Hydrologic Data for Long Valley Caldera, Mono County, California, 1987–93

By James F. Howle *and* Christopher D. Farrar

U.S. Geological Survey
Open-File Report 96-382

7230-12

Sacramento, California
1996

U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY
Gordon P. Eaton, Director

Any use of trade, product, or firm names in this publication is for descriptive purposes only and does not imply endorsement by the U.S. Government.

For sale by the U.S. Geological Survey
Branch of Information Services
Box 25286
Denver Federal Center
Denver, CO 80225-0286

For additional information write to:
District Chief
U.S. Geological Survey
Federal Building, Room W-2233
2800 Cottage Way
Sacramento, CA 95825

CONTENTS

Abstract 1
Introduction 1
Description of Study Area 4
Purpose and Scope 5
Previous Reports 5
Report Format 5
Acknowledgments 5
Methods of Data Collection 6
Ground-Water Levels and Temperature Profiles 6
Flow Measurements in Springs and Streams 6
Water and Gas Temperatures 7
Water Samples for Chemical and Isotopic Analyses 8
References Cited 8

FIGURES

1. Map showing location of Long Valley study area, Mono County, California 2
2. Map showing key geographic features, Long Valley Caldera, Mono County, California . . 3
3. Map showing locations of wells 16
4–20. Graphs showing:
4. Instantaneous water levels, well MWD M-14, 1988–93 17
5. Daily mean water levels, Lookout Mountain well (LKT), 1987–93 17
6. Daily mean and instantaneous water levels, Lookout Mountain well (LKT), 1987, 1988, 1989, 1990, 1991, 1992, and 1993 18
7. Instantaneous water levels, well SC-2, 1983–93 32
8. Daily mean water levels, well CH-1, 1987–92 33
9. Daily mean and instantaneous water levels, well CH-1, 1987, 1988, 1989, 1990, 1991, and 1992 34
10. Temperature log of well RDO-8, June 19, 1987 46
11. Daily mean water levels, well RDO-8, 1988–93 46
12. Daily mean and instantaneous water levels, well RDO-8, 1989, 1990, 1991, 1992, and 1993 48
13. Temperature log of well CM-2, July 22, 1989 58
14. Daily mean water levels, well CM-2, 1987–92 59
15. Daily mean water levels, well CM-2, 1987, 1988, 1989, 1990, and 1992 60
16. Instantaneous water levels, 1988–91, and mean daily water levels, 1992–93, well CW-3 70
17. Daily mean water levels, well CW-3, 1992 and 1993 72
18. Temperature log of well CH-10B, December 19, 1988 76
19. Daily mean water levels, well CH-10B, 1987–93 77
20. Daily mean and instantaneous water levels, well CH-10B, 1987, 1988, 1989, 1990, 1991, 1992, and 1993 78
21. Map showing locations of springs 115
22. Graph showing daily mean discharge, Laurel Spring (LS), 1987 116
23. Map showing locations of data-collection sites at Hot Creek Fish Hatchery 119
24–38. Graphs showing:
24. Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, 1990–93 120
25. Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, 1991, 1992, and 1993 122

26. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, 1988–92 128
27. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, 1988, 1989, 1990, 1991, and 1992 and weir site, October 1992 through December 1993 128
28. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), 1988–93 142
29. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T) October 1988 through December 1989, 1990, 1991, 1992, and 1993 142
30. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), 1987–93 154
31. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), 1987, 1988, 1989, 1990, 1991, 1992, and 1993 154
32. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), 1988–93 169
33. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), 1988, 1989, 1990, 1991, 1992, and 1993 170
34. Daily mean discharge, Colton Spring (CS), 1987–91 182
35. Daily mean and instantaneous measured gage heights, Hot Bubbling Pool (HBP), 1989–93 189
36. Daily mean and instantaneous measured gage heights, Hot Bubbling Pool (HBP), 1989, 1990, 1991, 1992, and 1993 190
37. Daily mean water temperature, Hot Bubbling Pool (HBP), 1989, 1990, and 1991 . . 200
38. Daily mean discharge, Little Hot Creek Spring (LHC-SP), 1987–93 206
39. Map showing locations of streamflow sites 209
40–45. Graphs showing:
40. Daily mean discharge, Hot Creek Flume (HCF), 1987–93 213
41. Daily mean discharge, Hot Creek Flume (HCF), 1987, 1988, 1989, 1990, 1991, 1992, and 1993 214
42. Daily mean water temperature, Hot Creek Flume (HCF), 1987–88 228
43. Daily mean specific conductance, Hot Creek Flume (HCF), 1987–88 232
44. Daily mean discharge, Little Hot Creek downstream from Little Hot Creek Spring (LHC-SW), 1990–93 235
45. Daily mean discharge, Little Hot Creek downstream from Little Hot Creek Spring (LHC-SW), 1990, 1991, 1992, and 1993 236
46. Map showing locations of fumaroles 244
47. Graph showing daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), 1991–93 245
48. Graph showing daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF) 1991, 1992, and 1993 246
49. Graph showing daily mean and instantaneous measured vent gas temperatures, Basalt Fumarole (BSF), 1987–90 252
50. Map showing locations of precipitation gages 255
51. Graph showing annual precipitation at Little Hot Creek (LHC-P), Lookout Mountain (LKT-P), and Mammoth Ranger Station (MRS), 1987–93 256
52. Map showing locations of water-quality sampling sites 261

TABLES

1. Descriptions of data-collection sites, Long Valley Caldera, Mono County, California 13
2–8. Daily mean water levels, Lookout Mountain well (LKT):
2. 1987 19
3. 1988 21
4. 1989 23
5. 1990 25
6. 1991 27
7. 1992 29
8. 1993 31

9–14. Daily mean water levels, well CH-1:
9. 1987 35
10. 1988 37
11. 1989 39
12. 1990 41
13. 1991 43
14. 1992 45
15–20. Daily mean water levels, well RDO-8:
15. 1988 47
16. 1989 49
17. 1990 51
18. 1991 53
19. 1992 55
20. 1993 57
21–25. Daily mean water levels, well CM-2:
21. 1987 61
22. 1988 63
23. 1989 65
24. 1990 67
25. 1992 69
26. Miscellaneous instantaneous water levels, well CW-3, 1988–91 71
27. Daily mean water levels, well CW-3, 1992 73
28. Daily mean water levels, well CW-3, 1993 75
29–35. Daily mean water levels, well CH-10B:
29. 1987 79
30. 1988 81
31. 1989 83
32. 1990 85
33. 1991 87
34. 1992 89
35. 1993 91
36. Ground-water levels in selected wells, 1987–93 92
37. Daily mean discharge, Laurel Spring (LS), 1987 117
38. Miscellaneous instantaneous discharge measurements, Laurel Spring (LS), 1991–92 118
39–42. Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site:
39. 1990 121
40. 1991 123
41. 1992 125
42. 1993 127
43–49. Daily mean water temperature, Fish Hatchery Spring AB (FHAB):
43. Upper site, 1988 129
44. Upper site, 1989 131
45. Upper site, 1990 133
46. Upper site, 1991 135
47. Upper site, 1992 137
48. Weir site, 1992 139
49. Weir site, 1993 140
50. Instantaneous discharge measurements, Fish Hatchery Spring CD (FHCD-Q), 1988–93 . . 141
51–56. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T):
51. 1988 143
52. 1989 144
53. 1990 147
54. 1991 149
55. 1992 151
56. 1993 153

57–63. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q):
57. 1987 155
58. 1988 157
59. 1989 159
60. 1990 161
61. 1991 163
62. 1992 165
63. 1993 167
64–69. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T):
64. 1988 171
65. 1989 173
66. 1990 175
67. 1991 177
68. 1992 179
69. 1993 181
70–74. Daily mean discharge, Colton Spring (CS):
70. 1987 183
71. 1988 184
72. 1989 185
73. 1990 186
74. 1991 187
75–79. Daily mean gage height, Hot Bubbling Pool (HBP):
75. 1989 191
76. 1990 193
77. 1991 195
78. 1992 197
79. 1993 199
80. Daily mean water temperature, Hot Bubbling Pool (HBP), 1989 201
81. Daily mean water temperature, Hot Bubbling Pool (HBP), 1990 203
82. Daily mean water temperature, Hot Bubbling Pool (HBP), 1991 205
83. Monthly mean discharge, Little Hot Creek Spring (LHC-SP), 1987–93 207
84. Miscellaneous discharge and water temperature, Big Alkali Lake Spring (BAL), 1988–93 208
85. Instantaneous discharge measurements, Mammoth Creek at Highway 395 (MC395), 1988–93 210
86. Instantaneous discharge measurements and gage heights, Mammoth Creek Flume (MCF), 1988–90 210
87. Instantaneous discharge measurements, Mammoth Creek upstream of Hot Creek Fish Hatchery (MCAF), 1988–93 210
88. Instantaneous discharge measurements, Hot Creek above Gorge Geyser (HCA), 1988–93 211
89–95. Daily mean discharge, Hot Creek Flume (HCF):
89. 1987 215
90. 1988 217
91. 1989 219
92. 1990 221
93. 1991 223
94. 1992 225
95. 1993 227
96. Daily mean water temperature, Hot Creek Flume (HCF), 1987 229
97. Daily mean water temperature, Hot Creek Flume (HCF), 1988 231
98. Daily mean specific conductance, Hot Creek Flume (HCF), 1987 233
99. Daily mean specific conductance, Hot Creek Flume (HCF), 1988 234

100–103. Daily mean discharge, Little Hot Creek downstream of Little Hot Creek Spring (LHC-SW):
100. 1990 237
101. 1991 239
102. 1992 241
103. 1993 243
104. Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), 1991 247
105. Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), 1992 249
106. Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), 1993 251
107. Daily mean vent gas temperature, Basalt Fumarole (BSF), 1987 253
108. Miscellaneous instantaneous vent gas temperatures, Basalt Fumarole (BSF), 1987–90 254
109. Daily precipitation Little Hot Creek gage (LHC-P), 1987 257
110. Daily precipitation Little Hot Creek gage (LHC-P), 1988 258
111. Daily precipitation, Lookout Mountain gage (LKT-P), 1993 259
112. Monthly precipitation, Mammoth Ranger Station gage (MRS), 1987–93 260
113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, 1987–93 262
114. Partial chemical analyses of water samples collected at selected surface-water sites and springs, 1987–93 280

CONVERSION FACTORS, ABBREVIATIONS, AND VERTICAL DATUM

Conversion Factors

Multiply	By	To obtain
foot (ft)	0.3048	meter
foot squared (ft^2)	0.09290	square meter
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
inch (in.)	25.4	millimeter
mile (mi)	1.609	kilometer

Temperature is given in degrees Celsius (°C), which can be converted to degrees Fahrenheit (°F) by the following equation:

$$°F = 1.8\ (°C) + 32$$

Abbreviations

µm = micrometer
mL = milliliter

Vertical Datum

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

Hydrologic Data for Long Valley Caldera, Mono County, California, 1987–93

By James F. Howle *and* Christopher D. Farrar

Abstract

Hydrologic data were collected during 1987–93 as part of the U.S. Geological Survey's long-term Volcanic Hazards Monitoring Program of the Long Valley Caldera, Mono County, California. The data are presented in graphs or tables. Data collected for the Long Valley Hydrologic Advisory Committee monitoring program also are presented. Hydrologic data collected include continuous record of ground-water levels in 6 wells, instantaneous measurement of ground-water levels in 55 wells, continuous record of discharge at 2 streams and 5 springs, instantaneous discharge measurements at 4 streams and 2 springs, ground-water temperature profiles of 3 thermal wells, continuous record of water temperature in 1 stream and 5 springs, vent gas temperatures at 2 fumaroles, and chemical and isotopic analyses of water samples collected at 13 ground-water and 6 surface-water sites. Precipitation amounts at three sites also are included. A diskette of data tables is provided.

INTRODUCTION

Long Valley Caldera (fig. 1) is a site of geologically recent volcanism (Bailey, 1989). The high rates of seismicity and crustal deformation recorded in Long Valley Caldera since 1980 probably are related to magmatic intrusions (Rundle and Hill, 1988). The volcanic history and recent crustal unrest have been the motivation for the U.S. Geological Survey and other agencies to monitor a number of geologic and geophysical parameters to assess the potential of volcanic eruption in the near term (Hill and others, 1991).

The volcanic activity has provided heat for a hydrothermal system that underlies the western, southern, and eastern parts of Long Valley Caldera. Ground-water temperatures greater than 200 °C have been measured in the western part of the caldera. Flow in the hydrothermal system is from west to east along the hydraulic gradient (Sorey and others, 1991). Thermal springs located in the southern and eastern parts of the caldera are natural discharge points for the hydrothermal system.

The thermal springs provide unique environments for wildlife and plants and are used for recreational bathing by thousands of tourists each year. The largest direct use of geothermal resources in the study area is at the Hot Creek Fish Hatchery (fig. 2), operated by the State of California since 1932. The hatchery uses between 15 and 25 ft^3/s of water from low-temperature (15–20 °C) thermal springs for raising trout. Use of geothermal resources for electric power generation began in 1985. By 1992, power production totaled about 40 megawatts from three plants located at Casa Diablo (fig. 2).

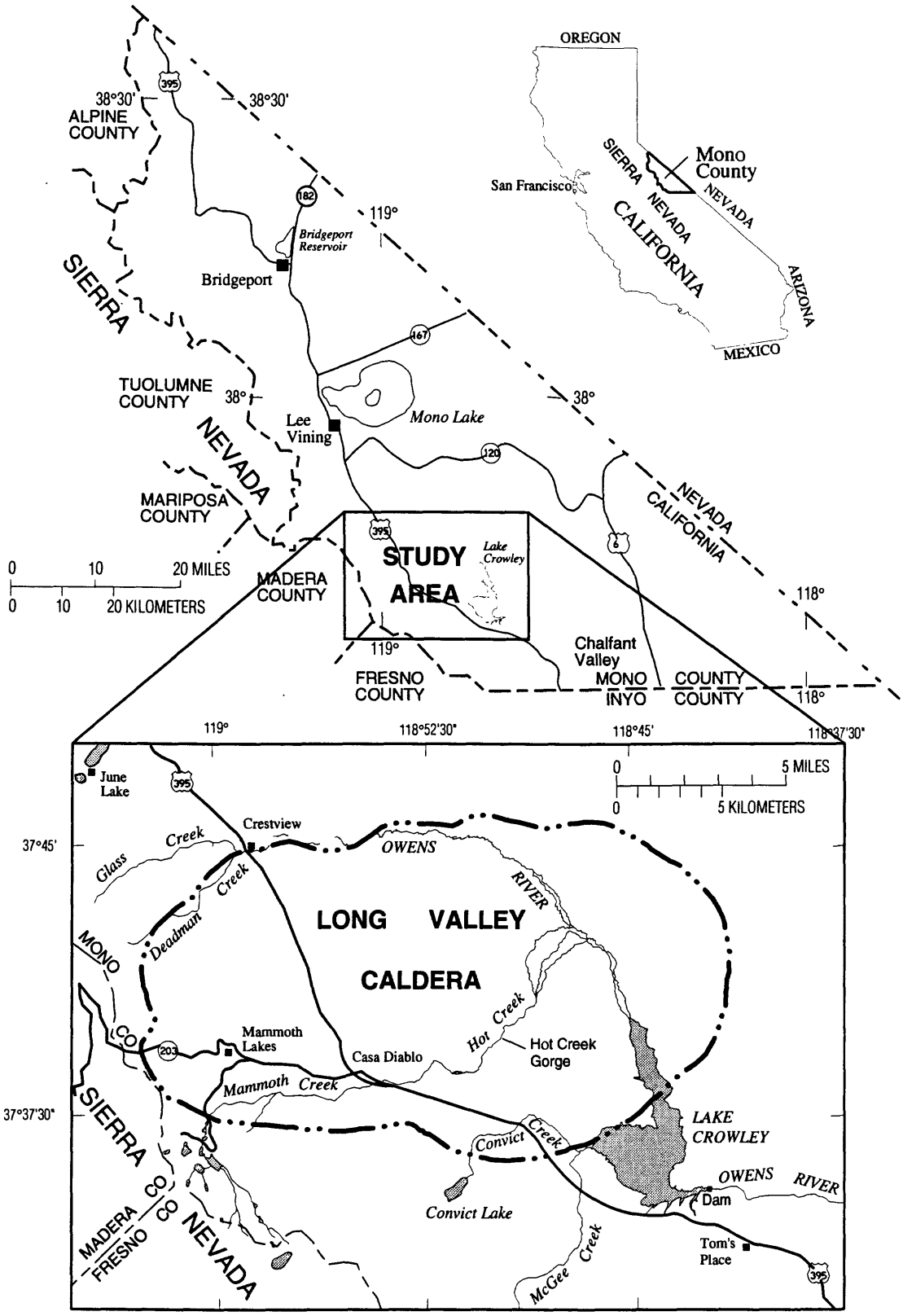

Figure 1. Location of Long Valley study area, Mono County, California.

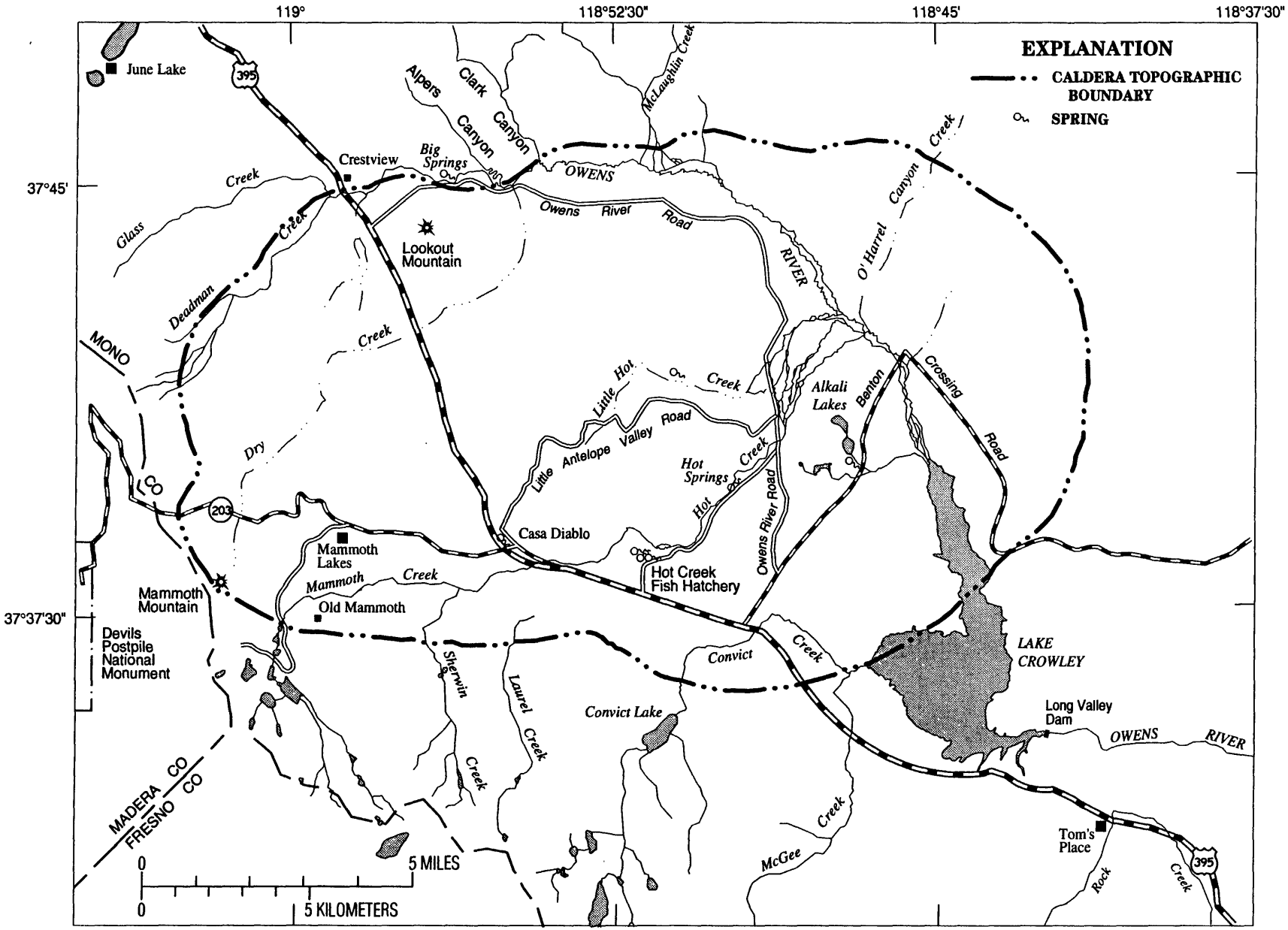

Figure 2. Key geographic features of Long Valley Caldera, Mono County, California.

A long-term hydrologic monitoring program was started in 1982 as part of the U.S. Geological Survey's Volcanic Hazards Monitoring Program. The purpose of the hydrologic monitoring is to document changes in the hydrologic system that are related to volcanic processes and seismicity. Hydrologic data collected for this purpose include ground-water levels, discharge rates of streams and springs, ground-water temperature profiles, water temperatures of streams and springs, vent gas temperatures of fumaroles, chemical and isotopic analyses of ground water and surface water, and precipitation amounts. The number of data-collection sites and frequency of data collection have varied over the years in response to changes in hydrologic conditions, the level of geologic unrest, fulfilling the needs for baseline records, and funding levels.

A second hydrologic monitoring program began in 1988 in cooperation with Mono County, California. The monitoring program was implemented to provide data to the Long Valley Hydrologic Advisory Committee (LVHAC). The LVHAC was formed in 1986 to provide Mono County with advice concerning hydrologic environmental issues related to resource developments (Farrar and Lyster, 1990). The monitoring program parallels the volcanic hazard monitoring, but is specifically directed at detecting hydrologic changes that are caused by geothermal resource utilization and ground-water pumping for potable water supply for the town of Mammoth Lakes.

The LVHAC has identified three key hydrologic features of concern for the county: Mammoth Creek, the thermal springs at Hot Creek Fish Hatchery (fig.2), and the thermal springs in Hot Creek Gorge. Hydrologic monitoring carried out by the U.S. Geological Survey for the LVHAC and Mono County is primarily at sites along Mammoth Creek, Hot Creek, and at Hot Creek Fish Hatchery (fig. 2).

Description of Study Area

Long Valley Caldera is in Mono County in eastern California along the steep eastern front of the Sierra Nevada about 20 mi south-southeast of Mono Lake (fig. 1). The caldera is an oval-shaped topographic depression measuring approximately 18 mi from east to west and about 12 mi north to south. The topographic depression formed as the result of a massive volcanic eruption about 760 thousand years ago (Sarna-Wojcicki and Pringle, 1992) and subsequent erosion. All monitoring sites for which data are presented in this report lie within the boundary of the Long Valley Caldera.

The caldera floor has a gentle topographic relief in the eastern part where altitudes range from about 6,800 to 7,200 ft above sea level. The central and western parts are more mountainous with altitudes that range up to about 9,000 ft. Prominent mountains, reaching altitudes of over 13,000 ft, enclose the caldera on the south, west, and north. The eastern boundary is of lower relief.

The caldera forms a well-defined surface-water drainage basin with a single outlet by way of Owens River in the southeastern part of the area (fig. 2). A number of perennial and intermittent streams drain from the high mountains that border the southern and western sides of the caldera. Fewer streams drain the northern mountains because precipitation amounts are less. These peripheral streams drain toward one of two main east-flowing streams on the caldera floor, Mammoth Creek on the south and Owens River on the north (fig. 2). Lake Crowley is an artificial reservoir formed by the Long Valley Dam across the Owens River. The reservoir receives water from Owens River, Mammoth Creek, and a few streams that drain smaller areas. In addition, the reservoir receives water imported from the Mono Basin located north of Long Valley Caldera. The imported water is transported 11 mi through a tunnel and discharged into the Owens River about 15 mi upstream of Lake Crowley. The reservoir is part of the water-supply system for the City of Los Angeles.

Purpose and Scope

This report provides a compilation of hydrologic data collected in Long Valley Caldera by the U.S. Geological Survey during 1987–93. Data collected for both the volcanic hazards monitoring program and the LVHAC are presented in this report. The data include ground-water levels; discharge measurements; water temperatures in wells, streams, and springs; vent gas temperatures; precipitation amounts; and chemical and isotopic analyses of water samples collected at selected sites. Hydrologic records for most of the monitoring sites span a few years and in some cases span the entire 7-year period. In many cases, these multi-year records indicate annual cycles and long-term trends.

Although no interpretations of the data are provided in this report, the data will be useful to researchers who may want to relate hydrologic changes to geodetic and geophysical measurements collected during the study of volcanic and seismic processes active during recent years. The report also provides a summary of hydrologic data relevant to some of the environmental concerns of local, State, and Federal agencies, as well as individuals.

Previous Reports

Hydrologic data from the volcanic hazards monitoring program for years prior to 1987 have been published in reports by Farrar and others (1985; 1987; 1989). Other significant data compilations include: California Department of Water Resources (1967; 1973), Lewis (1974), Willey and others (1974), Mariner and Willey (1976), and Setmire (1984). In addition, the U.S. Forest Service has published annual reports containing hydrologic data for 1980 through 1985.

Report Format

The data tables and figures in this report are grouped by site type (wells, springs, streams, fumaroles, and precipitation gages) and are further subdivided into nonthermal or thermal within the groups for wells and springs. Individual maps show the locations of sites by site type.

The presentation of data differs according to site type and the level of variability of the data over the collection period. In general, each graph is followed by the table of data used to construct the graph. For sites with several years of record and where the variability of data is great, graphs for individual years are provided in addition to the multi-year graphs.

Each site has been assigned a short alpha or alphanumeric identifier that is used in figures and tables. Table 1 lists all sites, grouped by site type, and provides the U.S. Geological Survey station identifier, station number, latitude, longitude, altitude, and information about the data presented in this report.

A high density, 1.4 Megabyte, 3-1/2-in. diskette containing ASCII files of the data tables is included at the back of the report. The files on the diskette are labeled to match the table numbers in the report.

Acknowledgments

The cooperation of many well owners and landowners in allowing access to collect data is greatly appreciated. Thom Heller, U.S. Forest Service, provided the precipitation data for the Mammoth Ranger Station gage. Gary Sisson was especially helpful in providing information and access to some of the Mammoth Community Water District wells. Donald Barnett, Intermountain Water Consultants, provided water-level data for well CW-3 for 1988–91. Chris Boone and Dennis Redfern, California Department of Fish and Game, cooperated in many ways that assisted data collection at Hot Creek Fish Hatchery.

METHODS OF DATA COLLECTION

Ground-Water Levels and Temperature Profiles

Ground-water levels were measured three times per year in a network of approximately 55 wells (tables 1 and 36, at back of report). The actual number of wells varied from year to year because of access conditions and the addition of new wells. The measurements generally were made in April, July, and November. These three months were chosen to provide values reasonably close to actual maximum and minimum water levels and to avoid difficult access conditions in the winter months. Beginning in 1988, water levels were measured monthly in about 10 wells selected from the larger network.

The water levels were measured using chalked steel tapes or electric sounding devices. Electric sounding devices were used only when conditions in the well bore prevented accurate steel tape measurements. Conditions that required the use of electric sounders were high water temperatures (>30 °C) at the water surface, which would cause a high evaporation rate as the tape was withdrawn from the well, and wet casings above the water level, which would give false indications of the true water level. The general procedures for making accurate water-level measurements discussed in a report by Garber and Koopman (1968) were followed.

The water levels were measured with reference to a convenient measuring point on the well head and then were adjusted to land-surface datum using a constant difference between the measuring point and the land surface at the well. Land-surface altitudes were determined for each well site by spirit leveling from a point of known altitude or approximated from topographic maps (table 1). Altitudes that have a precision of less than 1 ft are from leveling; those that have a precision of 1 ft or more are from topographic maps.

Daily mean values of water levels were computed from data recorded at hourly or shorter intervals. Water levels were recorded by a variety of means (table 1). A system consisting of a float, tape, and counter weight suspended over a pulley was used for shallow water levels. The data were recorded on graphic charts, digital punch tapes, or electronically using a shaft-encoder and data logger. For deeper water levels (more than 20 ft), pressure transducers were used to sense the depth of water above an arbitrary datum. In wells that had water temperatures at the water surface of less than 50 °C, submersible transducers were used. The transducers were suspended by weighted cables that held the sensing port at a constant depth. In wells that had water temperatures greater than 50 °C, a bubbler system was used with the transducer at the surface. The system consisted of a nitrogen tank, pressure regulator, and tubing. One end of the tubing was set at a fixed depth and nitrogen was allowed to bubble out of the tube below the water surface. The back-pressure on this tube was sensed by a transducer and was related to the height of the water column above the tube orifice. The pressure data were recorded by a data logger and were converted to water levels in feet below land surface.

Temperature profiles in wells were made using portable logging equipment consisting of a thermistor attached to a cable and a digital meter to display the resistance. Resistance was converted to the equivalent temperature using a polynomial equation derived from calibration measurements performed in a laboratory. The profiles consist of a number of readings made at discrete points, variably spaced depending on the temperature gradient and depth of the well. Temperatures are accurate to 0.1 °C or better.

Flow Measurements in Springs and Streams

Measurements of flow from springs and at cross sections in streams were made using current velocity meters, weirs, and flumes. Procedures used are described in reports by Buchanan and Somers (1969) and Kilpatrick and Schneider (1983).

Daily mean values of flow were computed from stage records and a stage-discharge relation equation (Rantz and others, 1982; Kennedy, 1983, 1984). Stage was measured using a float, tape, and counter weight suspended over a pulley and was recorded on digital punch tape, graphic chart, or electronically using a shaft-encoder and data logger.

Water and Gas Temperatures

Daily mean values of water temperature in springs and streams and vent gas temperatures for fumaroles were computed from values recorded at hourly or more frequent intervals. The temperatures were sensed by using either thermistors or platinum resistance devices, and the data were recorded using data loggers. The accuracy of the temperature values is about 0.2 °C for the sites at Hot Creek Fish Hatchery and Hot Creek Flume. The accuracy of the values for Basalt Fumarole, Hot Bubbling Pool, and Mammoth Mountain Fumarole is about 0.5 °C. Water temperatures were measured using the guidelines given in a report by Stevens and others (1975).

At Fish Hatchery Spring AB (fig. 23), several spring vents discharge subaqueously to a pool about 400 ft long and 10 to 25 ft wide. From June 1988 to October 1992, water temperatures were measured with a thermistor placed at the west end of the pool 0.1 ft above the pool floor and above a subaqueous spring vent. The flow from the vent declined during January 1992 and, within a few weeks, there was no measurable evidence of discharge. A radical departure of the general water temperature trend (shown in fig. 26) occurred during the period January to March 1992 because flow from the spring vents at the west end of the pool had ceased, and the stagnant water was cooled by winter air temperatures. The temperature site was moved to the east end of the pool near the weir at the outflow point. At this site, the temperature recorded is a flow-weighted average temperature from all the individual vents. This flow-weighted temperature is affected by variations in ambient air and soil temperatures, as well as variations in water temperatures at the spring vents.

Fish Hatchery Spring CD is similar to Fish Hatchery Spring AB, in that several spring vents discharge subaqueously to a collection pool about 700 ft in length. Temperature measurements at this site were made at the west end of the pool. A thermistor was placed in the subaqueous discharge stream of an individual vent that issues from between basalt boulders lining the pool side.

At the Fish Hatchery Spring 23 site, several springs, both subaqueous and subaerial, discharge to a collection pool. A thermistor was placed in a subaerial vent along the southeast side of the pool.

The Hot Bubbling Pool site is a thermal pool that receives discharge from several subaqueous spring vents. The pool is roughly elliptical in shape and has varied in surface area from about 5,000 ft^2 in 1987 to about 800 ft^2 in 1993. Water temperatures were measured at a depth of about 3 ft below the water surface along the north side of the pool.

Temperatures of the gas discharged from Basalt Fumarole and Mammoth Mountain Fumarole were measured by placing sensors in 1/2-in.-diameter pipes inserted into the side of the vent at a depth of approximately 1 ft below land surface. The discharge point for the main flow of gas at both fumaroles shifted a few inches from time to time because of minor slumping of the soil or disruption of the vent by curious visitors. At times, these disruptions of the vents left the temperature sensor a few inches from the main discharge stream. When the sensor was not positioned in the main discharge stream, recorded temperatures deviated from temperatures measured directly in the vent by as much as 2 or 3 °C.

Water Samples for Chemical and Isotopic Analyses

Water samples from subaerial springs were collected by dipping a polyethylene container into the discharge stream as near the vent as possible. Samples from subaqueous springs and streams were collected using a depth-integrated sampler and equal-width stationing. Samples of water in both vapor and liquid phase were collected from the discharge pipe of geothermal wells while the wells were being pumped. The vapor-fluid sample was condensed to a liquid in a coil of stainless steel tubing immersed in an ice-water bath and was cooled from about 170 °C to 30 °C.

Aliquots of the samples were used to determine alkalinity, pH, and specific conductance in the field. Aliquots for laboratory analyses were prepared in the field by filtering through a 0.45-μm acetate filter. Filtered, unacidified water was placed in polyethylene bottles for anion analyses, and filtered water acidified with nitric acid was placed in polyethylene bottles for cation analyses. Water for mercury analysis was placed in flint glass bottles to which 10 mL of nitric acid and potassium dichromate was added. Samples for nitrogen and phosphorous analyses were placed in opaque, brown polyethylene bottles, treated with mercuric chloride, and chilled to 4 °C. This procedure was done to inhibit biologic activity. Laboratory methods used for analyses are described in a report by Fishman and Friedman (1989).

REFERENCES CITED

Bailey, R.A., 1989, Geologic map of Long Valley caldera, Mono-Inyo Craters Volcanic Chain, and vicinity, eastern California: U.S. Geological Survey Map Series I-1933, 1 sheet plus 11 p. of text, scale 1:62,500.

Buchanan, T.J., and Somers, W.P., 1969, Discharge measurements at gaging stations: U.S. Geological Survey Techniques of Water-Resources Investigations, book 3, chap. A8, 65 p.

California Department of Water Resources, 1967, Investigation of geothermal waters in the Long Valley area, Mono County: California Department of Water Resources, 141 p.

———1973, Mammoth Basin water resources environmental study (final report): California Department of Water Resources, 70 p.

Farrar, C.D., and Lyster, D.L., 1990, Monitoring the hydrologic system for potential effects of geothermal and ground-water development in the Long Valley caldera, Mono County, California, U.S.A.: Geothermal Resources Council Transactions, v. 14, pt. 1, p. 669–674.

Farrar, C.D., Sorey, M.L., Rojstaczer, S.A., Janik, C.J., Mariner, R.H., Winnett, T.L., and Clark, M.D., 1985, Hydrologic and geochemical monitoring in Long Valley Caldera, Mono County, California: U.S. Geological Survey Water-Resources Investigations Report 85-4183, 137 p.

Farrar, C.D., Sorey, M.L., Rojstaczer, S.A., Janik, C.J., Winnett, T.L., and Clark, M.D., 1987, Hydrologic and geochemical monitoring in Long Valley caldera, Mono County, California, 1985: U.S. Geological Survey Water-Resources Investigations Report 87-4090, 71 p.

Farrar, C.D., Sorey, M.L., Rojstaczer, S.A., Steinemann, A.C., and Clark, M.D., 1989, Hydrologic and geochemical monitoring in Long Valley caldera, Mono County, California, 1986: U.S. Geological Survey Water-Resources Investigations Report 89-4033, 69 p.

Fishman, M.J., and Friedman, L.C., 1989, Methods for determination of inorganic substances in water and fluvial sediments (3d ed): U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, chap. A1, 545 p.

Garber, M.S., and Koopman, F.C., 1968, Methods of measuring water levels in deep wells: U.S. Geological Survey Techniques of Water-Resources Investigations, book 8, chap. A1, 23 p.

Hill, D.P., Johnston, M.J.S., Langbein, J.O., McNutt, S.R., Miller, C.D., Mortensen, C.E., Pitt, A.M., and Rojstaczer, S., 1991, Response plans for volcanic hazards in the Long Valley caldera and Mono Craters area, California: U.S. Geological Survey Open-File Report 91-270, 64 p.

Kennedy, E.J., 1983, Computation of continuous records of streamflow: U.S. Geological Survey Techniques of Water-Resources Investigations, book 3, chap. A13, 53 p.

———1984, Discharge ratings at gaging stations: U.S. Geological Survey Techniques of Water-Resources Investigations, book 3, chap. A10, 59 p.

Kilpatrick, F.A., and Schneider, V.R., 1983, Use of flumes in measuring discharge: U.S. Geological Survey Techniques of Water-Resources Investigations, book 3, chap. A14, 46 p.

Lewis, R.E., 1974, Data on wells, springs, and thermal springs in Long Valley, Mono County, California: U.S. Geological Survey Open-File Report, 52 p.

Mariner, R.H., and Willey, L.M., 1976, Geochemistry of thermal waters in Long Valley, Mono County, California: Journal of Geophysical Research, v. 81, no. 5, p. 792–800.

Rantz, S.E., and others, 1982, Measurement and computation of streamflow: Volume 2. Computation of discharge: U.S. Geological Survey Water-Supply Paper 2175, 631 p.

Rundle, J.B., and Hill, D.P., 1988, The geophysics of a restless caldera—Long Valley, California: Palo Alto, Calif., Annual Reviews Inc., Annual Review of Earth and Planetary Sciences, v. 16, p. 251–271.

Sarna-Wojcicki, A.M., and Pringle, M.S., Jr., 1992, Laser-fusion $^{40}Ar/^{39}Ar$ ages of the Tuff of Taylor Canyon and Bishop Tuff, E. California–W. Nevada: Eos, American Geophysical Union, Transactions, v. 73, no. 43, p. 633.

Setmire, J.G., 1984, Water-quality appraisal of Mammoth Creek and Hot Creek, Mono County, California: U.S. Geological Survey Water-Resources Investigations Report 84-4060, 50 p.

Stevens, H.H., Jr., Ficke, J.F., and Smoot, G.F., 1975, Water temperature—influential factors, field measurement, and data presentation: U.S. Geological Survey Techniques of Water-Resources Investigations, book 1, chap. D1, 65 p.

Sorey, M.L., Suemnicht, G.A., Sturchio, N.C., and Nordquist, G.A., 1991, New evidence on the hydrothermal system in Long Valley caldera, California, from wells, fluid sampling, electrical geophysics, and age determinations of hot-spring deposits: Journal of Volcanology and Geothermal Research, v. 48, p. 229–263.

U.S. Forest Service, 1980–1985, Water resources data for Mammoth Ranger District, Inyo National Forest, California: Published annually.

Willey, L.M., O'Neil, J.R., and Rapp, J.B., 1974, Chemistry of thermal waters in Long Valley, Mono County, California: U.S. Geological Survey Open-File Report, 19 p.

TABLES 1–114

AND

FIGURES 3–52

page 13 follows

Table 1. Descriptions of data-collection sites, Long Valley Caldera, Mono County, California

[Station identifier: Short alphanumeric code used as reference in figures and tables.
USGS station number: Unique numeric code used in U.S. Geological Survey data bases.
Data types: The types of data shown in this report are denoted by codes (CD—daily specific conductance, F—miscellaneous discharge measurements, FD—daily discharge, L—miscellaneous ground-water levels, LD—daily ground-water levels computed from values recorded at least hourly, PD—daily precipitation, PM—monthly precipitation (daily values available from U.S. Forest Service), Q—chemical or isotopic analyses, SD—daily gage height, T—miscellaneous temperatures, TD—daily water temperatures, TP—temperature profiles in a well).
Equipment types: The types of equipment used at recording sites to collect data are given by codes (C—conductivity sensor and data logger, DR—digital recorder, GR—graphic chart recorder, PT—pressure transducer with data logger, SE—shaft encoder with data logger, T—thermister with data logger, TB—tipping bucket gage with data logger, W—weir or flume, WB—weighing bucket gage and chart recorder).
Data on pages: pages in this report showing data for the site]

Station identifier	USGS station no.	Latitude	Longitude	Altitude of land surface (feet above sea level)	Data type	Equipment type	Data on page(s)
			Well sites (Location map on page 16)				
2A	374315118441201	37°43'15"	118°44'12"	6,922	L		92
27R1	374420118515501	37°44'20"	118°51'55"	7,039.18	L		92
28P1	374420118532501	37°44'20"	118°53'25"	7,109.02	L		92
30N2	374420118493301	37°44'20"	118°49'33"	6,913.21	L		93
31P1	374332118491001	37°43'32"	118°49'10"	6,914.01	L		93
31P2	374332118491002	37°43'32"	118°49'10"	6,915.7	L		93
35N1	374327118445901	37°43'27"	118°44'59"	6,914	L		94
36P1	374335118434101	37°43'35"	118°43'41"	6,995	L		94
AP	373737118501701	37°37'37"	118°50'17"	7,120	L		94
CD-2	373847118545802	37°38'47"	118°54'58"	7,316	L		95
CH-1	374045118491001	37°40'45"	118°49'10"	6,969.93	L,LD	PT	33, 95
CH-10	373932118491501	37°39'32"	118°49'15"	7,074.88	L		96
CH-10A	373930118491601	37°39'30"	118°49'16"	7,078.80	L		96
CH-10B	373930118491602	37°39'30"	118°49'16"	7,078.99	L,LD,TP	PT	76, 97
CH-3	373929118455405	37°39'29"	118°45'54"	6,870	L		97
CH-5	373759118474101	37°37'59"	118°47'41"	6,918	L		98
CH-6	374040118522501	37°40'40"	118°52'25"	7,248.23	L		98
CH-7	374000118483102	37°40'00"	118°48'31"	6,956.89	L		98
CHURCH	373707118491701	37°37'07"	118°49'17"	7,035	L		99
CM-2	373906118522301	37°39'06"	118°52'23"	7,077	L,LD,TP	DR	58, 99
CR	373816118532001	37°38'16"	118°53'20"	7,161.76	L		99
CT	374511118585801	37°45'11"	118°58'58"	7,520	L		100
CW-1	373850118513601	37°38'50"	118°51'36"	7,084.99	L		100
CW-3	373849118513001	37°38'49"	118°51'30"	7,062.20	L,LD	GR,SE	70, 101
DC	374410118583401	37°44'10"	118°58'34"	7,515.27	L		101
ESO	373818118514502	37°38'18"	118°51'45"	7,090	L		102
LAV-1	374051118523301	37°40'51"	118°52'33"	7,200	L		102
LKT	374300118554401	37°43'00"	118°55'44"	7,350	L,LD,PD	PT,SE	17, 103, 256, 259
LV-15	373913118551401	37°39'13"	118°55'14"	7,340	L		103
LV-18	373918118481901	37°39'18"	118°48'19"	6,966.00	L		104

Table 1. Descriptions of data-collection sites, Long Valley Caldera, Mono County, California—Continued

Station identifier	USGS station no.	Latitude	Longitude	Altitude of land surface (feet above sea level)	Data type	Equipment type	Data on page(s)
			Well sites—Continued				
LV-19	373754118501701	37°37'54"	118°50'17"	7,090.40	L		104
LV-2	373729118532802	37°37'29"	118°53'28"	7,167.39	L		105
LV-25	374233118482701	37°42'33"	118°48'27"	6,873.81	L		105
LV-3	373759118474101	37°37'59"	118°47'41"	6,918	L		105
LV-30	374109118484101	37°41'09"	118°48'41"	6,895.62	L		106
LV-44	373917118551402	37°39'17"	118°55'14"	7,340	L		106
LV-45	373914118472201	37°39'14"	118°47'22"	6,985.38	L		106
MBP-1	373849118545501	37°38'49"	118°54'55"	7,343	Q		275
MBP-3	373840118545001	37°38'40"	118°54'50"	7,310	Q		275
MW-1	373816118523901	37°38'16"	118°52'39"	7,046.43	L		107
MW-2	373841118512902	37°38'41"	118°51'29"	7,057.08	L		107
MW-4	373907118503801	37°39'07"	118°50'38"	7,081.26	L		107
MW-5	373841118512901	37°38'41"	118°51'29"	7,054.12	L		108
MWD 5	373757118591801	37°37'57"	118°59'18"	7,985.28	L		108
MWD M-10	373719118585301	37°37'19"	118°58'53"	7,939.63	L		108
MWD M-11	373705118585601	37°37'05"	118°58'56"	7,968.56	L		109
MWD M-12	373714118585501	37°37'14"	118°58'55"	7,952.92	L		109
MWD M-14	373739118582101	37°37'39"	118°58'21"	7,877.79	L		17, 110
PD	373732118490001	37°37'32"	118°49'00"	7,014	L		110
PLV-2	374249118584501	37°42'49"	118°58'45"	7,734	L		110
RDO-8	373924118571201	37°39'24"	118°57'14"	7,788.4	L,LD,TP	PT	46, 111
SC-1	373745118554001	37°37'45"	118°55'40"	7,469.84	L		112
SC-2	373745118554002	37°37'45"	118°55'40"	7,470.65	L		32, 112
SNARL	373654118495401	37°36'54"	118°49'54"	7,095	L		113
SQ	373742118515703	37°37'42"	118°51'57"	7,102.22	L		113
SS-1	373818118533201	37°38'18"	118°53'32"	7,180.61	L		114
SS-2	373818118533202	37°38'18"	118°53'32"	7,179.13	L		114
			Spring sites (Location map on pages 115 and 261)				
BAL	374010118465301	37°40'10"	118°46'53"	6,880	F,T,Q	W	208, 277
BS	374501118561501	37°45'01"	118°56'15"	7,230	Q		277
CS	373821118531901	37°38'21"	118°53'19"	7,200	FD,Q	GR,W	182, 268
FHAB-UPPER	373819118514901	37°38'19"	118°51'49"	7,051	TD	T	128
FHAB-WEIR	373822118514401	37°38'22"	118°51'44"	7,050	FD,TD,Q	DR,SE,T	120, 138, 268, 285
FHCD-Q	373818118513301	37°38'18"	118°51'33"	7,050	F,Q		141, 268, 284
FHCD-T	373817118514101	37°38'17"	118°51'41"	7,053	TD	T	142
FH23-Q	373829118505801	37°38'29"	118°50'56"	7,050	FD	DR,GR, SE,W	154
FH23-T	373829118505801	37°38'29"	118°50'58"	7,065	TD,Q	T	169, 271, 285
HBP	373850118513501	37°38'50"	118°51'35"	7,070	SD,TD,Q	PT,T	189, 200, 274
HC-3	373942118494201	37°39'42"	118°49'42"	6,960	Q		274, 286
HC-4	373941118494301	37°39'41"	118°49'37"	6,960	Q		286
HC-5L	373940118494001	37°39'40"	118°49'41"	6,970	Q		274, 286
LHC-SP	374125118502501	37°41'25"	118°50'25"	7,035	FD,Q	GR,W	206
LS	373701118533701	37°37'01"	118°53'37"	7,200	F,FD	GR,W	116

Table 1. Descriptions of data-collection sites, Long Valley Caldera, Mono County, California—*Continued*

Station identifier	USGS station no.	Latitude	Longitude	Altitude of land surface (feet above sea level)	Data type	Equipment type	Data on page(s)
			Stream sites (Location map on page 209)				
HCA	10265147	37°39'27"	118°49'54"	7,035	F,Q		211, 265, 280
HCF	10265150	37°40'08"	118°49'00"	6,950	FD,TD, CD,Q	DR,SE, T,C,W	213, 228, 232, 265, 282
LHC-SW	10265160	37°41'25"	118°50'31"	6,990	FD,Q	DR,W	235
MC395	10265130	37°38'16"	118°54'10"	7,200	F,Q		210, 262
MCAF	10265143	37°38'37"	118°51'11"	7,052	F,Q		210, 262
MCF	10265140	37°38'26"	118°53'58"	7,193	F,Q		210, 262
			Fumarole sites (Location map on page 244)				
BSF	373843118554601	37°38'43"	118°55'46"	7,515	T,TD	T	252, 254
MMF	373819119014201	37°38'19"	119°01'42"	9,900	TD	T	245
			Precipitation sites (Location map on page 255)				
LHC-P	374125118503101	37°41'25"	118°50'31"	6,990	PD	WB	256
LKT-P	374300118554401	37°43'00"	118°55'44"	7,350	PD	TB	256, 259
MRS	none	37°38'52"	118°57'35"	7,800	PM	WB	256, 260

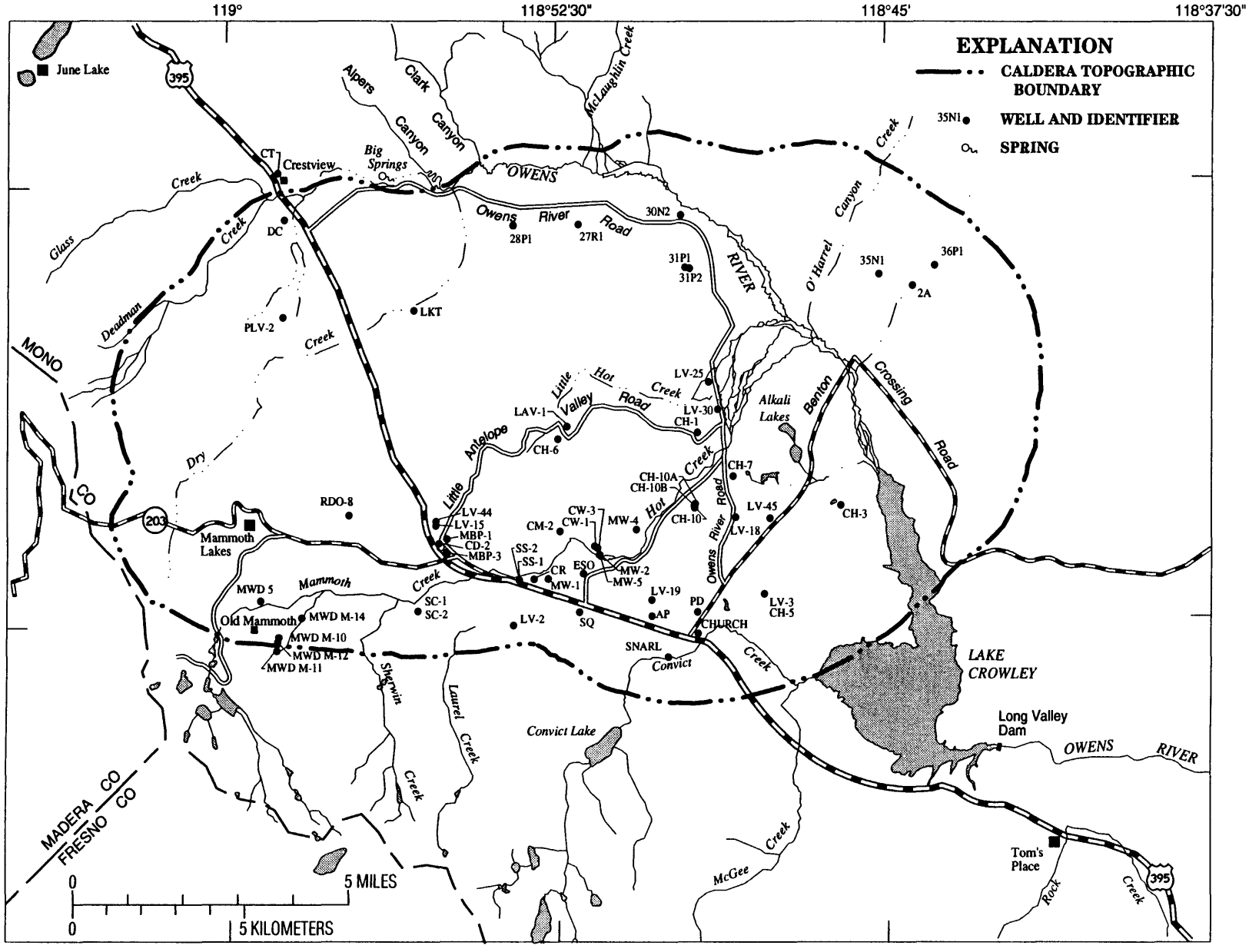

Figure 3. Locations of wells, Long Valley Caldera, Mono County, California.

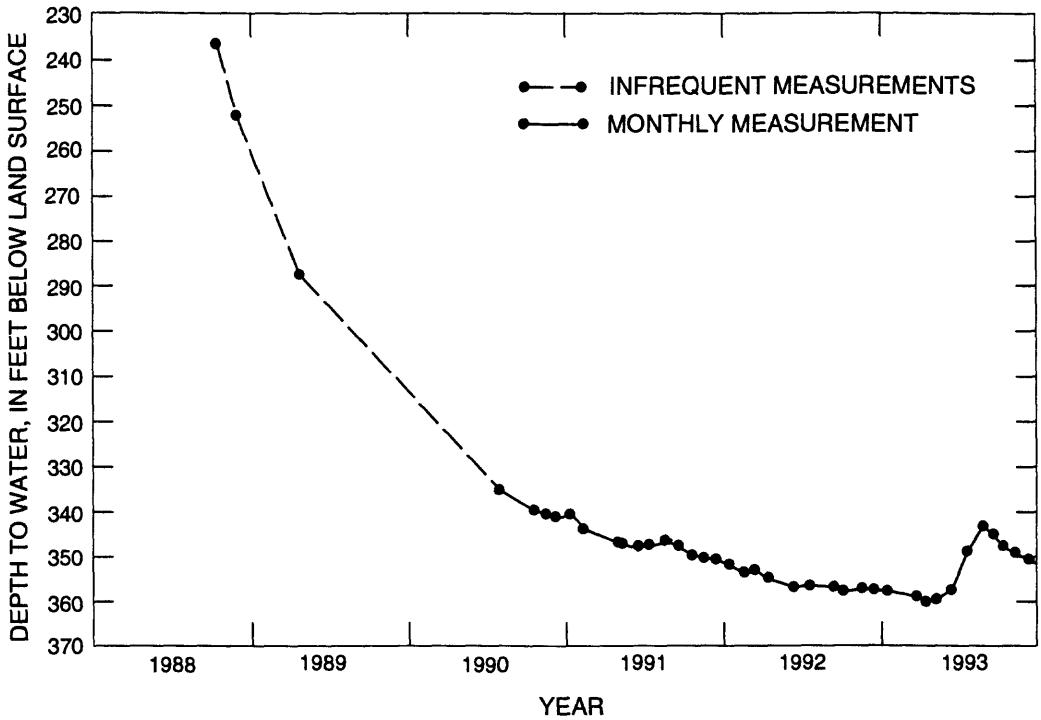

Figure 4. Instantaneous water levels, well MWD M-14, Long Valley Caldera, Mono County, California, 1988–93.

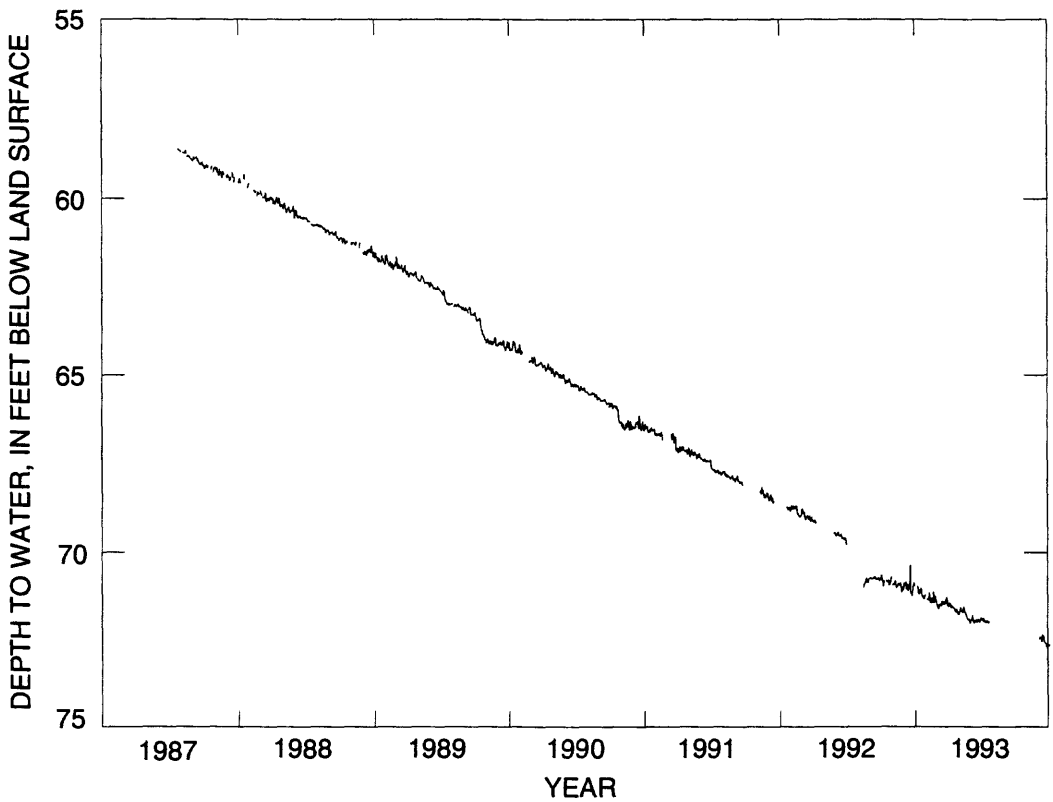

Figure 5. Daily mean water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1987–93.

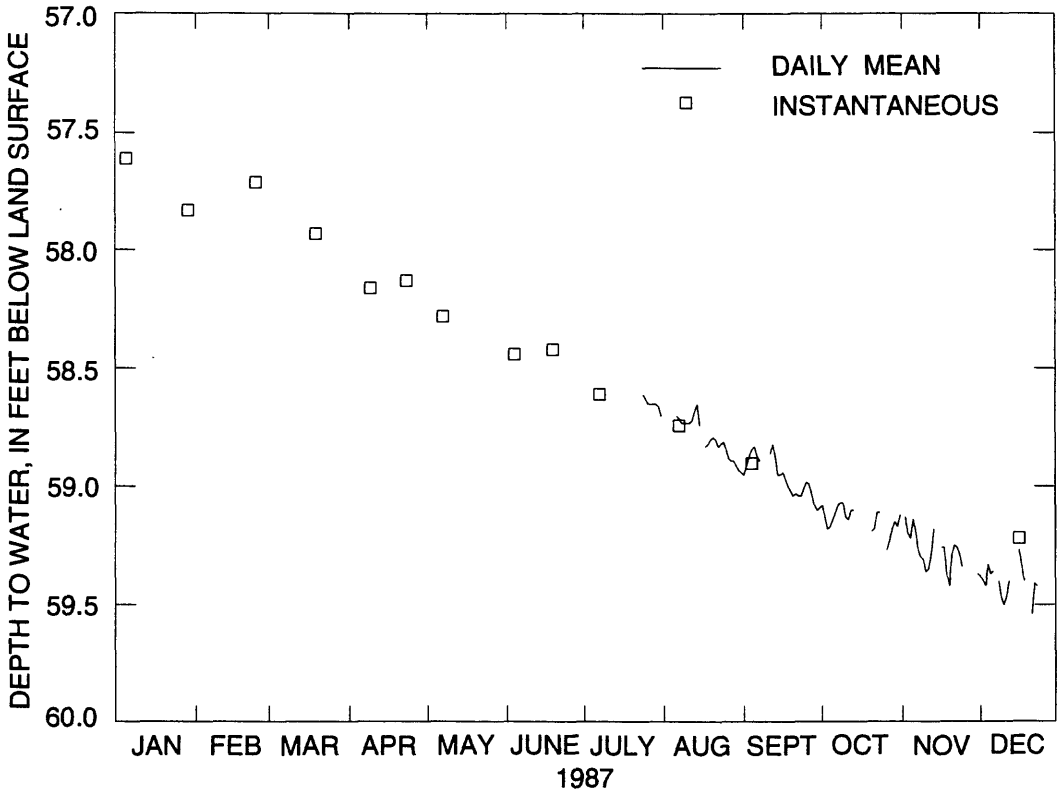

Figure 6. *(A)* Daily mean and instantaneous water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1987.

Table 2. Daily mean water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1987

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	—	—	—	—	58.95	59.08	—	59.38
2	—	—	—	—	—	—	—	—	58.91	59.13	59.13	59.40
3	—	—	—	—	—	—	—	—	58.87	59.18	59.20	59.42
4	—	—	—	—	—	—	—	—	58.84	59.17	59.22	59.33
5	—	—	—	—	—	—	—	—	58.83	59.14	59.14	59.37
6	—	—	—	—	—	—	—	58.70	58.87	59.11	59.19	59.36
7	—	—	—	—	—	—	—	58.71	58.89	59.08	59.27	—
8	—	—	—	—	—	—	—	58.73	—	59.07	59.30	59.40
9	—	—	—	—	—	—	—	58.73	—	59.07	59.31	59.47
10	—	—	—	—	—	—	—	58.73	—	59.13	59.36	59.50
11	—	—	—	—	—	—	—	58.73	58.86	59.14	59.35	59.47
12	—	—	—	—	—	—	—	58.72	58.82	59.10	59.29	59.40
13	—	—	—	—	—	—	—	58.68	58.87	59.10	59.18	—
14	—	—	—	—	—	—	—	58.65	58.95	—	—	—
15	—	—	—	—	—	—	—	58.74	58.95	59.13	—	—
16	—	—	—	—	—	—	—	—	58.94	—	59.26	59.27
17	—	—	—	—	—	—	—	58.83	58.97	59.21	59.26	59.33
18	—	—	—	—	—	—	—	58.82	59.00	—	59.37	59.40
19	—	—	—	—	—	—	—	58.80	59.02	—	59.42	—
20	—	—	—	—	—	—	—	58.79	59.04	59.19	59.29	—
21	—	—	—	—	—	—	—	58.80	59.03	59.18	59.25	59.54
22	—	—	—	—	—	—	—	58.83	59.04	59.11	59.26	59.41
23	—	—	—	—	—	—	—	58.82	59.04	59.11	59.29	59.42
24	—	—	—	—	—	—	58.61	58.81	59.01	—	59.34	—
25	—	—	—	—	—	—	58.63	58.84	58.98	—	—	—
26	—	—	—	—	—	—	58.65	58.88	58.99	59.27	—	—
27	—	—	—	—	—	—	58.65	58.89	59.03	59.23	—	—
28	—	—	—	—	—	—	58.65	58.89	59.08	59.18	—	59.49
29	—	—	—	—	—	—	58.65	58.91	59.10	59.15	—	—
30	—	—	—	—	—	—	58.66	58.93	59.09	59.17	59.37	—
31	—	—	—	—	—	—	58.70	58.94	—	59.12	—	—
Mean	—	—	—	—	—	—	58.65	58.80	58.96	59.14	59.27	59.41
Max	—	—	—	—	—	—	58.70	58.94	59.10	59.27	59.42	59.54
Min	—	—	—	—	—	—	58.61	58.65	58.82	59.07	59.13	59.27

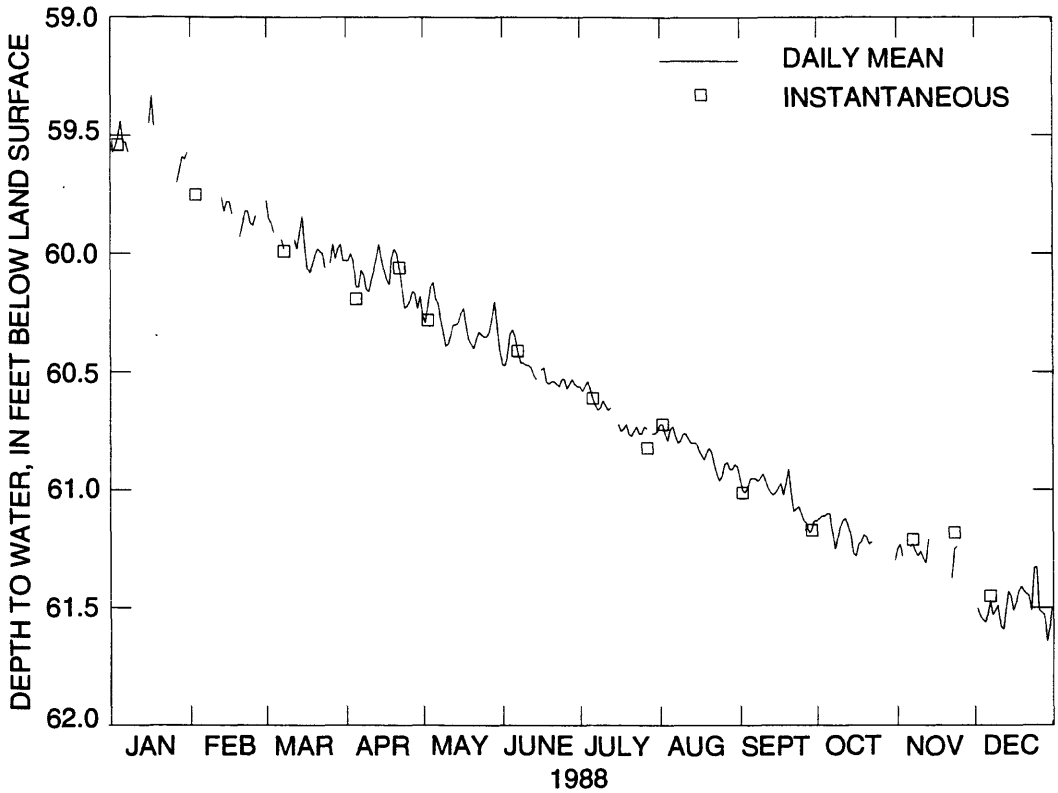

Figure 6. *(B)* Daily mean and instantaneous water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1988.

Table 3. Daily mean water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1988

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	59.77	60.03	60.26	60.47	60.56	60.72	60.95	61.13	61.25	—
2	59.57	—	59.85	60.03	60.29	60.47	60.58	60.72	61.00	61.12	61.23	61.50
3	59.55	—	59.87	60.00	60.22	60.43	60.56	60.76	61.01	61.11	61.28	61.53
4	59.51	—	59.91	60.03	60.14	60.34	60.54	60.79	60.99	61.11	—	61.55
5	59.44	—	—	60.14	60.12	60.32	60.57	60.74	60.95	61.10	—	61.56
6	59.53	—	—	60.14	60.19	60.35	60.61	60.73	60.95	61.10	61.24	61.53
7	59.53	—	59.94	60.07	60.21	60.41	60.64	60.77	60.95	61.18	61.23	61.47
8	59.57	—	59.98	60.09	60.28	60.46	60.66	60.80	60.96	61.25	61.26	61.53
9	—	—	—	60.15	60.33	60.46	60.65	60.79	60.95	61.20	61.28	61.51
10	—	59.86	—	60.16	60.39	60.47	60.62	60.76	60.93	61.16	61.26	61.49
11	—	—	—	60.11	60.38	60.47	60.64	60.76	60.96	61.13	61.29	61.58
12	—	—	59.94	60.07	60.34	60.48	60.66	60.78	60.99	61.12	61.31	61.59
13	—	59.76	59.98	60.02	60.30	60.51	60.65	60.80	61.01	61.15	61.21	61.52
14	59.67	59.82	59.91	59.96	60.30	60.53	—	60.80	61.02	61.19	—	61.43
15	—	59.78	59.84	60.02	60.29	—	—	60.80	61.01	61.27	—	61.45
16	59.45	59.78	59.96	60.07	60.25	60.49	60.72	60.83	60.99	61.28	—	61.51
17	59.33	59.83	60.06	60.11	60.23	60.48	60.75	60.85	60.97	61.23	61.26	61.48
18	59.46	—	60.08	60.13	60.30	60.54	60.74	60.87	61.02	61.22	—	61.43
19	—	—	60.05	60.02	60.36	60.55	60.72	60.84	60.97	61.19	—	61.41
20	—	59.93	60.01	59.98	60.38	60.54	60.76	60.82	60.91	61.20	—	61.43
21	—	59.88	59.98	60.00	60.40	60.54	60.77	60.84	61.01	61.23	—	61.44
22	—	59.82	59.99	60.06	60.36	60.55	60.75	60.89	61.09	61.22	61.38	61.45
23	—	59.82	60.00	60.15	60.33	60.56	60.73	60.93	61.08	—	61.25	61.51
24	—	59.87	60.06	60.23	60.34	60.53	60.76	60.96	61.07	—	61.24	61.33
25	—	59.88	—	60.22	60.35	60.53	60.76	60.94	61.10	—	—	61.33
26	—	59.84	60.04	60.20	60.35	60.57	60.73	60.89	61.13	—	—	61.51
27	59.70	—	59.96	60.16	60.33	60.55	60.74	60.88	61.14	—	61.49	61.52
28	59.65	—	60.02	60.17	60.27	60.53	—	60.91	61.18	61.21	—	61.53
29	59.59	—	59.98	60.23	60.20	60.55	60.76	60.91	61.17	—	—	61.64
30	59.60	—	59.96	60.18	60.30	60.56	60.76	60.89	61.13	—	—	61.58
31	59.57	—	60.03	—	60.40	—	60.75	60.90	—	61.30	—	61.50
Mean	59.54	59.84	59.97	60.10	60.30	60.49	60.68	60.83	61.02	61.18	61.28	61.49
Max	59.70	59.93	60.08	60.23	60.40	60.57	60.77	60.96	61.18	61.30	61.49	61.64
Min	59.33	59.76	59.77	59.96	60.12	60.32	60.54	60.72	60.91	61.10	61.21	61.33

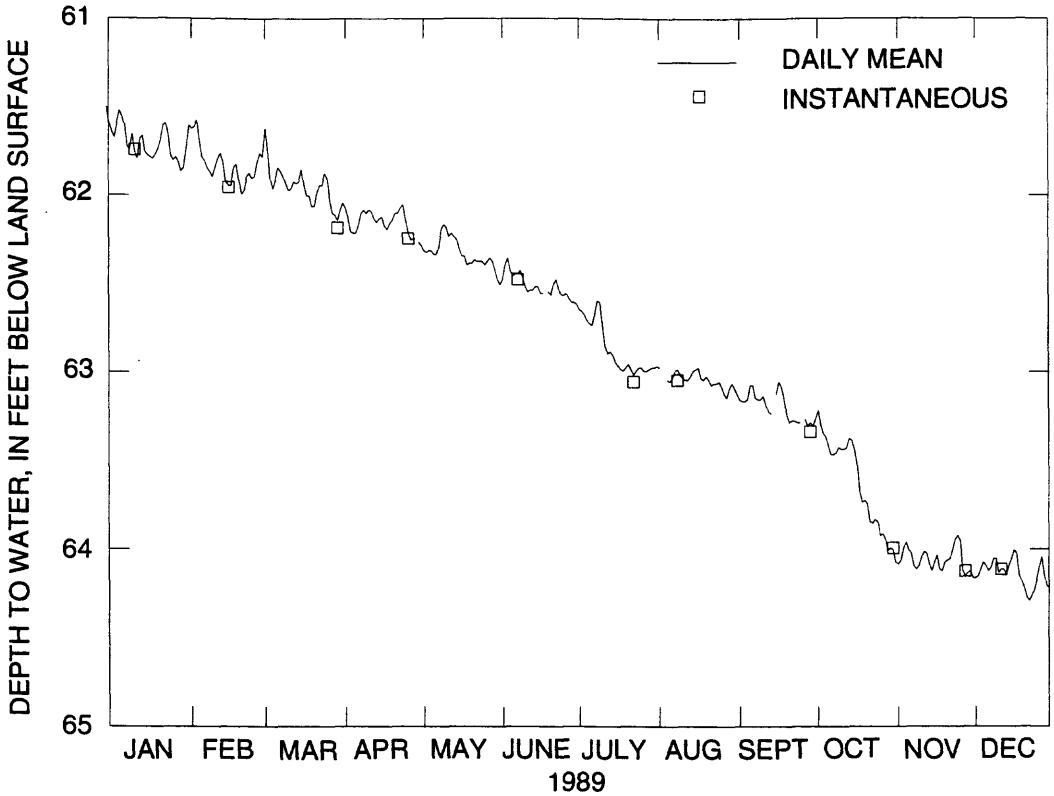

Figure 6. *(C)* Daily mean and instantaneous water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1989.

Table 4. Daily mean water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1989

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	61.59	61.60	61.78	62.04	62.28	62.50	62.61	62.96	63.12	63.26	64.07	64.16
2	61.64	61.62	61.62	62.07	62.31	62.47	62.64	62.97	63.15	63.21	64.08	64.16
3	61.67	61.61	61.74	62.12	62.32	62.39	62.65	—	63.16	63.29	64.06	64.15
4	61.59	61.57	61.90	62.20	62.31	62.35	62.67	—	63.16	63.34	63.99	64.11
5	61.52	61.69	61.96	62.21	62.31	62.42	62.70	63.04	63.15	63.36	63.96	64.07
6	61.55	61.78	61.91	62.21	62.33	62.45	62.72	63.05	63.07	63.41	64.00	64.09
7	61.60	61.80	61.84	62.17	62.33	62.44	62.73	63.03	63.07	63.46	64.02	64.12
8	61.72	61.84	61.86	62.10	62.29	62.44	62.67	62.99	63.14	63.46	64.09	64.10
9	61.74	61.86	61.89	62.08	62.19	62.42	62.59	62.98	63.15	63.45	64.11	64.05
10	61.65	61.89	61.93	62.10	62.16	62.46	62.60	63.01	63.15	63.42	64.09	64.05
11	61.75	61.84	61.97	62.08	62.18	62.51	62.72	63.03	63.13	63.43	64.04	64.13
12	61.79	61.79	61.96	62.09	62.23	62.54	62.84	63.04	63.18	63.43	64.01	64.11
13	61.68	61.76	61.92	62.13	62.21	62.53	62.89	63.04	63.22	63.42	64.02	64.11
14	61.66	61.81	61.93	62.15	62.23	62.53	62.88	63.02	63.23	63.37	64.08	64.14
15	61.75	61.92	61.92	62.13	62.25	62.51	62.90	62.99	—	63.38	64.12	64.09
16	61.77	61.94	61.85	62.12	62.30	62.51	62.94	62.98	63.12	63.43	64.07	64.05
17	61.78	61.94	61.94	62.17	62.34	62.55	62.96	62.97	63.05	63.51	64.03	64.00
18	61.79	61.84	62.00	62.19	62.34	62.55	62.98	63.03	63.08	63.67	64.11	64.02
19	61.77	61.82	62.00	62.16	62.39	—	62.99	63.04	63.14	63.73	64.12	64.14
20	61.74	61.91	62.06	62.14	62.38	62.54	62.97	63.02	63.24	63.72	64.07	64.18
21	61.69	61.99	62.06	62.10	62.38	62.56	62.95	63.04	63.28	63.74	64.06	64.22
22	61.60	61.97	61.98	62.10	62.36	62.50	62.98	63.07	63.27	63.84	64.05	64.27
23	61.59	61.89	61.94	62.07	62.37	62.47	63.01	63.06	63.27	63.85	64.00	64.29
24	61.65	61.87	61.94	62.05	62.37	62.52	62.99	63.06	63.28	63.83	63.94	64.26
25	61.77	61.90	61.87	62.13	62.37	62.56	62.97	63.05	63.28	63.84	63.92	64.23
26	61.80	61.89	61.90	62.20	62.39	62.56	62.97	63.08	—	63.92	63.95	64.17
27	61.78	61.81	62.03	62.25	62.37	62.55	62.99	63.12	63.26	63.91	64.12	64.10
28	61.81	61.76	62.10	62.24	62.35	62.58	62.99	63.14	63.30	63.94	64.15	64.04
29	61.86	—	62.11	—	62.37	62.60	62.98	63.09	63.28	64.00	64.13	64.14
30	61.84	—	62.14	62.26	62.42	62.60	62.97	63.06	63.30	63.99	64.12	64.21
31	61.73	—	62.08	—	62.47	—	62.97	63.09	—	64.00	—	64.21
Mean	61.71	61.82	61.94	62.14	62.32	62.50	62.85	63.04	63.19	63.60	64.05	64.13
Max	61.86	61.99	62.14	62.26	62.47	62.60	63.01	63.14	63.30	64.00	64.15	64.29
Min	61.52	61.57	61.62	62.04	62.16	62.35	62.59	62.96	63.05	63.21	63.92	64.00

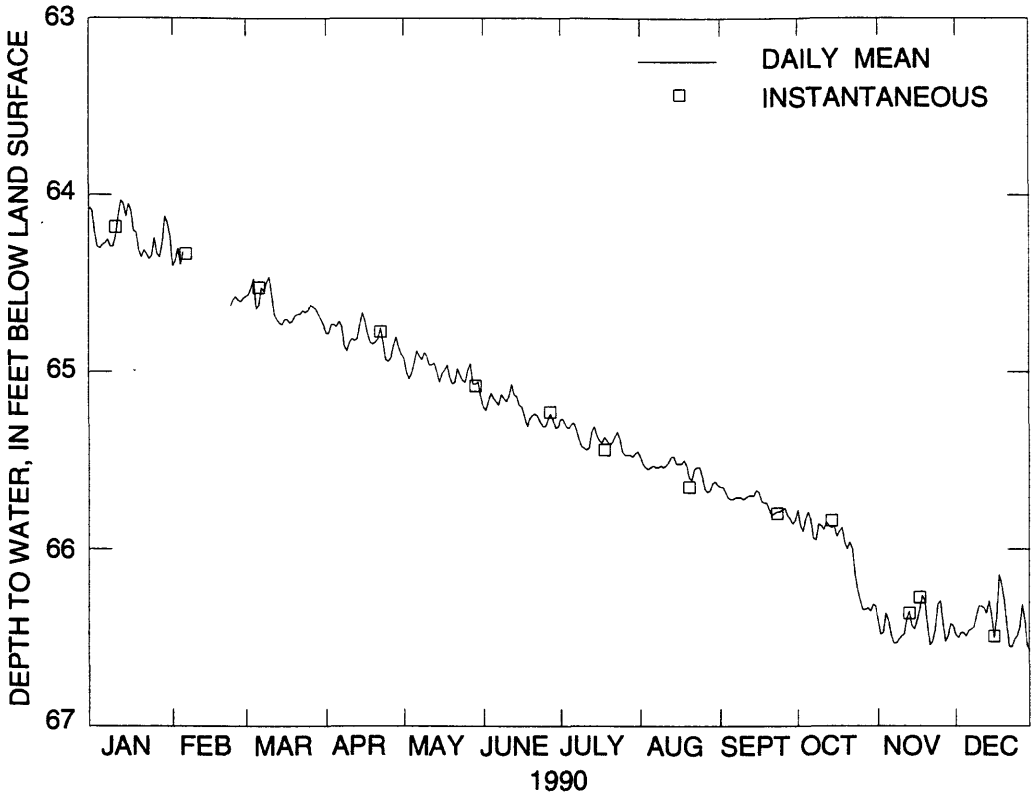

Figure 6. *(D)* Daily mean and instantaneous water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1990.

Table 5. Daily mean water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1990

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	64.07	64.23	64.58	64.73	64.90	65.14	65.31	65.45	65.64	65.84	66.32	66.43
2	64.09	64.40	64.57	64.78	64.92	65.20	65.27	65.48	65.65	65.78	66.40	66.48
3	64.21	64.37	64.56	64.78	65.00	65.22	65.27	65.52	65.65	65.87	66.48	66.50
4	64.29	64.30	64.52	64.73	65.04	65.17	65.31	65.54	65.68	65.90	66.47	66.47
5	64.30	64.39	64.47	64.73	65.01	65.12	65.32	65.55	65.71	65.83	66.36	66.47
6	64.28	64.32	64.64	64.74	64.95	65.15	65.30	65.54	65.72	65.79	66.40	66.49
7	64.27	—	64.62	64.71	64.88	65.17	65.29	65.53	65.72	65.84	66.48	66.46
8	64.25	—	64.52	64.74	64.91	65.19	65.33	65.54	65.71	65.94	66.53	66.45
9	64.29	—	64.54	64.85	64.93	65.13	65.38	65.54	65.71	65.95	66.53	66.44
10	64.29	—	64.49	64.88	64.89	65.15	65.42	65.53	65.71	65.86	66.51	66.38
11	64.23	—	64.46	64.83	64.91	65.17	65.43	65.54	65.72	65.87	66.49	66.32
12	64.12	—	64.56	64.81	64.96	65.14	65.44	65.53	65.71	65.89	66.48	66.32
13	64.03	—	64.67	64.82	64.96	65.07	65.43	65.51	65.70	65.85	66.39	66.33
14	64.05	—	64.70	64.81	64.95	65.13	65.34	65.48	65.70	65.87	66.35	66.36
15	64.12	—	64.72	64.73	65.00	65.14	65.31	65.48	65.70	65.88	66.43	66.29
16	64.05	—	64.73	64.66	65.06	65.19	65.36	65.52	65.67	65.87	66.45	66.37
17	64.09	—	64.70	64.71	65.01	65.20	65.39	65.52	65.68	65.93	66.40	66.50
18	64.20	—	64.70	64.78	64.99	65.25	65.40	65.52	65.73	65.90	66.34	66.38
19	64.21	—	64.72	64.83	64.96	65.31	65.37	65.50	65.74	65.88	66.26	66.14
20	64.31	—	64.71	64.84	65.03	65.27	65.39	65.53	65.74	65.96	66.29	66.20
21	64.35	—	64.68	64.83	65.07	65.25	65.41	65.60	65.78	66.00	66.43	66.29
22	64.31	—	64.67	64.81	65.06	65.24	65.40	65.61	65.81	65.96	66.54	66.43
23	64.33	—	64.67	64.75	64.98	65.25	65.37	65.55	65.80	66.00	66.52	66.55
24	64.36	64.63	64.65	64.83	65.02	65.28	65.34	65.54	65.79	66.14	66.45	66.55
25	64.34	64.59	64.66	64.93	65.05	65.31	65.38	65.54	65.79	66.23	66.31	66.51
26	64.24	64.57	64.65	64.94	65.06	65.31	65.45	65.59	65.78	66.29	66.29	66.49
27	64.33	64.59	64.62	64.92	64.99	65.28	65.47	65.66	65.77	66.34	66.41	66.44
28	64.35	64.60	64.63	64.85	64.95	65.24	65.47	65.68	65.81	66.34	66.52	66.31
29	64.27	—	64.64	64.80	65.07	65.27	65.47	65.67	65.83	66.33	66.49	66.40
30	64.12	—	64.67	64.86	65.07	65.32	65.48	65.63	65.86	66.35	66.42	66.54
31	64.16	—	64.70	—	65.06	—	65.46	65.62	—	66.31	—	66.57
Mean	64.22	64.45	64.63	64.80	64.99	65.21	65.38	65.55	65.73	65.99	66.42	66.41
Max	64.36	64.63	64.73	64.94	65.07	65.32	65.48	65.68	65.86	66.35	66.54	66.57
Min	64.03	64.23	64.46	64.66	64.88	65.07	65.27	65.45	65.64	65.78	66.26	66.14

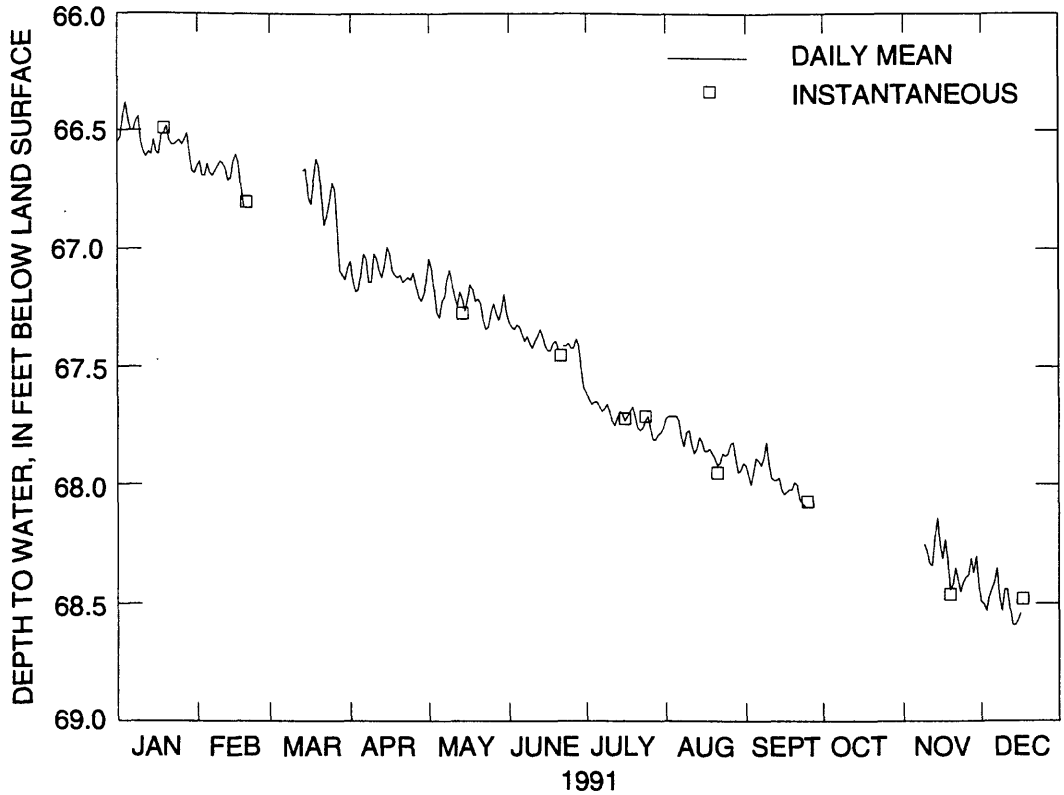

Figure 6. *(E)* Daily mean and instantaneous water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1991.

Table 6. Daily mean water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1991

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	66.55	66.65	—	67.05	67.04	67.31	67.61	67.72	67.92	—	—	68.49
2	66.53	66.63	—	67.13	67.08	67.33	67.64	67.71	67.96	—	—	68.50
3	66.44	66.69	—	67.18	67.17	67.34	67.66	67.71	68.00	—	—	68.53
4	66.38	66.69	—	67.17	67.27	67.32	67.65	67.71	67.95	—	—	68.47
5	66.45	66.64	—	67.11	67.29	67.33	67.65	67.71	67.89	—	—	68.44
6	66.50	66.68	—	67.02	67.22	67.36	67.67	67.73	67.90	—	—	68.41
7	66.50	66.69	—	67.04	67.20	67.39	67.69	67.80	67.92	—	—	68.35
8	66.46	66.67	—	67.14	67.13	67.37	67.68	67.84	67.89	—	—	68.47
9	66.44	66.65	—	67.14	67.09	67.40	67.66	67.78	67.82	—	68.25	68.53
10	66.55	66.63	—	67.02	67.14	67.42	67.69	67.77	67.91	—	68.28	68.44
11	66.59	66.64	—	67.04	67.20	67.39	67.73	67.83	67.97	—	68.33	68.44
12	66.61	66.66	—	67.09	67.24	67.37	67.75	67.87	67.98	—	68.34	68.52
13	66.59	66.71	—	67.12	67.18	67.34	67.72	67.85	67.98	—	68.22	68.59
14	66.60	66.70	66.67	67.07	67.21	67.37	67.69	67.80	67.97	—	68.14	68.59
15	66.54	66.63	66.66	66.99	67.26	67.41	67.70	67.82	68.02	—	68.25	68.57
16	66.59	66.60	66.78	67.02	67.21	67.43	67.73	67.86	68.04	—	68.31	68.54
17	66.60	66.64	66.81	67.09	67.15	67.43	67.71	67.86	68.03	—	68.23	—
18	66.52	66.74	66.71	67.11	67.17	67.40	67.69	67.85	68.02	—	68.32	—
19	66.51	66.82	66.62	67.12	67.22	67.39	67.67	67.87	68.02	—	68.44	—
20	66.48	—	66.65	67.11	67.21	67.42	67.71	67.89	67.99	—	68.42	—
21	66.54	—	66.77	67.14	67.23	—	67.76	67.92	68.00	—	68.35	—
22	66.56	—	66.90	67.13	67.30	67.41	67.77	67.91	68.06	—	68.40	—
23	66.56	—	66.86	67.12	67.34	67.41	67.76	67.87	68.08	—	68.45	—
24	66.55	—	66.80	67.13	67.33	67.40	67.73	67.88	68.09	—	68.41	—
25	66.54	—	66.72	67.10	67.27	67.42	67.71	67.87	—	—	68.39	—
26	66.56	—	66.75	67.15	67.23	67.42	67.76	67.83	—	—	68.38	—
27	66.54	—	66.91	67.20	67.27	67.38	67.81	67.82	—	—	68.31	—
28	66.51	—	67.09	67.22	67.30	67.41	67.81	67.89	—	—	68.37	—
29	66.60	—	67.11	67.19	67.26	67.51	67.79	67.95	—	—	68.30	—
30	66.67	—	67.13	67.14	67.19	67.59	67.78	67.94	—	—	68.42	—
31	66.68	—	67.08	—	67.27	—	67.76	67.91	—	—	—	—
Mean	66.54	66.67	66.83	67.11	67.22	67.40	67.71	67.83	67.98	—	68.33	68.49
Max	66.68	66.82	67.13	67.22	67.34	67.59	67.81	67.95	68.09	—	68.45	68.59
Min	66.38	66.60	66.62	66.99	67.04	67.31	67.61	67.71	67.82	—	68.14	68.35

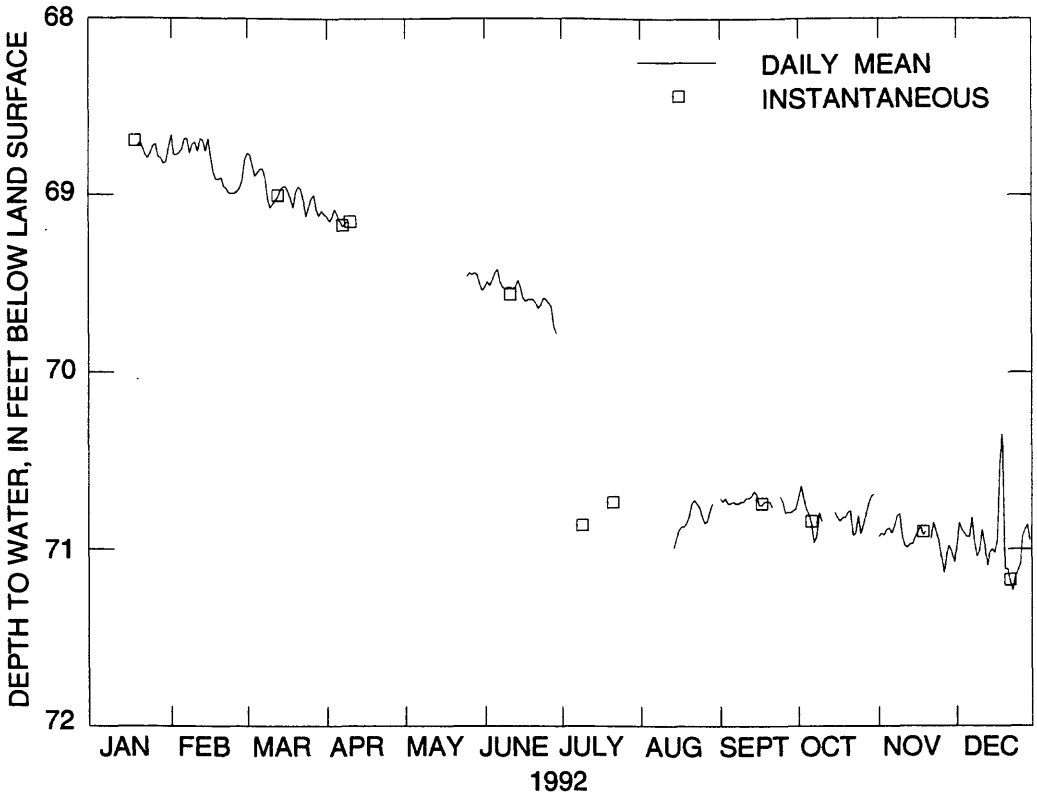

Figure 6. *(F)* Daily mean and instantaneous water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1992.

Table 7. Daily mean water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1992

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	68.66	68.76	69.12	—	69.52	—	—	70.71	70.71	70.93	71.00
2	—	68.77	68.77	69.15	—	69.49	—	—	70.73	70.64	70.91	70.85
3	—	68.77	68.83	69.13	—	69.51	—	—	70.71	70.71	70.92	70.89
4	—	68.76	68.89	69.08	—	69.48	—	—	70.74	70.77	70.89	70.91
5	—	68.74	68.87	69.11	—	69.44	—	—	70.74	70.80	70.88	70.93
6	—	68.68	68.85	69.15	—	69.42	—	—	70.73	70.85	70.91	70.93
7	—	68.68	68.85	69.18	—	69.49	—	—	70.74	70.96	70.87	70.82
8	—	68.76	68.90	69.16	—	69.52	—	—	70.74	70.93	70.81	70.96
9	—	68.71	69.02	69.15	—	69.53	—	—	70.73	70.79	70.80	71.04
10	—	68.70	69.07	—	—	69.52	—	—	70.73	70.84	70.93	71.01
11	—	68.75	69.05	—	—	69.52	—	—	70.71	—	70.98	70.89
12	—	68.68	69.03	—	—	69.53	—	—	70.71	—	70.99	70.97
13	—	68.69	69.01	—	—	69.52	—	—	70.70	70.74	70.97	71.09
14	—	68.75	68.97	—	—	69.48	—	70.99	70.67	—	70.97	71.02
15	—	68.68	68.95	—	—	69.52	—	70.94	70.69	70.79	70.93	71.00
16	—	68.78	68.95	—	—	69.58	—	70.89	70.75	70.82	70.90	71.02
17	—	68.87	68.98	—	—	69.60	—	70.87	70.75	70.84	70.87	70.95
18	—	68.91	69.02	—	—	69.59	—	70.87	70.73	70.82	70.92	70.50
19	68.72	68.91	69.07	—	—	69.59	—	70.85	70.73	70.82	70.90	70.35
20	68.70	68.90	68.98	—	—	69.59	—	70.81	70.73	70.79	—	71.11
21	68.73	68.95	68.95	—	—	69.61	—	70.74	70.76	70.78	70.94	71.11
22	68.77	68.96	68.97	—	—	69.64	—	70.72	—	70.92	70.85	71.18
23	68.79	68.99	69.03	—	—	69.62	—	70.74	—	70.91	70.90	71.23
24	68.76	68.99	69.12	—	—	69.58	—	70.76	70.70	70.81	70.95	71.15
25	68.72	68.99	69.07	—	69.46	69.59	—	70.81	70.73	70.91	71.04	71.12
26	68.71	68.98	69.02	—	69.44	69.61	—	70.85	70.79	70.86	71.13	71.08
27	68.78	68.96	69.00	—	69.45	69.63	—	70.84	70.79	70.80	71.04	70.93
28	68.79	68.92	69.08	—	69.44	—	—	70.78	70.79	70.74	70.98	70.89
29	68.82	68.80	69.12	—	69.45	—	—	70.74	70.78	70.70	71.01	70.86
30	68.81	—	69.09	—	69.50	—	—	—	70.77	70.69	71.07	70.95
31	68.73	—	69.11	—	69.54	—	—	—	—	—	—	—
Mean	68.76	68.82	68.98	69.14	69.47	69.64	—	70.82	70.73	70.81	70.94	70.96
Max	68.82	68.99	69.12	69.18	69.54	69.55	—	70.99	70.79	70.96	71.13	71.23
Min	68.70	68.66	68.76	69.08	69.44	69.42	—	70.72	70.67	70.64	70.80	70.35

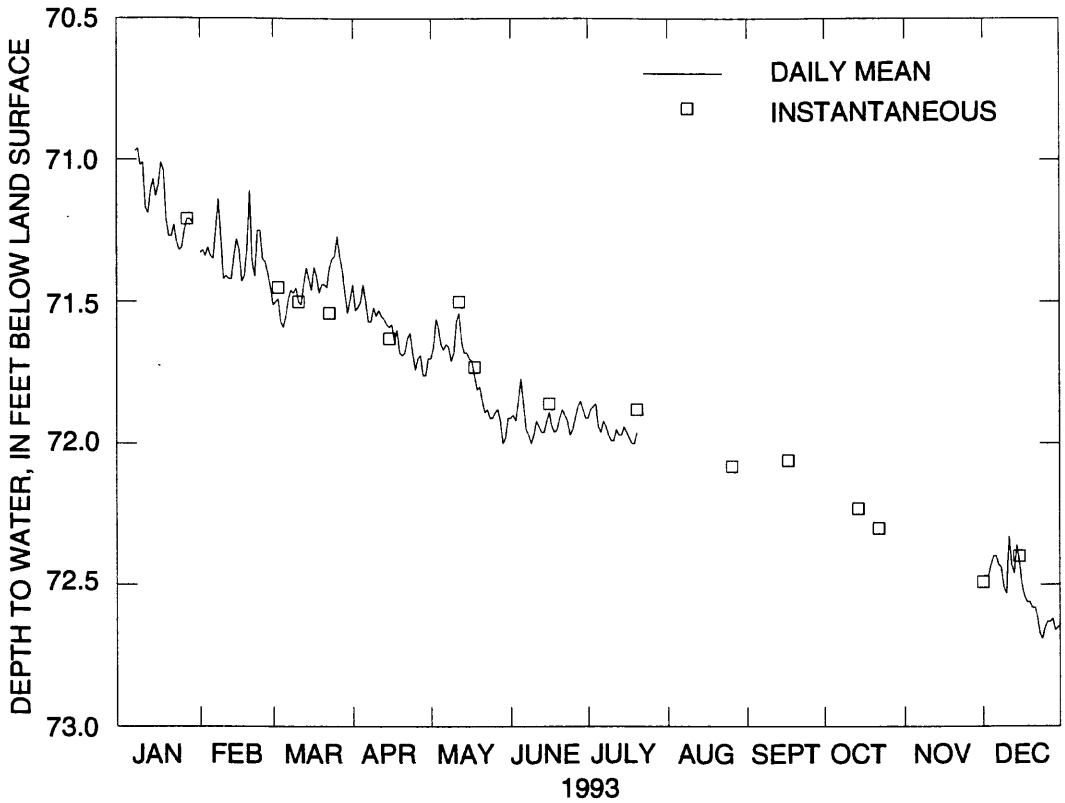

Figure 6. *(G)* Daily mean and instantaneous water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1993.

Table 8. Daily mean water levels, Lookout Mountain well (LKT), Long Valley Caldera, Mono County, California, 1993

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1		—	71.33	71.51	71.44	71.70	71.91	71.91	—	—	—	—
2	—	71.32	71.50	71.53	71.66	71.90	71.88	—	—	—	—	—
3	—	71.34	71.49	71.52	71.56	71.92	71.87	—	—	—	—	72.47
4	—	71.31	71.57	71.50	71.59	71.85	71.86	—	—	—	—	72.43
5	—	71.34	71.59	71.44	71.65	71.77	71.94	—	—	—	—	72.40
6	—	71.35	71.55	71.50	71.67	71.86	71.96	—	—	—	—	72.40
7	70.97	71.25	71.49	71.57	71.65	71.95	71.92	—	—	—	—	72.43
8	70.96	71.14	71.46	71.57	71.66	71.97	71.94	—	—	—	—	72.44
9	71.02	71.27	71.47	71.52	71.71	72.00	71.97	—	—	—	—	72.51
10	71.01	71.42	71.45	71.55	71.68	71.97	71.99	—	—	—	—	72.53
11	71.17	71.41	71.50	71.53	71.57	71.92	71.99	—	—	—	—	72.33
12	71.19	71.42	71.51	71.55	71.54	71.94	71.95	—	—	—	—	72.43
13	71.11	71.42	71.44	71.56	71.64	71.96	71.97	—	—	—	—	72.46
14	71.07	71.34	71.38	71.58	71.68	71.96	71.97	—	—	—	—	72.36
15	71.13	71.28	71.42	71.59	71.68	71.92	71.94	—	—	—	—	72.42
16	71.09	71.32	71.46	71.58	71.70	71.89	71.96	—	—	—	—	72.50
17	71.01	71.43	71.38	71.64	71.71	71.94	71.98	—	—	—	—	72.54
18	71.04	71.41	71.41	71.60	71.76	71.96	72.00	—	—	—	—	72.56
19	71.21	71.31	71.47	71.68	71.81	71.95	72.00	—	—	—	—	72.56
20	71.27	71.11	71.44	71.69	71.80	71.91	71.96	—	—	—	—	72.58
21	71.27	71.36	71.44	71.68	71.85	71.88	—	—	—	—	—	72.58
22	71.23	71.41	71.45	71.63	71.89	71.90	—	—	—	—	—	72.61
23	71.29	71.25	71.38	71.61	71.88	71.92	—	—	—	—	—	72.67
24	71.32	71.25	71.35	71.68	71.91	71.97	—	—	—	—	—	72.69
25	71.31	71.35	71.34	71.74	71.91	71.95	—	—	—	—	—	72.65
26	71.25	71.36	71.27	71.70	71.89	71.91	—	—	—	—	—	72.63
27	71.21	71.40	71.34	71.69	71.88	71.87	—	—	—	—	—	72.63
28	71.21	71.45	71.39	71.76	71.92	71.85	—	—	—	—	—	72.62
29	71.22	—	71.47	71.76	72.00	71.88	—	—	—	—	—	72.66
30	—	—	71.54	71.70	71.98	71.91	—	—	—	—	—	72.65
31	—	—	71.49	—	71.91	—	—	—	—	—	—	72.64
Mean	71.15	71.33	71.45	71.60	71.76	71.92	71.95	—	—	—	—	72.53
Max	71.32	71.45	71.59	71.76	72.00	72.00	72.00	—	—	—	—	72.69
Min	70.96	71.11	71.27	71.44	71.54	71.77	71.86	—	—	—	—	72.33

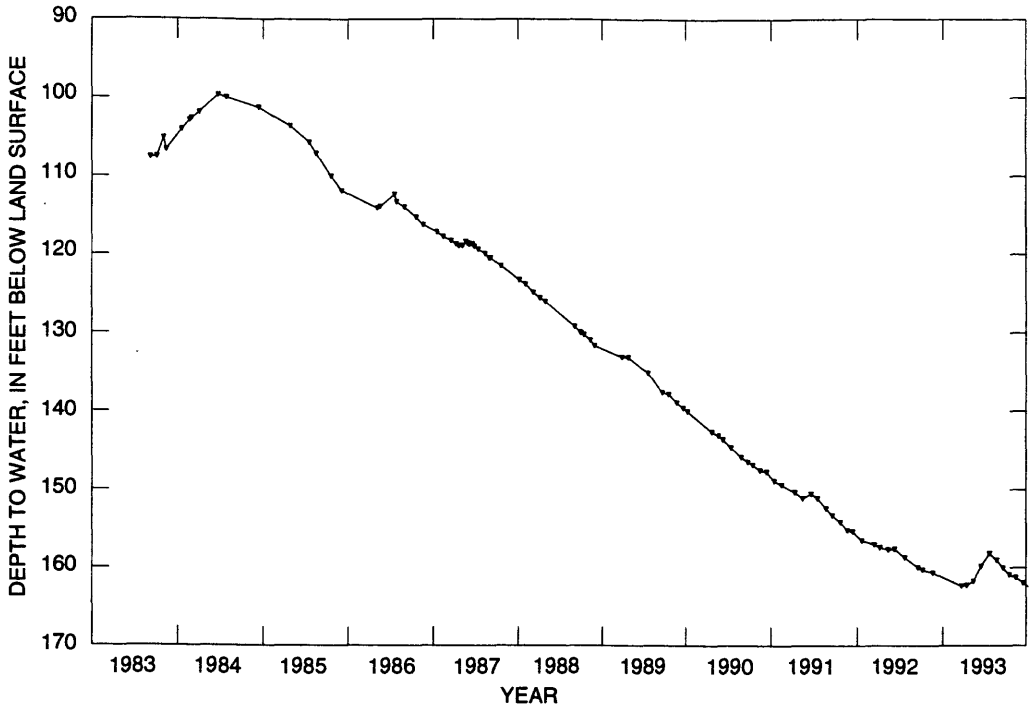

Figure 7. Instantaneous water levels, well SC-2, Long Valley Caldera, Mono County, California, 1983–93

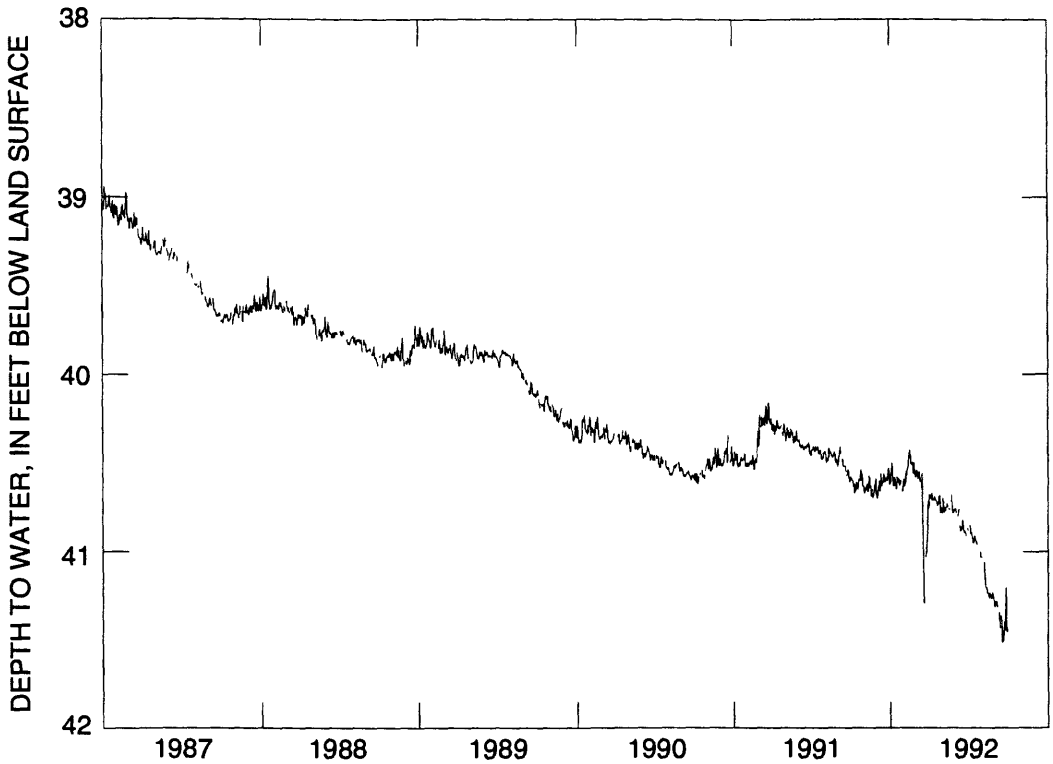

Figure 8. Daily mean water levels, well CH-1, Long Valley Caldera, Mono County, California, 1987–92.

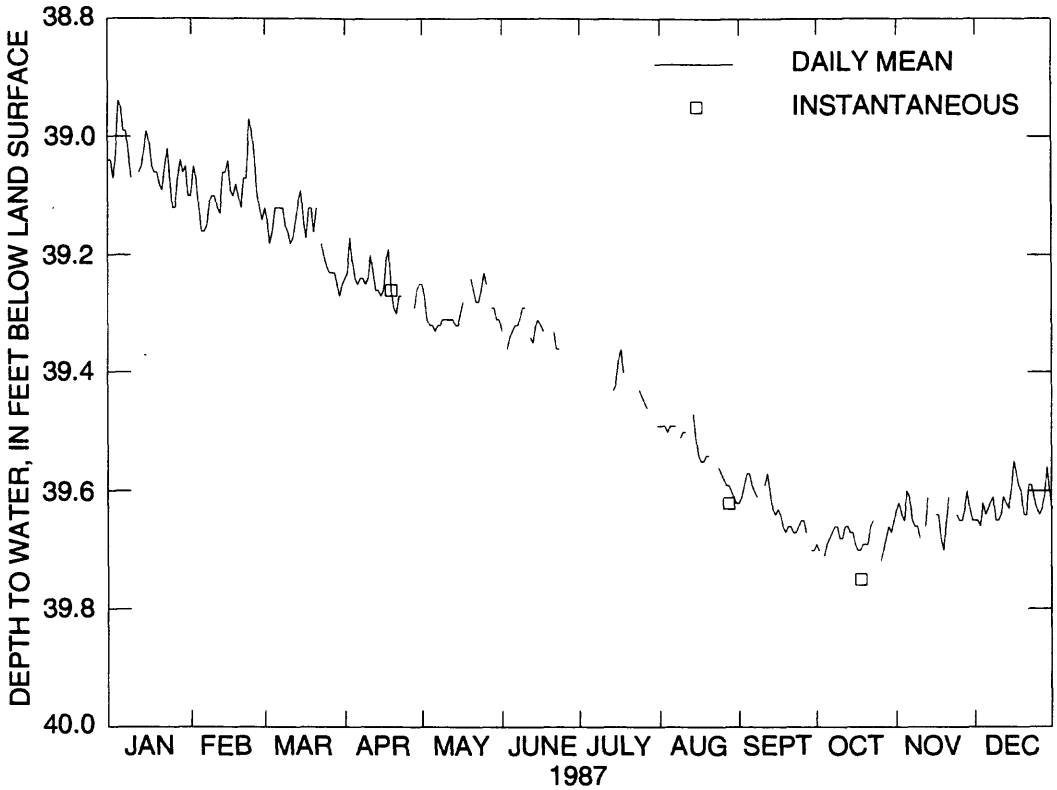

Figure 9. *(A)* Daily mean and instantaneous water levels, well CH-1, Long Valley Caldera, Mono County, California, 1987.

