79	22.48	04/18/89
14.		4150.	1954-	26.39	04/11/85	45.85	03/25/70	29.16	04/18/89
6.		4134.	1953-	1.96	07/07/55	8.66	02/28/89	8.66	02/28/89
10.		4135.	1953-	3.33	09/02/53	25.06	02/28/89	25.06	02/28/89
6.		3845.	1969-	20.39	04/03/85	27.14	07/14/70	24.60	02/28/89
48.		3800.	1968-	2.47	04/18/73	4.40	03/22/88	4.20	02/28/89
8.		3988.	1970-	10.25	03/09/72	24.28	03/12/84	17.67	02/28/89
2.	45.- 47.	3845.	1967-	5.90	07/28/67	11.51	03/15/89	11.51	03/15/89
2.	42.- 44.	3810.	1967-	16.63	07/28/67	19.21	03/15/89	19.21	03/15/89
2.	58.- 60.	3865.	1967-	15.31	07/28/67	21.28	03/15/89	21.28	03/15/89

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
83 N17 E21 06ADCA1	392212119394101	CARLSBURG DEVEL CORP	29	U	122ALTA	U	290.
83 N18 E21 32ABCD1	392313119384201	JOHN CHOATE	29	H	122ALTA	U	300.
83 N18 E21 32CBBD1	392254119392001	MICHAEL DEVANY	29	H	122ALTA	U	180.
83 N18 E21 33BABC2	392320119375302	MERAK DEVEL CORP	29	F		U	200.
85 N20 E20 01CBAB1	393743119413601	CUSTOM BUILDERS	31	H		U	130.
85 N20 E20 01DACB1	393737119411501	CUSTOM BUILDERS	31	H		U	125.
85 N20 E20 03BCDC1	393744119435101	JIM PATERSON	31	H		U	379.
85 N20 E20 03DBAC1	393738119432101	E A BECKER	31	P		U	815.
85 N20 E20 10CDAB1	393637119432901	DAVID L KILEY	31	S		U	105.
85 N20 E20 10DBBC1	393649119432301	DAVID L KILEY	31	S		U	300.
85 N20 E20 10DBBC2	393649119432302	DAVID L KILEY	31	S		U	250.
85 N20 E20 11BDDA1	393655119421901	JOE GASPARI	31	S		U	199.
85 N20 E20 21AABC1	393529119441601	DEAN SMITH	31	P		U	194.
85 N20 E20 21BDDA1	393513119443501		31	U		U	215.
85 N20 E21 07BCBA1	393707119403001	JIM SWEGER	31	U		U	119.
85 N20 E21 07CBCB1	393648119403301	JIM SWEGER	31	U		U	350.
85 N20 E21 07CCCC1	393631119403401	JIM SWEGER	31	U		U	44.
85 N20 E21 18DABD1	393558119395001	RICHARD BAILEY	31	I		U	262.
85 N20 E21 18DADB1	393544119394701	HARLEY A MILLS	31	I		U	121.
85 N20 E21 18DADB2	393554119395001		31	I		U	
85 N20 E21 18DDBA1	393548119395101	RICHARD L BAILEY	31	I		U	250.
85 N21 E20 12DACD1	394154119405401	WILLIAM L WARDRUP	31	H		U	500.
85 N21 E20 24BCBA1	394032119414601	RICHARD T DONOVAN	31	I		U	217.
85 N21 E20 26DDCC1	393904119420701	ROCKWELL INTERNATIONAL	31	N		U	787.
85 N21 E20 35CCCC1	393812119425701	JIM PATERSON	31	H		U	300.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

DIAMETER IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE) HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
6.	60.- 290.	6355.	1977-	67.44	03/04/87	74.93	04/09/82	68.32	03/23/89
6.	265.- 295.	5980.	1977-	63.65	05/01/84	94.49	03/23/89	94.49	03/23/89
6.	160.- 180.	6242.	1977-	75.60	03/11/86	98.67	04/04/79	92.69	03/23/89
9.	80.- 200.	5785.	1980-	10.47	05/01/84	20.11	03/11/81	19.62	03/23/89
6.	101.- 130.	4490.	1979-	7.99	03/13/86	13.64	03/22/89	13.64	03/22/89
6.	105.- 125.	4504.	1979-	11.74	03/13/86	22.84	07/18/80	13.31	03/22/89
8.		4642.	1964-	67.67	04/20/83	103.06	07/11/79	86.40	11/04/88
								87.20	12/07/88
								87.00	02/22/89
								86.77	03/22/89
16.	238.- 813.	4520.	1964-	54.90	01/18/80	66.68	11/19/87	60.00	11/04/88
								62.78	12/07/88
8.	59.- 105.	4497.	1979-	25.19	09/20/80	32.13	03/22/89	32.13	03/22/89
12.	100.- 300.	4485.	1979-	18.64	07/10/79	32.70	04/20/83	24.80	11/04/88
								29.08	12/07/88
								25.40	02/22/89
								25.52	03/22/89
10.	50.- 250.	4485.	1979-	19.36	07/10/79	26.30	03/22/89	26.30	03/22/89
6.	80.- 160.	4463.	1964-	0.64	03/13/86	5.27	08/31/64	2.17	03/22/89
12.	152.- 194.	4497.	1979-	90.80	01/19/81	111.66	03/22/89	111.66	03/22/89
8.		4540.	1979-	89.54	01/19/81	110.20	11/04/88	110.20	11/04/88
								109.20	12/07/88
								109.40	02/22/89
								110.06	03/22/89
6.		4503.	1979-	26.49	07/03/86	28.82	07/24/79	27.00	11/04/88
								26.70	12/07/88
								27.00	02/22/89
								26.93	03/22/89
8.	100.- 350.	4490.	1979-	4.06	03/04/87	5.91	07/18/80	5.50	11/04/88
								5.18	12/07/88
								4.90	02/22/89
								4.78	03/22/89
11.		4514.	1979-	25.89	10/17/80	28.51	06/23/81	26.50	11/04/88
								26.21	12/07/88
								26.45	02/22/89
								25.97	03/22/89
9.	86.- 126.	4528.	1979-	31.96	08/04/86	36.99	07/23/79	33.21	03/22/89
10.	93.- 121.	4531.	1979-	47.02	04/04/85	52.80	03/14/88	47.48	03/22/89
		4530.	1980-	38.72	03/22/89	45.18	05/02/84	38.72	03/22/89
8.		4538.	1979-	40.03	05/15/84	44.73	07/23/79	41.90	11/04/88
								41.60	12/07/88
								41.40	02/22/89
								41.14	03/22/89
6.	310.- 494.	4875.	1979-	340.36	07/03/79	344.72	03/13/86	341.60	12/07/88
								341.60	02/22/89
								341.62	03/22/89
12.	137.- 217.	4569.	1979-	94.70	02/22/89	106.92	07/29/88	96.70	11/04/88
								96.50	12/07/88
								94.70	02/22/89
								95.99	03/22/89
10.	37.- 787.	4550.	1964-	63.09	03/18/81	69.06	04/21/81	64.70	11/04/88
								64.70	12/07/88
								65.40	02/22/89
								64.53	03/22/89
10.	58.- 288.	4496.	1980-	23.30	06/11/80	32.31	07/02/86	26.10	11/04/88
								28.06	12/07/88
								25.11	02/22/89
								27.19	03/22/89

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
85 N21 E21 20BBDC1	394038119392601	CHARLES WILTSIE	31	H		U	480.
85 N21 E21 30CAAA1	393927119401301	BOB HIVERT	31	H		U	350.
85 N21 E21 31CACA1	393828119401601	BUD MAY	31	H		U	421.
89 N16 E19 10BBDA1	391617119502101	FLYING ME RANCH	31	U	110VLFL	U	94.
89 N16 E19 26DBDC1	391308119484801	KENNETH PIERCE	31	H		U	138.
92A N20 E18 02DDDD1	393718119550601	ANDERSON FIRE DEPT	31	H		U	170.
92A N21 E18 23AADD	394034119554301	JAMES SWEGER	31	U		U	570.
92A N?1 E18 36ADDD1	393839119544101	USGS	31	U		U	150.
92A N21 E19 18BCBD1	394120119550901	LEARENO	31	H		U	810.
92A N21 E19 20BDCD1	394022119541201	USGS	31	U		U	67.
92A N21 E19 20DABC1	394013119521001	USGS	31	U		U	87.
92A N21 E19 30CACC1	393916119543701	USGS	31	U		U	22.
92B N20 E19 05CDAD2	393725119522402	J CAVANAUGH	31	U		U	
92B N20 E19 05DAAD1	393737119514801		31	U		U	
92B N20 E19 08DDCB1	393630119520201	GLANCY PEARSON	31	U		U	387.
92B N20 E19 10BCAD1	393700119501101		31	C		U	
92B N20 E19 11BCAA1	393704119491801	TRIGG WARD	31	H		U	
92B N20 E19 15CDBA1	393544119501201	ATLAS PROPANE CO	31			U	150.
92B N21 E19 15BACD1	394126119502101		31	U		U	
92B N21 E19 22DBAA1	394017119500201	USGS	31	U		U	150.
92B N21 E19 26CCDB1	393907119493101	USGS	31	U		U	62.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
6.	330.- 480.	4918.	1979-	228.83	07/16/79	281.90	03/14/88	276.62	03/22/89
7.		4752.	1979-	209.99	03/14/88	212.88	01/31/80	210.38	03/22/89
8.	141.- 291.	4668.	1979-	132.27	03/14/86	144.04	03/14/88	133.03	03/22/89
12.		5065.	1968-	5.03	03/11/86	7.20	04/25/84	5.84	03/23/89
6.	73.- 138.	5120.	1960-	6.79	03/11/86	22.00	08/07/81	13.37	03/23/89
7.	100.- 170.	5222.	1963-	19.16	03/10/83	44.08	06/23/81	42.36	10/06/88
								32.79	01/13/89
								28.51	04/04/89
								37.02	07/07/89
10.	280.- 570.	5130.	1972-	80.00	05/02/72	173.92	01/07/88	173.17	10/06/88
								168.55	01/13/89
								165.08	04/04/89
								169.83	07/05/89
1.	148.- 150.	4970.	1971-	0.79	09/18/72	25.00	10/04/71	1.59	10/06/88
								1.58	01/13/89
								1.50	07/05/89
12.		5040.	1971-	82.32	03/14/72	107.41	06/23/81	104.04	10/06/88
								96.13	01/13/89
								94.05	04/04/89
								89.75	07/05/89
2.	65.- 67.	5025.	1971-	50.69	01/07/88	59.64	06/27/80	52.26	10/06/88
								51.90	01/13/89
								54.27	04/04/89
								52.30	07/05/89
2.	85.- 87.	5040.	1971-	53.16	01/07/88	67.54	01/06/80	55.31	10/06/88
								55.57	01/13/89
								55.60	04/04/89
								55.72	07/05/89
2.	20.- 22.	4970.	1971-	1.75	04/01/86	11.31	02/12/80	9.83	10/06/88
								9.10	01/13/89
								8.43	04/04/89
8.		5060.	1983-	8.08	04/01/86	19.69	10/06/88	19.69	10/06/88
								19.53	01/13/89
								18.92	04/04/89
8.		5020.	1966-	27.11	04/01/86	57.10	06/14/77	40.94	10/06/88
								38.89	01/13/89
								37.59	04/04/89
		5170.	1974-	10.42	04/17/75	18.32	10/14/77	15.32	10/06/88
								14.31	01/13/89
								15.99	04/04/89
								15.23	07/05/89
6.		5070.	1971-	35.00	11/05/71	94.20	07/05/89	92.27	10/06/88
								90.18	01/13/89
								90.00	04/04/89
								94.20	07/05/89
		5125.	1982-	90.07	04/06/84	100.21	07/05/89	100.04	10/06/88
								90.65	01/13/89
								95.79	04/04/89
								100.21	07/05/89
6.	131.- 151.	5170.	1959-	39.43	04/01/86	119.00	02/27/59	46.53	10/06/88
								46.66	01/13/89
								46.24	04/04/89
								46.34	07/07/89
6.		5025.	1971-	133.28	06/13/72	171.50	07/05/89	170.07	10/06/88
								169.26	01/13/89
								168.16	04/04/89
								171.50	07/05/89
2.	148.- 150.	4919.	1971-	17.36	04/20/72	45.68	07/05/89	43.82	10/06/88
								40.72	01/13/89
								40.93	04/04/89
								45.68	07/05/89
2.	60.- 62.	4919.	1971-	12.80	03/16/72	39.08	10/06/88	39.08	10/06/88
								33.39	01/13/89

