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Characterization of Surface-Water Resources in the Great Basin National Park Area and Their Susceptibility to Ground-Water Withdrawals in Adjacent Valleys, White Pine County, Nevada

Scientific Investigations Report 2006–5099

U.S. Department of the Interior
U.S. Geological Survey

Cover: Confluence of Lehman and Baker Creeks, looking west toward Great Basin National Park, White Pine County, Nevada. (Photograph taken by David A. Beck, U.S. Geological Survey, 2003.)

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By Peggy E. Elliott, David A. Beck, and David E. Prudic

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Conversion Factors and Datums

Inch/Pound to SI

Multiply	By	To obtain
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)
cubic foot per second per mile [(ft^3/s)/mi]	0.01760	cubic meter per second per kilometer [(m^3/s)/km]
cubic foot per second per square mile [(ft^3/s)/mi^2]	0.01093	cubic meter per second per square kilometer [(m^3/s)/km^2]
foot (ft)	0.3048	meter (m)
foot per second (ft/s)	0.3048	meter per second (m/s)
foot per mile (ft/mi)	0.1894	meter per kilometer (m/km)
inch (in.)	25.4	millimeter (mm)
mile (mi)	1.609	kilometer (km)
square mile (mi^2)	2.590	square kilometer (km^2)

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$°F=(1.8 \times °C)+32.$$

Temperature in degrees Fahrenheit (°F) may be converted to degrees Celsius (°C) as follows:

$$°C = 0.556(°F-32).$$

Specific conductance is given in microsiemens per centimeter at 25 degrees Celsius (µS/cm at 25°C).

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

Datums

Vertical coordinate information is referenced to the North American Vertical Datum of 1988 (NAVD 88). Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83).

Altitude, as used in this report, refers to distance above the vertical datum.

Characterization of Surface-Water Resources in the Great Basin National Park Area and Their Susceptibility to Ground-Water Withdrawals in Adjacent Valleys, White Pine County, Nevada

By Peggy E. Elliott, David A. Beck, and David E. Prudic

Abstract

Eight drainage basins and one spring within the Great Basin National Park area were monitored continually from October 2002 to September 2004 to quantify stream discharge and assess the natural variability in flow. Mean annual discharge for the stream drainages ranged from 0 cubic feet per second at Decathon Canyon to 9.08 cubic feet per second at Baker Creek. Seasonal variability in streamflow generally was uniform throughout the network. Minimum and maximum mean monthly discharges occurred in February and June, respectively, at all but one of the perennial streamflow sites. Synoptic-discharge, specific-conductance, and water- and air-temperature measurements were collected during the spring, summer, and autumn of 2003 along selected reaches of Strawberry, Shingle, Lehman, Baker, and Snake Creeks, and Big Wash to determine areas where surface-water resources would be susceptible to ground-water withdrawals in adjacent valleys. Comparison of streamflow and water-property data to the geology along each stream indicated areas where surface-water resources likely or potentially would be susceptible to ground-water withdrawals. These areas consist of reaches where streams (1) are in contact with permeable rocks or sediments, or (2) receive water from either spring discharge or ground-water inflow.

Introduction

Great Basin National Park, in east-central Nevada (fig. 1), is home to an abundance of natural resources and scenic attractions. The park encompasses Lehman Caves; Wheeler Peak, the second highest peak in Nevada at 13,063 ft; many glacial features, such as a remnant glacier, a rock glacier, cirques, and tarns; a bristlecone forest; subalpine lakes; as well as abundant wildlife (National Park Service, 1991, 2002; Miller and others, 1995a). Water from streams, springs, and seeps within Great Basin National Park is an important resource that maintains the diverse biological communities, enhances the abundance of geologic features, and provides for park operations.

The water resources of sparsely populated valleys in eastern Nevada and western Utah have received attention as potential sources of supply because of the increased demand for water in distant urban centers, in particular Las Vegas, Nevada. Several water-rights applications, including those filed by Las Vegas Valley Water District and Vidler Water Company, a private water-development firm, currently (2006) are pending before the Nevada State Engineer for large-scale ground-water withdrawals from Spring and Snake Valleys adjacent to the park. Streams, springs, and seeps in the park potentially could be affected because of the close proximity to the pending withdrawals. Any decreases in flow could adversely affect water-dependent biological and geological resources within the park as well as the park's water supply. The National Park Service (NPS) needs information on how the proposed withdrawals might affect water resources important to the park. The U.S. Geological Survey (USGS) is working, in cooperation with the NPS, to assess the park's surface-water resources and determine where the resources are most susceptible to ground-water withdrawals. The information presented in this report will assist NPS in managing and protecting the natural resources that may be affected by proposed ground-water withdrawals outside of the park's boundary.

Purpose and Scope

The purpose of this report is to document the results of a study to characterize surface-water resources in the Great Basin National Park area, and to evaluate the susceptibility of those resources to ground-water withdrawals in adjacent valleys. Characterization of surface-water resources included quantifying the discharge of streams and springs within the study area, and assessing the natural variability of their flow.

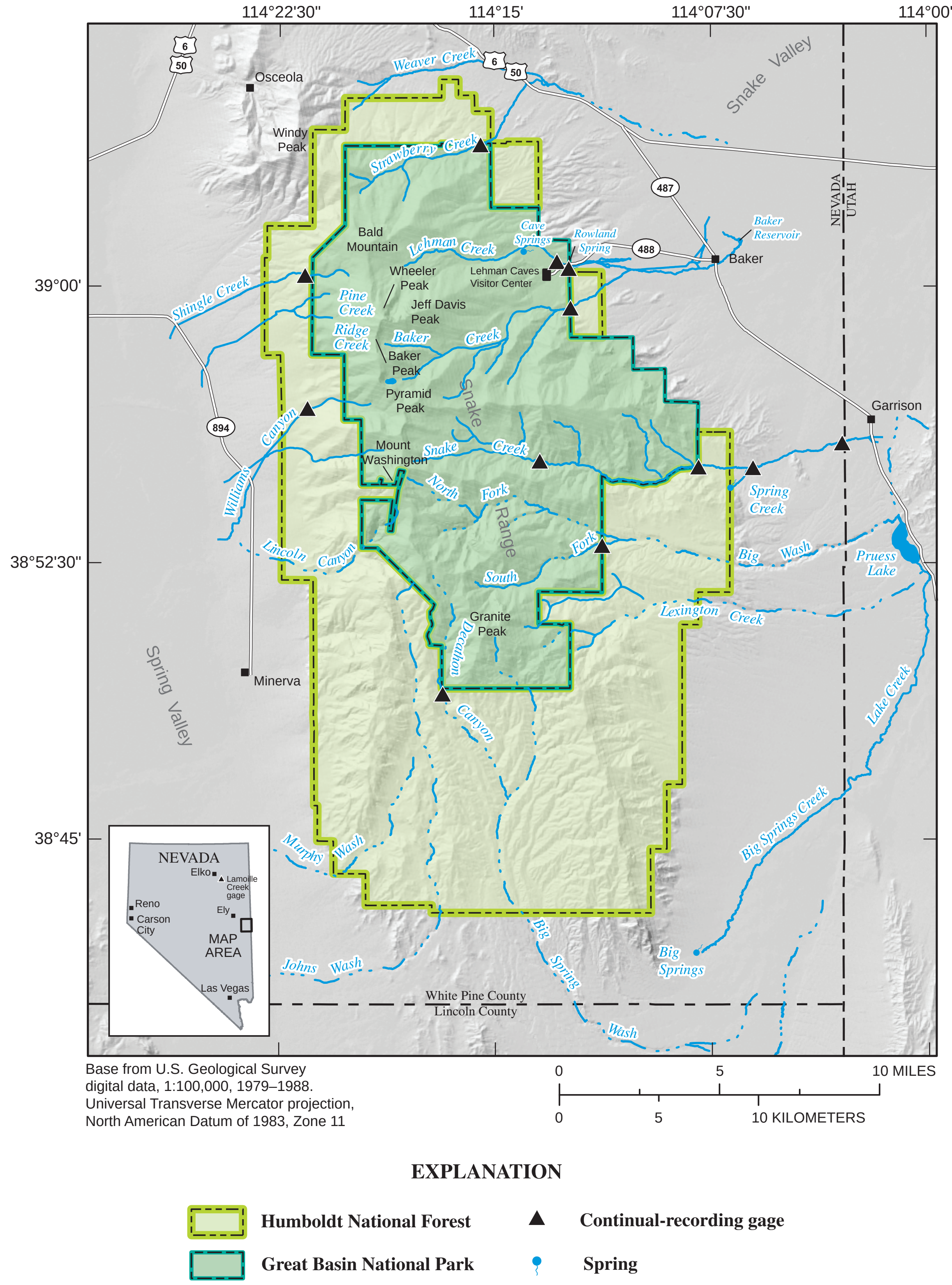

Figure 1. Location of Great Basin National Park, physiographic and geographic features, and continual-recording streamflow gages, White Pine County, Nevada, and Lamoille Creek gage near Elko, Nevada. See inset map for location of Elko, Nevada.

For the purpose of this report, the study area is defined as that part of the southern Snake Range south of Highway 50 that includes the Great Basin National Park, Humboldt National Forest, and adjacent areas that encompass the alluvial slopes and upper parts of the valley floor. Alluvial slope is used herein to describe the piedmont alluvial plain that has formed around the periphery of the southern Snake Range.

A streamflow network was developed to monitor the discharge of principal streams and springs in the study area. A series of synoptic streamflow measurements were made along six of the drainage basins during snowmelt runoff in the spring and summer, and during low flow in the autumn. Streamflow data were compared with precipitation data to characterize natural fluctuations in stream discharge. Surface-water resources in the study area that likely and potentially are susceptible to ground-water withdrawals in the adjacent valleys were determined from relations between changes in stream discharge and geologic units along each stream.

Description of Study Area

Physiography and Drainage

Great Basin National Park is in east-central Nevada near the border of Utah. The park covers more than 120 mi^2 (National Park Service, 2002), generally encompassing much of the southern Snake Range (fig. 1). The southern Snake Range is a north-south trending mountain range bounded on the east and west by Snake and Spring Valleys, respectively. Great Basin National Park is within the Great Basin hydrographic province where streams drain internally; the Great Basin hydrographic province is part of the larger Basin and Range physiographic province (Fenneman, 1931) where great differences in altitude between mountain ranges and adjacent valleys are typical. Wheeler Peak, at 13,063 ft, is the highest peak in the southern Snake Range, and the second highest peak in Nevada (Miller and others, 1995a; National Park Service, 2002). Altitudes in the valleys adjacent to the range are about 5,000 ft in Snake Valley to the east, and 5,800 ft in Spring Valley to the west.

Climate

The large variation in climate at and near Great Basin National Park is typical of northern and central Nevada (Houghton and others, 1975). This variation creates a range of habitat zones throughout the park as precipitation, temperature, and vegetation differ with altitude (National Park Service, 2002). The climate ranges from a midlatitude steppe in the valleys adjacent to the park to a humid continental climate at the highest altitudes in the park (Houghton and others, 1975). The midlatitude steppe is characterized as semiarid with cold winters and hot summers, whereas the humid continental climate is characterized by heavy precipitation, cold winters, and mild summers (Houghton and others, 1975). Sagebrush (*Artemisia L.*) is the dominant vegetation in the midlatitude steppe, and pinyon (*Pinus monophylla*)-juniper (*Juniperus L.*) woodlands and aspen (*Populus tremuloides*)-coniferous forests prevail in the mountains, except for the highest altitudes where alpine tundra is dominant (U.S. Department of the Interior, 1992; Orndorff and others, 2001).

Precipitation at the park is from three types of storms (Houghton and others, 1975). Storms that form as low-pressure systems in the Pacific move across the Sierra Nevada and Cascade Range. Although all of Nevada is in the rain shadow of these mountains, heavy precipitation from these storms can occur. Continental storms, or Great Basin lows, as referred to by Houghton and others (1975), occur when low-pressure systems build over Nevada and Utah. The lows build along cold fronts influenced by polar-air masses brought southward by northerly winds. These storms are most common from April to June, but can produce heavy snowfall during the winter. Convective thunderstorms from moist air that moves into the region from the Gulf of California and the Gulf of Mexico during late summer can produce intense rainfall.

All three types of storms are reflected in the mean monthly precipitation graph shown in figure 2. Mean monthly precipitation and air-temperature data for 1971–2000 are from the National Weather Service (NWS) weather station operated at the Lehman Caves Visitor Center (fig. 1; National Oceanic and Atmospheric Administration, 2002). Mean annual precipitation at the visitor center during this period was 13.61 in. Mean monthly precipitation ranged from 0.7 in. in December to 1.7 in. in September (fig. 2). Precipitation generally was greatest in late winter (February–March) from Pacific storms, in May from continental storms, and late summer to early autumn (August–October) from convective thunderstorms.

Mean monthly air temperatures at the Lehman Caves Visitor Center from 1971–2000 are shown in figure 2. The mean annual air temperature was 8.6°C. Mean monthly temperatures ranged from a low of -1.8°C in January to a high of 21.8°C in July. Mean monthly temperatures were below freezing from December through February and most precipitation during this period accumulated as snow.

Snow accumulates at high altitudes generally beginning in November and continues through March. Snowmelt usually begins in March and continues into summer, with snow at the highest altitudes melting last. Snow can remain in some protected, high-altitude areas throughout the year. As a result, a perennial ice field has formed in the cirque on the north side of Wheeler Peak (fig. 1).

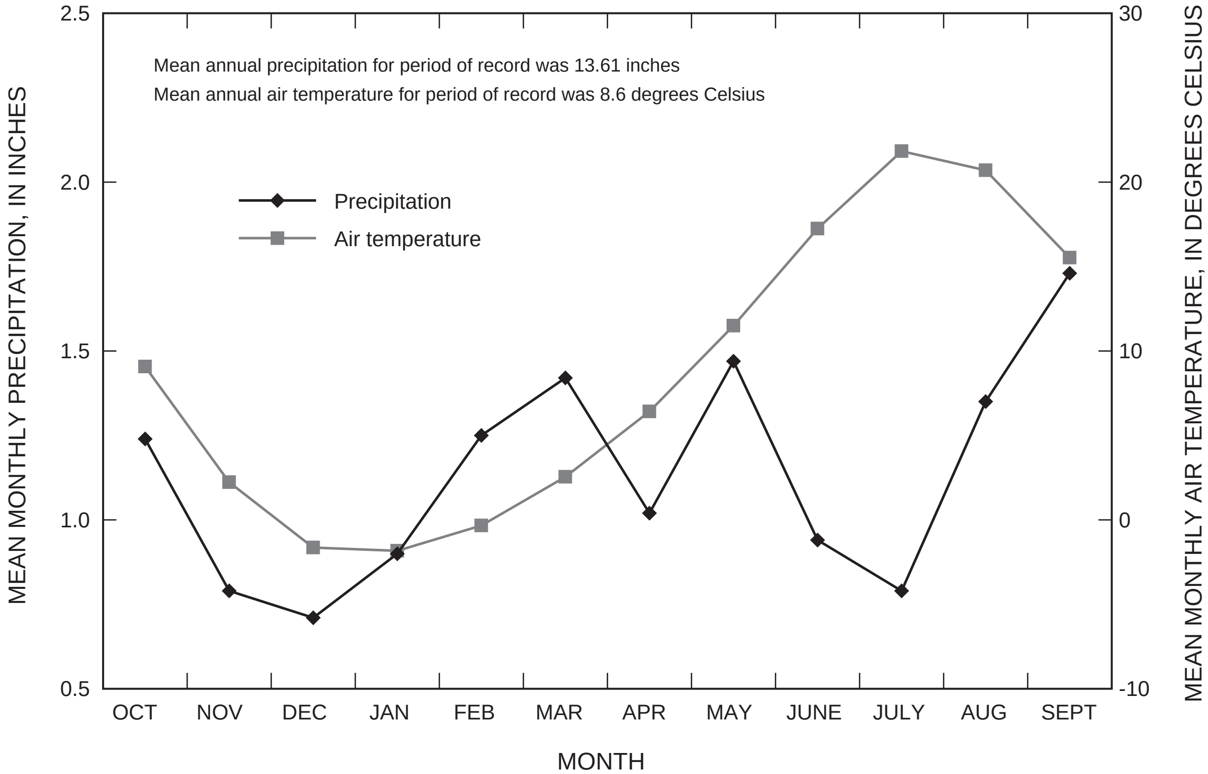

Figure 2. Mean monthly air temperature and precipitation from the National Weather Service weather station at the Lehman Caves Visitor Center, Great Basin National Park, Nevada, 1971–2000.

Geology

The southern Snake Range is part of a metamorphic core complex that was uplifted and exposed by erosion during extensional faulting that began in the Tertiary (Miller and others, 1999). The metamorphic core complex exposed Cretaceous granites, and metamorphosed Proterozoic and Paleozoic sedimentary rocks in the northern half of the range (McGrew and others, 1995; Miller and others, 1995a). Younger, Paleozoic (Middle Cambrian through Devonian) sedimentary rocks overlie the core complex in the southern half of the range; underlying these rocks is a major, gently east-dipping fault surface, known as the southern Snake Range décollement (pl. 1, table 1; McGrew and others, 1995). As a result of extensional faulting, the southern Snake Range is tilted eastward, creating a steep slope on the west side and a shallow slope on the east side (Orndorff and others, 2001). Uplift has been much greater to the north, where the core complex is exposed (pl. 1). Detritus eroded from the uplifted mountains has partially filled the surrounding valleys. This process of erosion and fill continues today.

Geologic units throughout the study area consist of sedimentary, metamorphic, and igneous rocks ranging in age from Late Proterozoic to Quaternary (table 1). The older undifferentiated rocks (ЄZr) of Late Proterozoic and Early Cambrian Age mostly are quartzite, argillite, and shale that correspond to the McCoy Creek Group (Misch and Hazzard, 1962; Hose and Blake, 1976; Miller and others, 1995a), Prospect Mountain Quartzite, and Pioche Shale (table 1; Misch and Hazzard, 1962; Whitebread, 1969; Hose and Blake, 1976; McGrew and others, 1995; Miller and others, 1995a, 1995b). These rocks are found mostly in the lower plate of the southern Snake Range décollement. The McCoy Creek Group generally consists of weakly metamorphosed quartzites, argillites, and siltstones with a combined thickness of about 3,600 ft (Misch and Hazzard, 1962; Miller and others, 1995a). The quartzites are fine to coarse grained, thinly bedded to massive, cliff-forming units; whereas, the very fine-grained argillites and siltstones are slope-forming units (Misch and Hazzard, 1962; Miller and others, 1995a). The Prospect Mountain Quartzite is fine to coarse grained, very light gray to red-purplish gray, crossbedded, and finely jointed (Misch and Hazzard, 1962; Whitebread, 1969; McGrew and others, 1995; Miller and others, 1995a, 1995b). The unit is at most 5,000 ft thick, and forms cliffs and talus-covered slopes (McGrew and others, 1995). The Pioche Shale is a thin bedded, fine-grained, calcareous quartzite with some beds and lenses of sandy limestone, to a light-olive-gray to dark-greenish-gray siltstone, and sandy siltstone that is at most 450 ft thick (Whitebread, 1969; McGrew and others, 1995; Miller and others, 1995a).

Table 1. Geologic unit descriptions and hydraulic properties, Great Basin National Park area, Nevada.

[Geologic data compiled from Drewes and Palmer, 1957; Misch and Hazzard, 1962; Lee and others, 1968; Whitebread, 1969; Lee and others, 1970; Hose and Blake, 1976; Lee and others, 1986; McGrew and others, 1995; Miller and others, 1995a, and 1995b. Hydraulic properties data compiled from Winograd and Thordarson, 1968; Plume, 1996; and Harrill and Prudic, 1998]

Geologic unit	System	Series	Rock or stratigraphic unit	Lithology	Hydraulic properties
QTs	Quaternary to Tertiary	Holocene to Pliocene	Alluvial and glacial deposits (younger alluvial and glacial deposits, and older alluvial deposits and sedimentary rocks)	Mostly alluvial deposits and some glacial deposits. Alluvial deposits range from unconsolidated to consolidated clay, silt, sand, and gravel. Glacial deposits consist of ground moraine and deposits from two glacial stages	Well-sorted sands and gravels readily transmit water.
Tr	Tertiary	Miocene	Tertiary rocks (younger sedimentary rocks, conglomerate, and volcanic rocks)	Younger sedimentary rocks include alluvial fan deposits, sand, gravel, and conglomerates. Volcanic rocks include tuffs and tuffaceous sedimentary rocks. The Tertiary rocks range from slightly to well consolidated or cemented	Well-consolidated or cemented rocks act as confining units, but may transmit some water where slightly consolidated or fractured.
TJi	Tertiary to Jurassic	Oligocene to Middle Jurassic	Intrusive rocks	Quartz monzonite to granodiorite, and aplites and pegmatites	Generally acts as a confining unit, but may transmit some water where highly fractured or weathered.
D€r	Devonian to Upper Cambrian		Younger undifferentiated rocks (Guilmette Formation; Sevy Dolomite; Laketown and Fish Haven Dolomites, undivided; Eureka Quartzite; Pogonip Group, undifferentiated; Notch Peak Limestone; and Corset Spring and Dunderberg Shales)	Limestone, dolomite, quartzite, and shale (found in the upper plate of the southern Snake Range décollement)	Units are discontinuous because of numerous faults, but form localized transmissive areas (aquifers) where the rocks are highly fractured or where dissolution of limestone has increased porosity.
€r	Cambrian	Middle	Undifferentiated sedimentary rocks (Johns Wash Limestone, Lincoln Peak Formation, and Pole Canyon Limestone)	Limestone and some shale (found in the lower and upper plates of the southern Snake Range décollement)	Continuous over large areas and can transmit large quantities of water where fractured or dissolution of limestone has increased porosity.
€Zr	Early Cambrian and Late Proterozoic		Older undifferentiated rocks (Pioche Shale, Prospect Mountain Quartzite, McCoy Creek Group)	Quartzite, argillite, and shale (found in the lower plate of the southern Snake Range décollement)	Generally acts as a confining unit except where highly fractured. The Prospect Mountain Quartzite may transmit some water through a remnant bedding structure.

All rock units within the older undifferentiated rocks of Late Proterozoic and Early Cambrian Age generally impede and restrict ground-water flow (Plume, 1996, p. B-29; Harrill and Prudic, 1998, p. A20). Such rocks store and transmit only small quantities of water along fractures and joints unless highly fractured (table 1). Because of the fine joint pattern along remnant bedding planes, the Prospect Mountain Quartzite may transmit more ground-water flow relative to the more massive quartzites of the McCoy Creek Group.

Undifferentiated sedimentary rocks (Ꞓr) of Middle Cambrian Age consist of Pole Canyon Limestone, Lincoln Peak Formation, and Johns Wash Limestone (table 1; Hose and Blake, 1976). These rocks are found in the lower and upper plates of the southern Snake Range décollement. The Pole Canyon Limestone is a thin-bedded to massive unit consisting of alternating members of dark-gray limestone with white to light-gray, cliff-forming limestone (Drewes and Palmer, 1957; Whitebread, 1969). The unit is about 1,800 ft thick (Whitebread, 1969). The Lincoln Peak Formation is a fine to coarsely crystalline to clastic, medium-dark gray, very thin-bedded limestone and shaly limestone (Drewes and Palmer, 1957; Whitebread, 1969). The unit is about 4,000–4,500 ft thick and is a slope former (Whitebread, 1969; McGrew and others, 1995). The Johns Wash Limestone is a light to dark gray, thin-bedded to massive, cliff-forming unit that is at most 285 ft thick (Drewes and Palmer, 1957; Whitebread, 1969; McGrew and others, 1995).

The Pole Canyon Limestone, where highly fractured, or where dissolution along fractures and bedding planes has increased porosity, can transmit large quantities of water. Lehman Caves and the Baker Creek cave system, the largest cave system discovered in Nevada (Bridgemon, 1965), are formed in this limestone. Caves have formed not only in the Pole Canyon Limestone, but also in every exposed carbonate unit throughout the park (Matthew Reece, National Park Service, Great Basin National Park, written commun., 2005).

The younger undifferentiated rocks (DꞒr) consist mostly of limestone, shale, quartzite, and dolomite of Devonian to Late Cambrian Age. These rocks include the Corset Spring and Dunderberg Shales; Notch Peak Limestone; the Pogonip Group, undifferentiated; Eureka Quartzite; Laketown and Fish Haven Dolomites, undivided; Sevy Dolomite; and the Guilmette Formation (table 1; Hose and Blake, 1976), and generally are found in the upper plate of the southern Snake Range décollement. The limestones generally are very fine grained to coarsely clastic, medium to dark gray, thin bedded to massive with some chert nodules, lenses, and shale. The rocks are slope to cliff formers and range in thickness from 400 to 1,800 ft (Drewes and Palmer, 1957; Whitebread, 1969; McGrew and others, 1995; Miller and others, 1995a, 1995b). The shales are fissile, yellowish brown to olive gray with some limestone lenses and nodules, and are at most 470 ft thick (Drewes and Palmer, 1957; Whitebread, 1969; McGrew and others, 1995). The quartzite consists of a very light gray, fine to medium grained, thick bedded, cliff-forming unit that is at most 440 ft thick (Whitebread, 1969; McGrew and others, 1995). The dolomites are light to dark gray, microcrystalline to very finely crystalline with poorly developed or thin to medium bedding, and are at most 1,500 ft thick (Whitebread, 1969; McGrew and others, 1995; Miller and others, 1995a).

The limestones and dolomites of the younger undifferentiated rocks are discontinuous because of numerous faults, and also are fractured and thus generally transmit large quantities of ground water. Spring Creek discharges from the Laketown and Fish Haven Dolomites, which have poorly developed beds obscured by fractures (table 1; Whitebread, 1969). The Eureka Quartzite, however, generally transmits only small quantities of ground water and typically is a barrier to ground-water flow (Winograd and Thordarson, 1975, p. C74).

The intrusive rocks (TJi) range from Jurassic to Tertiary Age, and consist of quartz monzonite, granodiorite (Lee and others, 1968; Hose and Blake, 1976, p. 26; Whitebread, 1969), and aplites and pegmatites (table 1; Lee and others, 1970; Lee and others, 1986; McGrew and others, 1995; Miller and others, 1995a). These rocks generally act as confining units but may transmit small quantities of ground water where fractured or weathered.

The Tertiary rocks (Tr) consist of volcanic and younger sedimentary rocks including alluvial fan deposits, sand, gravel, and conglomerates (Whitebread, 1969; Hose and Blake, 1976; Miller and others, 1995a, 1995b). Displaced masses or landslide blocks of Paleozoic rocks are found locally (Whitebread, 1969; McGrew and others, 1995). The Tertiary rocks range from slightly to well consolidated or cemented. The well-consolidated or cemented rocks typically act as confining units.

The alluvial and glacial deposits (QTs) generally consist of unconsolidated clay, silt, sand, and gravel that have been eroded from the southern Snake Range and adjacent mountains. The younger Quaternary deposits typically are unconsolidated, whereas the older Quaternary and Tertiary deposits range from unconsolidated to consolidated (McGrew and others, 1995; Miller and others, 1995a, 1995b). The glacial deposits generally are within the southern Snake Range and consist mostly of ground moraine from two glacial stages (Whitebread, 1969; Miller and others, 1995a). Alluvial and glacial deposits can range from poorly sorted to well-sorted (Thornbury, 1969). As a result, the water-storing and transmitting properties of these deposits can vary greatly, and are dependent on the material size, sorting, and cementation. Alluvial deposits that partly fill the basins in Snake and Spring Valleys are included in the basin-fill aquifers of the Great Basin (Plume, 1996, p. B14). The basin-fill aquifers are the most utilized aquifers in the Great Basin (Harrill and Prudic, 1998, p. A7).

Streamflow

To quantify discharge from streams and springs within the park area, sites within eight drainage basins and one spring were selected for monitoring. Continual records of stream discharge were obtained from these sites using a stage-recording device. At other sites, streamflow data were obtained through a series of discrete discharge measurements.

Continual-Recording Stations

Recording streamflow gages were installed near the park boundary to monitor stream discharge from selected drainage basins and one spring. These sites were on Strawberry Creek, which drains the northeast end of the park; Shingle Creek and Williams Canyon, which drain the western side of the park; Lehman, Baker, and Snake Creeks and Big Wash, which drain the eastern side of the park; Decathon Canyon, which drains the southern end of the park; and Rowland Spring, a tributary to Lehman Creek (fig. 1). Three additional streamflow gages were installed along Snake Creek to help characterize the variability of streamflow within selected areas of the Snake Creek drainage. The three additional sites selected for Snake Creek, in downstream order, were (1) above the pipeline diversion, (2) below the confluence with Spring Creek, and (3) at the Nevada–Utah State line (fig. 1). In all, 12 continual-recording streamflow gages were either installed or reactivated in the 8 stream drainages and 1 spring. Table 2 contains information on site location, altitude, drainage area, stream length and gradient, flow statistics, and period of record. Appendix A (at back of report) includes photographs of each gage site.

Data were collected at all but two sites during a 2-year period from October 2002 to September 2004 (water years 2003 and 2004). Water year 2003 is defined as beginning on October 1, 2002, and ending on September 30, 2003. Each streamflow gage was visited periodically for routine maintenance of stage-recording equipment and measurements of stream discharge using a current meter in accordance with standard USGS techniques (Rantz and others, 1982a, 1982b). Streamflow rates were determined using flumes and volumetric methods at selected sites during periods of low flow. Stage-discharge relations were developed for each gage and used to compute daily mean discharges. Additionally, continual water-temperature data were collected at each site, and daily mean temperatures were computed. Hydrographs and tables of daily mean discharge and continual water-temperature for water years 2003 and 2004 for each gage are included in appendix B (at back of report).

Strawberry Creek Gage

Strawberry Creek is a principal drainage basin at the northeast end of the park, with an areal extent of 9.45 mi^2 (fig. 1). The creek is perennial, flows to the northeast, and is tributary to Weaver Creek, which flows into Snake Valley. Altitudes within the drainage range from 11,562 ft at the summit of Bald Mountain to 6,020 ft at the confluence with Weaver Creek (fig. 1).

The Strawberry Creek gage was established on October 8, 2002, and was about 600 ft upstream of the park boundary (fig. 3; appendix A, photographs A1). No impoundments or diversions were observed upstream of the gage. Downstream of the gage, at an altitude of 6,180 ft, water is diverted through a pipeline to irrigate fields along Weaver Creek.

Shingle Creek Gage

Shingle Creek is one of many small perennial streams that drain the steep, northwest slopes of the southern Snake Range (fig. 1). The Shingle Creek drainage encompasses an area of 2.22 mi^2 originating at an altitude of 11,780 ft near the summit of Wheeler Peak. The creek flows southwest and becomes poorly defined when it reaches the alluvial slope at an altitude of about 6,950 ft. At 6,550 ft, downstream of synoptic measurement site Sh4 (fig. 4), flow is diverted through a 2.2-mile long pipeline for irrigation in Spring Valley.

The Shingle Creek gage was established on September 5, 2002, about 0.25 mi downstream of the park boundary (fig. 4; appendix A, photographs A2). No impoundments or diversions were observed upstream of the gage.

Lehman Creek Gage

Lehman Creek drains the northeastern slopes of the southern Snake Range and is the third largest stream in the park (fig. 1). The entire drainage area encompasses 15.6 mi^2, and ranges in altitude from 13,063 ft at Wheeler Peak to about 5,260 ft just upstream of the Baker Reservoir in Snake Valley. Headwaters of Lehman Creek flow from glacial cirques on the north side of Wheeler Peak and from the south side of Bald Mountain (fig. 1). The stream is perennial and generally flows eastward from the range crest at about 10,000 ft down to Snake Valley. Downstream of the park boundary, tributary inflow enters Lehman Creek from Rowland Spring and Baker Creek. Downstream of the confluence with Rowland Spring, higher flows from snowmelt runoff disperse into several irrigation ditches, but coalesce back into a single channel upstream of the confluence with Baker Creek. Streamflow from Baker Creek merges into Lehman Creek about 2 mi downstream of the park boundary by means of a diversion ditch that was dug in 1916 (Frantz, 1953). Downstream of the confluence, the combined flow of Lehman and Baker Creeks enters a large pond where all but the highest flows are diverted into a 1.6-mile long concrete-lined irrigation channel (fig. 5).

Lehman Creek previously had been gaged by the USGS from December 1947 to September 1955, and from October 1992 to September 1997. The former gage, about 0.5 mi upstream of the park boundary, was reactivated on July 17, 2002 (appendix A, photographs A3).

Table 2. Index for continual-recording streamflow gages, Great Basin National Park area, Nevada.

[Station name: above refers to upstream; below refers to downstream. n/a, not applicable]

USGS station No.	Station name	Coordinates (North American Datum of 1983)		Land-surface altitude (feet)	Drainage area of the gage (square miles)	Stream length above gage (miles)	Average stream gradient above gage (feet per mile)	Mean annual discharge (cubic feet per second)	Mean annual unit runoff (cubic feet per second per square mile)	Period of record
		Latitude	Longitude							
10243280	Strawberry Creek above Great Basin National Park boundary near Baker, Nevada	39°03’52”	114°15’31”	6,840	7.59	4.70	649	0.58	0.08	10/2002–09/2004
10243640	Shingle Creek near Great Basin National Park boundary near Osceola, Nevada	39°00’19”	114°21’37”	7,860	1.98	1.50	1,170	0.84	0.42	10/2002–09/2004
10243260	Lehman Creek near Baker, Nevada	39°00’42”	114°12’52”	6,700	8.93	5.50	602	5.13	0.57	12/1947–09/1955, 10/1992–09/1997, and 10/2002–09/2004
10243265	Rowland Spring at Great Basin National Park near Baker, Nevada	39°00’31”	114°12’28”	6,580	([1])	n/a	n/a	2.28	n/a	10/2002–09/2004
10243240	Baker Creek at Narrows near Baker, Nevada	38°59’27”	114°12’24”	6,730	16.6	6.80	640	9.08	0.55	12/1947–09/1955, 10/1992–09/1997, and 10/2002–09/2004
10243230	Snake Creek above pipeline near Baker, Nevada	38°55’18”	114°13’28”	7,620	9.26	4.20	898	2.70	0.29	10/2002–09/2004
10243232	Snake Creek at Great Basin National Park boundary near Baker, Nevada	38°55’08”	114°07’58”	6,190	22.0	9.90	678	1.22	0.06	10/2002–09/2004
10243233	Snake Creek below Spring Creek near Garrison, Utah	38°55’07”	114°06’04”	5,815	25.5	11.8	609	([2])	([2])	02/2003–09/2004
10243234	Snake Creek at Nevada–Utah State line near Garrison, Utah	38°55’47”	114°02’58”	5,350	32.5	15.0	526	([2])	([2])	02/2003–09/2004
10243228	South Fork Big Wash above Great Basin National Park boundary near Baker, Nevada	38°53’01”	114°11’18”	6,880	6.69	4.80	804	0.53	0.08	10/2002–09/2004
10243630	Williams Canyon above aqueduct near Minerva, Nevada	38°56’43”	114°21’32”	7,320	3.28	2.10	1,090	1.13	0.34	10/2002–09/2004
10243223	Decathon Canyon below Great Basin National Park boundary near Minerva, Nevada	38°48’59”	114°16’50”	8,410	5.06	4.50	724	0	0	10/2002–09/2004

[1]Contributing drainage indeterminate.

[2]Period of record less than 2 years.

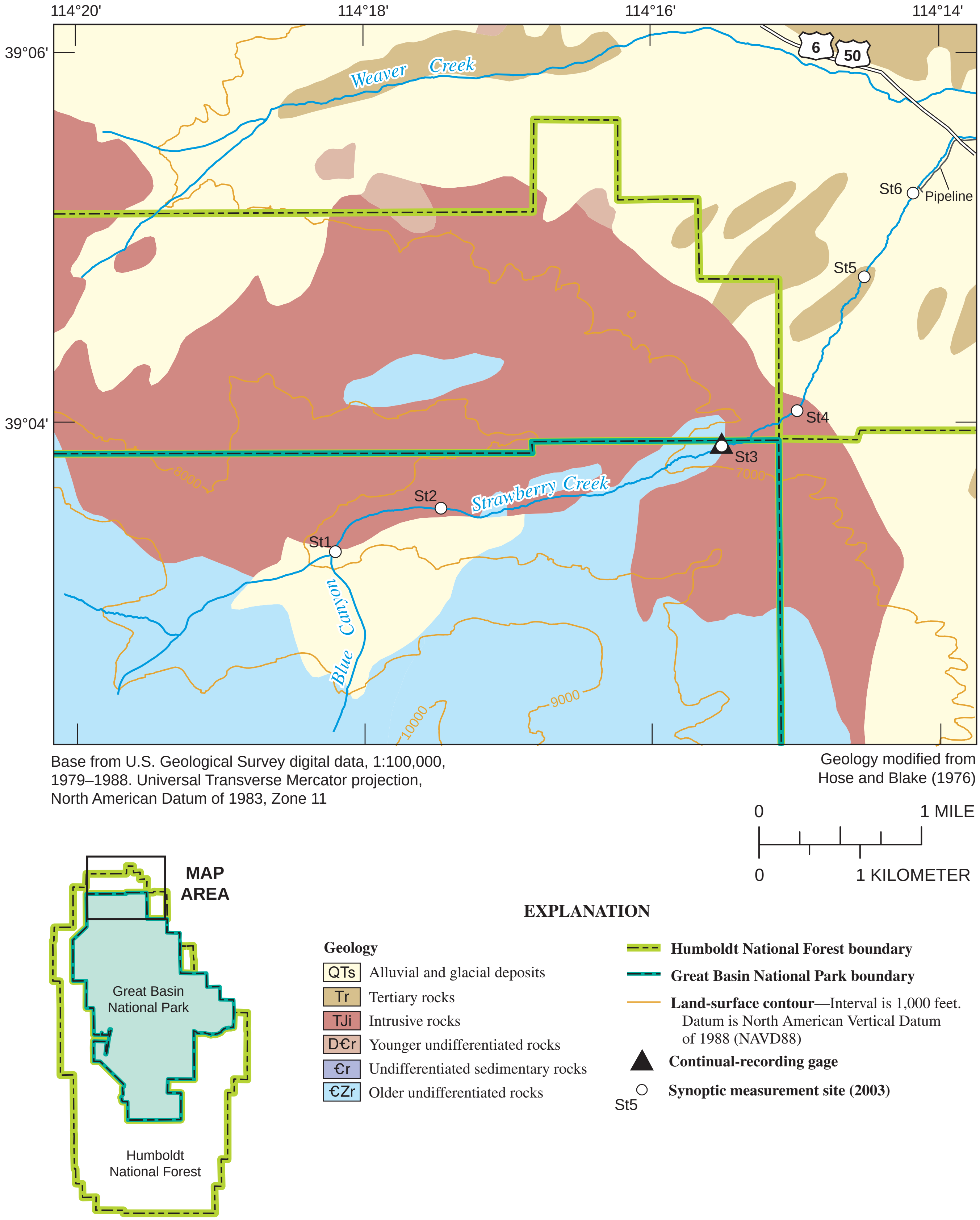

Figure 3. Generalized geology, location of continual-recording streamflow gage, and 2003 synoptic measurement sites for Strawberry Creek, Great Basin National Park area, Nevada.

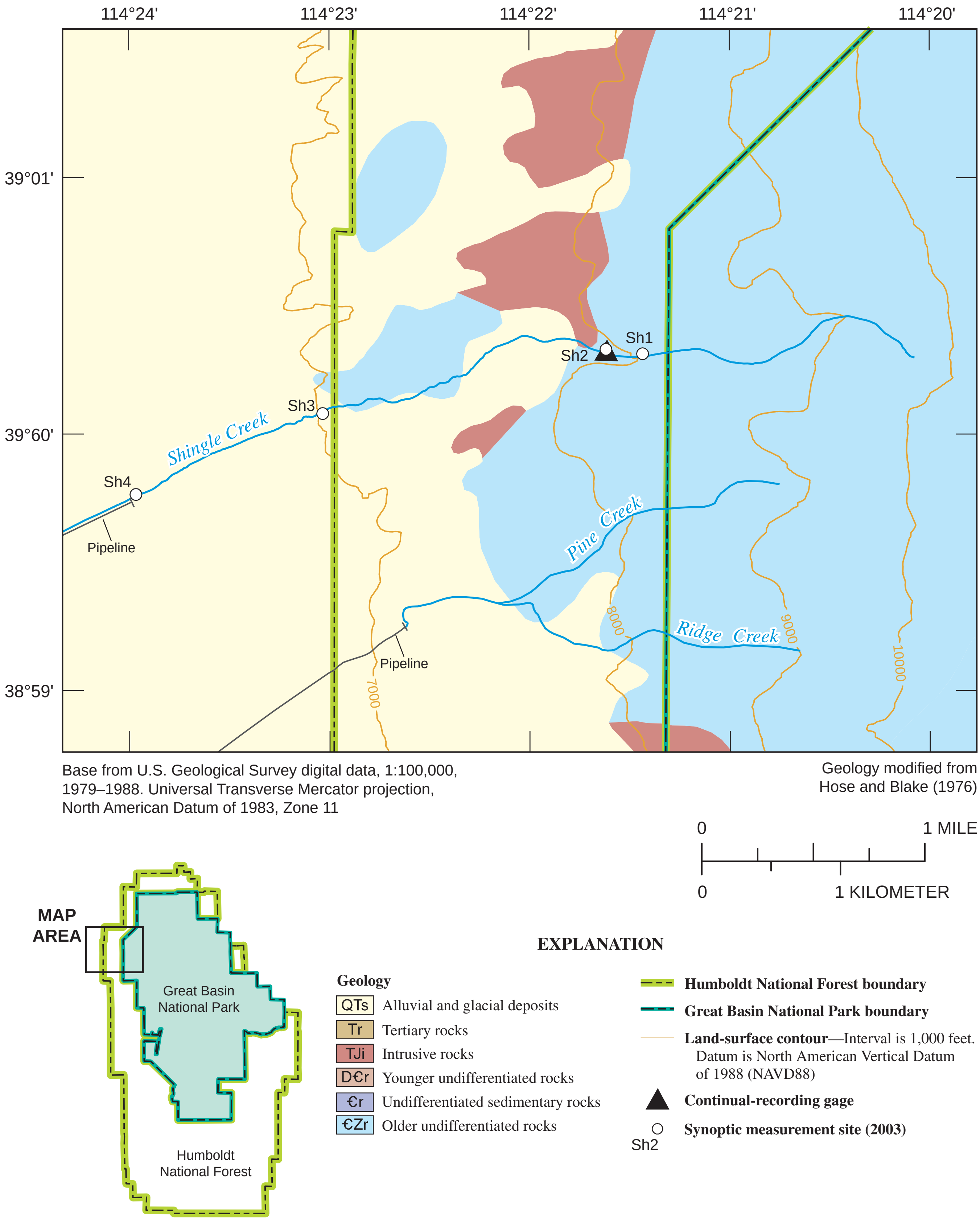

Figure 4. Generalized geology, location of continual-recording streamflow gage, and 2003 synoptic measurement sites for Shingle Creek, Great Basin National Park area, Nevada.

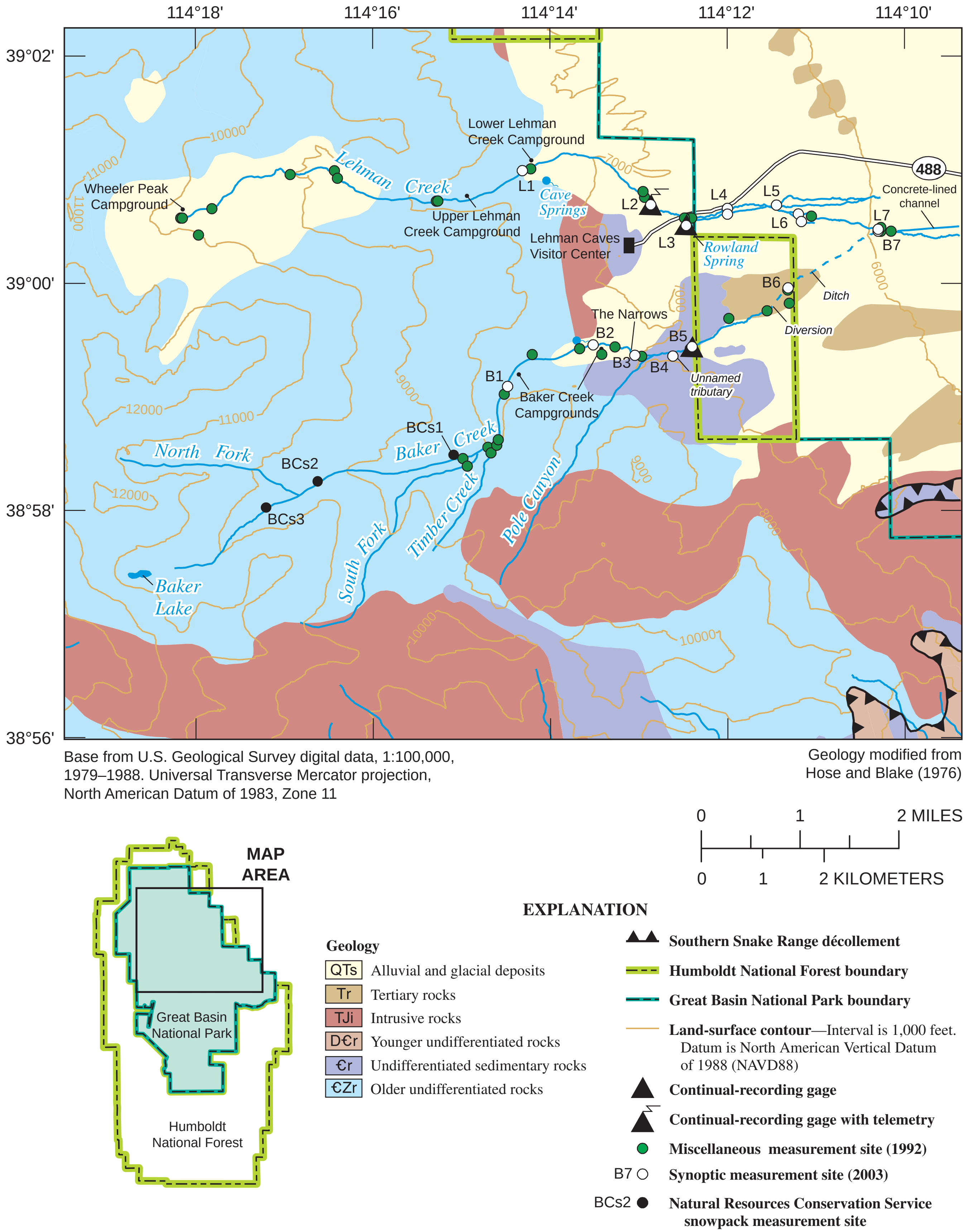

Figure 5. Generalized geology, location of continual-recording streamflow gages, 1992 miscellaneous measurement sites, and 2003 synoptic measurement sites for Lehman and Baker Creeks, Great Basin National Park area, Nevada.

Rowland Spring Gage

Rowland Spring is the second largest spring in the southern Snake Range (Gretchen Baker, National Park Service, Great Basin National Park, oral commun., 2005) and is tributary to Lehman Creek (fig. 1). The shallow spring pool is about 30 ft in diameter by about 1 ft deep and drains to the east (appendix A, photographs A4). Discharge from the spring splits into two channels about 20 ft downstream of the spring pool. The northern fork merges into Lehman Creek about 100 ft downstream of the spring pool, whereas the southern fork flows south of and parallel to Lehman Creek for about 0.75 mi before merging with Lehman Creek. Flow in the southern fork is diverted for irrigation during periods of spring runoff. The Rowland Spring gage was established on September 4, 2002, at the spring pool about 25 ft upstream of the park boundary (fig. 5).

Baker Creek Gage

Baker Creek is the second largest creek in the park and drains the northeastern edge of the southern Snake Range (fig. 1). The entire drainage encompasses an area of 24.3 mi^2 that ranges in altitude from 13,063 ft along the southern summit of Wheeler Peak to about 5,190 ft in Snake Valley. Headwaters of Baker Creek originate from three subdrainages: North Fork Baker Creek, Baker Creek, and South Fork Baker Creek. North Fork Baker Creek drains the southeast slope of Wheeler Peak, whereas Baker and South Fork Baker Creeks drain the eastern and northeastern slopes of Baker Peak and Pyramid Peak, respectively. Baker Lake, the largest alpine lake in volume within the southern Snake Range (Gretchen Baker, National Park Service, Great Basin National Park, oral commun., 2005), provides flow to Baker Creek during periods of snowmelt. Downstream of the confluence of the three drainages, Baker Creek is perennial and drains to the northeast before terminating in Lehman Creek, about 2 mi downstream of the park boundary.

Baker Creek was gaged by the USGS from December 1947 to September 1955, and from October 1992 to September 1997. The former gage, about 25 ft upstream of the park boundary, was reactivated on October 8, 2002 (fig. 5; appendix A, photographs A5).

Snake Creek above Pipeline Gage

Headwaters of Snake Creek originate on the south side of Pyramid Peak and the north side of Mount Washington (fig. 1). The creek flows east across the central part of the southern Snake Range and into Snake Valley where it is used for irrigation. The Snake Creek drainage area encompasses 38.4 mi^2, ranges in altitude from 11,926 ft at Pyramid Peak to about 5,230 ft in Snake Valley, and is the largest drainage area within the park (fig. 1). Flow is perennial within the upper and lower reaches of the creek and is intermittent for most of the central part of the drainage. One prominent, intermittent reach starts at an altitude of about 7,600 ft, and extends downstream about 3 mi. In 1961, local ranchers constructed a pipeline that conveys baseflow over the entire 3 mi of this stream channel. At the end of the pipeline, perennial springflow discharging into the channel combines with the diverted flow. At the park boundary, about 2.2 mi downstream of the end of the pipeline, flow becomes intermittent during winter months. Near the lower end of the drainage area, streamflow is perennial below an altitude of about 6,000 ft because of ground-water discharge to Snake Creek and tributary flow from Spring Creek.

The uppermost gage of the four gages on Snake Creek was installed on September 5, 2002. The gage is about 2 mi upstream of the park boundary and about 100 ft upstream of the pipeline diversion (fig. 6; appendix A, photographs A6). No impoundments or diversions were observed upstream of the gage.

Snake Creek at Park Boundary Gage

The streamflow gage Snake Creek at Great Basin National Park boundary was installed on September 6, 2002. The gage was at the park boundary about 2.2 mi downstream of the end of the pipeline (fig. 6; appendix A, photographs A7). Flow at the gage is intermittent.

Snake Creek below Spring Creek Gage

The gage on Snake Creek below Spring Creek was installed on January 8, 2003. The gage was about 1.7 mi downstream of the park boundary and about 0.1 mi downstream of the confluence of Spring Creek with Snake Creek (fig. 6; appendix A, photographs A8). Snake Creek at the gage is perennial. The State of Nevada operates the Spring Creek Rearing Station, which diverts flow from Spring Creek and Snake Creek upstream of the gage. Operations at the rearing station resulted in numerous, abrupt changes in streamflow at the gage, which occurred when operators cleaned or filled the large fish tanks.

Snake Creek at Nevada–Utah State Line Gage

The gage on Snake Creek at the Nevada–Utah State line was installed on January 8, 2003, and was about 40 ft upstream of the State line (fig. 6; appendix A, photographs A9). The stream is perennial. Regulation of flow in Spring and Snake Creeks during operations at the Spring Creek Rearing Station affected streamflow at this gage.

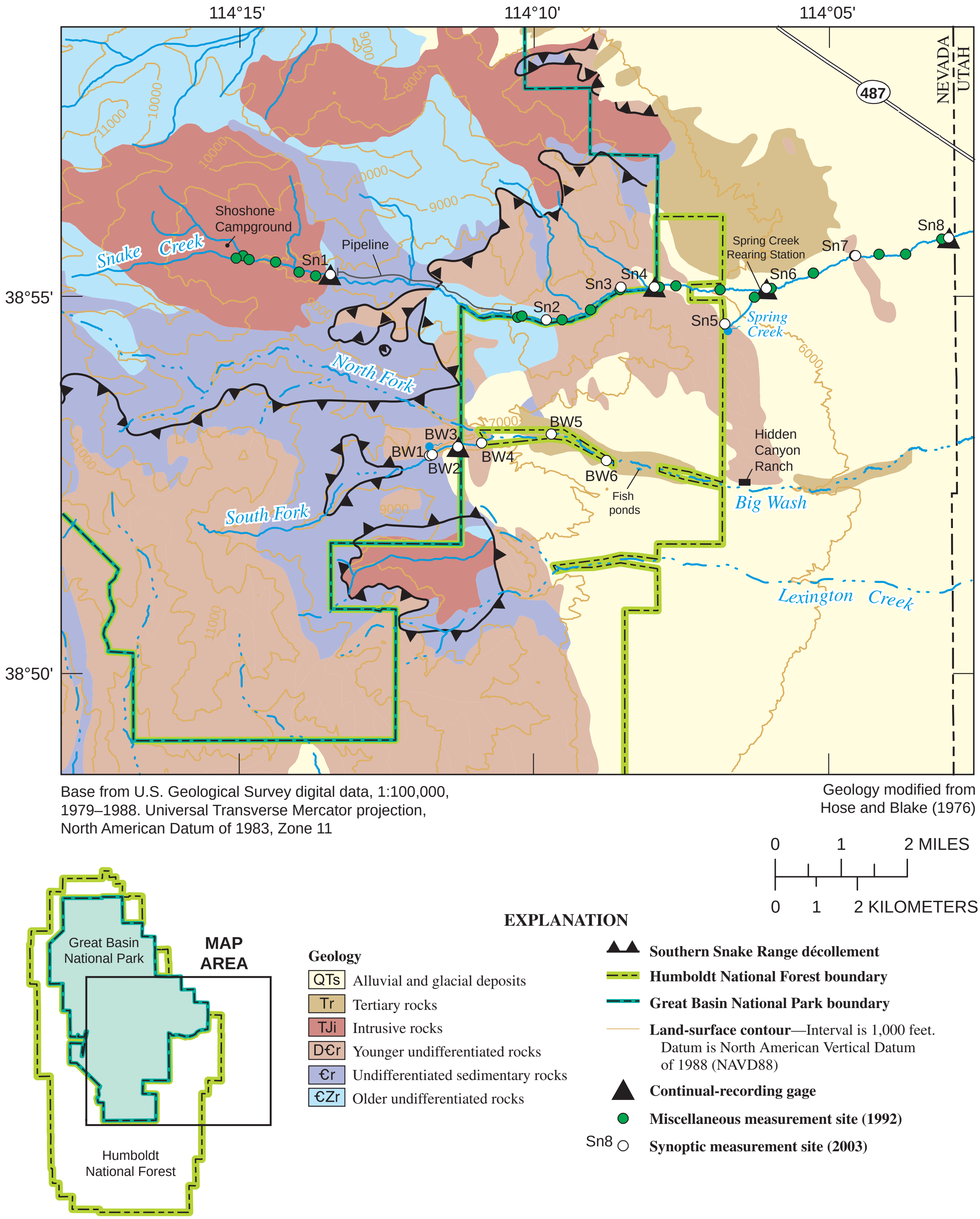

Figure 6. Generalized geology, location of continual-recording streamflow gages, 1992 miscellaneous measurement sites, and 2003 synoptic measurement sites for Snake Creek and Big Wash, Great Basin National Park area, Nevada.

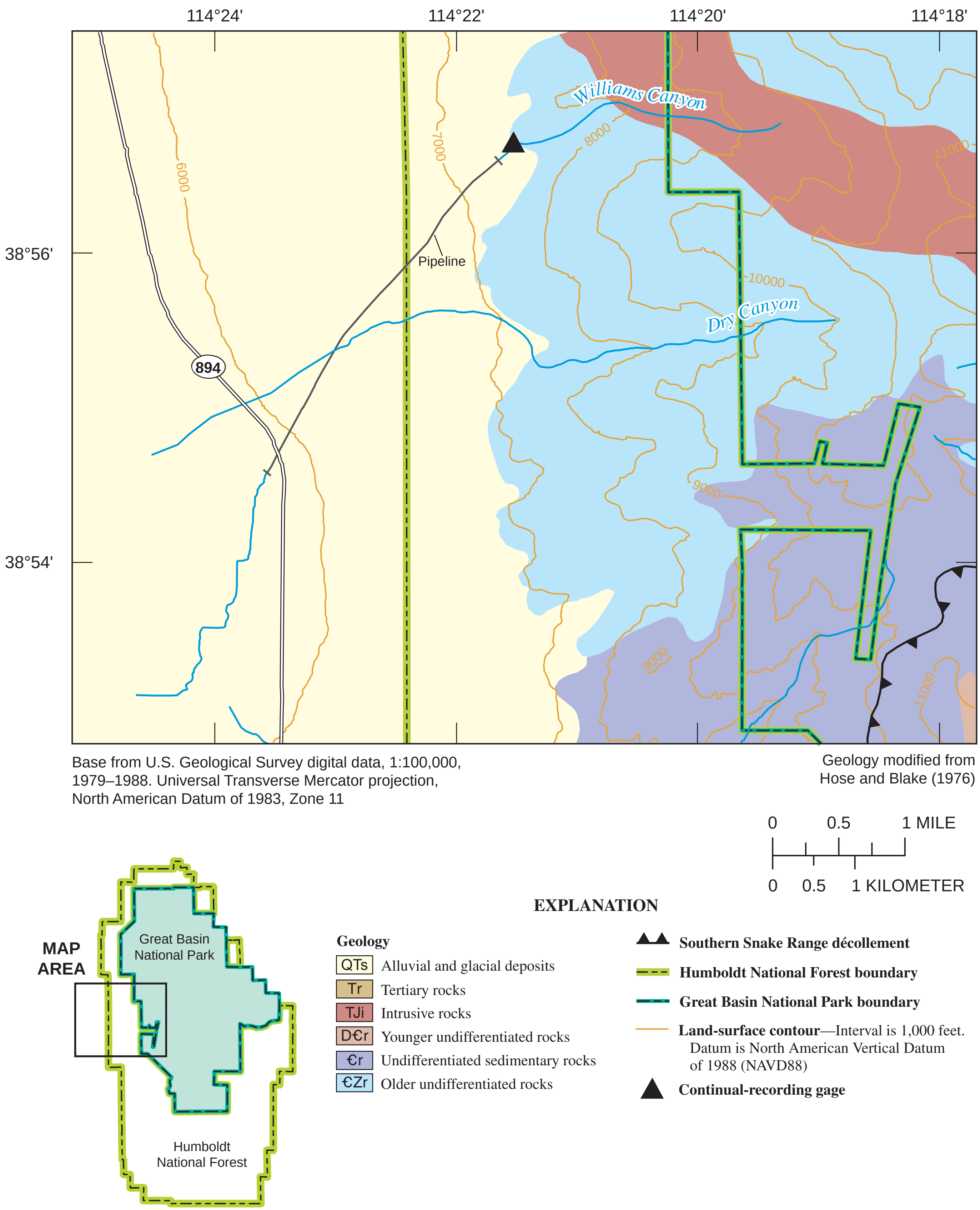

Figure 7. Generalized geology and location of continual-recording streamflow gage for Williams Canyon, Great Basin National Park area, Nevada.

Big Wash Gage

Big Wash begins on the southeast side of the southern Snake Range (fig. 1). The highest altitude in the Big Wash drainage exceeds 11,000 ft (fig. 6). South Fork Big Wash generally flows east and joins North Fork Big Wash just outside of the park boundary. Both forks are intermittent at their confluence and, except for areas where ground-water discharges to Big Wash, the channel is intermittent for much of its length. Big Wash continues east to Snake Valley where it intersects Pruess Lake (fig. 1). The Big Wash drainage encompasses an area of 28.8 mi^2 that ranges in altitude from 11,658 to 5,360 ft. Streamflow is diverted within the drainage area to fill fish-rearing ponds, irrigate fields for grazing, and supply living quarters and recreational facilities for a large ranch-style resort in the lower part of the drainage.

The South Fork Big Wash gage was installed on October 9, 2002, about 150 ft upstream of the park boundary (fig. 6; appendix A, photographs A10). A perennial spring is about 0.5 mi upstream of the gage; however, spring flow infiltrates the streambed about 100 ft upstream of the gage during winter months. No impoundments or diversions were observed upstream of the gage.

Williams Canyon Gage

Williams Canyon is a small, steep drainage basin that drains the west-central slopes of the southern Snake Range (fig. 1). The drainage originates along the ridge between Baker and Pyramid Peaks and perennially drains to the southwest. Similar to Shingle Creek, the channel for Williams Canyon becomes poorly defined when it reaches the alluvial slope. The Williams Canyon drainage encompasses an area of 3.33 mi^2 that ranges in altitude from about 11,775 to 7,200 ft near the fan apex. About 1.5 mi downstream of the park boundary, at an altitude of 7,250 ft, water is diverted into a pipeline and used to irrigate fields in Spring Valley. The Williams Canyon gage was installed on October 11, 2002, about 1.4 mi downstream of the park boundary (fig. 7; appendix A, photographs A11). No impoundments or diversions were observed upstream of the gage.

Decathon Canyon Gage

Decathon Canyon is tributary to Big Spring Wash, which drains the southern end of the southern Snake Range (fig. 1). The Decathon Canyon drainage originates along the western slopes of Granite Peak, and encompasses an area of 11.7 mi^2. The drainage area ranges in altitude from 11,532 to 7,300 ft at the confluence with Big Spring Wash. Decathon Canyon drains to the south within the park, but flows to the southeast downstream of the park boundary. Streamflow in Decathon Canyon is intermittent and typically occurs during periods of intense summer thunderstorms.

The Decathon Canyon gage was installed on October 10, 2002, about 0.1 mi downstream of the park boundary (fig. 8; appendix A, photographs A12). The gage was the highest of the 12 monitoring sites at an altitude of 8,410 ft (fig. 1). No diversions were observed upstream of the gage; however, several small springs within the drainage area have been developed as watering holes for wildlife. For water years 2003 and 2004, the mean annual discharge was 0 ft^3/s (table 2). Flow only occurred on June 24, 2003, and on September 3, 2004. Daily mean discharge for both days was 0.1 ft^3/s.

Miscellaneous Measurements

Streamflow within each drainage basin can vary greatly because of the distribution of permeable and impermeable rocks within the basin. Gains in streamflow generally occur from tributary and spring inflows, or from ground-water discharge into the channels, whereas losses in streamflow occur from evapotranspiration (ET) or infiltration. To quantify gains and losses in streamflow, seepage runs typically are done along selected reaches of a stream. A seepage run is a set of instantaneous discharge measurements made at selected intervals along a stream channel within a short period of time, usually less than 2 days. Seepage data previously collected by the USGS for Great Basin National Park (Hess and others, 1992) were compiled, and new seepage runs were performed on selected streams for this study.

In 1992, seepage runs were made by the USGS on Lehman, Baker, and Snake Creeks (Hess and others, 1992). Data collected during these seepage runs included instantaneous discharge measurements of streamflow, specific conductance, and water temperature (Table 3). Measurements were made upstream and downstream of tributaries, and at randomly picked intervals within the channel. These seepage runs started at the upper elevations of each drainage, and consisted of one streamflow measurement at each site before descending the stream channel to the next site. On September 1–2, 1992, 23 instantaneous measurements were made along Lehman Creek, starting upstream of the Wheeler Peak Campground (fig. 5) and ending at State Highway 487 in Baker, Nev. (fig. 1). During this same period, 17 instantaneous measurements were made along Baker Creek, beginning upstream of the confluence with Timber Creek and ending at the confluence with Lehman Creek (fig. 5). On September 3, 1992, 23 instantaneous measurements were made along Snake Creek. Measurements started downstream of the Shoshone Campground and ended just upstream of the Nevada–Utah State line (fig. 6).

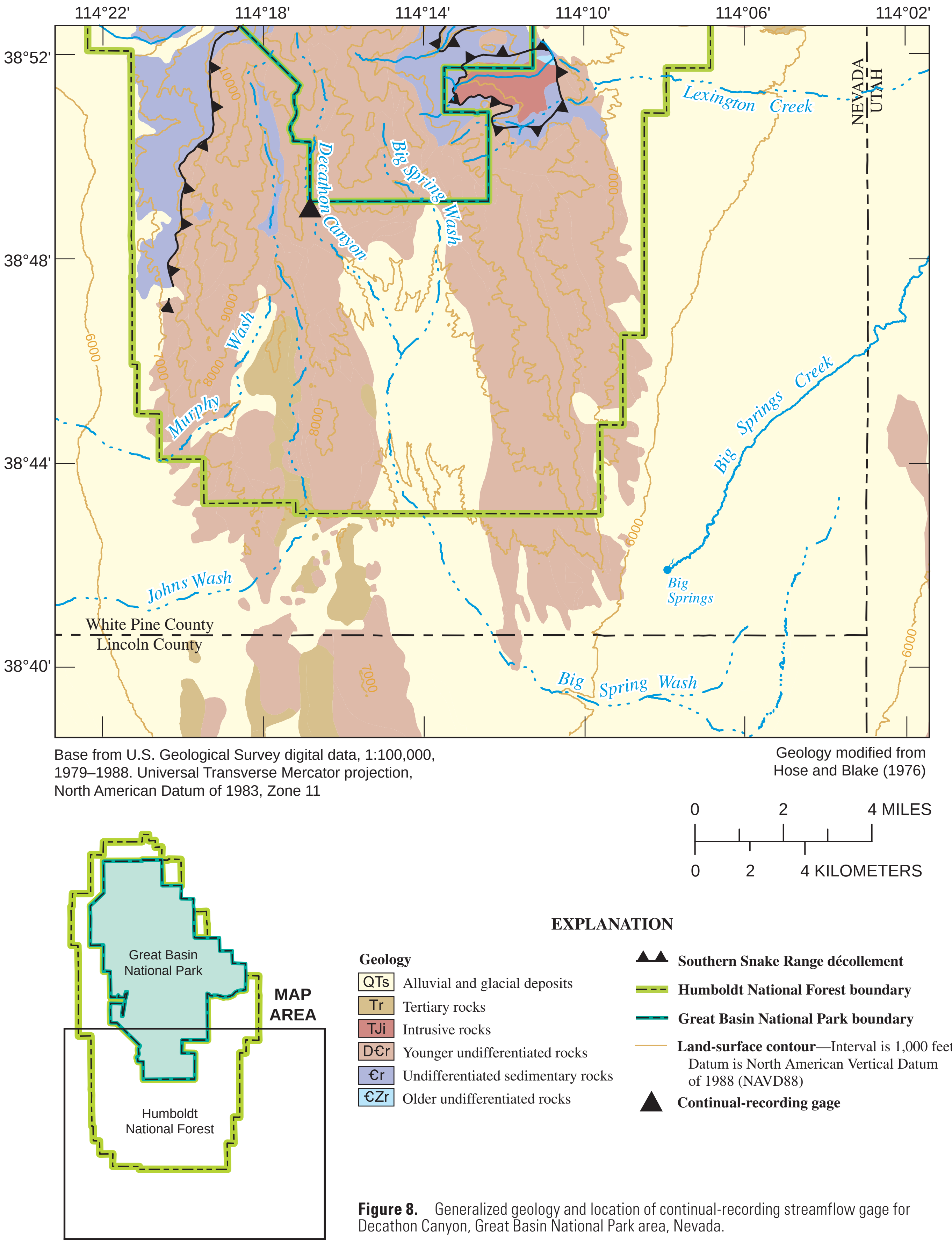

Figure 8. Generalized geology and location of continual-recording streamflow gage for Decathon Canyon, Great Basin National Park area, Nevada.

