



**TETON RIVER INVESTIGATIONS
PART I: FISHERY ASSESSMENT 25 YEARS
AFTER TETON DAM**

Final Progress Report

September 1997 to September 2002



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ABSTRACT

This report is the first part of a three-part series assessing the Teton River fishery 25 years after the collapse of Teton Dam—particularly in the Teton Canyon above the dam. Multi-stratified, roving-type creel survey data collected prior to the dam in 1974 and 1975 were compared to similar data collected in 1988, 1994, and 2000. Catch and effort data collected by postcards in 2000 were not used, as they were biased. Water temperature data were collected and streamflow data were compiled from 1996 to 2000 to provide some of the physical context for the assessment.

Fishing effort in the Teton Canyon was about 7,000 h in 1975, increased to 12,000 h by 1994, and declined to 3,000 h by 2000. Effort in the other two Teton River study sections was higher but followed a similar trend. Most of the Teton Canyon effort was by bank anglers, although their contribution relative to boat and tube anglers has declined from 73% in 1988 to 54% in 2000. Bank anglers were generally located near public fishing access sites, whereas most boat and tube anglers were between these sites where watercraft could be safely navigated. In 1975, 60% of the anglers interviewed in the Teton Canyon used bait, and 28% used flies. These proportions reversed by 2000, when 26% used bait and 64% used flies. Anglers using lures varied from 11 to 12% for all years. The proportion of Teton Canyon anglers that were non-residents increased from 12% in 1975 to 42% in 2000. Over all years, about half (48 to 62%) of the total effort in the Teton Canyon was during weekends and holidays.

Following the dam collapse, catch rates in all study sections declined until 2000. The Teton Canyon catch rate was 1.19 fish/h in 1975, declined to 0.78 fish/h by 1994, but increased to 1.74 fish/h by 2000. The unusually high catch rate in 2000 was mostly from released cutthroat trout (1.39 fish/h) that may have been over-reported by anglers. Total catch in the Teton Canyon was about 7,600 fish in 1975, declining to 4,000 fish by 2000. During the same time period, the harvest rate declined from 0.95 to 0.07 fish/h, and total harvest declined from about 6,200 to 127 fish. In 1975, roughly 1,900 cutthroat, 3,500 rainbow, and 700 brook trout were harvested in the Teton Canyon, compared to 76 cutthroat, 51 rainbow, and no brook trout in 2000. As many as 400 hatchery rainbow trout were harvested annually until 1994, the last year of stocking. Similar downward trends in catch and harvest were observed in the other two study sections. In general, the average size of fish in the creel has increased since the dam collapse, but recent sample sizes are small.

Minimum water temperatures in the Teton River and several tributaries were observed in December and January, whereas maximum temperatures were observed in July and August. Year-round temperatures ranged from 0-20°C, and temperatures increased moving downstream. However, extremely warm temperatures (greater than 20°C) were recorded throughout the mainstem (but not the tributaries) in 1998 and 2000, especially below Teton Dam. In general, the Teton River is at base flow from September through March, whereas flows increase during runoff from April to August, peaking in May or June. Base flows are about 400 ft³/s in the Lower Teton and 200 ft³/s in the Teton Valley, whereas peak flows are an order of magnitude larger (4,000 ft³/s in the Lower Teton, 2,000 ft³/s in the Teton Valley). Flows in the Teton Canyon fall somewhere between these values. Exceptionally high flows were recorded in 1997 (a record runoff year), and exceptionally low flows were recorded in 2000 (the beginning of the current drought). The South Fork and North Fork of the Teton River were often dewatered for irrigation.

In conclusion, the trout fishery in the Teton Canyon has declined markedly in the 25 years following the Teton Dam collapse, despite the shift to wild, native trout management, special protective regulations, and catch-and-release flyfishing. This decline is probably due to major changes in Teton River hydrology and geomorphology—the primary driver of stream structure and function—that were caused by the dam collapse. However, perhaps the greatest losses are those having to do with accessibility and aesthetics of the fishing experience, qualities that anglers often rate higher than catching fish. The construction and collapse of Teton Dam resulted in the loss of a unique cottonwood floodplain, of dark timbered hillsides, and of a channel type that was relatively easy to access, float, and fish by the general angler.

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INTRODUCTION

The Teton River in eastern Idaho provides an important coldwater fishery to sport anglers. It is one of the few remaining rivers in the greater Yellowstone ecosystem that support large numbers of native Yellowstone cutthroat trout *Oncorhynchus clarkii bouvieri*. Also pursued by anglers are rainbow trout *O. mykiss*, brook trout *Salvelinus fontinalis*, and, to a limited extent, brown trout *Salmo trutta* and mountain whitefish *Prosopium williamsoni*. The fishery enjoys regional, if not national, acclaim that supports a growing tourism economy in the local area.

Like many rivers in the West, the most significant event affecting this fishery besides nineteenth century European settlement was the construction of an earth-filled dam. The U.S. Bureau of Reclamation (BOR) built Teton Dam in 1975 to provide irrigation water and flood control. The reservoir pool inundated 27 km of the Teton River up through the scenic Teton River canyon (hereafter "Teton Canyon") as well as several kilometers of lower Canyon Creek, an important cutthroat trout spawning tributary. On June 5, 1976, the dam failed when the reservoir was nearly full. Lost lives and catastrophic damages to property from flooding and debris were well documented through the mitigation process. Less known are the changes to the fishery (the fish populations, their habitat, and the anglers that use them) both downstream and upstream of the dam.

Upstream of the dam, and before the reservoir filled, canyon slopes were logged and treated to remove vegetation up to the full pool elevation line. In addition, large amounts of fill material were excavated from several borrow pits. Soils on the canyon slopes became saturated and loosened as the reservoir filled. When the dam collapsed, the rapid evacuation of water in the saturated slopes pulled the loosened soils. This caused extensive and sometimes massive slumping, sloughing, and flow of debris to the channel below. Van Wormer (1978) counted 19 major sites where debris flowed across the river, forming short rapids and long pools that extended upstream as much as three kilometers. Randle et al. (2000), in their recent study of the resulting geomorphology and river hydraulics, counted 27 major sites. It has been hypothesized that these rapids and pools, the landslides in lower Canyon Creek, and the borrow pits created entirely new fish habitat to the detriment of the fishery. As a result, Van Wormer (1978) speculated that the self-sustaining sport fishery in the Teton Canyon was a total loss.

Past research regarding the dam collapse has focused on ecological (Minshall et al. 1982) and fishery (Van Wormer 1978; Moore and Andrews 1983) changes below Teton Dam. Moore and Andrews (1983) used changes in catch rates, pool-riffle structure, and modeled cutthroat trout abundance based on pool-riffle structure to calculate lost productivity in the lower Teton River (almost \$6 million). As a result, BOR settled with the State of Idaho (\$1.5 million) for sport fishery losses below the dam, which initiated the Idaho Department of Fish and Game's (IDFG) Teton River Enhancement Program (TREP) in 1987. However, sport fishery losses above the dam in the Teton Canyon were not specifically mitigated, partly because of the uncertain status of rebuilding the dam and partly because the fishery has continued without supplementation. Further, the original fishery mitigation for the dam and reservoir pool (developed access and hatchery stocking) was abandoned after the dam collapse.

A pre-impoundment study was conducted in 1974 and 1975 "to maximize benefits from the fishery resources consistent with the use of other resources in the project area..." (Irving et al. 1975, 1977; Irving 1979). Of course, the authors did not know the dam would ultimately collapse, but they noted afterwards that the "information we collected on the fish populations and fishery during the pre-impoundment phase may be useful in assessing the damage and

monitoring the recovery of fish populations in the altered areas." Although most of their raw data is no longer available (J. Irving, Idaho National Engineering and Environmental Laboratory, and T. Bjornn, University of Idaho, personal communication), their research is the primary basis for the temporal comparisons in this study.

This five-year study was initiated in 1997 by BOR to assess the Teton Canyon fishery 25 years after the Teton Dam collapse (Schrader 1997, 1999, 2000). It is one of several BOR studies addressing the ecological changes in the Teton Canyon caused by the dam collapse (England 1998; Beddow 1999; Bowser 1999; Randle et al. 2000). This report is the first part of a three-part Teton River Investigations series, and here I assess the overall impacts of the dam collapse on the fishery using standard creel survey data collected in 1974 and 1975 (Irving et al. 1977) and in 1988, 1994, and 2000. I also compare photographs and report water temperature and streamflow data to provide some of the physical context for the assessment. The second report (Schrader and Brenden, in press) presents fish population survey results that, unfortunately, were largely inconclusive for the Teton Canyon. The third and final report (Schrader and Jones, in press) presents fish movement and life history information.

Although my focus is on the Teton Canyon, I include two other Teton River sections in this series as field controls—one below Teton Dam (hereafter "Lower Teton," which was also affected by the dam) and one above the Teton Canyon (hereafter "Teton Valley," that was unaffected). My overall strategy was to examine the Teton Canyon fishery, its fish populations, and fish movements over time (pre- versus post-Teton Dam) and space (between sections). This was necessary, as pre-dam information was often limited or lacking altogether.

OBJECTIVE

- 1) Assess the impacts of Teton Dam—its construction and subsequent collapse—on the Teton Canyon recreational fishery.

STUDY AREA

Detailed descriptions of the Teton River drainage can be found in Irving et al. (1977), Van Wormer (1978), and Jeppson (1981). Like previous studies, I divided the Teton River into three major study sections with several reaches in each section (Irving et al. 1977; Jeppson 1981; Gamblin and Brostrom 1988). Extensive marking, tagging, radio telemetry, and trapping data have shown almost no juvenile or adult trout movement between sections (Irving et al. 1977; Schrader and Jones, in press), and the populations can be considered independent. All land adjacent to the Teton River is privately owned with the exception of IDFG fishing access sites in the Teton Valley and BOR property along the old Teton Reservoir in the Teton Canyon.

Lower Teton

The Lower Teton extends from the Henrys Fork Snake River confluence upstream 37 km (via the South Fork) or 52 km (via the North Fork) to the Teton Dam site northeast of Newdale, Idaho (Figure 1). The river splits into the North and South Forks approximately midway. Both forks flow downstream to a separate confluence with the Henrys Fork Snake River.

Fish habitat in the Lower Teton has been extensively degraded with agriculture development, with deposition and channelization during and after the Teton Dam collapse, and with post-flood reconstruction of the stream channels and diversion structures (Ball and Jeppson 1980; Jeppson 1981; Moore and Andrews 1983). Lower Teton streamflows, particularly in the North and South Forks, are regulated at a number of these structures. Complete dewatering of the stream channel, as well as fish kills from herbicides flushed from irrigation canals, is common in this section. DerHovanisian (1997) identified 17 decreed irrigation diversions and canals below Teton Dam, ranging from 16 to 609 ft³/s. None of the diversions is screened to prevent juvenile or adult fish entrainment. Assessment of fish losses at four of these diversions (Wilford Canal, Teton Canal, Woodmansee-Johnson Canal, and Rexburg City Ditch), and of the population effects of these losses, was not successful (DerHovanisian 1997). Many of the diversions are concrete dams extending across the entire river, and nine were identified as blocking upstream fish passage (Moore and Andrews 1983; Figure 2). Only one (the Rexburg City Ditch) now has a fish ladder, which was constructed with TREP funds in 1994.

Moore and Andrews (1983) and Jeppson (1981) provide additional detailed descriptions of the following reaches, both pre- and post-flood.

North Fork

This reach encompasses the entire North Fork Teton River. It begins at the Henrys Fork Snake River confluence and continues upstream 21 km to the Teton Forks. The reach is mostly channelized and there are numerous irrigation diversions. Post-flood reconstruction work caused most of the channelization (Moore and Andrews 1983), resulting in negative impacts to aquatic biota (Minshall et al. 1982). Four diversion structures rebuilt after the flood still need upstream fish passage facilities or fish screens (North Fork Control Gate, Teton Island Canal, Roxana Canal, and Island Ward Canal; Moore and Andrews 1983). Although the North Fork is often dewatered for irrigation, subsurface flow recharges the reach towards the lower end. There are no public or private boat ramps, and the only public access is at county road bridges or to boat upstream from the Henrys Fork Snake River. No tributaries drain into this reach.

South Fork

This reach encompasses the entire South Fork Teton River. It begins at the Henrys Fork Snake River confluence and continues upstream 36 km to the Teton Forks. The reach is mostly channelized and there are numerous irrigation diversions. However, although post-flood channel reconstruction was minimal in this reach, two diversion structures that were rebuilt still need upstream fish passage facilities or fish screens (South Fork Teton Control Gate and Rexburg Canal; Moore and Andrews 1983). The river flows through the city of Rexburg, Idaho, where several fish kills have been reported in the past. Although the South Fork is often dewatered for irrigation, subsurface flow recharges the reach towards the lower end. Like the North Fork, there are no public or private boat ramps, and the only public access is at county road bridges or to boat upstream from the Henrys Fork Snake River. Moody Creek, the only tributary in the Lower Teton, drains into this reach.

Hog Hollow

This reach begins at the Teton Forks and continues upstream 16 km to the Teton Dam site. It was the most severely impacted area from the dam collapse and flood (Moore and Andrews 1983). Below the Hog Hollow Bridge, which is approximately midway, the reach is mostly channelized and there are several major irrigation diversions. Two diversion structures rebuilt after the flood still need upstream fish passage facilities or fish screens (Wilford Canal and Teton Canal; Moore and Andrews 1983). From the bridge downstream, the river flows out of the canyon into the Snake River plain. From the bridge upstream to the dam site, the reach is confined by canyon walls, and there are no irrigation diversions. Large, deep pools are common throughout the reach due to the dam collapse and the large irrigation diversions. A primitive, public boat launch is located at the Hog Hollow Bridge, but floating below the bridge is dangerous due to the diversions. Another primitive, private boat launch is located just below the dam site at the Trupp Ranch. Although this was the most popular reach of the Teton River in 1980 (Jeppson 1981), access through private land has declined considerably (i.e. more locked gates). No tributaries drain into this reach.

Teton Canyon

Teton Canyon extends from the Teton Dam site upstream 45 km to the Highway 33 (Harrops) bridge west of Tetonia, Idaho (Figure 1). More than half of the section (27 km) was inundated by the old Teton Reservoir.

Three dams have been constructed in the Teton Canyon in the past (Teton Dam in 1975, Linderman Dam in the early 1960s, and Felt Dam in the early 1900s). Teton Dam collapsed in 1976, and Linderman Dam was breached (but not entirely removed) during construction of Teton Reservoir. Only Felt Dam, located above the old Teton Reservoir, remains. It is a small facility that diverts a portion of the river flow through a penstock for hydropower. A fish ladder was constructed in 1986 to provide passage around the dam. Several irrigation pumps are located in the Teton Canyon, but there are no major diversion structures associated with them.

White (1976), Jeppson (1981), and Randle et al. (2000) provide additional detailed descriptions of the following reaches, both pre- and post-dam.

Borrow Ponds

This reach begins at Teton Dam and continues upstream 3 km through a series of three large borrow pit pools (lower, middle, and upper) that were excavated to construct the dam. Part of the river flows through the pools and the remainder flows through an artificial channel built adjacent to the north canyon wall. Irrigation pumps are located at the upper end of the upper pool. Primitive, public boat launches are located at each of the pools. Public access is good from the south by the Teton Dam road and old reservoir boat ramp. No tributaries drain into this reach.

Parkinson

This reach begins at the upper Borrow Pond and continues upstream 6 km to Canyon Creek. Runs and riffles with no rapids and few pools characterize this reach. Public access is poor. A primitive, private boat launch is located at the irrigation pumps just below Canyon Creek, accessible through Parkinson Farms from the north. Canyon Creek drains into this reach.

Spring Hollow

This reach begins at Canyon Creek and continues upstream 18 km to Bitch Creek. Long, deep pools separated by whitewater rapids at the landslides characterize this reach. Prior to the dam collapse, the river below Linderman Dam (about midway) was navigable by canoe (Jeppson 1981), but whitewater craft are now needed. Public access is fair by the old reservoir boat ramp at Spring Hollow, now a primitive, public boat launch. Boats can also be launched at the mouth of Bitch Creek after sliding them down the canyon wall at the Bitch Creek Slide. Both sites are accessed from the north. Bitch Creek drains into this reach and, during spring runoff, kayakers often float down Bitch Creek from the Highway 32 Bridge to the Spring Hollow boat launch. Bitch Creek is the most important tributary in the Teton River drainage because it has large, permanent flow and is a major spawning and nursery area for native cutthroat trout (Jeppson 1981).

Narrows

This high-gradient reach begins at Bitch Creek and continues upstream 18 km to the Highway 33 (Harrops) Bridge. Large boulders, pocket pools, and whitewater characterize this reach. Not affected by Teton Reservoir, it remains the only reach of the Teton River in relatively pristine condition (Jeppson 1981). However, several hundred meters of the river are impounded at Felt Dam, which partially dewater the river for about one kilometer downstream. A fish ladder constructed in 1986 allows passage over the dam. Several different irrigation pumps also operate in this reach. Access is poor and very limited. Walk-in access is permitted to Felt Dam from a locked gate on the canyon rim. A developed, public boat ramp is located at Harrops Bridge, but floating downstream to Felt Dam is dangerous due to extreme whitewater. Badger Creek drains into this reach.

Teton Valley

Teton Valley extends from Harrops Bridge upstream 43 km to the confluence of Little Pine and Warm creeks west of Victor, Idaho (Figure 1). The entire section is low gradient and meandering. Although there are no dams or irrigation diversions, habitat quality has declined with livestock grazing, heavy sedimentation, and widening of the stream channel (Jeppson 1981, 1982; Gamblin and Brostrom 1988; USDA 1992). TREP activities for the last 15 years have focused on ameliorating these limiting factors, primarily through riparian fencing (Gamblin and Brostrom 1988).

Jeppson (1981, 1982) and USDA (1992) provide additional detailed descriptions of the following reaches.

Breckenridge

This reach begins at Harrops Bridge and continues upstream 13 km to Cache Bridge on the Packsaddle Road. Access is good at developed, public boat ramps maintained by IDFG at each end. Spring, South Leigh, and Packsaddle creeks drain into this reach.

Rainier

This reach begins at Cache Bridge and continues upstream 6 km to the IDFG Rainier access site. Access is good at developed, public boat ramps maintained by IDFG at each end. There is also public access, granted by a private landowner, at an old railroad trestle. Horseshoe Creek drains into this reach.

Buxton

This reach begins at the IDFG Rainier access site and continues upstream 7 km to Buxton (Bates) Bridge on the Buxton Road west of Driggs, Idaho. Access is good at developed, public boat ramps maintained by IDFG and Teton County at each end. Twin Creeks drains into this reach.

Nickerson

This reach begins at Buxton Bridge and continues upstream 6 km to Nickerson (South Bates) Bridge on the Bates Road, at the IDFG Teton Creek access site. Access is good at developed, public boat ramps maintained by IDFG and Teton County at each end. Mahogany Creek drains into this reach.

White Bridge

This reach begins at Nickerson Bridge and continues upstream 9 km to White Bridge on the North Cedron Road. Access is good in this reach. Two developed, public boat ramps are maintained by IDFG at the Teton Creek and Fox Creek West access sites. Small boats can also be launched from the bank at the undeveloped IDFG Fox Creek East site and at the county-owned White Bridge. Teton, Darby, and Fox creeks as well as Foster Slough drain into this reach.

Headwaters

This reach begins at White Bridge and continues upstream 2 km to the confluence of Little Pine and Warm creeks, just above the Cedron Road Bridge. Public access is poor (only at the county road bridges), and the river is generally too shallow for boats. Boquet, Patterson, Trail, Drake, Little Pine, and Warm creeks drain into this reach.

METHODS

Multi-stratified, roving-type creel surveys were conducted throughout the Teton River in 1974 and 1975 as part of a pre-dam fishery assessment study (Irving et al. 1977). Post-dam creel surveys were conducted in 1980, 1988, 1994, and 2000. Jeppson (1981) collected the 1980 data for IDFG fishery management purposes. The 1988 and 1994 data were collected for the IDFG Teton River Enhancement Program. The 2000 data were collected as part of the present study. The methods used in all years except 1980 were essentially the same as those described by Irving et al. (1977). Survey results for 1980 (Jeppson 1981) were not used in this report because of the differing methods.

For consistency and accuracy, all pre- and post-dam data were entered and analyzed using standard algorithms in the IDFG Creel Census System computer program (McArthur 1993). These algorithms are the same as those used by Irving et al. (1977) to estimate three fundamental parameters of a fishery: fishing pressure or angler effort (f), catch (C), and its subcomponent harvest (H), and catch rate or catch per unit effort ($CPUE=C/f$; Malvestuto 1983, Ney 1993). For this study, effort (estimated from angler counts) is combined with catch and harvest rates (estimated from angler interviews) to estimate catch and harvest.