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
92B N21 E19 26CCDB1	393907119493101	USGS	31	U		U	62.
92B N21 E19 28CBCB1	393921119515001	USGS	31	U		U	53.
92B N21 E19 29DACB1	393920119520701	USGS	31	U		U	84.
102 N18 E24 28ACAD1	392357119173001	USBLM	19	U		U	
102 N18 E25 30DDCD1	392310119130301	SOUTHERN PACIFIC RAILROAD	19	U		U	
103 N16 E21 27DBAA1	391319119362301	JOHN D WINTERS	19	U		U	478.
103 N16 E22 04CCCC1	391626119313501	FRED GAGNON	19	U		U	103.
103 N16 E22 05BBAB1	391714119323501	LARRY THOMPSON	19	U		U	119.
103 N16 E22 09DAAA2	391557119303301	PAUL PASCUZZO	19	H		U	182.
103 N17 E22 20DBAC1	391923119315901	DENNIS AUFDENKAMP	19	U		U	245.
103 N17 E22 32CADA1	391733119321001	GERALDINE SMITH	19	U	110VLFL	U	101.
103 N17 E23 01BDBD1	392142119210901	STAGE COACH LAND CO	19	P		U	252.
103 N17 E23 01DDBA1	392129119205301	STAGE COACH LAND CO	19	U		U	276.
103 N17 E23 02BDCC1	392137119221301	STAGE COACH LAND CO	19	P		U	300.
103 N17 E23 02CDCC1	392143119222401	USGS	19	U	110VLFL	U	86.
103 N17 E23 04DDCC1	392141119240601	DUTCH HUGHES	19	U	110VLFL	U	339.
103 N17 E23 07DDDD1	392047119260501	UTAH MINE & CONST CO	19	U	110VLFL	U	386.
103 N17 E23 09CCDC1	392050119244701	USGS	19	U	110VLFL	U	82.
103 N17 E23 09DAAA1	392110119235001	USGS	19	U	110VLFL	U	84.
103 N17 E23 10ABCD1	392126119230901	USGS	19	U	110VLFL	U	88.
103 N17 E23 10BABD1	392132119232501	TERRY WEATHERMAN	19	I	110VLFL	U	300.
103 N17 E23 11DBAB1	392112119215801	MCBEAN	19	H		U	87.
103 N17 E23 18DDDD1	391954119260601	UTAH MINE & CONST CO	19	U	110VLFL	U	822.
103 N17 E23 19ACBC1	391933119263301	NORRIS LEEGARD	19	U		U	240.
103 N17 E23 19ACBC2	391935119263401	NORRIS LEEGARD	19	U		U	247.
103 N17 E23 26CCCC1	391812119224001	KATHLEEN HOLLMAN	19	H		U	176.
103 N17 E23 27ABAC1	391857119230701	STEELE HOLMAN	19	H	110VLFL	U	220.
103 N18 E23 35CBDD1	392246119222901	CARL MCHENRY	19	H		U	215.
103 N18 E23 35DCDC1	392235119215601	STAGECOACH UTILITIES	19	H		U	268.
104 N15 E19 12ACAB1	391055119473301	USGS	510	U		U	273.
104 N15 E20 11BCBC1	391052119424701	CARSON CITY	510	U		U	1472.
104 N15 E20 14CCBB1	390938119424801	CARSON CITY	510	U		U	
104 N15 E20 16CDBB1	390939119443701	SAM LOMPA	510	S		U	
104 N15 E20 17CACD1	390940119454701	NEV BLDG & GRNDS DEPT	510	P	110VLFL	U	595.
104 N15 E20 20CCBB1	391235119521501	PHILIP HARPER	510	I	110VLFL	W	38.
104 N15 E20 21CABA1	391251119491701	STATE OF NEVADA	510	H		U	67.
104 N15 E20 33CDCC1	390652119444301	CARSON CITY	510	U		U	150.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE) HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
2.	60.- 62.	4919.	1971-	12.80	03/16/72	39.08	10/06/88	32.35 36.99	04/04/89 07/05/89
2.	51.- 53.	4930.	1971-	9.91	04/01/86	17.00	09/15/77	15.11 13.78 12.84	10/06/88 01/13/89 04/04/89
2.	82.- 84.	5035.	1971-	38.54	06/23/81	53.11	06/27/80	47.48 46.65 47.04	10/06/88 01/13/89 04/04/89
8.		4387.	1989-	212.23	09/11/89	212.23	09/11/89	212.23	09/11/89
		4173.	1959-	29.87	03/24/59	47.30	02/28/62	41.79	09/12/89
13.	273.- 473.	4400.	1976-	14.00	08/05/76	21.13	07/20/81	20.15	09/11/89
8.	82.- 102.	4345.	1981-	45.00	02/12/81	59.90	09/11/89	59.90	09/11/89
8.	76.- 116.	4345.	1967-	53.24	06/19/81	56.00	05/29/67	54.89	09/11/89
9.	100.- 200.	4405.	1979-	100.00	04/03/79	127.18	09/11/89	127.18	09/11/89
6.	230.- 270.	4509.	1979-	225.00	02/25/79	240.03	09/11/89	240.03	09/11/89
8.		4347.	1970-	53.58	06/03/70	57.60	09/22/77	55.89	03/23/89
8.		4378.	1970-	145.70	06/03/70	184.23	03/11/87	156.04	03/24/89
8.	240.- 276.	4455.	1972-	224.19	07/14/72	231.76	03/24/89	231.76	03/24/89
10.	196.- 296.	4324.	1971-	79.05	07/01/72	113.03	03/28/88	106.36	03/24/89
2.	83.- 86.	4286.	1977-	50.00	07/20/77	67.17	09/11/89	64.95 67.17	03/23/89 09/11/89
12.	287.- 395.	4322.	1977-	90.12	04/11/78	96.06	12/20/79	93.23 94.42	03/23/89 09/11/89
12.	12.-	4324.	1970-	73.98	08/05/70	89.02	09/11/89	87.30 89.02	03/15/89 09/11/89
2.	52.- 82.	4271.	1977-	25.76	09/21/77	41.00	03/23/89	41.00	03/23/89
2.		4282.	1977-	53.63	03/02/78	60.24	08/17/79	57.54	03/23/89
2.		4277.	1977-	48.51	04/11/78	58.09	03/11/86	55.46	03/23/89
12.	234.- 300.	4286.	1969-	48.00	04/01/69	64.09	08/20/80	63.19	03/23/89
8.		4288.	1981-	59.54	04/17/81	63.75	03/24/89	63.75	03/24/89
17.	137.- 265.	4286.	1970-	34.84	08/05/70	46.67	03/28/88	46.54	03/15/89
10.	175.- 255.	4279.	1980-	30.76	05/02/80	34.48	09/11/89	34.22 34.48	03/15/89 09/11/89
10.	160.- 247.	4279.	1980-	33.44	12/12/80	36.18	03/15/89	36.18	03/15/89
7.	156.- 176.	4298.	1978-	63.00	04/13/83	64.23	12/20/79	63.83	03/30/89
9.	180.- 220.	4286.	1970-	51.14	06/05/70	58.14	04/22/89	58.14	04/22/89
8.	191.- 211.	4400.	1977-	160.00	09/19/77	185.56	03/28/88	180.52	03/24/89
13.	218.- 263.	4385.	1973-	162.58	03/11/87	171.40	03/24/89	171.40	03/24/89
4.	137.- 273.	4927.	1984-	202.99	05/07/84	230.63	09/15/89	230.63	09/15/89
8.		4610.	1989-	41.64	09/21/89	41.64	09/21/89	41.64	09/21/89
4.		4603.	1989-	14.70	09/21/89	14.70	09/21/89	14.70	09/21/89
8.		4635.	1989-	10.51	09/13/89	10.51	09/13/89	10.51	09/13/89
18.		4662.	1946-	1.84	03/13/52	23.80	09/17/64	9.73	03/23/89
48.		4685.	1962-	19.81	03/26/86	28.63	03/24/82	27.93	03/23/89
6.	52.- 67.	4675.	1964-	12.00	01/22/64	22.45	09/13/89	22.45	09/13/89
4.		4695.	1989-	70.92	09/21/89	70.92	09/21/89	70.92	09/21/89

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
105 N12 E19 02BDDD1	385559119485701	JOHN C FEIL	5	S		U	262.
105 N12 E19 23CDBC1	385304119460601	USGS	5	U		U	27.
105 N12 E19 36ADDA1	385138119471801	LEWALLEN LAND & CATTLE CO	5	U		U	198.
105 N12 E20 04BAAA2	385620119453101	USGS	5	U	110VLFL	U	21.
105 N12 E20 09BCAD1	385512119444801	JOHN H WHITE	5	I		U	450.
105 N12 E20 13DDBB1	385413119405001	BARBARA LEE	5	H		U	250.
105 N13 E19 04DACD1	390058119504601	C J GERHARD/JANSEN	5	U		U	373.
105 N13 E19 22DCAC2	385815119500202	USGS	5	U		U	18.
105 N13 E19 24CADD1	385821119475001	DANGBERG	5	S		U	401.
105 N13 E19 33DADD1	385637119503701	ALLERMAN	5	U		U	80.
105 N13 E20 03BCBB1	390122119424701	HECKMAN	5	U		U	108.
105 N13 E20 08ACBC1	390024119453501	USGS	5	U		U	21.
105 N13 E20 14AADA1	385944119414501	TOM & SAM NEVIS	5	U		U	301.
105 N13 E20 19AAAB1	385859119461501	DANGBERG	5	S		U	318.
105 N13 E20 23DDDA1	385815119413101	TOM & SAM NEVIS	5	I		U	392.
105 N13 E20 32CAAA1	385630119452001	MACK LAND & CATTLE CO	5	I	110VLFL	U	420.
105 N13 E21 19CBBA1	385834119395901	BUCKEY CREEK WELL	5	U		U	140.
105 N13 E21 32BDAD1	385657119385801	ANITA C JONES	5	I		U	608.
105 N14 E19 26ABBC1	390315119485001	HARVEY GROSS	5	I		U	
105 N14 E19 34DBAD1	390156119495401	HARVEY GROSS	5	I		U	248.
105 N14 E20 07CBAD1	390525119465901	DOUGLAS COUNTY	5	U		U	246.
105 N14 E20 29ACCC1	390307119452201	USGS	5	U		U	17.
105 N14 E20 33BCDA1	390208119444601	NEVADA CARSON OWNERS INC	5	U		U	220.
105 N14 E20 34BAAA1	390228119432501	EVELYN SLAUGHTER	5	U		U	126.
107 N10 E24 04CDCC1	384500119182001	WALTER STRAUB	19	U	110VLFL	U	250.
107 N10 E24 08CBCA1	384426119194601	FRED FULSTONE JR	19	I		U	504.
107 N10 E24 16ACCC1	384350119172301	JOESEPH ACCAIRI	19	I		U	486.
107 N10 E24 17CCAA1	384326119193701	WILLIAM M WEAVER JR	19	I		U	490.
107 N10 E24 18BACD1	384356119203501	FRED FULSTONE JR	19	I		U	536.
107 N11 E23 01CCCC1	385016119214801	JAY ROOKER	19	U		U	128.
107 N11 E23 02ADDD1	385040119212301	DR MAURICE BLISS	19	I		U	537.
107 N11 E23 02BBCC1	385057119220701	JOHN NEILL	19	I		U	412.
107 N11 E23 02CCBB1	385030119220501	AUGUST BUNKOWSKI	19	I		U	546.
107 N11 E23 03CBBC1	385035119240001	ANNETTE NORMAN	19	I		U	580.
107 N11 E23 12CBBB1	384949119204901	WILLIAM G WALKER	19	U		U	585.
107 N11 E23 15CBAA1	384855119234801	MARVIN BERRINGTON	19	I		U	510.
107 N11 E23 23BCBB1	384830119220501	SAM STRIEBE	19	I		U	420.
107 N12 E23 34ACCC1	385834119322301	LESTER FARRIS	19	I		U	400.
107 N12 E23 34BACB1	385205119225401	THREE 2-BAR RANCH	19	I		U	423.
107 N12 E23 36BDBD1	385141119212701	SWEETWATER RANCH CO	19	I		U	270.
107 N12 E23 36DCDC1	385109119210701	SWEETWATER RANCH CO	19	I		U	495.
107 N12 E24 31BACB1	385201119193601	WILLIAM G WALKER	19	I		U	540.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
3.		4696.	1981-	-13.80	12/21/83	-3.70	09/14/89	-3.70	09/14/89
2.		4795.	1982-	0.05	03/11/86	5.46	02/14/82	4.64	09/14/89
12.		4794.	1981-	0.56	08/16/83	8.63	09/19/88	3.92	09/14/89
2.	11.- 21.	4759.	1977-	4.33	06/06/78	9.07	03/28/79	6.05	09/14/89
16.		4769.	1981-	12.37	06/15/87	28.60	09/20/88	22.47	09/14/89
6.		5005.	1980-	144.46	03/19/81	149.38	09/14/89	149.38	09/14/89
6.	301.- 373.	4920.	1979-	213.31	09/14/89	270.00	11/30/79	213.31	09/14/89
1.		4677.	1982-	3.05	02/19/82	6.95	09/20/88	6.75	09/14/89
3.		4685.	1981-	-15.40	06/23/82	-3.40	08/17/88	-3.80	09/14/89
8.		4755.	1981-	16.51	03/11/86	27.64	09/14/89	27.64	09/14/89
8.		4756.	1981-	31.87	03/21/81	33.30	09/14/89	33.30	09/14/89
2.		4692.	1982-	0.83	03/12/86	18.75	03/23/82	5.98	09/14/89
12.		4990.	1985-	92.08	12/11/85	93.93	03/08/88	93.18	09/14/89
3.		4696.	1981-	-6.20	03/12/86	20.32	08/16/88	13.38	09/14/89
13.	310.- 392.	4885.	1982-	76.05	08/17/82	81.36	08/17/87	79.86	09/14/89
18.		4733.	1951-	7.22	07/11/67	17.54	08/16/88	13.40	09/14/89
7.		5000.	1970-	92.24	08/17/87	102.38	05/14/70	93.16	09/14/89
14.		5141.	1981-	27.23	03/09/87	29.56	09/14/89	29.56	09/14/89
8.		4776.	1981-	17.35	09/14/89	24.56	08/18/82	17.35	09/14/89
13.	48.- 248.	4740.	1973-	36.10	09/05/86	54.79	09/14/89	54.79	09/14/89
8.		4835.	1981-	91.79	05/01/81	111.25	08/17/82	110.35	09/14/89
1.		4657.	1982-	2.49	02/24/83	11.66	03/25/82	9.20	09/14/89
13.		4683.	1981-	-1.03	06/04/86	3.92	09/14/89	3.92	09/14/89
9.	102.- 122.	4782.	1974-	52.00	03/22/74	60.71	09/14/89	60.71	09/14/89
14.	100.- 250.	4920.	1948-	38.00	07/15/48	107.84	03/06/89	107.84	03/06/89
16.	100.- 504.	4950.	1973-	55.47	04/04/84	97.00	03/07/77	79.47	03/06/89
14.	196.- 486.	5000.	1972-	101.40	04/02/87	133.60	03/06/89	133.60	03/06/89
16.	150.- 490.	4980.	1976-	107.15	04/02/87	187.34	07/27/76	133.53	03/06/89
16.	198.- 536.	5000.	1974-	79.00	11/22/74	218.60	08/02/77	150.88	03/06/89
8.	108.- 128.	4790.	1975-	15.56	11/03/83	22.25	03/06/89	22.25	03/06/89
14.	147.- 537.	4780.	1969-	10.00	09/09/69	37.49	03/06/89	37.49	03/06/89
14.	96.- 412.	4797.	1960-	18.38	10/22/81	37.29	10/12/77	32.79	03/06/89
14.	138.- 546.	4800.	1970-	20.00	07/03/70	56.25	03/06/89	56.25	03/06/89
16.	165.- 580.	4881.	1976-	100.96	04/04/84	186.25	08/05/77	130.21	03/06/89
14.	230.- 585.	4790.	1972-	15.62	04/04/84	40.70	03/06/89	40.70	03/06/89
16.	130.- 510.	8420.	1973-	20.03	11/03/83	115.70	06/02/76	40.30	03/06/89
14.	100.- 420.	4800.	1961-	23.81	11/03/83	85.00	05/11/61	41.92	03/06/89
14.	100.- 400.	4795.	1960-	18.00	05/15/60	42.51	03/06/89	42.51	03/06/89
16.	100.- 423.	4795.	1961-	7.00	04/22/82	37.08	03/06/89	37.08	03/06/89
15.	94.- 252.	4766.	1956-	3.00	05/01/56	26.04	03/06/89	26.04	03/06/89
12.	147.- 495.	4782.	1960-	20.00	09/25/60	47.65	03/06/89	47.65	03/06/89
14.	270.- 534.	4790.	1968-	40.00	08/10/68	73.35	12/02/81	72.08	03/06/89