Table 3. Index for miscellaneous discharge and water-property measurements for Lehman, Baker, and Snake Creeks, Great Basin National Park area, Nevada, September 1992.

[–, data not collected; e, estimated]

Site No.	Coordinates (North American Datum 1983)		Land-surface altitude (feet)	Measurement		Discharge (cubic feet per second)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	Water temperature (degrees Celsius)	Remarks (see figs. 5 and 6, and table 4 for site locations)
	Latitude	Longitude		Date (1992)	Time				
Lehman Creek									
1	39°00'35"	114°18'10"	9,840	09/01	1051	0.03	53	–	Upstream of site L1
2	39°00'35"	114°18'10"	9,840	09/01	1123	0.15	28	–	Upstream of site L1
3	39°00'35"	114°18'09"	9,840	09/01	1143	0.21	31	–	Upstream of site L1
4	39°00'40"	114°17'49"	9,600	09/01	1234	0.27	35	–	Upstream of site L1
4a	39°00'26"	114°17'58"	10,020	09/01	1250	e1.5	20	–	Upstream of site L1
5	39°00'58"	114°16'56"	9,020	09/01	1330	1.46	29	–	Upstream of site L1
6	39°01'00"	114°16'26"	8,720	09/01	1422	0.08	68	–	Upstream of site L1
7	39°00'56"	114°16'24"	8,600	09/01	1445	1.33	32	–	Upstream of site L1
8,9	39°00'44"	114°15'16"	7,800	09/01	1315	4.71	36	–	Upstream of site L1
10	39°01'01"	114°14'13"	7,280	09/01	1545	3.42	37	–	Downstream of site L1
11	39°00'46"	114°12'56"	6,720	09/01	1709	4.09	37	–	Upstream of site L2
12	39°00'49"	114°12'57"	6,760	09/01	1725	0.34	37		Upstream of site L2
13	39°00'35"	114°12'28"	6,560	09/02	900	0.22	163	10.5	Downstream of site L2
14	39°00'35"	114°12'24"	6,560	09/02	920	3.72	133	10.0	Downstream of site L2
15	39°00'35"	114°12'29"	6,580	09/02	953	3.45	36	10.0	Downstream of site L2
16	39°00'36"	114°11'03"	6,160	09/02	1132	6.52	88	9.0	Downstream of site L6
17	39°00'28"	114°10'16"	5,960	09/02	1213	1.69	91	18.0	Downstream of site B7
18	39°00'29"	114°10'17"	5,965	09/02	1302	6.63	90	16.0	At site L7
19	39°00'30"	114°10'16"	5,960	09/02	1317	0.30	88	20.0	Downstream of site L7
20	39°00'28"	114°10'09"	5,940	09/02	1416	8.13	91	16.5	Downstream from site L7
21	39°00'40"	114°08'11"	5,460	09/02	1554	6.74	92	16.0	Downstream of site L7
22	39°00'44"	114°07'54"	5,400	09/02	1615	4.79	92	17.0	Downstream of site L7
23	39°00'36"	114°07'23"	5,310	09/02	1645	3.37	–	17.0	Downstream of site L7
Baker Creek									
1	38°58'28"	114°14'59"	8,160	09/01	1100	4.07	22	8.0	Upstream of site B1
2	38°58'24"	114°14'56"	8,160	09/01	1150	0.61	41	8.5	Upstream of site B1
3	38°58'34"	114°14'42"	7,980	09/01	1253	3.43	–	–	Upstream of site B1
4	38°58'31"	114°14'40"	7,980	09/01	1256	0.93	41	8.5	Upstream of site B1
5	38°58'35"	114°14'36"	7,960	09/01	1050	0.01	93	11.0	Upstream of site B1
6	38°58'38"	114°14'35"	7,900	09/01	1205	3.91	29	10.0	Upstream of site B1
7	38°59'02"	114°14'31"	7,720	09/01	1350	3.97	29	10.5	Upstream of site B1
8	38°59'23"	114°14'12"	7,520	09/01	1425	0.02	40	13.0	Downstream of site B1
9	38°59'26"	114°13'40"	7,240	09/01	1700	5.30	34	12.0	Upstream of site B2
10	38°59'23"	114°13'25"	7,160	09/02	1005	4.05	34	11.0	Downstream of site B2
11	38°59'27"	114°13'16"	7,080	09/02	1030	4.11	33	11.0	Downstream of site B2
12	38°59'22"	114°12'58"	6,960	09/01	1810	1.45	36	12.0	Downstream of site B3
13	38°59'26"	114°12'25"	6,730	09/01	1830	1.01	35	13.0	At site B5
14	38°59'46"	114°11'33"	6,400	09/02	1205	1.30	50	16.0	Downstream of site B5
15	38°59'42"	114°11'59"	6,560	09/02	1207	0.31	168	11.0	Downstream of site B5
16	38°59'57"	114°11'19"	6,280	09/02	1330	1.30	72	17.5	At site B6
17	38°59'50"	114°11'18"	6,320	09/02	1330	0.13	121	19.5	Downstream of site B5
([1])	39°00'28"	114°10'16"	5,960	09/02	1213	1.69	91	18.0	Downstream of site B7

Table 3. Index for miscellaneous discharge and water-property measurements for Lehman, Baker, and Snake Creeks, Great Basin National Park area, Nevada, September 1992.—Continued

[–, data not collected; e, estimated]

Site No.	Coordinates (North American Datum 1983)		Land-surface altitude (feet)	Measurement		Discharge (cubic feet per second)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	Water temperature (degrees Celsius)	Remarks (see figs. 5 and 6, and table 4 for site locations)
	Latitude	Longitude		Date (1992)	Time				
				Snake Creek					
1	38°55’33”	114°14’57”	8,120	09/03	1025	0.61	73	9.5	Upstream of site Sn1
2	38°55’31”	114°15’04”	8,160	09/03	1120	1.31	113	8.5	Upstream of site Sn1
3	38°55’30”	114°14’51”	8,040	09/03	1210	1.98	343	9.5	Upstream of site Sn1
4	38°55’28”	114°14’24”	7,900	09/03	1310	1.51	105	9.5	Upstream of site Sn1
5	38°55’20”	114°14’00”	7,760	09/03	1425	1.52	106	10.0	Upstream of site Sn1
6	38°55’17”	114°13’43”	7,680	09/03	1355	1.37	110	10.0	Upstream of site Sn1
7	38°55’18”	114°13’28”	7,620	09/03	1510	1.23	115	10.5	At site Sn1
8	38°54’44”	114°10’17”	6,760	09/03	945	0.16	99	13.0	Upstream of site Sn2
9	38°54’45”	114°10’13”	6,720	09/03	1000	1.60	142	9.5	Upstream of site Sn2
10	38°54’42”	114°09’32”	6,560	09/03	1030	1.58	155	11.0	Downstream of site Sn2
11	38°54’50”	114°09’03”	6,440	09/03	1100	1.30	162	12.0	Downstream of site Sn2
12	38°55’06”	114°08’33”	6,300	09/03	1130	1.54	216	11.5	At site Sn3
13	38°55’08”	114°07’53”	6,160	09/03	1158	0.86	215	12.0	Downstream of site Sn4
14	38°55’09”	114°07’36”	6,120	09/03	1235	0.62	216	13.0	Downstream of site Sn4
15	38°55’06”	114°06’51”	5,970	09/03	1300	1.83	320	13.5	Downstream of site Sn4
16	38°55’00”	114°06’16”	5,870	09/03	1025	1.73	378	14.5	Downstream of site Sn5
17	38°55’07”	114°05’59”	5,800	09/03	1120	3.11	354	15.0	Downstream of site Sn6
18	38°55’19”	114°05’16”	5,660	09/03	1245	2.87	362	15.0	Downstream of site Sn6
19	38°55’19”	114°05’16”	5,660	09/03	1250	2.62	–	–	Downstream of site Sn6
20	38°55’33”	114°04’34”	5,540	09/03	1445	3.12	356	15.5	At site Sn7
21	38°55’34”	114°04’09”	5,480	09/03	1545	2.58	334	15.5	Downstream of site Sn7
22	38°55’34”	114°03’42”	5,420	09/03	1633	1.82	316	16.0	Downstream of site Sn7
23	38°55’46”	114°03’05”	5,360	09/03	1635	2.03	318	16.5	Upstream of site Sn8

[1]Same site as site 17 from Lehman Creek.

The main purpose of the seepage runs in the current study was to assess the spatial and temporal variability of flow rates within the context of local-channel geology. Seepage runs were made in June, July, and October 2003 within selected reaches of Strawberry, Shingle, Lehman, Baker, and Snake Creeks and Big Wash. Fewer sites were needed for this study than in 1992 because measurement sites were constrained by geologic changes. As a result, six sites were selected for Strawberry Creek (fig. 3), four sites for Shingle Creek (fig. 4), seven sites each for Lehman and Baker Creeks (fig. 5), eight sites for Snake Creek, and six sites for Big Wash (fig. 6). Streamflow measurements made in 2003 were done synoptically; that is, measurements were made at the same time of day for all sites along a selected stream. A minimum of three measurements were made at each site, and were averaged to increase confidence in the values used in this study.

Current meters, flumes, and volumetric methods were used to measure streamflow during the 2003 seepage runs. The accuracy of these measurements varied from good to poor, which means the measurement error ranged from 5 to greater than 8 percent, respectively, of the actual discharge (table 4; Sauer and Meyer, 1992). Measurements of specific conductance and water temperature were collected at each site by NPS staff using a YSI 85 System multimeasurement meter. The accuracy of the meter is ±0.5 percent full scale for specific conductance, and ±0.1°C (±1 least significant digit) for water temperature (http://www.ysi.com/environmental.htm). Stream discharge and water-property data collected during the synoptic measurements are included in table 4. Measurement errors for specific conductance were based on criteria described in the USGS National Field Manual for the Collection of Water-Quality Data (Radtke and others, 2005).

Table 4. Index for synoptic-discharge and water-property measurements for Strawberry, Shingle, Lehman, Baker, and Snake Creeks, and Big Wash, Great Basin National Park area, Nevada, June, July, and October 2003.

[Discharge measurement accuracy: G, good (5 percent); F, fair (8 percent); P, poor (greater than 8 percent) from Sauer and Meyer (1992). Value in parenthesis is the percentage of measurement error in the actual discharge. Water and air temperatures were measured by National Park Service and U.S. Geological Survey. –, no measurement made at this site on this day]

Site No.	Coordinates (North American Datum 1983)		Land-surface altitude (feet)	Measurement		Discharge (cubic feet per second)	Discharge measurement accuracy	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	Average water temperature (degrees Celsius)	Average air temperature (degrees Celsius)	Remarks
	Latitude	Longitude		Date	Time interval						
						Strawberry Creek					
St1	39°03'18"	114°18'12"	7,920	06/11/2003	0840–0940	2.29	F	52	7	20	Strawberry Creek just downstream of confluence with Blue Canyon Creek.
				10/08/2003	1400–1505	0.12	G	73	11	22	
St2	39°03'32"	114°17'28"	7,600	06/11/2003	0820–1015	2.96	F	66	8	19	Strawberry Creek 0.8 mile downstream of confluence with Blue Canyon Creek.
				10/08/2003	1350–1450	0.43	P	127	9	22	
St3	39°03'52"	114°15'31"	6,840	06/11/2003	0815–0940	2.37	F	74	9	22	Strawberry Creek gage (10243280) upstream of park boundary.
				10/08/2003	1345–1440	0.31	P	147	12	22	
St4	39°04'03"	114°15'00"	6,670	06/11/2003	0815–0950	3.18	F	75	11	23	Strawberry Creek 0.5 mile downstream of park boundary.
				10/08/2003	1355–1500	0.25	P	149	14	25	
St5	39°04'46"	114°14'32"	6,350	06/11/2003	0805–0950	2.76	F	78	10	20	Strawberry Creek 0.6 mile upstream of pipeline diversion.
				10/08/2003	1355–1515	0.17	P	153	17	27	
St6	39°05'14"	114°14'11"	6,170	06/11/2003	0745–0910	2.32	F	77	10	21	Strawberry Creek at pipeline diversion.
				10/08/2003	1405–1530	0.17	F	151	17	28	
						Shingle Creek					
Sh1	39°00'18"	114°21'26"	8,000	06/11/2003	1310–1420	2.02	F	60	8	20	Shingle Creek at park boundary.
				10/09/2003	0930–1055	0.77	F	76	7	15	
Sh2	39°00'19"	114°21'37"	7,860	06/11/2003	1255–1350	2.02	F	61	8	21	Shingle Creek gage (10243640) near park boundary.
				10/09/2003	0920–1020	0.73	P	77	7	16	
Sh3	39°00'05"	114°23'02"	7,000	06/11/2003	1225–1350	1.71	F	64	11	19	Shingle Creek at national forest boundary.
				10/09/2003	0910–1050	0.63	F	79	9	19	
Sh4	38°59'46"	114°23'54"	6,570	06/11/2003	1210–1350	1.83	F	65	13	24	Shingle Creek at pipeline diversion.
				10/09/2003	0855–1120	0.59	P	80	9	16	

Table 4. Index for synoptic-discharge and water-property measurements for Strawberry, Shingle, Lehman, Baker, and Snake Creeks, and Big Wash, Great Basin National Park area, Nevada, June, July, and October 2003.—Continued

[Discharge measurement accuracy: G, good (5 percent); F, fair (8 percent); P, poor (greater than 8 percent) from Sauer and Meyer (1992). Value in parenthesis is the percentage of measurement error in the actual discharge. Water and air temperatures were measured by National Park Service and U.S. Geological Survey. –, no measurement made at this site on this day]

Site No.	Coordinates (North American Datum 1983)		Land-surface altitude (feet)	Measurement		Discharge (cubic feet per second)	Discharge measurement accuracy	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	Average water temperature (degrees Celsius)	Average air temperature (degrees Celsius)	Remarks
	Latitude	Longitude		Date	Time interval						
						Lehman Creek					
L1	39°01’00”	114°14’19”	7,330	07/22/2003	1250–1450	6.57	G	30	14	31	Lehman Creek at Lower Lehman Creek Campground.
				10/07/2003	0830–1100	2.56	G	39	7	19	
L2	39°00’42”	114°12’52”	6,700	07/22/2003	1255–1510	6.15	F	30	17	30	Lehman Creek gage (10243260).
				10/07/2003	0810–0930	2.58	F	39	8	20	
L3	39°00’31”	114°12’28”	6,580	07/22/2003	1305–1510	3.49	G	116	10	32	Rowland Spring gage (10243265).
				10/07/2003	0840–1210	2.67	G	152	9	19	
L4	39°00’40”	114°12’00”	6,430	07/22/2003	1315–1540	8.82	G	59	16	33	Lehman Creek at Sage Way.
				10/07/2003	0900–1105	4.19	G	95	10	19	
L5	39°00’42”	114°11’27”	6,280	07/22/2003	–	–	–	–	–	–	Lehman Creek about 800 feet upstream of Circle M Road.
				10/07/2003	0850–1145	0.49	G	103	10	18	
L6	39°00’37”	114°11’12”	6,220	07/22/2003	1310–1640	9.91	G	68	17	35	Lehman Creek at Circle M Road.
				10/07/2003	0840–1155	5.03	G	[1]108	10	19	
L7	39°00’29”	114°10’18”	5,965	07/22/2003	1430–1530	11.7	F	70	20	36	Lehman Creek upstream of confluence with Baker Creek.
				10/07/2003	0755–1100	5.16	F	108	10	21	
						Baker Creek					
B1	38°59’06”	114°14’29”	7,660	07/22/2003	0800–1025	6.66	G	28	10	16	Baker Creek at Lower Baker Creek Campground.
				10/08/2003	0840–1055	3.03	G	35	6	11	
B2	38°59’28”	114°13’31”	7,190	07/22/2003	0825–1110	8.07	G	30	13	30	Baker Creek upstream of Narrows.
				10/08/2003	0830–1050	4.31	G	39	8	17	
B3	38°59’22”	114°13’03”	6,980	07/22/2003	–	–	–	–	–	–	Baker Creek at Three Hole Cave.
				10/08/2003	0810–1025	3.24	G	40	7	14	
B4	38°59’22”	114°12’37”	6,840	07/22/2003	0850–1020	0.15	P	107	10	29	Unnamed spring tributary to Baker Creek.
				10/08/2003	–	no flow	–	no flow	no flow	no flow	

Table 4. Index for synoptic-discharge and water-property measurements for Strawberry, Shingle, Lehman, Baker, and Snake Creeks, and Big Wash, Great Basin National Park area, Nevada, June, July, and October 2003.—Continued

[Discharge measurement accuracy: G, good (5 percent); F, fair (8 percent); P, poor (greater than 8 percent) from Sauer and Meyer (1992). Value in parenthesis is the percentage of measurement error in the actual discharge. Water and air temperatures were measured by National Park Service and U.S. Geological Survey. –, no measurement made at this site on this day]

Site No.	Coordinates (North American Datum 1983)		Land-surface altitude (feet)	Measurement		Discharge (cubic feet per second)	Discharge measurement accuracy	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	Average water temperature (degrees Celsius)	Average air temperature (degrees Celsius)	Remarks
	Latitude	Longitude		Date	Time interval						
						Baker Creek—Continued					
B5	38°59'27"	114°12'24"	6,730	07/22/2003	0840–1030	3.31	G	37	14	28	Baker Creek gage (10243240) at Narrows.
				10/08/2003	0830–1115	1.92	F	41	8	19	
B6	38°59'58"	114°11'19"	6,280	07/22/2003	0905–1100	3.37	F	63	16	31	Baker Creek at national forest boundary.
				10/08/2003	0830–1005	2.03	F	63	9	18	
B7	39°00'28"	114°10'18"	5,965	07/22/2003	0910–1050	3.9	G	81	18	32	Baker Creek upstream of confluence with Lehman Creek.
				10/08/2003	0820–1115	1.64	F	79	11	20	
						Snake Creek					
Sn1	38°55'18"	114°13'28"	7,620	06/10/2003	1425–1555	15.5	G	76	10	26	Snake Creek gage (10243230) upstream of pipeline.
				10/07/2003	1255–1420	1.05	F	110	7	18	
Sn2	38°54'42"	114°09'48"	6,620	06/10/2003	1400–1650	12.9	G	113	12	25	Snake Creek near Standing Snake Pinnacle.
				10/07/2003	1340–1520	1.14	F	162	10	20	
Sn3	38°55'08"	114°08'32"	6,300	06/10/2003	1405–1625	13.9	G	124	13	26	Snake Creek 0.4 mile upstream of Cave Canyon.
				10/07/2003	1400–1605	0.92	F	258	11	22	
Sn4	38°55'08"	114°07'58"	6,190	06/10/2003	1340–1610	13.7	F	124	13	29	Snake Creek gage (10243232) at park boundary.
				10/07/2003	–	no flow	–	no flow	no flow	no flow	
Sn5	38°54'35"	114°06'45"	6,100	06/10/2003	0945–1705	2.02	F	329	14	–	Spring Creek upstream of Spring Creek Rearing Station.
				10/07/2003	1340–1615	1.78	F	375	14	–	
Sn6	38°55'07"	114°06'04"	5,815	06/10/2003	1405–1610	14.8	F	179	14	26	Snake Creek gage (10243233) downstream of Spring Creek.
				10/07/2003	1400–1545	2.42	F	358	14	23	
Sn7	38°55'33"	114°04'33"	5,540	06/10/2003	1330–1505	14.3	F	[2]186	14	31	Snake Creek 1.5 mile upstream of Nevada–Utah State line.
				10/07/2003	1330–1530	2.31	F	361	14	28	
Sn8	38°55'47"	114°02'58"	5,350	06/10/2003	1325–1635	14.6	G	180	12	26	Snake Creek gage (10243234) at Nevada–Utah State line.
				10/07/2003	1335–1545	1.88	F	349	15	22	

Table 4. Index for synoptic-discharge and water-property measurements for Strawberry, Shingle, Lehman, Baker, and Snake Creeks, and Big Wash, Great Basin National Park area, Nevada, June, July, and October 2003.—Continued

[Discharge measurement accuracy: G, good (5 percent); F, fair (8 percent); P, poor (greater than 8 percent) from Sauer and Meyer (1992). Value in parenthesis is the percentage of measurement error in the actual discharge. Water and air temperatures were measured by National Park Service and U.S. Geological Survey. –, no measurement made at this site on this day]

Site No.	Coordinates (North American Datum 1983)		Land-surface altitude (feet)	Measurement		Discharge (cubic feet per second)	Discharge measurement accuracy	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	Average water temperature (degrees Celsius)	Average air temperature (degrees Celsius)	Remarks
	Latitude	Longitude		Date	Time interval						
Big Wash											
BW1	38°52’54”	114°11’47”	7,000	06/10/2003	0904–1030	3.02	F	341	8	21	South Fork Big Wash upstream of confluence with unnamed spring.
				10/06/2003	–	no flow	–	no flow	no flow	no flow	
BW2	38°52’54”	114°11’46”	7,000	06/10/2003	0900–1050	1.49	F	370	7	22	Unnamed spring tributary to South Fork Big Wash.
				10/06/2003	1410–1505	0.30	F	[2]456	9	18	
BW3	38°53’01”	114°11’18”	6,880	06/10/2003	0900–1110	4.51	G	354	8	20	South Fork Big Wash gage (10243228) upstream of park boundary.
				10/06/2003	1420–1445	0.063	P	391	10	18	
BW4	38°53’04”	114°10’54”	6,760	06/10/2003	0850–1130	4.44	G	358	10	26	South Fork Big Wash upstream of confluence with North Fork Big Wash.
				10/06/2003	–	no flow	–	no flow	no flow	no flow	
BW5	38°53’11”	114°09’43”	6,570	06/10/2003	0810–1010	4.47	F	384	10	20	Big Wash 0.85 mile downstream of confluence of North and South Forks Big Wash.
				10/06/2003	1440–1515	0.14	G	411	14	20	
BW6	38°52’50”	114°08’47”	6,415	06/10/2003	0805–1040	5.05	G	420	10	20	Big Wash at fishpond pipeline diversion.
				10/06/2003	1355–1530	0.51	P	475	12	23	

[1]Weighted mean average of specific conductance measured at the two channels at site L6.

[2]Specific conductance collected by National Park Service, except for specific conductance at Sn7 in June 2003 and BW2 in October 2003; these values were measured in the Nevada Water Science Center laboratory by U.S. Geological Survey personnel on October 22, 2003.

Water samples were collected for quality control by the USGS and analyzed in the Nevada Water Science Center laboratory to check the specific conductance field measurements. Differences in specific conductance between the Nevada Water Science Center laboratory and field measurements were within measurement error with the exception of two sites, one in Snake Creek and one in South Fork Big Wash. Laboratory values were substituted for the field measurements in table 4 for these two sites. Water and air temperatures also were measured by each field crew, using standard alcohol field thermometers, at the beginning, midpoint, and end of the streamflow measurements at each site. Mean values were computed for each set of water- and air-temperature readings (table 4).

ET either directly from the stream or from riparian vegetation adjacent to the stream was considered in this study because it may cause streamflow to decrease downstream, particularly during the summer months. ET directly from a stream could result in a gradual loss of flow downstream and, if ET is sufficiently large, it likely would increase the specific conductance of the stream. ET from riparian vegetation adjacent to the stream could increase infiltration rates along the stream but would not increase the specific conductance of the stream, because the concentration of salts from ET would occur in the water in the alluvium beneath the riparian vegetation.

ET either directly from the stream or from the riparian vegetation adjacent to the stream was not measured during the synoptic seepage runs. However, ET data were compiled from studies that included such measurements and found that the quantity of water lost as a result of ET was minimal compared to streamflow (Constantz and others, 1994; Ronan and others, 1998). In May 1994, the ET rate estimated in Vicee Canyon near Carson City, Nev. (see inset map in fig. 1 for location of Carson City), was 2×10^{-7} ft/s, and included the adjacent riparian area (Ronan and others, 1998). Hourly measurements of evaporation from Cold Creek, a tributary stream to Lake Tahoe about 35 mi southwest of Carson City, were taken on June 16 and September 24, 2004, using a hemispherical dome. Measurements at Cold Creek indicated a maximum ET rate during the day of 1×10^{-7} ft/s for June 16, and 6×10^{-8} ft/s for September 24 (Michael Johnson and Jena Green, U.S. Geological Survey, written commun., 2005). The altitude of the measurement site at Cold Creek was about 6,270 ft. Because Cold Creek is at a similar altitude and latitude as many of the streams in Great Basin National Park, the maximum daily ET rate from Cold Creek was applied to streams in this study. The ET rate was multiplied by a standard area for each stream, based on the average width of the stream measured during the synoptic seepage runs in June, July, and October 2003, and a stream length of 1 mi. The computed maximum ET rate for the streams in Great Basin National Park in June and July 2003 ranged from 0.002 (ft^3/s)/mi for Strawberry and Shingle Creeks to 0.005 (ft^3/s)/mi for Lehman and Snake Creeks. The maximum ET rate in October, assuming the maximum ET rate was the same as that measured for Cold Creek in September 2004, ranged from 0.001 (ft^3/s)/mi for Strawberry, Shingle, and Snake Creeks, and Big Wash to 0.003 (ft^3/s)/mi for Lehman Creek. This indicates that evaporation from the stream channel has little to no effect on streamflow and consequently on specific conductance of the streams.

Characterization of Streamflow

Many streams begin within the park boundary and discharge into the adjacent valleys (fig. 1). Streams are perennial in the northern half of the park where altitudes are higher, precipitation is greater, and the older undifferentiated rocks and intrusive rocks only store and transmit small quantities of water. Streamflow commonly increases near the mountain front because ground water is near land surface and potential recharge to ground water is rejected (fig. 9; Theis, 1940). Farther downstream on the alluvial slope, the water table is well below land surface and the streams lose water as they supply recharge to ground water. Stream losses and depth to ground water increase where faulting abruptly increases the thickness of alluvial deposits (Ronan and others, 1998). Many of the perennial streams discharging from the southern Snake Range are diverted on the alluvial slopes for irrigation in Spring and Snake Valleys.

Streams are intermittent in the southern half of the park because altitudes are lower, precipitation is less, and the underlying rocks consist of thick sections of permeable carbonate rocks. Most precipitation not lost to ET percolates into the rocks and becomes ground water. The water table in this region is well below the stream channels, and small springs that occur within the park locally are perched above the regional water table. Larger springs discharge near or at the base of the alluvial slopes along the southeast and southwest sides of the southern Snake Range.

Selected climate data available for the study period were compiled from the NWS weather station at the Lehman Caves Visitor Center, Great Basin National Park, to evaluate the effects of climate on streamflow. These data were compared to long-term averages for 1971–2000 published by the National Oceanic and Atmospheric Administration (2002). Annual mean air temperatures for water years 2003 and 2004 were 1.0ºC and 0.4ºC greater than the 30-year average, respectively (fig. 10). Precipitation totals for water years 2003 and 2004 were close to the 30-year average (fig. 11).

The Natural Resources Conservation Service measures snowpack at three sites in Great Basin National Park (fig. 5). These sites are along Baker Creek and range in altitude from 8,220 ft at Baker Creek #1 (BCs1); 9,220 ft at Baker Creek #2 (BCs2); and 9,520 ft at Baker Creek #3 (BCs3; Natural Resources Conservation Service, 2005). Annual snowpack is based on depth of snow measurements made at the beginning of April of each year, because snowpack depth usually peaks around April 1 (Ray Wilson, Natural Resources Conservation Service, oral commun., 2005). The mean annual snowpack for 1971–2000, based on snow-water equivalent, was 5.8 in.

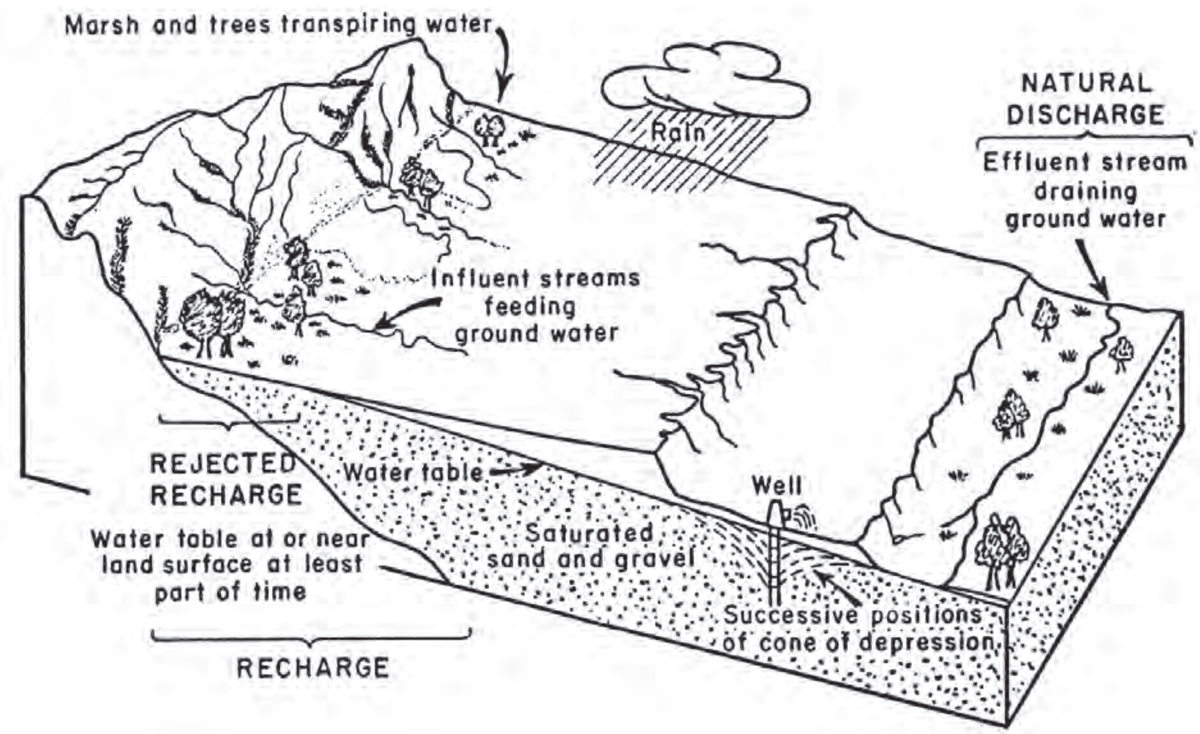

Figure 9. Schematic showing where potential recharge to ground water typically is rejected (from Theis, 1940).

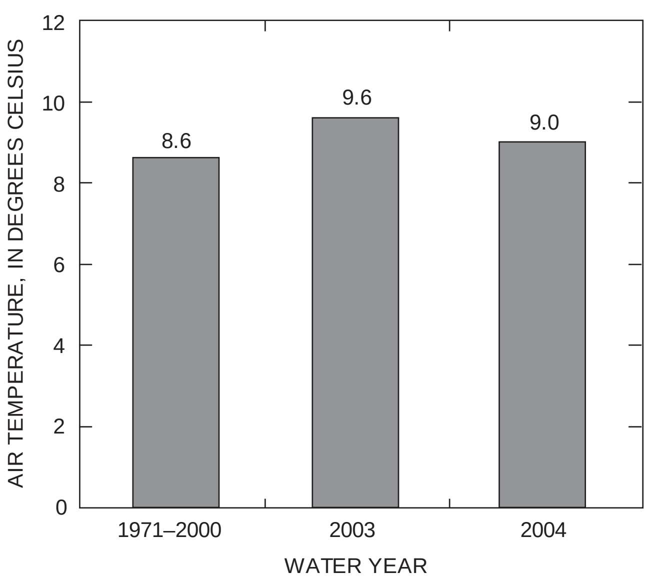

Figure 10. Mean annual air temperature for 1971–2000, and annual mean air temperature for water years 2003 and 2004, from the National Weather Service weather station at the Lehman Caves Visitor Center, Great Basin National Park, Nevada. Location of Lehman Caves Visitor Center is shown in figure 5.

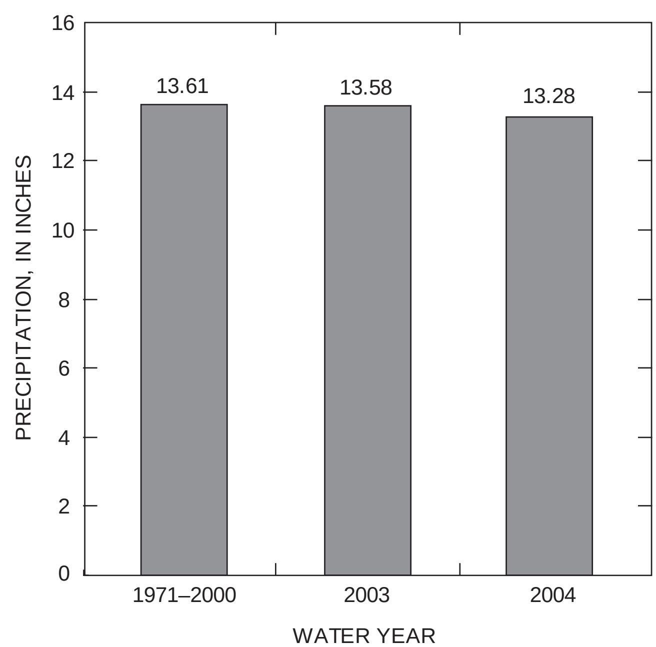

Figure 11. Mean annual precipitation for 1971–2000, and annual precipitation for water years 2003 and 2004 from the National Weather Service weather station at the Lehman Caves Visitor Center, Great Basin National Park, Nevada. Location of Lehman Caves Visitor Center is shown in figure 5.

at BCs1, 14.1 in. at BCs2, and 17.1 in. at BCs3 (fig. 12; Natural Resources Conservation Service, 2005). Snowpack totals for these three sites in 2003 and 2004 ranged from about 25 to 80 percent of normal (Ray Wilson, Natural Resources Conservation Service, written commun., 2005; Natural Resources Conservation Service, 2005).

Lehman and Baker Creeks had the only gages with adequate records for developing long-term mean annual discharges. Although there are large gaps in the record, 15 years of data were available for both gages from December 1947 to September 1955, October 1992 to September 1997, and October 2002 to September 2004 (fig. 13). Mean annual discharges for Lehman and Baker Creeks are 5.13 and 9.08 ft^3/s, respectively. Annual mean discharges for Lehman Creek for water years 2003 and 2004 were 4.02 and 3.47 ft^3/s, respectively, and are 78 and 68 percent of the mean annual discharge. Annual mean discharges for Baker Creek for water years 2003 and 2004 were 6.22 and 4.90 ft^3/s, respectively, and are 69 and 54 percent of the mean annual discharge. With the exception of the two lower Snake Creek streamflow gages, all other continual-recording gages in the current study (table 2) had at least 2 years of data. Mean annual discharges were computed for these gages, and ranged from 0 ft^3/s at Decathon Canyon to 2.70 ft^3/s at Snake Creek above pipeline (table 2). Annual mean discharges were not computed for the two lower Snake Creek gages because they had only 21 months of record.

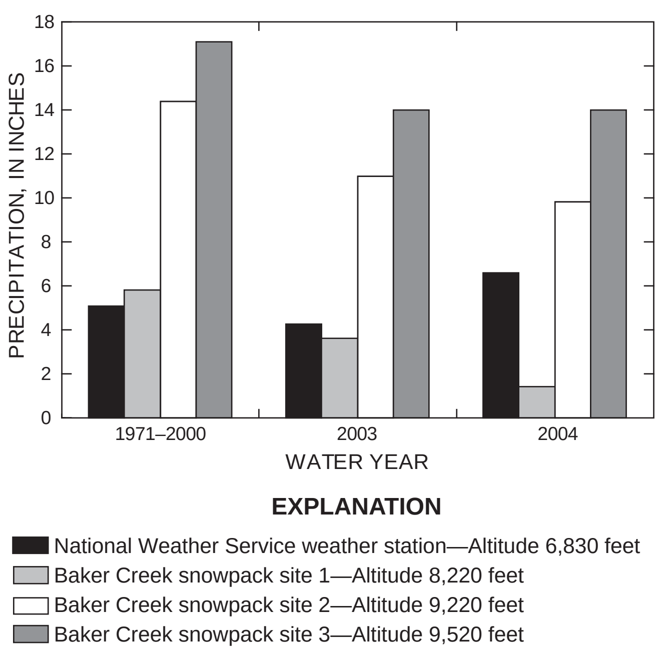

Figure 12. Mean annual precipitation and snowpack for November–March 1971–2000, and annual precipitation and snowpack for November–March 2003–04 from the National Weather Service weather station at the Lehman Caves Visitor Center, and the Natural Resources Conservation Service snowpack measurement sites 1–3 on Baker Creek (BCs1–BCs3), Great Basin National Park, Nevada. Locations of snowpack sites are shown in figure 5.

Minimum and maximum mean monthly discharges occurred in February and June, respectively, at Lehman and Baker Creeks for the 15 years of record (1948–55, 1993–97, 2003–04; fig. 14) and at most other perennial streamflow gages, including Rowland Spring. Maximum mean monthly discharges occurred in June for the intermittent gages, Snake Creek at park boundary and South Fork Big Wash. Mean monthly discharges could not be computed for Decathon Canyon, as the drainage was dry most of the year.

Mean annual discharge decreased from water year 2003 to 2004 by an average of 22 percent for perennial streams with two or more complete years of record (Strawberry, Shingle, Lehman, and Baker Creeks; Snake Creek above pipeline; and Williams Canyon). The decrease ranged from 14 percent at Lehman Creek to 36 percent at Strawberry Creek. Mean annual discharges for the two intermittent streams with 2 years of record, Snake Creek at park boundary and South Fork Big Wash, decreased by 24 and 48 percent, respectively. Mean annual discharge for Rowland Spring decreased 6 percent.

Relating streamflow records to precipitation and snowpack data for the park indicates that annual streamflow rates may be more dependent on the volume of snow in the lower altitudes than total precipitation. Although the annual means for Lehman and Baker Creeks for water years 2003 and 2004 are significantly less than their respective mean annual discharges, the 2003 and 2004 annual means are not the lowest of record, nor do the plots for the period of record show any discernible trends. Annual mean discharges were lower at both gages in 1953 (fig. 13).

The relation between the annual mean discharge of Lehman and Baker Creeks has not changed over the period of record (fig. 15*A*). The annual mean discharges for both gages were compared to Lamoille Creek on the northeast side of the Ruby Mountains near Elko, Nev. (see fig. 1 inset map; USGS station 10316500, Lamoille Creek near Lamoille, Nev.; streamflow data can be accessed online at http://waterdata.usgs.gov/nv/nwis). Lamoille Creek was chosen because (1) it is the nearest stream gage that has annual mean discharges for the same years as Baker and Lehman Creeks, (2) it has a drainage area of 24.9 mi^2, and (3) streamflow of Lamoille Creek upstream of the gage is not affected by diversions or use. Although climate variations affect the relation of annual mean discharge of Lamoille Creek with respect to Baker and Lehman Creeks (fig. 15*B*), the overall trend indicates no long-term change in the relation. The comparisons shown in figure 15 could be used to determine any future effects on the annual mean discharges of Baker and Lehman Creeks caused by increased ground-water withdrawals in Snake Valley, assuming streamflow in Lamoille Creek remains natural. Although Lamoille Creek is distant from Great Basin National Park (fig. 1), it may serve as a comparative control because it will not be affected by proposed ground-water withdrawals in eastern Nevada.

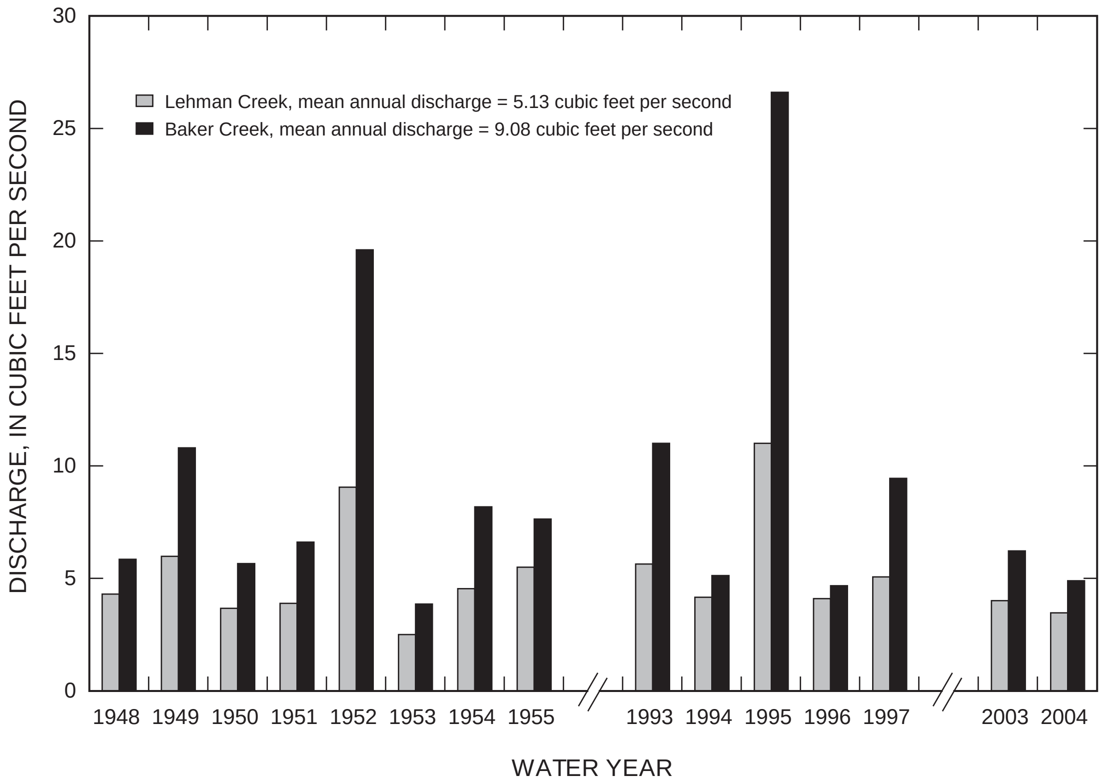

Figure 13. Annual mean discharges for Lehman and Baker Creeks, Great Basin National Park, Nevada, water years 1948–55, 1993–97, and 2003–04.

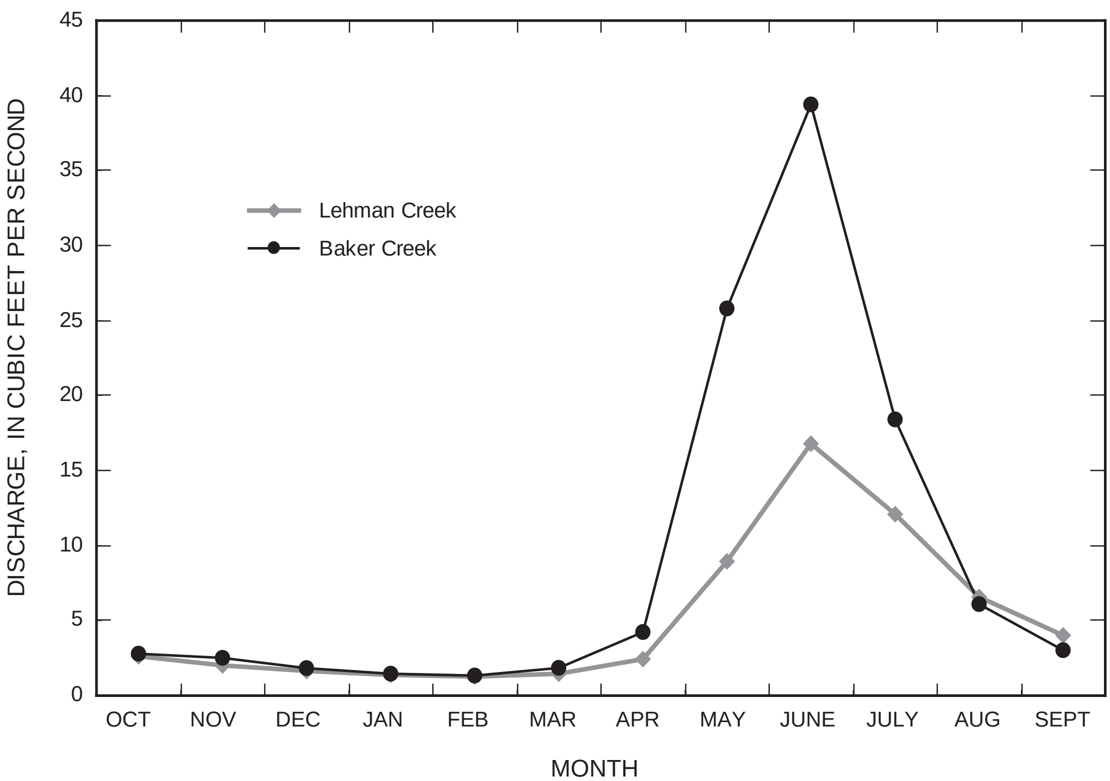

Figure 14. Mean monthly discharges for Lehman and Baker Creeks continual-recording streamflow gages, Great Basin National Park, Nevada, water years 1948–55, 1993–97, and 2003–04.

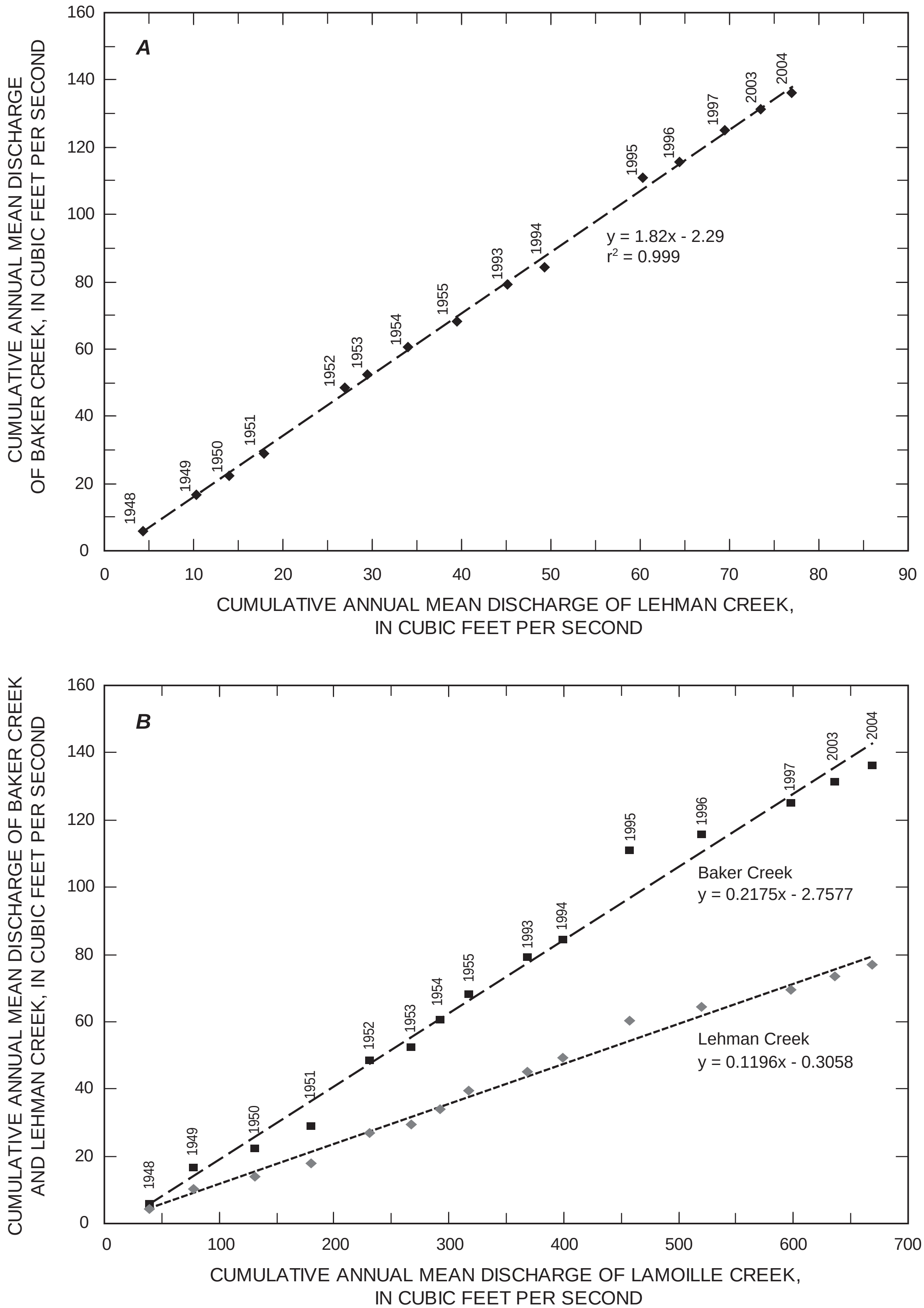

Figure 15. Comparison of cumulative annual mean discharge for period of record between (*A*) Lehman and Baker Creeks in Great Basin National Park and (*B*) Lehman and Baker Creeks with Lamoille Creek near Lamoille, Nevada (USGS station 10316500), on the northeast side of the Ruby Mountains near Elko, Nevada. Locations of gages are shown in figure 1.

Delineation of Areas Where Surface-Water Resources are Susceptible to Ground-Water Withdrawals

Relation of Streamflow and Water Properties to Geologic Units

The relation of streamflow to geologic units was studied to assess the potential for ground water in each geologic unit to be affected by ground-water withdrawals from the adjacent valleys and consequently, the potential for affecting surface-water resources within Great Basin National Park. This relation was determined by developing geologic profiles along selected streams. Changes in streamflow were correlated to the geology along each stream based on synoptic-discharge, specific-conductance, and water-temperature measurements completed during snowmelt runoff in June and July 2003, and during a period of low flow in October 2003.

Strawberry Creek

The headwaters of Strawberry Creek originate from runoff on the older undifferentiated rocks (ЄZr; table 1) on the north side of Bald Mountain and the west side of Windy Peak (fig. 1). The rocks are predominantly quartzite, argillite, and shale that generally transmit small quantities of ground water along fractures (table 1). The rocks are mantled by a thin layer of alluvial and glacial deposits (QTs; table 1) except near the confluence with Blue Canyon tributary, where the alluvial and glacial deposits are extensive and relatively thick. The uppermost synoptic measurement site (St1) is just downstream of the confluence of Blue Canyon with Strawberry Creek (fig. 3). At site St1, Strawberry Creek is perennial and flows over quartzite that is mantled by alluvial and glacial deposits (Miller and others, 1995a).

Stream discharge measured in June 2003 indicates increased discharge between sites St1 and St2, decreased discharge between sites St2 and St3, increased discharge between sites St3 and St4, and a net decrease in discharge on the alluvial slope downstream of site St4 (fig. 16). Surface-water inflows from tributaries were not observed between sites St1 and St4 during the synoptic measurements. Measured stream discharges for Strawberry Creek during low flow in October 2003 indicate increasing discharge between sites St1 and St2 and a gradual decrease in discharge from site St2 within the mountain section to site St5 on the alluvial slope.

Specific conductance measured during October 2003 doubled between sites St1 and St3 from 73 to 147 µS/cm with most of the increase occurring between St1 and St2 (table 4). Specific conductance remained nearly constant downstream of site St3. Specific conductance measurements in June 2003 were less than those in October 2003, but the pattern was similar with an increase in conductance between sites St1 and St3 and nearly constant specific conductance downstream (fig. 16). The specific conductance measurements likely were lower in June 2003 because flow was predominantly from snowmelt, whereas October 2003 measurements likely had a large ground-water component, and thus had a higher dissolved-solids concentration (Hem, 1985, p. 39).

Water- and air-temperature measurements followed similar trends in June and October 2003. The net increase in water temperature between sites St1 and St6 for June and October generally appears to coincide with an increase in air temperature. Water and air temperatures were lower in June 2003 than October 2003. The higher temperatures in October may simply be caused by normal solar heating of water that occurred throughout the day rather than by ground-water contribution, because the synoptic measurements on Strawberry Creek were made during the morning in June and during the afternoon in October (fig. 16). Regardless of when water temperature is measured, it can be a poor indicator of ground-water contributions to a stream, because many natural factors in addition to ground water can affect the water temperature of a stream. These factors can include solar and longwave radiation, air temperature, evaporation, heat conduction, snowmelt, and precipitation (Constantz and others, 1994).

The increased flow between sites St1 and St2 indicates that ground water adds flow to this stream reach all year. This is supported by an increase in specific conductance, because ground water generally has a higher concentration of dissolved solids than surface runoff. Assuming that all ground water that enters the stream between sites St1 and St2 has a constant specific conductance that is unaffected by chemical reactions in the stream, the specific conductance of ground water entering the stream was estimated using the following equation:

$$SC_{gw} = \frac{SC_{St2}Q_{St2} - SC_{St1}Q_{St1}}{Q_{St2} - Q_{St1}} , \qquad (1)$$

where

SC_{gw}, SC_{St1}, and SC_{St2} are the specific conductance of ground water, and stream water at sites St1 and St2, respectively, in microsiemens per centimeter; and

Q_{St1} and Q_{St2} are stream discharges at sites St1 and St2, respectively, in cubic feet per second.

The estimated specific conductance of ground water for June 2003 was about 110 µS/cm, whereas it increased to 150 µS/cm in October 2003. The source area for much of the ground-water discharge is the alluvial and glacial deposits (QTs) present on the south side of Strawberry Creek. The lower slope of these deposits is densely vegetated with phreatophytes. Lesser quantities of ground water also may discharge from water stored in the alluvium along the creek and possibly from the intrusive rocks (TJi).

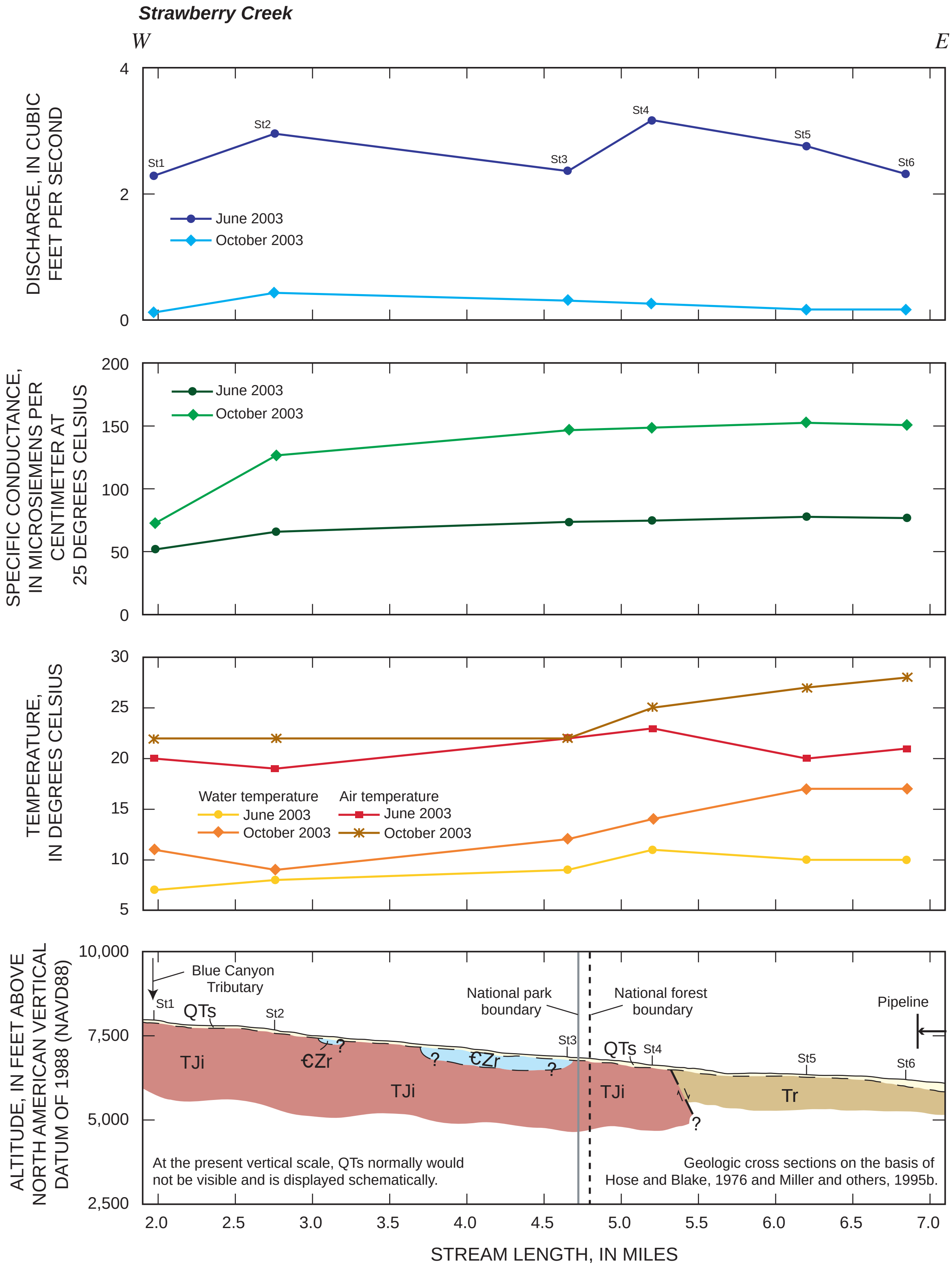

Figure 16. Geologic profile and 2003 synoptic-discharge, specific-conductance, and water- and air-temperature measurements for Strawberry Creek, Great Basin National Park area, Nevada.
Key to geologic units is in table 1.

The measured loss in stream discharge between sites St2 and St3 is consistent from spring to autumn although the loss of flow was greater during spring snowmelt in June 2003 than during low flow in October 2003. The increase in specific conductance between sites St2 and St3 during June and October indicates that ground water may contribute some flow to sections of Strawberry Creek downstream of site St2 even though there is a net loss of flow (fig. 16). The likely source of ground-water discharge is the alluvial and glacial deposits (QTs) that are present downstream of site St2. The increase in specific conductance cannot be explained by ET losses along the channel because ET rates for June and October were estimated to range from 0.001 to 0.01 ft^3/s (ET losses are discussed in section "Miscellaneous Measurements"). The loss in stream discharge between sites St2 and St3 probably occurred along the lower part of the reach as a result of stream water infiltrating a thin veneer of alluvium between the end of the alluvial and glacial deposits and site St3 (fig. 3). During snowmelt in June 2003, much of the loss in stream discharge between sites St2 and St3 was returned to the stream near the fault contact of the intrusive rocks (TJi) and the alluvial slope just downstream of site St4, where there are several small springs and seeps. The small springs and seeps may result from the thinning of alluvium associated with the stream near the fault contact. Ground-water discharge to the stream near the fault contact was insufficient in October 2003 to increase streamflow downstream of site St3.

Effects of ground-water withdrawals in Snake Valley to stream discharge along Strawberry Creek likely will be limited to the area outside of the park, downstream of the fault contact between the intrusive rocks (TJi) and the Tertiary rocks (Tr; fig. 16). The intrusive rocks, such as those in the southern Snake Range, generally act as barriers to ground-water flow (Harrill and Prudic, 1998). Because shallow alluvium is continuous across the fault, the effects of ground-water withdrawals in Snake Valley could propagate a short distance upstream of the fault contact.

Shingle Creek

The headwaters of Shingle Creek are on the west side of Wheeler Peak in older undifferentiated rocks (€Zr) that consist of quartzite, argillite, and shale (table 1). Most of the stream profile has a thin layer of alluvium overlying older undifferentiated rocks and intrusive rocks (TJi; fig. 17). The stream is perennial along the channel profile and enters a pipeline at the western end. The pipeline conveys water down the alluvial slope for irrigation on the valley floor. The alluvial and glacial deposits (QTs; fig. 17) are depicted as being thin at least down to the pipeline because measurements of stream discharge indicate little loss of flow on the alluvial slope upstream of the pipeline. This implies that the range-bounding fault is west of the profile. Alternatively, the range-bounding fault may exist between sites Sh3 and Sh4 and, if so, would substantially increase the thickness of the alluvial and glacial deposits similar to that at Strawberry Creek. If a range-bounding fault exists between sites Sh3 and Sh4, then the alluvial and glacial deposits on the west side of the fault are poorly permeable, otherwise there would be a noticeable loss in streamflow. The east end of the pipeline extends only to the edge of the profile indicating that much of the loss in stream discharge is farther west, thus the range-bounding fault probably is west of the profile.

Stream discharge measured during snowmelt in June 2003 indicated only a slight loss between sites Sh1 and Sh4 (from 2.02 to 1.83 ft^3/s, respectively; fig. 17, table 4). A similar loss was measured during low flow in October 2003 between sites Sh1 and Sh4 (from 0.77 to 0.59 ft^3/s, respectively), even though measured discharges were only one-third of that in June. The downstream decrease in measured flow on both dates is consistent with a shallow water table within the thin alluvium overlying rocks that transmit only small quantities of water. The specific-conductance values measured in June and October in Shingle Creek are similar to those measured at the uppermost site on Strawberry Creek. Specific conductance was nearly constant between sites Sh1 and Sh4 in June and October although specific conductance was higher in October (fig. 17, table 4).

The synoptic measurements for Shingle Creek were made during the afternoon in June 2003 and in the morning for October 2003. Water and air temperatures were higher in June than in October. Water temperature generally increased 5°C between sites Sh1 and Sh4 in June and 2°C in October. The increases in water temperature between sites Sh1 and Sh4 in June and October correspond to net increases in air temperature.

Streamflow along Shingle Creek would be affected only by ground-water withdrawals in Spring Valley along the section of the creek outside of the park boundary, downstream of the intrusive rocks (TJi) and upstream of the pipeline (fig. 17). The intrusive rocks in the middle of the profile act as a barrier to flow. Any increased loss in stream discharge between the intrusive rocks and the pipeline likely would lag behind withdrawals in the valley, because ground-water level declines would take time to propagate through the older undifferentiated rocks (€Zr) beneath the creek.

Lehman Creek, Cave Springs, and Rowland Spring

Lehman Creek headwaters begin in glacial deposits that mantle older undifferentiated rocks (€Zr) of quartzite, argillite, and shale (table 1). In the reach upstream of the upper Lehman Creek campground (fig. 5), the stream flows over alluvial and glacial deposits (QTs) that overlie mostly Prospect Mountain Quartzite (€Zr). Intrusive rocks (TJi) are exposed on either side of Lehman Creek at the base of the mountain near Lehman Caves, and presumably are continuous beneath the alluvial and glacial deposits.