The survey area includes the entire mainstem Teton River from White Bridge downstream to the confluence with the Henrys Fork Snake River, including both the North Fork Teton River and South Fork Teton River (Figure 1). The 2000 creel survey ran from May 27 to September 8. Limited creel information collected on tributaries or canals was not included.

Stratification

Each survey was stratified at four different levels to reflect spatial, temporal, and other variability of the estimated statistics (McArthur 1993). Irving et al. (1977) initially stratified the river by ten unequal-length zones. Because of low sample size, zones were grouped into sections for data analysis. Zones 1-3 were combined as section 3 (Lower Teton), zones 4-6 as section 2 (Teton Canyon), and zones 7-10 as section 1 (Teton Valley; Figure 1). Survey data have been recorded and analyzed with these zone and section designations ever since, with a minor variation at Harrops Bridge. Irving et al. (1977) ended the Teton Canyon section at Felt Dam, whereas this section ends at Harrops Bridge in post-dam years, a discrepancy of 15 km. However, few anglers have been observed in this variably defined reach and the statistical difference is probably minor.

The 105 d survey period is stratified temporally by five 21 d intervals (Table 1). Each interval is further stratified by day type (weekday or weekend day/holiday). Time of day (morning or afternoon/evening) was not a stratum per se but was considered a "cluster." Every attempt was made to collect half of the data in each cluster. The survey period began on Memorial Day weekend in May (the fishing season opener) and extended through the first part of September with the exception of 1974, which began and ended two weeks later.

In the post-dam years, anglers are also stratified by type of fishing (boat, bank, or tube). This level of detail was not recorded during the pre-dam surveys. Boat anglers are those with a boat whether they fished from the boat or from the bank. Most boaters in the Teton River use float boats (Mackenzie drift boats, canoes, or rafts) rather than powerboats, but this level of

detail was not recorded. Bank anglers are those fishing or wading from shore. Tubes include one-man float tubes and kick boats.

In sum, basic creel statistics are calculated by each section, interval, day type, and angler type (Appendix A). Catch statistics are also calculated by fish species: cutthroat, wild rainbow, hatchery rainbow, and brook trout (Appendix B and C). Mountain whitefish, suckers, and a few brown trout were also caught by anglers but were not included. For each creel statistic, there are values for three sections, five intervals, two day types, and three angler types, for a total of 90 different values. Because this level of analysis is cumbersome to report and difficult to compare, and because the focus of this study is evaluating the Teton Canyon after the dam collapse, I will emphasize reporting the grouped statistics by section. The IDFG Creel Census System computer program (McArthur 1993) makes these calculations with their associated variances.

Angler Counts

Angler effort was estimated by counting anglers with fixed-wing aircraft. Aerial counts were used in all years due to difficulty accessing most of the study area. One round trip flight was made per "cluster" and consisted of two separate flights and counts. Beginning times of each flight were separated by several hours. Originally, this provided a layover in Rexburg or St. Anthony between the first downstream and the second upstream flight (Irving et al. 1977). Flight dates were selected at random for each day type and cluster. Flight start times were fixed during the pre-dam surveys but, for the post-dam surveys, they were selected randomly from three or four pre-determined times.

Twelve round-trip flights were attempted during each interval (three on weekday mornings, three on weekday afternoon/evenings, three on weekend/holiday mornings, and three on weekend/holiday afternoon/evenings). This resulted in 24 one-way flights per interval or 120 flights over the entire 5-interval survey period. One-way flights took approximately one-hour to complete depending on weather conditions. Cancelled flights were made up as soon as possible but always within the same interval, day type, and cluster. If this was not possible, the flight was abandoned. Irving et al. (1977) averaged the previous counts as a substitute for abandoned flights, but I never did using the creel program. The actual number of flights was near the goal of 120 each year (Table 2).

Flights began at White Bridge, proceeded downstream to the Henrys Fork Snake River via the South Fork Teton River, then concluded at the upstream end of the North Fork Teton River; or they followed this route in the reverse order (Figure 1). Starting location for each round trip flight has been randomly selected in recent surveys, but Irving et al. (1977) always started in the Teton Valley.

Angler Interviews

Catch, harvest, time fished, and other fish and angler information were determined by interviewing anglers. Interviews were conducted as often as practical on both count and non-count days. In 2000, I focused on difficult strata (e.g. in the Teton Canyon on weekday mornings) and developed a tally spreadsheet to compare counts with interviews. This ensured that some anglers were interviewed whenever and wherever they were counted. The number of

anglers interviewed ranged from 614 in 1988 to 1,177 in 1994 (Table 2). Anglers that were fishing together were grouped as parties during the post-dam years.

For each angler or party, the creel clerk recorded standard creel information: time fished by terminal gear used (bait, lure, fly); number of fish kept and released by species; residency; type of angler (bank, boat, or tube except in 1974 and 1975); trip completed or not; and the size (TL) of fish kept by species. Time fished was rounded to the nearest one-half hour. Species were identified as cutthroat trout, wild rainbow or rainbow x cutthroat hybrid trout (hereafter “wild rainbow trout”), hatchery rainbow trout, or brook trout. Other species were sometimes recorded, such as mountain whitefish, suckers, or brown trout, but they were not included due to inconsistency over the years.

In 2000, I used self-addressed, stamped postcards to supplement angler interviews. Postcard boxes were installed at three locations in the Teton Canyon (Teton Dam boat launch, Spring Hollow boat launch, and Felt Dam parking lot) and one location in the Teton Valley (Teton Creek boat launch). Postcards were also distributed to local guides and outfitters.

Water Temperatures and Streamflows

Collecting water temperature data and compiling streamflow data were not part of the original study proposal (Schrader 1997). However, these data provide some of the physical context from which to evaluate the fishery following the dam collapse. In addition, there have been numerous requests for this information, prompted by water quality concerns throughout the drainage and the recent total maximum daily load (TMDL) process. To date, these water temperature data have been provided to Idaho Department of Environmental Quality, private consultants, non-governmental organizations, and other fisheries biologists.

In 1996, water temperature was recorded at five locations with Ryan RL100 temperature loggers (Figure 3; Table 3). Accuracy of the digital loggers was $+1.0^{\circ}\text{C}$ with resolution to the nearest 0.5°C . Three loggers were placed in the Teton Valley (Leigh, Teton Creek, and Fox Creek), and two others were placed in Teton Canyon tributaries (Bitch Creek and Badger Creek). Temperature was recorded hourly from the end of May to the end of October.

In 1997, water temperature was recorded at six locations (Figure 3; Table 3). Three were the same as in 1996 (Teton Valley), and three others were placed in the Lower Teton (North Fork, South Fork, and Hog Hollow). Temperature was recorded hourly from the end of March to mid-November, then every five hours throughout the winter.

In 1998, water temperature was recorded at eight locations (Figure 3; Table 3). Six were the same as in 1997, and temperature was recorded every 5 hr throughout the year. Two additional loggers were deployed in the Teton Canyon, one at the Felt Dam ladder trap and one at the Narrows screw trap, where temperature was recorded hourly.

In 1999, water temperature was recorded at six locations (Figure 3; Table 3). Three were deployed in the Lower Teton (North Fork, South Fork, and Hog Hollow), and one was deployed in the Teton Valley (Leigh). However, the South Fork logger washed away. Temperature was recorded every 5 hours throughout the year at these four locations. One additional logger was deployed in the Lower Teton (at the South Fork ladder trap) and another in the Teton Canyon (at the Felt Dam ladder trap), where temperature was recorded hourly.

In 2000, water temperature was recorded at two locations: one in the Lower Teton (Hog Hollow) and one in the Teton Valley (Leigh; Figure 3; Table 3). Temperature was recorded every 5 hr throughout the year at both locations.

From 1996 to 2000, approximately 72,171 temperature data points were logged at these locations.

Daily mean flow data at four U.S. Geological Survey (USGS) gauges were obtained from published records on the Internet (1996-2000). The gauges are: 1) North Fork Teton River at Teton, 2) South Fork Teton River at Rexburg, 3) Teton River near St. Anthony, and 4) Teton River above South Leigh Creek near Driggs (Figure 4). For simplicity, these are referred to as the South Fork, North Fork, St. Anthony, and Leigh gauges. The Leigh gauge is in the Teton Valley, whereas the other gauges are in the Lower Teton below Teton Dam.

RESULTS

Angler Effort

Anglers spent about 21,000 h fishing on the Teton River in 2000 (Table 2). This is the lowest effort on record, less than half the 1994 estimate (51,000 h), and about two-thirds of the 1975 pre-dam estimate (30,000 h). Overlapping 95% confidence intervals indicate an insignificant change from 1975 to 1988, but non-overlapping intervals indicate a significant increase by 1994 and a significant decline by 2000 (Appendix A). Since surveys began, most of the total effort has been in the Teton Valley (44 to 66%), followed by the Lower Teton (18 to 33%) and Teton Canyon (13 to 23%).

Most effort in 2000 was in interval three (28%), followed by interval two (26%), interval four (18%), interval five (16%), and interval one (13%; Appendix A). In contrast, most effort was in intervals four and five in 1975 (72%), but this was weather-related (Irving et al. 1977). The 1974 estimates are somewhat biased due to the late survey start and missing the season opener. In general, effort has been evenly distributed among the five intervals during the post-dam years, perhaps due to drought conditions each year.

Lower Teton

Effort in the Lower Teton was about 5,000 h in 1975, increased to 17,000 h by 1994, but declined back to 5,000 h by 2000 (Figure 5; Appendix A). About half (41 to 55%) of this effort was during weekends and holidays. Although angler types were not classified in 1974 or 1975, bank effort (71 to 93%) has been considerably higher than boat effort (7 to 27%) since Teton Dam collapsed. Tube effort has been relatively minor (2%). Further, the post-dam increase and decline in total effort was due to both bank and boat anglers. In 1975, 81% of the anglers interviewed used bait and 6% used flies. These proportions changed dramatically by 2000, when 40% used bait and 45% used flies. Anglers using lures varied from 13 to 15%. The proportion of interviewed anglers that were non-residents increased from 5% in 1975 to 22% in 2000.

Teton Canyon

Effort in the Teton Canyon was about 7,000 h in 1975, increased to 12,000 h by 1994, but declined to 3,000 h by 2000 (Figure 5; Appendix A). About half (48 to 62%) of this effort was during weekends and holidays. Like the Lower Teton, bank effort (54 to 77%) has been considerably higher than boat effort (21 to 32%) since Teton Dam collapsed. Tube effort has been relatively minor and has increased (2 to 15%). Unlike the Lower Teton, the post-dam increase and decline in total effort was due mostly to bank anglers. In 1975, 60% of the anglers interviewed used bait and 28% used flies. These proportions reversed by 2000, when 26% used bait and 64% used flies. Anglers using lures varied from 11 to 12%. The proportion of interviewed anglers that were non-residents increased from 12% in 1975 to 42% in 2000.

Teton Valley

Effort in the Teton Valley was about 18,000 h in 1975, increased to 23,000 h by 1994, but declined to 13,000 h by 2000 (Figure 5; Appendix A). About half (43 to 50%) of this effort was during weekends and holidays. Like the other Teton sections, bank effort (59 to 64%) was considerably higher than boat effort (35 to 41%) until 2000, when boat effort (57%) was higher than bank effort (36%). Tube effort over all years has been relatively minor and has increased (2 to 7%). Like the Teton Canyon, the post-dam increase and decline in total effort was due mostly to bank anglers. In 1975, 65% of the anglers interviewed used bait, and 24% used flies. These proportions reversed by 2000, when 14% used bait and 72% used flies. Anglers using lures varied from 11 to 14%. The proportion of interviewed anglers that were non-residents increased from 25% in 1975 to 48% in 2000.

Angler Locations

During 2000, most bank anglers were located near public fishing access sites, whereas most boat and tube anglers were between these sites where watercraft could be safely navigated. In the Teton Valley, boat and tube anglers were evenly distributed, whereas bank anglers were clumped around seven access sites (Figure 6). In the Teton Canyon, most bank anglers were concentrated just below Harrops Bridge and around Teton Dam, with a few at Spring Hollow (Figure 7). Boat and tube anglers were generally below Bitch Creek. Because of difficult access, few anglers of any type were observed above Bitch Creek. In the Lower Teton, anglers of all types, but mostly bank anglers, were concentrated from Teton Dam down to the North Fork/South Fork split. Few anglers were observed from the split down to the confluence. Fun boats (floaters not fishing) were observed throughout the Teton River but were concentrated in the Teton Valley (Figures 6 and 7). Kayaks, which launch into Bitch Creek at the Highway 32 Bridge, have become more common in the Teton River down to Spring Hollow.

Catch Rate and Harvest Rate

Despite low effort, trout catch rates in 2000 averaged 1.01 fish/h over all Teton River sections, which was higher than 1994 (0.68 fish/h) but lower than 1975 (1.24 fish/h; Table 2). Following the dam collapse, catch rates had been declining in each of the study sections until 2000. Excluding that year, they were generally highest in the Teton Valley (1.02 to 1.54 fish/h) followed by the Teton Canyon (0.72 to 1.19 fish/h) and Lower Teton (0.25 to 1.15 fish/h; Figure 8). In 2000, the Teton Valley catch rate (0.58 fish/h) was the lowest ever recorded and

was down considerably from 1975 (1.54 fish/h). In contrast, the Teton Canyon catch rate (1.74 fish/h) was the highest ever recorded and was higher than the combined Lower Teton (0.71 fish/h) and Teton Valley (0.58) rates. However, most of the record high Teton Canyon rate was due to released cutthroat trout (1.39 fish/h), as was the unusually high Lower Teton catch rate (Appendix B).

Cutthroat trout catch rates were similar between 1975 and 2000 in the Teton Valley (0.32 and 0.29 fish/h) and in the Lower Teton (0.49 and 0.53 fish/h), but not in the Teton Canyon (0.38 and 1.42 fish/h; Appendix B). In contrast, catch rates for rainbow trout (wild and hatchery combined) have declined in the Teton Valley (from 0.68 to 0.16 fish/h), in the Teton Canyon (from 0.67 to 0.31 fish/h), and in the Lower Teton (from 0.52 to 0.17 fish/h). Hatchery rainbow trout were not differentiated from wild rainbow in 1975, and their stocking was discontinued after 1994. Brook trout catch rates have also declined in the Teton Valley (from 0.53 to 0.13 fish/h).

Harvest rates in 2000 averaged 0.06 fish/h over all Teton River sections, which is considerably less than in 1975 (0.97 fish/h; Table 2). Harvest rates declined in all sections (Figure 8) and for all species (Appendix B). Like catch rates, harvest rates have generally been highest in the Teton Valley (0.05 to 1.05 fish/h) followed by the Teton Canyon (0.07 to 0.95 fish/h) and Lower Teton (0.07 to 0.90 fish/h).

Catch and Harvest

Anglers caught about 15,700 trout in the Teton River during 2000 (Table 2). Like the effort estimates, this is the lowest catch on record, less than half the 1994 estimate (37,200 fish), and about a third of the 1975 pre-dam estimate (42,000 fish). Overlapping 95% confidence intervals indicate an insignificant change from 1975 to 1994, but non-overlapping intervals indicate a significant decline by 2000 (Appendix C). Since surveys began, most of the total catch has been in the Teton Valley (49 to 74%), followed by the Teton Canyon (14 to 26%) and the Lower Teton (11 to 25%).

Anglers kept an estimated 1,300 fish in 2000, approximately 8% of the total catch (Table 2). This is the lowest harvest on record and a fraction of the 1975 estimate (30,600 fish), when anglers kept 73% of their catch. Non-overlapping 95% confidence intervals indicate a significant declining harvest trend from 1975 to 2000 (Appendix C). The record low harvest in 2000 was a combination of record low effort (with record low catch) as well as anglers keeping relatively fewer fish. Since surveys began, most of the total harvest has been in the Teton Valley (61 to 78%), followed by the Lower Teton (14 to 30%) and the Teton Canyon (7 to 20%).

Until 2000, most of the total harvest was wild and hatchery rainbow trout (36 to 83%), followed by cutthroat trout (6 to 35%) and brook trout (12 to 29%; Table 2). In 2000, most of the harvest was cutthroat trout (44%), followed by wild rainbow trout (36%) and brook trout (21%). About 16,600 wild and hatchery rainbow trout were harvested in 1975, declining to less than 500 fish by 2000 (Appendix C). About 7,500 cutthroat trout were harvested in 1975, declining to less than 600 fish by 2000. About 6,500 brook trout were harvested in 1975, declining to less than 300 fish by 2000. No hatchery rainbow trout were harvested in 2000, as stocking was discontinued after 1994.

Lower Teton

Total catch in the Lower Teton was about 5,800 fish in 1975 and declined to 3,900 fish by 2000 (Figure 9; Appendix C). Harvest was 5,100 fish in 1975 and declined to 400 fish by 2000. About 700 fish were caught and released in 1975 versus 3,600 fish in 2000. In 1975, 2,700 cutthroat trout and 2,400 rainbow trout were harvested. In 2000, 300 cutthroat trout and less than 100 rainbow trout were harvested. As many as 200 hatchery rainbow trout were harvested annually until 1994, the last year of stocking.

Teton Canyon

Total catch in the Teton Canyon was about 7,600 fish in 1975 and declined to 4,000 fish by 2000 (Figure 9; Appendix C). Harvest was 6,200 fish in 1975 and declined to 100 fish by 2000. About 1,400 fish were caught and released in 1975 versus 3,900 fish in 2000. In 1975, 1,900 cutthroat, 3,500 rainbow, and 700 brook trout were harvested. In 2000, less than 100 cutthroat and less than 100 rainbow trout were harvested. No brook trout were harvested in 2000. As many as 400 hatchery rainbow trout were harvested annually until 1994, the last year of stocking.

Teton Valley

Total catch in the Teton Valley was about 28,600 fish in 1975 and declined to 7,800 fish by 2000 (Figure 9; Appendix C). Harvest was 19,400 fish in 1975 and declined to 800 fish by 2000. About 9,300 fish were caught and released in 1975 versus 7,000 fish in 2000. In 1975, 2,900 cutthroat trout, 10,700 rainbow trout, and 5,800 brook trout were harvested. In 2000, 200 cutthroat trout, 300 rainbow trout, and 300 brook trout were harvested. As many as 4,800 hatchery rainbow trout were harvested annually until 1994, the last year of stocking.

Fish Length in the Creel

In general, the average size of fish in the creel has increased since the dam collapse, but recent sample sizes are small due to the lack of harvested fish. In 2000, the average length of cutthroat trout in the creel was 375 mm, a continuing increase from 364 mm in 1994 (Table 4), and 266 mm in 1974 and 1975 combined (Irving et al. 1977). Of the cutthroat trout checked in 1994 ($n = 22$) and 2000 ($n = 34$), about half were less than 406 mm and were illegally harvested. Wild rainbow trout averaged 329 mm in 2000, a slight decline from 340 mm in 1994 (Table 5) but an increase from 256 mm in 1974 and 1975 combined (Irving et al. 1977). No hatchery rainbow trout were observed in 2000, although they averaged 276 mm in 1994 (Table 6). They were not distinguished from wild rainbow trout in 1974 and 1975 (Irving et al. 1977). Brook trout averaged 237 mm in 2000, about the same as 239 mm in 1994 (Table 7) but up from 228 mm in 1974 and 1975 combined (Irving et al. 1977).

Angler Interviews versus Postcards

During the 2000 creel survey, 705 anglers were contacted using 408 roving angler interviews (Table 2), and another 105 anglers were contacted via 101 returned postcards. Another five postcards returned incomplete and were discarded. Postcards were meant to

supplement angler interviews in the difficult Teton Canyon, but the postcard data were not used for several reasons.

First, 35 postcards returned from anglers that claimed to have fished in the Teton Canyon. Yet 51 of all returning postcards had codes indicating anglers probably fished there: 14 were obtained at Teton Dam, 24 at Spring Hollow, and 13 at Felt Dam. It is not likely anglers obtained the postcards at these Teton Canyon locations but fished somewhere else. They probably did not understand my section descriptions and recorded the information incorrectly.

Second, 72% of the anglers interviewed in the Teton Canyon caught at least one fish, whereas 95% of the postcard anglers did so. Further, about 33% of the interviewed anglers caught more than six fish whereas 58% of the postcard anglers did so.

Finally, the catch rate for anglers interviewed was 1.74 fish/h versus 2.05 fish/h for postcard anglers. These differences were apparent for the other sections as well. Successful anglers were more likely to fill out and return the postcards than unsuccessful anglers, therefore biasing the results.