Table 9. Daily mean water levels, well CH-1, Long Valley Caldera, Mono County, California, 1987

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	39.04	39.10	39.12	39.24	39.25	39.33	—	39.49	39.62	39.69	39.63	39.65
2	39.07	39.05	39.14	39.23	39.27	—	39.36	39.49	39.61	39.70	39.62	39.65
3	39.03	39.07	39.18	39.17	39.31	39.36	—	39.49	39.59	—	39.64	39.66
4	38.94	39.12	39.16	39.21	39.32	39.34	39.35	39.50	39.57	39.71	39.65	39.62
5	38.95	39.16	39.12	39.24	39.32	39.33	—	39.49	39.57	39.69	39.60	39.64
6	38.99	39.16	39.12	39.25	39.33	39.32	—	39.49	39.59	39.68	39.61	39.63
7	38.99	39.15	39.12	39.24	39.32	39.32	—	—	39.61	39.66	39.66	39.61
8	39.03	39.11	39.12	39.24	39.32	39.31	—	—	39.61	39.66	39.66	39.61
9	39.07	39.10	39.15	39.25	39.31	39.29	39.37	39.51	—	39.66	39.66	39.65
10	—	39.10	39.16	39.24	39.31	39.29	—	39.50	—	39.68	39.68	39.65
11	—	39.12	39.18	39.20	39.31	—	—	39.50	39.59	39.68	—	39.64
12	39.06	39.13	39.17	39.23	39.31	39.34	—	—	39.57	39.66	39.66	39.61
13	39.05	39.06	39.14	39.26	39.31	39.35	—	—	39.60	39.66	39.61	39.62
14	39.02	39.06	39.11	39.26	39.32	39.32	39.43	39.47	39.63	39.67	—	39.63
15	38.99	39.04	39.09	39.27	39.32	39.31	39.42	39.51	39.64	39.67	—	39.60
16	39.01	39.09	39.14	39.26	39.30	39.32	39.38	39.54	39.63	39.69	39.64	39.55
17	39.05	39.10	39.17	39.21	39.28	39.33	39.36	39.55	39.64	39.70	39.64	39.57
18	39.06	39.08	39.12	39.19	—	—	39.40	39.55	39.66	39.70	39.68	39.59
19	39.06	39.10	39.12	39.26	—	39.33	—	39.54	39.67	39.69	39.70	39.60
20	39.08	39.12	39.16	39.29	39.24	—	—	39.54	39.66	39.69	39.65	39.64
21	39.09	39.07	39.12	39.30	39.26	39.33	—	—	39.66	39.69	39.61	39.64
22	39.05	39.07	—	39.27	39.28	39.36	39.43	39.56	39.67	39.66	—	39.59
23	39.02	38.97	39.18	39.27	39.28	39.36	—	—	39.67	39.65	—	39.59
24	39.07	38.99	39.20	—	39.26	—	39.43	39.56	39.66	—	39.64	39.61
25	39.12	39.03	39.22	—	39.23	—	39.44	39.57	39.65	—	39.65	39.63
26	39.12	39.09	39.23	39.30	39.25	39.40	39.45	39.58	39.65	39.72	39.65	39.64
27	39.07	39.12	39.23	—	—	—	39.46	39.59	39.67	39.70	39.63	39.63
28	39.04	39.14	39.23	39.29	39.29	—	—	39.59	—	39.68	39.60	39.61
29	39.06	—	39.25	39.26	39.29	—	—	39.60	39.70	39.66	39.63	39.56
30	39.05	—	39.27	39.25	39.31	—	—	39.61	39.70	39.67	39.65	39.60
31	39.10	—	39.25	—	39.31	—	39.49	39.62	—	39.65	—	39.63
Mean	39.04	39.09	39.17	39.25	39.29	39.33	39.41	39.54	39.63	39.68	39.64	39.62
Max	39.12	39.16	39.27	39.30	39.33	39.40	39.49	39.62	39.70	39.72	39.70	39.66
Min	38.94	38.97	39.09	39.17	39.23	39.29	39.35	39.47	39.57	39.65	39.60	39.55

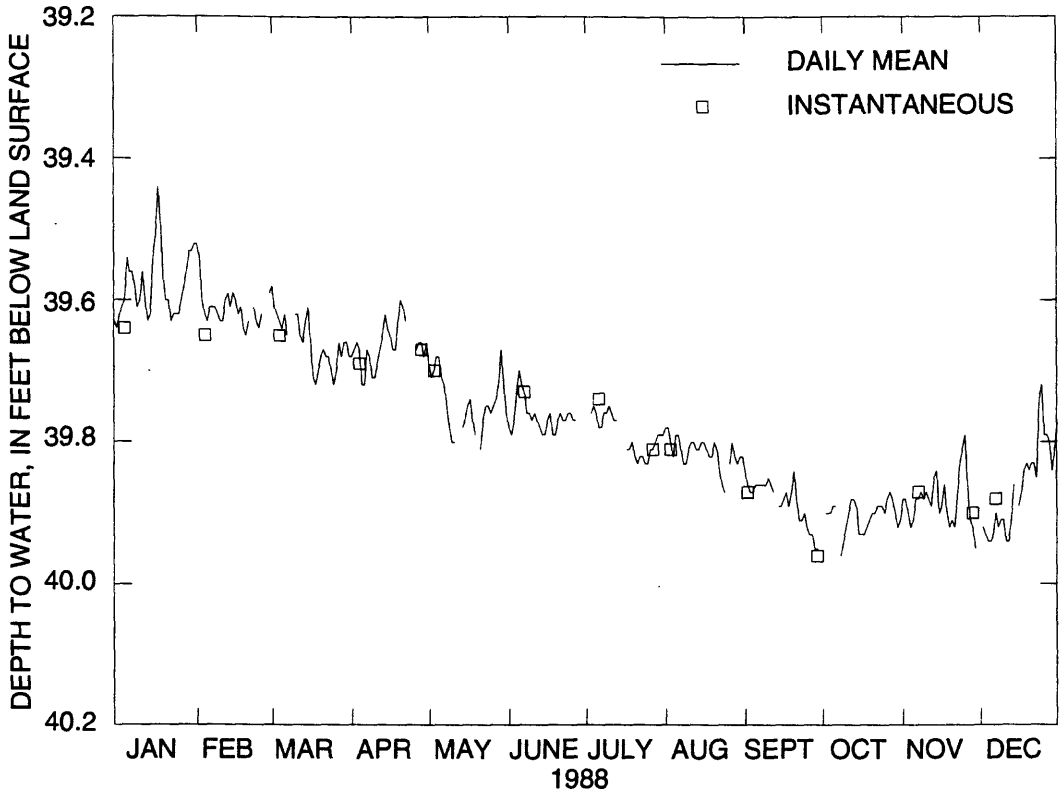

Figure 9. *(B)* Daily mean and instantaneous water levels, well CH-1, Long Valley Caldera, Mono County, California, 1988.

Table 10. Daily mean water levels, well CH-1, Long Valley Caldera, Mono County, California, 1988

[Values are in feet below land surface. Max. maximum; Min. minimum; —. no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	39.64	39.52	39.58	39.68	39.69	39.78	39.77	39.78	39.84	—	39.88	—
2	39.62	39.54	39.61	39.67	39.71	39.79	—	39.78	39.86	39.90	39.88	39.92
3	39.61	39.60	39.62	39.66	39.70	39.77	39.76	39.80	39.87	39.90	39.90	39.93
4	39.60	39.62	39.63	39.67	39.68	39.73	39.75	39.82	39.87	39.90	39.92	39.94
5	39.54	39.63	39.64	39.72	39.68	39.70	39.76	39.79	39.86	39.89	39.91	39.94
6	39.56	39.61	39.62	39.72	39.71	39.72	39.78	39.79	39.86	39.89	39.88	39.93
7	39.56	39.61	39.65	39.67	39.72	39.73	39.78	39.81	39.86	—	39.88	39.90
8	39.58	39.61	—	39.68	39.75	39.76	39.76	39.83	39.86	39.96	39.87	39.92
9	39.61	39.62	—	39.71	39.78	39.76	39.76	39.83	39.86	39.94	39.88	39.91
10	39.60	39.63	39.62	39.71	39.80	39.77	39.75	39.81	39.85	39.92	39.87	39.91
11	39.56	39.63	39.62	39.69	39.80	39.76	39.76	39.80	39.86	39.90	39.88	39.94
12	39.60	39.60	39.65	39.67	—	39.77	39.77	39.80	39.87	39.88	39.89	39.94
13	39.63	39.59	39.66	39.65	—	39.78	39.77	39.81	—	39.88	39.85	39.91
14	39.62	39.61	39.63	39.62	39.78	39.79	—	39.81	39.89	39.89	39.84	39.86
15	39.54	39.59	39.61	39.64	39.77	39.79	—	39.80	39.89	39.93	39.90	—
16	39.51	39.60	39.66	39.65	39.75	39.77	—	39.80	39.88	39.93	39.89	39.89
17	39.44	39.62	39.71	39.67	39.74	39.76	39.81	39.81	39.87	39.93	39.86	39.87
18	39.49	39.61	39.72	39.67	39.77	39.79	39.81	39.82	39.89	39.92	39.90	39.84
19	39.57	39.64	39.70	39.63	39.79	39.79	39.80	39.82	39.87	39.91	39.92	39.83
20	39.60	39.65	39.68	39.60	—	39.77	39.82	39.80	39.84	39.90	39.91	39.84
21	39.60	39.63	39.67	39.61	39.81	39.76	39.83	39.81	39.88	39.90	39.92	39.83
22	39.63	—	39.68	39.63	39.77	39.77	39.82	39.84	39.91	39.89	39.88	39.83
23	39.62	39.61	39.68	—	39.75	39.77	39.82	39.86	39.91	39.89	39.83	39.85
24	39.62	39.63	39.70	—	39.75	39.76	39.83	39.87	39.90	39.89	39.81	39.74
25	39.62	39.64	39.72	—	39.76	39.76	39.83	—	39.92	39.90	39.79	39.72
26	39.60	39.62	39.70	39.67	39.75	39.77	39.81	39.83	39.93	39.88	39.86	39.79
27	39.58	—	39.66	39.66	39.74	39.77	39.81	39.80	39.93	39.87	39.91	39.79
28	39.56	—	39.68	39.66	39.72	—	39.80	39.82	39.95	39.88	39.92	39.80
29	39.53	39.59	39.66	39.68	39.67	—	39.79	39.83	39.95	39.90	39.95	39.84
30	39.53	—	39.66	39.66	39.72	—	39.79	39.82	—	39.92	—	39.81
31	39.52	—	39.68	—	39.76	—	39.79	39.82	—	39.91	—	39.77
Mean	39.58	39.61	39.66	39.66	39.74	39.76	39.79	39.81	39.88	39.90	39.88	39.86
Max	39.64	39.65	39.72	39.72	39.81	39.79	39.83	39.87	39.95	39.96	39.95	39.94
Min	39.44	39.52	39.58	39.60	39.67	39.70	39.75	39.78	39.84	39.87	39.79	39.72

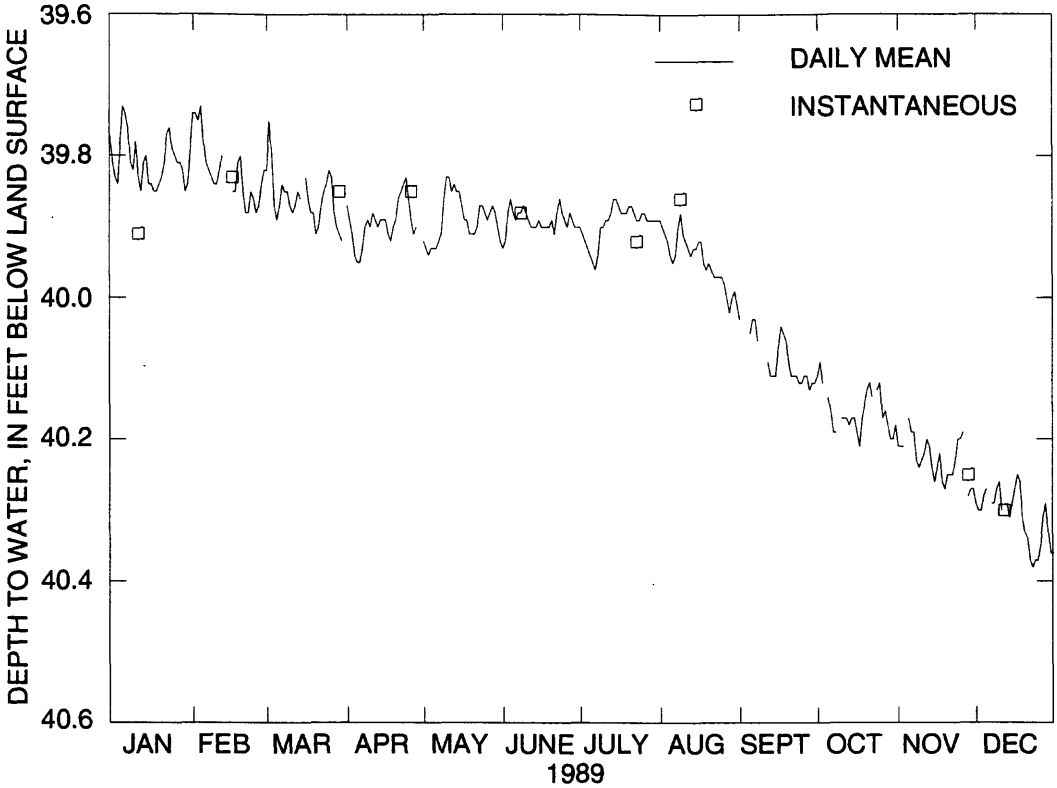

Figure 9. *(C)* Daily mean and instantaneous water levels, well CH-1, Long Valley Caldera, Mono County, California, 1989.

Table 11. Daily mean water levels, well CH-1, Long Valley Caldera, Mono County, California, 1989

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	39.81	39.74	39.82	39.87	39.92	39.93	39.90	39.89	40.03	40.11	40.21	40.29
2	39.83	39.74	39.75	39.89	39.93	39.92	39.91	39.90	—	40.09	40.21	40.30
3	39.84	39.75	39.80	39.91	39.94	39.88	39.92	39.91	40.05	40.12	40.21	40.30
4	39.78	39.73	39.87	39.94	39.93	39.86	39.93	39.92	—	—	—	40.28
5	39.73	39.78	39.89	39.95	39.93	39.88	39.94	39.94	40.05	40.14	40.17	40.27
6	39.74	39.81	39.87	39.95	39.93	39.89	39.95	39.95	40.03	40.16	40.19	—
7	39.76	39.82	39.84	39.93	39.92	39.88	39.96	39.94	40.03	40.19	40.19	40.29
8	39.81	39.83	39.85	39.90	39.91	39.88	39.94	39.90	40.06	40.19	40.23	40.29
9	39.82	39.84	39.85	39.89	39.86	39.87	39.90	39.88	—	—	40.24	40.27
10	39.78	39.84	39.87	39.90	39.83	39.88	39.90	39.91	—	40.17	40.23	40.26
11	39.83	39.82	39.88	39.88	39.83	39.89	39.89	39.92	—	40.17	40.22	40.30
12	39.85	39.80	39.87	39.89	39.85	39.90	39.89	39.93	40.09	40.17	40.20	—
13	39.81	—	39.85	39.90	39.84	39.90	39.88	39.94	40.11	40.18	40.21	40.29
14	39.80	—	39.86	39.89	39.85	39.90	39.86	39.93	40.11	40.17	40.24	40.31
15	39.84	—	—	39.89	39.85	39.89	39.86	39.93	40.11	40.17	40.26	40.29
16	39.84	39.85	39.83	39.89	39.87	39.90	39.87	39.92	40.07	40.19	40.24	40.27
17	39.85	39.85	39.86	39.91	39.89	39.90	39.88	39.92	40.04	40.21	40.22	40.25
18	39.85	39.81	39.88	39.92	39.89	39.90	39.88	39.95	40.05	40.17	40.26	40.26
19	39.84	39.80	39.88	39.90	39.91	39.90	39.88	39.96	40.06	40.15	40.27	40.31
20	39.83	39.85	39.91	39.89	39.91	39.89	39.87	39.95	40.09	40.13	40.25	40.33
21	39.81	39.88	39.90	39.86	39.91	39.91	39.87	39.96	40.11	40.12	40.25	40.34
22	39.77	39.88	39.87	39.85	39.90	39.88	39.88	39.97	40.11	40.14	40.25	40.37
23	39.76	39.85	39.85	39.84	39.87	39.86	39.89	39.97	40.11	—	40.23	40.38
24	39.79	39.86	39.84	39.83	39.87	39.88	39.89	39.97	40.12	40.13	40.20	40.37
25	39.80	39.88	39.82	39.86	39.88	39.89	39.88	39.97	40.12	40.12	40.20	40.37
26	39.81	39.87	39.83	39.89	39.89	39.90	39.88	39.98	40.11	40.17	40.19	40.35
27	39.81	39.84	39.88	39.91	39.88	39.88	39.89	40.00	40.11	40.16	—	40.31
28	39.82	39.82	39.90	39.90	39.87	39.89	39.89	40.02	40.13	40.18	40.28	40.29
29	39.85	—	39.91	—	39.88	39.90	39.89	40.00	40.12	40.20	40.27	40.33
30	39.84	—	39.92	—	39.90	39.90	39.89	39.99	40.12	40.20	40.27	40.36
31	39.79	—	—	—	39.92	—	39.89	40.01	—	40.18	—	40.36
Mean	39.81	39.82	39.86	39.89	39.89	39.89	39.90	39.95	40.09	40.16	40.23	40.31
Max	39.85	39.88	39.92	39.95	39.94	39.93	39.96	40.02	40.13	40.21	40.28	40.38
Min	39.73	39.73	39.75	39.83	39.83	39.86	39.86	39.88	40.03	40.09	40.17	40.25

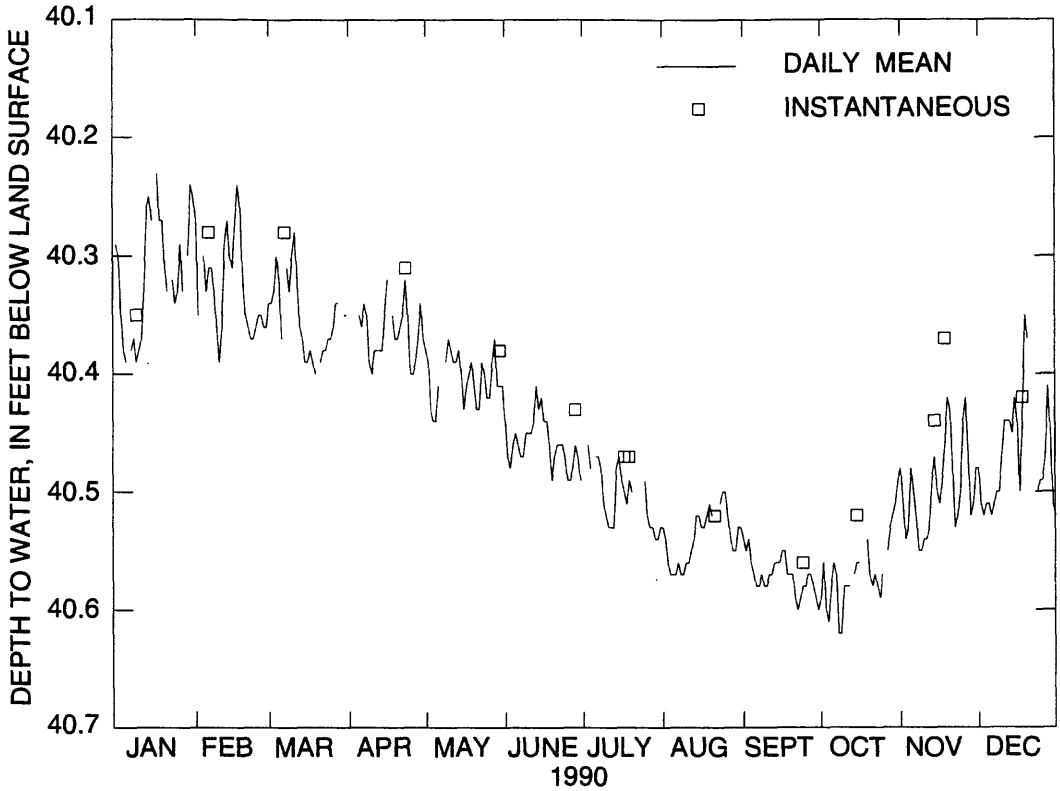

Figure 9. *(D)* Daily mean and instantaneous water levels, well CH-1, Long Valley Caldera, Mono County, California, 1990.

Table 12. Daily mean water levels, well CH-1, Long Valley Caldera, Mono County, California, 1990

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	40.29	40.27	40.34	—	40.38	40.44	—	40.53	40.54	40.59	40.48	40.48
2	40.30	40.35	40.34	40.39	40.39	40.47	—	40.54	40.55	40.56	40.51	40.51
3	40.35	—	40.33	—	40.43	40.48	40.46	40.56	40.54	40.60	40.54	40.52
4	40.38	40.30	40.30	—	40.44	40.46	40.48	40.57	40.56	40.61	40.53	40.51
5	40.39	40.33	40.32	40.35	40.44	40.45	—	40.57	40.57	40.58	40.48	40.51
6	—	40.31	40.37	40.36	40.41	40.46	40.47	40.57	40.58	40.56	40.50	40.52
7	40.38	40.31	—	40.34	—	40.47	40.47	40.56	40.58	40.57	40.52	40.51
8	40.37	40.33	40.31	40.35	—	40.47	40.48	40.57	40.57	40.62	40.55	40.50
9	40.39	40.36	40.33	40.39	40.39	40.45	40.51	40.57	40.58	40.62	40.55	40.50
10	40.38	40.39	40.30	40.40	40.37	40.45	40.52	40.56	40.58	40.58	40.54	40.47
11	40.37	40.36	40.28	40.38	40.38	40.45	40.53	40.56	40.57	40.58	40.54	40.44
12	40.33	40.29	40.32	40.38	40.39	40.44	40.53	40.55	40.57	40.58	40.53	40.44
13	40.26	40.27	40.36	40.38	40.39	40.41	40.53	40.54	40.56	—	40.49	40.44
14	40.25	40.30	40.37	40.38	40.38	40.43	40.48	40.52	40.56	40.57	40.47	40.45
15	40.27	40.31	40.39	40.35	40.40	40.42	40.47	40.52	40.56	40.56	40.50	40.42
16	—	40.27	40.39	40.32	40.43	40.44	40.49	40.53	40.55	40.56	40.51	40.44
17	40.23	40.24	40.38	—	40.41	40.44	40.50	40.53	40.55	—	40.49	40.50
18	40.27	40.26	40.39	40.35	40.40	40.46	40.51	40.52	40.57	—	40.46	40.44
19	40.27	40.32	40.40	40.37	40.39	40.49	40.49	40.51	40.57	40.54	40.42	40.35
20	40.31	40.35	—	40.37	40.41	40.47	40.50	40.52	40.57	40.57	40.43	40.37
21	40.33	40.36	40.39	40.36	40.43	40.46	—	—	40.59	40.58	40.48	—
22	—	40.37	40.38	40.35	40.43	40.46	40.50	—	40.60	40.57	40.53	—
23	40.32	40.37	40.38	40.32	40.39	40.46	—	40.51	40.59	40.58	40.52	40.50
24	40.34	40.36	40.37	40.35	40.40	40.47	—	40.50	40.58	40.59	40.50	40.50
25	40.33	40.35	40.37	40.40	40.42	40.49	40.49	40.50	40.58	40.57	40.44	40.49
26	40.29	40.35	40.36	40.40	40.42	40.49	40.52	40.52	40.57	—	40.42	40.49
27	40.33	40.36	40.34	40.39	40.39	40.48	40.53	40.54	40.57	40.55	40.47	40.47
28	—	40.36	40.34	40.37	40.37	40.46	40.53	40.55	40.58	40.53	40.52	40.41
29	40.30	—	—	40.34	40.41	40.47	40.54	40.55	40.59	40.52	40.51	40.45
30	40.24	—	40.35	40.37	40.41	40.49	40.54	40.53	40.60	40.51	40.48	40.51
31	40.25	—	40.35	—	40.41	—	40.53	40.53	—	40.49	—	40.52
Mean	40.32	40.33	40.35	40.37	40.40	40.46	40.50	40.54	40.57	40.57	40.50	40.47
Max	40.39	40.39	40.40	40.40	40.44	40.49	40.54	40.57	40.60	40.62	40.55	40.52
Min	40.23	40.24	40.28	40.32	40.37	40.41	40.46	40.50	40.54	40.49	40.42	40.35

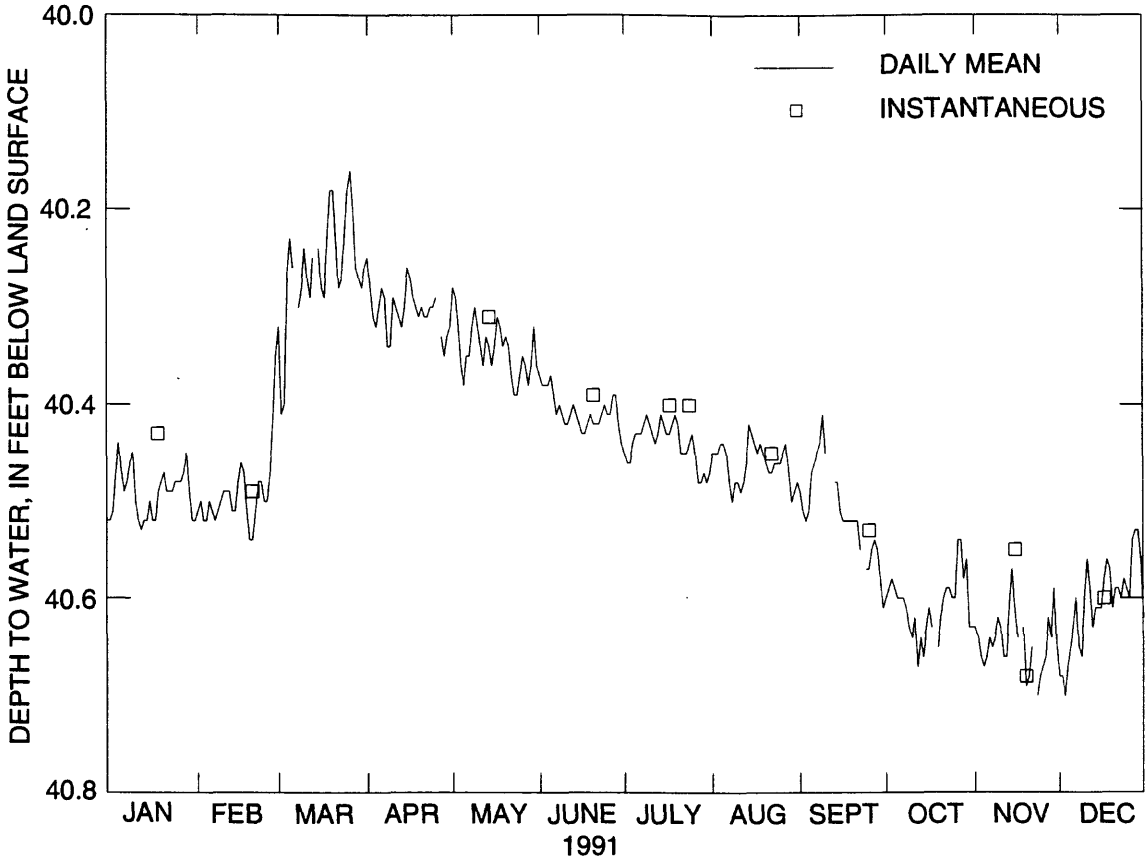

Figure 9. *(E)* Daily mean and instantaneous water levels, well CH-1, Long Valley Caldera, Mono County, California, 1991.

Table 13. Daily mean water levels, well CH-1, Long Valley Caldera, Mono County, California, 1991

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	40.52	40.51	40.32	40.25	40.28	40.37	40.45	40.45	40.49	40.60	40.63	40.68
2	40.51	40.50	40.41	40.28	40.29	40.38	40.46	40.45	40.51	40.59	40.64	40.68
3	40.47	40.52	40.40	40.31	40.32	40.38	40.46	40.45	40.52	40.58	40.66	40.70
4	40.44	40.52	40.27	40.32	40.36	40.38	40.44	40.44	40.51	40.59	40.67	40.67
5	40.47	40.50	40.23	40.30	40.38	40.37	40.43	40.44	40.47	40.60	40.66	40.65
6	40.49	40.51	40.26	40.28	40.35	40.39	40.43	40.45	40.46	40.60	40.64	40.63
7	40.48	40.52	—	40.29	40.35	40.41	40.43	40.48	40.45	40.60	40.65	40.60
8	40.46	40.51	40.30	40.34	40.32	40.40	40.42	40.50	40.44	40.61	40.64	40.65
9	40.45	40.50	40.28	40.34	40.30	40.41	40.41	40.48	40.41	40.63	40.62	40.66
10	40.50	40.49	40.24	40.29	40.32	40.42	40.42	40.48	40.45	40.64	40.63	40.60
11	40.52	40.49	40.27	40.30	40.34	40.42	40.43	40.49	—	40.62	40.66	40.56
12	40.53	40.49	40.29	40.31	40.36	40.41	40.44	40.48	—	40.67	40.66	40.59
13	40.52	40.51	40.25	40.32	40.33	40.40	40.43	40.46	40.48	40.64	40.61	40.63
14	40.52	40.51	—	40.30	40.34	40.41	40.41	40.42	40.48	40.66	40.57	40.61
15	40.50	40.48	40.24	40.26	40.36	40.42	40.42	40.43	40.51	40.63	40.61	40.61
16	40.52	40.46	40.28	40.27	40.34	40.43	40.43	40.44	40.52	40.61	40.64	40.61
17	40.52	40.47	40.29	40.29	40.31	40.43	40.43	40.45	40.52	40.63	—	40.58
18	40.49	40.51	40.23	40.30	40.32	40.42	40.42	40.44	40.52	—	40.63	40.56
19	40.48	40.54	40.18	40.31	40.34	40.41	40.41	40.45	40.52	40.65	40.69	40.57
20	40.47	40.54	40.18	40.30	40.33	40.42	40.42	40.46	40.52	40.62	40.68	40.61
21	40.49	40.51	40.23	40.31	40.34	40.42	40.45	40.47	40.52	40.60	40.65	40.59
22	40.49	40.48	40.28	40.31	40.37	40.42	40.45	40.47	40.55	40.59	—	40.59
23	40.49	40.48	40.27	40.30	40.39	40.41	40.45	40.46	—	40.59	40.70	40.60
24	40.48	40.50	40.23	40.30	40.39	40.40	40.44	40.46	40.57	40.60	40.68	40.58
25	40.48	40.50	40.18	40.29	40.37	40.41	40.43	40.46	40.57	40.60	40.67	40.59
26	40.48	40.47	40.16	—	40.35	40.41	40.45	40.45	40.55	40.54	40.66	40.60
27	40.47	40.42	40.20	40.33	40.36	40.39	40.48	40.44	40.54	40.54	40.62	40.54
28	40.45	40.35	40.26	40.35	40.38	40.39	40.48	40.47	40.55	40.58	40.64	40.53
29	40.49	—	40.27	40.33	40.36	40.42	40.47	40.50	40.58	40.56	40.59	40.53
30	40.52	—	40.28	40.32	40.32	40.44	40.48	40.49	40.61	40.63	40.65	40.56
31	40.52	—	40.26	—	40.36	—	40.47	40.48	—	40.63	—	40.62
Mean	40.49	40.49	40.26	40.30	40.34	40.41	40.44	40.46	40.51	40.61	40.64	40.61
Max	40.53	40.54	40.41	40.35	40.39	40.44	40.48	40.50	40.61	40.67	40.70	40.70
Min	40.44	40.35	40.16	40.25	40.28	40.37	40.41	40.42	40.41	40.54	40.57	40.53

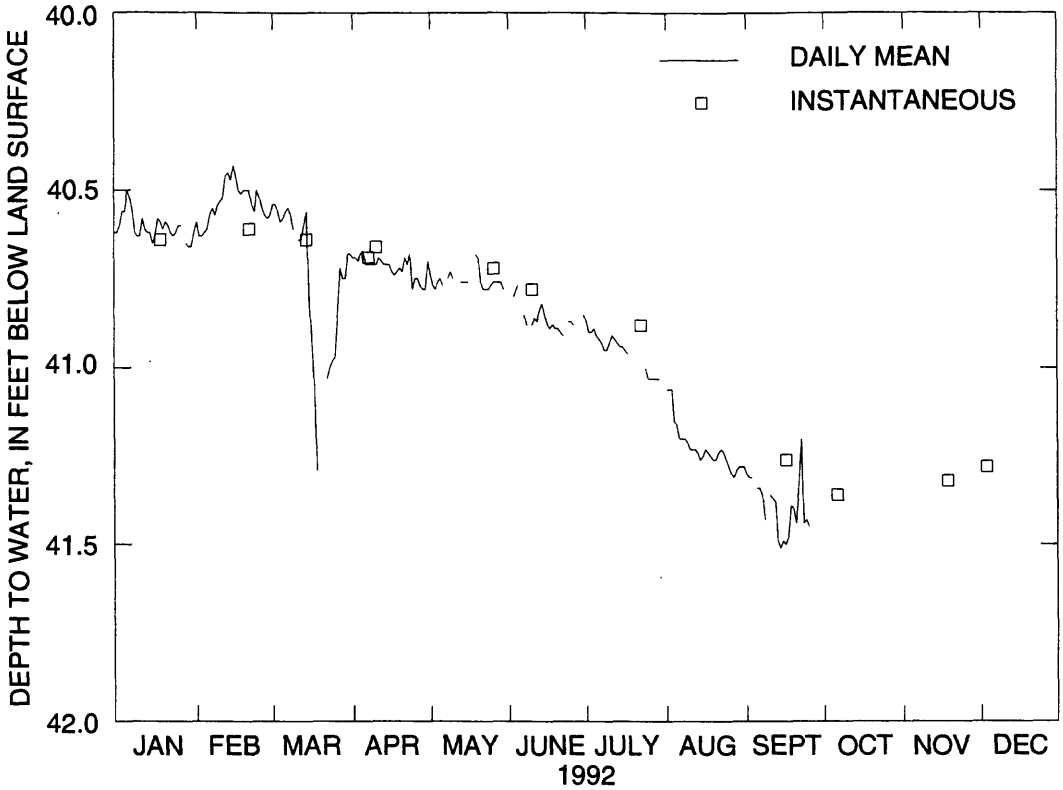

Figure 9. *(F)* Daily mean and instantaneous water levels, well CH-1, Long Valley Caldera, Mono County, California, 1992.

Table 14 . Daily mean water levels, well CH-1, Long Valley Caldera, Mono County, California, 1992

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	40.62	40.59	40.54	40.69	40.74	40.79	40.87	41.06	41.30	—	—	—
2	40.60	40.63	40.54	40.69	40.77	—	40.90	41.06	41.31	—	—	—
3	40.56	40.63	40.56	40.70	40.78	40.80	40.90	41.06	41.31	—	—	—
4	40.56	40.62	40.59	40.68	40.76	40.78	40.89	41.15	—	—	—	—
5	40.50	40.61	40.58	40.67	40.75	40.76	40.91	41.16	41.34	—	—	—
6	40.52	40.57	40.56	40.71	40.77	—	40.92	41.20	41.34	—	—	—
7	40.56	40.55	40.55	40.71	—	40.85	40.93	41.20	41.36	—	—	—
8	40.62	40.57	40.57	40.71	40.75	40.88	40.95	41.20	41.43	—	—	—
9	40.63	40.54	40.61	40.71	40.73	—	40.95	41.21	—	—	—	—
10	40.63	40.53	—	40.71	40.75	40.88	40.93	41.23	41.36	—	—	—
11	40.58	40.52	40.64	40.69	—	40.86	40.91	41.23	41.37	—	—	—
12	40.61	40.46	40.64	40.70	—	40.87	40.92	41.23	41.38	—	—	—
13	40.62	40.45	40.60	40.71	40.76	40.84	40.93	41.24	41.49	—	—	—
14	40.62	40.47	40.56	40.71	40.76	40.82	40.94	41.26	41.51	—	—	—
15	40.65	40.43	40.80	40.71	40.76	40.85	40.94	41.25	41.49	—	—	—
16	40.63	40.46	40.92	40.73	40.76	40.88	40.95	41.23	41.50	—	—	—
17	40.58	40.50	41.05	40.74	—	40.89	40.96	41.24	41.48	—	—	—
18	40.59	40.51	41.29	40.73	—	40.88	—	41.25	41.39	—	—	—
19	40.61	40.50	—	40.72	40.68	40.89	—	41.26	41.40	—	—	—
20	40.59	40.50	41.17	40.73	40.69	40.89	—	41.26	41.44	—	—	—
21	40.60	40.50	—	40.69	40.76	40.90	—	41.24	41.34	—	—	—
22	40.62	40.54	41.03	40.71	40.78	40.91	—	41.23	41.20	—	—	—
23	40.63	40.56	41.00	40.68	40.78	—	—	41.24	41.44	—	—	—
24	40.62	40.50	40.98	40.78	40.78	40.87	41.00	41.26	41.43	—	—	—
25	40.60	40.52	40.97	40.75	40.77	40.87	41.03	41.28	41.45	—	—	—
26	40.60	40.55	40.85	40.75	40.76	40.88	41.03	41.30	—	—	—	—
27		—	40.57	40.72	40.77	40.76	—	41.03	41.31	—	—	—
28	40.65	40.58	40.75	40.78	40.76	—	41.03	41.29	—	—	—	—
29	40.66	40.57	40.75	40.78	40.76	—	41.03	41.28	—	—	—	—
30	40.66	—	40.68	40.70	40.78	40.85	—	41.28	—	—	—	—
31	40.62	—	40.68	—	—	—	—	41.28	—	—	—	—
Mean	40.60	40.54	40.76	40.72	40.76	40.86	40.95	41.22	41.39	—	—	—
Max	40.66	40.63	41.29	40.78	40.78	40.91	41.03	41.31	41.51	—	—	—
Min	40.50	40.43	40.54	40.67	40.68	40.76	40.87	41.06	41.20	—	—	—

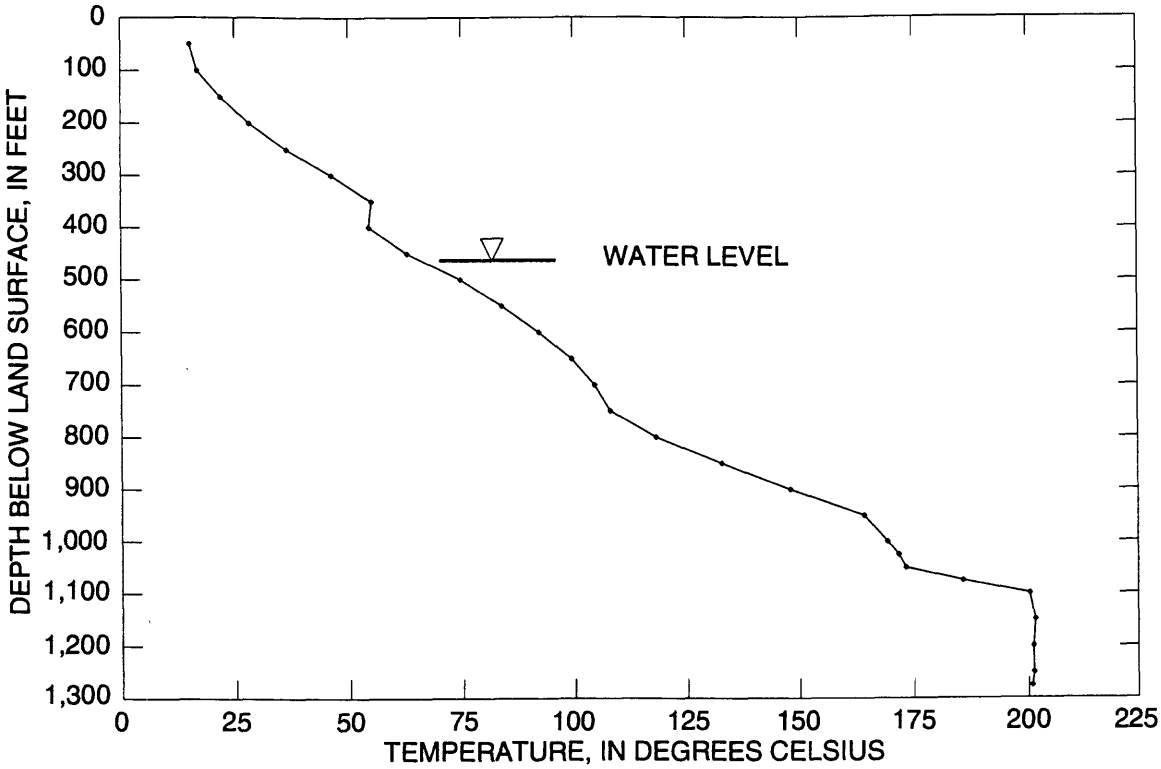

Figure 10. Temperature log of well RDO-8, Long Valley Caldera, Mono County, California, June 19, 1987.

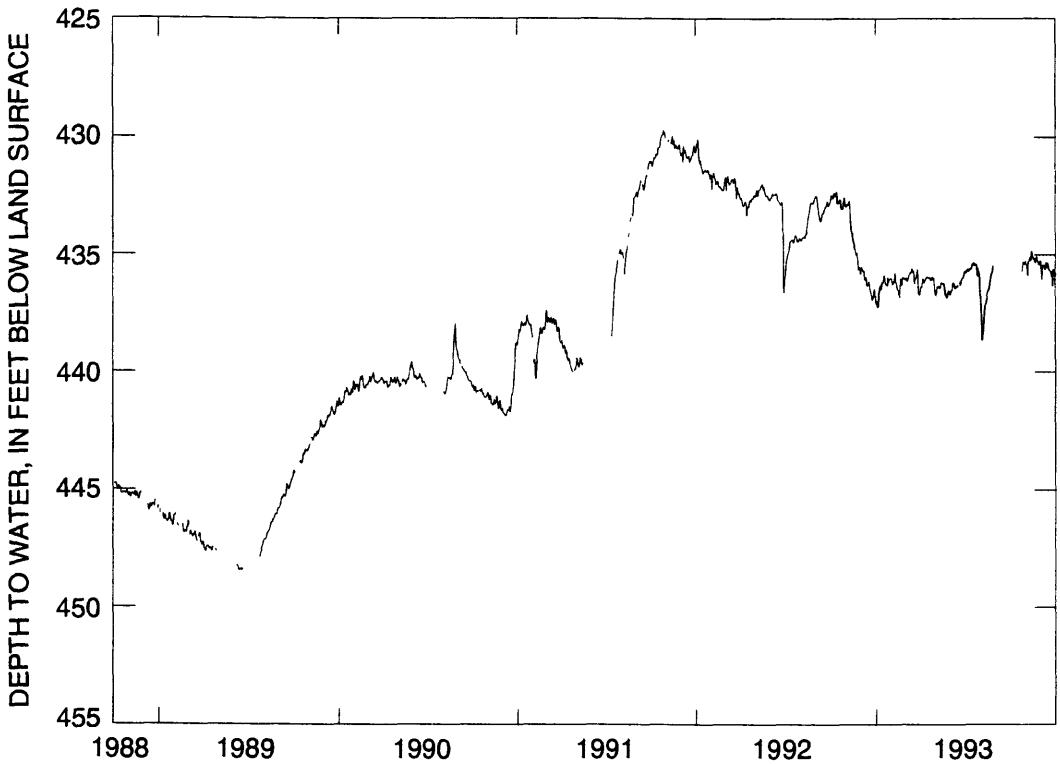

Figure 11. Daily mean water levels, well RDO-8, Long Valley Caldera, Mono County California, 1988–93.

Table 15. Daily water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1988

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	—	—	—	—	—	—	445.17	—
2	—	—	—	—	—	—	—	—	—	444.76	445.16	—
3	—	—	—	—	—	—	—	—	—	444.76	445.25	—
4	—	—	—	—	—	—	—	—	—	444.76	445.35	—
5	—	—	—	—	—	—	—	—	—	444.72	445.30	—
6	—	—	—	—	—	—	—	—	—	444.73	445.19	—
7	—	—	—	—	—	—	—	—	—	444.86	445.15	—
8	—	—	—	—	—	—	—	—	—	445.01	445.19	445.68
9	—	—	—	—	—	—	—	—	—	444.95	445.22	445.69
10	—	—	—	—	—	—	—	—	—	444.89	445.18	445.70
11	—	—	—	—	—	—	—	—	—	444.85	445.24	445.88
12	—	—	—	—	—	—	—	—	—	444.87	445.27	445.91
13	—	—	—	—	—	—	—	—	—	444.89	445.10	445.81
14	—	—	—	—	—	—	—	—	—	444.97	445.11	445.63
15	—	—	—	—	—	—	—	—	—	445.14	445.32	445.64
16	—	—	—	—	—	—	—	—	—	445.19	445.24	445.77
17	—	—	—	—	—	—	—	—	444.43	445.17	445.12	445.75
18	—	—	—	—	—	—	—	—	444.51	445.17	445.30	445.66
19	—	—	—	—	—	—	—	—	444.42	445.12	445.37	445.61
20	—	—	—	—	—	—	—	—	444.32	445.12	445.38	445.62
21	—	—	—	—	—	—	—	—	444.44	445.17	445.43	445.65
22	—	—	—	—	—	—	—	—	—	445.15	445.36	445.64
23	—	—	—	—	—	—	—	—	—	445.15	445.17	445.74
24	—	—	—	—	—	—	—	—	—	445.15	445.17	445.46
25	—	—	—	—	—	—	—	—	444.62	445.17	445.11	—
26	—	—	—	—	—	—	—	—	444.69	445.12	—	—
27	—	—	—	—	—	—	—	—	444.73	445.04	—	—
28	—	—	—	—	—	—	—	—	444.81	445.10	—	—
29	—	—	—	—	—	—	—	—	444.82	445.19	—	—
30	—	—	—	—	—	—	—	—	444.76	445.28	—	445.83
31	—	—	—	—	—	—	—	—	—	445.27	—	445.70
Mean	—	—	—	—	—	—	—	—	444.60	445.02	445.23	445.70
Max	—	—	—	—	—	—	—	—	444.82	445.28	445.43	445.91
Min	—	—	—	—	—	—	—	—	444.32	444.72	445.10	445.46

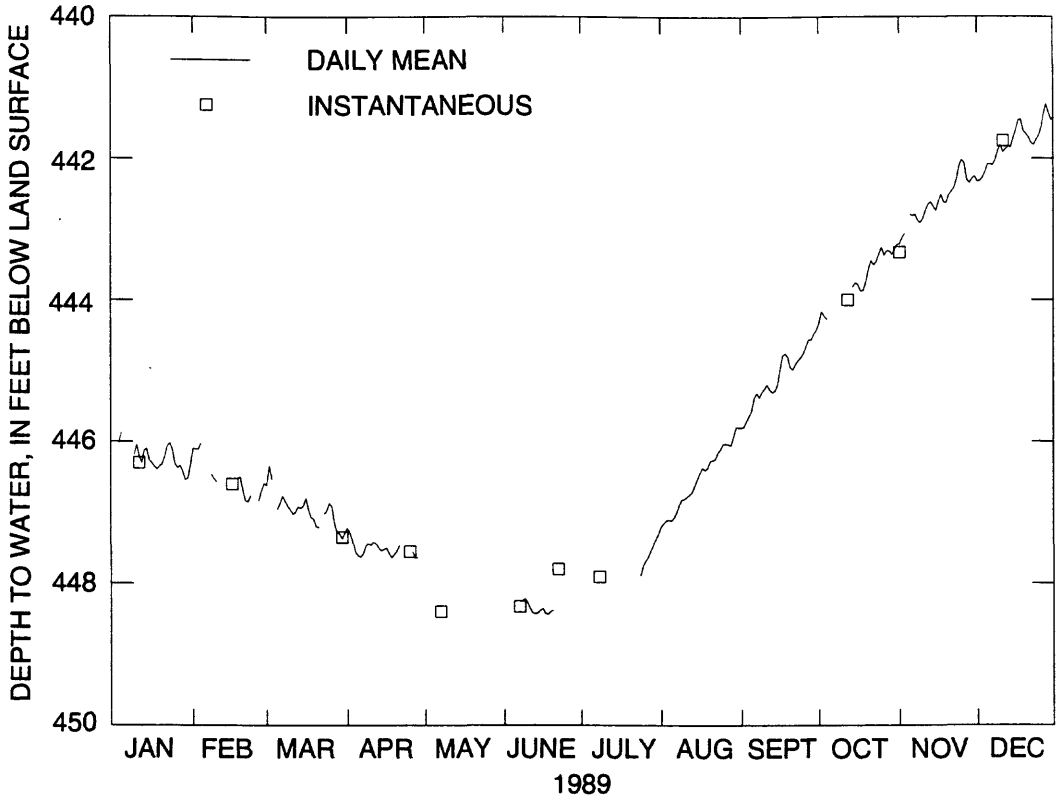

Figure 12. *(A)* Daily mean and instantaneous water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1989.

Table 16. Daily mean water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1989

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	446.10	446.62	447.22	447.77	—	—	447.20	445.80	444.33	443.20	442.32
2	—	446.11	446.34	447.29	—	—	—	447.15	445.79	444.16	443.11	442.31
3	446.02	446.11	446.53	447.40	—	—	—	447.11	445.71	444.22	443.05	442.27
4	445.87	446.03	—	447.56	—	—	—	447.10	445.64	444.27	—	442.19
5	—	—	446.96	447.61	—	—	—	447.11	445.56	—	442.78	442.08
6	—	—	446.88	447.63	—	—	—	447.07	445.38	—	442.80	442.08
7	—	—	446.77	447.58	—	—	—	447.00	445.31	—	442.78	442.09
8	—	446.46	446.84	447.47	—	448.25	—	446.89	445.37	—	442.87	442.02
9	446.19	446.52	446.91	447.44	—	448.22	—	446.82	445.30	—	442.90	441.89
10	446.04	446.57	446.96	447.46	—	448.28	—	446.81	445.25	—	442.84	441.81
11	446.21	—	447.02	447.42	—	448.36	—	446.78	445.19	—	442.73	441.91
12	446.30	446.40	447.00	447.44	—	448.42	—	446.75	445.26	—	442.64	441.87
13	446.13	—	446.92	447.50	—	448.43	—	446.71	445.30	—	442.61	441.83
14	446.10	—	446.94	447.54	—	448.42	—	446.62	445.28	443.81	442.67	441.84
15	446.26	—	446.91	447.52	—	448.38	—	446.53	445.20	443.75	442.73	441.72
16	446.30	446.68	446.80	447.50	—	448.36	—	446.44	444.98	443.78	442.60	441.60
17	446.35	—	446.96	447.58	—	448.43	—	446.37	444.78	443.87	442.50	441.46
18	446.39	446.52	447.07	447.64	—	448.44	—	446.40	444.75	443.86	442.61	441.45
19	446.35	446.50	447.09	447.59	—	448.40	—	446.37	444.80	443.74	442.62	441.61
20	446.32	446.68	447.20	447.54	—	448.38	—	446.27	444.95	443.56	442.51	441.65
21	446.22	446.84	447.21	447.46	—	—	—	446.26	444.98	443.44	442.46	441.70
22	446.07	446.85	—	—	—	—	—	446.24	444.90	443.50	442.41	441.78
23	446.02	446.76	447.02	—	—	—	—	446.15	444.85	443.45	442.29	441.81
24	446.11	—	446.98	—	—	—	447.89	446.10	444.81	443.34	442.10	441.74
25	446.31	—	446.87	—	—	—	447.75	446.03	444.75	443.25	442.02	441.68
26	446.37	446.84	446.92	447.55	—	—	447.68	446.03	444.66	443.36	442.07	441.56
27	446.34	446.70	447.15	447.64	—	—	447.62	446.04	444.56	443.30	442.30	441.38
28	446.42	446.59	447.28	447.64	—	—	447.53	446.05	444.56	443.30	442.34	441.23
29	446.54	—	447.30	—	—	—	447.45	445.92	444.48	443.35	442.28	441.35
30	446.52	—	447.37	—	—	—	447.38	445.79	444.43	443.29	442.25	441.45
31	446.33	—	447.29	—	—	—	447.30	445.80	—	443.21	—	441.42
Mean	446.24	446.51	446.97	447.51	447.77	448.37	447.57	446.51	445.09	443.64	442.59	441.78
Max	446.54	446.85	447.37	447.64	447.77	448.44	447.89	447.20	445.80	444.33	443.20	442.32
Min	445.87	446.03	446.34	447.22	447.77	448.22	447.30	445.79	444.43	443.21	442.02	441.23

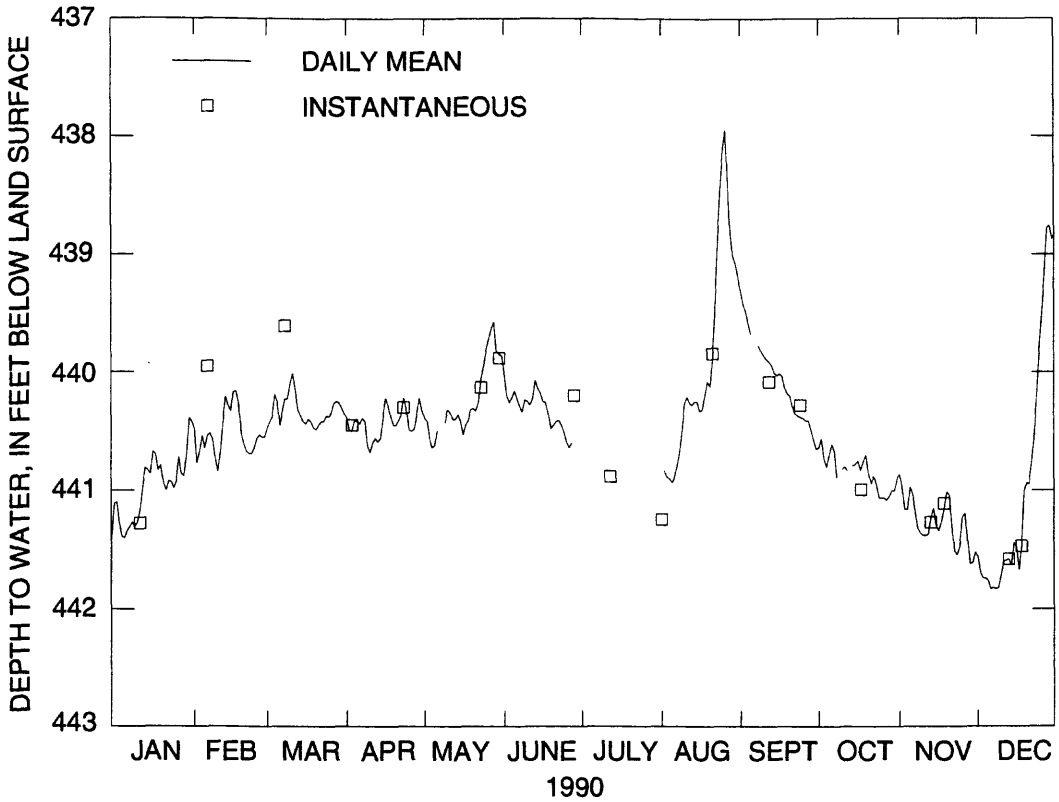

Figure 12. *(B)* Daily mean and instantaneous water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1990.

Table 17. Daily mean water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1990

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	441.11	440.48	440.47	440.39	440.39	440.02	—	—	439.31	440.64	440.86	441.56
2	441.10	440.77	440.42	440.50	440.42	440.20	—	440.83	439.42	440.56	440.99	441.69
3	441.28	440.68	440.38	440.49	440.56	440.26	—	440.88	439.48	440.73	441.16	441.74
4	441.39	440.54	440.19	440.41	440.64	440.22	—	440.90	439.58	440.80	441.16	441.74
5	441.40	440.64	440.25	440.42	440.62	440.16	—	440.93	439.67	440.70	440.97	441.76
6	441.34	440.54	440.45	440.44	440.50	440.23	—	440.89	—	440.61	441.03	441.83
7	441.31	440.52	440.34	440.39	—	440.29	—	440.80	—	440.67	441.19	441.82
8	441.27	440.57	440.23	440.42	—	440.34	—	440.68	439.77	440.89	441.32	441.83
9	441.31	440.72	440.23	440.62	440.43	440.24	—	440.49	439.82	—	441.36	441.82
10	441.27	440.84	440.10	440.68	440.32	440.25	—	440.27	439.86	440.82	441.38	441.72
11	441.16	440.68	440.01	440.60	440.34	440.28	—	440.21	439.89	440.80	441.38	441.60
12	440.96	440.42	440.14	440.56	440.40	440.23	—	440.26	439.91	440.83	441.37	441.59
13	440.81	440.21	440.31	440.59	440.40	440.07	—	440.28	439.94	—	441.23	441.58
14	440.83	440.28	440.37	440.56	440.36	440.14	—	440.25	440.00	440.79	441.15	441.63
15	440.86	440.33	440.42	440.39	440.42	440.18	—	440.25	440.03	440.78	441.30	441.44
16	440.67	440.17	440.44	440.22	440.53	440.25	—	440.33	440.01	440.75	441.34	441.48
17	440.70	440.16	440.40	440.28	440.45	440.26	—	440.32	440.03	440.83	441.27	441.67
18	440.83	440.26	440.42	440.38	440.41	440.35	—	440.20	440.13	440.76	441.16	441.46
19	440.79	440.52	440.47	440.45	440.32	440.48	—	440.08	440.18	440.70	441.01	441.00
20	440.94	440.61	440.49	440.45	440.31	440.45	—	440.12	440.20	440.85	441.04	440.94
21	441.00	440.67	440.45	440.41	440.33	440.42	—	439.88	440.29	440.94	441.29	440.95
22	440.92	440.69	440.42	440.36	440.26	440.41	—	439.43	440.35	440.88	441.51	440.78
23	440.93	440.69	440.42	440.22	440.06	440.45	—	438.87	440.37	440.95	441.54	440.56
24	440.98	440.64	440.37	440.31	439.94	440.51	—	438.45	440.38	441.06	441.47	440.23
25	440.92	440.56	440.38	440.49	439.81	440.59	—	438.12	440.39	441.06	441.23	439.83
26	440.72	440.53	440.35	440.50	439.72	440.64	—	437.94	440.41	441.06	441.19	439.52
27	440.86	440.55	440.27	440.48	439.63	440.60	—	438.40	440.41	441.08	441.41	439.20
28	440.88	440.55	440.25	440.36	439.57	—	—	438.83	440.49	441.05	441.62	438.78
29	440.70	—	440.26	440.22	439.82	—	—	439.01	440.57	441.00	441.61	438.76
30	440.39	—	440.30	440.32	439.85	—	—	439.07	440.65	441.00	441.52	438.87
31	440.42	—	440.35	—	439.86	—	—	439.17	—	440.90	—	438.82
Mean	440.97	440.53	440.33	440.43	440.23	440.32	—	439.87	440.05	440.84	441.27	440.91
Max	441.40	440.84	440.49	440.68	440.64	440.64	—	440.93	440.65	441.08	441.62	441.83
Min	440.39	440.16	440.01	440.22	439.57	440.02	—	437.94	439.31	440.56	440.86	438.76

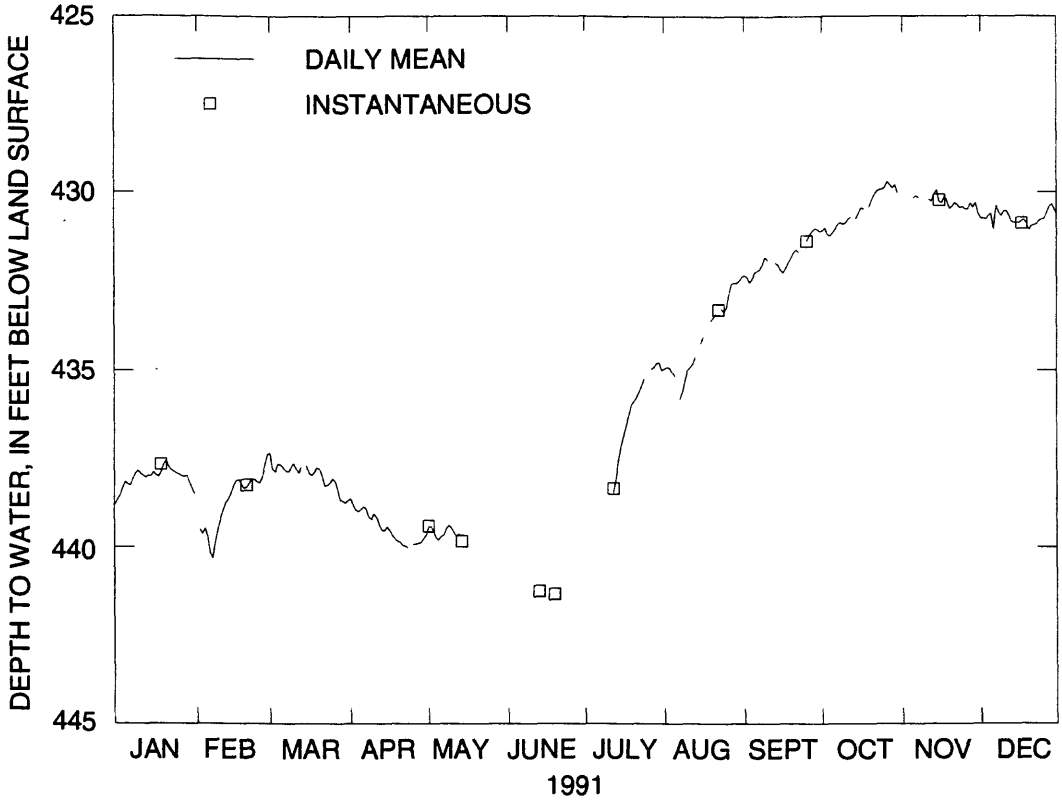

Figure 12. *(C)* Daily mean and instantaneous water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1991.

Table 18. Daily mean water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1991

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	438.68	—	437.37	438.65	439.42	—	—	434.95	432.32	431.07	430.11	430.73
2	438.56	439.51	437.82	438.83	439.43	—	—	434.90	432.38	431.00	—	430.73
3	438.35	439.63	437.90	438.96	439.56	—	—	434.92	432.53	431.18	430.21	430.76
4	438.18	439.48	437.68	439.01	439.73	—	—	435.04	432.42	431.22	—	430.66
5	438.25	439.70	437.69	438.95	439.80	—	—	435.15	432.25	431.13	430.17	430.60
6	438.28	440.16	437.75	438.87	439.70	—	—	—	432.20	431.03	430.10	431.03
7	438.09	440.31	437.87	438.93	439.66	—	—	435.82	432.16	430.91	430.15	430.37
8	437.94	439.85	437.89	439.15	439.48	—	—	435.61	432.02	430.84	—	430.56
9	437.86	439.48	437.80	439.23	439.39	—	—	435.25	431.81	430.89	430.03	430.66
10	437.95	439.22	437.66	439.07	439.47	—	—	434.99	431.90	430.86	—	430.53
11	438.00	438.98	437.80	439.16	439.60	—	—	434.91	—	430.75	430.20	430.52
12	438.05	438.77	437.93	439.38	439.71	—	438.47	434.81	—	430.69	430.26	430.64
13	438.02	438.67	437.77	439.53	439.61	—	438.09	434.61	431.98	—	430.05	430.82
14	438.02	438.50	—	439.53	—	—	437.58	—	432.03	430.74	429.94	430.85
15	437.91	438.29	437.71	439.43	—	—	437.17	434.23	432.16	430.57	430.27	430.85
16	437.99	438.14	437.94	439.53	—	—	436.86	434.06	432.25	430.43	430.30	430.87
17	438.03	438.12	437.99	439.67	—	—	436.57	—	432.13	430.46	430.11	430.81
18	437.90	438.24	437.90	439.76	—	—	436.32	—	431.97	—	430.25	430.77
19	437.70	438.37	437.78	439.83	—	—	436.01	433.60	431.84	430.41	430.46	430.87
20	437.57	438.34	437.81	439.86	—	—	435.90	433.50	431.68	430.22	430.40	431.05
21	437.74	438.23	438.02	439.95	—	—	435.79	433.41	431.60	430.07	430.30	430.95
22	437.84	438.10	438.29	439.97	—	—	435.63	—	431.68	429.96	430.36	430.92
23	437.89	438.11	438.27	440.02	—	—	435.45	433.25	—	429.93	430.44	430.90
24	437.94	438.18	438.21	—	—	—	435.24	433.34	—	429.91	430.41	430.80
25	437.97	438.21	438.09	439.93	—	—	—	433.23	431.36	429.87	430.47	430.76
26	438.02	438.04	438.16	439.91	—	—	—	432.84	431.20	429.70	430.47	430.74
27	438.03	437.72	438.40	439.89	—	—	434.96	432.56	431.10	429.78	430.32	430.57
28	438.00	437.40	438.69	439.87	—	—	434.90	432.54	431.02	429.88	430.43	430.40
29	438.20	—	438.73	439.76	—	—	434.79	432.54	431.03	429.79	430.30	430.33
30	438.36	—	438.77	439.66	—	—	434.77	432.47	431.09	430.02	430.59	430.48
31	438.52	—	438.70	—	—	—	434.99	432.36	—	—	—	430.62
Mean	438.06	438.73	438.01	439.46	439.58	—	436.08	434.03	431.85	430.48	430.27	430.71
Max	438.68	440.31	438.77	440.02	439.80	—	438.47	435.82	432.53	431.22	430.59	431.05
Min	437.57	437.40	437.37	438.65	439.39	—	434.77	432.36	431.02	429.70	429.94	430.33

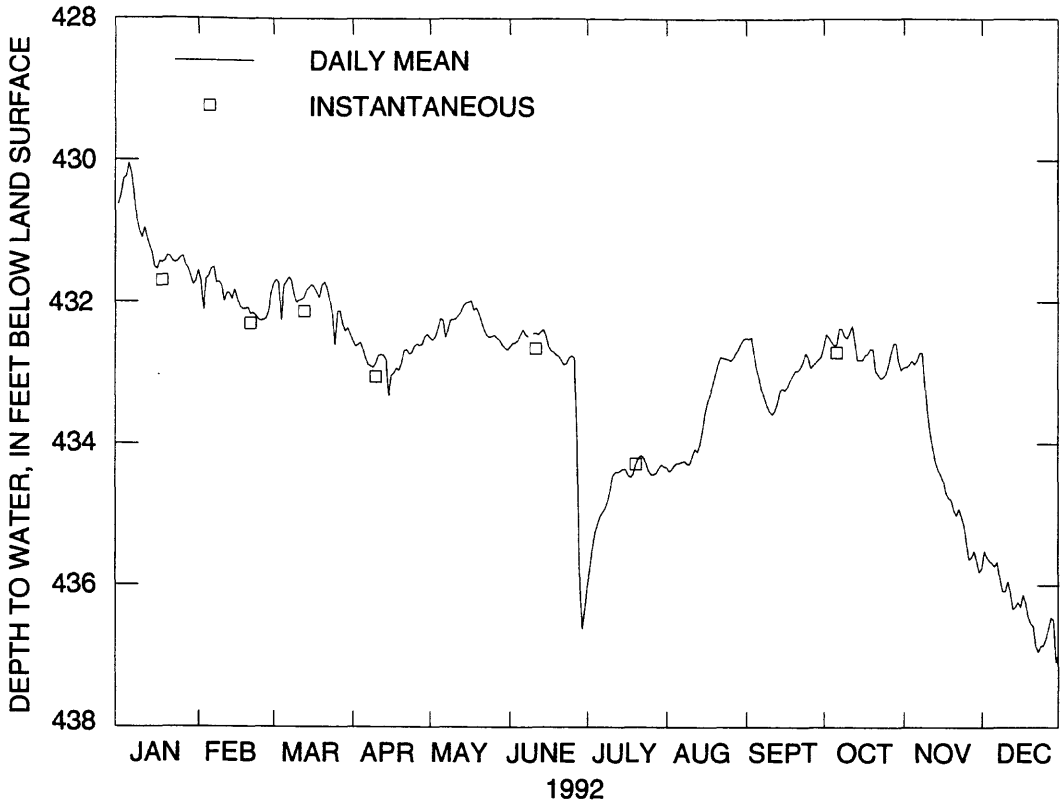

Figure 12. *(D)* Daily mean and instantaneous water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1992.

Table 19. Daily mean water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1992

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	430.63	431.56	431.75	—	432.50	432.63	435.98	434.33	432.50	432.62	432.91	435.75
2	430.50	431.71	431.69	432.62	432.53	432.58	435.77	434.39	432.51	432.44	432.91	435.51
3	430.27	432.11	—	432.60	432.49	432.57	435.47	434.36	432.49	432.49	432.88	435.60
4	430.24	431.68	432.25	432.57	432.37	432.54	435.25	434.30	432.71	432.55	432.82	435.65
5	430.05	431.64	431.78	432.67	432.23	432.46	435.13	434.27	432.93	432.60	432.87	435.68
6	430.20	431.53	431.72	432.79	—	432.38	435.02	434.27	433.06	432.59	432.82	435.73
7	430.48	431.51	431.65	432.88	432.49	432.45	434.96	434.25	433.24	432.36	432.71	435.67
8	430.84	431.73	431.70	432.90	432.40	432.48	434.90	434.24	433.35	432.37	432.71	435.92
9	431.01	431.72	431.89	432.92	432.25	—	434.79	434.28	433.46	432.47	433.16	436.08
10	431.10	431.77	432.01	432.86	432.24	432.44	434.62	434.28	433.54	432.50	433.57	436.08
11	430.96	431.99	431.98	432.75	432.23	432.43	434.45	434.17	433.58	432.42	433.85	435.94
12	431.10	431.88	431.97	432.74	—	432.45	434.40	434.07	433.53	432.32	434.06	436.09
13	431.22	—	431.94	432.75	432.14	432.41	434.40	434.11	433.41	432.55	434.25	436.33
14	431.32	431.96	431.84	432.81	432.05	432.38	434.38	433.99	433.25	432.81	434.36	436.30
15	431.51	431.83	431.80	433.32	432.01	432.47	434.35	433.79	433.21	432.81	434.43	436.23
16	431.54	431.95	431.76	433.03	432.00	432.62	434.36	433.55	433.24	432.81	434.52	436.30
17	431.43	432.07	431.80	433.00	—	432.68	434.44	433.39	433.19	432.74	434.69	436.13
18	431.45	432.10	431.87	432.93	—	432.70	434.47	433.29	433.10	432.72	434.76	436.24
19	431.43	432.10	431.94	432.96	432.08	432.74	434.42	433.16	433.03	432.65	434.79	436.44
20	431.35	432.08	431.77	432.86	432.16	432.76	434.28	433.01	432.96	432.66	434.93	436.53
21	431.37	432.17	431.72	432.68	432.27	432.82	434.20	432.88	432.96	432.96	435.01	436.57
22	431.43	432.15	431.81	432.67	432.38	432.88	434.16	432.77	432.92	433.01	434.91	436.85
23	431.45	432.19	431.97	432.73	432.46	432.86	434.19	432.78	432.84	433.07	435.03	436.93
24	431.43	432.24	432.18	432.71	432.49	432.78	434.27	432.79	432.71	433.05	435.15	436.85
25	431.38	432.26	432.60	432.62	432.48	432.75	434.38	432.80	432.77	433.00	435.40	436.84
26	431.36	432.25	432.13	432.59	432.46	432.78	434.43	432.82	432.92	432.88	435.63	436.74
27	—	432.23	432.13	432.61	432.50	434.01	434.43	432.78	432.88	432.70	435.60	436.61
28	431.53	432.13	432.30	432.59	432.53	435.96	434.41	432.71	432.84	432.57	435.51	436.45
29	431.64	431.89	432.40	432.48	432.60	436.61	434.34	432.65	432.80	432.58	435.65	436.48
30	431.76	—	432.36	432.45	432.64	436.32	434.29	432.57	432.76	432.83	435.81	437.07
31	431.71	—	432.45	—	432.67	—	434.32	432.51	—	432.95	—	436.97
Mean	431.13	431.94	431.96	432.75	432.33	433.03	434.62	433.53	433.02	432.68	434.26	436.28
Max	431.76	432.26	432.60	433.32	432.67	436.61	435.98	434.39	433.58	433.07	435.81	437.07
Min	430.05	431.51	431.65	432.45	431.98	432.38	434.16	432.51	432.49	432.32	432.71	435.51

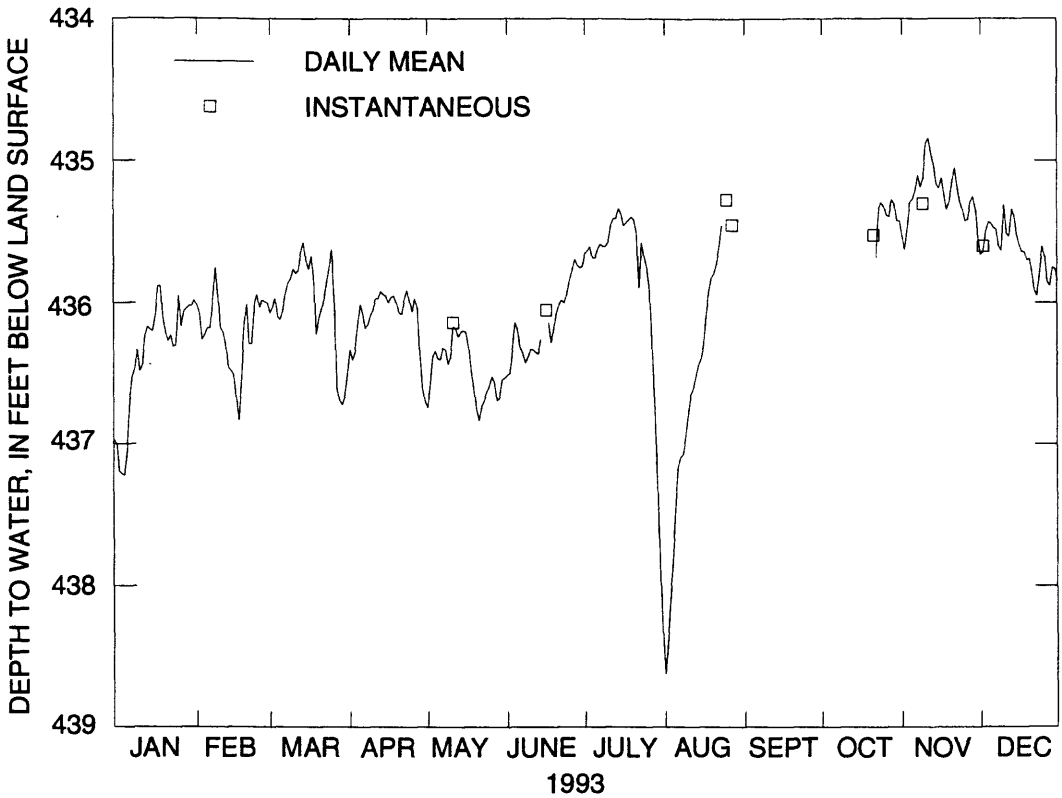

Figure 12. *(E)* Daily mean and instantaneous water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1993.

Table 20. Daily mean water levels, well RDO-8, Long Valley Caldera, Mono County, California, 1993

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	437.00	436.02	436.07	436.33	436.74	436.51	435.65	438.62	—	—	435.52	435.66
2	437.19	436.08	436.03	436.40	436.61	436.50	435.63	438.39	—	—	435.62	435.64
3	437.21	436.26	435.97	436.35	436.38	436.33	435.60	438.07	—	—	435.47	435.49
4	437.22	436.23	436.10	436.16	436.34	436.14	435.68	437.81	—	—	435.29	435.43
5	437.05	436.18	436.12	436.01	436.39	436.19	435.68	437.44	—	—	435.27	435.44
6	436.71	436.18	436.05	436.08	436.40	436.31	435.62	437.16	—	—	435.21	435.47
7	436.53	435.99	435.94	436.18	436.32	436.36	435.58	437.09	—	—	435.10	435.48
8	436.47	435.75	435.86	436.16	436.33	436.42	435.60	437.07	—	—	435.18	435.60
9	436.33	435.94	435.83	436.09	436.43	436.38	435.60	436.95	—	—	435.12	435.63
10	436.48	436.18	435.76	436.05	436.38	436.33	435.57	436.79	—	—	434.88	435.31
11	436.44	436.21	435.79	435.97	436.17	436.33	435.45	436.65	—	—	434.84	435.51
12	436.24	436.30	435.77	435.97	436.18	436.35	435.40	436.61	—	—	434.94	435.53
13	436.17	436.46	435.64	435.92	436.24	436.36	435.40	436.52	—	—	435.03	435.34
14	436.19	436.48	435.57	435.94	436.21	436.26	435.33	436.44	—	—	435.16	435.39
15	436.20	436.51	435.70	435.95	436.20	—	435.37	436.39	—	—	435.19	435.52
16	436.09	436.67	435.76	436.00	436.21	—	435.45	436.30	—	—	435.12	435.59
17	435.88	436.83	435.67	435.96	436.31	436.14	435.43	436.08	—	—	435.23	435.64
18	435.88	436.56	435.83	435.95	436.48	436.28	435.41	435.92	—	—	435.34	435.64
19	436.11	436.15	436.22	436.00	436.60	436.18	435.39	435.82	—	—	435.29	435.70
20	436.21	436.01	436.11	436.07	436.75	436.07	435.41	435.79	—	—	435.15	435.69
21	436.27	436.29	436.04	436.08	436.83	436.01	435.50	435.72	—	—	435.05	435.78
22	436.23	436.29	435.99	435.98	436.73	435.98	435.89	435.61	—	435.68	435.18	435.91
23	436.31	436.01	435.86	435.91	436.69	436.00	435.57	435.45	—	435.34	435.28	435.95
24	436.30	435.94	435.75	435.98	436.63	435.94	435.67	—	—	435.29	435.34	435.79
25	435.95	436.03	435.62	436.06	436.59	435.84	435.75	—	—	435.32	435.42	435.60
26	436.17	435.98	436.00	435.97	436.52	435.77	435.90	—	—	435.38	435.41	435.67
27	436.06	435.99	436.60	436.04	436.56	435.69	436.29	—	—	435.39	435.29	435.85
28	436.04	436.00	436.69	436.37	436.69	435.73	436.73	—	—	435.27	435.25	435.88
29	436.02	—	436.72	436.60	436.67	435.75	437.26	—	—	435.30	435.33	435.75
30	436.02	—	436.66	436.70	436.54	435.74	437.87	—	—	435.42	435.54	435.76
31	435.98	—	436.51	—	436.53	—	438.33	—	—	435.42	—	435.84
Mean	436.35	436.20	436.01	436.11	436.47	436.14	435.84	436.73	—	435.38	435.23	435.63
Max	437.22	436.83	436.72	436.70	436.83	436.51	438.33	438.62	—	435.68	435.62	435.95
Min	435.88	435.75	435.57	435.91	436.17	435.69	435.33	435.45	—	435.27	434.84	435.31

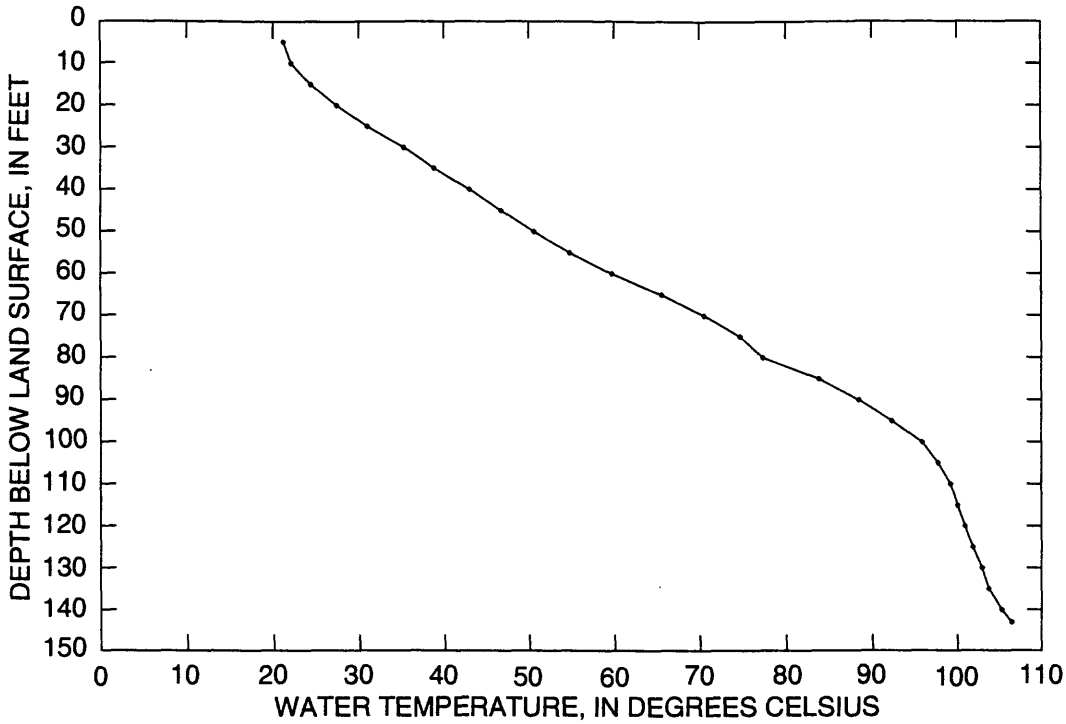

Figure 13. Temperature log of well CM-2, Long Valley Caldera, Mono County, California, July 22, 1989.

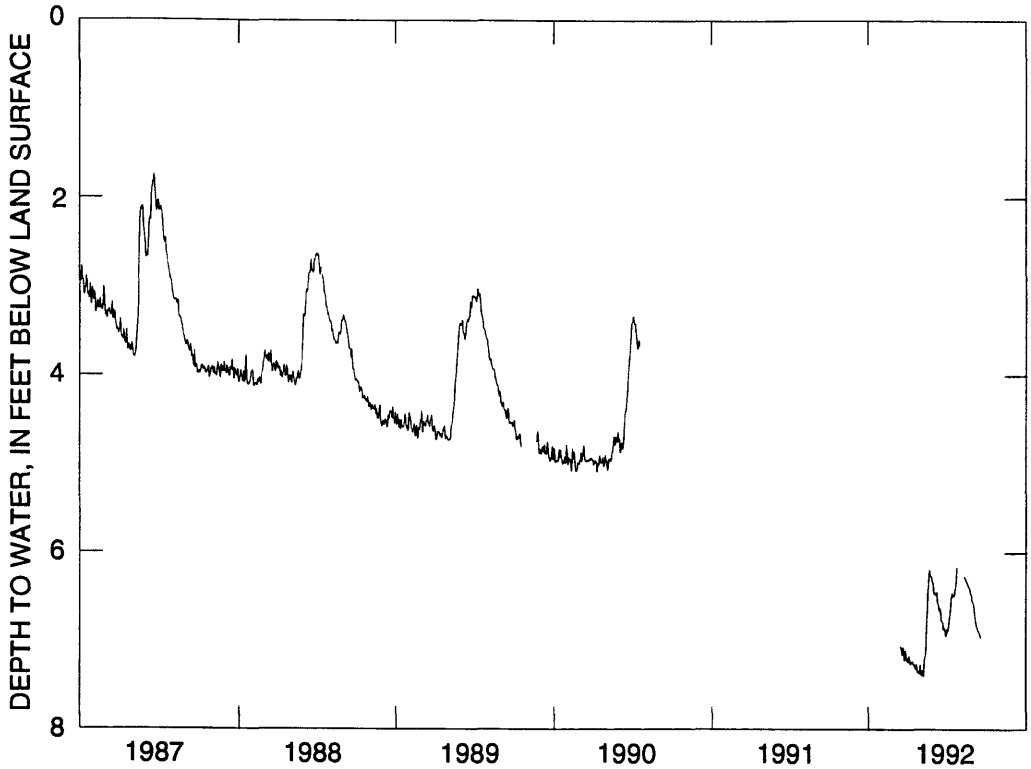

Figure 14. Daily mean water levels, well CM-2, Long Valley Caldera, Mono County California, 1987–92.

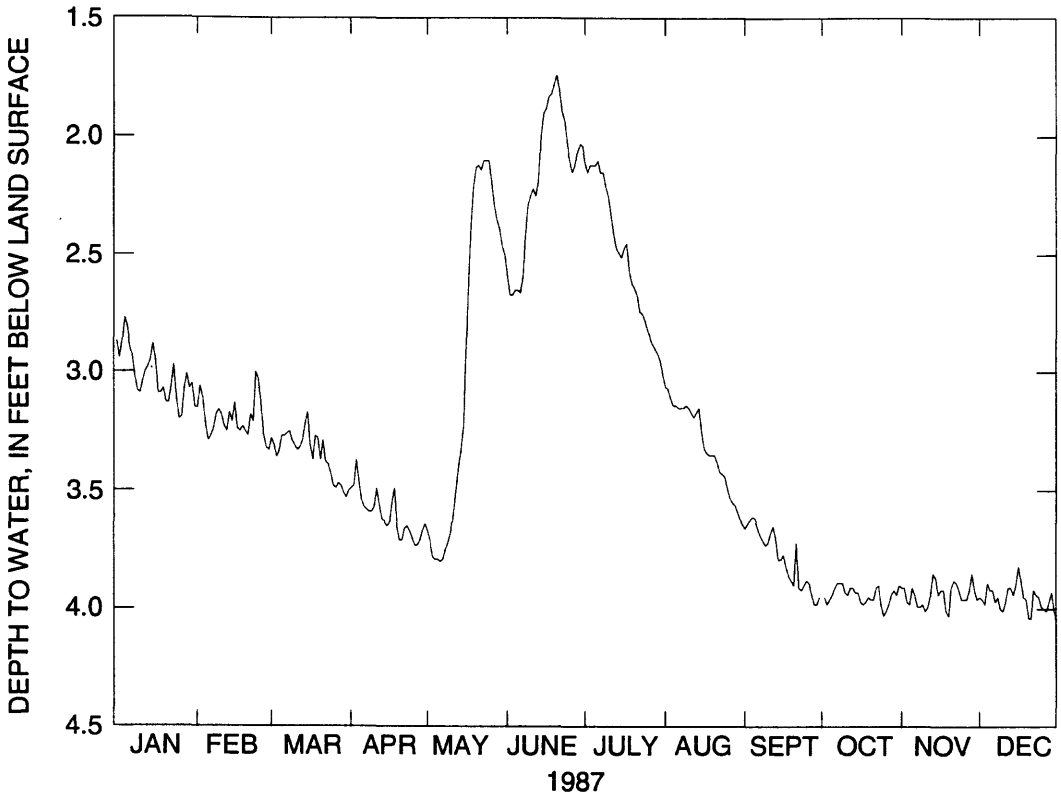

Figure 15. *(A)* Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1987.

Table 21. Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1987

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	2.87	3.15	3.28	3.49	3.67	2.59	2.11	3.06	3.66	—	3.91	3.95
2	2.94	3.06	3.31	3.48	3.71	2.67	2.15	3.07	3.64	3.95	3.91	3.96
3	2.87	3.11	3.36	3.37	3.78	2.67	2.12	3.11	3.62	3.98	3.97	3.98
4	2.77	3.22	3.33	3.46	3.79	2.65	2.12	3.14	3.61	3.96	3.98	3.89
5	2.81	3.29	3.27	3.54	3.79	2.65	2.12	3.14	3.62	3.94	3.91	3.92
6	2.90	3.27	3.27	3.57	3.80	2.66	2.10	3.15	3.66	3.91	3.94	3.92
7	2.93	3.24	3.26	3.58	3.79	2.59	2.15	3.15	3.69	3.89	3.99	3.97
8	3.02	3.18	3.25	3.59	3.75	2.41	2.15	3.15	3.71	3.89	3.99	3.95
9	3.08	3.16	3.29	3.59	3.72	2.29	2.21	3.14	3.73	3.89	3.98	4.00
10	3.09	3.18	3.31	3.57	3.68	2.25	2.25	3.15	3.72	3.93	4.01	4.01
11	3.04	3.23	3.33	3.49	3.60	2.22	2.33	3.17	3.68	3.94	3.99	3.97
12	3.00	3.25	3.32	3.56	3.50	2.25	2.41	3.19	3.65	3.91	3.94	3.91
13	2.98	3.17	3.29	3.62	3.40	2.19	2.47	3.17	3.70	3.91	3.85	3.91
14	2.95	3.21	3.22	3.63	3.33	1.99	2.49	3.15	3.79	3.93	3.87	3.94
15	2.88	3.13	3.17	3.65	3.23	1.90	2.51	3.25	3.79	3.93	3.94	3.90
16	2.95	3.24	3.31	3.64	2.91	1.88	2.47	3.32	3.77	3.97	3.92	3.82
17	3.09	3.25	3.37	3.55	2.60	1.83	2.45	3.34	3.82	3.98	3.92	3.88
18	3.09	3.23	3.27	3.49	2.37	1.82	2.57	3.35	3.86	3.97	4.01	3.95
19	3.07	3.25	3.28	3.65	2.21	1.78	2.62	3.35	3.88	3.95	4.03	3.96
20	3.13	3.27	3.37	3.71	2.13	1.74	2.64	3.35	3.90	3.96	3.91	4.04
21	3.13	3.18	3.29	3.71	2.12	1.80	2.67	3.38	3.72	3.96	3.88	4.04
22	3.06	3.21	3.38	3.66	2.14	1.89	2.74	3.42	3.91	3.91	3.89	3.92
23	2.97	3.00	3.39	3.65	2.10	1.93	2.75	3.43	3.92	3.90	3.92	3.94
24	3.11	3.03	3.43	3.67	2.10	2.03	2.78	3.44	3.90	3.98	3.96	3.95
25	3.20	3.14	3.48	3.70	2.10	2.10	2.82	3.49	3.88	4.03	3.96	3.99
26	3.19	3.27	3.49	3.73	2.19	2.15	2.85	3.53	3.89	4.01	3.96	4.00
27	3.07	3.32	3.47	3.73	2.29	2.12	2.88	3.55	3.94	3.98	3.92	4.01
28	3.01	3.33	3.48	3.71	2.35	2.06	2.90	3.56	3.98	3.94	3.85	3.97
29	3.07	—	3.51	3.67	2.39	2.03	2.92	3.59	3.98	3.92	3.92	3.93
30	3.05	—	3.53	3.64	2.46	2.04	2.95	3.62	3.95	3.94	3.96	4.01
31	3.15	—	3.50	—	2.50	—	3.01	3.64	—	3.90	—	4.08
Mean	3.02	3.20	3.35	3.60	2.95	2.17	2.51	3.31	3.79	3.94	3.94	3.96
Max	3.20	3.33	3.53	3.73	3.80	2.67	3.01	3.64	3.98	4.03	4.03	4.08
Min	2.77	3.00	3.17	3.37	2.10	1.74	2.10	3.06	3.61	3.89	3.85	3.82

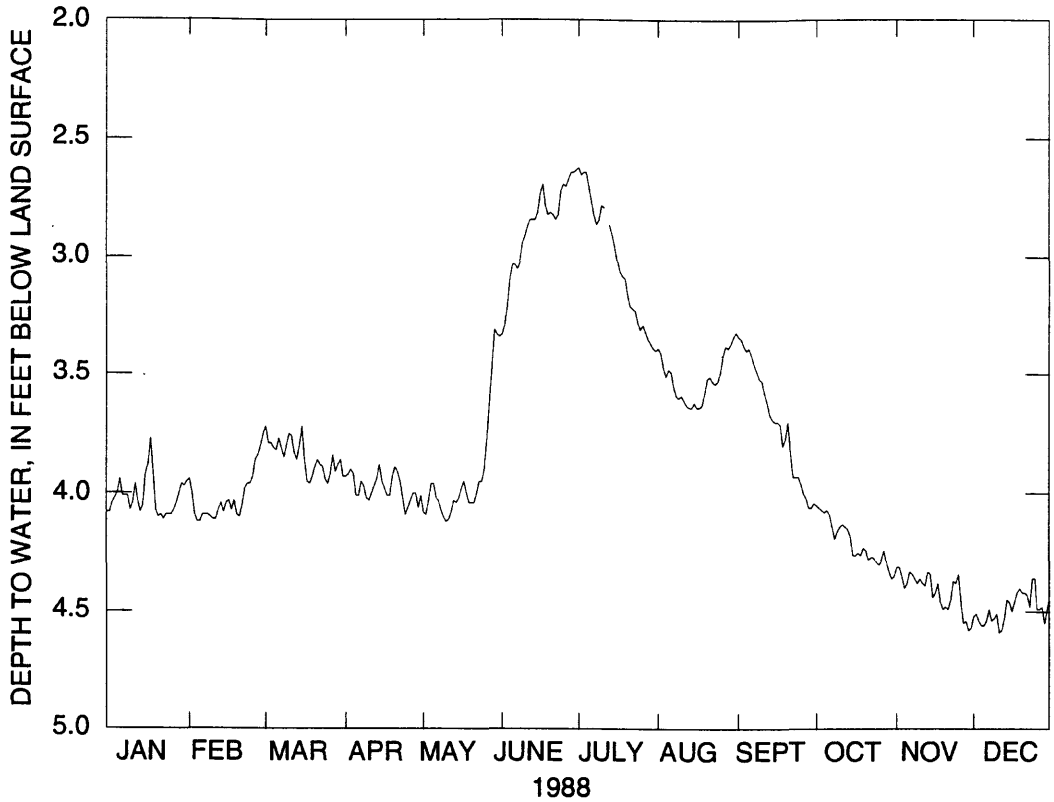

Figure 15. *(B)* Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1988.

Table 22. Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1988

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	4.08	3.94	3.72	3.93	4.08	3.33	2.62	3.39	3.34	4.05	4.31	4.52
2	4.04	4.00	3.79	3.92	4.09	3.29	2.65	3.41	3.35	4.06	4.31	4.51
3	4.02	4.09	3.79	3.90	4.03	3.21	2.64	3.47	3.38	4.07	4.35	4.54
4	4.00	4.12	3.81	3.92	3.96	3.09	2.64	3.51	3.40	4.08	4.40	4.56
5	3.94	4.12	3.82	4.01	3.96	3.03	2.70	3.48	3.39	4.07	4.38	4.56
6	4.01	4.09	3.77	4.01	4.02	3.03	2.76	3.49	3.42	4.09	4.33	4.54
7	4.01	4.09	3.81	3.95	4.03	3.05	2.82	3.55	3.46	4.14	4.34	4.49
8	4.01	4.09	3.85	3.97	4.07	3.02	2.86	3.59	3.49	4.19	4.36	4.54
9	4.07	4.10	3.80	4.02	4.10	2.94	2.84	3.60	3.52	4.16	4.38	4.53
10	4.04	4.11	3.75	4.03	4.12	2.91	2.78	3.59	3.53	4.14	4.36	4.51
11	3.96	4.11	3.76	4.00	4.11	2.87	2.79	3.61	3.58	4.13	4.38	4.59
12	4.03	4.07	3.83	3.97	4.08	2.84	—	3.63	3.62	4.14	4.39	4.58
13	4.08	4.04	3.86	3.94	4.03	2.84	2.86	3.64	3.67	4.15	4.33	4.53
14	4.05	4.08	3.80	3.88	4.04	2.84	2.90	3.64	3.69	4.18	4.34	4.45
15	3.92	4.04	3.72	3.95	4.02	2.81	2.95	3.62	3.70	4.26	4.44	4.46
16	3.88	4.03	3.86	3.98	3.98	2.73	3.01	3.64	3.70	4.26	4.42	4.50
17	3.77	4.07	3.95	4.01	3.95	2.69	3.06	3.64	3.71	4.25	4.38	4.46
18	3.91	4.03	3.96	4.01	4.00	2.78	3.08	3.63	3.80	4.26	4.46	4.42
19	4.07	4.09	3.93	3.93	4.04	2.82	3.09	3.58	3.77	4.23	4.49	4.40
20	4.10	4.10	3.89	3.89	4.04	2.81	3.16	3.52	3.70	4.24	4.48	4.42
21	4.09	4.05	3.86	3.91	4.04	2.82	3.21	3.51	3.83	4.28	4.49	4.42
22	4.11	3.98	3.88	3.95	4.00	2.84	3.22	3.53	3.93	4.27	4.45	4.43
23	4.09	3.96	3.89	4.02	3.95	2.82	3.23	3.54	3.93	4.27	4.37	4.48
24	4.09	3.96	3.94	4.09	3.95	2.72	3.28	3.53	3.93	4.29	4.38	4.36
25	4.09	3.93	3.96	4.06	3.90	2.69	3.31	3.49	3.96	4.30	4.34	4.36
26	4.07	3.86	3.92	4.03	3.77	2.70	3.29	3.42	4.00	4.28	4.46	4.49
27	4.04	3.84	3.84	4.00	3.62	2.67	3.32	3.38	4.02	4.24	4.55	4.49
28	4.00	3.80	3.91	4.00	3.47	2.64	3.35	3.39	4.06	4.29	4.54	4.48
29	3.96	3.75	3.88	4.06	3.31	2.64	3.37	3.37	4.06	4.33	4.58	4.55
30	3.97	—	3.86	4.01	3.33	2.63	3.39	3.34	4.04	4.36	4.57	4.49
31	3.95	—	3.93	—	3.34	—	3.40	3.32	—	4.35	—	4.42
Mean	4.01	4.02	3.85	3.98	3.92	2.87	3.02	3.52	3.70	4.21	4.41	4.49
Max	4.11	4.12	3.96	4.09	4.12	3.33	3.40	3.64	4.06	4.36	4.58	4.59
Min	3.77	3.75	3.72	3.88	3.31	2.63	2.62	3.32	3.34	4.05	4.31	4.36

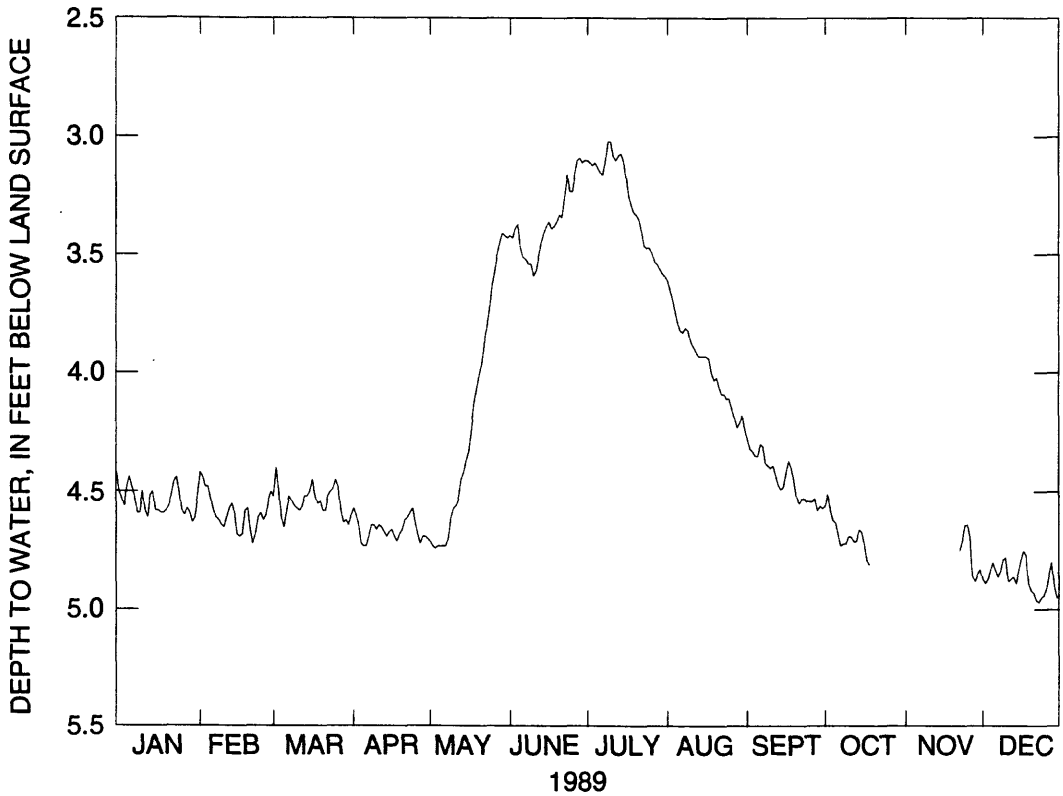

Figure 15. *(C)* Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1989.

Table 23. Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1989

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	4.50	4.42	4.52	4.57	4.71	3.42	3.10	3.61	4.28	4.56	—	4.87
2	4.53	4.44	4.40	4.60	4.73	3.43	3.11	3.65	4.32	4.51	—	4.89
3	4.56	4.48	4.49	4.64	4.74	3.39	3.12	3.69	4.33	4.58	—	4.87
4	4.48	4.48	4.61	4.72	4.73	3.37	3.11	3.74	4.35	4.62	—	4.84
5	4.44	4.53	4.65	4.73	4.73	3.47	3.13	3.79	4.35	4.63	—	4.80
6	4.48	4.58	4.58	4.73	4.73	3.51	3.15	3.82	4.30	4.68	—	4.83
7	4.52	4.61	4.52	4.69	4.73	3.52	3.16	3.83	4.31	4.73	—	4.86
8	4.59	4.62	4.54	4.64	4.70	3.54	3.10	3.81	4.38	4.72	—	4.84
9	4.59	4.64	4.56	4.64	4.61	3.54	3.02	3.82	4.39	4.72	—	4.79
10	4.50	4.65	4.57	4.66	4.57	3.59	3.02	3.87	4.40	4.69	—	4.78
11	4.58	4.61	4.58	4.64	4.56	3.57	3.08	3.89	4.39	4.69	—	4.88
12	4.61	4.57	4.56	4.65	4.53	3.51	3.10	3.91	4.43	4.71	—	4.87
13	4.52	4.55	4.52	4.67	4.45	3.45	3.08	3.93	4.47	4.71	—	4.86
14	4.50	4.59	4.52	4.69	4.42	3.41	3.07	3.93	4.49	4.66	—	4.89
15	4.58	4.68	4.50	4.67	4.37	3.38	3.10	3.93	4.48	4.67	—	4.84
16	4.58	4.69	4.45	4.66	4.33	3.36	3.17	3.93	4.42	4.72	—	4.79
17	4.59	4.68	4.52	4.69	4.24	3.39	3.25	3.94	4.37	4.79	—	4.75
18	4.59	4.58	4.55	4.71	4.13	3.38	3.29	4.00	4.40	4.81	—	4.77
19	4.58	4.57	4.54	4.68	4.07	3.36	3.32	4.03	4.45	—	—	4.89
20	4.56	4.66	4.58	4.66	4.01	3.33	3.33	4.02	4.52	—	—	4.92
21	4.52	4.72	4.58	4.62	3.96	3.34	3.35	4.06	4.55	—	—	4.93
22	4.46	4.68	4.52	4.61	3.87	3.25	3.40	4.09	4.53	—	4.75	4.96
23	4.44	4.61	4.50	4.59	3.81	3.16	3.46	4.09	4.53	—	4.71	4.97
24	4.50	4.59	4.49	4.57	3.73	3.23	3.47	4.11	4.54	—	4.64	4.95
25	4.58	4.62	4.45	4.63	3.63	3.23	3.47	4.11	4.54	—	4.64	4.94
26	4.60	4.60	4.48	4.68	3.57	3.16	3.49	4.15	4.54	—	4.69	4.91
27	4.57	4.54	4.58	4.72	3.50	3.10	3.53	4.19	4.53	—	4.86	4.85
28	4.59	4.50	4.63	4.69	3.45	3.09	3.54	4.23	4.58	—	4.88	4.80
29	4.63	—	4.62	4.69	3.41	3.11	3.56	4.21	4.56	—	4.85	4.90
30	4.61	—	4.64	4.70	3.42	3.10	3.58	4.18	4.57	—	4.83	4.95
31	4.52	—	4.60	—	3.43	—	3.59	4.24	—	—	—	4.94
Mean	4.55	4.59	4.54	4.66	4.19	3.36	3.27	3.96	4.44	4.68	4.76	4.87
Max	4.63	4.72	4.65	4.73	4.74	3.59	3.59	4.24	4.58	4.81	4.88	4.97
Min	4.44	4.42	4.40	4.57	3.41	3.09	3.02	3.61	4.28	4.51	4.64	4.75

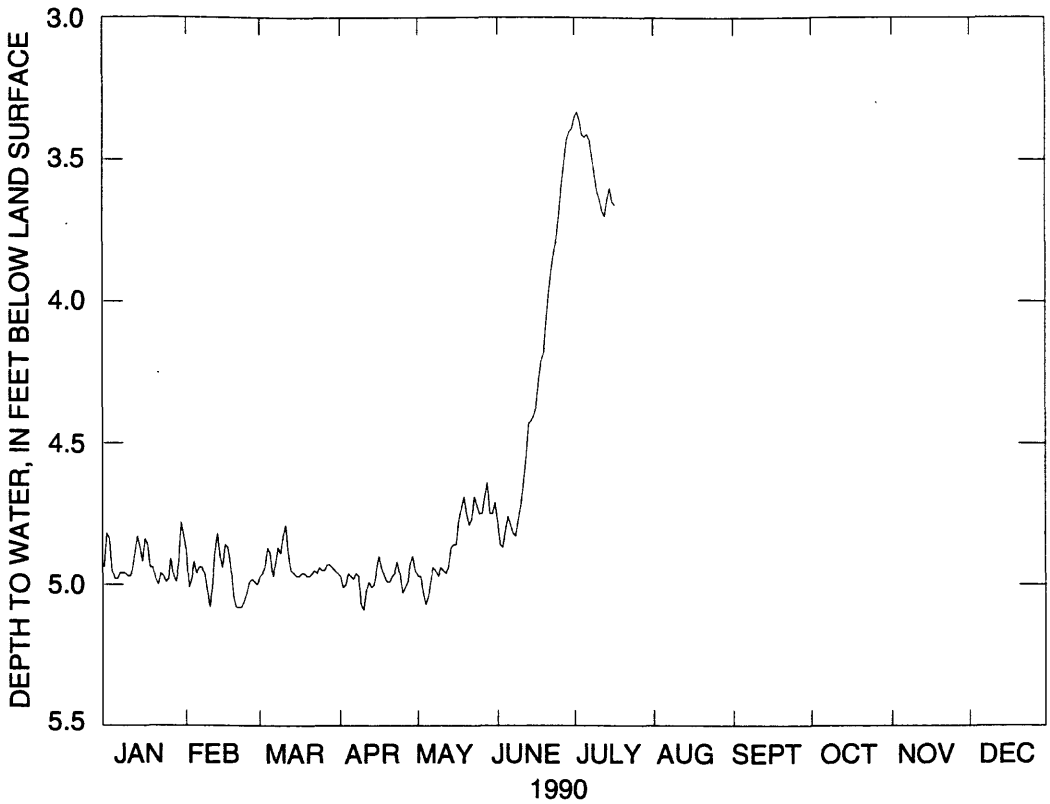

Figure 15. *(D)* Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1990.