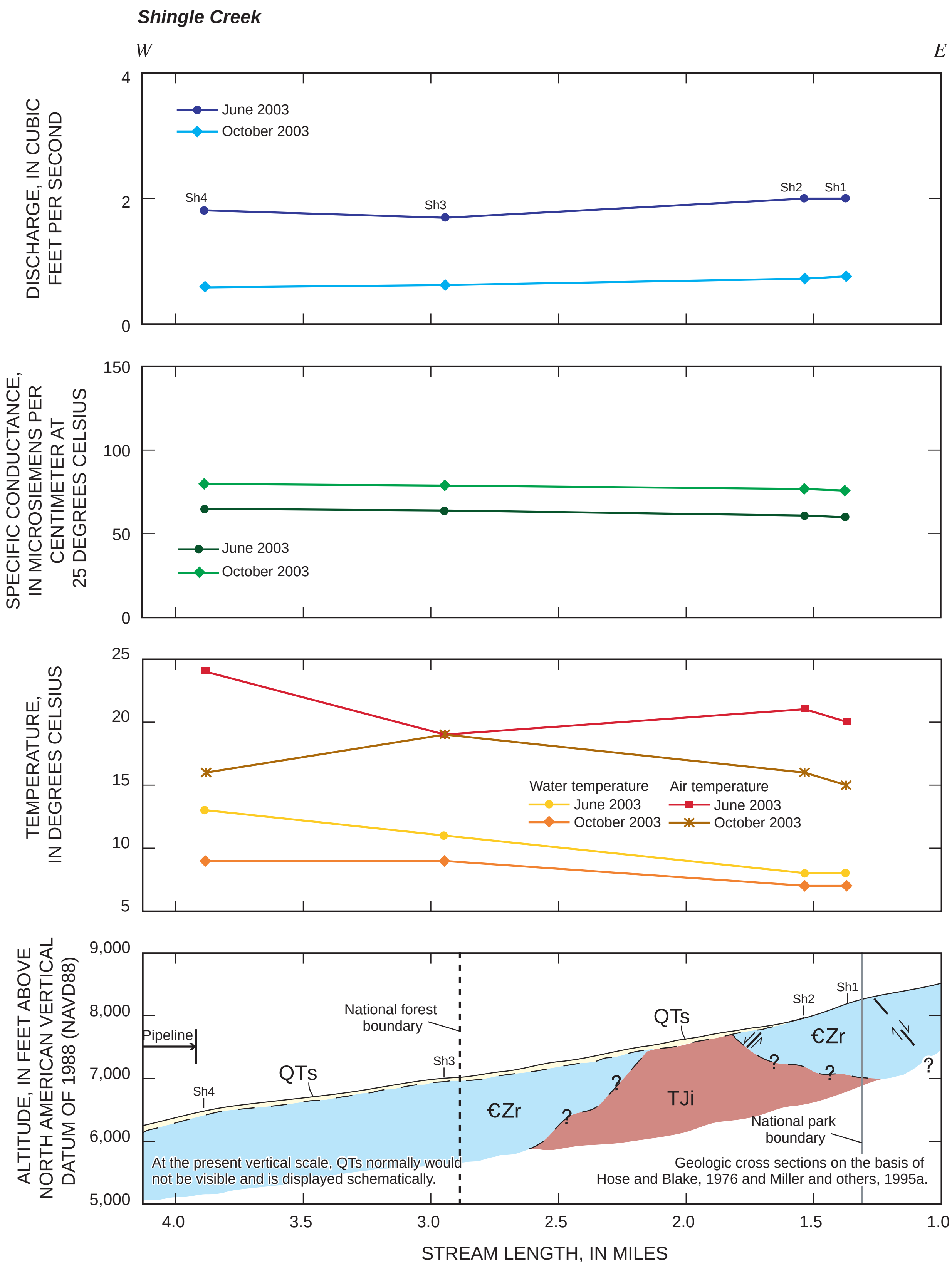

Figure 17. Geologic profile and 2003 synoptic-discharge, specific-conductance, and water- and air-temperature measurements for Shingle Creek, Great Basin National Park area, Nevada.
Key to geologic units is in table 1.

Undifferentiated sedimentary rocks (Ꞓr) of Middle Cambrian Age, mostly the Pole Canyon Limestone (table 1), underlie the alluvial and glacial deposits (QTs) downstream of the intrusive rocks; Lehman Caves are in the Pole Canyon Limestone. The limestone generally dips eastward toward Snake Valley, and is about 1,800 ft thick (Miller and others, 1995b). Farther downstream, Tertiary rocks (Tr) crop out on both sides of Lehman Creek and may overlie the Pole Canyon Limestone beneath Lehman Creek in areas where it has not been completely eroded away. The thin layer of Tertiary rocks, shown in figure 18, is based on a conglomerate found at a depth of about 100 ft and a limestone found at a depth of about 140 ft during the drilling of a test hole for the Baker Improvement District between sites L3 and L4 (fig. 5; S.J. Billin, Rothberg, Tamburini, and Winsor, Inc., Elko, Nev., written commun., 2004). Farther east, the alluvial and glacial deposits and Tertiary rocks thicken (Saltus and Jachens, 1995). Location of the range-bounding fault is not known precisely but probably is east of site L7.

Synoptic-discharge measurements were made at seven sites along Lehman Creek starting near the contact of the older undifferentiated rocks (ꞒZr) with the alluvial slope, and ending just upstream of the confluence with Baker Creek (fig. 5). Synoptic measurements were made during the afternoon in July 2003 and during the morning in October 2003 (table 4). Net increases of 5°C and 2°C in air temperature, and 6°C and 3°C in water temperature were measured between sites L1 and L7 during July and October, respectively. The higher water temperatures measured in July may simply be caused by solar heating of water throughout the day.

No measurable difference in stream discharge was observed between sites L1 and L2 during snowmelt in July 2003 or during low-flow conditions in October 2003 (fig. 18). Stream discharge increased slightly in September 1992 over this same reach. Specific-conductance values between sites L1 and L2 were unchanged and considered low in July 2003 (30 µS/cm), and were slightly higher in October 2003 (39 µS/cm) and September 1992 (37 µS/cm). Specific-conductance values indicate low concentrations of dissolved solids, which could mean the rocks upstream of site L1 are resistant to weathering, or that ground water has had a minimal residence time, or both.

Cave Springs, on the south side of Lehman Creek between sites L1 and L2 (fig. 18), is the water supply for the park's operational facilities. The springs discharge about 0.10 ft^3/s (Gretchen Baker, National Park Service, Great Basin National Park, written commun., 2004) from moraine deposits south of Lehman Creek at about the same altitude as the creek. The alluvial and glacial deposits (QTs) obscure bedrock but the springs are near an outcrop of the Prospect Mountain Quartzite (ꞒZr). One possibility for the origin of the springs is that the moraine deposits from which Cave Springs discharge may be resting on older alluvial and glacial deposits that are less permeable (Menzies, 1995). Alternatively, the springs may represent a place where the water table intersects land surface near the change in slope between the mountain and alluvial fan or slope (Theis, 1940).

The specific conductance of water discharging from Cave Springs is three to four times higher than the specific conductance of water in Lehman Creek at site L1, and from a nearby spring northwest of site B2 on Baker Creek (fig. 5; table 4). Specific-conductance measurements at Cave Springs ranged from 116 µS/cm in July 2003 to 132 µS/cm in October 2004, whereas specific conductance of the spring near site B2 was 38 µS/cm in May 2004 (Gretchen Baker, National Park Service, Great Basin National Park, written commun., 2004). Specific-conductance measurements at site L1 on Lehman Creek ranged from 30 µS/cm in July 2003 to 39 µS/cm in October 2003. One possible explanation for the higher specific conductance of water discharging from Cave Springs is that the Pole Canyon Limestone (Ꞓr) overlies the Prospect Mountain Quartzite (ꞒZr), but is buried beneath alluvial and glacial deposits (QTs) near the spring (fig. 18). Cave Springs may be present because intrusive rocks exposed on either side of Lehman Creek may disrupt the Pole Canyon Limestone downstream of Cave Springs.

Downstream of site L2, Lehman Creek merges with flow from Rowland Spring through a series of tributary channels east of the park boundary (fig. 5). Rowland Spring, at the eastern edge of the park, is a much larger spring than Cave Springs. The spring discharges from alluvial and glacial deposits (QTs) south of Lehman Creek at an altitude that is about 15 ft higher than the creek. In July 2003, measured discharge at Rowland Spring was 3.49 ft^3/s and specific conductance was 116 µS/cm, whereas in October 2003, discharge was 2.67 ft^3/s and specific conductance was 152 µS/cm.

Rowland Spring is sustained by deeper ground-water flow through carbonate rocks because discharge at the spring is too large to be explained by shallow flow through the alluvial and glacial deposits (QTs). Additionally, water temperatures at Rowland Spring (site L3) were 10°C in July 2003 and 9°C in October 2003 (table 4), which is consistent with discharge of deeper ground water through carbonate rocks. However, the source of water for Rowland Spring is uncertain. The alluvial and glacial deposits in the Lehman Creek drainage consist of clasts from the Prospect Mountain Quartzite (ꞒZr). Because Lehman Creek above Rowland Spring has a low specific conductance, the much higher specific conductance of the spring cannot be explained by flow through the alluvial and glacial deposits alone. Two possible sources for the water discharging at Rowland Spring are eastward ground-water flow through cavernous carbonate rocks, Pole Canyon Limestone (Ꞓr), in the Lehman Creek drainage and northeastward ground-water flow through cavernous carbonate rocks from the Baker Creek drainage (fig. 5). Such flow from Baker Creek is possible because (1) the Pole Canyon Limestone between Baker Creek and Rowland Spring has a northeasterly dip, (2) intrusive rocks

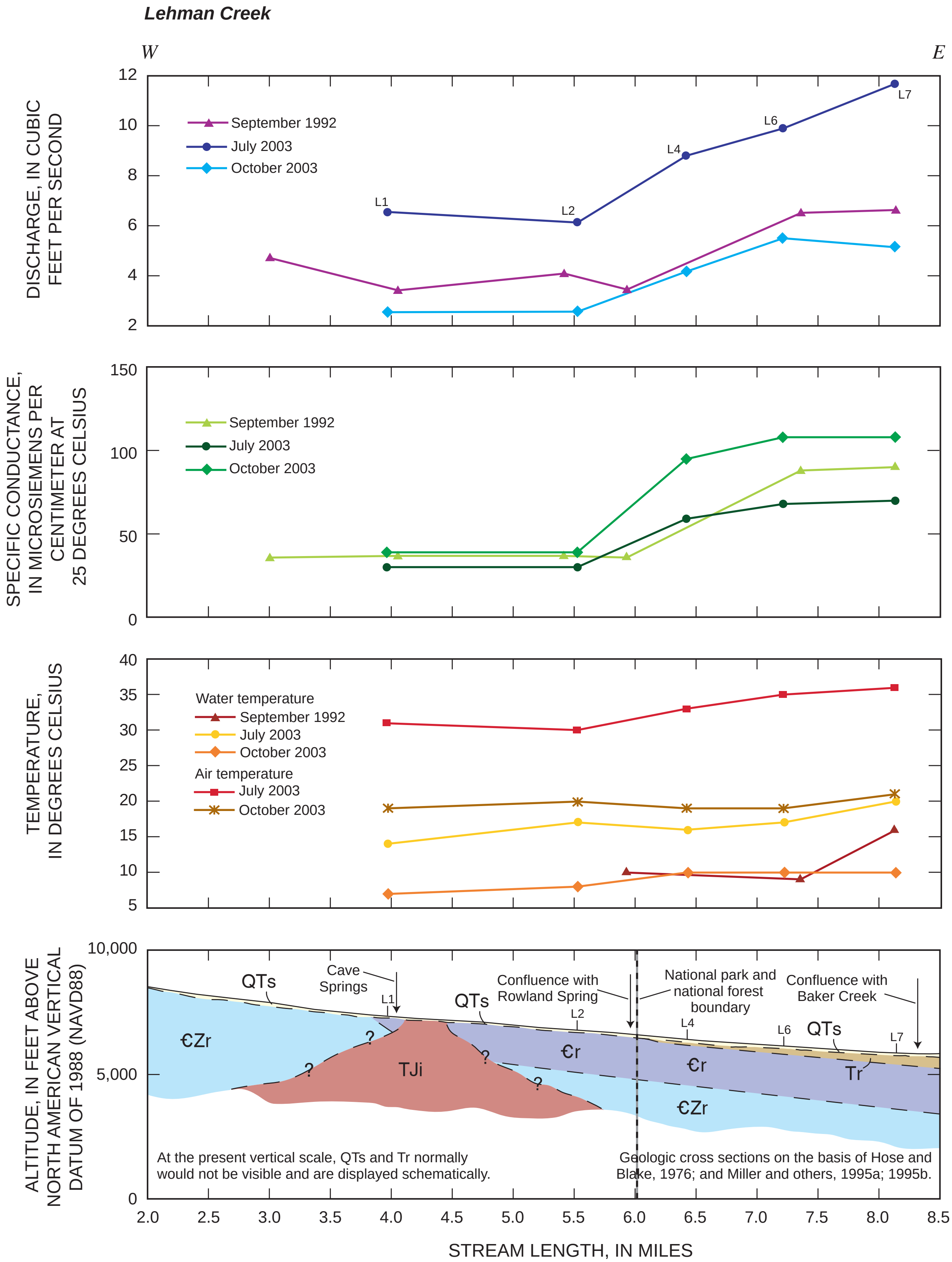

Figure 18. Geologic profile, 1992 miscellaneous discharge, specific-conductance, water-temperature measurements, and 2003 synoptic-discharge, specific-conductance, and water- and air-temperature measurements for Lehman Creek, Great Basin National Park area, Nevada.
Key to geologic units is in table 1.

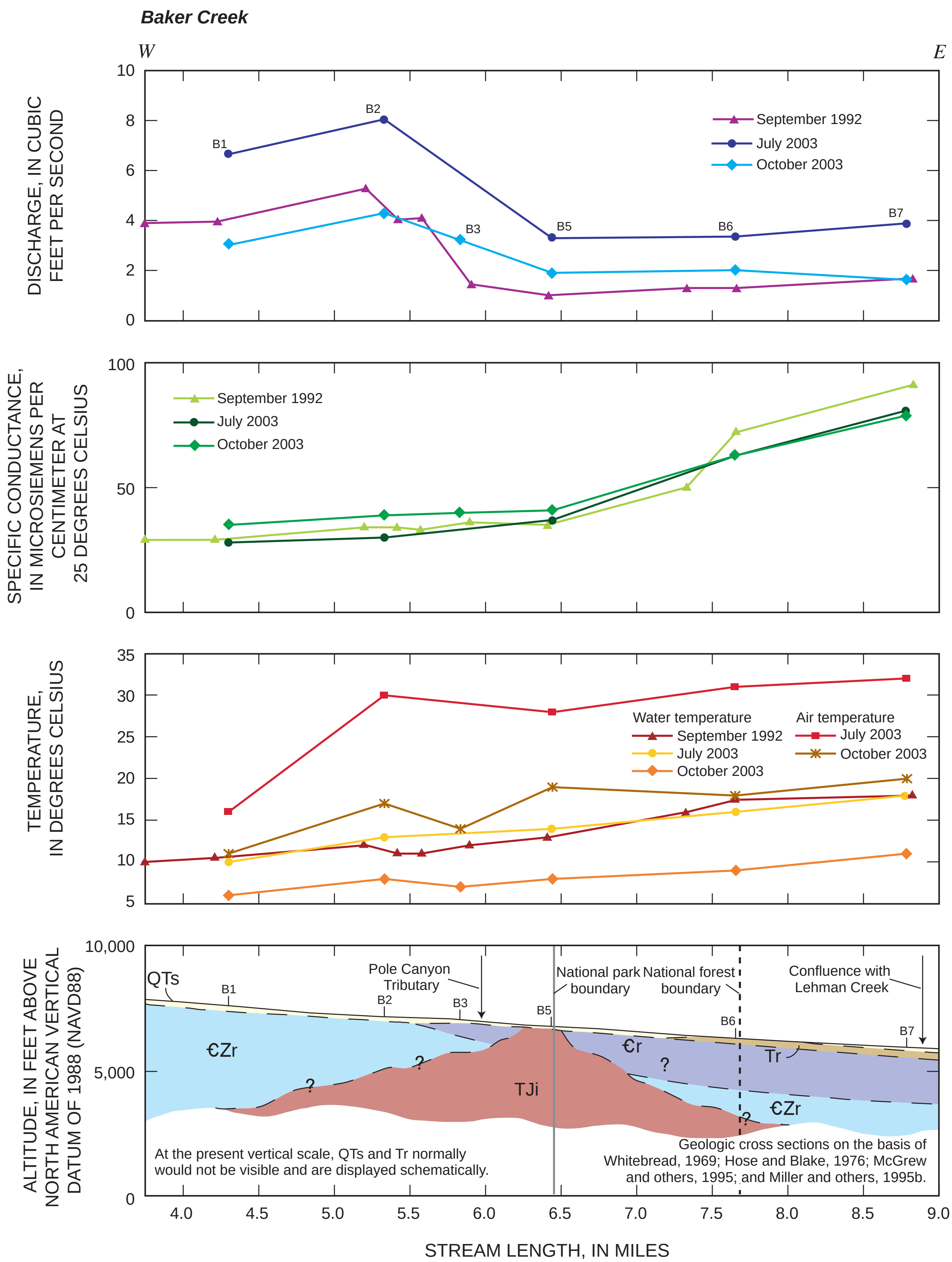

Figure 19. Geologic profile, 1992 miscellaneous discharge, specific-conductance, water-temperature measurements, and 2003 synoptic-discharge, specific-conductance, and water- and air-temperature measurements for Baker Creek, Great Basin National Park area, Nevada.
Key to geologic units is in table 1.

exposed along Baker Creek near its confluence with the Pole Canyon tributary may restrict eastward ground-water flow down Baker Creek, and (3) the elevation of Baker Creek upstream of site B3 is higher than the altitude of Rowland Spring (fig. 5). The carbonates become capped east of Rowland Spring by a cemented conglomerate at the top of the Tertiary rocks (Tr) (fig. 18), which may confine ground water in the lower part of the Tertiary rocks and in the carbonate rocks. Excess flow in the carbonates may discharge upward through the alluvial and glacial deposits at Rowland Spring.

Stream discharge increased between sites L2 and L4 along Lehman Creek (fig. 18) with flow from Rowland Spring accounting for most of the increase. Specific conductance also increased (fig. 18), but was lower at site L4 in July 2003 than in October 2003 because of the higher discharge from snowmelt runoff. About 40 percent of flow from Rowland Spring continued in a separate, parallel channel south of Lehman Creek downstream of site L4 (fig. 5). In 2003, the entire flow of Rowland Spring and Lehman Creek was measured in two channels in July at site L6, and in three channels in October that included one channel at site L5 and two channels at site L6 (fig. 5). No apparent gain or loss in flow was measured between sites L2 and L6 after accounting for Rowland Spring. Although Lehman Creek was split into multiple channels at site L6, specific-conductance measurements were the same for each channel, indicating that all discharge from Rowland Spring had entered Lehman Creek upstream of site L6 (fig. 5).

Trends in stream discharge and specific conductance were similar in September 1992 to those in October 2003 even though only single measurements were made in 1992. Although stream discharge in Lehman Creek generally was higher in September 1992 than in October 2003, the increase in discharge downstream of the park boundary was nearly the same, 2.54 ft^3/s compared with 2.58 ft^3/s, respectively. The large increase in water temperature in 1992 just upstream of the confluence of Lehman and Baker Creeks (site L7) probably was the result of solar heating (table 3). The water temperature at site L7 was measured in the afternoon as compared to the two upstream measurements that were measured in the morning.

The mean discharge in July 2003 at site L7 (11.7 ft^3/s) was greater than the combined discharge at site L2 on Lehman Creek and Rowland Spring (9.64 ft^3/s; fig. 18, table 4). Because no tributary inflow was observed, the increased flow was from ground-water discharge to the channel, indicating that the water table intersected land surface adjacent to the creek between sites L4 and L7. The mean discharge at site L7 in October 2003 (5.16 ft^3/s) was about the same as the combined mean discharges at site L2 on Lehman Creek and Rowland Spring (5.25 ft^3/s; fig. 18, table 4), indicating no measurable net gain or loss of flow between sites L2 and L7. The lack of a gain or loss between the sites may indicate that the water table was slightly lower during the low-flow period but remained near land surface along the creek. The water table near land surface indicates that the range-bounding fault that would increase the thickness of the alluvial and glacial deposits (QTs) and Tertiary rocks (Tr) is downstream of site L7.

The degree to which surface-water resources in the park could be affected in the Lehman Creek drainage basin is dependent on the location and quantity of ground water withdrawn. Pumping of ground water near the park from the Tertiary rocks (Tr) or in the Pole Canyon Limestone (Ꞓr) would affect flow through the cavernous limestone in the park. Depending on the quantity of water withdrawn, discharge in Rowland Spring could decrease. Pumping of ground water in the alluvial and glacial deposits (QTs) or Tertiary rocks beneath Snake Valley could lower the water table upstream of site L7 and, depending on the proximity of the pumping and its quantity, decrease flow along Lehman Creek and the discharges of Rowland Spring and Cave Springs. Because cavernous carbonate rocks underlie the alluvial and glacial deposits on the alluvial slope below Lehman Caves, the area downstream of the intrusive rocks (TJi) could be affected by the withdrawal of large quantities of ground water in the valley. The intrusive rocks exposed on either side of Lehman Creek likely would restrict the effects of ground-water withdrawals from extending farther up Lehman Creek. However, because the alluvial and glacial deposits are continuous across the intrusive rocks, the effects might extend upstream of the intrusive rocks.

Baker Creek

Baker Creek originates in alluvial and glacial deposits (QTs) that mantle older undifferentiated rocks (ꞒZr) of quartzite, argillite, and shale (table 1; fig. 5). The older undifferentiated rocks are predominantly Prospect Mountain Quartzite, similar to rocks in the Lehman Creek drainage. The stream crosses near an outcrop of intrusive rocks (TJi) to the north at site B2, and flows over Middle Cambrian undifferentiated sedimentary rocks (Ꞓr) that consist of the Pole Canyon Limestone at the Narrows near site B3. The Pole Canyon Limestone and the underlying Prospect Mountain Quartzite generally dip to the east, northeast (Whitebread, 1969; McGrew and others, 1995). The Baker Creek cave system, similar to Lehman Caves, is located in the Pole Canyon Limestone. It is the largest known cave system in Nevada (Bridgemon, 1965). Intrusive rocks just downstream of the confluence of Pole Canyon tributary with Baker Creek may disrupt the continuity of the Pole Canyon Limestone (fig. 19). Upstream of site B6, Baker Creek is diverted into a ditch that flows across Tertiary rocks (Tr), and alluvial and glacial deposits that overlie the Tertiary rocks and the Pole Canyon Limestone. Periodically, high flows overflow the ditch and some flow continues down the natural drainage channel. Flow in the ditch joins Lehman Creek just upstream of the concrete-lined channel (fig. 5).

Baker Creek is perennial from the cirque basins at an altitude of about 11,000 ft to the confluence with Lehman Creek. Synoptic-discharge measurements were made at seven sites along Baker Creek starting within the older undifferentiated rocks (€Zr) and ending just upstream of the confluence with Lehman Creek. The stream flows over alluvial and glacial deposits (QTs) except between sites B3 and B5, where the deposits thin over an outcrop of Pole Canyon Limestone (€r), and near site B6 where the stream was diverted over Tertiary rocks (Tr).

Stream discharge increased between sites B1 and B2 in July and October 2003 primarily from the discharge of ground water from recessional moraines, and discharge of ground water near the contact of the Prospect Mountain Quartzite (€Zr) with the intrusive rocks (TJi; fig. 19). Stream discharge also increased over this same reach in September 1992. Specific-conductance values for sites B1 and B2 were about the same during snowmelt in July 2003, were slightly higher during low flow in October 2003, and increased slightly in September 1992 (tables 3 and 4). Specific-conductance values are similar to those measured at the first two sites (L1 and L2) on Lehman Creek. The low values indicate water in the stream has had minimal ground-water residence time, or that the Prospect Mountain Quartzite is resistant to weathering, or both.

Stream discharge in Baker Creek decreased between sites B2 and B5 in July and October 2003, and in September 1992 (fig. 19). Most of the loss in flow between sites B2 and B5 in September 1992 occurred along a reach that started midway between sites B2 and B3 and ended just downstream of site B3 (fig. 5). Flow is lost directly to the Baker Creek cave system where the Pole Canyon Limestone (€r) crops out along the channel just downstream of site B3. An unnamed tributary upstream of site B5 contributed a small amount of discharge to Baker Creek in July 2003. The tributary originates from a seasonal spring upstream of site B4. Stream discharge measured in the tributary at site B4 in July 2003 was 0.15 ft^3/s (table 4). No flow was observed in the tributary in October 2003, and no discharge measurement was made on the tributary in September 1992.

Specific-conductance values increased between sites B2 and B5 from 30 to 37 µS/cm during snowmelt runoff in July 2003, but were nearly the same during low flow in October 2003 (39–41 µS/cm; table 4) and in September 1992 (34–35 µS/cm). The slight increase in specific conductance in July may have been from the seasonal spring, which had a specific conductance of 107 µS/cm. Water temperature between sites B2 and B5 increased in July 2003 and September 1992, but remained steady in October 2003 (fig. 19). Although water discharging from the seasonal spring was 3°C cooler than the creek in July 2003, discharge from the spring was insufficient to decrease the stream temperature at site B5 (table 4).

Stream discharge between sites B5 and B6 indicated no measurable change in July and October 2003, but increased slightly in September 1992. The lack of a net increase or decrease in flow during July and October indicates that the ground-water table may have been at or near the water level in the stream channel between the two sites. However, specific conductance increased from 37 to 63 µS/cm in July, from 41 to 63 µS/cm in October (fig. 19, table 4), and from 35 to 72 µS/cm in September 1992 indicating interaction with ground water between the two sites. The increase in specific conductance cannot be explained by ET losses along the channel, which were estimated to be less than 0.01 ft^3/s in July and October (ET losses are discussed in section "Miscellaneous Measurements").

Stream discharge on Baker Creek, downstream of the park boundary and upstream of the concrete-lined diversion channel, was similar to discharge along the lower reach of Lehman Creek. Stream discharge increased slightly between sites B6 and B7 during snowmelt in July 2003 and in September 1992, but decreased slightly during low flow in October 2003. This pattern indicates that the water table in the alluvial and glacial deposits (QTs) and Tertiary rocks (Tr) is seasonally near the water level of the creek. Specific-conductance values increased between sites B6 and B7 during all three measurement periods (fig. 19), which indicates that shallow ground water is mixing with water in Baker Creek along this reach. The continued increase in stream discharge and specific conductance between sites B6 and B7 provides further evidence that the range-bounding fault is east of the confluence of Lehman and Baker Creeks.

The degree to which surface-water resources in the park could be affected in the Baker Creek drainage basin is dependent on the location and quantity of ground water withdrawn. Pumping ground water near the park from the Tertiary rocks (Tr) or in the Pole Canyon Limestone (€r), likely would affect flow through the Baker Creek cave system in the park. Depending on the quantity of water withdrawn, flow in Baker Creek could decrease. Large-scale withdrawals of ground water in alluvial and glacial deposits (QTs) or in the Tertiary rocks beneath Snake Valley could lower the water table upstream of the confluence of Baker and Lehman Creeks, which would decrease flow along Baker Creek upstream of the park boundary. Intrusive rocks (TJi) that crop out along Baker Creek near the confluence with Pole Canyon tributary will restrict the effects of ground-water withdrawals in the valley to surface-water resources downstream of the outcrop. However, if the Pole Canyon Limestone upstream of the Pole Canyon tributary is continuous northward to the Lehman Creek drainage, effects from ground-water withdrawals could propagate south from Lehman Creek and decrease flow along Baker Creek upstream of the intrusive rocks.

Snake Creek

Snake Creek and its tributaries originate in Late Proterozoic and Early Cambrian Age older undifferentiated rocks (€Zr) that consist mostly of Prospect Mountain Quartzite (table 1) and have been intruded by intrusive rocks (TJi), all of which have been capped by alluvial and glacial deposits (QTs; fig. 20). Snake Creek flows over the southern

Snake Range décollement (SSRD) within the upper part of its drainage. The SSRD thinned the Paleozoic section (Hose and Blake, 1976), and younger rocks lie in fault contact over older rocks across the décollement. Local metamorphism is limited to rocks in the lower plate (Hose and Blake, 1976). Upstream of the SSRD, the creek flows over alluvial and glacial deposits that overlie lower-plate rocks. The lower-plate rocks in the Snake Creek drainage primarily are Middle Cambrian (€r) and older undifferentiated rocks (€Zr; fig. 20) that consist mostly of Pole Canyon Limestone and Prospect Mountain Quartzite, respectively. The rocks in the lower plate generally dip southeast (Whitebread, 1969; McGrew and others, 1995). Downstream of the SSRD, the alluvial and glacial deposits overlie complexly faulted rocks of mostly Middle Cambrian or younger age, although a section of Prospect Mountain Quartzite is in the upper plate where Snake Creek crosses the SSRD (fig. 20). Faulting continues onto the alluvial slope where a narrow section of younger undifferentiated rocks (D€r), consisting mostly of limestone and dolomite of the Guilmette Formation (Whitebread, 1969), is exposed adjacent to the channel at site Sn7 (fig. 20).

A pipeline was constructed to divert flow in Snake Creek at the contact of the intrusive rocks (TJi) and the lower-plate rocks (fig. 20). The pipeline continues across the SSRD and ends near the contact of Prospect Mountain Quartzite (€Zr) with the younger undifferentiated rocks (D€r). The pipeline is designed to divert about 3 ft^3/s of water (Gretchen Baker, National Park Service, Great Basin National Park, oral commun., 2005). The location of the pipeline indicates that considerable flow is lost along Snake Creek where it traverses the Pole Canyon Limestone (€r) and Prospect Mountain Quartzite (€Zr) of the lower-plate rocks.

During the synoptic measurements in June 2003, stream discharge upstream of the pipeline exceeded the flow capacity of the pipe and excess flow continued down the natural channel. Stream discharge between sites Sn1 and Sn2, upstream and downstream of the pipeline, decreased from 15.5 to 12.9 ft^3/s, which indicates that considerable flow was lost along the natural channel adjacent to the pipeline (fig. 20). During low flow in October 2003, all stream discharge at site Sn1 (1.05 ft^3/s) was diverted into the pipeline. Additional flow from seeps and small springs was observed entering the channel just upstream of the end of the pipeline and site Sn2. The seeps and small springs discharge from the Prospect Mountain Quartzite (€Zr). The combined discharge of the pipeline and flow from the seeps and springs resulted in a slight increase in stream discharge of 0.09 ft^3/s at site Sn2 in October 2003 (table 4). The measured increase at site Sn2 is similar to the measured increase of 0.16 ft^3/s in September 1992 (fig. 20).

Specific conductance measured in September 1992 immediately downstream of the lower end of the pipeline (142 µS/cm) was higher than water that entered the pipeline (115 µS/cm), and water that was discharging from the springs and seeps in the quartzite above the lower end of the pipeline (99 µS/cm; table 3 and fig. 20). The specific conductance of the seeps and springs is consistent with lower conductance of water discharging from quartzite. However, the specific conductance was higher than the conductance of water discharging from quartzite in Strawberry, Shingle, Baker, and Lehman Creeks (table 4). This may be caused by greater ET of precipitation prior to recharge, because the quartzite in the Snake Creek drainage is at a lower altitude. The increase in specific conductance downstream of the lower end of the pipeline corresponds to a slight increase in stream discharge, and likely is caused by ground-water discharge from the Pioche Shale near its contact with the Prospect Mountain Quartzite (€Zr).

The lower 1.5 mi of the pipeline may be unnecessary because the underlying outcrops of Prospect Mountain Quartzite (€Zr; Whitebread, 1969) are not very permeable. One possibility for why the pipeline was extended is that increased fractures are present in the quartzite in the upper plate. However, the quartzite in the upper plate is limited and underlain by Pioche Shale (€Zr; Whitebread, 1969) that generally is a barrier to ground-water flow. Additionally, discharge at seeps and small springs near the contact of the Prospect Mountain Quartzite with the Pioche Shale at the end of the pipeline indicates that much of the water in the quartzite and shale does not leave the Snake Creek drainage as ground-water flow, but rather, is discharged back to the creek.

Flow in Snake Creek that is lost to the Pole Canyon Limestone (€r), may not return to Snake Creek within the drainage area. The general southeast dip of rocks in the lower plate indicates that water lost to the Pole Canyon Limestone may flow out of the upper part of the Snake Creek drainage as ground water. Two possible areas where this ground-water flow may discharge are Big Springs at the southeast corner of the southern Snake Range, or as ET on the valley floor adjacent to Big Springs and Lake Creeks southeast of the Snake Creek drainage (pl. 1).

Stream discharge increased between sites Sn2 and Sn3 from 12.9 to 13.9 ft^3/s in June 2003, but decreased from 1.14 to 0.92 ft^3/s in October 2003 (fig. 20, table 4). Much of the streamflow at site Sn3 in October was ground-water discharge from younger undifferentiated rocks (D€r) consisting predominantly of faulted and fractured limestone of the Pogonip Group. This is supported by a marked increase in specific conductance between sites Sn2 and Sn3 from 162 to 258 µS/cm in October. Specific conductance only increased from 113 to 124 µS/cm along this same reach in June 2003, indicating most of the flow was from snowmelt runoff (fig. 20, table 4).

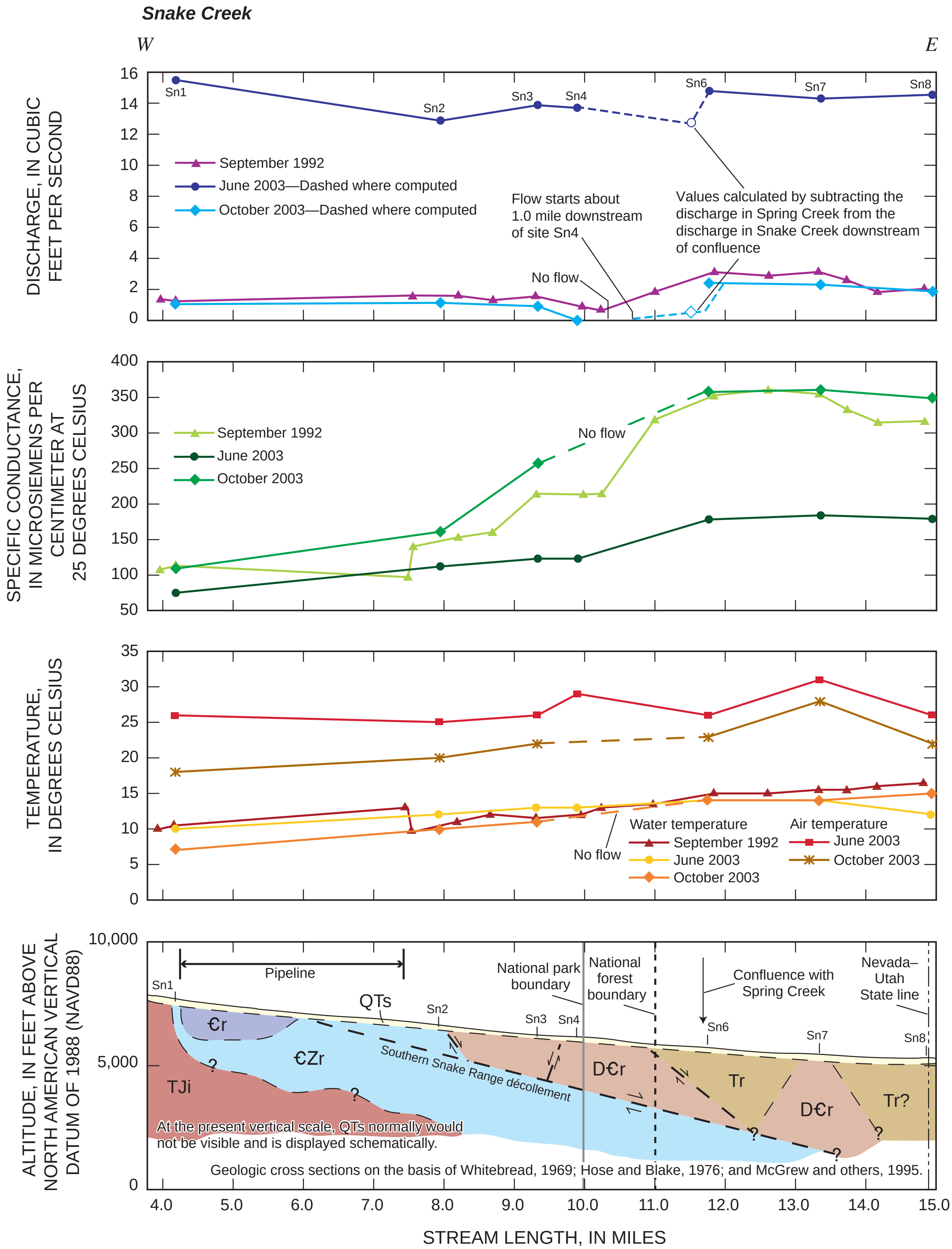

Figure 20. Geologic profile, 1992 miscellaneous discharge, specific-conductance, water-temperature measurements, and 2003 synoptic-discharge, specific-conductance, and water- and air-temperature measurements for Snake Creek, Great Basin National Park area, Nevada.
Key to geologic units is in table 1.

An increase in specific conductance between sites Sn2 and Sn3 also was measured in September 1992; however, an additional measurement was made midway between sites Sn2 and Sn3 that indicates the increase in specific conductance occurred within the lower part of the reach (fig. 20). The increase measured in September 1992 is consistent with stream discharge whereby flow decreased along the upper part of the reach between sites Sn2 and Sn3 and increased along the lower part of the reach (fig. 20).

The channel of Snake Creek crosses a fault just downstream of site Sn3. The Eureka Quartzite (D€r) forms the base of the southwest dipping block of the fault on the upstream side of the creek (fig. 20). Although the fault block that includes the Eureka Quartzite is highly fractured, the quartzite forms a sufficient barrier to ground-water flow and causes ground water to be close to the level of the stream upstream of the fault. Lush vegetation along the channel upstream of site Sn3 indicates that measured gains during June 2003 were real. Downstream of the fault, the younger undifferentiated rocks (D€r) consist of highly fractured rocks of the Cambrian and Ordovician Pogonip Group (fig. 20; Whitebread, 1969; McGrew and others, 1995). At the park boundary, a slight decrease in stream discharge was observed between sites Sn3 and Sn4 in June 2003 (0.2 ft^3/s); whereas, stream discharge decreased by 0.92 ft^3/s in October 2003 (fig. 20) indicating that the ground-water level is closer to the water level in the stream during the spring and summer than in the autumn. No flow was observed in the channel at site Sn4 in October 2003.

Spring Creek originates from a spring discharging at the fault contact of the Laketown and Fish Haven Dolomites (D€r) with the alluvial and glacial deposits (QTs) and Tertiary rocks (Tr; fig. 20). Spring Creek enters Snake Creek downstream of the Spring Creek Rearing Station. The rearing station diverts most of Spring Creek water and some of Snake Creek water into fish-rearing ponds before returning the flow to Snake Creek downstream of the ponds. Discharge of Snake Creek between sites Sn4 and Sn6, downstream of the Spring Creek Rearing Station, increased during June and October 2003 and in September 1992.

Discharge of Spring Creek just upstream of the fish-rearing ponds was 2.02 ft^3/s in June 2003 and 1.78 ft^3/s in October 2003, which indicates that discharge of Spring Creek did not change substantially during the year. Subtracting the discharge of Spring Creek from the discharge measured at site Sn6 provides an estimate of the discharge of Snake Creek immediately upstream of the Spring Creek Rearing Station (fig. 20). The estimated stream discharge upstream of the rearing station in June 2003 indicates that the stream continued to lose flow downstream of site Sn4, whereas the estimated stream discharge upstream of the rearing station in October 2003 indicates that the stream gained flow downstream of site Sn4 (fig. 20). Although there was no flow at site Sn4 during the October 2003 measurements, Snake Creek began flowing about 1 mi downstream of site Sn4 because of ground-water discharge to the creek. The estimated gain in flow upstream of the rearing station is supported by measured increases in discharge between sites Sn4 and Sn6 in September 1992 (fig. 20).

Snake Creek gains flow near the fault contact between the younger undifferentiated rocks (D€r) and the Tertiary rocks (Tr) upstream of site Sn6 (fig. 20). Stream discharge was nearly the same over the Tertiary rocks indicating that ground-water exchange with Snake Creek from the wedge of Tertiary rocks is minor compared with ground-water exchange with the limestone and dolomites in the younger undifferentiated rocks (table 4, fig. 20). The source of ground water that discharges into Snake and Spring Creeks probably is from the younger undifferentiated rocks within the upper plate, and includes most of the water lost to the younger undifferentiated rocks along Snake Creek in the upper part of the reach between sites Sn3 and Sn6 (fig. 20). Increased specific conductance in Snake Creek measured at site Sn6, corroborates a ground-water source to the creek (table 4).

In addition to snowmelt runoff, stream discharge in Snake Creek upstream of the confluence with Spring Creek during June 2003 includes some ground water that was discharged to the creek from limestone and dolomites in the younger undifferentiated rocks (D€r) near the fault contact with the Tertiary rocks (Tr; fig. 20). The quantity of this discharge was estimated using the measured flows and specific conductances at sites Sn4, Sn5, and Sn6 (table 4), and the following equation:

$$Q_{gw} = \frac{SC_{Sn6}Q_{Sn6} - SC_{Sn4}Q_{Sn4} - SC_{Sn5}Q_{Sn5}}{SC_{Sn5}} \quad , \quad (2)$$

where SC_{Sn4}, SC_{Sn5}, and SC_{Sn6} are the specific conductance of stream water, at sites Sn4, Sn5, and Sn6, respectively, in microsiemens per centimeter; and Q_{Sn4}, Q_{Sn5}, Q_{Sn6}, and Q_{gw} are stream discharges at sites Sn4, Sn5, and Sn6 and from ground water between sites Sn4 and Sn6, respectively, in cubic feet per second.

Specific conductance of the ground water discharging to Snake Creek between sites Sn4 and Sn6 was assumed to be the same as that measured in Spring Creek upstream of the rearing station, 329 µS/cm at site Sn5 (table 4). Assuming there is no change in specific conductance resulting from chemical reactions in the stream and in the fish-rearing ponds, the calculated discharge of ground water to Snake Creek upstream of the contact of the Tertiary rocks (site Sn4) was 0.9 ft^3/s in June 2003, or about 40 percent greater than estimated ground-water discharge for October 2003 (0.6 ft^3/s). This indicates that ground-water discharge to Snake Creek upstream of the Tertiary rock contact has a similar variation as the discharge of Spring Creek (2.02 ft^3/s in June 2003 and 1.78 ft^3/s in October 2003 at site Sn5; table 4).

Stream discharge did not change downstream of site Sn6, however slight decreases were observed between sites Sn7 and Sn8 during low flow in October 2003 and September 1992 (fig. 20). Specific conductance was nearly constant between sites Sn7 and Sn8 during June and October 2003, but decreased slightly during low flow in September 1992. This may indicate that ground-water levels along Snake Creek are close to the water level in the creek.

Ground-water withdrawals in Snake Valley potentially could affect surface-water resources along Snake Creek depending on the proximity of wells and the quantity of water pumped. Large quantities of ground-water withdrawals near the Snake Creek drainage in the alluvial and glacial deposits (QTs), the Tertiary rocks (Tr), or in the limestone and dolomites in the younger undifferentiated rocks (D€r), likely would affect stream discharge along Snake Creek including the spring that forms Spring Creek. If the Eureka Quartzite (D€r) is an effective barrier to ground-water flow, then the effects of ground-water withdrawals would be limited to the upper plate downstream of site Sn3. However, if the Eureka Quartzite is only a partial barrier to flow, the effects potentially could extend at least to site Sn2 where the Pioche Shale (€Zr) probably is a barrier to ground-water flow. Even if the Eureka Quartzite is an effective barrier to ground-water flow, effects of large-scale ground-water withdrawals from wells drilled on the valley floor and into the limestone southeast of the Snake Creek drainage could decrease ground-water levels in the Pole Canyon Limestone (€r) in the area where much of the flow in Snake Creek is diverted into a pipeline. Thus, depending on the effectiveness of the Eureka Quartzite as a barrier to ground-water flow, either a small part or a substantial part of Snake Creek within the park potentially could be affected by ground-water withdrawals.

Big Wash

The headwaters of South Fork Big Wash begin in the upper plate of the SSRD within Devonian to Middle Cambrian rocks (fig. 6, table 1; Whitebread, 1969). The younger undifferentiated rocks (D€r; fig. 21) consist mostly of the Notch Peak Limestone and limestones of the Pogonip Group; whereas, the Middle Cambrian undifferentiated sedimentary rocks (€r) consist mostly of the Lincoln Peak Formation and Johns Wash Limestone (Whitebread, 1969). The upper plate rocks are highly faulted and fractured (Hose and Blake, 1976; McGrew, 1993). The Pole Canyon Limestone, in the Middle Cambrian undifferentiated sedimentary rocks (€r), outcrops along the channel at a break or ‘window’ in the upper plate. Downstream of the window and upstream of the confluence with North Fork Big Wash, the South Fork crosses onto the upper-plate rocks that include the Middle Cambrian Lincoln Peak Formation and the undivided Laketown and Fish Haven Dolomites, Sevy Dolomite, and Guilmette Formation (D€r; fig. 21, table 1; Whitebread, 1969; McGrew and others, 1995).

North Fork Big Wash originates in the lower plate of the SSRD, east of Mount Washington (fig. 1). The rocks of the lower plate mostly are of Middle Cambrian Pole Canyon and Lincoln Peak Limestones (€r) although higher in the drainage, the channel crosses over outcrops of Lower Cambrian Pioche Shale and Prospect Mountain Quartzite (€Zr; fig. 6). Near the confluence with South Fork, the North Fork crosses onto the upper plate of the SSRD where it continues over highly faulted and fractured limestone and dolomite of the younger undifferentiated rocks (D€r; table 1). No evidence of flow was observed in North Fork near the confluence with South Fork during the study, which indicates that the Middle Cambrian Pole Canyon and Lincoln Peak Limestones are permeable.

Downstream of the confluence of the two forks, the channel of Big Wash enters a valley that is about 500 ft wide and has been incised into Tertiary rocks (Tr) overlain by alluvium (fig. 6). Tertiary conglomerates form cliffs along the sides of the valley. Younger undifferentiated rocks (D€r) consisting of Notch Peak Limestone, Eureka Quartzite, and limestones of the Pogonip Group (Whitebread, 1969) outcrop along the north side of the valley immediately downstream of the Humboldt National Forest boundary (fig. 6). Farther downstream, the channel crosses over Tertiary rocks covered by a thin layer of alluvium.

The uppermost measurement site (BW1) on South Fork Big Wash is near the contact between the Lincoln Peak Formation (€r; fig. 21) and the undivided Laketown and Fish Haven Dolomites (D€r), in which bedding generally is poorly developed or obscured by fractures (Whitebread, 1969). The site is upstream of an unnamed spring (site BW2) that provides perennial flow to South Fork between sites BW1 and BW3 (fig. 21). South Fork is intermittent where the Pole Canyon Limestone (€r) is exposed upstream of the confluence with the unnamed spring tributary.

Stream discharge at site BW1 on South Fork was 3.02 ft^3/s during snowmelt in June 2003, and the channel was dry during low flow in October 2003 (fig. 21, table 4). Discharge from the unnamed spring near site BW1 was 1.49 ft^3/s during snowmelt in June and decreased to 0.30 ft^3/s during low flow in October (site BW2). Specific conductance of the unnamed spring was 370 μS/cm in June, whereas it increased to 456 μS/cm in October. The specific conductance of the unnamed spring was similar to that of Spring Creek. Both springs discharge from the younger undifferentiated rocks (D€r), and have higher specific conductances than Rowland Spring and Cave Springs in the Lehman Creek drainage. The unnamed spring, however, had seasonal variations in discharge and water temperature, whereas Spring Creek had less variability in discharge and water temperature (table 4). Seasonal variations in spring discharge and water temperature are indicative of water that has rapidly moved through permeable rocks, whereas water that has remained in the rocks longer exhibits constant discharge and temperature (Mazor, 2004, p. 54).

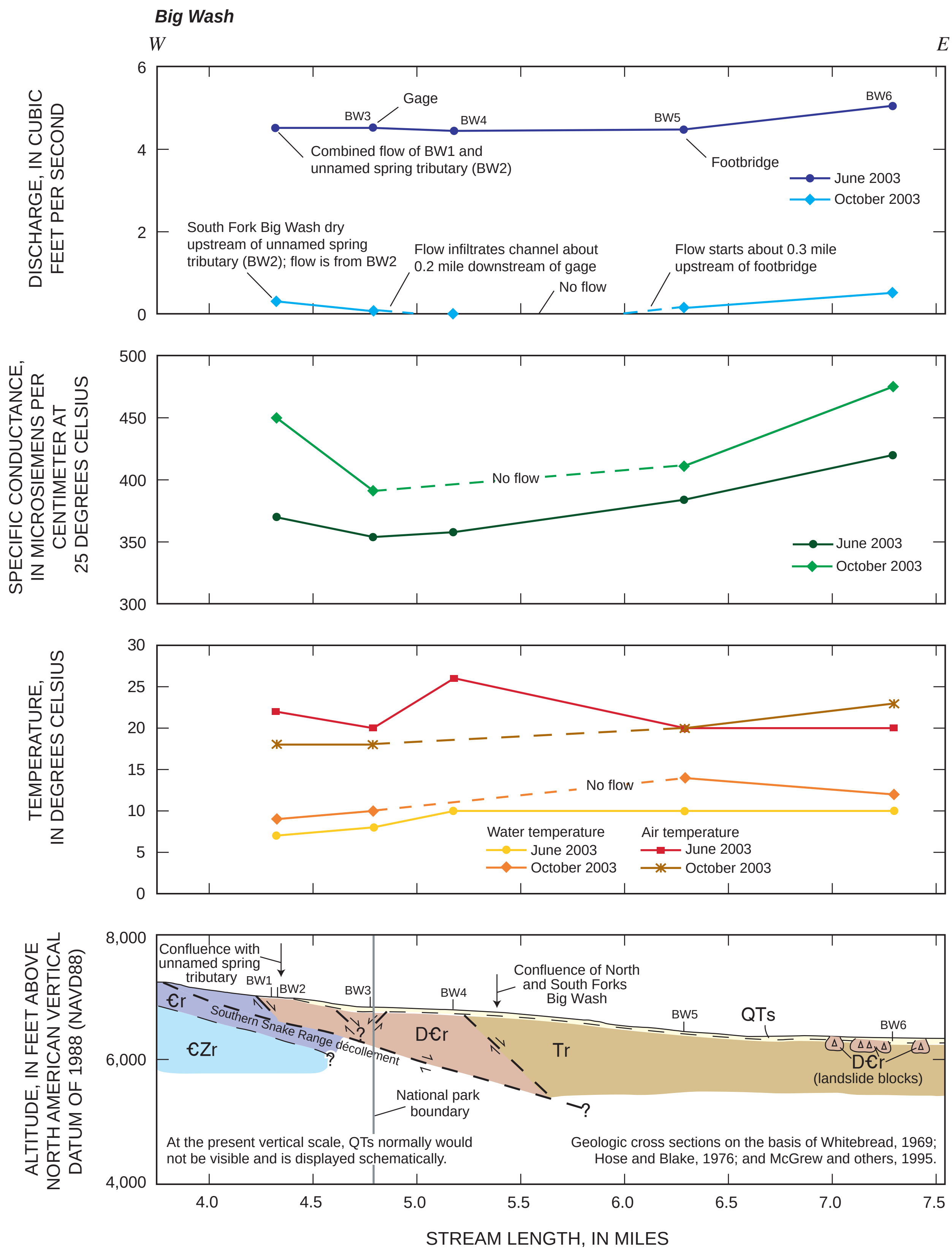

Figure 21. Geologic profile and 2003 synoptic-discharge, specific-conductance, and water- and air-temperature measurements for Big Wash, Great Basin National Park area, Nevada.
Key to geologic units is in table 1.

Ground-water levels are close to the water level of the stream, at least seasonally, between sites BW1 and BW3, which allows for much of the reach to be perennial. Stream discharge at site BW3, upstream of the park boundary, was 4.51 ft^3/s during snowmelt in June 2003 and 0.06 ft^3/s during low flow in October 2003. The flow at site BW3 in June was the same as the sum of discharges measured at sites BW1 and BW2; whereas, flow in October was a fraction of that measured from spring discharge at site BW2 (fig. 21).

Stream discharge was about the same from sites BW3 to BW4 during snowmelt in June 2003; however, South Fork ceased flowing less than 0.2 mi downstream of site BW3 during low flow in October 2003. Specific conductance remained nearly constant between sites BW3 and BW4 in June (table 4, fig. 21), which is consistent for a reach that is either not gaining flow or is steadily losing flow.

Most of Big Wash between its confluence with the two forks and the border of Nevada and Utah is intermittent, except for three short reaches in which springs and seeps discharge water to the channel and flow is perennial. Within the upper two reaches, flow is perennial immediately upstream and downstream of two major constrictions in the valley floor. The first constriction is a large alluvial fan that enters the valley from the north between sites BW4 and BW5 (figs. 6 and 21). Cottonwoods populate the valley floor upstream of the alluvial fan where several springs and seeps discharge into a large meadow. No flow was observed in the channel at site BW4 in October 2003, and the measured stream discharge at site BW5 downstream of the alluvial fan was 0.14 ft^3/s. During snowmelt runoff in June 2003, flow remained constant between sites BW4 and BW5. However, specific conductance increased (fig. 21) indicating ground water in the meadow was contributing to the overall discharge in the stream at site BW5.

A second constriction occurs immediately upstream of site BW6 where large landslide blocks within the Tertiary rocks (Tr) are exposed along the valley walls and on the valley floor (fig. 21). The landslide blocks consist of Notch Peak Limestone from the younger undifferentiated rocks (D€r; table 1; Whitebread, 1969; McGrew and others, 1995), and probably were placed during deposition of the Tertiary rocks. The blocks are monolithologic (McGrew and others, 1995), and do not exhibit fracturing or bedding typical of in-place limestone within the southern Snake Range. Similar to the first constriction, a large meadow is present immediately upstream of the landslide blocks. The channel is not incised in the large meadow or where the blocks are exposed along the walls of the valley. Springs and seeps in the meadow contribute flow to the channel.

Stream discharge between sites BW5 and BW6 increased about 0.6 ft^3/s in June 2003 during snowmelt runoff and 0.4 ft^3/s during low flow in October 2003 (fig. 21). The increase in stream discharge correlates with an increase in specific conductance on both dates. The specific conductance of ground water for June and October was estimated using equation 1, but values from sites BW5 and BW6 were substituted in place of the sites on Strawberry Creek. The estimated specific conductance of ground water was about 700 µS/cm in June, whereas it was 500 µS/cm in October. The greater value in June indicates that either ground water discharging in the meadow has higher salt concentrations during the summer, that more salts are added to the channel by dissolution of the streambed, or that some streamflow was lost downstream of site BW5 and upstream of the meadow that is just upstream of site BW6. The estimated evaporation directly from the stream channel was too small to account for the increase in specific conductance. Assuming the specific conductance of ground water did not change between June and October, the estimated loss upstream of the meadow and additional ground-water discharge in the meadow was estimated using the following equation:

$$Q_{AD} = \frac{SC_{BW6}Q_{BW6} - SC_{BW5}Q_{BW5} - SC_{GW}Q_{DIFF}}{SC_{GW} - SC_{BW5}}, \quad (3)$$

where SC_{BW5}, SC_{BW6}, and SC_{GW} are the specific conductances of stream water at sites BW5, BW6, and ground water from October 2003, respectively, in microsiemens per centimeter; and Q_{BW5}, Q_{BW6}, Q_{DIFF}, and Q_{AD} are stream discharges at sites BW5 and BW6, the difference in discharge between BW5 and BW6, and additional ground-water exchange between sites BW5 and BW6, respectively, in cubic feet per second.

The loss downstream of site BW5 and upstream of the meadow, and the additional ground-water discharge in the meadow was about 1 ft^3/s. Thus, the change in specific conductance measured at site BW6 can be explained by a loss of 1 ft^3/s in streamflow downstream of site BW5, and an overall gain in streamflow from ground-water discharge in the meadow of about 1.6 ft^3/s.

The decrease in water temperature between sites BW5 and BW6 during October 2003 indicates that ground water discharging in the meadow upstream of the slide blocks is colder than water in the stream at site BW5. The source of ground water in the meadow is unknown but the higher specific conductance, when compared with other stream drainages, indicates that it may have considerable residence time in the alluvium, Tertiary rocks (Tr), or possibly in the underlying carbonate rocks.

Downstream of site BW6, the last measurement site, the channel becomes deeply incised, about 20 ft deep by 30 ft wide, and flow in this section is intermittent. The channel becomes perennial upstream of where limestone and quartzite (D€r) outcrop along the north side of the valley (fig. 6), and the channel is no longer deeply incised. Farther downstream, the channel becomes incised again and flow is intermittent.

Ground-water withdrawals from the alluvial and glacial deposits (QTs) or the Tertiary rocks (Tr) in the Big Wash drainage could potentially affect surface-water resources along perennial reaches downstream of the park boundary depending on the proximity of wells and the quantity of water pumped. Pumping large quantities of ground water in Snake Valley would have little effect on flow in the Big Wash drainage, except for perhaps the three short perennial reaches downstream of the park boundary. Perennial sections of Big Wash seem to be controlled by local constrictions within the Tertiary rocks, or from structurally controlled spring discharge within the highly faulted and fractured upper plate rocks within the park boundary. Such localized discharges likely would be unaffected by the lowering of ground-water levels in the continuous and less disrupted limestone rocks in the lower plate of the SSRD. The short perennial reach at Hidden Canyon Ranch (fig. 6) may be ground-water discharge from the limestone and dolomites in the younger undifferentiated rocks (D€r) that crop out along the north side of the ranch. Ground-water withdrawals likely would affect this perennial reach in a manner similar to Spring Creek in the adjacent Snake Creek drainage.

Areas Where Surface-Water Resources are Susceptible to Ground-Water Withdrawals

The North Fork Big Wash marks the transition from low-permeability rocks to generally high-permeability rocks in the southern Snake Range. Low-permeability rocks result in greater stream discharge in drainages to the north (Weaver, Strawberry, Lehman, Baker, Snake, Shingle, Pine, and Ridge Creeks and Williams Canyon fig. 1, pl. 1); whereas, high-permeability rocks result in little to no stream discharge in drainages to the south (South Fork Big Wash, Lexington Creek, Big Spring Wash, Decathon Canyon, Johns Wash, and Murphy Wash) and west (Lincoln Canyon).

Streams, springs, and seeps north of North Fork Big Wash that are likely or potentially susceptible to ground-water withdrawals are limited to areas underlain by alluvial and glacial deposits (QTs), Tertiary rocks (Tr), limestones and dolomites within the Devonian and Upper Cambrian younger undifferentiated rocks (D€r), and limestones within the Middle Cambrian undifferentiated sedimentary rocks (€r ; pl. 1). These areas include the lower Snake Creek drainage, which was divided into a likely susceptible area downstream of where the Eureka Quartzite (D€r) crosses Snake Creek, and an area that potentially is susceptible upstream of the Eureka Quartzite. A third and smaller area that potentially is susceptible to ground-water withdrawals is where Snake Creek crosses the Middle Cambrian Pole Canyon Limestone (€r). This reach of Snake Creek was diverted into a pipeline prior to the establishment of Great Basin National Park, because considerable discharge is lost as the stream flows over the limestone. Stream discharge in June 2003 exceeded the capacity of the pipe and flow continued down the natural channel. More than 15 percent of the total flow, including flow diverted into the pipeline, was lost throughout this reach. This section of Snake Creek potentially is susceptible to ground-water withdrawals if the ground-water level in the Pole Canyon Limestone is close to the altitude of the stream. Lowering of the ground-water level might induce additional losses.

Important surface-water resources within the park boundary in the Lehman and Baker Creeks drainages likely are susceptible to ground-water withdrawals, including Rowland Spring and Cave Springs. The susceptible areas generally are limited to the alluvial and glacial deposits (QTs) and limestones (€r), including the Lehman and Baker Creeks cave systems, downstream of the intrusive rocks (TJi) and the Cambrian and Proterozoic older undifferentiated rocks (€Zr). In areas where the Prospect Mountain Quartzite (€Zr) is in direct contact with the Middle Cambrian Pole Canyon Limestone (€r) and where the intrusive rocks are well below the ground-water table, water-level declines from ground-water withdrawals in Snake Valley could propagate farther upstream than delineated because the Prospect Mountain Quartzite has some permeability (pl. 1).

Surface-water resources along Strawberry Creek and streams on the northeast side of the park, including Weaver Creek, likewise are susceptible to large-scale ground-water withdrawals in Snake Valley. The susceptible areas, however, are outside of the park boundary, downstream of intrusive rocks (TJi), and on the alluvial slopes. On the west side of the southern Snake Range, likely susceptible areas also are outside of the park boundary, and limited to streams on the alluvial slopes between the mountain front and where water is diverted into pipelines including Shingle, Pine, and Ridge Creeks and Williams Canyon.

Surface water in the park south and west of North Fork Big Wash is limited to areas where low-permeability rocks are exposed, for example, intrusive rocks (TJi) along Lexington Creek or where springs discharge from blocks of carbonate rocks in the upper plate of the décollement that structurally have been isolated from the carbonate rocks in the lower plate (pl. 1). Consequently, any additional ground-water level declines beneath and adjacent to the park south and west of North Fork Big Wash probably would not affect the surface-water resources in this area. However, a large percentage of ground-water flow beneath the south end of the park discharges at Big Springs on the southeast side of the southern Snake Range, and at numerous springs at the change in slope between the valley floor of Spring Valley and the alluvial slope on the west side of the southern Snake Range.

Large-scale ground-water withdrawals in the valleys likely would affect the discharge of the springs on the southeast and west sides of the southern Snake Range, and streamflow along Big Springs Creek and Lake Creek. These areas, although not studied in detail, probably represent areas that drain ground water as described by Theis (1940). Thus, the spring-discharge areas, Big Springs Creek, Lake Creek, and Pruess Lake were included as areas where surface-water resources likely are susceptible to ground-water withdrawals in Snake and Spring Valleys (pl. 1). Big Springs and the numerous springs at the base of the alluvial slopes on the west side of the southern Snake Range could be affected by ground-water withdrawals similar to springs in Pahrump and Las Vegas Valleys. Large-scale ground-water withdrawals from aquifers in the valleys lowered hydraulic heads and caused springs to stop flowing (Malmberg, 1965, p. 59; Harrill, 1976, p. 43; Harrill, 1986, p. 22).

Summary

Discharge data were continually collected at eight streams and one spring during 2003 and 2004 to quantify discharge and assess the spatial and temporal variability of flow of streams and springs within the Great Basin National Park area. Streamflow gages were installed near the park boundary on Strawberry Creek, Shingle Creek, Lehman Creek, Baker Creek, Snake Creek, South Fork Big Wash, Williams Canyon, Decathon Canyon, and Rowland Spring. Three additional gages were installed along Snake Creek to help characterize streamflow gains and losses within the upper and lower reaches of the drainage. Three of the sites, Snake Creek at the park boundary, South Fork Big Wash, and Decathon Canyon, were intermittent. All other sites were perennial. Mean annual discharge for the perennial streams ranged from 0.53 ft^3/s at South Fork Big Wash to 9.08 ft^3/s at Baker Creek. Seasonal variability of streamflow was climate driven and generally uniform as the minimum and maximum mean monthly discharges occurred in February and June, respectively, at all perennial sites except Strawberry Creek. Decathon Canyon had the lowest annual stream discharge as flow only occurred on 1 day in each of the 2 years of data collection. Maximum mean monthly discharge at Snake Creek at the park boundary and South Fork Big Wash also occurred in June during spring runoff.

Synoptic-discharge and water-property measurements were collected during the spring, summer, and autumn of 2003 along selected reaches on Strawberry, Shingle, Lehman, Baker, and Snake Creeks and Big Wash. Profiles of the selected reaches were developed to relate stream characteristics to geology, and show areas where streams are effluent and likely or potentially susceptible to ground-water withdrawals in adjacent valleys. Streams in contact with permeable rocks or sediments, and areas where streams receive either spring discharge or ground-water inflow comprise areas where streams are most susceptible.

The areas where surface-water resources likely are susceptible to ground-water withdrawals in adjacent valleys that were part of this study include (1) the lower half of Strawberry Creek downstream of the fault contact of the intrusive rocks and Tertiary rocks, including the springs and seeps; (2) Shingle Creek downstream of the intrusive rocks and upstream of the pipeline; (3) Lehman Creek from the lower Lehman Creek campground to the terminus of the stream in Snake Valley, including Rowland Spring and Cave Springs; (4) Baker Creek upstream of the confluence with Pole Canyon tributary to the terminus of the stream in Snake Valley; (5) Snake Creek from just upstream of the park boundary to the terminus of the stream, including Spring Creek.

Areas within the park where surface-water resources potentially are susceptible to ground-water withdrawals include that part of Snake Creek that crosses over the younger undifferentiated rocks (D€r) and its tributaries on the upper plate of the SSRD, and the upper part of Snake Creek that crosses over undifferentiated sedimentary rocks (€r) on the lower plate of the SSRD.

Surface-water resources in other areas adjacent to the park that likely are susceptible to ground-water withdrawals in Spring and Snake Valleys are (1) Williams Canyon upstream of the pipeline, and the following areas that were not gaged, (2) Weaver Creek along the alluvial slope on the northeast end of the southern Snake Range, (3) Pine and Ridge Creeks on the west side of the southern Snake Range between the mountain front and where streams are diverted into pipelines, (4) the numerous springs at the change in slope between the valley floor of Spring Valley and the alluvial slope on the west side of the southern Snake Range, and (5) Big Springs, Big Springs Creek, Lake Creek, Big Wash near Hidden Canyon Ranch, and Pruess Lake in southern Snake Valley.

Areas within the park where surface-water resources probably are not susceptible to ground-water withdrawals in adjacent Spring and Snake Valleys include Big Wash, Lexington Creek, Decathon Canyon, Big Spring Wash, and Lincoln Canyon. Johns Wash and Murphy Wash, adjacent to the park, also would not be susceptible to ground-water withdrawals.

Acknowledgments

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Appendix A. Photographs of Continual-Recording Streamflow Gages, Great Basin National Park Area, Nevada

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PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking downstream (northeast), October 2002.

PHOTOGRAPH BY GRETCHEN BAKER, NATIONAL PARK SERVICE

B. Looking downstream, January 2003.

Photographs A1. Strawberry Creek above park boundary, Great Basin National Park, Nevada.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

C. Looking downstream, June 2003.

Photographs A1.—Continued.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking upstream (east), October 2002.