Water Temperatures and Streamflows

Thermographs at six main stem sites (Figures 10 to 12; Appendices D to T) and four tributary sites (Figures 13 and 14; Appendices U to BB) showed similar overall patterns between 1996 and 2000. In general, minimum water temperatures were observed in December and January, whereas maximum temperatures were observed in July and August. Overall, year-round temperatures ranged from 0-20°C and temperatures increased moving downstream. However, extremely warm temperatures (greater than 20°C) were recorded throughout the mainstem (but not the tributaries) in 1998 and 2000, especially below Teton Dam (Figure 10).

Hydrographs at the four USGS gauging stations also showed similar overall patterns between 1996 and 2000 (Figures 15 and 16). In general, the Teton River is at base flow from September through March, whereas flows increase during runoff from April to August, peaking in May or June. Base flows are about 400 ft³/s in the Lower Teton (St. Anthony gauge) and 200 ft³/s in the Teton Valley (Leigh gauge), whereas peak flows are an order of magnitude larger (4,000 ft³/s in the Lower Teton, 2,000 ft³/s in the Teton Valley). Flows in the Teton Canyon fall somewhere between these values. Exceptionally high flows were recorded in 1997 (a record runoff year), and exceptionally low flows were recorded in 2000 (the beginning of the current drought).

Extremely low flows predominate in the South Fork during the latter half of the irrigation season (July through September; Figure 15). In fact, complete dewatering (i.e. less than 1 ft³/s) was recorded four days in 1998 and 23 days in 2000. It should be noted that only a portion of the South Fork (from the Rexburg Canal diversion to Highway 20 near Rexburg) is regularly dewatered. Minimum flows elsewhere ranged from 90 to 110 ft³/s at the North Fork gauge, from 290 to 420 ft³/s at the St. Anthony gauge, and from 140 to 190 ft³/s at the Leigh gauge (Figure 16). However, complete dewatering in portions of the North Fork below the gauge is common due to irrigation withdrawals.

DISCUSSION

The trout fishery in the Teton Canyon has declined in the 25 years following the Teton Dam collapse, despite the shift to wild, native trout management, special protective regulations, and catch-and-release flyfishing. My conclusion is based primarily on creel survey statistics estimated in 1975 just prior to the dam collapse (Irving et al. 1977) and compared to those following the dam collapse (1988, 1994, 2000). The lowest angler effort was observed in 2000, when Teton Canyon effort was half the pre-dam estimate and effort in the entire river was about a third less. If the Teton River fishery is viewed in context of adjacent river fishery changes, this decline in effort over 25 years seems remarkable. For example, mean annual effort in the South Fork Snake River during the 1970s (the same general period of the pre-dam estimates in this study) was about 47,000 h (Moore 1980). Following special angling regulations and the related increase in catch rates, effort on the South Fork Snake River increased dramatically. By 1996, effort increased over three-fold to almost 170,000 h (Schrader et al. 2003). Similar special regulations were implemented on the Teton River but effort decreased during the same period. Clearly, angler effort in the Teton River has not followed the same trend observed in this adjacent river with a similar wild, native trout management program.

The number of trout caught or harvested in the Teton Canyon has also declined since the dam collapse. Like the effort estimates, the lowest catch occurred in 2000, when the Teton Canyon catch was about half the pre-dam estimate and the entire river catch was about two-thirds less. Harvest has declined as well, although this was expected given the implementation of special regulations and the shift toward catch-and-release flyfishing. Total catch should have increased, not decreased, in response to decreased harvest. Again, this is in stark contrast to the South Fork Snake River, where the mean annual catch in the 1970s of 22,000 trout increased almost ten-fold by 1996 (189,000 trout; Moore 1980; Schrader et al. 2003).

Fishery managers and anglers expect that sacrificing harvest opportunity will result in more fish, larger fish, and higher catch rates, thereby leading to more effort on the fishery. Although Teton River anglers have sacrificed harvest (total harvest in 2000 was less than 5% of the pre-dam harvest), there has not been a corresponding increase in catch rates or angler effort. Rather, the pre-dam catch rate for the entire Teton River (1.24 fish/h) slid downward by 2000 (1.01 fish/h). Until 2000, catch rates in the Teton Canyon had been sliding downward as well. In contrast, the South Fork Snake River mean catch rate in the 1970s was about 0.46 fish/h and increased more than two-fold by 1996 to 1.12 fish/h (Moore 1980; Schrader et al. 2003).

The Teton Canyon catch rate observed in 2000 (1.74 fish/h) is much higher than the pre-dam estimate (1.19 fish/h), is well above the goal stated in the current Fisheries Management Plan (1.0 fish/h; IDFG 2001), and exceeds the recent South Fork Snake River catch rate (1.12 fish/h). However, recent catch rate estimates for both fisheries are probably misleading. Most of the Teton Canyon 2000 estimate is due to cutthroat trout that were released (1.39 fish/h), which may have been over-reported by anglers trying to remember their catch. Unlike 1975, when 81% of the fish caught were kept (and thereby sampled by the creel clerk), only 3% of the catch was kept in 2000. Catch rates would be overestimated if angler reports of released fish were inflated. Alternatively, perhaps novice anglers did not return to fish in the Teton Canyon in 2000, leaving experienced or guided anglers to report their higher catch rates.

Besides the Teton Canyon, catch rates have generally declined in the other Teton River sections as well, including the Teton Valley that was unaffected by the dam collapse. I initially

hypothesized that Teton Valley fish populations might be using the Teton Canyon, with its extensive pool habitat and relatively pristine tributaries, for overwintering, spawning, or rearing. However, pre- and post-dam movement studies have shown few adult or juvenile trout moving between study sections (Irving et al. 1977; ERI 1987, 1988; Schrader and Jones, in press). The decline in Teton Valley catch rates, effort, and total catch is partly related to the cessation of hatchery fish stocking. In the first two post-dam creel surveys (1988 and 1994), hatchery rainbow trout supported catch rates of 0.27 and 0.29 fish/h. Had this component not been lost in the 2000 creel survey, the decline in the overall Teton Valley catch rate would have been less severe. In addition, whirling disease, black spot disease, and loss of spawning and rearing habitat in the Teton Valley may be limiting recruitment (Gamblin and Brostrom 1988; Elle and Schill 1999; Schrader and Brenden, in press).

Why has the Teton Canyon fishery declined? Fundamentally, I believe it is due to major changes in Teton River hydrology and geomorphology—the primary driver of stream structure and function—that was caused by the dam collapse (Randle et al. 2000). The change from lotic to lentic conditions has resulted in less diverse habitat and poorer food production, likely resulting in fewer fish. Unfortunately, fish abundance estimates needed to make this assessment are lacking (Schrader and Brenden, in press). However, there is evidence that pool habitat has increased, while riffle habitat has decreased (Randle et al. 2000), reed canary grass monoculture has replaced diverse streamside woody vegetation (Beddow 1999), mainstem irrigation water pumping has reduced streamflow, and water temperatures have increased (Bowser 1999; Randle et al. 2000). Field studies from 1998 showed a possible rise of 1°C from hydrologic changes associated with the landslides (Bowser 1999). Most of the increase was from Spring Hollow to Canyon Creek – where most of the major landslides are located. Bowser notes, however, that climate changes since 1976 may account for some or all the increase. Historic data collected just below Teton Dam and in the Teton Valley show that maximum temperatures greater than 20°C were common in 1961 but not in 1974 or 1975 (Irving et al. 1977).

It is also possible that the dramatic changes in hydrology and geomorphology have caused the fishery to decline in other subtle ways. Prolonged exposure to water temperatures greater than 20°C can lead to increased stress and susceptibility to disease for coldwater fish. This may partly explain the significantly higher incidence and severity of black spot disease in the Teton Canyon compared to the other study sections (Schrader and Brenden, in press). In addition, Teton Canyon pools, which provide more habitat and macrophytes for the intermediate snail host, have increased (Randle et al. 2000). Whether black spot disease has affected fish populations in the Teton Canyon is unknown. However, its ubiquitous presence is a detriment to the quality of the angling experience, and may cause anglers to fish elsewhere. Virtually all fish are infected in the Teton Canyon, and many to the point where natural spotting patterns are completely obscured.

Perhaps the most notable losses to the Teton Canyon fishery are not those that lend themselves to quantification such as “catch rate” and “total harvest.” Rather, the greatest losses are those having to do with accessibility and aesthetics of the fishing experience. The construction and collapse of Teton Dam resulted in the loss of a unique cottonwood floodplain, of dark timbered hillsides, and of a channel type that was relatively easy to access, float, and fish by the general angler (Figure 17). What was once a river that invited novice boaters with minimal experience is now limited to those who possess whitewater skills and equipment suited to the potentially dangerous rapids at the landslides (Figure 18). The replacement of 20 km of pool-riffle channel by the existing channel type, characterized by 27 “dead water” pools interrupted by high-gradient rapids, has resulted in a substantial loss of “fishable” water. Trout

certainly use the deep, slow, and extensive pools to a degree, but the areas sought and most commonly fished by anglers are limited to the faster flowing rapids. BOR should carefully consider if improving access or removing some the rapids would lead to unacceptable boat effort or crowding at the remaining rapids.

The borrow ponds are a salient example of the replacement of nearly three km of a “blue ribbon” trout fishery by a series of deep, stagnant pools dominated by suckers and Utah chubs (Schrader and Brenden, in press). What was once a productive pool-riffle habitat meandering through a rich and diverse cottonwood floodplain is now a series of slack water “gravel pits” surrounded by a floodplain of reed canary grass (Beddow 1999, Randle et al. 2000; Figure 19).

Despite the difficulty of quantifying the aesthetic worth of a fishery, the intangible qualities, such as scenery, solitude, healthy fish, and a pristine environment, are regularly identified by anglers as the most important aspects of a high quality fishing experience. Past angler surveys (IDFG 2001) and the current IDFG strategic planning process consistently shows that anglers place a higher value on the quality of the fishing experience than on catch rates. These intangible qualities, which caused anglers to refer to the Teton Canyon as the “little South Fork,” were lost 25 years ago with the construction and collapse of Teton Dam.

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Table 1. Intervals and dates of pre- and post-Teton Dam, creel surveys, Teton River, Idaho. The 1980 creel survey conducted by Jeppson (1981) is not included.

Interval	Mean daylight hours	Number weekdays	Number weekend days/holidays	Interval dates		
				Pre-Teton Dam		
				1974 ^{a, b}	1975 ^b	
I	14.5	14	7	Jun 8—Jun 28	May 24—Jun 13	
II	14.5	14	7	Jun 29—Jul 19	Jun 14—Jul 4	
III	14.5	15	6	Jul 20—Aug 9	Jul 5—Jul 25	
IV	14.5	15	6	Aug 10—Aug 30	Jul 26—Aug 15	
V	14.0	14	7	Aug 31—Sep 20	Aug 16—Sep 5	
				Post-Teton Dam		
				1988 ^c	1994 ^d	2000
I	14.5	14	7	May 28—Jun 17	May 28—Jun 17	May 27—Jun 16
II	14.5	14	7	Jun 18—Jul 8	Jun 18—Jul 8	Jun 17—Jul 7
III	14.5	15	6	Jul 9—Jul 29	Jul 9—Jul 29	Jul 8—Jul 28
IV	14.5	15	6	Jul 30—Aug 19	Jul 30—Aug 19	Jul 29—Aug 18
V	14.0	14	7	Aug 20—Sep 9	Aug 20—Sep 9	Aug 19—Sep 8

^a Did not include fishing opener on Memorial Day weekend; first interval had 15 weekdays and 6 weekend days.

^b From Irving et al. (1977).

^c From IDFG file data collected by Mark Gamblin and Jody Brostrom.

^d From IDFG file data collected by Rick Henderson.

Table 2. Summary of pre- and post-Teton Dam creel survey statistics, all sections and intervals combined, Teton River, Idaho.

Creel survey statistic	Pre-Teton Dam		Post-Teton Dam		
	1974 ^a	1975	1988	1994	2000
Total number of flights	114	118	99	113	118
Estimated fishing effort (h):	26,201	29,954	31,074	51,046	21,076
% Weekday	50	50	49	50	56
% Weekend & holidays	50	50	51	50	44
% Boat effort	ND ^b	ND	30	29	46
% Bank effort	ND	ND	70	69	47
% Tube effort	ND	ND	ND	2	7
Average time per trip (h)	ND	ND	3.30	2.78	3.68
Total number of interviews	774	883	333	589	408
Number of anglers interviewed:	774	883	614	1,177	705
% Resident	79	78	77 ^c	68	58
% Nonresident	21	22	23 ^c	32	42
% Fishing with bait	53	64	59 ^c	42	21
% Fishing with lures	18	11	12 ^c	20	13
% Fishing with flies	29	24	29 ^c	38	66
Average catch rate (fish/h)	1.06	1.24	0.83	0.68	1.01
Average harvest rate (fish/h)	0.67	0.97	0.40	0.13	0.06
Total catch ^d	39,644	42,048	31,532	37,199	15,722
% Anglers catching:					
0 Fish	29	27	30	36	47
1 Fish	15	17	12	11	15
2 Fish	11	11	12	11	8
3 or more fish	45	45	46	42	30
Total harvest ^d	25,295	30,644	17,119	7,837	1,309
% Harvested	64	73	54	21	8
% Released	36	27	46	79	92
% Harvest composition:					
Cutthroat trout	35	25	25	6	44
Wild rainbow trout	36	54	32	38	36
Hatchery rainbow trout	ND ^e	ND	29	45	0 ^f
Brook trout	29	21	14	12	21

^a Creel survey began June 8, 1974, two weeks after opener.

^b ND = no data collected.

^c Data not collected from all anglers interviewed.

^d Does not include brown trout, mountain whitefish, or suckers.

^e ND = no data collected; hatchery rainbow not distinguished from wild rainbow trout.

^f Stocking discontinued after 1994.

Table 3. Specifics of Ryan RL100 temperature loggers deployed in 1996-2000, Teton River drainage, Idaho.

Logger	Location	Deployment period	Interval (hr)	Study section	Notes
North Fork	Highway 20	31 Mar 1997 – 10 Nov 1997	1	Lower	Partly out of water in early Sep 1997
		10 Nov 1997 – 29 Oct 1998	5		Out of water after runoff in 1998
		29 Oct 1998 – 25 Oct 1999	5		Out of water after runoff in 1999
South Fork	Fish ladder at Rexburg City Ditch diversion, just below confluence of Moody Creek	25 Mar 1997 – 10 Nov 1997	1	Lower	Ladder dry a few days in early Jul 1997
		10 Nov 1997 – 30 Oct 1998	5		Malfunctioned - no data
		30 Oct 1998 – Unknown	5		Missing - washed away
		1 Apr 1999 – 3 Jun 1999	1		
Hog Hollow	Concrete abutments just below Hog Hollow bridge, just above USGS gauge	31 Mar 1997 – 10 Nov 1997	1	Lower	
		10 Nov 1997 – 30 Oct 1998	5		
		30 Oct 1998 – 25 Oct 1999	5		Two deployed, one malfunctioned
		25 Oct 1999 – 25 Oct 2000	5		Two deployed, both OK
Bitch Creek	Just below old road bridge, 0.5 mi below Highway 32	21 May 1996 – 22 Oct 1996	1	Canyon	No data 5 to 7 Aug 1996
		20 Mar 1997 – 16 Sep 1997	1		Malfunctioned - no data 6 May to 2 Jul 1997
Badger Creek Felt Dam	Bull Elk road Fish ladder at Felt Dam, 0.8 mi above confluence of Badger Creek	21 May 1996 – 21 Jul 1996	1	Canyon	Channel dry since 22 Jul 1996?
		1 May 1998 – 3 Nov 1998	1		
Narrows	Old USGS gauge 1.7 mi below Highway 33	1 Apr 1999 – 15 Jun 1999	1	Canyon	Stuck in log jam
		31 Mar 1998 – 2 Nov 1998	1		No data 15 to 17 Jun 1998
Leigh	USGS gauge, just above Cache Bridge	21 May 1996 – 22 Oct 1996	1	Valley	No data 5 to 7 Aug 1996; partly out of water early Aug
		20 Mar 1997 – 10 Nov 1997	1		
		10 Nov 1997 – 30 Oct 1998	5		
		30 Oct 1998 – 26 Oct 1999	5		Two deployed, both OK
		26 Oct 1999 – 25 Oct 2000	5		Two deployed, both OK
Teton Creek	Steel bridge, 1.1 mi above confluence	21 May 1996 – 22 Oct 1996	1	Valley	No data 5 to 7 Aug 1996; partly out of water early Aug
		20 Mar 1997 – 10 Nov 1997	1		
		10 Nov 1997 – 21 Dec 1997	5		Malfunctioned - no data after 21 Dec 1997
Fox Creek	Near IDFG fence line, 0.5 mi above confluence	21 May 1996 – 22 Oct 1996	1	Valley	No data 5 to 7 Aug 1996
		20 Mar 1997 – 10 Nov 1997	1		
		10 Nov 1997 – 30 Oct 1998	5		

Table 4. Length frequency distributions of harvested cutthroat trout sampled during post-dam creel surveys (1988, 1994, and 2000) in all sections combined, Teton River, Idaho. Fish less than 400 mm are illegal harvest in 1994 and 2000.

Total length (mm)	<i>Post-Teton Dam</i>		
	1988	1994	2000
0-9			
10-19			
20-29			
30-39			
40-49			
50-59			
60-69			
70-79			
80-89			
90-99			
100-109			
110-119			
120-129	1		
130-139			
140-149	1		
150-159			
160-169	1		
170-179			
180-189	1		
190-199			
200-209	5	2	
210-219	1		2
220-229	2		
230-239	19		
240-249	5		1
250-259	23		
260-269	10		
270-279	6	1	1
280-289	22	1	
290-299	8		3
300-309	31		3
310-319	17	1	
320-329	2	2	1
330-339	15		2
340-349	6		1
350-359	14		1
360-369			
370-379	4	3	
380-389	6	1	
390-399	6		
400-409	7	4	4
410-419	1	3	5
420-429	1	2	3
430-439	5	1	1
440-449	1		
450-459	2		1
460-469			
470-479			
480-489	1		
490-499			2
500+	1	1	3
Total (sample size):	225	22	34
Average (mm):	303	364	375

Table 5. Length frequency distributions of harvested wild rainbow trout sampled during post-dam creel surveys (1988, 1994, and 2000) in all sections combined, Teton River, Idaho.

Total length (mm)	<i>Post-Teton Dam</i>		
	1988	1994	2000
0-9			
10-19			
20-29			
30-39			
40-49			
50-59			
60-69			
70-79			
80-89			
90-99			
100-109			
110-119			
120-129			
130-139			
140-149			
150-159	1		
160-169			
170-179			
180-189	1	1	
190-199			
200-209			
210-219		1	
220-229	3	7	2
230-239	7	1	1
240-249	11	2	
250-259	26	7	
260-269	18	6	1
270-279	12	12	1
280-289	24	2	2
290-299	9	8	1
300-309	17	10	2
310-319	3	4	
320-329	2	4	1
330-339	7	9	
340-349	2	3	
350-359	3	3	2
360-369		3	1
370-379	2	3	
380-389	2	2	
390-399	1	4	2
400-409	1	5	2
410-419	1	13	
420-429	1	6	
430-439		2	
440-449		3	
450-459	1	5	
460-469		3	
470-479		1	
480-489		2	
490-499		2	
500+	1	2	1
Total (sample size):	156	136	19
Average (mm):	283	340	329

Table 6. Length frequency distributions of harvested hatchery rainbow trout sampled during post-dam creel surveys (1988, 1994, and 2000) in all sections combined, Teton River, Idaho.

Total length (mm)	<i>Post-Teton Dam</i>		
	1988	1994	2000
0-9			
10-19			
20-29			
30-39			
40-49			
50-59			
60-69			
70-79			
80-89			
90-99			
100-109			
110-119			
120-129			
130-139			
140-149			
150-159			
160-169			
170-179	1		
180-189			
190-199			
200-209	1		
210-219	2	3	
220-229	2	3	
230-239	4	3	
240-249	11	15	
250-259	21	19	
260-269	13	26	
270-279	7	29	
280-289	11	23	
290-299	3	16	
300-309	3	11	
310-319	1	8	
320-329	1	9	
330-339		3	
340-349		1	
350-359	1	1	
360-369			
370-379		1	
380-389		1	
390-399		1	
400-409			
410-419			
420-429			
430-439	1		
440-449			
450-459	1		
460-469			
470-479		1	
480-489			
490-499			
500+			
Total (sample size):	84	174	ND ^a
Average (mm):	265	276	ND

^a ND = No data collected; stocking discontinued after 1994.