Table 24. Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1990

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	4.82	4.88	4.97	4.97	4.97	4.78	3.35	—	—	—	—	—
2	4.84	5.01	4.96	5.01	4.97	4.86	3.33	—	—	—	—	—
3	4.95	4.98	4.94	5.00	5.03	4.87	3.36	—	—	—	—	—
4	4.98	4.92	4.87	4.96	5.07	4.81	3.41	—	—	—	—	—
5	4.98	4.96	4.89	4.97	5.04	4.76	3.42	—	—	—	—	—
6	4.96	4.94	4.97	4.98	4.98	4.79	3.41	—	—	—	—	—
7	4.96	4.94	4.93	4.96	4.94	4.82	3.43	—	—	—	—	—
8	4.96	4.96	4.87	4.97	4.95	4.83	3.49	—	—	—	—	—
9	4.97	5.02	4.89	5.07	4.97	4.77	3.55	—	—	—	—	—
10	4.97	5.08	4.83	5.09	4.94	4.72	3.61	—	—	—	—	—
11	4.95	5.00	4.79	5.02	4.95	4.64	3.64	—	—	—	—	—
12	4.89	4.89	4.89	4.99	4.96	4.55	3.68	—	—	—	—	—
13	4.83	4.82	4.95	5.01	4.94	4.43	3.70	—	—	—	—	—
14	4.87	4.90	4.96	5.00	4.87	4.42	3.64	—	—	—	—	—
15	4.92	4.94	4.97	4.95	4.86	4.40	3.60	—	—	—	—	—
16	4.84	4.86	4.97	4.90	4.86	4.37	3.65	—	—	—	—	—
17	4.86	4.87	4.96	4.94	4.77	4.28	3.66	—	—	—	—	—
18	4.94	4.93	4.96	4.97	4.73	4.21	—	—	—	—	—	—
19	4.94	5.04	4.97	4.99	4.69	4.18	—	—	—	—	—	—
20	4.98	5.08	4.97	4.99	4.75	4.06	—	—	—	—	—	—
21	5.00	5.08	4.96	4.97	4.79	3.96	—	—	—	—	—	—
22	4.96	5.08	4.95	4.96	4.77	3.88	—	—	—	—	—	—
23	4.97	5.06	4.96	4.92	4.69	3.82	—	—	—	—	—	—
24	4.99	5.03	4.94	4.96	4.72	3.78	—	—	—	—	—	—
25	4.98	4.99	4.95	5.03	4.75	3.70	—	—	—	—	—	—
26	4.91	4.98	4.95	5.01	4.75	3.59	—	—	—	—	—	—
27	4.97	4.99	4.93	4.99	4.69	3.51	—	—	—	—	—	—
28	4.99	5.00	4.93	4.93	4.64	3.43	—	—	—	—	—	—
29	4.93	—	4.94	4.90	4.75	3.40	—	—	—	—	—	—
30	4.78	—	4.95	4.95	4.75	3.39	—	—	—	—	—	—
31	4.83	—	4.96	—	4.71	—	—	—	—	—	—	—
Mean	4.93	4.97	4.93	4.98	4.85	4.27	3.53	—	—	—	—	—
Max	5.00	5.08	4.97	5.09	5.07	4.87	3.70	—	—	—	—	—
Min	4.78	4.82	4.79	4.90	4.64	3.39	3.33	—	—	—	—	—

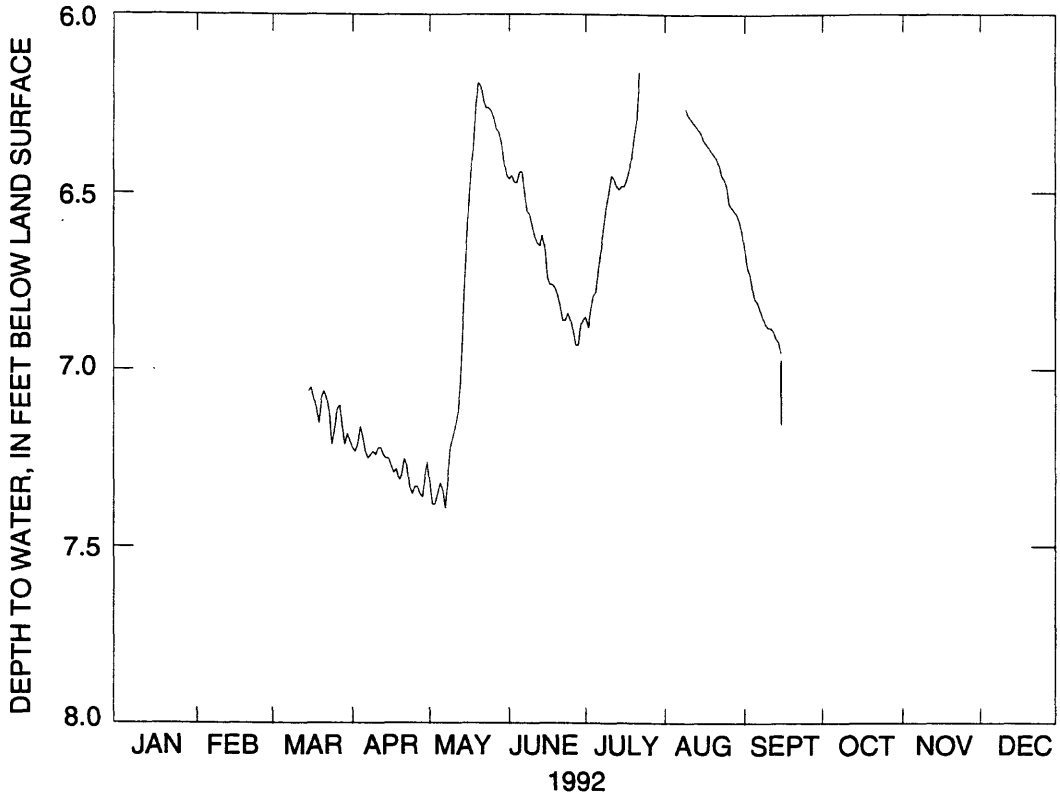

Figure 15. *(E)* Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1992.

Table 25. Daily mean water levels, well CM-2, Long Valley Caldera, Mono County, California, 1992

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	7.22	7.32	6.46	6.85	—	6.66	—	—	—
2	—	—	—	7.23	7.38	6.45	6.88	—	6.71	—	—	—
3	—	—	—	7.21	7.38	6.47	6.83	—	6.73	—	—	—
4	—	—	—	7.16	7.35	6.47	6.79	—	6.77	—	—	—
5	—	—	—	7.19	7.32	6.44	6.78	—	6.80	—	—	—
6	—	—	—	7.23	7.34	6.44	6.71	—	6.81	—	—	—
7	—	—	—	7.25	7.39	6.50	6.66	—	6.83	—	—	—
8	—	—	—	7.24	7.31	6.55	6.60	—	6.85	—	—	—
9	—	—	—	7.23	7.22	6.56	6.54	6.26	6.87	—	—	—
10	—	—	—	7.24	7.19	6.59	6.50	6.28	6.88	—	—	—
11	—	—	—	7.22	7.16	6.62	6.45	6.29	6.88	—	—	—
12	—	—	—	7.22	7.12	6.64	6.46	6.30	6.89	—	—	—
13	—	—	—	7.24	7.04	6.65	6.48	6.31	6.91	—	—	—
14	—	—	—	7.25	6.86	6.62	6.49	6.32	6.92	—	—	—
15	—	—	7.06	7.25	6.69	6.66	6.48	6.33	6.95	—	—	—
16	—	—	7.05	7.27	6.56	6.74	6.48	6.35	—	—	—	—
17	—	—	7.08	7.29	6.44	6.76	6.46	6.36	—	—	—	—
18	—	—	7.11	7.28	6.38	6.76	6.43	6.37	—	—	—	—
19	—	—	7.15	7.31	6.25	6.77	6.40	6.38	—	—	—	—
20	—	—	7.08	7.30	6.19	6.79	6.34	6.39	—	—	—	—
21	—	—	7.06	7.25	6.20	6.82	6.29	6.40	—	—	—	—
22	—	—	7.08	7.27	6.24	6.86	6.16	6.42	—	—	—	—
23	—	—	7.12	7.33	6.26	6.86	—	6.45	—	—	—	—
24	—	—	7.21	7.35	6.26	6.84	—	6.46	—	—	—	—
25	—	—	7.17	7.33	6.27	6.86	—	6.48	—	—	—	—
26	—	—	7.11	7.33	6.29	6.89	—	6.53	—	—	—	—
27	—	—	7.10	7.35	6.32	6.93	—	6.54	—	—	—	—
28	—	—	7.16	7.36	6.33	6.93	—	6.55	—	—	—	—
29	—	—	7.21	7.30	6.36	6.87	—	6.56	—	—	—	—
30	—	—	7.18	7.26	6.41	6.86	—	6.58	—	—	—	—
31	—	—	7.20	—	6.45	—	—	6.61	—	—	—	—
Mean	—	—	7.13	7.27	6.75	6.69	6.55	6.41	6.83	—	—	—
Max	—	—	7.21	7.36	7.39	6.93	6.88	6.61	6.95	—	—	—
Min	—	—	7.05	7.16	6.19	6.44	6.16	6.26	6.66	—	—	—

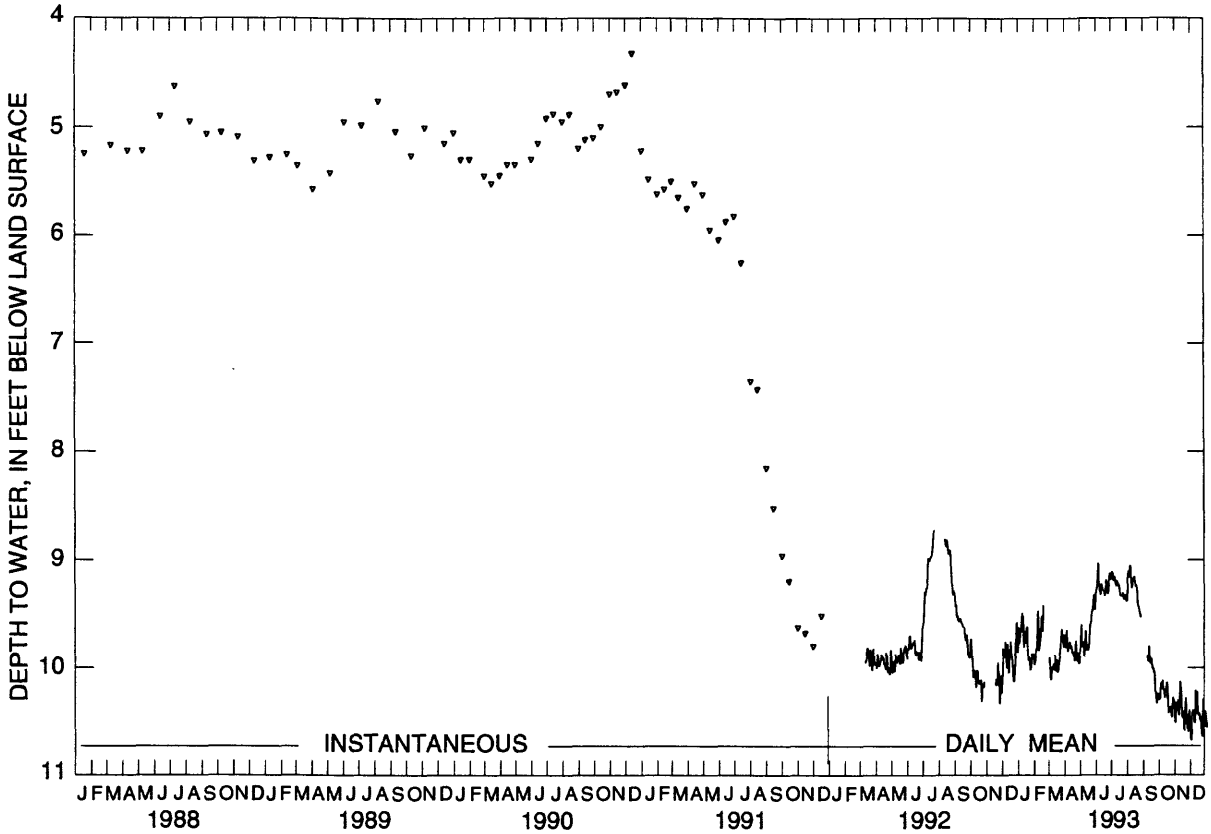

Figure 16. Instantaneous water levels, 1988–91, and daily mean water levels, 1992–93, well CW-3, Long Valley Caldera, Mono County, California. [Data for 1988–91 provided by Donald Barnett, Intermountain Water Consultants (written commun., 1993).]

Table 26. Miscellaneous instantaneous water levels, well CW-3, Long Valley Caldera, Mono County, California, 1988–91

[Water levels are feet below land surface. Data provided by Donald Barnett, Intermountain Water Consultants (written commun., 1993)]

Date	Water level	Date	Water level	Date	Water level
01-19-88	5.25	01-01-90	5.05	01-15-91	5.48
03-10-88	5.17	01-15-90	5.30	02-01-91	5.62
04-11-88	5.22	02-01-90	5.30	02-15-91	5.57
05-10-88	5.22	03-01-90	5.45	03-01-91	5.50
06-13-88	4.90	03-15-90	5.52	03-15-91	5.65
07-11-88	4.63	04-01-90	5.45	04-01-91	5.75
08-10-88	4.95	04-15-90	5.35	04-15-91	5.52
09-12-88	5.07	05-01-90	5.35	05-01-91	5.62
10-10-88	5.05	06-01-90	5.30	05-15-91	5.95
11-11-88	5.09	06-15-90	5.15	06-01-91	6.04
12-12-88	5.31	07-01-90	4.92	06-15-91	5.87
01-11-89	5.28	07-15-90	4.88	07-01-91	5.82
02-13-89	5.25	08-01-90	4.95	07-15-91	6.25
03-05-89	5.35	08-15-90	4.89	08-01-91	7.35
04-04-89	5.57	09-01-90	5.20	08-15-91	7.42
05-07-89	5.42	09-15-90	5.12	09-01-91	8.15
06-04-89	4.95	10-01-90	5.10	09-15-91	8.52
07-08-89	4.98	10-15-90	5.00	10-01-91	8.96
08-09-89	4.76	11-01-90	4.70	10-15-91	9.20
09-12-89	5.04	11-15-90	4.68	11-01-91	9.63
10-12-89	5.26	12-01-90	4.62	11-15-91	9.68
11-07-89	5.01	12-15-90	4.33	12-01-91	9.80
12-15-89	5.15	01-01-91	5.22	12-17-91	9.52

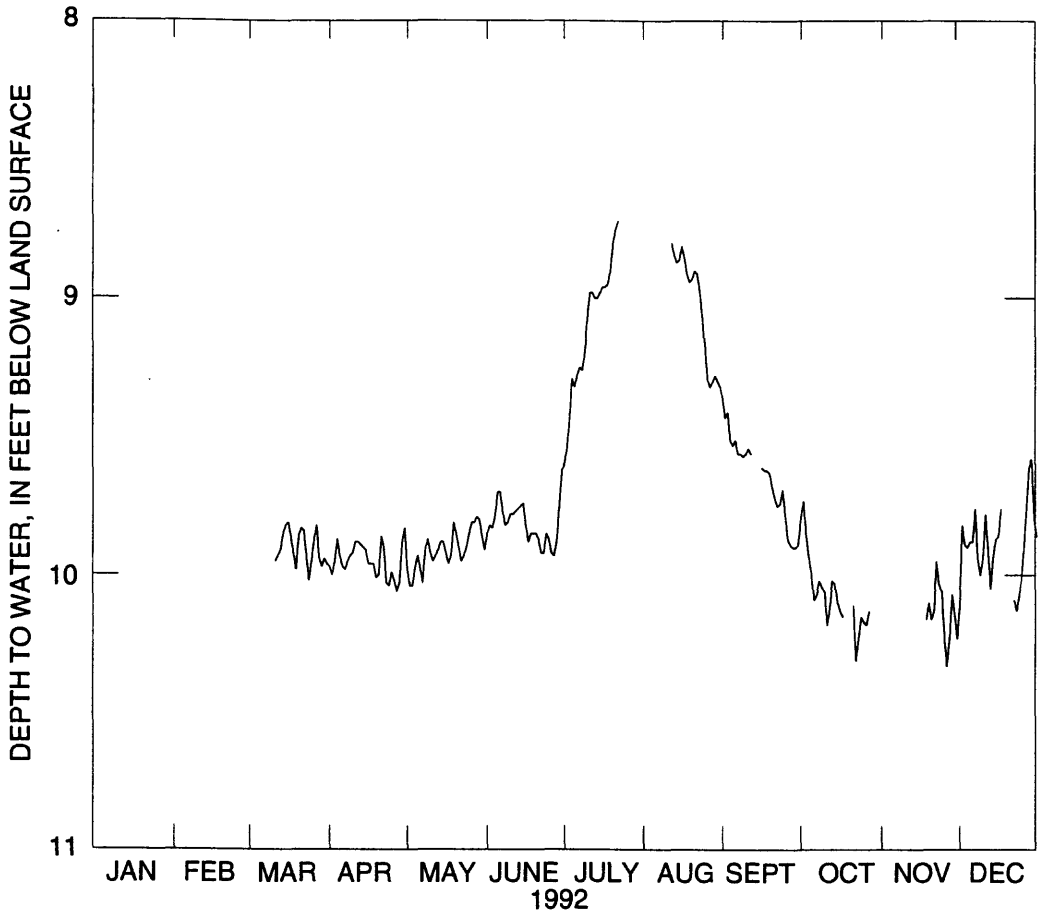

Figure 17. *(A)* Daily mean water levels, well CW-3, Long Valley Caldera, Mono County, California, 1992.

Table 27. Daily mean water levels, well CW-3, Long Valley Caldera, Mono County, California, 1992

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	9.97	9.98	9.85	9.60	8.78	9.36	9.79	—	10.10
2	—	—	—	10.00	10.04	9.82	9.55	—	9.43	9.73	—	9.82
3	—	—	—	9.95	10.04	9.83	9.45	—	9.41	9.85	—	9.89
4	—	—	—	9.87	9.97	9.79	9.29	—	9.51	9.93	—	9.90
5	—	—	—	9.93	9.93	9.70	9.32	—	9.53	9.99	—	9.88
6	—	—	—	9.97	9.98	9.70	9.28	—	9.51	10.09	—	9.88
7	—	—	—	9.98	10.03	9.77	9.25	—	9.56	10.07	—	9.76
8	—	—	—	9.95	9.91	9.82	9.26	—	9.56	10.02	—	9.94
9	—	—	—	9.93	9.87	9.81	9.20	—	9.57	10.04	—	10.00
10	—	—	—	9.92	9.92	9.78	9.08	—	9.56	10.06	—	9.94
11	—	—	9.95	9.88	9.95	9.78	8.98	—	9.54	10.18	—	9.78
12	—	—	9.93	9.88	9.93	9.77	8.98	8.80	9.56	10.12	—	9.91
13	—	—	9.91	9.89	9.91	—	9.00	8.84	—	10.02	—	10.05
14	—	—	9.85	9.90	9.88	—	9.00	8.87	—	10.03	—	9.93
15	—	—	9.82	9.91	9.88	9.74	8.98	8.86	—	10.10	—	9.87
16	—	—	9.81	9.96	9.92	9.82	8.96	8.81	9.61	10.13	—	9.86
17	—	—	9.86	9.96	9.96	9.88	8.96	8.85	9.62	10.15	—	9.76
18	—	—	9.92	9.96	9.93	9.85	8.95	8.91	9.62	—	10.16	—
19	—	—	9.98	10.01	9.81	9.85	8.90	8.94	9.63	—	10.10	—
20	—	—	9.86	10.00	9.85	9.85	8.80	8.93	9.68	—	10.16	—
21	—	—	9.83	9.86	9.90	9.87	8.75	8.90	9.72	10.11	10.13	—
22	—	—	9.84	9.90	9.95	9.92	8.72	8.91	9.75	10.31	9.95	10.09
23	—	—	9.93	10.03	9.93	9.92	—	8.97	9.74	—	10.03	10.13
24	—	—	10.02	10.04	9.90	9.85	—	9.06	9.69	10.15	10.06	10.07
25	—	—	9.95	9.99	9.85	9.87	—	9.17	9.78	10.17	10.22	10.02
26	—	—	9.87	10.02	9.81	9.92	—	9.29	9.87	10.18	10.33	9.91
27	—	—	9.82	10.06	9.81	9.93	—	9.32	9.89	10.13	10.23	9.76
28	—	—	9.94	10.03	9.79	9.88	—	9.30	9.90	—	10.07	9.61
29	—	—	9.97	9.88	9.80	9.75	—	9.28	9.90	—	10.14	9.58
30	—	—	9.94	9.83	9.86	9.62	—	9.30	9.89	—	10.23	9.79
31	—	—	9.96	—	9.91	—	—	9.32	—	—	—	9.86
Mean	—	—	9.90	9.95	9.91	9.82	9.10	9.02	9.64	10.06	10.14	9.89
Max	—	—	10.02	10.06	10.04	9.93	9.60	9.32	9.90	10.31	10.33	10.13
Min	—	—	9.81	9.83	9.79	9.62	8.72	8.78	9.36	9.73	9.95	9.58

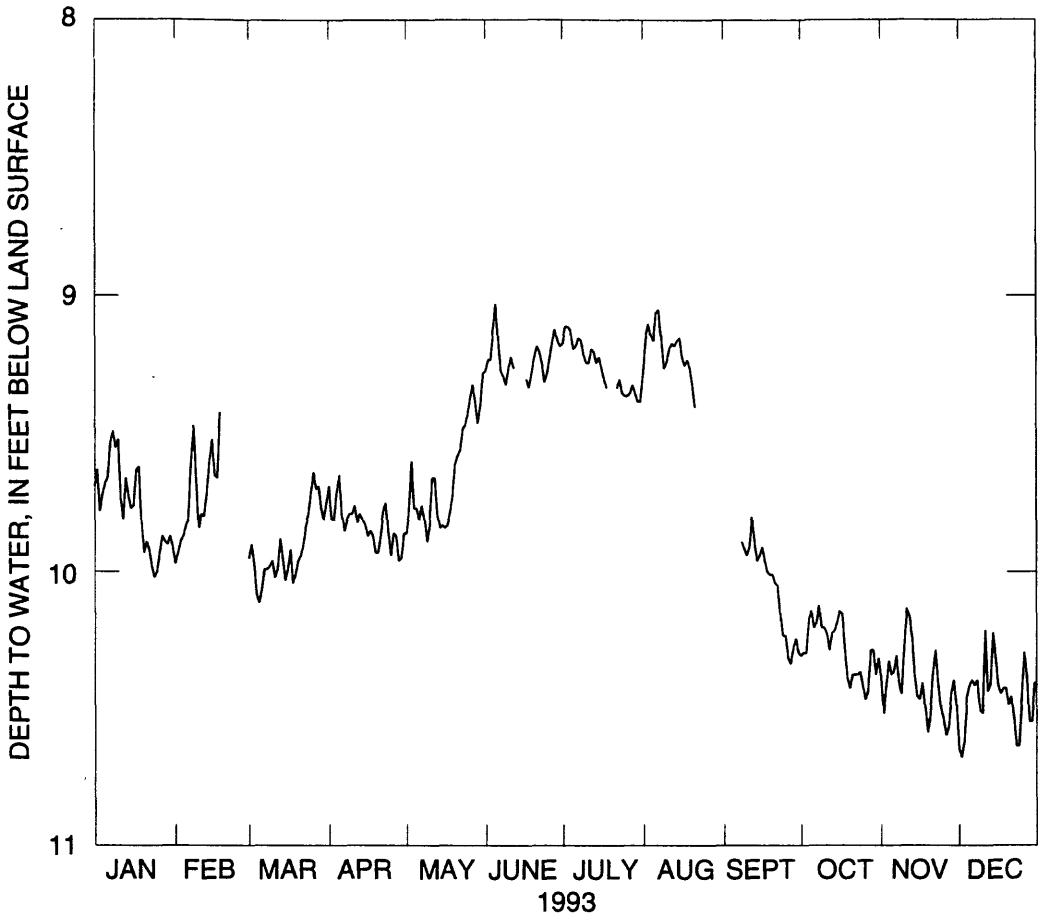

Figure 17. *(B)* Daily mean water levels, well CW-3, Long Valley Caldera, Mono County, California, 1993.

Table 28. Daily mean water levels, well CW-3, Long Valley Caldera, Mono County, California, 1993

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	9.69	9.97	9.95	9.69	9.86	9.27	9.17	9.28	—	10.30	10.38	10.64
2	9.63	9.93	9.90	9.81	9.78	9.23	9.11	9.15	—	10.29	10.51	10.67
3	9.78	9.89	9.97	9.81	9.60	9.23	9.11	9.10	—	10.29	10.41	10.61
4	9.72	9.87	10.08	9.71	9.77	9.12	9.12	9.14	—	10.17	10.32	10.45
5	9.68	9.83	10.11	9.65	9.77	9.03	9.19	9.16	—	10.14	10.37	10.41
6	9.66	9.81	10.06	9.79	9.81	9.16	9.18	9.06	—	10.20	10.36	10.39
7	9.53	9.60	9.99	9.85	9.76	9.27	9.15	9.05	—	10.18	10.30	10.41
8	9.49	9.47	9.99	9.81	9.81	9.29	9.16	9.15	9.89	10.12	10.40	10.39
9	9.55	9.67	9.98	9.79	9.89	9.32	9.21	9.26	9.92	10.20	10.44	10.50
10	9.52	9.84	9.96	9.79	9.83	9.26	9.24	9.24	9.94	10.20	10.26	10.51
11	9.73	9.79	10.02	9.76	9.66	9.22	9.24	9.19	9.91	10.22	10.13	10.21
12	9.81	9.80	9.99	9.82	9.66	9.26	9.19	9.17	9.80	10.28	10.16	10.43
13	9.66	9.72	9.88	9.79	9.79	—	9.20	9.18	9.89	10.22	10.24	10.41
14	9.72	9.60	9.95	9.81	9.84	—	9.24	9.16	9.96	10.21	10.37	10.22
15	9.77	9.52	10.03	9.83	9.83	—	9.22	9.15	9.94	10.18	10.45	10.31
16	9.76	9.65	9.99	9.87	9.84	—	9.26	9.22	9.91	10.14	10.46	10.41
17	9.63	9.66	9.92	9.85	9.83	9.30	9.30	9.25	9.96	10.15	10.40	10.44
18	9.62	9.42	10.04	9.87	9.79	9.33	9.33	9.23	10.00	10.28	10.49	10.42
19	9.82	—	10.01	9.93	9.73	9.28	—	9.26	10.01	10.38	10.58	10.42
20	9.93	—	9.96	9.93	9.61	9.22	—	9.32	10.01	10.42	10.51	10.48
21	9.89	—	9.94	9.87	9.58	9.18	—	9.40	10.04	10.37	10.36	10.45
22	9.92	—	9.90	9.78	9.56	9.20	9.33	—	10.05	10.37	10.28	10.53
23	9.98	—	9.83	9.75	9.48	9.24	9.30	—	10.16	10.37	10.40	10.63
24	10.02	—	9.79	9.86	9.47	9.31	9.35	—	10.23	10.36	10.49	10.63
25	10.00	—	9.71	9.94	9.43	9.28	9.36	—	10.23	10.41	10.53	10.46
26	9.93	—	9.64	9.86	9.37	9.22	9.36	—	10.31	10.46	10.59	10.29
27	9.87	—	9.70	9.87	9.32	9.16	9.35	9.53	10.33	10.43	10.56	10.37
28	9.89	—	9.69	9.96	9.38	9.12	9.32	—	10.27	10.28	10.44	10.54
29	9.90	—	9.77	9.95	9.46	9.16	9.35	—	10.24	10.28	10.39	10.54
30	9.87	—	9.81	9.86	9.40	9.18	9.38	—	10.29	10.37	10.48	10.40
31	9.91	—	9.75	—	9.28	—	9.38	—	—	10.31	—	10.41
Mean	9.77	9.72	9.91	9.83	9.65	9.22	9.25	9.21	10.06	10.28	10.40	10.45
Max	10.02	9.97	10.11	9.96	9.89	9.33	9.38	9.53	10.33	10.46	10.59	10.67
Min	9.49	9.42	9.64	9.65	9.28	9.03	9.11	9.05	9.80	10.12	10.13	10.21

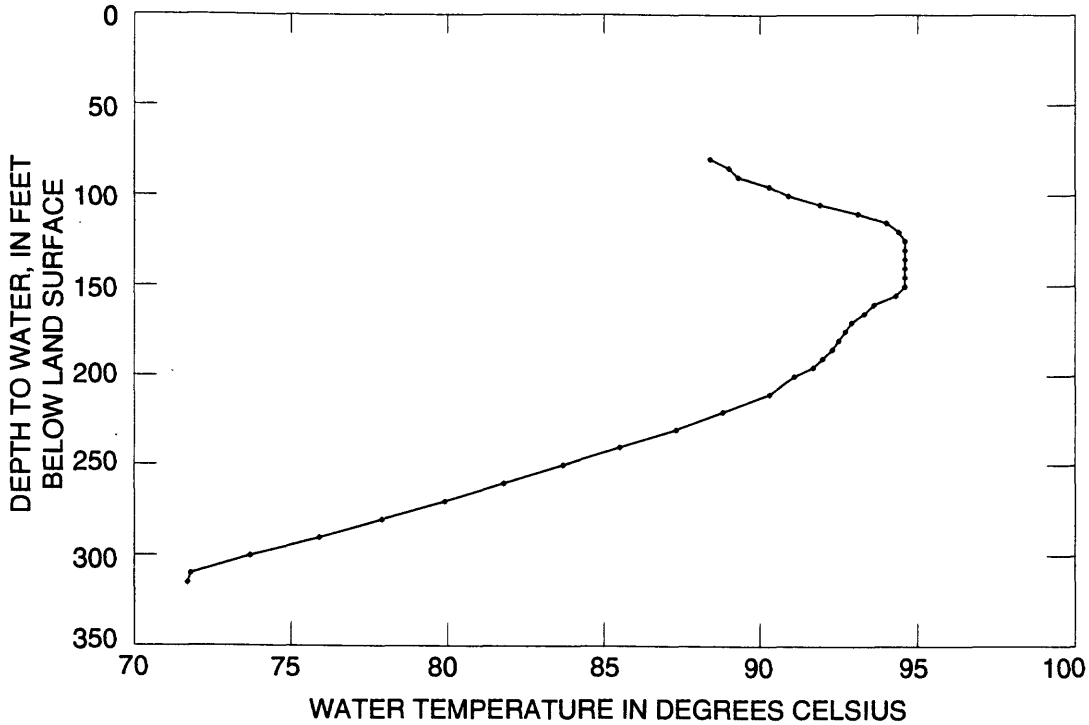

Figure 18. Temperature log of well CH-10B, Long Valley Caldera, Mono County, California, December 19, 1988.

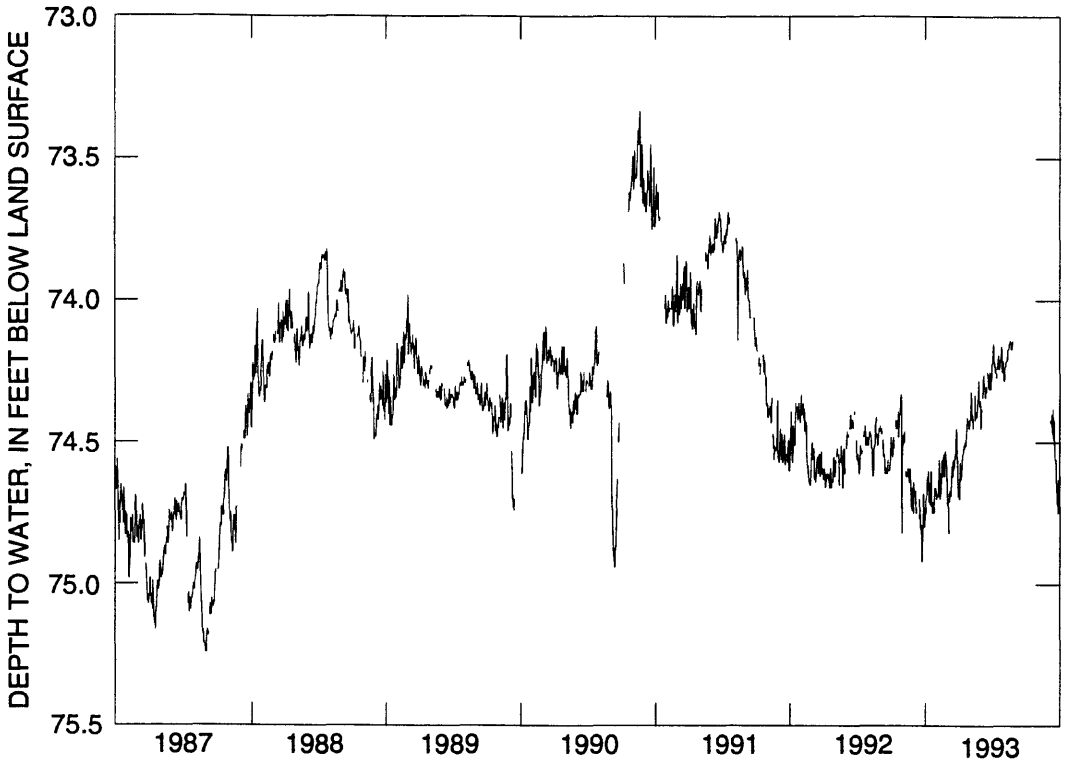

Figure 19. Daily mean water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1987–93.

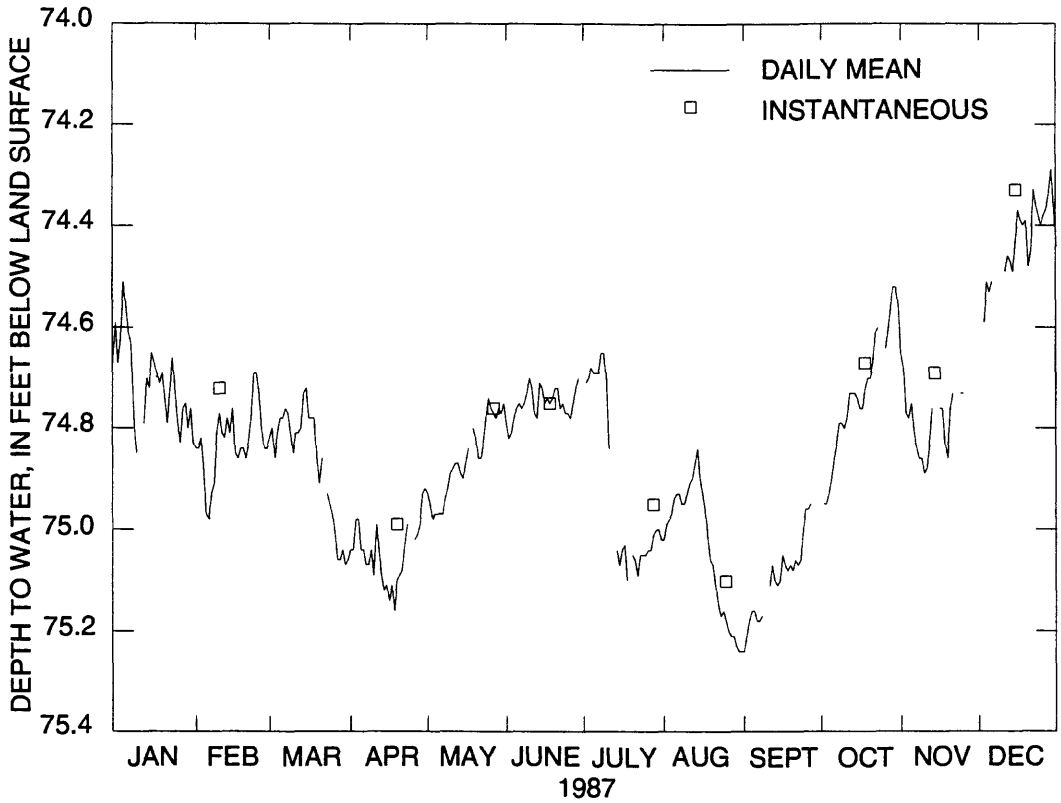

Figure 20. *(A)* Daily mean and instantaneous water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1987.

Table 29. Daily mean water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1987

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	74.59	74.84	74.82	75.04	74.93	74.79	—	75.02	75.24	—	74.65	—
2	74.67	74.84	74.80	75.04	74.95	74.82	74.71	74.99	75.21	74.95	74.68	—
3	74.62	74.82	74.86	74.98	74.98	74.81	74.70	74.98	75.18	74.95	74.77	74.59
4	74.51	74.89	74.81	74.98	74.97	74.78	74.68	74.97	75.16	74.93	74.78	74.51
5	74.56	74.97	74.78	75.04	74.97	74.76	74.69	74.94	75.16	74.90	74.75	74.53
6	74.61	74.98	74.78	75.04	74.97	74.75	74.69	74.93	75.18	74.86	74.80	74.51
7	74.63	74.93	74.76	75.07	74.97	74.76	74.69	74.93	75.18	74.83	74.84	—
8	74.77	74.91	74.77	75.07	74.94	74.75	74.65	74.95	75.17	74.79	74.86	—
9	74.85	74.81	74.81	75.04	74.92	74.73	74.65	74.95	—	74.79	74.86	—
10	—	74.77	74.85	75.09	74.89	74.70	74.70	74.93	—	74.80	74.89	—
11	—	74.81	74.81	74.99	74.88	74.72	74.84	74.91	75.11	74.78	74.88	74.49
12	74.79	74.82	74.81	75.04	74.87	74.77	—	74.90	75.07	74.73	74.83	74.46
13	74.70	74.78	74.80	75.09	74.87	74.78	—	74.87	75.10	74.73	74.76	74.47
14	74.72	74.81	74.73	75.12	74.89	74.71	75.04	74.84	75.11	74.73	—	74.49
15	74.65	74.76	74.72	75.11	74.90	74.72	75.07	74.90	75.10	74.74	—	74.43
16	74.67	74.85	74.78	75.14	74.87	74.75	75.04	74.93	75.05	74.76	74.76	74.37
17	74.69	74.86	74.78	75.11	74.84	74.74	75.03	74.96	75.07	74.76	74.76	74.39
18	74.71	74.84	74.78	75.16	—	74.75	75.10	75.02	75.08	74.72	74.83	74.40
19	74.69	74.84	74.86	75.10	74.80	74.74	—	75.06	75.07	74.70	74.86	74.39
20	74.74	74.86	74.91	75.09	74.82	74.72	75.05	75.07	75.08	74.70	74.76	74.48
21	74.79	74.83	74.86	75.08	74.86	74.72	75.06	75.11	75.06	74.67	74.73	74.45
22	74.72	74.78	—	75.03	74.86	74.76	75.09	75.15	75.07	74.61	—	74.33
23	74.66	74.69	74.93	74.99	74.83	74.75	75.05	75.17	75.06	74.60	—	74.36
24	74.73	74.69	74.95	—	74.78	74.77	75.05	75.16	75.00	—	74.73	74.38
25	74.79	74.73	74.97	—	74.74	74.77	75.05	75.18	74.96	—	74.73	74.40
26	74.83	74.80	75.01	75.02	74.76	74.78	75.04	75.20	74.96	74.64	—	74.38
27	74.76	74.84	75.06	75.01	74.77	74.75	75.04	75.21	74.95	74.60	—	74.37
28	74.75	74.84	75.06	74.99	74.78	74.72	75.01	75.21	—	74.55	—	74.34
29	74.80	—	75.04	74.93	74.76	74.70	75.00	75.23	—	74.52	—	74.29
30	74.76	—	75.07	74.92	74.77	—	75.00	75.24	—	74.52	—	74.36
31	74.83	—	75.06	—	74.75	—	75.02	75.24	—	74.56	—	74.44
Mean	74.71	74.83	74.87	75.05	74.86	74.75	74.92	75.04	75.10	74.73	74.79	74.42
Max	74.85	74.98	75.07	75.16	74.98	74.82	75.10	75.24	75.24	74.95	74.89	74.59
Min	74.51	74.69	74.72	74.92	74.74	74.70	74.65	74.84	74.95	74.52	74.65	74.29

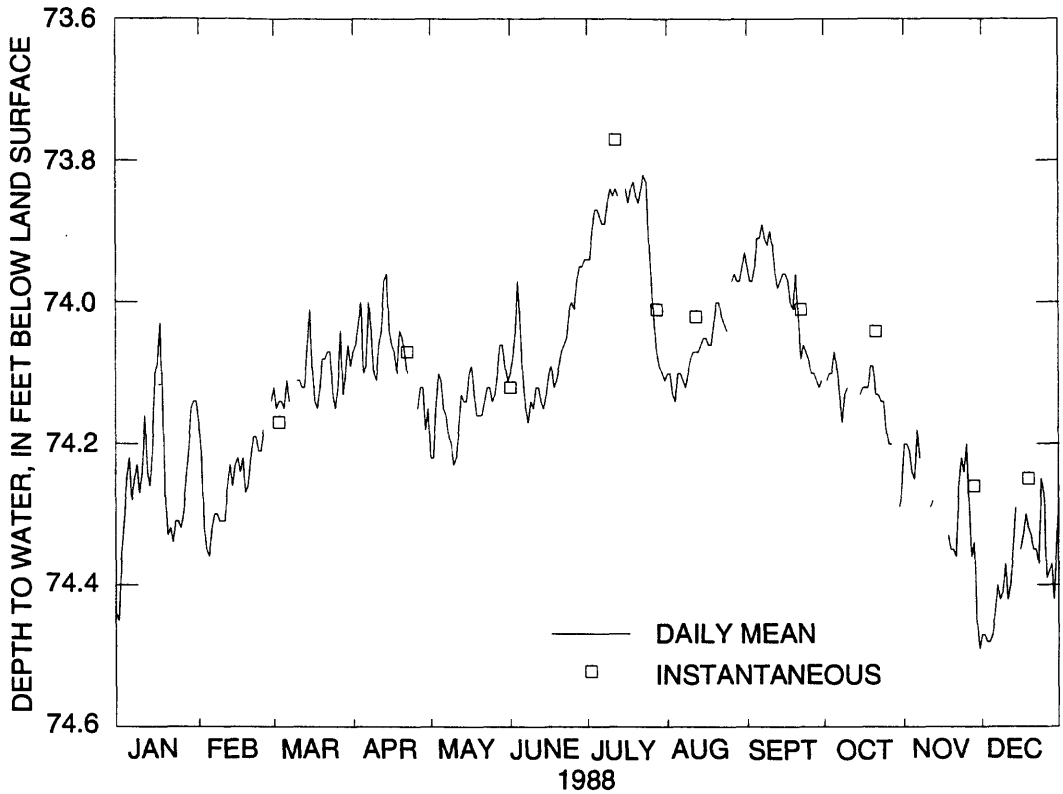

Figure 20. *(B)* Daily mean and instantaneous water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1988.

Table 30. Daily mean water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1988

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	74.45	74.17	74.12	74.07	74.22	74.10	73.94	74.10	73.95	—	74.20	74.47
2	74.36	74.22	74.15	74.06	74.22	74.08	73.94	74.10	73.97	74.11	74.20	74.47
3	74.31	74.32	74.14	74.03	74.15	74.04	73.90	74.13	73.97	74.10	74.21	74.48
4	74.25	74.35	74.14	74.00	74.10	73.97	73.87	74.14	73.95	74.10	74.24	74.48
5	74.22	74.36	74.15	74.10	74.11	74.04	73.87	74.10	73.91	74.07	74.25	74.47
6	74.28	74.32	74.11	74.09	74.15	74.11	73.88	74.10	73.91	74.09	74.18	74.44
7	74.25	74.30	74.14	74.00	74.16	74.15	73.89	74.11	73.89	74.13	74.22	74.40
8	74.23	74.30	—	74.04	74.19	74.17	73.89	74.12	73.91	74.17	—	74.42
9	74.27	74.31	—	74.10	74.20	74.14	73.86	74.10	73.92	74.13	—	74.41
10	74.24	74.31	74.11	74.11	74.23	74.15	73.84	74.08	73.90	74.12	—	74.37
11	74.16	74.31	74.11	74.06	74.22	74.12	73.85	74.07	73.92	—	74.29	74.42
12	74.24	74.26	74.12	74.04	74.18	74.12	73.84	74.07	73.96	—	74.28	74.40
13	74.26	74.23	74.12	73.97	74.13	74.14	73.85	74.07	73.98	—	—	74.35
14	74.21	74.26	74.07	73.96	74.14	74.15	—	74.06	73.97	—	—	74.29
15	74.10	74.23	74.01	74.04	74.14	74.13	—	74.05	73.96	74.13	74.35	—
16	74.09	74.22	74.09	74.06	74.10	74.10	73.84	74.05	73.96	74.12	—	74.35
17	74.03	74.24	74.14	74.07	74.09	74.09	73.86	74.06	73.97	74.12	—	74.33
18	74.14	74.22	74.15	74.10	74.13	74.12	73.84	74.06	74.00	74.12	74.33	74.30
19	74.28	74.27	74.12	74.04	74.16	74.11	73.83	74.03	74.01	74.09	74.35	74.32
20	74.33	74.26	74.08	74.05	74.16	74.09	73.85	74.00	73.96	74.09	74.35	74.33
21	74.32	74.22	74.08	74.07	74.16	74.07	73.86	74.00	74.02	74.13	74.36	74.35
22	74.34	74.19	74.07	74.10	74.14	74.06	73.84	74.02	74.08	74.13	74.26	74.35
23	74.31	74.19	74.07	—	74.12	74.05	73.82	74.03	74.06	74.14	74.22	74.37
24	74.31	74.21	74.13	—	74.12	74.01	73.83	74.04	74.07	74.14	74.24	74.25
25	74.32	74.21	74.15	—	74.14	74.00	73.91	—	74.08	74.18	74.20	74.27
26	74.30	74.18	74.12	74.15	74.13	74.01	73.97	73.97	74.10	74.20	74.29	74.39
27	74.25	—	74.04	74.12	74.10	73.97	74.03	73.96	74.10	74.20	74.36	74.38
28	74.21	—	74.13	74.12	74.06	73.95	74.07	73.97	74.11	—	74.34	74.37
29	74.15	74.14	74.10	74.18	74.06	73.95	74.09	73.97	74.12	—	74.45	74.42
30	74.14	—	74.06	74.15	74.09	73.94	74.10	73.95	74.11	74.29	74.49	74.34
31	74.14	—	74.09	—	74.11	—	74.11	73.93	—	74.27	—	74.26
Mean	74.24	74.25	74.11	74.07	74.14	74.07	73.91	74.05	73.99	74.14	74.29	74.37
Max	74.45	74.36	74.15	74.18	74.23	74.17	74.11	74.14	74.12	74.29	74.49	74.48
Min	74.03	74.14	74.01	73.96	74.06	73.94	73.82	73.93	73.89	74.07	74.18	74.25

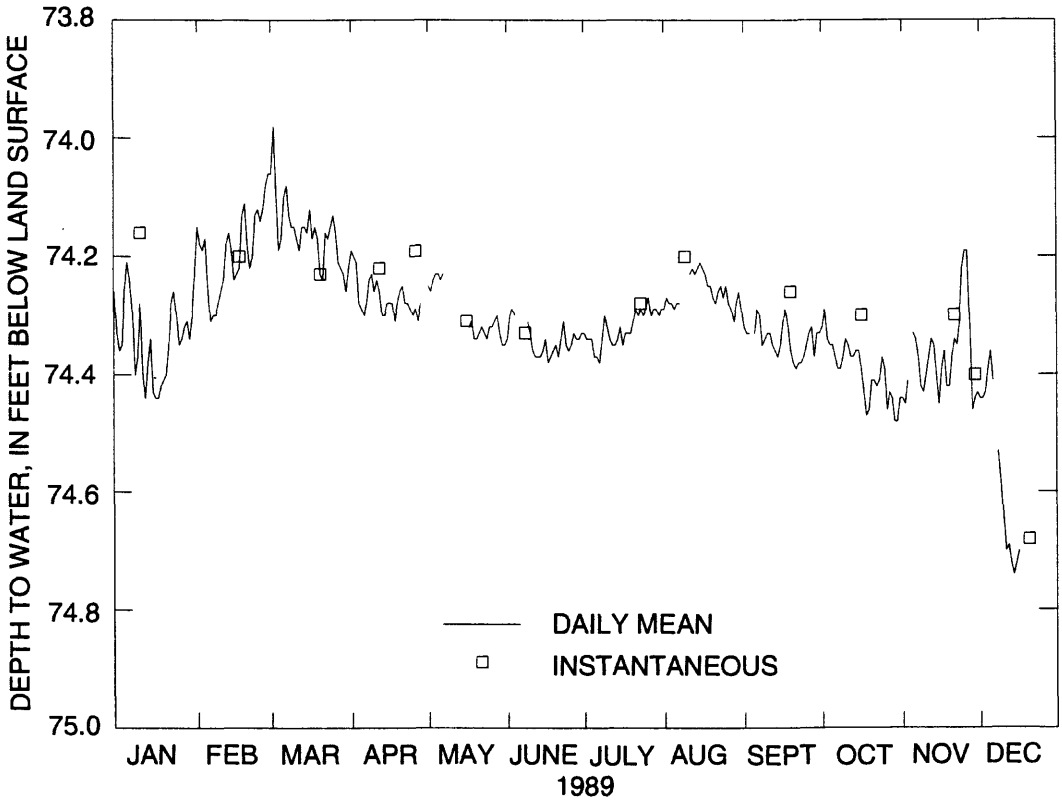

Figure 20. *(C)* Daily mean and instantaneous water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1989.

Table 31. Daily mean water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1989

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	74.33	74.15	74.06	74.19	74.25	74.34	74.33	74.29	74.32	74.32	74.44	74.44
2	74.36	74.18	73.98	74.20	74.26	74.30	74.34	74.27	74.33	74.29	74.45	74.44
3	74.35	74.19	74.09	74.21	74.24	74.29	74.34	74.28	74.33	74.34	74.41	74.43
4	74.26	74.17	74.19	74.28	74.23	74.30	74.34	74.28	—	74.35	—	74.39
5	74.21	74.25	74.17	74.29	74.23	—	74.37	74.29	74.33	74.35	74.33	74.36
6	74.24	74.31	74.10	74.30	74.24	—	74.37	74.28	74.29	74.37	74.34	74.41
7	74.29	74.30	74.08	74.28	74.23	—	74.38	74.28	74.30	74.39	74.37	—
8	74.40	74.30	74.13	74.24	—	—	74.34	—	74.35	74.39	74.42	74.53
9	74.37	74.28	74.15	74.23	—	74.31	74.30	—	74.34	74.37	74.43	74.58
10	74.28	74.26	74.15	74.26	—	74.33	74.32	—	74.33	74.34	74.40	74.64
11	74.40	74.24	74.17	74.24	—	74.36	74.34	74.23	74.33	74.35	74.37	74.70
12	74.44	74.18	74.19	74.26	—	74.37	74.35	74.22	74.35	74.37	74.34	74.69
13	74.38	74.16	74.15	74.30	—	74.37	74.35	74.23	74.36	74.37	74.35	74.72
14	74.34	74.19	74.15	74.30	—	74.37	74.34	74.22	74.37	74.36	74.40	74.74
15	74.43	74.24	74.16	74.28	—	74.36	74.32	74.21	74.35	74.36	74.45	74.72
16	74.44	74.23	74.12	74.28	—	74.34	74.35	74.22	74.31	74.39	74.39	74.70
17	74.44	74.22	74.17	74.28	74.32	74.38	74.33	74.23	74.29	74.43	74.36	—
18	74.42	74.13	74.15	74.31	74.31	74.37	74.33	74.25	74.32	74.47	74.42	—
19	74.41	74.11	74.17	74.28	74.34	74.36	74.33	74.25	74.36	74.46	74.42	—
20	74.40	74.18	74.23	74.26	74.34	74.35	74.31	74.27	74.38	74.41	74.37	—
21	74.35	74.22	74.24	74.25	74.33	74.37	74.29	74.28	74.39	74.41	74.34	—
22	74.28	74.20	74.16	74.28	74.32	74.34	74.30	74.26	74.38	74.42	74.35	—
23	74.26	74.13	74.17	74.28	74.33	74.31	74.29	74.25	74.38	74.41	74.31	—
24	74.30	74.12	74.15	74.29	74.34	74.35	74.30	74.27	74.37	74.37	74.22	—
25	74.35	74.14	74.13	74.30	74.32	74.36	74.29	74.25	74.35	74.39	74.19	—
26	74.34	74.12	74.16	74.29	74.32	74.35	74.27	74.28	74.33	74.46	74.19	—
27	74.32	74.08	74.21	74.31	74.31	74.33	74.30	74.29	74.32	74.43	74.31	—
28	74.31	74.06	74.22	74.28	74.30	74.34	74.29	74.31	74.37	74.44	74.46	—
29	74.34	—	74.23	—	74.33	74.34	74.29	74.28	74.33	74.48	74.44	—
30	74.30	—	74.26	—	74.35	74.33	74.30	74.26	74.33	74.48	74.43	—
31	74.23	—	74.22	—	74.35	—	74.29	74.29	—	74.44	—	—
Mean	74.34	74.19	74.16	74.27	74.30	74.34	74.32	74.26	74.34	74.39	74.37	74.57
Max	74.44	74.31	74.26	74.31	74.35	74.38	74.38	74.31	74.39	74.48	74.46	74.74
Min	74.21	74.06	73.98	74.19	74.23	74.29	74.27	74.21	74.29	74.29	74.19	74.36

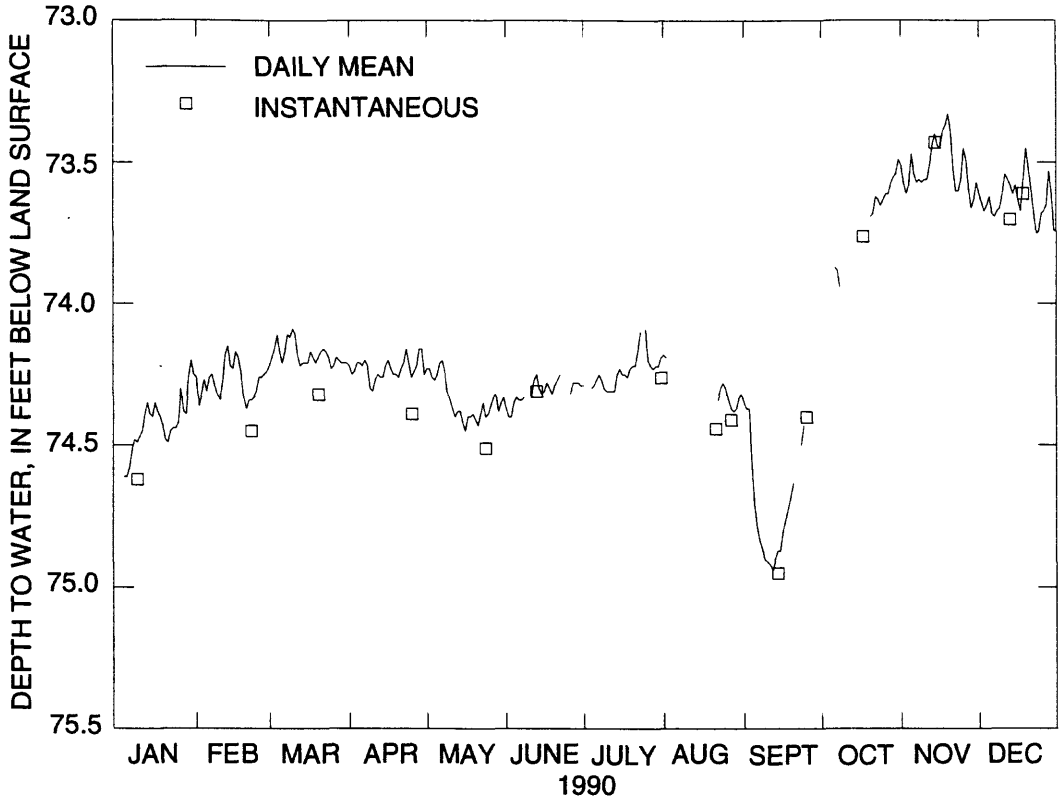

Figure 20. *(D)* Daily mean and instantaneous water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1990.

Table 32. Daily mean water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1990

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	74.26	74.22	74.22	74.23	74.37	74.29	74.18	74.35	—	73.51	73.61
2	—	74.36	74.19	74.25	74.23	74.40	—	74.19	74.37	—	73.57	73.64
3	—	74.32	74.16	74.24	74.26	74.40	—	—	74.37	—	73.61	73.67
4	74.61	74.27	74.11	74.21	74.27	74.35	74.30	—	74.56	—	73.58	73.65
5	74.61	74.31	74.17	74.21	74.25	74.33	74.29	—	74.70	—	73.47	73.62
6	74.58	74.26	74.21	74.22	74.21	74.34	74.27	—	74.78	73.87	73.54	73.68
7	74.52	74.25	74.17	74.20	74.20	74.34	74.25	—	74.83	73.88	73.57	73.69
8	74.48	74.29	74.11	74.22	74.24	74.33	74.27	—	74.86	73.94	73.56	73.67
9	74.49	74.32	74.12	74.30	74.31	—	74.30	—	74.90	—	73.57	73.66
10	74.47	74.34	74.09	74.31	74.34	—	74.31	—	74.91	—	73.56	73.61
11	74.45	74.28	74.11	74.27	74.37	74.33	74.31	—	74.92	—	73.56	73.54
12	74.39	74.18	74.18	74.25	74.40	74.27	74.31	—	74.94	—	73.51	73.56
13	74.35	74.15	74.22	74.26	74.38	74.25	74.31	—	74.90	—	73.44	73.58
14	74.39	74.22	74.21	74.26	74.38	74.30	74.25	—	74.87	—	73.40	73.61
15	74.40	74.23	74.21	74.22	74.42	74.32	74.23	—	74.87	—	73.44	73.58
16	74.35	74.17	74.21	74.20	74.45	74.31	74.25	—	74.80	—	73.45	73.63
17	74.38	74.19	74.17	74.23	74.40	74.28	74.25	—	74.76	—	73.39	73.67
18	74.40	74.24	74.19	74.25	74.40	74.30	74.26	—	74.72	—	73.37	73.56
19	74.43	74.33	74.21	74.25	74.39	74.32	74.23	—	74.68	—	73.33	73.45
20	74.48	74.37	74.19	74.26	74.41	74.29	74.22	—	74.63	73.69	73.39	73.52
21	74.49	74.34	74.17	74.23	74.43	74.27	74.22	—	—	73.68	73.52	73.59
22	74.45	74.34	74.16	74.21	74.39	74.25	74.17	74.34	—	73.62	73.60	73.67
23	74.44	74.33	74.17	74.16	74.35	—	74.10	74.30	74.50	73.63	73.60	73.75
24	74.44	74.31	74.19	74.21	74.40	—	—	74.28	74.43	73.65	73.56	73.74
25	74.42	74.26	74.23	74.26	74.39	—	74.09	74.30	—	73.63	73.45	73.68
26	74.30	74.26	74.22	74.24	74.36	74.32	74.20	74.34	—	73.61	73.49	73.67
27	74.38	74.25	74.19	74.22	74.33	74.28	74.22	74.37	—	73.61	73.59	73.65
28	74.39	74.24	74.20	74.16	74.32	74.28	74.23	74.38	—	73.57	73.66	73.53
29	74.26	—	74.21	74.16	74.38	74.28	74.22	74.37	—	73.55	73.63	73.61
30	74.20	—	74.21	74.25	74.35	74.29	74.22	74.33	—	73.54	73.57	73.74
31	74.25	—	74.21	—	74.33	—	74.19	74.32	—	73.49	—	73.74
Mean	74.42	74.27	74.18	74.23	74.34	74.31	74.24	74.31	74.71	73.66	73.52	73.63
Max	74.61	74.37	74.23	74.31	74.45	74.40	74.31	74.38	74.94	73.94	73.66	73.75
Min	74.20	74.15	74.09	74.16	74.20	74.25	74.09	74.18	74.35	73.49	73.33	73.45

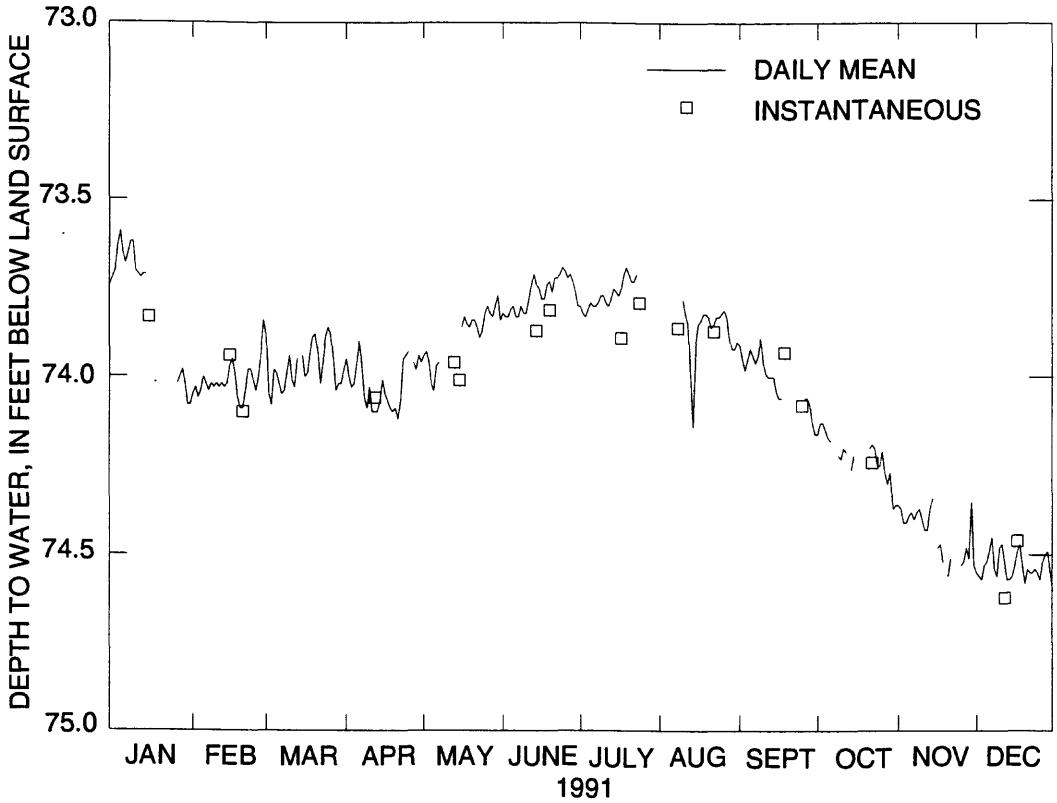

Figure 20. *(E)* Daily mean and instantaneous water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1991.

Table 33. Daily mean water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1991

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	73.72	74.05	73.88	73.95	73.94	73.82	73.80	—	73.91	74.16	74.36	74.55
2	73.70	74.03	74.05	74.00	73.93	73.83	73.82	—	73.95	74.13	74.37	74.56
3	73.63	74.06	74.08	74.03	73.96	73.83	73.83	—	73.98	74.13	74.41	74.57
4	73.59	74.04	73.98	74.02	74.02	73.81	73.81	—	73.95	74.15	74.41	74.53
5	73.65	74.00	73.99	73.96	74.04	73.80	73.79	—	73.92	74.17	74.39	74.52
6	73.68	74.02	74.02	73.90	73.97	73.83	73.80	—	73.94	74.18	74.38	74.49
7	73.65	74.04	74.05	73.97	73.96	73.83	73.80	—	73.96	—	74.40	74.45
8	73.62	74.02	74.04	74.06	—	73.80	73.79	—	73.94	—	74.38	74.54
9	73.62	74.03	73.99	74.09	—	73.82	73.77	—	73.89	74.22	74.37	74.56
10	73.70	74.02	73.94	74.03	—	73.82	73.77	73.78	73.96	74.23	74.40	74.48
11	73.71	74.03	74.01	74.10	—	73.78	73.79	73.82	73.99	74.20	74.43	74.47
12	73.72	74.02	74.03	74.10	—	73.74	73.80	73.85	74.00	74.21	74.43	74.52
13	73.71	74.03	73.95	74.10	—	73.71	73.78	74.00	74.00	—	74.37	74.57
14	73.71	74.02	—	74.07	—	73.74	73.75	74.14	74.00	74.26	74.34	74.57
15	—	73.97	73.94	74.01	—	73.75	73.76	73.91	74.04	74.22	—	74.56
16	—	73.95	74.00	74.05	73.86	73.78	73.77	73.85	74.06	—	74.48	74.53
17	—	73.99	73.99	74.07	73.83	73.78	73.75	73.84	74.06	—	74.47	74.49
18	—	74.06	73.93	74.09	73.85	73.74	73.71	73.82	—	—	74.52	74.47
19	—	74.09	73.89	74.10	73.86	73.73	73.69	73.82	—	—	—	74.53
20	—	74.09	73.88	74.09	73.84	73.76	73.71	73.83	—	—	74.56	74.58
21	—	74.04	73.93	74.12	73.84	73.72	73.73	73.86	—	74.20	74.51	74.54
22	—	73.98	74.02	74.07	73.86	73.72	73.73	73.85	—	74.19	—	74.55
23	—	73.98	73.96	73.95	73.89	73.71	73.71	73.83	—	74.20	74.58	74.55
24	—	74.01	73.89	73.94	73.87	73.69	—	73.83	—	74.25	—	74.54
25	—	74.04	73.86	73.93	73.82	73.70	—	73.82	—	74.25	74.53	74.55
26	74.02	74.00	73.88	—	73.80	73.72	—	73.81	74.06	74.21	74.52	74.57
27	74.00	73.93	73.95	73.96	73.82	73.71	—	73.83	74.06	74.27	74.48	74.52
28	73.98	73.84	74.04	73.98	73.83	73.73	—	73.89	74.08	74.30	74.51	74.50
29	74.02	—	74.02	73.94	73.80	73.76	—	73.92	74.13	74.27	74.35	74.49
30	74.08	—	74.02	73.96	73.77	73.80	—	73.92	74.16	74.37	74.53	74.55
31	74.08	—	73.98	—	73.84	—	—	73.90	—	74.36	—	74.60
Mean	73.78	74.01	73.97	74.02	73.88	73.77	73.77	73.87	74.00	74.22	74.44	74.53
Max	74.08	74.09	74.08	74.12	74.04	73.83	73.83	74.14	74.16	74.37	74.58	74.60
Min	73.59	73.84	73.86	73.90	73.77	73.69	73.69	73.78	73.89	74.13	74.34	74.45

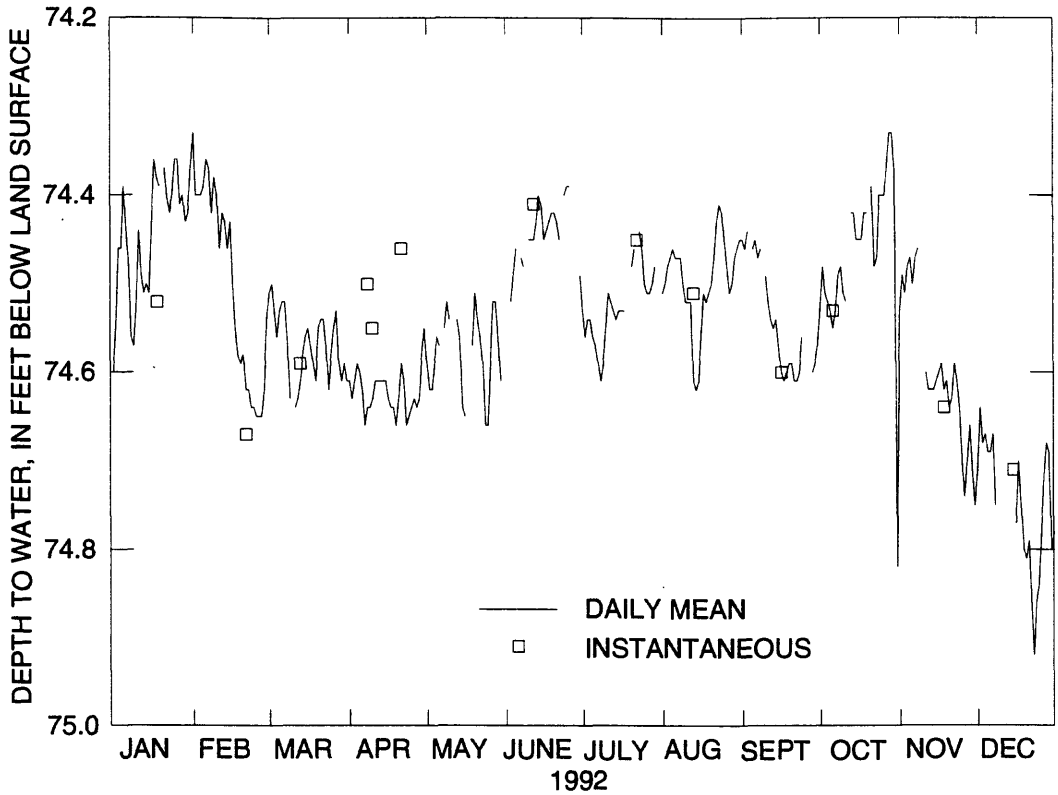

Figure 20. *(F)* Daily mean and instantaneous water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1992.

Table 34. Daily mean water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1992

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	74.60	74.33	74.51	74.61	74.59	74.55	74.53	74.51	74.45	74.53	74.53	74.71
2	74.55	74.40	74.50	74.63	74.62	—	74.56	74.50	74.46	74.48	74.49	74.64
3	74.46	74.40	74.53	74.61	74.62	74.52	74.54	74.48	74.44	74.51	74.51	74.68
4	74.46	74.40	74.56	74.59	74.59	74.49	74.54	74.47	—	74.52	74.48	74.67
5	74.39	74.39	74.53	74.60	74.56	74.46	74.56	74.46	74.46	74.53	74.47	74.69
6	74.44	74.36	74.52	74.62	74.57	—	74.57	74.47	74.45	74.55	74.50	74.69
7	74.48	74.37	74.52	74.66	—	74.47	74.59	74.47	74.47	74.53	74.47	74.67
8	74.56	74.42	74.56	74.64	74.55	74.48	74.61	74.47	74.46	74.49	74.46	74.75
9	74.57	74.38	74.63	74.64	74.52	—	74.59	74.50	—	74.48	—	—
10	74.52	74.40	—	74.63	74.54	74.45	74.55	74.52	74.49	74.51	—	74.74
11	74.44	74.46	74.64	74.61	—	74.45	74.51	74.52	74.52	74.52	74.60	—
12	74.49	74.42	74.63	74.61	—	74.45	74.52	74.52	74.54	—	74.62	74.74
13	74.51	74.43	74.61	74.61	74.54	74.43	74.53	74.61	74.55	74.42	74.62	—
14	74.50	74.46	74.58	74.61	74.56	74.40	74.54	74.62	74.54	74.42	74.62	74.75
15	74.51	74.43	74.56	74.61	74.64	74.41	74.53	74.61	74.57	74.45	74.61	—
16	74.43	74.50	74.55	74.63	74.65	74.45	74.53	74.56	74.60	74.45	74.60	74.77
17	74.36	74.55	74.57	74.64	—	74.44	74.53	74.51	74.61	74.45	74.59	74.70
18	74.38	74.58	74.59	74.64	—	74.43	—	74.52	74.60	74.42	74.62	74.75
19	74.39	74.59	74.61	74.66	74.57	74.42	—	74.51	74.59	74.42	74.61	74.80
20	—	74.58	74.55	74.63	74.51	74.42	74.48	74.50	74.59	—	74.64	74.81
21	74.37	74.62	74.54	74.59	74.54	74.43	74.46	74.47	74.61	74.39	74.63	74.79
22	74.40	74.62	74.54	74.61	74.56	74.45	—	74.43	74.61	74.48	74.59	74.86
23	74.42	74.64	74.57	74.66	74.59	—	74.44	74.41	74.60	74.47	74.61	74.92
24	74.40	74.64	74.62	74.65	74.66	74.40	74.46	74.42	74.56	74.40	74.64	74.86
25	74.36	74.65	74.58	74.64	74.66	74.39	74.50	74.45	—	74.40	74.70	74.84
26	74.36	74.65	74.55	74.63	74.59	74.39	74.51	74.48	74.62	74.40	74.74	74.78
27	74.41	74.65	74.53	74.64	74.52	—	74.51	74.51	—	74.37	74.70	74.72
28	74.40	74.62	74.59	74.63	74.52	—	74.50	74.50	74.60	74.33	74.66	74.68
29	74.43	74.54	74.61	74.58	74.56	—	74.48	74.47	74.59	74.33	74.71	74.69
30	74.42	—	74.59	74.55	74.61	74.49	—	74.46	74.57	74.37	74.75	74.80
31	74.37	—	74.61	—	—	—	—	74.45	—	74.82	—	74.78
Mean	74.45	74.50	74.57	74.62	74.58	74.45	74.53	74.50	74.54	74.46	74.60	74.75
Max	74.60	74.65	74.64	74.66	74.66	74.55	74.61	74.62	74.62	74.82	74.75	74.92
Min	74.36	74.33	74.50	74.55	74.51	74.39	74.44	74.41	74.44	74.33	74.46	74.64

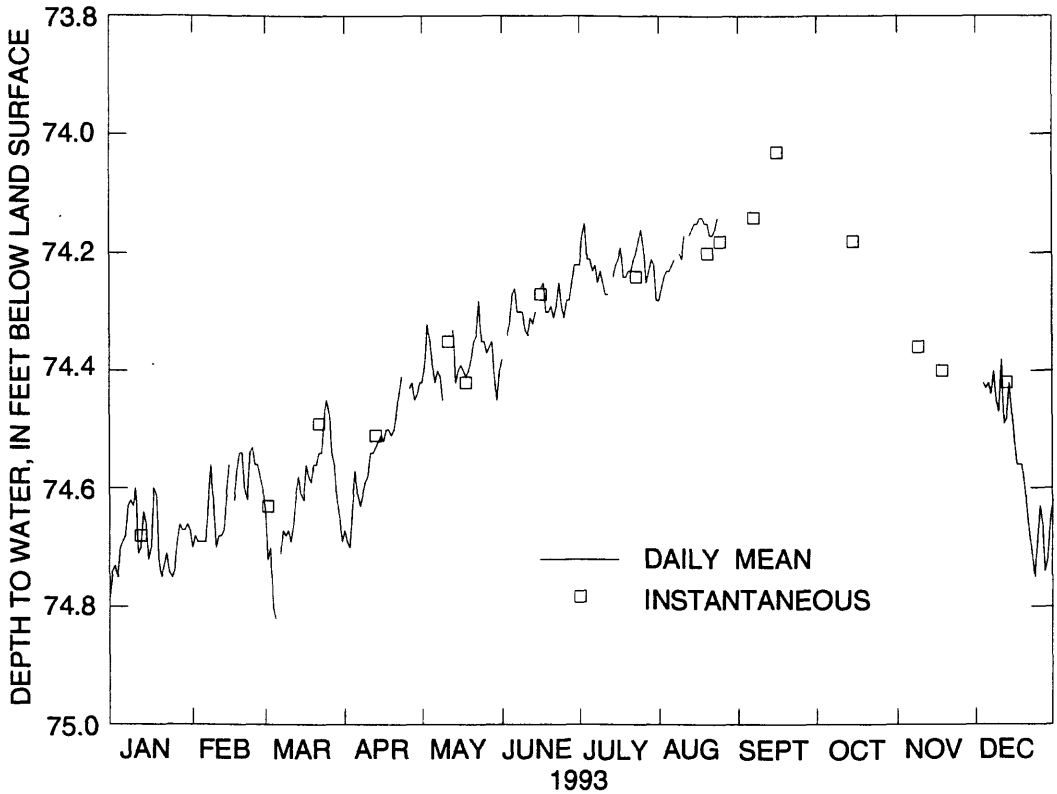

Figure 20. *(G)* Daily mean and instantaneous water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1993.

Table 35. Daily mean water levels, well CH-10B, Long Valley Caldera, Mono County, California, 1993

[Values are in feet below land surface. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	74.74	74.70	74.64	74.67	74.42	74.38	74.22	74.28	—	—	—	—
2	74.73	74.68	74.72	74.69	74.39	—	74.17	74.26	—	—	—	—
3	74.75	74.69	74.70	74.70	74.32	74.34	74.15	74.24	—	—	—	—
4	74.70	74.69	74.80	74.63	74.35	74.32	74.21	74.23	—	—	—	74.41
5	74.69	74.69	74.82	74.57	74.39	74.27	74.21	74.23	—	—	—	74.41
6	74.68	74.69	—	74.61	74.42	74.26	74.23	74.22	—	—	—	74.40
7	74.63	74.62	74.71	74.63	74.40	74.30	74.22	74.21	—	—	—	74.42
8	74.62	74.56	74.67	74.61	74.41	74.30	74.25	—	—	—	—	74.38
9	74.63	74.63	74.68	74.59	74.45	74.30	74.23	74.20	—	—	—	74.43
10	74.60	74.70	74.67	74.58	—	74.33	74.25	74.21	—	—	—	74.44
11	74.71	74.68	74.69	74.54	—	74.34	74.27	74.17	—	—	—	74.35
12	74.70	74.68	74.66	74.54	—	74.31	74.27	—	—	—	—	74.46
13	74.64	74.67	74.61	74.53	74.33	74.32	—	74.17	—	—	—	74.45
14	74.66	74.61	74.58	74.52	74.42	74.30	74.24	74.16	—	—	—	74.39
15	74.72	74.56	74.61	74.51	74.40	—	74.22	74.15	—	—	—	74.44
16	74.70	—	74.62	74.52	74.39	74.26	74.21	74.15	—	—	—	74.49
17	74.60	74.62	74.56	74.50	74.40	74.25	74.19	74.14	—	—	—	74.53
18	74.61	74.57	74.58	74.50	74.41	74.30	74.24	74.14	—	—	—	74.53
19	74.72	74.54	74.59	74.51	74.40	74.30	74.24	74.15	—	—	—	74.53
20	74.75	74.54	74.56	74.50	74.38	74.29	74.23	74.15	—	—	—	74.56
21	74.73	74.60	74.56	74.47	74.35	74.31	74.23	74.17	—	—	—	74.61
22	74.71	74.62	74.54	74.44	74.34	74.29	74.21	74.17	—	—	—	74.65
23	74.74	74.54	74.54	74.41	74.28	74.25	74.20	74.16	—	—	—	74.68
24	74.75	74.53	74.48	—	74.35	74.29	74.18	74.14	—	—	—	74.72
25	74.74	74.56	74.45	—	74.35	74.31	74.16	—	—	—	—	74.66
26	74.69	74.56	74.47	74.43	74.37	74.28	74.19	—	—	—	—	74.60
27	74.66	74.58	74.54	74.42	74.36	74.28	74.25	—	—	—	—	74.63
28	74.67	74.60	74.56	74.45	74.35	74.25	74.23	—	—	—	—	74.71
29	74.67	—	74.62	74.44	74.41	74.22	74.21	—	—	—	—	74.69
30	74.66	—	74.65	74.42	74.45	74.22	74.22	—	—	—	—	74.62
31	74.67	—	74.69	—	74.40	—	74.28	—	—	—	—	74.60
Mean	74.69	74.62	74.62	74.53	74.38	74.29	74.22	74.19	—	—	—	74.53
Max	74.75	74.70	74.82	74.70	74.45	74.38	74.28	74.28	—	—	—	74.72
Min	74.60	74.53	74.45	74.41	74.28	74.22	74.15	74.14	—	—	—	74.35

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93

[Water levels are in feet below land-surface datum. Readings above land surface indicated by "+". M, method of measurement: S is steel tape, V is calibrated electric sounder. W, status of well: P is pumping; R is recently pumped; D is dry; O is obstruction; N is nearby pumping; T is nearby recently pumped]

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: 2A
Site number: 374315118441201

About 13.7 miles northeast of Mammoth Lakes. Drilled livestock well. Diameter 8 inches, depth 32 feet. Altitude of land-surface datum 6,922 feet. Water-level records available 1982–94.

05-30-87	5.59 S	11-29-88	3.80 S	11-14-90	4.11 S	07-23-92	4.36 S
08-28-87	3.88 S	04-26-89	3.65 S	04-12-91	3.55 S	12-03-92	4.16 S
11-14-87	3.64 S	11-28-89	3.95 S	07-17-91	4.19 S	05-17-93	3.20 S
04-21-88	3.39 S	04-23-90	3.70 S	11-20-91	4.13 S	07-20-93	2.64 SP
07-27-88	4.51 S	07-17-90	4.27 S	04-08-92	4.27 S	11-10-93	3.93 S

Highest 2.64 07-20-93
Lowest 5.59 05-30-87
Period of record Highest 2.64 07-20-93 Lowest 5.59 05-30-87
Record begins 05-26-82 30 Entries

Site identifier: 27R1
Site number: 374420118515501

About 8.3 miles northeast of Mammoth Lakes and 2.6 miles southeast of Arcularius Ranch. Drilled livestock well. Diameter 6 inches, depth 44.3 feet. Altitude of land-surface datum 7,039.18 feet. Water-level records available 1982–94.

04-23-87	33.45 S	04-26-89	34.90 S	04-12-91	35.82 S	05-12-93	37.36 S
08-28-87	36.20 SP	08-08-89	35.04 V	07-16-91	36.86 S	07-20-93	39.9 VP
12-16-87	33.76 S	11-28-89	35.19 V	11-19-91	36.26 S	11-09-93	37.91 S
04-28-88	33.89 S	04-24-90	35.37 S	04-07-92	36.44 S		
07-27-88	35.43 S	07-17-90	35.79 S	07-21-92	37.44 S		
11-28-88	35.82 S	11-14-90	35.62 S	11-19-92	37.81 S		

Highest 33.45 04-23-87
Lowest 37.91 11-09-93
Period of record Highest 33.2 07-16-85 Lowest 38.18 04-07-94
Record begins 11-18-8 34 Entries

Site identifier: 28P1
Site number: 374420118532501

About 7.5 miles northeast of Mammoth Lakes and 1.4 miles southeast of Arcularius Ranch. Drilled livestock well. Diameter 6 inches, depth 125 feet. Altitude of land-surface datum 7,109.02 feet. Water-level records available 1983–94.

04-23-87	78.17 S	04-26-89	82.23 V	04-12-91	86.24 V	05-12-93	87.66 V
08-28-87	81.44 S	08-08-89	84.73 V	07-16-91	87.34 V	07-20-93	88.30 V
12-16-87	79.63 S	11-28-89	84.75 V	11-19-91	86.76 V	11-09-93	88.37 V
04-28-88	79.95 V	04-25-90	84.99 V	04-07-92	87.20 S		
07-27-88	83.66 S	07-17-90	85.55 V	07-21-92	87.63 V		
11-28-88	82.53 S	11-14-90	86.21 V	11-19-92	87.96 V		

Highest 78.17 04-23-87
Lowest 88.37 11-09-93
Period of record Highest 75.28 07-25-84 Lowest 116.55 06-03-83
Record begins 06-03-83 32 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW
Site identifier: 30N2							
Site number: 374420118493301							
About 7.8 miles northeast of Mammoth Lakes and 4.8 miles southeast of Arcularius Ranch. Drilled observation well. Diameter 8 inches, depth measured 31.8 feet in 1992. Altitude of land-surface datum 6,913.21 feet. Water-level records available 1972, 1982–94. Measurements from August 1989 through 1992 water year published as 003S029E19R001M.							
04-23-87	6.99 S	04-26-89	8.20 S	04-12-91	8.52 S	05-12-93	4.94 S
08-28-87	8.55 S	08-08-89	9.15 S	07-16-91	8.65 S	07-20-93	7.44 S
12-16-87	8.45 S	11-28-89	9.12 S	11-19-91	9.04 S	11-09-93	9.12 S
04-28-88	7.63 S	04-24-90	8.49 S	04-07-92	8.77 S		
07-27-88	8.65 S	07-17-90	9.00 S	07-21-92	9.09 S		
11-28-88	8.82 S	11-14-90	9.44 S	11-19-92	9.15 S		
Highest	4.94	05-12-93					
Lowest	9.44	11-14-90					
Period of record	Highest	2.95	05-10-86	Lowest	9.44	11-14-90	
Record begins	05-11-72	36 Entries					
Site identifier: 31P1							
Site number: 374332118491001							
About 9.4 miles northeast of Mammoth Lakes and 5.4 miles southeast of Arcularius Ranch. Unused water-table well in alluvium of Quaternary age. Diameter 30 inches, depth 7.6 feet. Altitude of land-surface datum 6,914.01 feet. Water-level records available 1966, 1972–73, 1978–94.							
04-23-87	0.74 S	04-26-89	3.22 S	04-12-91	3.74 S	05-12-93	2.83 S
08-28-87	3.14 S	08-08-89	3.86 S	07-16-91	4.52 ST	07-20-93	4.00 ST
12-16-87	2.68 S	11-28-89	4.24 S	11-19-91	4.96 S	11-09-93	4.56 S
04-28-88	2.09 S	04-25-90	3.71 S	04-07-92	4.41 S		
07-27-88	3.63 S	07-17-90	4.68 ST	07-21-92	5.18 S		
11-28-88	3.65 S	11-14-90	4.89 S	11-19-92	5.44 S		
Highest	0.74	04-23-87					
Lowest	5.44	11-19-92					
Period of record	Highest	0.00	04-02-84	Lowest	6.00	06-13-66	
Record begins	06-13-66	45 Entries					
Site identifier: 31P2							
Site number: 374332118491002							
About 9.4 miles northeast of Mammoth Lakes and 5.4 miles southeast of Arcularius Ranch. Livestock well. Diameter 4 inches, depth unknown. Altitude of land-surface datum 6,915.7 feet. Water-level records available 1988–94.							
04-28-88	2.09 S	11-28-89	4.10 S	04-12-91	3.62 S	11-19-92	5.33 S
07-27-88	3.41 S	04-25-90	3.58 S	11-19-91	4.83 S	07-20-93	9.70 SR
11-28-88	3.71 S	07-17-90	4.63 SR	04-07-92	4.30 S	11-09-93	4.44 S
04-26-89	3.17 S	11-14-90	4.76 S	07-21-92	5.05 S		
Highest	2.09	04-28-88					
Lowest	9.70	07-20-93					
Period of record	Highest	2.09	04-28-88	Lowest	9.70	07-20-93	
Record begins	04-28-88	16 Entries					

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW
Site identifier: 35N1							
Site number: 374327118445901							
About 13 miles northeast of Mammoth Lakes. Drilled livestock well. Diameter unknown, depth 75 feet. Altitude of land-surface datum 6,914 feet. Water-level records available 1972, 1984–94.							
05-30-87	1.77 S	11-29-88	3.03 S	11-14-90	3.43 S	07-23-92	3.70 S
08-28-87	4.28 S	04-26-89	2.27 S	04-12-91	1.12 S	12-03-92	3.05 S
11-14-87	2.61 S	11-28-89	3.03 S	07-17-91	3.43 S	05-17-93	1.25 S
04-21-88	1.61 S	04-23-90	1.81 S	11-20-91	3.22 S	07-20-93	2.95 S
07-27-88	4.17 S	07-17-90	3.81 S	04-08-92	1.80 S	11-10-93	2.70 S
Highest	1.12	04-12-91					
Lowest	4.28	08-28-87					
Period of record		Highest 1.05 07-25-84		Lowest 4.39 07-17-85			
Record begins		05-10-72 30 Entries					
Site identifier: 36P1							
Site number: 374335118434101							
About 14.2 miles northeast of Mammoth Lakes. Unused livestock well. Diameter unknown, depth measured 72 feet in 1992. Altitude of land-surface datum 6,995 feet. Water-level records available 1986–94.							
05-30-87	68.70 S	11-29-88	71.15 S	11-14-90	69.05 S	07-23-92	69.17 S
08-28-87	68.78 S	04-25-89	68.89 S	04-12-91	69.07 S	12-03-92	69.26 S
11-14-87	68.85 S	11-28-89	68.97 S	07-17-91	69.05 S	05-17-93	69.23 S
04-21-88	68.78 S	04-23-90	68.97 S	11-20-91	69.11 S	07-20-93	69.15 S
07-27-88	70.04 S	07-17-90	69.00 S	04-08-92	69.16 S		
Highest	68.70	05-30-87					
Lowest	71.15	11-29-88					
Period of record		Highest 68.70 05-30-87		Lowest 71.51 11-29-86			
Record begins		05-20-86 23 Entries					
Site identifier: AP							
Site number: 373737118501701							
About 7 miles southeast of Mammoth Lakes at the airport. Drilled public-supply well. Diameter 10 inches, depth 70 feet, perforated 52 to 66 feet. Altitude of land-surface datum 7,120 feet. Water-level records available 1984–94.							
04-21-87	27.10 S	11-28-88	28.34 S	11-15-90	29.25 SP	11-19-92	30.10 SP
08-30-87	25.88 S	04-25-89	28.97 S	04-10-91	29.84 SP	05-11-93	27.48 SP
12-18-87	27.66 S	08-09-89	28.40 SP	07-17-91	28.08 S	07-23-93	26.40 S
03-02-88	28.89 S	11-29-89	29.02 SP	11-21-91	29.02 S	11-10-93	27.22 S
04-04-88	28.90 S	04-24-90	29.54 SP	04-08-92	29.91 SR		
07-27-88	26.89 S	07-16-90	29.24 S	07-22-92	29.51 SP		
Highest	25.88	08-30-87					
Lowest	30.10	11-19-92					
Period of record		Highest 19.24 08-30-86		Lowest 30.10 11-19-92			
Record begins		10-09-8 29 Entries					

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: CD-2
Site number: 373847118545802

About 2.5 miles east of Mammoth Lakes and 0.1 mile northwest of Casa Diablo Hot Springs. Drilled irrigation well. Diameter 6 inches, depth 75 feet. Altitude of land-surface datum 7,316 feet. Water-level records available 1990–94.

08-29-90	13.94 S	06-21-91	30.45 SR	04-22-92	38.63 S	03-26-93	41.68 S
09-25-90	22.75 S	08-23-91	SO	05-15-92	42.36 S	04-15-93	31.56 S
10-16-90	17.74 S	09-19-91	29.80 S	06-09-92	35.4 S	05-13-93	31.70 S
11-16-90	23.47 SR	10-22-91	25.25 V	07-22-92	37.22 S	07-21-93	40.11 S
12-18-90	16.90 SN	11-20-91	25.49 V	09-17-92	42.76 S	09-07-93	45.55 S
01-15-91	15.29 S	12-12-91	29.10 S	10-07-92	44.50 S	10-15-93	43.72 S
02-15-91	19.71 S	01-15-92	29.01 S	11-19-92	43.64 S	11-11-93	43.90 S
03-22-91	16.38 S	02-21-92	29.07 S	12-17-92	42.87 SR		
04-10-91	14.37 S	03-15-92	30.71 S	01-14-93	45.52 S		
05-13-91	18.10 S	03-15-92	30.71 S	03-05-93	46.46 S		

Highest 13.94 08-29-90
Lowest 46.46 03-05-93
Period of record Highest 13.94 08-29-90 Lowest 48.39 05-19-94
Record begins 08-29-90 41 Entries

Site identifier: CH-1
Site number: 374045118491001

About 8.1 miles northeast of Mammoth Lakes and 0.7 mile southwest of Cashbaugh Ranch. Drilled observation well. Diameter 1.25 inches, depth 973 feet, perforated 470 to 475 feet. Altitude of land-surface datum 6,969.93 feet. Water-level records available 1982–94.

04-19-87	39.26 S	12-07-8839.88 S		07-19-90	40.47 S	12-17-91	40.60 S
08-28-87	39.62 S	01-11-8939.91 S		08-21-90	40.52 S	01-18-92	40.64 S
10-18-87	39.75 S	02-16-8939.83 S		09-24-90	40.56 S	02-21-92	40.61 S
01-04-88	39.64 S	03-29-8939.85 S		10-15-90	40.52 S	03-14-92	40.64 S
02-04-88	39.65 S	04-26-8939.85 S		11-14-90	40.44 S	04-07-92	40.69 S
03-04-88	39.65 S	06-08-8939.88 S		11-18-90	40.37 S	04-10-92	40.66 S
04-04-88	39.69 S	07-23-8939.92 S		12-18-90	40.42 S	05-26-92	40.72 S
04-28-88	39.67 S	08-09-8939.86 S		01-18-91	40.43 S	06-10-92	40.78 S
05-03-88	39.70 S	11-28-8940.25 S		02-20-91	40.49 S	07-22-92	40.88 S
06-07-88	39.73 S	12-12-8940.30 S		05-14-91	40.31 S	09-16-92	41.26 S
07-06-88	39.74 S	01-09-9040.35 S		06-20-91	40.39 S	10-06-92	41.36 S
07-27-88	39.81 S	02-06-9040.28 S		07-17-91	40.40 S	11-18-92	41.32 S
08-03-88	39.81 S	03-07-9040.28 S		07-24-91	40.40 S	12-03-92	41.28 S
09-02-88	39.87 S	04-23-9040.31 S		08-22-91	40.45 S	05-12-93	40.55 S
09-29-88	39.96 S	05-30-9040.38 S		09-25-91	40.53 S	07-23-93	40.10 S
11-07-88	39.87 S	06-28-9040.43 S		11-15-91	40.55 S	11-09-93	40.50 S
11-28-88	39.90 S	07-17-9040.47 S		11-19-91	40.68 S		

Highest 39.26 04-19-87
Lowest 41.36 10-06-92
Period of record Highest 33.67 08-03-82 Lowest 41.36 10-06-92
Record begins 08-03-82 106 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: CH-10
Site number: 373932118491501

About 7.8 miles east of Mammoth Lakes and 2 miles north of Whitmore Hot Springs. Drilled observation well. Diameter 1.25 inches, depth 175 feet, perforated 115 to 120 feet. Altitude of land-surface datum 7,074.88 feet. Water-level records available 1982–94.

04-19-87	70.77 V	04-26-89	69.96 V	11-14-90	69.30 V	07-22-92	70.24 V
08-30-87	70.98 V	08-09-89	69.95 V	04-12-91	69.91 V	11-18-92	70.45 V
04-21-88	69.83 V	11-29-89	70.22 V	07-17-91	69.71 V	05-11-93	70.12 V
07-28-88	69.79 V	04-25-90	70.24 V	04-08-92	70.35 V	07-23-93	70.01 V
11-28-88	70.04 V	07-18-90	70.27 V	04-10-92	70.37 V	11-09-93	70.11 V

Highest 69.30 11-14-90
Lowest 70.98 08-30-87
Period of record Highest 67.70 11-03-83 Lowest 70.98 08-30-87
Record begins 08-04-82 34 Entries

Site identifier: CH-10A
Site number: 373930118491601

About 7.8 miles east of Mammoth Lakes and 2 miles north of Whitmore Hot Springs. Drilled observation well. Diameter 6 inches, depth 110 feet, perforated 90 to 110 feet. Altitude of land-surface datum 7,078.80 feet. Water-level records available 1983–94.

04-19-87	74.73 V	04-26-89	73.93 V	04-12-91	73.81 V	05-11-93	74.12 V
08-30-87	74.96 V	08-09-89	73.92 S	07-17-91	73.61 V	07-23-93	74.01 V
12-15-87	74.05 V	11-29-89	74.12 V	04-08-92	74.10 V	11-09-93	74.14 V
04-21-88	73.80 V	04-25-90	74.18 V	04-10-92	74.28 V		
07-28-88	73.85 V	07-18-90	74.14 V	07-22-92	74.22 V		
11-28-88	74.00 V	11-14-90	73.22 V	11-18-92	74.40 V		

Highest 73.22 11-14-90
Lowest 74.96 08-30-87
Period of record Highest 69.8 09-28-83 Lowest 74.96 08-30-87
Record begins 08-10-83 47 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site Identifier: CH-10B
Site Number: 373930118491602

About 7.8 miles east of Mammoth Lakes and 2 miles north of Whitmore Hot Springs. Drilled observation well. Diameter 4 inches, depth 315 feet, open hole 300 to 315 feet. Altitude of land-surface datum 7,078.99 feet. Water-level records available 1983–94.

02-10-87	74.72 V	04-26-89	74.19 V	02-15-91	73.94 V	06-12-92	74.41 V
04-19-87	74.99 V	05-16-89	74.31 V	02-20-91	74.10 V	07-22-92	74.45 V
05-27-87	74.76 V	06-08-89	74.33 V	04-12-91	74.06 V	09-16-92	74.60 V
05-28-87	74.77 V	07-23-89	74.28 V	05-13-91	73.96 V	10-06-92	74.53 V
06-18-87	74.75 V	08-09-89	74.20 V	05-15-91	74.01 V	11-18-92	74.64 V
07-28-87	74.95 V	09-19-89	74.26 V	06-14-91	73.87 V	12-15-92	74.71 V
08-25-87	75.10 V	10-16-89	74.30 V	06-19-91	73.81 V	01-12-93	74.68 V
10-18-87	74.67 V	11-21-89	74.30 V	07-17-91	73.89 V	03-02-93	74.63 V
11-14-87	74.69 V	11-29-89	74.40 V	07-24-91	73.79 V	03-22-93	74.49 V
12-15-87	74.33 V	12-20-89	74.68 V	08-07-91	73.53 V	04-13-93	74.51 V
03-03-88	74.17 V	01-09-90	74.62 V	08-08-91	73.86 V	05-11-93	74.35 V
04-22-88	74.07 V	02-22-90	74.45 V	08-09-91	73.74 V	06-16-93	74.27 V
06-01-88	74.12 V	03-20-90	74.32 V	08-22-91	73.87 V	07-23-93	74.24 V
07-12-88	73.77 V	04-25-90	74.39 V	09-18-91	73.93 V	08-20-93	74.20 V
07-28-88	74.01 V	05-24-90	74.51 V	09-25-91	74.08 V	08-25-93	74.18 V
08-12-88	74.02 V	06-13-90	74.31 V	10-22-91	74.24 V	09-07-93	74.14 V
09-22-88	74.01 V	08-21-90	74.44 V	12-12-91	74.62 V	09-08-93	74.16 V
10-21-88	74.04 V	08-27-90	74.41 V	12-17-91	74.46 V	09-16-93	74.03 V
11-28-88	74.26 V	09-25-90	74.40 V	01-18-92	74.52 V	10-15-93	74.18 V
12-19-88	74.25 V	10-17-90	73.76 V	02-21-92	74.67 V	11-09-93	74.36 V
01-10-89	74.16 V	11-14-90	73.43 V	03-13-92	74.59 V	11-10-93	74.31 V
02-17-89	74.20 V	12-13-90	73.70 V	04-08-92	74.50 V	11-18-93	74.40 V
03-20-89	74.23 V	12-18-90	73.61 V	04-10-92	74.55 V	12-13-93	74.42 V
04-12-89	74.22 V	01-15-91	73.83 V	04-21-92	74.46 V		

Highest 73.43 11-14-90
Lowest 75.10 08-25-87
Period of record Highest 71.72 09-28-83 Lowest 75.10 08-25-87
Record begins 08-10-83 134 Entries

Site identifier: CH-3
Site number: 373929118455405

About 11.2 miles east of Mammoth Lakes and 3.2 miles northeast of Whitmore Hot Springs. Drilled observation well. Diameter 1.25 inches, depth 160 feet. Altitude of land-surface datum 6,870 feet. Water-level records available 1982–94.

04-24-87	6.41 S	04-26-89	6.29 S	04-11-91	5.84 S	05-14-93	5.50 S
08-28-87	6.57 S	08-08-89	6.40 S	07-17-91	5.99 S	07-20-93	5.84 S
12-18-87	6.43 S	11-28-89	6.79 S	11-20-91	5.85 S	11-10-93	5.61 S
04-21-88	6.23 S	04-24-90	6.34 S	04-08-92	5.69 S		
07-27-88	6.39 S	07-17-90	6.49 S	07-23-92	6.71 S		
11-29-88	6.34 S	11-15-90	6.34 S	11-20-92	6.71 S		

Highest 5.50 05-14-93
Lowest 6.79 11-28-89
Period of record Highest 5.50 05-14-93 Lowest 7.73 06-02-83
Record begins 08-24-82 34 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: CH-5
Site number: 373759118474105

About 9.9 miles east of Mammoth Lakes and 1.6 miles northeast of Whitmore Hot Springs. Drilled observation well. Diameter 1.25 inches, depth 875 feet. Altitude of land-surface datum 6,918 feet. Water-level records available 1982 to current year.

04-24-87	43.73 S	04-25-89	44.75 S	11-15-90	45.37 S	07-23-92	45.48 S
09-03-87	44.11 S	08-08-89	44.46 S	04-10-91	45.32 S	11-20-92	45.96 S
12-18-87	44.51 S	11-29-89	45.20 S	07-17-91	44.94 S	05-14-93	45.00 S
04-21-88	44.53 S	04-24-90	45.55 S	11-20-91	45.17 S	07-20-93	44.49 S
07-27-88	44.33 S	07-18-90	45.43 S	04-08-92	45.37 S	11-10-93	44.76 S
11-28-88	44.78 S						

Highest 43.73 04-24-87
Lowest 45.96 11-20-92
Period of record Highest 42.40 11-12-84 Lowest 45.96 11-20-92
Record begins 08-24-82 34 Entries

Site identifier: CH-6
Site number: 374040118522501

About 5.3 miles northeast of Mammoth Lakes in Little Antelope Valley. Drilled observation well. Diameter 1.25 inches, depth 677 feet, perforated 535 to 539 feet. Altitude of land-surface datum 7,248.23 feet. Water-level records available 1982–94.

04-19-87	205.35 V	04-26-89	206.04 V	04-12-91	205.88 V	05-12-93	208.29 V
08-26-87	205.55 V	08-09-89	205.27 V	07-16-91	205.60 V	07-23-93	207.93 V
12-18-87	205.02 V	11-29-89	205.62 V	11-19-91	209.25 V	11-09-93	208.62 V
04-28-88	205.88 V	04-25-90	206.32 V	04-07-92	208.41 V		
07-28-88	205.74 V	07-18-90	206.24 V	07-21-92	207.11 V		
11-28-88	207.73 V	11-15-90	205.65 V	11-18-92	208.25 V		

Highest 205.02 12-18-87
Lowest 209.25 11-19-91
Period of record Highest 202.55 08-27-86 Lowest 209.25 11-19-91
Record begins 08-24-82 42 Entries

Site identifier: CH-7
Site number: 374000118483102

About 8.6 miles northeast of Mammoth Lakes and 1.2 miles south of Cashbaugh Ranch. Drilled observation well. Diameter 1.25 inches, depth 210 feet, perforated 198 to 203 feet. Altitude of land-surface datum 6,960 feet. Water-level records available 1982–94.

04-24-87	5.32 S	04-26-89	5.29 S	04-10-91	3.97 S	06-24-92	+0.38 S
08-29-87	5.97 S	08-08-89	5.26 V	07-17-91	3.53 S	07-23-92	+.37 S
12-18-87	5.63 S	11-28-89	4.61 S	11-20-91	2.02 S	11-19-92	+.44 S
04-21-88	5.57 S	04-24-90	4.10 S	04-08-92	1.07 S	05-13-93	+.45 S
07-28-88	5.79 S	07-17-90	4.34 S	04-23-92	.67 S	07-20-93	+.37 S
11-28-88	5.38 S	11-14-90	3.80 S	06-11-92	+.42 S	11-10-93	+.45 S

Highest +0.45 05-13-93
Lowest 5.97 08-29-87
Period of record Highest +0.45 05-13-93 11-10-93
Lowest 6.29 11-17-82
Record begins 08-03-82 41 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: CHURCH
Site number: 373707118491701

About 8 miles southeast of Mammoth Lakes and 1 mile southwest of Whitmore Hot Springs. Drilled domestic well. Diameter 6 inches, depth 45.5 feet. Altitude of land-surface datum 7,035 feet. Water-level records available 1989–94.

04-25-89	8.25 S	07-18-90	7.78 S	11-20-91	7.61 S	05-14-93	6.79 S
08-08-89	7.83 S	11-15-90	8.29 S	04-08-92	8.02 S	07-20-93	4.29 S
11-29-89	7.84 S	04-10-91	7.36 S	07-22-92	8.54 S	11-10-93	6.82 V
04-24-90	8.32 S	07-17-91	4.15 S	11-19-92	8.58 S		

Highest 4.15 07-17-91
Lowest 8.58 11-19-92
Period of record Highest 4.15 07-17-91 Lowest 8.58 11-19-92
Record begins 04-25-89 16 Entries

Site identifier: CM-2
Site number: 373906118522301

About 4.9 miles east of Mammoth Lakes near Hot Creek Fish Hatchery. Drilled observation well. Diameter 4 inches, depth 152 feet. Altitude of land-surface datum 7,077.0 feet. Water-level records available 1985–94.

04-19-87	3.65 S	12-19-89	4.88 S	07-16-91	3.47 S	07-07-92	6.65 S
09-03-87	3.61 S	01-08-90	4.95 S	08-27-91	4.80 S	07-23-92	6.08 S
04-19-88	3.93 S	02-21-90	5.09 S	11-19-91	6.84 S	08-03-92	6.11 S
07-28-88	3.39 S	03-20-90	4.99 S	12-17-91	6.80 S	09-16-92	7.01 S
04-25-89	4.61 S	04-25-90	5.06 S	03-14-92	7.08 S	11-18-92	7.58 S
08-09-89	3.84 S	05-24-90	4.74 S	04-07-92	7.25 S	05-13-93	6.71 S
09-20-89	4.53 S	07-18-90	3.66 S	05-14-92	6.86 S	07-22-93	5.21 S
10-18-89	4.83 S	11-15-90	4.58 S	06-10-92	6.62 S	11-09-93	7.35 S
11-21-89	4.74 S	04-12-91	4.76 S	06-24-92	6.85 S		

Highest 3.39 07-28-88
Lowest 7.58 11-18-92
Period of record Highest 0.25 08-27-86 Lowest 7.58 11-18-92
Record begins 04-23-85 41 Entries

Site identifier: CR
Site number: 373816118532001

About 4 miles east of Mammoth Lakes. Drilled domestic well. Diameter 6 inches, depth 80 feet. Altitude of land-surface datum 7,161.76 feet. Water-level records available 1986–93.