Photographs A2. Shingle Creek near park boundary near Osceola, Nevada.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

B. Looking upstream, January 2003.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

C. Looking upstream, June 2003.

Photographs A2.—Continued.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking upstream (northwest), September 2002.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

B. Looking upstream, June 2003.

Photographs A3. Lehman Creek near Baker, Nevada.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking south, October 2002.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

B. Looking upstream (west), July 2003.

Photographs A4. Rowland Spring at park boundary near Baker, Nevada.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

C. Looking downstream (east), September 2002.

Photographs A4.—Continued.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking upstream (west), October 2002.

Photographs A5. Baker Creek at the Narrows, near Baker, Nevada.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

B. Looking upstream, January 2003.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

C. Looking upstream, June 2003.

Photographs A5.—Continued.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking downstream (east), October 2002.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

B. Looking downstream, January 2003.

Photographs A6. Snake Creek above pipeline, Great Basin National Park, Nevada.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking upstream (west), October 2002.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

B. Looking upstream, January 2003.

Photographs A7. Snake Creek at park boundary near Baker, Nevada.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

C. Looking upstream, June 2003.

Photographs A7.—Continued.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking upstream (west), January 2003.

Photographs A8. Snake Creek below confluence with Spring Creek near Garrison, Utah.

B. Looking upstream, June 2003.

Photographs A8.—Continued.

A. Looking upstream (west), January 2003.

Photographs A9. Snake Creek at Nevada–Utah State line near Garrison, Utah.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

B. Looking downstream (east), January 2003.

PHOTOGRAPH BY GRETCHEN BAKER, NATIONAL PARK SERVICE

C. Looking upstream (west), February 2004.

Photographs A9.—Continued.


PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking upstream (west), October 2002.


PHOTOGRAPH BY WILLIAM VAN LIEW, NATIONAL PARK SERVICE

B. Looking upstream, June 2003.

Photographs A10. South Fork Big Wash above park boundary near Baker, Nevada.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking upstream (east), October 2002.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

B. Looking downstream (west), October 2002.

Photographs A11. Williams Canyon above aqueduct near Minerva, Nevada.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

A. Looking upstream (north), October 2002.

PHOTOGRAPH BY DAVID A. BECK, U.S. GEOLOGICAL SURVEY

B. Looking downstream (south), October 2002.

Photographs A12. Decathon Canyon below park boundary near Minerva, Nevada.

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Appendix B. Hydrographs and Tables of Daily Mean Discharge and Water Temperature for Continual-Recording Streamflow Gages from October 1, 2002, to September 30, 2004, Great Basin National Park Area, Nevada

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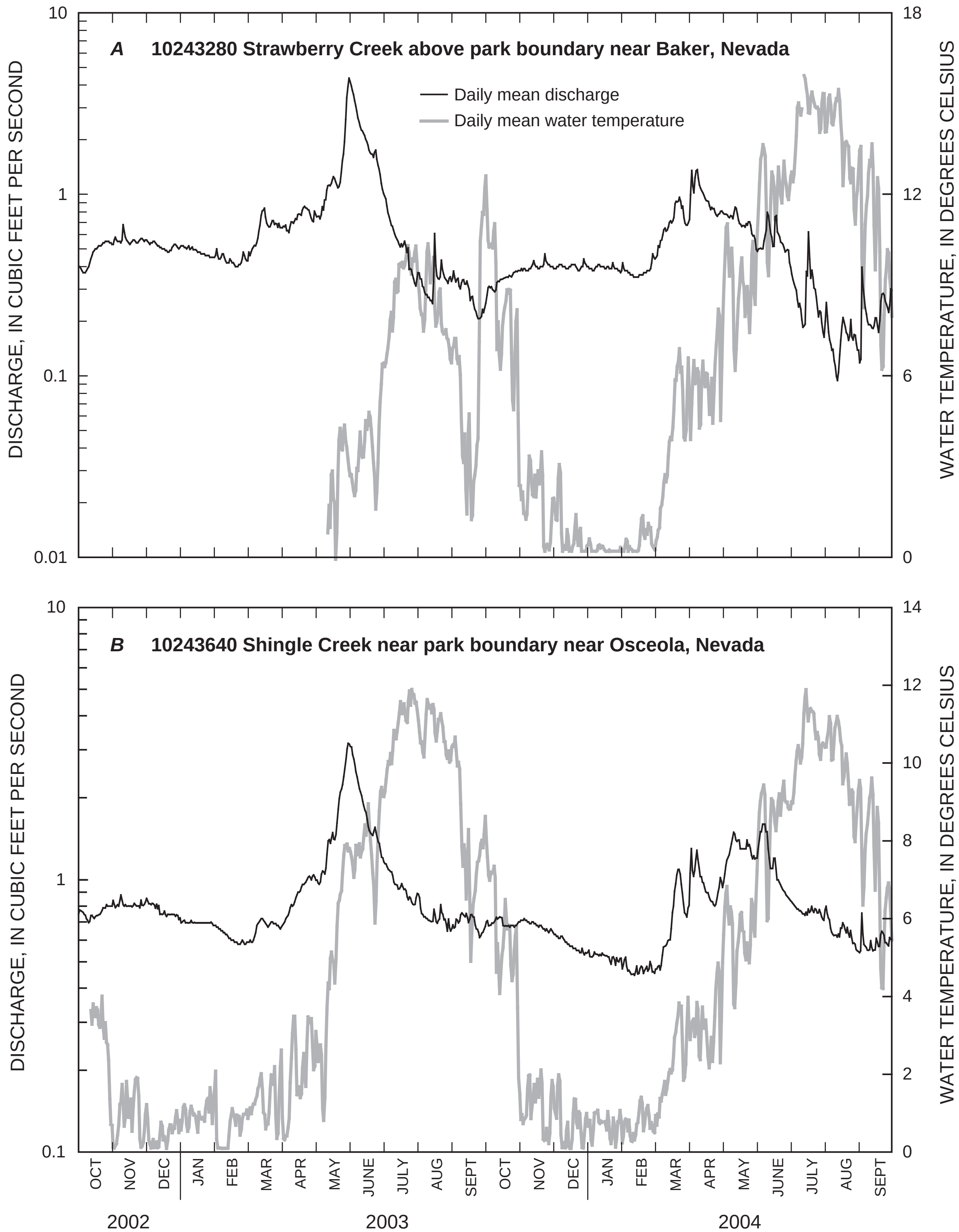

Figure B1. Daily mean discharge and water temperature for (*A*) Strawberry Creek, (*B*) Shingle Creek, (*C*) Lehman Creek, (*D*) Rowland Spring, (*E*) Baker Creek, (*F*) Snake Creek above pipeline, (*G*) Snake Creek at park boundary, (*H*) Snake Creek below Spring Creek, (*I*) Snake Creek at State line, (*J*) South Fork Big Wash, and (*K*) Williams Canyon, Great Basin National Park area, Nevada, October 1, 2002–September 30, 2004.

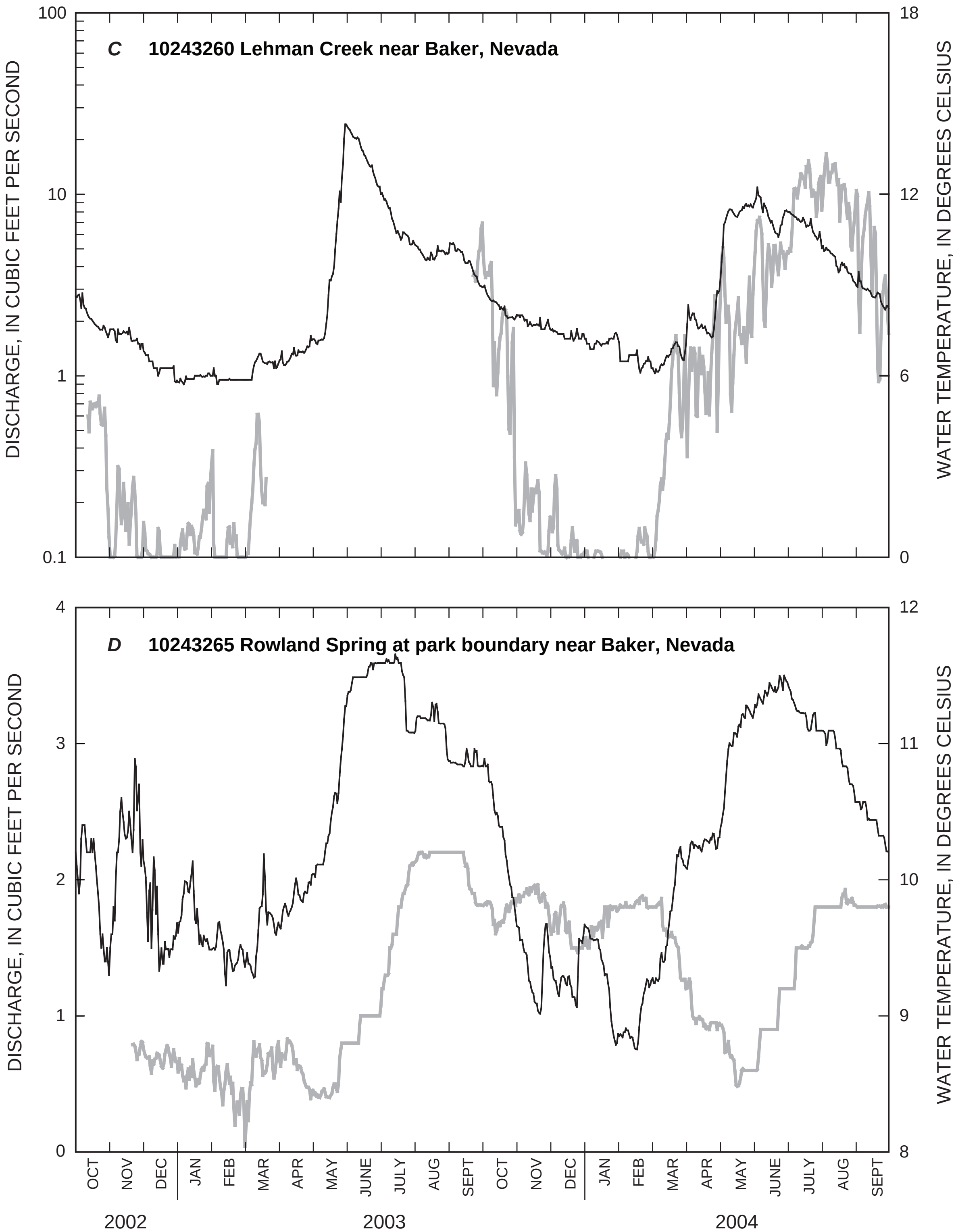

Figure B1. Continued.

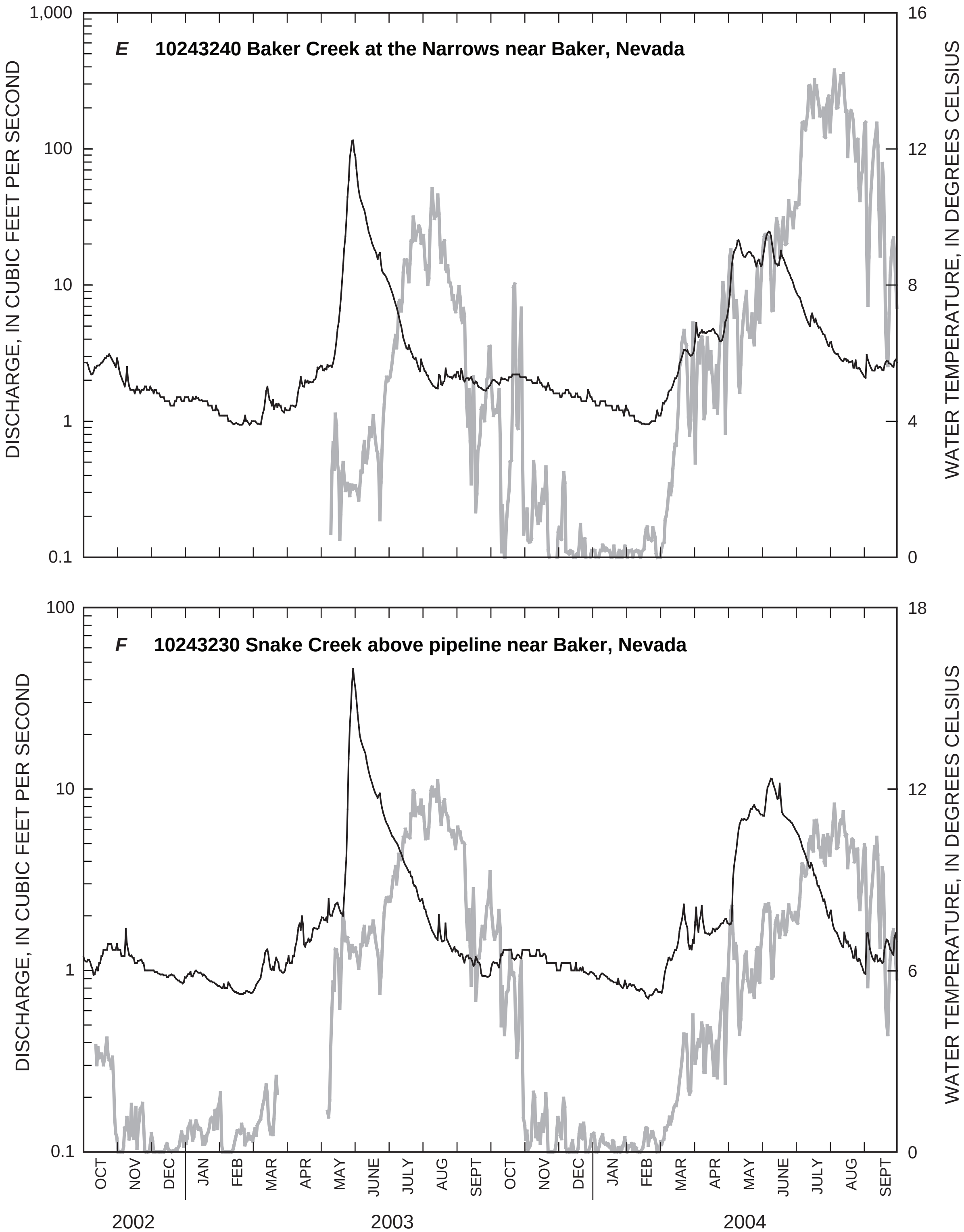

Figure B1. Continued.

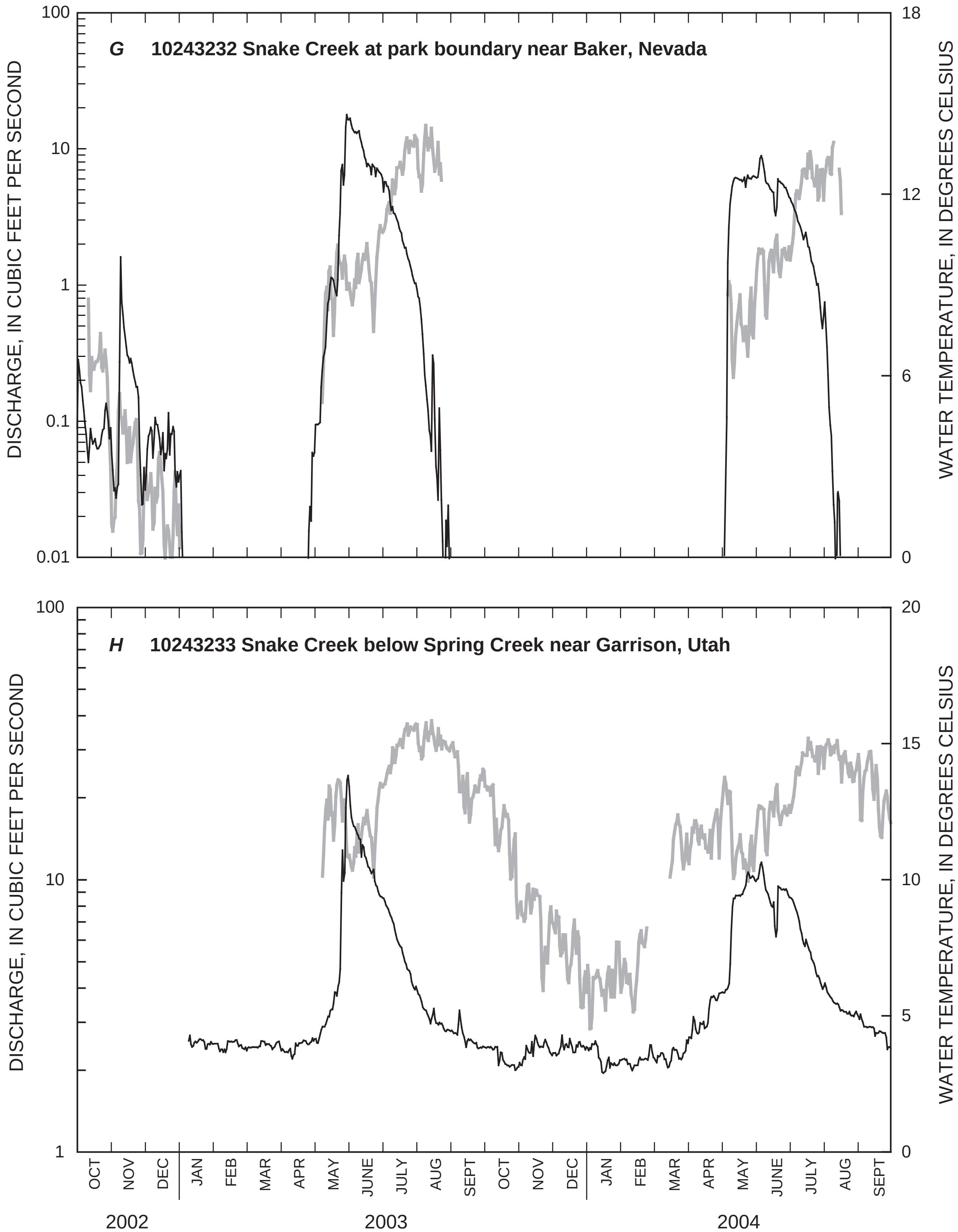

Figure B1. Continued.

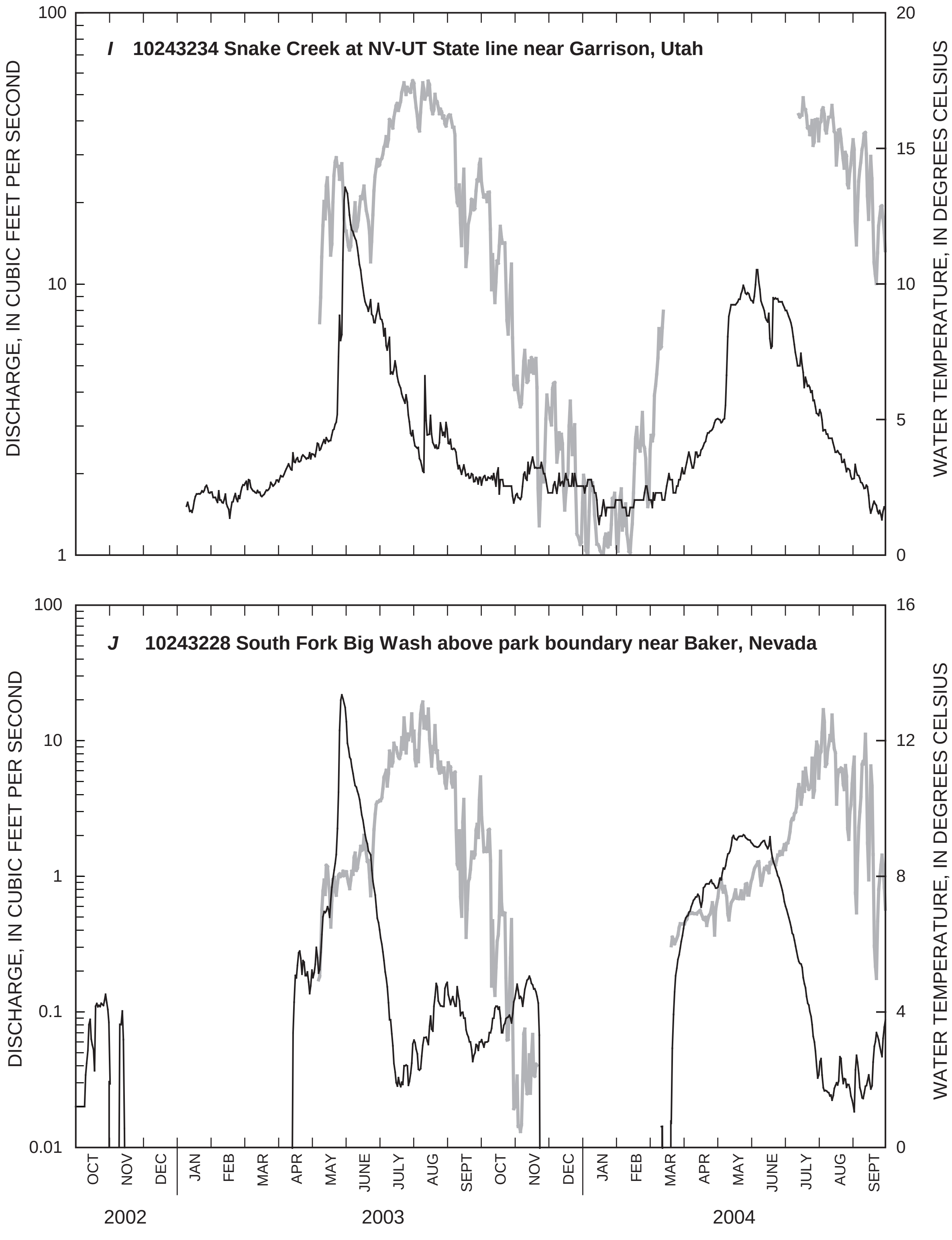

Figure B1. Continued.

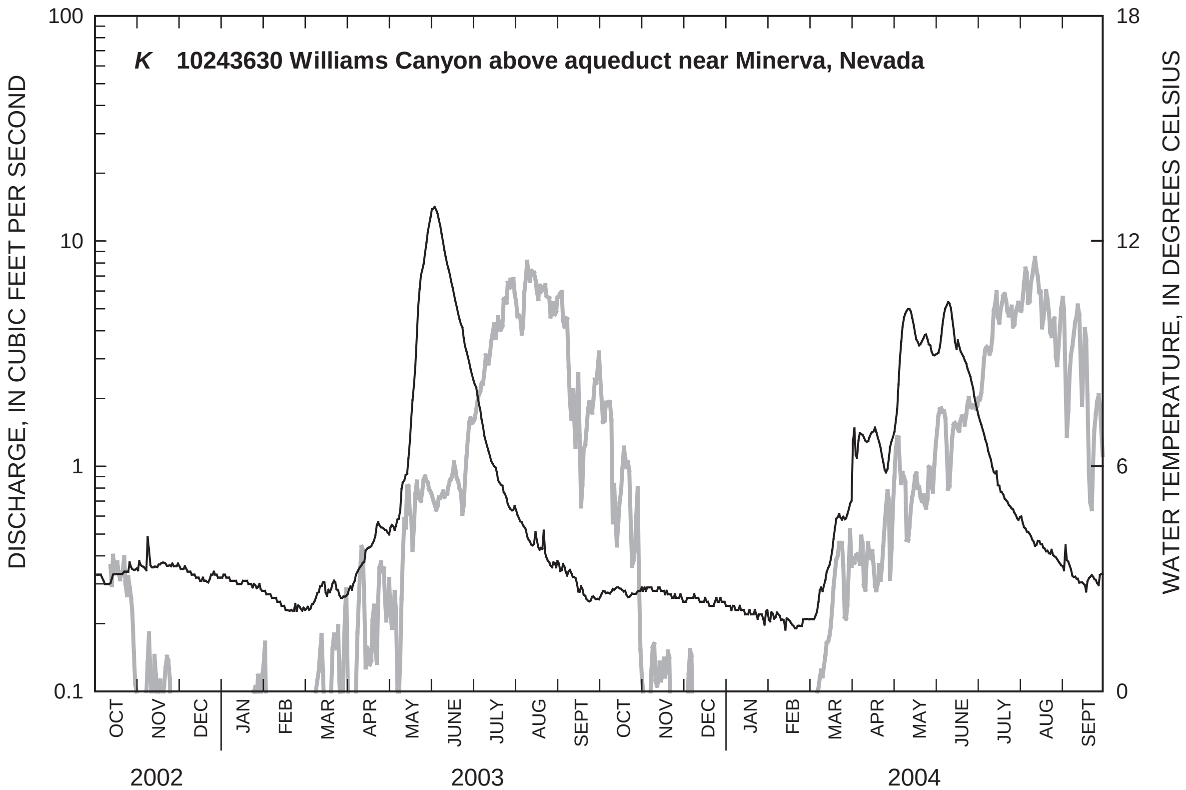

Figure B1. Continued.

Table B1. Daily mean discharge values for the continual-recording gage Strawberry Creek above Great Basin National Park boundary near Baker, Nevada (gage station 10243280).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	e0.40	e0.56	e0.55	e0.52	e0.50	e0.43	0.65	0.77	4.2	0.83	0.28	0.34
2	e0.39	e0.58	e0.54	e0.52	e0.46	e0.48	0.67	0.75	4.0	0.79	0.28	0.38
3	e0.38	e0.56	e0.53	e0.51	e0.44	e0.46	0.66	0.76	3.7	0.75	0.25	0.35
4	e0.37	e0.55	e0.54	e0.51	e0.44	e0.48	0.68	0.76	3.5	0.67	0.25	0.33
5	e0.37	e0.55	e0.54	e0.50	e0.45	e0.50	0.63	0.73	3.3	0.59	0.22	0.34
6	e0.37	e0.55	e0.55	e0.51	e0.47	0.51	0.63	0.77	3.1	0.54	0.22	0.34
7	e0.38	e0.54	e0.55	e0.52	e0.47	0.52	0.62	0.85	2.9	0.51	0.20	0.31
8	e0.39	e0.56	e0.54	0.50	e0.45	0.52	0.66	0.82	2.6	0.47	e0.28	0.30
9	e0.40	e0.68	e0.53	0.50	e0.43	0.54	0.70	0.93	2.5	0.46	e0.28	0.32
10	e0.42	e0.62	e0.52	0.51	e0.42	0.57	0.70	0.93	2.4	0.44	e0.27	0.34
11	e0.44	e0.58	e0.52	0.50	e0.42	0.63	0.69	1.1	2.3	0.40	e0.27	0.34
12	e0.46	e0.56	e0.51	0.49	e0.42	0.67	0.71	1.1	2.2	0.38	e0.26	0.32
13	e0.48	e0.55	e0.51	0.49	e0.44	0.76	0.73	1.1	2.1	0.36	e0.26	0.32
14	e0.49	e0.54	e0.50	0.49	e0.43	0.81	0.73	1.1	2.1	0.35	e0.25	0.33
15	e0.50	e0.53	e0.50	0.48	e0.42	0.82	0.77	1.1	1.9	0.33	e0.33	0.31
16	e0.50	e0.54	e0.50	e0.48	e0.42	0.84	0.78	1.2	1.9	0.32	0.51	0.30
17	e0.51	e0.55	e0.49	e0.48	e0.41	0.75	0.77	1.2	1.8	0.33	0.40	0.26
18	e0.52	e0.56	e0.49	e0.47	e0.40	0.69	0.77	1.2	1.7	0.32	0.36	0.27
19	e0.52	e0.56	e0.48	e0.47	e0.40	0.68	0.82	1.2	1.6	0.33	0.34	0.27
20	e0.52	e0.55	e0.48	e0.47	e0.40	0.66	0.84	1.1	1.6	0.35	0.34	0.25
21	e0.53	e0.54	e0.49	e0.47	e0.41	0.66	0.86	1.1	1.6	0.32	0.35	0.23
22	e0.54	e0.54	e0.49	e0.46	e0.41	0.69	0.84	1.1	1.5	0.29	0.43	0.23
23	e0.54	e0.55	e0.51	e0.46	e0.42	0.72	0.84	1.2	1.6	0.36	0.39	0.21
24	e0.55	e0.56	e0.52	e0.46	e0.44	0.72	0.82	1.3	1.6	0.29	0.36	0.21
25	e0.55	e0.57	e0.53	e0.46	e0.48	0.68	0.82	1.5	1.4	0.30	0.35	0.21
26	e0.55	e0.57	e0.53	e0.45	e0.46	0.69	0.77	1.7	1.3	0.29	0.34	0.21
27	e0.55	e0.56	e0.52	e0.45	e0.44	0.69	0.74	2.0	1.2	0.27	0.33	0.21
28	e0.54	e0.55	e0.51	e0.45	e0.43	0.66	0.71	2.6	1.1	0.25	0.32	0.21
29	e0.54	e0.56	e0.50	e0.45	–	0.69	0.71	3.4	1.0	0.24	0.34	0.20
30	e0.53	e0.56	e0.51	e0.45	–	0.66	0.81	3.9	0.9	0.22	0.35	0.22
31	e0.53	–	e0.52	e0.46	–	0.66	–	4.4	–	0.25	0.33	–
Total	14.76	16.83	16.00	14.94	12.18	19.84	22.13	43.67	64.56	12.6	9.74	8.46
Mean	0.48	0.56	0.52	0.48	0.43	0.64	0.74	1.41	2.15	0.41	0.31	0.28
Maximum	0.55	0.68	0.55	0.52	0.50	0.84	0.86	4.4	4.2	0.83	0.51	0.38
Minimum	0.37	0.53	0.48	0.45	0.40	0.43	0.62	0.73	0.89	0.22	0.20	0.20
Acre-foot	29	33	32	30	24	39	44	87	128	25	19	17

Table B1. Daily mean discharge values for the continual-recording gage Strawberry Creek above Great Basin National Park boundary near Baker, Nevada (gage station 10243280).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	0.23	e0.38	e0.39	e0.40	e0.42	e0.44	0.73	0.79	0.49	0.39	0.20	0.12
2	0.26	e0.39	e0.39	e0.39	e0.39	e0.45	1.00	0.78	0.50	0.36	0.25	0.12
3	0.28	e0.38	e0.39	e0.39	e0.38	e0.46	1.4	0.78	0.50	0.34	0.21	0.40
4	0.29	e0.39	e0.40	e0.39	e0.38	0.52	1.1	0.78	0.50	0.32	0.17	0.31
5	0.28	e0.39	e0.40	e0.38	e0.38	0.51	1.0	0.77	0.50	0.31	0.16	0.27
6	0.29	e0.38	e0.41	e0.38	e0.37	0.55	1.2	0.75	0.50	0.30	0.15	0.24
7	0.28	e0.38	e0.41	e0.39	e0.37	0.56	1.3	0.74	0.55	0.26	0.14	0.22
8	0.28	e0.38	e0.41	e0.40	e0.36	0.60	1.4	0.76	0.59	0.24	0.14	0.20
9	0.29	e0.39	e0.40	e0.40	e0.36	0.64	1.2	0.76	0.63	0.25	0.12	0.19
10	0.30	e0.39	e0.40	e0.41	e0.36	0.65	1.1	0.73	0.80	0.23	0.11	0.19
11	0.33	e0.40	e0.40	e0.41	e0.35	0.63	1.1	0.79	0.76	0.20	0.10	0.19
12	0.33	e0.41	e0.39	e0.40	e0.35	0.64	1.0	0.85	0.68	0.19	0.09	0.18
13	0.33	e0.43	e0.39	e0.40	e0.35	0.66	1.0	0.84	0.61	0.19	0.10	0.18
14	0.34	e0.41	e0.39	e0.40	e0.35	0.70	0.99	0.78	0.58	0.19	0.13	0.19
15	0.34	e0.40	e0.40	e0.40	e0.35	0.71	0.95	0.72	0.52	0.38	0.16	0.21
16	0.34	e0.40	e0.40	e0.39	e0.36	0.70	0.92	0.69	0.52	0.36	0.19	0.21
17	0.34	e0.39	e0.41	e0.39	e0.36	0.71	0.92	0.68	0.75	0.62	0.21	0.19
18	0.35	e0.39	e0.41	e0.40	e0.36	0.75	0.91	0.66	0.76	0.44	0.20	0.17
19	0.35	e0.40	e0.41	e0.40	e0.36	0.89	0.86	0.67	0.62	0.34	0.19	0.20
20	0.35	e0.40	e0.41	e0.39	e0.37	0.91	0.82	0.67	0.60	0.38	0.17	0.26
21	0.35	e0.40	e0.40	e0.39	e0.37	0.91	0.85	0.66	0.58	0.35	0.17	0.28
22	0.36	e0.41	e0.39	e0.39	e0.37	0.92	0.83	0.69	0.55	0.30	0.16	0.28
23	0.35	e0.47	e0.38	e0.42	e0.38	0.96	0.83	0.68	0.54	0.30	0.17	0.28
24	0.35	e0.43	e0.38	e0.40	e0.38	0.92	0.80	0.71	0.53	0.27	0.20	0.26
25	0.36	e0.42	e0.39	e0.39	e0.38	0.84	0.77	0.70	0.51	0.24	0.16	0.25
26	0.37	e0.41	e0.40	e0.39	e0.39	0.86	0.76	0.68	0.48	0.21	0.16	0.24
27	0.37	e0.41	e0.40	e0.39	e0.42	0.74	0.78	0.61	0.49	0.23	0.17	0.22
28	0.38	e0.40	e0.44	e0.38	e0.47	0.69	0.78	0.59	0.50	0.22	0.17	0.25
29	0.37	e0.40	e0.42	e0.38	e0.45	0.68	0.81	0.59	0.49	0.19	0.15	0.30
30	e0.38	e0.40	e0.41	e0.37	–	0.68	0.81	0.56	0.42	0.17	0.14	0.30
31	e0.38	–	e0.40	e0.38	–	0.70	–	0.50	–	0.16	0.14	–
Total	10.20	12.03	12.42	12.19	10.94	21.58	28.92	21.96	17.05	8.93	4.98	6.90
Mean	0.33	0.40	0.40	0.39	0.38	0.70	0.96	0.71	0.57	0.29	0.16	0.23
Maximum	0.38	0.47	0.44	0.42	0.47	0.96	1.4	0.85	0.80	0.62	0.25	0.40
Minimum	0.23	0.38	0.38	0.37	0.35	0.44	0.73	0.50	0.42	0.16	0.09	0.12
Acre-foot	20	24	25	24	22	43	57	44	34	18	9.9	14

Table B2. Daily mean discharge values for the continual-recording gage Shingle Creek near Great Basin National Park boundary near Osceola, Nevada (gage station 10243640).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	0.75	e0.84	0.85	0.69	e0.68	e0.59	e0.67	1.0	3.1	1.2	0.89	0.66
2	0.77	e0.81	0.84	0.70	e0.67	e0.59	e0.68	1.0	3.1	1.2	0.88	0.68
3	0.77	e0.79	0.82	0.71	e0.67	e0.59	e0.69	1.0	3.1	1.1	0.86	0.67
4	0.76	e0.80	0.82	0.71	e0.66	e0.60	e0.70	0.97	2.9	1.1	0.78	0.67
5	0.76	e0.81	0.81	0.69	e0.66	e0.59	e0.72	0.96	2.8	1.1	0.75	0.72
6	0.75	e0.80	0.82	0.70	e0.65	e0.59	e0.73	0.98	2.6	1.1	0.75	0.71
7	0.74	e0.84	0.82	0.69	e0.65	e0.60	e0.74	1.0	2.5	1.1	0.73	0.69
8	0.72	e0.88	0.81	0.69	e0.64	e0.62	e0.76	1.1	2.4	1.1	0.73	0.71
9	0.71	e0.84	0.79	0.70	e0.64	e0.64	e0.79	1.1	2.3	1.1	0.72	0.74
10	0.70	e0.81	0.81	0.71	e0.63	e0.68	e0.81	1.1	2.2	1.0	0.72	0.76
11	0.70	e0.80	0.78	0.70	e0.63	e0.69	e0.82	1.1	2.1	0.98	0.71	0.75
12	0.74	e0.81	0.80	0.69	e0.62	e0.70	e0.81	1.2	2.0	0.96	0.71	0.74
13	0.74	e0.80	0.75	0.70	e0.61	e0.71	e0.83	1.4	1.9	0.96	0.70	0.73
14	0.73	e0.80	0.75	0.69	e0.61	e0.72	e0.86	1.4	1.9	0.96	0.70	0.75
15	0.72	0.80	0.75	0.69	e0.60	e0.72	e0.88	1.4	1.8	0.93	0.70	0.73
16	0.73	0.80	0.75	0.69	e0.60	e0.71	e0.90	1.4	1.8	0.93	0.78	0.70
17	0.74	0.80	0.77	0.69	e0.60	e0.70	e0.90	1.5	1.7	0.94	0.75	0.72
18	0.74	0.79	0.75	0.69	e0.59	e0.69	e0.91	1.4	1.6	0.97	0.70	0.74
19	0.74	0.80	0.73	0.69	e0.59	e0.68	e0.94	1.4	1.5	0.94	0.69	0.74
20	0.75	0.82	0.75	0.69	e0.59	e0.67	0.96	1.5	1.5	0.92	0.71	0.73
21	0.76	0.81	0.75	0.69	e0.58	e0.68	0.96	1.6	1.5	0.92	0.72	0.73
22	0.77	0.80	0.74	0.69	e0.58	e0.69	0.97	1.8	1.5	0.91	0.81	0.68
23	0.79	0.80	0.75	0.69	e0.58	e0.70	0.98	2.0	1.5	0.86	0.76	0.66
24	0.79	0.80	0.75	0.69	e0.59	e0.70	1.0	2.1	1.6	0.84	0.75	0.66
25	0.79	0.79	0.75	0.69	e0.60	e0.69	e1.0	2.2	1.5	0.87	0.71	0.64
26	e0.81	0.84	0.75	0.69	e0.59	e0.69	e1.0	2.2	1.4	0.86	0.72	0.61
27	e0.80	0.81	0.73	0.69	e0.58	e0.69	e1.0	2.4	1.4	0.83	0.69	0.62
28	e0.80	0.81	0.74	0.70	e0.58	e0.68	e1.0	2.6	1.4	0.81	0.65	0.64
29	e0.80	0.81	0.74	e0.69	–	e0.68	1.0	2.8	1.3	0.81	0.72	0.64
30	e0.80	0.83	0.71	e0.68	–	e0.67	1.0	3.0	1.2	0.81	0.67	0.66
31	e0.80	–	0.72	e0.68	–	e0.66	–	3.2	–	0.86	0.65	–
Total	23.47	24.34	23.90	21.49	17.27	20.61	26.01	49.81	59.1	29.97	22.81	20.88
Mean	0.76	0.81	0.77	0.69	0.62	0.66	0.87	1.61	1.97	0.97	0.74	0.70
Maximum	0.81	0.88	0.85	0.71	0.68	0.72	1.0	3.2	3.1	1.2	0.89	0.76
Minimum	0.70	0.79	0.71	0.68	0.58	0.59	0.67	0.96	1.2	0.81	0.65	0.61
Acre-foot	47	48	47	43	34	41	52	99	117	59	45	41

Table B2. Daily mean discharge values for the continual-recording gage Shingle Creek near Great Basin National Park boundary near Osceola, Nevada (gage station 10243640).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	0.67	e0.70	e0.64	0.54	0.47	0.45	0.80	0.94	e1.2	e0.84	0.78	0.54
2	0.70	e0.71	e0.63	0.55	0.49	0.47	1.1	0.98	e1.3	e0.83	0.80	0.55
3	0.71	e0.71	e0.63	0.52	0.51	0.47	1.3	1.1	e1.4	e0.82	0.75	0.75
4	0.68	e0.71	e0.62	0.52	0.52	0.48	1.1	1.1	e1.5	e0.81	0.72	0.63
5	0.68	e0.72	e0.62	0.52	0.48	0.48	1.0	1.2	e1.5	e0.80	0.71	0.58
6	0.68	e0.71	e0.61	0.53	0.46	0.47	1.1	1.2	e1.6	e0.79	0.66	0.57
7	0.69	e0.71	e0.61	0.54	0.47	0.49	1.2	1.2	e1.6	e0.78	0.64	0.57
8	0.69	e0.70	e0.62	0.53	0.46	0.53	1.3	1.3	e1.6	e0.78	0.63	0.55
9	0.70	e0.70	e0.62	0.53	0.45	0.57	1.2	1.4	e1.5	e0.77	0.62	0.55
10	0.71	e0.69	e0.61	0.53	0.45	0.57	1.1	1.4	e1.5	e0.77	0.63	0.55
11	0.73	e0.69	e0.60	0.53	0.45	0.57	1.0	1.5	e1.3	e0.76	0.63	0.60
12	0.72	e0.70	e0.59	0.53	0.45	0.58	1.0	1.5	e1.2	e0.75	0.62	0.57
13	0.72	e0.70	e0.59	0.53	0.46	0.60	0.98	1.4	e1.1	e0.75	0.63	0.55
14	0.73	e0.69	e0.58	0.54	0.48	0.60	0.97	1.4	e1.1	e0.74	0.62	0.55
15	0.73	e0.69	e0.58	0.53	0.45	0.60	0.93	e1.4	e1.1	e0.76	0.67	0.55
16	0.73	e0.68	e0.57	0.53	0.45	0.66	0.90	e1.4	e1.2	0.74	0.66	0.61
17	0.68	e0.68	e0.57	0.53	0.47	0.76	0.90	e1.3	e1.2	0.78	0.70	0.59
18	0.68	e0.67	e0.57	0.53	0.48	0.80	0.90	e1.3	e1.1	0.76	0.68	0.57
19	0.68	e0.68	e0.56	0.52	0.48	0.91	0.86	e1.3	e1.0	0.77	0.66	0.57
20	0.68	e0.68	e0.56	0.52	0.45	0.97	0.84	e1.3	e1.0	0.80	0.64	0.63
21	0.68	e0.67	e0.56	0.50	0.46	1.0	0.83	e1.3	e0.98	0.77	0.67	0.65
22	0.68	e0.66	e0.55	0.49	0.47	1.1	0.83	e1.3	e0.96	0.76	0.64	0.64
23	e0.67	e0.66	e0.55	0.52	0.48	1.1	0.81	e1.4	e0.94	0.78	0.62	0.63
24	e0.68	e0.65	e0.55	0.52	0.46	1.0	0.80	1.3	e0.92	0.78	0.65	0.59
25	e0.68	e0.66	e0.54	0.51	0.47	0.96	0.81	1.3	e0.91	0.76	0.61	0.59
26	e0.68	e0.65	e0.54	0.49	0.50	0.90	0.85	1.3	e0.90	0.76	0.58	0.58
27	e0.67	e0.64	e0.56	0.52	0.48	0.81	0.90	1.2	e0.88	0.78	0.59	0.57
28	e0.68	e0.65	e0.54	0.50	0.46	0.76	0.94	1.2	e0.87	0.75	0.58	0.61
29	e0.68	e0.66	e0.53	0.50	0.46	0.75	1.0	1.2	e0.86	0.73	0.56	0.60
30	e0.69	e0.65	e0.54	0.51	–	0.73	0.99	1.2	e0.85	0.72	0.55	0.60
31	e0.70	–	0.54	0.52	–	0.79	–	e1.2	–	0.71	0.55	–
Total	21.48	20.47	17.98	16.18	13.62	21.93	29.24	39.52	35.07	23.90	20.05	17.69
Mean	0.69	0.68	0.58	0.52	0.47	0.71	0.97	1.27	1.17	0.77	0.65	0.59
Maximum	0.73	0.72	0.64	0.55	0.52	1.1	1.3	1.5	1.6	0.84	0.80	0.75
Minimum	0.67	0.64	0.53	0.49	0.45	0.45	0.80	0.94	0.85	0.71	0.55	0.54
Acre-foot	43	41	36	32	27	43	58	78	70	47	40	35

Table B3. Daily mean discharge values for the continual-recording gage Lehman Creek near Baker, Nevada (gage station 10243260).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	2.7	e1.8	1.4	0.92	1.0	e0.95	1.2	1.6	24	e11	5.4	4.8
2	2.7	e1.8	1.3	0.92	1.1	e0.95	1.2	1.6	23	e10	5.2	5.4
3	2.8	e1.8	e1.3	0.96	e1.0	e0.95	1.2	1.6	23	10	5.2	5.3
4	2.8	e1.8	e1.3	0.93	e1.0	e0.95	1.4	1.6	23	9.8	5.1	5.3
5	2.6	1.8	e1.3	0.92	e0.90	e0.95	1.2	1.5	22	9.3	5.0	5.4
6	2.4	1.6	e1.2	0.90	e0.90	e0.95	1.1	1.5	21	9.4	4.9	5.2
7	2.8	1.5	e1.2	0.93	e0.95	e0.95	1.1	1.6	21	9.1	4.8	4.9
8	2.5	1.8	e1.2	0.99	e0.95	e0.95	1.2	1.6	21	8.7	4.7	4.9
9	2.4	e1.7	e1.2	0.96	e0.95	1.0	1.2	1.6	20	8.4	4.6	5.0
10	2.3	e1.7	e1.1	0.96	e0.95	1.1	1.2	1.6	20	8.4	4.5	5.0
11	2.2	1.7	e1.1	0.96	e0.95	1.2	1.2	1.6	21	7.9	4.4	4.9
12	2.1	1.7	e1.1	0.96	e0.95	1.2	1.3	1.6	20	7.3	4.3	4.8
13	2.1	1.8	e1.1	0.96	e0.95	1.2	1.3	1.7	19	7.1	4.5	4.8
14	2.1	1.7	e1.0	0.96	e0.95	1.3	1.3	1.9	18	6.8	4.4	e4.6
15	2.1	1.7	1.0	0.96	0.95	1.3	1.4	2.2	18	6.4	4.3	4.3
16	2.0	1.7	e1.1	e1.0	0.96	1.3	1.3	2.8	17	6.1	4.8	4.2
17	2.0	1.7	e1.1	e1.0	0.95	1.3	1.3	3.4	17	6.3	4.6	4.2
18	1.9	1.8	e1.1	e1.0	e0.95	1.2	1.3	3.3	16	6.1	4.4	4.2
19	1.9	1.7	e1.1	e1.0	e0.95	1.2	1.4	3.5	16	5.8	4.4	4.3
20	1.9	1.6	e1.1	e1.0	e0.95	1.2	1.3	3.6	15	5.6	4.5	4.3
21	1.9	1.6	e1.1	1.0	e0.95	1.2	1.4	4.0	15	5.8	4.6	4.1
22	1.8	1.6	e1.1	0.99	e0.95	1.2	1.3	5.0	14	6.2	5.2	3.9
23	1.8	1.6	e1.1	0.99	e0.95	1.2	1.4	6.0	14	6.1	4.9	3.7
24	1.8	1.6	e1.1	0.99	e0.95	1.2	1.3	7.1	14	6.0	4.9	3.6
25	1.8	e1.6	e1.1	0.99	e0.95	1.2	1.4	8.4	13	6.0	4.8	3.5
26	1.9	e1.5	e1.1	1.0	e0.95	1.2	1.4	10	13	5.9	4.9	3.5
27	1.8	e1.5	e1.1	1.0	e0.95	1.2	1.5	9.1	12	5.7	4.9	3.3
28	1.8	1.4	1.1	1.0	e0.95	1.1	1.4	12	12	5.3	4.8	3.2
29	1.7	e1.5	0.93	1.0	–	1.2	1.5	15	11	5.3	4.7	3.1
30	1.6	e1.5	0.92	1.0	–	1.1	1.7	20	e11	5.3	4.8	3.1
31	e1.7	–	0.94	1.0	–	1.1	–	24	–	5.5	4.7	–
Total	65.9	49.8	34.89	30.15	26.81	35	39.4	162	524	222.6	147.2	130.8
Mean	2.13	1.66	1.13	0.97	0.96	1.13	1.31	5.23	17.5	7.18	4.75	4.36
Maximum	2.8	1.8	1.4	1.0	1.1	1.3	1.7	24	24	11	5.4	5.4
Minimum	1.6	1.4	0.92	0.90	0.90	0.95	1.1	1.5	11	5.3	4.3	3.1
Acre-foot	131	99	69	60	53	69	78	321	1,040	442	292	259

Table B3. Daily mean discharge values for the continual-recording gage Lehman Creek near Baker, Nevada (gage station 10243260).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	3.1	2.2	1.8	e1.6	1.5	e1.1	1.5	3.0	8.8	8.0	5.0	3.1
2	3.1	2.1	1.8	e1.6	e1.2	e1.1	1.9	3.5	9.1	8.0	5.2	3.1
3	3.1	2.2	1.8	e1.5	e1.2	1.1	2.5	4.2	9.5	8.0	4.9	3.7
4	3.0	2.1	1.8	e1.5	e1.2	1.0	2.1	5.1	11.0	7.8	4.9	3.3
5	2.8	2.2	1.8	e1.5	e1.2	1.1	2.0	6.8	9.9	7.7	5.1	3.3
6	2.8	2.2	1.8	e1.4	e1.2	1.1	2.1	7.0	9.7	7.7	4.9	3.1
7	2.7	2.1	1.7	e1.4	e1.2	1.1	2.2	7.3	9.6	7.6	4.9	3.0
8	2.6	2.0	1.7	e1.4	e1.2	1.1	2.2	7.7	8.5	7.5	4.9	3.0
9	2.6	2.0	e1.7	e1.4	e1.2	1.1	2.1	8.0	7.9	7.4	4.7	3.0
10	2.6	2.0	e1.7	e1.5	e1.3	1.2	2.0	8.2	8.9	7.2	4.7	3.0
11	2.6	1.9	e1.7	e1.5	e1.3	1.1	1.9	8.2	8.6	7.3	4.6	3.0
12	2.6	1.9	e1.7	1.6	e1.3	1.2	1.8	8.2	8.4	7.1	4.6	3.0
13	2.5	2.0	e1.7	1.5	e1.3	1.2	1.8	8.0	8.0	7.0	4.5	2.9
14	2.5	1.9	e1.6	1.5	e1.3	1.3	1.9	7.8	7.5	7.1	4.0	2.8
15	2.5	1.9	e1.6	1.5	e1.3	1.3	1.9	7.6	7.3	7.4	4.0	2.8
16	2.4	1.9	e1.6	1.5	e1.3	1.3	1.8	7.5	7.0	7.2	3.7	2.7
17	2.3	1.9	e1.6	e1.5	1.4	1.3	1.8	7.5	7.1	6.9	3.8	2.7
18	2.4	1.9	e1.6	e1.5	1.2	1.3	1.9	7.7	6.7	6.6	4.1	2.7
19	2.3	1.9	e1.6	e1.5	1.1	1.4	1.8	8.0	6.5	6.7	4.2	2.8
20	2.3	1.9	1.8	1.5	1.0	1.4	1.7	8.1	6.2	6.7	4.1	2.9
21	2.4	1.9	1.6	1.5	1.1	1.5	1.7	8.2	6.1	6.7	4.1	2.8
22	2.1	2.1	1.6	e1.5	1.1	1.5	1.7	8.5	6.1	7.3	3.9	2.8
23	2.1	e1.8	e1.6	e1.6	1.2	1.5	1.7	8.4	5.8	6.6	4.0	2.6
24	2.1	e1.8	1.6	e1.6	1.2	1.5	1.6	8.7	6.1	6.2	3.8	2.5
25	2.1	e1.8	1.8	1.6	1.2	1.5	1.6	8.8	6.7	6.1	3.7	2.4
26	2.1	e1.8	e1.7	e1.6	1.2	1.5	1.8	8.6	6.8	5.9	3.7	2.4
27	2.1	1.9	e1.6	e1.6	1.3	1.3	2.1	8.7	7.4	5.8	3.6	2.3
28	2.1	1.9	e1.6	e1.7	e1.2	1.3	2.6	8.6	7.7	5.6	3.5	2.4
29	2.1	2.0	e1.6	1.7	e1.2	1.2	2.9	8.8	8.1	5.8	3.3	2.4
30	2.0	1.9	e1.7	1.7	–	1.2	2.9	8.6	8.2	6.2	3.3	2.4
31	2.1	–	e1.7	1.6	–	1.3	–	8.4	–	5.6	3.2	–
Total	76.1	59.1	52.2	47.6	35.6	39.1	59.5	233.7	235.2	214.7	130.9	84.9
Mean	2.45	1.97	1.68	1.54	1.23	1.26	1.98	7.54	7.84	6.93	4.22	2.83
Maximum	3.1	2.2	1.8	1.7	1.5	1.5	2.9	8.8	11	8.0	5.2	3.7
Minimum	2.0	1.8	1.6	1.4	1.0	1.0	1.5	3.0	5.8	5.6	3.2	2.3
Acre-foot	151	117	104	94	71	78	118	464	467	426	260	168

Table B4. Daily mean discharge values for the continual-recording gage Rowland Spring at Great Basin National Park boundary near Baker, Nevada (gage station 10243265).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	e2.2	e1.5	2.1	1.6	1.5	1.4	1.7	2.1	3.3	3.6	3.1	2.9
2	e2.1	e1.6	2.1	1.7	1.5	1.4	1.7	2.2	3.4	3.6	3.1	2.9
3	e2.0	e1.6	2.0	1.7	1.5	1.4	1.7	2.2	3.4	3.6	3.2	2.9
4	e1.9	e1.8	1.8	1.7	1.5	1.5	1.7	2.1	3.4	3.6	3.2	2.9
5	e2.0	e1.7	1.5	1.9	1.6	1.4	1.8	2.2	3.4	3.6	3.2	2.9
6	e2.3	e2.0	1.9	1.9	1.7	1.4	1.8	2.2	3.4	3.6	3.2	2.9
7	e2.4	e2.2	2.0	2.0	1.7	1.4	1.9	2.2	3.5	3.6	3.2	2.9
8	e2.4	e2.2	1.5	2.0	1.6	1.3	1.8	2.2	3.5	3.6	3.2	2.9
9	e2.4	e2.3	1.8	2.0	1.6	1.3	1.8	2.2	3.5	3.6	3.2	2.8
10	e2.3	e2.5	2.2	1.9	1.5	1.3	1.8	2.2	3.5	3.6	3.2	2.8
11	e2.2	e2.6	2.1	1.9	1.5	1.3	1.8	2.2	3.5	3.6	3.2	2.8
12	e2.2	e2.5	1.7	2.0	1.3	1.4	1.8	2.2	3.5	3.6	3.2	2.8
13	e2.2	2.4	1.9	2.1	1.2	1.5	1.9	2.3	3.5	3.6	3.2	2.8
14	e2.2	2.3	e1.6	2.2	1.5	1.6	1.9	2.3	3.5	3.6	3.2	2.8
15	e2.3	2.3	1.3	1.9	1.5	1.8	2.0	2.3	3.5	3.7	3.2	2.8
16	e2.2	2.3	e1.4	1.7	1.5	1.8	2.0	2.4	3.5	3.6	3.2	2.9
17	e2.3	2.4	1.5	1.7	1.4	1.8	2.1	2.4	3.5	3.6	3.3	3.0
18	e2.2	e2.5	1.4	1.8	1.4	1.9	2.0	2.5	3.5	3.6	3.3	2.9
19	e2.1	e2.4	1.4	1.7	1.3	1.9	2.0	2.6	3.5	3.6	3.2	2.9
20	e2.0	e2.3	1.5	1.5	1.3	1.9	2.0	2.6	3.5	3.6	3.3	2.9
21	e1.9	e2.2	1.5	1.6	1.4	1.8	1.9	2.7	3.6	3.5	3.3	2.8
22	e1.8	2.4	1.5	1.5	1.4	1.7	1.9	2.7	3.6	3.5	3.2	2.8
23	e1.6	2.9	1.5	1.5	1.4	1.8	1.9	2.7	3.6	3.5	3.2	2.8
24	e1.5	2.8	1.4	1.6	1.4	1.8	2.0	2.6	3.6	3.3	3.1	3.0
25	e1.6	2.5	1.5	1.6	1.5	1.8	2.0	2.6	3.5	3.1	3.1	2.9
26	e1.5	2.6	1.5	1.5	1.5	1.8	2.0	2.8	3.6	3.1	3.1	3.0
27	e1.4	e2.7	1.5	1.6	1.5	1.7	2.0	2.9	3.6	3.1	3.1	2.8
28	e1.4	e2.2	1.6	1.5	1.5	1.7	2.1	3.0	3.6	3.1	3.1	2.8
29	e1.5	e2.1	1.6	1.5	–	1.6	2.1	3.1	3.6	3.1	3.1	2.8
30	e1.4	2.3	1.6	1.5	–	1.6	2.1	3.2	3.6	3.1	3.0	2.8
31	e1.3	–	1.7	1.5	–	1.7	–	3.3	–	3.1	2.9	–
Total	60.8	68.1	51.6	53.8	41.2	49.7	57.2	77.2	105.2	107.6	98.3	85.9
Mean	1.96	2.27	1.66	1.74	1.47	1.60	1.91	2.49	3.51	3.47	3.17	2.86
Maximum	2.4	2.9	2.2	2.2	1.7	1.9	2.1	3.3	3.6	3.7	3.3	3.0
Minimum	1.3	1.5	1.3	1.5	1.2	1.3	1.7	2.1	3.3	3.1	2.9	2.8
Acre-foot	121	135	102	107	82	99	113	153	209	213	195	170

Table B4. Daily mean discharge values for the continual-recording gage Rowland Spring at Great Basin National Park boundary near Baker, Nevada (gage station 10243265).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	2.8	1.7	1.5	1.8	0.85	1.3	2.1	2.4	3.3	e3.5	3.2	2.6
2	2.8	1.7	1.4	1.8	0.87	1.3	2.1	2.4	3.3	e3.4	3.2	2.6
3	2.8	1.7	1.4	1.7	0.86	1.3	2.1	2.4	3.3	e3.4	3.2	2.6
4	2.8	1.6	1.3	1.7	0.84	1.3	2.2	2.5	3.2	e3.4	3.2	2.6
5	2.8	1.6	1.3	1.7	0.88	1.3	2.3	2.5	3.3	e3.3	3.1	2.6
6	2.8	1.6	1.3	1.7	0.88	1.3	2.3	2.6	3.3	e3.3	3.1	2.6
7	2.7	1.5	1.2	1.7	0.91	1.3	2.3	2.8	3.3	e3.3	3.1	2.6
8	2.7	1.5	1.2	1.7	0.89	1.3	2.2	2.9	3.3	e3.3	3.1	2.6
9	2.7	1.5	1.2	1.6	0.89	1.5	2.3	3.0	3.3	e3.2	3.1	2.6
10	2.7	1.5	1.3	1.6	0.86	1.5	2.3	3.0	3.4	e3.2	3.1	2.5
11	2.6	1.4	1.3	1.6	0.84	1.4	2.2	3.0	3.4	e3.2	3.1	2.4
12	2.5	1.3	1.3	1.7	0.85	1.4	2.2	3.0	3.4	e3.2	3.1	2.4
13	2.5	1.3	1.3	1.6	0.84	1.5	2.2	3.0	3.4	3.4	3.0	2.4
14	2.5	1.2	1.3	1.6	0.80	1.6	2.2	3.1	3.4	3.4	3.0	2.4
15	2.5	1.2	1.3	1.6	0.76	1.6	2.2	3.1	3.4	3.3	3.0	2.4
16	2.4	1.2	1.3	1.5	0.76	1.7	2.2	3.1	3.4	3.3	3.0	2.4
17	2.4	1.1	1.3	1.5	0.75	1.7	2.3	3.0	3.4	3.3	3.0	2.4
18	2.4	1.1	1.3	1.4	0.81	1.8	2.3	3.1	3.4	3.3	3.0	2.4
19	2.4	1.1	1.3	1.3	0.92	1.8	2.3	3.1	3.4	3.2	2.9	2.4
20	2.4	1.0	1.2	1.3	1.0	1.8	2.3	3.1	3.4	3.2	2.8	2.4
21	2.3	1.0	1.2	1.3	1.1	1.9	2.3	3.2	3.4	3.2	2.8	2.3
22	2.2	1.0	1.2	1.3	1.1	2.0	2.3	3.2	3.4	3.2	2.8	2.3
23	2.2	1.1	1.1	1.2	1.2	2.1	2.3	3.3	3.4	3.2	2.8	2.3
24	2.1	1.3	1.1	1.1	1.2	2.2	2.3	3.3	3.4	3.3	2.8	2.3
25	2.1	1.5	1.1	0.96	1.2	2.2	2.4	3.3	3.4	3.3	2.7	2.3
26	2.0	1.7	1.3	0.91	1.3	2.2	2.4	3.3	3.4	3.4	2.7	2.3
27	2.0	1.8	1.7	0.85	1.3	2.2	2.4	3.3	3.4	3.2	2.7	2.3
28	1.9	1.8	1.6	0.82	1.2	2.2	2.3	3.3	e3.5	3.2	2.7	2.2
29	1.9	1.7	1.6	0.79	1.2	2.1	2.3	3.3	e3.5	3.2	2.7	2.2
30	1.9	1.5	1.6	0.80	–	2.1	2.3	3.2	e3.5	3.2	2.7	2.2
31	1.8	–	1.7	0.87	–	2.1	–	3.2	–	3.2	2.6	–
Total	74.6	42.2	41.2	43.0	27.86	53.0	67.9	93.0	101.3	101.7	91.3	72.6
Mean	2.41	1.41	1.33	1.39	0.96	1.71	2.26	3.0	3.38	3.28	2.95	2.42
Maximum	2.8	1.8	1.7	1.8	1.3	2.2	2.4	3.3	3.5	3.5	3.2	2.6
Minimum	1.8	1.0	1.1	0.79	0.75	1.3	2.1	2.4	3.2	3.2	2.6	2.2
Acre-foot	148	84	82	85	55	105	135	184	201	202	181	144

Table B5. Daily mean discharge values for the continual-recording gage Baker Creek at Narrows near Baker, Nevada (gage station 10243240).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	e2.4	e2.7	e1.7	e1.5	e1.1	e1.0	e1.2	2.6	95	11	2.9	2.5
2	e2.5	e2.4	e1.7	e1.5	e1.1	e1.0	e1.2	2.7	87	10	2.8	2.5
3	e2.4	e2.2	e1.6	e1.5	e1.1	e1.0	e1.2	2.5	71	9.8	2.7	2.3
4	e2.4	e2.1	e1.7	e1.4	e1.1	e1.0	e1.2	2.5	57	9.4	2.6	2.1
5	e2.4	e2.0	e1.7	e1.4	e1.1	e0.98	e1.3	2.5	50	8.8	2.5	2.5
6	e2.3	e1.9	e1.6	e1.4	e1.1	e0.96	e1.3	2.6	45	8.3	2.4	2.4
7	e2.3	e1.8	e1.6	e1.5	e1.1	e0.96	e1.3	e2.4	42	7.8	2.3	2.1
8	e2.3	e2.0	e1.6	1.5	e1.0	e0.95	1.4	e2.6	40	7.3	2.2	2.1
9	2.2	e2.5	e1.5	1.5	e1.0	0.95	1.3	2.7	37	6.9	2.1	2.2
10	2.3	e2.0	e1.5	1.5	e1.0	1.0	1.4	2.8	36	6.4	2.1	2.2
11	2.5	e1.8	e1.5	1.5	e0.98	1.1	1.5	2.8	33	5.9	2.0	2.2
12	2.5	e1.7	e1.5	1.5	e0.96	1.2	1.7	2.7	30	5.4	2.0	2.1
13	2.5	e1.7	e1.4	1.4	e0.95	1.4	1.8	3.0	27	5.0	1.9	2.2
14	2.6	e1.7	e1.4	1.4	e0.96	1.7	2.1	3.3	25	4.6	2.0	2.2
15	2.6	e1.7	e1.4	1.4	e0.97	1.8	1.9	3.7	23	4.1	1.9	2.1
16	2.6	e1.6	e1.4	e1.4	e0.96	1.6	1.9	4.7	22	3.8	2.4	2.0
17	e2.7	e1.7	e1.4	e1.4	e0.95	1.4	1.9	5.7	20	3.6	2.4	2.0
18	e2.7	e1.8	e1.3	e1.4	e0.94	1.4	2.1	6.4	19	3.4	2.1	2.1
19	e2.8	e1.7	e1.3	e1.4	e0.94	1.4	2.0	7.5	18	3.4	2.0	2.0
20	e2.9	e1.7	e1.3	e1.4	e0.94	1.4	2.1	9.2	18	3.6	2.2	1.9
21	e2.9	e1.6	e1.3	e1.3	e0.96	1.2	2.0	12	17	3.4	2.2	1.9
22	e3.0	e1.7	e1.4	e1.3	e1.0	1.3	2.0	16	15	3.2	2.7	1.9
23	e3.0	e1.7	e1.4	e1.3	e1.1	1.3	1.9	20	17	3.1	2.4	1.8
24	e3.1	e1.7	e1.5	e1.3	e1.0	1.3	2.0	25	17	2.9	2.4	1.8
25	e3.0	e1.8	e1.5	e1.2	e1.0	1.3	2.0	32	14	2.9	2.4	1.8
26	e2.9	e1.8	e1.5	e1.2	e0.97	e1.3	2.1	45	13	2.9	2.3	1.8
27	e2.8	e1.7	e1.5	e1.2	e0.94	e1.3	2.1	59	12	2.8	2.3	1.8
28	e2.7	e1.7	e1.4	e1.3	e0.96	e1.2	2.3	85	12	2.6	2.3	1.7
29	e2.6	e1.7	e1.4	e1.2	–	1.3	2.6	97	12	2.4	2.4	1.7
30	e2.5	e1.8	e1.4	e1.2	–	1.2	2.5	114	11	2.3	2.4	1.7
31	e2.9	–	e1.5	e1.1	–	1.2	–	116	–	3.0	2.3	–
Total	81.3	55.9	45.9	42.5	28.18	38.1	53.3	695.9	935	160	71.6	61.6
Mean	2.62	1.86	1.48	1.37	1.01	1.23	1.78	22.4	31.2	5.16	2.31	2.05
Maximum	3.1	2.7	1.7	1.5	1.1	1.8	2.6	116	95	11	2.9	2.5
Minimum	2.2	1.6	1.3	1.1	0.94	0.95	1.2	2.4	11	2.3	1.9	1.7
Acre-foot	161	111	91	84	56	76	106	1,380	1,850	317	142	122