Table 7. Length frequency distributions of harvested brook trout sampled during post-dam creel surveys (1988, 1994, and 2000) in all sections combined, Teton River, Idaho.

Total length (mm)	<i>Post-Teton Dam</i>		
	1988	1994	2000
0-9			
10-19			
20-29			
30-39			
40-49			
50-59			
60-69			
70-79			
80-89			
90-99			
100-109			
110-119			
120-129			
130-139			
140-149			
150-159	3	3	
160-169	2		
170-179	7		
180-189	2	3	
190-199	6	2	
200-209	15	3	3
210-219	6	4	
220-229	5	5	4
230-239	1	3	3
240-249	6	2	2
250-259	10	4	2
260-269	5	7	1
270-279	4	7	
280-289	1	4	1
290-299		1	
300-309	1		1
310-319	1	1	
320-329		1	
330-339			
340-349			
350-359		1	
360-369			
370-379			
380-389			
390-399			
400-409			
410-419			
420-429			
430-439			
440-449			
450-459			
460-469			
470-479			
480-489			
490-499			
500+			
Total (sample size):	75	51	17
Average (mm):	219	239	237

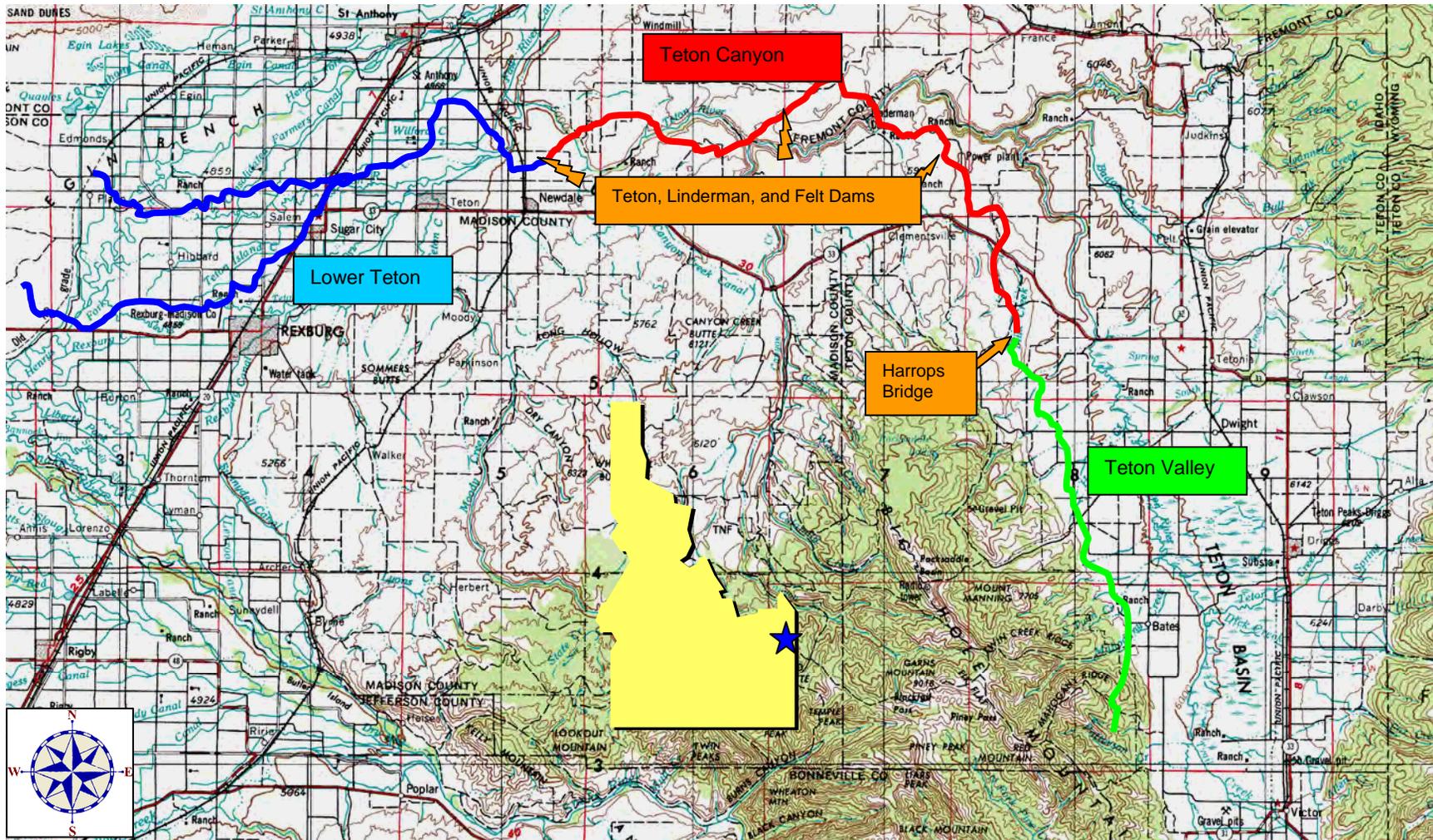


Figure 1. Location of study sections in the Teton River, Idaho.

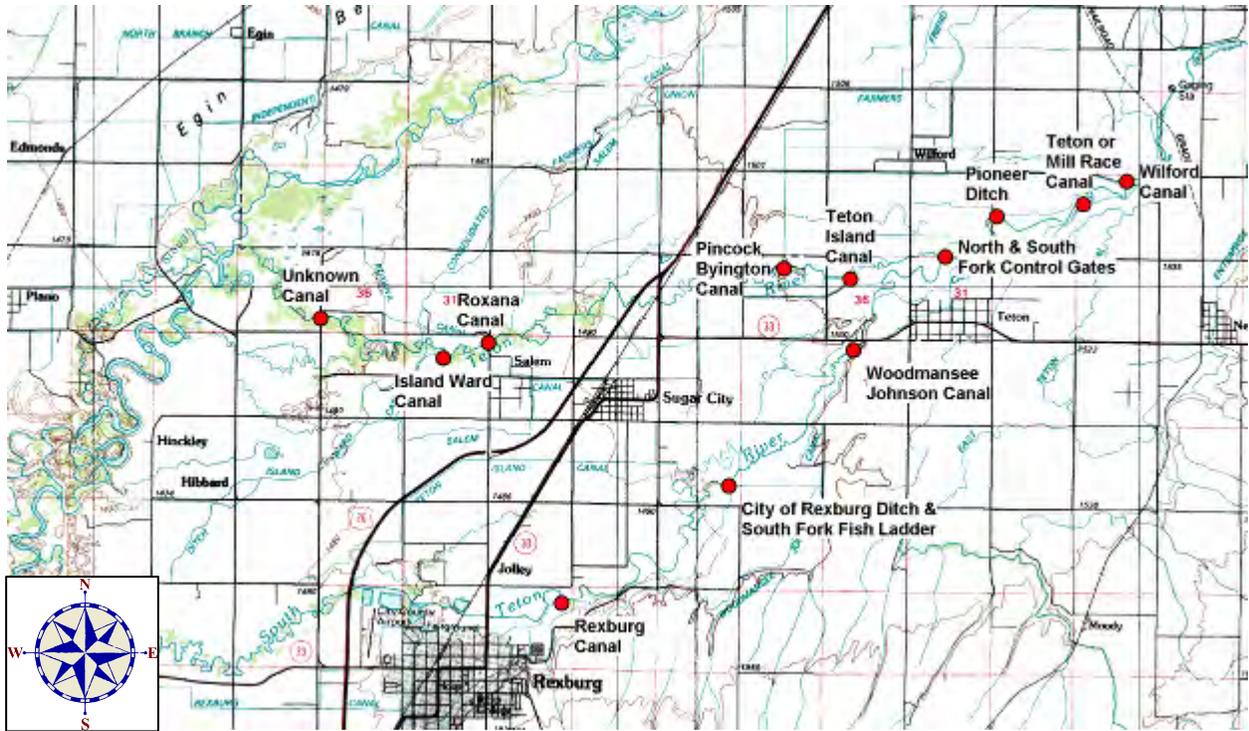


Figure 2. Location of major irrigation diversion structures (red dots) in the Lower Teton study section, Idaho.

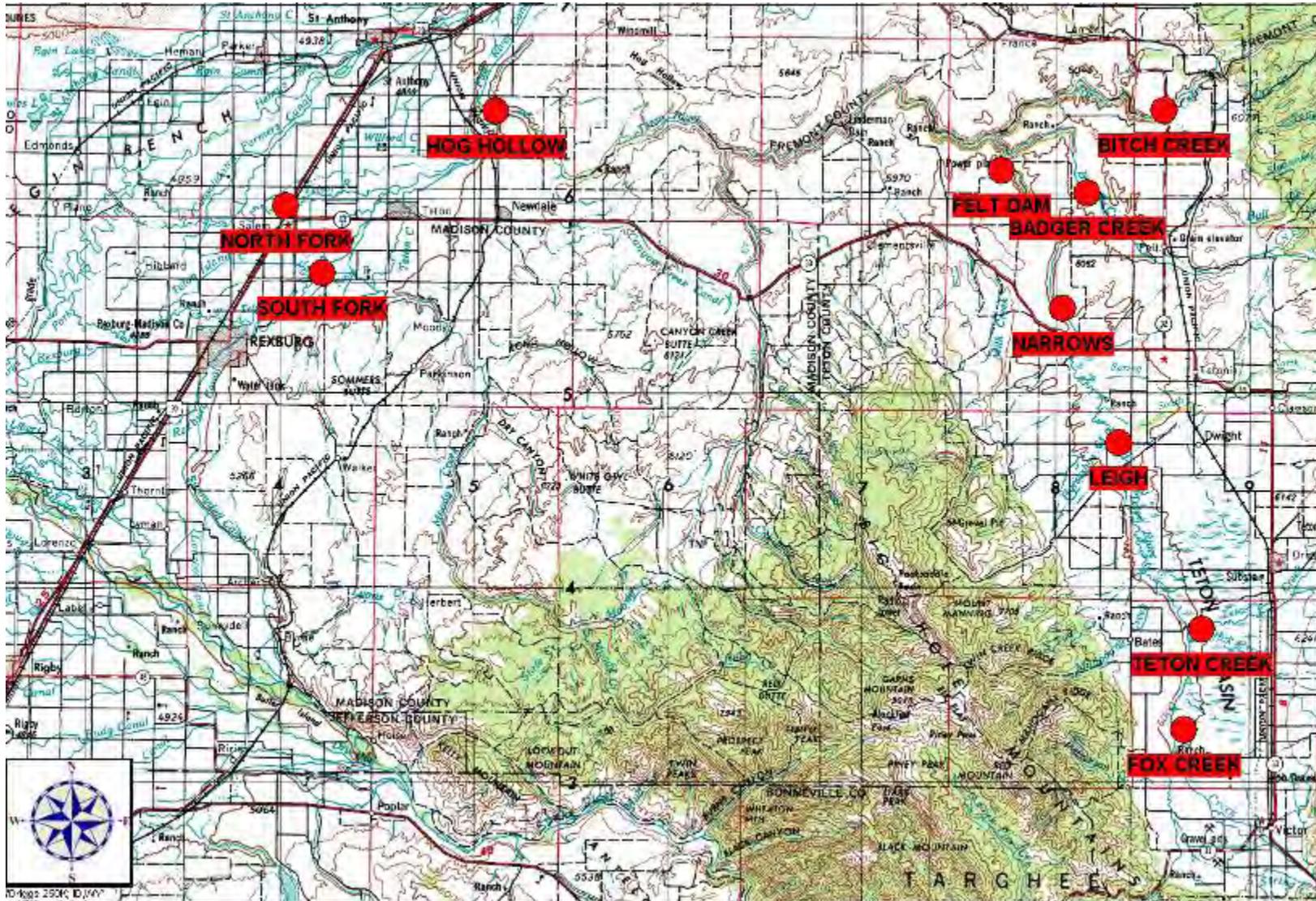


Figure 3. Location of IDFG water temperature loggers in the Teton River drainage, Idaho, 1996-2000.

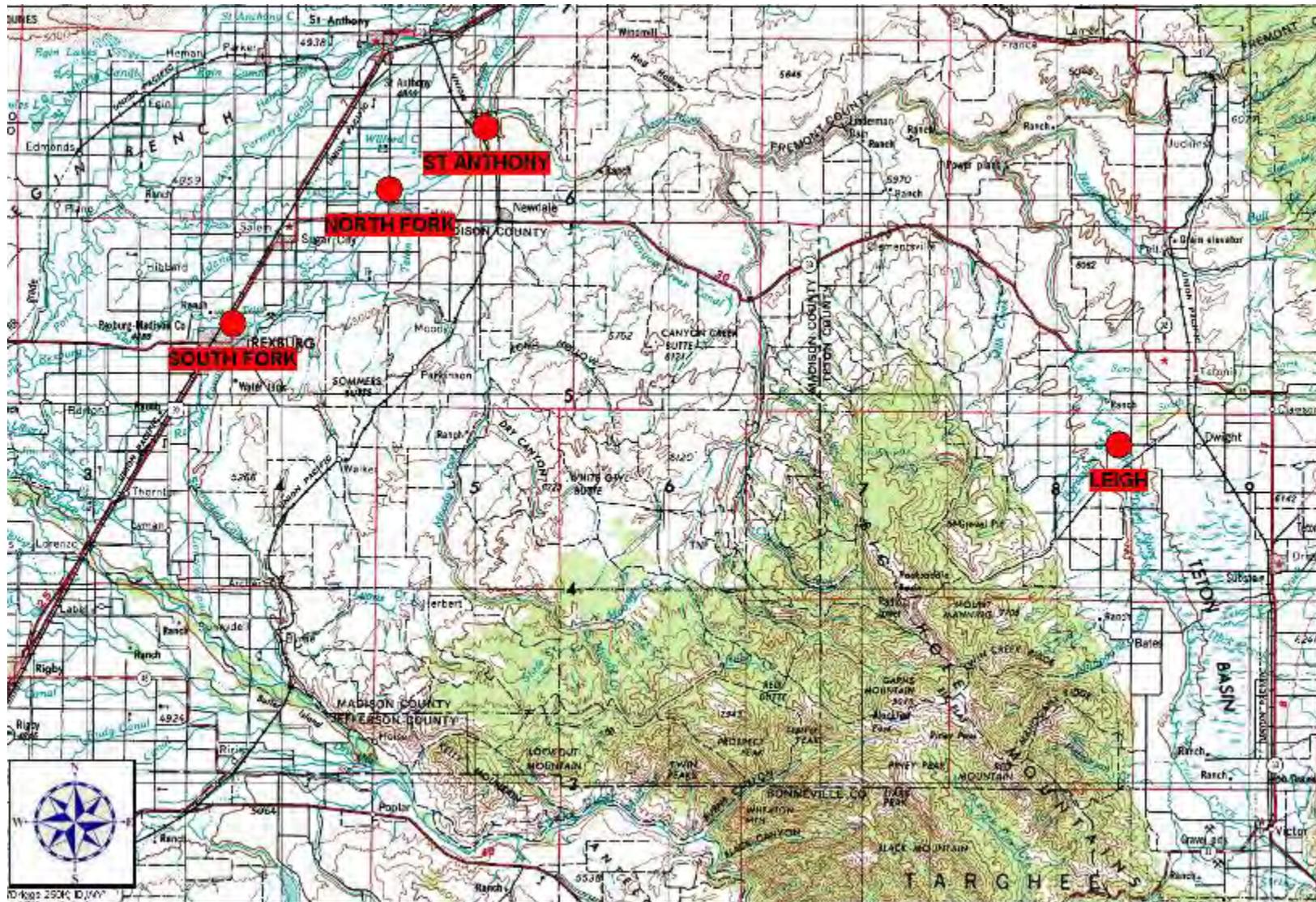


Figure 4. Location of USGS gauging stations in the Teton River drainage, Idaho, 1996-2000.

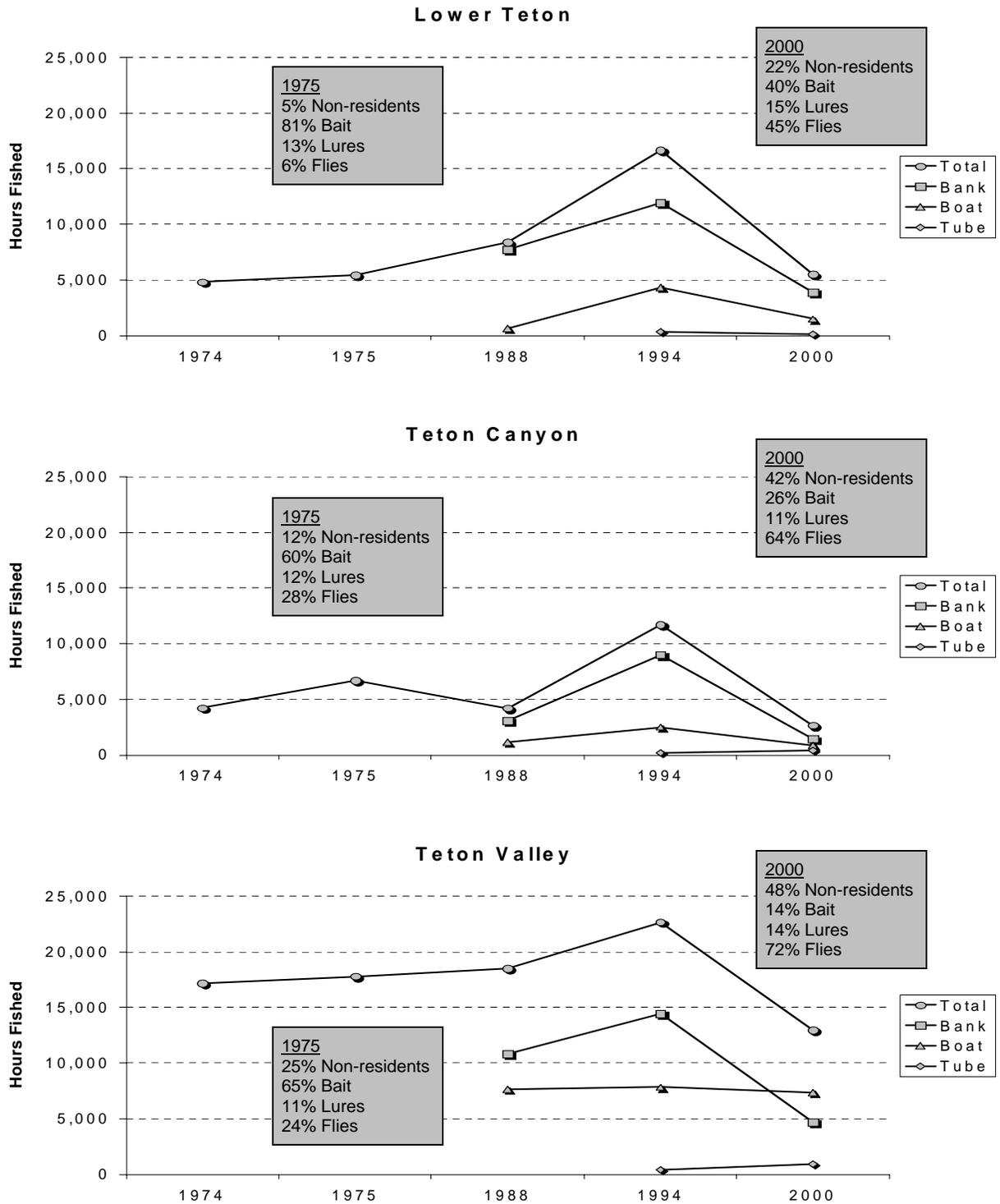


Figure 5. Estimated fishing effort by angler type in the Lower Teton, Teton Canyon, and Teton Valley study sections, Idaho, 1974-2000. Anglers were not classified in 1974 and 1975, and tube anglers were not recorded in 1988.