04-21-87	17.87 S	07-29-88	26.60 S	11-29-89	19.08 S	07-17-91	15.64 S
08-30-87	20.15 S	04-26-89	17.77 S	04-24-90	17.09 S	07-21-92	22.71 SR
12-16-87	21.88 S	08-09-89	17.84 S	07-18-90	15.95 S	07-23-93	16.73 S

Highest 15.64 07-17-91
Lowest 26.60 07-29-88
Period of record Highest 10.40 05-21-86 Lowest 26.60 07-29-88
Record begins 05-21-86 15 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW
Site identifier: CT							
Site number: 374511118585801							
About 7.5 miles north of Mammoth Lakes at the Caltrans Crestview Maintenance Station. Drilled commercial well. Diameter 10 inches, depth 490 feet. Altitude of land-surface datum 7,520 feet. Water-level records available 1990–94.							
08-02-90	123.72 V	07-12-91	126.43 V	11-20-91	133.81 V	11-19-92	134.31 V
12-14-90	130.03 V	07-16-91	126.61 V	04-07-92	133.03 V	05-12-93	130.00 V
04-11-91	132.63 VR	08-09-91	127.62 V	07-20-92	129.33 S	11-09-93	124.55 V

Highest 123.72 08-02-90
Lowest 134.31 11-19-92
Period of record Highest 123.72 08-02-90 Lowest 134.31 11-19-92
Record begins 08-02-90 13 Entries

Site identifier: CW-1							
Site number: 373850118513601							
About 5.6 miles east of Mammoth Lakes near Hot Creek Fish Hatchery. Drilled observation well. Diameter 18 inches, drilled depth 805 feet, open hole 223 to 805 feet. Altitude of land-surface datum 7,084.99 feet. Water-level records available 1973, 1982–94.							
04-19-87	9.73 V	04-25-90	10.53 V	11-19-91	14.68 V	05-14-92	15.03 V
04-19-88	9.96 V	07-18-90	10.10 V	12-17-91	14.63 V	07-23-92	13.83 V
07-28-88	10.05 V	11-15-90	9.76 V	01-16-92	14.45 V	11-18-92	15.36 V
04-25-89	10.30 V	01-17-91	10.61 V	03-11-92	15.02 V	05-12-93	14.78 V
08-09-89	9.80 V	04-12-91	10.79 V	04-09-92	14.93 V	07-22-93	14.45 V
11-21-89	10.26 V	07-16-91	11.34 V	04-17-92	14.97 V	11-09-93	15.35 V
01-09-90	10.55 S	08-27-91	12.84 V	04-23-92	15.15 V		

Highest 9.73 04-19-87
Lowest 15.36 11-18-92
Period of record Highest 6.77 08-13-83 Lowest 15.70 04-06-94
Record begins 08-01-73 44 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW
Site identifier: CW-3							
Site number: 373849118513001							
About 5.7 miles east of Mammoth Lakes near Hot Creek Fish Hatchery. Drilled observation well. Diameter 13 inches, accessible depth 420 feet, depth of hole 917 feet. Altitude of land-surface datum 7,062.20 feet. Water-level records available 1986–94.							
04-19-87	4.97 S	05-24-90	5.29 S	04-07-92	9.98 S	03-01-93	9.93 S
09-03-87	4.67 S	07-18-90	4.95 S	04-23-92	10.05 S	03-22-93	9.91 S
04-19-88	4.92 S	11-15-90	4.68 S	06-10-92	9.80 S	04-12-93	9.82 S
07-28-88	4.76 S	01-17-91	5.55 S	06-24-92	9.84 S	07-22-93	9.33 S
08-09-89	4.76 S	04-12-91	5.74 S	07-07-92	9.26 S	08-27-93	9.53 S
09-20-89	5.17 S	05-02-91	5.65 S	07-23-92	8.68 S	09-08-93	9.89 V
10-18-89	5.46 S	07-16-91	6.30 S	08-03-92	8.67 S	10-15-93	10.18 V
11-21-89	5.12 S	08-27-91	7.74 S	09-16-92	9.58 S	11-09-93	10.41 V
12-19-89	5.28 S	11-19-91	9.85 S	10-06-92	10.06 S	12-03-93	10.65 V
01-08-90	5.44 S	12-17-91	9.52 S	11-18-92	10.16 S	12-16-93	10.42 S
02-21-90	5.64 S	01-16-92	9.85 S	12-22-92	10.07 S		
03-20-90	5.54 S	01-18-92	9.85 S	01-12-93	9.73 S		
04-25-90	5.46 S	03-11-92	9.95 S	01-28-93	9.87 S		
Highest 4.67 09-03-87							
Lowest 10.65 12-03-93							
Period of record Highest 1.82 09-01-86 Lowest 10.65 12-03-93							
Record begins 05-10-86 57 Entries							
Site identifier: DC							
Site number: 374410118583401							
About 6.3 miles north of Mammoth Lakes and 0.4 mile west of Highway 395. Drilled observation well. Diameter 1.25 inches, depth 633 feet. Altitude of land-surface datum 7,515.27 feet. Water-level records available 1982–92.							
05-30-87	182.75 V	03-30-89	199.85 V	07-18-90	204.67 V	11-19-91	212.98 V
08-30-87	185.15 V	04-26-89	199.99 V	11-13-90	207.56 V	04-07-92	213.85 V
04-22-88	192.50 V	08-08-89	200.37 V	04-11-91	211.42 V	04-07-92	213.70 S
07-27-88	193.63 V	01-08-90	203.75 V	07-16-91	209.05 V		
11-23-88	196.69 V	04-27-90	205.22 V	08-26-91	209.30 V		
Highest 182.75 05-30-87							
Lowest 213.85 04-07-92							
Period of record Highest 171.30 07-20-83 Lowest 213.85 04-07-92							
Record begins 07-20-83 25 Entries							

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: ESO
Site number: 373818118514502

About 5.5 miles east of Mammoth Lakes at elementary school. Drilled institutional well. Diameter 6 inches, depth 44.3 feet. Altitude of land-surface datum 7,090 feet. Water-level records available 1985–94.

04-21-87	19.04 S	03-20-90	20.16 S	05-13-91	20.32 S	11-19-92	20.73 S
08-30-87	19.24 S	04-24-90	20.12 S	06-19-91	19.21 S	12-17-92	20.75 S
11-13-87	19.59 S	05-23-90	19.96 S	07-17-91	19.28 S	04-14-93	20.02 S
04-28-88	19.72 S	06-12-90	19.84 S	08-21-91	19.63 S	05-19-93	19.75 S
07-27-88	19.11 S	07-16-90	19.74 S	09-17-91	20.02 S	06-16-93	18.06 S
11-28-88	19.95 S	08-27-90	20.08 S	10-21-91	20.28 S	07-23-93	18.58 S
04-25-89	19.82 S	09-24-90	20.28 S	11-21-91	20.35 S	08-26-93	18.78 S
08-09-89	19.62 S	10-15-90	20.32 S	12-11-91	20.46 SR	09-07-93	18.98 S
09-20-89	20.12 S	11-15-90	20.40 S	03-13-92	20.60 S	10-14-93	19.59 S
10-18-89	20.04 S	12-18-90	21.55 S	04-08-92	20.56 S	11-10-93	19.90 S
11-29-89	20.12 S	01-15-91	20.50 S	06-10-92	19.90 S	12-15-93	20.20 V
12-19-89	22.30 S	02-14-91	20.60 S	09-16-92	20.60 S		
01-08-90	20.25 S	04-10-91	20.34 S	10-05-92	20.66 S		

Highest 18.06 06-16-93
Lowest 22.30 12-19-89
Period of record Highest 12.55 05-12-86 Lowest 22.30 12-19-89
Record begins 07-10-85 60 Entries

Site identifier: LAV-1
Site number: 374051118523301

About 5.3 miles northeast of Mammoth Lakes in Little Antelope Valley. Observation well. Diameter 30 inches, depth 14 feet. Altitude of land-surface datum 7,200 feet. Water-level records available 1972–73, 1982–94.

08-26-87	2.65 S	11-29-89	6.90 S	07-16-91	5.91 S	05-12-93	1.70 S
07-28-88	5.79 S	04-25-90	2.19 S	11-19-91	7.90 S	07-23-93	5.71 S
11-28-88	5.17 S	07-18-90	2.18 S	04-07-92	2.81 S	11-10-93	6.98 S
04-26-89	2.38 S	11-15-90	8.62 S	07-21-92	7.40 S		
08-09-89	7.99 S	04-12-91	.61 S	11-18-92	9.10 S		

Highest 0.61 04-12-91
Lowest 9.10 11-18-92
Period of record Highest +1.35 05-10-86 08-27-86
Lowest 9.10 11-18-92
Record begins 05-08-72 31 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: LKT
Site number: 374300118554401

About 5.2 miles northeast of Mammoth Lakes and 1.3 miles east of Highway 395. Drilled observation well. Diameter 6 inches, depth 3,500 feet, open hole 500 to 3,500 feet. Obstruction in well at 980 feet. Altitude of land-surface datum 7,350 feet. Water-level records available 1984–94.

01-05-87	57.61 S	09-02-88	61.01 S	08-21-90	65.65 S	09-17-92	70.74 S
01-29-87	57.83 S	09-29-88	61.17 S	09-24-90	65.80 S	10-06-92	70.84 S
02-24-87	57.71 S	11-07-88	61.21 S	10-15-90	65.84 S	11-18-92	70.90 S
03-19-87	57.93 S	11-23-88	61.18 S	11-14-90	66.36 S	12-22-92	71.17 S
04-09-87	58.16 S	12-07-88	61.45 S	11-18-90	66.27 S	01-27-93	71.21 S
04-23-87	58.13 S	01-11-89	61.74 S	12-17-90	66.49 S	03-03-93	71.45 S
05-07-87	58.28 S	02-16-89	61.95 S	01-19-91	66.49 S	03-11-93	71.50 S
06-04-87	58.44 S	03-30-89	62.18 S	02-20-91	66.80 S	03-23-93	71.54 S
06-19-87	58.42 S	04-26-89	62.24 S	05-14-91	67.27 S	04-15-93	71.63 S
07-07-87	58.61 S	06-08-89	62.47 S	06-21-91	67.45 S	05-12-93	71.51 S
08-07-87	58.74 S	07-23-89	63.05 S	07-16-91	67.72 S	06-16-93	71.86 S
09-04-87	58.90 S	08-09-89	63.04 S	07-24-91	67.71 S	07-20-93	71.89 S
12-16-87	59.22 S	09-29-89	63.33 S	08-21-91	67.95 S	08-26-93	72.08 S
01-04-88	59.54 S	10-31-89	63.99 S	09-25-91	68.07 S	09-17-93	72.06 S
02-03-88	59.75 S	11-28-89	64.12 S	11-19-91	68.46 S	10-14-93	72.23 V
03-08-88	59.99 S	12-12-89	64.11 S	12-17-91	68.48 S	10-22-93	72.30 S
04-05-88	60.19 S	01-11-90	64.18 S	01-18-92	68.69 S	12-01-93	72.49 S
04-22-88	60.06 S	02-07-90	64.33 S	03-13-92	69.00 V	12-02-93	72.57 S
05-03-88	60.28 S	03-07-90	64.52 S	04-07-92	69.17 S	12-03-93	72.52 S
06-07-88	60.41 S	04-23-90	64.77 S	04-10-92	69.15 S	12-15-93	72.40 S
07-06-88	60.61 S	05-30-90	65.08 S	06-11-92	69.56 S		
07-27-88	60.82 S	06-28-90	65.23 S	07-09-92	70.86 S		
08-02-88	60.72 S	07-19-90	65.44 S	07-21-92	70.73 S		

Highest 57.61 01-05-87
Lowest 72.57 12-02-93
Period of record Highest 57.61 01-05-87 Lowest 73.13 05-19-94
Record begins 11-12-84 113 Entries

Site identifier: LV-15
Site number: 373913118551401

About 2.4 miles northeast of Mammoth Lakes and 0.9 mile north of junction of Highways 395 and 203. Drilled observation well. Diameter 2 inches, depth 57 feet, depth measured 14 feet in 1992, perforated 55 to 57 feet. Altitude of land-surface datum 7,340 feet. Water-level records available 1982–94.

08-26-87	0.19 S	04-25-90	6.35 S	11-19-91	13.05 S	07-21-93	SD
11-28-88	1.98 S	07-17-90	7.20 S	04-07-92	SD	11-10-93	SD
04-25-89	2.14 S	11-15-90	8.45 S	07-21-92	SD		
08-09-89	4.37 S	04-13-91	10.12 S	11-15-92	SD		
11-21-89	5.35 S	07-16-91	10.96 S	05-12-93	SD		

Highest 0.19 08-26-87
Lowest 13.05 11-19-91
Period of record Highest 0.19 08-26-87 Lowest 13.05 11-19-91
Record begins 08-04-82 20 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: LV-18
Site number: 373918118481901

About 8.8 miles east of Mammoth Lakes and 1.9 miles northeast of Whitmore Hot Springs. Drilled observation well. Diameter 2 inches, depth 71 feet, perforated 69 to 71 feet. Altitude of land-surface datum 6,966.0 feet. Water-level records available 1972–73, 1982–94.

04-23-87	18.15 S	04-26-89	19.20 S	04-10-91	19.54 S	05-13-93	17.50 S
08-29-87	18.61 S	08-08-89	19.45 S	07-17-91	19.53 S	07-20-93	18.24 S
12-18-87	18.84 S	11-22-89	19.54 S	11-20-91	19.73 S	11-10-93	18.76 S
04-21-88	19.26 S	04-27-90	18.77 S	04-08-92	19.77 S		
07-28-88	19.00 S	07-17-90	19.63 S	07-23-92	19.98 S		
11-28-88	19.16 S	11-14-90	20.16 S	11-19-92	19.99 S		

Highest 17.50 05-13-93
Lowest 20.16 11-14-90
Period of record Highest 12.44 06-02-83 Lowest 21.00 06-02-72
Record begins 06-02-72 39 Entries

Site identifier: LV-19
Site number: 373754118501701

About 7 miles southeast of Mammoth Lakes and 1.4 miles west of Whitmore Hot Springs. Drilled observation well. Diameter 2 inches, depth 98.6 feet, perforated 96.6 to 98.6 feet. Altitude of land-surface datum 7,090.40 feet. Water-level records available 1972–73, 1986–94.

04-21-87	35.40 S	04-24-90	38.44 S	07-17-91	37.50 S	12-23-92	39.35 S
08-30-87	34.83 S	05-23-90	38.40 S	08-22-91	36.95 S	01-13-93	39.35 S
11-13-87	35.90 S	06-12-90	38.42 S	09-18-91	37.24 S	03-23-93	39.25 S
04-21-88	36.87 S	07-16-90	38.08 S	10-21-91	37.60 S	04-13-93	38.43 S
07-27-88	36.34 S	08-27-90	37.76 S	11-21-91	37.96 S	05-11-93	37.51 S
11-28-88	37.18 S	09-24-90	37.95 S	12-11-91	38.13 S	06-16-93	37.43 S
04-25-89	37.80 S	10-15-90	38.07 S	01-15-92	38.44 S	07-23-93	36.47 S
08-09-89	37.45 S	11-15-90	38.25 S	02-20-92	38.65 S	08-26-93	35.70 S
09-20-89	37.46 S	12-17-90	38.50 S	03-10-92	38.74 S	09-07-93	35.62 S
10-18-89	37.74 S	01-15-91	38.61 S	04-08-92	38.80 S	10-14-93	35.86 S
11-22-89	37.86 S	02-14-91	38.80 S	06-10-92	38.82 S	11-10-93	36.24 S
12-19-89	38.00 S	03-20-91	38.74 S	07-22-92	38.81 S	12-15-93	37.00 V
01-08-90	38.10 S	04-10-91	38.72 S	09-16-92	39.04 S		
02-21-90	38.29 S	05-14-91	38.72 S	10-05-92	39.08 S		
03-20-90	38.36 S	06-19-91	38.45 S	11-19-92	39.20 S		

Highest 34.83 08-30-87
Lowest 39.35 12-23-92 01-13-93
Period of record Highest 33.00 11-13-86 Lowest 39.35 12-23-92 01-13-93
Record begins 06-07-72 66 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: LV-2
Site number: 373729118532802

About 4.5 miles southeast of Mammoth Lakes. Drilled observation well. Diameter 2 inches, depth 44 feet, depth measured 41.5 feet in 1992, perforated 40 to 42 feet. Altitude of land-surface datum 7,167.39 feet. Water-level records available 1972–73, 1982–94.

04-21-87	37.13 S	04-25-89	SD	04-10-91	SD	11-19-92	SD
08-29-87	38.17 S	08-08-89	SD	07-17-91	38.86 S	05-13-93	SD
12-18-87	40.27 S	11-29-89	SD	08-27-91	SD	07-20-93	32.57 S
03-04-88	40.98 S	04-24-90	SD	11-20-91	SD	08-20-93	34.54 S
04-28-88	41.63 S	07-16-90	SD	04-08-92	SD	11-11-93	SD
07-28-88	39.46 S	11-15-90	SD	07-21-92	SD		

Highest 32.57 07-20-93
Lowest 41.63 04-28-88
Period of record Highest 24.07 05-26-82 Lowest 42.65 05-17-72
Record begins 05-17-72 39 Entries

Site identifier: LV-25
Site number: 374233118482701

About 8.9 miles northeast of Mammoth Lakes and 0.8 mile north of Cashbaugh Ranch. Drilled observation well. Diameter 2 inches, depth 18 feet, depth measured 5.45 feet in 1992, perforated 16 to 18 feet. Altitude of land-surface datum 6,873.81 feet. Water-level records available 1972–73, 1982–94.

07-23-87	5.59 S	04-26-89	8.44 S	04-12-91	1.20 S	05-12-93	2.06 S
08-28-87	8.09 S	08-08-89	9.00 S	07-16-91	3.23 S	07-20-93	2.36 S
12-16-87	9.40 S	11-21-89	3.06 S	11-19-91	3.75 S	11-09-93	4.40 S
04-28-88	7.59 S	04-25-90	1.58 S	04-07-92	1.96 S		
07-27-88	8.28 S	07-17-90	1.98 S	07-21-92	2.65 S		
11-28-88	10.28 S	11-14-90	3.67 S	11-19-92	4.05 S		

Highest 1.20 04-12-91
Lowest 10.28 11-28-88
Period of record Highest 0.62 06-03-83 Lowest 10.44 07-25-72
Record begins 07-25-72 39 Entries

Site identifier: LV-3
Site number: 373759118474101

About 9.9 miles east of Mammoth Lakes and 1.6 miles northeast of Whitmore Hot Springs. Drilled observation well. Diameter 2 inches, depth 98 feet, perforated 96 to 98 feet. Altitude of land-surface datum 6,918 feet. Water-level records available 1972–73, 1982–85, 1988.

04-21-88	44.51 S	07-27-88	45.52 S	11-28-88	46.14 S

Highest 44.51 04-21-88
Lowest 46.14 11-28-88
Period of record Highest 44.32 09-11-73 Lowest 46.14 11-28-88
Record available from 05-17-72 to 11-28-88 11 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: LV-30
Site number: 374109118484101

About 8.9 miles northeast of Mammoth Lakes and 0.1 mile north of Cashbaugh Ranch. Drilled observation well. Diameter 2 inches, depth 9.1 feet, depth measured 5.9 feet in 1991, perforated 7.1 to 9.1 feet. Altitude of land-surface datum 6,895.62 feet. Water-level records available 1982–94.

04-23-87	3.03 S	04-26-89	1.69 S	04-12-91	1.50 S	05-12-93	0.38 S
08-28-87	2.64 S	08-08-89	2.59 S	07-16-91	.58 S	07-20-93	5.56 S
12-16-87	4.68 S	11-21-89	4.92 S	11-19-91	4.94 S	11-09-93	4.11 S
04-28-88	.44 S	04-24-90	1.32 S	04-07-92	1.05 S		
07-27-88	1.18 S	07-17-90	1.06 S	07-21-92	1.94 S		
11-28-88	5.13 S	11-14-90	4.89 S	11-19-92	5.42 S		

Highest 0.38 05-12-93
Lowest 5.56 07-20-93
Period of record Highest 0.05 06-03-83 Lowest 5.56 07-20-93
Record begins 10-20-72 38 Entries

Site identifier: LV-44
Site number: 373917118551402

About 2.4 miles northeast of Mammoth Lakes and 1 mile north of junction of Highways 395 and 203. Drilled observation well. Diameter 2 inches, depth 79.7 feet, depth measured 55.2 feet in 1992, well point 77.7 to 79.7 feet. Altitude of land-surface datum 7,340 feet. Water-level records available 1973–94.

04-19-87	+0.79 S	11-28-88	2.81 S	11-15-90	10.88 S	07-21-92	24.75 S
08-26-87	+.75 S	04-25-89	4.20 S	04-10-91	13.18 S	11-19-92	27.75 S
12-16-87	+.15 S	08-09-89	5.56 S	07-16-91	15.00 S	05-12-93	28.30 S
04-28-88	.16 S	04-25-90	8.65 S	11-19-91	18.45 S	07-21-93	30.10 S
07-28-88	1.12 S	07-17-90	9.45 S	04-07-92	22.21 S	11-10-93	32.55 S

Highest +0.79 04-19-87
Lowest 32.55 11-10-93
Period of record Highest +1.00 05-21-86 Lowest 35.80 04-06-94
Record begins 08-07-73 27 Entries

Site identifier: LV-45
Site number: 373914118472201

About 9.6 miles east of Mammoth Lakes and 2 miles northeast of Whitmore Hot Springs. Drilled observation well. Diameter 2 inches, depth 96 feet. Altitude of land-surface datum 6,985.38 feet. Water-level records available 1982–94.

04-23-87	30.69 S	04-26-89	34.43 S	04-10-91	37.84 S	05-13-93	40.05 S
08-28-87	31.61 S	08-08-89	34.45 S	07-17-91	38.53 S	07-20-93	40.09 S
12-18-87	33.29 S	11-22-89	34.61 S	11-20-91	39.07 S	11-10-93	40.10 S
04-21-88	34.31 S	04-24-90	35.13 S	04-08-92	39.45 S		
07-27-88	34.36 S	07-17-90	35.75 S	07-23-92	39.59 S		
11-28-88	34.40 S	11-14-90	36.83 S	11-19-92	39.88 S		

Highest 30.69 04-23-87
Lowest 40.10 11-10-93
Period of record Highest 26.63 10-19-85 Lowest 40.15 04-06-94
Record begins 05-25-82 36 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: MW-1
Site number: 373816118523901

About 4.6 miles east of Mammoth Lakes near Hot Creek Fish Hatchery. Drilled observation well. Diameter 6 inches 0 to 40 feet, 2 inches 40 to 504 feet, depth 504 feet, perforated 450 to 504 feet. Altitude of land-surface datum 7046.43 feet. Water-level records available 1992–94.

09-16-92	34.49 S	01-13-93	39.67 S	07-23-93	26.08 S	11-11-93	32.50 S
10-05-92	34.72 S	03-02-93	38.92 S	08-26-93	24.68 S	12-16-93	34.31 S
11-19-92	36.92 S	06-16-93	27.61 S	09-17-93	29.58 S		

Highest 24.68 08-26-93
Lowest 39.67 01-13-93
Period of record Highest 24.68 08-26-93 Lowest 39.67 01-13-93
Record begins 09-16-92 16 Entries

Site identifier: MW-2
Site number: 373841118512902

About 5.6 miles east of Mammoth Lakes near Hot Creek Fish Hatchery. Drilled observation well. Diameter 5 inches 0 to 40 feet, 2 inches 40 to 255 feet, depth 255 feet, perforated 230 to 255 feet. Altitude of land-surface datum 7,057.08 feet. Water-level records available 1987–94.

04-19-87	+0.35 S	11-21-89	0.75 S	07-16-91	0.68 S	11-18-92	2.11 S
09-03-87	+.26 S	04-25-90	.89 S	08-27-91	.92 S	05-13-93	1.50 S
04-19-88	.03 S	07-18-90	.64 S	11-19-91	1.41 S	07-22-93	.62 S
07-28-88	+.05 S	11-15-90	.92 S	04-07-92	1.64 S	11-09-93	.94 S
08-09-89	.26 S	04-12-91	1.09 S	07-23-92	1.97 S		

Highest +0.35 04-19-87
Lowest 2.11 11-18-92
Period of record Highest +0.35 04-19-87 Lowest 2.11 11-18-92
Record begins 04-19-87 20 Entries

Site identifier: MW-4
Site number: 373907118503801

About 6.5 miles east of Mammoth Lakes near Hot Creek Fish Hatchery. Drilled observation well. Diameter 6 inches 0 to 80 feet, 2 inches 80 to 340 feet, depth 340 feet, perforated 320 to 340 feet. Altitude of land-surface datum 7,081.26 feet. Water-level records available 1986–94.

07-28-88	45.50 S	07-18-90	46.36 S	11-19-91	48.64 S	07-22-93	48.85 S
11-28-88	45.82 S	11-15-90	46.00 S	04-07-92	49.26 S	11-09-93	49.60 S
08-09-89	45.60 S	04-12-91	46.40 S	07-23-92	48.2 S		
11-29-89	46.16 S	07-16-91	46.62 S	11-18-92	49.23 S		
04-25-90	46.59 S	08-27-91	47.20 S	05-13-93	50.20 S		

Highest 45.50 07-28-88
Lowest 50.20 05-13-93
Period of record Highest 43.60 08-12-86 Lowest 50.20 05-13-93
Record begins 05-09-86 21 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: MW-5
Site number: 373841118512901

About 5.6 miles east of Mammoth Lakes near Hot Creek Fish Hatchery. Drilled observation well. Diameter 6 inches 0 to 50 feet, 2 inches 50 to 496 feet, depth 496 feet, perforated 460 to 496 feet. Altitude of land-surface datum 7,054.12 feet. Water-level records available 1986–94.

04-19-87	2.99 S	01-08-90	5.60 S	07-16-91	5.30 S	09-16-92	7.08 S
07-28-88	3.82 S	02-21-90	5.78 S	08-27-91	5.20 S	11-18-92	7.20 S
04-25-89	5.33 S	03-20-90	5.88 S	11-19-91	5.92 S	05-13-93	6.31 S
08-09-89	4.89 S	04-25-90	5.98 S	04-07-92	6.69 S	07-22-93	5.20 S
09-20-89	5.01 S	05-24-90	5.90 S	06-24-92	6.63 S	11-09-93	4.94 S
10-18-89	5.20 S	07-18-90	4.61 S	07-07-92	6.97 S		
11-21-89	5.42 S	11-15-90	5.88 S	07-23-92	6.96 S		
12-19-89	5.50 S	04-12-91	6.32 S	08-03-92	6.98 S		

Highest 2.99 04-19-87
Lowest 7.20 11-18-92
Period of record Highest 0.21 09-01-86 Lowest 7.20 11-18-92
Record begins 05-10-86 33 Entries

Site identifier: MWD 5
Site number: 373757118591801

In Old Mammoth near Mammoth Creek. Drilled unused well. Diameter 8 inches, depth 357.5 feet, perforated 59.8 to 112.7 and 132.7 to 357.5 feet. Altitude of land-surface datum 7,985.28 feet. Water-level records available 1988–94.

03-03-88	0.58 S	11-29-89	3.41 S	07-18-91	3.19 S	11-19-92	7.10 S
04-21-88	.22 S	04-24-90	2.45 S	08-27-91	3.94 S	05-14-93	2.58 S
11-29-88	1.83 S	08-02-90	3.90 S	11-18-91	4.54 S	07-19-93	3.32 S
04-25-89	.71 S	11-16-90	3.94 S	04-09-92	3.77 S	11-08-93	3.40 S
08-08-89	2.18 S	04-11-91	3.76 S	07-21-92	4.28 S	12-15-93	4.59 S

Highest 0.22 04-21-88
Lowest 7.10 11-19-92
Period of record Highest 0.22 04-21-88 Lowest 7.10 11-19-92
Record begins 03-03-88 21 Entries

Site identifier: MWD M-10
Site number: 373719118585301

About 0.8 mile south of Mammoth Lakes near the Snow Creek development. Drilled observation well. Diameter 4 inches, depth measured 27.2 feet, perforated 7 to 27 feet. Altitude of land-surface datum 7,939.63 feet. Water-level records available 1988–94.

07-28-88	13.27 S	01-09-90	SD	07-18-91	SD	05-14-93	SD
10-16-88	22.49 S	02-20-90	26.90 S	08-27-91	SD	07-19-93	SD
11-29-88	26.98 S	03-19-90	27.01 S	11-18-91	SD	11-08-93	SD
10-18-89	SD	04-24-90	27.03 S	04-09-92	SD		
11-22-89	SD	05-24-90	27.14 S	07-21-92	SD		
12-20-89	SD	11-16-90	SD	11-19-92	SD		

Highest 13.27 07-28-88
Lowest 27.14 05-24-90
Period of record Highest 13.27 07-28-88 Lowest 27.14 05-24-90
Record begins 07-28-88 22 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: MWD M-11
Site number: 373705118585601

About 0.8 mile south of Mammoth Lakes near the Snow Creek development. Drilled observation well. Diameter 4 inches, depth 43 feet, perforated 5 to 43 feet. Altitude of land-surface datum 7,968.56 feet. Water-level records available 1988–94.

07-28-88	12.14 S	12-20-89	27.89 S	11-16-90	28.82 S	07-21-92	22.75 S
10-16-88	19.18 S	01-09-90	29.10 S	06-16-91	16.98 V	11-19-92	34.40 S
11-29-88	20.40 S	02-20-90	30.62 S	07-18-91	19.10 S	05-14-93	22.34 S
04-25-89	21.75 S	03-19-90	30.85 S	08-27-91	22.42 S	07-19-93	4.26 S
10-18-89	23.95 S	04-24-90	26.84 S	11-18-91	30.46 S	11-08-93	23.39 S
11-22-89	26.19 S	05-24-90	27.05 S	04-09-92	33.67 S		

Highest 4.26 07-19-93
Lowest 34.40 11-19-92
Period of record Highest 4.26 07-19-93 Lowest 34.40 11-19-92
Record begins 07-28-88 24 Entries

Site identifier: MWD M-12
Site number: 373714118585501

About 0.9 mile south of Mammoth Lakes near the Snow Creek development. Drilled observation well. Diameter 4 inches, depth measured 26.45 feet in 1991, original depth 27 feet, perforated 7 to 27 feet. Altitude of land-surface datum 7,952.92 feet. Water-level records available 1988–94.

10-16-88	20.65 S	01-09-90	25.03 S	04-11-91	SD	11-19-92	SD
11-29-88	21.32 S	02-20-90	25.63 S	06-16-91	SD	05-14-93	SD
04-25-89	25.02 S	03-19-90	26.00 S	07-18-91	SD	07-19-93	8.25 S
08-08-89	18.83 S	04-24-90	SD	08-27-91	SD	11-08-93	24.88 S
10-18-89	23.35 S	05-24-90	SD	11-18-91	SD		
11-22-89	24.17 S	08-29-90	24.61 S	04-09-92	SD		
12-20-89	24.72 S	11-16-90	SD	07-21-92	SD		

Highest 8.25 07-19-93
Lowest 26.00 03-19-90
Period of record Highest 8.25 07-19-93 Lowest 26.21 04-07-94
Record begins 10-16-88 26 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: MWD M-14
Site number: 373739118582101

About 0.3 mile south of Mammoth Lakes in the Snow Creek development. Drilled observation well. Diameter 4 inches, depth 501 feet, perforated 100 to 501 feet. Altitude of land-surface datum 7,877.79 feet. Water-level records available 1988–94.

10-16-88	237.00 V	05-14-91	347.18 V	02-21-92	353.84 V	04-14-93	360.12 V
11-29-88	252.32 V	06-16-91	348.22 V	03-14-92	352.95 V	05-12-93	359.45 V
04-25-89	287.73 V	06-21-91	347.74 V	04-09-92	354.91 V	06-14-93	357.18 V
08-02-90	335.25 V	07-16-91	347.56 V	06-10-92	356.75 V	07-19-93	348.93 V
10-18-90	339.55 V	08-22-91	346.72 V	07-21-92	356.50 V	08-26-93	343.00 V
11-15-90	340.50 V	08-27-91	346.69 V	09-16-92	356.80 V	09-17-93	345.22 V
12-11-90	341.20 V	09-17-91	347.91 V	10-05-92	357.88 V	10-14-93	347.97 V
12-13-90	340.95 V	10-21-91	349.57 V	11-19-92	357.10 V	11-08-93	349.30 V
01-14-91	340.56 V	11-18-91	350.25 V	12-16-92	357.55 V	12-15-93	350.64 V
02-14-91	343.82 V	12-18-91	350.65 V	01-14-93	357.58 V		
04-30-91	346.88 V	01-16-92	352.09 V	03-25-93	359.10 V		

Highest 237.00 10-16-88
Lowest 360.12 04-14-93
Period of record Highest237.00 10-16-88 Lowest 360.12 04-14-93
Record begins 10-16-88 47 Entries

Site identifier: PD
Site number: 373732118490001

About 8.2 miles southeast of Mammoth Lakes at Mono County Probation Department Camp. Drilled institutional well. Diameter 6 inches, depth 150 feet. Altitude of land-surface datum 7,014 feet. Water-level records available 1986–94.

04-23-87	24.53 V	11-28-88	25.02 S	07-17-90	29.00 SP	04-08-92	25.60 VR
09-03-87	24.62 S	04-25-89	29.45 V	11-15-90	24.35 VP	07-22-92	24.78 V
12-18-87	24.75 V	08-08-89	27.04 VP	04-11-91	24.11 VP	11-19-92	24.91 S
04-21-88	24.63 V	11-29-89	26.14 VP	07-17-91	23.98 V	05-14-93	24.53 SP
07-27-88	28.59 S	04-24-90	28.12 VP	11-20-91	25.69 V	07-20-93	24.09 SR

Highest 23.71 11-19-92
Lowest 29.45 04-25-89
Period of record Highest 21.69 08-30-86 Lowest 29.45 04-25-89
Record begins 05-21-86 24 Entries

Site identifier: PLV-2
Site number: 374249118584501

About 4.7 miles north of Mammoth Lakes and 1.3 miles west of Highway 395. Drilled observation well. Diameter 1.25 inches, depth 2,330 feet, perforated 1,845 to 1,855 feet. Altitude of land-surface datum 7,734 feet. Water-level records available 1984–94.

04-23-87	425.23 V	08-08-89	422.02 V	07-16-91	438.76 V	07-19-93	437.20 V
08-30-87	418.55 V	04-25-90	430.34 V	11-19-91	440.80 V	11-09-93	438.35 V
07-27-88	413.14 V	07-18-90	431.78 V	04-06-92	444.63 V		
11-23-88	417.39 V	11-13-90	435.88 V	07-20-92	444.06 V		
04-26-89	424.61 V	04-11-91	439.44 V	11-19-92	445.70 V		

Highest 413.14 07-27-88
Lowest 445.70 11-19-92
Period of record Highest398.00 08-30-84 Lowest 445.70 11-19-92
Record begins 08-30-84 38 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: RDO-8
Site number: 373924118571201

About 0.8 mile northeast of Mammoth Lakes and 0.7 mile north of U.S. Forest Service ranger station. Drilled observation well. Diameter 2.38 inches, depth 1,304 feet, original depth of hole 2,346 feet, perforated 1,100 to 1,110 feet. Altitude of land-surface datum 7,788.4 feet. Water-level records available 1986–94.

01-14-87	437.98 V	05-03-88	441.98 V	02-06-90	439.95 V	07-12-91	438.36 V
01-29-87	438.10 V	06-03-88	442.73 V	03-08-90	439.60 V	07-18-91	436.12 V
02-24-87	437.47 V	08-02-88	444.20 V	04-03-90	440.45 V	08-06-91	435.09 V
03-09-87	438.03 V	08-15-88	443.90 V	04-23-90	440.30 V	08-22-91	433.28 V
03-19-87	437.93 V	09-02-88	443.90 V	05-23-90	440.13 V	09-25-91	431.36 V
04-09-87	438.23 V	09-29-88	444.55 V	05-30-90	439.88 V	11-15-91	430.22 V
04-20-87	441.46 V	10-03-88	444.45 V	06-28-90	440.20 V	12-17-91	430.87 V
05-29-87	438.22 V	10-13-88	444.60 V	07-12-90	440.88 V	01-18-92	431.70 V
06-18-87	438.65 V	10-17-88	444.80 V	08-01-90	441.24 V	02-21-92	432.30 V
07-14-87	438.97 V	11-07-88	444.65 V	08-21-90	439.84 V	03-13-92	432.13 V
08-25-87	439.10 V	12-07-88	445.25 V	09-12-90	440.08 V	04-10-92	433.05 V
08-29-87	439.35 V	01-11-89	446.30 V	09-24-90	440.28 V	06-11-92	432.65 V
08-30-87	439.45 V	02-16-89	446.60 V	10-17-90	440.99 V	07-20-92	434.28 V
09-13-87	439.17 V	03-30-89	447.35 V	11-13-90	441.27 V	10-06-92	432.70 V
12-16-87	440.82 V	04-25-89	447.55 V	11-18-90	441.11 V	05-11-93	436.14 V
12-17-87	439.95 V	06-07-89	448.40 V	12-13-90	441.58 V	06-16-93	436.05 V
12-22-87	440.61 V	07-07-89	448.33 V	12-18-90	441.47 V	08-25-93	435.27 V
01-06-88	440.80 V	07-22-89	447.80 V	01-18-91	437.68 V	08-27-93	435.45 V
01-14-88	440.72 V	08-08-89	447.91 V	02-20-91	438.27 V	10-21-93	435.52 V
01-27-88	440.95 V	10-12-89	444.00 V	05-01-91	439.41 V	11-09-93	435.30 V
02-02-88	440.80 V	11-01-89	443.32 V	05-14-91	439.83 V	11-09-93	435.30 V
03-04-88	441.45 V	12-11-89	441.75 V	06-13-91	441.24 V	12-02-93	435.60 V
04-22-88	441.85 V	01-11-90	441.28 V	06-19-91	441.31 V		

Highest 430.22 11-15-91
Lowest 448.40 06-07-89
Period of record Highest 430.22 11-15-91 Lowest 448.40 06-07-89
Record begins 10-21-86 100 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: SC-1
Site number: 373745118554001

About 2.3 miles southeast of Mammoth Lakes. Drilled observation well. Diameter 2.5 inches, depth of hole 132 feet, open hole 40 to 132 feet. Altitude of land-surface datum 7,469.84 feet. Water-level records available 1982–94.

04-28-88	111.09 V	06-12-90	112.73 V	08-21-91	113.74 V	10-05-92	119.09 V
07-28-88	108.90 S	07-16-90	113.02 V	08-27-91	114.09 V	11-19-92	119.15 V
11-28-88	111.55 S	08-27-90	114.52 V	09-17-91	115.38 V	03-23-93	120.46 V
04-25-89	111.55 V	09-24-90	114.44 V	10-21-91	116.72 V	04-14-93	114.00 V
08-08-89	112.03 V	10-15-90	114.30 V	11-18-91	116.91 V	05-13-93	113.52 V
09-20-89	113.10 V	11-15-90	114.47 V	12-11-91	116.10 S	06-14-93	108.70 V
09-29-89	110.45 V	12-19-90	114.07 V	02-21-92	119.12 V	07-20-93	104.68 V
10-18-89	113.40 V	01-14-91	113.82 V	03-14-92	119.57 V	08-20-93	109.95 V
11-22-89	113.57 V	02-14-91	114.62 V	04-06-92	119.51 V	09-17-93	113.10 V
12-20-89	113.30 V	04-11-91	115.56 V	05-12-92	115.87 V	10-14-93	115.05 V
01-08-90	113.86 V	05-14-91	114.89 V	06-08-92	113.81 V	11-11-93	116.60 V
04-24-90	114.58 V	06-19-91	110.22 V	07-21-92	116.40 V	12-15-93	117.96 V
05-23-90	113.34 V	07-16-91	111.02 V	09-16-92	118.61 V		

Highest 104.68 07-20-93
Lowest 120.46 03-23-93
Period of record Highest 69.95 07-06-83 Lowest 120.46 03-23-93
Record begins 08-05-82 84 Entries

Site identifier: SC-2
Site number: 373745118554002

About 2.3 miles southeast of Mammoth Lakes. Drilled observation well. Diameter 4 inches, depth of hole 230 feet, open hole 215 to 230 feet. Altitude of land-surface datum 7,470.65 feet. Water-level records available 1983–94.

01-16-87	117.14 V	04-04-88	125.61 V	06-12-90	143.56 V	01-19-92	156.48 V
02-12-87	117.75 V	04-28-88	126.09 V	07-16-90	144.56 V	03-14-92	157.07 V
03-17-87	118.27 V	07-28-88	127.99 S	08-27-90	145.79 V	04-06-92	157.40 V
04-08-87	118.69 V	09-02-88	129.21 V	09-24-90	146.42 V	05-12-92	157.70 V
04-20-87	118.92 V	09-26-88	129.91 V	10-15-90	146.80 V	06-08-92	157.60 V
05-06-87	118.91 V	09-30-88	130.00 V	11-15-90	147.51 V	07-21-92	158.68 V
05-17-87	118.27 V	10-13-88	130.22 V	12-12-90	147.68 V	09-16-92	159.97 V
05-20-87	118.36 V	11-10-88	130.91 V	12-19-90	147.59 V	10-05-92	160.27 V
05-28-87	118.57 V	11-28-88	131.63 S	01-14-91	148.85 V	11-19-92	160.67 V
06-05-87	118.74 V	03-29-89	133.10 V	02-14-91	149.36 V	03-23-93	162.35 V
06-17-87	118.68 V	04-25-89	133.12 S	04-11-91	150.30 V	04-14-93	162.26 V
06-26-87	119.00 V	08-08-89	135.90 S	05-14-91	151.06 V	05-13-93	161.74 V
07-13-87	119.37 V	09-20-89	137.54 V	06-19-91	150.50 V	06-14-93	159.82 V
08-11-87	119.93 V	09-29-89	137.54 V	07-16-91	151.07 V	07-20-93	158.17 V
08-28-87	120.46 V	10-18-89	137.78 V	08-21-91	152.36 V	08-20-93	159.02 V
09-03-87	120.46 V	11-22-89	138.86 V	08-27-91	152.36 V	09-17-93	160.04 V
10-19-87	121.50 V	12-20-89	139.55 V	09-17-91	153.28 V	10-14-93	160.92 V
01-06-88	123.29 V	01-08-90	140.00 V	10-21-91	154.16 V	11-11-93	161.29 V
02-02-88	123.85 V	04-24-90	142.60 V	11-18-91	155.20 V	12-15-93	161.97 V
03-07-88	124.93 V	05-23-90	143.09 V	12-11-91	155.34 S		

Highest 117.14 01-16-87
Lowest 162.35 03-23-93
Period of record Highest 99.66 06-21-84 Lowest 163.05 03-08-94
Record begins 08-20-83 111 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW

Site identifier: SNARL
Site number: 373654118495401

About 7.6 miles southeast of Mammoth Lakes at the Sierra Nevada Aquatic Research Laboratory. Drilled commercial well. Diameter 6 inches. depth 70 feet, perforated 34 to 70 feet. Altitude of land-surface datum 7,095 feet. Water-level records available 1959–94.

07-27-88	27.48 S	04-24-90	33.24 V	11-20-91	29.57 V	07-20-93	21.31 S
11-28-88	31.50 S	07-18-90	27.19 V	04-08-92	32.55 S	11-10-93	28.85 V
04-25-89	30.99 V	11-15-90	31.88 V	07-22-92	30.44 V		
08-08-89	30.03 V	04-10-91	32.25 V	11-19-92	33.07 VR		
11-29-89	32.30 V	07-17-91	22.67 V	05-14-93	29.51 S		

Highest 21.31 07-20-93
Lowest 33.24 04-24-90
Period of record Highest 21.31 07-20-93 Lowest 33.69 04-06-94
Record begins 09-16-59 20 Entries

Site identifier: SQ
Site number: 373742118515703

About 5.6 miles southeast of Mammoth Lakes. Drilled unused well. Diameter 8 inches, depth 125 feet, perforated 27 to 125 feet. Altitude of land-surface datum 7,102.22 feet. Water-level records available 1984–94.

04-21-87	16.09 S	04-24-90	20.24 S	07-17-91	17.92 S	10-05-92	21.93 S
08-30-87	16.58 S	05-23-90	19.90 S	08-21-91	18.66 S	11-19-92	22.17 S
12-18-87	18.04 S	06-12-90	19.70 S	08-27-91	18.84 S	12-16-92	22.34 S
03-01-88	18.18 S	07-16-90	19.50 S	09-17-91	20.81 S	01-13-93	21.80 S
04-21-88	18.39 S	08-27-90	19.92 S	10-21-91	20.48 S	03-04-93	21.63 S
07-27-88	17.00 S	09-24-90	20.53 S	11-20-91	20.95 S	03-23-93	21.54 V
04-25-89	19.09 S	10-15-90	20.78 S	12-11-91	21.18 S	04-14-93	20.28 S
08-08-89	18.59 S	11-15-90	21.12 S	01-15-92	21.45 S	05-14-93	19.90 S
09-20-89	19.55 S	12-17-90	21.48 S	02-21-92	21.58 S	06-16-93	17.22 S
10-18-89	19.84 S	01-15-91	21.42 S	03-10-92	21.79 S	07-20-93	15.18 S
11-22-89	19.95 S	02-14-91	21.42 S	04-08-92	21.65 S	08-26-93	15.48 S
12-19-89	20.19 S	03-19-91	21.32 S	05-14-92	21.56 S	09-07-93	16.35 S
01-08-90	20.38 S	04-10-91	21.07 S	06-08-92	19.96 S	10-14-93	18.53 S
02-21-90	20.55 S	05-13-91	21.10 S	07-21-92	20.76 S	11-10-93	19.64 S
03-20-90	20.41 S	06-19-91	18.08 S	09-16-92	21.72 S	12-16-93	20.54 S

Highest 15.18 07-20-93
Lowest 22.34 12-16-92
Period of record Highest 10.55 06-08-86 Lowest 22.34 12-16-92
Record begins 07-17-84 72 Entries

Table 36. Ground-water levels in selected wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Date	Water level MW	Date	Water level MW	Date	Water level MW	Date	Water level MW
Site identifier: SS-1							
Site number: 373818118533201							
About 3.9 miles east of Mammoth Lakes at the Mono County Sheriff Substation. Unused public-supply well. Diameter 8 inches, depth 75 feet, perforated 51 to 75 feet. Altitude of land-surface datum 7,180.61 feet. Water-level records available 1971–72, 1982–93.							
04-21-87	28.38 S	11-30-89	31.31 S	07-17-91	27.69 SP	05-14-93	33.74 S
08-29-87	28.44 S	04-24-90	31.08 S	11-20-91	36.48 V	07-23-93	23.76 S
07-28-88	27.93 S	07-16-90	29.78 S	04-08-92	34.44 S		
11-28-88	31.06 S	11-15-90	33.10 S	07-21-92	34.08 VR		
08-09-89	29.68 S	04-10-91	33.43 S	11-19-92	39.77 V		
Highest	23.76	07-23-93					
Lowest	39.77	11-19-92					
Period of record	Highest 16.53	05-21-86	Lowest 39.77	11-19-92			
Record begins	08-28-71	30 Entries					
Site identifier: SS-2							
Site number: 373818118533202							
About 3.9 miles east of Mammoth Lakes at the Mono County Sheriff Substation. Drilled public-supply well. Diameter 6 inches, depth 100 feet, perforated 34 to 60 and 80 to 100 feet. Altitude of land-surface datum 7,179.13 feet. Water-level records available 1978, 1984–94.							
04-21-87	14.85 S	04-26-89	16.39 V	06-14-91	14.91 V	11-19-92	21.60 V
08-29-87	8.98 S	08-09-89	15.70 S	07-17-91	14.78 SN	05-14-93	16.94 S
12-16-87	16.73 S	11-29-89	17.30 SR	08-27-91	17.02 V	07-23-93	9.93 S
04-28-88	17.30 S	04-24-90	20.45 SR	11-20-91	20.00 V	11-11-93	18.85 S
07-28-88	14.68 S	07-16-90	15.15 S	04-08-92	21.28 SP		
11-28-88	17.68 S	11-15-90	19.26 S	07-21-92	17.95 VT		
Highest	8.98	08-29-87					
Lowest	21.60	11-19-92					
Period of record	Highest 6.35	07-19-84	Lowest 21.60	11-19-92			
Record begins	10-17-78	30 Entries					

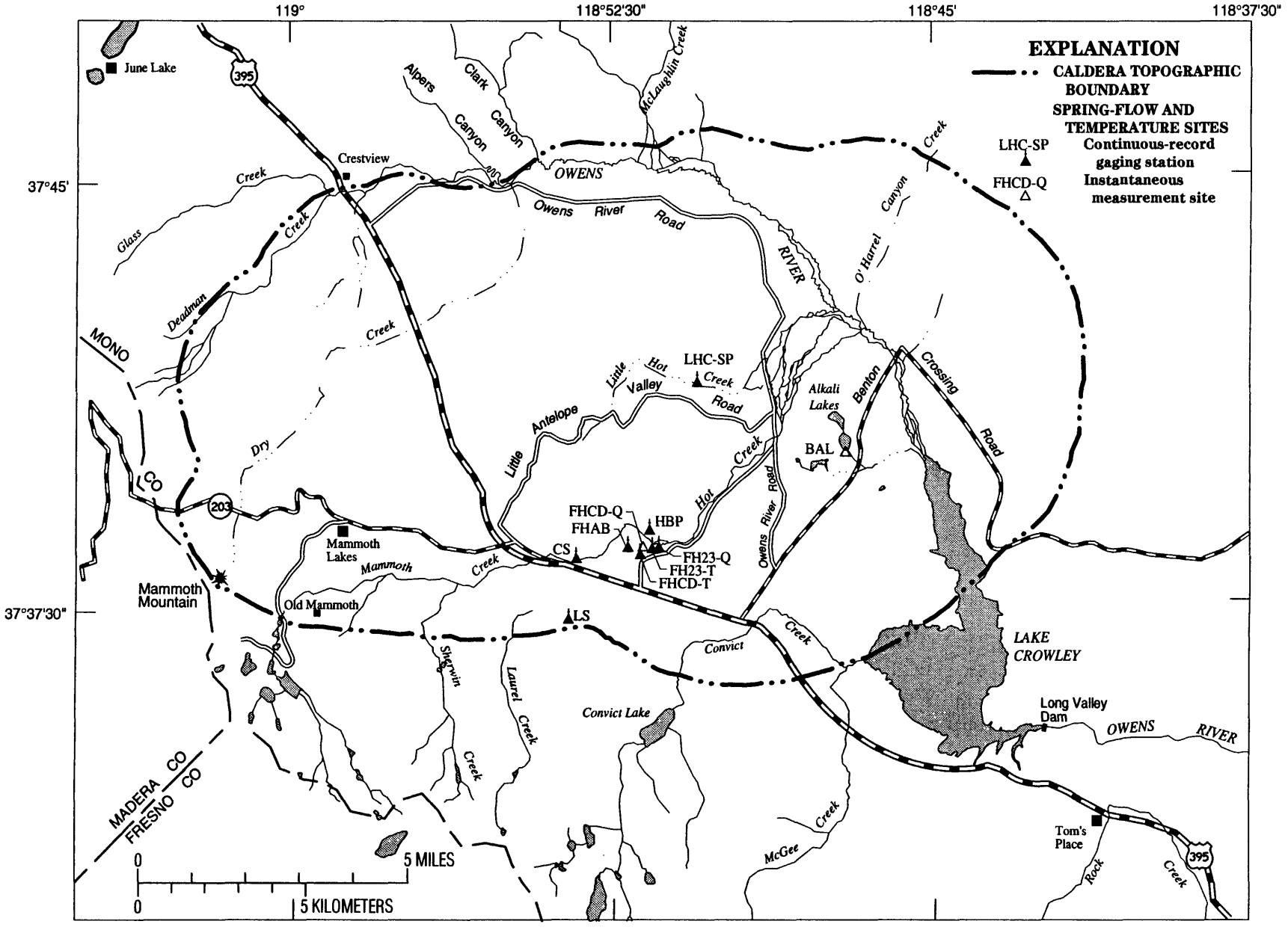

Figure 21. Locations of springs, Long Valley Caldera, Mono County, California.

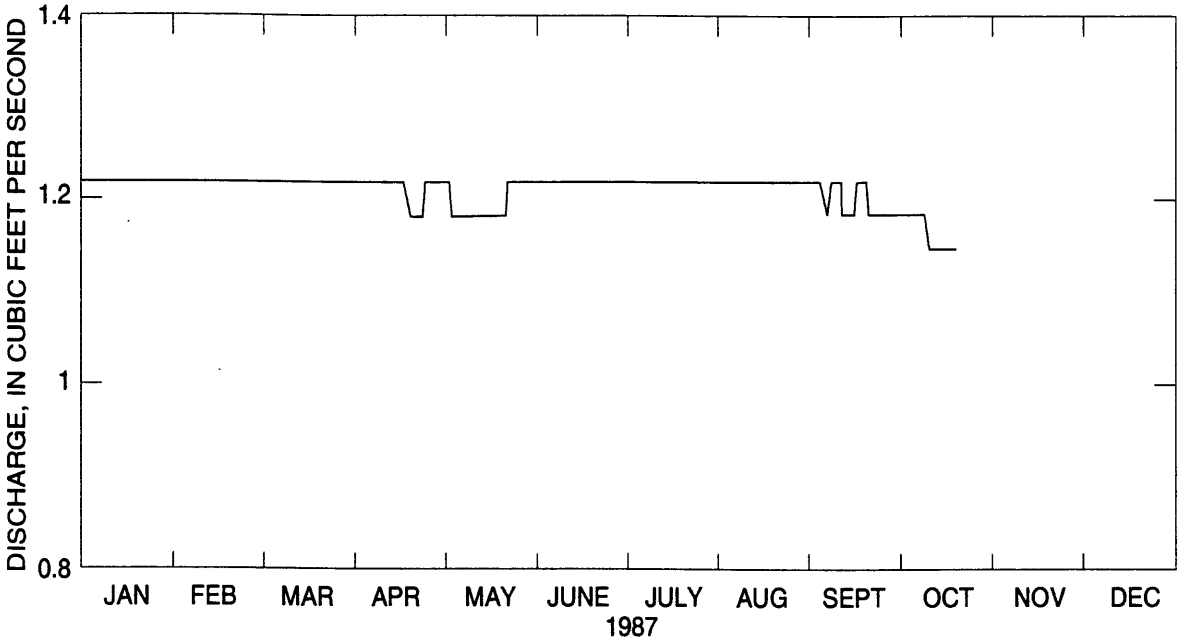

Figure 22. Daily mean discharge, Laurel Spring (LS), Long Valley Caldera, Mono County, California, 1987.

Table 37. Daily mean discharge, Laurel Spring (LS), Long Valley Caldera, Mono County, California, 1987

[Values are in cubic feet per second.. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—
2	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—
3	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—
4	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—
5	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—
6	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.18	—	—
7	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.18	—	—
8	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.18	—	—
9	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.18	1.18	—	—
10	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.18	1.18	—	—
11	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.18	—	—
12	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.14	—	—
13	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.14	—	—
14	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.18	1.14	—	—
15	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.18	1.14	—	—
16	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.18	1.14	—	—
17	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.18	1.14	—	—
18	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.18	1.14	—	—
19	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.14	—	—
20	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.14	—	—
21	1.22	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.14	—	—
22	1.22	1.22	1.22	1.18	1.18	1.22	1.22	1.22	1.22	1.14	—	—
23	1.22	1.22	1.22	1.18	1.18	1.22	1.22	1.22	1.18	—	—	—
24	1.22	1.22	1.22	1.18	1.18	1.22	1.22	1.22	1.18	—	—	—
25	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.18	—	—	—
26	1.22	1.22	1.22	1.18	1.22	1.22	1.22	1.22	1.18	—	—	—
27	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—	—
28	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—	—
29	1.22	—	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—	—
30	1.22	—	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—	—
31	1.22	—	1.22	—	1.22	—	1.22	1.22	—	—	—	—
Mean	1.22	1.22	1.22	1.21	1.20	1.22	1.22	1.22	1.20	1.16	—	—
Max	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.18	—	—
Min	1.22	1.22	1.22	1.18	1.18	1.22	1.22	1.22	1.18	1.14	—	—

Table 38. Miscellaneous instantaneous discharge measurements, Laurel Spring (LS), Long Valley Caldera, Mono County, California, 1991–92

[Measurements made with current meter. Discharge is in cubic feet per second]

Date	Discharge
01-19-91	0.70
06-16-91	.82
07-13-91	.99
03-15-92	.87
04-23-92	.77
05-28-92	.68
06-12-92	.74
07-21-92	.58
08-14-92	.61
09-02-92	.56
09-27-92	.60

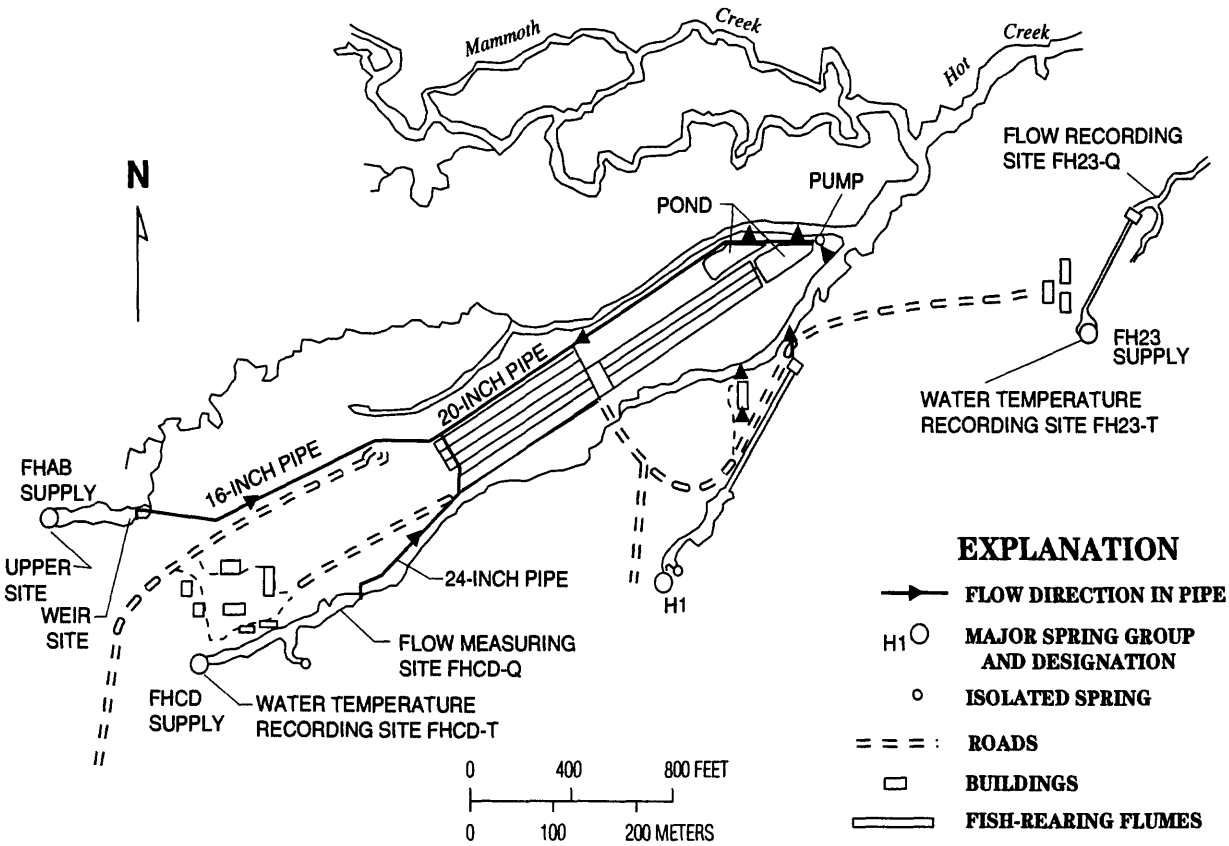

Figure 23. Locations of data-collection sites at Hot Creek Fish Hatchery, Long Valley Caldera, Mono County, California.

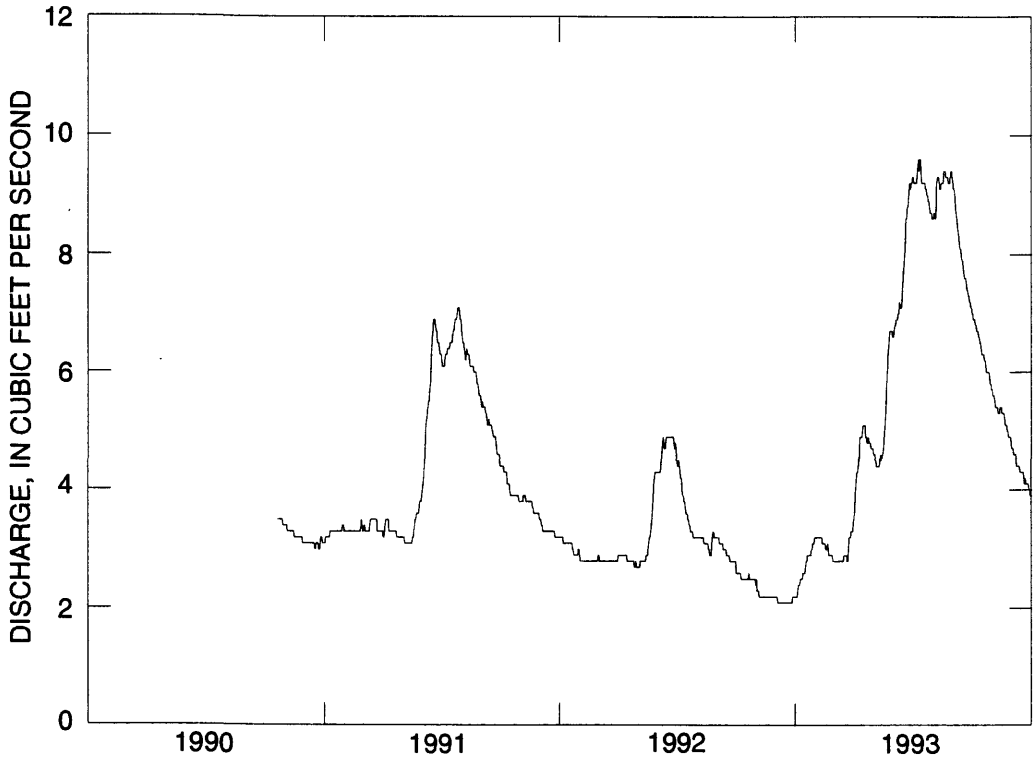

Figure 24. Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1990–93.

Table 39. Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1990

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	—	—	—	—	—	—	3.4	3.1
2	—	—	—	—	—	—	—	—	—	—	3.4	3.1
3	—	—	—	—	—	—	—	—	—	—	3.4	3.1
4	—	—	—	—	—	—	—	—	—	—	3.3	3.1
5	—	—	—	—	—	—	—	—	—	—	3.3	3.1
6	—	—	—	—	—	—	—	—	—	—	3.3	3.1
7	—	—	—	—	—	—	—	—	—	—	3.3	3.1
8	—	—	—	—	—	—	—	—	—	—	3.3	3.1
9	—	—	—	—	—	—	—	—	—	—	3.3	3.1
10	—	—	—	—	—	—	—	—	—	—	3.3	3.1
11	—	—	—	—	—	—	—	—	—	—	3.3	3.1
12	—	—	—	—	—	—	—	—	—	—	3.3	3.1
13	—	—	—	—	—	—	—	—	—	—	3.3	3.1
14	—	—	—	—	—	—	—	—	—	—	3.3	3.1
15	—	—	—	—	—	—	—	—	—	—	3.2	3.1
16	—	—	—	—	—	—	—	—	—	—	3.2	3.1
17	—	—	—	—	—	—	—	—	—	—	3.2	3.0
18	—	—	—	—	—	—	—	—	—	—	3.2	3.0
19	—	—	—	—	—	—	—	—	—	3.5	3.2	3.1
20	—	—	—	—	—	—	—	—	—	3.5	3.2	3.1
21	—	—	—	—	—	—	—	—	—	3.5	3.2	3.1
22	—	—	—	—	—	—	—	—	—	3.5	3.2	3.1
23	—	—	—	—	—	—	—	—	—	3.5	3.2	3.0
24	—	—	—	—	—	—	—	—	—	3.5	3.2	3.0
25	—	—	—	—	—	—	—	—	—	3.5	3.2	3.0
26	—	—	—	—	—	—	—	—	—	3.5	3.2	3.2
27	—	—	—	—	—	—	—	—	—	3.5	3.2	3.2
28	—	—	—	—	—	—	—	—	—	3.4	3.1	3.2
29	—	—	—	—	—	—	—	—	—	3.4	3.1	3.1
30	—	—	—	—	—	—	—	—	—	3.4	3.1	3.1
31	—	—	—	—	—	—	—	—	—	3.4	—	3.1
Mean	—	—	—	—	—	—	—	—	—	3.47	3.25	3.09
Max	—	—	—	—	—	—	—	—	—	3.5	3.4	3.2
Min	—	—	—	—	—	—	—	—	—	3.4	3.1	3.0

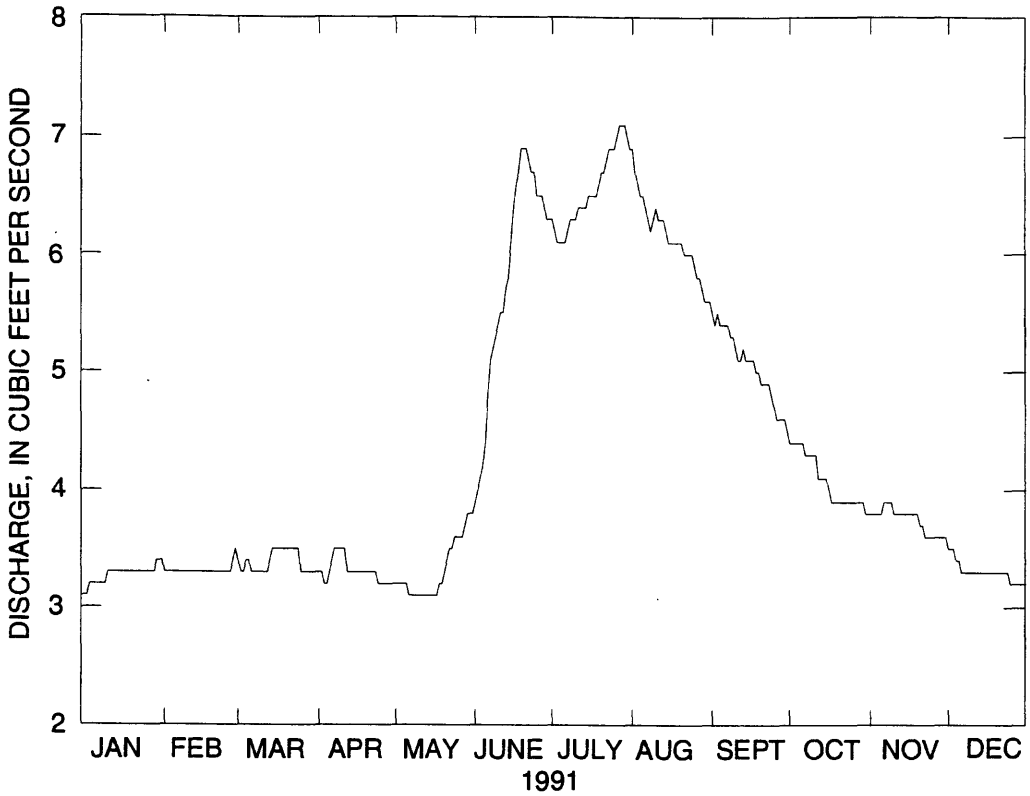

Figure 25. *(A)* Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1991.

Table 40. Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1991

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	3.1	3.3	3.4	3.3	3.2	3.9	6.3	6.9	5.5	4.4	3.8	3.5
2	3.1	3.3	3.3	3.3	3.2	4.0	6.2	6.7	5.4	4.4	3.8	3.5
3	3.2	3.3	3.3	3.2	3.2	4.1	6.1	6.6	5.5	4.4	3.8	3.5
4	3.2	3.3	3.4	3.2	3.2	4.2	6.1	6.5	5.4	4.4	3.8	3.4
5	3.2	3.3	3.4	3.3	3.2	4.4	6.1	6.5	5.4	4.4	3.8	3.4
6	3.2	3.3	3.3	3.4	3.1	4.8	6.1	6.4	5.4	4.4	3.9	3.3
7	3.2	3.3	3.3	3.5	3.1	5.1	6.2	6.3	5.4	4.3	3.9	3.3
8	3.2	3.3	3.3	3.5	3.1	5.2	6.3	6.2	5.3	4.3	3.9	3.3
9	3.2	3.3	3.3	3.5	3.1	5.3	6.3	6.3	5.3	4.3	3.9	3.3
10	3.3	3.3	3.3	3.5	3.1	5.4	6.3	6.4	5.2	4.3	3.8	3.3
11	3.3	3.3	3.3	3.5	3.1	5.5	6.4	6.3	5.1	4.3	3.8	3.3
12	3.3	3.3	3.3	3.3	3.1	5.5	6.4	6.3	5.1	4.1	3.8	3.3
13	3.3	3.3	3.4	3.3	3.1	5.7	6.4	6.3	5.2	4.1	3.8	3.3
14	3.3	3.3	3.5	3.3	3.1	5.8	6.4	6.2	5.1	4.1	3.8	3.3
15	3.3	3.3	3.5	3.3	3.1	6.1	6.5	6.1	5.1	4.1	3.8	3.3
16	3.3	3.3	3.5	3.3	3.1	6.4	6.5	6.1	5.1	4.0	3.8	3.3
17	3.3	3.3	3.5	3.3	3.1	6.6	6.5	6.1	5.1	3.9	3.8	3.3
18	3.3	3.3	3.5	3.3	3.2	6.7	6.5	6.1	5.0	3.9	3.8	3.3
19	3.3	3.3	3.5	3.3	3.2	6.9	6.6	6.1	5.0	3.9	3.8	3.3
20	3.3	3.3	3.5	3.3	3.3	6.9	6.7	6.1	4.9	3.9	3.7	3.3
21	3.3	3.3	3.5	3.3	3.4	6.9	6.7	6.0	4.9	3.9	3.7	3.3
22	3.3	3.3	3.5	3.3	3.5	6.8	6.8	6.0	4.9	3.9	3.6	3.3
23	3.3	3.3	3.5	3.3	3.5	6.7	6.9	6.0	4.9	3.9	3.6	3.3
24	3.3	3.3	3.5	3.2	3.6	6.7	6.9	6.0	4.8	3.9	3.6	3.3
25	3.3	3.3	3.3	3.2	3.6	6.5	6.9	5.9	4.7	3.9	3.6	3.2
26	3.3	3.3	3.3	3.2	3.6	6.5	7.0	5.8	4.6	3.9	3.6	3.2
27	3.3	3.4	3.3	3.2	3.6	6.5	7.1	5.8	4.6	3.9	3.6	3.2
28	3.3	3.5	3.3	3.2	3.7	6.4	7.1	5.7	4.6	3.9	3.6	3.2
29	3.4	—	3.3	3.2	3.8	6.3	7.1	5.6	4.6	3.9	3.6	3.2
30	3.4	—	3.3	3.2	3.8	6.3	7.0	5.6	4.5	3.8	3.6	3.2
31	3.4	—	3.3	—	3.8	—	6.9	5.6	—	3.8	—	3.2
Mean	3.27	3.31	3.38	3.31	3.32	5.80	6.56	6.15	5.05	4.08	3.75	3.30
Max	3.4	3.5	3.5	3.5	3.8	6.9	7.1	6.9	5.5	4.4	3.9	3.5
Min	3.1	3.3	3.3	3.2	3.1	3.9	6.1	5.6	4.5	3.8	3.6	3.2

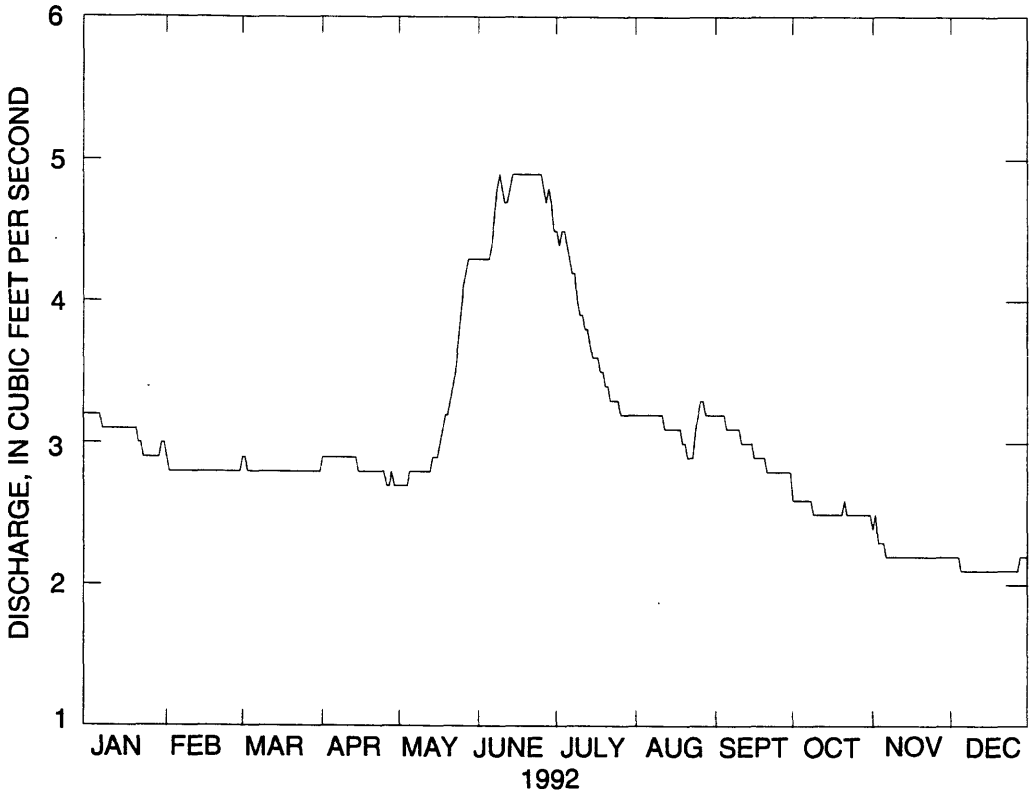

Figure 25. *(B)* Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1992

Table 41. Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1992

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	3.2	2.9	2.9	2.9	2.7	4.3	4.5	3.2	3.2	2.6	2.4	2.2
2	3.2	2.8	2.9	2.9	2.7	4.3	4.4	3.2	3.2	2.6	2.5	2.2
3	3.2	2.8	2.8	2.9	2.7	4.3	4.5	3.2	3.2	2.6	2.3	2.2
4	3.2	2.8	2.8	2.9	2.7	4.3	4.5	3.2	3.2	2.6	2.3	2.2
5	3.2	2.8	2.8	2.9	2.8	4.3	4.4	3.2	3.1	2.6	2.3	2.1
6	3.2	2.8	2.8	2.9	2.8	4.4	4.3	3.2	3.1	2.6	2.2	2.1
7	3.1	2.8	2.8	2.9	2.8	4.6	4.2	3.2	3.1	2.6	2.2	2.1
8	3.1	2.8	2.8	2.9	2.8	4.8	4.2	3.2	3.1	2.6	2.2	2.1
9	3.1	2.8	2.8	2.9	2.8	4.9	4.0	3.2	3.1	2.5	2.2	2.1
10	3.1	2.8	2.8	2.9	2.8	4.8	3.9	3.2	3.1	2.5	2.2	2.1
11	3.1	2.8	2.8	2.9	2.8	4.7	3.9	3.2	3.0	2.5	2.2	2.1
12	3.1	2.8	2.8	2.9	2.8	4.7	3.8	3.1	3.0	2.5	2.2	2.1
13	3.1	2.8	2.8	2.9	2.8	4.8	3.8	3.1	3.0	2.5	2.2	2.1
14	3.1	2.8	2.8	2.9	2.9	4.9	3.7	3.1	3.0	2.5	2.2	2.1
15	3.1	2.8	2.8	2.8	2.9	4.9	3.6	3.1	3.0	2.5	2.2	2.1
16	3.1	2.8	2.8	2.8	2.9	4.9	3.6	3.1	2.9	2.5	2.2	2.1
17	3.1	2.8	2.8	2.8	3.0	4.9	3.6	3.1	2.9	2.5	2.2	2.1
18	3.1	2.8	2.8	2.8	3.1	4.9	3.5	3.1	2.9	2.5	2.2	2.1
19	3.1	2.8	2.8	2.8	3.2	4.9	3.5	3.0	2.9	2.5	2.2	2.1
20	3.1	2.8	2.8	2.8	3.2	4.9	3.4	3.0	2.9	2.5	2.2	2.1
21	3.0	2.8	2.8	2.8	3.3	4.9	3.4	2.9	2.8	2.6	2.2	2.1
22	3.0	2.8	2.8	2.8	3.4	4.9	3.3	2.9	2.8	2.5	2.2	2.1
23	2.9	2.8	2.8	2.8	3.5	4.9	3.3	2.9	2.8	2.5	2.2	2.1
24	2.9	2.8	2.8	2.8	3.7	4.9	3.3	3.1	2.8	2.5	2.2	2.1
25	2.9	2.8	2.8	2.8	3.9	4.9	3.3	3.2	2.8	2.5	2.2	2.1
26	2.9	2.8	2.8	2.7	4.1	4.8	3.2	3.3	2.8	2.5	2.2	2.1
27	2.9	2.8	2.8	2.7	4.2	4.7	3.2	3.3	2.8	2.5	2.2	2.1
28	2.9	2.8	2.8	2.8	4.3	4.8	3.2	3.2	2.8	2.5	2.2	2.2
29	2.9	2.8	2.8	2.7	4.3	4.7	3.2	3.2	2.8	2.5	2.2	2.2
30	3.0	—	2.8	2.7	4.3	4.5	3.2	3.2	2.8	2.5	2.2	2.2
31	3.0	—	2.8	—	4.3	—	3.2	3.2	—	2.5	—	2.2
Mean	3.06	2.80	2.81	2.83	3.24	4.72	3.71	3.14	2.96	2.53	2.23	2.13
Max	3.2	2.9	2.9	2.9	4.3	4.9	4.5	3.3	3.2	2.6	2.5	2.2
Min	2.9	2.8	2.8	2.7	2.7	4.3	3.2	2.9	2.8	2.5	2.2	2.1

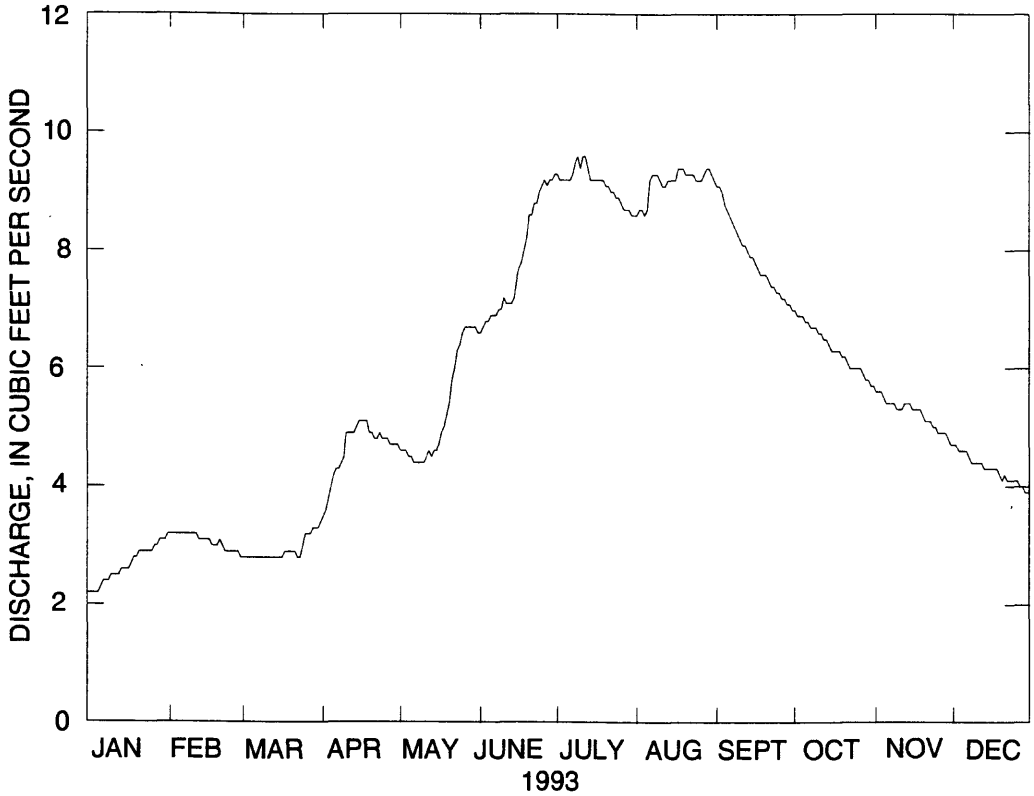

Figure 25. *(C)* Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1993.

Table 42. Daily mean discharge, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1993

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	2.2	3.2	2.8	3.5	4.6	6.6	9.3	8.6	9.1	7.0	5.6	4.7
2	2.2	3.2	2.8	3.6	4.6	6.7	9.2	8.7	9.1	6.9	5.6	4.7
3	2.2	3.2	2.8	3.8	4.6	6.8	9.2	8.7	9.0	6.9	5.6	4.6
4	2.2	3.2	2.8	4.0	4.5	6.8	9.2	8.6	8.8	6.9	5.5	4.6
5	2.3	3.2	2.8	4.2	4.5	6.9	9.2	8.7	8.7	6.8	5.4	4.6
6	2.4	3.2	2.8	4.3	4.4	6.9	9.2	9.2	8.6	6.8	5.4	4.6
7	2.4	3.2	2.8	4.3	4.4	6.9	9.3	9.3	8.5	6.7	5.4	4.5
8	2.4	3.2	2.8	4.4	4.4	7.0	9.5	9.3	8.4	6.7	5.4	4.4
9	2.5	3.2	2.8	4.5	4.4	7.0	9.6	9.3	8.3	6.7	5.3	4.4
10	2.5	3.2	2.8	4.9	4.4	7.2	9.4	9.2	8.2	6.6	5.3	4.4
11	2.5	3.2	2.8	4.9	4.5	7.1	9.6	9.1	8.1	6.6	5.3	4.4
12	2.5	3.1	2.8	4.9	4.6	7.1	9.6	9.1	8.1	6.5	5.4	4.4
13	2.6	3.1	2.8	4.9	4.5	7.1	9.4	9.2	8.0	6.5	5.4	4.3
14	2.6	3.1	2.8	5.0	4.6	7.2	9.2	9.2	7.9	6.4	5.4	4.3
15	2.6	3.1	2.8	5.1	4.6	7.5	9.2	9.2	7.9	6.3	5.3	4.3
16	2.6	3.1	2.8	5.1	4.7	7.7	9.2	9.2	7.8	6.3	5.3	4.3
17	2.7	3.0	2.9	5.1	4.9	7.8	9.2	9.4	7.7	6.3	5.3	4.3
18	2.8	3.0	2.9	5.1	5.0	8.0	9.2	9.4	7.6	6.3	5.3	4.3
19	2.8	3.0	2.9	4.9	5.2	8.2	9.2	9.4	7.6	6.2	5.2	4.2
20	2.9	3.1	2.9	4.9	5.4	8.6	9.1	9.3	7.6	6.2	5.1	4.1
21	2.9	3.0	2.9	4.8	5.8	8.6	9.1	9.3	7.5	6.1	5.1	4.2
22	2.9	2.9	2.8	4.8	6.0	8.8	9.0	9.3	7.4	6.0	5.1	4.1
23	2.9	2.9	2.8	4.9	6.3	8.8	9.0	9.3	7.4	6.0	5.0	4.1
24	2.9	2.9	3.0	4.8	6.4	9.0	8.9	9.2	7.3	6.0	5.0	4.1
25	2.9	2.9	3.2	4.8	6.6	9.1	8.9	9.2	7.3	6.0	4.9	4.1
26	3.0	2.9	3.2	4.8	6.7	9.2	8.8	9.2	7.2	6.0	4.9	4.1
27	3.0	2.9	3.2	4.7	6.7	9.1	8.7	9.3	7.2	5.9	4.9	4.0
28	3.1	2.8	3.3	4.7	6.7	9.2	8.7	9.4	7.1	5.8	4.9	4.0
29	3.1	—	3.3	4.7	6.7	9.2	8.7	9.4	7.1	5.8	4.8	3.9
30	3.1	—	3.3	4.7	6.7	9.3	8.6	9.3	7.0	5.7	4.7	3.9
31	3.2	—	3.4	—	6.6	—	8.6	9.2	—	5.7	—	3.9
Mean	2.67	3.07	2.93	4.64	5.29	7.85	9.13	9.17	7.92	6.34	5.23	4.28
Max	3.2	3.2	3.4	5.1	6.7	9.3	9.6	9.4	9.1	7.0	5.6	4.7
Min	2.2	2.8	2.8	3.5	4.4	6.6	8.6	8.6	7.0	5.7	4.7	3.9

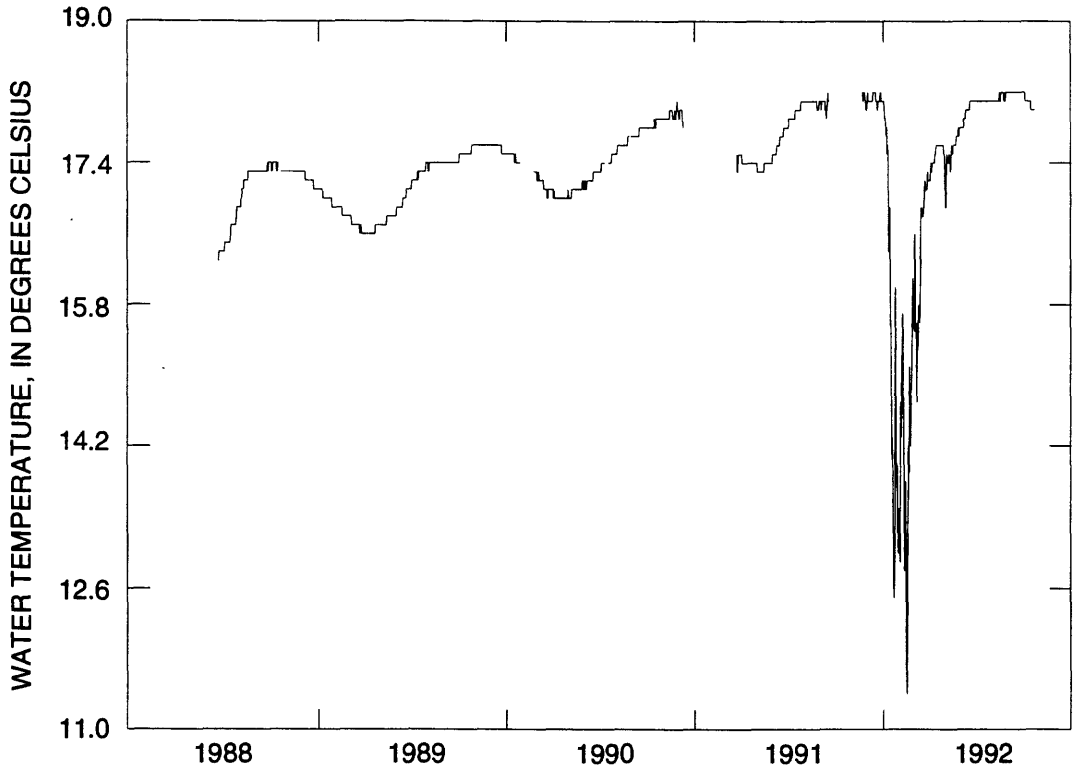

Figure 26. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1988–92.

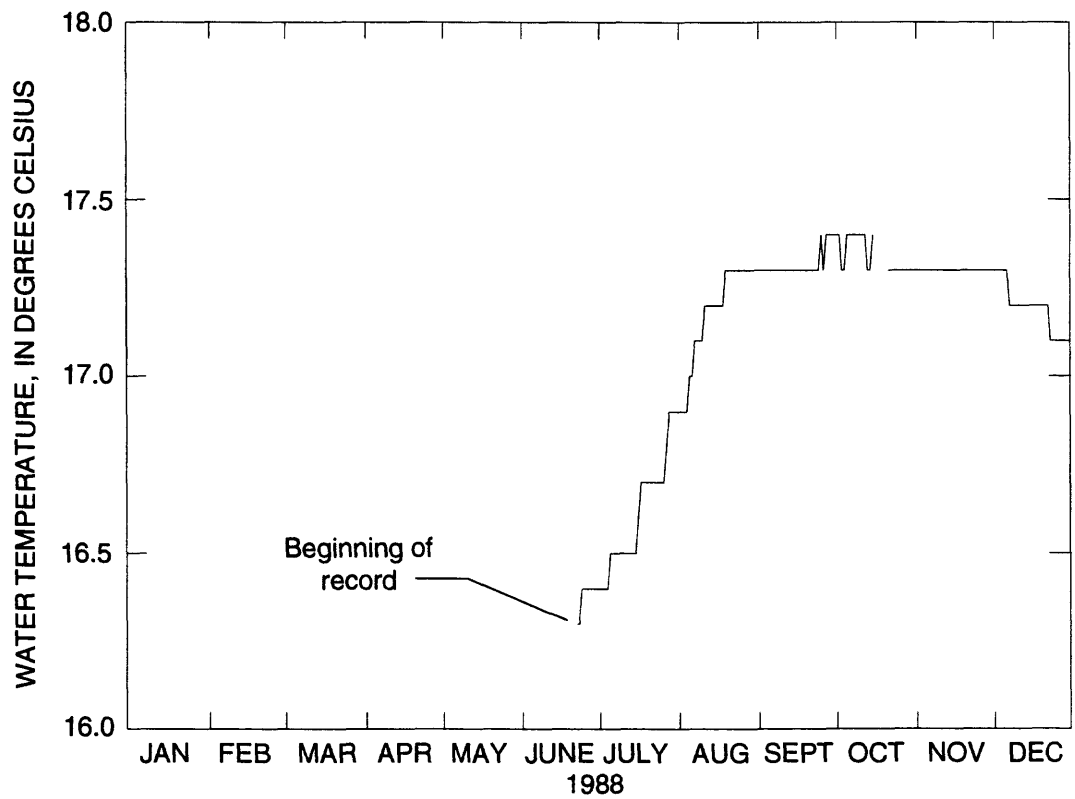

Figure 27. *(A)* Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1988.

Table 43. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1988

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	—	—	16.4	16.9	17.3	17.4	17.3	17.3
2	—	—	—	—	—	—	16.4	16.9	17.3	17.4	17.3	17.3
3	—	—	—	—	—	—	16.4	16.9	17.3	17.3	17.3	17.3
4	—	—	—	—	—	—	16.4	16.9	17.3	17.3	17.3	17.3
5	—	—	—	—	—	—	16.5	17.0	17.3	17.4	17.3	17.3
6	—	—	—	—	—	—	16.5	17.0	17.3	17.4	17.3	17.3
7	—	—	—	—	—	—	16.5	17.1	17.3	17.4	17.3	17.2
8	—	—	—	—	—	—	16.5	17.1	17.3	17.4	17.3	17.2
9	—	—	—	—	—	—	16.5	17.1	17.3	17.4	17.3	17.2
10	—	—	—	—	—	—	16.5	17.1	17.3	17.4	17.3	17.2
11	—	—	—	—	—	—	16.5	17.2	17.3	17.4	17.3	17.2
12	—	—	—	—	—	—	16.5	17.2	17.3	17.4	17.3	17.2
13	—	—	—	—	—	—	16.5	17.2	17.3	17.3	17.3	17.2
14	—	—	—	—	—	—	16.5	17.2	17.3	17.3	17.3	17.2
15	—	—	—	—	—	—	16.5	17.2	17.3	17.4	17.3	17.2
16	—	—	—	—	—	—	16.6	17.2	17.3	—	17.3	17.2
17	—	—	—	—	—	—	16.7	17.2	17.3	—	17.3	17.2
18	—	—	—	—	—	—	16.7	17.2	17.3	—	17.3	17.2
19	—	—	—	—	—	—	16.7	17.3	17.3	—	17.3	17.2
20	—	—	—	—	—	—	16.7	17.3	17.3	—	17.3	17.2
21	—	—	—	—	—	—	16.7	17.3	17.3	17.3	17.3	17.2
22	—	—	—	—	—	16.3	16.7	17.3	17.3	17.3	17.3	17.2
23	—	—	—	—	—	16.3	16.7	17.3	17.3	17.3	17.3	17.1
24	—	—	—	—	—	16.4	16.7	17.3	17.3	17.3	17.3	17.1
25	—	—	—	—	—	16.4	16.7	17.3	17.4	17.3	17.3	17.1
26	—	—	—	—	—	16.4	16.7	17.3	17.3	17.3	17.3	17.1
27	—	—	—	—	—	16.4	16.8	17.3	17.4	17.3	17.3	17.1
28	—	—	—	—	—	16.4	16.9	17.3	17.4	17.3	17.3	17.1
29	—	—	—	—	—	16.4	16.9	17.3	17.4	17.3	17.3	17.1
30	—	—	—	—	—	16.4	16.9	17.3	17.4	17.3	17.3	17.1
31	—	—	—	—	—	—	16.9	17.3	—	17.3	—	17.1
Mean	—	—	—	—	—	16.4	16.6	17.2	17.3	17.3	17.3	17.2
Max	—	—	—	—	—	16.4	16.9	17.3	17.4	17.4	17.3	17.3
Min	—	—	—	—	—	16.3	16.4	16.9	17.3	17.3	17.3	17.1

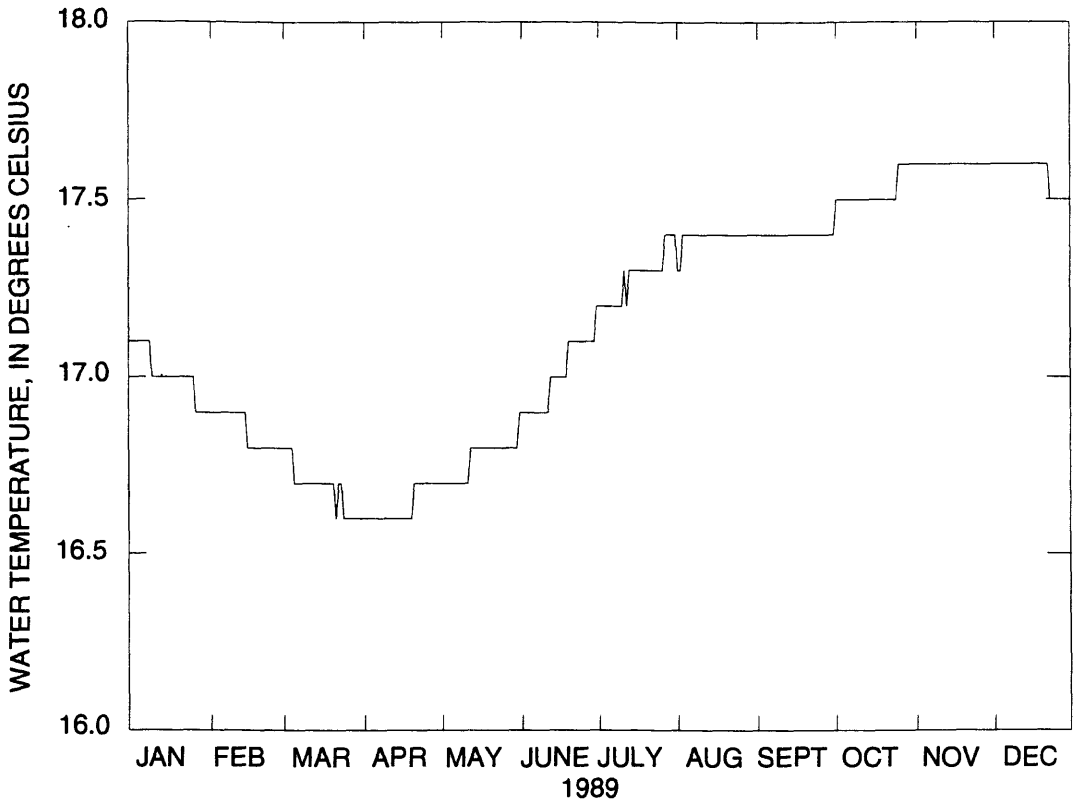

Figure 27. *(B)* Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1989.

Table 44. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1989

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	17.1	16.9	16.8	16.6	16.7	16.9	17.2	17.3	17.4	17.5	17.6	17.6
2	17.1	16.9	16.8	16.6	16.7	16.9	17.2	17.3	17.4	17.5	17.6	17.6
3	17.1	16.9	16.8	16.6	16.7	16.9	17.2	17.4	17.4	17.5	17.6	17.6
4	17.1	16.9	16.8	16.6	16.7	16.9	17.2	17.4	17.4	17.5	17.6	17.6
5	17.1	16.9	16.7	16.6	16.7	16.9	17.2	17.4	17.4	17.5	17.6	17.6
6	17.1	16.9	16.7	16.6	16.7	16.9	17.2	17.4	17.4	17.5	17.6	17.6
7	17.1	16.9	16.7	16.6	16.7	16.9	17.2	17.4	17.4	17.5	17.6	17.6
8	17.1	16.9	16.7	16.6	16.7	16.9	17.2	17.4	17.4	17.5	17.6	17.6
9	17.0	16.9	16.7	16.6	16.7	16.9	17.2	17.4	17.4	17.5	17.6	17.6
10	17.0	16.9	16.7	16.6	16.7	16.9	17.2	17.4	17.4	17.5	17.6	17.6
11	17.0	16.9	16.7	16.6	16.7	16.9	17.3	17.4	17.4	17.5	17.6	17.6
12	17.0	16.9	16.7	16.6	16.8	17.0	17.2	17.4	17.4	17.5	17.6	17.6
13	17.0	16.9	16.7	16.6	16.8	17.0	17.3	17.4	17.4	17.5	17.6	17.6
14	17.0	16.9	16.7	16.6	16.8	17.0	17.3	17.4	17.4	17.5	17.6	17.6
15	17.0	16.8	16.7	16.6	16.8	17.0	17.3	17.4	17.4	17.5	17.6	17.6
16	17.0	16.8	16.7	16.6	16.8	17.0	17.3	17.4	17.4	17.5	17.6	17.6
17	17.0	16.8	16.7	16.6	16.8	17.0	17.3	17.4	17.4	17.5	17.6	17.6
18	17.0	16.8	16.7	16.6	16.8	17.0	17.3	17.4	17.4	17.5	17.6	17.6
19	17.0	16.8	16.7	16.6	16.8	17.1	17.3	17.4	17.4	17.5	17.6	17.6
20	17.0	16.8	16.7	16.7	16.8	17.1	17.3	17.4	17.4	17.5	17.6	17.6
21	17.0	16.8	16.6	16.7	16.8	17.1	17.3	17.4	17.4	17.5	17.6	17.6
22	17.0	16.8	16.7	16.7	16.8	17.1	17.3	17.4	17.4	17.5	17.6	17.6
23	17.0	16.8	16.7	16.7	16.8	17.1	17.3	17.4	17.4	17.5	17.6	17.5
24	17.0	16.8	16.6	16.7	16.8	17.1	17.3	17.4	17.4	17.5	17.6	17.5
25	17.0	16.8	16.6	16.7	16.8	17.1	17.3	17.4	17.4	17.6	17.6	17.5
26	16.9	16.8	16.6	16.7	16.8	17.1	17.3	17.4	17.4	17.6	17.6	17.5
27	16.9	16.8	16.6	16.7	16.8	17.1	17.4	17.4	17.4	17.6	17.6	17.5
28	16.9	16.8	16.6	16.7	16.8	17.1	17.4	17.4	17.4	17.6	17.6	17.5
29	16.9	—	16.6	16.7	16.8	17.1	17.4	17.4	17.4	17.6	17.6	17.5
30	16.9	—	16.6	16.7	16.8	17.2	17.4	17.4	17.4	17.6	17.6	17.5
31	16.9	—	16.6	—	16.9	—	17.4	17.4	—	17.6	—	17.5
Mean	17.0	16.8	16.7	16.6	16.8	17.0	17.3	17.4	17.4	17.5	17.6	17.6
Max	17.1	16.9	16.8	16.7	16.9	17.2	17.4	17.4	17.4	17.6	17.6	17.6
Min	16.9	16.8	16.6	16.6	16.7	16.9	17.2	17.3	17.4	17.5	17.6	17.5

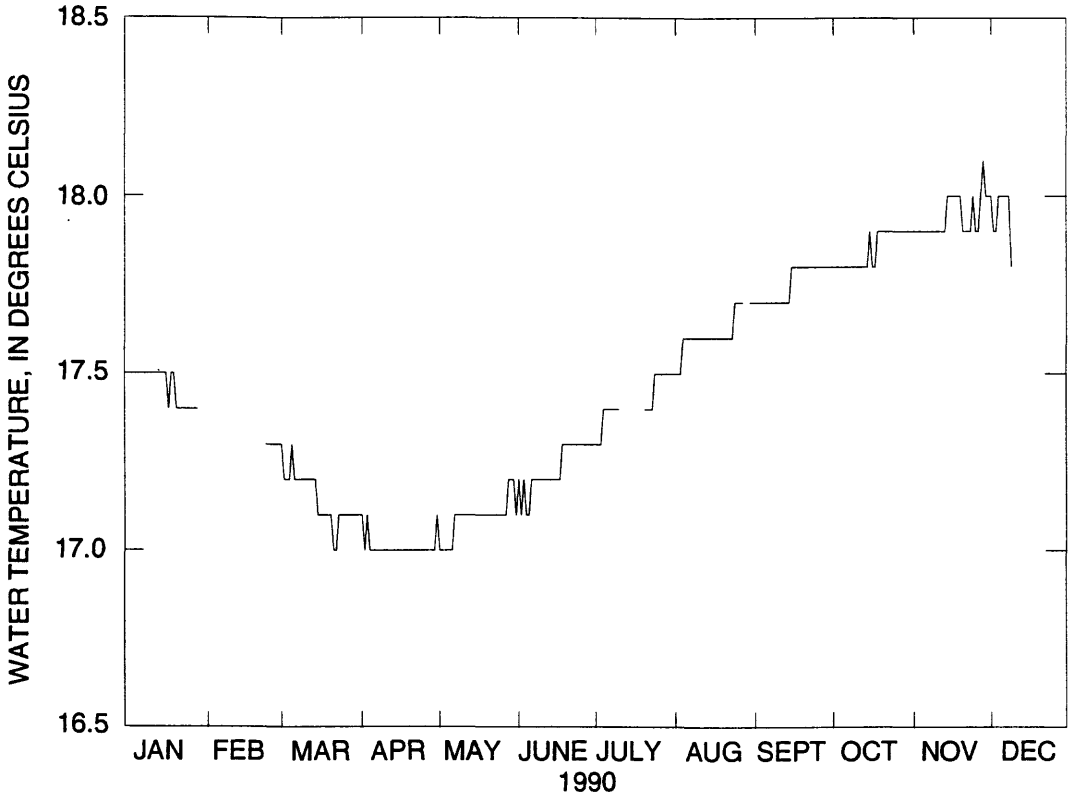

Figure 27. *(C)* Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1990.

Table 45. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1990

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	17.5	—	17.3	17.1	17.0	17.2	17.3	17.5	17.7	17.8	17.9	18.0
2	17.5	—	17.2	17.0	17.0	17.1	17.3	17.5	17.7	17.8	17.9	17.9
3	17.5	—	17.2	17.1	17.0	17.2	17.3	17.5	17.7	17.8	17.9	17.9
4	17.5	—	17.2	17.0	17.0	17.1	17.4	17.6	17.7	17.8	17.9	18.0
5	17.5	—	17.3	17.0	17.0	17.1	17.4	17.6	17.7	17.8	17.9	18.0
6	17.5	—	17.2	17.0	17.0	17.2	17.4	17.6	17.7	17.8	17.9	18.0
7	17.5	—	17.2	17.0	17.1	17.2	17.4	17.6	17.7	17.8	17.9	18.0
8	17.5	—	17.2	17.0	17.1	17.2	17.4	17.6	17.7	17.8	17.9	18.0
9	17.5	—	17.2	17.0	17.1	17.2	17.4	17.6	17.7	17.8	17.9	17.8
10	17.5	—	17.2	17.0	17.1	17.2	17.4	17.6	17.7	17.8	17.9	—
11	17.5	—	17.2	17.0	17.1	17.2	—	17.6	17.7	17.8	17.9	—
12	17.5	—	17.2	17.0	17.1	17.2	—	17.6	17.7	17.8	17.9	—
13	17.5	—	17.2	17.0	17.1	17.2	—	17.6	17.7	17.8	17.9	—
14	17.5	—	17.2	17.0	17.1	17.2	—	17.6	17.7	17.8	18.0	—
15	17.5	—	17.1	17.0	17.1	17.2	—	17.6	17.8	17.9	18.0	—
16	17.5	—	17.1	17.0	17.1	17.2	—	17.6	17.8	17.8	18.0	—
17	17.4	—	17.1	17.0	17.1	17.2	—	17.6	17.8	17.8	18.0	—
18	17.5	—	17.1	17.0	17.1	17.3	—	17.6	17.8	17.9	18.0	—
19	17.5	—	17.1	17.0	17.1	17.3	—	17.6	17.8	17.9	18.0	—
20	17.4	—	17.1	17.0	17.1	17.3	17.4	17.6	17.8	17.9	17.9	—
21	17.4	—	17.0	17.0	17.1	17.3	17.4	17.6	17.8	17.9	17.9	—
22	17.4	—	17.0	17.0	17.1	17.3	17.4	17.6	17.8	17.9	17.9	—
23	17.4	17.3	17.1	17.0	17.1	17.3	17.4	17.6	17.8	17.9	17.9	—
24	17.4	17.3	17.1	17.0	17.1	17.3	17.5	17.7	17.8	17.9	18.0	—
25	17.4	17.3	17.1	17.0	17.1	17.3	17.5	17.7	17.8	17.9	17.9	—
26	17.4	17.3	17.1	17.0	17.1	17.3	17.5	17.7	17.8	17.9	17.9	—
27	17.4	17.3	17.1	17.0	17.1	17.3	17.5	17.7	17.8	17.9	18.0	—
28	17.4	17.3	17.1	17.0	17.2	17.3	17.5	—	17.8	17.9	18.1	—
29	—	—	17.1	17.0	17.2	17.3	17.5	—	17.8	17.9	18.0	—
30	—	—	17.1	17.1	17.2	17.3	17.5	17.7	17.8	17.9	18.0	—
31	—	—	17.1	—	17.1	—	17.5	17.7	—	17.9	—	—
Mean	17.5	17.3	17.1	17.0	17.1	17.2	17.4	17.6	17.8	17.8	17.9	18.0
Max	17.5	17.3	17.3	17.1	17.2	17.3	17.5	17.7	17.8	17.9	18.1	18.0
Min	17.4	17.3	17.0	17.0	17.0	17.1	17.3	17.5	17.7	17.8	17.9	17.8

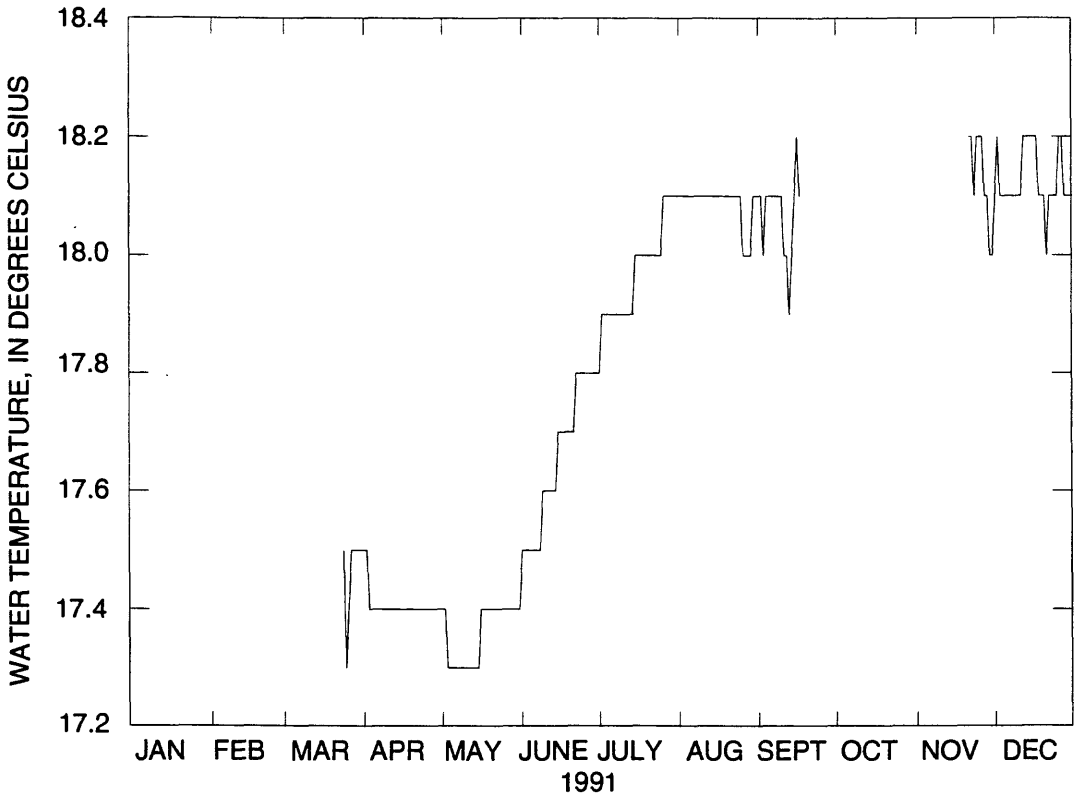

Figure 27. *(D)* Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1991.