Table B5. Daily mean discharge values for the continual-recording gage Baker Creek at Narrows near Baker, Nevada (gage station 10243240).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	1.7	e2.1	e1.6	e1.4	e1.2	e1.1	3.3	6.1	15	8.8	3.8	2.1
2	1.8	e2.1	e1.6	e1.4	e1.2	e1.1	4.2	6.9	17	8.5	3.8	2.1
3	1.9	e2.0	e1.5	e1.4	e1.1	e1.2	5.5	8.4	19	8.1	3.5	3.1
4	1.9	e2.0	e1.5	e1.3	e1.1	1.4	4.6	11	22	7.9	3.3	2.8
5	1.9	e2.0	e1.6	e1.3	e1.1	1.4	4.4	14	24	7.8	3.2	2.7
6	1.9	e2.0	e1.6	e1.3	e1.1	1.5	4.6	16	25	7.3	3.1	2.6
7	1.8	e2.0	e1.6	e1.3	e1.1	1.5	4.7	18	25	6.8	3.1	2.4
8	1.8	e1.9	e1.7	e1.4	e1.0	1.6	4.9	18	25	6.6	3.1	2.4
9	1.8	e1.9	e1.7	e1.4	e1.0	1.7	4.7	19	24	6.2	3.0	2.4
10	1.8	e1.9	e1.7	e1.4	e1.0	1.8	4.8	21	21	5.9	2.9	2.4
11	2.0	e1.9	e1.6	e1.4	e1.0	1.8	4.7	22	19	5.6	2.8	2.5
12	1.9	e1.9	e1.6	e1.4	e0.98	1.9	4.7	21	17	5.4	2.8	2.6
13	1.9	e2.1	e1.5	e1.3	e0.98	1.9	4.8	20	15	5.1	2.8	2.5
14	1.9	e2.0	e1.5	e1.3	e0.96	2.1	4.8	18	15	5.0	2.9	2.5
15	1.9	e1.9	e1.5	e1.3	e0.96	2.2	4.8	17	15	5.8	2.9	2.5
16	1.9	e1.9	e1.5	e1.3	e0.96	2.2	4.8	17	15	6.1	2.8	2.5
17	1.9	e1.8	e1.6	e1.3	e0.95	2.3	4.9	17	17	5.7	2.8	2.4
18	e2.1	e1.8	e1.6	e1.3	e0.95	2.4	5.0	18	18	5.3	2.7	2.4
19	e2.1	e1.8	e1.5	e1.2	e0.95	2.8	4.9	18	16	5.6	2.7	2.6
20	e2.1	e1.7	e1.5	e1.2	e0.95	2.9	4.7	18	16	5.3	2.7	2.7
21	e2.2	e1.8	e1.5	e1.2	e0.96	3.1	4.6	18	15	5.0	2.8	2.8
22	e2.2	e1.9	e1.4	e1.2	e0.98	3.3	4.5	18	14	4.9	2.5	2.8
23	e2.2	e1.8	e1.4	e1.3	e1.0	3.5	4.3	17	13	4.9	2.5	2.7
24	e2.2	e1.7	e1.4	e1.3	e1.0	3.5	4.1	17	12	4.7	2.8	2.6
25	e2.2	e1.7	e1.4	e1.2	e1.0	3.4	4.1	17	12	4.5	2.5	2.6
26	e2.2	e1.7	e1.4	e1.2	e1.0	3.5	4.1	16	12	4.4	2.4	2.5
27	e2.2	e1.6	e1.5	e1.2	e1.1	3.3	4.2	15	11	4.3	2.5	2.5
28	e2.1	e1.6	e1.7	e1.2	e1.2	3.2	4.6	16	11	4.1	2.4	2.8
29	e2.1	e1.6	e1.6	e1.1	e1.1	3.1	5.3	16	10	3.9	2.3	2.8
30	e2.1	e1.6	e1.5	e1.2	–	3.2	5.6	16	9.3	3.7	2.2	2.7
31	e2.1	–	e1.5	e1.3	–	3.2	–	15	–	3.6	2.2	–
Total	61.8	55.7	47.8	40	29.88	73.1	139.2	505.4	499.3	176.8	87.8	77
Mean	1.99	1.86	1.54	1.29	1.03	2.36	4.64	16.3	16.6	5.7	2.83	2.57
Maximum	2.2	2.1	1.7	1.4	1.2	3.5	5.6	22	25	8.8	3.8	3.1
Minimum	1.7	1.6	1.4	1.1	0.95	1.1	3.3	6.1	9.3	3.6	2.2	2.1
Acre-foot	123	110	95	79	59	145	276	1,000	990	351	174	153

Table B6. Daily mean discharge values for the continual-recording gage Snake Creek above pipeline near Baker, Nevada (gage station 10243230).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	1.2	e1.3	e1.0	0.91	e0.81	e0.75	e1.1	1.8	40	6.3	2.5	1.3
2	1.1	e1.3	e1.0	0.93	e0.80	e0.76	e1.1	1.9	36	6.1	2.3	1.3
3	1.1	e1.3	e1.0	0.95	e0.80	e0.78	e1.2	2.0	31	5.9	2.2	1.2
4	1.1	e1.2	e0.98	0.96	e0.84	e0.80	e1.1	2.0	27	5.7	2.2	1.2
5	1.1	e1.2	e0.98	0.98	e0.80	0.83	e1.1	1.9	23	5.5	2.0	1.2
6	1.1	e1.2	e0.98	0.93	e0.80	0.85	e1.1	1.9	20	5.4	1.9	1.2
7	1.1	e1.2	e0.96	0.93	e0.80	0.87	e1.2	2.0	18	5.3	1.9	1.1
8	1.1	e1.7	e0.96	0.96	e0.86	0.89	e1.2	1.8	18	5.2	1.8	1.1
9	1.0	e1.4	e0.95	0.99	e0.84	0.91	1.3	2.5	17	5.1	1.7	1.2
10	0.95	e1.3	e0.95	1.0	e0.81	0.99	1.4	2.0	16	4.9	1.7	1.2
11	0.95	1.2	e0.95	0.99	e0.80	1.1	1.6	2.0	16	4.8	1.6	1.2
12	1.0	e1.2	e0.94	0.97	e0.78	1.1	1.7	2.0	14	4.6	1.6	1.2
13	1.0	1.2	e0.94	0.97	e0.77	1.2	1.8	2.1	13	4.4	1.5	1.2
14	e1.0	1.2	e0.94	0.97	e0.76	1.3	1.7	2.2	12	4.3	1.5	1.2
15	e1.1	1.2	e0.92	0.96	e0.76	1.3	2.0	2.3	12	4.1	1.5	1.1
16	e1.1	e1.1	e0.92	0.94	e0.75	1.2	1.8	2.3	11	3.9	2.0	1.1
17	e1.2	e1.1	e0.94	e0.95	e0.75	1.1	1.4	2.4	11	3.8	1.7	1.1
18	e1.2	e1.1	e0.94	e0.94	e0.74	1.0	1.4	2.3	10	3.7	1.5	1.2
19	e1.3	1.1	e0.95	e0.92	e0.74	1.0	1.4	2.1	9.8	3.6	1.4	1.2
20	e1.3	1.1	e0.94	e0.90	e0.74	1.1	1.4	2.1	9.5	3.5	1.5	1.1
21	e1.3	1.1	e0.94	e0.89	e0.74	1.0	1.5	2.1	9.2	3.5	1.5	1.1
22	e1.3	1.1	e0.92	e0.88	e0.75	1.1	1.4	2.0	8.9	3.3	1.8	1.1
23	e1.4	e1.1	e0.90	e0.87	e0.75	1.2	1.5	2.5	9.2	3.3	1.5	0.96
24	e1.4	e1.1	e0.89	e0.87	e0.77	1.1	1.5	3.3	9.4	3.0	1.4	0.93
25	e1.4	e1.0	e0.88	e0.86	e0.77	e1.1	1.7	4.2	8.5	2.9	1.4	0.93
26	e1.4	e1.0	e0.88	e0.86	e0.76	e1.0	1.7	7.7	7.8	2.9	1.4	0.93
27	e1.3	e1.0	e0.86	e0.85	e0.76	e1.0	1.7	15	7.4	2.8	1.3	0.93
28	e1.3	e1.0	e0.86	e0.84	e0.75	e0.98	1.7	22	7.1	2.6	1.3	0.92
29	e1.3	e1.0	0.85	e0.83	–	e0.97	1.7	28	6.7	2.5	1.3	0.92
30	e1.3	e1.0	0.86	e0.82	–	e0.98	1.7	38	6.5	2.4	1.3	0.93
31	e1.4	–	0.92	e0.82	–	e1.0	–	46	–	2.4	1.3	–
Total	36.8	35.0	28.9	28.44	21.8	31.26	44.1	212.4	445	127.7	51.5	33.25
Mean	1.19	1.17	0.93	0.92	0.78	1.01	1.47	6.85	14.8	4.12	1.66	1.11
Maximum	1.4	1.7	1.0	1.0	0.86	1.3	2.0	46	40	6.3	2.5	1.3
Minimum	0.95	1.0	0.85	0.82	0.74	0.75	1.1	1.8	6.5	2.4	1.3	0.92
Acre-foot	73	69	57	56	43	62	87	421	883	253	102	66

Table B6. Daily mean discharge values for the continual-recording gage Snake Creek above pipeline near Baker, Nevada (gage station 10243230).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	0.9	e1.3	e1.0	e0.97	e0.80	e0.76	1.4	1.8	7.2	6.0	1.9	0.88
2	1.0	e1.3	e1.0	e0.96	e0.82	e0.76	1.8	1.8	7.1	5.8	2.0	0.87
3	1.1	e1.3	e1.0	e0.94	e0.84	e0.75	2.2	1.8	7.1	5.7	1.8	1.5
4	1.1	e1.3	e1.1	e0.93	e0.84	e0.80	1.8	1.8	7.9	5.6	1.6	1.6
5	1.1	e1.3	e1.1	e0.90	e0.82	e0.90	1.6	1.9	9.2	5.3	1.6	1.4
6	1.1	e1.2	e1.1	e0.90	e0.83	e0.98	1.9	3.2	10	5.1	1.5	1.3
7	1.1	e1.2	e1.1	e0.90	e0.83	1.0	2.0	3.7	11	4.8	1.5	1.2
8	1.1	e1.2	e1.1	e0.94	e0.81	1.1	2.3	4.2	11	4.7	1.5	1.2
9	1.0	e1.2	e1.1	e0.96	e0.79	1.2	1.9	4.6	11	4.5	1.4	1.1
10	1.1	e1.2	e1.1	e0.96	e0.78	1.2	1.7	5.2	11	4.3	1.3	1.1
11	1.2	e1.2	e1.1	e0.95	e0.78	1.1	1.6	5.9	11	4.1	1.3	1.2
12	1.2	e1.3	e1.1	e0.94	e0.77	1.1	1.6	6.4	10	4.0	1.3	1.2
13	e1.3	e1.3	e1.0	e0.93	e0.79	1.2	1.6	6.7	9.8	3.8	1.2	1.1
14	e1.3	e1.3	e1.0	e0.92	e0.79	1.3	1.6	6.8	9.3	3.7	1.5	1.1
15	e1.3	e1.2	e1.0	e0.90	e0.78	1.3	1.6	6.8	8.8	3.9	1.4	1.2
16	e1.3	e1.2	e1.0	e0.90	e0.77	1.3	1.6	6.8	8.9	3.8	1.3	1.1
17	e1.3	e1.2	e1.1	e0.88	e0.75	1.4	1.6	6.8	11	3.6	1.3	1.1
18	e1.3	1.2	e1.0	e0.88	e0.72	1.4	1.7	6.7	8.7	3.3	1.3	1.1
19	e1.3	1.2	e1.0	e0.87	e0.71	1.7	1.7	6.8	7.5	3.3	1.3	1.3
20	e1.3	e1.2	e1.0	e0.86	e0.70	1.8	1.6	7.1	7.2	3.1	1.2	1.4
21	1.2	e1.1	1.0	e0.86	e0.73	1.9	1.7	7.4	7.1	2.9	1.2	1.5
22	1.2	e1.1	1.0	e0.86	e0.73	2.0	1.7	7.8	7.0	2.9	1.1	1.5
23	1.1	e1.1	1.0	e0.84	e0.73	2.3	1.7	7.8	6.9	2.8	1.1	1.4
24	1.2	e1.1	e0.98	e0.90	e0.74	1.9	1.8	8.0	6.8	2.7	1.3	1.3
25	1.2	e1.1	e0.98	e0.84	e0.76	1.8	1.8	8.2	6.8	2.6	1.1	1.3
26	1.2	e1.1	e0.97	e0.83	e0.78	1.7	1.8	7.9	6.7	2.4	1.0	1.2
27	1.2	e1.1	e0.96	e0.81	e0.79	1.4	1.8	7.7	6.6	2.5	1.1	1.2
28	1.2	e1.1	e0.95	e0.80	e0.78	1.3	1.9	7.7	6.5	2.3	1.0	1.5
29	1.2	e1.1	e0.96	e0.82	e0.76	1.4	1.9	7.6	6.3	2.1	0.99	1.6
30	e1.3	e1.0	e0.98	e0.88	–	1.3	1.9	7.3	6.1	1.9	0.96	1.4
31	e1.3	–	e0.98	e0.84	–	1.5	–	7.2	–	1.8	0.91	–
Total	36.74	35.7	31.76	27.67	22.52	41.55	52.8	181.4	251.5	115.3	40.96	37.85
Mean	1.19	1.19	1.02	0.89	0.78	1.34	1.76	5.85	8.38	3.72	1.32	1.26
Maximum	1.3	1.3	1.1	0.97	0.84	2.3	2.3	8.2	11	6.0	2.0	1.6
Minimum	0.94	1.0	0.95	0.8	0.7	0.75	1.4	1.8	6.1	1.8	0.91	0.87
Acre-foot	73	71	63	55	45	82	105	360	499	229	81	75

Table B7. Daily mean discharge values for the continual-recording gage Snake Creek at Great Basin National Park boundary near Baker, Nevada (gage station 10243232).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	0.09	0.06	0.03	0.04	0.00	0.00	0.00	0.06	16	6.5	1.0	0.01
2	0.28	0.04	0.04	0.04	0.00	0.00	0.00	0.06	16	6.1	0.92	0.00
3	0.23	0.03	0.06	0.02	0.00	0.00	0.00	0.09	17	4.8	0.82	0.00
4	0.19	0.03	0.08	0.01	0.00	0.00	0.00	0.09	15	5.7	0.80	0.00
5	0.18	0.03	0.08	e0.00	0.00	0.00	0.00	0.09	14	5.7	0.68	0.00
6	0.14	0.03	0.09	e0.00	0.00	0.00	0.00	0.10	14	5.3	0.56	0.00
7	0.12	0.03	0.09	e0.00	0.00	0.00	0.00	0.10	13	5.3	0.43	0.00
8	0.10	0.27	0.05	e0.00	0.00	0.00	0.00	0.18	13	4.9	0.31	0.00
9	0.08	1.60	0.07	0.00	0.00	0.00	0.00	0.23	13	4.0	0.22	0.00
10	0.06	0.76	0.11	0.00	0.00	0.00	0.00	0.30	13	3.5	0.18	0.00
11	0.05	0.61	0.10	0.00	0.00	0.00	0.00	0.32	14	3.8	0.14	0.00
12	0.06	0.49	0.09	e0.00	0.00	0.00	0.00	0.35	12	3.4	0.12	0.00
13	0.09	0.42	0.08	e0.00	0.00	0.00	0.00	0.54	11	3.3	0.09	0.00
14	0.08	0.35	0.07	e0.00	0.00	0.00	0.00	0.73	10	3.2	0.08	0.00
15	0.07	0.31	0.06	0.00	0.00	0.00	e0.02	0.78	9.7	3.0	0.06	0.00
16	0.07	0.30	0.06	0.00	0.00	0.00	e0.00	1.0	8.7	2.9	0.31	0.00
17	0.07	0.27	0.08	0.00	0.00	0.00	0.00	1.1	8.3	2.6	0.26	0.00
18	0.07	0.29	0.04	0.00	0.00	0.00	e0.00	1.1	7.4	2.5	0.10	0.00
19	0.06	0.27	0.06	0.00	0.00	0.00	0.00	1.1	7.8	2.4	0.05	0.00
20	0.06	0.24	0.05	0.00	0.00	0.00	0.00	0.98	7.6	2.1	0.04	0.00
21	0.07	0.21	0.06	0.00	0.00	0.00	0.00	0.89	7.4	2.0	0.03	0.00
22	0.07	0.19	0.12	0.00	0.00	0.00	0.00	0.84	6.5	1.9	0.12	0.00
23	0.08	0.18	0.06	0.00	0.00	0.00	0.00	1.1	7.7	1.9	0.06	0.00
24	0.09	0.18	0.08	0.00	0.00	0.00	0.00	2.3	7.4	1.7	0.03	0.00
25	0.09	0.15	0.08	0.00	0.00	0.00	0.00	3.4	7.3	1.6	0.01	0.00
26	0.12	0.07	0.09	0.00	0.00	0.00	0.01	6.9	6.3	1.5	0.01	0.00
27	0.14	0.04	0.08	0.00	0.00	0.00	0.02	7.7	7.2	1.4	0.00	0.00
28	0.12	0.02	0.04	0.00	0.00	0.00	0.02	5.4	7.0	1.3	0.02	0.00
29	0.10	0.02	0.03	0.00	–	0.00	0.02	6.4	6.8	1.2	0.01	0.00
30	0.07	0.05	0.04	0.00	–	0.00	0.06	14	6.6	1.1	0.02	0.00
31	0.09	–	0.04	0.00	–	0.00	–	18	–	1.0	0.01	–
Total	3.19	7.54	2.11	0.11	0.00	0.00	0.15	76.23	310.7	97.6	7.49	0.01
Mean	0.10	0.25	0.07	0.00	0.00	0.00	0.01	2.46	10.4	3.15	0.24	0.00
Maximum	0.28	1.6	0.12	0.04	0.00	0.00	0.06	18	17	6.5	1.0	0.01
Minimum	0.05	0.02	0.03	0.00	0.00	0.00	0.00	0.06	6.3	1.0	0.00	0.00
Acre-foot	6.3	15	4.2	0.2	0.00	0.00	0.3	151	616	194	15	0.02

Table B7. Daily mean discharge values for the continual-recording gage Snake Creek at Great Basin National Park boundary near Baker, Nevada (gage station 10243232).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.2	4.4	0.59	0.00
2	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.1	4.3	0.75	0.00
3	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.2	4.1	0.53	0.00
4	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	7.1	3.9	0.35	0.00
5	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	8.5	3.8	0.22	0.00
6	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.11	8.9	3.6	0.13	0.00
7	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	1.5	8.4	3.4	0.09	0.00
8	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	2.7	7.6	3.2	0.08	0.00
9	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	3.9	6.7	2.9	0.04	0.00
10	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	4.6	5.8	2.8	0.02	0.00
11	e0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	5.3	5.6	2.7	0.02	0.00
12	e0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	5.8	5.5	2.5	0.01	0.00
13	e0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	6.1	5.4	2.3	0.00	0.00
14	e0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	6.2	5.1	2.2	0.03	0.00
15	e0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	6.1	5.0	2.3	0.03	0.00
16	e0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	6.0	4.8	2.4	0.01	0.00
17	e0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	6.0	4.8	2.2	0.01	0.00
18	e0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	5.9	3.5	1.9	0.00	0.00
19	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	5.9	3.2	1.9	0.00	0.00
20	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	5.7	3.7	1.7	0.00	0.00
21	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	5.9	6.0	1.5	0.00	0.00
22	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.2	5.8	1.4	0.00	0.00
23	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	5.2	5.7	1.4	0.00	0.00
24	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.0	5.6	1.2	0.00	0.00
25	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.4	5.5	1.1	0.00	0.00
26	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.1	5.4	1.0	0.00	0.00
27	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.1	5.2	1.0	0.00	0.00
28	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.0	5.2	0.88	0.00	0.00
29	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.2	4.9	0.69	0.00	0.00
30	e0.00	e0.00	0.00	0.00	–	0.00	0.00	6.3	4.7	0.56	0.00	0.00
31	e0.00	–	0.00	0.00	–	0.00	–	6.3	–	0.48	0.00	–
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	138.51	172.1	69.71	2.91	0.00
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.47	5.74	2.25	0.09	0.00
Maximum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.4	8.9	4.4	0.75	0.00
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.2	0.48	0.00	0.00
Acre-foot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	275	341	138	5.8	0.00

Table B8. Daily mean discharge values for the continual-recording gage Snake Creek below Spring Creek near Garrison, Utah (gage station 10243233).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	–	–	–	–	2.5	2.4	2.4	2.6	24	8.7	4.1	2.8
2	–	–	–	–	e2.5	2.4	2.4	2.6	22	8.6	3.9	2.8
3	–	–	–	–	e2.5	2.4	2.4	2.6	19	8.5	3.8	2.8
4	–	–	–	–	e2.5	2.4	2.4	2.5	17	8.3	3.8	2.7
5	–	–	–	–	e2.4	2.4	2.3	2.5	16	8.1	3.7	2.7
6	–	–	–	–	2.3	2.4	2.3	2.6	16	7.9	3.6	2.7
7	–	–	–	–	2.4	2.4	2.3	2.7	16	7.8	3.4	2.7
8	–	–	–	–	2.4	2.4	2.3	2.8	15	7.6	3.4	2.9
9	–	–	–	2.6	2.3	2.4	2.4	2.9	15	7.4	3.3	3.3
10	–	–	–	2.7	2.4	2.4	2.4	2.9	15	7.2	3.3	3.0
11	–	–	–	2.5	2.3	2.4	2.3	2.9	14	7.0	3.2	2.9
12	–	–	–	2.4	2.4	2.4	2.2	3.0	14	6.9	3.2	2.7
13	–	–	–	2.5	2.6	2.4	2.3	3.0	12	6.5	3.1	2.7
14	–	–	–	2.5	2.5	2.4	2.3	3.1	13	6.3	3.0	2.5
15	–	–	–	2.5	2.5	2.6	2.5	3.1	13	6.0	3.1	2.4
16	–	–	–	2.5	2.5	2.6	2.5	3.3	12	5.9	3.2	2.6
17	–	–	–	2.5	2.5	2.5	2.5	3.3	12	5.8	3.4	2.6
18	–	–	–	2.6	2.5	2.5	2.5	3.3	12	5.7	3.1	2.6
19	–	–	–	2.6	2.5	2.5	2.5	3.5	11	5.6	3.0	2.6
20	–	–	–	2.6	2.6	2.5	2.5	3.9	11	5.4	3.0	2.6
21	–	–	–	2.6	2.6	2.5	2.5	3.9	11	5.2	2.9	2.5
22	–	–	–	2.6	2.5	2.5	2.6	3.7	11	5.0	3.0	2.5
23	–	–	–	2.5	2.4	2.5	2.6	4.1	11	4.9	3.0	2.5
24	–	–	–	2.4	2.5	2.5	2.6	4.2	11	4.7	3.0	2.5
25	–	–	–	2.4	2.5	2.4	2.5	4.7	9.9	4.7	2.9	2.4
26	–	–	–	2.5	2.4	2.4	2.5	9.0	9.5	4.6	2.8	2.4
27	–	–	–	2.5	2.4	2.4	2.5	13	9.4	4.5	2.8	2.4
28	–	–	–	2.5	2.4	2.5	2.5	9.9	9.1	4.2	2.8	2.4
29	–	–	–	2.5	–	2.5	2.5	11	8.8	4.1	2.8	2.4
30	–	–	–	2.5	–	2.5	2.6	18	8.7	4.0	2.8	2.4
31	–	–	–	2.5	–	2.5	–	23	–	3.9	2.8	–
Total	–	–	–	–	68.8	76.0	73.1	163.6	398.4	191	99.2	79.0
Mean	–	–	–	–	2.46	2.45	2.44	5.28	13.3	6.16	3.2	2.63
Maximum	–	–	–	–	2.6	2.6	2.6	23	24	8.7	4.1	3.3
Minimum	–	–	–	–	2.3	2.4	2.2	2.5	8.7	3.9	2.8	2.4
Acre-foot	–	–	–	–	136	151	145	325	790	379	197	157

Table B8. Daily mean discharge values for the continual-recording gage Snake Creek below Spring Creek near Garrison, Utah (gage station 10243233).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	2.4	2.1	2.3	2.4	2.2	2.1	2.5	3.8	9.9	8.6	4.0	3.0
2	2.4	2.1	2.3	2.4	2.2	2.1	2.6	3.9	10	8.6	4.2	2.9
3	2.4	2.1	2.3	2.4	2.2	2.1	2.6	3.8	10	8.5	4.0	3.1
4	2.4	2.1	2.3	2.4	2.2	2.0	2.6	3.9	11	8.4	3.9	2.9
5	2.4	2.2	2.3	2.4	2.2	2.1	2.8	3.9	11	8.2	3.8	2.9
6	2.4	2.2	2.3	2.5	2.2	2.1	3.1	4.0	12	8.0	3.8	2.9
7	2.4	2.2	2.3	2.5	2.1	2.1	3.0	4.0	11	7.8	3.7	2.9
8	2.4	2.5	2.4	2.5	2.1	2.2	2.8	4.2	10	7.6	3.7	2.9
9	2.4	2.4	2.4	2.6	2.1	2.2	2.7	4.9	9.7	7.3	3.4	2.9
10	2.4	2.3	2.7	2.5	2.0	2.2	2.7	6.5	9.2	7.0	3.4	2.9
11	2.4	2.3	2.5	2.4	2.0	2.2	2.7	8.0	9.0	6.6	3.3	2.9
12	2.4	2.3	2.4	2.2	2.0	2.2	3.0	8.5	8.9	6.4	3.3	2.9
13	2.4	2.5	2.5	2.2	2.1	2.1	3.0	8.5	8.6	6.0	3.3	2.9
14	2.1	2.2	2.5	2.1	2.1	2.0	2.9	8.8	8.2	5.8	3.3	2.9
15	2.2	2.5	2.4	2.0	2.1	2.1	3.0	8.7	8.0	5.7	3.3	2.8
16	2.3	2.7	2.4	1.9	2.1	2.1	2.8	8.7	7.9	6.0	3.3	2.6
17	2.3	2.6	2.6	2.0	2.2	2.2	2.9	8.8	8.3	5.8	3.3	2.6
18	2.2	2.5	2.5	2.0	2.2	2.4	2.9	8.7	6.7	5.7	3.3	2.6
19	2.1	2.5	2.4	2.1	2.2	2.4	3.0	8.8	6.2	5.5	3.3	2.6
20	2.1	2.4	2.3	2.2	2.2	2.4	3.4	8.8	6.6	5.4	3.3	2.7
21	2.1	2.4	2.3	2.2	2.2	2.4	3.6	9.1	9.5	5.1	3.3	2.7
22	2.1	2.4	2.3	2.0	2.2	2.4	3.7	9.3	9.4	4.9	3.2	2.6
23	2.1	2.4	2.5	2.1	2.2	2.3	3.7	9.5	9.3	4.7	3.2	2.6
24	2.1	2.5	2.4	2.1	2.2	2.2	3.7	10	9.2	4.6	3.3	2.6
25	2.1	2.6	2.5	2.1	2.2	2.2	3.7	11	9.2	4.5	3.2	2.6
26	2.1	2.5	2.5	2.1	2.3	2.2	3.6	10	9.2	4.4	3.2	2.5
27	2.1	2.5	2.4	2.1	2.5	2.2	3.6	10	9.2	4.4	3.1	2.4
28	2.1	2.4	2.4	2.1	2.2	2.3	3.7	10	9.2	4.3	3.0	2.4
29	2.0	2.3	2.5	2.1	2.1	2.3	3.8	10	9.1	4.2	3.1	2.4
30	2.0	2.3	2.4	2.1	–	2.4	3.8	10	8.8	4.1	3.1	2.4
31	2.0	–	2.4	2.2	–	2.6	–	10	–	4	3	–
Total	69.3	71.0	74.7	68.9	62.8	68.8	93.9	238.1	274.3	188.1	105.6	82.0
Mean	2.24	2.37	2.41	2.22	2.17	2.22	3.13	7.68	9.14	6.07	3.41	2.73
Maximum	2.4	2.7	2.7	2.6	2.5	2.6	3.8	11	12	8.6	4.2	3.1
Minimum	2.0	2.1	2.3	1.9	2.0	2.0	2.5	3.8	6.2	4.0	3.0	2.4
Acre-foot	137	141	148	137	125	136	186	472	544	373	209	163

Table B9. Daily mean discharge values for the continual-recording gage Snake Creek at Nevada–Utah State line near Garrison, Utah (gage station 10243234).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	–	–	–	–	1.7	1.8	1.9	2.3	23	8.5	2.9	2.9
2	–	–	–	–	1.6	1.8	1.9	2.4	22	7.8	2.7	2.6
3	–	–	–	–	1.6	1.8	1.9	2.4	22	7.4	2.5	2.6
4	–	–	–	–	1.6	1.9	2.0	2.3	20	7.4	2.5	2.7
5	–	–	–	–	1.6	1.8	2.0	2.3	18	7.1	2.5	2.5
6	–	–	–	–	1.6	1.9	2.0	2.4	17	6.4	2.5	2.5
7	–	–	–	–	1.7	1.9	2.0	2.6	16	6.9	2.3	2.5
8	–	–	–	–	e1.6	1.8	2.0	2.6	16	5.9	2.2	2.5
9	–	–	–	1.5	e1.6	1.8	2.1	2.4	15	5.7	2.2	2.4
10	–	–	–	1.6	1.6	1.7	2.1	2.5	15	6.0	2.0	2.2
11	–	–	–	1.5	1.6	1.7	2.2	2.5	14	6.4	2.0	2.1
12	–	–	–	1.5	1.6	1.7	2.1	2.6	14	4.7	4.6	2.1
13	–	–	–	1.5	1.7	1.7	2.1	2.7	13	4.7	3.1	2.1
14	–	–	–	1.4	1.6	1.7	2.1	2.6	12	4.7	2.8	2.0
15	–	–	–	1.5	1.5	1.7	2.4	2.7	11	4.8	2.8	2.1
16	–	–	–	1.6	1.5	1.7	2.2	2.7	10	5.2	2.8	2.2
17	–	–	–	1.6	1.4	1.7	2.2	2.6	9.7	4.9	3.3	2.1
18	–	–	–	1.7	1.5	1.6	2.3	2.6	9.1	4.6	2.8	2.0
19	–	–	–	1.7	1.6	1.7	2.3	2.7	8.6	4.4	2.6	2.0
20	–	–	–	1.7	1.6	1.7	2.2	2.8	8.4	4.2	2.6	2.0
21	–	–	–	1.7	1.6	1.7	2.2	2.9	8.2	4.1	2.5	1.9
22	–	–	–	1.7	1.7	1.7	2.2	2.9	8.0	3.9	2.6	1.9
23	–	–	–	1.7	1.6	1.7	2.3	3.0	8.3	3.8	2.5	2.0
24	–	–	–	1.7	1.6	1.7	2.3	3.1	8.8	3.7	2.5	2.0
25	–	–	–	1.7	1.7	1.8	2.3	3.3	7.8	3.6	2.6	1.9
26	–	–	–	1.8	1.6	1.9	2.3	5.4	7.6	3.9	3.1	1.9
27	–	–	–	1.8	1.7	1.8	2.3	7.7	7.2	3.7	2.9	1.9
28	–	–	–	1.8	1.8	1.8	2.3	6.2	7.2	3.3	2.8	1.9
29	–	–	–	1.7	–	1.8	2.3	6.5	7.7	3.1	2.8	1.8
30	–	–	–	1.7	–	1.8	2.4	12	7.9	2.8	2.7	1.9
31	–	–	–	1.7	–	1.9	–	20	–	2.8	3.1	–
Total	–	–	–	–	45.1	54.7	64.9	123.7	372.5	156.4	83.8	65.2
Mean	–	–	–	–	1.61	1.76	2.16	3.99	12.4	5.05	2.70	2.17
Maximum	–	–	–	–	1.8	1.9	2.4	20	23	8.5	4.6	2.9
Minimum	–	–	–	–	1.4	1.6	1.9	2.3	7.2	2.8	2.0	1.8
Acre-foot	–	–	–	–	89	108	129	245	739	310	166	129

Table B9. Daily mean discharge values for the continual-recording gage Snake Creek at Nevada–Utah State line near Garrison, Utah (gage station 10243234).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	1.9	1.6	e1.7	e1.8	e1.6	e1.6	e2.0	3.2	8.7	e8.2	3.3	1.9
2	1.8	1.7	e1.7	e1.8	e1.6	e1.6	e2.0	3.2	8.7	e8.0	3.4	1.9
3	1.9	1.7	e1.7	e1.7	e1.6	e1.6	e2.1	3.2	8.5	e8.0	3.3	2.2
4	1.9	1.6	e1.7	e1.8	e1.6	e1.5	e2.2	3.2	9.0	e7.8	3.2	2.0
5	2.0	1.6	e1.7	e1.8	e1.6	e1.7	e2.3	3.1	10	e7.6	2.9	2.0
6	1.9	1.6	1.8	e1.9	e1.5	e1.6	e2.4	3.1	11	e7.4	e2.9	2.0
7	1.9	1.6	1.9	e1.9	e1.5	e1.7	e2.3	3.2	11	e7.2	e2.9	1.9
8	1.9	1.8	1.8	e1.9	e1.5	e1.7	e2.2	3.2	10	e6.9	e2.8	1.9
9	1.9	2.0	1.7	e1.9	e1.5	e1.7	e2.1	3.6	9.6	e6.4	e2.8	1.8
10	1.9	2.0	1.8	e1.8	e1.4	e1.7	e2.1	4.6	8.7	e6.0	e2.7	1.8
11	2.0	1.9	2.0	e1.8	e1.4	e1.7	e2.2	e6.4	8.4	e5.6	e2.7	1.8
12	e1.9	1.9	1.8	e1.7	e1.4	e1.7	e2.4	e7.6	8.2	e5.3	e2.7	1.8
13	e2.0	2.2	1.9	e1.7	e1.5	e1.6	e2.4	e8.0	8.0	e5.0	e2.7	1.8
14	e1.9	e2.0	1.9	e1.6	e1.5	e1.6	e2.3	e8.4	7.5	e5.0	e2.6	1.8
15	e1.8	e2.1	e1.8	e1.4	e1.5	e1.6	2.3	e8.4	7.4	e5.0	e2.5	1.7
16	e2.0	e2.2	e1.9	e1.3	e1.5	e1.7	2.3	e8.4	7.3	5.5	e2.4	1.5
17	e2.1	e2.3	e2.0	e1.4	e1.6	e1.8	2.4	e8.4	7.8	5.1	e2.4	1.4
18	1.7	e2.2	e1.9	e1.4	e1.6	e1.9	2.5	e8.4	6.3	4.7	2.4	1.5
19	e1.9	e2.1	e1.9	e1.5	e1.6	e2.0	2.5	e8.5	5.8	4.2	2.4	1.5
20	e1.9	2.1	e1.8	e1.6	e1.6	e1.9	2.6	e8.6	5.9	4.5	2.4	1.6
21	e1.9	2.1	e1.8	e1.5	e1.6	e1.9	2.6	e8.8	8.9	4.4	2.4	1.5
22	e1.8	e2.1	e1.8	e1.4	e1.6	e1.9	2.7	e8.8	8.8	4.2	2.2	1.5
23	e1.8	e2.1	e2.0	e1.5	e1.6	e1.7	2.8	e9.2	8.9	4.2	2.2	1.5
24	e1.8	e2.1	e1.8	e1.5	e1.6	e1.7	2.8	9.4	8.8	4.2	2.3	1.4
25	e1.8	e2.2	e2.0	e1.5	e1.6	e1.7	2.9	9.9	8.8	4.0	2.2	1.5
26	e1.8	e2.1	e1.9	e1.5	e1.7	e1.8	2.9	9.6	e8.6	4.0	2.0	1.4
27	e1.8	e2.0	e1.8	e1.5	e1.8	e1.8	2.9	9.3	e8.6	3.8	2.1	1.4
28	e1.8	e2.0	e1.8	e1.5	e1.8	e1.9	3.0	9.2	e8.6	3.8	2.1	1.4
29	e1.8	e1.9	e1.8	e1.5	e1.7	e1.9	3.1	9.3	e8.6	3.5	2.1	1.5
30	1.7	e1.8	e1.8	e1.5	–	e2.0	3.2	9.2	e8.4	3.3	2.0	1.5
31	1.6	–	e1.8	e1.6	–	e2.1	–	8.9	–	3.3	1.9	–
Total	57.8	58.6	56.7	50.2	45.6	54.3	74.5	216.3	254.8	166.1	78.9	50.4
Mean	1.86	1.95	1.83	1.62	1.57	1.75	2.48	6.98	8.49	5.36	2.55	1.68
Maximum	2.1	2.3	2.0	1.9	1.8	2.1	3.2	9.9	11	8.2	3.4	2.2
Minimum	1.6	1.6	1.7	1.3	1.4	1.5	2.0	3.1	5.8	3.3	1.9	1.4
Acre-foot	115	116	112	100	90	108	148	429	505	329	156	100

Table B10. Daily mean discharge values for the continual-recording gage South Fork Big Wash above Great Basin National Park boundary near Baker, Nevada (gage station 10243228).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	e0.06	0.03	e0.00	0.00	0.00	0.00	0.00	0.13	18	0.45	0.06	0.17
2	e0.06	0.00	e0.00	0.00	0.00	0.00	0.00	0.18	14	0.40	0.06	0.14
3	e0.05	0.00	e0.00	0.00	0.00	0.00	0.00	0.15	9.3	0.35	0.06	0.12
4	e0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.17	8.8	0.32	0.05	0.11
5	e0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.20	7.6	0.28	0.05	0.12
6	e0.04	0.00	e0.00	0.00	0.00	0.00	0.00	0.27	7.3	0.24	0.04	0.13
7	e0.03	0.00	e0.00	0.00	0.00	0.00	0.00	0.22	6.3	0.20	0.04	0.12
8	e0.03	e0.00	0.00	0.00	0.00	0.00	0.00	0.17	5.7	0.18	0.04	0.11
9	e0.03	e0.00	e0.00	0.00	0.00	0.00	0.00	0.18	5.1	0.15	0.05	0.11
10	0.03	e0.00	e0.00	0.00	0.00	0.00	0.00	0.25	4.7	0.12	0.06	0.15
11	0.04	0.08	0.00	0.00	0.00	0.00	0.00	0.33	4.5	0.09	0.06	0.13
12	0.05	0.10	0.00	0.00	0.00	0.00	0.00	0.45	4.2	0.09	0.06	0.12
13	0.08	0.06	e0.00	0.00	0.00	0.00	0.00	0.50	4.0	0.07	0.07	0.09
14	0.09	0.01	e0.00	0.00	0.00	0.00	0.00	0.54	3.7	0.06	0.06	0.10
15	0.06	0.00	0.00	0.00	0.00	0.00	0.05	0.51	3.2	0.04	0.06	0.10
16	0.06	0.00	e0.00	0.00	0.00	0.00	0.10	0.54	2.8	0.04	0.08	0.09
17	0.05	e0.00	0.00	0.00	0.00	0.00	0.16	0.51	2.6	0.03	0.09	0.09
18	0.04	0.00	0.00	0.00	0.00	0.00	0.15	0.49	2.3	0.03	0.07	0.07
19	0.11	0.00	0.00	0.00	0.00	0.00	0.19	0.66	2.0	0.03	0.07	0.07
20	0.12	0.00	e0.00	0.00	0.00	0.00	0.24	0.76	1.8	0.03	0.11	0.07
21	0.11	0.00	e0.00	0.00	0.00	0.00	0.25	0.88	1.7	0.03	0.13	0.06
22	0.11	0.00	0.00	0.00	0.00	0.00	0.22	1.1	1.5	0.03	0.16	0.06
23	0.11	0.00	0.00	0.00	0.00	0.00	0.16	1.2	1.5	0.03	0.15	0.05
24	0.12	0.00	0.00	0.00	0.00	0.00	0.21	1.4	1.4	0.04	0.12	0.04
25	0.11	0.00	0.00	0.00	0.00	0.00	0.20	2.1	1.1	0.04	0.11	0.05
26	0.11	e0.00	0.00	0.00	0.00	0.00	0.16	4.1	0.92	0.04	0.11	0.05
27	0.12	e0.00	0.00	0.00	0.00	0.00	0.16	12	0.82	0.04	0.11	0.06
28	0.13	e0.00	0.00	0.00	0.00	0.00	0.17	20	0.73	0.03	0.11	0.06
29	0.12	e0.00	0.00	0.00	–	0.00	0.14	21	0.60	0.03	0.11	0.05
30	0.10	0.00	0.00	0.00	–	0.00	0.11	20	0.49	0.04	0.15	0.06
31	0.08	–	0.00	0.00	–	0.00	–	19	–	0.04	0.16	–
Total	2.34	0.28	0.00	0.00	0.00	0.00	2.67	109.99	128.66	3.59	2.66	2.75
Mean	0.08	0.01	0.00	0.00	0.00	0.00	0.09	3.55	4.29	0.12	0.09	0.09
Maximum	0.13	0.10	0.00	0.00	0.00	0.00	0.25	21	18	0.45	0.16	0.17
Minimum	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.49	0.03	0.04	0.04
Acre-foot	4.6	0.6	0.00	0.00	0.00	0.00	5.3	218	255	7.1	5.3	5.5

Table B10. Daily mean discharge values for the continual-recording gage South Fork Big Wash above Great Basin National Park boundary near Baker, Nevada (gage station 10243228).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	0.06	0.15	e0.00	0.00	0.00	0.00	0.41	0.82	1.8	0.65	0.03	0.02
2	0.06	0.17	e0.00	0.00	0.00	0.00	0.46	0.83	1.7	0.60	0.04	0.02
3	0.06	0.19	e0.00	0.00	0.00	0.00	0.49	0.89	1.7	0.57	0.05	0.04
4	0.06	0.17	e0.00	0.00	0.00	0.00	0.50	0.97	1.7	0.53	0.03	0.05
5	0.06	0.15	e0.00	0.00	0.00	0.00	0.51	0.94	1.7	0.49	0.03	0.04
6	0.06	0.15	0.00	0.00	0.00	0.00	0.54	1.1	1.6	0.46	0.03	0.03
7	0.06	0.15	0.00	0.00	0.00	0.00	0.55	1.1	1.6	0.42	0.03	0.03
8	0.06	0.13	0.00	0.00	0.00	0.00	0.60	1.1	1.7	0.38	0.03	0.03
9	0.07	0.16	0.00	0.00	0.00	0.00	0.63	1.2	1.7	0.37	0.03	0.02
10	0.07	0.18	e0.00	0.00	0.00	0.00	0.66	1.3	1.8	0.34	0.03	0.02
11	0.08	0.19	e0.00	0.00	0.00	0.00	0.68	1.5	1.8	0.31	0.02	0.03
12	0.09	0.20	e0.00	0.00	0.00	0.01	0.70	1.5	1.8	0.28	0.02	0.03
13	0.09	0.20	e0.00	0.00	0.00	0.01	0.71	1.5	1.8	0.25	0.02	0.03
14	0.12	0.21	0.00	0.00	0.00	0.00	0.74	1.7	1.7	0.24	0.02	0.03
15	0.13	0.20	0.00	0.00	0.00	0.00	0.71	1.9	1.7	0.23	0.03	0.03
16	0.13	0.19	e0.00	0.00	0.00	0.00	0.64	e2.0	1.6	0.22	0.03	0.03
17	0.12	0.19	e0.00	0.00	0.00	0.00	0.59	e1.9	1.7	0.21	0.03	0.03
18	0.13	0.18	e0.00	0.00	0.00	0.00	0.66	1.9	2.0	0.18	0.03	0.03
19	0.10	0.18	e0.00	0.00	0.00	0.00	0.82	1.9	1.6	0.16	0.03	0.04
20	0.07	0.17	0.00	0.00	0.00	0.00	0.84	1.9	1.4	0.15	0.05	0.06
21	0.07	0.16	0.00	0.00	0.00	0.02	0.87	2.0	1.3	0.13	0.05	0.06
22	0.08	0.14	0.00	0.00	0.00	0.05	0.88	2.0	1.2	0.12	0.04	0.07
23	0.08	0.01	0.00	0.00	0.00	0.10	0.88	2.0	1.1	0.11	0.03	0.07
24	0.09	0.00	0.00	0.00	0.00	0.14	0.88	2.0	1.1	0.10	0.03	0.06
25	0.09	0.00	0.00	0.00	0.00	0.19	0.91	2.0	1.0	0.09	0.03	0.06
26	0.09	0.00	0.00	0.00	0.00	0.21	0.94	2.0	0.97	0.08	0.03	0.05
27	0.10	e0.00	0.00	0.00	0.00	0.26	0.89	1.9	0.91	0.07	0.03	0.05
28	0.09	e0.00	0.00	0.00	0.00	0.29	0.88	1.9	0.86	0.06	0.03	0.06
29	0.08	e0.00	0.00	0.00	0.00	0.33	0.85	1.9	0.79	0.05	0.03	0.08
30	0.10	e0.00	0.00	0.00	–	0.36	0.82	1.9	0.73	0.04	0.02	0.09
31	0.14	–	0.00	0.00	–	0.38	–	1.8	–	0.03	0.02	–
Total	2.69	3.82	0.00	0.00	0.00	2.35	21.24	49.35	44.06	7.92	0.95	1.29
Mean	0.09	0.13	0.00	0.00	0.00	0.08	0.71	1.59	1.47	0.26	0.03	0.04
Maximum	0.14	0.21	0.00	0.00	0.00	0.38	0.94	2.0	2.0	0.65	0.05	0.09
Minimum	0.06	0.00	0.00	0.00	0.00	0.00	0.41	0.82	0.73	0.03	0.02	0.02
Acre-foot	5.3	7.6	0.00	0.00	0.00	4.7	42	98	87	16	1.9	2.6

Table B11. Daily mean discharge values for the continual-recording gage Williams Canyon above aqueduct near Minerva, Nevada (gage station 10243630).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	e0.34	0.34	e0.36	e0.32	e0.28	0.24	0.27	0.51	13	2.6	0.67	0.38
2	e0.33	0.38	e0.35	e0.33	e0.27	0.23	0.27	0.50	14	2.4	0.64	0.37
3	e0.33	0.36	e0.35	e0.33	e0.27	0.23	0.29	0.54	14	2.3	0.61	0.34
4	e0.33	0.36	e0.35	e0.32	e0.27	0.24	0.29	0.55	14	2.2	0.59	0.35
5	e0.32	0.36	e0.36	e0.32	e0.27	0.23	0.28	0.54	14	2.1	0.57	0.37
6	e0.32	0.35	e0.35	e0.32	e0.26	0.23	e0.30	0.52	13	1.9	0.56	0.36
7	e0.31	0.35	e0.34	e0.31	e0.26	0.24	e0.31	0.55	13	1.8	0.55	0.34
8	e0.31	0.48	e0.34	e0.31	e0.26	0.25	e0.33	0.58	12	1.6	0.54	0.33
9	e0.30	0.43	e0.34	e0.31	e0.26	0.25	e0.34	0.58	11	1.5	0.52	0.34
10	e0.30	0.36	e0.33	e0.31	e0.25	0.26	e0.35	0.64	9.9	1.4	0.49	0.35
11	e0.30	0.36	e0.33	e0.31	e0.25	0.27	0.36	0.80	9.1	1.3	0.47	0.34
12	0.30	0.36	e0.33	e0.30	e0.25	0.28	0.36	0.85	8.5	1.2	0.46	0.32
13	0.32	0.36	e0.32	e0.30	e0.24	0.29	0.37	0.87	7.9	1.2	0.45	0.32
14	0.33	0.36	e0.32	e0.30	e0.24	0.29	0.38	0.92	7.5	1.1	0.44	0.32
15	0.33	0.36	e0.32	e0.30	e0.24	0.30	0.42	0.93	7.1	1.1	0.45	0.30
16	0.33	0.37	e0.31	e0.31	e0.23	0.31	0.43	1.1	6.6	1.0	0.51	0.28
17	0.33	0.37	e0.31	e0.31	e0.23	0.28	0.43	1.3	6.2	1.0	0.47	0.28
18	0.33	0.37	e0.32	e0.31	0.23	0.27	0.44	1.6	5.8	0.99	0.44	0.29
19	0.33	0.37	e0.31	e0.31	0.23	0.28	0.44	2.0	5.4	0.94	0.43	0.28
20	0.33	0.37	0.31	e0.30	0.23	0.28	0.45	2.3	5.1	0.87	0.43	0.27
21	0.33	0.37	0.31	e0.30	0.23	0.29	0.47	2.8	4.8	0.84	0.43	0.27
22	0.34	0.36	0.30	e0.30	0.23	0.30	0.49	3.8	4.5	0.83	0.52	0.26
23	0.34	0.36	0.32	e0.29	0.25	0.31	0.55	5.0	4.3	0.82	0.41	0.25
24	0.34	0.36	e0.33	e0.30	0.23	0.30	0.56	6.1	4.1	0.77	0.39	0.25
25	0.34	0.36	e0.33	0.30	0.24	0.28	0.55	7.0	3.7	0.75	0.38	0.25
26	0.37	e0.37	e0.34	0.29	0.24	0.28	0.54	7.4	3.4	0.72	0.37	0.26
27	0.36	e0.36	e0.33	0.29	0.23	0.27	0.53	8.0	3.2	0.68	0.36	0.26
28	0.35	e0.36	e0.33	0.30	0.23	e0.26	0.53	8.8	3.1	0.66	0.36	0.26
29	0.35	e0.36	e0.32	0.28	–	e0.26	0.52	9.9	2.9	0.65	0.37	0.26
30	0.35	e0.37	e0.32	e0.28	–	0.26	0.52	11	2.7	0.64	0.37	0.26
31	0.35	–	e0.32	e0.28	–	0.26	–	12	–	0.64	0.36	–
Total	10.24	11.05	10.2	9.44	6.9	8.32	12.37	99.98	233.8	38.5	14.61	9.11
Mean	0.33	0.37	0.33	0.3	0.25	0.27	0.41	3.23	7.79	1.24	0.47	0.3
Maximum	0.37	0.48	0.36	0.33	0.28	0.31	0.56	12	14	2.6	0.67	0.38
Minimum	0.3	0.34	0.3	0.28	0.23	0.23	0.27	0.5	2.7	0.64	0.36	0.25
Acre-foot	20	22	20	19	14	17	25	198	464	76	29	18

Table B11. Daily mean discharge values for the continual-recording gage Williams Canyon above aqueduct near Minerva, Nevada (gage station 10243630).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	0.26	e0.29	e0.25	e0.24	0.21	0.21	0.71	1.3	3.1	1.8	0.65	0.39
2	0.26	e0.28	e0.25	e0.24	0.20	0.21	1.3	1.4	3.2	1.7	0.65	0.36
3	0.27	e0.29	e0.25	e0.24	0.22	0.21	1.5	1.6	3.2	1.6	0.61	0.49
4	0.28	e0.28	e0.26	e0.24	0.22	0.21	1.1	1.8	3.4	1.5	0.59	0.42
5	0.28	e0.29	e0.26	e0.23	0.21	0.21	1.1	2.3	3.8	1.5	0.59	0.40
6	0.27	e0.29	e0.26	e0.24	0.21	0.22	1.3	2.9	4.3	1.4	0.57	0.39
7	0.27	e0.29	e0.26	e0.24	0.22	0.23	1.4	3.6	4.8	1.3	0.56	0.37
8	0.27	e0.29	e0.26	e0.23	0.22	0.25	1.4	4.2	5.0	1.3	0.55	0.34
9	0.27	e0.28	e0.27	e0.23	0.22	0.28	1.4	4.6	5.2	1.2	0.54	0.34
10	0.28	e0.28	e0.26	e0.23	0.21	0.29	1.3	4.8	5.4	1.1	0.53	0.33
11	0.28	e0.28	e0.26	e0.24	0.21	0.28	1.3	4.9	5.3	1.1	0.52	0.33
12	0.28	e0.28	e0.26	e0.23	0.21	0.29	1.3	5.0	5.0	1.0	0.49	0.33
13	0.29	e0.29	e0.25	e0.23	0.19	0.31	1.3	5.0	4.5	0.95	0.50	0.31
14	0.29	e0.29	e0.25	e0.23	0.21	0.34	1.3	4.9	4.0	0.93	0.52	0.31
15	0.29	e0.28	e0.25	e0.22	0.21	0.35	1.4	4.6	3.6	0.96	0.52	0.31
16	0.29	e0.28	e0.25	e0.22	0.21	0.36	1.4	4.2	3.3	0.87	0.50	0.31
17	0.29	e0.28	e0.26	e0.22	0.20	0.39	1.4	3.9	3.6	0.86	0.51	0.30
18	0.28	e0.27	e0.25	e0.23	0.20	0.42	1.5	3.7	3.4	0.81	0.49	0.28
19	0.28	e0.28	e0.25	e0.22	0.20	0.48	1.4	3.6	3.2	0.80	0.48	0.31
20	0.28	e0.27	e0.24	e0.22	0.19	0.54	1.3	3.4	3.2	0.78	0.47	0.34
21	0.27	e0.27	e0.24	e0.22	0.19	0.58	1.3	3.5	3.1	0.75	0.47	0.34
22	0.26	e0.27	e0.24	e0.23	0.20	0.60	1.2	3.6	3.0	0.74	0.46	0.34
23	0.26	e0.26	e0.24	e0.22	0.20	0.61	1.1	3.7	2.9	0.73	0.45	0.32
24	0.27	e0.26	e0.25	e0.21	0.20	0.59	1.0	3.8	2.7	0.72	0.47	0.32
25	0.27	e0.27	e0.26	e0.22	0.20	0.58	0.96	3.9	2.6	0.71	0.45	0.31
26	0.27	e0.26	e0.25	e0.22	0.21	0.60	0.94	3.7	2.5	0.69	0.43	0.30
27	0.27	e0.26	e0.25	e0.22	0.21	0.58	0.98	3.5	2.4	0.69	0.43	0.30
28	0.27	e0.26	e0.26	e0.21	0.21	0.59	1.1	3.4	2.2	0.67	0.42	0.33
29	0.28	e0.27	e0.25	0.20	0.21	0.61	1.2	3.2	2.0	0.66	0.41	0.33
30	e0.28	e0.26	e0.25	0.23	–	0.65	1.3	3.1	1.9	0.64	0.40	0.33
31	e0.28	–	e0.25	0.23	–	0.68	–	3.1	–	0.63	0.39	–
Total	8.54	8.3	7.84	7.03	6.00	12.75	37.19	110.2	105.8	31.09	15.62	10.18
Mean	0.28	0.28	0.25	0.23	0.21	0.41	1.24	3.55	3.53	1.0	0.5	0.34
Maximum	0.29	0.29	0.27	0.24	0.22	0.68	1.5	5.0	5.4	1.8	0.65	0.49
Minimum	0.26	0.26	0.24	0.2	0.19	0.21	0.71	1.3	1.9	0.63	0.39	0.28
Acre-foot	17	16	16	14	12	25	74	219	210	62	31	20

Table B12. Daily mean discharge values for the continual-recording gage Decathon Canyon below Great Basin National Park boundary near Minerva, Nevada (gage station 10243223).

[2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2003											
1	e0.00	0.00	0.00	0.00	e0.00	0.00	e0.00	0.00	e0.00	e0.00	0.00	0.00
2	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00
3	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00
4	e0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	e0.00	e0.00	0.00	0.00
5	e0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	e0.00	e0.00	0.00	0.00
6	e0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	e0.00	e0.00	0.00	0.00
7	e0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	e0.00	e0.00	0.00	0.00
8	e0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	e0.00	e0.00	0.00	0.00
9	e0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	e0.00	e0.00	0.00	0.00
10	e0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	e0.00	e0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00
18	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00
19	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00
20	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00
21	0.00	e0.00	0.00	e0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00
22	0.00	e0.00	0.00	e0.00	e0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00
23	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00
24	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	e0.00	e0.10	0.00	0.00	0.00
25	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	e0.00	0.00	0.00	e0.00	e0.00	e0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	e0.00	–	0.00	0.00	e0.00	e0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	e0.00	–	e0.00	0.00	e0.00	e0.00	0.00	0.00	0.00
31	0.00	–	0.00	e0.00	–	e0.00	–	e0.00	–	0.00	0.00	–
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acre-foot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.2	0.00	0.00	0.00

Table B12. Daily mean discharge values for the continual-recording gage Decathon Canyon below Great Basin National Park boundary near Minerva, Nevada (gage station 10243223).—Continued

[2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Abbreviation: e, estimate. Symbol: –, data not collected at this site on this day]

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	Discharge, in cubic feet per second, mean values											
	Water year 2004											
1	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	e0.10
4	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	–	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	–	0.00	0.00	–	0.00	–	0.00	–	0.00	0.00	–
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acre-foot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.2

Table B13. Maximum, minimum, and mean water temperature for the continual-recording gage Strawberry Creek above Great Basin National Park boundary near Baker, Nevada (gage station 10243280).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	–	–	–
7	–	–	–	–	–	–	–	–	–	5.0	3.5	4.0
8	–	–	–	–	–	–	–	–	–	4.0	0.5	2.0
9	–	–	–	–	–	–	–	–	–	5.0	0.0	2.0
10	–	–	–	–	–	–	–	–	–	5.5	0.5	3.0
11	–	–	–	–	–	–	–	–	–	10.0	1.5	5.0
12	–	–	–	–	–	–	–	–	–	11.5	2.5	7.0
13	–	–	–	–	–	–	–	–	–	12.5	4.0	8.0
14	–	–	–	–	–	–	–	–	–	9.0	5.0	7.0
15	–	–	–	–	–	–	–	–	–	13.0	5.5	9.0
16	–	–	–	–	–	–	–	–	–	13.0	5.5	9.0
17	–	–	–	–	–	–	–	–	–	11.0	6.0	8.0
18	–	–	–	–	–	–	–	–	–	12.0	5.0	8.0
19	–	–	–	–	–	–	–	–	–	9.5	3.0	6.0
20	–	–	–	–	–	–	–	–	–	11.5	3.5	7.0
21	–	–	–	–	–	–	–	–	–	13.5	5.0	9.0
22	–	–	–	–	–	–	–	–	–	14.5	6.5	10.0
23	–	–	–	–	–	–	–	–	–	13.5	8.0	10.5
24	–	–	–	–	–	–	–	–	–	11.5	8.0	10.0
25	–	–	–	–	–	–	–	–	–	13.5	7.0	10.0
26	–	–	–	–	–	–	–	–	–	13.5	8.0	10.5
27	–	–	–	–	–	–	–	–	–	14.0	8.0	11.0
28	–	–	–	–	–	–	–	–	–	12.0	8.0	10.0
29	–	–	–	–	–	–	–	–	–	12.0	8.5	10.0
30	–	–	–	–	–	–	–	–	–	11.5	8.0	9.5
31	–	–	–	–	–	–	–	–	–	11.5	7.5	9.5
Month	–	–	–	–	–	–	–	–	–	–	–	–

Table B13. Maximum, minimum, and mean water temperature for the continual-recording gage Strawberry Creek above Great Basin National Park boundary near Baker, Nevada (gage station 10243280).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	11.0	7.5	9.0	15.0	11.5	13.0	19.0	14.0	16.0	15.5	12.5	14.0
2	11.5	7.5	9.0	15.5	11.0	13.0	17.5	14.5	16.0	16.0	12.5	14.0
3	11.0	7.5	9.0	15.5	11.0	13.0	17.0	13.5	15.0	16.5	12.5	14.5
4	11.0	7.0	9.0	16.0	11.0	13.5	17.0	13.0	15.0	16.0	13.5	14.5
5	10.5	7.0	8.5	16.5	11.0	13.5	18.5	13.0	15.0	15.0	12.5	13.5
6	11.5	6.5	9.0	16.5	12.0	14.0	17.5	12.0	14.5	15.5	12.0	13.5
7	11.5	8.0	9.5	17.0	12.5	14.5	18.5	13.0	15.0	15.5	12.0	14.0
8	11.0	8.0	9.5	17.0	13.0	15.0	20.5	13.5	16.0	15.5	12.0	13.0
9	11.5	9.0	10.0	16.5	12.0	14.5	22.0	14.0	17.0	13.0	10.5	12.0
10	13.0	9.5	11.0	17.0	12.0	15.0	20.5	15.0	17.5	12.0	9.5	10.5
11	11.0	9.0	10.0	18.0	14.0	16.0	19.5	14.5	17.0	12.5	8.5	10.5
12	11.5	8.5	10.0	18.0	14.0	16.0	18.0	14.5	16.0	14.0	9.0	11.5
13	11.5	8.5	10.0	17.5	14.0	15.5	19.5	14.0	16.5	11.5	7.5	9.5
14	13.0	8.5	10.5	18.0	13.5	15.5	18.5	14.5	16.5	10.5	6.5	8.5
15	13.0	9.5	11.0	18.5	14.5	16.5	19.0	15.5	17.0	14.5	8.5	11.5
16	12.0	9.5	11.0	18.0	15.5	16.5	18.5	12.0	15.5	15.0	10.0	12.0
17	13.0	9.0	11.0	18.0	15.0	16.5	17.5	12.5	14.5	12.0	8.5	10.0
18	14.0	9.5	11.5	18.5	15.0	16.5	17.0	13.0	15.0	10.0	6.5	8.0
19	12.5	10.0	11.5	18.0	15.0	16.5	18.0	13.0	15.0	10.0	5.5	8.0
20	12.0	10.0	11.0	18.0	15.0	16.5	17.0	15.0	16.0	10.5	7.0	8.5
21	11.0	9.0	10.5	18.5	15.0	16.5	17.5	14.5	16.0	10.5	6.5	8.5
22	11.5	8.5	10.0	19.0	15.0	17.0	15.5	14.0	15.0	10.5	6.5	8.5
23	10.5	9.0	9.5	19.0	15.5	17.0	16.5	12.5	14.5	11.0	7.0	8.5
24	9.5	7.0	8.5	19.5	15.5	17.0	15.5	13.5	14.5	10.5	7.0	8.5
25	11.0	7.0	9.0	18.0	15.5	16.5	17.5	12.5	14.5	16.5	6.0	11.5
26	12.0	7.5	10.0	18.5	14.0	16.5	16.0	13.0	14.5	16.5	12.5	14.5
27	13.5	9.0	11.0	19.0	15.0	17.0	16.5	13.0	14.5	16.5	13.0	14.5
28	14.0	10.0	12.0	20.0	14.0	16.5	16.5	12.5	14.5	16.5	13.0	14.5
29	15.0	10.5	12.5	21.5	14.0	17.0	15.5	13.0	14.0	16.0	12.0	14.0
30	15.0	11.5	13.0	23.0	14.0	17.5	16.0	12.0	13.5	16.0	13.0	14.5
31	–	–	–	18.5	15.5	17.0	15.5	12.0	13.5	–	–	–
Month	15.0	6.5	10.2	23.0	11.0	15.7	22.0	12.0	15.3	16.5	5.5	11.6

Table B13. Maximum, minimum, and mean water temperature for the continual-recording gage Strawberry Creek above Great Basin National Park boundary near Baker, Nevada (gage station 10243280).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	16.5	13.5	14.5	2.5	1.5	2.0	2.5	1.5	2.0	1.0	0.5	0.5
2	14.0	12.0	13.0	2.0	0.5	1.5	2.5	1.0	1.5	1.0	1.0	1.0
3	13.0	10.5	11.5	2.0	1.0	2.0	2.0	0.5	1.0	1.0	0.5	0.5
4	12.5	9.5	11.0	2.0	0.0	1.0	2.0	0.5	1.0	0.5	0.5	0.5
5	12.5	9.5	10.5	2.0	0.5	1.0	3.5	1.5	2.5	0.5	0.5	0.5
6	12.0	9.0	10.5	1.5	0.0	1.0	4.0	2.0	3.0	0.5	0.5	0.5
7	11.0	8.5	10.0	2.0	0.0	1.0	3.5	2.0	3.0	0.5	0.5	0.5
8	12.0	8.5	10.0	3.0	0.5	2.0	2.0	0.0	1.0	0.5	0.5	0.5
9	12.5	8.5	10.5	4.0	2.0	3.0	0.0	0.0	0.0	1.0	0.5	0.5
10	10.5	6.5	9.0	3.5	2.5	3.0	0.5	0.0	0.5	1.0	0.5	1.0
11	7.5	4.5	6.0	3.5	1.0	2.0	1.0	0.0	0.5	1.0	0.5	1.0
12	9.5	5.0	7.0	2.5	1.0	2.0	0.5	0.0	0.5	1.0	0.5	1.0
13	7.5	4.5	6.0	2.5	1.0	1.5	1.5	0.0	1.0	1.5	0.5	1.0
14	8.0	3.0	5.5	3.5	1.5	2.5	1.5	0.0	0.5	1.5	0.5	1.0
15	8.0	4.0	6.0	2.5	0.5	1.5	0.5	0.5	0.5	1.0	0.5	1.0
16	9.0	5.0	7.0	3.0	1.5	2.5	0.5	0.5	0.5	1.0	0.5	0.5
17	9.5	6.0	7.5	3.5	2.0	2.5	0.5	0.5	0.5	0.5	0.5	0.5
18	9.5	6.0	7.5	3.5	1.0	2.0	0.5	0.5	0.5	1.0	0.5	0.5
19	9.5	6.5	8.0	3.5	1.5	2.5	1.0	0.5	0.5	1.0	1.0	1.0
20	10.0	6.5	8.0	4.0	2.5	3.5	1.5	0.5	1.0	1.0	1.0	1.0
21	10.0	6.5	8.0	3.5	0.5	2.5	2.0	1.0	1.5	1.0	1.0	1.0
22	10.0	6.5	8.5	0.5	0.0	0.0	1.5	0.5	0.5	1.0	1.0	1.0
23	10.0	7.5	8.5	0.0	0.0	0.0	1.0	0.5	0.5	1.0	1.0	1.0
24	7.5	5.0	6.5	0.5	0.0	0.0	1.5	0.5	1.0	1.0	1.0	1.0
25	6.0	4.0	4.5	1.0	0.0	0.0	1.5	0.5	1.0	1.0	1.0	1.0
26	6.0	2.5	4.5	0.5	0.0	0.0	0.5	0.5	0.5	1.0	1.0	1.0
27	8.0	4.5	6.0	0.5	0.0	0.0	0.5	0.5	0.5	1.0	1.0	1.0
28	9.0	6.0	7.5	0.5	0.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0
29	9.5	6.0	7.5	1.5	0.5	1.0	0.5	0.5	0.5	1.0	1.0	1.0
30	6.0	2.5	4.0	3.0	1.5	2.0	0.5	0.5	0.5	1.0	1.0	1.0
31	2.5	1.5	2.0	–	–	–	1.0	0.5	0.5	1.0	1.0	1.0
Month	16.5	1.5	8.0	4.0	0.0	1.5	4.0	0.0	0.9	1.5	0.5	0.8