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
107 N12 E24 31DBBA1	385130119192001	DALE HUSBOE	19	I		U	587.
108 N11 E25 01ABDD1	385102119075301	HAVSIS RANCH	19	I		U	400.
108 N11 E25 10DBCD1	384942119100801	LOUIS G SCAETENA	19	I		U	597.
108 N12 E25 11CACD1	385456119091901	THOMAS WILSON	19	I		U	245.
108 N12 E25 12CDAA1	385447119075901	ALBERT MACKENZIE	19	H		U	102.
108 N12 E25 15DB 1	385410119100401	DAVE MENESINI	19	I		U	310.
108 N12 E25 21ACA 1	385332119110601	KAY BUNN	19	H		U	100.
108 N12 E25 23DCC 1	385255119090501	NAT LOMMORI	19	I		U	325.
108 N12 E25 27DAA 1	385225119094801	CHARLES HOWARD	19	I		U	
108 N12 E25 35DC 1	385204119075201	JOHN C BAKER	19	I		U	253.
108 N13 E25 01DBDD1	390100119075201	BILL BARTELS	19	I		U	505.
108 N13 E25 10CDB 1	390004119103001	W J LAGOMARSINO	19	I		U	328.
108 N13 E25 11ACBD2	390026119090401	WALKER RIVER IRR DISTRICT	19	I		U	435.
108 N13 E25 13CCCD1	385904119083001	LUIGI LOMMORI	19	I		U	306.
108 N13 E25 13DDDD1	385903119073001	JOHN CONNELY	19	I		U	280.
108 N13 E25 23DDDC1	385809119084401	WILBUR SEYDEN	19	I		U	308.
108 N13 E25 25CDDA1	385722119080701	GEORGI BROS	19	S		U	45.
108 N13 E25 26DDCC1	385720119085001	FRAZIER	19	I		U	160.
108 N13 E25 36DCCA1	385633119074201	R H HOLBROOK	19	I		U	255.
108 N13 E26 02BBCC1	390127119030001	CARROL HASKINS	19	I		U	203.
108 N13 E26 06DBDC1	390059119064301	LANDOLT	19	I		U	241.
108 N13 E26 08CACA1	390011119060201	BARBARA DILLARD	19	I		U	130.
108 N13 E26 09DBCC1	390006119043901	H H THURSTON	19	I		U	166.
108 N13 E26 31DDCD1	385628119063301	TIBBLES	19	I		U	172.
108 N14 E25 03DDDC1	390558119094701	VINCE DYE	19	I		U	85.
108 N14 E25 04DACC1	390611119110301	LARRY MASINI	19	I		U	451.
108 N14 E25 08ADDC1	390531119115901	JIM CHICO	19	I		U	523.
108 N14 E25 08CCCC1	390501119130001	LARRY MASINI	19	I		U	200.
108 N14 E25 08DCCC1	390507119122801	LARRY MASINI	19	I		U	348.
108 N14 E25 10CCDA1	390509119103401	LARRY MASINI	19	I		U	460.
108 N14 E25 11BDAC1	390538119091301	HERB PENROSE	19	S		U	60.
108 N14 E25 15CDCC1	390416119102901	S BARBER	19	I		U	286.
108 N14 E25 18DCCA1	390415119132801		19	U		U	73.
108 N14 E25 27ACCD1	390225119100801	TWAMBLEY POLI RANCH	19	I		U	320.
108 N14 E25 29DCBC1	390233119122401	C J SIMMONS	19	H		U	150.
108 N14 E25 34CB 1	390154119104001	ANTONE FARIAS	19	I		U	358.
108 N14 E26 03DCBC1	390606119032901	GENE BINGHAM	19	I		U	160.
108 N14 E26 03DCDD1	390601119031701	GENE BINGHAM	19	I		U	160.
108 N14 E26 15DAAC1	390436119030701	ARTHUR BURGRESS	19	I		U	158.
108 N14 E26 26ADCC1	390255119021101	OBRA L GLASS	19	I		U	157.
108 N14 E26 31DCCC1	390137119065401	JOHN RITTER	19	I		U	239.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
14.	197.- 587.	4810.	1971-	61.03	03/29/73	80.78	12/01/81	79.93	03/06/89
16.	156.- 382.	4538.	1960-	48.07	11/06/84	69.98	03/09/89	69.98	03/09/89
16.	183.- 575.	4568.	1961-	68.87	10/26/65	89.53	03/17/88	86.38	03/09/89
14.	100.- 245.	4436.	1961-	5.86	10/27/65	42.00	04/01/61	14.69	03/09/89
6.		4470.	1978-	18.00	06/28/78	51.08	03/09/89	51.08	03/09/89
14.	42.- 310.	4440.	1965-	9.77	11/09/65	16.15	03/09/89	16.15	03/09/89
6.		4460.	1965-	21.32	01/19/83	24.71	04/15/65	23.50	03/09/89
16.	104.- 325.	4460.	1965-	7.05	10/20/65	15.43	03/09/89	15.43	03/09/89
		4458.	1977-	11.74	08/22/79	23.30	08/16/77	16.72	03/09/89
16.	110.- 242.	4500.	1952-	8.00	01/26/52	27.16	03/09/89	27.16	03/09/89
16.	20.- 505.	4364.	1977-	6.26	03/10/80	11.14	03/24/82	10.60	03/07/89
14.	94.- 328.	4375.	1960-	5.66	04/06/87	35.00	07/08/60	9.52	03/10/89
18.	120.- 432.	4371.	1972-	7.08	01/20/83	10.92	03/10/89	10.92	03/10/89
16.	103.- 306.	4380.	1961-	1.54	10/14/80	14.00	05/27/61	10.89	03/10/89
16.	115.- 280.	4370.	1977-	5.40	03/24/81	17.00	11/15/77	12.79	03/10/89
14.	100.- 308.	4394.	1963-	5.62	10/28/65	14.43	03/10/89	14.43	03/10/89
6.		4425.	1965-	14.68	11/01/65	28.40	03/10/89	28.40	03/10/89
14.	102.-	4405.	1981-	6.22	11/06/84	17.55	03/10/89	17.55	03/10/89
14.	40.- 255.	4434.	1965-	10.22	10/28/65	36.65	03/09/89	36.65	03/09/89
12.	64.- 203.	4408.	1961-	65.00	11/04/61	80.20	03/09/89	80.20	03/09/89
14.	95.- 241.	4358.	1961-	5.01	11/07/84	9.05	03/07/89	9.05	03/07/89
13.	50.- 120.	4350.	1973-	8.00	03/01/73	16.35	03/07/89	16.35	03/07/89
12.	60.- 160.	4380.	1956-	43.00	12/15/56	59.57	04/06/87	54.33	03/09/89
13.	90.- 172.	4460.	1960-	37.00	08/04/60	94.00	03/08/79	66.33	03/09/89
16.	91.- 258.	4323.	1977-	7.35	01/20/83	24.26	04/06/87	13.43	03/07/89
16.	97.- 451.	4320.	1981-	4.98	02/01/83	10.13	03/07/89	10.13	03/07/89
16.	89.- 523.	4320.	1981-	6.48	04/02/84	11.94	03/07/89	11.94	03/07/89
		4323.	1983-	6.46	11/07/84	13.85	03/07/89	13.85	03/07/89
16.	107.- 348.	4410.	1976-	6.22	11/07/84	20.00	08/18/76	15.10	03/07/89
16.	448.- 460.	4332.	1974-	8.76	11/07/84	14.99	03/07/89	14.99	03/07/89
6.		4330.	1965-	6.02	10/27/65	12.23	03/07/89	12.23	03/07/89
14.	96.- 286.	4325.	1977-	8.70	10/14/80	18.30	11/29/77	14.73	03/07/89
10.		4345.	1965-	19.70	10/27/65	31.14	03/07/89	31.14	03/07/89
16.	91.- 320.	4351.	1960-	8.90	03/08/77	13.99	03/07/89	13.99	03/07/89
10.	110.- 150.	4390.	1960-	45.00	12/06/60	52.47	03/07/89	52.47	03/07/89
16.	103.- 358.	4360.	1961-	10.00	03/30/61	19.58	03/07/89	19.58	03/07/89
12.	87.- 123.	4330.	1959-	1.80	04/02/84	7.80	11/29/77	4.22	03/09/89
12.	87.- 123.	4333.	1983-	4.83	04/02/84	7.51	03/09/89	7.51	03/09/89
12.	58.- 158.	4328.	1961-	2.48	03/16/66	10.02	03/09/89	10.02	03/09/89
12.	80.- 157.	4400.	1980-	78.83	02/16/84	84.75	04/02/84	83.75	03/09/89
16.	87.- 239.	4349.	1977-	6.34	11/07/84	11.20	11/29/77	9.92	03/07/89

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
108 N14 E26 31DCCC2	390137119065402	JOHN RITTER	19	I		U	400.
108 N14 E26 32ADCA1	390204119052801	LANDOLT	19	I		U	308.
108 N14 E26 32BCCC2	390201119062002	O D GABLE	19	I		U	249.
108 N14 E26 32BDDD1	390203119055101	JOSEPH MANHA	19	S		U	104.
108 N15 E25 33AADD1	390727119115301	ALFRED PALMER	19	I		U	428.
108 N15 E25 34ACDD1	390715119095901	LARRY MASINI	19	I		U	370.
110C N06 E31 33BAB 1	382031118315901	SWEETWATER RANCH CO	21	U	110VLFL	U	86.
110C N06 E31 33BAB 2	382033118315501	SWEETWATER RANCH CO	21	U	110VLFL	U	126.
110C N08 E30 03DA 1	383440118365001	US ARMY AMTN PLANT	21	N	110VLFL	U	850.
110C N08 E30 04AAA 1	383525118375101	USGS	21	U	110VLFL	U	62.
110C N08 E30 18AAD 1	383310118401001	US ARMY AMTN PLANT	21	N	110VLFL	U	345.
110C N08 E30 21DDB 1	383150118380001	US ARMY AMTN PLANT	21	N	110VLFL	U	394.
110C N08 E30 26DDA 1	383100118355001	US ARMY AMTN PLANT	21	N	110VLFL	U	423.
110C N08 E31 29CDC 1	383100118330001	US ARMY AMTN PLANT	21	N	110VLFL	U	452.
110C N09 E30 29DDD 1	383624118385801	USGS	21	U	110VLFL	W	18.
110C N09 E30 33CAA 1	383550118382201	USGS	21	U	110VLFL	W	41.
117 S01 E35 28A 1	374950118051001	REX CLARK	9	S	110VLFL	U	624.
118 N03 E36 02BCB 1	380854117565601		9	U	110VLFL	U	145.
129 N30 E35 27BBAA2	402640118015002	BERGENDAHL COND CO	27	I	110VLFL	U	208.
131 N30 E42 24CCAD1	402710117124001	USBLM	15	S	110VLFL	U	54.
139 N21 E49 16C 1	394059116282901	FRED ETCHEGARAY	11	S	110VLFL	U	60.
142 S01 E42 10AAA 2	375300117150002	ESMERALDA COUNTY	9	S		U	400.
143 S03 E39 16CA 1	374036117392901	FOOTE MINERAL CO	9	S	110VLFL	U	60.
144 S06 E43 05CAD 1	372700117110001		9	S	110VLFL	U	
149 N03 E48 32B 1	380400116380001	JOHN J CASEY	23	S	110VLFL	U	150.
151 N18 E51 34D 1	392310116125001	BARTHOLEMAE CORP	11	S	110VLFL	U	134.
153 N19 E53 12C 1	393143115572701	IRENE ANDERSON	11	H	111FLDP	W	8.
153 N22 E54 27CA 1	394520115524001	ROBERT STUCKI	11	H	110VLFL	W	94.
153 N23 E53 27BB 1	395100115593001	USGS	11	U	110VLFL	W	22.
153 N23 E53 30DD 1	395020116030001	USGS	11	U	110VLFL	W	22.
153 N23 E54 18DB 1	395220115561001	USGS	11	U	110VLFL	U	32.
155A N17 E54 29CA 1	391858115550201	USBLM	11	S	110VLFL	U	60.
161 S16 E56 08BAAD1	363447115404601	USAF	3			U	437.
162 S20 E52 23BBA 1	361204116060301	W M TURNER	23	U	110VLFL	A	500.
162 S20 E53 06CDA 1	361405116033201	ROOKRIDGE & CARRADO	23	U	110VLFL	U	200.
162 S20 E53 14DCB 1	361225115590301	WILLIAMS & CREWS	23	H	110VLFL	A	254.
162 S21 E54 19DD 2	360611115561802	TURNER	23	U	110VLFL	W	76.
170 S03 E55 05BDD 1	374256115485501		17	S	110VLFL	W	20.
171 N03 E59 10BD 1	380758115204601	USGS	23	U		U	
172 N04 E58 36A 1	381000115240001	USBLM	23	S	110VLFL	U	27.
176 N28 E59 09C 1	401900115200001	RUBY VALLEY NO 1	7	S	110VLFL	U	44.