Table 46. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1991

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	17.5	17.4	17.5	17.8	18.1	18.1	—	—	18.1
2	—	—	—	17.5	17.4	17.5	17.9	18.1	18.1	—	—	18.2
3	—	—	—	17.4	17.3	17.5	17.9	18.1	18.0	—	—	18.1
4	—	—	—	17.4	17.3	17.5	17.9	18.1	18.1	—	—	18.1
5	—	—	—	17.4	17.3	17.5	17.9	18.1	18.1	—	—	18.1
6	—	—	—	17.4	17.3	17.5	17.9	18.1	18.1	—	—	18.1
7	—	—	—	17.4	17.3	17.5	17.9	18.1	18.1	—	—	18.1
8	—	—	—	17.4	17.3	17.5	17.9	18.1	18.1	—	—	18.1
9	—	—	—	17.4	17.3	17.6	17.9	18.1	18.1	—	—	18.1
10	—	—	—	17.4	17.3	17.6	17.9	18.1	18.1	—	—	18.1
11	—	—	—	17.4	17.3	17.6	17.9	18.1	18.0	—	—	18.1
12	—	—	—	17.4	17.3	17.6	17.9	18.1	18.0	—	—	18.2
13	—	—	—	17.4	17.3	17.6	17.9	18.1	17.9	—	—	18.2
14	—	—	—	17.4	17.3	17.6	17.9	18.1	18.0	—	—	18.2
15	—	—	—	17.4	17.3	17.7	18.0	18.1	18.1	—	—	18.2
16	—	—	—	17.4	17.4	17.7	18.0	18.1	18.2	—	—	18.2
17	—	—	—	17.4	17.4	17.7	18.0	18.1	18.1	—	—	18.2
18	—	—	—	17.4	17.4	17.7	18.0	18.1	—	—	—	18.1
19	—	—	—	17.4	17.4	17.7	18.0	18.1	—	—	—	18.1
20	—	—	—	17.4	17.4	17.7	18.0	18.1	—	—	—	18.1
21	—	—	—	17.4	17.4	17.7	18.0	18.1	—	—	18.2	18.0
22	—	—	—	17.4	17.4	17.8	18.0	18.1	—	—	18.2	18.1
23	—	—	—	17.4	17.4	17.8	18.0	18.1	—	—	18.1	18.1
24	—	—	17.5	17.4	17.4	17.8	18.0	18.1	—	—	18.2	18.1
25	—	—	17.3	17.4	17.4	17.8	18.0	18.1	—	—	18.2	18.1
26	—	—	17.4	17.4	17.4	17.8	18.1	18.0	—	—	18.2	18.2
27	—	—	17.5	17.4	17.4	17.8	18.1	18.0	—	—	18.1	18.2
28	—	—	17.5	17.4	17.4	17.8	18.1	18.0	—	—	18.1	18.1
29	—	—	17.5	17.4	17.4	17.8	18.1	18.0	—	—	18.0	18.1
30	—	—	17.5	17.4	17.4	17.8	18.1	18.1	—	—	18.0	18.1
31	—	—	17.5	—	17.4	—	18.1	18.1	—	—	—	18.1
Mean	—	—	17.5	17.4	17.4	17.7	18.0	18.1	18.1	—	18.1	18.1
Max	—	—	17.5	17.5	17.4	17.8	18.1	18.1	18.2	—	18.2	18.2
Min	—	—	17.3	17.4	17.3	17.5	17.8	18.0	17.9	—	18.0	18.0

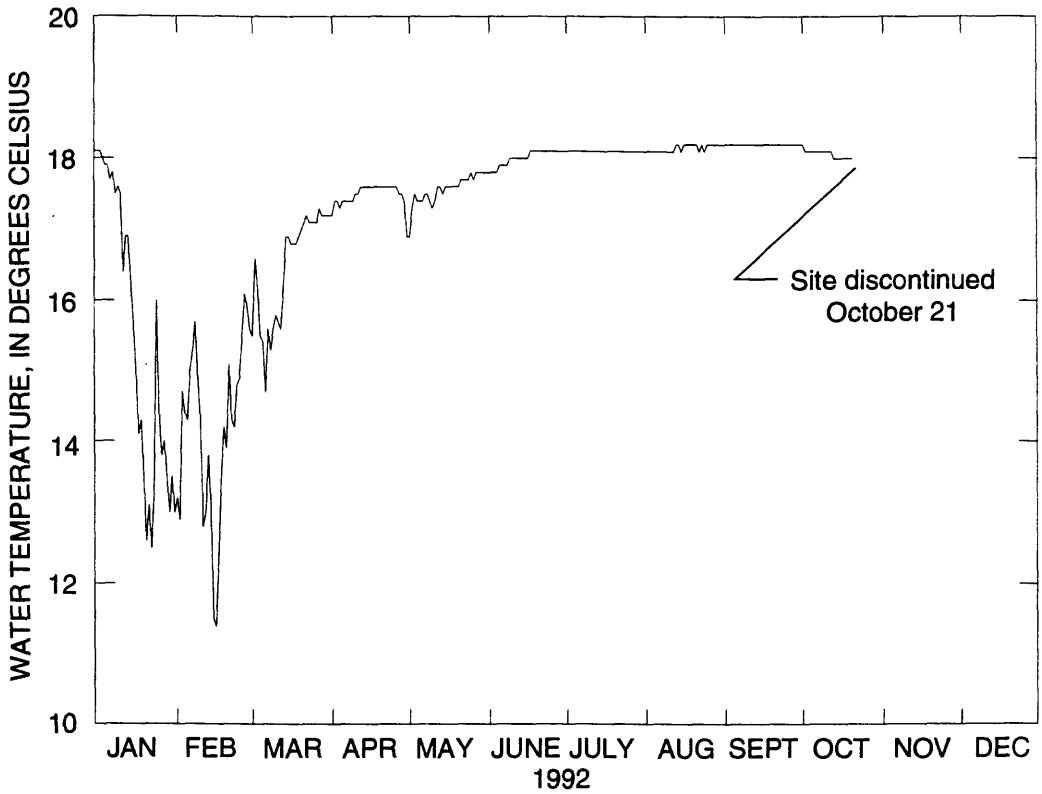

Figure 27. *(E)* Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1992.

Table 47. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), upper site, Long Valley Caldera, Mono County, California, 1992

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	18.1	13.2	15.5	17.2	16.9	17.8	18.1	18.1	18.2	18.2	—	—
2	18.1	12.9	16.6	17.4	17.3	17.8	18.1	18.1	18.2	18.1	—	—
3	18.0	14.7	16.2	17.4	17.5	17.8	18.1	18.1	18.2	18.1	—	—
4	17.9	14.4	15.5	17.3	17.4	17.8	18.1	18.1	18.2	18.1	—	—
5	17.9	14.3	15.4	17.4	17.4	17.9	18.1	18.1	18.2	18.1	—	—
6	17.7	15.0	14.7	17.4	17.4	17.9	18.1	18.1	18.2	18.1	—	—
7	17.8	15.3	15.6	17.4	17.5	17.9	18.1	18.1	18.2	18.1	—	—
8	17.5	15.7	15.3	17.4	17.5	17.9	18.1	18.1	18.2	18.1	—	—
9	17.6	14.9	15.6	17.4	17.4	18.0	18.1	18.1	18.2	18.1	—	—
10	17.5	14.3	15.8	17.5	17.3	18.0	18.1	18.1	18.2	18.1	—	—
11	16.4	12.8	15.7	17.5	17.4	18.0	18.1	18.1	18.2	18.1	—	—
12	16.9	13.0	15.6	17.6	17.6	18.0	18.1	18.1	18.2	18.1	—	—
13	16.9	13.8	16.2	17.6	17.6	18.0	18.1	18.2	18.2	18.0	—	—
14	16.3	13.1	16.9	17.6	17.5	18.0	18.1	18.2	18.2	18.0	—	—
15	15.7	11.5	16.9	17.6	17.6	18.0	18.1	18.1	18.2	18.0	—	—
16	15.0	11.4	16.8	17.6	17.6	18.0	18.1	18.2	18.2	18.0	—	—
17	14.1	12.4	16.8	17.6	17.6	18.1	18.1	18.2	18.2	18.0	—	—
18	14.3	13.5	16.8	17.6	17.6	18.1	18.1	18.2	18.2	18.0	—	—
19	13.5	14.2	16.9	17.6	17.6	18.1	18.1	18.2	18.2	18.0	—	—
20	12.6	13.9	17.0	17.6	17.6	18.1	18.1	18.2	18.2	18.0	—	—
21	13.1	15.1	17.1	17.6	17.7	18.1	18.1	18.2	18.2	—	—	—
22	12.5	14.3	17.2	17.6	17.7	18.1	18.1	18.1	18.2	—	—	—
23	13.3	14.2	17.1	17.6	17.7	18.1	18.1	18.2	18.2	—	—	—
24	16.0	14.8	17.1	17.6	17.7	18.1	18.1	18.1	18.2	—	—	—
25	14.4	14.9	17.1	17.6	17.8	18.1	18.1	18.2	18.2	—	—	—
26	13.8	15.5	17.1	17.6	17.7	18.1	18.1	18.2	18.2	—	—	—
27	14.0	16.1	17.3	17.5	17.8	18.1	18.1	18.2	18.2	—	—	—
28	13.5	15.9	17.2	17.5	17.8	18.1	18.1	18.2	18.2	—	—	—
29	13.0	15.6	17.2	17.4	17.8	18.1	18.1	18.2	18.2	—	—	—
30	13.5	—	17.2	16.9	17.8	18.1	18.1	18.2	18.2	—	—	—
31	13.0	—	17.2	—	17.8	—	18.1	18.2	—	—	—	—
Mean	15.5	14.2	16.5	17.5	17.6	18.0	18.1	18.2	18.2	18.1	—	—
Max	18.1	16.1	17.3	17.6	17.8	18.1	18.1	18.2	18.2	18.2	—	—
Min	12.5	11.4	14.7	16.9	16.9	17.8	18.1	18.1	18.2	18.0	—	—

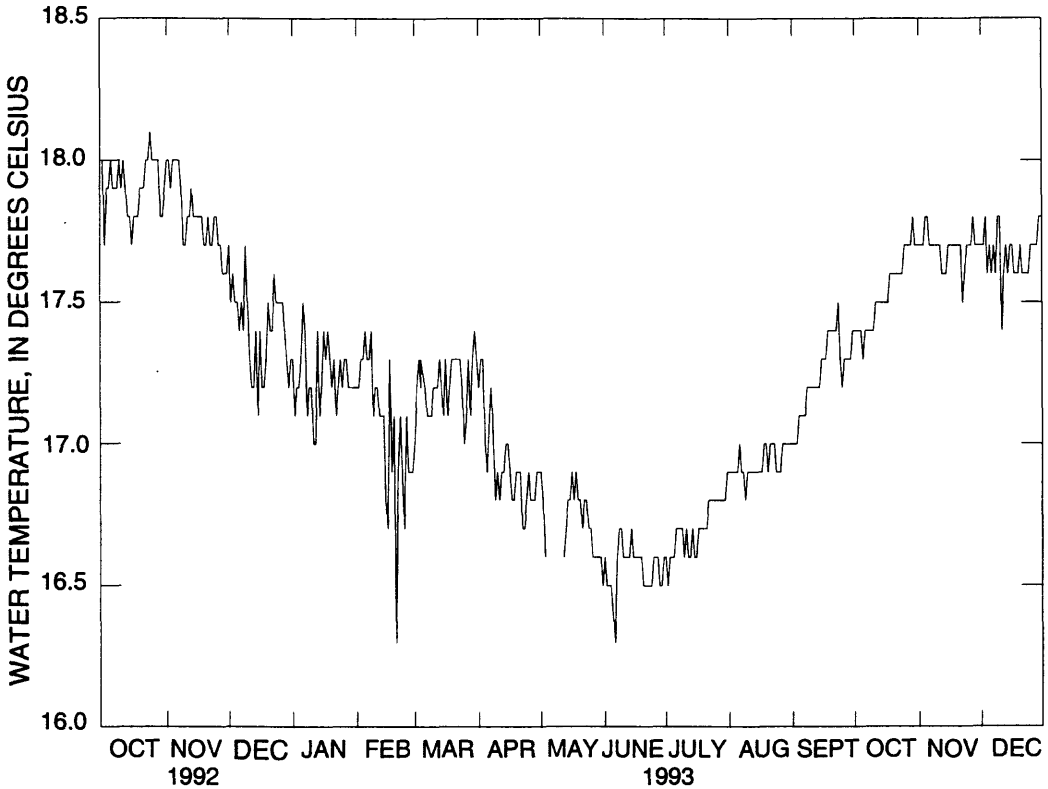

Figure 27. *(F)* Daily mean water temperature, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, October 1992 through December 1993.

Table 48. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1992

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Oct	Nov	Dec
1	18.0	18.0	17.7
2	17.7	18.0	17.5
3	17.9	17.9	17.6
4	17.9	18.0	17.5
5	18.0	18.0	17.5
6	17.9	18.0	17.4
7	17.9	18.0	17.5
8	17.9	17.9	17.4
9	18.0	17.7	17.7
10	17.9	17.7	17.5
11	18.0	17.8	17.3
12	17.9	17.8	17.2
13	17.8	17.9	17.2
14	17.8	17.8	17.4
15	17.7	17.8	17.1
16	17.8	17.8	17.4
17	17.8	17.8	17.2
18	17.8	17.8	17.2
19	17.9	17.7	17.3
20	17.9	17.7	17.5
21	17.9	17.8	17.4
22	18.0	17.7	17.4
23	18.0	17.7	17.6
24	18.1	17.8	17.5
25	18.0	17.8	17.5
26	18.0	17.7	17.5
27	18.0	17.7	17.5
28	18.0	17.6	17.4
29	17.8	17.6	17.3
30	17.8	17.6	17.2
31	17.9	—	17.3
Mean	17.9	17.8	17.4
Max	18.1	18.0	17.7
Min	17.7	17.6	17.1

Table 49. Daily mean water temperature, Fish Hatchery Spring AB (FHAB), weir site, Long Valley Caldera, Mono County, California, 1993

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	17.3	17.2	17.0	17.2	16.9	16.6	16.6	16.9	17.0	17.4	17.7	17.7
2	17.1	17.2	17.2	17.3	16.8	16.5	16.5	16.9	17.0	17.4	17.7	17.7
3	17.2	17.3	17.3	17.3	16.6	16.5	16.6	16.9	17.0	17.4	17.7	17.8
4	17.2	17.3	17.2	17.0	—	16.5	16.6	16.9	17.1	17.4	17.8	17.6
5	17.3	17.4	17.3	16.9	—	16.4	16.6	16.9	17.1	17.3	17.8	17.7
6	17.5	17.3	17.2	17.1	—	16.3	16.7	17.0	17.1	17.4	17.7	17.6
7	17.4	17.3	17.1	17.2	—	16.6	16.7	16.9	17.1	17.4	17.7	17.7
8	17.1	17.4	17.1	17.0	—	16.7	16.7	16.9	17.2	17.4	17.7	17.6
9	17.2	17.1	17.1	16.8	—	16.7	16.7	16.8	17.2	17.4	17.7	17.8
10	17.2	17.2	17.2	16.9	—	16.6	16.6	16.9	17.2	17.4	17.7	17.8
11	17.0	17.2	17.2	16.8	—	16.6	16.7	16.9	17.2	17.5	17.7	17.4
12	17.0	17.1	17.2	16.9	16.6	16.6	16.6	16.9	17.2	17.5	17.6	17.6
13	17.4	17.1	17.3	16.9	16.7	16.6	16.6	16.9	17.2	17.5	17.6	17.7
14	17.1	17.1	17.2	17.0	16.8	16.7	16.7	16.9	17.2	17.5	17.6	17.6
15	17.2	16.8	17.1	17.0	16.8	16.6	16.6	16.9	17.3	17.5	17.7	17.7
16	17.4	16.7	17.3	16.9	16.9	16.6	16.6	16.9	17.3	17.5	17.7	17.7
17	17.3	17.3	17.1	16.8	16.8	16.6	16.7	16.9	17.3	17.5	17.7	17.6
18	17.4	16.9	17.2	16.8	16.9	16.6	16.7	17.0	17.4	17.6	17.7	17.6
19	17.3	17.1	17.3	16.9	16.8	16.6	16.7	17.0	17.4	17.6	17.7	17.6
20	17.2	16.3	17.3	16.9	16.8	16.5	16.7	16.9	17.4	17.6	17.7	17.7
21	17.3	16.9	17.3	16.9	16.7	16.5	16.7	17.0	17.4	17.6	17.7	17.6
22	17.1	17.1	17.3	16.7	16.8	16.5	16.8	17.0	17.4	17.6	17.5	17.6
23	17.2	16.9	17.3	16.7	16.8	16.5	16.8	17.0	17.5	17.6	17.6	17.6
24	17.3	16.7	17.2	16.8	16.7	16.5	16.8	16.9	17.3	17.6	17.7	17.6
25	17.2	17.1	17.0	16.9	16.7	16.6	16.8	16.9	17.2	17.7	17.7	17.7
26	17.3	16.9	17.1	16.8	16.6	16.6	16.8	16.9	17.3	17.7	17.7	17.7
27	17.3	16.9	17.3	16.8	16.6	16.6	16.8	17.0	17.3	17.7	17.8	17.7
28	17.2	16.9	17.1	16.8	16.6	16.5	16.8	17.0	17.3	17.7	17.7	17.7
29	17.2	—	17.3	16.9	16.6	16.5	16.8	17.0	17.3	17.8	17.7	17.8
30	17.2	—	17.4	16.9	16.6	16.6	16.8	17.0	17.4	17.7	17.7	17.8
31	17.2	—	17.3	—	16.5	—	16.9	17.0	—	17.7	—	17.8
Mean	17.2	17.1	17.2	16.9	16.7	16.6	16.7	16.9	17.2	17.5	17.7	17.7
Max	17.5	17.4	17.4	17.3	16.9	16.7	16.9	17.0	17.5	17.8	17.8	17.8
Min	17.0	16.3	17.0	16.7	16.5	16.3	16.5	16.8	17.0	17.3	17.5	17.4

Table 50. Instantaneous discharge measurements, Fish Hatchery Spring CD (FHCD-Q), Long Valley Caldera, Mono County, California, 1988–93

[Gage height is in feet relative to an arbitrary datum; discharge is in cubic feet per second]

Date	Gage height	Discharge	Date	Gage height	Discharge
10-21-88	1.35	7.37	06-19-91	1.36	8.89
11-22-88	1.35	6.95	07-23-91	1.35	9.65
12-14-88	1.35	8.23	08-22-91	1.34	11.0
			09-18-91	1.34	9.51
01-10-89	1.35	8.21	10-23-91	1.36	7.33
02-16-89	1.34	8.35			
03-20-89	1.35	8.07	01-14-92	1.33	7.48
04-12-89	1.35	9.30	02-19-92	1.31	7.52
05-17-89	1.36	7.96	03-12-92	1.30	7.71
06-28-89	1.38	8.67	04-15-92	1.31	7.52
06-28-89	1.38	9.16	05-13-92	1.30	7.20
07-20-89	1.37	9.48	05-27-92	1.34	7.26
08-16-89	1.36	9.36	06-09-92	1.32	7.97
10-19-89	1.36	6.18	07-07-92	1.33	8.03
11-20-89	1.34	6.00	08-04-92	1.31	7.64
12-20-89	1.34	8.25	09-15-92	1.31	7.02
			10-20-92	1.31	7.13
01-08-90	1.33	8.65	11-17-92	1.30	6.59
02-22-90	1.34	7.05	12-16-92	1.30	6.71
03-21-90	1.34	9.42			
04-24-90	1.33	7.75	01-26-93	1.31	7.12
05-24-90	1.34	7.57	02-23-93	1.29	7.34
07-17-90	1.35	8.82	03-24-93	1.31	8.80
08-29-90	1.34	7.69	03-25-93	1.30	8.49
09-25-90	1.34	8.08	04-13-93	1.32	9.03
10-16-90	1.33	9.19	05-19-93	1.32	8.20
11-14-90	1.32	9.17	06-15-93	1.36	9.18
12-18-90	1.32	8.53	08-18-93	2.18	10.2
			08-19-93	2.18	10.4
01-17-91	1.32	7.69	09-08-93	1.36	11.0
02-14-91	1.32	8.45	10-13-93	1.35	10.4
03-20-91	1.31	8.03	11-17-93	1.33	7.71
04-16-91	1.32	7.70	12-14-93	1.31	8.12
05-16-91	1.32	6.80			

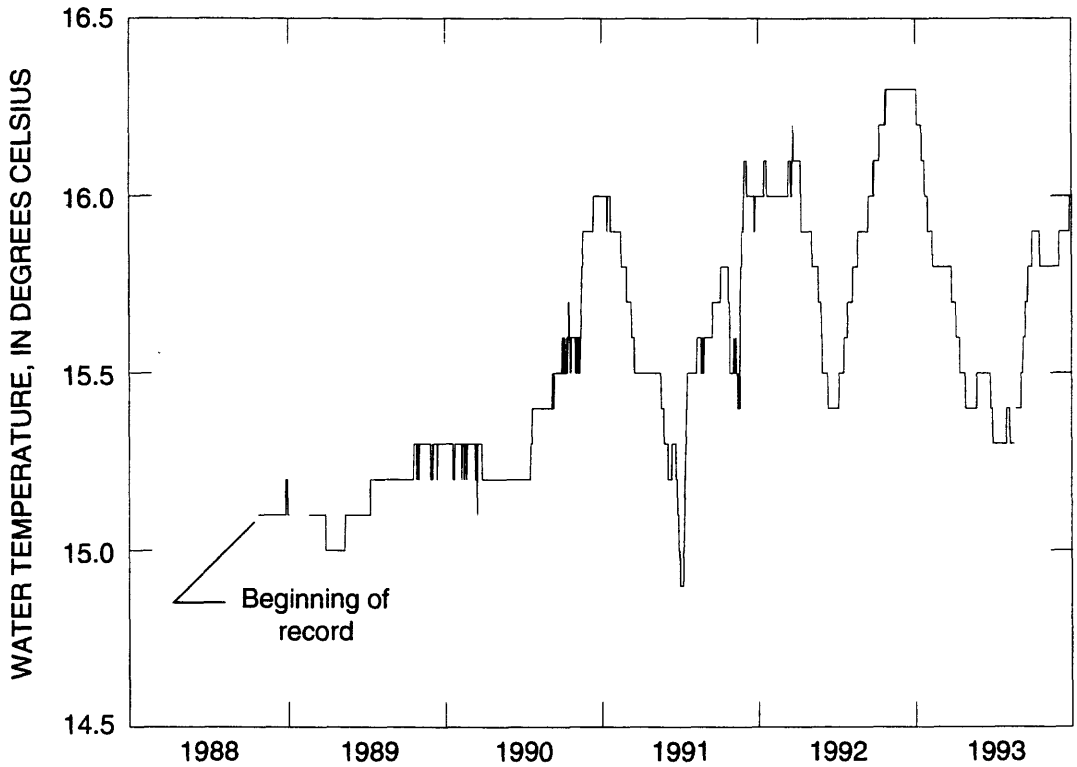

Figure 28. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1988–93.

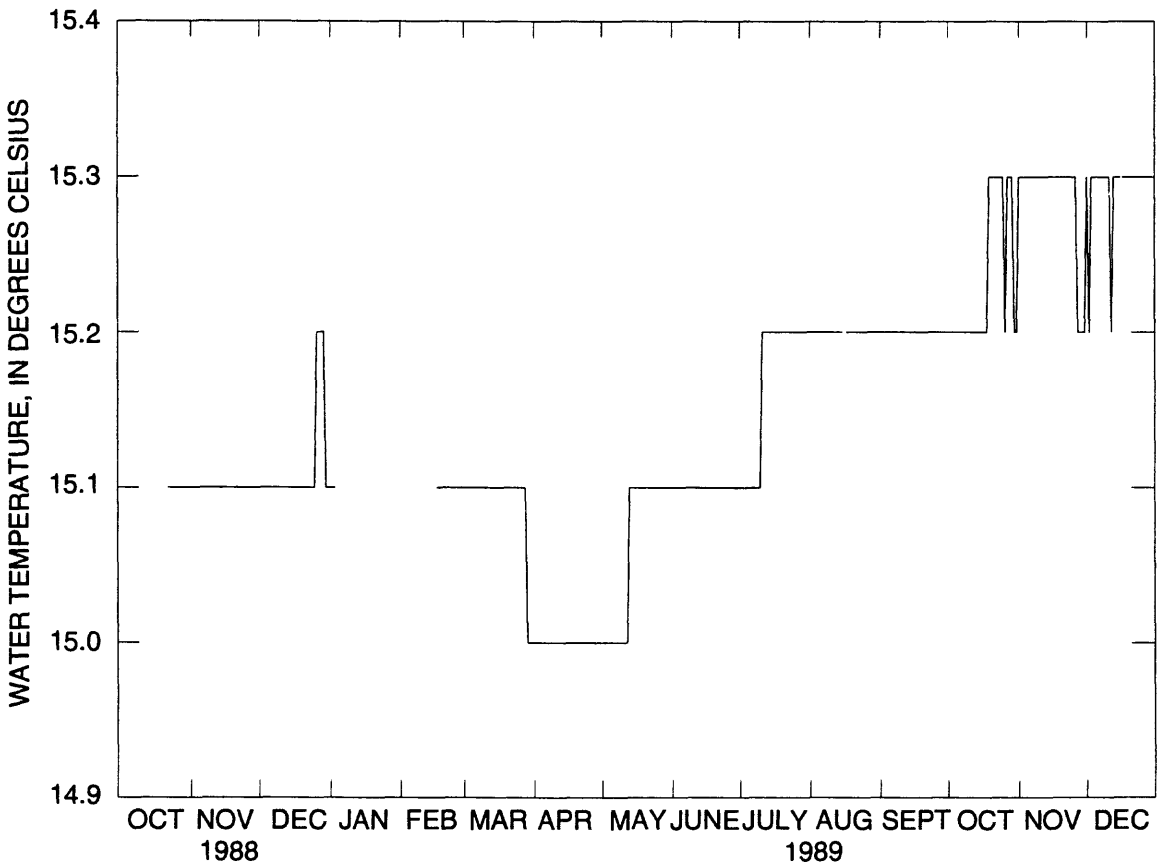

Figure 29. *(A)* Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, October 1988 through December 1989.

Table 51. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1988

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	—	—	—	—	—	—	15.1	15.1
2	—	—	—	—	—	—	—	—	—	—	15.1	15.1
3	—	—	—	—	—	—	—	—	—	—	15.1	15.1
4	—	—	—	—	—	—	—	—	—	—	15.1	15.1
5	—	—	—	—	—	—	—	—	—	—	15.1	15.1
6	—	—	—	—	—	—	—	—	—	—	15.1	15.1
7	—	—	—	—	—	—	—	—	—	—	15.1	15.1
8	—	—	—	—	—	—	—	—	—	—	15.1	15.1
9	—	—	—	—	—	—	—	—	—	—	15.1	15.1
10	—	—	—	—	—	—	—	—	—	—	15.1	15.1
11	—	—	—	—	—	—	—	—	—	—	15.1	15.1
12	—	—	—	—	—	—	—	—	—	—	15.1	15.1
13	—	—	—	—	—	—	—	—	—	—	15.1	15.1
14	—	—	—	—	—	—	—	—	—	—	15.1	15.1
15	—	—	—	—	—	—	—	—	—	—	15.1	15.1
16	—	—	—	—	—	—	—	—	—	—	15.1	15.1
17	—	—	—	—	—	—	—	—	—	—	15.1	15.1
18	—	—	—	—	—	—	—	—	—	—	15.1	15.1
19	—	—	—	—	—	—	—	—	—	—	15.1	15.1
20	—	—	—	—	—	—	—	—	—	—	15.1	15.1
21	—	—	—	—	—	—	—	—	—	—	15.1	15.1
22	—	—	—	—	—	—	—	—	—	15.1	15.1	15.1
23	—	—	—	—	—	—	—	—	—	15.1	15.1	15.1
24	—	—	—	—	—	—	—	—	—	15.1	15.1	15.1
25	—	—	—	—	—	—	—	—	—	15.1	15.1	15.1
26	—	—	—	—	—	—	—	—	—	15.1	15.1	15.2
27	—	—	—	—	—	—	—	—	—	15.1	15.1	15.2
28	—	—	—	—	—	—	—	—	—	15.1	15.1	15.2
29	—	—	—	—	—	—	—	—	—	15.1	15.1	15.2
30	—	—	—	—	—	—	—	—	—	15.1	15.1	15.1
31	—	—	—	—	—	—	—	—	—	15.1	—	15.1
Mean	—	—	—	—	—	—	—	—	—	15.1	15.1	15.1
Max	—	—	—	—	—	—	—	—	—	15.1	15.1	15.2
Min	—	—	—	—	—	—	—	—	—	15.1	15.1	15.1

Table 52. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1989

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	15.1	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3
2	15.1	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.2
3	15.1	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3
4	—	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3
5	—	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3
6	—	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3
7	—	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3
8	—	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3
9	—	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3
10	—	—	15.1	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3
11	—	—	15.1	15.0	15.0	15.1	15.2	15.2	15.2	15.2	15.3	15.3
12	—	—	15.1	15.0	15.0	15.1	15.2	15.2	15.2	15.2	15.3	15.2
13	—	—	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.2	15.3	15.3
14	—	—	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.2	15.3	15.3
15	—	—	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.2	15.3	15.3
16	—	—	15.1	15.0	15.1	15.1	15.2	—	15.2	15.2	15.3	15.3
17	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.2	15.3	15.3
18	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.2	15.3	15.3
19	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3	15.3
20	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3	15.3
21	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3	15.3
22	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3	15.3
23	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3	15.3
24	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3	15.3
25	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3	15.3
26	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.2	15.3	15.3
27	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.2	15.3
28	—	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.2	15.3
29	—	—	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.2	15.3
30	—	—	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.2	15.2	15.3
31	—	—	15.0	—	15.1	—	15.2	15.2	—	15.2	—	15.3
Mean	15.1	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.2	15.3	15.3
Max	15.1	15.1	15.1	15.0	15.1	15.1	15.2	15.2	15.2	15.3	15.3	15.3
Min	15.1	15.1	15.0	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.2	15.2

This page intentionally left blank.

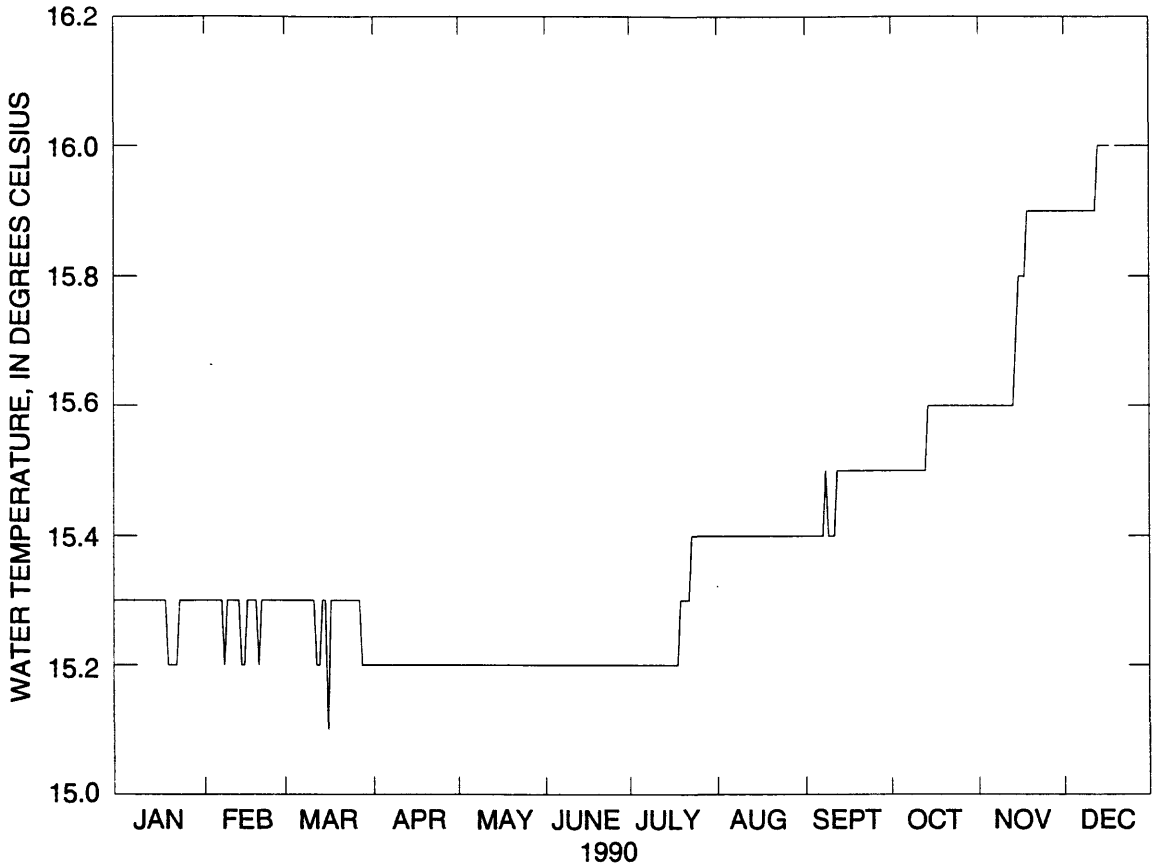

Figure 29. *(B)* Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1990.

Table 53. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1990

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
2	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
3	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
4	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
5	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
6	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
7	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
8	15.3	15.2	15.3	15.2	15.2	15.2	15.2	15.4	15.5	15.5	15.6	15.9
9	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
10	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
11	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9
12	15.3	15.3	15.2	15.2	15.2	15.2	15.2	15.4	15.5	15.5	15.6	15.9
13	15.3	15.3	15.2	15.2	15.2	15.2	15.2	15.4	15.5	15.5	15.6	16.0
14	15.3	15.2	15.3	15.2	15.2	15.2	15.2	15.4	15.5	15.6	15.7	16.0
15	15.3	15.2	15.3	15.2	15.2	15.2	15.2	15.4	15.5	15.6	15.8	16.0
16	15.3	15.3	15.1	15.2	15.2	15.2	15.2	15.4	15.5	15.6	15.8	16.0
17	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.5	15.6	15.8	16.0
18	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.5	15.6	15.9	—
19	15.2	15.3	15.3	15.2	15.2	15.2	15.3	15.4	15.5	15.6	15.9	16.0
20	15.2	15.2	15.3	15.2	15.2	15.2	15.3	15.4	15.5	15.6	15.9	16.0
21	15.2	15.3	15.3	15.2	15.2	15.2	15.3	15.4	15.5	15.6	15.9	16.0
22	15.2	15.3	15.3	15.2	15.2	15.2	15.3	15.4	15.5	15.6	15.9	16.0
23	15.3	15.3	15.3	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9	16.0
24	15.3	15.3	15.3	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9	16.0
25	15.3	15.3	15.3	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9	16.0
26	15.3	15.3	15.3	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9	16.0
27	15.3	15.3	15.3	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9	16.0
28	15.3	15.3	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9	16.0
29	15.3	—	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9	16.0
30	15.3	—	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9	16.0
31	15.3	—	15.2	—	15.2	—	15.4	15.4	—	15.6	—	16.0
Mean	15.3	15.3	15.3	15.2	15.2	15.2	15.3	15.4	15.5	15.6	15.8	16.0
Max	15.3	15.3	15.3	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9	16.0
Min	15.2	15.2	15.1	15.2	15.2	15.2	15.2	15.4	15.4	15.5	15.6	15.9

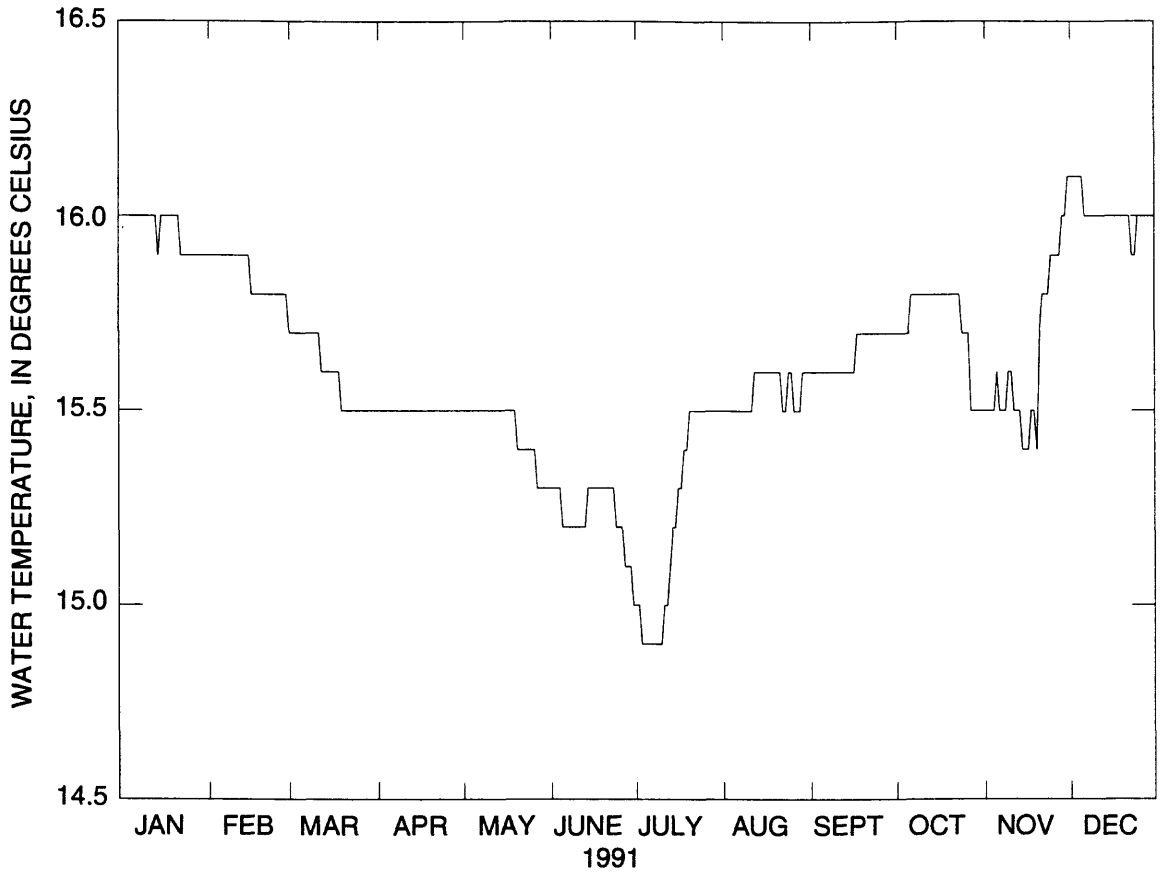

Figure 29. *(C)* Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1991.

Table 54. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1991

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	16.0	15.9	15.7	15.5	15.5	15.3	15.0	15.5	15.6	15.7	15.5	16.1
2	16.0	15.9	15.7	15.5	15.5	15.3	15.0	15.5	15.6	15.7	15.5	16.1
3	16.0	15.9	15.7	15.5	15.5	15.3	14.9	15.5	15.6	15.7	15.5	16.1
4	16.0	15.9	15.7	15.5	15.5	15.3	14.9	15.5	15.6	15.7	15.5	16.1
5	16.0	15.9	15.7	15.5	15.5	15.2	14.9	15.5	15.6	15.7	15.6	16.1
6	16.0	15.9	15.7	15.5	15.5	15.2	14.9	15.5	15.6	15.8	15.5	16.0
7	16.0	15.9	15.7	15.5	15.5	15.2	14.9	15.5	15.6	15.8	15.5	16.0
8	16.0	15.9	15.7	15.5	15.5	15.2	14.9	15.5	15.6	15.8	15.5	16.0
9	16.0	15.9	15.7	15.5	15.5	15.2	14.9	15.5	15.6	15.8	15.6	16.0
10	16.0	15.9	15.7	15.5	15.5	15.2	14.9	15.5	15.6	15.8	15.6	16.0
11	16.0	15.9	15.7	15.5	15.5	15.2	15.0	15.5	15.6	15.8	15.5	16.0
12	16.0	15.9	15.6	15.5	15.5	15.2	15.0	15.6	15.6	15.8	15.5	16.0
13	16.0	15.9	15.6	15.5	15.5	15.2	15.1	15.6	15.6	15.8	15.5	16.0
14	15.9	15.9	15.6	15.5	15.5	15.3	15.2	15.6	15.6	15.8	15.4	16.0
15	16.0	15.9	15.6	15.5	15.5	15.3	15.2	15.6	15.6	15.8	15.4	16.0
16	16.0	15.8	15.6	15.5	15.5	15.3	15.3	15.6	15.6	15.8	15.4	16.0
17	16.0	15.8	15.6	15.5	15.5	15.3	15.3	15.6	15.7	15.8	15.5	16.0
18	16.0	15.8	15.6	15.5	15.5	15.3	15.4	15.6	15.7	15.8	15.5	16.0
19	16.0	15.8	15.5	15.5	15.5	15.3	15.4	15.6	15.7	15.8	15.4	16.0
20	16.0	15.8	15.5	15.5	15.4	15.3	15.5	15.6	15.7	15.8	15.7	16.0
21	16.0	15.8	15.5	15.5	15.4	15.3	15.5	15.6	15.7	15.8	15.8	16.0
22	15.9	15.8	15.5	15.5	15.4	15.3	15.5	15.5	15.7	15.8	15.8	16.0
23	15.9	15.8	15.5	15.5	15.4	15.3	15.5	15.5	15.7	15.8	15.8	15.9
24	15.9	15.8	15.5	15.5	15.4	15.2	15.5	15.6	15.7	15.7	15.9	15.9
25	15.9	15.8	15.5	15.5	15.4	15.2	15.5	15.6	15.7	15.7	15.9	16.0
26	15.9	15.8	15.5	15.5	15.4	15.2	15.5	15.5	15.7	15.7	15.9	16.0
27	15.9	15.8	15.5	15.5	15.3	15.1	15.5	15.5	15.7	15.5	15.9	16.0
28	15.9	15.8	15.5	15.5	15.3	15.1	15.5	15.5	15.7	15.5	16.0	16.0
29	15.9	—	15.5	15.5	15.3	15.1	15.5	15.6	15.7	15.5	16.0	16.0
30	15.9	—	15.5	15.5	15.3	15.0	15.5	15.6	15.7	15.5	16.1	16.0
31	15.9	—	15.5	—	15.3	—	15.5	15.6	—	15.5	—	16.0
Mean	16.0	15.9	15.6	15.5	15.4	15.2	15.2	15.5	15.6	15.7	15.6	16.0
Max	16.0	15.9	15.7	15.5	15.5	15.3	15.5	15.6	15.7	15.8	16.1	16.1
Min	15.9	15.8	15.5	15.5	15.3	15.0	14.9	15.5	15.6	15.5	15.4	15.9

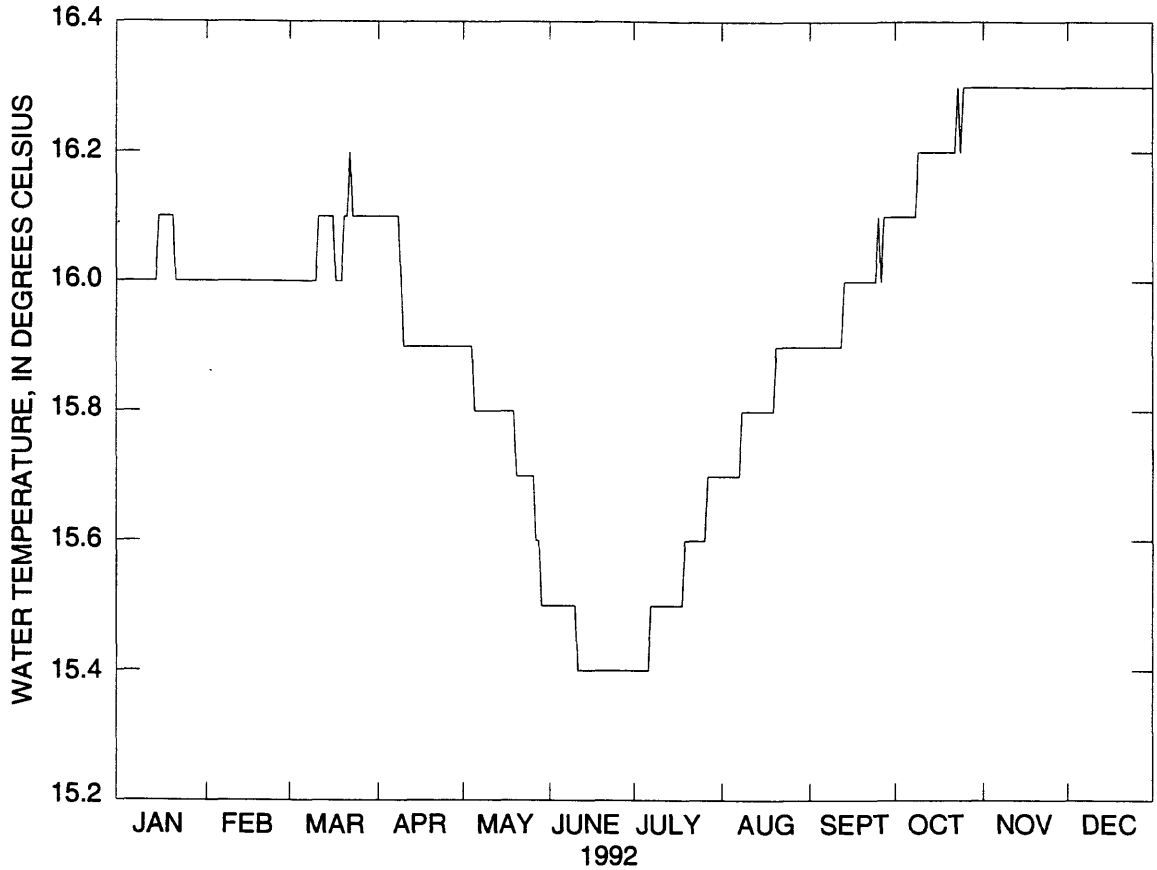

Figure 29. *(D)* Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1992.

Table 55. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1992

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	16.0	16.0	16.0	16.1	15.9	15.5	15.4	15.7	15.9	16.1	16.3	16.3
2	16.0	16.0	16.0	16.1	15.9	15.5	15.4	15.7	15.9	16.1	16.3	16.3
3	16.0	16.0	16.0	16.1	15.9	15.5	15.4	15.7	15.9	16.1	16.3	16.3
4	16.0	16.0	16.0	16.1	15.9	15.5	15.4	15.7	15.9	16.1	16.3	16.3
5	16.0	16.0	16.0	16.1	15.8	15.5	15.4	15.7	15.9	16.1	16.3	16.3
6	16.0	16.0	16.0	16.1	15.8	15.5	15.4	15.7	15.9	16.1	16.3	16.3
7	16.0	16.0	16.0	16.1	15.8	15.5	15.5	15.7	15.9	16.1	16.3	16.3
8	16.0	16.0	16.0	16.1	15.8	15.5	15.5	15.8	15.9	16.1	16.3	16.3
9	16.0	16.0	16.0	16.0	15.8	15.5	15.5	15.8	15.9	16.2	16.3	16.3
10	16.0	16.0	16.0	15.9	15.8	15.5	15.5	15.8	15.9	16.2	16.3	16.3
11	16.0	16.0	16.1	15.9	15.8	15.4	15.5	15.8	15.9	16.2	16.3	16.3
12	16.0	16.0	16.1	15.9	15.8	15.4	15.5	15.8	15.9	16.2	16.3	16.3
13	16.0	16.0	16.1	15.9	15.8	15.4	15.5	15.8	16.0	16.2	16.3	16.3
14	16.0	16.0	16.1	15.9	15.8	15.4	15.5	15.8	16.0	16.2	16.3	16.3
15	16.1	16.0	16.1	15.9	15.8	15.4	15.5	15.8	16.0	16.2	16.3	16.3
16	16.1	16.0	16.1	15.9	15.8	15.4	15.5	15.8	16.0	16.2	16.3	16.3
17	16.1	16.0	16.0	15.9	15.8	15.4	15.5	15.8	16.0	16.2	16.3	16.3
18	16.1	16.0	16.0	15.9	15.8	15.4	15.5	15.8	16.0	16.2	16.3	16.3
19	16.1	16.0	16.0	15.9	15.8	15.4	15.6	15.8	16.0	16.2	16.3	16.3
20	16.1	16.0	16.1	15.9	15.7	15.4	15.6	15.9	16.0	16.2	16.3	16.3
21	16.0	16.0	16.1	15.9	15.7	15.4	15.6	15.9	16.0	16.2	16.3	16.3
22	16.0	16.0	16.2	15.9	15.7	15.4	15.6	15.9	16.0	16.2	16.3	16.3
23	16.0	16.0	16.1	15.9	15.7	15.4	15.6	15.9	16.0	16.3	16.3	16.3
24	16.0	16.0	16.1	15.9	15.7	15.4	15.6	15.9	16.0	16.2	16.3	16.3
25	16.0	16.0	16.1	15.9	15.7	15.4	15.6	15.9	16.1	16.3	16.3	16.3
26	16.0	16.0	16.1	15.9	15.7	15.4	15.6	15.9	16.0	16.3	16.3	16.3
27	16.0	16.0	16.1	15.9	15.6	15.4	15.7	15.9	16.1	16.3	16.3	16.3
28	16.0	16.0	16.1	15.9	15.6	15.4	15.7	15.9	16.1	16.3	16.3	16.3
29	16.0	16.0	16.1	15.9	15.5	15.4	15.7	15.9	16.1	16.3	16.3	16.3
30	16.0	—	16.1	15.9	15.5	15.4	15.7	15.9	16.1	16.3	16.3	16.3
31	16.0	—	16.1	—	15.5	—	15.7	15.9	—	16.3	—	16.3
Mean	16.0	16.0	16.1	16.0	15.7	15.4	15.5	15.8	16.0	16.2	16.3	16.3
Max	16.1	16.0	16.2	16.1	15.9	15.5	15.7	15.9	16.1	16.3	16.3	16.3
Min	16.0	16.0	16.0	15.9	15.5	15.4	15.4	15.7	15.9	16.1	16.3	16.3

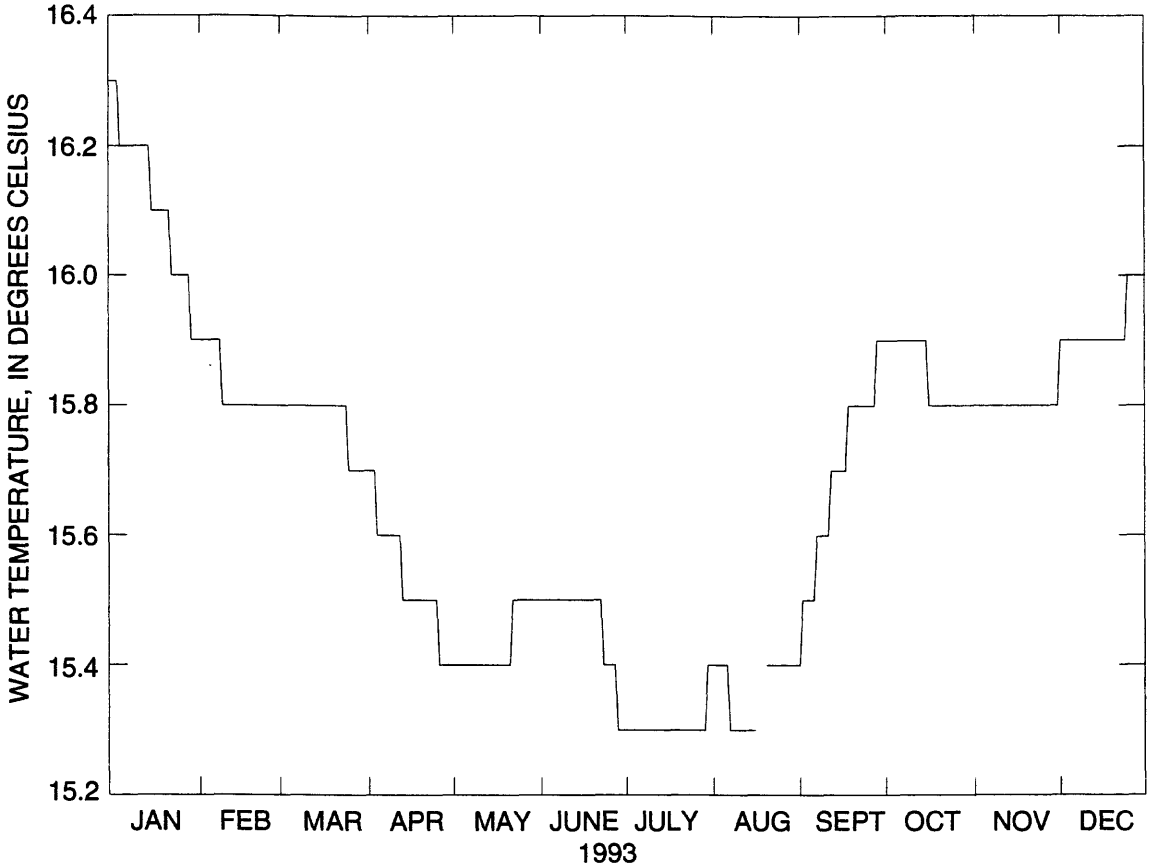

Figure 29. *(E)* Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1993.

Table 56. Daily mean water temperature, Fish Hatchery Spring CD (FHCD-T), Long Valley Caldera, Mono County, California, 1993

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	16.3	15.9	15.8	15.7	15.4	15.5	15.3	15.4	15.4	15.9	15.8	15.9
2	16.3	15.9	15.8	15.7	15.4	15.5	15.3	15.4	15.5	15.9	15.8	15.9
3	16.3	15.9	15.8	15.7	15.4	15.5	15.3	15.4	15.5	15.9	15.8	15.9
4	16.2	15.9	15.8	15.6	15.4	15.5	15.3	15.4	15.5	15.9	15.8	15.9
5	16.2	15.9	15.8	15.6	15.4	15.5	15.3	15.4	15.5	15.9	15.8	15.9
6	16.2	15.9	15.8	15.6	15.4	15.5	15.3	15.4	15.5	15.9	15.8	15.9
7	16.2	15.9	15.8	15.6	15.4	15.5	15.3	15.3	15.6	15.9	15.8	15.9
8	16.2	15.9	15.8	15.6	15.4	15.5	15.3	15.3	15.6	15.9	15.8	15.9
9	16.2	15.8	15.8	15.6	15.4	15.5	15.3	15.3	15.6	15.9	15.8	15.9
10	16.2	15.8	15.8	15.6	15.4	15.5	15.3	15.3	15.6	15.9	15.8	15.9
11	16.2	15.8	15.8	15.6	15.4	15.5	15.3	15.3	15.6	15.9	15.8	15.9
12	16.2	15.8	15.8	15.6	15.4	15.5	15.3	15.3	15.7	15.9	15.8	15.9
13	16.2	15.8	15.8	15.5	15.4	15.5	15.3	15.3	15.7	15.9	15.8	15.9
14	16.2	15.8	15.8	15.5	15.4	15.5	15.3	15.3	15.7	15.9	15.8	15.9
15	16.1	15.8	15.8	15.5	15.4	15.5	15.3	15.3	15.7	15.9	15.8	15.9
16	16.1	15.8	15.8	15.5	15.4	15.5	15.3	15.3	15.7	15.8	15.8	15.9
17	16.1	15.8	15.8	15.5	15.4	15.5	15.3	—	15.7	15.8	15.8	15.9
18	16.1	15.8	15.8	15.5	15.4	15.5	15.3	—	15.8	15.8	15.8	15.9
19	16.1	15.8	15.8	15.5	15.4	15.5	15.3	—	15.8	15.8	15.8	15.9
20	16.1	15.8	15.8	15.5	15.4	15.5	15.3	15.4	15.8	15.8	15.8	15.9
21	16.1	15.8	15.8	15.5	15.4	15.5	15.3	15.4	15.8	15.8	15.8	15.9
22	16.0	15.8	15.8	15.5	15.5	15.5	15.3	15.4	15.8	15.8	15.8	15.9
23	16.0	15.8	15.8	15.5	15.5	15.4	15.3	15.4	15.8	15.8	15.8	15.9
24	16.0	15.8	15.8	15.5	15.5	15.4	15.3	15.4	15.8	15.8	15.8	15.9
25	16.0	15.8	15.7	15.5	15.5	15.4	15.3	15.4	15.8	15.8	15.8	16.0
26	16.0	15.8	15.7	15.4	15.5	15.4	15.3	15.4	15.8	15.8	15.8	16.0
27	16.0	15.8	15.7	15.4	15.5	15.4	15.3	15.4	15.8	15.8	15.8	16.0
28	16.0	15.8	15.7	15.4	15.5	15.3	15.3	15.4	15.9	15.8	15.8	16.0
29	15.9	—	15.7	15.4	15.5	15.3	15.3	15.4	15.9	15.8	15.8	16.0
30	15.9	—	15.7	15.4	15.5	15.3	15.4	15.4	15.9	15.8	15.8	16.0
31	15.9	—	15.7	—	15.5	—	15.4	15.4	—	15.8	—	16.0
Mean	16.1	15.8	15.8	15.5	15.4	15.5	15.3	15.4	15.7	15.8	15.8	15.9
Max	16.3	15.9	15.8	15.7	15.5	15.5	15.4	15.4	15.9	15.9	15.8	16.0
Min	15.9	15.8	15.7	15.4	15.4	15.3	15.3	15.3	15.4	15.8	15.8	15.9

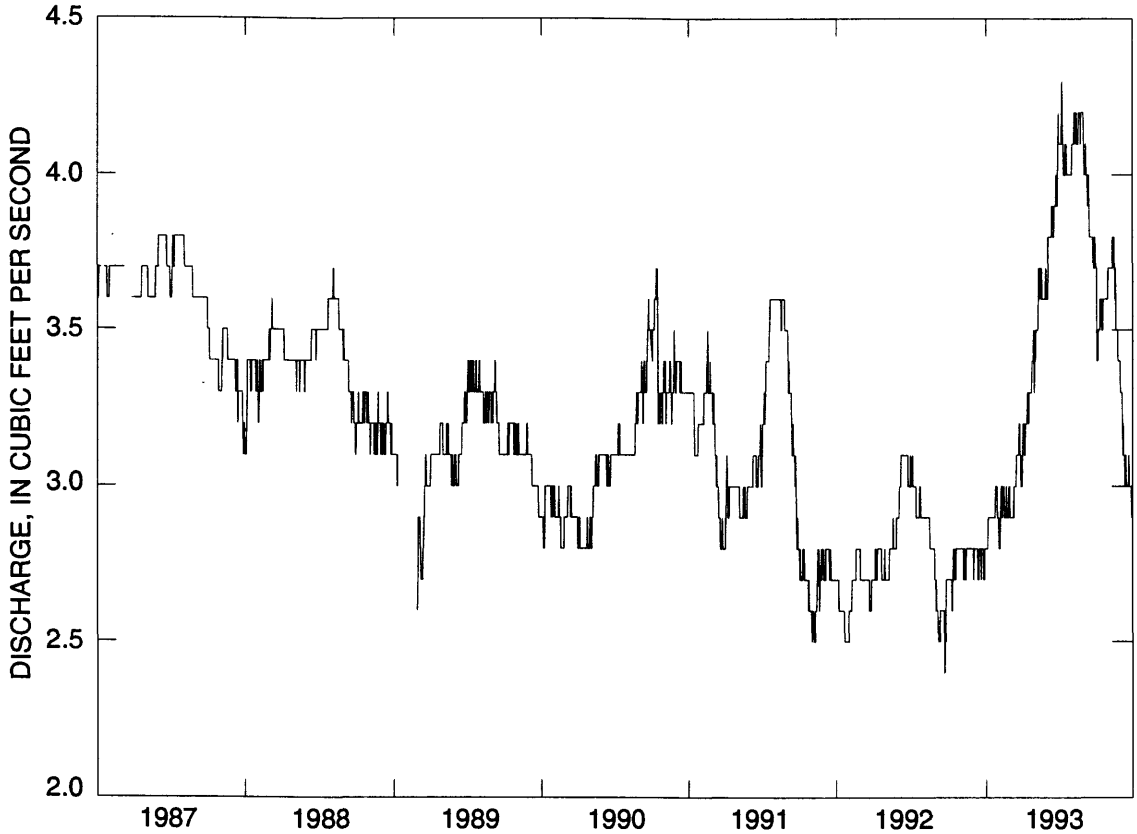

Figure 30. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1987–93.

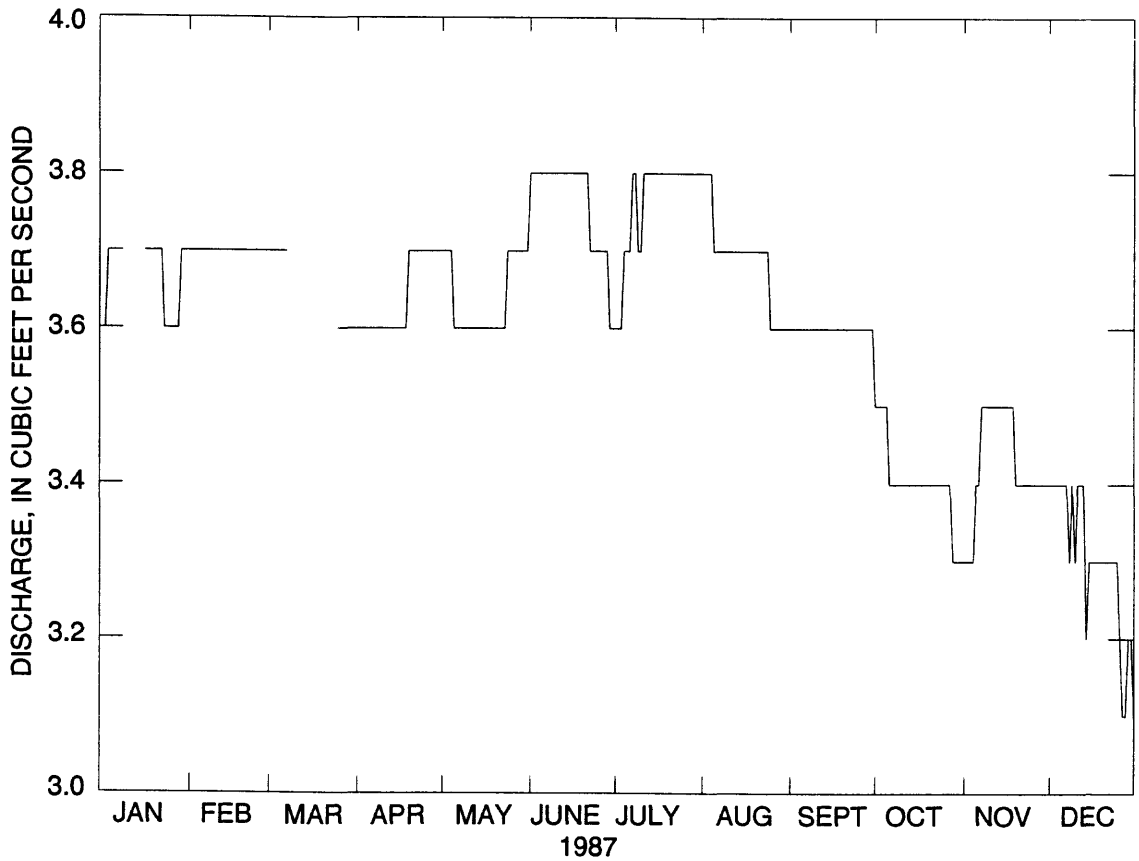

Figure 31. *(A)* Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1987.

Table 57. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1987

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	3.6	3.7	3.7	3.6	3.7	3.8	3.6	3.8	3.6	3.5	3.3	3.4
2	3.6	3.7	3.7	3.6	3.7	3.8	3.6	3.8	3.6	3.5	3.3	3.4
3	3.7	3.7	3.7	3.6	3.7	3.8	3.6	3.8	3.6	3.5	3.3	3.4
4	3.7	3.7	3.7	3.6	3.7	3.8	3.7	3.8	3.6	3.5	3.3	3.4
5	3.7	3.7	3.7	3.6	3.6	3.8	3.7	3.7	3.6	3.5	3.4	3.4
6	3.7	3.7	3.7	3.6	3.6	3.8	3.7	3.7	3.6	3.4	3.4	3.4
7	3.7	3.7	3.7	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.4
8	3.7	3.7	—	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.3
9	—	3.7	—	3.6	3.6	3.8	3.7	3.7	3.6	3.4	3.5	3.4
10	—	3.7	—	3.6	3.6	3.8	3.7	3.7	3.6	3.4	3.5	3.3
11	—	3.7	—	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.4
12	—	3.7	—	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.4
13	3.7	3.7	—	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.4
14	—	3.7	—	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.2
15	—	3.7	—	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.3
16	3.7	3.7	—	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.3
17	3.7	3.7	—	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.3
18	3.7	3.7	—	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.5	3.3
19	3.7	3.7	—	3.7	3.6	3.8	3.8	3.7	3.6	3.4	3.4	3.3
20	3.7	3.7	—	3.7	3.6	3.8	3.8	3.7	3.6	3.4	3.4	3.3
21	3.7	3.7	—	3.7	3.6	3.8	3.8	3.7	3.6	3.4	3.4	3.3
22	3.7	3.7	—	3.7	3.6	3.7	3.8	3.7	3.6	3.4	3.4	3.3
23	3.6	3.7	—	3.7	3.6	3.7	3.8	3.7	3.6	3.4	3.4	3.3
24	3.6	3.7	—	3.7	3.7	3.7	3.8	3.7	3.6	3.4	3.4	3.3
25	3.6	3.7	3.6	3.7	3.7	3.7	3.8	3.6	3.6	3.4	3.4	3.3
26	3.6	3.7	3.6	3.7	3.7	3.7	3.8	3.6	3.6	3.4	3.4	3.2
27	3.6	3.7	3.6	3.7	3.7	3.7	3.8	3.6	3.6	3.4	3.4	3.1
28	3.6	3.7	3.6	3.7	3.7	3.7	3.8	3.6	3.6	3.3	3.4	3.1
29	3.7	—	3.6	3.7	3.7	3.6	3.8	3.6	3.6	3.3	3.4	3.2
30	3.7	—	3.6	3.7	3.7	3.6	3.8	3.6	3.6	3.3	3.4	3.2
31	3.7	—	3.6	—	3.7	—	3.8	3.6	—	3.3	—	3.1
Mean	3.67	3.70	3.65	3.64	3.64	3.76	3.76	3.69	3.60	3.40	3.43	3.30
Max	3.7	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.6	3.5	3.5	3.4
Min	3.6	3.7	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.3	3.3	3.1

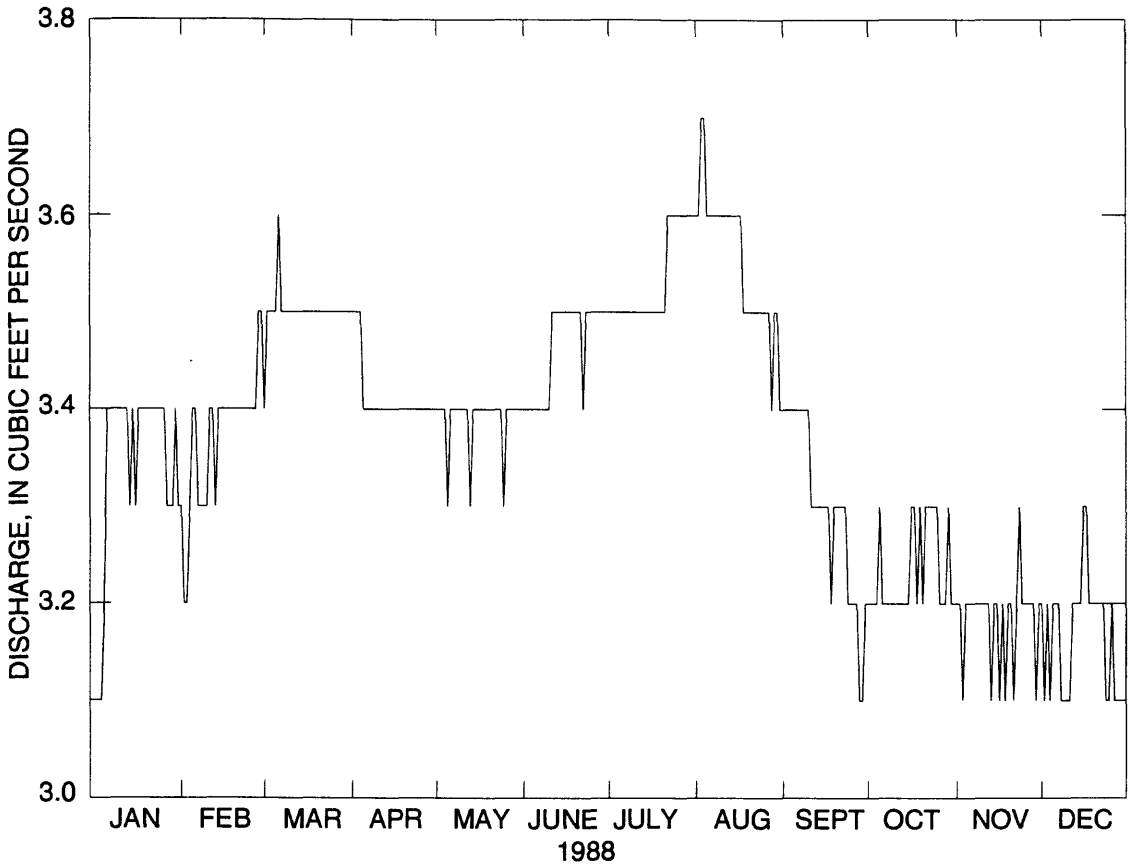

Figure 31. *(B)* Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1988.

Table 58. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1988

[Values are in cubic feet per second. e, estimated; Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	3.1	3.3	3.4	3.5	3.4	3.4	3.5	3.6	3.4	3.2	3.2	3.2
2	3.1	3.2	3.5	3.5	3.4	3.4	3.5	3.6	3.4	3.2	3.2	3.1
3	3.1	3.2	3.5	3.5	3.4	3.4	3.5	3.7	3.4	3.2	3.1	3.2
4	3.1	3.3	3.5	3.5	3.4	3.4	3.5	3.7	3.4	3.2	3.2	3.1
5	3.2	3.4	3.5	3.4	3.3	3.4	3.5	3.6	3.4	3.3	3.2	3.2
6	3.4	3.4	3.6	3.4	3.4	3.4	3.5	3.6	3.4	3.2	3.2	3.2
7	3.4	3.3	e3.5	3.4	3.4	3.4	3.5	3.6	3.4	3.2	3.2	3.2
8	3.4	3.3	e3.5	3.4	3.4	3.4	3.5	3.6	3.4	3.2	3.2	3.1
9	3.4	3.3	e3.5	3.4	3.4	3.4	3.5	3.6	3.4	3.2	3.2	3.1
10	3.4	3.3	e3.5	3.4	3.4	3.4	3.5	3.6	3.4	3.2	3.2	3.1
11	3.4	3.4	e3.5	3.4	3.4	3.5	3.5	3.6	3.3	3.2	3.2	3.1
12	3.4	3.4	e3.5	3.4	3.4	3.5	3.5	3.6	3.3	3.2	3.2	3.2
13	3.4	3.3	e3.5	3.4	3.3	3.5	3.5	3.6	3.3	3.2	3.1	3.2
14	3.3	3.4	e3.5	3.4	3.4	3.5	3.5	3.6	3.3	3.2	3.2	3.2
15	3.4	3.4	e3.5	3.4	3.4	3.5	3.5	3.6	3.3	3.2	3.2	3.2
16	3.3	3.4	e3.5	3.4	3.4	3.5	3.5	3.6	3.3	3.3	3.1	3.3
17	3.4	3.4	e3.5	3.4	3.4	3.5	3.5	3.6	3.3	3.3	3.2	3.3
18	3.4	3.4	3.5	3.4	3.4	3.5	3.5	3.5	3.2	3.2	3.1	3.2
19	3.4	3.4	3.5	3.4	3.4	3.5	3.5	3.5	3.3	3.3	3.2	3.2
20	e3.4	3.4	3.5	3.4	3.4	3.5	3.5	3.5	3.3	3.2	3.2	3.2
21	e3.4	3.4	3.5	3.4	3.4	3.5	3.5	3.5	3.3	3.3	3.1	3.2
22	e3.4	3.4	3.5	3.4	3.4	3.4	3.6	3.5	3.3	3.3	3.2	3.2
23	e3.4	3.4	3.5	3.4	3.4	3.5	3.6	3.5	3.3	3.3	3.3	3.2
24	e3.4	3.4	3.5	3.4	3.4	3.5	3.6	3.5	3.2	3.3	3.2	3.1
25	e3.4	3.4	3.5	3.4	3.3	3.5	3.6	3.5	3.2	3.3	3.2	3.1
26	3.4	3.4	3.5	3.4	3.4	3.5	3.6	3.5	3.2	3.2	3.2	3.2
27	3.3	3.4	3.5	3.4	3.4	3.5	3.6	3.5	3.2	3.2	3.2	3.1
28	3.3	3.5	3.5	3.4	3.4	3.5	3.6	3.4	3.1	3.2	3.2	3.1
29	3.3	3.5	3.5	3.4	3.4	3.5	3.6	3.5	3.1	3.3	3.1	3.1
30	3.4	—	3.5	3.4	3.4	3.5	3.6	3.5	3.2	3.2	3.2	3.1
31	3.3	—	3.5	—	3.4	—	3.6	3.4	—	3.2	—	3.1
Mean	3.34	3.37	3.50	3.41	3.39	3.46	3.53	3.55	3.30	3.23	3.18	3.16
Max	3.4	3.5	3.6	3.5	3.4	3.5	3.6	3.7	3.4	3.3	3.3	3.3
Min	3.1	3.2	3.4	3.4	3.3	3.4	3.5	3.4	3.1	3.2	3.1	3.1

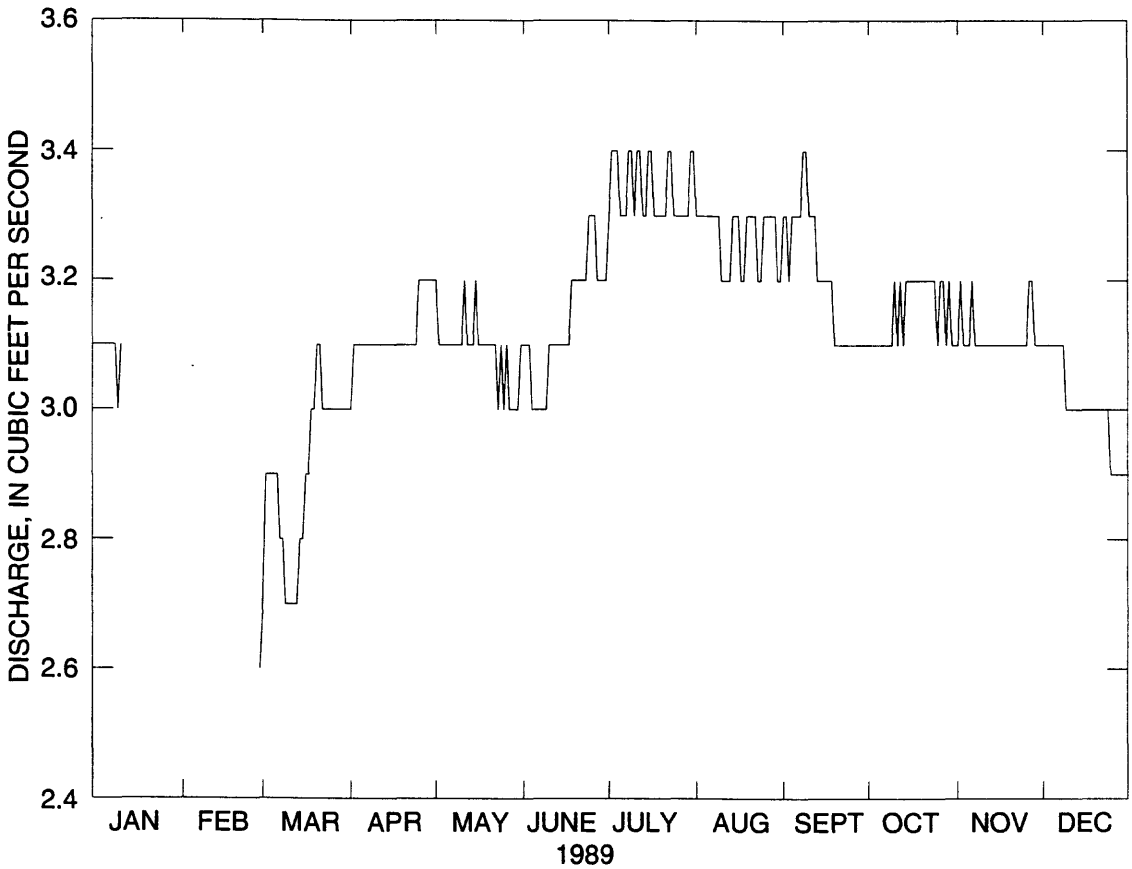

Figure 31. *(C)* Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1989.

Table 59. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1989

[Values are in cubic feet per second. e, estimated; Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	3.1	—	2.7	3.0	3.2	3.1	3.3	3.3	3.3	3.1	3.1	e3.1
2	3.1	—	2.9	3.1	3.1	3.1	3.4	3.3	3.3	3.1	3.2	e3.1
3	3.1	—	2.9	3.1	3.1	3.1	3.4	3.3	3.2	3.1	3.1	e3.1
4	3.1	—	2.9	3.1	3.1	3.0	3.4	3.3	3.3	3.1	3.1	e3.1
5	3.1	—	2.9	3.1	3.1	3.0	3.3	3.3	3.3	3.1	3.1	e3.1
6	3.1	—	2.9	3.1	3.1	3.0	3.3	3.3	3.3	3.1	3.2	e3.1
7	3.1	—	2.8	3.1	3.1	3.0	3.3	3.3	3.3	3.1	3.1	e3.1
8	3.1	—	2.8	3.1	3.1	3.0	3.4	3.3	3.4	3.1	3.1	e3.1
9	3.0	—	2.7	3.1	3.1	3.0	3.4	3.3	3.4	3.1	3.1	e3.0
10	3.1	—	2.7	3.1	3.1	3.1	3.3	3.2	3.3	3.2	3.1	e3.0
11	—	—	2.7	3.1	3.2	3.1	3.4	3.2	3.3	3.1	3.1	e3.0
12	—	—	2.7	3.1	3.1	3.1	3.4	3.2	3.3	3.2	3.1	e3.0
13	—	—	2.7	3.1	3.1	3.1	3.3	3.2	3.2	3.1	3.1	e3.0
14	—	—	2.8	3.1	3.1	3.1	3.3	3.3	3.2	3.2	3.1	e3.0
15	—	—	2.8	3.1	3.2	3.1	3.4	3.3	3.2	3.2	3.1	e3.0
16	—	—	2.9	3.1	3.1	3.1	3.4	3.3	3.2	3.2	3.1	e3.0
17	—	—	2.9	3.1	3.1	3.1	3.3	3.2	3.2	3.2	3.1	e3.0
18	—	—	3.0	3.1	3.1	3.2	3.3	3.2	3.2	3.2	3.1	e3.0
19	—	—	3.0	3.1	3.1	3.2	3.3	3.3	3.1	3.2	3.1	e3.0
20	—	—	3.1	3.1	3.1	3.2	3.3	3.3	3.1	3.2	3.1	3.0
21	—	—	3.1	3.1	3.1	3.2	3.3	3.3	3.1	3.2	3.1	3.0
22	—	—	3.0	3.1	3.1	3.2	3.4	3.3	3.1	3.2	3.1	3.0
23	—	—	3.0	3.1	3.0	3.2	3.4	3.2	3.1	3.2	3.1	3.0
24	—	—	3.0	3.1	3.1	3.3	3.3	3.2	3.1	3.2	3.1	3.0
25	—	—	3.0	3.2	3.0	3.3	3.3	3.3	3.1	3.1	3.1	2.9
26	—	—	3.0	3.2	3.1	3.3	3.3	3.3	3.1	3.2	3.2	2.9
27	—	—	3.0	3.2	3.0	3.2	3.3	3.3	3.1	3.2	3.2	2.9
28	—	2.6	3.0	3.2	3.0	3.2	3.3	3.3	3.1	3.1	e3.1	2.9
29	—	—	3.0	3.2	3.0	3.2	3.3	3.3	3.1	3.2	e3.1	2.9
30	—	—	3.0	3.2	3.0	3.2	3.4	3.2	3.1	3.1	e3.1	2.9
31	—	—	3.0	—	3.1	—	3.4	3.2	—	3.1	—	2.9
Mean	3.09	2.60	2.90	3.12	3.09	3.13	3.34	3.27	3.20	3.15	3.11	3.00
Max	3.1	2.6	3.1	3.2	3.2	3.3	3.4	3.3	3.4	3.2	3.2	3.1
Min	3.0	2.6	2.7	3.0	3.0	3.0	3.3	3.2	3.1	3.1	3.1	2.9

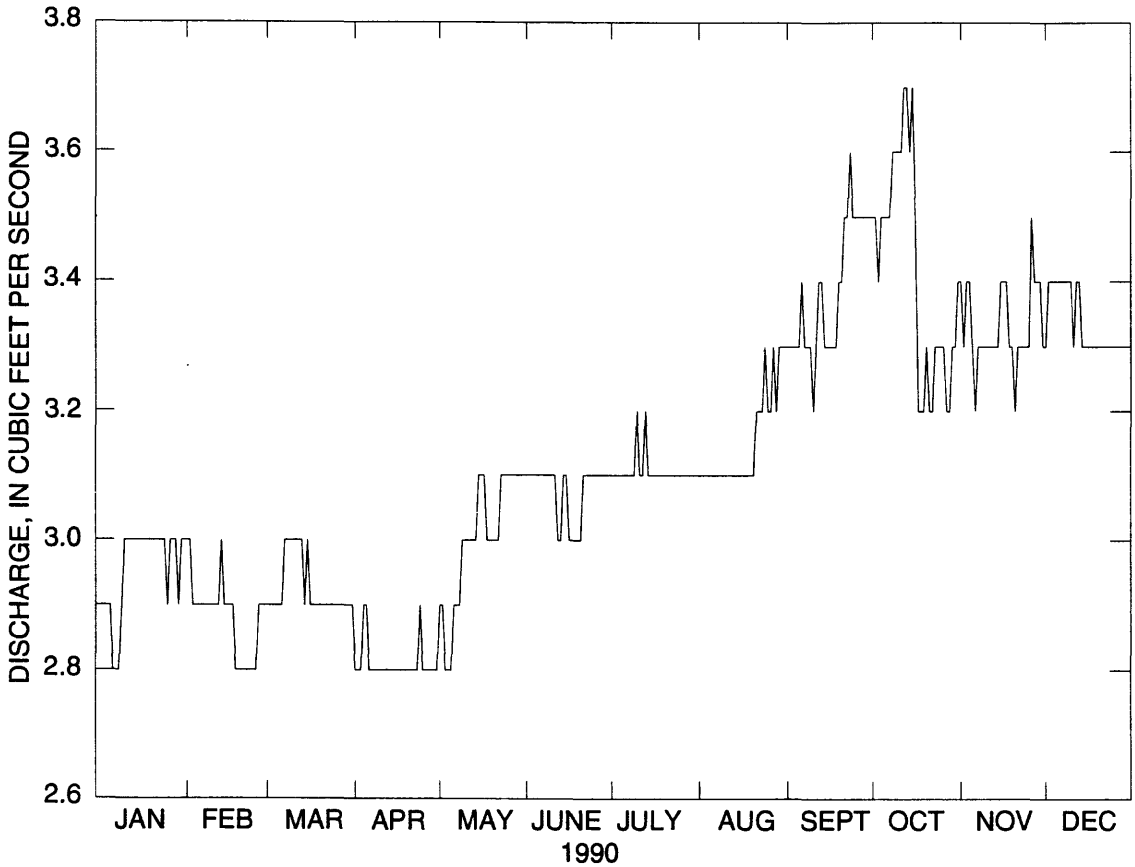

Figure 31. *(D)* Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1990.

Table 60. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1990

[Values are in cubic feet per second. e, estimated; Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	2.9	3.0	2.9	2.8	2.9	3.1	3.1	3.1	3.3	3.5	3.4	3.3
2	2.9	3.0	2.9	2.8	2.9	3.1	3.1	3.1	3.3	3.5	3.3	3.4
3	2.9	2.9	2.9	2.8	2.8	3.1	3.1	3.1	3.3	3.4	3.4	3.4
4	2.9	2.9	2.9	2.9	2.8	3.1	3.1	3.1	3.3	3.5	3.4	3.4
5	2.9	2.9	2.9	2.9	2.8	3.1	3.1	3.1	3.3	3.5	3.3	3.4
6	2.8	2.9	2.9	2.8	2.9	3.1	3.1	3.1	3.4	3.5	3.2	3.4
7	2.8	2.9	3.0	2.8	2.9	3.1	3.1	3.1	3.3	3.5	3.3	3.4
8	2.8	2.9	3.0	2.8	2.9	3.1	3.1	3.1	3.3	3.6	3.3	3.4
9	2.9	2.9	3.0	2.8	3.0	3.1	3.1	3.1	3.3	3.6	3.3	3.4
10	3.0	2.9	3.0	2.8	3.0	3.1	3.2	3.1	3.2	3.6	3.3	3.4
11	3.0	2.9	3.0	2.8	3.0	3.1	3.1	3.1	3.3	3.6	3.3	3.3
12	3.0	2.9	3.0	2.8	3.0	3.0	3.1	3.1	3.4	3.7	3.3	3.4
13	3.0	3.0	3.0	2.8	3.0	3.0	3.2	3.1	3.4	3.7	3.3	3.4
14	3.0	2.9	2.9	2.8	3.0	3.1	3.1	3.1	3.3	3.6	3.3	3.3
15	3.0	2.9	3.0	2.8	3.1	3.1	3.1	3.1	3.3	3.7	3.4	3.3
16	3.0	2.9	2.9	2.8	3.1	3.0	3.1	3.1	3.3	3.5	3.4	3.3
17	3.0	2.9	2.9	2.8	3.1	3.0	3.1	3.1	3.3	3.2	3.4	3.3
18	3.0	2.8	2.9	2.8	3.0	3.0	3.1	3.1	3.3	3.2	3.3	3.3
19	3.0	2.8	2.9	2.8	3.0	3.0	3.1	3.1	3.4	3.2	3.3	e3.3
20	3.0	2.8	2.9	2.8	3.0	3.0	3.1	3.1	3.4	3.3	3.2	e3.3
21	3.0	2.8	2.9	2.8	3.0	3.1	3.1	3.2	3.5	3.2	3.3	e3.3
22	3.0	2.8	2.9	2.8	3.0	3.1	3.1	3.2	3.5	3.2	3.3	e3.3
23	3.0	2.8	2.9	2.8	3.1	3.1	3.1	3.2	3.6	3.3	3.3	e3.3
24	3.0	2.8	2.9	2.9	3.1	3.1	3.1	3.3	3.5	3.3	3.3	e3.3
25	2.9	2.8	2.9	2.8	3.1	3.1	3.1	3.2	3.5	3.3	3.3	e3.3
26	3.0	2.9	2.9	2.8	3.1	3.1	3.1	3.2	3.5	3.3	3.5	e3.3
27	3.0	2.9	2.9	2.8	3.1	3.1	3.1	3.3	3.5	3.2	3.4	e3.3
28	3.0	2.9	2.9	2.8	3.1	3.1	3.1	3.2	3.5	3.2	3.4	e3.3
29	2.9	—	2.9	2.8	3.1	3.1	3.1	3.3	3.5	3.3	3.4	e3.3
30	3.0	—	2.9	2.8	3.1	3.1	3.1	3.3	3.5	3.3	3.3	e3.3
31	3.0	—	2.9	—	3.1	—	3.1	3.3	—	3.4	—	e3.3
Mean	2.95	2.88	2.93	2.81	3.00	3.08	3.11	3.15	3.38	3.42	3.33	3.34
Max	3.0	3.0	3.0	2.9	3.1	3.1	3.2	3.3	3.6	3.7	3.5	3.4
Min	2.8	2.8	2.9	2.8	2.8	3.0	3.1	3.1	3.2	3.2	3.2	3.3

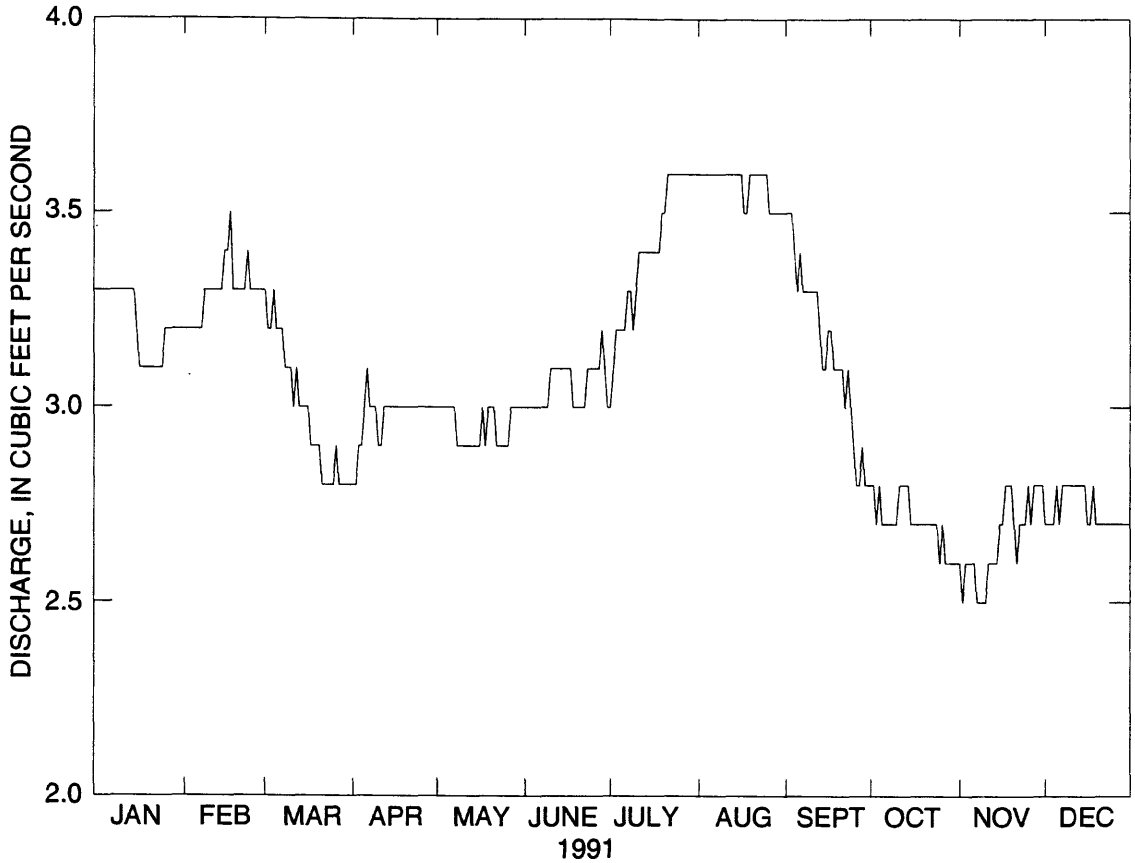

Figure 31. *(E)* Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1991.

Table 61. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1991

[Values are in cubic feet per second. e, estimated; Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	e3.3	e3.2	3.3	2.8	3.0	3.0	3.0	3.6	3.5	2.8	2.6	2.7
2	e3.3	e3.2	3.2	2.8	3.0	3.0	3.1	3.6	3.5	2.8	2.5	2.7
3	e3.3	e3.2	3.2	2.9	3.0	3.0	3.2	3.6	3.5	2.7	2.6	2.7
4	e3.3	e3.2	3.3	2.9	3.0	3.0	3.2	3.6	3.4	2.8	2.6	2.7
5	e3.3	e3.2	3.2	3.0	3.0	3.0	3.2	3.6	3.3	2.7	2.6	2.8
6	e3.3	e3.2	3.2	3.1	3.0	3.0	3.2	3.6	3.4	2.7	2.6	2.7
7	e3.3	e3.2	3.2	3.0	3.0	3.0	3.3	3.6	3.3	2.7	2.5	2.8
8	e3.3	e3.3	3.1	3.0	2.9	3.0	3.3	3.6	3.3	2.7	2.5	2.8
9	e3.3	e3.3	3.1	3.0	2.9	3.0	3.2	3.6	3.3	2.7	2.5	2.8
10	e3.3	e3.3	3.1	2.9	2.9	3.1	3.3	3.6	3.3	2.7	2.5	2.8
11	e3.3	e3.3	3.0	2.9	2.9	3.1	3.4	3.6	3.3	2.8	2.6	2.8
12	e3.3	e3.3	3.1	3.0	2.9	3.1	3.4	3.6	3.3	2.8	2.6	2.8
13	e3.3	e3.3	3.0	3.0	2.9	3.1	3.4	3.6	3.2	2.8	2.6	2.8
14	e3.3	e3.3	3.0	3.0	2.9	3.1	3.4	3.6	3.1	2.8	2.6	2.8
15	e3.2	3.4	3.0	3.0	2.9	3.1	3.4	3.6	3.1	2.7	2.7	2.8
16	e3.1	3.4	3.0	3.0	2.9	3.1	3.4	3.6	3.2	2.7	2.7	2.7
17	e3.1	3.5	2.9	3.0	3.0	3.1	3.4	3.5	3.2	2.7	2.8	2.7
18	e3.1	3.3	2.9	3.0	2.9	e3.0	3.4	3.5	3.1	2.7	2.8	2.8
19	e3.1	3.3	2.9	3.0	3.0	e3.0	3.5	3.6	3.1	2.7	2.8	2.7
20	e3.1	3.3	2.9	3.0	3.0	e3.0	3.5	3.6	3.1	2.7	2.7	2.7
21	e3.1	3.3	2.8	3.0	3.0	3.0	3.6	3.6	3.1	2.7	2.6	2.7
22	e3.1	3.3	2.8	3.0	2.9	3.0	3.6	3.6	3.0	2.7	2.7	2.7
23	e3.1	3.4	2.8	3.0	2.9	3.1	3.6	3.6	3.1	2.7	2.7	2.7
24	e3.1	3.3	2.8	3.0	2.9	3.1	3.6	3.6	3.0	2.7	2.7	2.7
25	e3.2	3.3	2.8	3.0	2.9	3.1	3.6	3.6	2.9	2.6	2.8	2.7
26	e3.2	3.3	2.9	3.0	2.9	3.1	3.6	3.5	2.8	2.7	2.7	2.7
27	e3.2	3.3	2.8	3.0	3.0	3.1	3.6	3.5	2.8	2.6	2.8	2.7
28	e3.2	3.3	2.8	3.0	3.0	3.2	3.6	3.5	2.9	2.6	2.8	2.7
29	e3.2	—	2.8	3.0	3.0	3.1	3.6	3.5	2.8	2.6	2.8	2.7
30	e3.2	—	2.8	3.0	3.0	3.0	3.6	3.5	2.8	2.6	2.8	2.7
31	e3.2	—	2.8	—	3.0	—	3.6	3.5	—	2.6	—	2.7
Mean	3.22	3.29	2.98	2.98	2.95	3.05	3.41	3.57	3.16	2.70	2.66	2.74
Max	3.3	3.5	3.3	3.1	3.0	3.2	3.6	3.6	3.5	2.8	2.8	2.8
Min	3.1	3.2	2.8	2.8	2.9	3.0	3.0	3.5	2.8	2.6	2.5	2.7

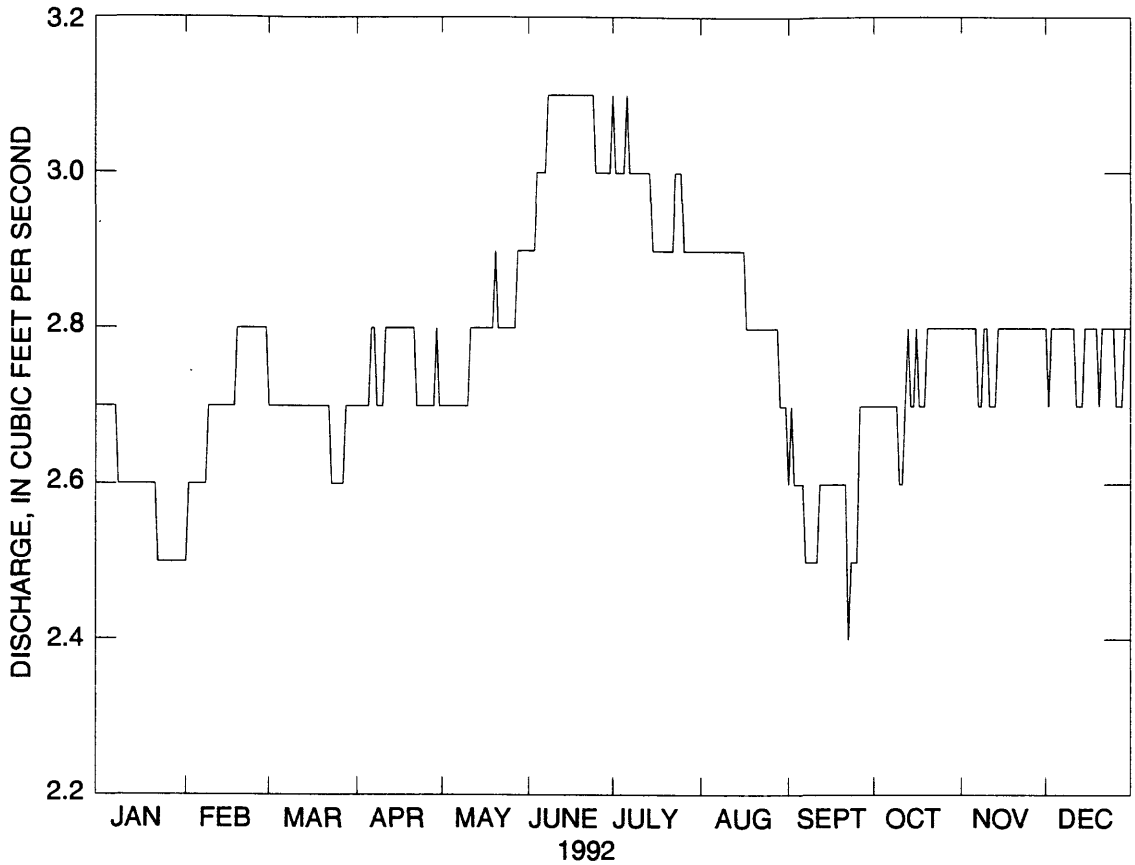

Figure 31. *(F)* Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1992.

Table 62. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1992

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	2.7	2.5	2.7	2.7	2.7	2.9	3.1	2.9	2.6	2.7	2.8	2.8
2	2.7	2.6	2.7	2.7	2.7	2.9	3.0	2.9	2.7	2.7	2.8	2.7
3	2.7	2.6	2.7	2.7	2.7	2.9	3.0	2.9	2.6	2.7	2.8	2.8
4	2.7	2.6	2.7	2.7	2.7	3.0	3.0	2.9	2.6	2.7	2.8	2.8
5	2.7	2.6	2.7	2.7	2.7	3.0	3.0	2.9	2.6	2.7	2.8	2.8
6	2.7	2.6	2.7	2.8	2.7	3.0	3.1	2.9	2.6	2.7	2.8	2.8
7	2.7	2.6	2.7	2.8	2.7	3.0	3.0	2.9	2.5	2.7	2.7	2.8
8	2.6	2.6	2.7	2.7	2.7	3.1	3.0	2.9	2.5	2.7	2.7	2.8
9	2.6	2.7	2.7	2.7	2.7	3.1	3.0	2.9	2.5	2.7	2.8	2.8
10	2.6	2.7	2.7	2.7	2.7	3.1	3.0	2.9	2.5	2.6	2.8	2.8
11	2.6	2.7	2.7	2.8	2.8	3.1	3.0	2.9	2.5	2.6	2.7	2.8
12	2.6	2.7	2.7	2.8	2.8	3.1	3.0	2.9	2.6	2.7	2.7	2.7
13	2.6	2.7	2.7	2.8	2.8	3.1	3.0	2.9	2.6	2.8	2.7	2.7
14	2.6	2.7	2.7	2.8	2.8	3.1	3.0	2.9	2.6	2.7	2.8	2.7
15	2.6	2.7	2.7	2.8	2.8	3.1	2.9	2.9	2.6	2.7	2.8	2.8
16	2.6	2.7	2.7	2.8	2.8	3.1	2.9	2.9	2.6	2.8	2.8	2.8
17	2.6	2.7	2.7	2.8	2.8	3.1	2.9	2.8	2.6	2.7	2.8	2.8
18	2.6	2.7	2.7	2.8	2.8	3.1	2.9	2.8	2.6	2.7	2.8	2.8
19	2.6	2.8	2.7	2.8	2.8	3.1	2.9	2.8	2.6	2.7	2.8	2.8
20	2.6	2.8	2.7	2.8	2.9	3.1	2.9	2.8	2.6	2.8	2.8	2.7
21	2.6	2.8	2.7	2.8	2.8	3.1	2.9	2.8	2.6	2.8	2.8	2.8
22	2.5	2.8	2.7	2.7	2.8	3.1	2.9	2.8	2.4	2.8	2.8	2.8
23	2.5	2.8	2.6	2.7	2.8	3.1	3.0	2.8	2.5	2.8	2.8	2.8
24	2.5	2.8	2.6	2.7	2.8	3.1	3.0	2.8	2.5	2.8	2.8	2.8
25	2.5	2.8	2.6	2.7	2.8	3.0	3.0	2.8	2.5	2.8	2.8	2.8
26	2.5	2.8	2.6	2.7	2.8	3.0	2.9	2.8	2.7	2.8	2.8	2.7
27	2.5	2.8	2.6	2.7	2.8	3.0	2.9	2.8	2.7	2.8	2.8	2.7
28	2.5	2.8	2.7	2.7	2.9	3.0	2.9	2.8	2.7	2.8	2.8	2.7
29	2.5	2.8	2.7	2.8	2.9	3.0	2.9	2.7	2.7	2.8	2.8	2.8
30	2.5	—	2.7	2.7	2.9	3.0	2.9	2.7	2.7	2.8	2.8	2.8
31	2.5	—	2.7	—	2.9	—	2.9	2.7	—	2.8	—	2.8
Mean	2.59	2.71	2.68	2.75	2.78	3.05	2.96	2.84	2.59	2.74	2.78	2.77
Max	2.7	2.8	2.7	2.8	2.9	3.1	3.1	2.9	2.7	2.8	2.8	2.8
Min	2.5	2.5	2.6	2.7	2.7	2.9	2.9	2.7	2.4	2.6	2.7	2.7

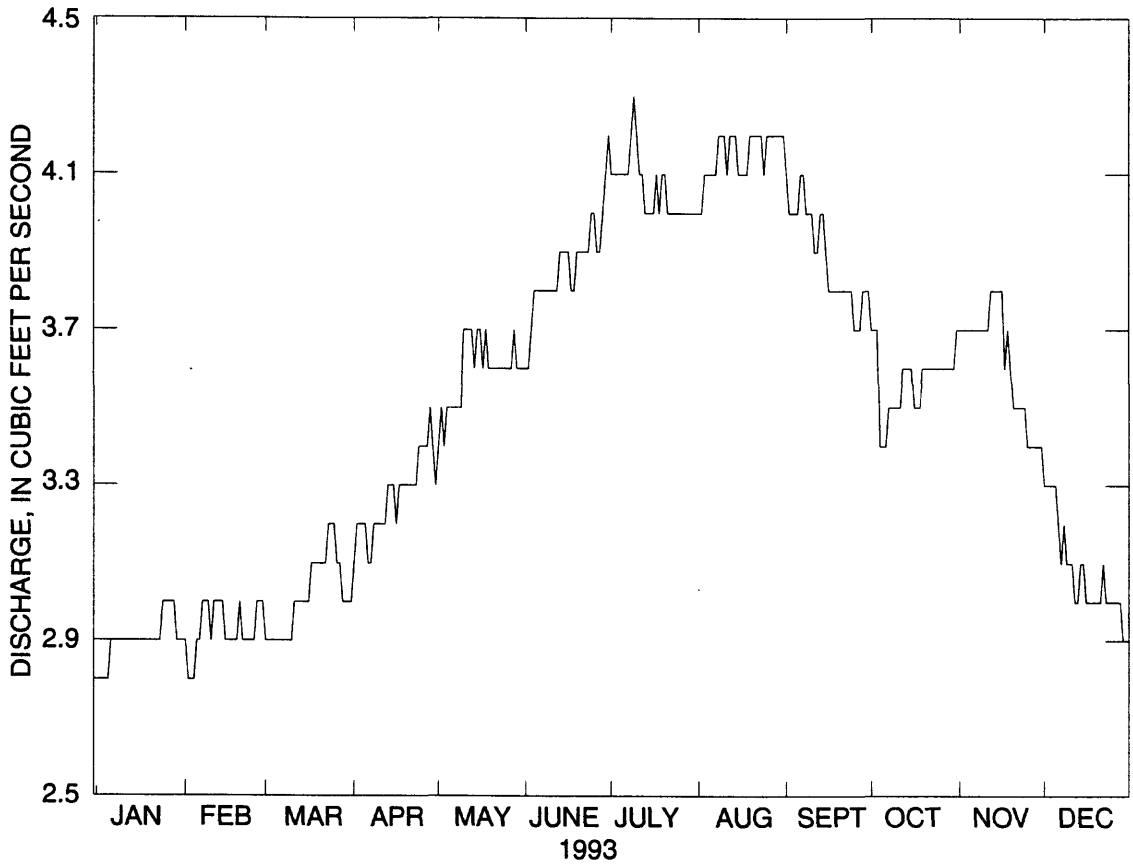

Figure 31. *(G)* Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1993.

Table 63. Daily mean discharge, Fish Hatchery Spring 23 (FH23-Q), Long Valley Caldera, Mono County, California, 1993

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	2.8	2.9	2.9	3.1	3.4	3.6	4.1	4.0	4.1	3.7	3.7	3.3
2	2.8	2.8	2.9	3.2	3.5	3.6	4.1	4.0	4.0	3.7	3.7	3.3
3	2.8	2.8	2.9	3.2	3.4	3.7	4.1	4.1	4.0	3.7	3.7	3.3
4	2.8	2.8	2.9	3.2	3.5	3.8	4.1	4.1	4.0	3.4	3.7	3.3
5	2.8	2.9	2.9	3.2	3.5	3.8	4.1	4.1	4.0	3.4	3.7	3.3
6	2.9	2.9	2.9	3.1	3.5	3.8	4.1	4.1	4.1	3.4	3.7	3.2
7	2.9	3.0	2.9	3.1	3.5	3.8	4.1	4.1	4.1	3.5	3.7	3.1
8	2.9	3.0	2.9	3.2	3.5	3.8	4.2	4.2	4.0	3.5	3.7	3.2
9	2.9	3.0	2.9	3.2	3.5	3.8	4.3	4.2	4.0	3.5	3.7	3.1
10	2.9	2.9	2.9	3.2	3.7	3.8	4.2	4.2	4.0	3.5	3.7	3.1
11	2.9	3.0	3.0	3.2	3.7	3.8	4.1	4.1	3.9	3.5	3.7	3.1
12	2.9	3.0	3.0	3.2	3.7	3.8	4.1	4.2	3.9	3.6	3.8	3.0
13	2.9	3.0	3.0	3.3	3.7	3.9	4.0	4.2	4.0	3.6	3.8	3.0
14	2.9	3.0	3.0	3.3	3.6	3.9	4.0	4.2	4.0	3.6	3.8	3.1
15	2.9	2.9	3.0	3.3	3.7	3.9	4.0	4.1	3.9	3.6	3.8	3.1
16	2.9	2.9	3.0	3.2	3.7	3.9	4.0	4.1	3.8	3.5	3.8	3.0
17	2.9	2.9	3.1	3.3	3.6	3.8	4.1	4.1	3.8	3.5	3.6	3.0
18	2.9	2.9	3.1	3.3	3.7	3.8	4.0	4.1	3.8	3.5	3.7	3.0
19	2.9	2.9	3.1	3.3	3.6	3.9	4.1	4.2	3.8	3.6	3.6	3.0
20	2.9	3.0	3.1	3.3	3.6	3.9	4.1	4.2	3.8	3.6	3.5	3.0
21	2.9	2.9	3.1	3.3	3.6	3.9	4.0	4.2	3.8	3.6	3.5	3.0
22	2.9	2.9	3.1	3.3	3.6	3.9	4.0	4.2	3.8	3.6	3.5	3.1
23	2.9	2.9	3.2	3.3	3.6	3.9	4.0	4.2	3.8	3.6	3.5	3.0
24	3.0	2.9	3.2	3.4	3.6	4.0	4.0	4.1	3.8	3.6	3.5	3.0
25	3.0	2.9	3.2	3.4	3.6	4.0	4.0	4.2	3.7	3.6	3.4	3.0
26	3.0	3.0	3.1	3.4	3.6	3.9	4.0	4.2	3.7	3.6	3.4	3.0
27	3.0	3.0	3.1	3.4	3.6	3.9	4.0	4.2	3.7	3.6	3.4	3.0
28	3.0	3.0	3.0	3.5	3.7	4.0	4.0	4.2	3.8	3.6	3.4	3.0
29	2.9	—	3.0	3.4	3.6	4.1	4.0	4.2	3.8	3.6	3.4	2.9
30	2.9	—	3.0	3.3	3.6	4.2	4.0	4.2	3.8	3.6	3.4	2.9
31	2.9	—	3.0	—	3.6	—	4.0	4.2	—	3.7	—	2.9
Mean	2.90	2.93	3.01	3.27	3.59	3.86	4.06	4.15	3.89	3.57	3.62	3.07
Max	3.0	3.0	3.2	3.5	3.7	4.2	4.3	4.2	4.1	3.7	3.8	3.3
Min	2.8	2.8	2.9	3.1	3.4	3.6	4.0	4.0	3.7	3.4	3.4	2.9

This page intentionally left blank.