Table B13. Maximum, minimum, and mean water temperature for the continual-recording gage Strawberry Creek above Great Basin National Park boundary near Baker, Nevada (gage station 10243280).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	1.0	1.0	1.0	1.5	1.5	1.5	8.0	6.0	7.0	14.5	7.0	10.5
2	1.0	1.0	1.0	2.5	1.5	1.5	7.0	4.5	5.5	15.0	8.5	11.5
3	1.5	1.0	1.0	2.5	1.5	2.0	9.0	5.0	7.0	16.0	9.0	12.5
4	1.5	1.5	1.5	3.0	1.5	2.0	11.0	5.0	7.5	17.0	10.5	13.5
5	1.5	1.0	1.5	3.0	1.5	2.0	11.0	6.0	8.5	16.5	11.0	13.5
6	1.0	1.0	1.0	4.0	2.0	3.0	9.5	6.5	7.5	15.5	10.0	12.5
7	1.5	1.0	1.0	5.0	2.0	3.0	10.0	6.0	7.5	14.5	10.0	12.0
8	1.5	1.0	1.0	5.0	2.0	3.5	9.5	7.0	8.0	15.5	10.0	12.5
9	1.5	1.0	1.0	6.0	2.0	4.0	11.0	5.5	8.0	15.5	10.0	13.0
10	1.0	1.0	1.0	6.0	2.5	4.0	7.5	5.0	6.5	15.0	10.0	12.0
11	1.0	1.0	1.0	6.0	2.0	4.0	10.0	3.5	6.5	11.5	8.0	9.5
12	1.0	1.0	1.0	6.0	2.0	4.0	11.5	5.0	8.0	10.5	7.5	9.0
13	1.0	1.0	1.0	7.5	2.5	4.5	12.0	5.5	8.5	13.0	7.0	9.5
14	1.0	1.0	1.0	8.0	3.0	5.0	10.5	5.5	8.0	13.5	7.5	10.5
15	1.5	1.0	1.0	8.0	3.5	5.5	10.0	6.0	7.5	14.0	9.0	11.5
16	2.0	1.0	1.5	8.0	3.0	5.0	10.0	6.5	8.0	14.0	9.5	11.5
17	2.0	1.5	2.0	9.0	3.0	5.5	10.0	6.5	8.0	14.0	10.5	12.5
18	2.5	2.0	2.5	9.5	3.5	6.5	10.5	6.0	7.5	15.5	10.5	12.5
19	3.0	2.0	2.5	11.0	5.0	7.5	8.5	6.0	7.0	14.0	10.0	12.0
20	2.0	1.5	2.0	11.0	4.5	7.5	9.5	5.0	7.5	14.5	9.5	12.0
21	2.0	1.0	1.5	11.0	5.0	8.0	10.5	6.0	8.0	12.5	9.5	11.0
22	2.0	2.0	2.0	10.5	6.0	8.0	8.5	5.0	6.5	13.0	9.5	11.0
23	2.0	1.5	2.0	11.0	6.5	8.5	11.5	5.0	8.0	14.5	10.0	12.0
24	3.0	1.5	2.0	10.0	5.5	7.5	12.5	5.5	8.5	13.0	9.5	11.5
25	3.0	1.5	2.0	11.0	5.5	8.0	12.5	6.5	9.5	11.5	9.5	10.5
26	2.5	1.5	2.0	9.0	5.5	7.0	13.5	6.5	10.0	14.5	8.5	11.5
27	2.0	1.5	1.5	8.0	4.0	5.5	13.5	7.5	10.5	15.5	11.0	13.0
28	2.0	1.5	1.5	8.5	3.5	5.5	13.0	8.0	10.5	15.5	12.5	13.5
29	2.0	1.5	1.5	9.0	3.0	6.0	8.0	6.0	7.0	14.0	10.5	12.0
30	–	–	–	10.5	4.0	7.0	13.0	5.5	8.5	14.5	8.5	11.5
31	–	–	–	11.5	5.5	8.5	–	–	–	15.5	10.5	13.0
Month	3.0	1.0	1.5	11.5	1.5	5.2	13.5	3.5	7.9	17.0	7.0	11.8

Table B13. Maximum, minimum, and mean water temperature for the continual-recording gage Strawberry Creek above Great Basin National Park boundary near Baker, Nevada (gage station 10243280).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	16.0	11.5	14.0	18.5	14.5	16.5	19.0	16.0	17.5	18.0	13.0	15.0
2	17.0	12.0	14.5	18.5	15.0	16.5	19.0	15.5	17.0	16.5	13.5	15.5
3	18.5	12.5	15.5	18.0	14.5	16.5	21.0	15.0	17.5	15.0	9.5	11.5
4	19.0	14.0	16.5	18.5	15.0	16.5	21.0	16.0	18.0	12.5	8.0	10.0
5	19.5	14.0	16.5	19.0	15.0	17.0	20.5	15.5	18.5	15.0	9.0	11.5
6	19.5	14.5	17.0	20.5	15.5	18.0	20.5	15.5	18.0	15.5	10.0	12.5
7	20.0	14.5	17.0	21.0	17.0	19.0	20.5	14.5	17.5	16.0	11.0	13.0
8	19.0	14.5	16.5	21.5	16.5	19.0	20.5	14.5	17.0	16.0	10.5	13.5
9	17.0	13.0	15.0	21.0	16.5	19.0	20.5	14.5	17.5	16.0	12.0	14.0
10	15.5	11.0	13.0	21.0	16.5	18.5	20.0	15.5	18.0	16.5	13.0	14.5
11	15.0	10.5	12.5	21.5	16.5	19.0	20.0	15.5	18.0	16.5	12.0	14.0
12	16.5	11.5	14.0	–	–	–	20.0	15.0	18.0	17.0	13.5	15.0
13	18.5	12.5	15.5	21.5	18.0	20.0	20.5	16.0	18.0	16.0	12.0	14.0
14	18.5	14.0	16.0	21.0	18.0	20.0	19.5	16.0	17.5	14.0	10.0	12.0
15	18.5	14.0	16.0	21.0	18.0	19.5	18.5	15.0	17.0	13.0	8.0	10.5
16	17.5	14.0	15.5	21.5	17.5	19.0	17.5	15.0	16.5	15.0	10.0	12.0
17	16.0	13.5	14.5	20.5	17.0	18.5	16.0	14.0	14.5	16.0	11.5	13.5
18	17.0	12.5	14.5	21.0	17.0	18.5	17.5	13.5	15.5	14.5	11.5	13.0
19	18.5	13.0	15.5	21.0	17.5	19.0	19.0	14.0	16.0	12.5	9.0	11.0
20	19.0	14.5	16.5	22.0	16.5	19.0	18.0	14.5	16.0	9.0	7.0	8.0
21	18.5	14.5	16.0	21.5	16.5	19.0	17.5	14.0	16.0	8.5	5.5	7.0
22	18.5	13.0	15.5	20.0	17.0	18.5	18.0	13.5	16.0	10.0	5.0	7.0
23	16.5	14.0	15.5	21.0	16.5	18.5	16.0	13.0	14.5	11.5	6.5	8.5
24	18.5	14.0	16.0	21.0	16.0	18.5	16.0	13.0	14.5	12.5	7.5	10.0
25	18.5	15.0	17.0	20.0	16.5	18.5	17.5	13.0	15.0	13.0	8.0	10.0
26	17.5	14.5	16.0	20.0	16.0	18.5	17.0	12.5	15.0	13.5	8.5	11.0
27	18.0	14.0	16.0	19.0	16.0	17.5	16.0	11.5	13.5	13.5	8.0	10.5
28	17.0	14.5	15.5	20.5	15.0	17.5	16.0	10.5	13.0	11.5	8.5	10.0
29	17.5	13.5	15.5	21.0	15.5	18.5	17.0	11.0	14.0	10.5	7.5	9.5
30	18.5	13.5	16.0	21.5	16.5	18.5	16.0	11.5	14.0	10.0	7.0	8.5
31	–	–	–	21.0	16.0	18.5	17.0	12.0	14.5	–	–	–
Month	20.0	10.5	15.5	–	–	–	21.0	10.5	16.2	18.0	5.0	11.5

Table B14. Maximum, minimum, and mean water temperature for the continual-recording gage Shingle Creek near Great Basin National Park boundary near Osceola, Nevada (gage station 10243640).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	0.5	0.0	0.0	1.5	1.0	1.0	1.0	0.5	0.5
2	–	–	–	0.5	0.0	0.0	1.0	0.5	1.0	1.0	0.5	1.0
3	–	–	–	0.5	0.0	0.0	0.5	0.0	0.5	1.0	1.0	1.0
4	–	–	–	0.5	0.0	0.0	0.5	0.0	0.0	1.5	1.0	1.0
5	–	–	–	0.5	0.5	0.5	0.5	0.0	0.0	1.5	1.0	1.0
6	–	–	–	1.0	0.5	0.5	0.5	0.0	0.0	1.0	0.5	0.5
7	–	–	–	1.5	1.0	1.0	0.5	0.0	0.5	1.0	0.5	0.5
8	–	–	–	1.5	1.0	1.5	0.5	0.0	0.0	1.0	0.5	0.5
9	–	–	–	2.0	1.0	1.5	0.5	0.0	0.0	1.0	1.0	1.0
10	–	–	–	1.5	1.0	1.0	0.5	0.0	0.5	1.5	1.0	1.0
11	–	–	–	1.0	0.5	0.5	0.5	0.0	0.0	1.0	1.0	1.0
12	5.0	2.5	3.5	1.5	0.5	1.0	0.5	0.0	0.0	1.5	0.5	1.0
13	4.5	2.0	3.5	2.0	1.5	2.0	1.0	0.0	0.5	1.0	1.0	1.0
14	5.0	2.5	4.0	1.5	1.0	1.5	1.0	0.5	1.0	1.0	0.5	1.0
15	4.5	2.5	3.5	1.0	0.5	1.0	1.0	0.5	0.5	1.0	0.5	0.5
16	4.5	2.5	3.5	1.5	0.5	1.0	0.5	0.0	0.5	1.0	0.5	0.5
17	5.0	2.5	3.5	2.0	1.0	1.5	0.5	0.0	0.5	1.5	0.5	1.0
18	4.5	2.5	3.5	1.0	0.5	0.5	0.5	0.0	0.5	1.0	0.5	1.0
19	4.5	2.5	3.5	2.0	0.5	1.0	0.0	0.0	0.0	1.0	0.5	1.0
20	4.5	2.5	3.0	2.0	1.0	1.5	0.5	0.0	0.5	1.0	0.5	1.0
21	4.5	2.5	3.5	2.5	1.5	2.0	1.0	0.5	0.5	1.0	0.5	1.0
22	4.5	3.5	4.0	2.5	1.5	2.0	1.0	0.5	0.5	1.0	0.5	1.0
23	4.0	2.5	3.0	2.5	1.5	2.0	1.0	0.5	0.5	1.5	1.0	1.0
24	4.0	2.0	3.0	2.0	1.0	1.5	0.5	0.5	0.5	1.5	1.0	1.5
25	4.0	2.5	3.5	1.0	0.0	0.5	1.0	0.5	0.5	1.5	1.0	1.5
26	3.5	2.5	3.0	0.5	0.0	0.0	1.0	0.5	0.5	1.5	0.5	1.0
27	3.5	2.5	3.0	0.5	0.0	0.0	1.0	1.0	1.0	2.0	1.0	1.5
28	3.0	1.5	2.5	0.5	0.0	0.0	1.0	1.0	1.0	2.0	1.0	1.5
29	2.0	0.5	1.5	1.0	0.5	0.5	1.0	0.5	1.0	1.0	0.5	0.5
30	1.0	0.5	0.5	1.0	0.5	1.0	1.0	0.5	0.5	1.5	1.0	1.0
31	1.5	0.5	0.5	–	–	–	1.0	1.0	1.0	2.0	1.0	1.5
Month	–	–	–	2.5	0.0	0.9	1.5	0.0	0.5	2.0	0.5	1.0

Table B14. Maximum, minimum, and mean water temperature for the continual-recording gage Shingle Creek near Great Basin National Park boundary near Osceola, Nevada (gage station 10243640).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2002. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	2.5	1.5	2.0	1.0	1.0	1.0	4.0	2.0	2.5	3.5	1.0	2.0
2	1.5	0.0	0.5	1.0	1.0	1.0	2.0	0.5	1.0	4.0	2.0	3.0
3	0.5	0.0	0.0	1.0	1.0	1.0	0.5	0.0	0.5	3.5	2.5	2.5
4	0.5	0.0	0.0	1.0	1.0	1.0	0.5	0.0	0.5	3.0	2.0	2.5
5	0.5	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.5	4.0	1.0	2.5
6	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.5	4.0	2.0	3.0
7	0.0	0.0	0.0	1.5	1.0	1.0	1.0	0.5	0.5	3.0	2.0	2.5
8	0.0	0.0	0.0	1.5	1.0	1.0	1.5	0.5	1.0	2.0	0.5	1.0
9	0.0	0.0	0.0	1.5	1.0	1.5	3.5	1.0	2.0	1.5	0.5	1.0
10	0.0	0.0	0.0	1.5	1.0	1.5	4.0	1.0	2.5	2.5	0.5	1.5
11	0.0	0.0	0.0	2.0	1.5	1.5	4.5	1.5	3.0	5.0	1.0	2.5
12	0.5	0.0	0.0	2.0	1.5	1.5	5.0	2.5	3.5	6.0	2.0	3.5
13	0.5	0.5	0.5	2.5	1.5	2.0	4.5	3.0	3.5	6.5	3.0	4.5
14	1.0	0.5	1.0	2.5	1.5	2.0	3.0	1.5	2.5	5.0	3.5	4.0
15	1.0	1.0	1.0	2.0	1.0	1.5	2.0	1.0	1.5	7.0	3.5	5.0
16	1.0	1.0	1.0	1.5	0.5	1.0	3.0	0.5	1.5	7.0	3.5	5.0
17	1.0	1.0	1.0	1.5	0.5	1.0	2.0	1.5	1.5	5.5	4.0	5.0
18	1.0	1.0	1.0	1.0	0.5	0.5	2.0	1.0	1.5	6.5	3.5	5.0
19	1.0	0.5	0.5	1.5	0.0	0.5	3.0	0.5	1.5	6.0	3.0	4.5
20	1.0	1.0	1.0	1.0	0.5	0.5	3.5	1.0	2.0	7.0	3.5	5.0
21	1.0	1.0	1.0	2.0	0.5	1.0	3.0	2.5	2.5	8.0	4.0	6.0
22	1.0	0.5	1.0	2.5	1.0	1.5	2.5	1.5	2.0	8.5	4.5	6.5
23	0.5	0.5	0.5	2.5	1.5	2.0	2.5	1.0	1.5	8.0	5.0	6.5
24	1.0	0.5	0.5	2.5	1.5	2.0	4.5	1.5	3.0	8.0	5.5	6.5
25	1.0	1.0	1.0	3.0	1.0	1.5	5.0	2.5	3.5	8.5	5.5	6.5
26	1.0	1.0	1.0	3.0	1.5	2.0	5.0	2.0	3.5	9.0	5.5	7.0
27	1.0	1.0	1.0	1.5	0.5	1.0	4.0	2.5	3.5	9.5	6.0	7.5
28	1.0	1.0	1.0	0.5	0.5	0.5	4.5	2.5	3.5	9.5	6.5	8.0
29	–	–	–	1.0	0.0	0.5	3.5	2.0	2.5	9.5	6.5	8.0
30	–	–	–	2.5	0.5	1.5	2.5	1.5	2.0	10.0	6.5	8.0
31	–	–	–	3.5	1.0	2.0	–	–	–	9.0	6.5	7.5
Month	2.5	0.0	0.6	3.5	0.0	1.2	5.0	0.0	2.0	10.0	0.5	4.6

Table B14. Maximum, minimum, and mean water temperature for the continual-recording gage Shingle Creek near Great Basin National Park boundary near Osceola, Nevada (gage station 10243640).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	9.5	6.5	8.0	11.0	7.5	9.0	12.0	11.0	11.5	11.0	10.0	10.5
2	9.5	6.5	7.5	11.0	7.5	9.0	11.5	10.5	11.0	11.0	10.0	10.5
3	9.0	6.5	7.5	11.0	7.5	9.5	11.5	10.0	11.0	11.0	10.0	10.5
4	9.0	6.0	7.5	11.5	8.0	9.5	11.5	9.5	10.5	11.0	10.5	10.5
5	9.0	6.0	7.0	12.0	8.0	10.0	11.0	9.5	10.5	11.0	10.0	10.5
6	9.0	5.5	7.5	12.0	8.5	10.0	11.0	9.5	10.5	10.5	9.5	10.0
7	9.5	6.5	8.0	12.0	8.5	10.0	11.0	9.5	10.0	10.5	9.5	10.0
8	8.5	6.5	7.5	12.0	9.0	10.0	11.5	10.0	11.0	10.5	9.5	10.0
9	9.0	6.5	8.0	12.0	8.0	10.0	12.0	10.5	11.5	10.0	8.5	9.0
10	9.0	7.0	8.0	12.0	8.5	10.5	12.5	11.0	11.5	8.5	7.0	8.0
11	9.0	6.5	7.5	12.5	9.0	11.0	12.0	11.0	11.5	8.0	6.5	7.5
12	9.0	6.5	7.5	12.5	9.0	10.5	12.0	11.0	11.5	9.0	7.0	8.0
13	9.5	6.5	8.0	12.0	9.0	10.5	12.0	10.5	11.5	8.5	7.0	7.5
14	10.5	6.5	8.0	12.5	9.5	11.0	12.0	10.5	11.5	7.5	5.5	6.5
15	10.5	6.5	8.5	12.5	9.5	11.0	12.0	11.0	11.5	8.0	6.5	7.5
16	9.0	7.0	8.0	12.5	10.5	11.5	12.0	11.0	11.5	10.0	7.5	8.5
17	10.0	7.0	8.5	13.0	10.5	11.5	11.5	10.0	11.0	8.0	5.5	6.5
18	11.0	7.5	9.0	12.0	10.5	11.5	11.5	9.5	10.5	6.5	3.5	5.0
19	9.5	7.5	8.5	12.5	10.5	11.5	11.5	10.0	11.0	7.0	4.0	5.5
20	9.0	7.0	8.0	12.5	10.5	11.5	11.5	11.0	11.0	8.0	5.0	6.5
21	8.5	7.0	7.5	12.0	10.5	11.5	11.5	10.5	11.0	8.0	5.5	6.5
22	8.5	6.0	7.0	11.5	10.5	11.0	11.5	11.0	11.5	8.0	5.5	6.5
23	7.5	6.0	7.0	12.0	10.5	11.0	11.5	10.5	11.0	8.5	6.0	7.0
24	7.0	5.0	6.0	13.0	10.5	11.5	11.5	10.5	11.0	9.0	6.5	7.5
25	8.5	5.0	6.5	12.5	11.0	12.0	11.0	10.0	10.5	8.5	6.5	7.5
26	9.5	5.5	7.5	12.5	10.5	11.5	11.0	10.0	10.5	9.0	6.5	7.5
27	10.5	6.5	8.0	13.0	11.0	12.0	11.0	9.5	10.0	9.0	7.0	8.0
28	10.5	7.0	9.0	12.5	11.0	12.0	11.0	9.5	10.0	9.0	7.0	8.0
29	11.5	7.5	9.5	12.5	11.0	12.0	10.5	10.0	10.5	9.0	6.5	8.0
30	11.0	8.0	9.5	12.5	10.5	11.5	10.5	9.0	10.0	9.0	7.0	8.0
31	–	–	–	12.5	11.0	11.5	11.0	9.5	10.0	–	–	–
Month	11.5	5.0	7.8	13.0	7.5	10.9	12.5	9.0	10.9	11.0	3.5	8.1

Table B14. Maximum, minimum, and mean water temperature for the continual-recording gage Shingle Creek near Great Basin National Park boundary near Osceola, Nevada (gage station 10243640).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	9.5	8.0	8.5	1.5	1.0	1.5	2.0	1.5	1.5	1.0	0.5	0.5
2	9.0	7.0	8.0	1.0	0.5	1.0	1.5	1.0	1.0	1.0	0.5	1.0
3	8.0	7.0	7.5	1.0	0.5	1.0	1.5	0.5	1.0	1.0	0.5	1.0
4	8.0	6.0	7.0	1.0	0.5	0.5	1.0	0.5	1.0	0.5	0.5	0.5
5	7.5	6.5	7.0	1.5	0.5	1.0	2.0	1.0	1.5	0.5	0.0	0.0
6	8.0	6.5	7.0	1.5	0.5	1.0	2.5	1.5	2.0	1.0	0.5	0.5
7	8.0	6.5	7.0	1.5	0.5	1.0	2.0	1.5	2.0	1.0	1.0	1.0
8	8.0	6.5	7.0	2.0	1.0	1.5	1.5	0.0	0.5	1.0	1.0	1.0
9	8.5	6.5	7.5	2.0	1.5	2.0	0.5	0.0	0.0	1.0	1.0	1.0
10	8.0	5.5	7.0	2.5	1.5	2.0	0.5	0.0	0.0	1.0	1.0	1.0
11	5.5	3.5	4.5	1.5	0.5	1.0	0.5	0.0	0.0	1.0	0.5	1.0
12	6.5	4.5	5.5	1.5	1.0	1.0	0.5	0.0	0.0	1.0	0.5	0.5
13	6.0	4.0	4.5	1.5	1.0	1.5	1.0	0.0	0.5	1.0	0.5	1.0
14	5.5	3.0	4.0	2.0	1.5	1.5	1.0	0.5	1.0	1.0	0.5	1.0
15	5.5	3.5	4.5	1.5	0.5	1.5	0.5	0.0	0.0	1.0	0.5	1.0
16	6.0	4.0	5.0	2.0	1.0	1.5	0.0	0.0	0.0	1.0	0.5	1.0
17	6.5	4.0	5.5	2.0	1.5	2.0	0.0	0.0	0.0	1.0	0.5	0.5
18	7.0	5.0	5.5	2.0	1.0	1.5	1.0	0.0	0.5	1.0	0.5	0.5
19	7.5	6.0	6.5	2.0	1.0	1.5	1.0	1.0	1.0	1.0	1.0	1.0
20	7.0	5.0	6.0	2.5	1.5	2.0	1.5	1.0	1.5	1.0	0.5	1.0
21	6.5	5.0	5.5	2.0	0.5	2.0	1.5	1.0	1.5	0.5	0.5	0.5
22	7.0	5.0	6.0	0.5	0.5	0.5	1.0	0.5	1.0	0.5	0.0	0.0
23	6.5	5.0	6.0	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5
24	6.0	4.0	5.0	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.5	1.0
25	5.0	4.0	4.5	1.0	0.5	0.5	1.0	0.5	1.0	1.0	0.5	0.5
26	5.5	4.0	4.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0
27	6.0	4.5	5.0	0.5	0.0	0.0	0.5	0.0	0.0	1.0	0.0	0.5
28	6.5	5.0	5.5	1.0	0.0	0.5	0.5	0.0	0.0	1.0	0.5	1.0
29	6.5	5.0	6.0	1.5	1.0	1.5	0.5	0.5	0.5	1.0	0.5	1.0
30	5.0	2.5	3.5	2.0	1.5	2.0	1.0	0.5	1.0	1.0	1.0	1.0
31	2.5	1.5	2.0	–	–	–	1.0	1.0	1.0	1.0	0.5	1.0
Month	9.5	1.5	5.8	2.5	0.0	1.2	2.5	0.0	0.7	1.0	0.0	0.7

Table B14. Maximum, minimum, and mean water temperature for the continual-recording gage Shingle Creek near Great Basin National Park boundary near Osceola, Nevada (gage station 10243640).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	0.5	0.0	0.0	1.0	0.0	0.5	3.5	2.5	3.0	8.0	2.5	5.0
2	0.5	0.5	0.5	1.0	1.0	1.0	4.5	1.5	3.0	8.5	3.5	5.5
3	1.0	0.5	1.0	1.0	0.5	0.5	5.5	2.5	3.0	9.0	4.0	6.5
4	1.0	1.0	1.0	1.0	1.0	1.0	5.0	2.0	3.5	9.0	4.5	6.5
5	1.0	0.5	1.0	1.0	0.5	1.0	5.0	2.5	3.5	9.5	5.0	7.0
6	1.0	0.5	0.5	1.5	1.0	1.5	5.0	1.5	3.0	8.5	4.5	6.0
7	1.0	0.5	1.0	1.5	1.0	1.5	4.0	2.0	3.0	8.5	4.0	6.0
8	0.5	0.5	0.5	2.0	1.0	1.5	5.0	3.0	4.0	9.0	4.5	6.5
9	0.5	0.0	0.5	2.0	1.0	1.5	6.0	2.5	3.5	9.0	4.0	6.0
10	0.5	0.0	0.5	2.0	1.5	2.0	3.5	1.5	2.5	8.5	4.5	6.0
11	1.0	0.5	0.5	2.0	1.0	1.5	4.5	1.0	2.5	5.0	3.0	4.0
12	0.5	0.5	0.5	2.5	1.0	1.5	6.0	1.5	3.5	5.5	2.5	3.5
13	0.5	0.5	0.5	2.5	1.0	2.0	6.0	2.0	3.5	7.0	2.5	4.5
14	1.0	0.5	0.5	3.0	1.5	2.0	4.5	2.0	3.0	8.0	3.5	5.0
15	1.0	0.5	1.0	3.0	1.5	2.0	4.5	2.0	3.0	7.5	4.0	5.5
16	1.0	1.0	1.0	3.5	1.0	2.0	4.5	2.5	3.5	7.5	4.0	5.5
17	1.5	1.0	1.5	3.5	1.0	2.0	3.5	2.5	3.0	7.5	5.0	6.0
18	1.5	1.0	1.5	4.0	1.5	2.5	4.0	1.5	2.5	8.5	4.5	6.0
19	1.5	1.0	1.5	4.5	2.0	3.0	3.0	1.5	2.0	7.5	4.0	5.5
20	1.0	0.5	0.5	4.5	2.0	3.0	3.5	1.5	2.5	8.0	4.0	5.5
21	1.0	0.5	0.5	5.0	2.5	3.5	4.0	2.0	3.0	7.0	3.5	5.0
22	1.0	1.0	1.0	5.0	2.5	3.5	4.0	1.0	2.5	6.0	4.0	5.0
23	1.5	1.0	1.0	5.5	3.0	4.0	5.5	1.0	3.0	7.0	4.0	5.5
24	1.5	1.0	1.0	5.0	2.5	3.5	6.0	1.5	3.5	7.0	3.5	5.0
25	1.0	1.0	1.0	5.5	2.5	4.0	6.5	2.0	4.0	6.0	4.0	5.0
26	1.0	0.5	0.5	3.5	2.0	3.0	7.5	2.5	4.5	8.0	3.5	5.5
27	1.0	0.5	1.0	3.0	1.0	2.0	7.0	3.0	5.0	8.0	5.0	6.5
28	1.0	0.5	0.5	3.5	1.0	2.0	6.5	3.0	4.5	7.0	6.0	6.5
29	1.0	0.5	0.5	4.0	1.0	2.5	3.5	1.0	2.5	7.5	4.5	5.5
30	–	–	–	5.5	1.5	3.0	6.5	1.5	3.5	8.5	3.5	5.5
31	–	–	–	6.0	3.0	4.0	–	–	–	8.5	4.5	6.5
Month	1.5	0.0	0.8	6.0	0.0	2.2	7.5	1.0	3.2	9.5	2.5	5.6

Table B14. Maximum, minimum, and mean water temperature for the continual-recording gage Shingle Creek near Great Basin National Park boundary near Osceola, Nevada (gage station 10243640).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	9.5	5.5	7.0	10.5	7.5	9.0	11.0	9.5	10.5	11.0	8.5	9.5
2	11.0	6.0	8.0	11.0	7.5	9.0	12.0	9.5	10.5	10.0	8.5	9.5
3	11.5	6.5	8.5	11.0	7.5	9.0	12.5	9.5	10.5	9.5	6.5	7.5
4	11.5	7.0	9.0	10.5	8.0	9.0	12.5	9.5	11.0	7.5	5.5	6.5
5	12.0	7.0	9.0	11.0	8.5	9.5	12.5	10.0	11.0	8.5	5.5	7.0
6	12.0	7.0	9.5	12.5	8.5	10.0	12.5	10.0	11.0	9.5	6.5	8.0
7	12.0	7.5	9.5	12.5	8.5	10.5	12.0	8.5	10.0	9.5	7.0	8.0
8	11.5	7.5	9.0	12.5	9.0	10.5	12.0	8.5	10.0	10.0	7.0	8.5
9	9.5	6.5	8.0	12.0	9.0	10.5	12.5	9.0	10.5	10.0	7.5	8.5
10	7.0	5.0	6.0	12.0	8.5	10.0	12.5	9.5	11.0	10.5	8.0	9.0
11	8.0	4.5	6.0	12.5	8.5	10.0	12.5	9.5	11.0	10.5	8.5	9.0
12	9.5	5.5	7.5	13.0	8.5	10.5	13.0	9.5	11.0	10.5	9.0	9.5
13	11.5	6.5	8.5	13.0	10.0	11.5	12.0	10.0	11.0	10.0	8.0	9.0
14	11.0	7.5	9.0	13.0	10.5	11.5	12.5	9.5	11.0	9.0	7.0	8.0
15	11.5	7.5	9.0	13.5	11.0	12.0	11.5	10.0	10.5	8.0	5.5	6.5
16	10.5	7.5	9.0	12.0	11.0	11.5	11.5	9.5	10.5	9.5	6.5	8.0
17	10.0	7.5	8.5	12.5	10.0	11.0	10.0	9.0	9.5	10.0	8.0	9.0
18	10.0	6.5	8.5	13.0	10.0	11.5	10.5	9.0	9.5	9.0	8.0	8.5
19	10.5	7.0	8.5	13.0	10.5	11.5	11.0	9.0	10.0	8.0	5.5	7.0
20	11.0	7.0	9.0	13.5	10.0	11.5	11.5	9.0	10.0	5.5	4.0	4.5
21	11.0	8.0	9.0	13.0	9.5	11.5	11.0	9.0	10.0	5.0	3.5	4.0
22	11.0	6.5	8.5	12.5	10.5	11.5	10.5	8.5	9.5	5.5	3.0	4.0
23	10.5	7.5	9.0	12.0	10.0	11.0	9.5	8.5	9.0	7.0	4.0	5.5
24	11.0	7.5	9.5	12.0	9.5	10.5	10.0	8.5	9.0	7.5	5.0	6.0
25	11.0	8.0	9.5	12.0	9.5	11.0	11.0	8.5	9.5	8.0	5.5	6.5
26	10.0	8.0	9.0	11.5	9.5	10.5	10.5	8.5	9.5	8.0	5.5	7.0
27	10.5	7.5	9.0	11.0	9.5	10.0	9.5	7.0	8.0	8.0	6.0	7.0
28	10.5	8.0	9.0	12.0	8.5	10.0	9.5	6.5	8.0	7.5	6.0	6.5
29	10.5	7.5	9.0	11.5	9.0	10.5	10.0	7.0	8.5	7.0	5.5	6.0
30	10.5	7.0	9.0	12.5	9.0	10.5	10.5	7.5	9.0	6.5	4.5	5.5
31	–	–	–	12.5	9.0	10.5	11.0	8.0	9.5	–	–	–
Month	12.0	4.5	8.6	13.5	7.5	10.5	13.0	6.5	10.0	11.0	3.0	7.3
Year	13.5	0.0	4.7									

Table B15. Maximum, minimum, and mean water temperature for the continual-recording gage Lehman Creek near Baker, Nevada (gage station 10243260).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	0.0	0.0	0.0	2.0	0.5	1.0	0.0	0.0	0.0
2	–	–	–	0.0	0.0	0.0	2.0	0.0	1.0	0.0	0.0	0.0
3	–	–	–	0.0	0.0	0.0	1.0	0.0	0.0	0.5	0.0	0.5
4	–	–	–	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.5	0.5
5	–	–	–	0.0	0.0	0.0	0.5	0.0	0.0	1.5	0.5	1.0
6	–	–	–	1.5	0.0	0.5	0.5	0.0	0.0	1.0	0.0	0.5
7	–	–	–	3.0	0.5	1.5	0.5	0.0	0.0	1.0	0.0	0.5
8	–	–	–	3.5	2.0	3.0	0.0	0.0	0.0	1.0	0.0	0.5
9	9.5	5.0	–	4.5	1.0	3.0	0.0	0.0	0.0	1.5	0.0	0.5
10	9.0	5.5	–	3.5	1.0	2.0	0.0	0.0	0.0	1.5	0.5	1.0
11	8.5	5.0	–	3.0	0.0	1.0	0.0	0.0	0.0	2.0	0.0	1.0
12	7.0	3.0	4.5	3.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.5
13	7.0	2.0	4.0	4.0	1.5	2.5	0.5	0.0	0.0	2.0	0.0	1.0
14	7.5	3.5	5.0	3.5	0.0	2.0	2.0	0.0	1.0	2.0	0.0	1.0
15	7.5	3.0	5.0	2.5	0.0	1.0	2.0	0.0	1.0	2.0	0.0	0.5
16	7.5	3.0	5.0	3.0	0.0	1.5	0.5	0.0	0.0	0.5	0.0	0.0
17	7.5	3.0	5.0	3.5	0.0	2.0	0.0	0.0	0.0	1.0	0.0	0.0
18	7.5	3.5	5.0	1.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
19	7.5	3.0	5.0	3.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.5
20	7.5	3.5	5.0	3.5	0.0	1.5	0.0	0.0	0.0	2.0	0.0	0.5
21	7.5	3.0	5.0	4.5	1.0	2.5	0.0	0.0	0.0	1.5	0.0	0.5
22	7.5	3.5	5.5	4.5	1.5	2.5	0.0	0.0	0.0	2.0	0.0	1.0
23	7.0	3.0	4.5	4.0	1.0	2.0	0.0	0.0	0.0	3.0	0.5	1.5
24	6.5	3.0	4.5	3.0	0.0	1.5	0.0	0.0	0.0	3.0	0.5	1.5
25	6.0	3.0	4.5	0.5	0.0	0.0	0.0	0.0	0.0	3.0	0.5	1.5
26	5.5	4.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	1.5
27	7.0	3.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	1.5	2.5
28	6.0	2.0	4.0	0.0	0.0	0.0	0.5	0.0	0.0	3.5	1.0	2.5
29	4.0	1.0	2.5	0.0	0.0	0.0	0.5	0.0	0.5	3.5	0.0	1.5
30	3.5	0.0	1.5	0.5	0.0	0.5	0.0	0.0	0.0	4.5	1.0	2.5
31	2.5	0.0	0.5	–	–	–	0.0	0.0	0.0	5.0	1.5	3.0
Month	–	–	–	4.5	0.0	1.1	2.0	0.0	0.1	5.0	0.0	1.0

Table B15. Maximum, minimum, and mean water temperature for the continual-recording gage Lehman Creek near Baker, Nevada (gage station 10243260).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
	Water year 2003—Continued											
1	5.0	2.5	3.5	0.0	0.0	0.0	–	–	–	–	–	–
2	2.5	0.0	0.5	0.0	0.0	0.0	–	–	–	–	–	–
3	0.0	0.0	0.0	0.0	0.0	0.0	–	–	–	–	–	–
4	0.0	0.0	0.0	0.5	0.0	0.0	–	–	–	–	–	–
5	0.0	0.0	0.0	0.5	0.0	0.0	–	–	–	–	–	–
6	0.0	0.0	0.0	2.5	0.0	1.0	–	–	–	–	–	–
7	0.0	0.0	0.0	4.0	0.0	1.5	–	–	–	–	–	–
8	0.0	0.0	0.0	5.0	0.0	2.0	–	–	–	–	–	–
9	0.0	0.0	0.0	5.5	0.0	2.0	–	–	–	–	–	–
10	0.0	0.0	0.0	5.5	0.5	3.0	–	–	–	–	–	–
11	0.0	0.0	0.0	7.0	1.0	3.5	–	–	–	–	–	–
12	0.0	0.0	0.0	7.0	1.5	4.0	–	–	–	–	–	–
13	0.0	0.0	0.0	8.0	2.0	4.5	–	–	–	–	–	–
14	1.0	0.0	0.5	7.5	3.5	4.5	–	–	–	–	–	–
15	2.0	0.0	1.0	7.5	3.0	4.5	–	–	–	–	–	–
16	2.5	0.0	1.0	5.0	1.5	3.0	–	–	–	–	–	–
17	1.5	0.0	0.5	4.0	1.0	2.0	–	–	–	–	–	–
18	2.5	0.0	0.5	4.5	0.0	2.0	–	–	–	–	–	–
19	1.0	0.0	0.5	5.0	0.0	2.0	–	–	–	–	–	–
20	3.0	0.0	1.0	4.0	0.0	1.5	–	–	–	–	–	–
21	2.5	0.0	0.5	6.0	0.0	2.5	–	–	–	–	–	–
22	3.0	0.0	0.5	–	–	–	–	–	–	–	–	–
23	0.5	0.0	0.0	–	–	–	–	–	–	–	–	–
24	0.0	0.0	0.0	–	–	–	–	–	–	–	–	–
25	0.0	0.0	0.0	–	–	–	–	–	–	–	–	–
26	0.0	0.0	0.0	–	–	–	–	–	–	–	–	–
27	0.0	0.0	0.0	–	–	–	–	–	–	–	–	–
28	0.0	0.0	0.0	–	–	–	–	–	–	–	–	–
29	–	–	–	–	–	–	–	–	–	–	–	–
30	–	–	–	–	–	–	–	–	–	–	–	–
31	–	–	–	–	–	–	–	–	–	–	–	–
Month	5.0	0.0	0.4	–	–	–	–	–	–	–	–	–

Table B15. Maximum, minimum, and mean water temperature for the continual-recording gage Lehman Creek near Baker, Nevada (gage station 10243260).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2002. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	–	–	–
7	–	–	–	–	–	–	–	–	–	–	–	–
8	–	–	–	–	–	–	–	–	–	–	–	–
9	–	–	–	–	–	–	–	–	–	–	–	–
10	–	–	–	–	–	–	–	–	–	–	–	–
11	–	–	–	–	–	–	–	–	–	–	–	–
12	–	–	–	–	–	–	–	–	–	–	–	–
13	–	–	–	–	–	–	–	–	–	–	–	–
14	–	–	–	–	–	–	–	–	–	–	–	–
15	–	–	–	–	–	–	–	–	–	–	–	–
16	–	–	–	–	–	–	–	–	–	–	–	–
17	–	–	–	–	–	–	–	–	–	–	–	–
18	–	–	–	–	–	–	–	–	–	–	–	–
19	–	–	–	–	–	–	–	–	–	–	–	–
20	–	–	–	–	–	–	–	–	–	–	–	–
21	–	–	–	–	–	–	–	–	–	–	–	–
22	–	–	–	–	–	–	–	–	–	–	–	–
23	–	–	–	–	–	–	–	–	–	13.5	7.0	9.5
24	–	–	–	–	–	–	–	–	–	13.0	7.0	9.5
25	–	–	–	–	–	–	–	–	–	12.5	7.0	9.0
26	–	–	–	–	–	–	–	–	–	12.5	7.0	9.0
27	–	–	–	–	–	–	–	–	–	13.0	7.5	9.5
28	–	–	–	–	–	–	–	–	–	13.5	8.0	10.0
29	–	–	–	–	–	–	–	–	–	13.5	8.0	10.0
30	–	–	–	–	–	–	–	–	–	14.0	9.0	11.0
31	–	–	–	–	–	–	–	–	–	–	–	–
Month	–	–	–	–	–	–	–	–	–	–	–	–

Table B15. Maximum, minimum, and mean water temperature for the continual-recording gage Lehman Creek near Baker, Nevada (gage station 10243260).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	14.0	9.0	11.0	2.0	0.5	1.5	2.0	1.0	1.5	0.0	0.0	0.0
2	12.0	8.5	10.0	3.0	0.0	1.5	3.0	0.5	1.0	0.0	0.0	0.0
3	12.0	8.0	9.5	2.0	1.0	1.5	2.0	0.0	1.0	0.0	0.0	0.0
4	12.0	7.0	9.0	2.0	0.0	1.0	2.0	0.0	1.0	0.0	0.0	0.0
5	12.5	7.5	9.5	1.5	0.0	1.0	3.5	1.0	2.5	0.0	0.0	0.0
6	12.0	7.5	9.5	2.0	0.0	1.0	3.5	2.0	2.5	0.0	0.0	0.0
7	11.5	7.5	9.5	2.0	0.0	1.0	4.0	1.5	2.5	0.0	0.0	0.0
8	12.5	7.5	9.5	4.0	1.0	2.0	1.5	0.0	0.5	0.0	0.0	0.0
9	13.0	7.5	9.5	4.5	2.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0
10	10.5	5.5	8.5	3.5	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
11	8.5	3.5	5.5	4.5	0.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
12	10.0	5.0	7.0	3.0	0.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0
13	8.0	4.0	6.0	2.0	0.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0
14	8.5	3.0	5.5	4.5	1.5	2.5	1.0	0.0	0.5	0.0	0.0	0.0
15	9.0	3.5	6.0	3.0	0.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0
16	9.5	5.0	7.0	3.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
17	10.5	5.0	7.5	3.5	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
18	10.0	5.5	7.5	4.5	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
19	10.5	6.5	8.0	4.5	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
20	11.0	6.5	8.0	4.5	1.0	2.5	1.0	0.0	0.5	0.0	0.0	0.0
21	11.0	6.0	8.0	3.5	0.0	2.0	1.5	1.0	1.0	0.0	0.0	0.0
22	11.0	6.5	8.0	0.5	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
23	10.5	6.5	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	8.5	4.5	6.0	0.0	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
25	6.5	2.5	4.0	0.0	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
26	7.0	2.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	8.5	3.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	10.0	5.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	10.5	5.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	5.0	1.5	3.5	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
31	1.5	0.5	1.0	–	–	–	0.0	0.0	0.0	0.0	0.0	0.0
Month	14.0	0.5	7.3	4.5	0.0	1.3	4.0	0.0	0.5	0.0	0.0	0.0

Table B15. Maximum, minimum, and mean water temperature for the continual-recording gage Lehman Creek near Baker, Nevada (gage station 10243260).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	0.0	0.0	0.0	0.5	0.0	0.0	6.0	3.5	5.5	12.0	4.5	7.5
2	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.0	3.5	12.5	5.5	9.0
3	0.0	0.0	0.0	0.0	0.0	0.0	7.5	3.0	5.0	14.0	6.5	10.0
4	0.0	0.0	0.0	1.0	0.0	0.0	10.0	3.0	6.5	14.0	7.5	10.0
5	0.0	0.0	0.0	2.0	0.0	0.5	10.5	4.0	7.0	13.0	7.5	10.0
6	0.0	0.0	0.0	3.5	0.0	1.5	8.0	4.5	6.0	11.5	6.5	8.5
7	0.0	0.0	0.0	4.5	0.0	1.5	10.0	4.5	6.5	10.5	5.5	8.0
8	0.0	0.0	0.0	5.0	0.0	2.0	8.5	6.0	7.0	11.0	6.0	8.0
9	0.0	0.0	0.0	5.5	0.5	2.5	10.5	4.0	6.5	11.0	6.0	8.5
10	0.0	0.0	0.0	5.5	1.0	2.5	6.0	3.5	4.5	11.0	6.0	7.5
11	0.0	0.0	0.0	5.5	0.0	2.0	9.0	1.5	4.5	7.0	4.0	5.5
12	0.0	0.0	0.0	6.0	0.0	2.5	10.5	3.0	6.0	6.5	3.5	5.0
13	0.0	0.0	0.0	7.0	1.0	3.0	11.0	4.0	7.0	9.0	3.5	5.5
14	0.0	0.0	0.0	7.0	1.5	4.0	10.0	3.5	6.5	10.0	3.5	6.5
15	0.0	0.0	0.0	8.0	1.5	4.0	8.5	4.0	6.0	10.0	5.0	7.5
16	0.0	0.0	0.0	8.0	1.0	4.0	10.0	4.5	6.5	10.0	6.0	8.0
17	1.0	0.0	0.0	8.5	1.5	4.5	8.5	5.0	6.5	10.0	6.5	8.0
18	1.0	0.5	0.5	9.5	2.0	5.0	8.5	3.5	5.5	12.0	6.5	8.5
19	3.0	0.5	1.0	10.5	3.5	6.0	6.0	3.5	5.0	9.5	5.0	7.5
20	1.5	0.0	0.5	10.5	3.5	6.5	8.0	2.5	5.0	10.5	5.0	7.5
21	1.5	0.0	0.5	11.0	4.0	7.0	9.0	4.0	6.0	9.0	5.0	7.0
22	1.0	0.0	0.5	10.0	4.5	7.0	7.0	3.0	4.5	9.0	5.5	7.0
23	0.5	0.0	0.5	10.0	5.5	7.5	10.0	3.0	6.0	11.0	6.0	7.5
24	3.0	0.0	1.0	10.5	4.5	7.0	11.0	3.5	6.5	9.5	5.5	7.0
25	1.5	0.0	1.0	10.5	3.5	6.5	11.0	4.0	7.5	7.5	5.5	6.5
26	1.0	0.0	0.5	6.5	4.0	5.5	12.0	4.5	8.0	10.5	4.5	7.5
27	0.5	0.0	0.0	8.0	2.0	4.5	12.5	5.5	8.5	10.5	6.5	8.5
28	0.5	0.0	0.0	7.5	1.5	4.0	11.5	5.5	8.0	12.0	7.5	9.5
29	1.0	0.0	0.0	8.5	1.0	4.5	5.5	3.0	4.0	9.0	6.0	7.5
30	–	–	–	10.0	2.0	5.5	10.5	3.0	6.0	10.5	4.5	7.5
31	–	–	–	11.5	4.5	7.5	–	–	–	12.0	6.5	8.5
Month	3.0	0.0	0.2	11.5	0.0	3.8	12.5	1.5	6.0	14.0	3.5	7.8

Table B15. Maximum, minimum, and mean water temperature for the continual-recording gage Lehman Creek near Baker, Nevada (gage station 10243260).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	12.5	7.0	9.5	13.0	8.0	10.0	13.0	10.0	11.5	15.5	10.0	12.0
2	13.5	7.5	10.0	13.0	8.0	10.0	14.5	10.0	12.0	14.0	10.0	12.0
3	14.0	8.0	11.0	14.0	8.0	10.0	16.0	10.0	12.5	11.5	7.0	8.5
4	14.0	8.5	11.0	12.5	8.0	10.0	16.5	10.5	13.0	9.5	6.0	7.5
5	14.5	8.5	11.0	13.5	8.5	10.5	16.5	11.0	13.5	12.0	6.5	9.0
6	14.5	9.0	11.0	14.5	8.5	11.5	16.0	10.5	13.0	13.5	8.0	10.0
7	14.0	8.5	11.0	16.0	10.0	12.0	15.5	10.0	12.5	13.5	8.5	10.5
8	13.5	8.5	10.5	16.0	9.5	12.0	15.5	10.0	12.5	14.0	8.5	11.0
9	11.5	7.5	9.5	16.0	9.5	12.0	16.0	10.0	12.5	14.0	9.0	11.5
10	10.5	6.0	8.0	15.5	9.0	12.0	14.5	10.5	12.5	14.0	9.5	11.5
11	10.5	5.5	7.5	16.0	9.5	12.0	15.5	10.5	13.0	14.5	10.0	12.0
12	12.0	6.5	8.5	16.0	9.5	12.5	15.5	10.5	13.0	14.5	10.0	12.0
13	14.0	7.0	10.0	15.0	11.0	12.5	15.5	11.0	13.0	14.0	10.0	11.5
14	14.0	8.0	10.5	14.5	11.0	12.5	14.5	11.0	12.5	12.0	8.5	10.0
15	14.0	8.0	10.0	14.5	11.0	12.5	14.0	11.0	12.5	11.0	6.5	8.5
16	13.5	8.0	9.5	14.5	11.0	12.5	15.0	11.0	12.5	12.5	7.5	10.0
17	11.0	8.0	9.0	14.0	10.5	12.0	12.0	10.5	11.0	13.5	9.0	11.0
18	13.0	7.0	9.5	15.5	10.5	13.0	14.0	10.0	12.0	13.0	9.0	10.5
19	14.0	7.5	10.5	15.5	11.0	12.5	14.5	10.5	12.5	11.0	7.0	9.0
20	13.5	8.0	10.5	17.0	10.5	13.0	14.0	10.5	12.0	7.5	5.0	6.5
21	13.0	8.0	10.0	16.0	10.5	13.0	14.5	10.5	12.5	7.0	4.5	6.0
22	13.5	6.5	9.5	14.5	10.5	12.5	14.5	10.0	12.0	8.5	3.5	6.0
23	10.5	8.0	9.5	14.5	10.0	12.0	13.0	10.0	11.5	10.0	5.0	7.0
24	12.5	8.0	10.0	14.5	10.0	12.0	12.5	10.0	11.0	11.0	6.5	8.5
25	13.5	8.5	10.5	14.0	10.5	12.0	14.5	9.5	11.5	11.0	7.0	9.0
26	12.5	8.5	10.0	14.5	10.0	12.0	13.5	10.0	11.5	12.0	7.0	9.0
27	12.5	8.0	10.0	12.5	10.0	11.5	13.0	8.5	10.5	11.5	7.0	9.5
28	12.5	8.5	10.0	14.0	9.5	11.5	13.5	8.0	10.0	10.0	7.5	8.5
29	11.5	8.0	9.5	15.5	10.0	12.5	14.0	8.5	11.0	9.0	7.0	8.0
30	13.5	7.5	10.0	15.5	10.0	12.5	13.5	9.0	11.0	8.5	6.0	7.5
31	–	–	–	16.0	10.0	12.5	14.5	9.5	11.5	–	–	–
Month	14.5	5.5	9.9	17.0	8.0	11.9	16.5	8.0	12.0	15.5	3.5	9.4
Year	17.0	0.0	5.9									

Table B16. Maximum, minimum, and mean water temperature for the continual-recording gage Rowland Spring at Great Basin National Park near Baker, Nevada (gage station 10243265).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	–	–	–	9.0	8.5	9.0	8.5	8.5	8.5
2	–	–	–	–	–	–	9.0	8.5	8.5	9.0	8.5	8.5
3	–	–	–	–	–	–	8.5	8.5	8.5	8.5	8.5	8.5
4	–	–	–	–	–	–	8.5	8.5	8.5	9.0	8.5	8.5
5	–	–	–	–	–	–	8.5	8.5	8.5	9.0	8.5	8.5
6	–	–	–	–	–	–	9.0	8.5	8.5	8.5	8.5	8.5
7	–	–	–	–	–	–	8.5	8.5	8.5	8.5	8.5	8.5
8	–	–	–	–	–	–	8.5	8.5	8.5	8.5	8.5	8.5
9	–	–	–	–	–	–	9.0	8.5	8.5	9.0	8.5	8.5
10	–	–	–	–	–	–	8.5	8.5	8.5	9.0	8.0	8.5
11	–	–	–	–	–	–	9.0	8.5	8.5	9.0	8.0	8.5
12	–	–	–	–	–	–	8.5	8.5	8.5	9.0	8.5	8.5
13	–	–	–	–	–	–	9.0	8.5	8.5	8.5	8.5	8.5
14	–	–	–	–	–	–	9.0	8.5	8.5	9.0	8.5	8.5
15	–	–	–	–	–	–	9.0	8.5	8.5	8.5	8.5	8.5
16	–	–	–	–	–	–	9.0	8.5	8.5	8.5	8.5	8.5
17	–	–	–	–	–	–	8.5	8.5	8.5	8.5	8.5	8.5
18	–	–	–	–	–	–	9.0	8.5	8.5	8.5	8.5	8.5
19	–	–	–	–	–	–	8.5	8.5	8.5	8.5	8.5	8.5
20	–	–	–	–	–	–	9.0	8.5	8.5	8.5	8.5	8.5
21	–	–	–	9.0	8.5	9.0	9.0	8.5	9.0	9.0	8.5	8.5
22	–	–	–	9.0	8.5	9.0	9.0	8.5	9.0	9.0	8.5	8.5
23	–	–	–	9.0	8.5	9.0	9.0	8.5	9.0	9.0	8.5	8.5
24	–	–	–	9.0	8.5	8.5	9.0	8.5	8.5	9.0	8.5	8.5
25	–	–	–	8.5	8.5	8.5	8.5	8.5	8.5	9.0	8.5	8.5
26	–	–	–	9.0	8.5	8.5	9.0	8.5	8.5	9.0	8.0	8.5
27	–	–	–	9.0	8.5	8.5	9.0	8.5	8.5	9.0	8.5	9.0
28	–	–	–	9.0	8.5	9.0	9.0	8.5	9.0	9.0	8.5	9.0
29	–	–	–	9.0	8.5	9.0	9.0	8.5	8.5	9.0	8.5	8.5
30	–	–	–	9.0	8.5	9.0	9.0	8.5	8.5	9.0	8.5	8.5
31	–	–	–	–	–	–	9.0	8.5	8.5	9.0	8.5	8.5
Month	–	–	–	–	–	–	9.0	8.5	8.6	9.0	8.0	8.5

Table B16. Maximum, minimum, and mean water temperature for the continual-recording gage Rowland Spring at Great Basin National Park near Baker, Nevada (gage station 10243265).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	9.0	8.5	9.0	9.0	8.0	8.5	9.0	8.5	9.0	8.5	8.5	8.5
2	9.0	8.0	8.5	8.5	7.5	8.0	9.0	8.5	8.5	8.5	8.5	8.5
3	8.5	8.0	8.5	8.5	8.0	8.0	9.0	8.5	8.5	8.5	8.5	8.5
4	9.0	8.5	8.5	9.0	8.0	8.5	10.0	8.5	8.5	8.5	8.5	8.5
5	8.5	8.5	8.5	9.0	8.0	8.0	9.5	8.5	8.5	8.5	8.5	8.5
6	9.0	8.5	8.5	9.0	8.0	8.5	9.5	8.5	8.5	8.5	8.5	8.5
7	8.5	8.5	8.5	9.0	8.0	8.5	9.0	8.5	8.5	8.5	8.5	8.5
8	8.5	8.5	8.5	9.0	8.0	8.5	9.0	8.5	8.5	8.5	8.5	8.5
9	8.5	8.0	8.5	9.0	8.0	8.5	9.5	8.5	9.0	8.5	8.5	8.5
10	8.5	8.0	8.5	9.0	8.5	9.0	9.0	8.5	9.0	8.5	8.5	8.5
11	9.0	8.0	8.5	9.0	8.5	8.5	9.0	8.5	9.0	8.5	8.5	8.5
12	9.0	8.0	8.5	9.0	8.5	8.5	9.0	8.5	9.0	8.5	8.5	8.5
13	9.0	8.5	8.5	9.5	8.5	9.0	9.0	8.5	9.0	8.5	8.5	8.5
14	9.0	8.5	8.5	9.5	8.5	9.0	9.0	8.5	8.5	8.5	8.5	8.5
15	9.0	8.5	8.5	9.5	8.5	9.0	9.0	8.0	8.5	8.5	8.5	8.5
16	9.0	8.0	8.5	9.5	8.5	8.5	9.0	8.5	8.5	8.5	8.5	8.5
17	9.0	8.0	8.5	9.0	8.5	8.5	9.0	8.5	8.5	8.5	8.5	8.5
18	9.0	8.0	8.5	9.0	8.5	8.5	9.0	8.5	8.5	8.5	8.5	8.5
19	9.0	8.5	8.5	9.0	8.0	8.5	9.0	8.5	8.5	8.5	8.5	8.5
20	9.0	8.0	8.5	9.0	8.0	8.5	9.0	8.5	8.5	8.5	8.5	8.5
21	9.0	8.0	8.0	9.5	8.5	8.5	9.0	8.5	8.5	8.5	8.5	8.5
22	9.0	8.0	8.5	9.5	8.5	8.5	9.0	8.5	8.5	8.5	8.5	8.5
23	9.0	8.0	8.5	9.0	8.5	8.5	9.0	8.5	8.5	8.5	8.5	8.5
24	9.0	8.0	8.5	9.0	8.5	8.5	9.0	8.5	8.5	8.5	8.5	8.5
25	9.0	8.0	8.5	9.0	8.5	8.5	9.0	8.5	8.5	8.5	8.5	8.5
26	9.5	8.0	8.5	9.0	8.5	9.0	9.0	8.5	8.5	8.5	8.5	8.5
27	9.0	8.0	8.5	9.0	8.5	8.5	8.5	8.5	8.5	9.0	8.5	9.0
28	9.0	8.0	8.5	9.0	8.5	8.5	8.5	8.5	8.5	9.0	9.0	9.0
29	–	–	–	9.0	8.5	8.5	8.5	8.5	8.5	9.0	9.0	9.0
30	–	–	–	9.0	8.5	8.5	8.5	8.0	8.5	9.0	9.0	9.0
31	–	–	–	9.0	8.5	9.0	–	–	–	9.0	9.0	9.0
Month	9.5	8.0	8.5	9.5	7.5	8.5	10.0	8.0	8.6	9.0	8.5	8.6

Table B16. Maximum, minimum, and mean water temperature for the continual-recording gage Rowland Spring at Great Basin National Park near Baker, Nevada (gage station 10243265).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	9.0	9.0	9.0	9.0		9.0	10.0	10.0	10.0	10.0	10.0	10.0
2	9.0	9.0	9.0	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
3	9.0	9.0	9.0	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
4	9.0	9.0	9.0	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
5	9.0	9.0	9.0	9.5	9.0	9.5	10.0	10.0	10.0	10.0	10.0	10.0
6	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
7	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
8	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
9	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
10	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
11	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
12	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
13	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
14	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
15	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
16	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
17	9.0	9.0	9.0	10.0	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
18	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
19	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
20	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
21	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
22	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
23	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
24	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
25	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
26	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
27	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
28	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
29	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
30	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
31	–	–	–	10.0	10.0	10.0	10.0	10.0	10.0	–	–	–
Month	9.0	9.0	9.0	10.0	9.0	9.7	10.0	10.0	10.0	10.0	10.0	10.0

Table B16. Maximum, minimum, and mean water temperature for the continual-recording gage Rowland Spring at Great Basin National Park near Baker, Nevada (gage station 10243265).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	10.0	9.5	9.5
2	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	9.5	10.0	9.5	9.5
3	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	10.0	9.5	9.5
4	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	9.5	9.5	9.5
5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	9.5	9.5	9.5
6	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	10.0	10.0	9.5	9.5
7	10.0	9.5	10.0	10.0	10.0	10.0	10.0	9.5	9.5	10.0	9.5	9.5
8	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	10.0	9.5	9.5
9	10.0	9.5	10.0	10.0	10.0	10.0	10.0	9.5	9.5	10.0	9.5	9.5
10	10.0	9.5	10.0	10.0	10.0	10.0	10.0	9.5	10.0	10.0	9.5	9.5
11	10.0	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5
12	10.0	9.5	9.5	10.0	9.5	10.0	10.0	10.0	10.0	10.0	9.5	9.5
13	10.0	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5
14	10.0	9.5	9.5	10.0	10.0	10.0	10.0	9.5	10.0	10.0	9.5	9.5
15	10.0	9.5	9.5	10.0	10.0	10.0	10.0	9.5	9.5	10.0	9.5	9.5
16	10.0	9.5	9.5	10.0	10.0	10.0	10.0	9.5	9.5	10.0	9.5	9.5
17	10.0	9.5	9.5	10.0	10.0	10.0	10.0	9.5	9.5	10.0	9.5	9.5
18	10.0	9.5	9.5	10.0	10.0	10.0	10.0	9.5	9.5	10.0	9.5	9.5
19	10.0	9.5	9.5	10.0	10.0	10.0	10.0	9.5	9.5	10.0	10.0	10.0
20	10.0	9.5	9.5	10.0	10.0	10.0	9.5	9.5	9.5	10.0	9.5	10.0
21	10.0	9.5	9.5	10.0	9.5	10.0	9.5	9.5	9.5	10.0	10.0	10.0
22	10.0	9.5	10.0	10.0	10.0	10.0	9.5	9.5	9.5	10.0	9.5	9.5
23	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	9.5	10.0	9.5	9.5
24	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	9.5	10.0	10.0	10.0
25	10.0	9.5	10.0	10.0	10.0	10.0	9.5	9.0	9.5	10.0	9.5	10.0
26	10.0	9.5	10.0	10.0	10.0	10.0	9.5	9.0	9.5	10.0	9.5	10.0
27	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	9.5	10.0	10.0	10.0
28	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	9.5	10.0	10.0	10.0
29	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.5	9.5	10.0	10.0	10.0
30	10.0	10.0	10.0	10.0	9.5	9.5	9.5	9.5	9.5	10.0	9.5	10.0
31	10.0	10.0	10.0	–	–	–	10.0	9.5	9.5	10.0	9.5	10.0
Month	10.0	9.5	9.8	10.0	9.5	10.0	10.0	9.0	9.6	10.0	9.5	9.7

Table B16. Maximum, minimum, and mean water temperature for the continual-recording gage Rowland Spring at Great Basin National Park near Baker, Nevada (gage station 10243265).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	10.0	9.5	10.0	10.0	10.0	10.0	9.0	9.0	9.0	9.0	9.0	9.0
2	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.0	9.0	9.0	9.0	9.0
3	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.0	9.0	9.0	9.0	9.0
4	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.0	9.5	9.0	9.0	9.0
5	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.0	9.0	9.0	8.5	9.0
6	10.0	10.0	10.0	10.0	10.0	10.0	9.0	9.0	9.0	9.0	8.5	8.5
7	10.0	10.0	10.0	10.0	10.0	10.0	9.0	9.0	9.0	9.0	8.5	8.5
8	10.0	10.0	10.0	10.0	10.0	10.0	9.0	9.0	9.0	9.0	8.5	9.0
9	10.0	10.0	10.0	10.0	9.5	10.0	9.0	9.0	9.0	9.0	8.5	9.0
10	10.0	10.0	10.0	10.0	9.5	10.0	9.0	9.0	9.0	9.0	8.5	8.5
11	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	9.0	8.5	8.5
12	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	9.0	8.5	8.5
13	10.0	10.0	10.0	10.0	9.5	9.5	9.5	9.0	9.0	9.0	8.5	8.5
14	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	9.0	8.5	8.5
15	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	9.0	8.5	8.5
16	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.5
17	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.5
18	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.5
19	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.5
20	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.5
21	10.0	9.5	10.0	10.0	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.5
22	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	9.0	8.5	8.5
23	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.5
24	10.0	10.0	10.0	10.0	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.5
25	10.0	10.0	10.0	9.5	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.5
26	10.0	10.0	10.0	9.5	9.0	9.5	9.0	9.0	9.0	8.5	8.5	8.5
27	10.0	9.5	10.0	9.5	9.0	9.5	9.0	9.0	9.0	8.5	8.5	8.5
28	10.0	10.0	10.0	9.5	9.0	9.5	9.0	9.0	9.0	8.5	8.5	8.5
29	10.0	10.0	10.0	9.5	9.0	9.5	9.0	9.0	9.0	8.5	8.5	8.5
30	–	–	–	9.5	9.0	9.5	9.0	9.0	9.0	8.5	8.5	8.5
31	–	–	–	9.5	9.0	9.5	–	–	–	8.5	8.5	8.5
Month	10.0	9.5	10.0	10.0	9.0	9.7	9.5	9.0	9.0	9.0	8.5	8.6

Table B16. Maximum, minimum, and mean water temperature for the continual-recording gage Rowland Spring at Great Basin National Park near Baker, Nevada (gage station 10243265).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	8.5	8.5	8.5	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
2	8.5	8.5	8.5	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
3	8.5	8.5	8.5	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
4	9.0	8.5	8.5	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
5	9.0	8.5	8.5	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
6	9.0	8.5	9.0	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
7	9.0	9.0	9.0	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0
8	9.0	9.0	9.0	9.5	9.0	9.5	10.0	10.0	10.0	10.0	10.0	10.0
9	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
10	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
11	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
12	9.0	9.0	9.0	–	–	–	10.0	10.0	10.0	10.0	10.0	10.0
13	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
14	9.0	9.0	9.0	10.0	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
15	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
16	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
17	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
18	9.0	9.0	9.0	9.5	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
19	9.0	9.0	9.0	9.5	9.5	9.5	10.5	10.0	10.0	10.0	10.0	10.0
20	9.0	9.0	9.0	10.0	9.5	9.5	10.5	10.0	10.0	10.0	10.0	10.0
21	9.0	9.0	9.0	10.0	9.5	9.5	10.5	10.0	10.0	10.0	10.0	10.0
22	9.0	9.0	9.0	10.0	9.5	9.5	11.0	10.0	10.0	10.0	10.0	10.0
23	9.0	9.0	9.0	10.0	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
24	9.0	9.0	9.0	10.0	9.5	9.5	10.5	10.0	10.0	10.0	10.0	10.0
25	9.0	9.0	9.0	10.0	9.5	9.5	10.0	10.0	10.0	10.0	10.0	10.0
26	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
27	9.0	9.0	9.0	10.0	10.0	10.0	10.5	10.0	10.0	10.0	10.0	10.0
28	9.0	9.0	9.0	10.0	10.0	10.0	10.5	10.0	10.0	10.0	10.0	10.0
29	9.0	9.0	9.0	10.0	10.0	10.0	10.5	10.0	10.0	10.0	10.0	10.0
30	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
31	–	–	–	10.0	10.0	10.0	10.0	10.0	10.0	–	–	–
Month	9.0	8.5	8.9	–	–	–	11.0	10.0	10.0	10.0	10.0	10.0