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
176 N32 E60 29C 1	403639115133001	USGS	7	U	110VLFL	U	202.
176 N32 E60 29C 2	403730115134002	USGS	7	U	110VLFL	W	15.
177 N35 E62 27B 1	405310114574001	USGS	7	U	110VLFL	U	286.
178B N22 E60 26AAB 1	394507115102501	PARIS	33	S	110VLFL	U	130.
179 N12 E63 12AB 1	385521114503601	USGS	33	U		U	640.
179 N15 E64 07A 1	391100114492001	LLOYD SORENSON	33	I	110VLFL	U	200.
179 N16 E64 06CBDC1	391634114484901	USBLM	33	U		U	306.
181 N03 E63 27CA 1	380531114534201	USGS	17	U		U	2395.
189B N43 E66 25D 1	413444114261701	ECCLES RANCH	7	U	110VLFL	W	28.
189D N40 E69 13D 1	412100114060001	GAMBLE RANCH	7	S	110VLFL	U	
203 S01 E68 33B 1	374910114231001	LAVON PHILLIPS	17	I	110VLFL	U	120.
203 S02 E68 08B 5	374750114242001	USGS	17	U	110VLFL	U	110.
203 S03 E67 02A 1	374317114265801	GRANT LEE	17	I	110VLFL	U	225.
205 S04 E67 18B 1	373627114315301	EMORY CONAWAY	17	I	110VLFL	U	165.
205 S09 E67 14BDBA2	371012114280302		17	I		U	55.
207 N09 E61 07B 1	382432115095801	LLOYD SORENSON	23	S	110VLFL	W	43.
207 N11 E61 35A 1	384640115045001	PUBLIC DOMAIN	33	S	110VLFL	U	44.
207 N12 E62 18D 1	385400115024001	USGS	33	U	110VLFL	U	108.
209 S04 E60 02A 2	373806115125102	NEIL STEWART	17	U	110VLFL	U	255.
209 S04 E60 34A 2	373330115142002	W U SCHOFIELD	17	I	110VLFL	W	96.
209 S06 E61 18DC 2	372500115104002	KENT WHIPPLE	17	U	110VLFL	W	41.
209 S08 E61 02C 1	371640115072001	LAMB	17	I	110VLFL	U	92.
212 S17 E59 20BD 1	362750115244001	USBLM	3	S		U	300.
212 S19 E57 28ADA 1	361622115350501	PAUL KINGSTON	3	H		U	
212 S19 E60 04DAB 1	361939115154801	NEV DIV FORESTRY	3	I		U	780.
212 S19 E60 12DB 1	361806115122701	ELMER LAUB	3	H		U	240.
212 S19 E60 22BDD 1	361703115150601	BOOKER REID	3	P		U	400.
212 S19 E60 24CBC 1	361655115132101	DOUGLAS O'HAIR	3	H		U	380.
212 S19 E60 36CBB 1	361453115130301	SNMRE	3	P		U	330.
212 S19 E61 21DDB 1	361626115090701	CITY NLV	3	U		U	1300.
212 S19 E61 31ADCD1	361514115112901	WILLIAM STYRES	3	H		U	300.
212 S19 E61 33ABCC1	361531115093201	CITY NLV	3	R		U	700.
212 S19 E62 29DDBA1	361555115034801	LEE YOFFE	3	C		U	300.
212 S19 E62 32BBAA1	361542115042901	USGS	3	U		U	95.
212 S19 E62 35DCDC1	361451115004401	LK MEAD B	3	P		U	838.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE) HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
6.		6000.	1949-	0.35	04/22/83	4.03	04/11/89	4.03	04/11/89
2.		6000.	1960-	0.75	03/31/70	7.48	09/21/61	6.63	04/11/89
6.		5650.	1941-	5.45	04/20/83	11.07	05/03/55	9.85	04/11/89
6.		6160.	1950-	59.85	04/21/69	66.18	08/07/84	65.16	04/18/89
		7320.	1980-	409.72	08/05/86	420.36	08/30/89	419.74	06/15/89
								420.36	08/30/89
16.		6520.	1951-	30.25	06/12/84	41.83	03/10/61	37.09	04/19/89
6.	270.- 306.	6407.	1951-	224.25	07/26/85	270.00	06/10/51	249.38	06/15/89
								250.48	08/30/89
10.		5560.	1980-	846.20	04/29/86	869.45	04/13/84	850.80	06/06/89
								850.80	07/27/89
								851.00	09/14/89
60.		5250.	1950-	7.07	04/25/85	15.21	02/28/68	14.12	10/04/88
								8.05	04/19/89
6.		4800.	1968-	5.69	03/13/74	9.30	03/28/68	6.79	04/19/89
10.	60.- 80.	4850.	1946-	30.32	04/25/86	41.63	03/11/81	39.07	02/28/89
8.		4720.	1949-	10.72	03/20/50	22.82	08/27/64	18.81	02/28/89
10.		4605.	1962-	20.74	02/24/62	24.73	03/26/86	23.29	02/28/89
14.		4360.	1963-	11.83	03/13/85	26.26	11/18/65	13.23	02/28/89
16.		2670.	1977-	25.04	03/13/84	33.00	01/21/77	29.52	02/28/89
48.		5400.	1965-	28.99	03/31/88	31.83	03/24/65	29.90	04/19/89
6.		5400.	1953-	3.20	03/16/76	13.66	10/13/62	10.85	04/19/89
6.		5600.	1962-	44.21	03/27/85	53.51	04/13/78	51.05	04/19/89
12.		4200.	1973-	88.60	03/23/73	198.87	03/26/86	186.57	02/27/89
10.		4000.	1955-	60.39	09/15/55	72.73	02/22/65	61.56	02/27/89
6.		3550.	1960-	5.85	02/23/63	11.76	01/18/77	10.26	02/27/89
10.		3020.	1952-	14.82	04/13/83	28.06	02/24/76	21.07	02/27/89
6.	80.-	2950.	1945-	26.01	02/14/72	30.88	02/14/45	29.12	03/06/89
8.		5655.	1978-	379.70	07/25/80	538.40	02/28/88	538.10	03/08/89
16.		2454.	1946-	-30.40	04/05/46	77.07	03/08/89	77.07	03/08/89
9.	80.- 240.	2350.	1975-	103.19	03/02/76	130.46	03/08/89	130.46	03/08/89
9.	200.- 400.	2360.	1976-	76.00	01/23/76	177.00	09/10/86	145.03	03/08/89
9.	210.- 380.	2315.	1977-	85.00	07/21/77	158.03	09/10/86	135.04	03/08/89
8.		2290.	1971-	127.15	03/05/71	187.98	08/09/88	177.47	11/23/88
								173.74	03/08/89
								181.37	06/01/89
								185.62	09/15/89
8.	50.-1300.	2160.	1953-	23.00	04/08/71	36.02	03/13/89	36.02	03/13/89
9.	180.- 300.	2200.	1980-	123.74	02/24/81	155.28	06/07/88	145.39	11/23/88
								142.52	03/13/89
								146.60	06/01/89
								149.97	09/15/89
8.	300.- 700.	2117.	1989-	120.82	03/13/89	120.82	03/13/89	120.82	03/13/89
8.	150.- 300.	1980.	1971-	86.10	03/06/84	115.00	07/08/71	98.32	03/13/89
4.	91.- 95.	1960.	1979-	90.62	05/01/81	93.50	03/13/89	93.50	03/13/89
14.	370.-	1867.	1972-	96.30	03/18/87	139.05	02/24/72	110.90	03/22/89
								114.98	06/14/89
								115.79	09/20/89

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212 S20 E60 09DCC 1	361259115153901	LAWRENCE MONTELLO	3	U		U	450.
212 S20 E60 12DCB 1	361254115124701	LVVWD	3	U		U	355.
212 S20 E60 13DCCD1	361201115123701	MIKE TOMASELLI	3	H		U	157.
212 S20 E60 23AABA1	361143115133801	LVVWD	3	P		U	900.
212 S20 E60 26DCC 1	361025115133801	LVVWD	3	P		U	960.
212 S20 E60 34CCCC2	360935115153201	LVVWD	3	P		U	1000.
212 S20 E60 35DDA 2	360940115133701	LVVWD	3	P		U	1010.
212 S20 E61 01ACCD1	361425115061901	USGS	3	U	110LSVG	U	84.
212 S20 E61 03DAD 2	361412115080801	NELLIS AFB	3	P	110VLFL	U	913.
212 S20 E61 04BDCA1	361426115095001		3	U	110VLFL	U	270.
212 S20 E61 11CDDC1	361305115073201	USGS	3	U	121MDCK	U	62.
212 S20 E61 13ABDB1	361232115061001	CITY NLV	3	P		U	1230.
212 S20 E61 14CCCC1	361212115065901	USGS	3	U		U	46.
212 S20 E61 18BCCD1	361237115121401	CITY NLV	3	P		U	500.
212 S20 E61 20CDC 1	361120115105301	LVVWD	3	P		U	925.
212 S20 E61 21BAA 1	361147115094001	CITY NLV	3	P	110VLFL	U	397.
212 S20 E61 22BCDD1	361141115085001	CITY NLV	3	P		U	1000.
212 S20 E61 22DACD1	361120115080401	CITY NLV	3	P	110VLFL	U	1105.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE) HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
8.	360.-	2400.	1970-	330.00	07/22/70	449.00	06/27/84	418.27	11/21/88
								417.90	12/02/88
								414.00	02/09/89
								412.05	03/08/89
								410.31	06/01/89
								418.10	09/15/89
11.	100.- 400.	2252.	1974-	98.70	06/25/86	217.00	04/02/74	99.29	11/21/88
								99.54	02/09/89
								99.51	03/14/89
								99.58	06/01/89
								99.59	09/15/89
8.		2224.	1971-	23.47	09/24/85	87.30	02/22/72	30.35	11/14/88
16.	330.- 886.	2270.	1969-	207.00	02/19/69	312.00	11/30/85	309.13	03/20/89
20.	400.- 930.	2335.	1970-	289.00	02/05/70	394.00	11/05/87	393.00	10/01/88
								390.00	11/01/88
								386.00	12/01/88
								378.00	01/01/89
								381.00	02/01/89
20.	465.- 970.	2505.	1968-	483.30	02/15/73	542.00	12/02/88	542.00	12/02/88
								538.60	03/20/89
35.	550.- 986.	2300.	1978-	316.00	04/30/80	399.00	12/31/86	388.00	12/01/88
								384.00	01/01/89
								362.00	02/01/89
								354.71	03/20/89
4.	80.- 84.	1919.	1979-	60.94	05/01/81	65.12	06/25/84	64.08	11/14/88
								63.38	02/08/89
								63.29	03/20/89
								63.96	06/07/89
								64.46	09/15/89
12.	150.- 900.	1973.	1974-	39.50	03/01/77	150.94	08/30/88	91.97	12/07/88
								91.49	03/22/89
								98.23	06/14/89
								95.56	09/22/89
12.		2105.	1976-	75.70	03/04/76	95.76	09/15/89	95.14	11/14/88
								94.73	02/08/89
								94.90	03/13/89
								95.19	06/07/89
								95.76	09/15/89
4.	58.- 62.	1920.	1979-	5.73	09/15/89	46.99	03/14/86	21.76	11/14/88
								27.32	02/08/89
								28.00	03/13/89
								29.93	06/07/89
								5.73	09/15/89
30.	102.-1040.	1857.	1973-	48.04	03/13/84	82.64	09/12/84	51.35	03/13/89
								54.30	06/07/89
								53.05	09/15/89
4.	43.- 46.	1910.	1981-	27.55	03/02/81	30.65	09/15/89	32.97	11/14/88
								29.45	02/08/89
								29.58	03/13/89
								30.20	06/07/89
								30.65	09/15/89
10.	300.- 500.	2208.	1978-	117.41	03/14/89	237.40	01/20/88	118.29	11/21/88
								117.41	03/14/89
								125.47	06/07/89
								120.89	09/15/89
	300.-	2110.	1943-	-35.65	10/20/43	194.00	08/31/82	167.08	11/21/88
								151.53	02/09/89
10.	200.- 395.	2064.	1973-	48.58	02/14/73	84.66	10/13/87	78.96	11/25/88
								77.02	06/07/89
								83.50	09/15/89
14.	500.- 925.	2019.	1973-	54.01	02/20/73	74.40	09/18/87	60.66	03/16/89
30.	249.-1019.	1911.	1973-	10.27	03/16/87	51.70	09/25/85	14.10	11/14/88
								11.75	03/14/89
								18.10	06/07/89
								14.69	09/18/89