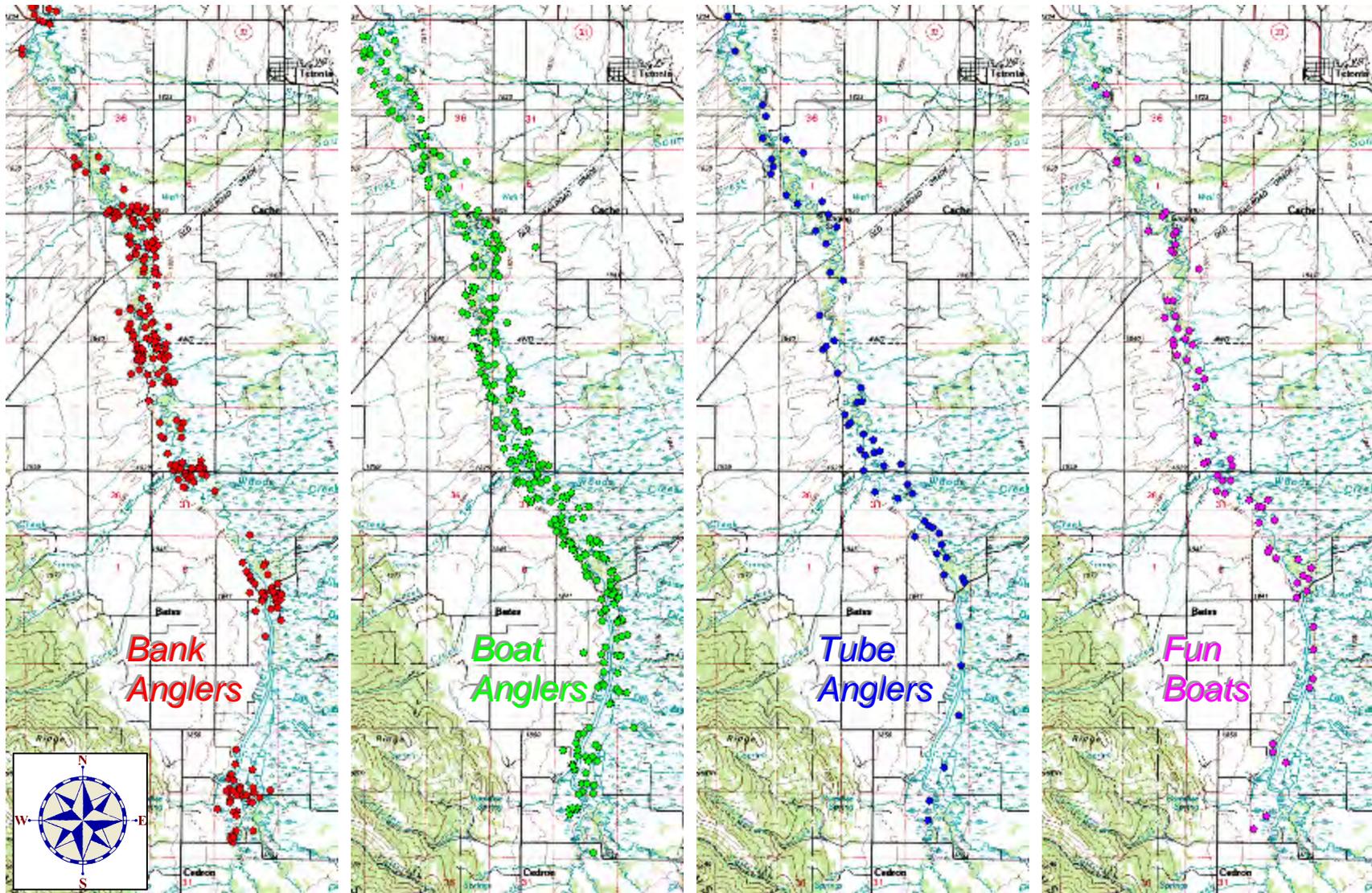


Figure 6. Location of bank (red), boat (green), and tube (blue) anglers, and fun boats (pink), counted during aerial creel surveys, Teton Valley study section, Idaho, 2000. Dots sometimes represent more than one party.

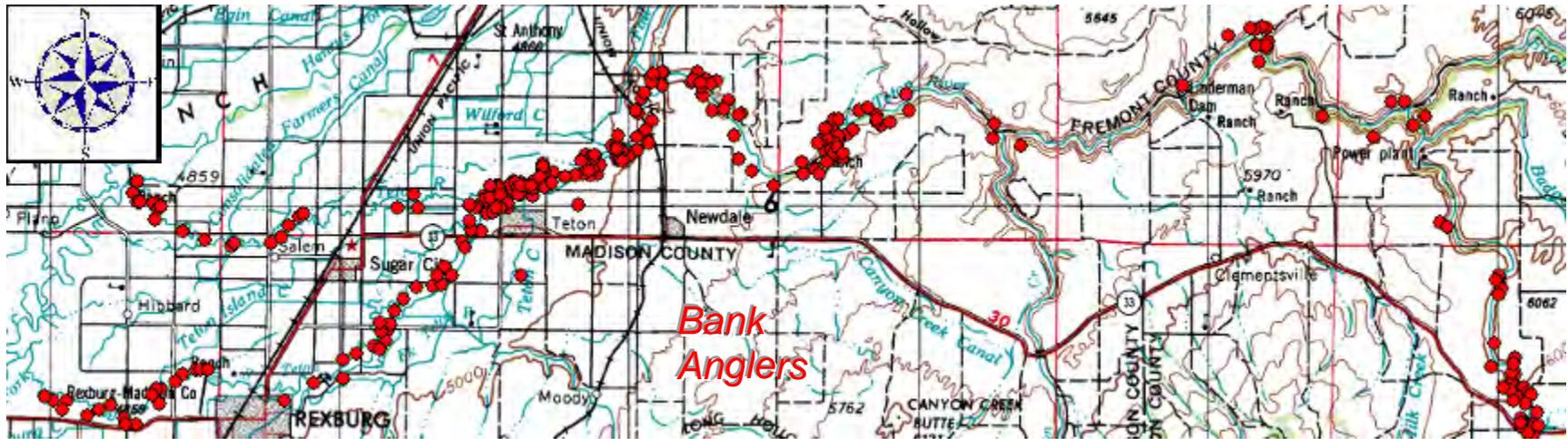


Figure 7. Location of bank (red), boat (green), and tube (blue) anglers, and fun boats (pink), counted during aerial creel surveys, Lower Teton and Teton Canyon study sections, Idaho, 2000. Dots sometimes represent more than one party.

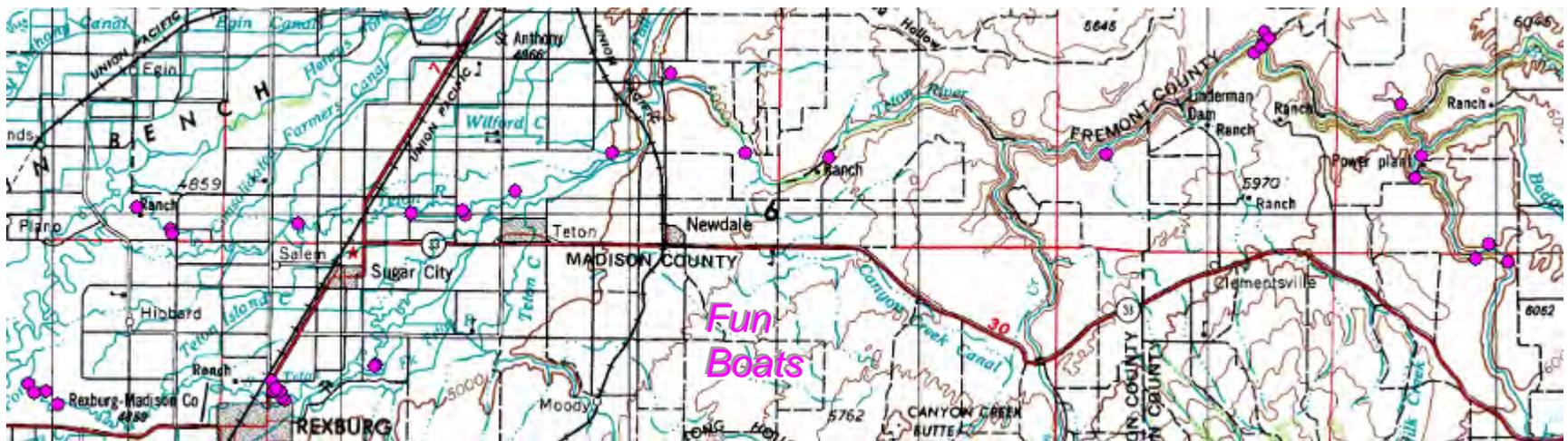
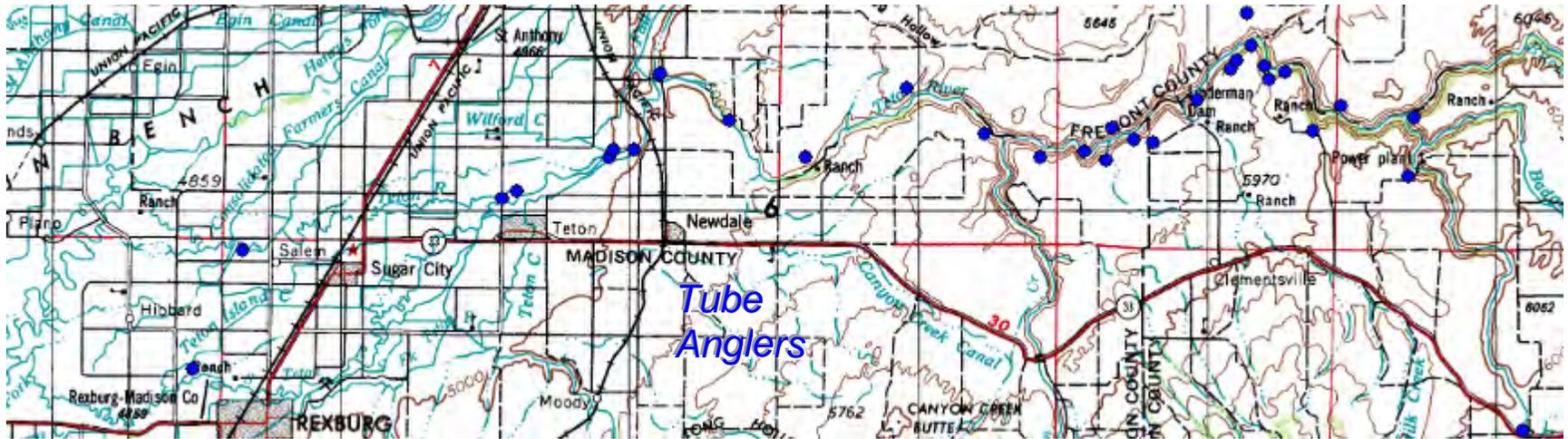


Figure 7. Continued.

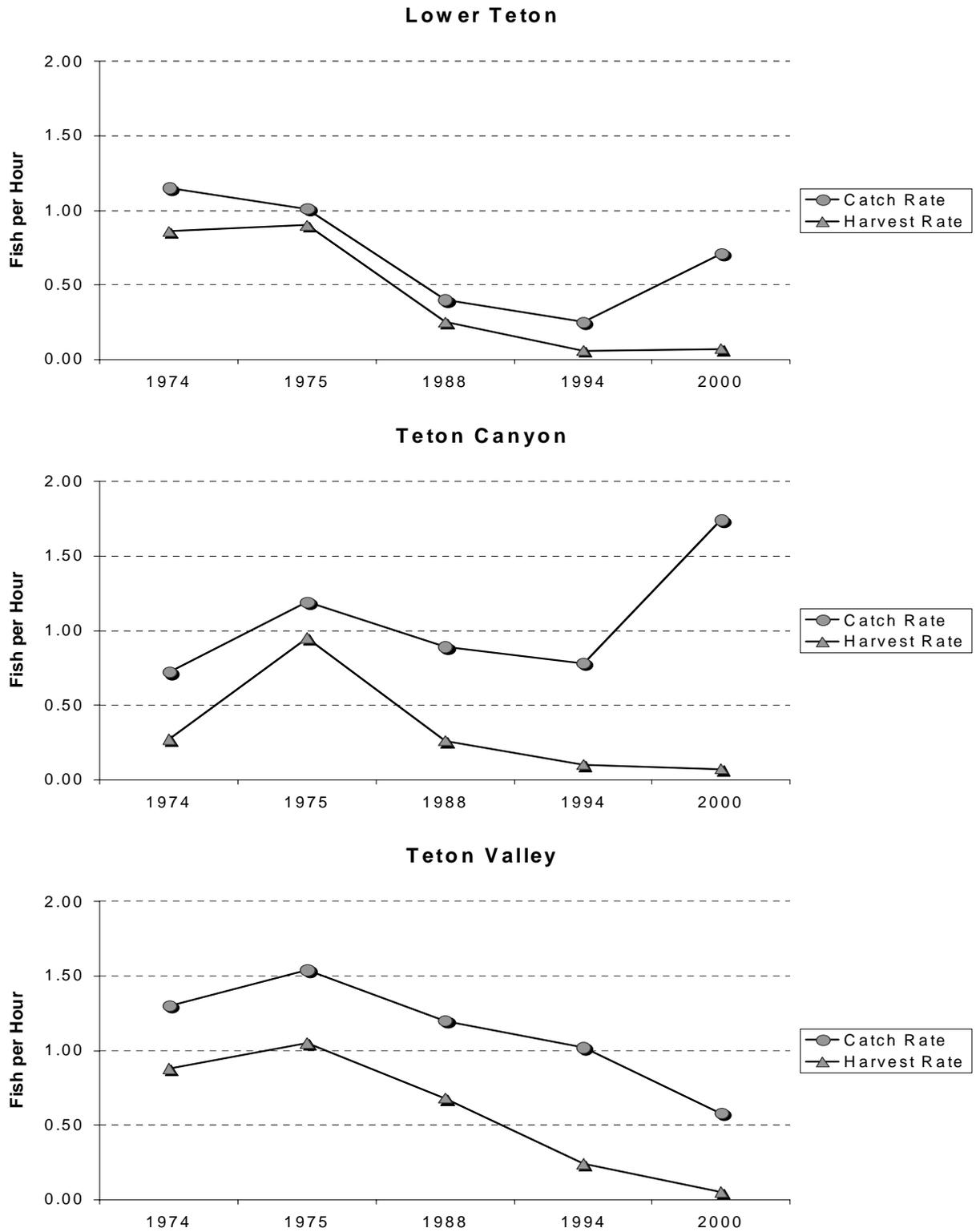


Figure 8. Estimated catch rate and harvest rate for all species combined in the Lower Teton, Teton Canyon, and Teton Valley study sections, Idaho, 1974-2000. Differences between catch rates and harvest rates are release rates.

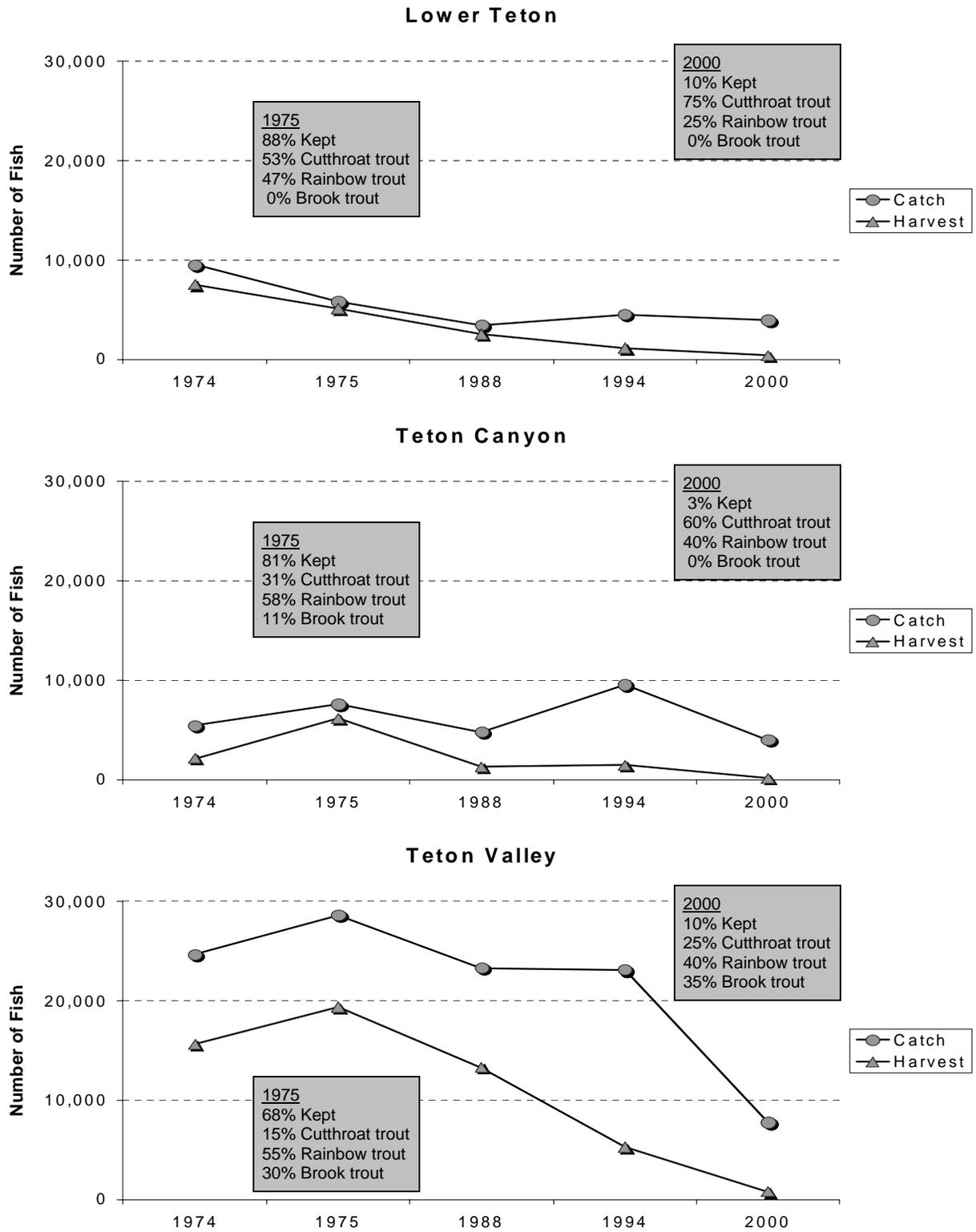


Figure 9. Estimated catch and harvest for all species combined in the Lower Teton, Teton Canyon, and Teton Valley study sections, Idaho, 1974-2000. Differences between catch and harvest are the number of fish released.

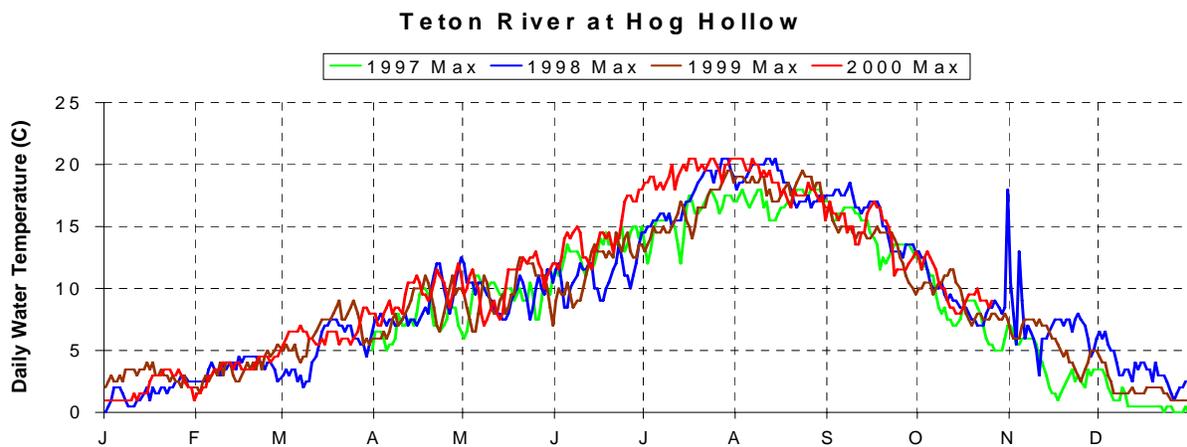
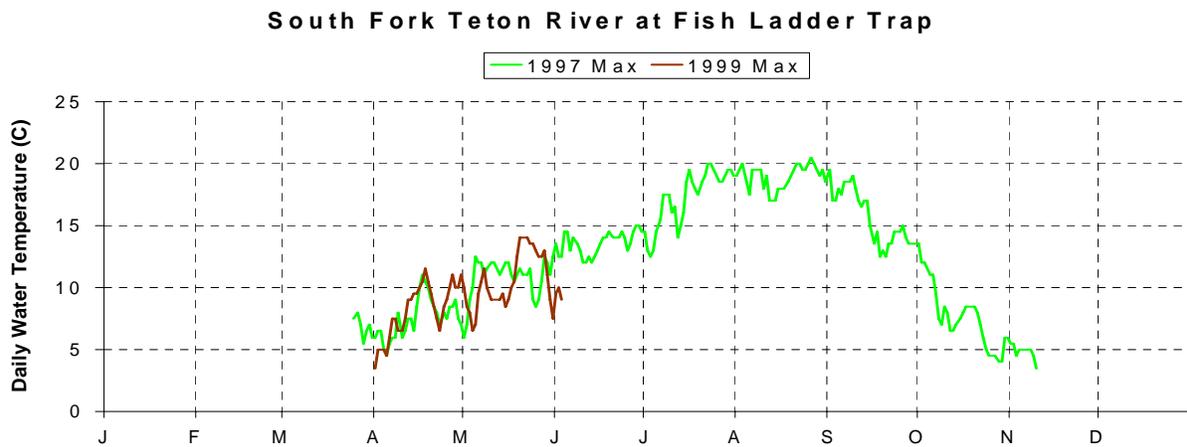
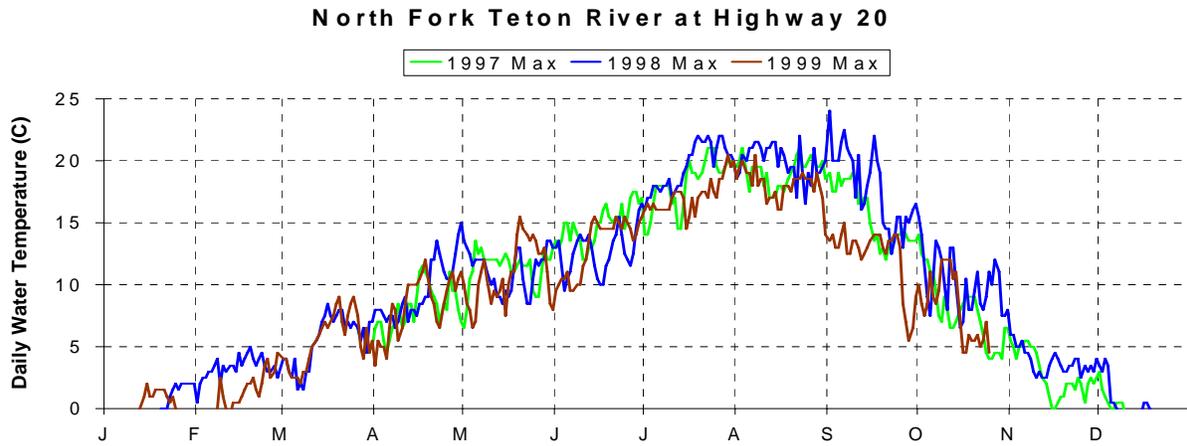


Figure 10. Maximum daily water temperatures in the Lower Teton study section, Idaho, 1997-2000.