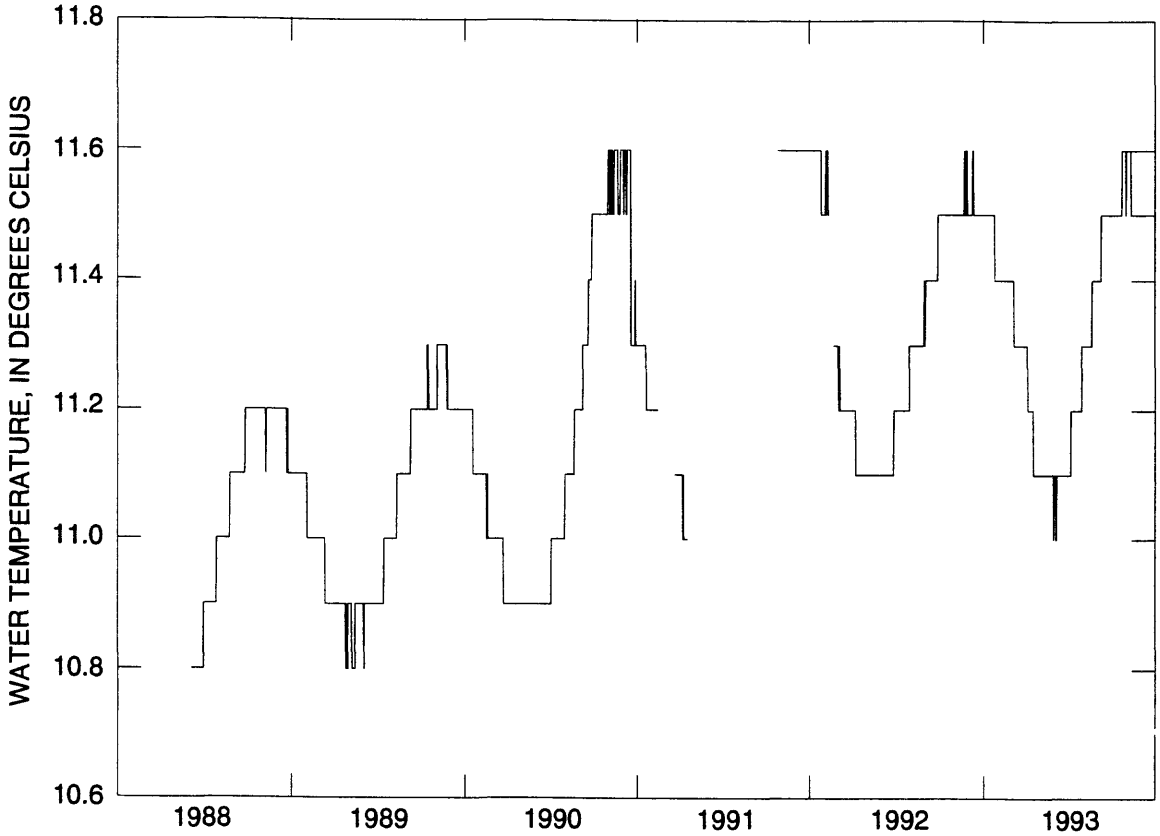

Figure 32. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1988–93.

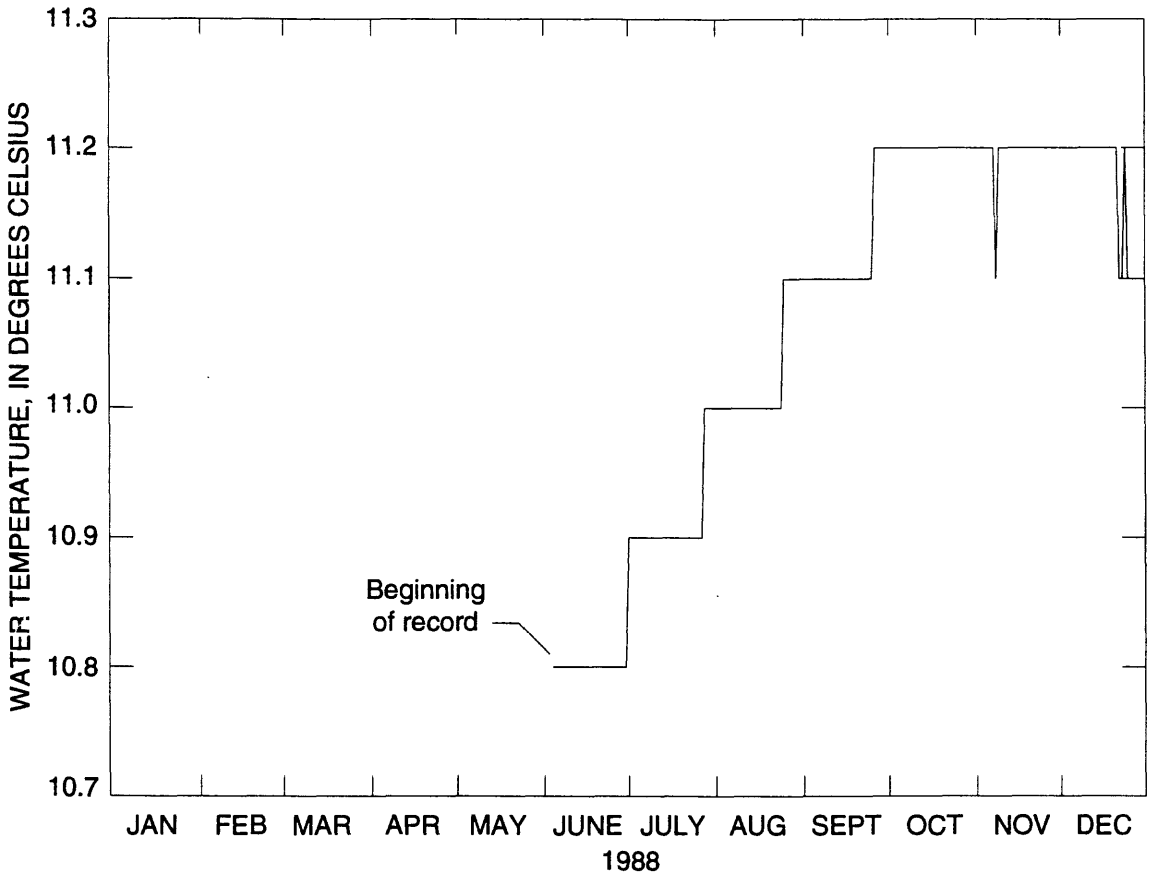

Figure 33. *(A)* Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1988.

Table 64. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1988

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	—	—	10.9	11.0	11.1	11.2	11.2	11.2
2	—	—	—	—	—	—	10.9	11.0	11.1	11.2	11.2	11.2
3	—	—	—	—	—	—	10.9	11.0	11.1	11.2	11.2	11.2
4	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
5	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
6	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
7	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
8	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.1	11.2
9	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
10	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
11	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
12	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
13	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
14	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
15	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
16	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
17	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
18	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
19	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
20	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
21	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
22	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.1
23	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.1
24	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
25	—	—	—	—	—	10.8	10.9	11.1	11.1	11.2	11.2	11.1
26	—	—	—	—	—	10.8	10.9	11.1	11.2	11.2	11.2	11.1
27	—	—	—	—	—	10.8	10.9	11.1	11.2	11.2	11.2	11.1
28	—	—	—	—	—	10.8	11.0	11.1	11.2	11.2	11.2	11.1
29	—	—	—	—	—	10.8	11.0	11.1	11.2	11.2	11.2	11.1
30	—	—	—	—	—	10.8	11.0	11.1	11.2	11.2	11.2	11.1
31	—	—	—	—	—	—	11.0	11.1	—	11.2	—	11.1
Mean	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.2	11.2
Max	—	—	—	—	—	10.8	11.0	11.1	11.2	11.2	11.2	11.2
Min	—	—	—	—	—	10.8	10.9	11.0	11.1	11.2	11.1	11.1

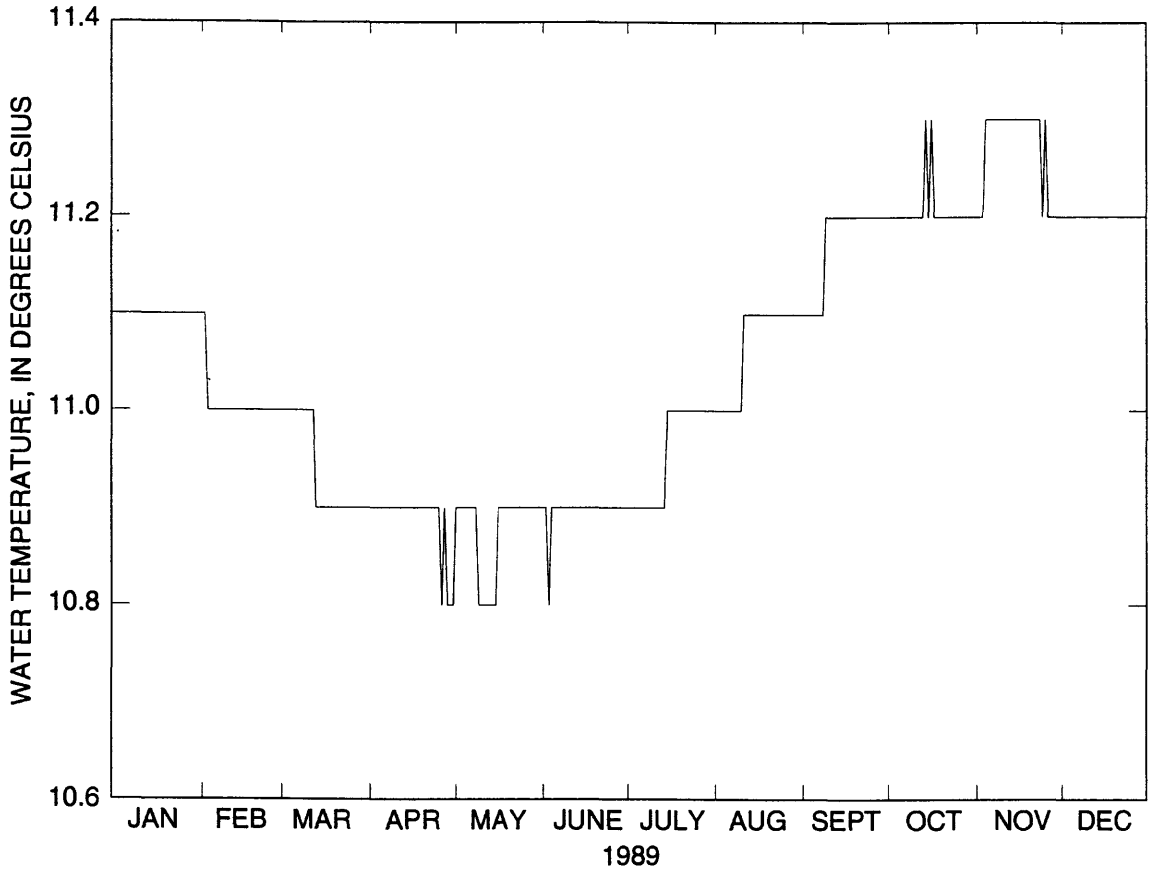

Figure 33. *(B)* Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1989.

Table 65. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1989

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	11.1	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.2
2	11.1	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.2
3	11.1	11.0	11.0	10.9	10.9	10.8	10.9	11.0	11.1	11.2	11.2	11.2
4	11.1	11.0	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.3	11.2
5	11.1	11.0	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.3	11.2
6	11.1	11.0	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.3	11.2
7	11.1	11.0	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.3	11.2
8	11.1	11.0	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.3	11.2
9	11.1	11.0	11.0	10.9	10.8	10.9	10.9	11.0	11.2	11.2	11.3	11.2
10	11.1	11.0	11.0	10.9	10.8	10.9	10.9	11.0	11.2	11.2	11.3	11.2
11	11.1	11.0	11.0	10.9	10.8	10.9	10.9	11.1	11.2	11.2	11.3	11.2
12	11.1	11.0	11.0	10.9	10.8	10.9	10.9	11.1	11.2	11.2	11.3	11.2
13	11.1	11.0	10.9	10.9	10.8	10.9	10.9	11.1	11.2	11.2	11.3	11.2
14	11.1	11.0	10.9	10.9	10.8	10.9	10.9	11.1	11.2	11.3	11.3	11.2
15	11.1	11.0	10.9	10.9	10.8	10.9	11.0	11.1	11.2	11.2	11.3	11.2
16	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.3	11.3	11.2
17	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.2
18	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.2
19	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.2
20	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.2
21	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.2
22	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.2
23	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.2
24	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.2	11.2
25	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.2
26	11.1	11.0	10.9	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.2	11.2
27	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.2	11.2
28	11.1	11.0	10.9	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.2	11.2
29	11.1	—	10.9	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.2	11.2
30	11.1	—	10.9	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.2	11.2
31	11.1	—	10.9	—	10.9	—	11.0	11.1	—	11.2	—	11.2
Mean	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.2
Max	11.1	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.2	11.3	11.3	11.2
Min	11.1	11.0	10.9	10.8	10.8	10.8	10.9	11.0	11.1	11.2	11.2	11.2

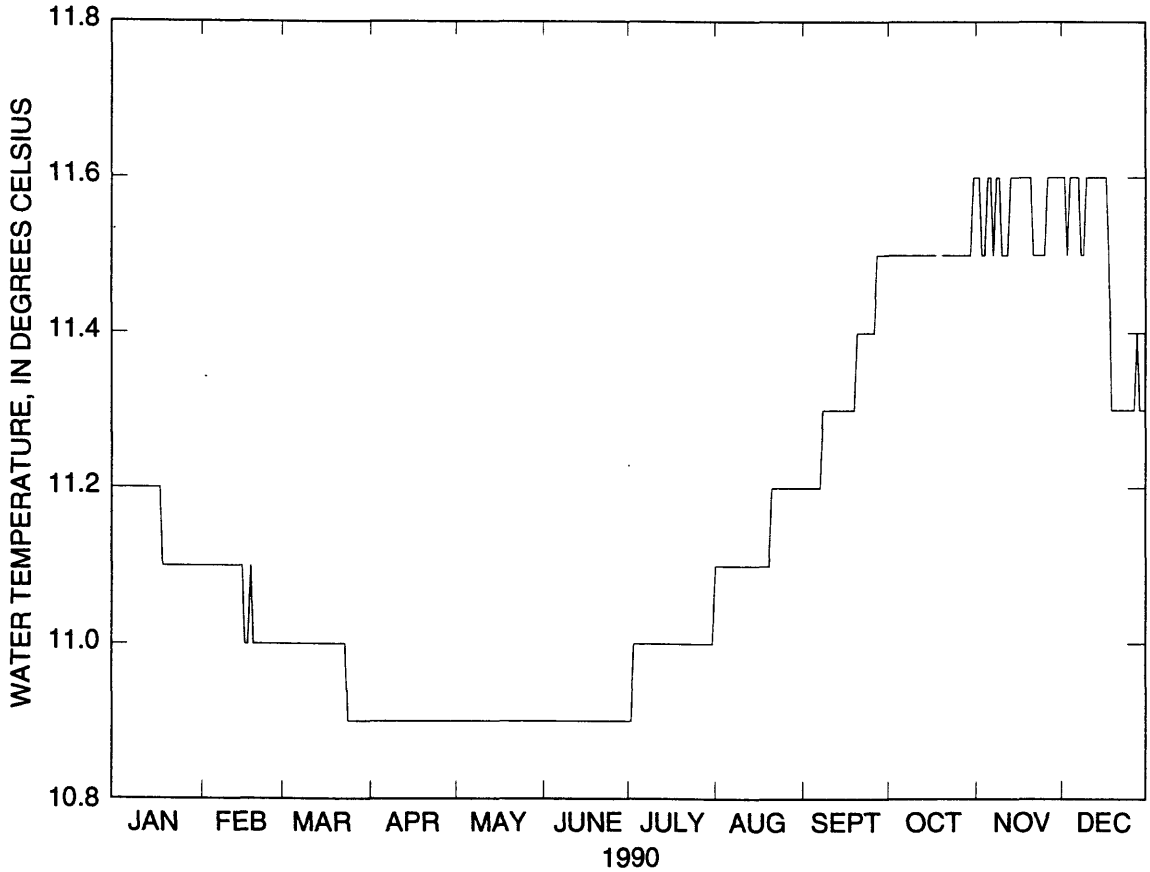

Figure 33. *(C)* Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1990.

Table 66. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1990

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	11.2	11.1	11.0	10.9	10.9	10.9	10.9	11.1	11.2	11.5	11.6	11.6
2	11.2	11.1	11.0	10.9	10.9	10.9	10.9	11.1	11.2	11.5	11.6	11.6
3	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.2	11.5	11.5	11.5
4	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.2	11.5	11.5	11.6
5	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.2	11.5	11.6	11.6
6	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.2	11.5	11.6	11.6
7	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.2	11.5	11.5	11.6
8	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.6	11.5
9	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.6	11.5
10	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.5	11.6
11	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.5	11.6
12	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.5	11.6
13	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.6	11.6
14	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.6	11.6
15	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.6	11.6
16	11.2	11.0	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.6	11.6
17	11.2	11.0	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.6	11.6
18	11.1	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.6	11.5
19	11.1	11.0	11.0	10.9	10.9	10.9	11.0	11.1	11.3	—	11.6	11.3
20	11.1	11.0	11.0	10.9	10.9	10.9	11.0	11.1	11.4	11.5	11.6	11.3
21	11.1	11.0	11.0	10.9	10.9	10.9	11.0	11.2	11.4	11.5	11.5	11.3
22	11.1	11.0	11.0	10.9	10.9	10.9	11.0	11.2	11.4	11.5	11.5	11.3
23	11.1	11.0	11.0	10.9	10.9	10.9	11.0	11.2	11.4	11.5	11.5	11.3
24	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.2	11.4	11.5	11.5	11.3
25	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.2	11.4	11.5	11.5	11.3
26	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.2	11.4	11.5	11.6	11.3
27	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.2	11.5	11.5	11.6	11.3
28	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.2	11.5	11.5	11.6	11.4
29	11.1	—	10.9	10.9	10.9	10.9	11.0	11.2	11.5	11.5	11.6	11.3
30	11.1	—	10.9	10.9	10.9	10.9	11.0	11.2	11.5	11.5	11.6	11.3
31	11.1	—	10.9	—	10.9	—	11.0	11.2	—	11.6	—	11.3
Mean	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.1	11.3	11.5	11.6	11.5
Max	11.2	11.1	11.0	10.9	10.9	10.9	11.0	11.2	11.5	11.6	11.6	11.6
Min	11.1	11.0	10.9	10.9	10.9	10.9	10.9	11.1	11.2	11.5	11.5	11.3

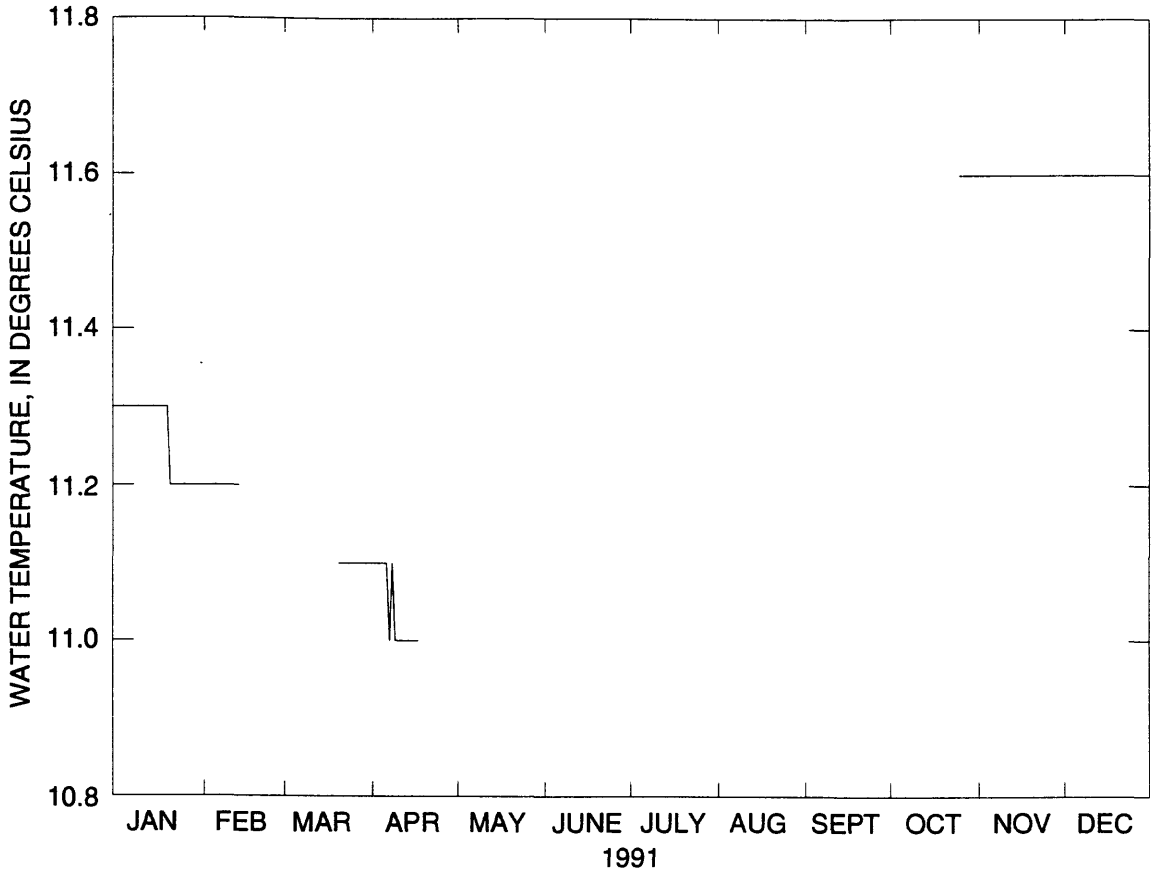

Figure 33. *(D)* Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1991.

Table 67. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1991

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	11.3	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6
2	11.3	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6
3	11.3	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6
4	11.3	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6
5	11.3	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6
6	11.3	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6
7	11.3	11.2	—	11.0	—	—	—	—	—	—	11.6	11.6
8	11.3	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6
9	11.3	11.2	—	11.0	—	—	—	—	—	—	11.6	11.6
10	11.3	11.2	—	11.0	—	—	—	—	—	—	11.6	11.6
11	11.3	11.2	—	11.0	—	—	—	—	—	—	11.6	11.6
12	11.3	11.2	—	11.0	—	—	—	—	—	—	11.6	11.6
13	11.3	11.2	—	11.0	—	—	—	—	—	—	11.6	11.6
14	11.3	—	—	11.0	—	—	—	—	—	—	11.6	11.6
15	11.3	—	—	11.0	—	—	—	—	—	—	11.6	11.6
16	11.3	—	—	11.0	—	—	—	—	—	—	11.6	11.6
17	11.3	—	—	11.0	—	—	—	—	—	—	11.6	11.6
18	11.3	—	—	—	—	—	—	—	—	—	11.6	11.6
19	11.3	—	—	—	—	—	—	—	—	—	11.6	11.6
20	11.2	—	11.1	—	—	—	—	—	—	—	11.6	11.6
21	11.2	—	11.1	—	—	—	—	—	—	—	11.6	11.6
22	11.2	—	11.1	—	—	—	—	—	—	—	11.6	11.6
23	11.2	—	11.1	—	—	—	—	—	—	—	11.6	11.6
24	11.2	—	11.1	—	—	—	—	—	—	—	11.6	11.6
25	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6	11.6
26	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6	11.6
27	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6	11.6
28	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6	11.6
29	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6	11.6
30	11.2	—	11.1	—	—	—	—	—	—	11.6	11.6	11.6
31	11.2	—	11.1	—	—	—	—	—	—	11.6	—	11.6
Mean	11.3	11.2	11.1	11.0	—	—	—	—	—	11.6	11.6	11.6
Max	11.3	11.2	11.1	11.1	—	—	—	—	—	11.6	11.6	11.6
Min	11.2	11.2	11.1	11.0	—	—	—	—	—	11.6	11.6	11.6

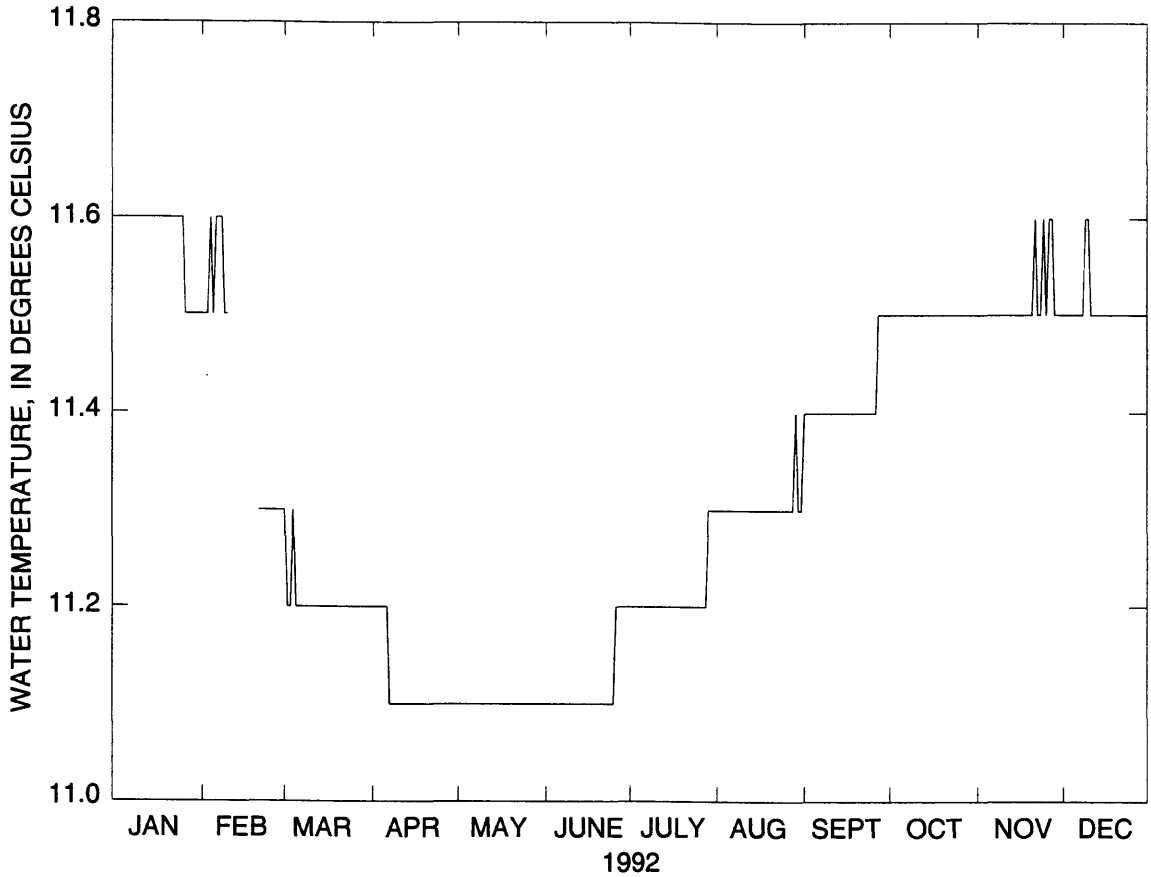

Figure 33. *(E)* Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1992.

Table 68. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1992

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	11.6	11.5	11.3	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
2	11.6	11.5	11.2	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
3	11.6	11.5	11.2	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
4	11.6	11.6	11.3	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
5	11.6	11.5	11.2	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
6	11.6	11.6	11.2	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
7	11.6	11.6	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
8	11.6	11.6	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
9	11.6	11.5	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.6
10	11.6	11.5	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.6
11	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
12	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
13	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
14	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
15	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
16	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
17	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
18	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
19	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
20	11.6	—	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
21	11.6	11.3	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.6	11.5
22	11.6	11.3	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
23	11.6	11.3	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
24	11.6	11.3	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.6	11.5
25	11.6	11.3	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
26	11.5	11.3	11.2	11.1	11.1	11.2	11.2	11.3	11.4	11.5	11.6	11.5
27	11.5	11.3	11.2	11.1	11.1	11.2	11.2	11.3	11.5	11.5	11.6	11.5
28	11.5	11.3	11.2	11.1	11.1	11.2	11.2	11.3	11.5	11.5	11.5	11.5
29	11.5	11.3	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5	11.5
30	11.5	—	11.2	11.1	11.1	11.2	11.3	11.3	11.5	11.5	11.5	11.5
31	11.5	—	11.2	—	11.1	—	11.3	11.3	—	11.5	—	11.5
Mean	11.6	11.4	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5
Max	11.6	11.6	11.3	11.2	11.1	11.2	11.3	11.4	11.5	11.5	11.6	11.6
Min	11.5	11.3	11.2	11.1	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.5

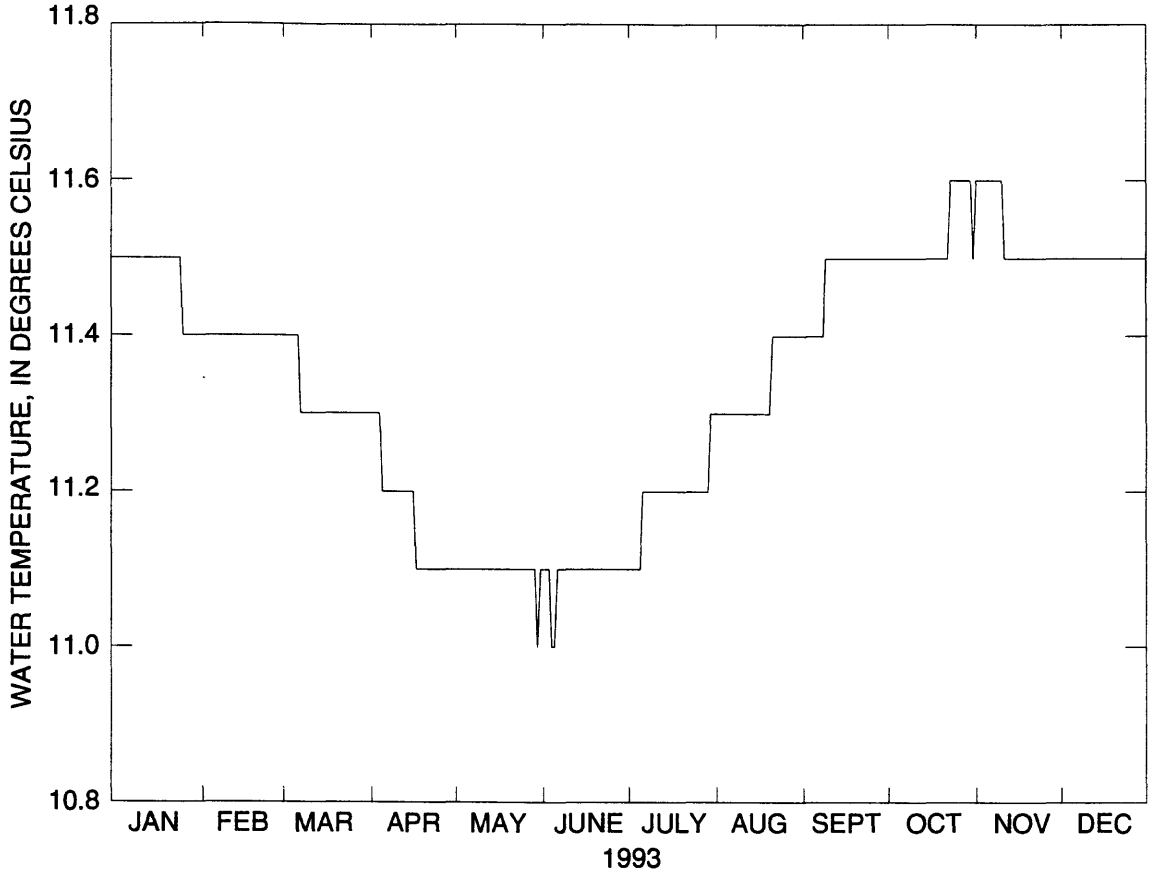

Figure 33. *(F)* Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1993.

Table 69. Daily mean water temperature, Fish Hatchery Spring 23 (FH23-T), Long Valley Caldera, Mono County, California, 1993

[Values are in degrees Celsius. Max, maximum: Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	11.5	11.4	11.4	11.3	11.1	11.1	11.1	11.3	11.4	11.5	11.6	11.5
2	11.5	11.4	11.4	11.3	11.1	11.1	11.1	11.3	11.4	11.5	11.6	11.5
3	11.5	11.4	11.4	11.3	11.1	11.1	11.1	11.3	11.4	11.5	11.6	11.5
4	11.5	11.4	11.4	11.3	11.1	11.0	11.1	11.3	11.4	11.5	11.6	11.5
5	11.5	11.4	11.4	11.2	11.1	11.0	11.1	11.3	11.4	11.5	11.6	11.5
6	11.5	11.4	11.4	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.6	11.5
7	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.6	11.5
8	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.4	11.5	11.6	11.5
9	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.5	11.5	11.6	11.5
10	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.5	11.5	11.6	11.5
11	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
12	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
13	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
14	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
15	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
16	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
17	11.5	11.4	11.3	11.1	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
18	11.5	11.4	11.3	11.1	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
19	11.5	11.4	11.3	11.1	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
20	11.5	11.4	11.3	11.1	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
21	11.5	11.4	11.3	11.1	11.1	11.1	11.2	11.4	11.5	11.5	11.5	11.5
22	11.5	11.4	11.3	11.1	11.1	11.1	11.2	11.4	11.5	11.5	11.5	11.5
23	11.5	11.4	11.3	11.1	11.1	11.1	11.2	11.4	11.5	11.6	11.5	11.5
24	11.5	11.4	11.3	11.1	11.1	11.1	11.2	11.4	11.5	11.6	11.5	11.5
25	11.4	11.4	11.3	11.1	11.1	11.1	11.2	11.4	11.5	11.6	11.5	11.5
26	11.4	11.4	11.3	11.1	11.1	11.1	11.2	11.4	11.5	11.6	11.5	11.5
27	11.4	11.4	11.3	11.1	11.1	11.1	11.2	11.4	11.5	11.6	11.5	11.5
28	11.4	11.4	11.3	11.1	11.1	11.1	11.2	11.4	11.5	11.6	11.5	11.5
29	11.4	—	11.3	11.1	11.1	11.1	11.2	11.4	11.5	11.6	11.5	11.5
30	11.4	—	11.3	11.1	11.0	11.1	11.3	11.4	11.5	11.6	11.5	11.5
31	11.4	—	11.3	—	11.1	—	11.3	11.4	—	11.5	—	11.5
Mean	11.5	11.4	11.3	11.2	11.1	11.1	11.2	11.3	11.5	11.5	11.5	11.5
Max	11.5	11.4	11.4	11.3	11.1	11.1	11.3	11.4	11.5	11.6	11.6	11.5
Min	11.4	11.4	11.3	11.1	11.0	11.0	11.1	11.3	11.4	11.5	11.5	11.5

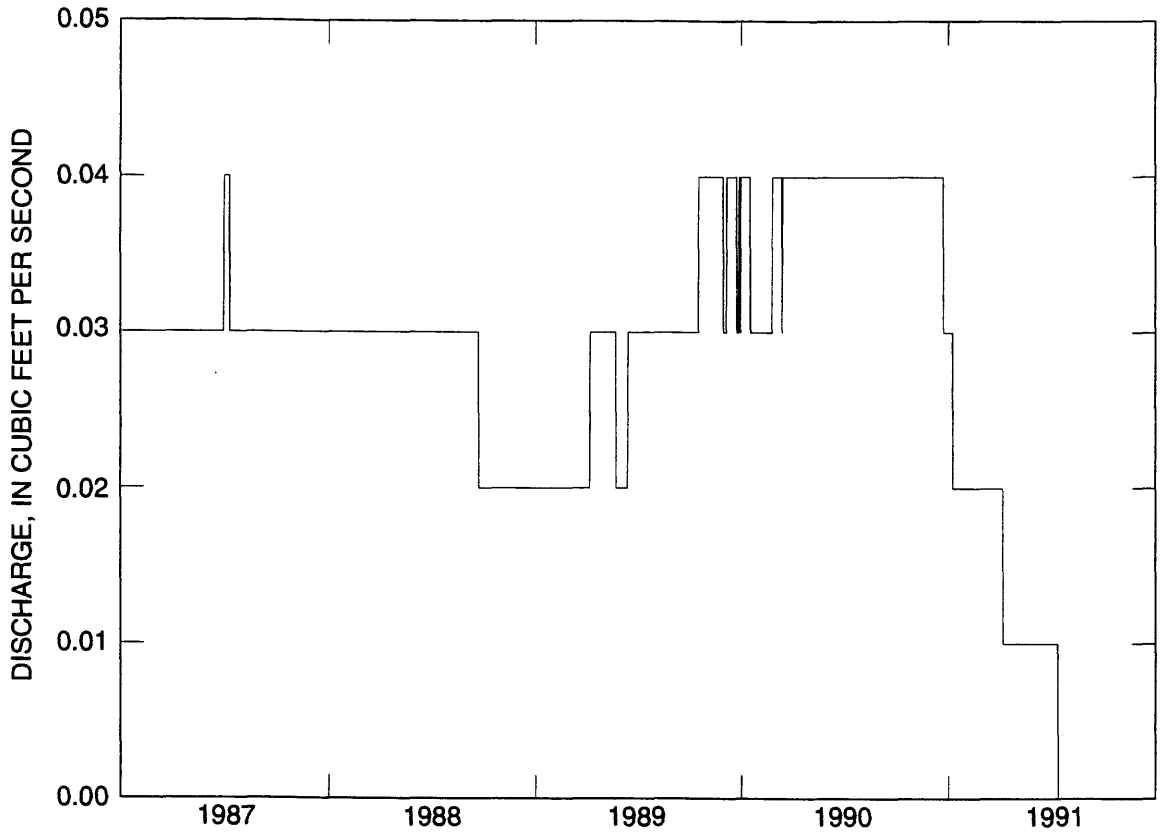

Figure 34. Daily mean discharge, Colton Spring (CS), Long Valley Caldera, Mono County, California, 1987–91.

Table 70. Daily mean discharge, Colton Spring (CS), Long Valley Caldera, Mono County, California, 1987

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
2	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
3	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
4	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
5	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
6	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
7	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
8	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
9	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
10	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
11	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
12	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
13	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
14	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
15	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
16	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
17	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
18	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
19	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
20	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
21	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
22	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
23	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
24	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
25	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
26	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
27	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
28	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
29	.03	—	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
30	.03	—	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
31	.03	—	.03	—	.03	—	.03	.03	—	.03	—	.03
Mean	.030	.030	.030	.030	.030	.030	.033	.030	.030	.030	.030	.030
Max	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.03
Min	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03

Table 71. Daily mean discharge, Colton Spring (CS), Long Valley Caldera, Mono County, California, 1988

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02
2	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
3	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
4	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
5	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
6	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
7	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
8	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
9	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
10	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
11	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
12	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
13	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
14	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
15	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
16	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
17	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
18	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
19	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
20	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
21	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
22	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02
23	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02
24	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02
25	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02
26	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02
27	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02
28	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02
29	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02
30	.03	—	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02
31	.03	—	.03	—	.03	—	.03	.03	—	.02	—	.02
Mean	.030	.030	.030	.030	.030	.030	.030	.030	.027	.020	.020	.020
Max	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
Min	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02	.02

Table 72. Daily mean discharge, Colton Spring (CS), Long Valley Caldera, Mono County, California, 1989

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.02	0.02	0.02	0.02	0.03	0.02	0.03	0.03	0.03	0.03	0.04	0.03
2	.02	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.03
3	.02	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.03
4	.02	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.03
5	.02	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.03
6	.02	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.04
7	.02	.02	.02	.03	.03	.02	.03	.03	.03	.03	.04	.04
8	.02	.02	.02	.03	.03	.02	.03	.03	.03	.03	.04	.04
9	.02	.02	.02	.03	.03	.02	.03	.03	.03	.03	.04	.04
10	.02	.02	.02	.03	.03	.02	.03	.03	.03	.03	.04	.04
11	.02	.02	.02	.03	.03	.02	.03	.03	.03	.03	.04	.04
12	.02	.02	.02	.03	.03	.02	.03	.03	.03	.03	.04	.04
13	.02	.02	.02	.03	.03	.03	.03	.03	.03	.03	.04	.04
14	.02	.02	.02	.03	.03	.03	.03	.03	.03	.03	.04	.04
15	.02	.02	.02	.03	.03	.03	.03	.03	.03	.03	.04	.04
16	.02	.02	.02	.03	.03	.03	.03	.03	.03	.03	.04	.04
17	.02	.02	.02	.03	.03	.03	.03	.03	.03	.04	.04	.04
18	.02	.02	.02	.03	.03	.03	.03	.03	.03	.04	.04	.04
19	.02	.02	.02	.03	.03	.03	.03	.03	.03	.04	.04	.04
20	.02	.02	.02	.03	.03	.03	.03	.03	.03	.04	.04	.04
21	.02	.02	.02	.03	.03	.03	.03	.03	.03	.04	.04	.04
22	.02	.02	.02	.03	.03	.03	.03	.03	.03	.04	.04	.04
23	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.04	.04
24	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.04	.03
25	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.04	.03
26	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.04	.03
27	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.04	.03
28	.02	.02	.02	.03	.02	.03	.03	.03	.03	.04	.04	.04
29	.02	—	.02	.03	.02	.03	.03	.03	.03	.04	.04	.04
30	.02	—	.02	.03	.02	.03	.03	.03	.03	.04	.03	.03
31	.02	—	.02	—	.02	—	.03	.03	—	.04	—	.04
Mean	.020	.020	.020	.028	.027	.026	.030	.030	.030	.035	.040	.037
Max	.02	.02	.02	.03	.03	.03	.03	.03	.03	.04	.04	.04
Min	.02	.02	.02	.02	.02	.02	.03	.03	.03	.03	.03	.03

Table 73. Daily mean discharge, Colton Spring (CS), Long Valley Caldera, Mono County, California, 1990

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
2	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
3	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
4	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
5	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
6	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
7	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
8	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
9	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
10	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
11	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
12	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
13	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
14	.04	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04
15	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
16	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
17	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
18	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
19	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
20	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
21	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
22	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
23	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03
24	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03
25	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03
26	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03
27	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03
28	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03
29	.03	—	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03
30	.03	—	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03
31	.03	—	.04	—	.04	—	.04	.04	—	.04	—	.03
Mean	.035	.031	.040	.040	.040	.040	.040	.040	.040	.040	.040	.037
Max	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Min	.03	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.03

Table 74. Daily mean discharge, Colton Spring (CS), Long Valley Caldera, Mono County, California, 1991

[Values are in cubic feet per second. e, estimated; Max. maximum; Min. minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0	0	—	—	—
2	.03	.02	.02	.02	.01	.01	.01	0	0	—	—	—
3	.03	.02	.02	.02	.01	.01	.01	0	0	—	—	—
4	.03	.02	.02	.02	.01	.01	.01	0	0	—	—	—
5	.03	.02	.02	.02	.01	.01	.01	0	0	—	—	—
6	.03	.02	.02	.01	.01	.01	.01	0	0	—	—	—
7	.03	.02	.02	.01	.01	.01	.01	0	0	—	—	—
8	.03	.02	.02	.01	.01	.01	.01	0	0	—	—	—
9	.02	.02	.02	.01	.01	.01	.01	0	0	—	—	—
10	.02	.02	.02	.01	.01	.01	.01	0	0	—	—	—
11	.02	.02	.02	.01	.01	.01	.01	0	0	—	—	—
12	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
13	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
14	.02	.02	.02	.01	e.01	.01	0	0	0	—	—	—
15	.02	.02	.02	.01	e.01	.01	0	0	0	—	—	—
16	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
17	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
18	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
19	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
20	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
21	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
22	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
23	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
24	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
25	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
26	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
27	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
28	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—
29	.02	—	.02	.01	.01	.01	0	0	0	—	—	—
30	.02	—	.02	.01	.01	.01	0	0	0	—	—	—
31	.02	—	.02	—	.01	—	0	0	—	—	—	—
Mean	.023	.020	.020	.012	.010	.010	.004	0	0	—	—	—
Max	.03	.02	.02	.02	.01	.01	.01	0	0	—	—	—
Min	.02	.02	.02	.01	.01	.01	0	0	0	—	—	—

This page intentionally left blank.

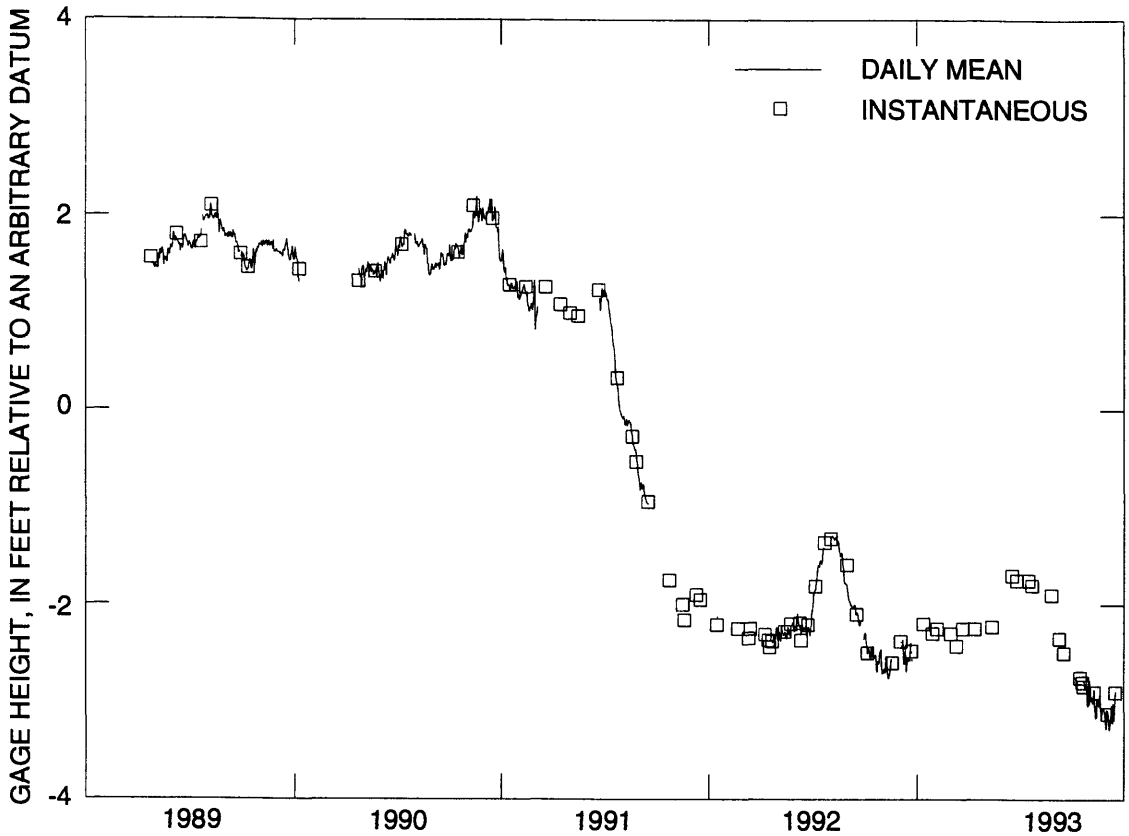

Figure 35. Daily mean and instantaneous measured gage heights, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1989–93.

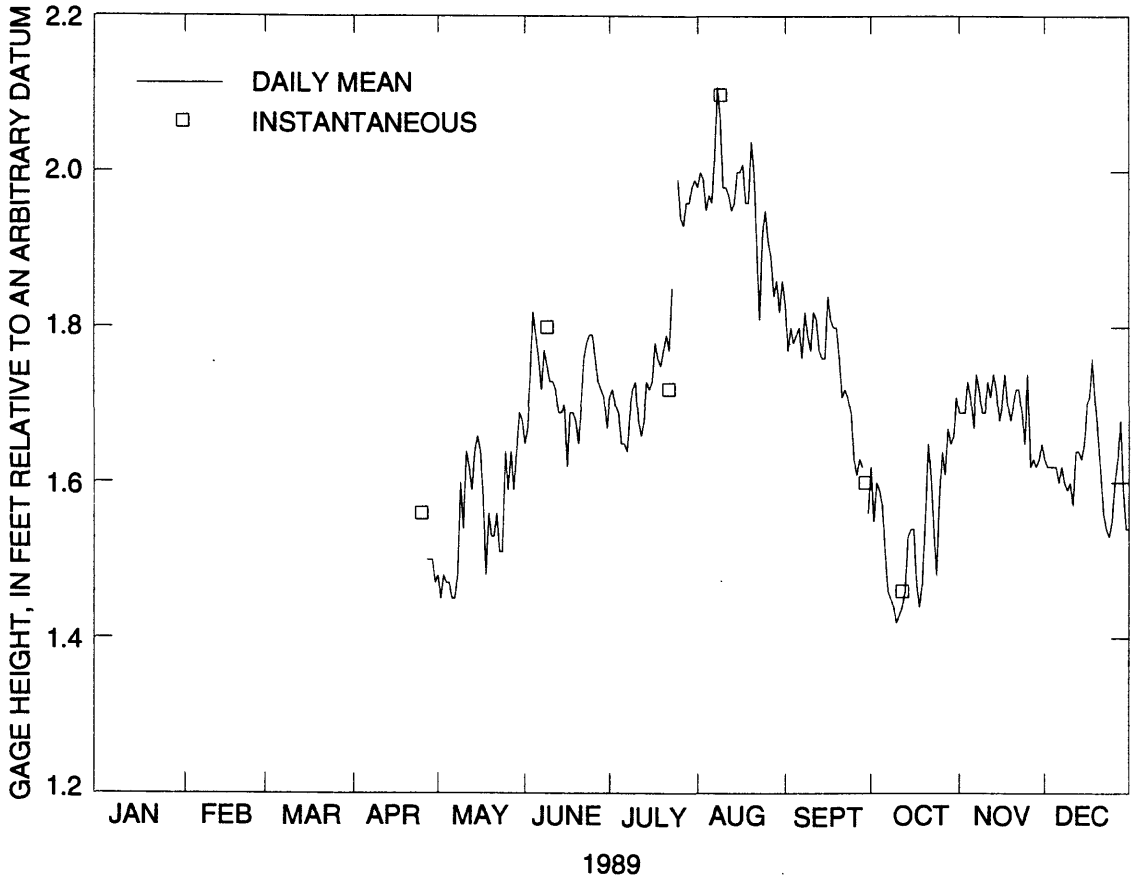

Figure 36. *(A)* Daily mean and instantaneous measured gage heights, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1989.

Table 75. Daily mean gage height, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1989

[Values are in feet relative to an arbitrary datum. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	1.48	1.65	1.71	1.98	1.83	1.62	1.69	1.63
2	—	—	—	—	1.45	1.67	1.72	2.00	1.77	1.55	1.69	1.62
3	—	—	—	—	1.48	1.74	1.70	1.99	1.80	1.60	1.69	1.62
4	—	—	—	—	1.47	1.82	1.69	1.95	1.78	1.59	1.73	1.62
5	—	—	—	—	1.47	1.79	1.65	1.97	1.79	1.57	1.71	1.62
6	—	—	—	—	1.45	1.76	1.65	1.96	1.80	1.51	1.67	1.60
7	—	—	—	—	1.45	1.72	1.64	2.02	1.76	1.46	1.74	1.62
8	—	—	—	—	1.48	1.77	1.69	2.11	1.82	1.45	1.72	1.60
9	—	—	—	—	1.60	1.75	1.72	2.07	1.79	1.44	1.69	1.59
10	—	—	—	—	1.54	1.73	1.73	1.98	1.77	1.42	1.69	1.60
11	—	—	—	—	1.64	1.73	1.68	1.98	1.82	1.43	1.73	1.57
12	—	—	—	—	1.62	1.72	1.66	1.97	1.81	1.44	1.71	1.64
13	—	—	—	—	1.59	1.69	1.68	1.95	1.77	1.46	1.74	1.64
14	—	—	—	—	1.64	1.69	1.73	1.96	1.76	1.53	1.72	1.63
15	—	—	—	—	1.66	1.70	1.72	2.00	1.76	1.54	1.68	1.65
16	—	—	—	—	1.64	1.62	1.73	2.00	1.84	1.54	1.70	1.70
17	—	—	—	—	1.58	1.69	1.78	2.01	1.81	1.47	1.74	1.71
18	—	—	—	—	1.48	1.69	1.76	1.96	1.80	1.44	1.70	1.76
19	—	—	—	—	1.56	1.68	1.75	1.96	1.80	1.47	1.68	1.71
20	—	—	—	—	1.53	1.65	1.77	2.04	1.76	1.55	1.70	1.66
21	—	—	—	—	1.53	1.70	1.79	2.00	1.71	1.65	1.72	1.61
22	—	—	—	—	1.56	1.76	1.77	1.90	1.72	1.61	1.72	1.56
23	—	—	—	—	1.51	1.78	1.85	1.81	1.71	1.54	1.69	1.54
24	—	—	—	—	1.51	1.79	—	1.92	1.69	1.48	1.65	1.53
25	—	—	—	—	1.64	1.79	1.99	1.95	1.63	1.59	1.74	1.55
26	—	—	—	—	1.59	1.76	1.94	1.91	1.61	1.64	1.62	1.60
27	—	—	—	1.50	1.64	1.73	1.93	1.89	1.63	1.61	1.63	1.63
28	—	—	—	1.50	1.59	1.72	1.96	1.84	1.62	1.67	1.62	1.68
29	—	—	—	1.50	1.64	1.71	1.96	1.86	—	1.65	1.63	1.59
30	—	—	—	1.47	1.69	1.67	1.98	1.82	1.56	1.66	1.65	1.54
31	—	—	—	—	1.68	—	1.99	1.86	—	1.71	—	1.54
Mean	—	—	—	1.49	1.56	1.72	1.78	1.96	1.75	1.54	1.69	1.62
Max	—	—	—	1.50	1.69	1.82	1.99	2.11	1.84	1.71	1.74	1.76
Min	—	—	—	1.47	1.45	1.62	1.64	1.81	1.56	1.42	1.62	1.53

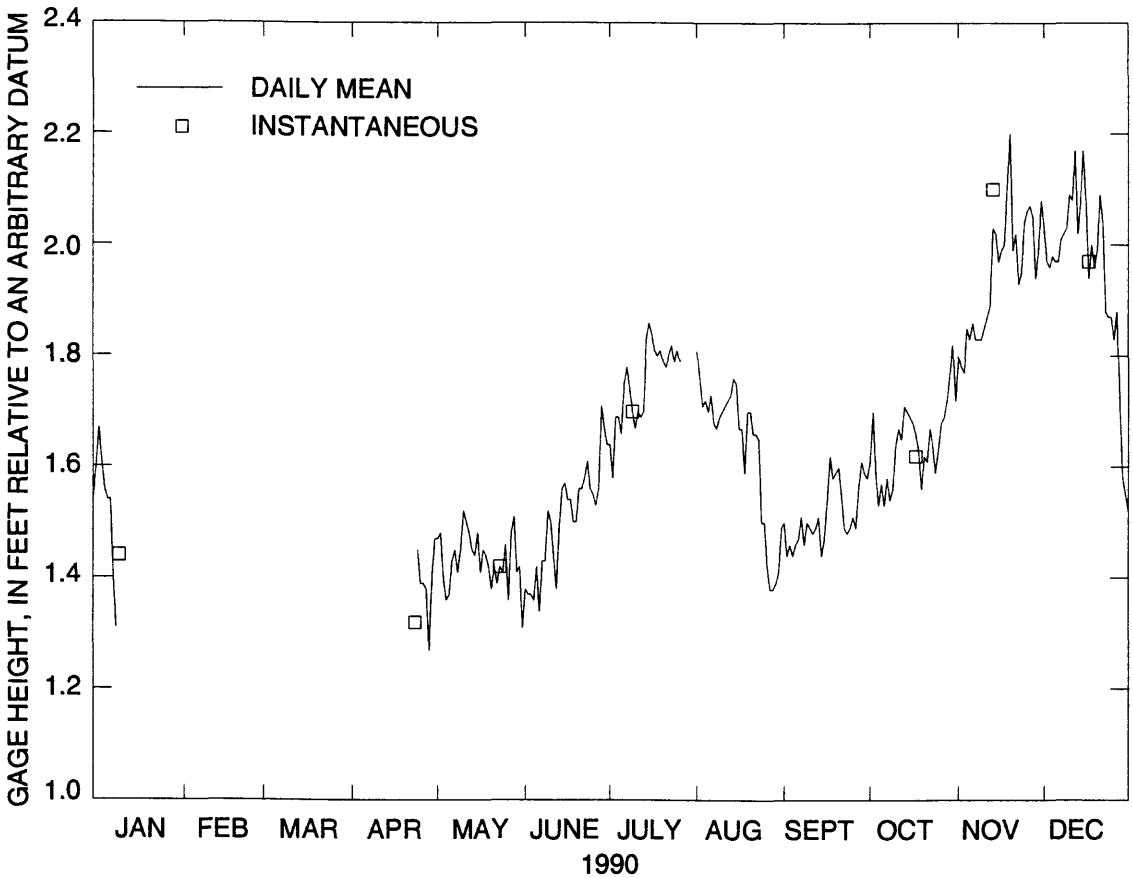

Figure 36. *(B)* Daily mean and instantaneous measured gage heights, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1990.

Table 76. Daily mean gage height, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1990

[Values are in feet relative to an arbitrary datum. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1.60	—	—	—	1.47	1.38	1.64	1.81	1.50	1.61	1.80	2.03
2	1.67	—	—	—	1.48	1.37	1.58	1.76	1.44	1.70	1.78	1.97
3	1.61	—	—	—	1.40	1.37	1.69	1.71	1.46	1.59	1.77	1.96
4	1.56	—	—	—	1.36	1.36	1.69	1.72	1.44	1.53	1.85	1.98
5	1.54	—	—	—	1.37	1.42	1.66	1.70	1.46	1.57	1.83	1.97
6	1.54	—	—	—	1.43	1.34	1.75	1.73	1.47	1.53	1.86	1.97
7	1.40	—	—	—	1.45	1.43	1.78	1.68	1.51	1.58	1.83	2.01
8	1.31	—	—	—	1.41	1.43	1.74	1.67	1.46	1.54	1.83	2.02
9	—	—	—	—	1.45	1.52	1.70	1.69	1.50	1.56	1.83	2.03
10	—	—	—	—	1.52	1.50	1.67	1.70	1.49	1.64	1.85	2.09
11	—	—	—	—	1.50	1.44	1.70	1.71	1.48	1.67	1.87	2.08
12	—	—	—	—	1.48	1.38	1.69	1.72	1.49	1.65	1.89	2.17
13	—	—	—	—	1.45	1.49	1.70	1.73	1.51	1.71	2.03	2.02
14	—	—	—	—	1.44	1.56	1.83	1.76	1.44	1.70	2.02	2.08
15	—	—	—	—	1.48	1.57	1.86	1.75	1.47	1.69	1.97	2.17
16	—	—	—	—	1.41	1.54	1.84	1.67	1.54	1.68	1.99	2.08
17	—	—	—	—	1.45	1.54	1.81	1.67	1.62	1.66	2.00	1.94
18	—	—	—	—	1.44	1.50	1.80	1.59	1.58	1.63	2.11	2.00
19	—	—	—	—	1.42	1.50	1.81	1.70	1.59	1.56	2.20	1.96
20	—	—	—	—	1.38	1.56	1.79	1.70	1.60	1.62	1.99	1.99
21	—	—	—	—	1.42	1.56	1.78	1.66	1.55	1.61	2.02	2.09
22	—	—	—	—	1.39	1.58	1.80	1.66	1.49	1.67	1.93	2.04
23	—	—	—	—	1.42	1.61	1.82	1.65	1.48	1.64	1.95	1.88
24	—	—	—	1.45	1.41	1.56	1.79	1.50	1.49	1.59	2.04	1.87
25	—	—	—	1.39	1.46	1.55	1.81	1.50	1.51	1.63	2.06	1.87
26	—	—	—	1.39	1.36	1.53	1.79	1.42	1.49	1.68	2.07	1.83
27	—	—	—	1.38	1.48	1.56	—	1.38	1.56	1.69	2.05	1.88
28	—	—	—	1.27	1.51	1.71	—	1.38	1.61	1.72	1.94	1.71
29	—	—	—	1.40	1.41	1.67	—	1.39	1.59	1.77	1.99	1.58
30	—	—	—	1.47	1.42	1.64	—	1.41	1.58	1.82	2.08	1.55
31	—	—	—	—	1.31	—	—	1.49	—	1.72	—	1.52
Mean	1.53	—	—	1.39	1.43	1.51	1.75	1.63	1.51	1.64	1.95	1.95
Max	1.67	—	—	1.47	1.52	1.71	1.86	1.81	1.62	1.82	2.20	2.17
Min	1.31	—	—	1.27	1.31	1.34	1.58	1.38	1.44	1.53	1.77	1.52

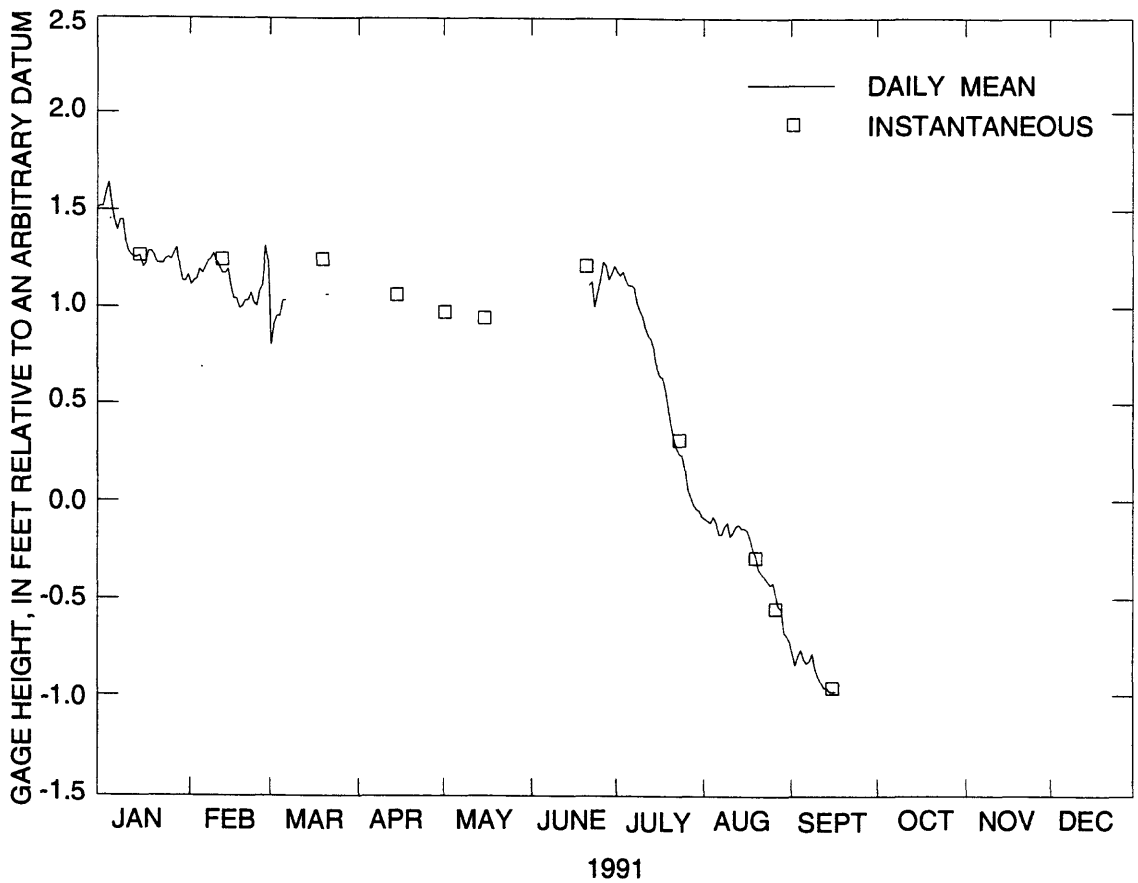

Figure 36. *(C)* Daily mean and instantaneous measured gage heights, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1991.

Table 77. Daily mean gage height, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1991

[Values are in feet relative to an arbitrary datum. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1.53	1.18	1.25	—	—	—	1.23	−0.06	−0.70	—	—	—
2	1.53	1.13	0.82	—	—	—	1.20	−.07	−.76	—	—	—
3	1.60	1.15	0.93	—	—	—	1.18	−.08	−.82	—	—	—
4	1.65	1.16	0.97	—	—	—	1.20	−.09	−.77	—	—	—
5	1.54	1.21	0.97	—	—	—	1.16	−.06	−.74	—	—	—
6	1.46	1.19	1.05	—	—	—	1.13	−.09	−.79	—	—	—
7	1.41	1.22	1.05	—	—	—	1.13	−.15	−.81	—	—	—
8	1.46	1.25	—	—	—	—	1.12	−.15	−.80	—	—	—
9	1.46	1.26	—	—	—	—	1.04	−.11	−.76	—	—	—
10	1.35	1.29	—	—	—	—	1.00	−.09	−.84	—	—	—
11	1.30	1.25	—	—	—	—	.97	−.16	−.88	—	—	—
12	1.28	1.22	—	—	—	—	.91	−.14	−.91	—	—	—
13	1.27	1.19	—	—	—	—	.87	−.11	−.94	—	—	—
14	1.27	1.19	—	—	—	—	.85	−.10	−.94	—	—	—
15	1.28	1.21	—	—	—	—	.80	−.12	−.96	—	—	—
16	1.22	1.12	—	—	—	—	.70	−.12	−.96	—	—	—
17	1.24	1.06	—	—	—	—	.66	−.13	−.96	—	—	—
18	1.30	1.06	—	—	—	—	.65	−.17	—	—	—	—
19	1.30	1.01	—	—	—	—	.59	−.23	—	—	—	—
20	1.28	1.02	—	—	—	—	.50	−.26	—	—	—	—
21	1.24	1.05	1.08	—	—	—	.41	−.33	—	—	—	—
22	1.24	1.05	1.08	—	—	1.13	.34	−.35	—	—	—	—
23	1.24	1.09	—	—	—	1.15	.29	−.37	—	—	—	—
24	1.26	1.04	—	—	—	1.02	.26	−.39	—	—	—	—
25	1.27	1.02	—	—	—	1.09	.25	−.41	—	—	—	—
26	1.26	1.10	—	—	—	1.16	.18	−.40	—	—	—	—
27	1.29	1.13	—	—	—	1.25	.08	−.46	—	—	—	—
28	1.32	1.33	—	—	—	1.23	.04	−.52	—	—	—	—
29	1.22	—	—	—	—	1.16	0.00	−.53	—	—	—	—
30	1.15	—	—	—	—	1.19	−.02	−.65	—	—	—	—
31	1.15	—	—	—	—	—	−.03	−.67	—	—	—	—
Mean	1.33	1.15	1.02	—	—	1.15	.67	−.24	−.84	—	—	—
Max	1.65	1.33	1.25	—	—	1.25	1.23	−.06	−.70	—	—	—
Min	1.15	1.01	0.82	—	—	1.02	−.03	−.67	−.96	—	—	—

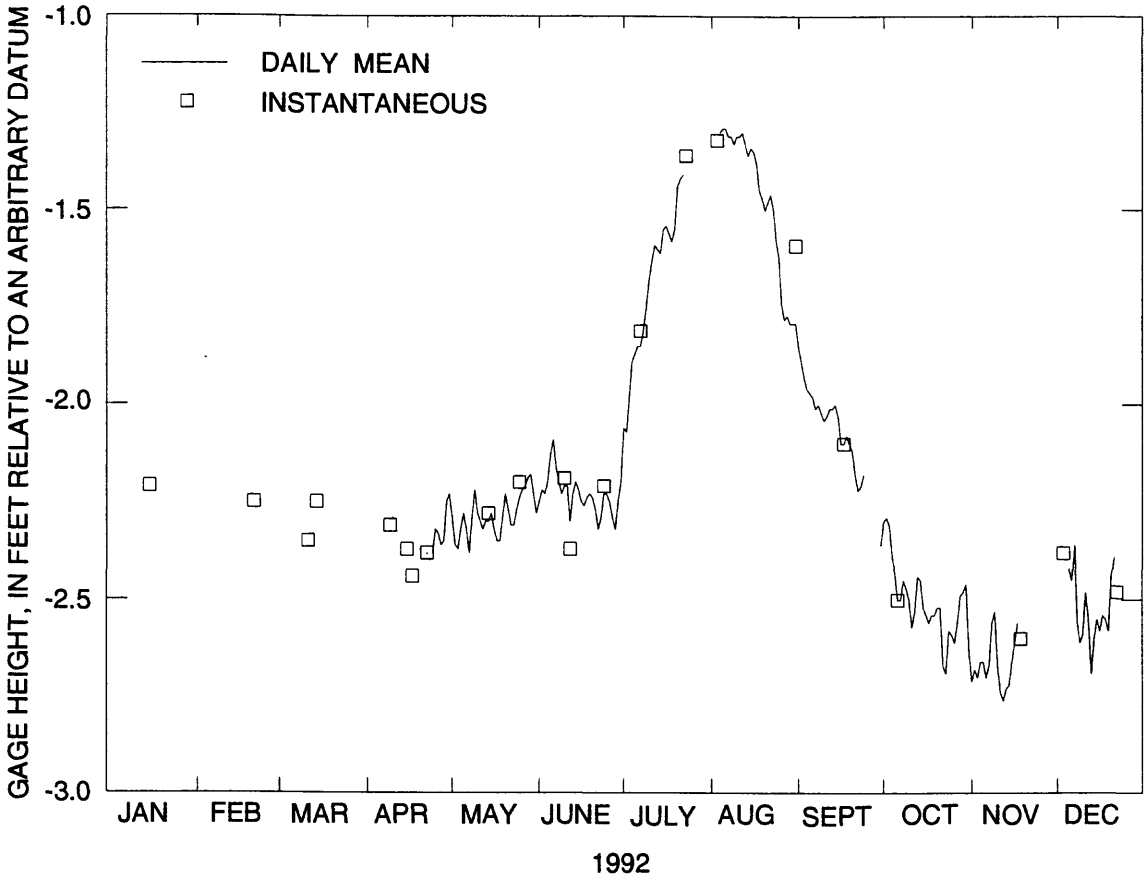

Figure 36. *(D)* Daily mean and instantaneous measured gage heights, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1992.

Table 78. Daily mean gage height, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1992

[Values are in feet relative to an arbitrary datum. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	−2.29	−2.25	−2.06	—	−1.85	−2.30	−2.71	—
2	—	—	—	—	−2.36	−2.22	−2.07	—	−1.89	−2.29	−2.68	—
3	—	—	—	—	−2.37	−2.23	−1.98	—	−1.93	−2.31	−2.70	—
4	—	—	—	—	−2.32	−2.20	−1.89	−1.30	−1.96	−2.39	−2.66	—
5	—	—	—	—	−2.28	−2.13	−1.87	−1.29	−1.97	−2.43	−2.66	−2.42
6	—	—	—	—	−2.32	−2.09	−1.85	−1.29	−1.98	−2.50	−2.70	−2.45
7	—	—	—	—	−2.38	−2.16	−1.85	−1.31	−2.01	−2.50	−2.67	−2.36
8	—	—	—	—	−2.29	−2.20	−1.81	−1.31	−2.00	−2.45	−2.56	−2.56
9	—	—	—	—	−2.22	−2.23	−1.75	−1.33	−2.02	−2.47	−2.53	−2.61
10	—	—	—	—	−2.28	−2.21	−1.68	−1.31	−2.04	−2.50	−2.67	−2.59
11	—	—	—	—	−2.30	−2.21	−1.63	−1.31	−2.03	−2.57	−2.74	−2.48
12	—	—	—	—	−2.32	−2.30	−1.59	−1.30	−2.01	−2.53	−2.76	−2.55
13	—	—	—	—	−2.30	−2.23	−1.60	−1.33	−2.01	−2.44	−2.73	−2.69
14	—	—	—	—	−2.30	−2.20	−1.61	−1.36	−2.00	−2.45	−2.72	−2.60
15	—	—	—	—	−2.28	−2.22	−1.55	−1.34	−2.03	−2.52	−2.66	−2.55
16	—	—	—	—	−2.32	−2.25	−1.54	−1.35	−2.10	−2.54	−2.61	−2.58
17	—	—	—	—	−2.35	−2.26	−1.56	−1.38	−2.10	−2.56	−2.56	−2.54
18	—	—	—	—	−2.35	−2.24	−1.58	−1.45	−2.08	−2.54	—	−2.55
19	—	—	—	—	−2.29	−2.23	−1.55	−1.47	−2.10	−2.54	—	−2.58
20	—	—	—	—	−2.23	−2.24	−1.44	−1.50	−2.12	−2.52	—	−2.44
21	—	—	—	—	−2.27	−2.27	−1.42	−1.48	−2.18	−2.52	—	−2.39
22	—	—	—	—	−2.31	−2.32	−1.41	−1.46	−2.22	−2.67	—	—
23	—	—	—	—	−2.31	−2.29	—	−1.50	−2.21	−2.69	—	—
24	—	—	—	−2.38	−2.27	−2.23	—	−1.58	−2.18	−2.58	—	—
25	—	—	—	−2.32	−2.24	−2.23	—	−1.62	—	−2.59	—	—
26	—	—	—	−2.33	−2.22	−2.25	—	−1.74	—	−2.61	—	—
27	—	—	—	−2.36	−2.21	−2.29	—	−1.78	—	−2.56	—	—
28	—	—	—	−2.35	−2.19	−2.32	—	−1.77	—	−2.49	—	—
29	—	—	—	−2.25	−2.18	−2.25	—	−1.79	—	−2.48	—	—
30	—	—	—	−2.23	−2.23	−2.20	—	−1.79	−2.36	−2.46	—	—
31	—	—	—	—	−2.28	—	—	−1.79	—	−2.63	—	—
Mean	—	—	—	−2.32	−2.29	−2.23	−1.70	−1.47	−2.06	−2.50	−2.67	−2.53
Max	—	—	—	−2.23	−2.18	−2.09	−1.41	−1.29	−1.85	−2.29	−2.53	−2.36
Min	—	—	—	−2.38	−2.38	−2.32	−2.07	−1.79	−2.36	−2.69	−2.76	−2.69

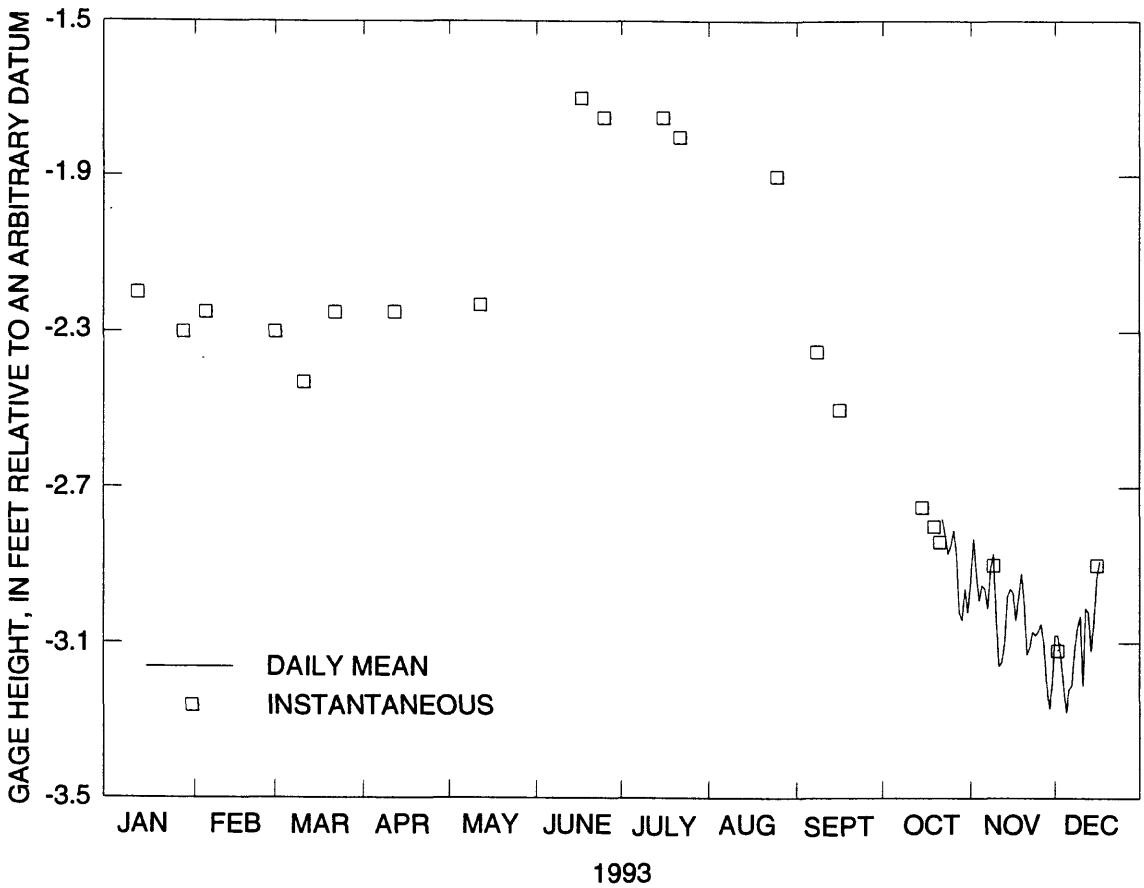

Figure 36. *(E)* Daily mean and instantaneous measured gage heights, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1993.

Table 79. Daily mean gage height, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1993

[Values are in feet relative to an arbitrary datum. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	—	—	—	—	—	—	-2.94	-3.08
2	—	—	—	—	—	—	—	—	—	—	-2.83	-3.08
3	—	—	—	—	—	—	—	—	—	—	-2.92	-3.13
4	—	—	—	—	—	—	—	—	—	—	-2.99	-3.20
5	—	—	—	—	—	—	—	—	—	—	-2.95	-3.28
6	—	—	—	—	—	—	—	—	—	—	-2.96	-3.22
7	—	—	—	—	—	—	—	—	—	—	-3.01	-3.21
8	—	—	—	—	—	—	—	—	—	—	-2.91	-3.12
9	—	—	—	—	—	—	—	—	—	—	-2.87	-3.06
10	—	—	—	—	—	—	—	—	—	—	-3.03	-3.03
11	—	—	—	—	—	—	—	—	—	—	-3.16	-3.21
12	—	—	—	—	—	—	—	—	—	—	-3.15	-3.01
13	—	—	—	—	—	—	—	—	—	—	-3.10	-3.02
14	—	—	—	—	—	—	—	—	—	—	-2.98	-3.12
15	—	—	—	—	—	—	—	—	—	—	-2.96	-3.04
16	—	—	—	—	—	—	—	—	—	—	-2.97	-2.93
17	—	—	—	—	—	—	—	—	—	—	-3.04	-2.89
18	—	—	—	—	—	—	—	—	—	—	-2.98	—
19	—	—	—	—	—	—	—	—	—	—	-2.92	—
20	—	—	—	—	—	—	—	—	—	—	-3.00	—
21	—	—	—	—	—	—	—	—	—	—	-3.13	—
22	—	—	—	—	—	—	—	—	—	-2.78	-3.11	—
23	—	—	—	—	—	—	—	—	—	-2.82	-3.07	—
24	—	—	—	—	—	—	—	—	—	-2.87	-3.08	—
25	—	—	—	—	—	—	—	—	—	-2.85	-3.07	—
26	—	—	—	—	—	—	—	—	—	-2.81	-3.05	—
27	—	—	—	—	—	—	—	—	—	-2.87	-3.10	—
28	—	—	—	—	—	—	—	—	—	-3.02	-3.20	—
29	—	—	—	—	—	—	—	—	—	-3.04	-3.27	—
30	—	—	—	—	—	—	—	—	—	-2.96	-3.21	—
31	—	—	—	—	—	—	—	—	—	-3.02	—	—
Mean	—	—	—	—	—	—	—	—	—	-2.90	-3.03	-3.10
Max	—	—	—	—	—	—	—	—	—	-2.78	-2.83	-2.89
Min	—	—	—	—	—	—	—	—	—	-3.04	-3.27	-3.28

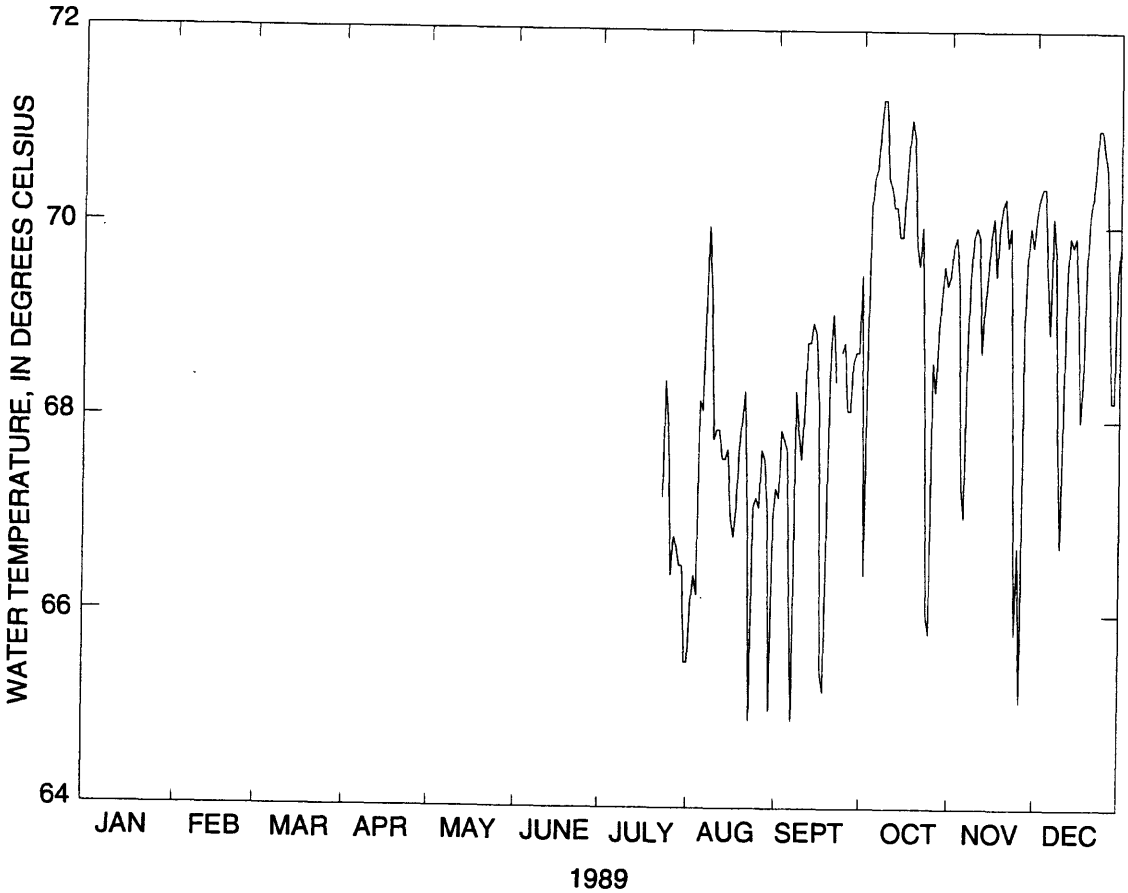

Figure 37. *(A)* Daily mean water temperature, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1989.

Table 80. Daily mean water temperature, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1989

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	—	—	—	65.5	67.3	69.5	69.5	70.1
2	—	—	—	—	—	—	—	66.1	67.2	66.4	69.8	70.3
3	—	—	—	—	—	—	—	66.4	67.9	68.7	69.9	70.4
4	—	—	—	—	—	—	—	66.2	67.8	70.2	69.5	70.4
5	—	—	—	—	—	—	—	68.2	67.7	70.5	67.4	69.5
6	—	—	—	—	—	—	—	68.1	66.1	70.6	67.0	68.9
7	—	—	—	—	—	—	—	69.1	64.9	71.0	68.7	70.1
8	—	—	—	—	—	—	—	70.0	68.3	71.3	69.5	69.7
9	—	—	—	—	—	—	—	69.3	67.9	71.3	69.9	67.8
10	—	—	—	—	—	—	—	67.8	67.6	70.5	70.0	66.7
11	—	—	—	—	—	—	—	67.9	68.1	70.4	69.9	68.2
12	—	—	—	—	—	—	—	67.9	68.8	70.2	68.7	69.5
13	—	—	—	—	—	—	—	67.6	68.8	70.2	69.2	69.9
14	—	—	—	—	—	—	—	67.6	69.0	69.9	69.5	69.8
15	—	—	—	—	—	—	—	67.7	68.9	69.9	69.9	69.9
16	—	—	—	—	—	—	—	67.0	68.2	70.4	70.1	69.2
17	—	—	—	—	—	—	—	66.8	65.4	70.8	69.5	68.0
18	—	—	—	—	—	—	—	67.1	65.2	71.1	70.0	68.4
19	—	—	—	—	—	—	—	67.7	67.1	70.9	70.2	69.6
20	—	—	—	—	—	—	—	68.0	68.7	69.8	70.3	70.1
21	—	—	—	—	—	—	—	68.3	69.1	69.6	69.8	70.3
22	—	—	—	—	—	—	—	67.1	68.4	70.0	70.0	70.6
23	—	—	—	—	—	—	67.2	64.9	—	68.4	68.3	71.0
24	—	—	—	—	—	—	68.4	67.1	68.7	66.0	65.8	71.0
25	—	—	—	—	—	—	67.9	67.2	68.8	65.8	66.7	70.8
26	—	—	—	—	—	—	66.4	67.1	68.1	68.6	65.1	70.6
27	—	—	—	—	—	—	66.8	67.7	68.1	68.3	69.0	69.5
28	—	—	—	—	—	—	66.7	67.6	68.6	68.9	69.7	68.2
29	—	—	—	—	—	—	66.5	67.1	68.7	69.3	70.0	68.2
30	—	—	—	—	—	—	66.5	65.0	68.7	69.6	69.8	69.5
31	—	—	—	—	—	—	65.5	67.0	—	69.4	—	69.8
Mean	—	—	—	—	—	—	66.9	67.4	67.9	69.6	69.1	69.5
Max	—	—	—	—	—	—	68.4	70.0	69.1	71.3	70.3	71.0
Min	—	—	—	—	—	—	65.5	64.9	64.9	65.8	65.1	66.7

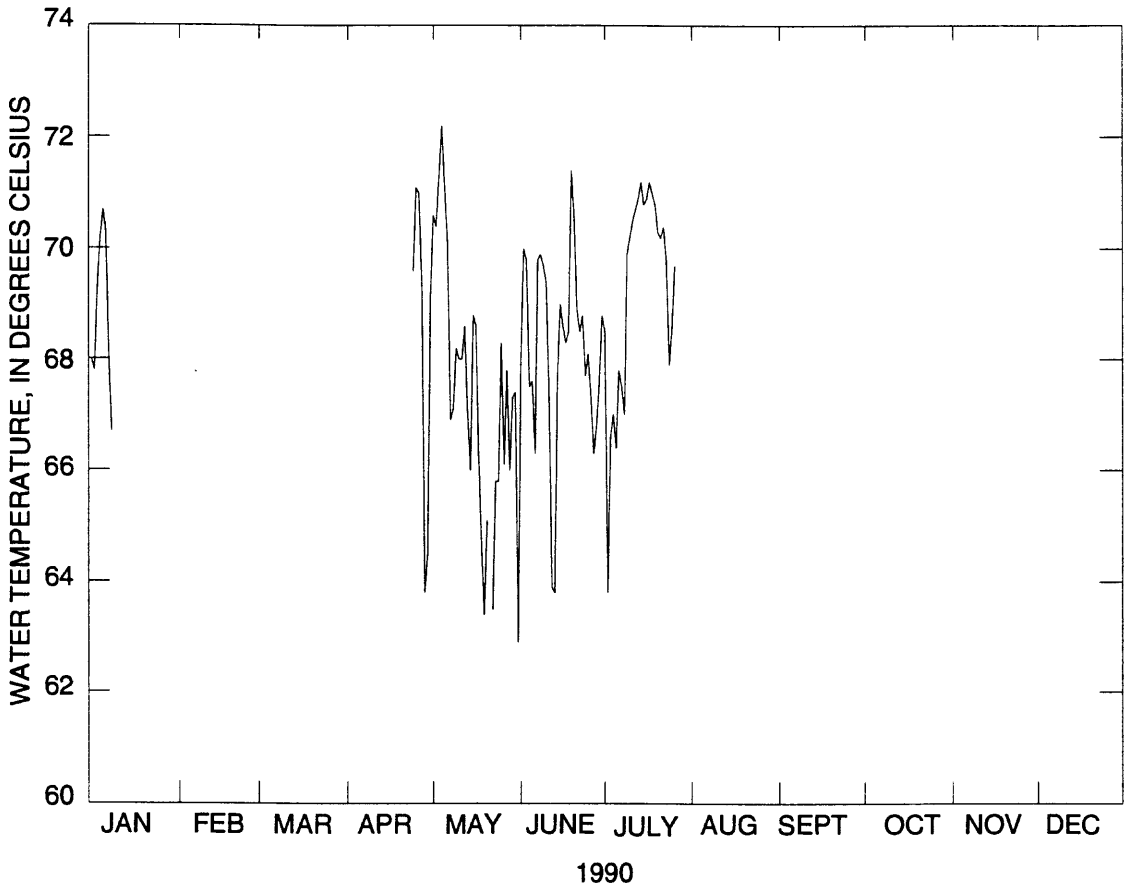

Figure 37. *(B)* Daily mean water temperature, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1990.

Table 81. Daily mean water temperature, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1990

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	68.0	—	—	—	70.6	68.0	68.5	—	—	—	—	—
2	67.8	—	—	—	70.4	70.0	63.8	—	—	—	—	—
3	69.3	—	—	—	71.3	69.8	66.6	—	—	—	—	—
4	70.2	—	—	—	72.2	67.5	67.0	—	—	—	—	—
5	70.7	—	—	—	71.1	67.6	66.4	—	—	—	—	—
6	70.3	—	—	—	70.1	66.3	67.8	—	—	—	—	—
7	68.1	—	—	—	66.9	69.8	67.5	—	—	—	—	—
8	66.7	—	—	—	67.1	69.9	67.0	—	—	—	—	—
9	—	—	—	—	68.2	69.7	69.9	—	—	—	—	—
10	—	—	—	—	68.0	69.4	70.2	—	—	—	—	—
11	—	—	—	—	68.0	67.3	70.5	—	—	—	—	—
12	—	—	—	—	68.6	63.9	70.7	—	—	—	—	—
13	—	—	—	—	67.0	63.8	70.9	—	—	—	—	—
14	—	—	—	—	66.0	67.7	71.2	—	—	—	—	—
15	—	—	—	—	68.8	69.0	70.8	—	—	—	—	—
16	—	—	—	—	68.6	68.6	70.9	—	—	—	—	—
17	—	—	—	—	66.3	68.3	71.2	—	—	—	—	—
18	—	—	—	—	64.7	68.5	71.0	—	—	—	—	—
19	—	—	—	—	63.4	71.4	70.8	—	—	—	—	—
20	—	—	—	—	65.1	70.6	70.3	—	—	—	—	—
21	—	—	—	—	—	68.9	70.2	—	—	—	—	—
22	—	—	—	—	63.5	68.5	70.4	—	—	—	—	—
23	—	—	—	—	65.8	68.8	69.8	—	—	—	—	—
24	—	—	—	69.6	65.8	67.7	67.9	—	—	—	—	—
25	—	—	—	71.1	68.3	68.1	68.6	—	—	—	—	—
26	—	—	—	71.0	66.1	67.3	69.7	—	—	—	—	—
27	—	—	—	69.4	67.8	66.3	—	—	—	—	—	—
28	—	—	—	63.8	66.0	66.8	—	—	—	—	—	—
29	—	—	—	64.5	67.3	67.6	—	—	—	—	—	—
30	—	—	—	69.1	67.4	68.8	—	—	—	—	—	—
31	—	—	—	—	62.9	—	—	—	—	—	—	—
Mean	68.9	—	—	68.4	67.4	68.2	69.2	—	—	—	—	—
Max	70.7	—	—	71.1	72.2	71.4	71.2	—	—	—	—	—
Min	66.7	—	—	63.8	62.9	63.8	63.8	—	—	—	—	—

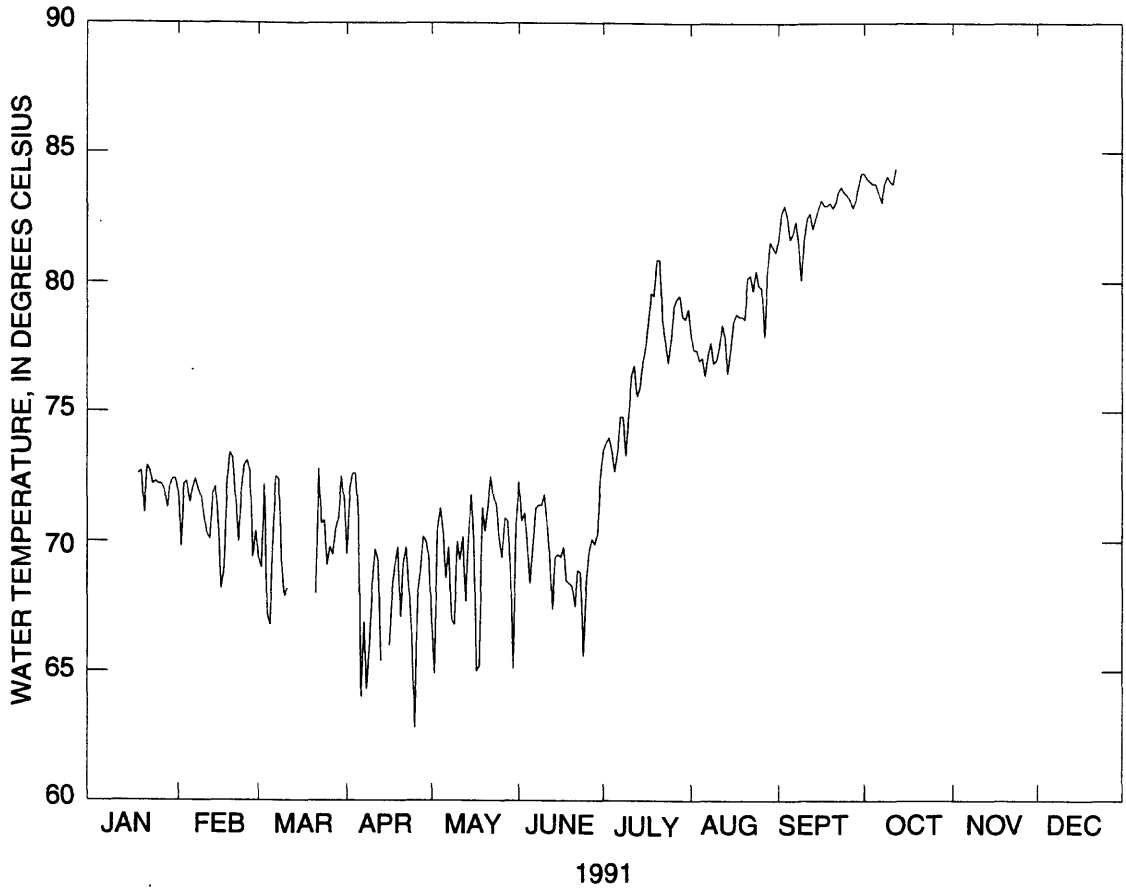

Figure 37. *(C)* Daily mean water temperature, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1991.

Table 82. Daily mean water temperature, Hot Bubbling Pool (HBP), Long Valley Caldera, Mono County, California, 1991

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	71.9	69.4	69.5	66.9	72.3	73.5	78.0	81.7	84.2	—	—
2	—	69.8	69.0	72.0	64.9	70.8	73.8	77.4	82.7	84.0	—	—
3	—	72.2	72.2	72.6	70.5	71.1	74.0	77.4	83.0	83.9	—	—
4	—	72.3	67.2	72.6	71.3	69.9	73.5	77.0	82.6	83.8	—	—
5	—	71.5	66.8	71.0	70.4	68.4	72.7	77.1	81.7	83.8	—	—
6	—	72.0	70.2	64.0	68.6	69.8	73.4	76.4	81.9	83.5	—	—
7	—	72.4	72.5	66.9	69.8	71.3	74.8	77.2	82.4	83.1	—	—
8	—	72.0	72.4	64.3	67.0	71.4	74.8	77.7	81.6	83.8	—	—
9	—	71.7	69.3	66.1	66.8	71.4	73.3	76.9	80.1	84.1	—	—
10	—	70.9	67.9	68.4	70.0	71.8	74.9	77.0	81.7	83.9	—	—
11	—	70.3	68.2	69.7	69.3	70.7	76.4	77.5	82.5	83.8	—	—
12	—	70.1	—	69.3	70.2	69.5	76.8	78.4	82.7	84.4	—	—
13	—	71.8	—	65.4	67.7	67.4	75.6	77.9	82.1	—	—	—
14	—	72.1	—	—	70.2	69.4	75.9	76.5	82.5	—	—	—
15	—	70.6	—	—	71.8	69.5	76.9	77.4	82.9	—	—	—
16	—	68.2	—	66.0	70.1	69.4	77.5	78.5	83.2	—	—	—
17	—	68.9	—	68.1	65.0	69.8	78.6	78.8	83.0	—	—	—
18	72.6	72.2	—	69.1	65.2	68.5	79.6	78.7	83.0	—	—	—
19	72.7	73.4	—	69.8	71.3	68.4	79.5	78.7	83.1	—	—	—
20	71.1	73.2	—	67.1	70.4	68.3	80.9	78.6	82.9	—	—	—
21	72.9	71.7	68.0	69.2	71.4	67.5	80.9	80.2	83.1	—	—	—
22	72.7	70.0	72.8	69.8	72.5	68.9	78.5	80.3	83.5	—	—	—
23	72.2	71.9	70.7	68.2	71.7	68.8	77.7	79.7	83.7	—	—	—
24	72.3	72.9	70.8	66.3	71.4	65.6	76.9	80.5	83.5	—	—	—
25	72.2	73.1	69.1	62.8	70.1	68.3	77.8	79.9	83.4	—	—	—
26	72.2	72.7	69.8	67.9	69.4	69.6	79.1	79.8	83.2	—	—	—
27	72.0	69.4	69.5	68.8	70.9	70.1	79.4	77.9	82.9	—	—	—
28	71.3	70.4	70.5	70.2	70.8	69.9	79.5	80.4	83.2	—	—	—
29	72.1	—	70.9	70.0	69.1	70.3	78.7	81.6	83.7	—	—	—
30	72.4	—	72.5	69.4	65.1	72.5	78.6	81.4	84.2	—	—	—
31	72.4	—	71.6	—	70.7	—	79.0	81.2	—	—	—	—
Mean	72.2	71.4	70.1	68.4	69.4	69.7	76.9	78.6	82.7	83.9	—	—
Max	72.9	73.4	72.8	72.6	72.5	72.5	80.9	81.6	84.2	84.4	—	—
Min	71.1	68.2	66.8	62.8	64.9	65.6	72.7	76.4	80.1	83.1	—	—

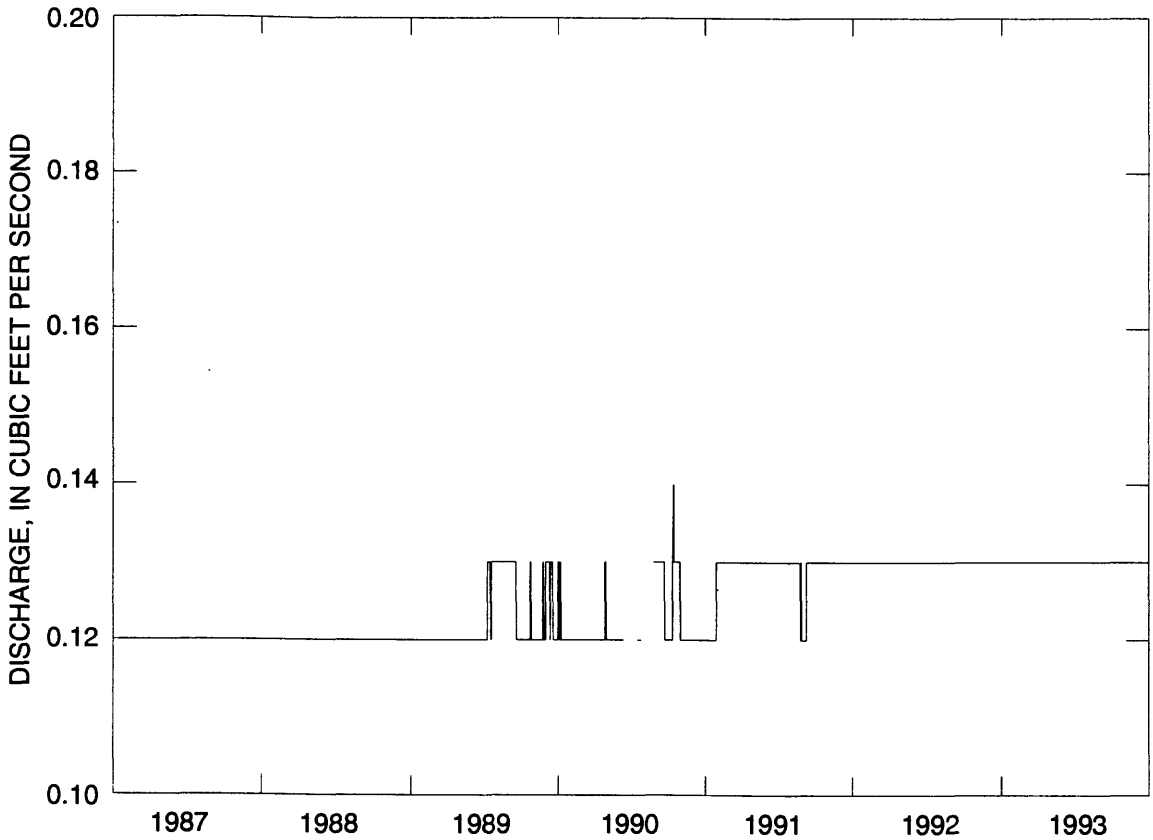

Figure 38. Daily mean discharge, Little Hot Creek Spring (LHC-SP), Long Valley Caldera, Mono County, California, 1987–93.

Table 83. Monthly mean discharge, Little Hot Creek Spring (LHC-SP), Long Valley Caldera, Mono County, California, 1987–93

[Values are in cubic feet per second]

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1987	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
1988	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
1989	.12	.12	.12	.12	.12	.12	.13	.13	.13	.12	.12	.13
1990	.12	.12	.12	.12	.12	.12	.12	.13	.13	.13	.12	.12
1991	.12	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13
1992	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13
1993	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13

Table 84. Miscellaneous discharge and water temperature, Big Alkali Lake Spring (BAL), Long Valley Caldera, Mono County, California, 1988–93

[Discharge is in cubic feet per second; water temperature is in degrees Celsius. —, no data]

Date	Discharge	Water temperature
06-22-88	2.12	57.5
07-14-88	1.78	57.6
08-11-88	1.15	58.4
09-14-88	1.15	58.2
10-17-88	1.45	58.1
11-22-88	2.31	57.7
12-13-88	2.50	56.2
01-12-89	1.44	57.4
02-16-89	2.12	57.2
03-20-89	2.12	57.0
04-10-89	1.95	57.2
05-17-89	1.95	57.4
06-26-89	2.12	57.6
07-17-89	1.61	57.7
08-17-89	1.95	57.9
09-20-89	2.12	57.6
10-16-89	2.49	57.3
11-22-89	2.49	57.4
12-19-89	1.95	57.4
01-10-90	2.69	57.1
02-20-90	3.09	56.5
03-21-90	2.69	56.8
04-25-90	2.69	56.7
05-23-90	2.49	57.0
07-17-90	2.32	—
05-01-91	1.64	56.4
06-16-91	1.64	—
04-23-92	1.53	56.6
08-14-92	1.44	57.8
07-14-93	1.94	57.0
12-16-93	2.31	57.4

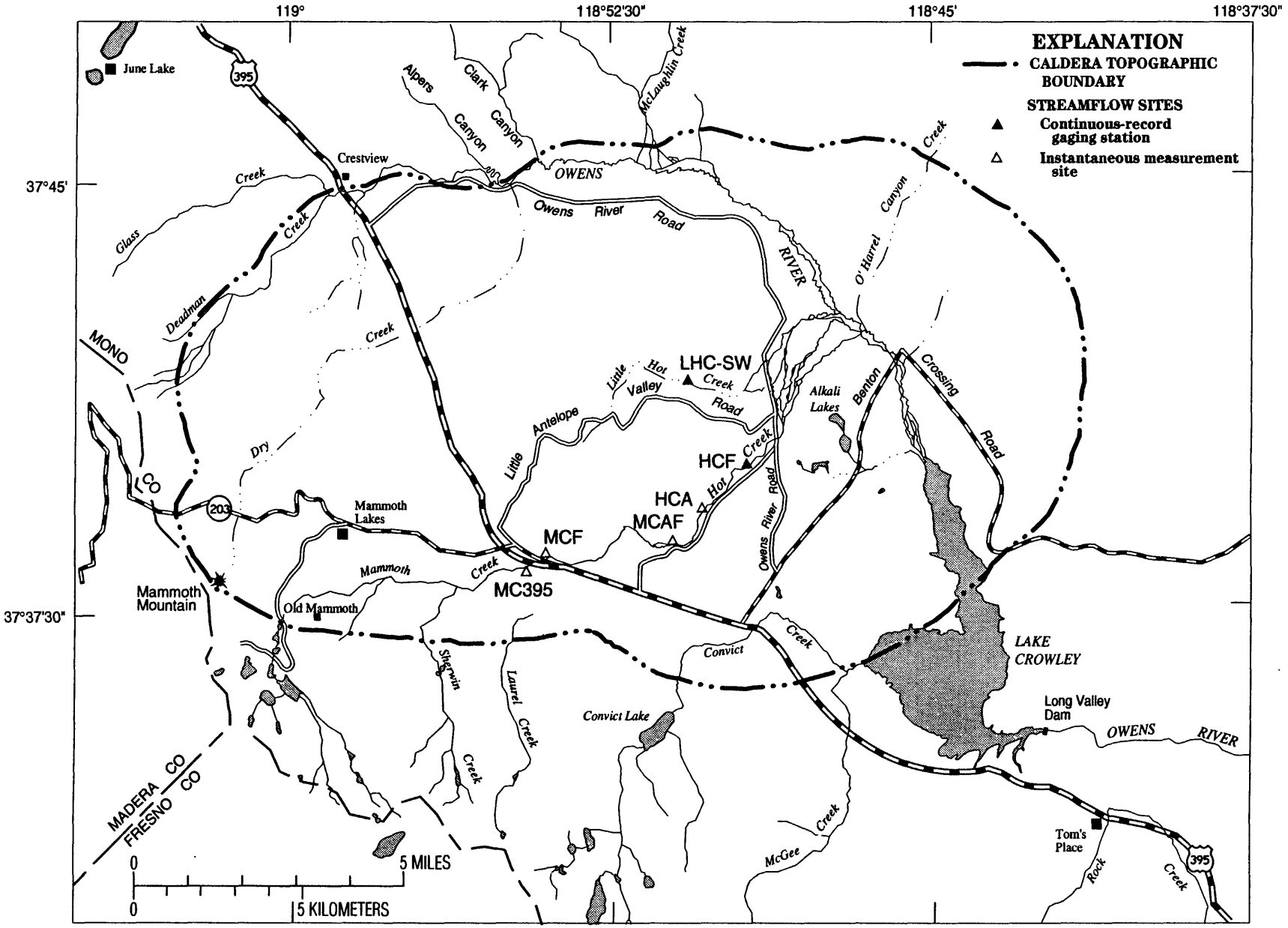

Figure 39. Locations of streamflow sites, Long Valley Caldera, Mono County, California.