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212 S20 E61 24CCAB1	361110115064601	CITY NLV	3	P		U	500.
212 S20 E61 27BDAA1	361102115083601	USGS	3	U	110VLFL	U	15.
212 S20 E61 30ACC 1	361053115120501	USGS	3	U		U	31.
212 S20 E61 31AADD2	361014115111401	LVVWD	3	P		U	500.
212 S20 E61 31DCD 1	360937115113401	USGS	3	U		U	18.
212 S20 E61 31DDBB1	360944115112701	LVVWD	3	P		U	410.
212 S20 E61 31DDCB1	360938115112801	LVVWD	3	P		U	1250.
212 S20 E61 32CDC 1	360941115104801	KENNETH SEARLES	3	H	110VLFL	A	665.
212 S20 E61 34BCBC1	361008115084101	UNION PACIFIC RR	3	C		U	780.
212 S20 E61 34CAA 1	360837115095501	USGS	3	U		U	22.
212 S20 E62 05CAAA1	361400115040901	CITY NLV	3	P		U	1000.
212 S20 E62 09CCC 1	361258115032101	NELLIS AFB	3	P		U	650.
212 S20 E62 15BBAB1	361233115021501	NELLIS AFB	3	P		U	1000.
212 S20 E62 18BABA1	361243115052501	CITY NLV	3	P		U	700.
212 S20 E62 26BBCC1	361100115011901	FORREST PURDY	3	H		U	330.
212 S20 E62 29DCAB1	361036115040401		3	U	110VLFL	W	98.
212 S20 E62 34CABB1	360952115020701		3	U		U	100.
212 S21 E60 12BABA1	360825115130301	DEAN & NICK DALACAS	3	U		U	165.
212 S21 E60 15BBDC1	360739115152701	WELLS CARGO	3	N	110VLFL	U	680.
212 S21 E60 16BDDB1	360712115155501	CLEAR GRAVEL INC	3	U		U	750.
212 S21 E60 35ADAB1	360444115132301	FRANK KIM	3	H	110VLFL	U	500.

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE) HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
13.	186.- 490.	1840.	1973-	3.20	03/15/83	18.34	02/14/73	4.62	03/14/89
4.	11.- 15.	2010.	1979-	9.05	11/14/88	13.06	06/14/85	9.05	11/14/88
								9.86	03/16/89
								10.49	06/07/89
								10.96	09/18/89
4.	27.- 31.	2000.	1981-	7.93	01/07/87	11.92	03/02/81	9.04	11/15/88
								9.52	02/09/89
								9.27	03/14/89
								9.26	06/07/89
								9.22	09/18/89
13.	193.- 410.	2135.	1974-	122.00	02/25/74	208.86	04/09/86	197.89	12/07/88
								203.77	03/20/89
4.	14.- 18.	2155.	1981-	6.86	08/15/88	13.21	03/02/81	7.52	11/15/88
								8.02	02/09/89
								8.13	03/14/89
								7.78	06/08/89
								9.42	09/18/89
13.	495.-1160.	2140.	1973-	112.00	02/25/74	217.00	10/06/87	203.00	10/01/88
								201.00	11/01/88
								197.00	12/01/88
								197.00	01/01/89
								194.23	03/20/89
14.	280.-	2034.	1981-	166.37	02/27/81	212.38	10/09/87	196.97	12/07/88
								178.73	03/20/89
10.	570.- 650.	2102.	1946-	-81.30	02/27/46	108.19	08/07/75	63.68	11/15/88
								55.96	02/09/89
								54.86	03/14/89
								61.10	06/08/89
								65.94	09/18/89
12.		1838.	1971-	46.55	02/23/73	84.03	09/18/89	75.38	12/07/88
								67.09	02/10/89
								72.00	03/16/89
								71.70	06/08/89
								84.03	09/18/89
4.	18.- 22.	2010.	1981-	5.23	03/16/87	8.77	07/20/83	6.70	11/15/88
								6.40	02/10/89
								6.39	03/16/89
								6.65	06/08/89
								5.74	09/18/89
14.	320.- 980.	1816.	1973-	87.68	03/02/82	144.82	09/16/86	99.68	03/16/89
14.	290.- 630.	1827.	1973-	82.20	03/03/82	243.70	09/22/89	89.66	03/22/89
								224.63	06/14/89
								243.70	09/22/89
9.	350.- 550.	1847.	1973-	91.96	01/09/87	128.20	09/15/86	100.28	03/22/89
9.		1847.	1974-	60.34	03/18/87	92.51	03/05/74	62.48	03/16/89
9.	160.- 330.	1900.	1969-	140.00	07/07/69	154.34	02/26/86	142.87	03/15/89
8.		1766.	1971-	35.84	09/18/89	75.06	10/12/77	36.78	11/15/88
								36.27	02/15/89
								36.19	03/16/89
								36.04	06/08/89
								35.84	09/18/89
		1740.	1972-	35.45	03/15/89	53.45	03/07/75	35.45	03/15/89
8.		2270.	1973-	97.49	06/08/89	154.56	03/02/77	100.55	11/28/88
								98.66	02/09/89
								97.60	03/16/89
								97.49	06/08/89
								97.52	09/21/89
10.	380.- 680.	2480.	1969-	362.30	09/13/84	467.97	01/07/86	434.04	11/28/88
								434.91	02/16/89
								434.53	03/09/89
8.	405.- 750.	2545.	1974-	443.05	03/08/74	492.20	03/09/89	492.20	03/09/89
8.	230.- 295.	2359.	1971-	257.88	03/04/71	338.23	09/13/84	313.12	03/14/89

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212 S21 E61 01ACCC1	360908115062901	USGS	3	U		U	24.
212 S21 E61 03AAAD1	360924115081101	USGS	3	U	110VLFL	U	15.
212 S21 E61 03ABB 2	360931115083802	W PARK	3	U		U	807.
212 S21 E61 04ABC 1	360921115093601	USGS	3	U		U	17.
212 S21 E61 04DDBA2	360846115091402	USGS	3	U		U	20.
212 S21 E61 09BBBB1	360838115101801	USGS	3	U		U	25.
212 S21 E61 15DDDD1	360701115081301	USGS	3	U		U	24.
212 S21 E61 16CA 3	360719115095903	SANDS HOTEL	3	P		U	840.
212 S21 E61 17BADD1	360735115105201	USGS	3	U	110LSVG	U	45.
212 S21 E61 22CCC 1	360600115091001	A P BAKER	3	U	110VLFL	A	500.
212 S21 E61 24CAD 1	360617115063801	USGS	3	U		U	24.
212 S21 E61 26DDBB1	360522115072101	USGS	3	U		U	30.
212 S21 E61 27DDBC1	360518115082401	LVVWD	3	P		U	1200.
212 S21 E61 28CABB1	360528115094201		3	U		U	93.
212 S21 E61 30DABB1	360518115112101	S J HALL	3			U	304.
212 S21 E61 36ADC 3	360449115061201	USGS	3	U	110VLFL	U	26.
212 S21 E62 08DBDA2	360733115034402	RONALD OKELBERRY	3	H		U	200.
212 S21 E62 10ACAA1	360826115020001	NEVADA POWER CO	3	U	110VLFL	U	715.
212 S21 E62 17DAB 1	360744115050801	USGS	3	U		U	11.

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
4.	20.- 24.	1840.	1979-	7.02	02/26/80	8.06	09/18/89	7.80	11/15/88
								7.62	02/10/89
								7.60	03/14/89
								7.90	06/12/89
								8.06	09/18/89
4.	11.- 15.	1990.	1979-	6.96	06/20/85	8.67	06/27/84	7.48	11/15/88
								7.43	02/10/89
								7.44	03/16/89
								7.47	06/12/89
								7.35	09/18/89
12.		2014.	1944-	-38.11	03/06/44	72.98	09/05/86	58.50	03/16/89
4.	13.- 14.	2047.	1981-	8.27	03/07/88	10.02	09/10/86	9.06	11/15/88
								8.78	02/10/89
								8.76	03/15/89
								9.04	06/12/89
								9.13	09/18/89
4.	16.- 20.	2042.	1979-	6.91	02/24/88	9.23	10/22/79	7.07	03/16/89
4.	21.- 25.	2075.	1979-	8.87	02/24/88	17.15	09/14/79	9.25	03/09/89
4.	21.- 24.	2000.	1981-	14.36	12/29/86	16.75	11/09/82	15.88	03/16/89
13.	260.- 820.	2090.	1968-	95.46	03/03/82	176.43	08/16/88	144.33	03/09/89
								164.64	06/12/89
4.	41.- 45.	2120.	1979-	9.65	09/20/89	26.69	02/26/80	10.09	11/15/88
								10.49	02/16/89
								10.49	03/09/89
								10.25	06/12/89
								9.65	09/20/89
6.		2072.	1940-	-35.60	01/24/43	93.72	07/10/78	59.99	11/21/88
								48.87	02/16/89
								57.08	03/10/89
								76.86	06/08/89
								72.39	09/20/89
4.	20.- 24.	1950.	1981-	11.18	09/13/84	14.30	03/02/81	10.61	11/15/88
								12.47	02/15/89
								12.53	03/10/89
								12.54	06/12/89
								12.76	09/20/89
4.	26.- 30.	2010.	1981-	13.62	09/16/87	16.90	02/26/86	14.54	03/15/89
12.	500.-1150.	2060.	1986-	20.75	02/19/86	30.86	08/22/86	26.03	11/21/88
								22.67	02/16/89
10.		2125.	1970-	27.85	09/20/89	40.06	03/11/74	29.10	11/15/88
								29.30	02/16/89
								29.73	03/10/89
								29.20	06/12/89
								27.85	09/20/89
8.		2225.	1970-	124.00	03/21/73	174.30	09/16/87	171.40	03/10/89
2.	23.- 26.	1948.	1977-	16.69	02/15/89	25.39	09/11/86	17.54	11/15/88
								16.69	02/15/89
								16.72	03/09/89
								17.29	06/12/89
								17.37	09/21/89
9.	50.- 200.	1731.	1971-	11.76	03/11/88	28.59	06/13/89	14.24	11/15/88
								13.10	02/15/89
								15.09	03/16/89
								28.59	06/13/89
								28.08	09/19/89
13.	50.- 80.	1705.	1972-	11.69	03/22/85	19.97	02/22/72	16.27	11/15/88
								14.71	02/15/89
								14.21	03/16/89
								14.04	06/13/89
								14.22	09/19/89
4.	7.- 11.	1730.	1981-	3.80	06/25/81	9.70	09/11/84	8.50	11/15/88
								7.39	02/15/89
								7.05	03/15/89
								7.42	06/13/89

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212 S21 E62 17DAB 1	360744115050801	USGS	3	U		U	11.
212 S21 E62 19AABA1	360651115050501	LVVWD	3	U		U	23.
212 S21 E62 20DDD 1	360601115034401	L BILLMAN	3	U		U	500.
212 S21 E62 27CCCB1	360509115023001	NEVADA POWER CO	3	U		U	360.
212 S21 E62 28AAC 1	360548115024601	USGS	3	U		U	27.
212 S22 E60 01DDDC1	360318115123501	LVVWD	3	U	110VLFL	U	1070.
212 S22 E60 20CACA1	360047115171401	MOFFAT & LILLIS	3	U	110VLFL	U	710.
212 S22 E60 23BBD 1	360118115141101	JOE HORNYAK	3			U	500.
212 S22 E61 01CCC 1	360328115065501	USGS	3	U		U	55.
212 S22 E61 04ACAD1	360400115092401		3	U		U	113.
212 S22 E61 10CCD 1	360235115090301	LEWIS J DEATCH	3	H		U	300.
212 S22 E61 12AAAD1	360321115060001	JOSEPHINE G BROWN	3	P		U	500.
212 S22 E61 20BAD 1	360112115104301	ED CLOVER	3			U	210.
212 S22 E61 24ADD 1	360115115060201	NEVA COTLEY	3	H		U	300.
212 S22 E61 29DCDB1	360002115103801		3			U	300.
212 S22 E62 08CBDC1	360241115044001	PARADISE VLLY CNTRY CLUB	3	I		U	712.
212 S22 E63 20ABC 1	360122114574801	CITY OF HENDERSON	3	U	110VLFL	U	750.
212 S23 E61 03BCC 1	361136115101401	SKY HARBOR AIRPORT	3	C		U	650.
213 S32 E66 13AB 1	350931114341601	BIG BEND WATER DISTRICT	3	P	111FLDP	U	111.
213 S32 E66 32AA 2	350721114380302	BIG BEND WATER DISTRICT	3	P	111FLDP	U	105.
213 S32 E66 33AAA 1	350723114364201	JOHN B KNIGHT	3	I	111FLDP	U	50.
213 S32 E66 33BBB 1	350726114375501	GEORGE CROMER	3	H	111FLDP	U	96.
230 S16 E49 18DCCA1	363310116294001	USBLM	23	U	110VLFL	U	348.
230 S17 E52 08CDB 1	362929116085701	HERSHAL & ETAL CLARK	23	I	110VLFL	U	246.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