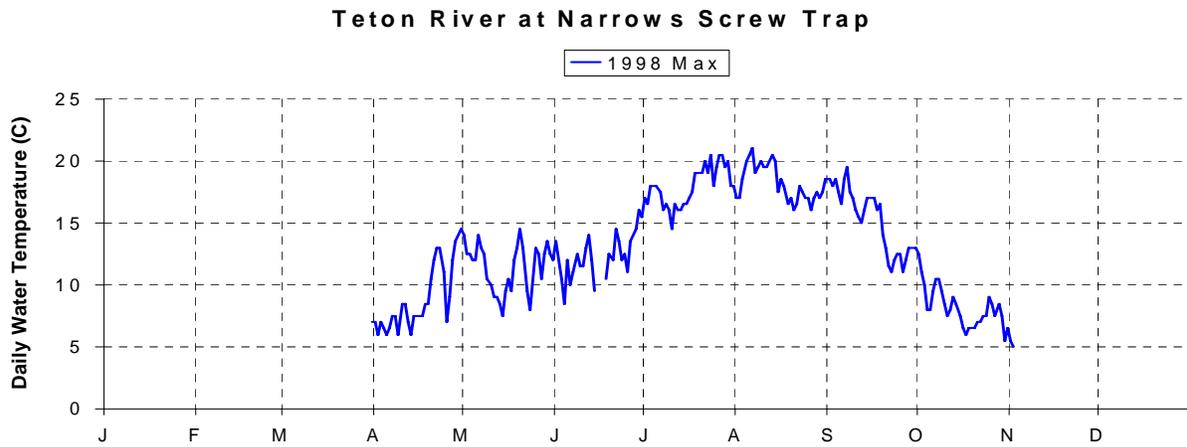
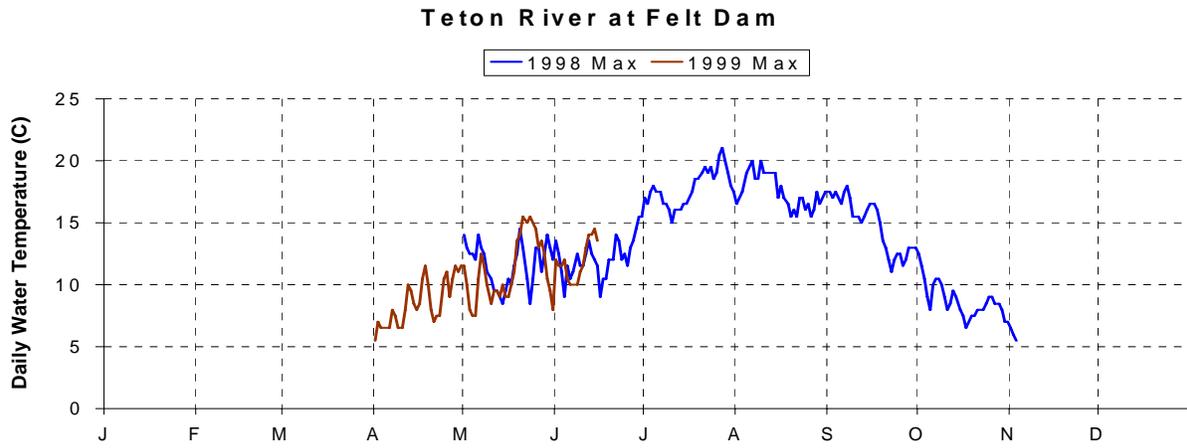


Figure 11. Maximum daily water temperatures in the Teton Canyon study section, Idaho, 1998-1999.

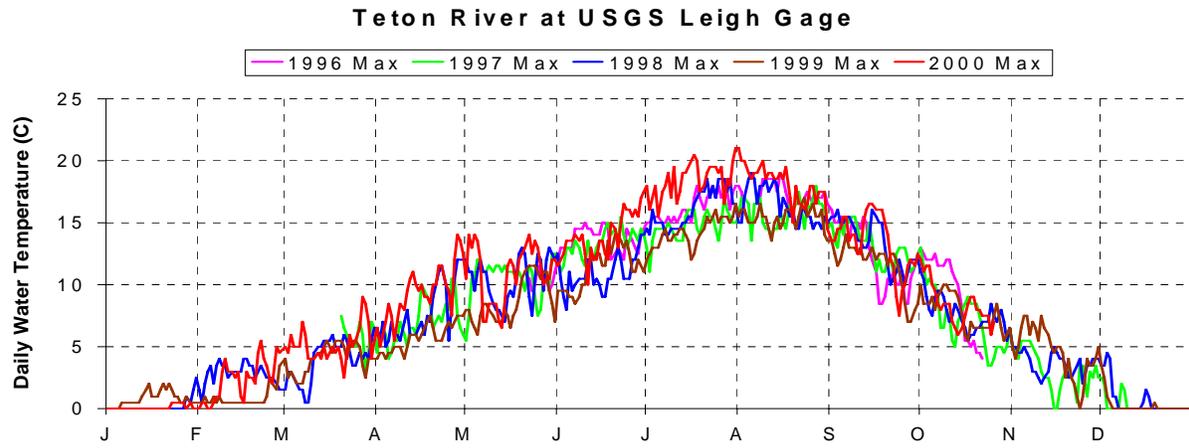


Figure 12. Maximum daily water temperatures in the Teton Valley study section, Idaho, 1996-2000.

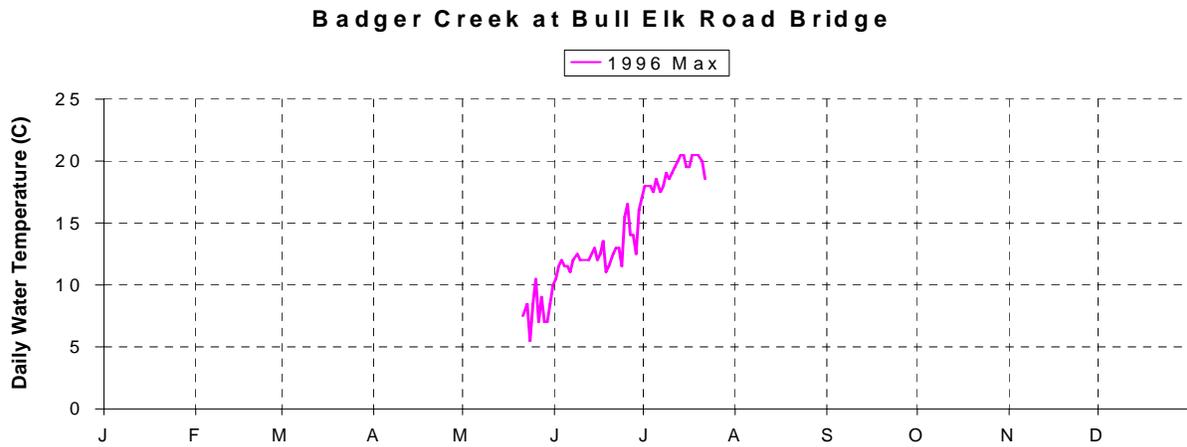
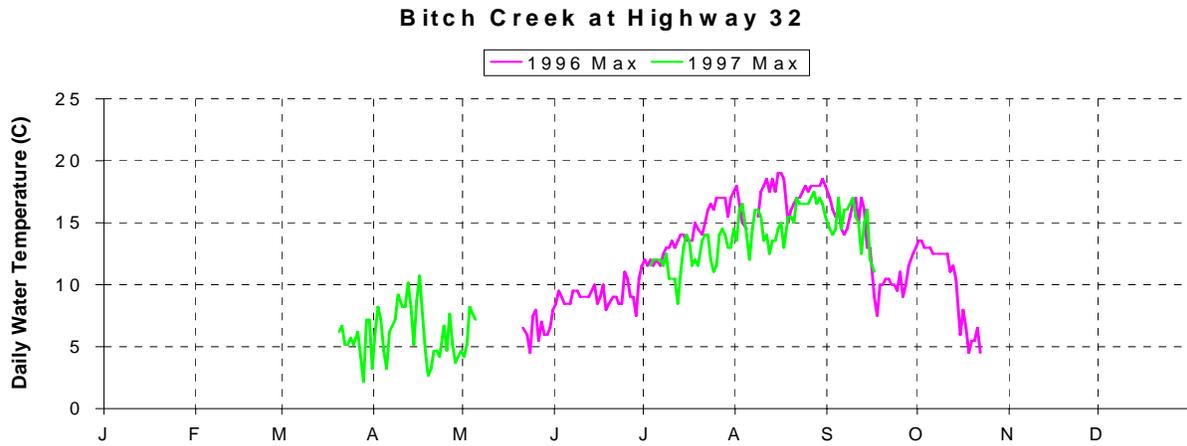


Figure 13. Maximum daily water temperatures in Bitch Creek and Badger Creek, tributaries to the Teton Canyon study section, Idaho, 1996-1997.

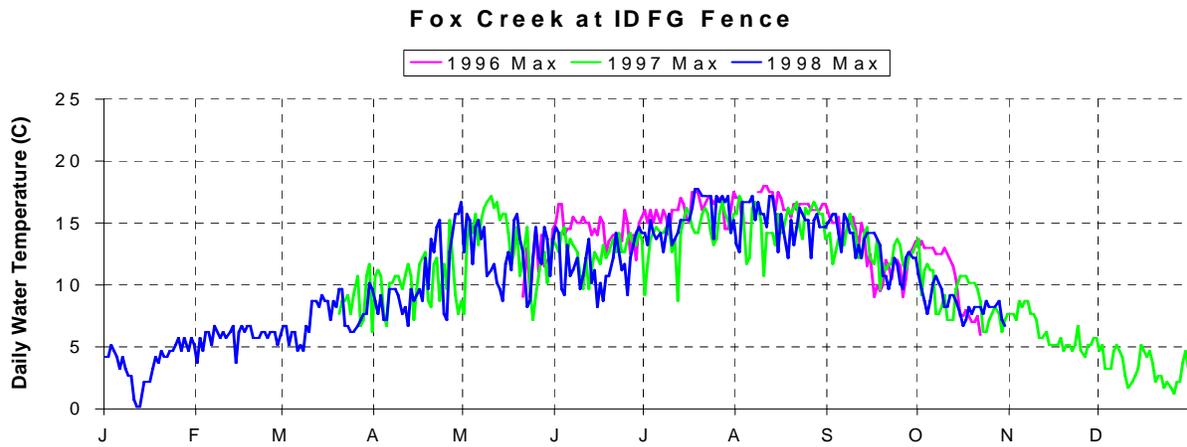
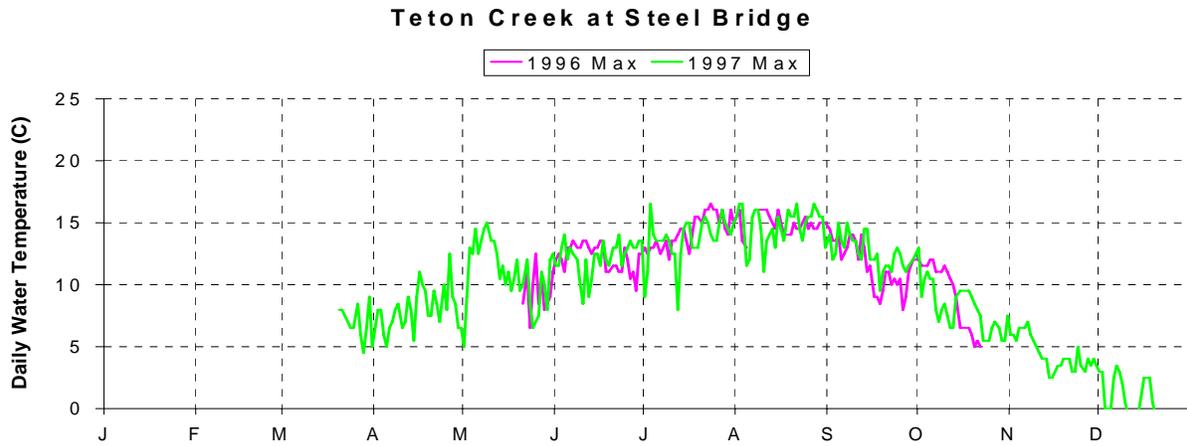


Figure 14. Maximum daily water temperatures in Teton Creek and Fox Creek, tributaries to the Teton Valley study section, Idaho, 1996-1998.

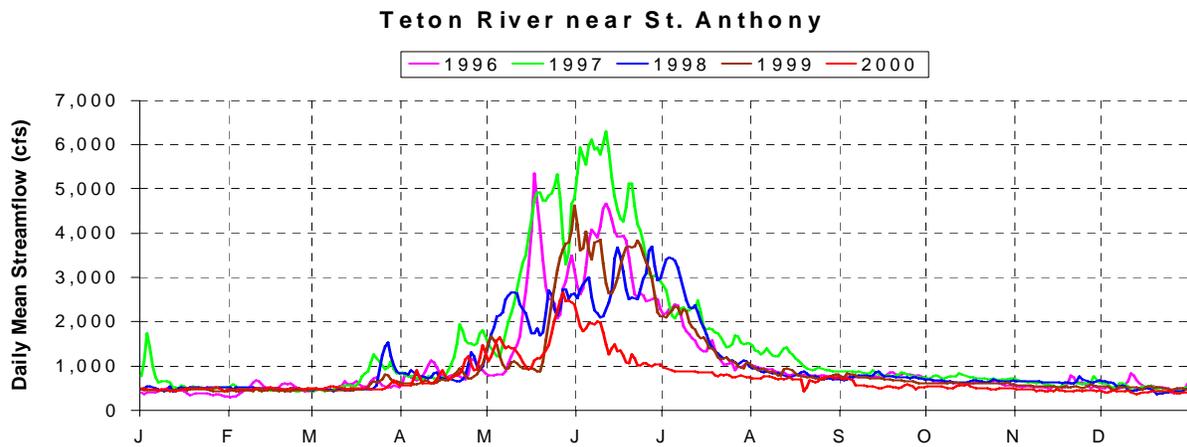
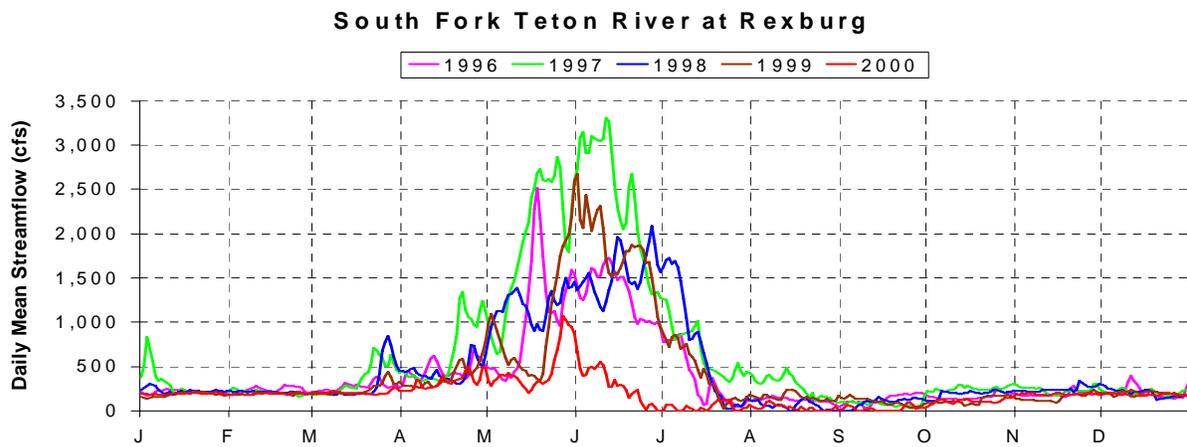
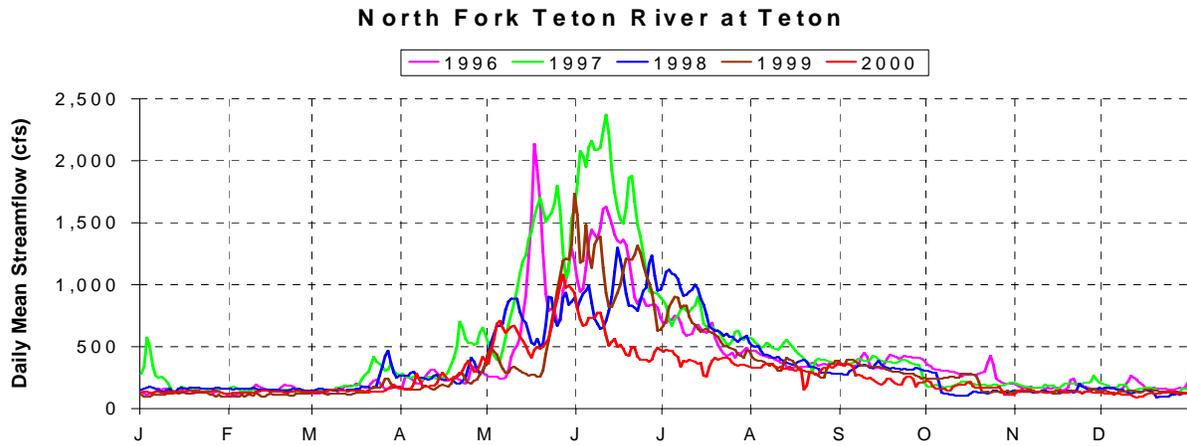


Figure 15. Daily mean discharge in the Lower Teton study section, Idaho, 1996-2000. Note different scales.