Table B17. Maximum, minimum, and mean water temperature for the continual-recording gage Baker Creek at Narrows near Baker, Nevada (gage station 10243240).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	–	–	–
7	–	–	–	–	–	–	–	–	–	–	–	–
8	–	–	–	–	–	–	–	–	–	–	–	–
9	–	–	–	–	–	–	–	–	–	–	–	–
10	–	–	–	–	–	–	–	–	–	5.5	0.0	3.0
11	–	–	–	–	–	–	–	–	–	10.0	1.0	5.0
12	–	–	–	–	–	–	–	–	–	11.5	3.0	7.0
13	–	–	–	–	–	–	–	–	–	12.5	4.0	8.0
14	–	–	–	–	–	–	–	–	–	9.0	5.0	7.0
15	–	–	–	–	–	–	–	–	–	13.0	5.0	8.5
16	–	–	–	–	–	–	–	–	–	12.0	5.0	8.5
17	–	–	–	–	–	–	–	–	–	9.0	5.5	7.0
18	–	–	–	–	–	–	–	–	–	10.5	4.5	7.0
19	–	–	–	–	–	–	–	–	–	8.5	2.5	5.0
20	–	–	–	–	–	–	–	–	–	10.0	2.5	6.0
21	–	–	–	–	–	–	–	–	–	11.0	4.0	7.0
22	–	–	–	–	–	–	–	–	–	11.0	4.5	7.5
23	–	–	–	–	–	–	–	–	–	9.5	5.0	7.0
24	–	–	–	–	–	–	–	–	–	8.0	5.5	6.5
25	–	–	–	–	–	–	–	–	–	9.5	4.5	6.5
26	–	–	–	–	–	–	–	–	–	9.0	5.5	7.0
27	–	–	–	–	–	–	–	–	–	9.0	5.0	6.5
28	–	–	–	–	–	–	–	–	–	8.5	5.0	6.5
29	–	–	–	–	–	–	–	–	–	9.0	5.5	7.0
30	–	–	–	–	–	–	–	–	–	9.0	5.5	7.0
31	–	–	–	–	–	–	–	–	–	9.0	5.0	7.0
Month	–	–	–	–	–	–	–	–	–	–	–	–

Table B17. Maximum, minimum, and mean water temperature for the continual-recording gage Baker Creek at Narrows near Baker, Nevada (gage station 10243240).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	9.0	5.5	7.0	13.0	8.5	10.5	17.5	13.0	15.0	14.5	11.5	13.0
2	9.0	5.0	7.0	13.5	8.5	10.5	17.5	13.5	15.0	15.5	11.5	13.5
3	9.0	5.0	7.0	13.5	8.5	10.5	16.5	12.5	14.5	15.5	11.5	13.5
4	9.0	5.0	6.5	14.0	8.5	11.0	16.5	12.0	14.0	14.5	12.0	13.0
5	9.0	5.0	6.5	14.0	9.0	11.0	17.0	11.5	14.0	14.0	11.5	12.5
6	9.5	5.0	7.0	14.5	9.0	11.5	15.5	12.0	13.5	14.0	10.5	12.5
7	10.0	5.5	7.5	14.5	9.5	12.0	16.0	11.5	14.0	14.5	11.0	13.0
8	9.0	5.5	7.5	15.0	10.0	12.0	18.5	13.0	15.0	14.5	11.5	12.5
9	9.5	6.5	8.0	14.5	9.0	11.5	18.5	13.5	16.0	12.5	10.0	11.0
10	11.0	7.0	8.5	15.5	9.5	12.0	19.5	14.0	16.5	11.5	8.5	10.0
11	9.5	6.5	8.0	16.0	10.5	13.0	17.5	13.5	16.0	11.5	7.0	9.5
12	9.5	6.5	8.0	16.0	10.5	13.0	17.0	13.5	15.5	13.0	8.5	10.5
13	10.5	6.0	8.0	15.0	10.5	13.0	18.0	13.5	15.5	11.0	7.0	9.0
14	11.5	6.0	8.5	16.0	10.5	13.0	18.0	13.5	15.5	10.0	5.0	7.5
15	11.5	7.0	9.0	17.0	11.5	14.0	19.0	14.0	16.0	12.5	7.5	10.0
16	10.0	7.0	8.5	17.0	12.0	14.5	18.5	14.0	15.5	12.5	9.0	11.0
17	11.0	7.0	9.0	16.0	12.5	14.5	17.5	12.5	15.0	12.0	7.0	9.0
18	11.5	7.5	9.5	17.0	12.0	14.5	17.0	12.0	14.5	9.0	4.5	7.0
19	10.5	8.0	9.0	16.0	12.5	14.0	17.5	12.0	14.5	9.5	5.0	7.5
20	10.0	7.5	8.5	16.0	12.5	14.0	16.0	13.5	15.0	11.0	6.5	8.5
21	9.5	7.0	8.5	16.5	12.5	14.5	17.0	13.5	15.0	11.0	6.5	8.5
22	10.5	6.5	8.5	18.0	12.5	15.0	15.0	13.5	14.0	11.5	7.0	9.0
23	9.0	7.0	8.0	17.5	13.0	15.0	16.5	12.0	14.0	11.5	7.5	9.5
24	8.0	5.5	6.5	19.0	13.5	15.5	16.0	12.5	14.0	11.5	7.5	9.5
25	10.0	5.5	7.5	17.0	14.0	15.5	16.0	11.5	13.5	11.0	7.0	9.0
26	11.0	6.0	8.5	17.5	12.5	15.0	15.0	12.0	13.5	11.0	7.0	9.0
27	12.0	7.5	9.5	18.0	13.0	15.5	16.0	11.5	13.5	12.0	7.5	9.5
28	12.0	8.0	10.0	18.0	12.5	15.5	14.5	11.5	13.0	12.0	8.0	10.0
29	13.0	8.0	10.5	18.5	12.5	15.5	14.5	12.0	13.5	12.0	8.5	10.0
30	13.5	8.5	10.5	18.5	12.5	15.5	15.5	10.5	13.0	13.0	9.5	11.0
31	–	–	–	17.0	13.5	15.0	15.0	10.5	13.0	–	–	–
Month	13.5	5.0	8.2	19.0	8.5	13.5	19.5	10.5	14.5	15.5	4.5	10.3

Table B17. Maximum, minimum, and mean water temperature for the continual-recording gage Baker Creek at Narrows near Baker, Nevada (gage station 10243240).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	12.5	9.5	11.0	4.5	3.0	4.0	2.5	1.0	2.0	0.5	0.5	0.5
2	11.0	8.0	10.0	4.5	3.0	4.0	2.5	1.5	2.0	0.5	0.5	0.5
3	10.5	7.5	9.0	4.5	3.0	4.0	2.0	1.0	1.5	0.5	0.5	0.5
4	10.0	7.0	8.5	4.5	2.5	3.0	2.0	1.0	1.5	0.5	0.0	0.0
5	10.5	7.0	8.5	4.0	2.5	3.0	4.0	2.0	3.0	0.5	0.0	0.0
6	10.0	7.0	8.5	4.0	2.5	3.0	4.5	2.5	3.5	0.5	0.0	0.0
7	10.0	7.0	8.5	4.0	2.5	3.0	4.0	2.0	3.0	0.5	0.0	0.5
8	10.5	7.0	8.5	5.5	3.0	4.0	2.0	0.5	1.0	0.5	0.5	0.5
9	10.5	7.5	9.0	6.5	4.5	5.0	1.0	0.5	1.0	0.5	0.5	0.5
10	9.0	5.0	7.5	5.5	4.0	5.0	1.0	0.5	1.0	0.5	0.5	0.5
11	6.0	2.5	4.0	5.0	3.0	4.0	1.0	0.5	0.5	0.5	0.5	0.5
12	8.0	3.5	5.5	5.0	2.5	3.5	1.0	0.5	1.0	0.5	0.5	0.5
13	6.0	3.0	4.5	4.0	2.5	3.0	0.5	0.5	0.5	0.5	0.5	0.5
14	6.0	1.5	3.5	4.5	3.0	3.5	0.5	0.5	0.5	0.5	0.5	0.5
15	6.5	2.0	4.5	4.0	2.5	3.0	0.5	0.5	0.5	0.5	0.5	0.5
16	6.5	3.5	5.0	4.5	3.0	3.5	0.5	0.0	0.5	0.5	0.5	0.5
17	7.0	3.5	5.5	5.0	3.5	4.0	0.5	0.0	0.5	0.5	0.0	0.0
18	7.5	3.5	5.5	4.5	2.5	3.5	0.5	0.0	0.5	0.5	0.0	0.0
19	8.5	5.0	6.5	5.0	2.5	3.5	0.5	0.0	0.0	0.5	0.0	0.0
20	8.0	4.5	6.5	5.5	3.5	4.5	1.0	0.0	0.5	0.5	0.5	0.5
21	13.5	4.5	8.0	4.5	2.0	3.5	1.5	1.0	1.0	0.5	0.0	0.0
22	13.0	9.5	11.5	2.0	1.5	2.0	1.5	0.0	0.5	0.5	0.0	0.0
23	13.0	10.0	11.5	2.0	1.5	1.5	0.5	0.0	0.5	0.5	0.0	0.0
24	10.5	7.5	9.0	2.0	1.5	1.5	1.0	0.5	0.5	0.5	0.0	0.0
25	8.5	6.0	7.0	1.5	1.5	1.5	1.0	0.0	0.5	0.5	0.5	0.5
26	8.5	5.5	7.0	1.5	1.5	1.5	0.0	0.0	0.0	0.5	0.0	0.0
27	10.5	6.0	8.5	1.5	1.0	1.0	0.5	0.0	0.0	0.5	0.0	0.0
28	11.5	8.5	9.5	1.5	1.0	1.0	0.0	0.0	0.0	0.5	0.0	0.5
29	12.0	8.0	10.5	1.5	1.0	1.0	0.0	0.0	0.0	0.5	0.5	0.5
30	8.0	4.0	6.0	1.5	1.0	1.0	0.5	0.0	0.0	0.5	0.5	0.5
31	4.0	3.5	3.5	–	–	–	0.5	0.5	0.5	0.5	0.0	0.0
Month	13.5	1.5	7.5	6.5	1.0	3.0	4.5	0.0	0.9	0.5	0.0	0.3

Table B17. Maximum, minimum, and mean water temperature for the continual-recording gage Baker Creek at Narrows near Baker, Nevada (gage station 10243240).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	0.5	0.0	0.0	0.0	0.0	0.0	6.0	3.0	5.0	12.0	4.5	8.0
2	0.5	0.5	0.5	0.0	0.0	0.0	4.5	1.5	3.0	12.5	5.5	9.0
3	0.5	0.5	0.5	0.5	0.0	0.5	8.0	3.0	5.0	14.0	6.5	9.5
4	0.5	0.5	0.5	1.0	0.0	0.5	10.0	3.0	6.0	13.5	7.0	10.0
5	0.5	0.5	0.5	1.0	0.0	0.5	10.0	3.5	6.5	12.5	7.5	9.5
6	0.5	0.0	0.0	1.5	0.5	1.0	8.0	4.5	6.0	11.5	6.5	8.5
7	0.5	0.0	0.5	2.5	0.0	1.0	10.0	4.5	7.0	11.0	6.0	8.0
8	0.5	0.0	0.5	2.5	0.0	1.5	8.5	5.5	7.0	11.5	6.0	8.5
9	0.5	0.5	0.5	3.0	1.0	2.0	10.5	4.0	6.5	11.5	6.0	8.5
10	0.5	0.5	0.5	3.0	1.5	2.0	6.0	3.0	4.5	10.5	6.0	8.0
11	0.5	0.0	0.5	3.5	0.0	2.0	8.5	1.5	4.5	8.0	4.5	6.0
12	0.5	0.0	0.0	3.5	0.5	2.0	10.5	2.5	6.0	7.5	4.5	6.0
13	0.5	0.0	0.0	4.5	1.0	2.5	10.5	4.0	7.0	9.5	4.5	6.5
14	0.5	0.0	0.5	5.0	1.5	3.0	9.5	3.5	6.0	11.0	4.5	7.5
15	0.5	0.5	0.5	6.0	1.5	3.5	8.5	4.0	6.0	10.5	6.0	8.0
16	0.5	0.5	0.5	6.0	1.0	3.5	9.5	4.0	6.5	10.5	6.0	8.5
17	1.0	0.5	0.5	6.5	1.5	3.5	7.5	5.0	6.0	10.5	7.0	8.5
18	1.0	1.0	1.0	7.5	2.0	4.5	10.0	3.5	5.5	11.5	7.0	9.0
19	1.0	0.5	1.0	9.0	3.5	5.5	6.5	3.5	5.0	9.5	5.5	7.5
20	1.0	0.5	0.5	9.5	3.0	6.0	8.5	3.0	5.5	10.5	6.0	7.5
21	1.0	0.5	0.5	10.0	3.5	6.5	9.0	4.5	6.0	9.5	6.0	7.5
22	1.0	0.5	0.5	9.5	4.0	6.5	7.5	3.0	5.0	10.0	6.0	7.5
23	1.0	0.5	0.5	9.5	5.0	7.0	10.0	3.0	6.0	11.0	6.5	8.0
24	1.5	0.5	1.0	10.0	4.0	6.5	11.0	3.5	7.0	9.0	6.0	7.5
25	1.5	0.0	0.5	10.0	3.5	6.5	11.5	4.0	7.5	8.5	6.0	7.0
26	1.0	0.0	0.5	7.0	4.0	5.5	12.0	4.5	8.0	11.0	5.5	8.0
27	0.0	0.0	0.0	7.0	2.0	4.5	13.0	5.5	9.0	11.5	7.0	9.0
28	0.0	0.0	0.0	7.0	1.5	4.0	12.0	5.5	8.5	12.0	8.0	9.5
29	0.0	0.0	0.0	7.5	1.0	4.0	5.5	3.5	4.5	10.0	7.0	8.0
30	–	–	–	9.0	2.0	5.5	11.0	3.5	6.5	11.0	5.0	8.0
31	–	–	–	10.5	4.5	7.0	–	–	–	12.0	6.5	9.0
Month	1.5	0.0	0.4	10.5	0.0	3.5	13.0	1.5	6.1	14.0	4.5	8.1

Table B17. Maximum, minimum, and mean water temperature for the continual-recording gage Baker Creek at Narrows near Baker, Nevada (gage station 10243240).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	12.5	7.5	9.5	14.0	9.5	11.5	14.5	12.0	13.5	16.0	11.5	13.5
2	13.0	7.5	10.0	13.5	9.5	11.0	16.5	12.0	14.0	15.0	12.0	13.5
3	13.5	8.0	10.5	14.0	9.0	11.5	17.5	12.0	14.5	13.5	8.0	10.0
4	13.0	8.5	10.5	13.5	9.5	11.5	17.5	12.5	15.0	10.0	6.5	8.0
5	13.0	8.0	10.5	14.0	10.0	12.0	17.5	13.0	15.0	12.5	7.5	9.5
6	13.0	8.5	10.5	15.5	10.0	12.5	17.5	12.5	15.0	13.5	9.0	11.0
7	13.0	8.5	10.5	16.5	11.5	13.5	17.0	11.5	14.0	14.0	9.5	11.5
8	12.5	8.5	10.5	17.0	11.5	13.5	17.0	11.5	14.0	14.5	10.5	12.0
9	11.0	7.5	9.0	16.5	11.0	13.5	17.5	12.0	14.5	14.5	11.0	12.5
10	10.0	7.0	8.0	17.0	10.5	13.5	17.0	12.5	15.0	14.5	11.0	13.0
11	11.0	6.0	8.5	17.0	11.0	13.5	17.5	12.5	15.0	15.0	12.0	13.0
12	12.0	7.5	9.5	17.5	11.0	14.0	17.0	12.5	15.0	15.5	12.0	13.5
13	14.0	7.5	10.5	17.5	12.5	14.5	17.0	13.5	15.0	14.5	11.0	13.0
14	13.5	9.0	11.0	16.0	13.5	15.0	16.0	13.5	14.5	12.5	9.5	11.0
15	13.5	9.0	11.0	16.0	13.5	14.5	15.5	12.5	14.0	11.5	7.5	9.5
16	13.0	8.5	10.5	16.0	13.0	14.0	16.0	12.5	14.0	13.0	8.5	10.5
17	11.0	9.0	10.0	15.5	12.5	14.0	13.5	12.0	12.5	14.0	11.0	12.5
18	13.0	8.0	10.0	17.5	12.5	15.0	16.0	11.5	13.5	13.0	11.0	12.0
19	13.5	8.0	10.5	16.5	13.0	14.5	16.0	12.0	14.0	11.0	8.5	10.0
20	13.5	8.5	11.0	17.5	12.5	15.0	16.0	12.5	14.0	8.5	6.5	7.5
21	13.0	8.5	10.5	16.0	12.5	14.5	15.5	12.5	14.0	7.5	5.5	6.5
22	13.5	7.5	10.0	16.0	12.5	14.0	15.5	12.0	13.5	8.5	4.5	6.5
23	11.5	8.5	10.0	16.0	12.0	14.0	14.0	12.0	13.0	10.0	6.5	8.0
24	12.5	8.5	10.5	16.0	12.0	14.0	13.5	11.5	12.5	11.0	7.5	9.0
25	14.0	9.5	11.5	15.5	12.5	14.0	15.5	11.0	13.0	11.5	8.0	9.5
26	12.5	9.5	11.0	16.5	12.0	14.0	15.0	11.5	13.0	12.0	8.5	10.0
27	13.5	9.0	11.0	14.5	12.0	13.5	13.5	10.0	11.5	12.0	8.5	10.0
28	13.0	9.5	11.0	15.5	11.0	13.0	14.0	9.0	11.5	10.5	8.5	9.5
29	12.0	8.5	10.5	17.0	12.0	14.0	14.5	10.0	12.0	9.5	7.5	9.0
30	14.0	8.5	11.0	17.0	12.0	14.5	14.0	10.5	12.0	9.5	7.0	8.0
31	–	–	–	17.0	12.0	14.5	14.5	11.0	13.0	–	–	–
Month	14.0	6.0	10.3	17.5	9.0	13.6	17.5	9.0	13.7	16.0	4.5	10.4
Year	17.5	0.0	6.5									

Table B18. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek above pipeline near Baker, Nevada (gage station 10243230).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	0.0	0.0	0.0	1.0	0.5	0.5	0.5	0.0	0.5
2	–	–	–	0.0	0.0	0.0	1.0	0.0	0.5	1.0	0.5	0.5
3	–	–	–	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	1.0
4	–	–	–	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	1.0
5	–	–	–	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
6	–	–	–	0.5	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.5
7	–	–	–	1.0	0.5	1.0	0.0	0.0	0.0	0.5	0.0	0.5
8	–	–	–	1.0	0.0	0.5	0.0	0.0	0.0	1.0	0.5	0.5
9	–	–	–	2.0	0.5	1.0	0.0	0.0	0.0	1.0	0.5	1.0
10	–	–	–	2.0	0.5	1.0	0.0	0.0	0.0	1.0	1.0	1.0
11	7.0	4.0	–	1.0	0.0	0.5	0.0	0.0	0.0	1.5	0.5	1.0
12	5.0	2.0	3.5	1.0	0.0	0.5	0.0	0.0	0.0	1.0	0.5	1.0
13	4.5	1.0	3.0	2.5	1.0	1.5	0.0	0.0	0.0	1.0	0.5	1.0
14	5.5	2.0	3.5	1.5	0.5	1.0	0.5	0.0	0.0	1.0	0.5	1.0
15	5.0	1.5	3.0	1.0	0.0	0.5	0.5	0.0	0.5	1.0	0.5	0.5
16	5.0	1.5	3.0	1.5	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.5
17	5.0	1.5	3.0	2.0	0.5	1.5	0.0	0.0	0.0	1.0	0.5	0.5
18	5.0	1.5	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
19	4.5	1.0	3.0	1.5	0.0	0.5	0.0	0.0	0.0	1.0	0.0	0.5
20	5.0	1.5	3.0	2.0	0.5	1.0	0.0	0.0	0.0	1.0	0.5	0.5
21	5.0	2.0	3.5	2.5	1.0	1.5	0.0	0.0	0.0	1.0	0.5	0.5
22	5.0	2.5	4.0	2.5	1.0	1.5	0.0	0.0	0.0	1.0	0.5	1.0
23	4.5	1.5	3.0	2.5	1.0	1.5	0.0	0.0	0.0	1.5	1.0	1.0
24	4.5	1.5	3.0	1.5	0.0	1.0	0.0	0.0	0.0	1.5	1.0	1.0
25	4.0	1.5	3.0	0.5	0.0	0.0	0.5	0.0	0.0	1.5	0.5	1.0
26	3.0	2.0	3.0	0.0	0.0	0.0	0.5	0.0	0.0	1.0	0.0	1.0
27	4.5	2.0	3.0	0.0	0.0	0.0	0.5	0.5	0.5	2.0	1.0	1.5
28	4.0	1.0	2.5	0.0	0.0	0.0	1.0	0.5	0.5	1.5	1.0	1.5
29	2.5	0.0	1.0	0.0	0.0	0.0	0.5	0.0	0.5	1.5	0.5	1.0
30	1.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.0	2.0	1.0	1.5
31	1.5	0.0	0.5	–	–	–	0.5	0.5	0.5	2.5	1.0	1.5
Month	–	–	–	2.5	0.0	0.6	1.0	0.0	0.1	2.5	0.0	0.9

Table B18. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek above pipeline near Baker, Nevada (gage station 10243230).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	2.5	1.0	2.0	1.0	0.5	0.5	–	–	–	–	–	–
2	1.0	0.0	0.0	1.0	0.0	0.5	–	–	–	–	–	–
3	0.0	0.0	0.0	1.0	0.0	0.5	–	–	–	–	–	–
4	0.0	0.0	0.0	1.0	0.5	1.0	–	–	–	–	–	–
5	0.0	0.0	0.0	1.0	0.0	0.5	–	–	–	–	–	–
6	0.0	0.0	0.0	1.5	0.5	1.0	–	–	–	–	–	–
7	0.0	0.0	0.0	1.5	0.5	1.0	–	–	–	–	–	–
8	0.0	0.0	0.0	2.0	0.5	1.0	–	–	–	3.0	0.0	1.5
9	0.0	0.0	0.0	2.0	0.5	1.0	–	–	–	3.5	0.0	1.0
10	0.0	0.0	0.0	2.5	0.5	1.5	–	–	–	3.5	0.0	1.5
11	0.0	0.0	0.0	2.5	1.0	1.5	–	–	–	7.5	0.5	3.5
12	0.0	0.0	0.0	3.0	1.0	1.5	–	–	–	8.5	1.5	4.5
13	0.5	0.0	0.0	3.5	1.0	2.0	–	–	–	9.5	2.5	5.5
14	0.5	0.5	0.5	3.5	1.5	2.0	–	–	–	7.0	3.5	5.5
15	1.0	0.5	0.5	3.0	1.0	2.0	–	–	–	10.0	4.0	6.5
16	1.0	0.5	0.5	2.0	0.5	1.0	–	–	–	10.0	4.0	6.5
17	1.0	0.5	0.5	1.5	0.5	0.5	–	–	–	8.5	5.0	6.5
18	1.0	0.5	0.5	1.5	0.0	0.5	–	–	–	10.0	3.5	6.5
19	1.0	0.5	0.5	2.0	0.0	1.0	–	–	–	8.5	1.5	5.0
20	1.0	1.0	1.0	1.0	0.0	0.5	–	–	–	10.0	2.0	5.5
21	1.0	0.5	0.5	2.5	0.0	1.0	–	–	–	11.5	3.5	7.0
22	1.0	0.5	0.5	4.0	0.0	2.0	–	–	–	12.0	4.5	8.0
23	0.5	0.0	0.0	4.0	1.5	2.5	–	–	–	9.5	5.5	7.5
24	0.5	0.0	0.5	3.0	1.0	2.0	–	–	–	8.5	5.5	7.0
25	0.5	0.0	0.5	–	–	–	–	–	–	10.5	4.5	7.0
26	1.0	0.5	0.5	–	–	–	–	–	–	10.0	5.0	7.0
27	1.0	0.5	0.5	–	–	–	–	–	–	9.5	5.0	7.0
28	0.5	0.5	0.5	–	–	–	–	–	–	8.5	5.0	6.5
29	–	–	–	–	–	–	–	–	–	9.0	5.0	6.5
30	–	–	–	–	–	–	–	–	–	9.0	5.5	7.0
31	–	–	–	–	–	–	–	–	–	8.5	5.0	6.5
Month	2.5	0.0	0.3	–	–	–	–	–	–	–	–	–

Table B18. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek above pipeline near Baker, Nevada (gage station 10243230).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	8.5	5.0	6.5	11.0	6.5	8.5	12.0	10.0	11.0	11.5	9.5	10.5
2	9.0	5.0	6.5	11.0	6.5	8.5	13.5	10.0	11.5	12.0	9.5	10.5
3	9.0	5.0	6.5	11.0	6.0	8.5	12.0	9.5	11.0	12.0	9.0	10.5
4	8.5	4.5	6.5	11.0	6.0	8.5	12.0	8.5	10.5	11.5	9.5	10.5
5	8.0	4.5	6.0	11.5	6.5	9.0	13.0	9.0	10.5	11.5	9.5	10.5
6	8.5	4.5	6.5	11.5	7.0	9.0	11.5	9.5	10.5	11.5	9.0	10.0
7	9.0	5.0	7.0	11.5	7.0	9.0	12.5	9.0	10.5	11.5	8.5	10.0
8	8.5	5.5	7.0	12.0	8.0	9.5	14.0	10.0	11.5	11.5	9.5	10.0
9	9.0	6.0	7.5	11.5	6.5	9.0	14.0	10.5	12.0	9.5	7.5	8.5
10	9.5	6.5	7.5	12.0	6.5	9.0	13.5	10.5	12.0	8.5	6.5	7.5
11	8.5	6.0	7.0	12.5	8.0	10.0	13.5	10.0	12.0	9.0	5.0	7.0
12	8.5	5.5	7.0	12.5	7.5	10.0	13.5	10.5	12.0	10.5	6.0	8.0
13	9.0	5.5	7.0	12.0	8.0	9.5	14.0	10.0	12.0	8.5	5.0	7.0
14	9.5	5.5	7.0	12.5	7.5	9.5	13.0	10.0	11.5	7.5	3.5	5.5
15	10.0	5.5	7.5	13.0	8.5	10.5	14.5	11.0	12.5	9.5	6.0	7.5
16	9.0	6.0	7.5	11.5	8.5	10.5	13.0	11.0	12.0	10.0	7.5	8.5
17	9.0	6.0	7.5	12.5	9.0	10.5	13.5	9.5	11.5	9.0	5.5	7.5
18	10.0	6.0	7.5	12.5	9.0	10.5	13.0	8.5	11.0	6.5	3.5	5.0
19	8.5	6.5	7.5	12.0	9.0	10.5	13.5	9.0	11.0	7.5	3.5	5.5
20	8.5	6.0	7.0	12.0	9.0	10.5	12.5	11.0	11.5	8.5	4.5	6.5
21	8.0	5.5	7.0	11.5	9.0	10.5	13.0	10.5	11.5	8.5	4.5	6.5
22	8.5	4.5	6.5	14.0	9.5	11.0	12.0	11.0	11.5	8.5	4.5	6.5
23	7.0	5.5	6.5	12.5	9.5	11.0	13.0	9.5	11.0	9.5	5.0	7.0
24	6.5	4.0	5.0	14.5	10.5	12.0	12.5	10.0	11.0	9.5	6.0	7.5
25	7.5	4.0	6.0	13.5	11.0	12.0	12.5	9.0	10.5	9.0	5.5	7.0
26	9.5	4.5	6.5	13.0	9.5	11.0	12.0	9.5	10.5	9.0	5.5	7.0
27	10.0	5.5	7.5	13.5	10.0	11.5	11.5	9.0	10.5	9.5	6.0	7.5
28	10.5	6.0	8.0	13.5	9.5	11.5	12.0	8.5	10.5	10.0	6.5	8.0
29	11.0	6.5	8.5	13.5	9.5	11.5	11.5	9.5	10.5	10.0	6.5	8.0
30	11.0	6.5	8.5	13.5	9.0	11.0	12.0	8.5	10.5	10.5	7.0	8.5
31	–	–	–	13.5	10.0	11.5	11.5	8.5	10.0	–	–	–
Month	11.0	4.0	7.0	14.5	6.0	10.2	14.5	8.5	11.2	12.0	3.5	8.0

Table B18. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek above pipeline near Baker, Nevada (gage station 10243230).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	10.5	8.0	9.5	2.0	0.0	1.0	1.5	1.0	1.0	0.5	0.0	0.5
2	9.0	7.0	8.0	1.0	0.0	0.5	1.5	0.5	1.0	1.0	0.0	0.5
3	8.5	6.5	7.5	1.5	0.0	0.5	1.0	0.0	0.5	0.5	0.0	0.5
4	8.5	5.5	7.0	0.5	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
5	8.5	5.5	7.0	0.5	0.0	0.0	2.0	1.0	1.5	0.0	0.0	0.0
6	8.5	6.0	7.0	1.0	0.0	0.0	2.0	1.5	2.0	0.0	0.0	0.0
7	8.5	5.5	7.5	1.0	0.0	0.5	2.0	1.0	1.5	0.0	0.0	0.0
8	9.0	6.0	7.5	2.0	0.5	1.5	1.0	0.0	0.0	0.5	0.0	0.5
9	9.5	6.5	8.0	2.5	1.5	2.0	0.0	0.0	0.0	0.5	0.0	0.5
10	8.5	5.0	7.5	2.0	1.0	2.0	0.0	0.0	0.0	1.0	0.0	0.5
11	6.0	2.5	4.0	1.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.5
12	7.5	4.0	5.5	1.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.5
13	6.0	3.5	4.5	1.0	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.5
14	6.0	2.0	4.0	2.0	0.0	1.0	0.5	0.0	0.5	0.5	0.0	0.0
15	6.5	2.5	4.5	1.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.5
16	7.0	3.5	5.5	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
17	7.5	4.0	5.5	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
18	8.0	4.0	6.0	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
19	8.0	5.5	6.5	2.0	0.0	1.0	0.0	0.0	0.0	0.5	0.0	0.5
20	8.0	4.5	6.0	2.5	1.5	2.0	1.0	0.0	0.5	0.5	0.0	0.5
21	7.5	4.5	6.0	2.0	0.0	1.5	1.0	1.0	1.0	0.0	0.0	0.0
22	7.5	4.5	6.0	0.0	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
23	7.5	4.0	5.5	0.0	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
24	5.5	2.5	4.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0
25	4.5	2.0	3.0	0.0	0.0	0.0	1.0	0.0	0.5	0.0	0.0	0.0
26	5.0	2.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	6.0	3.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	7.5	5.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	7.5	5.0	6.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
30	5.0	2.0	3.5	1.0	0.5	1.0	0.0	0.0	0.0	1.0	0.0	0.5
31	2.0	1.0	1.0	–	–	–	0.5	0.0	0.5	0.5	0.0	0.0
Month	10.5	1.0	5.7	2.5	0.0	0.6	2.0	0.0	0.4	1.0	0.0	0.2

Table B18. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek above pipeline near Baker, Nevada (gage station 10243230).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.5	3.5	9.0	2.5	5.5
2	0.0	0.0	0.0	0.5	0.0	0.5	4.5	2.0	3.0	10.0	3.0	6.5
3	0.0	0.0	0.0	0.5	0.0	0.0	5.5	2.0	3.0	11.0	4.0	7.0
4	0.0	0.0	0.0	0.5	0.0	0.5	6.0	1.5	3.5	11.5	5.5	8.0
5	0.5	0.0	0.5	1.0	0.0	0.5	5.5	2.0	3.5	11.5	6.0	8.0
6	0.0	0.0	0.0	1.0	0.5	1.0	5.5	2.0	3.5	10.0	5.0	7.0
7	0.5	0.0	0.5	1.5	0.0	0.5	5.0	2.5	3.5	9.5	4.5	6.5
8	0.0	0.0	0.0	2.0	0.0	1.0	6.0	3.0	4.5	10.0	4.5	7.0
9	0.0	0.0	0.0	2.0	0.5	1.0	6.5	2.0	4.0	10.0	4.5	7.0
10	0.0	0.0	0.0	2.0	1.0	1.0	4.0	2.0	2.5	9.0	4.5	6.0
11	0.0	0.0	0.0	2.0	0.0	1.0	5.5	0.5	2.5	6.5	3.0	4.5
12	0.0	0.0	0.0	2.0	0.0	1.0	6.5	1.0	3.5	5.5	2.5	4.0
13	0.0	0.0	0.0	2.5	0.5	1.5	7.5	2.0	4.0	7.5	2.5	4.5
14	0.0	0.0	0.0	2.5	1.0	1.5	6.0	2.0	3.5	8.5	2.5	5.5
15	0.0	0.0	0.0	2.5	1.0	1.5	5.5	2.0	3.5	8.0	3.5	5.5
16	0.5	0.0	0.5	3.0	0.5	1.5	5.5	2.5	4.0	8.0	4.0	6.0
17	1.0	0.0	0.5	3.0	1.0	1.5	4.5	2.5	3.5	8.5	4.5	6.5
18	1.0	0.5	1.0	3.5	1.0	2.0	5.5	1.5	3.0	9.0	5.0	6.5
19	1.0	0.5	1.0	4.0	1.5	2.5	4.0	2.0	2.5	8.0	3.5	5.5
20	0.5	0.0	0.0	4.5	1.5	2.5	6.0	1.5	3.0	8.0	3.5	5.5
21	1.0	0.0	0.5	5.0	2.0	3.0	5.5	2.5	3.5	7.5	3.5	5.5
22	0.5	0.0	0.5	5.5	2.0	3.5	4.0	1.0	2.5	7.5	4.0	5.5
23	1.0	0.5	0.5	6.0	2.5	4.0	6.5	1.5	3.5	8.5	4.5	6.0
24	1.0	0.0	0.5	5.5	2.5	3.5	7.5	1.0	4.0	7.0	4.0	5.5
25	1.0	0.0	0.5	6.0	2.5	4.0	8.0	2.0	4.5	6.5	4.0	5.0
26	0.5	0.0	0.5	4.5	2.0	3.0	8.5	2.0	5.0	8.0	3.5	5.5
27	0.5	0.0	0.0	4.0	0.5	2.0	8.5	2.5	5.5	9.0	5.0	6.5
28	0.0	0.0	0.0	4.0	0.0	2.0	8.5	3.5	5.5	8.0	5.5	7.0
29	0.0	0.0	0.0	4.5	0.0	2.0	3.5	1.5	2.5	7.5	4.5	5.5
30	–	–	–	5.5	1.0	3.0	8.0	1.5	4.0	8.5	3.0	5.5
31	–	–	–	7.0	3.0	4.5	–	–	–	9.0	5.0	6.5
Month	1.0	0.0	0.2	7.0	0.0	1.8	8.5	0.5	3.6	11.5	2.5	6.0

Table B18. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek above pipeline near Baker, Nevada (gage station 10243230).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	10.0	5.0	7.0	10.0	6.0	8.0	11.0	8.5	10.0	12.0	8.0	10.0
2	10.5	5.5	7.5	9.5	6.0	7.5	12.0	8.5	10.0	11.5	8.5	10.0
3	11.0	6.0	8.0	9.0	6.0	7.5	12.5	8.5	10.5	10.0	5.5	7.0
4	10.5	6.0	8.0	10.0	6.5	8.0	13.5	9.0	11.0	6.5	4.5	5.5
5	10.5	6.0	8.0	10.0	6.5	8.5	13.5	10.0	11.5	9.0	4.5	6.5
6	10.5	6.0	8.0	11.5	6.5	9.0	13.5	9.5	11.0	10.0	6.0	8.0
7	10.5	6.5	8.0	12.0	7.5	9.5	12.5	7.5	10.0	10.5	6.5	8.5
8	10.0	6.5	8.0	12.0	7.5	9.5	13.0	7.5	10.0	10.5	7.5	9.0
9	8.5	5.5	6.5	11.5	7.5	9.5	13.0	8.0	10.5	11.5	7.5	9.5
10	8.0	4.5	5.5	11.5	7.5	9.0	13.0	8.5	11.0	11.5	8.5	10.0
11	8.0	4.0	6.0	12.0	6.5	9.0	13.0	9.0	11.0	11.5	8.0	9.5
12	9.0	5.0	7.0	12.5	7.0	9.5	13.0	8.5	11.0	12.0	9.0	10.5
13	10.5	5.5	7.5	12.0	9.0	10.0	13.0	9.5	11.0	11.0	8.5	10.0
14	10.0	6.0	7.5	11.5	9.0	10.5	12.0	9.5	10.5	9.5	6.5	8.0
15	10.0	6.0	8.0	11.5	9.5	10.5	11.5	9.5	10.5	8.5	4.5	7.0
16	9.5	6.0	7.5	10.5	9.5	10.0	12.0	9.5	10.5	10.0	6.0	8.0
17	8.5	6.5	7.0	11.5	8.5	10.0	10.0	8.5	9.5	11.0	8.0	9.5
18	9.5	6.0	7.5	13.5	9.0	11.0	12.0	8.0	10.0	10.0	8.0	9.0
19	9.5	6.0	7.5	12.0	9.0	10.5	11.0	8.5	10.0	8.5	6.0	7.5
20	10.5	6.0	8.0	13.5	9.0	11.0	11.5	9.0	10.0	6.0	4.0	5.0
21	9.5	6.5	7.5	13.0	8.5	10.5	11.5	9.0	10.5	5.5	3.0	4.0
22	10.0	5.0	7.0	11.0	9.0	10.0	12.0	8.5	10.5	6.0	2.0	4.0
23	8.5	6.0	7.5	11.5	8.5	10.0	10.5	8.5	9.5	7.5	3.5	5.5
24	9.5	6.0	7.5	11.0	8.0	10.0	11.5	8.5	9.5	8.5	4.5	6.5
25	10.0	6.5	8.0	11.5	8.5	10.0	12.0	8.5	10.0	8.5	5.0	6.5
26	9.5	6.5	8.0	12.5	8.5	10.5	11.5	8.5	10.0	9.5	5.5	7.0
27	9.5	6.5	8.0	10.5	8.5	9.5	10.0	7.0	8.5	9.0	5.5	7.5
28	9.5	6.5	7.5	11.5	7.5	9.5	10.5	6.0	8.0	8.0	6.0	7.0
29	9.5	6.0	7.5	13.0	8.5	10.5	11.0	6.5	8.5	7.0	5.5	6.5
30	10.0	6.0	7.5	13.0	8.5	10.5	10.5	7.0	9.0	7.0	4.5	5.5
31	–	–	–	13.0	8.0	10.5	12.0	7.5	9.5	–	–	–
Month	11.0	4.0	7.5	13.5	6.0	9.7	13.5	6.0	10.1	12.0	2.0	7.6
Year	13.5	0	4.5									

Table B19. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Great Basin National Park boundary near Baker, Nevada (gage station 10243232).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	2.5	0.0	1.0	4.0	2.5	3.0	–	–	–
2	–	–	–	–	–	–	4.0	1.5	2.5	–	–	–
3	–	–	–	–	–	–	3.0	1.0	2.0	3.0	2.0	2.5
4	–	–	–	–	–	–	3.5	1.0	2.0	–	–	–
5	–	–	–	5.0	1.0	2.5	3.5	1.0	2.0	–	–	–
6	–	–	–	5.0	1.0	3.0	4.5	1.5	3.0	–	–	–
7	–	–	–	6.0	3.5	5.0	4.0	1.0	2.0	–	–	–
8	–	–	–	6.0	5.0	5.5	2.5	0.0	1.0	–	–	–
9	–	–	–	5.5	3.5	4.5	–	–	–	–	–	–
10	–	–	–	6.0	3.0	4.5	3.0	1.5	2.5	–	–	–
11	10.5	6.0	8.5	5.5	3.0	4.0	3.0	1.0	2.0	–	–	–
12	8.0	4.5	6.0	6.5	3.0	4.5	3.0	1.0	2.0	–	–	–
13	8.5	3.0	5.5	6.0	4.0	5.0	5.0	2.0	3.0	–	–	–
14	9.0	5.0	6.5	5.0	3.0	4.0	5.0	2.5	3.5	–	–	–
15	9.0	4.5	6.5	4.5	2.0	3.0	3.5	2.5	3.0	–	–	–
16	9.0	4.5	6.0	6.5	2.5	4.0	4.0	1.5	2.5	–	–	–
17	9.0	4.5	6.5	5.5	3.0	4.5	3.5	0.5	2.0	–	–	–
18	9.0	5.0	6.5	5.0	2.0	3.0	–	–	–	–	–	–
19	9.0	5.0	6.5	5.0	2.5	3.5	–	–	–	–	–	–
20	9.0	5.0	6.5	5.0	3.0	4.0	2.0	0.0	1.0	–	–	–
21	9.0	5.0	7.0	5.0	3.0	4.0	–	–	–	–	–	–
22	9.5	6.0	7.5	6.0	3.0	4.5	–	–	–	–	–	–
23	8.0	5.0	6.5	6.0	3.5	4.5	–	–	–	–	–	–
24	8.5	4.5	6.0	6.0	1.0	4.0	–	–	–	–	–	–
25	8.5	5.0	6.5	2.5	1.0	2.0	–	–	–	–	–	–
26	8.0	6.0	7.0	3.0	0.0	1.5	–	–	–	–	–	–
27	8.0	5.0	6.5	–	–	–	3.0	1.0	2.0	–	–	–
28	8.0	4.0	6.0	–	–	–	4.0	1.5	3.0	–	–	–
29	6.5	3.0	4.5	–	–	–	–	–	–	–	–	–
30	6.0	3.0	4.0	4.0	0.5	2.5	–	–	–	–	–	–
31	5.0	1.5	3.0	–	–	–	3.0	0.5	1.5	–	–	–
Month	–	–	–	–	–	–	–	–	–	–	–	–

Table B19. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Great Basin National Park boundary near Baker, Nevada (gage station 10243232).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	–	–	–
7	–	–	–	–	–	–	–	–	–	–	–	–
8	–	–	–	–	–	–	–	–	–	–	–	–
9	–	–	–	–	–	–	–	–	–	8.5	3.0	5.0
10	–	–	–	–	–	–	–	–	–	10.0	3.5	6.5
11	–	–	–	–	–	–	–	–	–	13.0	4.5	8.0
12	–	–	–	–	–	–	–	–	–	13.5	5.5	8.5
13	–	–	–	–	–	–	–	–	–	13.5	6.0	9.0
14	–	–	–	–	–	–	–	–	–	9.5	6.5	8.0
15	–	–	–	–	–	–	–	–	–	12.5	7.0	9.5
16	–	–	–	–	–	–	–	–	–	13.0	7.0	9.5
17	–	–	–	–	–	–	–	–	–	10.0	7.5	8.5
18	–	–	–	–	–	–	–	–	–	12.0	6.5	8.5
19	–	–	–	–	–	–	–	–	–	11.0	5.0	7.5
20	–	–	–	–	–	–	–	–	–	12.0	5.0	8.0
21	–	–	–	–	–	–	–	–	–	13.5	6.5	9.5
22	–	–	–	–	–	–	–	–	–	14.0	7.5	10.0
23	–	–	–	–	–	–	–	–	–	14.0	8.0	10.5
24	–	–	–	–	–	–	–	–	–	12.0	8.5	10.0
25	–	–	–	–	–	–	–	–	–	13.0	7.5	9.5
26	–	–	–	–	–	–	–	–	–	12.5	7.5	9.5
27	–	–	–	–	–	–	–	–	–	12.0	6.5	9.0
28	–	–	–	–	–	–	–	–	–	12.5	7.5	9.5
29	–	–	–	–	–	–	–	–	–	12.5	8.0	10.0
30	–	–	–	–	–	–	–	–	–	13.0	7.5	9.5
31	–	–	–	–	–	–	–	–	–	11.5	6.5	9.0
Month	–	–	–	–	–	–	–	–	–	–	–	–

Table B19. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Great Basin National Park boundary near Baker, Nevada (gage station 10243232).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	12.0	6.5	9.0	13.5	9.0	11.0	16.0	12.0	14.0	–	–	–
2	12.0	6.5	9.0	14.0	8.0	10.5	16.5	11.5	14.0	–	–	–
3	11.5	6.5	9.0	14.0	8.5	11.0	14.5	11.0	13.0	–	–	–
4	11.5	6.5	8.5	14.0	8.5	11.0	14.5	10.5	12.5	–	–	–
5	11.0	6.0	8.5	14.0	8.5	11.0	15.5	10.5	12.5	–	–	–
6	11.5	6.0	8.5	14.5	9.0	11.5	14.0	10.5	12.0	–	–	–
7	12.0	7.0	9.0	14.5	9.0	11.5	15.5	10.0	12.5	–	–	–
8	10.5	7.0	9.0	14.5	9.0	11.5	15.5	11.5	13.5	–	–	–
9	12.0	8.0	9.5	14.0	9.0	11.5	16.5	11.5	14.0	–	–	–
10	13.0	8.0	10.0	14.5	9.0	12.0	17.0	12.0	14.5	–	–	–
11	10.5	7.5	9.0	15.5	10.5	12.5	16.0	12.0	13.5	–	–	–
12	11.5	7.5	9.5	15.5	10.0	12.5	15.5	11.5	13.5	–	–	–
13	12.0	7.5	9.5	14.0	10.5	12.0	16.5	11.5	14.0	–	–	–
14	13.0	7.0	10.0	15.0	10.0	12.0	16.0	11.5	13.5	–	–	–
15	13.0	7.5	10.0	15.5	10.5	13.0	17.5	12.0	14.0	–	–	–
16	12.5	8.0	10.0	14.5	11.0	13.0	16.0	12.0	13.5	–	–	–
17	12.5	8.0	10.0	14.5	11.5	13.0	16.0	11.0	13.0	–	–	–
18	13.0	8.5	10.5	15.5	11.5	13.0	15.5	10.5	13.0	–	–	–
19	11.5	9.0	10.0	15.0	11.5	13.0	15.5	10.5	13.0	–	–	–
20	11.5	8.5	9.5	14.0	11.0	12.5	14.5	11.5	13.0	–	–	–
21	10.5	8.0	9.0	15.0	11.0	13.0	17.0	11.5	13.5	–	–	–
22	11.5	6.5	9.0	16.5	11.5	13.5	13.5	11.5	12.5	–	–	–
23	9.0	7.5	8.5	16.5	11.5	13.5	15.5	11.0	13.0	–	–	–
24	9.0	6.5	7.5	16.0	12.0	14.0	14.0	11.5	12.5	–	–	–
25	11.5	6.0	8.5	15.5	12.5	13.5	16.5	10.5	13.0	–	–	–
26	12.0	6.5	9.0	16.0	11.5	13.5	16.5	11.0	13.5	–	–	–
27	13.0	7.5	10.0	16.5	11.5	14.0	18.5	10.5	13.5	–	–	–
28	13.0	8.0	10.5	16.5	11.5	13.5	17.0	10.5	13.5	–	–	–
29	14.0	8.5	11.0	16.5	11.5	13.5	16.0	11.0	13.5	–	–	–
30	14.0	9.0	11.0	16.5	11.0	13.5	17.5	10.0	13.0	–	–	–
31	–	–	–	16.5	12.0	14.0	–	–	–	–	–	–
Month	14.0	6.0	9.4	16.5	8.0	12.5	–	–	–	–	–	–

Table B19. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Great Basin National Park boundary near Baker, Nevada (gage station 10243232).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	14.5	8.0	11.0
7	–	–	–	–	–	–	–	–	–	11.0	6.5	8.5
8	–	–	–	–	–	–	–	–	–	11.5	7.0	9.0
9	–	–	–	–	–	–	–	–	–	11.5	6.5	9.0
10	–	–	–	–	–	–	–	–	–	11.0	6.5	8.5
11	–	–	–	–	–	–	–	–	–	8.5	5.0	6.5
12	–	–	–	–	–	–	–	–	–	7.0	5.0	6.0
13	–	–	–	–	–	–	–	–	–	9.0	4.5	6.5
14	–	–	–	–	–	–	–	–	–	10.0	4.5	7.0
15	–	–	–	–	–	–	–	–	–	10.0	5.5	7.5
16	–	–	–	–	–	–	–	–	–	10.0	6.0	8.0
17	–	–	–	–	–	–	–	–	–	10.5	6.5	8.5
18	–	–	–	–	–	–	–	–	–	11.0	7.0	8.5
19	–	–	–	–	–	–	–	–	–	10.0	5.5	7.5
20	–	–	–	–	–	–	–	–	–	10.5	5.5	7.5
21	–	–	–	–	–	–	–	–	–	9.0	5.5	7.0
22	–	–	–	–	–	–	–	–	–	9.0	6.0	7.5
23	–	–	–	–	–	–	–	–	–	9.5	6.5	7.5
24	–	–	–	–	–	–	–	–	–	9.0	5.5	7.0
25	–	–	–	–	–	–	–	–	–	7.5	5.5	6.5
26	–	–	–	–	–	–	–	–	–	10.0	5.0	7.5
27	–	–	–	–	–	–	–	–	–	10.5	6.5	8.5
28	–	–	–	–	–	–	–	–	–	11.0	7.5	9.0
29	–	–	–	–	–	–	–	–	–	9.0	6.5	7.5
30	–	–	–	–	–	–	–	–	–	10.5	5.0	7.5
31	–	–	–	–	–	–	–	–	–	11.0	6.0	8.5
Month	–	–	–	–	–	–	–	–	–	–	–	–

Table B19. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Great Basin National Park boundary near Baker, Nevada (gage station 10243232).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	11.0	6.5	9.0	13.0	8.5	10.5	13.0	10.5	12.0	–	–	–
2	12.0	7.5	9.5	11.5	8.0	10.0	14.5	11.0	12.5	–	–	–
3	13.0	7.5	10.0	12.5	8.0	10.0	16.0	10.5	13.0	–	–	–
4	12.5	8.0	10.0	12.0	8.5	10.5	16.5	11.0	13.0	–	–	–
5	13.0	8.0	10.0	12.5	9.0	10.5	16.5	11.5	13.0	–	–	–
6	13.0	8.0	10.0	14.0	9.0	11.5	16.5	11.0	13.0	–	–	–
7	13.0	8.0	10.0	15.0	9.5	12.0	16.5	10.0	12.5	–	–	–
8	12.5	8.5	10.0	15.0	10.0	12.0	16.5	10.0	12.5	–	–	–
9	11.0	7.5	9.0	14.5	10.0	12.0	–	–	–	–	–	–
10	10.5	6.5	8.0	14.5	9.5	12.0	–	–	–	–	–	–
11	10.0	6.0	8.0	15.0	9.5	12.0	–	–	–	–	–	–
12	11.0	6.5	9.0	15.5	9.5	12.5	–	–	–	–	–	–
13	13.0	7.0	10.0	14.0	11.5	13.0	–	–	–	–	–	–
14	13.0	8.0	10.0	14.5	11.5	13.0	–	–	–	–	–	–
15	13.0	8.0	10.0	14.5	12.0	13.0	–	–	–	–	–	–
16	12.5	8.0	10.0	14.5	11.5	12.5	–	–	–	–	–	–
17	11.5	8.5	9.5	14.5	11.0	12.5	–	–	–	–	–	–
18	13.0	8.0	10.0	16.0	11.5	13.5	–	–	–	–	–	–
19	13.5	8.0	10.5	14.5	11.5	13.0	–	–	–	–	–	–
20	13.0	8.5	10.5	16.0	11.5	13.5	–	–	–	–	–	–
21	12.0	8.5	10.0	16.0	11.0	13.0	–	–	–	–	–	–
22	12.0	7.0	9.5	14.0	11.0	12.5	–	–	–	–	–	–
23	11.0	8.0	9.5	15.0	11.0	12.5	–	–	–	–	–	–
24	11.0	8.0	9.5	14.5	11.0	12.5	–	–	–	–	–	–
25	11.5	9.0	10.0	14.5	11.0	12.5	–	–	–	–	–	–
26	11.5	8.5	10.0	15.5	11.0	13.0	–	–	–	–	–	–
27	12.0	8.5	10.0	12.5	11.0	12.0	–	–	–	–	–	–
28	11.5	8.5	10.0	14.5	10.0	12.0	–	–	–	–	–	–
29	11.5	8.5	10.0	15.5	11.0	13.0	–	–	–	–	–	–
30	12.5	8.0	10.0	16.0	10.5	13.0	–	–	–	–	–	–
31	–	–	–	16.0	10.5	13.0	–	–	–	–	–	–
Month	13.5	6.0	9.7	16.0	8.0	12.2	–	–	–	–	–	–

Table B20. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek below Spring Creek near Garrison, Utah (gage station 10243233).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	–	–	–
7	–	–	–	–	–	–	–	–	–	–	–	–
8	–	–	–	–	–	–	–	–	–	–	–	–
9	–	–	–	–	–	–	–	–	–	12.5	8.5	10.0
10	–	–	–	–	–	–	–	–	–	13.5	8.5	11.0
11	–	–	–	–	–	–	–	–	–	15.5	9.5	12.0
12	–	–	–	–	–	–	–	–	–	16.0	10.0	12.5
13	–	–	–	–	–	–	–	–	–	16.5	10.5	13.0
14	–	–	–	–	–	–	–	–	–	13.5	10.5	12.0
15	–	–	–	–	–	–	–	–	–	16.0	11.5	13.5
16	–	–	–	–	–	–	–	–	–	16.5	11.0	13.5
17	–	–	–	–	–	–	–	–	–	13.5	11.5	12.5
18	–	–	–	–	–	–	–	–	–	15.5	10.5	12.5
19	–	–	–	–	–	–	–	–	–	14.5	9.5	11.5
20	–	–	–	–	–	–	–	–	–	16.0	9.5	12.0
21	–	–	–	–	–	–	–	–	–	17.0	10.0	13.0
22	–	–	–	–	–	–	–	–	–	17.0	11.0	13.5
23	–	–	–	–	–	–	–	–	–	17.0	11.5	13.5
24	–	–	–	–	–	–	–	–	–	16.5	12.0	13.5
25	–	–	–	–	–	–	–	–	–	16.5	11.5	13.5
26	–	–	–	–	–	–	–	–	–	15.5	11.5	13.0
27	–	–	–	–	–	–	–	–	–	15.0	10.0	12.0
28	–	–	–	–	–	–	–	–	–	15.5	10.5	12.5
29	–	–	–	–	–	–	–	–	–	15.0	11.0	13.0
30	–	–	–	–	–	–	–	–	–	14.5	10.0	12.0
31	–	–	–	–	–	–	–	–	–	13.5	8.5	11.0
Month	–	–	–	–	–	–	–	–	–	–	–	–

Table B20. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek below Spring Creek near Garrison, Utah (gage station 10243233).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
						Water year 2003—Continued						
1	13.5	8.5	11.0	17.0	11.5	13.5	18.5	14.0	15.5	17.0	13.5	15.0
2	13.5	8.5	11.0	17.0	11.0	13.5	19.0	14.0	15.5	17.0	13.5	15.0
3	13.5	8.0	10.5	17.0	11.5	13.5	17.5	13.5	15.0	17.5	13.5	15.0
4	13.5	8.0	10.5	17.5	11.5	13.5	17.5	13.0	14.5	16.0	13.5	14.5
5	13.5	8.0	10.5	17.5	11.5	13.5	18.0	13.0	15.0	16.0	13.5	14.5
6	14.0	8.0	10.5	17.5	11.5	14.0	16.5	13.5	14.5	16.5	13.5	14.5
7	14.5	8.5	11.0	18.0	12.0	14.0	17.0	12.5	14.5	17.0	13.0	14.5
8	12.5	9.0	11.0	18.0	12.0	14.0	17.5	13.5	15.0	16.0	13.5	14.0
9	14.5	10.0	11.5	17.5	11.5	14.0	18.5	13.5	15.5	14.0	12.5	13.0
10	15.5	10.0	12.0	18.0	12.0	14.0	18.5	14.0	16.0	15.5	11.5	13.0
11	12.5	9.5	11.0	18.5	12.5	15.0	17.5	13.5	15.0	16.0	11.5	13.0
12	14.0	10.0	11.5	18.5	12.5	15.0	17.5	13.5	15.0	16.5	12.0	14.0
13	14.5	9.5	11.5	17.0	12.5	14.5	18.5	13.5	15.5	15.0	11.0	12.5
14	15.5	9.5	12.0	18.0	12.0	14.5	18.0	13.5	15.5	15.5	10.0	12.5
15	16.0	10.0	12.0	18.5	12.5	15.0	18.5	14.0	16.0	16.0	12.0	13.5
16	14.5	10.0	12.0	17.0	13.5	15.0	18.0	14.0	15.5	16.0	12.5	14.0
17	15.0	10.0	12.5	17.0	13.5	15.0	18.5	13.5	15.0	14.5	11.5	13.0
18	15.0	10.5	12.5	18.5	13.5	15.0	18.0	13.0	15.0	14.5	10.5	12.0
19	14.5	10.5	12.0	17.5	13.5	15.0	16.5	13.0	15.0	14.5	10.5	12.5
20	14.0	10.5	12.0	17.0	13.5	15.0	16.5	14.0	15.0	15.5	11.5	13.0
21	13.0	10.5	11.5	18.0	13.5	15.5	18.5	14.0	15.5	15.5	11.5	13.0
22	14.0	9.5	11.5	19.0	13.5	15.5	16.5	14.0	15.0	15.5	11.5	13.0
23	12.0	10.0	11.0	19.0	13.5	15.5	17.5	13.5	15.5	16.0	11.5	13.5
24	12.0	9.0	10.0	19.0	14.0	15.5	16.0	14.0	15.0	16.0	11.5	13.5
25	14.5	8.5	11.0	17.5	14.0	15.5	18.5	13.0	15.0	15.5	11.5	13.0
26	15.5	9.5	12.0	19.0	13.5	15.5	17.0	13.5	15.0	15.5	11.5	13.0
27	16.5	10.0	12.5	19.0	14.0	15.5	17.5	13.5	15.0	16.0	12.0	13.5
28	16.0	11.0	13.0	19.0	13.5	15.5	17.0	13.5	15.0	16.0	12.0	14.0
29	17.0	11.0	13.5	19.0	13.5	15.5	17.0	13.5	15.0	16.0	12.0	13.5
30	17.0	11.5	13.5	19.0	13.5	15.5	17.5	13.0	15.0	16.0	12.5	14.0
31	–	–	–	19.0	14.0	15.5	17.5	12.5	14.5	–	–	–
Month	17.0	8.0	11.6	19.0	11.0	14.7	19.0	12.5	15.1	17.5	10.0	13.6

Table B20. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek below Spring Creek near Garrison, Utah (gage station 10243233).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	15.5	13.0	14.0	9.5	8.0	9.0	9.5	8.0	8.5	6.5	5.0	6.0
2	15.0	12.0	13.5	10.0	8.0	9.0	9.5	7.5	8.5	7.5	6.0	7.0
3	15.0	12.0	13.5	10.0	8.5	9.0	9.5	7.5	8.0	7.0	5.0	6.5
4	15.0	12.0	13.5	10.0	7.5	8.5	9.0	7.0	8.0	5.5	4.0	4.5
5	15.5	12.0	13.5	10.0	8.0	8.5	9.5	8.5	9.0	5.5	4.0	4.5
6	15.5	12.0	13.5	9.5	7.5	8.5	9.5	8.0	8.5	6.0	4.5	5.0
7	14.5	12.0	13.0	10.0	7.0	8.5	9.5	8.0	8.5	7.5	5.5	6.5
8	15.5	12.0	13.5	10.5	8.0	9.0	8.5	7.0	7.5	7.0	6.0	6.5
9	15.5	12.0	13.5	10.5	9.5	10.0	8.0	6.5	7.0	7.5	5.5	6.5
10	14.0	10.5	12.5	10.5	9.0	10.0	8.5	6.5	7.5	7.5	6.0	6.5
11	13.5	9.5	11.5	11.0	8.5	9.5	8.5	8.0	8.0	8.0	6.0	6.5
12	14.5	10.5	12.0	10.0	7.5	9.0	8.0	7.0	7.5	7.0	6.0	6.5
13	13.0	10.0	11.5	10.0	7.5	9.0	9.5	7.0	8.0	7.0	5.5	6.5
14	13.5	9.5	11.0	10.5	9.0	9.5	8.0	6.5	7.0	7.0	5.0	6.0
15	13.5	9.5	11.5	10.5	8.0	9.5	7.0	6.0	6.5	6.5	5.0	6.0
16	14.0	10.0	12.0	10.5	9.5	9.5	7.5	5.0	6.0	7.0	5.0	6.0
17	14.0	10.0	12.0	10.5	9.0	9.5	8.0	6.0	6.5	6.5	5.0	6.0
18	14.5	10.5	12.5	11.0	8.0	9.5	7.5	6.5	7.0	6.0	4.5	5.0
19	14.5	11.5	12.5	10.5	8.5	9.5	8.5	6.5	7.5	7.0	5.5	6.0
20	14.5	11.0	12.5	10.5	8.5	9.5	9.0	7.0	8.0	7.0	6.0	6.5
21	14.5	11.0	12.5	10.0	6.0	8.5	9.5	8.0	8.5	7.5	6.5	7.0
22	14.5	10.5	12.5	7.5	5.5	6.5	8.5	7.0	7.5	6.5	6.0	6.0
23	14.0	11.0	12.0	7.0	5.0	6.0	8.0	6.5	7.5	6.5	5.0	5.5
24	12.5	9.5	11.0	8.5	6.0	7.0	9.0	7.0	8.0	8.0	5.5	6.5
25	11.5	9.0	10.0	8.5	7.0	7.5	8.5	6.5	8.0	7.0	6.0	6.5
26	12.0	8.5	10.0	8.0	6.5	7.0	7.0	5.5	6.5	6.5	5.0	5.5
27	12.5	9.5	11.0	8.0	6.0	7.0	6.0	4.5	5.5	8.0	5.5	6.5
28	13.5	10.0	11.5	9.5	6.5	8.0	6.0	4.5	5.5	8.5	7.0	7.5
29	13.5	10.0	11.5	10.0	7.5	8.5	6.0	5.0	5.5	8.5	6.5	7.5
30	10.0	8.5	9.5	10.0	8.5	9.0	7.0	5.5	6.5	8.5	7.0	7.5
31	9.0	8.5	8.5	–	–	–	7.0	6.5	6.5	7.5	6.0	6.5
Month	15.5	8.5	12.0	11.0	5.0	8.6	9.5	4.5	7.4	8.5	4.0	6.2

Table B20. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek below Spring Creek near Garrison, Utah (gage station 10243233).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	7.0	5.0	6.0	–	–	–	11.5	10.0	11.0	15.5	10.5	12.5
2	6.5	5.5	6.0	–	–	–	11.5	10.0	10.5	15.5	11.0	13.0
3	7.0	6.0	6.5	–	–	–	12.5	10.0	11.0	16.0	11.5	13.5
4	8.0	6.5	7.0	–	–	–	13.5	10.0	11.5	16.0	12.0	14.0
5	7.5	6.5	7.0	–	–	–	14.0	10.0	12.0	15.5	12.0	13.5
6	7.0	5.0	6.0	–	–	–	12.5	10.5	11.5	15.5	11.5	13.0
7	7.0	6.0	6.5	–	–	–	13.5	11.0	12.0	14.5	11.5	13.0
8	7.0	5.0	6.0	–	–	–	13.0	11.5	12.0	15.5	11.5	13.0
9	7.0	6.0	6.5	–	–	–	14.0	10.5	12.0	15.5	11.5	13.0
10	6.5	5.0	6.0	–	–	–	12.5	10.5	11.5	14.0	10.5	12.0
11	6.5	5.0	5.5	–	–	–	13.5	10.0	11.5	12.5	9.5	10.5
12	6.0	4.5	5.0	–	–	–	14.0	10.0	12.0	11.5	9.0	10.0
13	6.5	4.5	5.0	–	–	–	14.0	10.5	12.0	12.0	8.5	10.0
14	7.0	5.0	6.0	–	–	–	13.0	10.5	11.5	13.5	8.5	11.0
15	7.5	5.0	6.5	–	–	–	13.0	10.5	11.5	13.0	9.5	11.0
16	8.0	6.0	7.0	12.0	8.0	10.0	13.0	10.5	11.5	12.5	9.5	11.0
17	8.5	7.0	7.5	13.0	8.5	10.5	12.0	10.5	11.0	13.0	10.0	11.5
18	8.5	7.5	8.0	12.5	8.5	10.5	12.5	10.0	11.0	14.0	10.0	11.5
19	8.5	8.0	8.0	13.5	10.0	11.5	12.5	10.0	11.0	13.0	9.5	11.0
20	8.5	7.0	7.5	13.5	10.0	11.5	13.0	10.0	11.5	13.0	9.5	11.0
21	8.0	7.0	7.5	14.0	10.5	12.0	13.5	10.5	12.0	12.0	9.0	10.5
22	8.0	7.0	7.5	13.5	10.5	12.0	11.5	10.0	11.0	12.5	9.5	10.5
23	8.0	7.5	8.0	14.0	11.5	12.5	14.0	10.0	11.5	12.0	9.5	10.5
24	9.0	7.5	8.0	13.5	10.5	12.0	14.5	10.0	12.0	12.0	9.0	10.5
25	–	–	–	13.5	10.5	12.0	14.5	10.5	12.0	11.0	9.0	10.0
26	–	–	–	12.5	10.5	11.5	15.0	10.5	12.5	12.5	8.5	10.5
27	–	–	–	12.5	9.5	11.0	14.5	10.5	12.5	13.0	9.5	11.5
28	–	–	–	12.0	9.0	10.5	14.0	10.5	12.0	13.5	10.5	11.5
29	–	–	–	12.5	9.0	10.5	12.0	10.0	11.0	11.5	9.5	10.5
30	–	–	–	13.0	9.5	11.0	14.5	10.5	12.0	12.5	8.0	10.5
31	–	–	–	13.5	10.5	11.5	–	–	–	13.5	9.0	11.0
Month	–	–	–	–	–	–	15.0	10.0	11.6	16.0	8.0	11.5