DIAMETER (IN)	PERFORATED INTERVAL (FT)	ELEVATION (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE) HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
4.	7.- 11.	1730.	1981-	3.80	06/25/81	9.70	09/11/84	8.84	09/19/89
2.		1840.	1979-	11.11	03/02/87	12.29	02/26/81	11.76	03/20/89
		1720.	1973-	-61.20	02/06/88	-42.00	07/14/77	-60.80	12/07/88
								-60.50	02/15/89
								-60.00	09/20/89
		1665.	1946-	18.00	03/15/83	24.72	11/28/47	19.42	03/10/89
4.	23.- 27.	1665.	1981-	16.76	09/11/84	19.85	03/02/81	18.83	11/15/88
								19.19	02/15/89
								19.28	03/15/89
								19.18	06/12/89
								18.99	09/19/89
20.	250.-1050.	2363.	1969-	253.50	02/25/72	297.22	03/20/89	296.89	11/30/88
								297.13	02/24/89
								297.22	03/20/89
8.	610.- 710.	2810.	1963-	473.00	02/25/63	498.04	03/14/83	478.71	11/30/88
								478.50	02/24/89
								478.00	03/15/89
								478.70	06/13/89
8.	410.- 500.	2545.	1970-	400.00	03/02/70	462.80	09/10/86	455.77	03/15/89
4.	51.- 55.	2032.	1981-	46.22	03/26/85	53.61	09/21/89	51.40	06/13/89
								53.61	09/21/89
8.		2165.	1955-	40.00	07/01/55	104.17	12/14/83	98.32	11/30/88
								98.43	02/24/89
								99.49	03/16/89
								98.79	06/13/89
								99.29	09/21/89
8.	168.- 300.	2160.	1970-	90.00	06/13/70	128.12	03/10/89	121.69	12/07/88
								128.12	03/10/89
								123.93	06/13/89
								123.39	09/21/89
9.	160.- 500.	2020.	1977-	28.11	02/19/88	66.00	09/11/86	35.26	03/14/89
		2287.	1975-	179.39	03/04/77	203.78	06/26/86	202.65	03/14/89
9.	200.- 300.	2190.	1979-	155.07	02/27/80	205.00	02/22/79	174.35	03/10/89
8.		2275.	1979-	116.79	03/08/79	128.84	06/12/87	127.98	03/15/89
11.	565.- 712.	1982.	1971-	95.71	03/04/75	157.92	03/15/89	157.92	03/15/89
14.	460.- 630.	2030.	1971-	311.52	09/19/89	346.30	02/21/84	313.05	11/29/88
								313.00	02/15/89
								312.32	03/15/89
								311.94	06/12/89
								311.52	09/19/89
10.	220.- 650.	2375.	1969-	193.30	02/22/72	217.68	03/15/89	217.68	03/15/89
16.	69.- 111.	520.	1985-	20.25	05/21/86	41.14	05/15/87	31.44	02/10/89
								27.14	08/11/89
5.	70.- 100.	510.	1983-	6.00	09/24/83	18.55	05/15/87	16.68	11/23/88
								15.44	08/11/89
6.		507.	1967-	17.02	07/11/85	26.42	11/27/67	21.95	11/22/88
								22.02	02/09/89
								23.85	08/10/89
7.	95.-	511.	1973-	15.40	12/04/85	25.67	04/07/76	17.55	11/22/88
								19.77	02/10/89
								17.80	08/10/89
12.		2375.	1955-	103.10	02/12/55	117.90	04/12/89	117.90	04/12/89
12.		2395.	1960-	33.24	02/16/65	37.75	03/24/83	35.01	04/13/89

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

STATION NUMBER	LOCAL WELL NO.	STATION NAME	COUNTY	GEOLOGIC UNIT	DEPTH OF WELL, TOTAL (FEET	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
350721114380301	213 S32 E66 32AA 1	BIG BEND WELL 1 AREA 2	CLARK	FLOOD-PLAIN DEPOSITS	108.00	510
350723114364201	213 S32 E66 33AAA 1	B. LAUGHLIN (KNIGHT) WELL	CLARK	FLOOD-PLAIN DEPOSITS	50.00	507
350726114375501	213 S32 E66 33BBB 1	CROMER WELL	CLARK	FLOOD-PLAIN DEPOSITS	96.00	511
350930114351101	213 S32 E66 14DBDB1	MONITOR WELL 116	CLARK	VALLEY FILL	300.00	620
350910114344001	213 S32 E66 24BBA 1	SUNDANCE SHORES WELL	CLARK	VALLEY FILL	480.00	727
350931114341601	213 S32 E66 13AB 1	BIG BEND WELL 1 AREA 1	CLARK	FLOOD-PLAIN DEPOSITS	111.00	520

STATION NUMBER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
350721114380301	11-23-88	0835	16.68	1240	8.00	12.0	20.0	410	110	34
	02-10-89	1055	--	1220	7.90	--	21.0	380	100	32
	05-11-89	0815	E15.10	1340	7.80	19.0	18.0	410	110	33
	08-11-89	0640	15.44	1240	8.00	26.5	21.0	440	120	34
350723114364201	11-22-88	1400	21.95	1080	7.50	22.0	19.0	320	86	26
	02-09-89	1530	22.02	1080	7.90	--	18.5	330	89	26
	05-10-89	1245	20.16	1000	7.50	24.0	18.0	310	83	24
	08-10-89	1500	23.85	1030	8.00	32.0	19.0	300	81	23
350726114375501	11-22-88	1500	17.55	1000	7.50	22.0	21.0	330	84	29
	02-10-89	0945	18.77	1130	7.70	19.0	21.0	330	85	29
	05-10-89	1430	17.88	1100	7.40	29.0	21.0	320	83	28
	08-10-89	1345	18.80	952	8.10	36.0	21.0	320	83	27
350930114351101	08-11-89	0810	--	2970	7.50	25.0	27.5	880	230	73
350910114344001	11-22-88	1225	--	1610	7.80	19.5	27.0	250	70	19
350931114341601	11-23-88	1005	33.43	1420	7.60	16.0	18.0	450	120	36
	02-10-89	1215	31.44	930	8.00	18.0	16.5	300	81	23
	05-11-89	0945	--	1000	7.80	18.0	13.0	290	79	23
	08-11-89	0730	27.14	915	8.10	27.0	18.0	290	79	23

STATION NUMBER	DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
350721114380301	11-23-88	110	2	4.1	280	82	0.30	19	792	808
	02-10-89	110	2	4.4	300	84	0.30	19	818	807
	05-11-89	110	2	4.2	280	73	0.30	19	829	807
	08-11-89	110	2	5.6	300	78	0.30	20	761	810
350723114364201	11-22-88	100	2	3.7	290	86	0.30	16	710	704
	02-09-89	100	2	4.0	280	85	0.30	17	704	699
	05-10-89	100	2	3.7	270	77	0.30	18	671	668
	08-10-89	100	3	3.8	270	71	0.30	18	653	655
350726114375501	11-22-88	100	2	3.0	170	66	0.30	20	636	641
	02-10-89	99	2	3.3	160	73	0.30	19	640	653
	05-10-89	100	2	3.1	220	61	0.30	19	683	657
	08-10-89	100	2	3.1	230	59	0.30	19	634	649
350930114351101	08-11-89	280	4	7.7	440	520	0.90	29	1930	1850
350910114344001	11-22-88	220	6	3.7	260	280	0.80	23	956	955
350931114341601	11-23-88	130	3	4.5	350	160	0.30	15	923	920
	02-10-89	86	2	3.3	240	65	0.30	14	599	600
	05-11-89	82	2	3.3	230	68	0.30	12	596	583
	08-11-89	89	2	3.6	240	67	0.30	13	595	599

E Estimated.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

STATION NUMBER	DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
350721114380301	11-23-88	1.08	<0.100	3.2	4	--	130	--	--
	02-10-89	1.11	<0.100	2.9	4	--	140	--	--
	05-11-89	1.13	<0.100	2.8	4	90	160	<1	2
	08-11-89	1.03	<0.100	2.8	3	--	160	--	--
350723114364201	11-22-88	0.97	<0.100	2.6	5	--	130	--	--
	02-09-89	0.96	<0.100	2.4	5	--	130	--	--
	05-10-89	0.91	<0.100	2.0	5	76	150	<1	<1
	08-10-89	0.89	<0.100	2.1	4	--	130	--	--
350726114375501	11-22-88	0.86	<0.100	3.3	4	--	140	--	--
	02-10-89	0.87	<0.100	2.6	4	--	150	--	--
	05-10-89	0.93	<0.100	5.4	4	36	160	<1	<1
	08-10-89	0.86	<0.100	2.7	3	--	310	--	--
350930114351101	08-11-89	2.62	47.0	1.6	<1	--	520	--	--
350910114344001	11-22-88	1.30	1.60	0.3	<1	--	150	--	--
350931114341601	11-23-88	1.26	<0.100	2.3	3	--	130	--	--
	02-10-89	0.81	<0.100	1.7	3	48	90	<1	<1
	05-11-89	0.81	0.110	1.5	2	46	110	<1	<1
	08-11-89	0.81	0.110	1.7	2	--	130	--	--

STATION NUMBER	DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
350721114380301	11-23-88	--	37	--	760	--	--	--	--
	02-10-89	--	14	--	760	--	--	--	--
	05-11-89	2	19	1	760	<0.1	<1	<1.0	10
	08-11-89	--	15	--	810	--	--	--	--
350723114364201	11-22-88	--	120	--	590	--	--	--	--
	02-09-89	--	31	--	650	--	--	--	--
	05-10-89	1	150	1	580	<0.1	<1	<1.0	10
	08-10-89	--	110	--	590	--	--	--	--
350726114375501	11-22-88	--	100	--	340	--	--	--	--
	02-10-89	--	19	--	350	--	--	--	--
	05-10-89	1	200	1	340	<0.1	<1	<1.0	11
	08-10-89	--	13	--	350	--	--	--	--
350930114351101	08-11-89	--	40	--	10	--	--	--	--
350910114344001	11-22-88	--	<3	--	22	--	--	--	--
350931114341601	11-23-88	--	44	--	430	--	--	--	--
	02-10-89	1	44	13	170	--	2	3.0	20
	05-11-89	2	12	1	140	<0.1	2	<1.0	11
	08-11-89	--	22	--	140	--	--	--	--

GROUND-WATER QUALITY

STATION NUMBER	LOCAL WELL NO.	STATION NAME	DEPTH OF WELL, TOTAL (FEET)	DATE	DIS-CHARGE, INST. (CUBIC FEET PER SECOND)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE AIR (DEG C)	H-2 / H-1 STABLE-ISOTOPE RATIO (PER-MIL)	O-18 / O-16 STABLE-ISOTOPE RATIO (PER-MIL)
401654119470101	21 N28 E20 19BDCD1	SAND PASS FLOWING WELL	--	04-05-89	0.03	2670	21.0	--	--
				05-05-89	--	2670	21.5	--	--
				07-12-89	--	2640	21.5	--	--
401849119474301	21 N28 E19 12ACAD1	BONHAM RANCH SOUTH WELL	110	04-05-89	0.33	2890	21.5	--	--
				07-12-89	0.33	2790	22.0	--	--
401957119482501	21 N28 E19 01BBBD1	FLWNG WELL E OF ROTTEN EGG	60	04-05-89	0.01	4840	22.0	--	--
				07-12-89	--	4700	22.0	--	--
402357119493001	21 N29 E19 10DAAA1	FLOWING WELL N OF BUCKBRSH	56	04-05-89	0.03	3590	20.5	--	--
				07-12-89	--	3280	20.0	--	--
402846119490601	21 N30 E19 14BABC1	FLOWING WELL 3 E OF SMOKE	127	04-05-89	0.06	807	17.5	--	--
				07-12-89	--	771	17.5	--	--
402914119482501	21 N30 E19 11DAAB1	FLOWING WELL E OF CORNELL	72	04-05-89	0.03	2460	16.5	--	--
				07-12-89	--	2360	16.0	--	--
403504119465001	21 N31 E20 07BADB1	FLOWING WELL 1 NR PARKER	76	05-04-89	0.01	2330	20.5	--	--
				07-13-89	--	2240	20.5	--	--
403603119433701	21 N32 E20 33DDDC1	FLOWING WELL NR BUFFALO SL	98	04-05-89	--	702	15.0	--	--
				07-13-89	--	665	15.0	--	--
404029119362701	21 N32 E21 09AAAD1	PARKER RANCH FLOWING WELL	208	04-06-89	0.41	301	30.0	--	--
				05-03-89	--	292	30.0	-116.0	-15.05
				07-13-89	--	285	30.0	--	--
404300119285401	21 N33 E22 27BDBD1	CASEY RANCH 71 FT WELL	71	04-06-89	0.02	604	15.0	--	--
				07-13-89	--	614	14.5	--	--
404525120072601	18 N33 E16 01BBCB1	BIG SPRING	--	05-03-89	--	--	--	-113.0	-15.20
405020119324501	21 N34 E22 18BBCA1	SQUAW VALLEY FLOWING WELL	--	05-04-89	--	366	20.0	--	--
				07-13-89	--	355	19.5	--	--