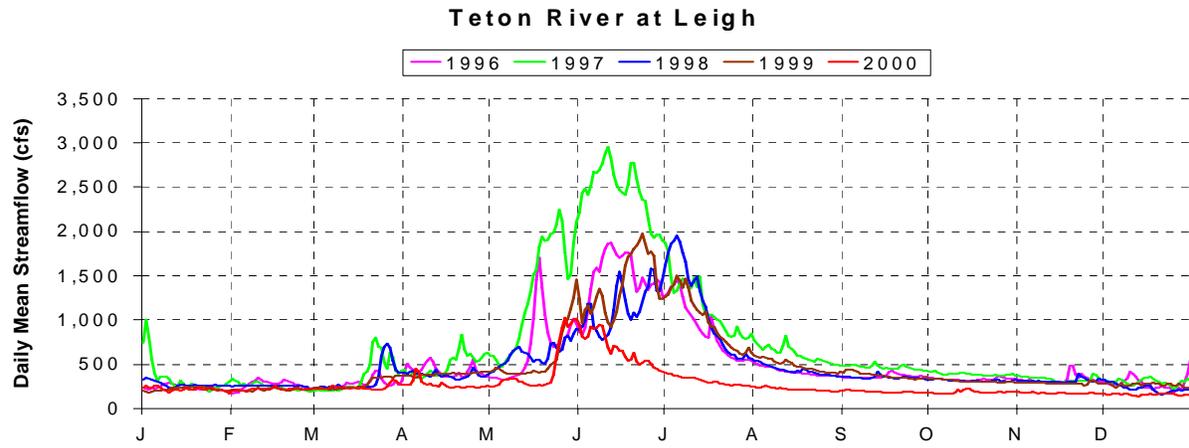


Figure 16. Daily mean discharge in the Teton Valley study section, Idaho, 1996-2000.



Figure 17. Teton River at upper borrow pit area just above Teton Dam, Idaho. Top photo taken May 12, 1972; bottom photo taken April 10, 2003. Road in upper photo built in 1971. Note the only cottonwood grove currently in Teton Canyon (in lower photo).



Figure 18. Teton River looking upstream at Spire Rock, between Linderman Dam and Canyon Creek, Idaho. Top photo taken August 26, 1972; bottom photo taken September 16, 2003. Note riffles (in top photo) replaced by pool habitat and the lack of woody riparian vegetation (in bottom photo).



Figure 19. Teton River at middle borrow pit or pond just above Teton Dam, Idaho. Top photo taken April 9, 1972; bottom photo taken April 10, 2003.

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APPENDICES

Appendix A. Summary of pre- and post-Teton Dam angler effort (h) statistics by study section, interval, day type, and angler type strata, Teton River, Idaho. Also included are 95% confidence limits and, in parentheses, percentage of total.

Creel stratum	Pre-Teton Dam		Post-Teton Dam		
	1974 ^a	1975	1988	1994	2000
Section:					
Lower Teton	4,805 ±1,050 (18%)	5,451 ±1,304 (18%)	8,358 ±1,416 (27%)	16,642 ±2,527 (33%)	5,475 ±816 (26%)
Teton Canyon	4,221 ±1,073 (16%)	6,705 ±1,227 (22%)	4,201 ±923 (14%)	11,719 ±1,798 (23%)	2,646 ±646 (13%)
Teton Valley	17,175 ±2,956 (66%)	17,798 ±3,045 (59%)	18,515 ±2,993 (60%)	22,685 ±2,766 (44%)	12,955 ±1,905 (61%)
Total:	26,201 ±3,315 (100%)	29,954 ±3,533 (99%)	31,074 ±3,437 (101%)	51,046 ±4,155 (100%)	21,076 ±2,171 (100%)
Interval: ^b					
I (Late May to Mid June)	1,084 +551 (4%)	4,229 +1,062 (14%)	5,246 ±1,302 (17%)	13,171 ±2,521 (26%)	2,689 ±741 (13%)
II (Mid June to Early July)	3,971 ±1,272 (15%)	2,191 ±685 (7%)	9,138 ±2,293 (29%)	9,956 ±1,993 (20%)	5,410 ±1,176 (26%)
III (Early July to Late July)	8,309 ±2,250 (32%)	1,955 ±767 (7%)	5,590 ±1,326 (18%)	11,197 ±1,524 (22%)	5,826 ±1,188 (28%)
IV (Late July to Mid August)	8,728 ±1,743 (33%)	10,488 ±2,227 (35%)	5,681 ±1,306 (18%)	8,641 ±1,225 (17%)	3,713 ±840 (18%)
V (Mid August to Early September)	4,109 +984 (16%)	11,091 ±2,310 (37%)	5,419 ±1,182 (17%)	8,081 ±1,765 (16%)	3,438 ±814 (16%)
Total:	26,201 ±3,315 (100%)	29,954 ±3,533 (100%)	31,074 ±3,437 (99%)	51,046 ±4,155 (101%)	21,076 ±2,171 (101%)
Day Type:					
Lower Teton Weekday	2,477 +748 (52%)	2,440 ±961 (45%)	3,909 ±1,061 (47%)	8,121 ±1,829 (49%)	3,212 ±706 (59%)
Lower Teton Weekend/Holiday	2,328 +737 (48%)	3,011 ±881 (55%)	4,449 ±937 (53%)	8,521 ±1,743 (51%)	2,263 ±409 (41%)
Lower Teton Total:	4,805 ±1,050 (100%)	5,451 ±1,304 (100%)	8,358 ±1,416 (100%)	16,642 ±2,527 (100%)	5,475 ±816 (100%)
Teton Canyon Weekday	1,871 +831 (44%)	3,054 ±833 (46%)	1,592 ±583 (38%)	6,059 ±1,488 (52%)	1,209 ±503 (46%)
Teton Canyon Weekend/Holiday	2,350 +678 (56%)	3,651 ±901 (54%)	2,609 ±715 (62%)	5,660 ±1,010 (48%)	1,437 ±405 (54%)
Teton Canyon Total:	4,221 ±1,073 (100%)	6,705 ±1,227 (100%)	4,201 ±923 (100%)	11,719 ±1,798 (100%)	2,646 ±646 (100%)

Appendix A. Continued.

Creel stratum	Pre-Teton Dam		Post-Teton Dam		
	1974 ^a	1975	1988	1994	2000
Day Type, continued.					
Teton Valley Weekday	8,740 ±2,249 (51%)	9,377 ±2,401 (53%)	9,715 ±1,972 (52%)	11,279 ±2,100 (50%)	7,356 ±1,536 (57%)
Teton Valley Weekend/Holiday	8,435 ±1,918 (49%)	8,421 ±1,873 (47%)	8,800 ±2,252 (48%)	11,406 ±1,800 (50%)	5,599 ±1,128 (43%)
Teton Valley Total:	17,175 ±2,956 (100%)	17,798 ±3,045 (100%)	18,515 ±2,993 (100%)	22,685 ±2,766 (100%)	12,955 ±1,905 (100%)
Total Weekday	13,088 ±2,512 (50%)	14,871 ±2,718 (50%)	15,216 ±2,314 (49%)	25,459 ±3,157 (50%)	11,777 ±1,763 (56%)
Total Weekend/Holiday	13,113 ±2,164 (50%)	15,083 ±2,257 (50%)	15,858 ±2,542 (51%)	25,587 ±2,702 (50%)	9,299 ±1,266 (44%)
Grand Total:	26,201 ±3,315 (100%)	29,954 ±3,533 (100%)	31,074 ±3,437 (100%)	51,046 ±4,155 (100%)	21,076 ±2,171 (100%)
Angler Type:					
Lower Teton Boat			623 ±208 (7%)	4,344 ±1,157 (26%)	1,480 ±422 (27%)
Lower Teton Bank	ND ^c	ND	7,736 ±1,400 (93%)	11,935 ±2,234 (72%)	3,865 ±692 (71%)
Lower Teton Tube	ND	ND		363 ±235 (2%)	129 ±93 (2%)
Lower Teton Total:	ND	ND	8,358 ±1,416 (100%)	16,642 ±2,527 (100%)	5,475 ±816 (100%)
Teton Canyon Boat			1,117 ±468 (27%)	2,507 ±744 (21%)	837 ±450 (32%)
Teton Canyon Bank	ND ^c	ND	3,083 ±795 (73%)	9,011 ±1,630 (77%)	1,416 ±410 (54%)
Teton Canyon Tube	ND	ND		202 ±154 (2%)	393 ±215 (15%)
Teton Canyon Total:	ND	ND	4,201 ±923 (100%)	11,719 ±1,798 (100%)	2,646 ±646 (101%)
Teton Valley Boat			7,667 ±2,394 (41%)	7,837 ±1,736 (35%)	7,347 ±1,624 (57%)
Teton Valley Bank	ND ^c	ND	10,850 ±1,797 (59%)	14,437 ±2,136 (64%)	4,697 ±931 (36%)
Teton Valley Tube	ND	ND		412 ±273 (2%)	913 ±355 (7%)
Teton Valley Total:	17,175 ±2,956	17,798 ±3,045	18,515 ±2,993 (100%)	22,685 ±2,766 (101%)	12,955 ±1,905 (100%)

Appendix A. Continued.

Creel stratum	Pre-Teton Dam		Post-Teton Dam		
	1974 ^a	1975	1988	1994	2000
Total Boat			9,407	14,688	9,664
			<u>+2,448</u>	<u>+2,215</u>	<u>+1,737</u>
	ND ^c	ND	(30%)	(29%)	(46%)
Total Bank			21,669	35,383	9,978
			<u>+2,413</u>	<u>+3,494</u>	<u>+1,231</u>
	ND	ND	(70%)	(69%)	(47%)
Total Tube				977	1,435
				<u>+392</u>	<u>+425</u>
	ND	ND	ND	(2%)	(7%)
Grand Total:			<u>31,074</u>	<u>51,046</u>	<u>21,076</u>
	26,201	29,954	<u>+3,437</u>	<u>+4,155</u>	<u>+2,171</u>
	<u>+3,315</u>	<u>+3,533</u>	(100%)	(100%)	(100%)

^a Creel survey began June 8, 1974, two weeks after opener.

^b See Table 1 for actual interval dates.

^c ND = no data collected.

Appendix B. Summary of pre- and post-Teton Dam harvest rate and catch rate (fish/h) statistics by study section and species, Teton River, Idaho.

Section and species ^a	Pre-Teton Dam		Post-Teton Dam		
	1974 ^b	1975	1988	1994	2000
Lower Teton:					
Cutthroat trout:					
Kept	0.57	0.39	0.18	0.01	0.06
Released	0.29	0.10	0.12	0.12	0.47
Caught	0.86	0.49	0.30	0.13	0.53
Wild rainbow trout:					
Kept	0.29	0.51	0.06	0.05	0.01
Released	0.00	0.01	0.02	0.07	0.16
Caught	0.29	0.52	0.08	0.12	0.17
Hatchery rainbow trout:					
Kept	ND ^c	ND	0.02	0.00	0.00 ^d
Released	ND	ND	0.00	0.00	0.00
Caught	ND	ND	0.02	0.00	0.00
Brook trout:					
Kept	0.00	0.00	0.00	0.00	0.00
Released	0.00	0.01	0.00	0.00	0.00
Caught	0.00	0.01	0.00	0.00	0.00
Overall species:					
Kept	0.86	0.90	0.25	0.06	0.07
Released	0.29	0.11	0.15	0.19	0.64
Caught	1.15	1.01	0.40	0.25	0.71
Teton Canyon:					
Cutthroat trout:					
Kept	0.08	0.31	0.16	0.01	0.03
Released	0.24	0.07	0.39	0.31	1.39
Caught	0.32	0.38	0.55	0.32	1.42
Wild rainbow trout:					
Kept	0.14	0.52	0.09	0.05	0.03
Released	0.17	0.15	0.20	0.36	0.28
Caught	0.31	0.67	0.29	0.41	0.31
Hatchery rainbow trout:					
Kept	ND ^c	ND	0.00	0.04	0.00 ^d
Released	ND	ND	0.00	0.01	0.00
Caught	ND	ND	0.00	0.05	0.00
Brook trout:					
Kept	0.04	0.11	0.00	0.00	0.00
Released	0.04	0.02	0.04	0.00	0.00
Caught	0.08	0.13	0.04	0.00	0.00
Overall species:					
Kept	0.27	0.95	0.26	0.10	0.07
Released	0.45	0.24	0.64	0.68	1.68
Caught	0.72	1.19	0.89	0.78	1.74

Appendix B. Continued.

Section and species ^a	Pre-Teton Dam		Post-Teton Dam		
	1974 ^b	1975	1988	1994	2000
Teton Valley:					
Cutthroat trout:					
Kept	0.13	0.18	0.08	0.01	0.01
Released	0.11	0.14	0.20	0.29	0.28
Caught	0.24	0.32	0.28	0.30	0.29
Wild rainbow trout:					
Kept	0.34	0.53	0.20	0.05	0.02
Released	0.11	0.15	0.14	0.26	0.14
Caught	0.45	0.68	0.34	0.31	0.16
Hatchery rainbow trout:					
Kept	ND ^c	ND	0.23	0.14	0.00 ^d
Released	ND	ND	0.04	0.15	0.00
Caught	ND	ND	0.27	0.29	0.00
Brook trout:					
Kept	0.41	0.34	0.17	0.04	0.02
Released	0.20	0.19	0.15	0.09	0.11
Caught	0.61	0.53	0.32	0.13	0.13
Overall species:					
Kept	0.88	1.05	0.68	0.24	0.05
Released	0.42	0.48	0.52	0.78	0.53
Caught	1.30	1.54	1.20	1.02	0.58
All Sections Combined (Average):					
Cutthroat trout:					
Kept	0.26	0.29	0.14	0.01	0.04
Released	0.22	0.10	0.24	0.24	0.71
Caught	0.48	0.39	0.38	0.25	0.75
Wild rainbow trout:					
Kept	0.26	0.52	0.12	0.05	0.02
Released	0.09	0.10	0.12	0.23	0.19
Caught	0.35	0.62	0.24	0.28	0.21
Hatchery rainbow trout:					
Kept	ND ^c	ND	0.08	0.06	0.00 ^d
Released	ND	ND	0.01	0.05	0.00
Caught	ND	ND	0.09	0.11	0.00
Brook trout:					
Kept	0.15	0.15	0.06	0.01	0.01
Released	0.08	0.07	0.06	0.03	0.04
Caught	0.23	0.22	0.12	0.04	0.05
Overall species:					
Kept	0.67	0.97	0.40	0.13	0.06
Released	0.39	0.28	0.43	0.55	0.95
Caught	1.06	1.24	0.83	0.68	1.01

^a Does not include brown trout, mountain whitefish, or suckers.

^b Creel survey began June 8, 1974, two weeks after opener.

^c ND = no data collected; hatchery rainbow not distinguished from wild rainbow trout.

^d Stocking discontinued after 1994.

Appendix C. Summary of pre- and post-Teton Dam harvest and catch statistics by study section and species, Teton River, Idaho. Also included are 95% confidence limits and, in parentheses, percentage of total.

Section and species ^a	Pre-Teton Dam			Post-Teton Dam	
	1974 ^b	1975	1988	1994	2000
Lower Teton:					
Cutthroat trout harvest	5,578 ±2,820 (74%)	2,701 ±1,357 (53%)	1,788 ±1,003 (70%)	165 ±229 (15%)	293 ±391 (75%)
Wild rainbow trout harvest	1,933 ±1,116 (26%)	2,414 ±3,176 (47%)	558 ±477 (22%)	941 ±631 (83%)	97 ±170 (25%)
Hatchery rainbow trout harvest	ND ^c	ND	204 ±314 (8%)	23 ±58 (2%)	0 ^d ±0 (0%)
Brook trout harvest	16 ±22 (<1%)	0 ±0 (0%)	0 ±0 (0%)	0 ±0 (0%)	0 ±0 (0%)
Overall species:					
Total harvest	7,528 ±3,036 (100%)	5,114 ±3,672 (100%)	2,548 ±1,519 (100%)	1,129 ±670 (100%)	390 ±429 (100%)
Total released	1,991 ±1,116	710 ±365	891 ±546	3,417 ±674	3,560 ±693
Total caught	9,519 ±3,602	5,821 ±4,845	3,438 ±2,406	4,538 ±1,702	3,948 ±1,498
Teton Canyon:					
Cutthroat trout harvest	538 ±366 (25%)	1,930 ±559 (31%)	762 ±375 (60%)	105 ±120 (7%)	76 ±78 (60%)
Wild rainbow trout harvest	1,152 ±779 (54%)	3,548 ±1,015 (58%)	454 ±247 (36%)	881 ±400 (61%)	51 ±63 (40%)
Hatchery rainbow trout harvest	ND ^c	ND	36 ±90 (3%)	445 ±417 (31%)	0 ^d ±0 (0%)
Brook trout harvest	441 ±864 (21%)	675 ±586 (11%)	11 ±24 (1%)	0 ±0 (0%)	0 ±0 (0%)
Overall species:					
Total harvest	2,131 ±1,795 (100%)	6,158 ±1,625 (100%)	1,264 ±519 (100%)	1,434 ±633 (99%)	127 ±115 (100%)
Total released	3,317 ±1,248	1,434 ±330	3,529 ±1,116	8,109 ±1,733	3,878 ±1,130
Total caught	5,447 ±2,863	7,593 ±1,896	4,792 ±1,642	9,544 ±2,830	4,005 ±1,641
Teton Valley:					
Cutthroat trout harvest	2,661 ±736 (17%)	2,885 ±822 (15%)	1,720 ±685 (13%)	195 ±126 (4%)	202 ±157 (26%)
Wild rainbow trout harvest	6,138 ±1,414 (39%)	10,686 ±2,855 (55%)	4,385 ±1,544 (33%)	1,140 ±498 (22%)	319 ±228 (40%)
Hatchery rainbow trout harvest	ND ^c	ND	4,782 ±1,681 (36%)	3,042 ±1,102 (58%)	0 ^d ±0 (0%)
Brook trout harvest	6,840 ±1,557 (44%)	5,814 ±1,315 (30%)	2,422 ±955 (18%)	904 ±419 (17%)	274 ±191 (35%)
Overall species:					

Appendix C. Continued.

Section and species ^a	Pre-Teton Dam			Post-Teton Dam	
	1974 ^b	1975	1988	1994	2000
Teton Valley, continued.					
Total harvest	15,636 ±3,127 (100%)	19,372 ±4,272 (100%)	13,307 ±3,168 (100%)	5,274 ±1,522 (101%)	792 +416 (101%)
Total released	9,041 ±1,848	9,255 ±1,805	9,999 ±1,966	17,841 ±2,100	6,977 ±1,046
Total caught	24,678 ±5,118	28,634 ±6,162	23,302 ±5,200	23,117 ±4,380	7,769 ±1,945
All Sections Combined:					
Cutthroat trout harvest	8,777 ±2,937 (35%)	7,516 ±1,682 (25%)	4,270 ±1,271 (25%)	465 ±288 (6%)	571 ±429 (44%)
Wild rainbow trout harvest	9,223 ±1,962 (36%)	16,648 ±4,389 (54%)	5,397 ±1,635 (32%)	2,962 ±898 (38%)	467 ±291 (36%)
Hatchery rainbow trout harvest	ND ^c	ND	5,022 ±1,712 (29%)	3,510 ±1,180 (45%)	0 ^d ±0 (0%)
Brook trout harvest	7,297 ±1,780 (29%)	6,489 ±1,440 (21%)	2,433 ±955 (14%)	904 ±419 (12%)	274 ±191 (21%)
Overall species:					
Grand total harvest	25,295 ±4,714 (100%)	30,644 ±5,863 (100%)	17,119 ±3,551 (100%)	7,837 ±1,779 (101%)	1,309 ±608 (101%)
Grand total released	14,349 ±2,493	11,399 ±1,871	14,419 ±2,325	29,367 ±2,805	14,415 ±1,689
Grand total caught	39,644 ±6,882	42,048 ±8,065	31,532 ±5,960	37,199 ±5,485	15,722 ±2,953

^a Does not include brown trout, mountain whitefish, or suckers.

^b Creel survey began June 8, 1974, two weeks after opener.

^c ND = no data collected; hatchery rainbow not distinguished from wild rainbow trout.

^d Stocking discontinued after 1994.