Table B20. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek below Spring Creek near Garrison, Utah (gage station 10243233).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	13.5	10.0	11.5	14.5	11.5	12.5	15.5	13.5	14.0	17.0	13.0	14.5
2	14.0	10.0	12.0	14.5	11.0	12.5	17.0	13.5	14.5	16.0	13.0	14.0
3	14.5	10.5	12.5	15.5	10.5	12.5	17.5	13.0	15.0	13.5	11.5	12.0
4	14.5	11.0	12.5	14.5	11.5	13.0	18.0	13.5	15.0	14.0	10.5	12.0
5	14.5	10.5	12.5	14.5	11.5	13.0	17.5	13.5	15.0	16.0	11.5	13.0
6	14.5	11.0	12.5	16.0	11.5	13.5	17.5	13.5	15.0	16.5	12.0	14.0
7	14.5	11.0	12.5	16.5	12.0	14.0	17.5	12.5	14.5	16.5	12.0	14.0
8	14.5	11.0	12.5	16.5	12.5	14.0	17.5	12.5	14.5	16.5	12.0	14.0
9	13.5	10.5	12.0	16.0	12.5	14.0	18.5	12.5	15.0	16.0	13.0	14.5
10	13.5	10.0	11.0	16.0	12.0	14.0	17.5	12.5	14.5	17.0	12.5	14.5
11	12.5	9.5	11.0	16.5	12.0	14.0	18.5	12.5	15.0	17.0	13.0	14.5
12	13.5	10.0	11.5	17.0	12.0	14.5	18.0	12.5	15.0	16.5	13.5	14.5
13	15.0	10.5	12.5	16.0	13.5	14.5	18.0	13.5	15.0	16.0	12.5	14.0
14	15.5	11.0	13.0	16.0	13.5	14.5	17.0	13.0	14.5	15.5	12.0	13.5
15	15.5	11.5	13.0	16.5	13.5	14.5	16.0	13.5	14.5	15.5	11.0	13.0
16	14.5	11.0	12.5	16.5	13.5	14.5	16.5	13.0	14.5	16.0	12.0	13.5
17	14.0	11.5	12.5	17.0	13.0	14.5	14.5	12.5	13.5	16.0	13.0	14.0
18	15.0	11.0	13.0	17.5	13.5	15.0	17.0	12.5	14.5	15.5	12.5	13.5
19	16.0	11.5	13.5	17.0	13.5	15.0	17.0	13.0	14.5	14.0	11.5	12.5
20	15.5	12.0	13.5	17.5	13.5	15.0	17.0	13.5	14.5	13.5	10.5	12.0
21	14.5	11.5	12.5	17.5	13.0	15.0	16.0	13.5	14.5	13.5	10.0	11.5
22	14.5	10.0	12.5	17.0	13.0	14.5	16.5	12.5	14.0	14.0	10.0	11.5
23	13.5	10.5	12.0	17.0	13.0	14.5	15.5	12.5	14.0	14.5	10.5	12.5
24	13.5	11.0	12.0	16.5	12.5	14.5	15.5	13.0	14.0	15.0	11.5	13.0
25	14.0	11.5	12.5	17.0	13.0	14.5	17.0	12.5	14.5	15.5	11.5	13.0
26	14.0	11.5	12.5	17.5	13.0	15.0	16.5	12.5	14.0	15.5	11.5	13.5
27	14.5	11.0	12.5	15.0	13.0	14.0	16.0	12.0	13.5	15.0	11.5	13.0
28	14.0	11.5	12.5	17.0	12.5	14.5	16.5	11.5	13.5	14.0	11.5	12.5
29	14.0	11.0	12.5	17.5	13.0	15.0	16.5	12.0	14.0	13.5	11.5	12.5
30	14.5	10.5	12.5	17.5	12.5	15.0	16.0	12.0	14.0	13.5	10.5	12.0
31	–	–	–	17.5	12.5	15.0	17.0	12.5	14.5	–	–	–
Month	16.0	9.5	12.4	17.5	10.5	14.2	18.5	11.5	14.4	17.0	10.0	13.2

Table B21. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Nevada–Utah State line near Garrison, Utah (gage station 10243234).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	–	–	–
7	–	–	–	–	–	–	–	–	–	–	–	–
8	–	–	–	–	–	–	–	–	–	–	–	–
9	–	–	–	–	–	–	–	–	–	10.5	7.0	8.5
10	–	–	–	–	–	–	–	–	–	12.5	7.0	9.5
11	–	–	–	–	–	–	–	–	–	14.0	8.0	11.0
12	–	–	–	–	–	–	–	–	–	15.0	9.5	12.0
13	–	–	–	–	–	–	–	–	–	16.0	10.5	13.0
14	–	–	–	–	–	–	–	–	–	13.5	11.0	12.5
15	–	–	–	–	–	–	–	–	–	16.0	11.5	13.5
16	–	–	–	–	–	–	–	–	–	16.0	11.5	14.0
17	–	–	–	–	–	–	–	–	–	14.0	12.0	13.0
18	–	–	–	–	–	–	–	–	–	14.5	11.0	12.5
19	–	–	–	–	–	–	–	–	–	13.0	9.0	11.0
20	–	–	–	–	–	–	–	–	–	14.5	9.0	11.5
21	–	–	–	–	–	–	–	–	–	16.0	10.0	13.0
22	–	–	–	–	–	–	–	–	–	16.5	11.5	14.0
23	–	–	–	–	–	–	–	–	–	16.5	12.5	14.5
24	–	–	–	–	–	–	–	–	–	16.0	13.0	14.5
25	–	–	–	–	–	–	–	–	–	16.5	12.5	14.5
26	–	–	–	–	–	–	–	–	–	16.0	13.0	14.5
27	–	–	–	–	–	–	–	–	–	15.5	12.5	14.0
28	–	–	–	–	–	–	–	–	–	16.0	11.5	14.0
29	–	–	–	–	–	–	–	–	–	16.0	13.0	14.5
30	–	–	–	–	–	–	–	–	–	15.0	12.0	13.5
31	–	–	–	–	–	–	–	–	–	14.5	10.0	12.5
Month	–	–	–	–	–	–	–	–	–	–	–	–

Table B21. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Nevada–Utah State line near Garrison, Utah (gage station 10243234).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	14.5	9.5	12.0	16.5	12.5	14.5	18.5	16.5	17.5	16.5	15.5	16.0
2	14.5	9.5	12.0	16.5	12.5	14.5	18.5	16.5	17.5	17.0	15.5	16.0
3	14.0	9.5	11.5	16.5	12.5	14.5	18.0	16.0	17.0	17.0	15.5	16.0
4	13.5	9.0	11.5	16.5	13.0	14.5	17.5	15.5	16.5	16.5	16.0	16.0
5	13.5	9.0	11.5	16.5	13.0	15.0	17.0	15.0	16.0	16.5	15.5	16.0
6	14.0	9.0	11.5	16.5	13.0	15.0	16.5	15.0	16.0	16.5	15.0	16.0
7	14.5	10.0	12.0	17.0	13.5	15.0	16.5	15.0	15.5	16.5	15.0	16.0
8	13.5	10.0	12.0	17.0	13.5	15.5	17.5	15.0	16.5	16.5	14.5	15.5
9	14.5	11.0	12.5	17.0	13.0	15.0	18.0	16.0	17.0	15.0	12.5	13.5
10	15.0	11.0	13.0	17.0	13.0	15.5	18.5	16.5	17.5	15.0	11.0	13.0
11	13.0	10.5	12.0	18.0	14.5	16.0	18.0	16.5	17.0	15.0	10.5	13.0
12	13.5	10.5	12.0	18.0	14.5	16.0	17.5	16.0	17.0	16.0	11.0	13.5
13	14.5	10.0	12.5	17.0	14.5	16.0	18.0	16.0	17.0	13.5	10.5	12.0
14	15.0	10.5	13.0	17.5	14.0	16.0	18.0	16.0	17.0	13.5	9.0	11.5
15	15.5	11.0	13.0	18.0	14.5	16.0	18.5	16.5	17.5	15.5	11.0	13.0
16	15.0	11.0	13.0	17.5	15.0	16.5	18.0	16.5	17.5	16.0	12.5	14.0
17	15.5	11.0	13.5	17.5	15.5	16.5	18.0	16.0	17.0	14.0	10.5	12.5
18	15.5	11.5	13.5	18.0	15.5	16.5	17.5	15.5	16.5	13.0	8.0	10.5
19	14.5	12.0	13.0	17.0	15.5	16.5	17.0	15.5	16.5	13.5	8.0	11.0
20	14.0	11.5	12.5	17.0	15.5	16.5	17.0	16.0	16.5	14.5	9.5	12.0
21	13.5	11.5	12.5	18.5	15.0	16.5	18.0	16.5	17.0	15.0	9.5	12.5
22	14.0	10.5	12.5	18.0	16.0	17.0	17.5	16.5	16.5	15.0	9.5	12.5
23	13.0	11.0	12.0	18.5	16.0	17.0	17.5	16.0	16.5	16.0	10.5	13.0
24	12.0	10.0	11.0	18.5	16.5	17.5	17.0	16.0	16.5	15.5	10.5	13.0
25	14.0	9.5	11.5	18.0	16.5	17.0	17.0	15.5	16.5	15.0	10.0	12.5
26	14.5	10.5	12.5	18.5	16.0	17.0	17.0	16.0	16.5	15.0	10.0	13.0
27	16.0	11.0	13.5	18.5	16.0	17.5	17.0	15.5	16.5	16.0	11.0	13.5
28	16.0	12.0	14.0	18.5	16.0	17.0	16.5	15.0	16.0	16.0	11.0	14.0
29	16.5	12.5	14.5	18.5	16.0	17.0	16.5	15.5	16.0	16.0	11.5	14.0
30	16.5	13.0	14.5	18.5	16.0	17.0	16.5	15.0	16.0	16.5	12.5	14.5
31	–	–	–	18.5	16.5	17.5	16.5	15.0	16.0	–	–	–
Month	16.5	9.0	12.5	18.5	12.5	16.1	18.5	15.0	16.7	17.0	8.0	13.7

Table B21. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Nevada–Utah State line near Garrison, Utah (gage station 10243234).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
	Water year 2004											
1	16.5	13.0	14.5	6.5	5.5	6.0	6.0	5.0	5.5	2.5	1.0	2.0
2	15.5	12.5	14.0	7.0	6.0	6.5	6.5	4.5	5.5	3.5	2.0	3.0
3	15.0	12.0	13.5	7.5	6.0	6.5	6.0	4.0	5.0	3.5	1.0	2.5
4	15.0	11.0	13.0	7.0	5.0	6.0	6.0	3.5	5.0	1.0	0.0	0.0
5	15.0	11.5	13.5	6.5	5.0	6.0	7.0	5.5	6.0	0.0	0.0	0.0
6	15.0	11.5	13.5	6.0	4.5	5.5	7.0	5.5	6.5	0.0	0.0	0.0
7	14.5	11.5	13.0	6.5	4.5	5.5	7.5	5.5	6.5	3.5	0.0	1.5
8	15.0	11.5	13.5	7.5	5.0	6.5	6.0	3.5	4.5	3.5	2.0	3.0
9	15.0	12.0	13.5	8.0	6.5	7.0	4.5	2.0	3.5	3.5	0.5	2.5
10	13.0	10.0	12.0	8.0	7.0	7.5	5.5	2.5	4.0	3.5	2.0	2.5
11	11.5	8.0	10.0	7.5	6.0	7.0	5.5	4.0	4.5	3.5	1.0	2.5
12	13.0	9.0	11.0	7.0	5.5	6.5	5.0	3.0	4.0	2.5	1.0	1.5
13	11.5	9.0	10.0	7.0	5.5	6.5	6.0	3.5	4.5	1.5	0.5	1.0
14	11.5	7.0	9.5	8.0	6.5	7.0	5.0	2.5	4.0	0.5	0.5	0.5
15	11.5	8.0	10.0	7.5	5.5	7.0	3.5	1.5	2.5	0.5	0.5	0.5
16	12.5	9.5	11.0	8.0	7.0	7.5	3.0	1.0	1.5	0.5	0.0	0.5
17	12.5	9.0	11.0	8.0	6.5	7.0	3.5	1.0	2.5	0.5	0.0	0.0
18	13.0	9.5	11.5	8.0	5.5	6.5	4.0	1.5	2.5	0.0	0.0	0.0
19	13.5	11.0	12.0	8.0	6.0	7.0	4.5	1.5	3.0	0.0	0.0	0.0
20	13.0	10.0	11.5	8.5	6.0	7.5	6.0	3.5	5.0	0.0	0.0	0.0
21	13.0	10.0	11.5	7.0	3.0	6.0	6.5	5.0	5.5	1.0	0.0	0.5
22	13.0	9.5	11.5	3.0	1.5	2.5	5.5	3.5	4.5	1.0	0.5	1.0
23	12.5	10.0	11.5	1.5	1.0	1.0	4.5	2.5	3.5	1.0	0.0	0.5
24	11.5	9.0	10.0	3.5	1.0	2.0	5.5	3.5	4.5	1.0	0.0	0.5
25	9.5	8.0	8.5	4.0	2.5	3.5	5.5	3.5	5.0	1.0	0.0	1.0
26	9.5	7.0	8.0	4.0	2.5	3.0	3.5	1.0	2.5	1.0	0.0	0.5
27	10.5	7.5	9.0	4.0	1.5	2.5	1.0	0.5	1.0	2.0	0.5	1.0
28	11.0	8.5	10.0	5.0	2.0	3.5	0.5	0.5	0.5	2.5	2.0	2.0
29	12.0	9.5	10.5	6.0	4.0	5.0	0.5	0.5	0.5	2.5	1.0	2.0
30	9.5	7.0	8.0	7.0	5.0	6.0	0.5	0.5	0.5	2.5	2.0	2.5
31	7.0	6.0	6.5	–	–	–	1.0	0.5	0.5	2.5	0.5	1.5
Month	16.5	6.0	11.2	8.5	1.0	5.6	7.5	0.5	3.7	3.5	0.0	1.2

Table B21. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Nevada–Utah State line near Garrison, Utah (gage station 10243234).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	0.5	0.0	0.5	4.5	0.0	2.0	–	–	–	–	–	–
2	0.5	0.0	0.0	6.0	2.5	4.0	–	–	–	–	–	–
3	2.0	0.5	1.0	7.0	3.5	4.5	–	–	–	–	–	–
4	3.5	1.0	2.0	7.0	2.5	4.0	–	–	–	–	–	–
5	3.5	1.5	2.5	7.0	2.5	4.5	–	–	–	–	–	–
6	2.0	0.0	1.0	9.0	3.5	6.0	–	–	–	–	–	–
7	3.0	0.5	1.5	9.5	4.0	6.5	–	–	–	–	–	–
8	2.0	0.0	1.0	10.0	4.0	6.5	–	–	–	–	–	–
9	2.5	1.5	2.0	10.5	4.5	7.5	–	–	–	–	–	–
10	2.0	0.0	1.0	11.0	6.5	8.5	–	–	–	–	–	–
11	1.5	0.0	0.5	11.0	5.0	7.5	–	–	–	–	–	–
12	0.5	0.0	0.0	11.0	5.0	7.5	–	–	–	–	–	–
13	0.0	0.0	0.0	11.5	5.5	8.5	–	–	–	–	–	–
14	2.0	0.0	0.5	12.5	6.0	9.0	–	–	–	–	–	–
15	2.5	0.0	1.0	–	–	–	–	–	–	–	–	–
16	3.5	1.0	2.5	–	–	–	–	–	–	–	–	–
17	4.5	2.5	3.5	–	–	–	–	–	–	–	–	–
18	5.5	3.5	4.5	–	–	–	–	–	–	–	–	–
19	6.0	4.0	4.5	–	–	–	–	–	–	–	–	–
20	5.5	2.5	4.0	–	–	–	–	–	–	–	–	–
21	5.5	3.0	4.0	–	–	–	–	–	–	–	–	–
22	5.0	3.0	4.0	–	–	–	–	–	–	–	–	–
23	5.5	3.5	4.5	–	–	–	–	–	–	–	–	–
24	7.0	4.0	5.5	–	–	–	–	–	–	–	–	–
25	5.5	3.0	4.0	–	–	–	–	–	–	–	–	–
26	5.5	3.5	4.0	–	–	–	–	–	–	–	–	–
27	5.0	1.0	3.5	–	–	–	–	–	–	–	–	–
28	4.5	0.5	2.5	–	–	–	–	–	–	–	–	–
29	4.0	0.5	2.0	–	–	–	–	–	–	–	–	–
30	–	–	–	–	–	–	–	–	–	–	–	–
31	–	–	–	–	–	–	–	–	–	–	–	–
Month	7.0	0.0	2.3	–	–	–	–	–	–	–	–	–

Table B21. Maximum, minimum, and mean water temperature for the continual-recording gage Snake Creek at Nevada–Utah State line near Garrison, Utah (gage station 10243234).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	–	–	–	–	–	–	17.0	14.0	15.5	17.0	13.0	15.5
2	–	–	–	–	–	–	18.0	14.5	16.0	16.0	13.5	15.0
3	–	–	–	–	–	–	18.5	13.5	16.0	15.0	11.0	12.5
4	–	–	–	–	–	–	18.5	14.5	16.5	13.0	10.0	11.5
5	–	–	–	–	–	–	18.5	14.5	16.5	15.0	11.0	12.5
6	–	–	–	–	–	–	18.5	14.5	16.5	16.0	11.5	14.0
7	–	–	–	–	–	–	18.5	13.0	15.5	16.0	12.5	14.0
8	–	–	–	–	–	–	18.5	13.0	15.5	16.5	12.5	14.5
9	–	–	–	–	–	–	18.5	13.0	16.0	17.0	13.5	15.0
10	–	–	–	–	–	–	18.5	13.5	16.0	17.0	13.5	15.0
11	–	–	–	–	–	–	19.0	13.5	16.0	18.0	13.5	15.5
12	–	–	–	–	–	–	19.0	13.5	16.0	17.0	14.0	15.5
13	–	–	–	–	–	–	18.5	14.5	16.5	16.5	13.0	15.0
14	–	–	–	18.0	15.0	16.5	18.0	14.0	16.0	15.0	11.5	13.5
15	–	–	–	18.5	15.0	16.0	17.0	14.5	15.5	14.5	10.0	12.5
16	–	–	–	18.5	14.5	16.0	17.0	14.5	15.5	16.0	11.5	14.0
17	–	–	–	19.0	14.5	16.0	15.0	13.5	14.5	16.0	13.5	14.5
18	–	–	–	18.5	15.0	17.0	17.0	13.0	15.0	15.0	13.0	14.0
19	–	–	–	18.5	14.5	16.5	17.5	13.5	15.5	13.5	11.5	12.5
20	–	–	–	18.5	14.5	16.5	17.5	14.0	15.5	12.0	9.5	11.0
21	–	–	–	18.0	14.0	16.0	17.0	14.0	15.5	11.5	9.0	10.5
22	–	–	–	17.5	13.5	16.0	17.0	13.0	15.0	12.0	8.0	10.0
23	–	–	–	18.0	14.0	16.0	16.0	13.5	14.5	13.0	9.0	11.0
24	–	–	–	17.0	13.5	15.5	15.5	13.5	14.5	14.0	10.0	12.0
25	–	–	–	17.0	13.5	15.5	17.0	13.0	15.0	14.0	10.5	12.5
26	–	–	–	18.5	13.5	16.0	16.5	13.0	14.5	14.5	11.0	13.0
27	–	–	–	16.0	14.0	15.0	15.5	12.0	13.5	14.5	11.5	13.0
28	–	–	–	18.0	12.5	15.0	16.0	11.0	13.5	13.0	11.5	12.5
29	–	–	–	18.5	13.5	16.0	16.5	11.5	14.0	12.5	11.0	12.0
30	–	–	–	18.5	13.5	16.0	16.5	12.5	14.5	12.5	9.5	11.0
31	–	–	–	18.5	13.5	16.0	17.0	12.5	15.0	–	–	–
Month	–	–	–	–	–	–	19.0	11.0	15.3	18.0	8.0	13.2

Table B22. Maximum, minimum, and mean water temperature for the continual-recording gage South Fork Big Wash above Great Basin National Park boundary near Baker, Nevada (gage station 10243228).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	–	–	–
7	–	–	–	–	–	–	–	–	–	–	–	–
8	–	–	–	–	–	–	–	–	–	6.0	2.5	5.0
9	–	–	–	–	–	–	–	–	–	7.0	3.5	5.0
10	–	–	–	–	–	–	–	–	–	8.5	4.0	6.0
11	–	–	–	–	–	–	–	–	–	11.0	4.5	7.0
12	–	–	–	–	–	–	–	–	–	11.5	5.0	7.5
13	–	–	–	–	–	–	–	–	–	12.0	5.5	8.0
14	–	–	–	–	–	–	–	–	–	9.5	6.0	7.5
15	–	–	–	–	–	–	–	–	–	11.5	6.5	8.5
16	–	–	–	–	–	–	–	–	–	12.0	6.0	8.5
17	–	–	–	–	–	–	–	–	–	11.0	6.0	8.0
18	–	–	–	–	–	–	–	–	–	11.5	5.0	7.5
19	–	–	–	–	–	–	–	–	–	10.0	4.5	6.5
20	–	–	–	–	–	–	–	–	–	11.0	5.0	7.5
21	–	–	–	–	–	–	–	–	–	12.0	6.0	8.0
22	–	–	–	–	–	–	–	–	–	11.5	6.0	8.0
23	–	–	–	–	–	–	–	–	–	10.5	6.5	7.5
24	–	–	–	–	–	–	–	–	–	10.0	6.5	7.5
25	–	–	–	–	–	–	–	–	–	10.0	6.5	8.0
26	–	–	–	–	–	–	–	–	–	10.0	6.5	8.0
27	–	–	–	–	–	–	–	–	–	10.5	6.5	8.0
28	–	–	–	–	–	–	–	–	–	10.0	7.0	8.0
29	–	–	–	–	–	–	–	–	–	10.0	7.0	8.0
30	–	–	–	–	–	–	–	–	–	10.5	7.0	8.0
31	–	–	–	–	–	–	–	–	–	10.0	7.0	8.0
Month	–	–	–	–	–	–	–	–	–	–	–	–

Table B22. Maximum, minimum, and mean water temperature for the continual-recording gage South Fork Big Wash above Great Basin National Park boundary near Baker, Nevada (gage station 10243228).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	10.0	7.0	8.0	12.5	8.5	10.0	14.0	10.5	12.0	12.5	9.5	11.0
2	10.5	6.5	8.0	13.0	8.0	10.0	15.5	10.5	12.5	13.5	9.5	11.5
3	10.5	6.5	8.0	13.0	8.0	10.0	13.5	9.5	11.5	14.0	9.0	11.0
4	10.0	6.5	8.0	13.5	8.0	10.5	14.0	9.0	11.5	13.5	10.0	11.0
5	10.0	6.5	7.5	13.5	8.5	10.5	14.5	9.0	11.5	12.5	9.5	11.0
6	10.5	6.5	8.0	14.0	8.5	11.0	13.5	10.0	11.5	12.5	9.0	10.5
7	10.5	6.5	8.0	14.0	9.0	11.0	15.0	10.0	12.0	13.5	9.0	11.0
8	10.0	7.0	8.0	14.0	9.0	11.0	16.0	10.5	13.0	12.5	10.0	11.0
9	10.5	7.5	8.5	14.0	8.0	10.5	16.0	11.0	13.0	10.5	8.0	9.5
10	10.5	7.5	8.5	14.5	8.5	11.0	16.0	10.5	13.0	10.0	6.5	8.5
11	10.0	7.0	8.0	15.0	10.0	11.5	15.0	10.0	12.5	10.5	6.0	8.0
12	10.0	7.0	8.0	15.0	9.0	11.5	15.0	10.5	12.5	12.0	7.0	9.5
13	10.5	7.0	8.5	14.0	9.0	11.5	15.5	10.5	12.5	9.5	5.5	7.5
14	10.5	7.0	8.5	14.5	9.0	11.5	14.5	10.0	12.5	10.0	4.0	7.0
15	11.0	7.0	9.0	15.0	10.0	12.0	16.0	11.0	13.0	12.0	7.0	9.5
16	10.5	7.5	9.0	14.5	10.0	12.0	14.0	10.5	12.0	12.0	8.5	10.5
17	10.5	7.5	9.0	14.5	10.0	12.0	14.5	9.5	11.5	10.0	6.0	8.0
18	11.0	7.5	9.0	14.5	10.0	11.5	14.5	8.5	11.0	8.5	4.0	6.0
19	10.0	8.0	9.0	14.0	9.5	11.5	15.5	9.0	12.0	10.0	4.5	7.0
20	10.0	8.0	8.5	15.0	9.5	11.5	13.0	10.5	11.5	10.5	6.0	8.0
21	10.0	7.0	8.5	14.5	9.0	11.5	15.5	10.5	12.5	10.5	5.5	8.0
22	10.5	6.5	8.5	15.5	10.0	12.0	12.5	11.0	11.5	11.0	6.0	8.0
23	8.5	7.0	8.0	14.5	9.5	11.5	14.5	9.5	11.5	11.5	6.5	8.5
24	8.5	6.5	7.5	16.0	10.5	12.5	13.0	10.0	11.0	11.0	6.5	8.5
25	10.5	6.5	8.0	14.5	11.0	12.5	14.0	8.5	11.0	11.0	6.5	8.5
26	11.0	6.5	8.5	14.0	9.5	11.5	13.5	9.5	11.5	11.0	6.5	8.5
27	12.0	7.0	9.5	15.5	10.0	12.0	13.0	9.0	11.0	12.0	7.0	9.5
28	12.0	8.0	10.0	15.5	10.0	12.0	13.5	8.5	11.0	12.0	7.0	9.5
29	12.5	8.0	10.0	15.5	10.0	12.0	13.0	9.5	11.0	11.5	6.5	9.0
30	12.5	8.5	10.0	15.5	9.5	12.0	13.5	8.5	11.0	12.5	8.5	10.5
31	–	–	–	16.0	10.5	13.0	13.0	8.5	10.5	–	–	–
Month	12.5	6.5	8.5	16.0	8.0	11.4	16.0	8.5	11.8	14.0	4.0	9.2

Table B22. Maximum, minimum, and mean water temperature for the continual-recording gage South Fork Big Wash above Great Basin National Park boundary near Baker, Nevada (gage station 10243228).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	12.5	9.5	11.0	2.0	0.0	1.0	–	–	–	–	–	–
2	11.0	8.0	9.5	2.5	0.0	1.5	–	–	–	–	–	–
3	10.5	8.0	9.5	3.0	1.5	2.0	–	–	–	–	–	–
4	10.5	6.5	8.5	1.5	0.0	0.5	–	–	–	–	–	–
5	10.5	7.0	8.5	1.5	0.0	0.5	–	–	–	–	–	–
6	11.0	7.0	9.0	1.5	0.0	0.5	–	–	–	–	–	–
7	10.5	6.5	8.5	2.0	0.0	0.5	–	–	–	–	–	–
8	11.0	7.5	9.5	3.0	1.0	2.0	–	–	–	–	–	–
9	11.0	7.5	9.5	4.5	2.5	3.5	–	–	–	–	–	–
10	10.0	5.5	8.5	4.0	3.0	3.5	–	–	–	–	–	–
11	7.0	2.5	5.0	3.0	1.0	2.0	–	–	–	–	–	–
12	9.0	5.0	6.5	2.5	1.0	1.5	–	–	–	–	–	–
13	7.0	3.5	5.0	2.5	0.5	1.5	–	–	–	–	–	–
14	7.0	2.0	4.5	3.5	2.5	2.5	–	–	–	–	–	–
15	8.0	3.0	5.5	2.5	0.0	1.5	–	–	–	–	–	–
16	8.0	4.5	6.0	3.5	2.5	2.5	–	–	–	–	–	–
17	8.5	4.5	6.5	4.5	2.5	3.5	–	–	–	–	–	–
18	9.0	4.5	7.0	3.5	1.0	2.0	–	–	–	–	–	–
19	10.5	7.0	8.5	3.0	1.0	2.0	–	–	–	–	–	–
20	9.0	5.0	7.0	3.5	1.0	2.5	–	–	–	–	–	–
21	9.0	5.0	7.0	–	–	–	–	–	–	–	–	–
22	9.0	5.0	7.0	–	–	–	–	–	–	–	–	–
23	8.5	5.0	7.0	–	–	–	–	–	–	–	–	–
24	6.5	3.5	5.0	–	–	–	–	–	–	–	–	–
25	4.5	2.0	3.0	–	–	–	–	–	–	–	–	–
26	5.5	1.5	3.0	–	–	–	–	–	–	–	–	–
27	7.0	2.5	4.5	–	–	–	–	–	–	–	–	–
28	7.5	4.0	5.5	–	–	–	–	–	–	–	–	–
29	8.5	5.0	6.5	–	–	–	–	–	–	–	–	–
30	6.5	2.0	3.5	–	–	–	–	–	–	–	–	–
31	2.0	1.0	1.0	–	–	–	–	–	–	–	–	–
Month	12.5	1.0	6.7	–	–	–	–	–	–	–	–	–

Table B22. Maximum, minimum, and mean water temperature for the continual-recording gage South Fork Big Wash above Great Basin National Park boundary near Baker, Nevada (gage station 10243228).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2002. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	–	–	–	–	–	–	6.5	6.5	6.5	9.0	6.0	7.0
2	–	–	–	–	–	–	6.5	6.5	6.5	9.0	6.5	7.5
3	–	–	–	–	–	–	7.0	6.5	6.5	10.0	6.5	7.5
4	–	–	–	–	–	–	7.0	6.5	6.5	10.0	7.0	8.0
5	–	–	–	–	–	–	7.0	6.5	7.0	9.5	7.0	8.0
6	–	–	–	–	–	–	7.0	7.0	7.0	9.0	6.5	7.5
7	–	–	–	–	–	–	7.0	7.0	7.0	9.0	6.5	7.5
8	–	–	–	–	–	–	7.0	7.0	7.0	9.0	7.0	7.5
9	–	–	–	–	–	–	7.0	7.0	7.0	9.0	6.5	7.5
10	–	–	–	–	–	–	7.0	7.0	7.0	9.0	6.5	7.5
11	–	–	–	–	–	–	7.0	7.0	7.0	8.5	6.0	7.0
12	–	–	–	–	–	–	7.0	6.5	7.0	7.5	6.5	6.5
13	–	–	–	–	–	–	7.0	6.5	7.0	8.5	6.0	7.0
14	–	–	–	–	–	–	7.0	6.5	7.0	8.5	6.5	7.0
15	–	–	–	–	–	–	7.0	7.0	7.0	8.5	6.5	7.5
16	–	–	–	–	–	–	7.0	7.0	7.0	8.5	6.5	7.5
17	–	–	–	–	–	–	7.0	6.5	7.0	8.5	7.0	7.5
18	–	–	–	–	–	–	7.0	6.5	7.0	8.5	7.0	7.5
19	–	–	–	–	–	–	7.0	6.5	6.5	8.5	6.5	7.5
20	–	–	–	–	–	–	7.5	6.5	6.5	8.5	6.5	7.5
21	–	–	–	–	–	–	7.5	6.5	7.0	8.5	6.5	7.5
22	–	–	–	–	–	–	7.0	6.5	6.5	8.0	7.0	7.5
23	–	–	–	7.0	6.0	6.0	8.0	6.5	6.5	8.5	7.0	7.5
24	–	–	–	6.5	6.0	6.0	8.0	6.0	7.0	8.0	7.0	7.5
25	–	–	–	7.0	6.0	6.0	8.0	6.0	7.0	8.0	7.0	7.5
26	–	–	–	6.5	6.0	6.0	8.5	6.0	7.0	8.5	6.5	7.5
27	–	–	–	6.5	6.0	6.5	8.5	6.5	7.0	8.5	7.0	8.0
28	–	–	–	6.5	6.5	6.5	8.5	6.5	7.0	8.5	7.5	8.0
29	–	–	–	6.5	6.5	6.5	7.0	6.0	6.5	8.5	7.0	7.5
30	–	–	–	6.5	6.5	6.5	8.5	6.0	7.0	8.5	6.5	7.5
31	–	–	–	6.5	6.5	6.5	–	–	–	8.5	7.0	7.5
Month	–	–	–	–	–	–	8.5	6.0	6.8	10.0	6.0	7.5

Table B22. Maximum, minimum, and mean water temperature for the continual-recording gage South Fork Big Wash above Great Basin National Park boundary near Baker, Nevada (gage station 10243228).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
	Water year 2004—Continued											
1	9.0	7.0	8.0	10.5	8.0	9.0	12.5	9.0	11.0	14.0	8.5	11.0
2	9.0	7.0	8.0	10.0	8.0	9.0	14.0	9.5	11.5	13.5	10.0	11.5
3	9.5	7.0	8.0	10.5	8.0	9.0	15.0	9.0	11.5	11.5	5.5	7.5
4	9.5	7.5	8.0	10.0	8.0	9.0	15.5	9.5	12.0	9.0	5.0	7.0
5	9.5	7.5	8.5	10.0	8.5	9.0	15.5	11.0	13.0	11.5	6.0	8.5
6	9.5	7.5	8.5	10.5	8.0	9.5	15.5	10.5	12.5	12.5	7.0	9.5
7	9.5	8.0	8.5	11.0	8.5	9.5	14.5	8.0	11.0	12.5	7.5	10.0
8	9.5	8.0	8.5	11.5	8.5	9.5	14.5	8.0	11.5	12.5	8.0	10.5
9	9.0	7.5	8.0	11.5	8.5	9.5	15.0	8.5	11.5	13.5	9.0	11.5
10	8.5	7.0	7.5	11.5	8.5	10.0	14.5	9.5	12.0	13.0	9.5	11.5
11	9.0	7.0	8.0	12.0	8.0	10.0	15.5	9.0	12.0	13.5	9.0	11.5
12	9.0	7.5	8.0	12.5	8.0	10.0	14.5	9.0	12.0	14.0	10.5	12.0
13	9.5	7.0	8.0	12.0	9.5	10.5	15.5	10.5	13.0	12.5	9.0	11.0
14	9.5	7.5	8.0	12.5	9.5	10.5	13.5	10.0	12.0	11.0	7.0	9.0
15	9.5	8.0	8.5	12.0	9.5	10.5	13.5	10.5	12.0	10.5	5.5	8.0
16	9.5	7.5	8.0	11.0	9.5	10.0	14.0	10.0	11.5	12.0	7.0	9.5
17	9.0	8.0	8.0	12.5	9.0	10.5	11.5	8.5	10.0	12.5	10.0	11.5
18	10.0	7.5	8.5	13.5	9.5	11.0	13.5	8.5	11.0	11.5	10.0	10.5
19	9.5	7.5	8.5	12.0	9.5	10.5	13.0	9.0	11.0	10.0	7.0	8.5
20	9.5	8.0	8.5	14.0	9.0	11.0	13.0	9.5	11.0	7.0	5.0	6.0
21	9.5	8.0	8.5	13.0	9.0	11.0	13.5	9.5	11.0	6.5	4.0	5.5
22	10.0	7.5	8.5	12.5	9.0	10.5	13.5	9.0	11.0	7.5	3.0	5.0
23	9.0	8.0	8.5	12.5	9.0	10.5	12.5	9.0	10.5	9.0	4.5	6.5
24	9.5	8.0	8.5	13.0	9.0	10.5	12.0	9.0	10.5	9.5	5.5	7.5
25	9.5	8.0	8.5	12.5	9.0	10.5	13.5	9.0	11.5	10.0	6.0	8.0
26	9.5	8.0	8.5	14.0	9.0	11.5	12.5	9.5	11.0	10.0	6.5	8.5
27	10.0	8.0	8.5	11.5	9.0	10.5	11.5	8.0	9.5	10.0	7.0	8.5
28	10.0	8.0	8.5	13.0	8.5	10.5	12.0	6.5	9.0	9.0	7.0	8.5
29	10.0	8.0	8.5	14.5	9.0	11.5	13.0	7.0	10.0	8.5	6.5	7.5
30	10.5	8.0	9.0	14.5	10.0	12.0	12.5	7.5	10.0	9.0	5.0	7.0
31	–	–	–	15.0	9.0	12.0	13.5	8.0	10.5	–	–	–
Month	10.5	7.0	8.3	15.0	8.0	10.3	15.5	6.5	11.2	14.0	3.0	8.9

Table B23. Maximum, minimum, and mean water temperature for the continual-recording gage Williams Canyon above aqueduct near Minerva, Nevada (gage station 10243630).

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003												
1	–	–	–	0.0	0.0	0.0	1.5	0.5	1.0	0.0	0.0	0.0
2	–	–	–	0.0	0.0	0.0	1.5	0.0	0.5	0.0	0.0	0.0
3	–	–	–	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
4	–	–	–	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.5
5	–	–	–	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
6	–	–	–	0.5	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.5
7	–	–	–	1.5	0.5	1.0	0.5	0.0	0.0	0.5	0.0	0.0
8	–	–	–	2.5	1.0	2.0	0.0	0.0	0.0	0.5	0.0	0.5
9	–	–	–	3.5	1.5	2.5	0.0	0.0	0.0	1.0	0.0	0.5
10	–	–	–	2.0	1.0	1.5	0.0	0.0	0.0	1.0	0.0	0.5
11	–	–	–	2.0	0.5	1.0	0.0	0.0	0.0	1.0	0.5	1.0
12	6.0	3.0	4.5	2.0	0.0	1.0	0.0	0.0	0.0	1.0	0.5	1.0
13	5.5	2.5	4.0	3.5	1.5	2.0	0.0	0.0	0.0	1.0	0.0	0.5
14	6.5	3.5	4.5	2.5	1.0	1.5	0.5	0.0	0.5	1.0	0.0	0.5
15	6.0	3.0	4.5	2.0	0.0	1.0	0.5	0.0	0.5	1.0	0.0	0.5
16	6.0	2.5	4.0	2.0	0.5	1.0	0.5	0.0	0.0	0.5	0.0	0.5
17	6.0	3.0	4.5	2.5	0.5	1.5	0.0	0.0	0.0	1.0	0.0	0.5
18	6.0	2.5	4.0	1.0	0.0	0.5	0.0	0.0	0.0	1.0	0.0	0.5
19	6.0	2.5	4.0	2.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.5
20	6.0	3.0	4.0	2.5	0.5	1.5	0.0	0.0	0.0	1.0	0.0	0.5
21	5.5	3.0	4.0	3.0	0.5	1.5	0.0	0.0	0.0	1.0	0.0	0.5
22	5.5	4.0	4.5	3.5	1.0	2.0	0.0	0.0	0.0	1.0	0.0	0.5
23	5.0	3.0	4.0	3.0	1.0	2.0	0.0	0.0	0.0	1.5	0.5	1.0
24	4.5	2.5	3.5	2.5	0.5	1.5	0.0	0.0	0.0	2.0	1.0	1.5
25	5.0	3.0	4.0	0.5	0.0	0.0	0.0	0.0	0.0	2.0	1.0	1.5
26	4.5	3.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.0
27	4.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.0	1.5
28	4.5	2.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.0	1.5
29	3.5	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0
30	2.5	0.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0	3.0	1.0	1.5
31	2.5	0.0	1.0	–	–	–	0.0	0.0	0.0	3.0	1.0	2.0
Month	–	–	–	3.5	0.0	0.9	1.5	0.0	0.1	3.0	0.0	0.7

Table B23. Maximum, minimum, and mean water temperature for the continual-recording gage Williams Canyon above aqueduct near Minerva, Nevada (gage station 10243630).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	3.5	1.5	2.5	1.0	0.5	0.5	6.0	3.0	4.0	6.0	2.0	4.0
2	1.5	0.0	0.5	0.5	0.5	0.5	3.0	0.5	1.5	6.0	3.5	4.5
3	0.0	0.0	0.0	1.0	0.5	0.5	1.5	0.5	0.5	4.5	3.0	3.5
4	0.0	0.0	0.0	1.0	0.5	0.5	1.5	0.5	0.5	4.0	2.5	3.5
5	0.0	0.0	0.0	1.0	0.5	0.5	1.5	0.5	0.5	6.0	2.0	4.0
6	0.0	0.0	0.0	1.0	0.5	1.0	1.0	0.5	0.5	6.0	3.0	4.0
7	0.0	0.0	0.0	1.0	0.5	1.0	2.0	0.5	1.0	4.5	3.0	4.0
8	0.0	0.0	0.0	1.5	0.5	1.0	3.5	0.5	1.5	3.0	0.5	1.5
9	0.0	0.0	0.0	2.0	1.0	1.0	5.5	1.0	3.0	2.5	0.5	1.5
10	0.0	0.0	0.0	2.0	1.0	1.5	6.5	2.0	4.0	4.5	1.0	2.5
11	0.0	0.0	0.0	2.5	1.0	1.5	7.0	2.5	4.5	6.5	2.0	4.0
12	0.0	0.0	0.0	3.0	1.0	2.0	7.5	4.0	5.5	8.0	3.0	5.0
13	0.0	0.0	0.0	3.5	1.5	2.5	7.0	4.0	5.5	9.0	4.0	6.0
14	0.5	0.0	0.0	4.0	2.0	3.0	4.5	2.5	4.0	6.5	5.0	6.0
15	0.5	0.5	0.5	2.5	0.5	2.0	3.5	1.5	2.0	9.5	5.0	7.0
16	0.5	0.5	0.5	1.0	0.5	1.0	5.0	1.0	2.5	9.5	5.0	7.0
17	0.5	0.5	0.5	2.0	0.5	1.0	3.5	2.0	2.5	7.0	5.5	6.5
18	1.0	0.5	0.5	1.5	0.5	0.5	3.5	1.5	2.0	8.5	4.5	6.0
19	0.5	0.5	0.5	2.5	0.5	1.0	4.0	1.0	2.5	7.5	3.5	5.5
20	1.0	0.5	0.5	2.0	0.5	1.0	5.5	1.5	3.5	8.5	4.0	6.0
21	1.0	0.5	0.5	3.0	0.5	1.5	5.0	3.5	4.0	9.5	5.0	7.0
22	1.0	0.5	0.5	4.5	1.0	2.5	3.5	1.5	2.5	9.5	5.0	7.0
23	0.5	0.5	0.5	3.5	2.0	3.0	3.5	1.0	2.5	8.0	5.5	7.0
24	0.5	0.5	0.5	4.0	1.5	3.0	6.0	2.0	4.0	8.0	6.0	6.5
25	0.5	0.5	0.5	5.0	1.0	2.5	7.0	3.5	5.0	8.5	5.5	6.5
26	0.5	0.5	0.5	4.5	2.0	3.0	7.0	3.0	5.0	8.5	6.0	7.0
27	0.5	0.5	0.5	3.5	0.5	2.0	6.0	3.5	4.5	9.0	6.0	7.5
28	0.5	0.5	0.5	1.5	0.5	0.5	7.0	3.5	5.0	9.0	6.0	7.5
29	–	–	–	2.0	0.5	1.0	5.5	3.0	4.0	8.5	6.5	7.0
30	–	–	–	4.5	0.5	2.5	4.5	3.0	3.5	8.0	6.5	7.0
31	–	–	–	6.0	1.5	3.5	–	–	–	7.5	6.5	7.0
Month	3.5	0.0	0.4	6.0	0.5	1.6	7.5	0.5	3.0	9.5	0.5	5.5

Table B23. Maximum, minimum, and mean water temperature for the continual-recording gage Williams Canyon above aqueduct near Minerva, Nevada (gage station 10243630).—Continued

[Water temperature in degrees Celsius. 2003 water year is defined as beginning on October 1, 2002 and ending September 30, 2003. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2003—Continued												
1	7.5	6.5	7.0	9.5	7.5	8.5	12.5	11.0	11.5	13.0	11.0	12.0
2	7.5	6.0	6.5	9.5	7.5	8.5	12.5	10.5	11.5	13.0	11.0	12.0
3	7.5	6.0	6.5	9.5	7.5	8.5	12.0	10.0	11.0	13.5	11.0	12.0
4	7.5	5.5	6.5	10.0	8.0	9.0	12.5	9.5	11.0	13.0	12.0	12.0
5	7.0	5.5	6.5	10.0	8.0	9.0	12.5	10.0	11.0	12.0	11.0	11.5
6	7.5	5.5	6.5	10.5	8.0	9.5	11.5	10.0	10.5	12.0	10.5	11.0
7	7.5	6.0	6.5	10.5	8.0	9.5	12.0	9.5	11.0	12.5	10.5	11.5
8	7.0	6.5	6.5	10.5	8.0	9.0	13.0	10.5	11.5	12.5	11.0	11.5
9	7.5	6.5	6.5	10.5	7.0	9.0	13.5	11.0	12.0	11.0	9.5	10.0
10	7.5	6.5	7.0	11.0	7.0	9.0	14.0	11.5	12.5	10.0	8.5	9.5
11	7.0	6.5	6.5	11.5	8.0	9.5	13.5	11.0	12.0	10.0	7.5	9.0
12	7.5	6.5	6.5	11.5	7.5	9.5	13.0	11.0	12.0	11.0	8.5	9.5
13	7.5	6.0	7.0	11.0	8.0	9.5	13.5	11.0	12.5	10.0	8.0	9.0
14	8.0	6.0	7.0	11.0	8.0	9.5	13.5	11.0	12.5	9.5	7.0	8.0
15	8.0	6.5	7.0	12.0	8.5	10.0	13.0	11.5	12.5	10.5	8.0	9.5
16	8.0	6.5	7.0	11.0	9.0	10.0	13.5	11.5	12.0	11.5	9.0	10.0
17	8.0	7.0	7.5	12.0	9.0	10.5	13.0	10.5	12.0	10.0	7.0	8.5
18	8.5	7.0	7.5	11.0	9.0	10.0	13.0	10.5	11.5	8.5	4.5	6.5
19	8.0	7.0	7.5	11.5	9.5	10.5	13.5	10.5	12.0	9.0	5.5	7.0
20	7.5	7.0	7.0	12.0	9.5	11.0	12.5	11.5	12.0	10.0	6.5	8.0
21	7.5	6.5	7.0	11.5	9.5	10.5	13.0	11.5	12.0	10.0	6.5	8.5
22	7.5	6.0	7.0	11.0	9.5	10.5	12.5	11.5	12.0	11.0	7.0	8.5
23	7.0	6.5	7.0	11.5	9.5	10.5	13.5	11.0	12.0	11.5	7.5	9.0
24	7.0	5.5	6.0	13.0	10.0	11.0	12.5	11.5	12.0	11.5	7.5	9.5
25	7.5	5.5	6.5	12.5	10.5	11.5	13.5	10.5	12.0	11.5	7.5	9.0
26	8.0	6.0	7.0	12.5	10.0	11.5	12.5	11.5	12.0	11.0	7.5	9.0
27	9.0	6.5	7.5	13.5	11.0	12.0	12.5	10.0	11.5	11.5	7.5	9.5
28	9.0	7.0	8.0	13.0	10.5	11.5	13.0	10.5	11.5	12.0	8.5	10.0
29	9.5	7.5	8.5	13.0	10.5	12.0	12.5	11.0	12.0	11.5	8.0	10.0
30	9.5	7.5	8.5	13.0	10.5	11.5	12.5	10.0	11.5	12.0	8.5	10.0
31	–	–	–	13.5	10.5	12.0	13.0	10.0	11.5	–	–	–
Month	9.5	5.5	7.0	13.5	7.0	10.1	14.0	9.5	11.8	13.5	4.5	9.7

Table B23. Maximum, minimum, and mean water temperature for the continual-recording gage Williams Canyon above aqueduct near Minerva, Nevada (gage station 10243630).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004												
1	12.0	9.5	10.5	2.5	1.5	2.0	1.5	1.0	1.5	0.5	0.5	0.5
2	12.0	8.5	10.0	2.0	0.5	1.5	1.5	1.0	1.0	0.5	0.5	0.5
3	10.5	8.5	9.5	2.0	0.5	1.5	1.5	0.5	1.0	0.5	0.5	0.5
4	10.5	7.5	9.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	0.5
5	10.5	7.5	9.0	2.0	0.5	1.0	2.5	1.0	2.0	0.5	0.0	0.0
6	11.0	8.0	9.5	1.5	0.5	1.0	3.0	2.0	2.5	0.0	0.0	0.0
7	10.5	8.0	9.5	2.0	0.5	1.0	3.0	1.5	2.5	0.5	0.0	0.5
8	11.0	8.0	9.0	3.0	1.5	2.0	1.5	0.0	0.5	0.5	0.5	0.5
9	11.0	8.0	9.5	3.0	2.0	2.5	0.5	0.0	0.5	0.5	0.5	0.5
10	10.0	6.5	9.0	3.5	2.0	2.5	0.5	0.0	0.0	0.5	0.5	0.5
11	8.0	4.5	6.0	2.5	1.0	1.5	0.5	0.0	0.5	0.5	0.5	0.5
12	8.5	6.0	7.0	2.5	1.0	1.5	0.0	0.0	0.0	0.5	0.5	0.5
13	7.5	5.0	6.0	2.0	1.5	1.5	0.5	0.0	0.5	0.5	0.5	0.5
14	7.5	4.0	5.5	3.0	2.0	2.0	0.5	0.0	0.5	0.5	0.5	0.5
15	8.0	4.5	6.0	2.0	1.0	1.5	0.0	0.0	0.0	0.5	0.5	0.5
16	8.5	5.0	6.5	2.5	1.0	2.0	0.0	0.0	0.0	0.5	0.5	0.5
17	8.5	5.5	7.0	2.5	2.0	2.5	0.0	0.0	0.0	0.5	0.5	0.5
18	9.5	6.0	7.5	2.5	1.0	2.0	0.0	0.0	0.0	0.5	0.5	0.5
19	9.5	7.0	8.0	3.0	1.0	2.0	0.0	0.0	0.0	0.5	0.5	0.5
20	9.5	6.5	7.5	3.5	1.5	2.5	0.5	0.0	0.5	0.5	0.0	0.5
21	9.0	6.0	7.5	3.5	1.0	2.5	1.0	0.5	0.5	0.5	0.0	0.0
22	9.0	6.5	7.5	1.0	0.5	0.5	1.0	0.5	0.5	0.5	0.0	0.0
23	9.0	6.5	7.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0
24	7.0	4.5	6.0	0.5	0.5	0.5	1.0	0.5	1.0	0.5	0.0	0.0
25	6.0	3.5	5.0	0.5	0.5	0.5	1.0	0.5	1.0	0.5	0.0	0.0
26	6.5	3.5	5.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0
27	7.0	4.0	5.5	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.0	0.0
28	7.5	5.0	6.0	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.0
29	8.5	6.0	7.0	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.0
30	6.0	3.5	4.5	1.0	0.5	0.5	0.5	0.0	0.0	0.5	0.0	0.5
31	3.5	2.0	2.5	–	–	–	0.5	0.5	0.5	0.5	0.0	0.5
Month	12.0	2.0	7.3	3.5	0.5	1.4	3.0	0.0	0.6	0.5	0.0	0.3

Table B23. Maximum, minimum, and mean water temperature for the continual-recording gage Williams Canyon above aqueduct near Minerva, Nevada (gage station 10243630).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	0.5	0.5	0.5	0.5	0.0	0.5	4.5	3.5	4.0	7.5	3.5	5.5
2	0.5	0.5	0.5	0.5	0.5	0.5	6.0	3.0	4.5	8.0	5.0	6.5
3	0.5	0.5	0.5	0.5	0.0	0.5	5.5	3.0	4.0	9.0	5.5	7.0
4	0.5	0.0	0.0	0.5	0.5	0.5	6.0	3.0	4.5	9.0	6.0	7.5
5	0.0	0.0	0.0	0.5	0.5	0.5	5.5	3.5	4.5	9.0	6.0	7.5
6	0.0	0.0	0.0	1.0	0.5	1.0	5.5	4.0	4.5	7.5	5.5	6.5
7	0.0	0.0	0.0	1.5	0.5	1.0	5.0	3.0	4.0	7.5	5.0	6.0
8	0.0	0.0	0.0	1.5	0.5	1.0	6.0	4.0	5.0	7.5	5.5	6.5
9	0.0	0.0	0.0	2.0	0.5	1.5	6.0	3.5	4.5	7.5	5.0	6.5
10	0.0	0.0	0.0	2.0	1.0	1.5	4.5	3.0	3.5	7.5	5.5	6.0
11	0.0	0.0	0.0	2.0	0.5	1.5	5.0	2.0	3.5	5.5	4.0	4.5
12	0.0	0.0	0.0	2.5	0.5	1.5	6.0	2.5	4.0	5.5	3.5	4.5
13	0.0	0.0	0.0	3.0	0.5	2.0	6.5	3.5	4.5	6.0	4.0	5.0
14	0.0	0.0	0.0	3.5	1.5	2.0	5.0	3.5	4.5	7.0	4.0	5.5
15	0.0	0.0	0.0	4.0	1.0	2.5	5.0	3.5	4.5	7.0	5.0	6.0
16	0.0	0.0	0.0	6.5	1.0	2.5	5.0	3.5	4.5	7.0	5.0	6.0
17	0.5	0.0	0.0	4.5	1.5	2.5	4.5	3.5	4.0	7.0	5.5	6.5
18	0.5	0.5	0.5	5.0	1.5	3.0	4.5	2.5	3.5	7.5	5.5	6.5
19	1.0	0.5	0.5	6.0	2.0	3.5	4.0	3.0	3.5	7.5	5.0	6.0
20	0.5	0.0	0.5	6.5	2.5	4.0	4.5	2.5	3.5	7.0	5.0	6.0
21	0.5	0.0	0.5	6.5	2.5	4.5	5.0	3.5	4.0	7.0	5.0	6.0
22	0.5	0.5	0.5	6.0	3.0	4.5	5.0	3.0	3.5	6.5	4.5	5.5
23	0.5	0.5	0.5	6.5	3.0	5.0	6.0	2.5	4.0	6.5	5.0	5.5
24	1.0	0.5	0.5	6.0	3.0	4.5	6.5	3.0	4.5	6.5	4.5	5.5
25	1.0	0.5	0.5	6.5	3.0	5.0	7.0	3.5	5.0	6.0	4.5	5.5
26	0.5	0.5	0.5	5.5	3.0	4.0	7.5	3.5	5.5	7.0	4.5	5.5
27	0.5	0.5	0.5	4.0	2.0	3.0	7.5	4.5	6.0	7.5	5.5	6.5
28	0.5	0.5	0.5	4.5	1.0	2.5	7.0	4.5	6.0	6.5	6.0	6.5
29	0.5	0.5	0.5	5.0	1.0	3.0	4.5	3.0	3.5	7.0	5.5	6.0
30	–	–	–	6.0	2.5	4.0	6.5	3.0	4.5	7.5	4.5	6.0
31	–	–	–	7.0	4.0	5.0	–	–	–	7.5	5.5	6.5
Month	1.0	0.0	0.3	7.0	0.0	2.5	7.5	2.0	4.3	9.0	3.5	6.0

Table B23. Maximum, minimum, and mean water temperature for the continual-recording gage Williams Canyon above aqueduct near Minerva, Nevada (gage station 10243630).—Continued

[Water temperature in degrees Celsius. 2004 water year is defined as beginning on October 1, 2003 and ending September 30, 2004. Symbol: –, data not collected at this site on this day]

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN	MAX.	MIN.	MEAN
Water year 2004—Continued												
1	8.5	6.0	7.0	9.0	7.0	8.0	11.0	10.0	10.5	12.5	9.5	11.0
2	8.5	6.0	7.5	9.5	7.0	8.0	12.0	9.5	10.5	11.0	9.5	10.5
3	9.5	6.5	8.0	9.0	7.0	8.0	12.5	9.5	11.0	10.5	7.0	8.5
4	9.5	7.0	8.0	9.0	7.5	8.5	13.0	9.5	11.0	8.0	6.0	7.0
5	9.5	7.0	8.0	9.5	7.5	8.5	13.0	10.5	11.5	9.5	6.5	8.0
6	9.5	6.5	8.0	10.5	8.0	9.0	13.0	10.5	11.5	10.5	7.5	8.5
7	9.5	7.0	8.0	11.0	8.0	9.5	12.5	9.0	10.5	11.0	8.0	9.5
8	8.5	7.0	8.0	11.0	8.0	9.5	12.5	9.0	10.5	11.0	8.0	9.5
9	7.5	6.0	7.0	10.5	8.5	9.5	13.0	9.5	11.0	11.0	8.5	10.0
10	6.5	5.5	6.0	10.5	8.0	9.5	13.0	10.5	11.5	11.5	9.0	10.0
11	7.0	5.0	6.0	11.0	8.0	9.5	13.5	10.0	11.5	11.5	9.5	10.5
12	8.0	5.5	6.5	11.0	8.0	9.5	13.5	10.5	12.0	11.5	9.5	10.5
13	8.5	6.0	7.0	11.5	9.5	10.5	12.5	11.0	11.5	11.5	9.0	10.5
14	8.5	6.5	7.5	11.5	9.5	10.5	13.0	10.5	11.5	10.0	8.0	9.0
15	8.5	6.5	7.5	12.5	10.5	11.0	11.5	10.5	11.0	9.5	6.5	8.0
16	8.5	6.5	7.5	11.0	9.5	10.5	12.5	10.5	11.0	10.5	7.5	9.0
17	8.0	7.0	7.5	11.5	9.0	10.0	10.5	9.5	10.0	11.0	9.0	10.0
18	8.5	6.5	7.5	12.0	9.0	10.5	11.0	9.0	10.0	10.5	9.0	9.5
19	9.0	6.5	7.5	12.5	9.5	10.5	11.5	9.5	10.5	9.0	7.0	8.0
20	8.5	6.5	7.5	13.0	9.0	11.0	12.5	10.0	11.0	7.0	5.5	6.0
21	9.0	7.0	7.5	12.5	9.0	11.0	11.5	9.5	11.0	6.0	4.5	5.5
22	9.0	6.5	7.5	12.0	9.5	10.5	11.5	9.5	10.5	6.5	4.0	5.0
23	8.5	7.0	7.5	12.0	9.0	10.5	10.5	9.5	10.0	7.5	5.0	6.5
24	9.0	7.0	8.0	12.0	9.0	10.5	10.5	9.0	10.0	8.5	6.0	7.5
25	9.0	7.5	8.0	12.0	9.0	10.5	11.5	9.0	10.0	9.0	6.5	7.5
26	8.5	7.0	8.0	12.0	9.0	10.5	11.5	9.0	10.0	9.0	7.0	8.0
27	9.0	7.0	8.0	11.0	9.5	10.0	10.5	8.0	9.0	9.5	7.0	8.0
28	9.0	7.0	8.0	12.0	8.5	10.0	10.5	7.5	9.0	8.5	7.5	8.0
29	9.0	7.0	8.0	11.5	9.0	10.5	11.0	8.0	9.5	7.5	6.5	7.0
30	9.0	7.0	8.0	12.5	9.0	10.5	11.5	8.5	10.0	7.5	5.5	6.5
31	–	–	–	12.5	9.0	10.5	12.0	9.0	10.5	–	–	–
Month	9.5	5.0	7.5	13.0	7.0	9.9	13.5	7.5	10.6	12.5	4.0	8.4
Year	13.5	0.0	5.0									

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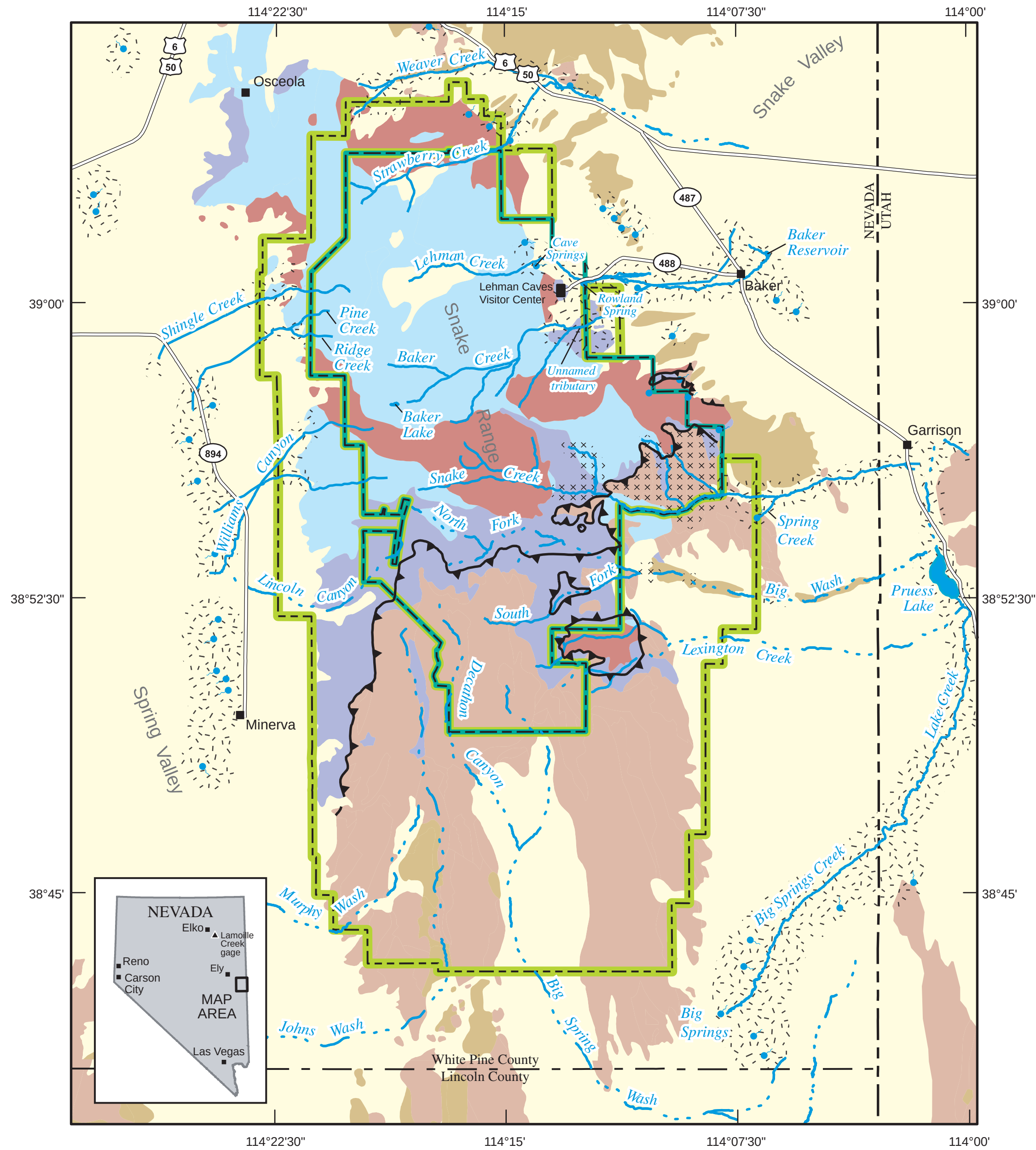
SCIENTIFIC INVESTIGATIONS REPORT 2006–5099
Plate 1
Elliott, P.E., Beck, D.A., and Prudic, D.E., 2006
Characterization of Surface-Water Resources in the Great Basin National Park Area and Their Susceptibility to Ground-Water Withdrawals in Adjacent Valleys, White Pine County, Nevada



Base from U.S. Geological Survey digital data, 1:100,000, 1979–1988. Universal Transverse Mercator projection, North American Datum of 1983, Zone 11

5 0 5 MILES
5 0 5 KILOMETERS

Geology modified from Hose and Blake (1976)

EXPLANATION

Area where surface-water resources likely are susceptible to ground-water withdrawals

Area where surface-water resources potentially are susceptible to ground-water withdrawals

Geology

QTs	Alluvial and glacial deposits
Tr	Tertiary rocks
TJi	Intrusive rocks
D€r	Younger undifferentiated rocks
€r	Undifferentiated sedimentary rocks
€Zr	Older undifferentiated rocks

Southern Snake Range décollement

Humboldt National Forest boundary

Great Basin National Park boundary

Spring

GENERALIZED AREAS WHERE SURFACE-WATER RESOURCES LIKELY OR POTENTIALLY ARE SUSCEPTIBLE TO GROUND-WATER WITHDRAWALS IN ADJACENT VALLEYS, GREAT BASIN NATIONAL PARK AREA, NEVADA

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Elliott and others

Characterization of Surface-Water Resources in the Great Basin National Park Area and Their Susceptibility to Ground-Water Withdrawals in Adjacent Valleys, White Pine County, Nevada

SIR 2006-5099