GROUND-WATER LEVELS

STATION NUMBER		LOCAL WELL NO.	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	DIAMETER OF CASING (IN)	ALTITUDE OF LAND SURFACE (FEET)	WATER-LEVEL DATE	WATER LEVEL (FEET)	WATER-LEVEL STATUS	WATER-LEVEL METHOD
401528119470501	97	N28 E20 31BACD1	U	330	4	4178	10-13-88	239.48	-	S
					--		10-27-88	250.5	-	T
					--		11-04-88	250.7	-	T
					--		12-09-88	249.2	-	T
					--		01-23-89	250.1	-	T
					--		04-04-89	250.5	-	T
					--		05-05-89	250.1	-	T
					--		07-12-89	250.5	-	T
401654119470101	21	N28 E20 19BDCD1	S	--	--	3891	04-05-89	-3.0	-	G
					--		07-12-89	-2.8	-	G
401849119474301	21	N28 E19 12ACAD1	S	110	--	3884	04-05-89	-10.7	-	G
					--		07-12-89	-10.4	-	G
401957119482501	21	N28 E19 01BBBD1	S	60	--	3866	04-05-89	-1.0	-	G
					--		07-12-89	-1.3	-	-
402357119493001	21	N29 E19 10DAAA1	S	56	--	3986	04-05-89	-3.0	-	G
					--		07-12-89	-1.7	-	G
402449119505201	21	N29 E20 04DACB1	U	147	6	3982	04-05-89	86.76	-	S
					--		07-12-89	86.1	-	T
402802119511201	21	N30 E19 16CCBA1	S	194	6	3985	04-03-89	83.98	-	S
					--		07-12-89	84.07	-	S
402846119490601	21	N30 E19 14BABC1	S	127	--	3862	04-05-89	-10.8	-	G
					--		07-12-89	-11.0	-	G
402914119482501	21	N30 E19 11DAAB1	S	72	--	3856	04-05-89	-8.3	-	G
					--		07-12-89	-7.7	-	G
403200119490001	21	N31 E19 26B 1	S	111	6	4000	03-15-89	53.63	-	S
					6		04-05-89	53.62	-	S
					--		07-12-89	53.77	-	S
403504119465001	21	N31 E20 07BADB1	S	76	4	3889	05-04-89	-2.1	-	G
					--		07-13-89	-2.2	-	G
403655119455401	21	N32 E20 31AAAA1	I	200	--	3929	04-05-89	19.00	-	S
					--		07-13-89	23.65	-	S
403900119460401	21	N32 E20 18DAC 1	S	174	6	4057	04-05-89	132.2	-	T
					--		07-13-89	130.63	-	S
404300119285401	21	N33 E22 27BDBD1	S	71	--	3925	04-06-89	-9.3	-	G
					--		07-13-89	-9.0	-	G
404314119285001	21	N33 E22 27BAAC1	U	290	16	3930	04-06-89	1.08	-	S
					--		07-13-89	1.05	-	S
404644119595601	18	N34 E17 25DBBC1	S	110	6	5645	05-04-89	55.37	-	S
					--		07-11-89	55.35	-	S
405020119324501	21	N34 E22 18BBCA1	S	--	--	4485	07-13-89	-3.0	-	G

STATION NAME	SITE ID	LATITUDE	LONGITUDE	ELEVATION (FEET)	PERIOD	PRECIPITATION (INCHES)
CAVE MOUNTAIN	390946114364901	390946	1143649	10,650	10/07/88 TO 06/06/89	12.60
					06/06/89 TO 10/30/89	3.70
CHERRY CREEK RANGE	400726114524701	400726	1145247	9,700	10/07/88 TO 06/05/89	8.58
					06/05/89 TO 10/30/89	3.90
HAYFORD PEAK	363929115115801	363929	1151158	9,840	10/26/88 TO 05/18/89	6.00
					05/18/89 TO 10/31/89	1.25
KYLE CANYON	361457115373301	361457	1153733	7,760	10/28/88 TO 05/18/89	13.25
					05/18/89 TO 11/01/89	7.25
LEE CANYON	361822115402501	361822	1154025	8,510	10/28/88 TO 05/18/89	11.25
					05/18/89 TO 11/01/89	1.00
MT. HAMILTON	391436115323901	391436	1153239	10,600	10/07/88 TO 06/05/89	15.00
					06/05/89 TO 10/30/89	2.84
MT. WASHINGTON	385409114185401	385409	1141854	10,400	10/21/88 TO 06/29/89	15.70
					06/29/89 TO 11/02/89	6.68
MT. WILSON	381438114233301	381438	1142333	9,200	10/26/88 TO 05/17/89	12.79
					05/17/89 TO 10/31/89	4.63
NW OF MT. MORIAH	391913114143101	391913	1141431	9,300	10/07/88 TO 06/05/89	9.54
					06/05/89 TO 10/30/89	3.96
POTOSI PEAK	355641115294601	365641	1152946	8,080	10/26/88 TO 05/17/89	6.75
SHEEP PEAK	363500115144301	363500	1151443	9,600	10/26/88 TO 10/31/89	6.00
TROUGH SPRING	362240115462101	362240	1154621	8,240	10/27/88 TO 05/18/89	9.00
					05/18/89 TO 11/01/89	0.75

Page

Accuracy of records 16
Acre-foot, definition of 21
Access to WATSTORE data 20
Adenosine triphosphate, definition of 21
Algae, definition of 21
Algal growth potential, definition of 21
Aquifer, definition of 21
Arrangement of records 17
Artesian, definition of 21
Artificial substrate, definition of 25
Ash Canyon Creek near Carson City 131
Ash mass, definition of 21
Austin, Kingston Creek below Cougar Canyon near . 97
  Stoneberger Creek near 94
Bacteria, definition of 21
Battle Mountain, Rock Creek near 153
Bed load, definition of 24
Bed-load discharge, definition of 24
Bed material, definition of 21
Belmont, Pine Creek near 92
  Mosquito Creek near 93
Big Smoky Valley (Northern Part),
  gaging-station records in 97-100
Biochemical oxygen demand, definition of 21
Biomass, definition of 21
Black Rock Desert basin, crest-stage
  partial-record stations in 281
  gaging station records in 267, 268
Blackwood Creek, near Tahoe City 173-177
Blue-green algae, definition of 24
Boca Reservoir near Truckee 231
Bottom material, definition of 21
Bridgeport, CA, Bridgeport Reservoir near 105
  East Walker River near 106
  Lower Twin Lake near 104
  Upper Twin Lake near 103
Bridgeport Reservoir near Bridgeport, CA 105
Bruneau River at Rowland 272
Bruneau River basin, gaging-station records in . . 272
Buckeye Creek near Minden 121
Caliente, Meadow Valley Wash near 52
Camp Richardson, Fallen Leaf Lake near 166
  Taylor Creek near 167
Carlin, Humboldt River near 149-151
Carson City, Ash Canyon Creek near 131
  Carson River at Tarzyn Road near Fallon 141
  Carson River near 127
  Clear Creek near 126
  Eagle Valley Creek at 132
  Franktown Creek near 239
  Kings Canyon Creek near 130
  Marlette Creek near 193
  Marlette Lake near 192
  North Fork Kings Canyon near 129
  North Fork Kings Canyon Diversion near 128
  Washoe Lake near 240
Carson River, Carson City near 127
  below Lahontan Reservoir near Fallon 137
  East Fork near Gardnerville 117
  East Fork below Markleeville Creek near
    Markleeville, CA 116
  near Fort Churchill 133-135
  West Fork at Woodfords, CA 122
Carson River basin, crest-stage partial-record
  stations in 280
  gaging-station records in 116-141
  discharge measurements at miscellaneous
    sites 282
Cells/volume, definition of 21
Charleston Park, Lee Canyon near 62
Charleston Peak, Peak Spring Canyon Creek near . . 101
Chemical oxygen demand, definition of 21
Chlorophyll, definition of 21
Clark, Truckee River at 250, 251
Classification of records 17
Clear Creek, near Carson City 126
Coleville, CA, West Walker River below Little
  Walker River near 108
  West Walker River near 109
Color unit, definition of 22
Colorado River, below Hoover Dam, AZ-NV 78-80
Colorado River basin, crest-stage partial-
  record stations in 278, 279
  gaging-station records in 39-81
Colorado River main stem, gaging-station
  records in 76-81
Comus, Humboldt River at 154
Contents, definition of 22
Control, definition of 22
Control structure, definition of 22

Page

Conversion factors, U.S. customary units to
  International System (SI) units . . . . Back cover
Cooperation 1
Corn Creek Spring at National Fish & Wildlife
  Headquarters 63
Crest-stage partial-record stations,
  discharge at 278-281
Crittenden Springs above Crittenden Reservoir
  near Montello 86
Crystal Bay, Third Creek near 183-186
  Incline Creek near 187-191
Cubic foot per second, definition of 22
Cubic foot per second per day, definition of . . . 22
Cubic foot per second per square mile,
  definition of 22
D-Line Canal below East Lake near Stilllwater . . 139
Daggett Creek, near Genoa 125
Data collection and computation 19, 20
Data presentation 15, 18, 19, 20
Davis Dam, Lake Mohave at 81
Deeth, Marys River above Hot Springs Creek
  near 142
Definition of terms 21-26
Diatoms, definitions of 24
Discharge, definition of 22
Discharge at partial-record stations and
  miscellaneous sites 278-287
Discontinued Gaging Stations. 31-33
Dissolved, definition of 22
Dissolved-solids concentration, definition of . . . 22
Dixie Valley basin, crest-stage partial-record
  stations in 279
Donner Creek, at Donner Lake near Truckee 213
Downstream order system 13
Drainage area, definition of. 22
Drainage basin, definition of 22
Dry mass, definition of 21
Eagle Valley Creek at Carson City 132
East Fork Carson River, near Gardnerville 117
  below Markleeville Creek, near Markleeville . . 116
East Las Vegas, Las Vegas Wasteway near 70
East Walker River, above Strosnider ditch,
  near Mason 107
  near Bridgeport, CA 106
Edgewood Creek, at Lake Tahoe near Stateline 202-204
Elko, Humboldt River near 144
  South Fork Humboldt River above
    Dixie Creek near 147, 148
  South Fork Humboldt River above Tenmile
    Creek near 145
  Tenmile Creek above South Fork Humboldt
    River near 146
Ely, Steptoe Creek near 89-91
Explanation of records 13
Fallen Leaf Lake near Camp Richardson 166
Fallon, Carson River at Tarzyn Road near 141
  Carson River below Lahontan Reservoir near . . 137
  Lahontan Reservoir near 136
Farad, Truckee River at 233
Fecal coliform bacteria, definition of 21
Fecal streptococcal bacteria, definition of 21
Fernley A Drain at Powerline Crossing
  near Fernley 253
Flamingo Wash near Torrey Pines Drive
  near Las Vegas 69
Fort Churchill, Carson River near 133-135
Franktown Creek near Carson City 239
Fredericksburg Creek, near Fredericksburg 123
Gage height, definition of 22
Gaging station, definition of 22
Gaging-station records 39-274
Gaging stations, in downstream order, for which
  records are published . . . . . vii-ix
Galena Creek, at Galena Creek State Park 242
  near Steamboat 243
Gardnerville, East Fork Carson River near . . . 117
  Pine Nut Creek near 120
General Creek near Meeks Bay 168-172
Genoa, Daggett Creek near 125
Gerlach, South Willow Creek near 270
Glendale, Muddy River near 57
Glenbrook Creek, at Glenbrook 194-197
  Logan House Creek near 198-201
Gold Creek, Owyhee River near 274
  Wild Horse Reservoir near 273
Great Basin, gaging-station records in 82-88
Great Salt Lake Desert, crest-stage partial-
  record stations in 279
  gaging-station records in 87, 88
Green algae, definition of 24