Table 85. Instantaneous discharge measurements, Mammoth Creek at Highway 395 (MC395), Long Valley Caldera, Mono County, California, 1988–93

[Discharge is in cubic feet per second]

Date	Discharge
07-13-88	12.9
10-18-88	3.48
01-11-89	1.04
04-11-89	9.14
07-18-89	8.97
10-17-89	3.90
01-09-90	4.32
04-25-90	10.4
07-17-90	7.74
10-16-90	2.03
01-17-91	3.24
04-16-91	2.36
07-22-91	14.4
10-22-91	3.59
01-13-92	4.36
04-14-92	3.74
07-06-92	10.3
10-19-92	4.14
04-12-93	7.88
07-12-93	72.9
10-13-93	10.4

Table 86. Instantaneous discharge measurements and gage heights, Mammoth Creek Flume (MCF), Long Valley Caldera, Mono County, California, 1988–90

[Discharge is in cubic feet per second; gage height is in feet relative to an arbitrary datum]

Date	Discharge	Gage height
07-13-88	12.0	0.87
10-19-88	3.08	.29
01-11-89	3.59	.34
04-11-89	8.30	.64
07-18-89	7.77	.45
10-17-89	3.04	.28
01-09-90	4.51	.43
04-25-90	8.82	.72
07-12-90	7.01	.56

Table 87. Instantaneous discharge measurements, Mammoth Creek above Hot Creek Fish Hatchery (MCAF), Long Valley Caldera, Mono County, California, 1988–93

[Discharge is in cubic feet per second]

Date	Discharge
07-13-88	5.81
10-19-88	2.09
01-11-89	Frozen solid
04-11-89	8.74
07-18-89	5.27
10-18-89	2.09
01-09-90	5.32
04-25-90	3.49
07-17-90	3.28
10-16-90	1.30
01-17-91	1.25
04-16-91	3.09
07-22-91	2.33
10-22-91	2.78
01-13-92	4.57
04-14-92	4.16
07-06-92	5.03
10-19-92	2.24
01-25-93	3.40
04-12-93	8.72
07-13-93	65.6
10-13-93	9.71

Table 88. Instantaneous discharge measurements, Hot Creek above Gorge Geyser (HCA), Long Valley Caldera, Mono County, California, 1988–93

[Gage height is in feet relative to an arbitrary datum; discharge is in cubic feet per second. —, no data]

Date	Gage height	Discharge	Date	Gage height	Discharge
06-10-88	—	52.2	01-17-91	0.61	23.2
06-20-88	—	55.2	02-15-91	.56	23.7
07-07-88	—	42.1	03-21-91	.58	28.7
07-12-88	—	43.6	04-17-91	.62	27.7
08-03-88	0.86	35.0	05-16-91	.72	33.9
08-10-88	.86	36.3	06-21-91	.95	62.3
09-06-88	.88	31.8	07-23-91	.79	30.7
09-13-88	.89	30.5	08-22-91	.90	32.9
10-19-88	.90	31.2	09-18-91	.93	30.3
11-21-88	.90	31.1	10-23-91	.90	26.4
12-14-88	.87	27.4	12-12-91	.86	26.6
01-09-89	.89	28.9	01-14-92	.70	25.8
02-15-89	.85	31.4	02-20-92	.61	27.0
03-21-89	.81	30.9	03-12-92	.65	25.7
04-12-89	.86	35.6	04-16-92	.74	26.6
05-16-89	.96	50.2	05-13-92	.88	41.8
06-27-89	.93	47.8	06-09-92	.81	31.3
07-19-89	.96	36.2	07-08-92	1.00	31.6
08-15-89	.95	33.6	08-04-92	.82	26.7
09-19-89	1.00	31.0	09-15-92	.74	24.3
10-17-89	.92	28.7	10-21-92	.72	22.6
11-21-89	.88	29.8	11-17-92	.72	25.8
12-20-89	.84	29.5	12-23-92	.67	24.4
01-10-90	.81	29.5	01-27-93	.64	24.8
02-21-90	.70	27.9	03-02-93	.62	26.0
03-20-90	.72	29.7	03-24-93	.81	50.6
04-24-90	.74	27.1	04-13-93	.80	35.5
05-25-90	.80	35.9	05-20-93	1.37	102
06-11-90	.94	52.6	06-15-93	1.45	137
07-18-90	.90	30.1	07-14-93	1.32	97.2
08-28-90	.87	29.3	08-19-93	1.10	54.6
09-26-90	.87	28.7	09-08-93	1.12	51.8
10-17-90	.84	26.1	10-14-93	1.04	39.6
11-15-90	.80	26.2	11-18-93	.89	35.6
12-19-90	.75	25.0	12-14-93	.81	31.5

This page intentionally left blank.

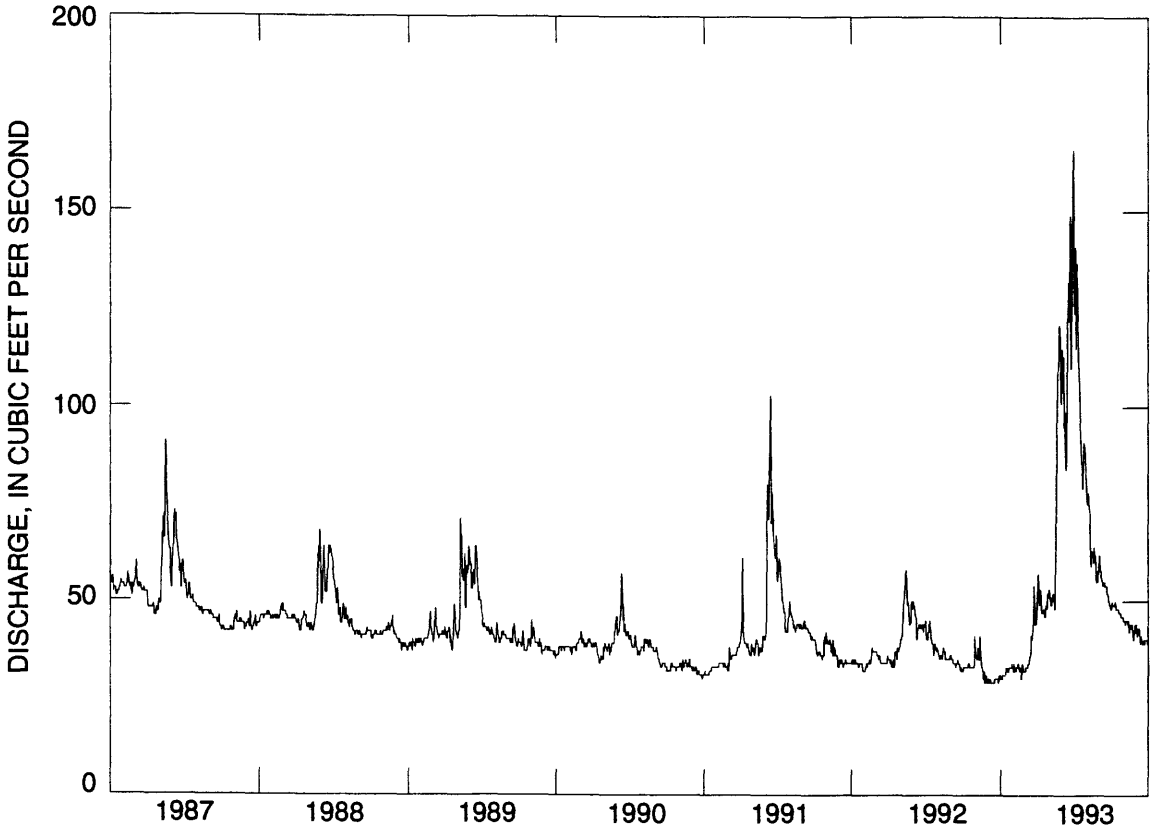

Figure 40. Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1987–93.

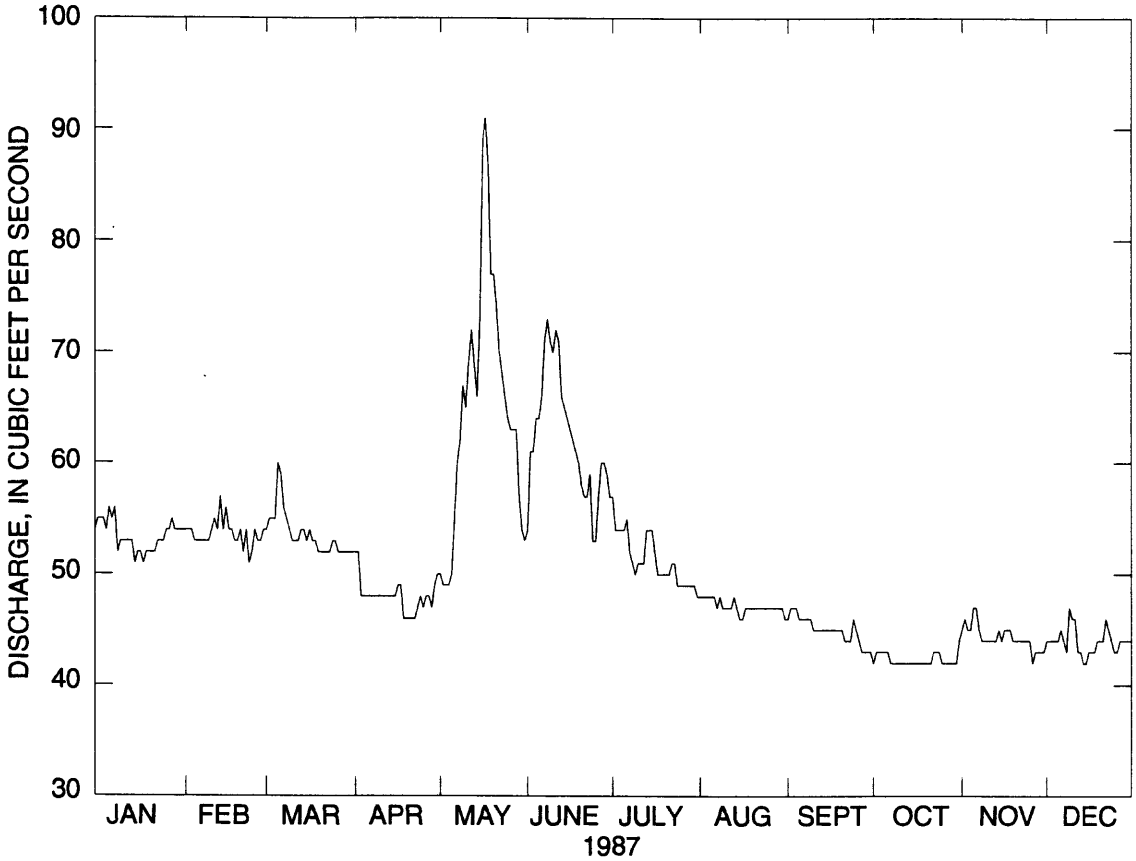

Figure 41. *(A)* Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1987.

Table 89. Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1987

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	55	54	54	52	50	54	57	48	46	42	45	44
2	55	54	55	52	49	61	54	48	47	43	46	44
3	55	54	55	48	49	61	54	48	47	43	45	44
4	54	53	55	48	49	64	54	48	47	43	45	44
5	56	53	60	48	50	64	54	48	46	43	47	44
6	55	53	59	48	55	66	55	48	46	43	47	45
7	56	53	56	48	60	71	52	47	46	42	45	44
8	52	53	55	48	62	73	51	48	46	42	44	43
9	53	53	54	48	67	71	50	47	46	42	44	47
10	53	54	53	48	65	70	51	47	45	42	44	46
11	53	55	53	48	69	72	51	47	45	42	44	46
12	53	54	53	48	72	71	51	47	45	42	44	43
13	53	57	54	48	69	66	54	48	45	42	44	43
14	51	54	54	48	66	65	54	47	45	42	45	42
15	52	56	53	48	73	64	54	46	45	42	44	42
16	52	54	54	49	89	63	52	46	45	42	45	43
17	51	54	53	49	91	62	50	47	45	42	45	43
18	52	53	53	46	87	61	50	47	45	42	45	43
19	52	53	52	46	77	60	50	47	45	42	44	44
20	52	54	52	46	77	58	50	47	45	42	44	44
21	52	52	52	46	74	57	50	47	44	42	44	44
22	53	54	52	46	70	57	51	47	44	43	44	46
23	53	51	52	47	68	59	51	47	44	43	44	45
24	53	52	53	48	66	53	49	47	46	43	44	44
25	54	54	53	47	64	53	49	47	45	42	44	43
26	54	53	52	48	63	57	49	47	44	42	42	43
27	55	53	52	48	63	60	49	47	43	42	43	44
28	54	54	52	47	63	60	49	47	43	42	43	44
29	54	—	52	49	57	59	49	47	43	42	43	44
30	54	—	52	50	54	57	49	47	43	42	43	44
31	54	—	52	—	53	—	48	46	—	44	—	44
Mean	53.4	53.6	53.6	48.0	65.2	62.3	51.3	47.2	45.0	42.3	44.3	44.0
Max	56	57	60	52	91	73	57	48	47	44	47	47
Min	51	51	52	46	49	53	48	46	43	42	42	42

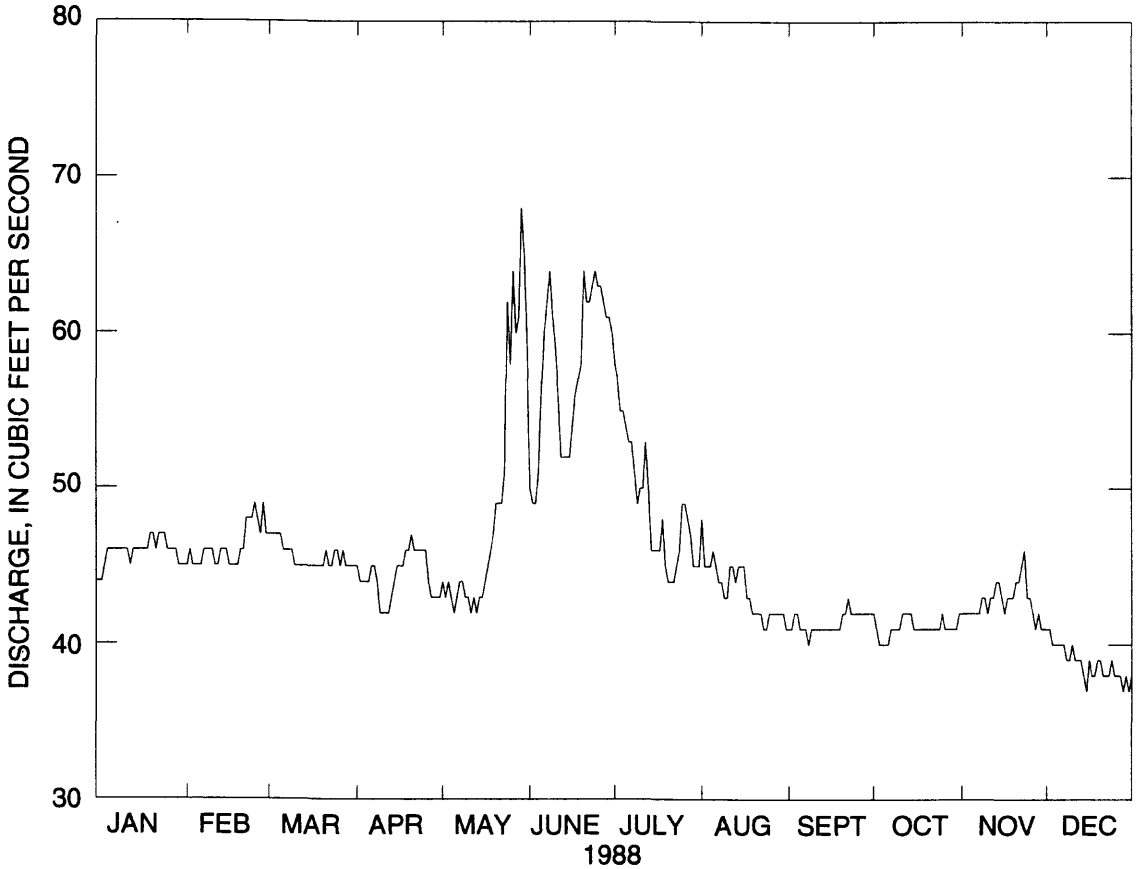

Figure 41. *(B)* Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1988.

Table 90. Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1988

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	44	45	47	45	44	50	58	48	41	42	42	41
2	44	46	47	44	43	49	57	45	41	41	42	41
3	45	45	47	44	44	49	55	45	42	40	42	40
4	46	45	47	44	43	51	55	45	42	40	42	40
5	46	45	47	44	42	56	54	46	41	40	42	40
6	46	45	46	45	43	60	53	45	41	40	42	40
7	46	46	46	45	44	62	53	44	41	41	42	40
8	46	46	46	44	44	64	51	44	40	41	43	39
9	46	46	46	42	43	61	49	43	41	41	43	39
10	46	46	45	42	43	59	50	43	41	41	42	40
11	46	45	45	42	42	56	50	45	41	42	43	39
12	45	45	45	42	43	52	53	45	41	42	43	39
13	46	46	45	43	42	52	50	44	41	42	44	39
14	46	46	45	44	43	52	46	45	41	42	44	38
15	46	46	45	45	43	52	46	45	41	41	43	37
16	46	45	45	45	44	54	46	45	41	41	42	39
17	46	45	45	45	45	56	46	43	41	41	43	38
18	46	45	45	46	46	57	48	43	41	41	43	38
19	47	45	45	46	47	58	45	42	41	41	43	39
20	47	46	45	47	49	64	44	42	42	41	44	39
21	46	46	46	46	49	62	44	42	42	41	44	38
22	47	48	45	46	49	62	44	42	43	41	45	38
23	47	48	45	46	51	63	45	41	42	41	46	38
24	47	48	46	46	62	64	46	41	42	41	43	39
25	46	49	46	46	58	63	49	42	42	42	43	38
26	46	48	45	44	64	63	49	42	42	41	42	38
27	46	47	46	43	60	62	48	42	42	41	41	38
28	46	49	45	43	61	61	47	42	42	41	42	37
29	45	47	45	43	68	61	45	42	42	41	41	38
30	45	—	45	43	65	60	45	42	42	41	41	37
31	45	—	45	—	59	—	45	41	—	42	—	38
Mean	45.9	46.2	45.6	44.3	49.1	57.8	48.9	43.4	41.4	41.1	42.7	38.8
Max	47	49	47	47	68	64	58	48	43	42	46	41
Min	44	45	45	42	42	49	44	41	40	40	41	37

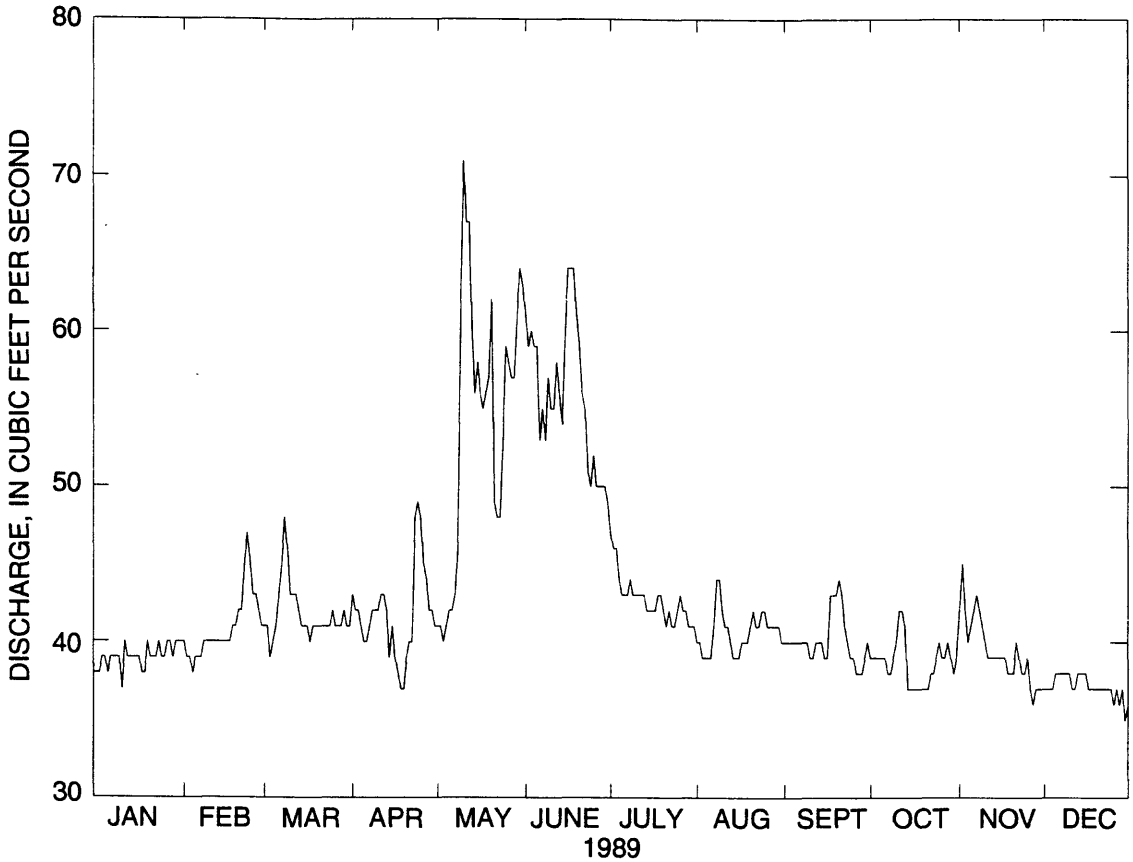

Figure 41. *(C)* Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1989.

Table 91. Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1989

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	38	40	41	43	41	61	47	40	40	39	42	37
2	38	39	41	42	41	59	46	40	40	39	45	37
3	39	39	39	42	40	60	46	39	40	39	42	37
4	39	38	40	41	41	59	44	39	40	39	40	37
5	38	39	41	40	42	59	43	39	40	39	41	38
6	39	39	43	40	42	53	43	39	40	39	42	38
7	39	39	45	41	43	55	43	41	40	38	43	38
8	39	40	48	42	46	53	44	44	40	38	42	38
9	39	40	46	42	61	57	43	44	40	39	41	38
10	37	40	43	42	71	55	43	42	39	40	40	38
11	40	40	43	43	67	55	43	41	39	42	39	37
12	39	40	43	43	67	58	43	41	40	42	39	37
13	39	40	42	42	60	56	43	40	40	41	39	38
14	39	40	41	39	56	54	42	39	40	37	39	38
15	39	40	41	41	58	60	42	39	39	37	39	38
16	39	40	41	39	56	64	42	39	39	37	39	38
17	38	40	40	38	55	64	42	40	43	37	39	37
18	38	41	41	37	56	64	43	40	43	37	38	37
19	40	41	41	37	57	61	43	40	43	37	38	37
20	39	42	41	39	62	59	42	41	44	37	38	37
21	39	42	41	40	49	56	41	42	43	37	40	37
22	39	45	41	40	48	55	42	41	41	38	39	37
23	40	47	41	48	48	51	41	41	40	38	38	37
24	39	45	41	49	53	50	41	42	39	39	38	37
25	39	43	42	48	59	52	42	42	39	40	39	37
26	40	43	41	45	58	50	43	41	38	39	37	36
27	40	42	41	44	57	50	42	41	38	39	36	37
28	39	41	41	42	57	50	42	41	38	40	37	36
29	40	—	42	42	61	50	41	41	39	39	37	37
30	40	—	41	41	64	49	41	41	40	38	37	35
31	40	—	41	—	63	—	41	40	—	39	—	36
Mean	39.0	40.9	41.7	41.7	54.2	56.0	42.7	40.6	40.1	38.7	39.4	37.2
Max	40	47	48	49	71	64	47	44	44	42	45	38
Min	37	38	39	37	40	49	41	39	38	37	36	35

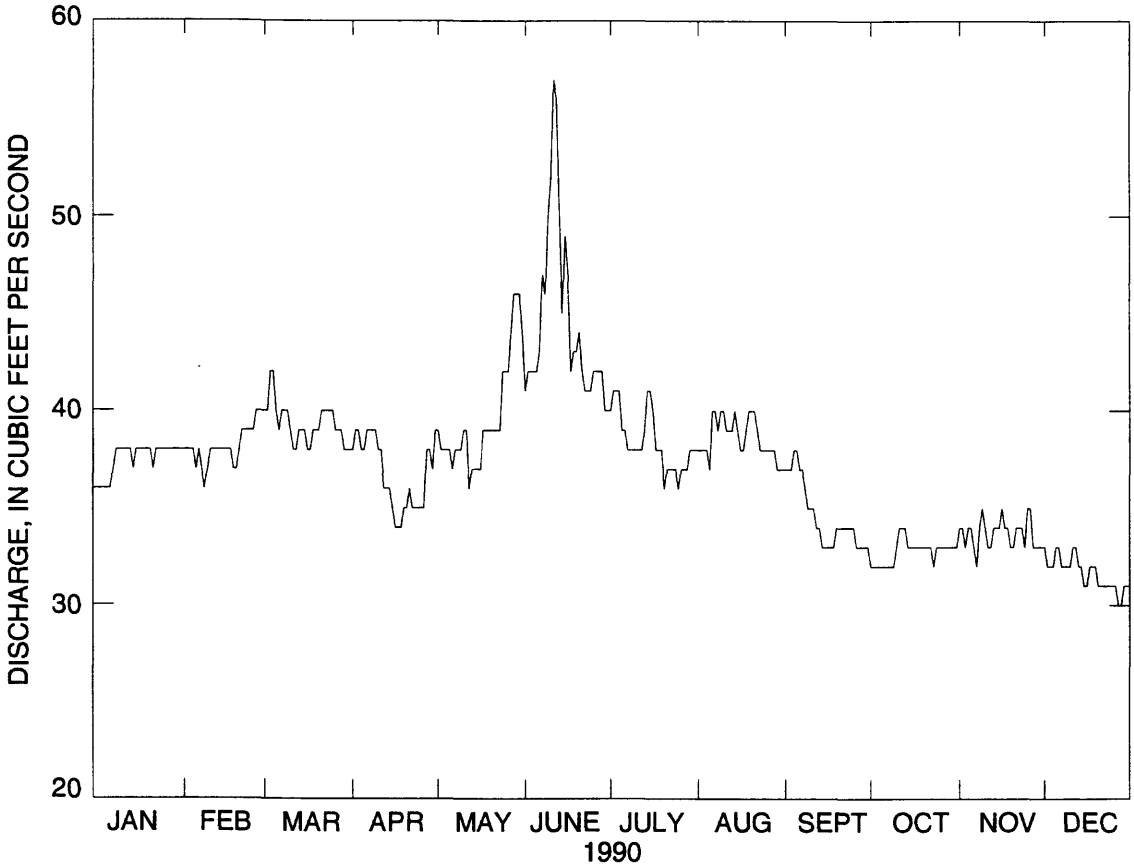

Figure 41. *(D)* Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1990.

Table 92. Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1990

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	36	38	40	38	39	41	40	38	37	32	34	33
2	36	38	40	39	38	42	41	38	37	32	34	32
3	36	38	42	39	38	42	41	38	37	32	33	32
4	36	38	42	38	38	42	41	38	38	32	34	32
5	36	37	40	38	38	42	39	37	38	32	34	33
6	36	38	39	39	37	43	39	40	37	32	33	33
7	37	37	40	39	38	47	38	40	37	32	32	32
8	38	36	40	39	38	46	38	39	36	32	34	32
9	38	37	40	39	38	50	38	40	35	32	35	32
10	38	38	39	38	39	52	38	40	35	33	34	32
11	38	38	38	38	39	57	38	39	35	34	33	33
12	38	38	38	36	36	56	38	39	34	34	33	33
13	38	38	39	36	37	50	39	39	34	34	34	32
14	37	38	39	36	37	45	41	40	33	33	34	32
15	38	38	39	35	37	49	41	39	33	33	34	31
16	38	38	38	34	37	47	40	38	33	33	35	31
17	38	38	38	34	39	42	38	38	33	33	34	32
18	38	37	39	34	39	43	38	39	33	33	34	32
19	38	37	39	35	39	43	38	40	34	33	33	32
20	38	38	39	35	39	44	36	40	34	33	33	31
21	37	39	40	36	39	42	37	40	34	33	34	31
22	38	39	40	35	39	41	37	39	34	33	34	31
23	38	39	40	35	39	41	37	38	34	32	34	31
24	38	39	40	35	42	41	37	38	34	33	33	31
25	38	39	40	35	42	42	36	38	34	33	35	31
26	38	40	39	35	42	42	37	38	33	33	35	31
27	38	40	39	38	44	42	37	38	33	33	33	30
28	38	40	39	38	46	42	37	38	33	33	33	30
29	38	—	38	37	46	40	38	37	33	33	33	31
30	38	—	38	39	46	40	38	37	33	33	33	31
31	38	—	38	—	44	—	38	37	—	33	—	31
Mean	37.5	38.1	39.3	36.7	39.6	44.5	38.4	38.6	34.6	32.8	33.7	31.6
Max	38	40	42	39	46	57	41	40	38	34	35	33
Min	36	36	38	34	36	40	36	37	33	32	32	30

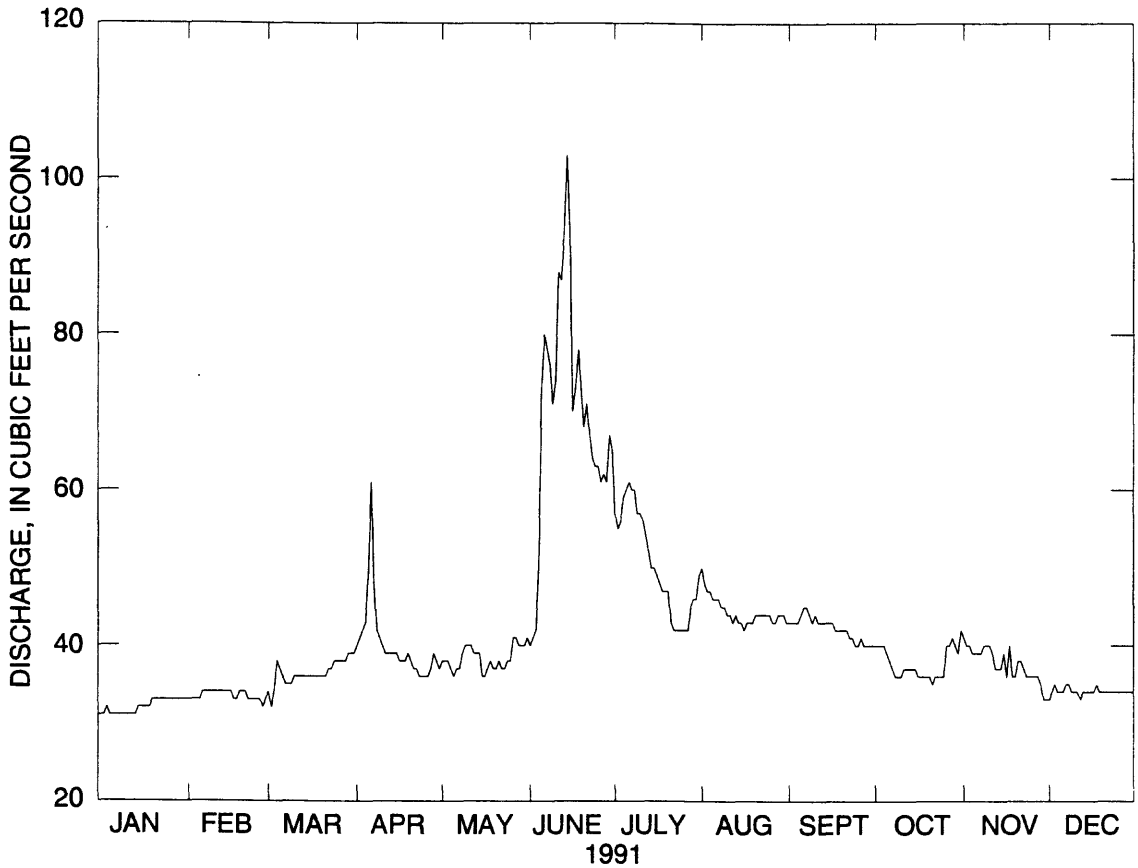

Figure 41. *(E)* Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1991.

Table 93. Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California 1991

[Values are in cubic feet per second. e, estimated; Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	31	33	34	40	38	40	57	50	43	40	41	33
2	31	33	32	41	38	41	55	48	43	40	40	34
3	32	33	34	42	38	42	56	47	43	40	40	35
4	31	33	38	43	37	50	59	47	43	40	39	34
5	31	33	37	49	36	73	60	46	44	39	39	34
6	31	34	36	61	37	80	61	46	45	38	39	34
7	31	34	35	48	37	78	60	46	45	37	39	35
8	31	34	35	42	39	76	60	45	44	36	40	35
9	31	34	35	41	40	71	57	45	43	36	40	34
10	31	34	36	40	40	74	57	44	44	36	40	34
11	31	34	36	39	40	88	56	44	43	37	39	34
12	31	34	36	39	39	87	54	43	43	37	37	33
13	31	34	36	39	39	93	52	44	43	37	37	34
14	32	34	36	39	39	103	50	43	43	37	37	34
15	32	34	36	39	36	94	50	43	43	37	39	34
16	32	34	36	38	36	70	49	42	43	36	36	34
17	32	33	36	38	37	73	48	43	42	36	40	34
18	32	33	36	38	38	78	47	43	42	36	36	35
19	33	34	36	39	37	e73	47	43	42	36	36	34
20	33	34	36	38	37	68	47	44	42	36	38	34
21	33	34	36	37	38	71	43	44	42	35	38	34
22	33	33	37	37	37	67	42	44	41	36	37	34
23	33	33	37	36	37	64	42	44	41	36	36	34
24	33	33	38	36	38	63	42	44	40	36	36	34
25	33	33	38	36	38	63	42	44	40	36	36	34
26	33	33	38	36	41	61	42	43	41	40	36	34
27	33	32	38	37	41	62	42	43	40	40	36	34
28	33	33	38	39	40	61	45	44	40	41	35	34
29	33	—	39	38	40	67	46	44	40	40	33	34
30	33	—	39	37	40	65	46	44	40	39	33	34
31	33	—	39	—	41	—	49	43	—	42	—	34
Mean	32.0	33.5	36.4	40.1	38.4	69.9	50.4	44.4	42.3	37.7	37.6	34.1
Max	33	34	39	61	41	103	61	50	45	42	41	35
Min	31	32	32	36	36	40	42	42	40	35	33	33

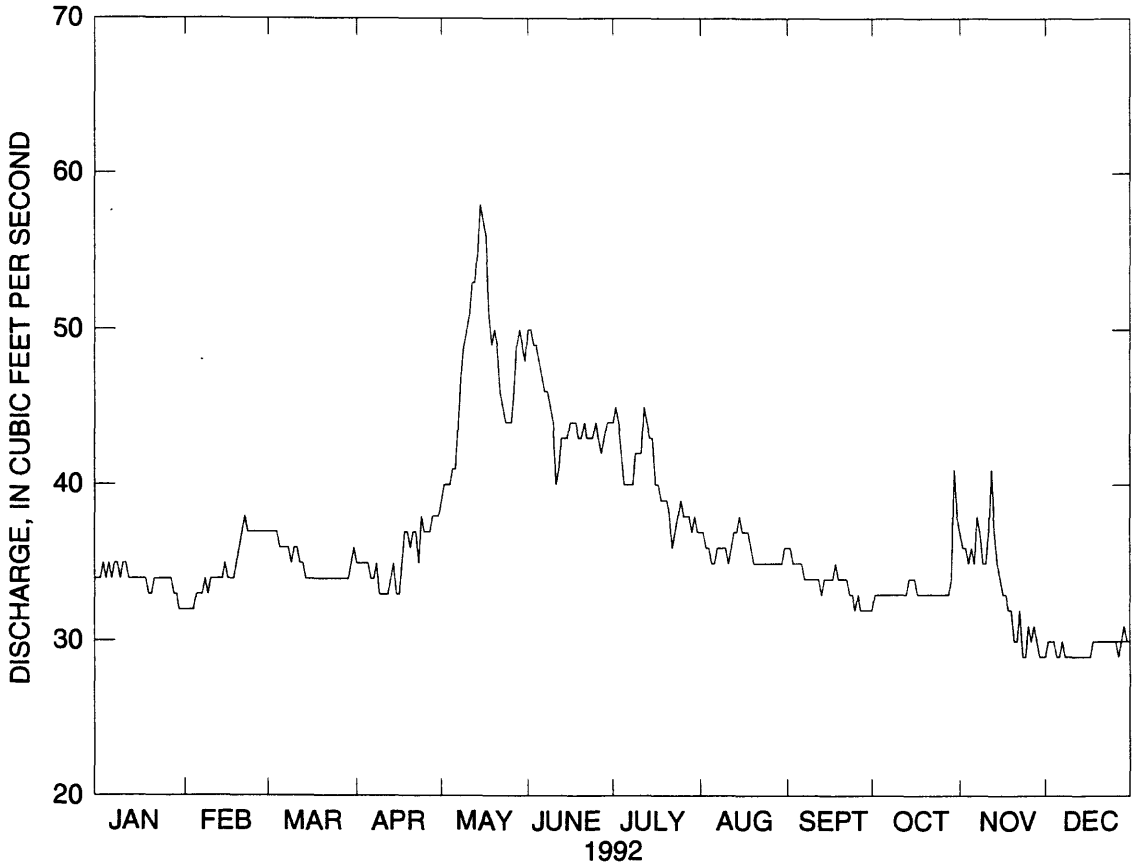

Figure 41. *(F)* Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1992.

Table 94. Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1992

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	34	32	37	35	39	50	44	37	36	32	37	29
2	34	32	37	35	40	50	45	37	36	33	36	30
3	35	32	37	35	40	49	44	36	35	33	36	30
4	34	32	37	35	40	49	42	36	35	33	35	30
5	35	33	36	35	41	48	40	35	35	33	36	29
6	34	33	36	34	41	47	40	35	35	33	35	29
7	35	33	36	34	44	46	40	36	34	33	38	30
8	35	34	36	35	47	46	40	36	34	33	37	29
9	34	33	35	33	49	45	42	36	34	33	35	29
10	35	34	36	33	50	44	42	36	34	33	35	29
11	35	34	36	33	51	40	42	35	34	33	37	29
12	34	34	35	33	53	41	45	36	34	33	41	29
13	34	34	35	34	53	43	44	37	33	33	37	29
14	34	34	34	35	55	43	43	37	34	34	35	29
15	34	35	34	33	58	43	43	38	34	34	34	29
16	34	34	34	33	57	44	40	37	34	34	33	29
17	34	34	34	35	56	44	40	37	34	33	33	29
18	34	34	34	37	51	44	39	37	35	33	32	30
19	33	35	34	37	49	43	39	36	34	33	32	30
20	33	36	34	36	50	43	39	35	34	33	30	30
21	34	37	34	37	49	44	38	35	34	33	30	30
22	34	38	34	37	46	43	36	35	34	33	32	30
23	34	37	34	35	45	43	37	35	33	33	29	30
24	34	37	34	38	44	43	38	35	33	33	29	30
25	34	37	34	37	44	44	39	35	32	33	31	30
26	34	37	34	37	44	43	38	35	33	33	30	30
27	34	37	34	37	46	42	38	35	32	33	31	29
28	33	37	34	38	49	43	38	35	32	33	30	30
29	33	37	34	38	50	44	37	35	32	34	29	31
30	32	—	35	38	49	44	38	35	32	41	29	30
31	32	—	36	—	48	—	37	36	—	38	—	30
Mean	33.9	34.7	35.0	35.4	47.7	44.5	40.2	35.8	33.8	33.5	33.5	29.6
Max	35	38	37	38	58	50	45	38	36	41	41	31
Min	32	32	34	33	39	40	36	35	32	32	29	29

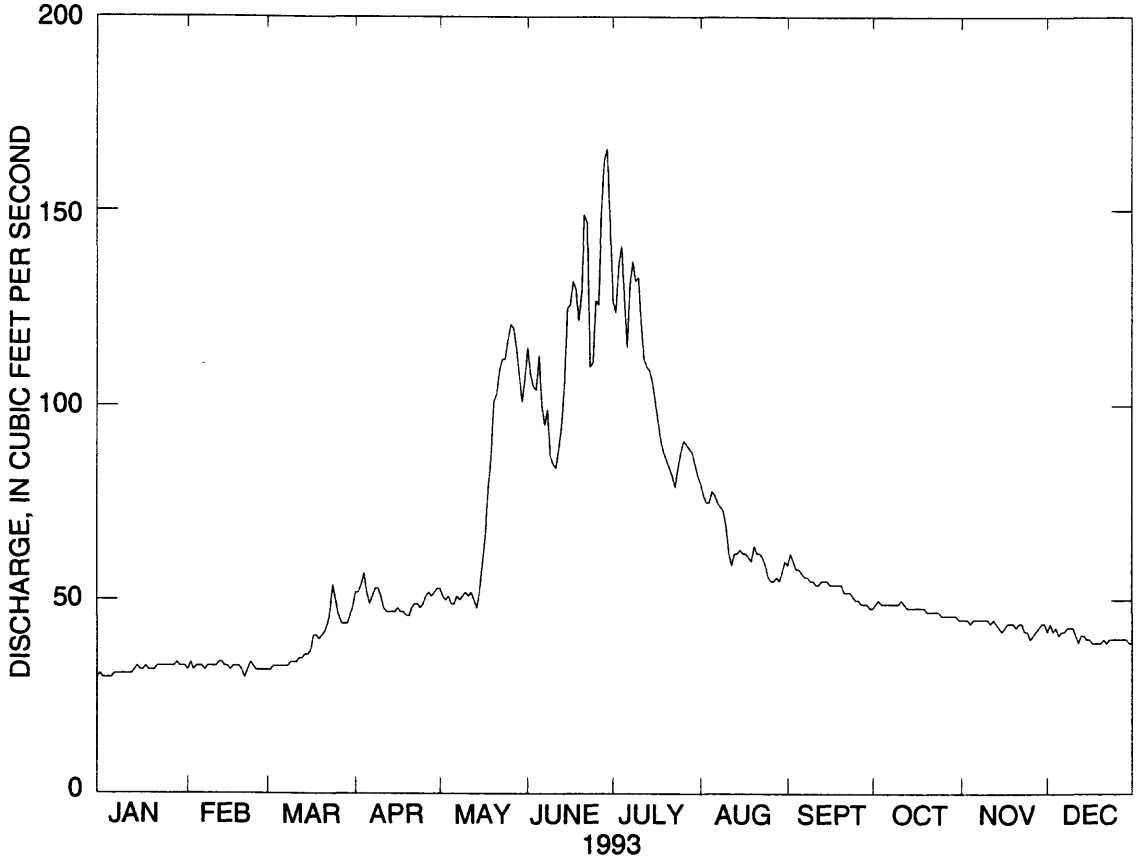

Figure 41. *(G)* Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1993.

Table 95. Daily mean discharge, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1993

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	31	32	32	52	53	115	127	80	59	48	45	42
2	30	34	32	52	51	108	124	77	62	49	45	44
3	30	32	33	54	50	105	136	75	60	50	45	42
4	30	33	33	57	51	104	141	75	58	49	44	43
5	30	33	33	52	49	113	128	78	58	49	45	41
6	31	33	33	49	49	100	115	77	57	49	45	42
7	31	32	33	51	51	95	131	75	56	49	45	42
8	31	33	33	53	50	99	137	74	56	49	45	43
9	31	33	34	53	51	87	132	73	55	49	45	43
10	31	33	34	51	52	85	133	69	55	49	45	43
11	31	33	34	48	51	84	121	62	54	50	44	41
12	31	34	35	47	52	89	112	59	54	49	45	39
13	32	34	35	47	50	95	110	62	55	48	44	41
14	33	33	36	47	48	106	109	62	55	48	43	41
15	32	33	36	47	52	125	106	63	55	48	42	40
16	32	32	37	48	59	126	101	62	54	48	43	40
17	33	33	41	47	66	132	96	62	54	48	44	39
18	32	33	41	47	78	130	91	61	54	48	44	39
19	32	33	40	46	86	122	88	60	54	48	44	39
20	32	32	41	46	101	129	86	64	54	47	43	39
21	33	30	42	48	103	149	84	62	52	47	44	40
22	33	32	44	49	109	147	82	62	52	47	44	39
23	33	34	47	49	112	110	79	61	52	47	42	40
24	33	33	54	48	112	111	84	59	51	47	42	40
25	33	32	50	49	117	127	88	56	50	46	40	40
26	33	32	46	51	121	126	91	55	50	46	41	40
27	33	32	44	52	120	149	90	55	49	46	42	40
28	34	32	44	51	115	163	89	56	49	46	43	40
29	33	—	44	52	108	166	88	55	49	46	44	40
30	33	—	46	53	101	149	85	57	48	46	44	39
31	33	—	48	—	107	—	82	60	—	45	—	39
Mean	31.9	32.7	39.2	49.9	76.6	118	105	64.8	54.0	47.8	43.7	40.6
Max	34	34	54	57	121	166	141	80	62	50	45	44
Min	30	30	32	46	48	84	79	55	48	45	40	39

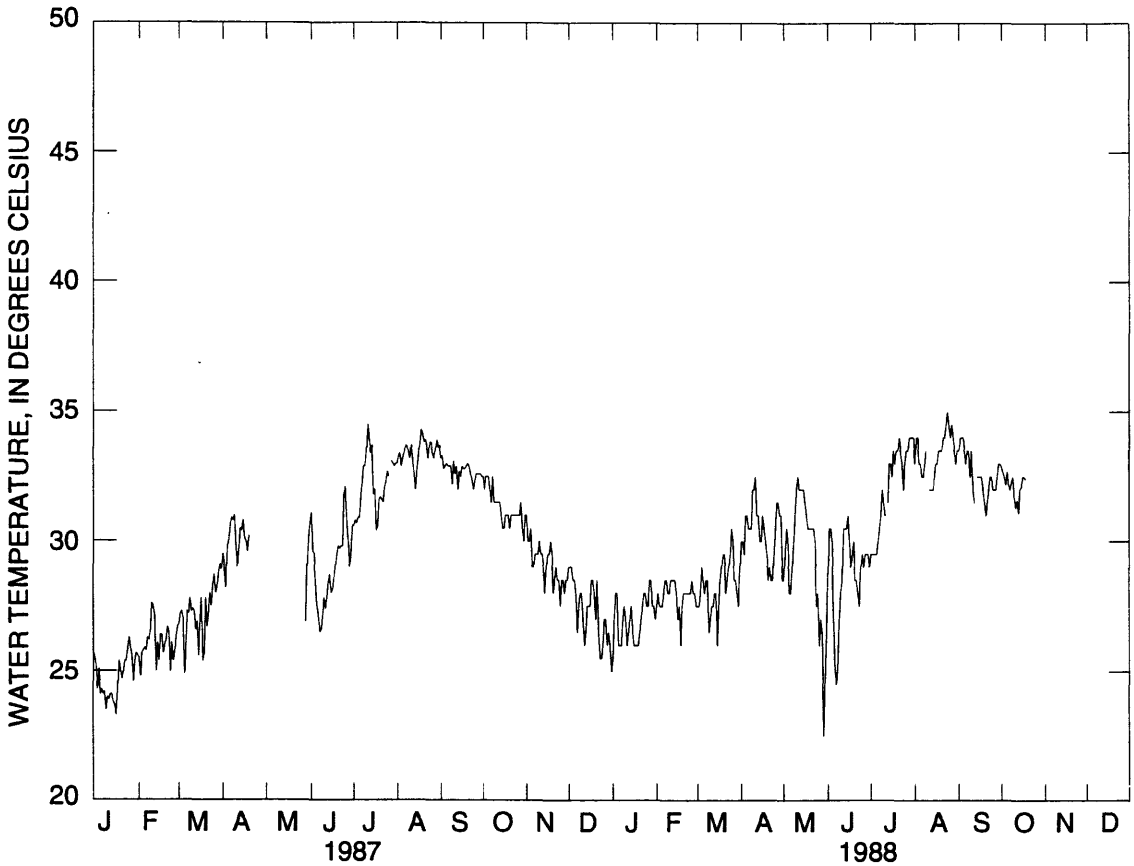

Figure 42. Daily mean water temperature, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1987–88.

Table 96. Daily mean water temperature, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1987

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	25.5	25.5	26.8	29.5	—	31.1	30.6	33.0	33.2	32.5	31.0	29.0
2	25.2	24.8	27.2	29.0	—	29.6	30.8	33.3	33.3	32.0	30.0	29.0
3	24.3	25.7	27.3	28.2	—	29.5	30.7	33.4	32.8	32.5	30.0	29.0
4	25.1	25.8	27.0	29.8	—	28.3	30.9	32.9	32.9	32.5	30.5	28.5
5	24.1	25.9	24.9	30.0	—	27.5	30.9	33.2	33.0	32.5	29.0	28.5
6	24.3	25.8	25.8	30.6	—	27.1	31.7	33.4	32.9	32.0	29.0	28.0
7	24.1	26.3	27.3	30.9	—	26.5	32.3	33.7	32.9	31.5	29.5	26.5
8	24.2	26.2	27.2	30.8	—	26.6	32.9	33.6	32.9	32.5	29.5	27.5
9	23.5	26.6	27.8	31.0	—	27.1	32.9	33.5	32.2	31.5	29.5	28.0
10	24.0	27.6	27.3	29.8	—	27.8	33.5	33.2	33.1	31.5	30.0	28.0
11	23.9	27.5	27.4	29.0	—	27.4	34.5	33.7	32.6	31.5	29.5	27.0
12	24.1	27.1	27.3	29.7	—	27.8	33.9	33.2	32.9	31.5	29.5	26.0
13	24.1	25.0	26.6	30.5	—	28.4	33.4	32.6	32.0	31.5	29.0	26.5
14	23.8	26.1	26.9	30.4	—	28.7	33.7	32.0	32.7	31.0	28.0	27.5
15	23.7	25.4	25.6	30.8	—	28.0	31.8	32.7	32.5	30.5	29.0	27.5
16	23.3	26.4	27.0	30.1	—	28.1	32.0	33.2	32.9	30.5	29.5	27.5
17	24.3	26.4	27.8	30.0	—	28.5	30.4	33.8	32.8	31.0	29.5	28.5
18	25.4	25.7	25.4	29.6	—	29.0	30.6	34.3	32.8	31.0	30.0	28.5
19	25.0	26.0	25.7	30.2	—	29.5	31.6	34.1	32.9	31.0	29.5	28.0
20	24.7	26.2	27.8	—	—	29.8	31.7	33.8	33.0	30.5	28.0	27.0
21	25.0	26.7	26.7	—	—	29.7	31.6	33.9	32.9	31.0	28.5	28.5
22	25.4	26.5	27.2	—	—	29.8	31.5	33.6	32.6	31.0	29.0	26.5
23	25.4	25.0	28.0	—	—	29.8	32.1	33.2	32.4	31.0	28.5	25.5
24	25.9	26.1	27.5	—	—	31.8	32.3	33.8	32.0	31.0	28.5	25.5
25	26.3	25.4	28.3	—	—	32.1	32.7	33.8	32.3	31.0	27.5	26.0
26	25.9	25.7	28.7	—	—	30.8	32.5	33.4	32.6	31.0	28.5	27.0
27	25.6	26.3	28.0	—	—	30.0	—	33.2	32.6	31.0	28.5	27.0
28	24.6	26.7	28.2	—	26.9	29.0	33.1	33.5	32.6	31.5	28.0	26.0
29	25.4	—	28.7	—	28.9	29.6	33.0	33.9	32.6	30.5	28.5	26.5
30	25.7	—	29.1	—	30.1	30.6	32.9	33.6	32.5	30.0	28.5	26.0
31	25.6	—	28.9	—	30.7	—	33.0	33.7	—	31.0	—	25.0
Mean	24.8	26.1	27.3	30.0	29.2	29.0	32.2	33.4	32.7	31.3	29.1	27.3
Max	26.3	27.6	29.1	31.0	30.7	32.1	34.5	34.3	33.3	32.5	31.0	29.0
Min	23.3	24.8	24.9	28.2	26.9	26.5	30.4	32.0	32.0	30.0	27.5	25.0

This page intentionally left blank.

Table 97. Daily mean water temperature, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1988

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	25.5	27.5	27.5	30.0	28.5	28.5	29.5	33.0	33.5	32.9	—	—
2	27.0	28.0	27.5	30.0	29.5	30.5	29.5	34.0	34.0	32.7	—	—
3	28.0	27.5	28.0	29.5	30.5	30.5	29.5	34.0	34.0	32.5	—	—
4	28.0	27.5	29.0	31.0	30.0	30.0	29.5	33.0	34.0	32.2	—	—
5	26.0	27.5	28.5	31.0	28.0	27.0	29.5	33.0	33.5	32.7	—	—
6	26.0	28.0	28.0	30.5	28.0	25.0	30.0	32.5	33.0	32.2	—	—
7	26.0	28.5	28.5	30.5	29.0	24.5	30.5	32.5	33.5	32.0	—	—
8	27.0	28.5	28.5	30.5	30.0	25.5	31.0	33.0	33.5	32.3	—	—
9	27.5	28.0	26.5	32.0	31.0	27.0	32.0	33.5	32.5	32.5	—	—
10	27.0	28.0	27.0	32.0	32.0	28.0	31.5	—	33.5	31.7	—	—
11	26.0	28.5	27.5	32.5	32.5	28.5	31.0	32.0	32.0	31.3	—	—
12	26.5	28.5	27.5	31.0	32.0	30.5	—	32.0	31.5	31.6	—	—
13	27.0	28.5	28.0	31.0	32.0	30.5	31.5	32.0	—	31.1	—	—
14	27.5	28.5	28.0	30.0	32.0	30.5	33.0	32.0	32.5	32.0	—	—
15	26.5	28.0	26.0	30.0	32.0	31.0	33.0	32.5	32.5	32.1	—	—
16	26.0	27.0	27.5	31.0	31.5	30.0	32.5	33.0	32.5	32.5	—	—
17	26.0	27.5	28.5	30.5	31.0	29.0	33.5	33.0	32.5	32.5	—	—
18	26.0	26.0	29.0	30.0	30.5	29.5	33.0	33.5	32.0	32.4	—	—
19	26.0	27.5	29.5	29.5	30.5	30.0	33.5	33.5	31.5	—	—	—
20	26.5	28.0	29.5	28.5	30.5	28.5	33.5	33.5	31.0	—	—	—
21	27.0	28.0	28.0	29.0	30.5	28.5	34.0	34.0	31.5	—	—	—
22	27.5	28.0	28.5	28.5	30.5	28.0	33.5	34.0	32.0	—	—	—
23	28.0	28.0	29.0	28.5	30.0	27.5	33.0	34.5	32.5	—	—	—
24	28.0	28.0	29.5	29.5	27.5	29.0	32.0	35.0	32.5	—	—	—
25	27.5	28.0	30.5	30.5	28.0	29.5	33.0	34.5	32.0	—	—	—
26	27.5	28.5	30.0	31.5	26.0	29.0	33.5	34.0	32.0	—	—	—
27	28.5	28.0	28.5	31.5	27.0	29.5	33.5	34.5	32.0	—	—	—
28	28.5	28.0	28.5	31.0	26.5	29.5	34.0	34.0	32.5	—	—	—
29	27.5	27.5	28.0	31.0	22.5	29.5	34.0	33.5	33.0	—	—	—
30	27.5	—	27.5	28.5	24.5	29.0	34.0	33.0	33.0	—	—	—
31	27.0	—	29.0	—	26.5	—	34.0	33.5	—	—	—	—
Mean	27.0	27.9	28.3	30.3	29.4	28.8	32.2	33.3	32.6	32.2	—	—
Max	28.5	28.5	30.5	32.5	32.5	31.0	34.0	35.0	34.0	32.9	—	—
Min	25.5	26.0	26.0	28.5	22.5	24.5	29.5	32.0	31.0	31.1	—	—

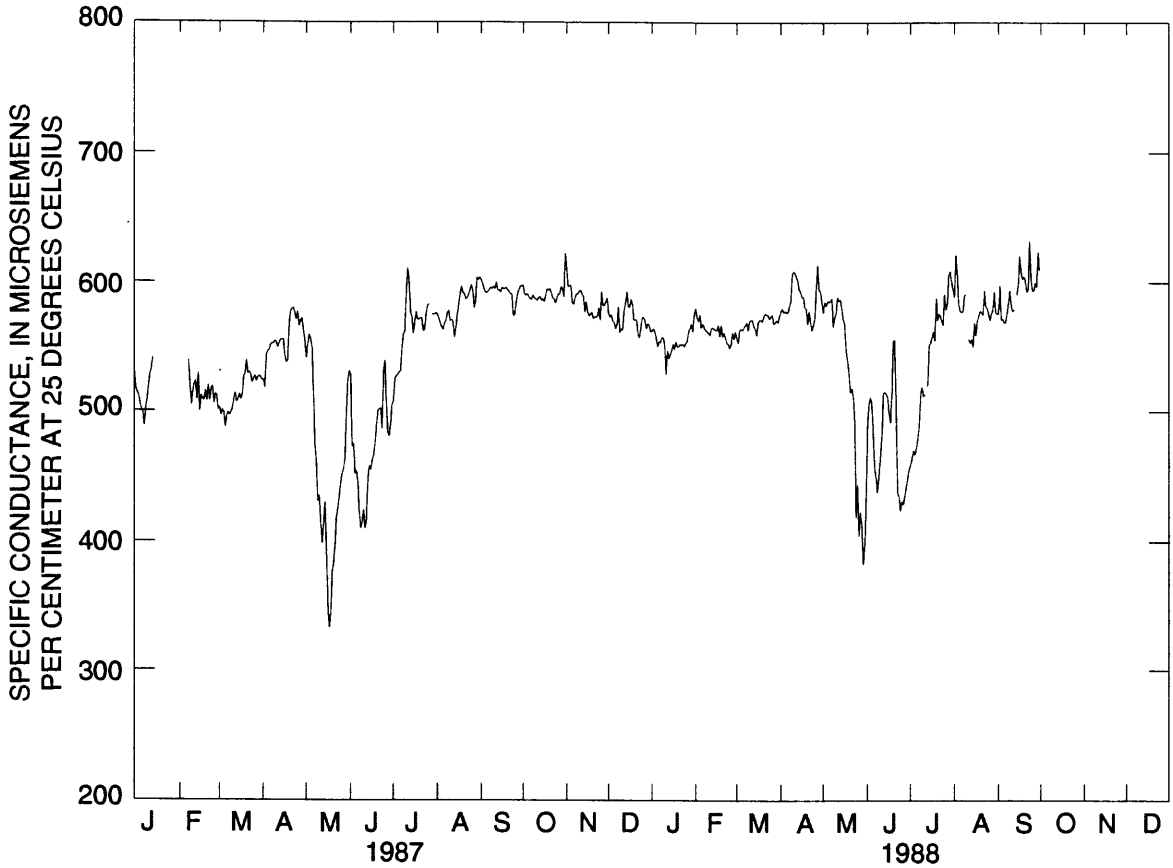

Figure 43. Daily mean specific conductance, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1987–88.

Table 98. Daily mean specific conductance, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1987

[Values are in microsiemens per centimeter at 25 degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	518	—	503	524	541	528	508	575	602	598	613	576
2	514	—	497	518	551	473	525	572	599	591	597	573
3	512	—	501	543	559	475	527	568	595	590	597	575
4	506	—	499	546	556	452	528	565	592	591	598	570
5	501	—	488	547	549	454	530	563	592	589	584	569
6	499	—	496	551	512	446	531	568	593	587	583	564
7	489	539	499	552	474	423	549	570	595	587	588	567
8	502	520	497	552	460	410	559	576	596	590	591	581
9	509	505	499	554	431	415	562	578	595	588	591	561
10	520	515	502	553	435	424	592	570	597	587	593	564
11	528	521	509	549	415	410	611	571	595	586	594	563
12	533	523	514	552	399	416	602	569	600	588	591	578
13	541	509	507	555	413	447	577	557	594	589	589	584
14	539	529	509	555	430	458	573	564	594	586	577	593
15	—	500	513	555	396	455	560	574	592	587	585	581
16	—	512	509	543	351	462	569	583	596	585	577	581
17	—	509	512	537	333	466	577	591	595	590	574	587
18	—	508	526	539	343	475	571	597	595	595	575	583
19	—	516	529	566	376	489	571	592	596	594	577	571
20	—	508	539	577	383	500	572	591	594	595	572	571
21	—	520	529	579	398	502	572	587	593	592	573	571
22	—	508	530	580	419	502	562	588	591	588	573	559
23	—	517	528	576	426	487	563	590	591	587	574	557
24	—	519	522	571	435	531	575	594	574	584	580	565
25	—	506	525	577	446	539	582	598	575	588	571	573
26	—	513	527	566	452	507	583	594	584	591	593	573
27	—	512	523	570	456	484	—	580	591	591	582	571
28	—	501	526	572	464	481	575	585	594	597	582	564
29	—	—	527	563	500	490	575	604	597	595	585	568
30	—	—	526	554	524	505	575	602	597	589	588	567
31	—	—	524	—	531	—	576	604	—	623	—	562
Mean	515[1]	514[1]	514	556	450	470	564	581	593	591	585	572
Max	541	539	539	580	559	539	611	604	602	623	613	593
Min	489	500	488	518	333	410	508	557	574	584	571	557

[1]Incomplete Record

Table 99. Daily mean specific conductance, Hot Creek Flume (HCF), Long Valley Caldera, Mono County, California, 1988

[Values are in microsiemens per centimeter at 25 degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	562	580	557	578	577	488	459	589	576	—	—	—
2	564	573	553	580	585	506	464	622	598	—	—	—
3	562	570	563	577	582	511	470	607	571	—	—	—
4	557	575	564	578	586	507	467	583	572	—	—	—
5	550	565	563	577	585	484	472	578	569	—	—	—
6	554	568	565	577	586	457	479	577	569	—	—	—
7	553	565	567	582	588	449	489	578	576	—	—	—
8	557	563	569	586	566	438	514	590	584	—	—	—
9	557	562	563	607	573	452	519	591	594	—	—	—
10	552	561	570	609	576	465	512	—	582	—	—	—
11	529	559	571	608	589	480	513	556	578	—	—	—
12	547	564	571	605	586	514	—	553	579	—	—	—
13	541	565	566	602	587	515	520	556	—	—	—	—
14	544	564	564	595	580	514	551	550	591	—	—	—
15	547	563	559	593	572	511	553	569	598	—	—	—
16	552	563	569	589	568	499	557	559	621	—	—	—
17	548	567	571	589	548	492	562	570	609	—	—	—
18	554	558	571	581	540	514	555	574	603	—	—	—
19	550	567	570	580	531	555	588	578	605	—	—	—
20	550	558	574	568	515	555	571	577	602	—	—	—
21	552	561	576	578	518	499	576	575	593	—	—	—
22	551	557	575	570	512	438	574	594	595	—	—	—
23	552	553	575	563	494	435	570	582	633	—	—	—
24	550	552	572	567	419	424	567	580	604	—	—	—
25	553	549	574	572	444	431	591	576	594	—	—	—
26	554	552	575	596	405	429	579	571	594	—	—	—
27	562	561	568	614	423	435	583	576	600	—	—	—
28	564	556	569	595	414	442	606	579	597	—	—	—
29	568	562	571	593	383	449	609	593	624	—	—	—
30	562	—	569	585	395	456	601	577	610	—	—	—
31	575	—	574	—	427	—	595	576	—	—	—	—
Mean	554	563	568	586	524	478	542	578	594	—	—	—
Max	575	580	576	614	589	555	609	622	633	—	—	—
Min	529	549	553	563	383	424	459	550	569	—	—	—

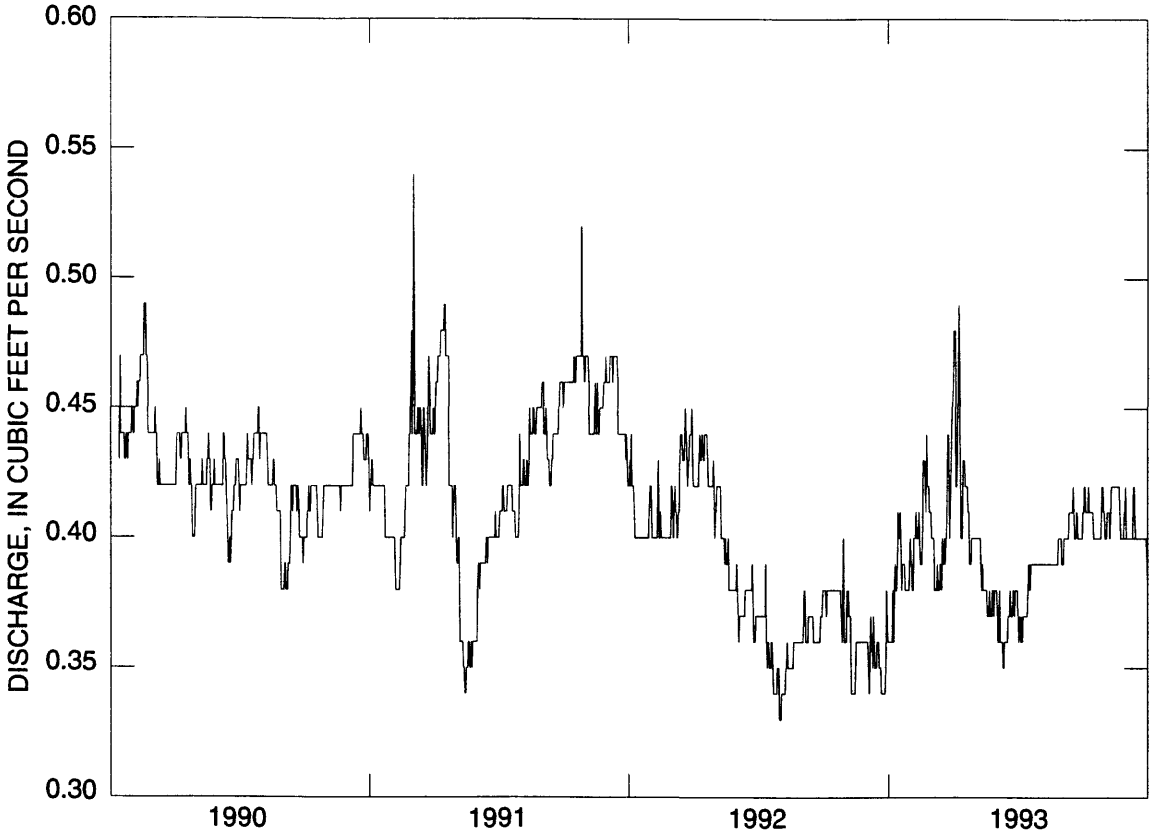

Figure 44. Daily mean discharge, Little Hot Creek downstream from Little Hot Creek Spring (LHC-SW), Long Valley Caldera, Mono County, California, 1990–93.

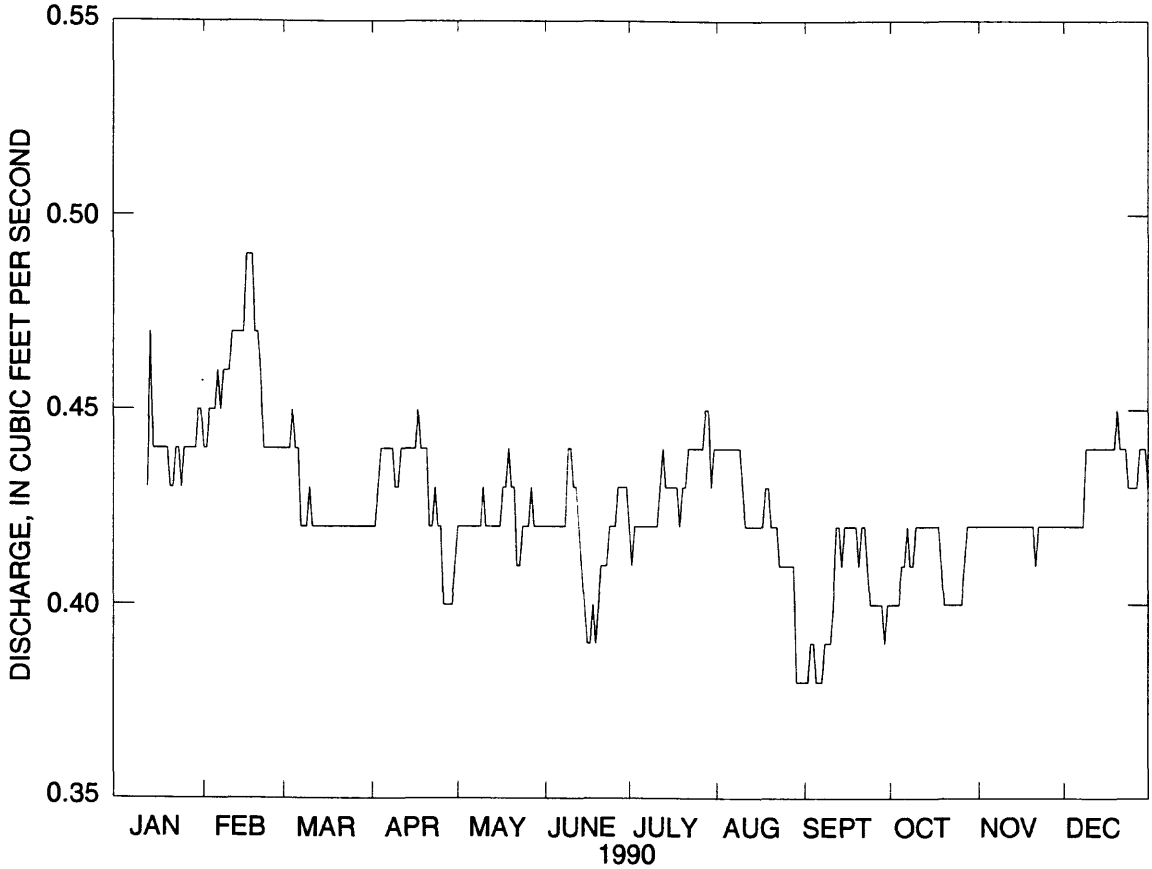

Figure 45. *(A)* Daily mean discharge, Little Hot Creek downstream from Little Hot Creek Spring (LHC-SW), Long Valley Caldera, Mono County, California, 1990.

Table 100. Daily mean discharge, Little Hot Creek downstream of Little Hot Creek Spring (LHC-SW), Long Valley Caldera, Mono County, California, 1990

[Values are in cubic feet per second. e, estimated; Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	0.44	0.44	0.42	0.42	0.42	0.42	0.44	0.38	0.40	0.42	0.42
2	—	.44	.44	.42	.42	.42	.41	.44	.38	.40	.42	.42
3	—	.45	.44	.43	.42	.42	.42	.44	.39	.40	.42	.42
4	—	.45	.45	.44	.42	.42	.42	.44	.39	.40	.42	.42
5	—	.45	.44	.44	.42	.42	.42	.44	.38	.41	.42	.42
6	—	.46	.44	.44	.42	.42	.42	.44	.38	.41	.42	.42
7	—	.45	.42	.44	.42	.42	.42	.44	.38	.42	.42	.42
8	—	.46	.42	.44	.42	.42	.42	.44	.39	.41	.42	.42
9	—	.46	.42	.43	.42	.44	.42	.44	.39	.41	.42	.44
10	—	.46	.43	.43	.43	.44	.42	.43	.39	.42	.42	.44
11	—	.47	.42	.44	.42	.43	.42	.42	.40	.42	.42	.44
12	0.43	.47	.42	.44	.42	e.43	.43	.42	.42	.42	.42	.44
13	.47	.47	.42	.44	.42	e.42	.44	.42	.42	.42	.42	.44
14	.44	.47	.42	.44	.42	e.41	.43	.42	.41	.42	.42	.44
15	.44	.47	.42	.44	.42	e.40	.43	.42	.42	.42	.42	.44
16	.44	.49	.42	.44	.42	.39	.43	.42	.42	.42	.42	.44
17	.44	.49	.42	.45	.43	.39	.43	.42	.42	.42	.42	e.44
18	.44	.49	.42	.44	.43	.40	.43	.43	.42	.42	.42	e.44
19	.44	.47	.42	.44	.44	.39	.42	.43	.42	.41	.42	e.44
20	.43	.47	.42	.44	.43	.40	.43	.42	.41	.40	.42	.45
21	.43	.46	.42	.42	.43	.41	.43	.42	.42	.40	.41	.44
22	.44	.44	.42	.42	.41	.41	.44	.42	.42	.40	.42	.44
23	.44	.44	.42	.43	e.41	.41	.44	.41	.41	.40	.42	.44
24	.43	.44	.42	.42	e.42	.42	.44	.41	.40	.40	.42	.43
25	.44	.44	.42	.42	.42	.42	.44	.41	.40	.40	.42	.43
26	.44	.44	.42	.40	.42	.42	.44	.41	.40	.40	.42	.43
27	.44	.44	.42	.40	.43	.43	.44	.41	.40	.41	.42	.43
28	.44	.44	.42	.40	.42	.43	.45	.41	.40	.42	.42	.44
29	.44	—	.42	.40	.42	.43	.45	.38	.39	.42	.42	.44
30	.45	—	.42	.41	.42	.43	.43	.38	.40	.42	.42	.44
31	.45	—	.42	—	.42	—	.44	.38	—	.42	—	.43
Mean	.44	.46	.42	.43	.42	.42	.43	.42	.40	.41	.42	.43
Max	.47	.49	.45	.45	.44	.44	.45	.44	.42	.42	.42	.45
Min	.43	.44	.42	.40	.41	.39	.41	.38	.38	.40	.41	.42

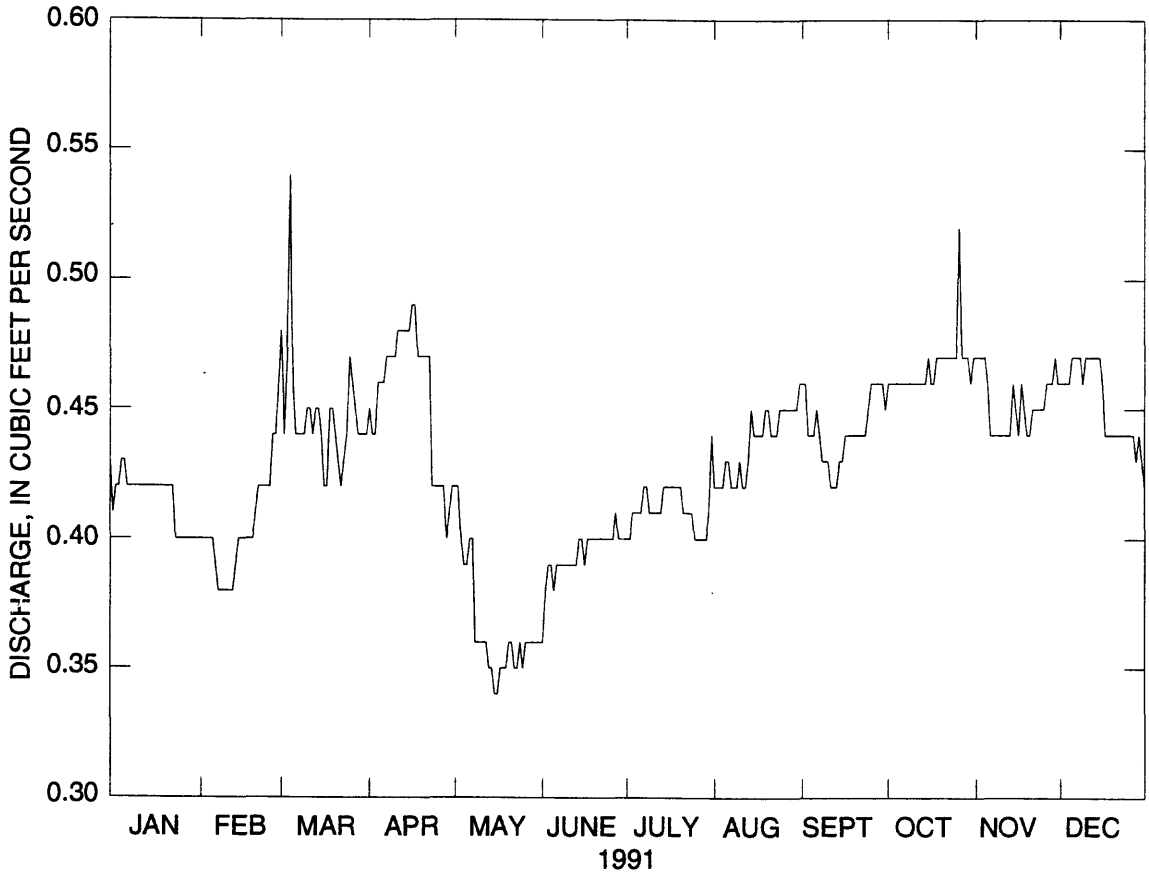

Figure 45. *(B)* Daily mean discharge, Little Hot Creek downstream from Little Hot Creek Spring (LHC-SW), Long Valley Caldera, Mono County, California, 1991.

Table 101. Daily mean discharge, Little Hot Creek downstream of Little Hot Creek Spring (LHC-SW), Long Valley Caldera, Mono County, California, 1991

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.41	0.40	0.48	0.45	0.42	0.36	0.40	0.42	0.46	0.46	0.47	0.46
2	.42	.40	.44	.44	.42	.38	.40	.42	.46	.46	.47	.46
3	.42	.40	.47	.44	.40	.39	.41	.42	.44	.46	.47	.46
4	.43	.40	.54	.46	.39	.39	.41	.42	.44	.46	.47	.46
5	.43	.40	.46	.46	.39	.38	.41	.43	.44	.46	.46	.47
6	.42	.39	.44	.46	.40	.39	.41	.43	.45	.46	.44	.47
7	.42	.38	.44	.47	.40	.39	.42	.42	.44	.46	.44	.47
8	.42	.38	.44	.47	.36	.39	.42	.42	.43	.46	.44	.47
9	.42	.38	.44	.47	.36	.39	.41	.42	.43	.46	.44	.46
10	.42	.38	.45	.47	.36	.39	.41	.43	.43	.46	.44	.47
11	.42	.38	.45	.48	.36	.39	.41	.42	.42	.46	.44	.47
12	.42	.38	.44	.48	.36	.39	.41	.42	.42	.46	.44	.47
13	.42	.39	.45	.48	.35	.39	.41	.43	.42	.46	.44	.47
14	.42	.40	.45	.48	.35	.40	.42	.45	.43	.46	.46	.47
15	.42	.40	.44	.48	.34	.40	.42	.44	.43	.47	.45	.47
16	.42	.40	.42	.49	.34	.39	.42	.44	.44	.46	.44	.46
17	.42	.40	.42	.49	.35	.40	.42	.44	.44	.46	.46	.44
18	.42	.40	.45	.47	.35	.40	.42	.44	.44	.47	.45	.44
19	.42	.40	.45	.47	.35	.40	.42	.45	.44	.47	.44	.44
20	.42	.41	.44	.47	.36	.40	.42	.45	.44	.47	.44	.44
21	.42	.42	.43	.47	.36	.40	.41	.44	.44	.47	.45	.44
22	.42	.42	.42	.47	.35	.40	.41	.44	.44	.47	.45	.44
23	.40	.42	.43	.42	.35	.40	.41	.44	.44	.47	.45	.44
24	.40	.42	.44	.42	.36	.40	.41	.45	.45	.47	.45	.44
25	.40	.42	.47	.42	.35	.40	.40	.45	.46	.47	.45	.44
26	.40	.44	.46	.42	.36	.40	.40	.45	.46	.52	.46	.44
27	.40	.44	.45	.42	.36	.41	.40	.45	.46	.47	.46	.44
28	.40	.46	.44	.40	.36	.40	.40	.45	.46	.47	.46	.43
29	.40	—	.44	.41	.36	.40	.40	.45	.46	.47	.47	.44
30	.40	—	.44	.42	.36	.40	.41	.45	.45	.46	.46	.43
31	.40	—	.44	—	.36	—	.44	.46	—	.47	—	.42
Mean	.41	.40	.45	.45	.37	.39	.41	.44	.44	.47	.45	.45
Max	.43	.46	.54	.49	.42	.41	.44	.46	.46	.52	.47	.47
Min	.40	.38	.42	.40	.34	.36	.40	.42	.42	.46	.44	.42

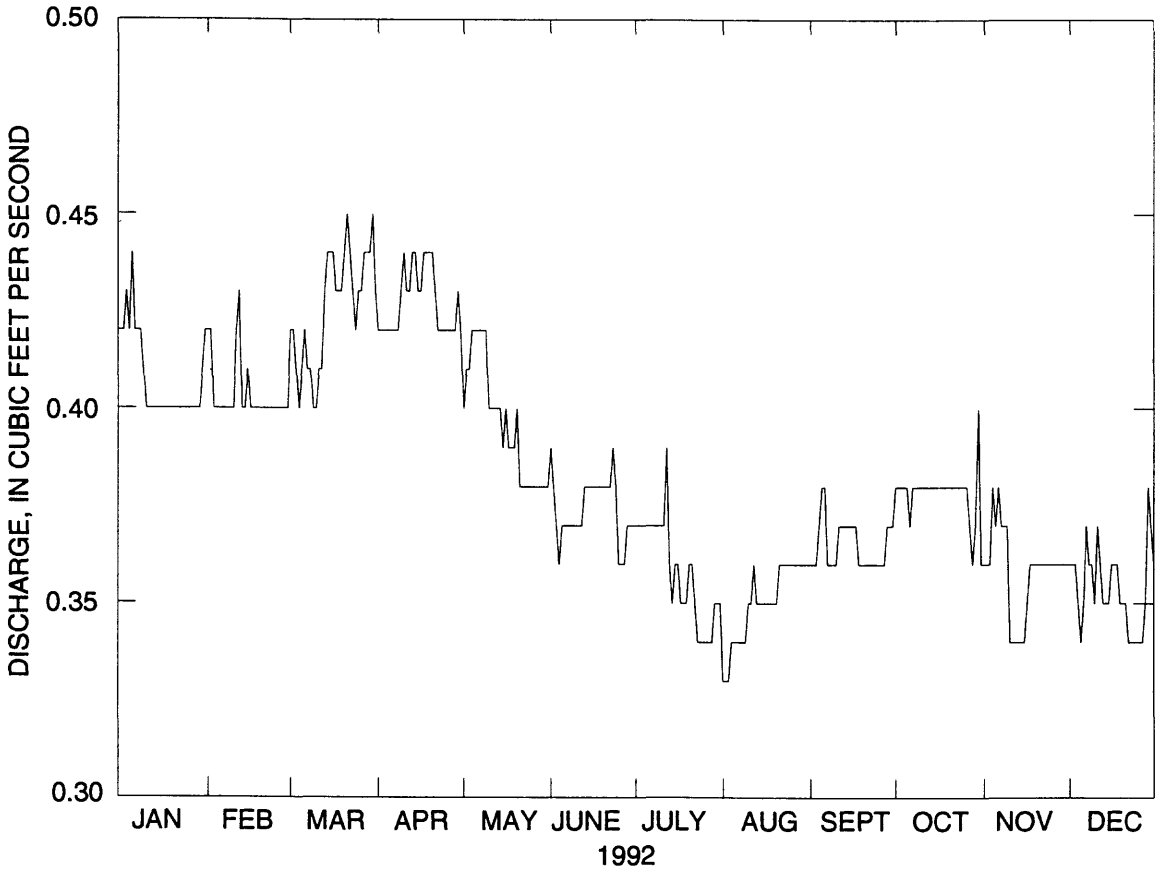

Figure 45. *(C)* Daily mean discharge, Little Hot Creek downstream from Little Hot Creek Spring (LHC-SW), Long Valley Caldera, Mono County, California, 1992.

Table 102. Daily mean discharge, Little Hot Creek downstream of Little Hot Creek Spring (LHC-SW), Long Valley Caldera, Mono County, California, 1992

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.42	0.42	0.42	0.42	0.40	0.39	0.37	0.33	0.36	0.38	0.36	0.36
2	.42	.42	.42	.42	.41	.38	.37	.33	.36	.38	.36	.36
3	.43	.40	.41	.42	.41	.37	.37	.33	.36	.38	.36	.36
4	.42	.40	.40	.42	.42	.36	.37	.34	.37	.38	.38	.35
5	.44	.40	.41	.42	.42	.37	.37	.34	.38	.38	.37	.34
6	.42	.40	.42	.42	.42	.37	.37	.34	.38	.37	.38	.35
7	.42	.40	.41	.42	.42	.37	.37	.34	.36	.38	.37	.37
8	.42	.40	.41	.42	.42	.37	.37	.34	.36	.38	.37	.36
9	.41	.40	.40	.43	.42	.37	.37	.34	.36	.38	.37	.36
10	.40	.40	.40	.44	.40	.37	.37	.35	.36	.38	.34	.35
11	.40	.42	.41	.43	.40	.37	.37	.35	.37	.38	.34	.37
12	.40	.43	.41	.43	.40	.37	.39	.36	.37	.38	.34	.36
13	.40	.40	.43	.44	.40	.38	.36	.35	.37	.38	.34	.35
14	.40	.40	.44	.44	.40	.38	.35	.35	.37	.38	.34	.35
15	.40	.41	.44	.43	.39	.38	.36	.35	.37	.38	.34	.35
16	.40	.40	.44	.43	.40	.38	.36	.35	.37	.38	.35	.36
17	.40	.40	.43	.44	.39	.38	.35	.35	.37	.38	.36	.36
18	.40	.40	.43	.44	.39	.38	.35	.35	.36	.38	.36	.36
19	.40	.40	.43	.44	.39	.38	.35	.35	.36	.38	.36	.35
20	.40	.40	.44	.44	.40	.38	.36	.35	.36	.38	.36	.35
21	.40	.40	.45	.43	.38	.38	.36	.36	.36	.38	.36	.35
22	.40	.40	.44	.42	.38	.38	.35	.36	.36	.38	.36	.34
23	.40	.40	.43	.42	.38	.39	.34	.36	.36	.38	.36	.34
24	.40	.40	.42	.42	.38	.38	.34	.36	.36	.38	.36	.34
25	.40	.40	.43	.42	.38	.36	.34	.36	.36	.38	.36	.34
26	.40	.40	.43	.42	.38	.36	.34	.36	.36	.38	.36	.34
27	.40	.40	.44	.42	.38	.36	.34	.36	.36	.37	.36	.34
28	.40	.40	.44	.42	.38	.37	.34	.36	.37	.36	.36	.35
29	.40	.40	.44	.43	.38	.37	.35	.36	.37	.37	.36	.38
30	.41	—	.45	.42	.38	.37	.35	.36	.37	.40	.36	.37
31	.42	—	.43	—	.38	—	.35	.36	—	.36	—	.36
Mean	.41	.40	.43	.43	.40	.37	.36	.35	.36	.38	.36	.35
Max	.44	.43	.45	.44	.42	.39	.39	.36	.38	.40	.38	.38
Min	.40	.40	.40	.42	.38	.36	.34	.33	.36	.36	.34	.34

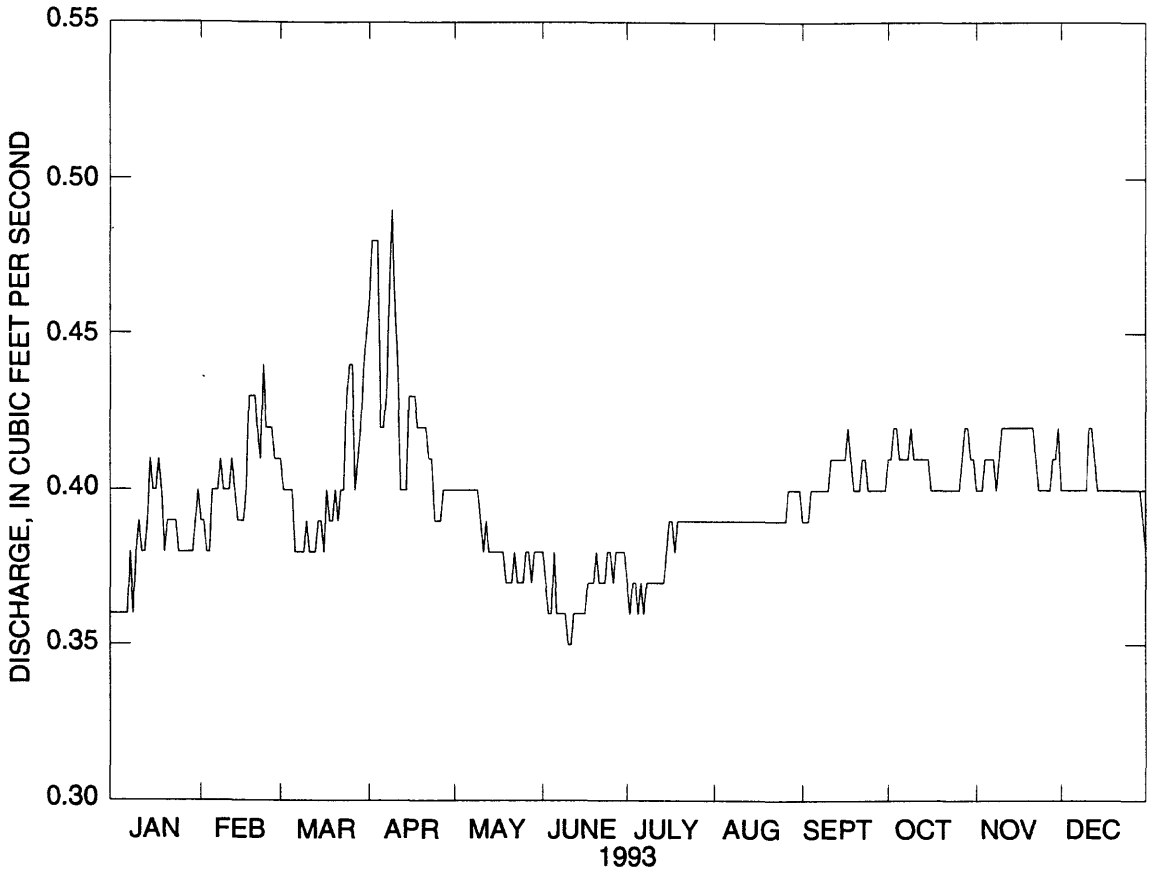

Figure 45. *(D)* Daily mean discharge, Little Hot Creek downstream from Little Hot Creek Spring (LHC-SW), Long Valley Caldera, Mono County, California, 1993.

Table 103. Daily mean discharge, Little Hot Creek downstream of Little Hot Creek Spring (LHC-SW), Long Valley Caldera, Mono County, California, 1993

[Values are in cubic feet per second. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.36	0.39	0.41	0.46	0.40	0.38	0.37	0.39	0.39	0.41	0.40	0.40
2	.36	.39	.40	.48	.40	.37	.36	.39	.39	.41	.40	.40
3	.36	.38	.40	.48	.40	.36	.37	.39	.39	.42	.40	.40
4	.36	.38	.40	.48	.40	.36	.37	.39	.40	.42	.41	.40
5	.36	.40	.40	.42	.40	.38	.36	.39	.40	.41	.41	.40
6	.36	.40	.38	.42	.40	.36	.37	.39	.40	.41	.41	.40
7	.38	.40	.38	.43	.40	.36	.36	.39	.40	.41	.41	.40
8	.36	.41	.38	.46	.40	.36	.37	.39	.40	.41	.40	.40
9	.38	.40	.38	.49	.40	.36	.37	.39	.40	.42	.41	.40
10	.39	.40	.39	.46	.39	.35	.37	.39	.40	.41	.42	.40
11	.38	.40	.38	.44	.38	.35	.37	.39	.41	.41	.42	.42
12	.38	.41	.38	.40	.39	.36	.37	.39	.41	.41	.42	.42
13	.39	.40	.38	.40	.38	.36	.37	.39	.41	.41	.42	.41
14	.41	.39	.39	.40	.38	.36	.37	.39	.41	.41	.42	.40
15	.40	.39	.39	.43	.38	.36	.38	.39	.41	.41	.42	.40
16	.40	.39	.38	.43	.38	.36	.39	.39	.41	.40	.42	.40
17	.41	.40	.40	.43	.38	.37	.39	.39	.42	.40	.42	.40
18	.40	.43	.39	.42	.38	.37	.38	.39	.41	.40	.42	.40
19	.38	.43	.39	.42	.37	.37	.39	.39	.40	.40	.42	.40
20	.39	.43	.40	.42	.37	.38	.39	.39	.40	.40	.42	.40
21	.39	.42	.39	.42	.37	.37	.39	.39	.40	.40	.42	.40
22	.39	.41	.40	.41	.38	.37	.39	.39	.41	.40	.41	.40
23	.39	.44	.40	.41	.37	.37	.39	.39	.41	.40	.40	.40
24	.38	.42	.43	.39	.37	.38	.39	.39	.40	.40	.40	.40
25	.38	.42	.44	.39	.37	.38	.39	.39	.40	.40	.40	.40
26	.38	.42	.44	.39	.38	.37	.39	.39	.40	.40	.40	.40
27	.38	.41	.40	.40	.38	.38	.39	.40	.40	.41	.40	.40
28	.38	.41	.41	.40	.37	.38	.39	.40	.40	.42	.41	.40
29	.38	—	.42	.40	.38	.38	.39	.40	.40	.42	.41	.40
30	.39	—	.44	.40	.38	.38	.39	.40	.40	.41	.42	.39
31	.40	—	.45	—	.38	—	.39	.40	—	.41	—	.38
Mean	.38	.41	.40	.43	.38	.37	.38	.39	.40	.41	.41	.40
Max	.41	.44	.45	.49	.40	.38	.39	.40	.42	.42	.42	.42
Min	.36	.38	.38	.39	.37	.35	.36	.39	.39	.40	.40	.38

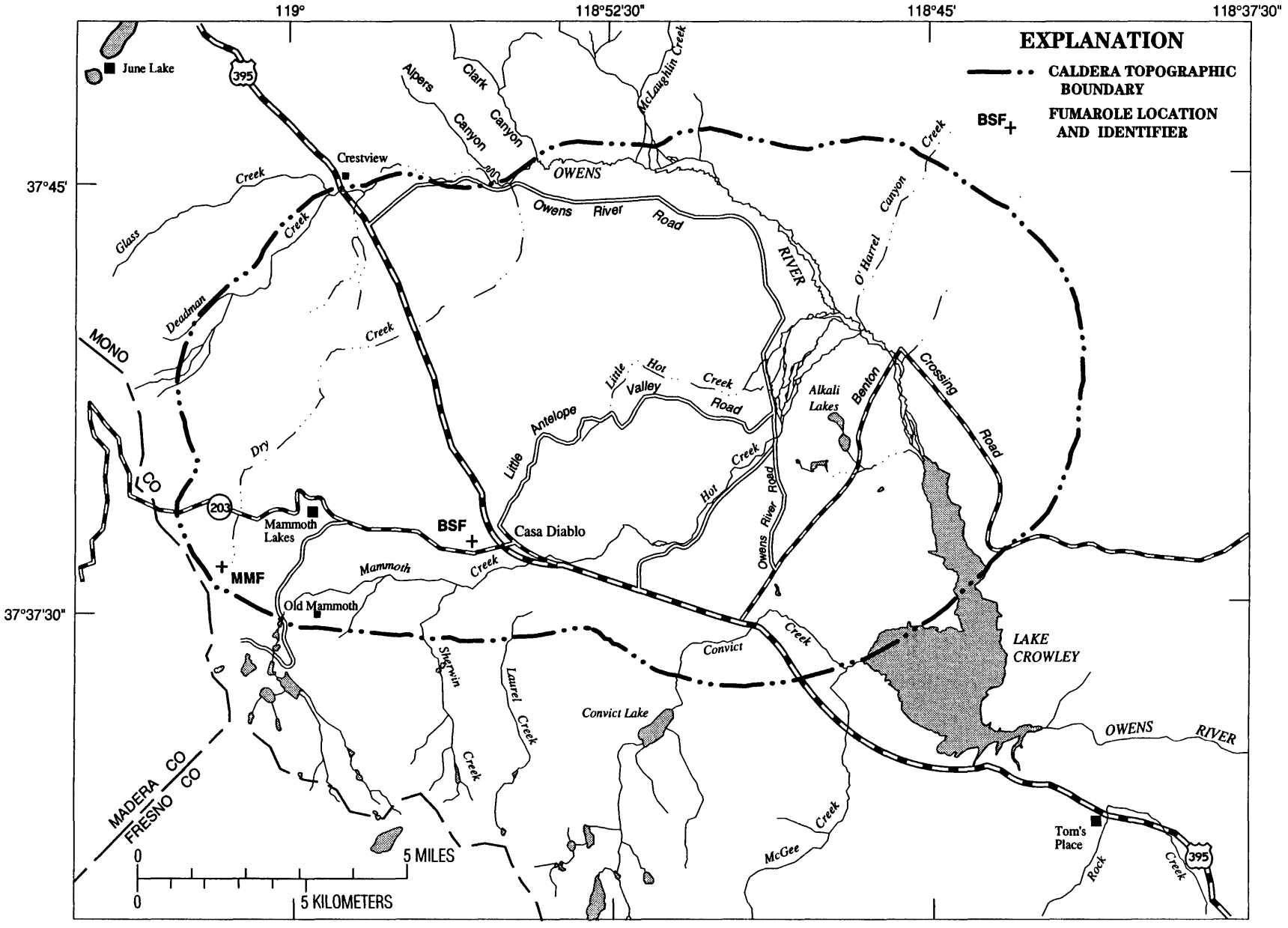

Figure 46. Locations of fumaroles, Long Valley Caldera, Mono County California.

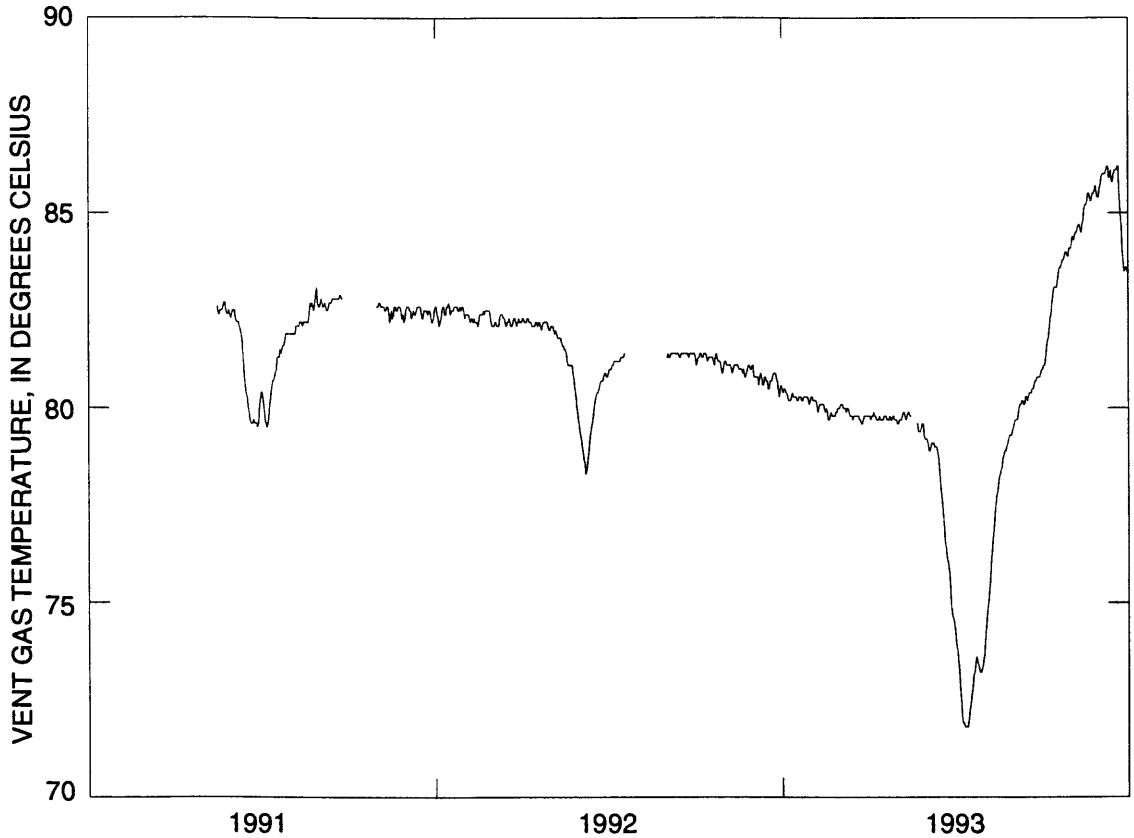

Figure 47. Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), Long Valley Caldera, Mono County, California, 1991–93.

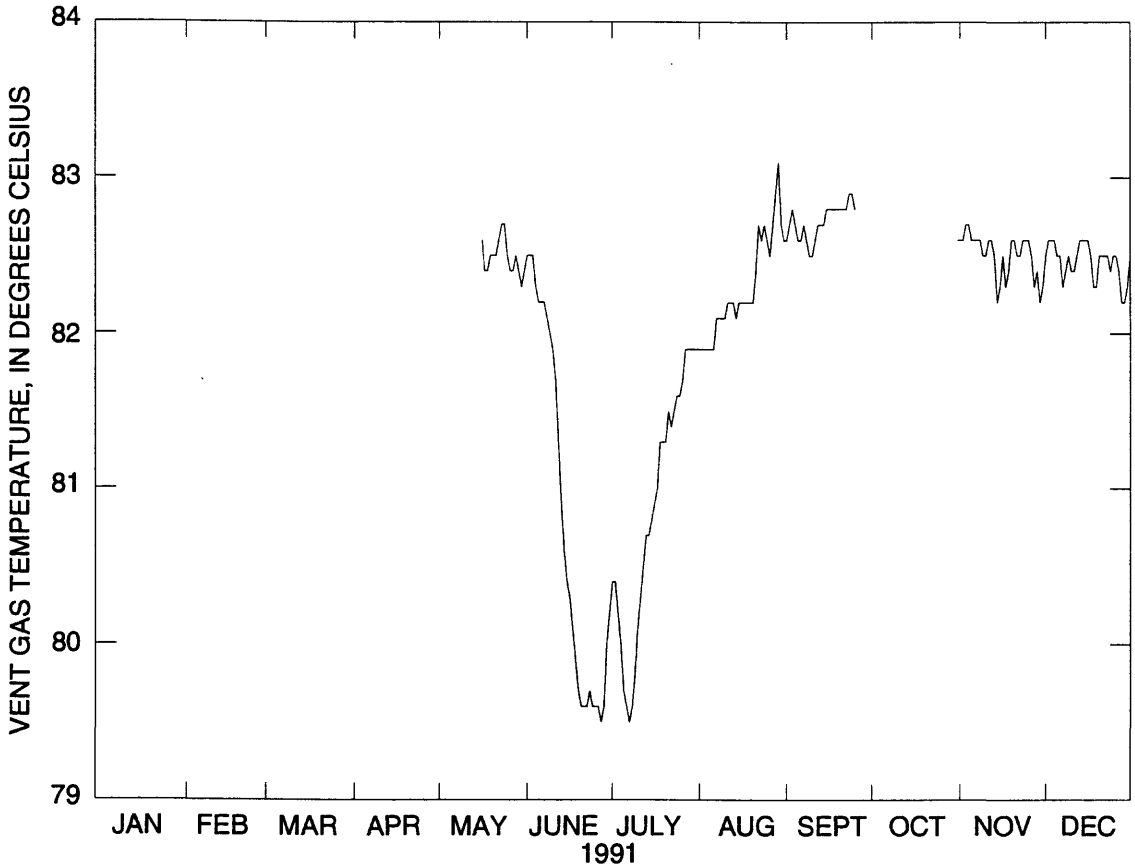

Figure 48. *(A)* Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), Long Valley Caldera, Mono County, California, 1991.

Table 104. Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), Long Valley Caldera, Mono County, California, 1991

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	—	—	—	82.5	80.4	81.9	82.6	—	82.6	82.5
2	—	—	—	—	—	82.5	80.4	81.9	82.7	—	82.6	82.6
3	—	—	—	—	—	82.5	80.2	81.9	82.8	—	82.7	82.6
4	—	—	—	—	—	82.3	80.0	81.9	82.7	—	82.7	82.6
5	—	—	—	—	—	82.2	79.7	81.9	82.6	—	82.6	82.5
6	—	—	—	—	—	82.2	79.6	81.9	82.6	—	82.6	82.5
7	—	—	—	—	—	82.2	79.5	82.1	82.7	—	82.6	82.3
8	—	—	—	—	—	82.1	79.6	82.1	82.6	—	82.6	82.4
9	—	—	—	—	—	82.0	79.8	82.1	82.5	—	82.5	82.5
10	—	—	—	—	—	81.9	80.1	82.1	82.5	—	82.5	82.4
11	—	—	—	—	—	81.7	80.3	82.2	82.6	—	82.6	82.4
12	—	—	—	—	—	81.3	80.5	82.2	82.7	—	82.6	82.5
13	—	—	—	—	—	80.9	80.7	82.2	82.7	—	82.5	82.6
14	—	—	—	—	—	80.6	80.7	82.1	82.7	—	82.2	82.6
15	—	—	—	—	—	80.4	80.8	82.2	82.8	—	82.3	82.6
16	—	—	—	—	82.6	80.3	80.9	82.2	82.8	—	82.5	82.6
17	—	—	—	—	82.4	80.1	81.0	82.2	82.8	—	82.3	82.5
18	—	—	—	—	82.4	79.9	81.3	82.2	82.8	—	82.4	82.3
19	—	—	—	—	82.5	79.7	81.3	82.2	82.8	—	82.6	82.3
20	—	—	—	—	82.5	79.6	81.3	82.2	82.8	—	82.6	82.5
21	—	—	—	—	82.5	79.6	81.5	82.4	82.8	—	82.5	82.5
22	—	—	—	—	82.6	79.6	81.4	82.7	82.8	—	82.5	82.5
23	—	—	—	—	82.7	79.7	81.5	82.6	82.9	—	82.6	82.5
24	—	—	—	—	82.7	79.6	81.6	82.7	82.9	—	82.6	82.4
25	—	—	—	—	82.5	79.6	81.6	82.6	82.8	—	82.6	82.5
26	—	—	—	—	82.4	79.6	81.7	82.5	—	—	82.5	82.5
27	—	—	—	—	82.4	79.5	81.9	82.7	—	—	82.3	82.4
28	—	—	—	—	82.5	79.6	81.9	82.9	—	—	82.4	82.2
29	—	—	—	—	82.4	80.0	81.9	83.1	—	—	82.2	82.2
30	—	—	—	—	82.3	80.2	81.9	82.7	—	—	82.3	82.3
31	—	—	—	—	82.4	—	81.9	82.6	—	82.6	—	82.5
Mean	—	—	—	—	82.5	80.8	80.9	82.3	82.7	82.6	82.5	82.5
Max	—	—	—	—	82.7	82.5	81.9	83.1	82.9	82.6	82.7	82.6
Min	—	—	—	—	82.3	79.5	79.5	81.9	82.5	82.6	82.2	82.2

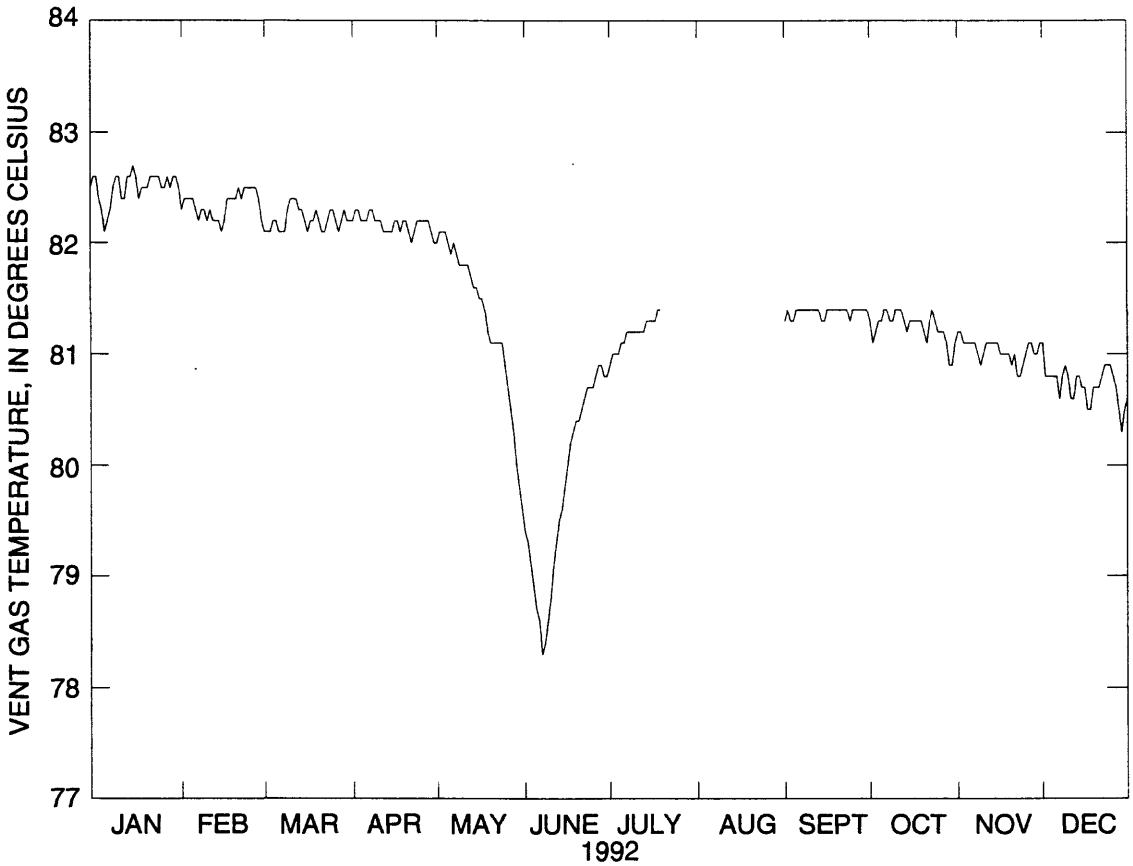

Figure 48. *(B)* Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), Long Valley Caldera, Mono County, California, 1992.