Page

Ground water 6
Ground-water levels 19
Ground-water quality 20
Ground-water records 291-325
Ground-water levels,
Primary observation wells 291-298
Secondary observation wells 300-323
Ground-water quality, data on 324, 325
Hardness, definition of 22
Hawthorne, Walker Lake near 102
Hazen, Truckee Canal near 254
Henderson, Las Vegas Wash near 71, 72
above Three Kids Wash below 73-75
High-Elevation Precipitation Network 13
Hoover Dam, AZ-NV, Colorado River below 78-80
Lake Mead at 76, 77
Hot Creek and Railroad (Northern Part) Valleys,
gaging-station records in. 95
Hualapai Flat, gaging-station records in 270
Hudson, West Walker River near 112
Humboldt River, at Comus 154
at Palisade 152
near Carlin 149-151
near Elko 144
near Imlay 157
near Rye Patch 159
Humboldt River basin, crest-stage partial-record
stations in 280, 281
discharge measurements at miscellaneous
sites 282-284
gaging-station records in 142-159
Hydrographic areas, list of 289
Hydrologic Bench-Mark Network 13, 22
Hydrologic unit, definition of 22
Hydrologic conditions during current year . . . 2-11
Identifying estimated daily discharges 16
Imlay, Humboldt River near 157
Incline Creek, near Crystal Bay 187-191
Independence Creek near Truckee 224
Indian Creek, at Diamond Valley near
Paynesville, CA 119
near Woodfords, CA 118
Instantaneous discharge, definition of 22
Introduction 1
Kings Canyon Creek near Carson City 130
North Fork near Carson City 129
North Fork Diversion near Carson City 128
Kings River near Orovada 268
Kingston Creek below Cougar Canyon, near Austin . 97
Laboratory measurements 18
Lahontan Reservoir near Fallon 136
Lake Mead, at Hoover Dam, AZ-NV 76, 77
Lake Tahoe basin, gaging station records in . 161-211
Lakes and reservoirs:
Boca Reservoir near Truckee 231
Bridgeport Reservoir near Bridgeport, CA 105
Fallen Leaf Lake near Camp Richardson 166
Lahontan Reservoir near Fallon 136
Lake Mead, at Hoover Dam, AZ-NV 76, 77
Lake Mohave at Davis Dam 81
Lake Tahoe at Tahoe City 211
Little Washoe Lake near Steamboat 241
Lower Twin Lake near Bridgeport, CA 104
Marlette Lake near Carson City 192
Martis Creek Lake 216, 217
Prosser Creek Reservoir near Truckee 222
Pyramid Lake near Nixon 160
Rye Patch Reservoir near Rye Patch 158
Stampede Reservoir near Truckee 229
Topaz Lake near Topaz, CA 110
Upper Twin Lake near Bridgeport, CA 103
Walker Lake near Hawthorne 102
Washoe Lake near Carson City 240
Wild Horse Reservoir near Gold Creek 273
Lamoille Creek near Lamoille 143
Land-surface datum, definition of 22
Las Vegas, Flamingo Wash near Torrey Pines
Drive near 69
Las Vegas Creek at Lamb Boulevard near . . 64, 65
Las Vegas Wash near Sahara Avenue at . . . 66, 67
Sloan Channel at Charleston Boulevard near . . 68
Las Vegas Valley, gaging station records in . . 62-75
Las Vegas Wash, near Henderson 71, 72
near Sahara Avenue 66, 67
above Three Kids Wash below 73-75
Las Vegas Wasteway near East Las Vegas 70

Page

Latitude-longitude system 14
Lee Canyon near Charleston Park 62
Littlefield, AZ, Virgin River at 39-41
Little Humboldt River near Paradise Valley 155
Little Truckee River, above Boca Reservoir,
near Truckee 230
below Boca Dam near Truckee 232
Little Washoe Lake near Steamboat 241
Local site numbers 14
Logan House Creek near Glenbrook 198-201
Lower Twin Lake near Bridgeport, CA 104
Marble Bluff Dam, Truckee River at 264-266
Markleeville, CA, East Fork Carson River below
Markleeville Creek near 116
Marlette Creek near Carson City 193
Marlette Lake near Carson City 192
Martin Creek near Paradise Valley 156
Martis Creek, at State Highway 267,
near Truckee 214, 215
Martis Creek Lake near Truckee 216-217
Marys River above Hot Springs Creek near Deeth . . 142
Mason, East Walker River above Strosnider
Ditch near 107
McDermitt near McDermitt Creek 267
Meadow Valley Wash, Caliente near 52
near Rox 53-56
Mean concentration, definition of 24
Mean discharge, definition of 22
Measuring point, definition of 22
Meeks Bay, General Creek near 168-172
Metamorphic stage, definition 22
Methylene blue active substances, definition of. . 22
Micrograms per gram, definition of 23
Micrograms per liter, definition of 23
Miller Spring, near Sheridan 124
Milligrams of carbon per area or volume per unit
time [mg C/(m^2.time)] for periphyton and
macrophytes and [mg C/(m^3.time)] for
phytoplankton 24
Milligrams of oxygen per area or volume per
unit time (mg0 /(m^2.time)] for periphyton
and macrophytes and [mg0 /(m^3.time)] for
phytoplankton 24
Milligrams per liter, definition of 23
Minden, Buckeye Creek near 121
Miscellaneous data:
Crest-stage partial-record stations . . . 278-286
Discharge measurements at miscellaneous
sites 282-287
Water-quality partial-record stations
and miscellaneous sites 288
Moapa, Muddy River near 47-51
Muddy spring at L.D.S. Farm near 44
Pahranagat Wash near 42, 43
Pederson Spring near 45
Warm Springs West near 46
Mahogany Creek near Summit Lake 269
Monitor Valley-Diamond Valley system,
crest-stage partial-record stations in 280
gaging station records in 92-94
Montello, Crittenden Springs above 86
Montello, Thousand Springs Creek near 87, 88
Mosquito Creek near Belmont 93
Muddy River, above Lake Mead near Overton . . . 58-60
near Glendale 57
near Moapa 47-51
National Fish & Wildlife Headquarters,
Corn Creek Spring at 63
National Geodetic Vertical Datum, definition of . 23
National Stream-Quality Accounting Network . . 13, 23
National Trends Network 13, 23
Natural substrate, definition of 25
Nixon, Pyramid Lake near 160
Truckee River near 259-263
Numbers, station identification 13
On-site measurements and sample collection 17
Organic mass, definition of 21
Organism, definition of 23
Organism count/volume, definition of 23
Orovada, Kings River near 268
Other records available 17
Overton, Muddy River above Lake Mead near . . . 58-60
Overton Beach, Rogers Spring near 61
Owyhee River basin,
gaging-station records in 273, 274
Owyhee River, Gold Creek near 274

Page

Pahranagat Wash near Moapa 42, 43
Paiute Drain above D-Line Canal near Stillwater 138
Palisade, Humboldt River near 152
Paradise Valley, Little Humboldt River near . . . 155
Martin Creek near 156
Parameter code, definition of 23
Partial-record station, definition of 23
Particle size, definition of 23
Particle-size classification, definition of . . . 23
Paynesville, CA, Indian Creek at Diamond Valley near 119
Peak Spring Canyon Creek near Charleston Peak . . 101
Pederson Spring near Moapa 45
Percent composition, definition of 23
Periphyton, definition of 23
Pesticides, definition of 24
Phytoplankton, definition of 24
Picocurie, definition of 24
Pine Creek near Belmont 92
Pine Nut Creek near Gardnerville 120
Plankton, definition of 24
Precipitation network, Nevada high-elevation 328
Cave Mountain 328
Cherry Creek Range 328
Douglas County 328
Hayford Peak 328
Kyle Canyon 328
Lee Canyon 328
Mt. Hamilton 328
Mt. Washington 328
Mt. Wilson 328
NW of Mt. Moriah 328
Potosi Peak 328
Sheep Peak 328
Trough Spring 328
Primary productivity, definition of 24
Prosser Creek below Prosser Creek Dam near Truckee 223
Publications, water-related reports for Nevada completed by the Geological Survey during calendar year 1988 . . . . . 27, 28
techniques of water-resources investigations 29, 30
Pyramid Lake near Nixon 160
Pyramid and Winnemucca Lakes basin, crest-stage partial-record stations in 281
gaging-station records in 160-266
Radiochemical program 13, 24
Records of ground-water levels 19
Records of ground-water quality 20
Records of stage and water discharge 14
Records of surface-water quality 17
Recoverable from bottom material, definition of . 24
Remarks code 19
Reno, Truckee River at 234
Reservoirs. See Lakes and reservoirs
Return period, definition of 24
Rock Creek near Battle Mountain 153
Rogers Spring, near Overton Beach 61
Round Mountain, South Twin River near 98-100
Rowland, Bruneau River at 272
Rox, Meadow Valley Wash near 53-56
Runoff, in inches, definition of 24
Rye Patch, Humboldt River near 159
Rye Patch Reservoir near Rye Patch 158
Sagehen Creek near Truckee 225-228
Sediment 18
Sediment, definition of 24
Seven-day 10-year low flow, definition of 25
Sheridan, Miller Spring near 124
Shores, Thousand Springs Creek below Toano Draw, near 84, 85
Sixmile Creek near Warm Springs 95
Sloan Channel at Charleston Boulevard near Las Vegas 68
Smoke Creek below Reservoir near Smoke Creek . . . 271
Smoke Creek Desert, gaging station records in 271
ground water records in 327
miscellaneous discharge measurements in . . 285-287
water quality of ground water in 326
Sodium-adsorption-ratio, definition of 25
Solute, definition of 25
South Fork Humboldt River above Dixie Creek near Elko 147, 148
above Tenmile Creek near Elko 145

Page

South Lake Tahoe, Trout Creek at 207-210
Upper Truckee River at 161-165
South Twin River near Round Mountain 98-100
South Willow Creek near Gerlach 270
Sparks, Truckee River near 235-238
Special networks and programs 13
Specific conductance, definition of 25
Spring discharge 275
Stage and water discharge data, explanation of 13-16
Stage-discharge relation, definition of 25
Stampede Reservoir 229
Stateline, Edgewood Creek at Lake Tahoe near . 202-204
Station identification numbers 13
Steamboat, Galena Creek near 243
Little Washoe Lake near 241
Steamboat Creek at 244
Steptoe Creek near Ely 89-91
Steptoe Valley, gaging-station records in . . . 89-91
Stillwater, D-Line Canal below Eastlake near . . 139
Paiute Drain above D-Line Canal near 138
TJ Drain at Wildlife Entrance near 140
Stoneberger Creek near Austin 94
Stone Cabin and Ralston Valleys, crest-stage partial-record stations in 280
Streamflow, definition of 25
Substrate, definition of 25
Summary of hydrologic conditions 2
Summit Lake Valley, gaging-station records in 269
Summit Lake, Mahogany Creek near 269
Surface area, definition of 25
Surface water 2
Surface-water quality 2
Surficial bed material, definition of 25
Suspended, definition of 25
Suspended, recoverable, definition of 25
Suspended sediment, definition of 24
Suspended-sediment concentration, definition of . 24
Suspended-sediment discharge, definition of . . . 25
Suspended-sediment load, definition of 25
Suspended, total, definition of 25
TJ Drain at Wildlife Entrance near Stillwater . . 140
Tahoe City, Blackwood Creek near 173-177
Truckee River at 212
Tahoe Pines, Ward Creek at State Highway 89, near 178-182
Tahoe Valley, Trout Creek near 206
Taxonomy, definition of 26
Taylor Creek, near Camp Richardson 167
Tenmile Creek, above South Fork Humboldt River near Elko 146
Terms, definition of 21-26
Thermograph, definition of 26
Third Creek near Crystal Bay 183-186
Thousand Springs Creek, below Toano Draw near Shores 84, 85
near Montello 87, 88
near Wilkins 82, 83
Time-weighted average, definition of 26
Tons per acre-foot, definition of 26
Tons per day, definition of 26
Topaz Lake near Topaz, CA 110
Total, definition of 26
Total coliform bacteria, definition of 21
Total discharge, definition of 26
Total organism count, definition of 23
Total, recoverable, definition of 26
Total-sediment discharge, definition of 25
Total-sediment load, definition of 25
Tracy, Truckee River below 249
Tritium network 13, 26
Trout Creek, at South Lake Tahoe 207-210
near Tahoe Valley 206
Truckee, Boca Reservoir near 231
Donner Creek at Donner Lake near 213
Independence Creek near 224
Little Truckee River, above Boca Reservoir, near 230
Truckee, Little Truckee River, below Boca Dam near 232
Martis Creek at State Highway 267, near 214-215
Prosser Creek below Prosser Creek Dam, near 223
Prosser Creek Reservoir, near 222
Truckee, Sagehen Creek, near 225-228
Stampede Reservoir, near 229

Page

Truckee Canal, near Hazen 254
near Wadsworth 252
Truckee River at Clark 250, 251
at Farad 233
at Marble Bluff Dam 264-266
at Reno 234
at Tahoe City 212
at Vista 245-248
below Derby Dam near Wadsworth 255-258
below Tracy 249
near Nixon 259-263
near Sparks 235-238
Upper Truckee River, at South Lake Tahoe . . . 161-165
Upper Twin Lake near Bridgeport, CA 103
Virgin River, at Littlefield, AZ 39-41
Virgin River basin, gaging-station records in . 39-60
Vista, Truckee River at 245-248
WATSTORE data, access to 20
WDR, definition of 26
WSP, definition of 26
Wabuska, Walker River near 113-115
Wadsworth, Truckee Canal near 252
Truckee River below Derby Dam near 255-258
Walker Lake near Hawthorne 102
Walker Lake Basin,
gaging-station records in 102-115
Walker River near Wabuska 113-115
Ward Creek at State Highway 89,
near Tahoe Pines 178-182
Warm Springs West, Moapa near 46
Sixmile Creek near 95

Page

Warm Springs West near Willow Creek near 96
Washoe Lake near Carson City 240
Water quality, ground water 324, 325
Water-quality, partial-record stations
and miscellaneous sites, analyses of
samples 288
Water-quality data, explanation of 17
Water-related reports for Nevada completed
by the Geological Survey during calendar
year 1989 27-28
Water temperature 17
Water year, definition of 26
Weighted average, definition of 26
Wellington, West Walker River at Hoye bridge near. 111
West Fork Carson River at Woodfords 122
West Walker River at Hoye bridge, near
Wellington 111
below Little Walker River near
Coleville, CA 108
near Coleville, CA 109
near Hudson 112
Wet mass, definition of 21
Wild Horse Reservoir near Gold Creek 273
Wilkins, Thousand Springs Creek near 82, 83
Willow Creek near Warm Springs 96
Winnemucca Lake basin. See Pyramid and
Winnemucca Lakes basin.
Woodfords, CA, Indian Creek near 118
West Fork Carson River at 122
Zooplankton, definition of 24

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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