Table 105. Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), Long Valley Caldera, Mono County, California, 1992

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	82.6	82.3	82.1	82.2	82.0	79.4	80.9	—	81.3	81.3	81.2	81.1
2	82.6	82.4	82.1	82.3	82.1	79.3	81.0	—	81.4	81.1	81.2	80.8
3	82.4	82.4	82.1	82.3	82.1	79.1	81.0	—	81.3	81.2	81.1	80.8
4	82.3	82.4	82.2	82.2	82.1	78.9	81.0	—	81.3	81.3	81.1	80.8
5	82.1	82.4	82.2	82.2	82.0	78.7	81.1	—	81.4	81.3	81.1	80.8
6	82.2	82.3	82.1	82.2	81.9	78.6	81.1	—	81.4	81.4	81.1	80.8
7	82.3	82.2	82.1	82.3	82.0	78.3	81.2	—	81.4	81.4	81.1	80.6
8	82.5	82.3	82.1	82.3	81.9	78.4	81.2	—	81.4	81.3	81.0	80.8
9	82.6	82.3	82.3	82.2	81.8	78.6	81.2	—	81.4	81.3	80.9	80.9
10	82.6	82.2	82.4	82.2	81.8	78.8	81.2	—	81.4	81.4	81.0	80.8
11	82.4	82.3	82.4	82.2	81.8	79.1	81.2	—	81.4	81.4	81.1	80.6
12	82.4	82.2	82.4	82.1	81.8	79.3	81.2	—	81.4	81.4	81.1	80.6
13	82.6	82.2	82.3	82.1	81.7	79.5	81.2	—	81.4	81.3	81.1	80.8
14	82.6	82.2	82.3	82.1	81.6	79.6	81.3	—	81.3	81.2	81.1	80.8
15	82.7	82.1	82.2	82.1	81.6	79.8	81.3	—	81.3	81.3	81.1	80.7
16	82.6	82.2	82.1	82.2	81.5	80.0	81.3	—	81.4	81.3	81.0	80.7
17	82.4	82.4	82.2	82.2	81.5	80.2	81.3	—	81.4	81.3	81.0	80.5
18	82.5	82.4	82.2	82.1	81.4	80.3	81.4	—	81.4	81.3	81.0	80.5
19	82.5	82.4	82.3	82.2	81.2	80.4	81.4	—	81.4	81.3	81.0	80.7
20	82.5	82.4	82.2	82.2	81.1	80.4	—	—	81.4	81.2	80.9	80.7
21	82.6	82.5	82.1	82.1	81.1	80.5	—	—	81.4	81.1	81.0	80.7
22	82.6	82.4	82.1	82.0	81.1	80.6	—	—	81.4	81.3	80.8	80.8
23	82.6	82.5	82.2	82.1	81.1	80.7	—	—	81.4	81.4	80.8	80.9
24	82.6	82.5	82.3	82.2	81.1	80.7	—	—	81.3	81.3	80.9	80.9
25	82.5	82.5	82.3	82.2	80.9	80.7	—	—	81.4	81.2	81.0	80.9
26	82.5	82.5	82.2	82.2	80.7	80.8	—	—	81.4	81.2	81.1	80.8
27	82.6	82.5	82.1	82.2	80.5	80.9	—	—	81.4	81.2	81.1	80.7
28	82.5	82.4	82.2	82.2	80.3	80.9	—	—	81.4	81.1	81.0	80.5
29	82.6	82.2	82.3	82.1	80.0	80.8	—	—	81.4	80.9	81.0	80.3
30	82.6	—	82.2	82.0	79.8	80.8	—	—	81.4	80.9	81.1	80.5
31	82.5	—	82.2	—	79.6	—	—	—	—	81.1	—	80.6
Mean	82.5	82.3	82.2	82.2	81.3	79.8	81.2	—	81.4	81.2	81.0	80.7
Max	82.7	82.5	82.4	82.3	82.1	80.9	81.4	—	81.4	81.4	81.2	81.1
Min	82.1	82.1	82.1	82.0	79.6	78.3	80.9	—	81.3	80.9	80.8	80.3

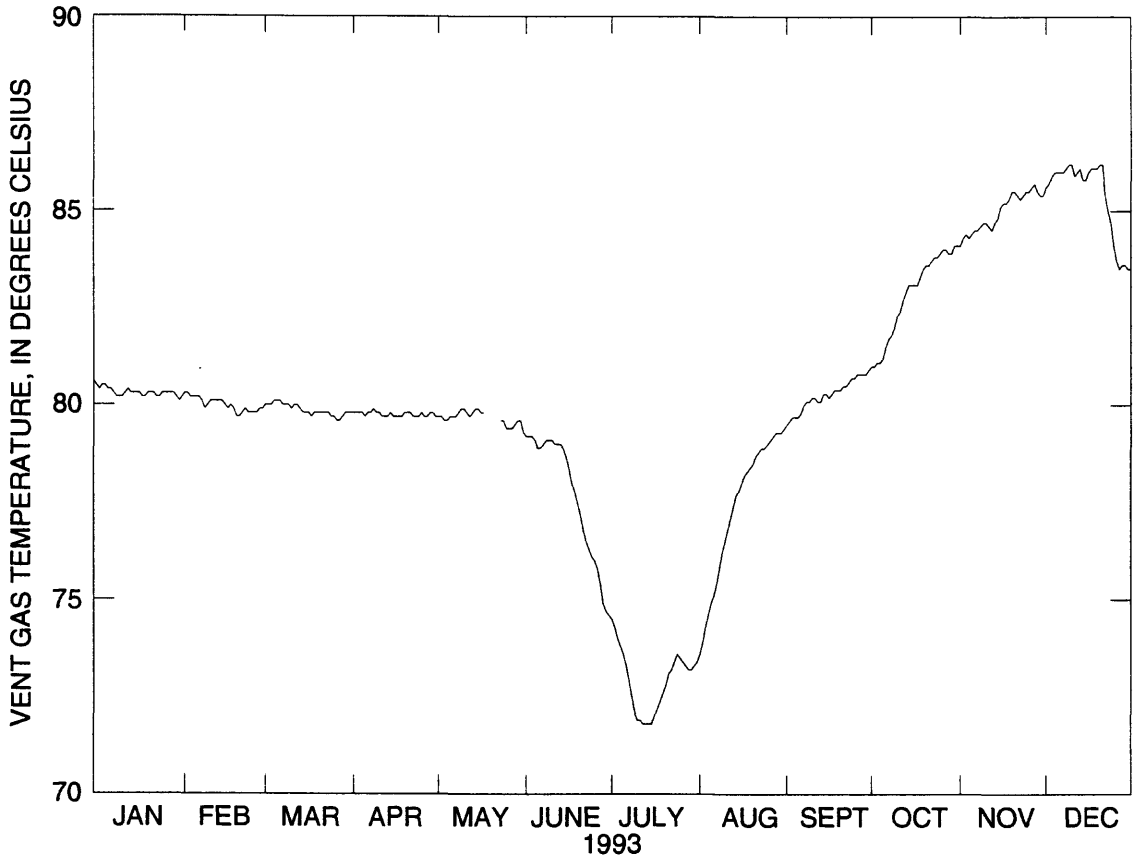

Figure 48. *(C)* Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), Long Valley Caldera, Mono County, California, 1993.

Table 106. Daily mean vent gas temperature, Mammoth Mountain Fumarole (MMF), Long Valley Caldera, Mono County, California, 1993

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	80.5	80.3	80.0	79.8	79.7	79.2	74.5	73.6	79.5	81.0	84.1	85.6
2	80.4	80.3	80.0	79.8	79.7	79.2	74.3	73.9	79.6	81.0	84.3	85.7
3	80.5	80.2	80.0	79.8	79.6	79.2	74.0	74.3	79.7	81.1	84.4	85.9
4	80.5	80.2	80.1	79.8	79.6	79.1	73.8	74.6	79.7	81.1	84.3	86.0
5	80.4	80.2	80.1	79.7	79.7	78.9	73.6	74.9	79.7	81.2	84.4	86.0
6	80.4	80.2	80.1	79.8	79.7	78.9	73.3	75.1	79.8	81.5	84.5	86.0
7	80.3	80.1	80.0	79.8	79.7	79.0	72.9	75.4	80.0	81.7	84.5	86.0
8	80.2	79.9	80.0	79.9	79.8	79.1	72.5	75.8	80.1	81.8	84.6	86.1
9	80.2	80.0	80.0	79.8	79.9	79.1	72.1	76.2	80.1	82.0	84.7	86.2
10	80.2	80.1	79.9	79.8	79.9	79.1	71.9	76.5	80.2	82.3	84.7	86.2
11	80.3	80.1	80.0	79.7	79.8	79.0	71.9	76.8	80.2	82.4	84.6	85.9
12	80.4	80.1	80.0	79.7	79.7	79.0	71.8	77.1	80.1	82.7	84.5	86.0
13	80.3	80.1	79.9	79.7	79.8	79.0	71.8	77.4	80.1	82.9	84.7	86.1
14	80.3	80.1	79.8	79.8	79.9	78.9	71.8	77.7	80.3	83.1	84.8	85.8
15	80.3	80.0	79.8	79.7	79.9	78.7	71.8	77.8	80.3	83.1	85.1	85.8
16	80.3	79.9	79.8	79.7	79.8	78.4	72.0	78.0	80.2	83.1	85.2	86.0
17	80.2	80.0	79.7	79.7	79.8	78.0	72.2	78.2	80.3	83.1	85.2	86.1
18	80.2	79.9	79.8	79.7	—	77.8	72.4	78.3	80.4	83.3	85.3	86.1
19	80.3	79.7	79.8	79.8	—	77.5	72.6	78.4	80.4	83.5	85.5	86.1
20	80.3	79.7	79.8	79.8	—	77.2	72.8	78.5	80.4	83.6	85.5	86.2
21	80.3	79.8	79.8	79.8	—	76.8	73.1	78.7	80.5	83.6	85.4	86.2
22	80.2	79.9	79.8	79.7	—	76.5	73.2	78.8	80.5	83.7	85.3	85.4
23	80.2	79.8	79.8	79.7	79.6	76.3	73.4	78.9	80.6	83.8	85.4	85.0
24	80.3	79.8	79.7	79.7	79.6	76.1	73.6	78.9	80.7	83.8	85.5	84.7
25	80.3	79.8	79.7	79.8	79.4	76.0	73.5	79.0	80.7	83.9	85.5	84.1
26	80.3	79.8	79.6	79.7	79.4	75.8	73.4	79.1	80.8	84.0	85.6	83.7
27	80.3	79.9	79.6	79.7	79.4	75.4	73.3	79.2	80.8	84.0	85.7	83.5
28	80.3	79.9	79.7	79.8	79.5	74.9	73.2	79.3	80.8	83.9	85.5	83.6
29	80.2	—	79.8	79.8	79.6	74.7	73.2	79.3	80.8	83.9	85.4	83.6
30	80.1	—	79.8	79.7	79.6	74.6	73.3	79.3	80.9	84.1	85.4	83.5
31	80.2	—	79.8	—	79.3	—	73.4	79.4	—	84.1	—	83.5
Mean	80.3	80.0	79.9	79.8	79.7	77.7	72.9	77.4	80.3	82.8	85.0	85.4
Max	80.5	80.3	80.1	79.9	79.9	79.2	74.5	79.4	80.9	84.1	85.7	86.2
Min	80.1	79.7	79.6	79.7	79.3	74.6	71.8	73.6	79.5	81.0	84.1	83.5

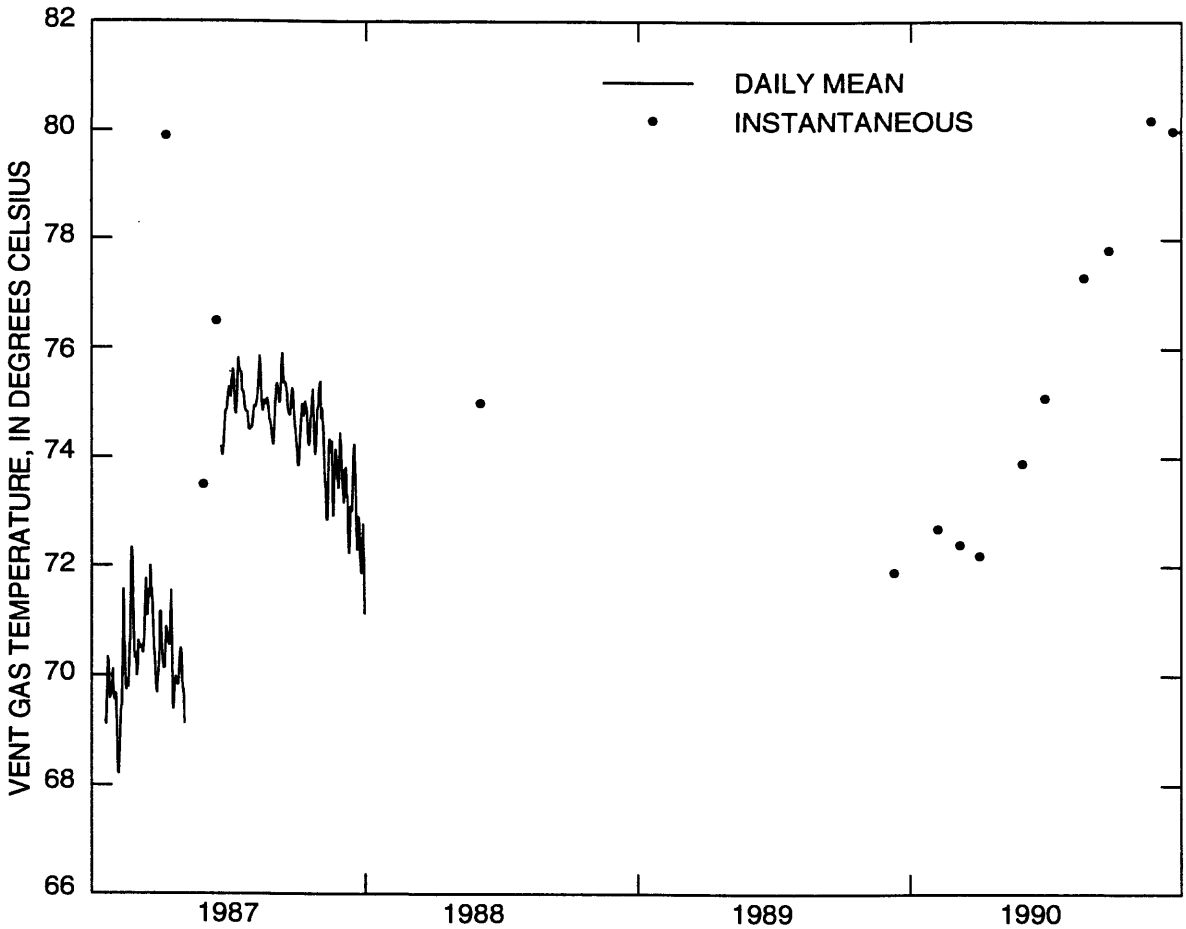

Figure 49. Daily mean and instantaneous measured vent gas temperatures, Basalt Fumarole (BSF), Long Valley Caldera, Mono County, California, 1987–90.

Table 107. Daily mean vent gas temperature, Basalt Fumarole (BSF), Long Valley Caldera, Mono County, California, 1987

[Values are in degrees Celsius. Max, maximum; Min, minimum; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	69.6	70.4	70.1	70.5	—	74.9	74.5	74.2	74.4	75.3	73.6
2	—	69.7	70.3	70.3	70.4	—	74.9	74.5	74.5	74.2	75.4	73.4
3	—	69.7	70.0	71.2	69.9	—	75.2	74.5	74.8	73.9	74.7	73.2
4	—	69.2	70.2	71.2	69.8	—	75.2	74.6	75.1	73.8	74.9	73.8
5	—	68.5	70.6	70.8	69.7	—	75.3	74.7	75.3	74.0	—	73.8
6	—	68.2	70.6	70.4	69.1	—	75.2	74.8	75.4	74.2	74.5	73.8
7	—	68.2	70.5	70.2	—	—	75.1	75.0	75.3	74.6	73.9	73.3
8	—	68.6	70.5	70.1	—	—	75.4	74.9	75.2	74.8	73.6	73.3
9	—	69.1	70.5	70.1	—	—	75.5	74.9	75.0	75.0	73.4	72.6
10	—	69.4	70.5	70.3	—	—	75.6	75.0	75.0	74.9	72.9	72.2
11	—	69.5	70.4	70.9	—	—	75.5	75.1	75.3	74.8	72.8	72.4
12	—	70.6	70.6	70.8	—	—	75.1	75.3	75.8	75.0	73.2	73.1
13	—	71.6	70.8	70.7	—	—	74.8	75.6	75.9	75.0	74.1	73.2
14	—	70.6	71.3	70.6	—	—	74.8	75.9	75.5	74.9	74.3	73.0
15	—	70.5	71.8	70.6	—	—	75.0	75.7	75.4	74.9	74.1	73.5
16	—	69.8	71.4	70.6	—	—	75.5	75.3	75.4	74.6	74.3	74.1
17	—	69.7	71.1	71.1	—	—	75.8	75.0	75.4	74.3	74.3	74.3
18	—	69.9	71.3	71.6	—	—	75.6	74.8	75.3	74.2	73.5	73.9
19	—	69.8	71.6	70.8	—	—	—	74.9	75.2	74.3	72.9	73.7
20	69.2	69.8	71.4	69.5	—	—	75.6	75.1	74.9	74.7	73.5	72.6
21	69.1	70.4	72.0	69.2	—	—	75.6	75.1	74.8	74.8	73.8	72.3
22	69.7	70.7	71.6	69.7	—	—	75.2	75.0	74.8	75.1	74.2	72.9
23	70.3	72.0	71.6	69.9	—	—	75.2	75.0	74.8	75.3	74.0	72.9
24	70.2	72.3	71.3	70.0	—	74.2	75.2	75.1	74.9	74.8	73.7	72.8
25	69.9	72.2	70.8	70.0	—	74.2	75.0	75.0	75.2	74.2	73.6	72.2
26	69.6	71.4	70.5	69.8	—	74.0	74.9	74.8	75.3	74.0	73.4	71.9
27	69.7	70.7	70.3	69.8	—	74.1	74.9	74.7	75.1	74.2	73.8	71.9
28	69.8	70.3	69.9	69.9	—	74.4	74.8	74.7	74.9	74.5	74.5	72.2
29	69.9	—	69.8	70.2	—	74.6	74.8	74.6	74.7	74.9	74.3	72.8
30	70.1	—	69.7	70.4	—	74.8	74.7	74.4	74.5	74.9	73.9	72.2
31	69.6	—	69.9	—	—	—	74.5	74.3	—	75.3	—	71.1
Mean	69.8	70.1	70.8	70.4	69.9	74.3	75.2	74.9	75.1	74.6	74.0	73.0
Max	70.3	72.3	71.8	71.6	70.5	74.8	75.8	75.9	75.9	75.3	75.4	74.3
Min	69.1	68.2	69.7	69.2	69.1	74.0	74.5	74.3	74.2	73.8	72.8	71.1

Table 108. Miscellaneous instantaneous vent gas temperatures, Basalt Fumarole (BSF), Long Valley Caldera, Mono County, California, 1987–90

[Vent gas temperature is in degrees Celsius]

Date	Vent gas temperature
04-11-87	79.9
05-31-87	73.5
06-18-87	76.5
06-03-88	75.0
12-11-89	71.9
02-06-90	72.7
03-07-90	72.4
04-03-90	72.2
05-30-90	73.9
06-29-90	75.1
08-21-90	77.3
09-24-90	77.8
11-18-90	80.2
12-18-90	80.0

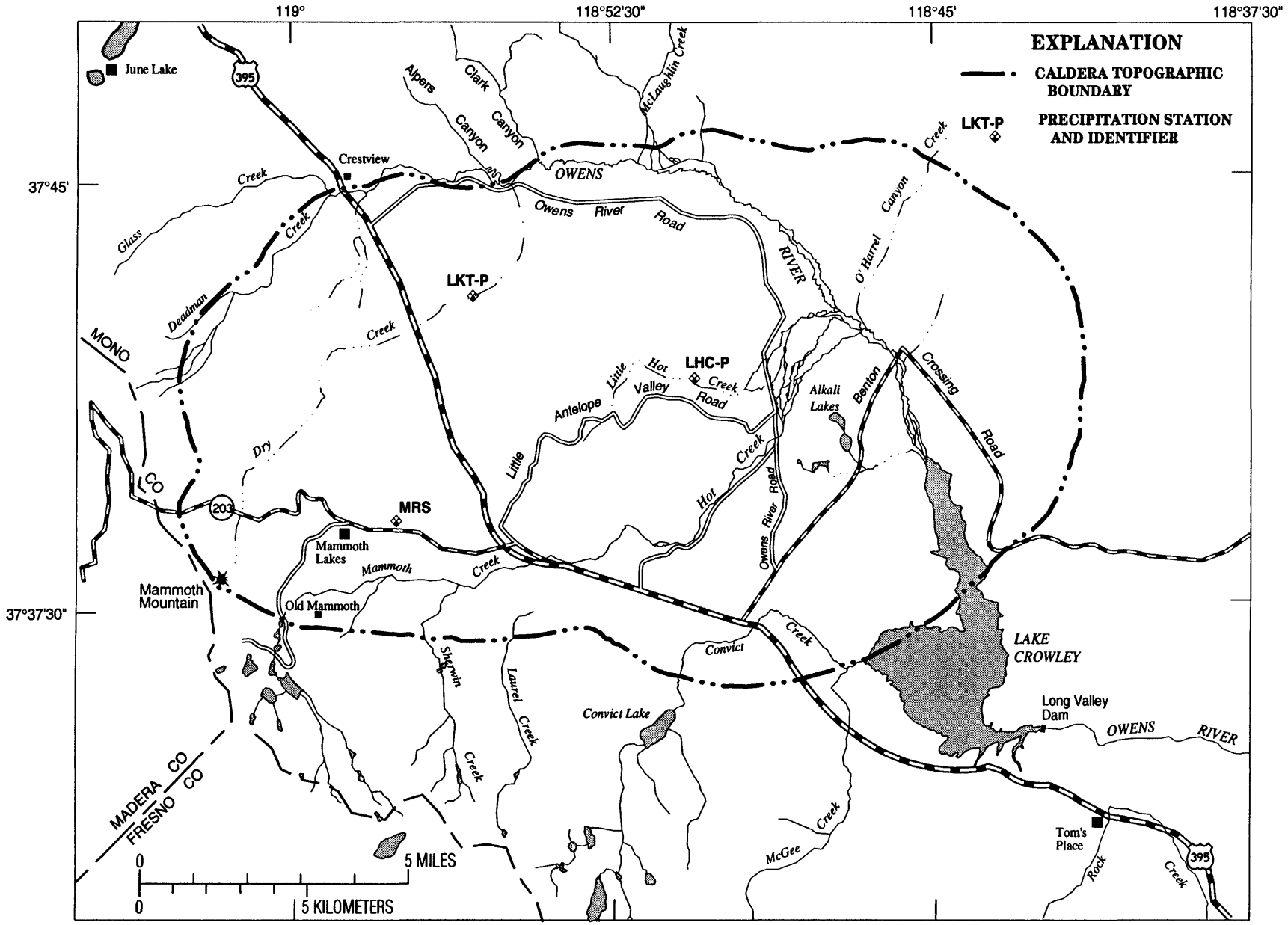

Figure 50. Locations of precipitation gages, Long Valley Caldera, Mono County, California.

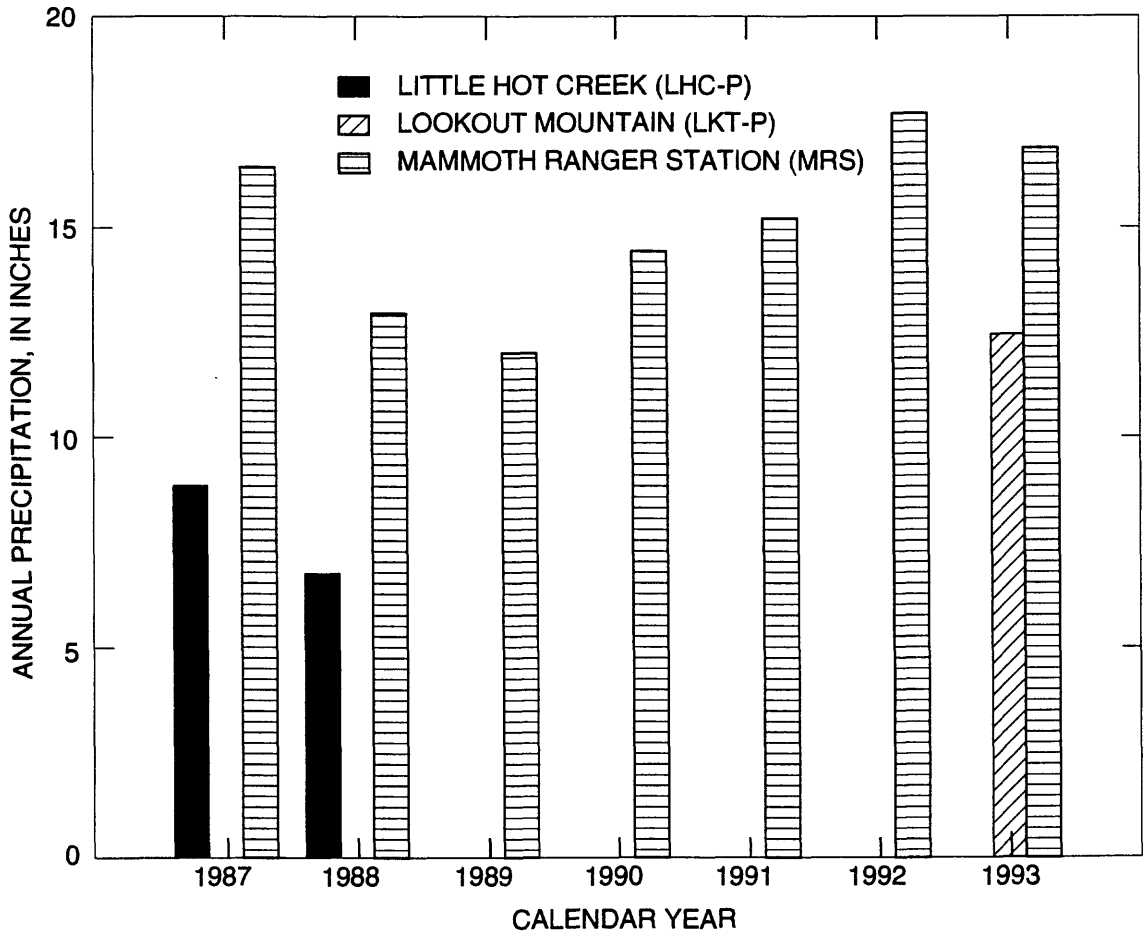

Figure 51. Annual precipitation at Little Hot Creek (LHC-P), Lookout Mountain (LKT-P), and Mammoth Ranger Station (MRS), 1987–93.

Table 109. Daily precipitation, Little Hot Creek gage (LHC-P), Long Valley Caldera, Mono County, California, 1987

[Altitude of site: 6,960 feet. Instrument type: weighing-bucket gage. Precipitation in inches; calendar year January to December 1987; daily sum values. Max, maximum; *, no precipitation]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	0.07	*	0.15	*
3	0.54	*	*	0.05	*	*	*	0.10	*	*	.15	*
4	.59	*	*	*	*	*	*	*	*	*	.35	*
5	.02	*	0.25	*	*	0.07	*	*	*	*	.48	*
6	.10	*	.03	*	*	.21	*	*	*	*	*	0.50
7	*	*	*	*	*	*	*	*	*	*	*	.03
8	*	*	*	*	0.10	*	*	*	*	*	*	*
9	*	*	*	*	.03	*	*	*	*	*	*	*
10	*	*	*	*	.03	*	*	*	*	*	*	*
11	*	0.02	*	*	*	*	*	*	*	*	*	*
12	*	.66	.09	*	.05	*	*	*	*	0.03	*	*
13	*	.49	.06	*	*	*	*	*	*	*	.04	*
14	*	*	.06	*	.10	*	*	*	*	*	*	*
15	*	*	*	*	.15	*	0.10	*	*	*	*	.08
16	*	*	*	*	*	*	*	*	*	*	*	.06
17	*	*	*	*	.13	*	*	*	*	*	.17	*
18	*	*	*	*	*	*	*	*	*	*	*	.08
19	*	*	*	*	*	*	*	*	*	*	*	.03
20	*	*	*	*	.52	*	*	*	*	*	.10	*
21	*	*	.02	*	*	*	*	*	*	*	.02	*
22	*	*	*	*	*	*	*	*	*	.21	*	.06
23	*	.15	.06	*	*	*	*	*	*	*	*	*
24	*	*	.06	*	*	*	*	*	*	.05	*	*
25	*	.02	*	*	*	*	*	*	*	*	*	*
26	*	*	*	*	*	.08	*	*	*	*	*	*
27	.19	*	*	*	.20	*	*	*	*	.06	*	*
28	*	*	*	*	*	*	*	*	*	.09	*	.40
29	*	*	*	.05	*	*	*	*	*	*	*	.15
30	*	*	*	*	*	*	*	*	*	*	*	*
31	*	*	*	*	*	*	*	*	*	.10	*	*
Total	1.44	1.34	.63	.10	1.31	.36	.10	.10	.07	.54	1.46	1.39
Max	.59	.66	.25	.05	.52	.21	.10	.10	.07	.21	.48	.50

Table 110. Daily precipitation, Little Hot Creek gage (LHC-P), Long Valley Caldera, Mono County, California, 1988

[Altitude of site: 6,960 feet. Instrument type: weighing-bucket gage. Precipitation in inches; calendar year January to December 1988; daily sum values. No record July 22 to August 3 and November 7 to December 6 due to recorder malfunction. Max, maximum; *, no precipitation; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	*	*	0.11	*	*	*	*	—	0.17	*	*	—
2	*	*	*	*	*	*	*	—	*	*	*	—
3	*	*	*	*	*	*	*	—	*	*	*	—
4	0.40	*	*	*	*	*	*	0.09	*	*	*	—
5	.43	*	*	*	*	0.02	*	*	*	0.05	*	—
6	*	*	*	*	*	*	*	*	*	*	*	—
7	*	*	*	*	*	*	*	*	*	*	—	*
8	*	*	*	*	*	*	*	*	*	*	—	*
9	*	*	*	*	*	*	*	*	*	*	—	*
10	*	*	*	*	*	*	*	*	*	*	—	*
11	.05	*	*	*	*	*	*	*	*	*	—	*
12	*	*	*	*	*	*	*	*	*	*	—	*
13	*	*	*	*	*	*	*	*	*	*	—	*
14	*	*	*	0.10	*	*	*	*	*	*	—	*
15	.32	*	*	.07	*	*	*	*	*	*	—	*
16	.02	*	*	*	*	*	*	*	*	*	—	0.30
17	.52	*	*	*	*	*	*	*	*	*	—	.20
18	*	*	*	*	*	*	*	*	*	*	—	*
19	*	*	*	.10	*	.37	*	*	.02	*	—	*
20	*	*	*	.05	*	.10	*	*	.09	*	—	.17
21	*	*	*	*	*	*	*	*	*	*	—	.02
22	*	*	*	*	*	*	—	*	*	*	—	.16
23	*	*	*	.04	*	*	—	*	*	*	—	.40
24	*	*	*	*	*	*	—	*	*	*	—	.75
25	*	*	*	*	*	*	—	*	*	*	—	.02
26	*	*	*	*	*	*	—	.80	*	*	—	.01
27	*	0.12	*	*	*	*	—	*	*	*	—	.01
28	*	.04	*	*	0.35	*	—	*	*	*	—	.01
29	*	.07	*	*	.02	*	—	*	*	*	—	*
30	*	*	*	*	*	*	—	.04	*	*	—	.09
31	*	*	*	*	*	*	—	*	*	.04	—	.01
Total	1.74	.23	.11	.36	.37	.49	[1]	[1].93	.28	.09	[1]	[1]2.15
Max	.52	.12	.11	.10	.35	.37	[1]	[1].80	.17	.05	[1]	[1].75

[1]Incomplete record.

Table 111. Daily precipitation, Lookout Mountain gage (LKT-P), Long Valley Caldera, Mono County, California, 1993

[Altitude of site: 7,350 feet. Instrument type: tipping-bucket gage. Values are in inches. Max, maximum; *, no precipitation; —, no data]

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	—	—	*	*	*	—	*	—	—	—	—	—
2	—	—	*	*	*	—	*	—	—	—	—	*
3	—	—	*	*	0.04	—	*	—	—	—	—	*
4	—	*	*	0.08	*	—	*	—	—	—	—	0.04
5	—	0.04	*	.04	*	—	*	—	—	—	—	*
6	*	.04	*	*	*	—	*	—	—	—	—	*
7	*	*	*	*	*	—	*	—	—	—	—	*
8	0.04	.12	*	*	*	—	*	—	—	—	—	*
9	*	.04	*	*	*	—	*	—	—	—	—	*
10	.39	*	*	*	*	—	*	—	—	—	—	*
11	*	*	*	*	*	—	*	—	—	—	—	.35
12	.39	*	*	*	—	—	*	—	—	—	—	.23
13	.58	*	*	*	—	—	*	—	—	—	—	*
14	1.3	*	*	*	—	—	*	—	—	—	—	*
15	.74	*	*	*	—	—	*	—	—	—	—	*
16	.35	.04	*	*	—	*	*	—	—	—	—	.04
17	.51	*	*	.23	—	*	*	—	—	—	—	*
18	.16	1.1	*	.08	—	*	*	—	—	—	—	*
19	.08	.74	*	*	—	*	*	—	—	—	—	*
20	*	.58	*	*	—	*	—	—	—	—	—	*
21	.04	*	*	*	—	0.04	—	—	—	—	—	*
22	.35	.16	*	*	—	*	—	—	—	—	—	*
23	*	1.5	*	*	—	*	—	—	—	—	—	*
24	*	1.0	*	*	—	*	—	—	—	—	—	.04
25	*	*	0.23	*	—	*	—	—	—	—	—	*
26	*	.16	.39	*	—	*	—	—	—	—	—	*
27	—	.04	*	*	—	*	—	—	—	—	—	.04
28	—	*	.19	*	—	*	—	—	—	—	—	*
29	—	*	*	*	—	*	—	—	—	—	—	*
30	—	*	*	*	—	*	—	—	—	—	—	*
31	—	*	*	*	—	*	—	—	—	—	—	*
Total	4.93[1]	5.56[1]	.81	.43	.04[1]	.04[1]	[1]	—	—	—	—	.74[1]
Max	1.30[1]	1.50[1]	.39	.23	.04[1]	.04[1]	[1]	—	—	—	—	.35[1]

[1]Incomplete record.

Table 112. Monthly precipitation at Mammoth Ranger Station gage (MRS), Long Valley Caldera, Mono County, California, 1987–93

[Altitude of site: 7,800 feet. Instrument type: weighing-bucket recording gage. Data provided by: Thom Heller, U.S. Forest Service. Values are in inches. Max, maximum]

	1987	1988	1989	1990	1991	1992	1993
January	3.13	3.26	0.57	4.89	0.93	1.38	4.99
February	2.98	.56	1.60	4.05	.32	3.50	6.80
March	2.00	.15	3.59	.86	9.12	.80	1.03
April	.61	.87	.37	1.12	.18	.00	.32
May	1.09	.93	.81	.80	.21	.02	.00
June	.47	.66	.43	.67	.02	1.02	1.16
July	.00	.31	.07	.50	.25	.86	.00
August	.00	.52	1.09	.16	.17	.39	.00
September	.05	.31	1.59	.54	.54	.30	.00
October	.88	.03	.93	.00	.39	.73	.26
November	1.90	2.33	.71	.48	1.01	.00	.76
December	3.30	3.00	.23	.35	1.85	8.68	1.52
Total	16.41	12.93	11.99	14.42	14.99	17.68	16.84
Max	3.30	3.26	3.59	4.89	9.12	8.68	6.80

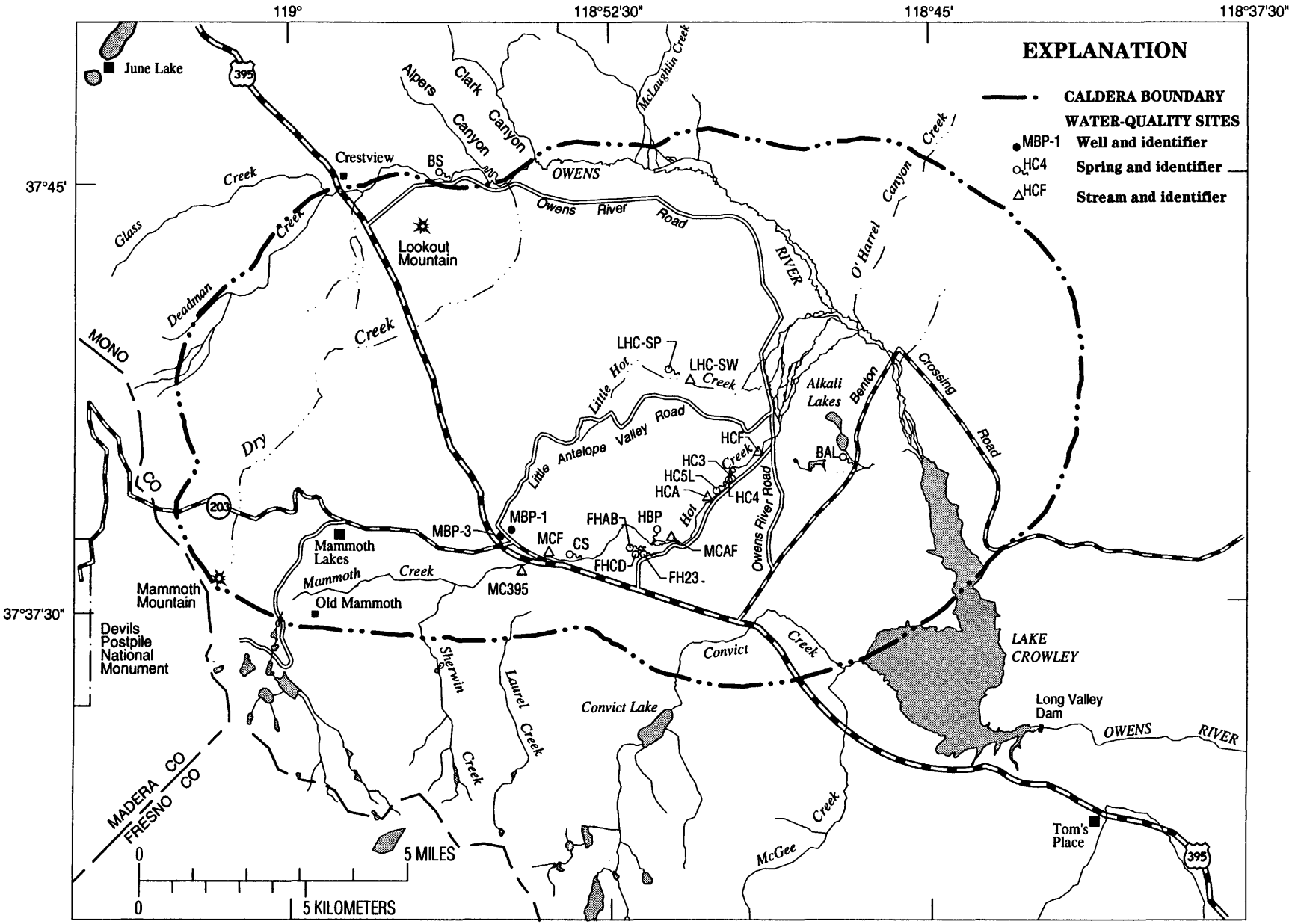

Figure 52. Locations of water-quality sampling sites, Long Valley Caldera, Mono County, California.

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93

[°C, degrees Celsius; µS/cm, microsiemens per centimeter at 25 °C; alkalinity is total, whole water, fixed end point titration to pH 4.5; mg/L, milligrams per liter; µg/L, micrograms per liter; ratio per mil, parts per thousand difference from Standard Mean Ocean Water; —, no data; <, less than]

Station identifier	Date	Temperature, water (°C)	Specific conductance (µS/cm)	pH, water whole field (standard units)	Alkalinity, field, as $CaCO_3$ (mg/L)	Alkalinity lab, as $CaCO_3$ (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L)
MC395	07-13-88	13.0	82	7.9	42	30	0.30	0.20	0.010
	10-18-88	5.5	140	8.2	73	70	.40	.10	<.010
	01-11-89	.0	165	7.6	78	79	.40	.30	<.010
	04-11-89	5.5	143	7.7	69	72	.40	.20	.010
	07-18-89	13.5	90	7.2	49	43	.30	.10	.020
	10-18-89	4.0	137	8.2	—	65	1.0	.10	<.010
	01-09-90	.0	143	7.9	86	79	.40	.10	.020
	04-25-90	3.0	124	8.0	64	—	.50	.10	<.010
	07-17-90	17.5	84	8.0	45	44	<.10	.20	.020
	10-16-90	8.0	103	8.1	64	68	1.2	.30	<.050
	01-17-91	.0	165	8.0	81	85	.20	<.10	.040
	04-16-91	1.0	161	8.1	82	85	.20	.10	<.010
	07-22-91	17.0	71	7.3	35	35	<.10	.10	.020
	10-22-91	9.5	119	8.3	63	60	.70	.20	.020
	01-13-92	.5	137	8.2	70	72	.50	.20	.010
	04-14-92	1.0	159	8.4	80	81	.10	<.10	.020
	07-06-92	15.0	88	8.1	42	42	<.10	<.10	.010
	10-19-92	9.5	121	8.1	62	60	.40	.10	.020
	01-25-93	.0	121	7.9	63	61	.40	.10	<.010
	04-12-93	4.5	161	8.2	79	79	.70	.10	.020
	07-12-93	17.0	42	7.8	20	21	.20	<.10	.020
	10-13-93	9.0	101	8.1	49	52	.30	.10	.030
MCF	07-13-88	17.0	84	8.2	38	38	.50	.10	<.010
	10-19-88	5.0	140	7.6	78	70	.50	.10	<.010
	01-11-89	.0	165	7.6	76	80	.40	.10	<.010
	04-11-89	7.0	144	7.9	71	72	.50	.10	.010
	07-18-89	17.5	88	7.3	47	43	.30	.20	.010
	10-18-89	5.5	131	8.2	—	64	1.2	.10	<.010
	01-09-90	.0	147	8.0	83	80	.50	.10	.020
	04-25-90	5.5	131	8.3	53	63	.50	.10	<.010
MCAF	07-13-88	25.5	146	8.7	57	54	6.1	.10	<.010
	10-19-88	1.0	221	8.3	88	89	11	.30	<.010
	04-11-89	14.5	165	8.2	73	75	3.3	.20	<.010
	07-18-89	23.5	135	8.6	58	54	5.6	.30	<.010
	10-18-89	12.0	202	8.6	—	82	9.6	.20	<.010

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Nitrogen, nitrite dissolved (mg/L)	Nitrogen, NO_2+NO_3 dissolved (mg/L)	Phosphorus Ortho, dissolved (mg/L)	Sulfate, dissolved (mg/L)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Strontium, dissolved (µg/L)	Sodium, dissolved (mg/L)	Potassium, dissolved (mg/L)	Silica, dissolved (mg/L)
MC395	07-13-88	0.010	0.100	0.021	3.1	7.8	2.4	28	4.8	1.1	9.4
	10-18-88	<.010	<.100	.030	5.8	11	5.6	46	9.3	2.3	17
	01-11-89	<.010	<.100	.050	6.8	13	6.3	52	11	2.6	30
	04-11-89	<.010	<.100	.060	6.3	11	6.0	46	11	2.4	27
	07-18-89	<.010	<.100	.010	4.0	8.5	2.9	32	5.8	1.2	11
	10-18-89	<.010	<.100	.030	6.0	11	4.8	46	9.3	2.1	17
	01-09-90	<.010	<.100	.040	6.0	14	6.2	—	11	3.0	30
	04-25-90	.020	.500	.040	5.1	10	4.7	—	8.6	2.0	21
	07-17-90	<.010	<.100	.030	3.6	8.5	2.8	—	6.0	1.1	12
	10-16-90	<.010	<.100	.040	4.3	11	5.0	—	9.6	2.2	18
	01-17-91	<.010	<.100	.040	5.9	14	6.4	—	12	2.8	30
	04-16-91	<.010	.110	.040	7.4	13	6.7	—	13	2.8	30
	07-22-91	<.010	<.050	.010	3.1	7.8	2.1	—	4.9	1.0	12
	10-22-91	<.010	<.050	.030	5.1	9.7	4.4	—	7.5	1.9	14
	01-13-92	<.010	.079	.040	5.3	12	5.1	—	9.4	2.1	27
	04-14-92	<.010	<.050	.060	6.6	12	6.8	—	13	2.6	28
	07-06-92	<.010	<.050	.020	3.5	8.3	2.6	—	5.3	1.1	9.8
	10-19-92	<.010	<.050	.020	4.3	11	4.3	—	7.9	2.0	14
	01-25-93	<.010	.069	.080	5.4	11	4.4	—	8.3	1.9	22
	04-12-93	<.010	.200	.050	7.2	12	6.3	—	12	2.6	30
	07-12-93	<.010	<.050	.020	1.7	5.5	.92	—	2.1	.60	8.8
	10-13-93	<.010	<.050	.020	4.1	9.1	3.7	—	6.1	1.6	16
MCF	07-13-88	<.010	<.100	.020	4.1	8.0	2.5	31	5.4	1.1	9.3
	10-19-88	<.010	<.100	.040	5.6	11	5.6	47	9.4	2.3	17
	01-11-89	<.010	<.100	.050	6.9	13	6.3	52	11	2.6	30
	04-11-89	<.010	<.100	.050	6.4	11	5.9	46	11	2.3	27
	07-18-89	<.010	<.100	.020	4.0	8.6	3.0	33	6.0	1.1	11
	10-18-89	<.010	<.100	.030	5.0	10	4.8	45	9.3	2.0	17
	01-09-90	<.010	<.100	.040	6.0	14	6.2	—	11	2.8	30
	04-25-90	.020	.200	.040	5.4	9.9	4.9	—	16	3.4	31
MCAF	07-13-88	<.010	<.100	.050	8.4	9.0	3.5	39	13	2.8	25
	10-19-88	<.010	<.100	.040	12	12	6.7	69	23	4.9	41
	04-11-89	<.010	<.100	.060	7.7	11	5.9	51	15	3.0	31
	07-18-89	<.010	<.100	.060	7.0	8.3	3.6	41	13	3.2	26
	10-18-89	<.010	<.100	.040	10	12	5.8	64	20	5.0	40

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Boron, dis-solved (µg/L)	Arsenic, dis-solved (µg/L)	Lithium, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Solids, residue at 180°C dis-solved (mg/L)	H-2/H-1 stable isotope ratio per mil	O-18/O-16 stable isotope ratio per mil
MC395	07-13-88	<10	3	10	<0.1	15	2	50	—	—
	10-18-88	<10	4	30	<.1	20	2	95	—	—
	01-11-89	20	4	40	<.1	17	<1	109	—	—
	04-11-89	10	21	40	<.1	26	2	108	—	—
	07-18-89	<10	4	20	<.1	37	4	86	—	—
	10-18-89	10	3	30	<.1	21	2	76	—	—
	01-09-90	10	29	30	<.1	26	3	116	—	—
	04-25-90	<10	4	20	<.1	21	2	88	—	—
	07-17-90	<10	3	20	<.1	38	4	63	—	—
	10-16-90	<10	3	20	<.1	22	3	81	—	—
	01-17-91	10	4	30	<.1	16	4	99	—	—
	04-16-91	<10	4	30	<.1	28	2	109	—	—
	07-22-91	20	4	20	<.1	35	5	46	—	—
	10-22-91	<10	4	20	<.1	23	4	66	−104.0	−13.95
	01-13-92	<10	2	30	<.1	12	<1	95	—	—
	04-14-92	20	5	40	<.1	20	2	108	—	—
	07-06-92	<10	2	10	<.1	29	3	48	—	—
	10-19-92	<10	3	20	<.1	20	4	99	—	—
	01-25-93	<10	3	20	<.1	18	<1	80	—	—
	04-12-93	10	5	30	<.1	19	2	98	−112.0	−15.32
	07-12-93	10	2	<10	<.1	36	7	30	−114.0	−15.62
	10-13-93	<10	3	10	<.1	30	5	70	—	—
MCF	07-13-88	10	5	10	<.1	15	16	56	—	—
	10-19-88	<10	4	30	<.1	18	3	94	—	—
	01-11-89	<10	4	40	<.1	17	4	113	—	—
	04-11-89	<10	4	40	—	30	4	105	—	—
	07-18-89	<10	4	20	<.1	39	8	71	—	—
	10-18-89	<10	3	30	<.1	21	4	84	—	—
	01-09-90	<10	1	—	—	21	3	120	—	—
	04-25-90	<10	30	60	<.1	59	52	87	—	—
MCAF	07-13-88	250	46	50	<.1	55	15	100	—	—
	10-19-88	500	40	100	<.1	55	44	163	—	—
	04-11-89	140	20	60	<.1	43	70	123	—	—
	07-18-89	240	52	60	<.1	56	10	113	—	—
	10-18-89	440	38	80	<.1	33	20	118	—	—

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature, water (°C)	Specific conductance (µS/cm)	pH, water whole field (standard units)	Alkalinity, field, as $CaCO_3$ (mg/L)	Alkalinity lab, as $CaCO_3$ (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L)
MCAF	01-09-90	2.5	192	8.0	87	84	6.3	0.20	0.020
	04-25-90	17.0	168	8.7	70	—	6.0	.30	<.010
	07-17-90	24.0	142	8.9	61	60	7.2	.20	.020
	10-16-90	12.5	195	8.5	88	88	12	<.10	<.020
	01-17-91	5.5	251	8.0	101	100	17	.40	.080
	04-16-91	13.5	195	7.5	85	87	7.4	.20	<.010
	07-22-91	24.5	155	8.2	63	62	8.3	.30	.040
	10-22-91	13.5	154	8.7	67	65	5.8	.30	.010
	01-13-92	0.5	165	8.0	76	77	4.5	.20	<.010
	04-14-92	15.5	187	8.4	83	84	4.8	.20	.010
	07-06-92	22.0	105	8.9	43	43	2.2	<.10	.010
	10-19-92	14.5	156	8.4	69	68	4.6	.20	.020
	01-25-93	2.5	220	7.7	79	78	13	.20	.040
	04-12-93	14.0	187	8.3	79	81	5.2	.20	.020
	07-13-93	13.0	71	7.6	33	35	1.2	<.10	.030
	10-13-93	10.0	120	7.7	54	56	2.4	.10	.030
HCA	06-22-87	—	—	—	—	—	5.9	.30	—
	09-26-90	10.5	231	—	—	—	7.8	.20	—
	10-17-90	12.0	219	—	—	—	9.2	.20	—
	11-15-90	11.0	240	—	—	—	9.7	.50	—
	12-19-90	4.0	246	—	—	—	9.9	.30	—
	01-17-91	14.0	236	—	—	—	9.5	.40	—
	02-15-91	11.0	240	—	—	—	9.4	.30	—
HCF	07-27-87	36.0	579	—	—	176	50	.50	.030
	07-12-88	34.0	470	7.8	140	147	40	1.6	<.010
	07-19-89	37.0	586	7.7	171	173	52	2.4	<.010
	07-18-90	33.0	591	7.6	192	183	57	2.5	.020
	09-26-90	29.5	612	—	—	—	62	2.7	—
	10-17-90	33.0	600	7.9	194	—	59	2.5	—
	11-15-90	31.5	612	—	—	—	57	2.4	—
	12-19-90	25.5	656	—	—	—	63	2.7	—
	01-17-91	34.0	603	7.7	195	—	65	2.8	—
	02-15-91	33.5	652	—	—	—	65	3.1	—
	07-08-92	33.5	561	8.0	168	171	54	2.5	.020

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Nitrogen, nitrite dissolved (mg/L)	Nitrogen, NO_2+NO_3 dissolved (mg/L)	Phosphorus ortho, dissolved (mg/L)	Sulfate, dissolved (mg/L)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Strontium, dissolved (µg/L)	Sodium, dissolved (mg/L)	Potassium, dissolved (mg/L)	Silica, dissolved (mg/L)
MCAF	01-09-90	<0.010	0.130	0.040	9.0	13	6.5	—	18	4.5	40
	04-25-90	.020	1.50	.060	8.2	10	4.8	—	8.6	2.0	21
	07-17-90	<.010	<.100	.100	6.1	9.1	3.7	—	15	3.5	24
	10-16-90	<.010	<.100	.050	14	12	6.2	—	23	5.5	44
	01-17-91	<.010	<.100	.070	15	13	7.0	—	29	6.7	56
	04-16-91	<.010	<.050	.040	10	13	6.7	—	19	4.2	36
	07-22-91	<.010	<.050	.050	7.6	9.2	3.8	—	16	3.7	32
	10-22-91	<.010	.051	.030	7.1	9.4	4.4	—	14	3.6	27
	01-13-92	<.010	<.050	.040	7.5	12	5.4	—	15	3.5	35
	04-14-92	<.010	<.050	.070	8.2	12	6.5	—	17	3.3	33
	07-06-92	<.010	<.050	.040	5.0	7.6	2.7	—	8.4	2.1	15
	10-19-92	<.010	<.050	.040	6.7	11	4.8	—	14	3.5	26
	01-25-93	.020	.120	.070	18	13	6.0	—	25	5.3	40
	04-12-93	<.010	.050	.050	10	12	6.3	—	15	3.6	32
	07-13-93	<.010	<.050	.030	2.3	6.8	2.0	—	4.4	1.2	14
	10-13-93	<.010	<.050	.030	5.0	10	4.0	—	8.6	2.3	20
HCA	06-22-87	—	—	—	—	—	—	—	—	—	13
	09-26-90	—	—	—	19	—	—	—	—	—	—
	10-17-90	—	—	—	10	—	—	—	—	—	—
	11-15-90	—	—	—	12	—	—	—	—	—	—
	12-19-90	—	—	—	15	—	—	—	—	—	—
	01-17-91	—	—	—	14	—	—	—	—	—	—
	02-15-91	—	—	—	14	—	—	—	—	—	—
HCF	07-27-87	—	.260	—	30	13	6.0	—	95	8.5	68
	07-12-88	.020	.430	.160	24	12	5.5	110	78	7.0	58
	07-19-89	<.010	.120	.170	28	13	5.7	120	98	8.2	67
	07-18-90	.040	<.100	.240	32	13	6.0	—	100	9.0	69
	09-26-90	—	—	—	38	—	—	—	—	—	—
	10-17-90	—	—	—	30	—	—	—	—	—	—
	11-15-90	—	—	—	31	—	—	—	—	—	—
	12-19-90	—	—	—	36	—	—	—	—	—	—
	01-17-91	—	—	—	34	—	—	—	—	—	—
	02-15-91	—	—	—	35	—	—	—	—	—	—
	07-08-92	.020	.160	.190	31	12	5.9	—	96	7.3	—

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Boron, dis-solved (µg/L)	Arsenic, dis-solved (µg/L)	Lithium, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Solids, residue at 180°C dis-solved (mg/L)	H-2/H-1 stable isotope ratio per mil	O-18/O-16 stable isotope ratio per mil
MCAF	01-09-90	290	21	60	<0.1	35	26	152	—	—
	04-25-90	—	3	20	—	22	5	110	—	—
	07-17-90	290	52	70	<.1	65	20	107	—	—
	10-16-90	500	46	90	.1	64	81	155	—	—
	01-17-91	640	54	120	<.1	280	1000	197	—	—
	04-16-91	230	29	70	<.1	130	220	146	—	—
	07-22-91	360	43	60	<.1	44	9	98	—	—
	10-22-91	240	27	50	<.1	41	18	99	−107.0	−13.95
	01-13-92	200	20	50	<.1	68	96	118	—	—
	04-14-92	170	29	60	<.1	68	92	136	—	—
	07-06-92	110	19	30	<.1	66	35	68	—	—
	10-19-92	200	26	50	<.1	34	24	134	—	—
	01-25-93	520	60	100	<.1	230	240	162	—	—
	04-12-93	180	24	60	<.1	110	120	118	−112.0	−15.18
	07-13-93	60	11	10	<.1	75	71	54	−113.0	−15.39
	10-13-93	70	11	20	<.1	61	64	74	—	—
HCA	06-22-87	250	—	—	—	—	—	—	—	—
	09-26-90	310	—	—	—	—	—	—	—	—
	10-17-90	330	—	—	—	—	—	—	—	—
	11-15-90	320	—	—	—	—	—	—	—	—
	12-19-90	340	—	—	—	—	—	—	—	—
	01-17-91	350	—	—	—	—	—	—	—	—
	02-15-91	350	—	—	—	—	—	—	—	—
HCF	07-27-87	2,300	110	590	.3	6	31	369	—	—
	07-12-88	1,700	230	450	.1	17	10	323	—	—
	07-19-89	2,300	270	600	<.1	10	9	388	—	—
	07-18-90	2,600	280	600	.1	16	20	408	—	—
	09-26-90	2,500	—	—	—	—	—	—	—	—
	10-17-90	2,600	—	—	—	—	—	—	—	—
	11-15-90	2,600	—	—	—	—	—	—	—	—
	12-19-90	2,900	—	—	—	—	—	—	—	—
	01-17-91	2,800	—	—	—	—	—	—	—	—
	02-15-91	2,900	—	—	—	—	—	—	—	—
	07-08-92	2,400	280	560	<.1	10	<10	346	—	—

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature, water (°C)	Specific conductance (µS/cm)	pH, water whole field (standard units)	Alkalinity, field, as $CaCO_3$ (mg/L)	Alkalinity lab, as $CaCO_3$ (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Nitrogen, ammonia dissolved (mg/L)
LHC-SW	07-18-90	52.5	—	8.1	626	609	210	8.7	0.020
	07-08-92	54.0	1,940	8.4	611	597	210	9.7	.020
FHCD	10-21-88	15.0	185	7.3	108	103	4.5	.30	.021
	01-10-89	14.0	229	7.3	108	104	5.6	.30	.020
	04-12-89	15.0	231	7.3	108	106	5.6	.30	<.010
	07-20-89	15.5	236	7.2	108	105	5.7	.40	.020
	10-19-89	15.0	232	7.5	—	104	5.4	.30	.020
	10-19-89	15.0	232	7.5	—	—	—	—	.020
	01-08-90	15.5	213	7.3	105	105	5.2	.30	.040
	04-24-90	15.5	243	7.4	99	106	7.2	.30	<.010
	07-17-90	15.5	230	7.2	104	105	7.0	.10	.010
	10-16-90	15.5	222	7.2	108	108	6.3	.30	.020
	01-17-91	16.0	246	7.4	—	110	8.2	.40	.010
	04-16-91	16.0	263	7.3	108	110	8.0	.30	<.010
	07-23-91	16.0	235	7.3	105	105	6.9	.30	.030
	10-23-91	15.5	239	7.5	111	108	6.1	.30	.030
	01-14-92	16.0	243	7.5	106	109	7.3	.40	<.010
	04-15-92	16.0	240	7.7	109	106	6.4	.40	.010
	07-07-92	16.5	246	7.5	106	108	6.5	.40	.030
	10-20-92	15.5	244	7.4	107	110	5.9	.40	.030
	01-26-93	16.0	250	7.6	113	113	5.9	.30	<.010
	04-13-93	15.5	255	7.5	107	111	6.7	.30	.020
	07-13-93	17.0	214	7.4	97	98	4.2	.30	.030
	10-13-93	15.0	237	7.2	104	108	4.3	.30	.040
CS	08-29-87	93.0	—	8.2	—	400	250	12	<.010
	07-14-88	93.0	—	8.5	402	389	270	9.5	.060
	01-12-89	92.5	—	8.4	390	383	270	11	.050
	07-18-89	93.0	—	8.3	384	410	270	11	.060
	01-10-90	93.0	—	8.6	408	400	260	12	.080
	07-18-90	93.0	—	8.6	403	399	230	9.1	<.010
	01-18-91	92.5	—	8.8	386	382	260	12	.020
	04-17-91	92.5	—	8.7	357	354	260	11	.100
FHAB	07-11-88	16.0	270	7.1	—	109	10	.20	.020
	10-18-88	16.5	267	7.2	114	112	11	.30	<.010
	01-10-89	16.0	272	7.1	116	112	11	.30	<.010
	04-12-89	16.0	278	7.2	115	112	11	.20	<.010
	07-20-89	16.5	276	7.1	105	109	15	.30	<.010

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Nitrogen, nitrite dissolved (mg/L)	Nitrogen, NO_2+NO_3 dissolved (mg/L)	Phosphorus ortho, dissolved (mg/L)	Sulfate dissolved (mg/L)	Calcium dissolved (mg/L)	Magnesium, dissolved (mg/L)	Strontium, dissolved (µg/L)	Sodium, dissolved (mg/L)	Potassium, dissolved (mg/L)	Silica, dissolved (mg/L)
LHC-SW	07-18-90	<0.010	<0.100	0.040	100	20	0.60	—	420	28	93
	07-08-92	<.010	<.050	.030	110	16	.50	—	440	28	—
FHCD	10-21-88	<.010	.300	.160	11	12	9.4	69	24	4.4	57
	01-10-89	<.010	.320	.180	11	12	9.0	70	22	5.1	57
	04-12-89	<.010	.290	.180	11	12	9.0	70	23	4.7	58
	07-20-89	<.010	.240	.170	10	12	9.0	72	23	5.1	59
	10-19-89	<.010	.270	.170	11	12	8.6	72	23	4.6	57
	10-19-89	.010	.270	.170	—	—	—	—	—	—	—
	01-08-90	<.010	.430	.170	11	12	9.0	—	24	5.5	60
	04-24-90	.020	.300	.190	10	12	9.1	—	25	5.2	60
	07-17-90	<.010	.300	.190	11	12	8.8	—	24	5.1	59
	10-16-90	<.010	.300	.170	11	12	9.1	—	24	4.9	59
	01-17-91	<.010	.300	.180	14	13	9.5	—	25	5.1	58
	04-16-91	<.010	.300	.160	10	13	9.6	—	25	5.1	59
	07-23-91	<.010	.330	.170	11	12	8.9	—	25	5.0	59
	10-23-91	<.010	.410	.110	13	12	9.4	—	26	5.2	59
	01-14-92	<.010	.320	.180	15	12	9.2	—	24	5.1	62
	04-15-92	<.010	.330	.190	13	12	9.3	—	24	5.1	55
	07-07-92	<.010	.330	.180	12	12	9.1	—	25	5.2	58
	10-20-92	<.010	.280	.180	11	12	9.3	—	25	5.3	58
	01-26-93	.020	.340	.180	11	13	10	—	27	5.3	62
	04-13-93	.010	.400	.180	11	14	9.5	—	23	5.2	58
	07-13-93	.010	.330	.180	11	11	8.1	—	22	4.5	58
	10-13-93	<.010	.280	.150	11	11	8.0	—	23	5.3	58
CS	08-29-87	—	.120	—	140	1.6	.01	—	380	30	190
	07-14-88	.030	<.100	.110	130	1.5	<.10	110	370	31	260
	01-12-89	.040	<.100	.090	130	1.5	.02	110	370	31	250
	07-18-89	.030	<.100	.100	140	1.6	.04	110	390	32	260
	01-10-90	.050	<.100	.100	140	1.5	<.01	—	390	34	260
	07-18-90	.030	<.100	.110	120	1.4	<.02	—	380	29	250
	01-18-91	.050	<.100	.060	120	1.3	<.01	—	380	28	250
	04-17-91	.040	<.050	.280	140	1.2	.02	—	370	29	260
FHAB	07-11-88	<.010	.340	.150	14	14	10	91	26	5.0	60
	10-18-88	<.010	.340	.140	13	14	11	96	29	5.2	61
	01-10-89	<.010	.350	.160	14	14	10	97	26	6.0	60
	04-12-89	<.010	.320	.150	14	14	10	99	27	5.6	61
	07-20-89	<.010	.270	.140	13	14	9.9	98	28	6.0	62

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Boron, dis-solved (µg/L)	Arsenic, dis-solved (µg/L)	Lithium, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Solids, residue at 180°C dis-solved (mg/L)	H-2/H-1 stable isotope ratio per mil	O-18/O-16 stable isotope ratio per mil
LHC-SW	07-18-90	9,100	710	3000	<0.1	16	170	1,280	−123.0	−15.00
	07-08-92	9,600	740	2700	<.1	20	60	1,250	—	—
FHCD	10-21-88	230	57	70	<.1	8	<1	181	—	—
	01-10-89	240	62	80	<.1	8	3	171	—	—
	04-12-89	240	54	90	<.1	7	<1	181	—	—
	07-20-89	260	49	80	<.1	6	3	188	—	—
	10-19-89	270	54	70	<.1	7	<1	154	—	—
	10-19-89	—	—	—	—	—	—	—	—	—
	01-08-90	260	30	70	<.1	16	1	180	−116.5	−15.85
	04-24-90	270	54	70	<.1	7	<1	182	−117.0	−15.80
	07-17-90	280	55	80	<.1	<3	1	187	−117.0	−15.75
	10-16-90	270	66	70	<.1	9	<1	181	−118.0	−15.80
	01-17-91	320	48	80	<.1	6	2	163	−115.0	−15.80
	04-16-91	310	52	80	<.1	4	1	176	−117.0	−15.80
	07-23-91	280	85	80	<.1	5	<1	184	—	−15.65
	10-23-91	260	46	70	<.1	<3	<1	173	−116.0	−15.70
	01-14-92	300	50	80	<.1	7	2	170	−115.0	−15.60
	04-15-92	300	56	70	<.1	3	<1	194	−117.0	−15.75
	07-07-92	320	54	80	<.1	3	<1	182	−116.0	−15.65
	10-20-92	290	53	80	<.1	<3	2	204	−116.0	−15.70
	01-26-93	290	55	80	<.1	5	<1	190	−115.0	−15.76
	04-13-93	300	51	80	<.1	12	<1	180	−117.0	−15.82
	07-13-93	250	46	70	<.1	<3	1	168	−116.0	−15.82
	10-13-93	210	40	90	<.1	<3	<1	174	—	—
CS	08-29-87	11,000	1,900	2,400	.2	10	13	1,370	−115.0	−14.25
	07-14-88	11,000	2,200	2,800	.3	<3	6	1,360	—	—
	01-12-89	11,000	2,100	3,000	.3	<3	5	1,360	—	—
	07-18-89	11,000	1,800	3,100	.2	4	6	1,250	—	—
	01-10-90	11,000	1,700	2,900	.5	9	5	1,370	−114.0	−14.20
	07-18-90	12,000	1,200	3,000	.3	<3	5	1,240	−113.0	−14.25
	01-18-91	12,000	1,600	4,400	.5	8	4	1,340	—	—
	04-17-91	12,000	1,800	2,900	.1	11	4	1,410	−115.0	−13.90
FHAB	07-11-88	440	56	90	<.1	3	<1	201	−114.0	−15.20
	10-18-88	470	51	90	<.1	3	<1	203	—	—
	01-10-89	460	56	100	<.1	<3	<1	192	—	—
	04-12-89	550	26	110	<.1	6	<1	209	—	—
	07-20-89	590	50	110	<.1	4	<1	214	—	—

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature, water (°C)	Specific conductance (µS/cm)	pH, water whole field (standard units)	Alkalinity, field, as $CaCO_3$ (mg/L)	Alkalinity lab, as $CaCO_3$ (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L)
FHAB	10-19-89	17.0	280	7.2	—	110	12	0.30	<0.010
	01-8-90	16.5	254	7.1	111	110	13	.30	.020
	04-24-90	17.0	290	7.3	103	113	14	.30	<.010
	07-17-90	16.5	273	7.2	111	112	14	.20	.010
	10-17-90	17.0	281	7.1	113	114	18	.30	.020
	01-16-91	17.5	295	7.2	109	114	18	.30	.010
	04-16-91	16.5	302	7.1	113	116	16	.20	<.010
	07-23-91	16.5	264	7.1	102	100	13	.30	.030
	10-23-91	17.5	275	7.2	105	109	15	.30	.010
	01-14-92	17.0	274	7.4	106	108	12	.30	<.010
	04-15-92	17.0	276	7.4	108	107	14	.40	<.010
	07-07-92	17.5	268	7.2	101	102	16	.30	.020
	10-20-92	17.5	289	7.4	115	116	14	.30	.020
	01-26-93	17.5	287	7.5	116	116	13	.30	<.010
	04-13-93	16.5	289	7.3	105	107	14	.30	.010
	07-13-93	16.5	226	7.3	92	93	9.1	.30	.010
	10-13-93	17.5	239	7.2	97	100	7.5	.30	.030
FH23	07-11-88	11.0	193	7.2	—	75	6.2	.30	.010
	10-18-88	11.0	187	7.1	—	75	5.4	.20	<.010
	01-10-89	11.0	182	7.2	81	75	5.4	.20	<.010
	04-11-89	11.0	186	7.2	73	76	5.4	.20	<.010
	07-20-89	11.0	190	7.1	77	79	5.4	.30	.010
	10-18-89	11.0	190	7.3	—	77	5.6	.20	<.010
	01-09-90	11.0	179	7.2	73	76	5.2	.20	.020
	04-24-90	11.0	199	7.2	74	76	7.1	.20	<.010
	07-17-90	11.5	192	7.1	77	78	8.0	.10	.020
	10-16-90	11.5	166	7.1	79	78	7.3	.40	<.020
	01-16-91	11.5	177	7.2	—	77	5.7	<.10	<.010
	04-16-91	11.0	190	7.1	76	76	6.9	.20	<.010
	07-23-91	11.5	198	7.0	79	79	7.9	.20	.020
	10-23-91	11.5	201	7.2	75	81	8.0	.20	.010
	01-14-92	11.5	200	7.3	79	81	7.0	.20	<.010
	04-15-92	11.0	210	7.4	82	80	9.4	.10	<.010
	07-07-92	11.0	213	7.2	84	84	8.1	.10	.020
	10-20-92	11.5	210	7.2	85	84	8.3	.20	.030
	01-26-93	11.5	213	7.4	88	86	8.2	.20	<.010
	04-13-93	11.5	241	7.1	86	90	11	.20	<.010

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Nitrogen, nitrite dissolved (mg/L)	Nitrogen, NO_2+NO_3 dissolved (mg/L)	Phosphorus ortho, dissolved (mg/L)	Sulfate dissolved (mg/L)	Calcium dissolved (mg/L)	Magnesium, dissolved (mg/L)	Strontium, dissolved (µg/L)	Sodium, dissolved (mg/L)	Potassium, dissolved (mg/L)	Silica, dissolved (mg/L)
FHAB	10-19-89	<0.010	0.300	0.150	13	14	9.7	100	28	6.0	60
	01-08-90	<.010	.320	.150	14	14	10	—	29	6.4	63
	04-24-90	.020	.300	.150	14	14	10	—	29	6.3	62
	07-17-90	<.010	.300	.160	9.5	15	10	—	31	6.4	65
	10-17-90	<.010	.300	.140	14	14	10	—	29	6.0	63
	01-16-91	<.010	.300	.130	18	15	11	—	30	6.1	62
	04-16-91	<.010	.310	.130	16	15	11	—	30	6.2	63
	07-23-91	<.010	.370	.150	14	13	9.0	—	29	5.6	62
	10-23-91	<.010	.520	.130	17	14	9.2	—	26	6.7	61
	01-14-92	<.010	.280	.150	18	13	9.3	—	28	6.0	66
	04-15-92	<.010	.290	.160	19	14	9.9	—	29	5.8	61
	07-07-92	<.010	.300	.150	16	12	8.8	—	28	5.9	63
	10-20-92	<.010	.290	.150	15	14	10	—	31	6.6	63
	01-26-93	.010	.320	.150	14	14	11	—	31	6.4	67
	04-13-93	<.010	.780	.160	16	14	10	—	28	6.0	63
	07-13-93	<.010	.440	.160	12	9.4	7.1	—	21	4.6	56
	10-13-93	<.010	.330	.140	12	12	8.9	—	22	5.1	53
FH23	07-11-88	<.010	.310	.080	12	16	5.6	57	13	3.0	39
	10-18-88	<.010	.290	.090	12	16	5.9	58	15	3.2	39
	01-10-89	<.010	.290	.090	12	16	5.4	55	13	3.4	38
	04-11-89	<.010	.330	.100	12	16	5.4	56	13	3.3	38
	07-20-89	<.010	.260	.090	11	16	5.5	59	14	3.5	39
	10-18-89	.010	.270	.100	11	16	5.3	58	14	3.5	38
	01-09-90	<.010	.340	.090	6.0	16	5.3	—	14	3.6	40
	04-24-90	.020	.700	.100	13	16	5.6	—	15	3.5	40
	07-17-90	<.010	.500	.100	11	17	5.5	—	15	3.4	40
	10-16-90	<.010	.300	<.090	12	16	5.4	—	14	3.4	39
	01-16-91	<.010	.300	.100	11	16	5.2	—	14	3.2	38
	04-16-91	<.010	.630	.080	11	16	5.4	—	15	3.5	39
	07-23-91	<.010	.520	.090	13	17	5.7	—	16	3.5	39
	10-23-91	<.010	.550	.080	12	17	5.8	—	16	3.7	39
	01-14-92	<.010	.330	.100	12	17	5.6	—	15	3.5	41
	04-15-92	<.010	.500	.100	12	18	6.2	—	16	3.5	38
	07-07-92	<.010	.400	.100	12	18	5.9	—	16	3.6	39
	10-20-92	<.010	.500	.100	12	18	5.9	—	16	3.7	39
	01-26-93	.010	.350	.100	12	18	6.3	—	18	3.7	41
	04-13-93	<.010	.530	.100	13	20	6.8	—	17	3.8	40

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Boron, dis-solved (µg/L)	Arsenic, dis-solved (µg/L)	Lithium, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Mange-nese, dis-solved (µg/L)	Solids, residue at 180°C dis-solved (mg/L)	H-2/H-1 stable isotope ratio per mil	O-18/O-16 stable isotope ratio per mil
FHAB	10-19-89	560	48	100	—	7	<1	191	—	—
	01-08-90	590	39	90	<.1	8	<1	210	−114.5	−15.50
	04-24-90	590	52	100	<.1	3	<1	209	−115.0	−15.50
	07-17-90	680	59	110	<.1	5	1	215	−114.0	−15.40
	10-17-90	660	50	100	.1	<3	<1	206	−115.0	−15.30
	01-16-91	690	46	100	<.1	4	<1	203	−115.0	−15.50
	04-16-91	680	45	110	<.1	<3	<1	227	−115.0	−15.45
	07-23-91	640	77	100	<.1	5	<1	194	—	−15.20
	10-23-91	620	38	100	<.1	6	<1	196	−116.0	−15.40
	01-14-92	620	50	100	<.1	<3	<1	200	−115.0	−15.35
	04-15-92	620	53	100	<.1	4	<1	216	−116.0	−15.50
	07-07-92	700	47	100	<.1	<3	<1	168	−114.0	−15.25
	10-20-92	670	50	100	<.1	<3	<1	230	−115.0	−15.45
	01-26-93	620	55	110	<.1	7	<1	211	−115.0	−15.51
	04-13-93	620	47	100	<.1	<3	<1	186	−116.0	−15.59
	07-13-93	500	40	80	<.1	6	<1	180	−114.0	−15.47
	10-13-93	390	47	70	<.1	5	<1	182	—	—
FH23	07-11-88	120	20	40	<.1	4	<1	141	−120.0	−16.15
	10-18-88	90	22	40	<.1	43	<1	143	—	—
	01-10-89	90	26	40	<.1	3	<1	137	—	—
	04-11-89	100	48	40	<.1	10	<1	139	—	—
	07-20-89	110	20	50	<.1	3	<1	156	—	—
	10-18-89	100	23	40	<.1	8	<1	122	—	—
	01-09-90	100	18	40	<.1	8	<1	134	−122.5	−16.20
	04-24-90	110	23	40	<.1	<3	<1	147	−119.0	−16.15
	07-17-90	100	21	50	<.1	<3	<1	150	−120.0	−15.95
	10-16-90	100	24	40	<.1	<3	2	129	−119.0	−16.00
	01-16-91	100	20	40	<.1	<3	<1	105	−118.0	−16.20
	04-16-91	110	22	40	<.1	<3	<1	146	−121.0	−16.15
	07-23-91	120	22	40	<.1	4	<1	140	—	−16.10
	10-23-91	110	19	40	<.1	<3	<1	142	−120.0	−15.95
	01-14-92	110	21	40	<.1	<3	<1	116	−120.0	−15.90
	04-15-92	120	21	40	<.1	<3	<1	158	−121.0	−15.95
	07-07-92	120	23	40	<.1	<3	<1	130	−119.0	−16.05
	10-20-92	110	22	40	<.1	<3	<1	167	−120.0	−15.95
	01-26-93	120	24	50	<.1	<3	<1	149	−119.0	−16.06
	04-13-93	120	21	40	<.1	<3	<1	158	−119.0	−15.98

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature, water (°C)	Specific conductance (µS/cm)	pH water whole field (standard units)	Alkalinity, field, as $CaCO_3$ (mg/L)	Alkalinity lab, as $CaCO_3$ (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L)
FH23	07-13-93	11.5	230	7.1	94	95	8.6	0.20	0.020
	10-13-93	12.0	234	7.1	92	95	8.3	.20	.030
MBP-3	07-30-87	171.0	—	6.1	356	365	240	11	.320
	12-17-87	170.0	—	6.5	360	370	240	9.0	.260
	04-19-88	168.0	—	6.3	358	361	220	11	.290
	04-19-88	168.0	—	6.3	—	360	240	11	—
	07-13-88	169.0	—	6.5	360	365	240	9.8	.330
	01-12-89	168.0	—	6.4	443	357	240	8.6	.250
	07-21-89	163.5	—	6.1	354	367	260	10	.220
	01-10-90	—	1,610	6.7	387	367	240	10	.250
	07-10-90	161.0	1,710	6.3	—	377	240	8.0	.210
MBP-1	12-17-87	—	—	—	—	353	290	11	.360
	12-17-87	—	—	—	—	353	260	11	—
	04-19-88	164.0	—	6.5	350	346	250	11	.400
	04-19-88	164.0	—	6.5	—	344	250	11	—
	07-13-88	163.0	—	6.5	335	341	250	11	.440
	01-12-89	163.0	—	6.8	348	340	250	9.6	.370
	07-21-89	160.0	—	6.8	344	334	250	10	.320
	01-10-90	—	1,630	6.5	347	337	240	11	.330
	07-10-90	158.0	1,690	6.8	—	351	260	11	.280
HBP	07-10-90	64.5	1,730	7.7	—	399	240	11	.100
	04-15-92	87.5	1,830	7.7	382	385	240	12	.140
HC-5L	07-08-92	83.0	1,720	8.6	466	459	210	10	.030
HC-3	07-28-87	93.5	—	7.6	—	472	220	11	.110
	07-11-88	93.0	—	8.1	473	476	220	9.9	.060
	07-19-89	95.0	—	7.8	—	479	220	9.7	.020
	07-18-90	95.5	—	8.1	503	475	220	9.9	.040
	10-17-90	93.0	—	8.2	486	—	220	11	—
	01-17-91	94.0	—	8.2	472	—	210	9.8	—
	04-16-92	81.0	1,830	7.6	—	475	230	12	.110

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Nitrogen, nitrite dissolved (mg/L)	Nitrogen, NO_2+NO_3 dissolved (mg/L)	Phosphorus ortho, dissolved (mg/L)	Sulfate, dissolved (mg/L)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Strontium, dissolved (µg/L)	Sodium, dissolved (mg/L)	Potassium, dissolved (mg/L)	Silica, dissolved (mg/L)
FH23	07-13-93	<0.010	0.460	0.100	13	21	6.9	—	17	3.8	41
	10-13-93	<.010	.440	.100	12	19	6.5	—	17	3.9	38
MBP-3	07-30-87	—	<.100	—	120	5.3	.22	—	330	36	240
	12-17-87	—	<.100	—	110	6.7	.22	220	330	36	230
	04-19-88	<.010	<.100	.010	140	2.6	.12	100	320	33	250
	04-19-88	—	—	—	120	2.9	.09	110	350	30	240
	07-13-88	<.010	.130	.030	110	5.8	.19	200	340	22	240
	01-12-89	<.010	<.100	<.010	110	2.1	.20	86	330	30	230
	07-21-89	<.010	<.100	<.010	110	5.9	.25	190	330	30	230
	01-10-90	<.010	<.100	.010	120	6.1	.22	—	340	35	230
	07-10-90	<.010	<.100	<.010	110	7.4	<.02	—	330	31	210
MBP-1	12-17-87	—	<.100	—	120	5.0	.18	170	320	37	230
	12-17-87	—	—	—	120	5.4	.18	180	340	37	240
	04-19-88	<.010	<.100	.020	120	4.7	.12	160	340	24	220
	04-19-88	—	—	—	120	4.9	.04	170	360	30	230
	07-13-88	<.010	<.100	.010	120	5.3	.10	170	350	23	240
	01-12-89	.010	<.100	<.010	110	5.7	.26	190	330	30	240
	07-21-89	<.010	<.100	.020	120	5.1	.15	170	340	—	230
	01-10-90	<.010	<.100	.020	120	5.3	.08	—	340	33	230
	07-10-90	<.010	<.100	.010	120	7.9	.11	—	360	30	220
HBP	07-10-90	.040	<.100	.100	120	8.0	<.02	—	360	22	200
	04-15-92	<.010	<.050	.120	110	6.8	.16	—	350	23	260
HC-5L	07-08-92	<.010	<.050	.070	97	1.4	.12	—	370	21	140
HC-3	07-28-87	—	<.100	—	97	3.8	.15	—	380	23	<150
	07-11-88	.020	<.100	.040	96	3.8	.17	260	390	17	150
	07-19-89	<.010	<.100	.050	96	3.2	.27	280	380	26	140
	07-18-90	.010	<.100	.060	94	3.2	.21	—	380	24	140
	10-17-90	—	—	—	91	—	—	—	—	—	—
	01-17-91	—	—	—	89	—	—	—	—	—	—
	04-16-92	<.010	<.050	.070	110	3.2	.07	—	370	12	160

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Boron, dis-solved (µg/L)	Arsenic, dis-solved (µg/L)	Lithium, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Solids, residue at 180°C dis-solved (mg/L)	H-2/H-1 stable isotope ratio per mil	O-18/O-16 stable isotope ratio per mil
FH23	07-13-93	130	20	40	—	<3	<1	164	−118.0	−15.99
	10-13-93	110	22	40	<0.1	4	<1	166	—	—
MBP-3	07-30-87	9,900	190	2,400	5.3	120	23	1,200	−118.0	−15.00
	12-17-87	9,600	1,800	2,500	2.8	38	22	1,210	−118.5	−14.90
	04-19-88	9,400	310	2,600	2.4	11	2	1,210	—	—
	04-19-88	9,900	1,200	2,600	—	17	2	1,190	—	—
	07-13-88	9,600	1,700	2,400	—	290	6	1,220	−118.5	−14.80
	01-12-89	9,500	420	2,600	2.4	9	9	1,200	—	—
	07-21-89	9,600	1,000	2,700	1.0	22	20	1,240	—	—
	01-10-90	10,000	260	2,500	1.2	18	25	1,230	−117.5	−14.95
	07-10-90	10,000	340	2,600	5.2	28	27	1,230	−116.0	−14.70
MBP-1	12-17-87	10,000	440	2,500	8.1	22	18	1,240	−117.0	−14.70
	12-17-87	11,000	1,900	2,500	—	13	17	1,220	—	—
	04-19-88	10,000	2,200	260	11	74	16	1,230	—	—
	04-19-88	11,000	1,600	2,600	—	15	19	1,220	—	—
	07-13-88	9,900	1,800	2,400	—	12	6	1,250	−116.5	−14.65
	01-12-89	9,900	1,200	2,700	4.5	13	18	1,200	—	—
	07-21-89	11,000	1,700	2,600	1.0	8	13	1,200	−117.0	−14.70
	01-10-90	10,000	1,800	2,400	6.8	31	18	1,210	−119.0	−14.80
	07-10-90	10,000	510	2,400	2.1	21	25	1,250	−117.0	−14.65
HBP	07-10-90	12,000	1,500	2,700	.3	5	41	1,240	−113.0	−13.10
	04-15-92	11,000	1,500	4,300	.2	5	22	1,230	−114.0	−13.85
HC-5L	07-08-92	10,000	1,100	2,300	<.1	20	4	1,110	−120.0	−14.95
HC-3	07-28-87		1,100	2,300	.6	<3	<1	1,180	−120.5	−15.10
	07-11-88	9,700	1,300	2,400	1.0	<3	<1	1,200	−119.5	−15.00
	07-19-89	10,000	1,100	2,500	<.1	4	2	1,190	—	—
	07-18-90	9,900	1,000	2,300	.2	<3	2	1,200	−119.0	−15.05
	10-17-90	10,000	—	—	—	—	—	—	—	—
	01-17-91	9,900	—	—	—	—	—	—	−119.0	−14.90
	04-16-92	10,000	1,100	4,000	.2	7	4	1,200	−120.0	−14.65

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature, water (°C)	Specific conductance (µS/cm)	pH, water whole field (standard units)	Alkalinity, field, as $CaCO_3$ (mg/L)	Alkalinity lab, as $CaCO_3$ (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L)
BAL	08-29-87	58.5	—	6.8	—	594	150	3.2	0.120
	07-14-88	57.5	—	7.0	—	642	150	4.8	.130
	01-12-89	57.5	—	7.0	719	645	150	3.7	.100
	07-17-89	57.5	—	6.7	693	648	160	4.9	.100
	01-10-90	57.0	—	7.0	645	638	150	4.4	.110
LHC-SP	08-29-87	83.0	—	6.6	—	548	200	7.2	.140
	07-14-88	83.0	—	7.0	590	599	200	7.8	.150
	01-13-89	82.5	—	6.8	630	592	200	7.2	.140
	07-17-89	82.5	—	6.7	631	603	200	7.9	.110
	01-09-90	82.5	2,100	7.1	574	594	200	8.5	.150
	07-18-90	83.0	—	7.0	595	595	200	8.4	.110
	01-18-91	82.5	1,990	6.9	566	553	200	8.5	.130
	07-24-91	83.0	2,030	7.6	602	567	200	8.1	.150
	01-15-92	82.5	1,920	8.0	601	606	210	8.1	.050
	04-16-92	82.5	1,980	7.6	598	597	200	9.4	.130
	07-08-92	82.5	1,920	7.7	600	570	200	5.8	.110
	01-26-93	83.0	1,900	7.1	585	599	200	8.7	.140
	07-15-93	82.5	1,910	7.8	—	602	190	8.7	.120
BS	08-29-87	11.0	189	7.2	—	83	5.4	.50	.010
	07-14-88	10.5	192	7.3	82	82	6.5	.40	<.010
	07-19-90	11.0	191	7.3	84	85	9.1	.30	.030

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Nitrogen, nitrite dissolved (mg/L)	Nitrogen, NO_2+NO_3 dissolved (mg/L)	Phosphorus ortho, dissolved (mg/L)	Sulfate dissolved (mg/L)	Calcium dissolved (mg/L)	Magnasium, dissolved (mg/L)	Strontium, dissolved (µg/L)	Sodium, dissolved (mg/L)	Potassium, dissolved (mg/L)	Silica, dissolved (mg/L)
BAL	08-29-87	<0.010	<0.100	0.040	63	24	0.44	—	360	33	190
	07-14-88	<.010	<.100	.050	61	25	.62	180	360	31	200
	01-12-89	<.010	<.100	.060	64	25	.54	180	350	31	190
	07-17-89	.010	<.100	.060	64	25	.61	180	360	35	190
	01-10-90	<.010	<.100	.050	64	24	.66	—	370	38	190
LHC-SP	08-29-87	<.010	<.100	.010	99	22	.42	—	390	30	87
	07-14-88	<.010	<.100	.040	95	23	.58	580	370	24	90
	01-13-89	<.010	<.100	.020	98	22	.55	560	350	24	81
	07-17-89	<.010	<.100	.030	100	23	.62	540	390	22	88
	01-09-90	<.010	<.100	.040	100	23	.65	—	400	30	87
	07-18-90	<.010	<.100	.040	98	23	.69	—	390	28	87
	01-18-91	<.010	<.100	.020	99	23	.63	—	390	27	82
	07-24-91	<.010	<.050	.150	100	21	.63	—	370	25	82
	01-15-92	<.010	<.050	.060	99	22	.42	—	390	25	89
	04-16-92	<.010	<.050	.060	100	22	.61	—	380	28	82
	07-08-92	<.010	<.050	.040	100	23	.62	—	400	27	87
	01-26-93	.020	<.050	.040	100	23	.63	—	400	22	90
	07-15-93	<.010	<.050	.030	100	23	.62	—	390	24	86
BS	08-29-87	—	<.100	—	7.3	5.1	6.4	—	24	3.8	54
	07-14-88	<.010	.130	.340	7.0	5.4	6.6	—	24	4.0	55
	07-19-90	<.010	.100	.340	6.3	6.0	6.7	—	26	4.4	54

Table 113. Chemical and isotopic analyses of water samples collected at selected surface-water sites, springs, and wells, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Boron, dis-solved (µg/L)	Arsenic, dis-solved (µg/L)	Lithium, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Solids, residue at 180°C dis-solved (mg/L)	H-2/H-1 stable isotope ratio per mil	O-18/O-16 stable isotope ratio per mil
BAL	08-29-87	6,300	86	1,600	0.3	170	150	1,260	−125.0	−16.35
	07-14-88	6,100	380	1,500	.3	180	160	1,260	—	—
	01-12-89	6,000	470	1,600	<.1	160	150	1,230	—	—
	07-17-89	6,600	200	1,700	<.1	180	150	1,270	—	—
	01-10-90	6,400	150	1,500	.1	190	160	1,260	−127.5	−16.25
LHC-SP	08-29-87	8,900	650	2,800	.2	44	210	1,240	−124.0	−15.75
	07-14-88	8,500	590	2,600	.4	31	210	1,250	—	—
	01-13-89	8,500	850	2,700	.5	36	200	1,230	—	—
	07-17-89	8,800	300	2,900	<.1	36	200	1,260	—	—
	01-09-90	9,000	700	2,700	.1	37	210	1,240	−123.5	−15.75
	07-18-90	8,800	610	2,800	.1	15	210	1,250	−122.0	−15.75
	01-18-91	8,700	700	4,200	.7	32	200	1,230	−122.0	−15.65
	07-24-91	9,200	710	3,800	.2	33	190	1,220	−120.0	−15.65
	01-15-92	8,900	710	3,600	.1	36	200	1,150	−123.0	−15.60
	04-16-92	9,100	710	4,500	<.1	29	200	1,220	—	—
	07-08-92	9,100	690	2,800	<.1	50	200	1,200	−123.0	−15.65
	01-26-93	9,200	780	2,700	.2	36	210	1,220	−124.0	−15.71
	07-15-93	9,700	650	2,900	<.1	35	200	1,230	—	—
BS	08-29-87	260	18	40	<.1	<3	<1	139	−114.5	−15.85
	07-14-88	300	19	40	—	<3	<1	153	—	—
	07-19-90	380	18	30	<.1	<3	2	153	−115.0	−15.75

Table 114. Partial chemical analyses of water samples collected at selected surface-water sites and springs, Long Valley Caldera, Mono County, California, 1987–93

[°C, degrees Celsius; µS/cm, microsiemens per centimeter at 25 °C; mg/L, milligrams per liter; µg/L, micrograms per liter; —, no data]

Station identifier	Date	Temperature water (°C)	Specific conductance (µS/cm)	Specific conductance lab (µS/cm)	Chloride, dissolved (mg/L)	Boron, dissolved (µg/L)
HCA	01-16-87	—	—	219	5.9	250
	01-16-87	—	—	222	5.7	250
	02-17-87	—	—	230	7.7	280
	03-20-87	—	—	218	5.5	250
	04-20-87	—	240	—	—	—
	05-22-87	—	—	199	6.2	240
	06-22-87	—	—	210	6.0	240
	07-17-87	—	—	218	6.3	260
	08-20-87	—	—	—	6.0	270
	08-27-87	16.0	222	223	7.0	250
	09-21-87	—	—	221	6.5	250
	10-17-87	—	223	226	5.9	260
	10-20-87	—	—	225	6.4	260
	11-30-87	—	—	232	—	280
	12-15-87	10.0	237	238	—	260
	01-08-88	—	—	225	7.4	260
	02-26-88	—	—	241	8.3	300
	03-15-88	—	—	235	7.0	270
	04-05-88	—	—	229	7.5	280
	04-20-88	14.5	226	229	8.0	270
	05-10-88	—	—	226	7.6	270
	05-10-88	—	—	227	7.2	270
	06-10-88	—	—	202	6.8	270
	06-20-88	20.0	201	211	7.6	270
	07-07-88	—	—	205	6.2	240
	07-12-88	14.0	201	198	6.1	230
	08-03-88	—	—	227	7.4	270
	08-10-88	15.0	218	225	7.1	270
	09-06-88	—	—	221	6.8	260
	09-13-88	12.0	214	224	7.0	280
	09-13-88	12.0	214	227	6.7	260
	10-19-88	16.5	222	228	7.2	290
	11-21-88	11.0	221	231	7.0	250
	12-14-88	8.0	224	234	7.0	280
	01-09-89	11.5	226	239	8.7	300
	02-15-89	13.0	217	230	7.6	280
	03-21-89	15.5	217	230	7.0	280
	04-12-89	15.0	211	219	6.5	270
	05-16-89	19.0	183	195	6.1	260
	06-27-89	12.5	209	220	7.4	310

Table 114. Partial chemical analyses of water samples collected at selected surface-water sites and springs, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature water (°C)	Specific conductance (µS/cm)	Specific conductance lab (µS/cm)	Chloride, dissolved (mg/L)	Boron, dissolved (µg/L)
HCA	07-19-89	15.5	216	225	7.4	300
	08-15-89	14.0	228	234	7.6	290
	09-19-89	10.5	218	223	6.6	260
	10-17-89	10.0	236	239	7.1	290
	11-21-89	7.5	226	236	6.9	280
	12-20-89	7.5	230	238	7.2	320
	01-10-90	8.0	227	242	6.7	300
	02-21-90	8.5	229	239	6.8	300
	03-20-90	10.5	229	241	7.7	330
	04-24-90	17.0	230	231	7.6	300
	05-25-90	10.0	223	213	9.7	300
	06-11-90	17.5	177	185	7.6	250
	07-18-90	—	219	234	9.5	330
	08-28-90	12.5	223	226	7.1	290
	09-26-90	10.5	231	228	7.8	310
	10-17-90	12.0	219	238	9.2	330
	11-15-90	11.0	240	238	9.7	320
	12-19-90	4.0	246	245	9.9	340
	01-17-91	14.0	236	248	9.5	350
	02-15-91	11.0	240	246	9.4	350
	03-21-91	16.5	241	254	8.0	380
	04-17-91	9.5	263	255	10	360
	05-16-91	20.0	232	232	9.0	330
	06-14-91	20.0	236	227	—	—
	06-21-91	11.5	166	168	5.9	240
	07-23-91	22.0	235	237	9.5	350
	08-22-91	17.5	216	222	8.4	310
	09-18-91	14.0	223	224	6.6	290
	10-23-91	13.5	226	229	8.0	310
	11-21-91	9.5	213	221	6.4	260
	11-21-91	9.5	213	—	7.0	250
	12-12-91	8.0	227	238	8.9	320
	01-14-92	12.5	228	236	8.8	290
	02-20-92	13.5	253	247	10	310
	03-12-92	15.0	263	258	11	360
	04-16-92	11.0	240	247	10	340
	05-13-92	19.0	172	170	6.7	190
	06-09-92	20.0	201	201	7.6	270
	07-08-92	14.5	219	—	6.9	290
	08-04-92	21.0	217	221	7.8	270
	09-15-92	18.0	228	231	8.2	280
	10-21-92	10.5	232	242	7.7	290
	11-17-92	12.0	229	233	7.3	290
	12-23-92	—	241	249	8.4	340
	01-27-93	—	253	257	9.2	360

Table 114. Partial chemical analyses of water samples collected at selected surface-water sites and springs, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature water (°C)	Specific conductance (µS/cm)	Specific conductance lab (µS/cm)	Chloride, dissolved (mg/L)	Boron, dissolved (µg/L)
HCA	03-02-93	12.5	257	258	9.4	350
	03-24-93	12.0	307	311	13	—
	04-13-93	15.5	251	244	8.9	280
	05-20-93	12.0	136	140	4.1	140
	06-15-93	20.5	122	122	3.1	120
	07-14-93	17.0	126	131	3.3	170
	08-19-93	19.5	208	210	8.7	210
	09-08-93	16.0	254	265	23	230
	10-14-93	13.0	205	215	5.9	220
	11-18-93	9.0	222	227	5.3	240
	12-14-93	9.0	221	229	5.9	240
HCF	01-14-87	25.0	510	543	47	2,100
	01-14-87	25.0	510	541	48	2,100
	01-16-87	—	—	533	45	2,000
	01-16-87	—	—	534	45	2,100
	02-10-87	26.0	637	526	46	2,300
	02-10-87	26.0	637	527	46	2,200
	02-17-87	—	—	545	49	2,300
	03-20-87	—	—	562	52	2,400
	04-20-87	35.0	565	570	51	2,300
	04-20-87	35.0	565	576	51	2,300
	05-22-87	—	—	422	32	1,500
	05-27-87	28.0	458	460	37	1,700
	05-27-87	28.0	458	463	39	1,700
	06-18-87	27.5	452	470	38	1,800
	06-22-87	—	—	498	42	1,900
	07-17-87	—	—	550	53	2,300
	07-27-87	36.0	579	560	51	2,300
	08-20-87	—	—	—	52	2,500
	08-26-87	36.0	595	580	55	2,400
	08-26-87	36.0	595	582	55	2,400
	09-21-87	—	—	578	58	2,400
	10-17-87	—	594	573	51	2,500
	10-17-87	—	594	541	51	2,400
	10-20-87	—	—	577	51	2,400
	11-14-87	—	578	570	50	2,300
	11-14-87	—	578	568	51	2,300
	11-30-87	—	—	592	51	2,400
	12-15-87	32.0	604	595	54	2,400
	12-15-87	32.0	—	594	54	2,400
	01-08-88	—	—	547	49	2,200

Table 114. Partial chemical analyses of water samples collected at selected surface-water sites and springs, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature water (°C)	Specific conductance (µS/cm)	Specific conductance lab (µS/cm)	Chloride, dissolved (mg/L)	Boron, dissolved (µg/L)
HCF	02-26-88	—	—	557	48	2,200
	03-03-88	30.0	569	567	49	2,300
	03-15-88	—	—	579	49	2,300
	04-05-88	—	—	564	48	2,300
	04-20-88	29.0	561	568	50	2,200
	04-20-88	29.0	561	563	51	2,300
	05-10-88	—	—	566	48	2,300
	05-10-88	—	—	555	50	2,200
	06-10-88	—	—	459	38	1,800
	06-21-88	31.0	432	432	35	1,600
	07-07-88	—	—	477	39	1,700
	08-03-88	—	—	567	50	2,200
	08-10-88	35.5	576	569	52	2,200
	09-06-88	—	—	563	50	2,300
	09-13-88	35.5	602	571	53	2,500
	09-13-88	35.5	602	578	53	2,300
	10-19-88	36.0	620	597	56	2,600
	11-21-88	27.5	525	539	46	2,100
	12-14-88	29.5	587	609	56	2,500
	01-09-89	30.5	607	608	57	2,400
	02-15-89	32.0	603	596	55	2,400
	03-21-89	34.0	577	574	53	2,400
	04-12-89	32.5	584	557	48	2,300
	04-12-89	34.0	587	560	49	2,300
	05-16-89	32.0	434	461	38	1,900
	06-27-89	28.0	476	500	41	2,000
	08-15-89	36.5	596	598	55	2,400
	09-19-89	30.0	522	569	51	2,300
	10-17-89	34.0	619	619	55	2,700
	11-21-89	29.0	554	591	51	2,500
	12-20-89	29.0	613	627	59	2,700
	01-10-90	29.5	591	627	59	2,600
	02-21-90	30.5	575	608	56	2,500
	03-20-90	32.5	571	609	57	2,700
	04-24-90	34.5	618	609	62	2,700
	05-25-90	28.0	543	521	51	2,200
	06-11-90	30.5	417	431	39	1,700
	08-28-90	34.5	584	596	57	2,600
	09-26-90	29.5	612	587	62	2,500
	10-17-90	33.0	600	606	59	2,600
	11-15-90	31.5	612	602	57	2,600
	12-19-90	25.5	656	646	63	2,900
	01-17-91	34.0	603	655	65	2,800
	02-15-91	33.5	652	655	65	2,900
	03-21-91	33.5	599	634	59	2,800

Table 114. Partial chemical analyses of water samples collected at selected surface-water sites and springs, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature water (°C)	Specific conductance (µS/cm)	Specific conductance lab (µS/cm)	Chloride, dissolved (mg/L)	Boron, dissolved (µg/L)
HCF	04-17-91	32.0	654	641	60	2,800
	05-16-91	38.0	605	611	55	2,700
	06-14-91	27.0	299	293	26	—
	06-21-91	22.0	348	357	32	1,400
	07-23-91	37.0	569	564	55	2,400
	08-22-91	36.0	526	549	54	2,300
	09-18-91	34.0	569	574	53	2,500
	10-23-91	32.0	605	618	60	2,700
	11-21-91	26.0	559	570	51	2,400
	12-12-91	30.0	609	627	61	2,800
	01-14-92	33.0	617	620	58	2,700
	02-20-92	33.0	633	616	59	2,600
	03-12-92	35.0	621	619	62	2,600
	04-16-92	34.0	657	643	71	2,900
	05-13-92	33.0	438	442	42	1,800
	06-09-92	35.0	520	527	52	2,300
	08-04-92	39.0	609	609	64	2,600
	09-15-92	39.0	639	642	63	2,800
	10-21-92	33.0	646	640	64	2,800
	11-17-92	32.0	626	625	59	2,700
	12-23-92	—	666	673	62	3,100
	01-27-93	27.5	634	645	62	2,800
	03-02-93	30.0	637	637	60	2,700
	03-24-93	25.0	514	513	42	1,900
	04-13-93	24.5	547	555	51	2,200
	05-20-93	18.0	285	288	21	1,000
	06-15-93	—	238	237	15	820
	07-14-93	21.0	258	269	15	1,000
	08-19-93	30.5	445	443	38	1,600
	09-08-93	30.5	435	447	36	1,700
	10-14-93	27.0	504	508	41	2,000
	11-18-93	27.0	553	559	49	2,300
	12-14-93	26.5	549	558	46	2,300
FHCD	10-19-89	15.0	232	—	—	—
	02-19-92	16.0	253	249	7.8	270
	03-12-92	15.5	258	251	7.2	300
	05-13-92	16.5	252	254	7.4	320
	05-27-92	16.0	253	260	8.9	—
	06-09-92	16.0	253	257	7.8	350
	08-04-92	16.0	244	250	7.3	280
	09-15-92	16.0	244	250	6.9	280
	11-17-92	15.5	251	251	6.1	290
	12-16-92	15.5	250	260	6.3	310

Table 114. Partial chemical analyses of water samples collected at selected surface-water sites and springs, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature water (°C)	Specific conductance (µS/cm)	Specific conductance lab (µS/cm)	Chloride, dissolved (mg/L)	Boron, dissolved (µg/L)
FHCD	02-23-93	15.0	257	260	6.0	290
	03-24-93	15.5	265	268	8.8	300
	05-19-93	16.5	249	258	6.0	290
	06-15-93	16.0	242	246	5.3	270
	08-18-93	15.5	230	231	3.7	200
	09-08-93	15.0	223	233	4.1	200
	11-17-93	15.5	240	235	3.6	230
	12-14-93	15.0	239	246	4.0	240
FHAB	04-21-87	—	—	267	8.8	340
	05-27-87	15.0	274	274	10	410
	07-31-87	17.5	251	249	7.7	320
	03-02-88	16.5	266	272	7.4	390
	12-13-90	17.5	—	—	—	—
	02-19-92	17.5	—	281	15	580
	03-10-92	17.5	282	284	14	610
	05-13-92	17.5	282	286	15	610
	05-27-92	17.0	280	288	16	—
	06-09-92	17.0	270	276	18	680
	08-04-92	18.0	278	285	18	660
	09-15-92	18.0	283	291	15	650
	11-17-92	18.0	298	300	14	640
	12-16-92	17.5	289	293	14	630
	02-23-93	17.0	285	288	13	600
	03-24-93	17.5	285	287	13	590
	05-19-93	17.0	279	287	14	630
	06-15-93	18.0	261	260	11	580
	08-18-93	17.0	231	234	7.3	380
	09-08-93	17.0	225	233	7.4	400
	11-17-93	18.0	245	249	7.3	430
	12-14-93	17.5	249	255	8.6	440
FH23	04-21-87	—	—	188	4.5	80
	05-27-87	11.0	172	189	4.3	90
	06-18-87	11.0	179	182	5.0	100
	07-31-87	11.0	181	182	4.4	80
	03-02-88	11.0	183	187	4.3	90

Table 114. Partial chemical analyses of water samples collected at selected surface-water sites and springs, Long Valley Caldera, Mono County, California, 1987–93—Continued

Station identifier	Date	Temperature water (°C)	Specific conductance (µS/cm)	Specific conductance lab (µS/cm)	Chloride, dissolved (mg/L)	Boron, dissolved (µg/L)
HC-5L	01-17-91	92.0	—	—	—	—
	04-17-91	91.5	—	1,730	210	10,000
	07-24-91	92.5	—	1,730	220	10,000
	10-23-91	95.0	1,710	1,740	220	10,000
	01-14-92	94.0	1,710	1,730	210	9,700
	04-16-92	91.0	1,810	1,710	240	10,000
	10-21-92	93.5	1,740	1,730	220	9,800
	07-14-93	92.5	1,680	1,720	200	11,000
	10-14-93	91.0	1,770	1,720	200	9,700
HC-4	10-21-92	93.5	1,800	1,780	220	1,000
	01-27-93	92.5	1,730	1,760	210	10,000
	04-13-93	—	1,810	1,780	220	10,000
	07-14-93	92.0	1,660	1,710	200	10,000
	10-14-93	89.0	1,750	1,700	190	9,500
HC-3	02-10-87	90.0	1,710	1,810	230	11,000
	07-28-87	—	—	1,760	230	9,900
	03-03-88	90.0	—	1,810	220	11,000
	04-20-88	91.5	—	1,780	220	9,800
	10-19-88	94.0	—	1,770	210	10,000
	01-09-89	94.0	—	1,760	210	9,600
	04-12-89	94.0	—	1,770	220	10,000
	10-17-89	95.0	—	1,820	210	10,000
	01-10-90	94.0	—	1,820	210	9,600
	04-24-90	91.5	—	1,770	230	10,000
	07-18-90	—	—	—	—	—
	10-17-90	93.0	—	1,750	220	10,000
	01-17-91	94.0	—	1,760	210	9,900
	04-17-91	89.0	—	1,790	210	10,000
	07-24-91	90.0	—	1,790	220	9,500