Appendix D. Water temperature records for the North Fork Teton River at the Highway 20 Bridge near St. Anthony, Idaho, 1997.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	6.5	2.5	4.3	6.5	5.0	5.5	13.5	10.5	11.8
2	—	—	—	—	—	—	—	—	—	7.0	3.0	5.0	8.0	4.5	6.1	13.0	10.0	11.4
3	—	—	—	—	—	—	—	—	—	7.0	3.5	5.2	10.5	4.5	7.4	13.5	10.0	11.6
4	—	—	—	—	—	—	—	—	—	5.5	4.0	4.6	11.0	6.5	8.6	15.0	11.0	12.7
5	—	—	—	—	—	—	—	—	—	4.5	2.0	2.8	13.5	7.5	10.4	15.0	12.0	13.2
6	—	—	—	—	—	—	—	—	—	5.5	1.5	3.4	12.5	9.0	10.6	13.5	11.0	12.3
7	—	—	—	—	—	—	—	—	—	6.5	2.5	4.3	13.0	9.0	10.6	15.0	10.5	12.6
8	—	—	—	—	—	—	—	—	—	7.0	3.0	4.9	12.0	8.0	9.8	14.0	11.5	12.7
9	—	—	—	—	—	—	—	—	—	8.5	4.0	6.2	12.0	7.5	9.6	13.5	11.5	12.3
10	—	—	—	—	—	—	—	—	—	6.5	3.0	4.7	12.0	8.0	10.1	12.0	11.0	11.5
11	—	—	—	—	—	—	—	—	—	7.0	3.0	5.0	12.0	8.5	10.1	12.0	10.5	11.1
12	—	—	—	—	—	—	—	—	—	8.5	3.0	5.8	12.0	8.0	9.7	13.0	10.5	11.7
13	—	—	—	—	—	—	—	—	—	8.5	4.0	6.1	11.5	8.0	9.5	13.0	10.5	11.6
14	—	—	—	—	—	—	—	—	—	7.0	5.0	6.1	12.0	8.0	9.7	13.5	10.5	11.9
15	—	—	—	—	—	—	—	—	—	9.0	5.0	7.0	12.5	8.5	10.2	15.0	11.0	12.7
16	—	—	—	—	—	—	—	—	—	11.0	5.5	8.3	12.0	9.0	10.3	15.0	12.0	13.4
17	—	—	—	—	—	—	—	—	—	11.5	7.5	9.5	11.0	8.5	9.9	16.0	12.0	13.7
18	—	—	—	—	—	—	—	—	—	11.0	7.5	9.5	11.0	8.0	9.4	16.5	12.5	14.2
19	—	—	—	—	—	—	—	—	—	10.5	8.5	9.4	11.5	8.0	9.5	15.5	12.5	13.9
20	—	—	—	—	—	—	—	—	—	9.5	7.5	8.6	12.0	8.0	9.8	15.0	12.0	13.4
21	—	—	—	—	—	—	—	—	—	9.0	6.0	7.2	11.5	8.5	9.6	15.5	11.5	13.4
22	—	—	—	—	—	—	—	—	—	8.5	5.5	6.7	11.5	7.5	9.5	15.0	12.0	13.4
23	—	—	—	—	—	—	—	—	—	7.0	6.0	6.2	12.0	8.5	10.0	16.5	12.5	14.0
24	—	—	—	—	—	—	—	—	—	8.5	5.5	7.0	9.5	7.5	8.8	14.5	11.5	12.9
25	—	—	—	—	—	—	—	—	—	8.0	6.5	7.1	9.0	7.0	7.6	15.5	10.5	12.9
26	—	—	—	—	—	—	—	—	—	11.0	6.5	8.5	9.0	6.5	7.7	17.0	11.5	14.1
27	—	—	—	—	—	—	—	—	—	9.5	7.5	8.4	11.0	7.0	9.1	17.5	13.0	15.0
28	—	—	—	—	—	—	—	—	—	9.5	7.5	8.3	13.0	9.0	10.7	17.5	13.5	15.0
29	—	—	—	—	—	—	—	—	—	8.0	6.5	7.2	12.0	10.0	10.8	16.5	12.5	14.4
30	—	—	—	—	—	—	—	—	—	7.0	5.5	6.3	12.0	9.0	10.3	17.0	12.5	14.6
31	—	—	—	—	—	—	5.0	3.0	3.8	—	—	—	13.0	9.5	11.0	—	—	—
Month	—	—	—	—	—	—	5.0	3.0	3.8	11.5	1.5	6.5	13.5	4.5	9.4	17.5	10.0	13.0

Appendix D. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	14.0	12.0	12.9	19.5	15.5	17.5	19.0	15.0	16.8	14.0	10.5	12.2	5.5	3.5	4.6	3.0	2.0	2.2
2	14.0	11.0	12.3	20.0	15.5	17.9	17.5	15.0	16.0	12.5	10.5	11.5	5.0	2.5	4.0	1.5	1.0	1.3
3	15.0	10.0	12.6	21.0	16.0	18.5	17.5	14.5	15.8	12.0	9.0	10.5	4.0	3.0	3.6	1.0	0.0	0.5
4	16.5	11.5	14.1	19.0	17.0	17.8	19.0	14.5	16.4	12.0	9.0	10.4	5.0	2.0	3.5	0.5	-0.5	0.0
5	18.0	13.0	15.4	17.5	16.5	16.8	18.0	14.5	16.2	11.0	8.0	9.4	5.0	2.5	3.7	0.0	-0.5	-0.3
6	18.0	14.0	15.8	19.5	15.5	17.4	18.5	14.5	16.4	11.0	7.5	9.1	5.5	2.5	4.1	0.0	-0.5	-0.3
7	18.0	13.5	15.8	19.5	15.5	17.6	18.5	14.5	16.4	9.5	7.5	8.3	5.5	3.0	4.3	0.5	0.0	0.2
8	18.0	13.5	15.9	19.5	16.5	18.0	18.5	14.5	16.4	7.5	6.0	6.8	5.0	3.0	4.2	0.5	0.0	0.1
9	18.0	14.0	16.0	19.5	15.5	17.6	19.0	15.0	16.8	7.0	6.0	6.4	5.0	2.5	3.7	0.5	-0.5	-0.2
10	16.5	14.5	15.4	18.0	16.0	16.8	18.5	15.5	16.8	9.0	6.5	7.5	4.5	2.0	2.8	-0.5	-0.5	-0.5
11	17.0	13.5	14.9	19.0	14.5	16.6	16.5	14.5	15.5	8.0	5.5	6.6	3.5	2.0	2.6	-0.5	-0.5	-0.5
12	14.5	12.0	13.0	17.0	14.5	16.0	16.5	13.5	14.8	6.5	4.5	5.3	2.5	0.5	1.6	-0.5	-0.5	-0.5
13	14.5	11.0	12.8	17.0	14.0	15.7	17.0	13.5	15.0	6.5	4.0	5.2	2.0	0.5	1.4	-0.5	-0.5	-0.5
14	16.5	11.0	13.6	17.0	14.5	15.6	17.0	13.5	15.3	7.0	4.0	5.7	1.0	-0.5	0.3	-0.5	-0.5	-0.5
15	19.0	13.5	16.2	18.0	14.5	16.0	15.0	12.0	13.9	8.0	4.5	6.1	0.0	-0.5	-0.4	-0.5	-0.5	-0.5
16	20.0	15.5	17.7	18.0	14.0	16.2	13.5	10.5	11.9	8.5	5.0	6.9	0.0	-0.5	-0.4	-0.5	-0.5	-0.5
17	19.0	16.5	17.7	17.5	14.5	16.2	14.0	10.5	12.4	9.0	5.5	7.3	0.5	0.0	0.3	-0.5	-0.5	-0.5
18	19.0	16.0	17.1	18.5	15.0	16.7	12.5	10.5	11.3	9.0	6.0	7.5	1.0	0.0	0.4	-0.5	-0.5	-0.5
19	18.5	14.5	16.3	19.0	14.5	16.8	13.0	9.5	11.2	9.0	6.0	7.6	1.0	0.5	0.7	-0.5	-0.5	-0.5
20	19.0	14.5	16.9	19.5	15.0	17.3	12.0	10.5	11.4	9.0	6.0	7.5	2.0	1.0	1.4	-0.5	-0.5	-0.5
21	20.0	15.0	17.5	20.5	16.0	18.1	13.0	11.5	12.1	8.0	5.0	6.7	2.0	1.0	1.5	-0.5	-0.5	-0.5
22	21.0	15.5	18.3	21.0	15.5	18.4	13.0	10.5	11.9	7.0	5.0	6.2	2.0	1.0	1.5	-0.5	-0.5	-0.5
23	21.0	16.5	18.9	19.5	16.0	17.7	14.0	11.0	12.4	6.0	3.0	5.1	1.5	1.0	1.3	-0.5	-0.5	-0.5
24	21.0	17.0	18.7	19.5	16.5	17.9	14.0	11.0	12.5	4.5	3.0	3.5	2.5	1.0	1.6	-0.5	-0.5	-0.5
25	19.5	16.5	17.7	20.0	15.5	17.7	14.0	11.5	12.8	4.0	1.0	2.5	2.0	1.0	1.7	-0.5	-0.5	-0.5
26	19.0	15.0	16.8	20.5	16.5	18.4	14.5	12.5	13.3	4.0	1.5	2.7	0.5	0.0	0.4	-0.5	-0.5	-0.5
27	19.0	15.0	16.9	20.0	16.5	18.3	14.0	12.0	12.7	4.5	2.0	3.3	2.0	1.0	1.6	-0.5	-0.5	-0.5
28	19.5	16.0	17.7	19.5	15.5	17.8	13.5	10.5	11.9	4.5	2.5	3.5	2.5	2.0	2.3	-0.5	-0.5	-0.5
29	20.0	17.0	18.3	19.5	16.0	17.6	13.5	10.5	11.8	4.0	3.5	3.8	2.0	1.0	1.5	-0.5	-0.5	-0.5
30	20.0	16.5	18.1	20.0	15.0	17.3	13.5	10.0	11.8	6.5	4.0	5.0	2.5	1.0	1.7	-0.5	-0.5	-0.5
31	19.5	16.0	17.6	18.5	15.5	17.0	—	—	—	6.5	5.0	5.6	—	—	—	-0.5	-0.5	-0.5
Month	21.0	10.0	16.1	21.0	14.0	17.3	19.0	9.5	14.0	14.0	1.0	6.6	5.5	-0.5	2.0	3.0	-0.5	-0.2

Appendix E. Water temperature records for the North Fork Teton River at the Highway 20 Bridge near St. Anthony, Idaho, 1998.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	-0.5	-0.5	-0.5	0.5	-0.5	0.1	4.0	0.5	1.8	8.0	4.0	6.4	13.5	10.5	12.1	13.0	9.5	11.4
2	-0.5	-0.5	-0.5	2.0	0.0	0.9	4.0	1.0	2.4	8.0	6.0	7.0	13.0	10.0	11.4	13.5	10.5	11.8
3	-0.5	-0.5	-0.5	2.5	0.5	1.4	3.0	2.0	2.4	8.0	6.5	7.2	12.5	9.0	10.7	11.5	10.5	10.8
4	-0.5	-0.5	-0.5	2.5	1.0	1.6	2.5	0.5	1.3	7.5	6.0	6.8	11.5	9.0	10.2	9.5	8.5	8.8
5	-0.5	-0.5	-0.5	3.0	1.5	2.1	4.0	1.0	2.1	7.0	5.5	6.2	12.0	8.0	9.9	10.5	7.0	8.5
6	-0.5	-0.5	-0.5	3.0	1.0	2.1	1.5	0.0	0.8	7.5	5.5	6.6	12.0	8.5	10.2	11.0	8.0	9.5
7	-0.5	-0.5	-0.5	3.5	2.0	2.6	2.0	-0.5	0.3	7.5	5.0	6.1	12.0	9.0	10.6	12.5	9.0	10.6
8	-0.5	-0.5	-0.5	4.0	2.0	2.8	1.5	-0.5	0.3	6.5	5.0	5.9	12.0	8.5	10.1	13.5	9.5	11.3
9	-0.5	-0.5	-0.5	2.0	1.5	1.8	3.0	0.0	1.1	7.0	5.0	5.9	11.0	8.5	9.6	14.0	10.5	12.0
10	-0.5	-0.5	-0.5	3.5	1.5	2.3	3.0	0.5	1.7	8.5	5.0	6.7	10.0	8.0	8.9	13.5	11.0	12.0
11	-0.5	-0.5	-0.5	3.0	1.5	2.4	5.0	1.0	2.7	9.0	6.0	7.7	10.5	7.0	8.6	13.5	11.0	12.3
12	-0.5	-0.5	-0.5	3.5	2.0	2.6	5.5	1.5	3.3	7.0	6.0	6.4	9.0	7.0	8.0	14.0	11.0	12.5
13	-0.5	-0.5	-0.5	3.5	2.0	2.7	6.0	2.0	4.0	8.0	4.5	6.1	9.0	7.5	8.1	13.0	11.0	12.1
14	-0.5	-0.5	-0.5	3.0	2.0	2.3	7.0	3.0	4.7	8.0	5.5	6.6	8.5	6.5	7.6	11.5	10.0	10.7
15	-0.5	-0.5	-0.5	4.5	2.0	3.3	7.5	4.0	5.5	7.5	5.0	6.3	9.5	6.0	7.6	10.5	9.5	9.9
16	-0.5	-0.5	-0.5	3.5	3.0	3.3	8.5	5.5	6.6	8.5	6.0	7.0	9.0	6.5	7.9	10.0	8.5	9.3
17	-0.5	-0.5	-0.5	4.0	2.0	2.8	7.5	4.0	5.6	8.5	5.5	6.6	9.5	7.5	8.5	10.0	8.0	8.9
18	-0.5	-0.5	-0.5	4.5	2.0	3.1	7.0	4.0	5.5	9.0	5.5	7.2	11.5	7.5	9.3	11.5	8.0	9.7
19	-0.5	-0.5	-0.5	5.0	2.0	3.4	7.5	4.5	5.7	9.0	6.0	7.7	13.0	7.5	10.2	12.0	9.5	10.5
20	0.0	-0.5	-0.3	4.0	1.5	2.7	8.0	4.0	5.7	12.0	6.0	8.9	13.0	9.0	11.2	13.5	10.0	11.5
21	0.0	-0.5	-0.2	3.5	2.0	2.9	8.0	4.0	6.0	12.0	7.5	9.9	10.5	10.0	10.3	14.0	10.0	12.0
22	0.0	-0.5	-0.3	4.0	2.0	2.8	6.5	5.5	6.0	13.5	8.5	10.9	8.5	8.0	8.4	15.5	11.0	13.1
23	1.0	0.0	0.3	4.5	2.0	2.9	7.0	5.5	6.1	12.5	10.0	11.3	8.5	7.0	7.6	14.0	12.0	13.0
24	1.5	0.5	0.9	3.5	2.0	2.7	6.5	5.5	5.9	11.0	8.5	9.5	10.5	6.5	8.4	12.5	11.0	11.6
25	2.0	0.5	1.1	3.0	1.0	2.0	7.0	5.5	6.2	10.5	8.0	9.0	12.0	8.0	10.1	12.0	10.5	10.9
26	1.5	0.0	0.8	3.0	1.0	2.0	6.5	5.0	5.7	10.5	6.0	8.2	11.5	10.0	10.5	11.5	10.0	10.6
27	2.0	1.0	1.5	3.5	1.0	1.8	5.5	4.0	4.9	11.0	6.5	8.6	12.0	9.5	10.8	12.5	9.0	10.7
28	2.0	1.0	1.4	2.5	-0.5	0.8	6.5	4.0	5.1	12.5	7.5	10.0	12.0	8.5	10.0	14.5	10.0	12.0
29	2.0	0.0	0.7	—	—	—	4.5	3.0	3.7	14.0	8.5	11.3	13.5	9.0	11.0	16.0	11.0	13.2
30	2.0	1.0	1.5	—	—	—	7.0	3.0	4.7	15.0	9.5	12.2	13.5	10.0	11.5	16.5	12.5	14.2
31	2.0	1.0	1.6	—	—	—	7.0	4.0	5.7	—	—	—	13.0	9.5	11.0	—	—	—
Month	2.0	-0.5	0.0	5.0	-0.5	2.3	8.5	-0.5	4.0	15.0	4.0	7.9	13.5	6.0	9.7	16.5	7.0	11.2

Appendix E. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	16.0	13.0	14.6	18.5	15.0	16.7	24.0	13.0	17.5	15.5	10.0	12.8	6.0	5.5	5.8	3.5	2.5	3.0
2	17.0	13.0	14.9	19.0	15.5	17.5	20.0	13.0	16.5	14.0	9.5	11.6	6.0	5.5	5.7	3.0	2.5	2.8
3	17.0	13.0	14.9	20.5	15.5	17.6	20.0	13.5	16.6	11.5	6.5	8.8	5.0	4.5	4.9	4.0	3.0	3.5
4	18.0	13.5	15.4	20.0	15.5	17.8	20.0	14.0	17.3	9.0	6.5	7.3	5.0	3.5	4.2	3.5	0.5	2.2
5	18.0	14.5	15.9	21.0	15.0	18.5	21.5	15.0	18.3	7.5	1.0	4.8	5.5	4.5	4.8	0.5	-0.5	-0.1
6	17.5	14.0	16.0	21.0	15.0	18.4	22.5	16.0	18.8	10.5	2.5	7.0	4.5	3.5	3.7	0.5	-0.5	-0.1
7	18.0	14.0	15.8	21.5	16.0	18.9	21.0	15.5	18.6	13.5	3.5	8.4	4.5	3.0	3.7	0.0	-0.5	-0.4
8	18.0	14.0	15.9	21.5	16.0	18.6	20.5	17.5	18.8	13.0	5.0	8.7	4.0	3.0	3.5	-0.5	-0.5	-0.5
9	18.5	14.0	16.2	21.0	16.5	18.2	20.0	16.5	18.1	12.0	4.5	7.6	3.0	2.5	2.7	-0.5	-0.5	-0.5
10	17.0	14.5	15.6	20.0	15.0	18.0	17.0	15.5	16.1	10.0	5.5	6.8	2.5	1.5	2.0	-0.5	-0.5	-0.5
11	17.5	14.0	15.9	21.0	14.5	18.0	20.5	12.0	16.1	8.0	0.5	4.4	3.0	1.5	2.0	-0.5	-0.5	-0.5
12	18.0	13.0	15.6	21.0	16.0	18.6	16.0	14.0	15.4	13.0	2.0	6.5	2.5	1.5	2.0	-0.5	-0.5	-0.5
13	18.0	14.0	15.9	21.5	16.0	18.6	16.5	14.0	14.9	13.0	5.0	8.4	2.5	1.5	2.0	-0.5	-0.5	-0.5
14	19.0	14.5	16.3	21.5	16.5	18.5	18.0	12.5	15.3	10.0	3.0	6.4	3.5	2.0	2.7	-0.5	-0.5	-0.5
15	19.5	13.5	16.2	19.5	15.5	17.4	19.0	12.5	15.6	6.5	2.0	4.5	4.0	2.5	3.1	-0.5	-0.5	-0.5
16	20.5	13.0	17.3	21.0	15.5	17.7	22.0	13.0	17.1	7.0	3.0	5.0	4.5	2.5	3.4	0.5	-0.5	-0.2
17	20.5	13.0	17.4	20.5	15.0	17.8	20.0	13.0	16.4	10.5	1.0	4.4	4.0	3.5	3.7	0.5	-0.5	0.0
18	21.5	16.0	18.8	19.0	16.5	17.5	19.0	13.0	15.8	8.0	1.5	3.9	3.5	3.0	3.3	0.0	-0.5	-0.3
19	22.0	16.5	18.9	19.5	15.5	17.2	15.0	11.0	12.5	8.0	-0.5	3.5	3.0	2.5	2.7	-0.5	-0.5	-0.5
20	21.5	17.5	19.4	19.5	14.5	16.9	14.5	9.5	11.5	9.5	-1.0	3.9	3.0	2.0	2.4	-0.5	-0.5	-0.5
21	21.5	16.0	19.4	17.0	13.5	15.8	14.5	6.5	10.8	11.0	-0.5	4.7	3.5	2.0	2.8	-0.5	-0.5	-0.5
22	22.0	15.0	18.7	22.0	12.5	16.9	12.5	9.0	10.6	8.5	2.5	5.8	3.5	2.5	3.1	-0.5	-0.5	-0.5
23	21.5	17.0	19.3	19.0	12.0	15.3	13.5	7.0	10.0	8.0	5.5	6.4	4.0	2.5	3.3	-0.5	-0.5	-0.5
24	19.5	17.5	18.5	16.5	11.5	13.8	15.5	7.0	11.3	9.0	3.5	6.1	4.0	2.5	3.4	-0.5	-0.5	-0.5
25	21.0	17.0	19.0	19.0	10.0	15.0	15.5	8.0	11.5	11.0	6.0	7.9	2.5	1.5	2.0	-0.5	-0.5	-0.5
26	22.0	17.0	19.5	18.0	14.0	16.2	13.0	9.5	11.0	10.0	3.5	6.6	3.5	1.5	2.4	-0.5	-0.5	-0.5
27	22.0	18.0	20.0	21.0	11.5	15.7	15.5	8.0	11.5	12.0	2.5	7.1	3.0	1.5	2.4	-0.5	-0.5	-0.5
28	21.0	17.0	19.2	19.0	11.5	15.0	15.0	8.5	11.5	11.0	4.5	7.4	3.5	2.5	3.0	-0.5	-0.5	-0.5
29	20.5	17.0	18.6	19.0	12.5	15.6	16.0	8.5	11.9	7.5	3.5	5.0	3.0	2.5	2.8	-0.5	-0.5	-0.5
30	20.5	16.5	18.5	19.5	13.5	16.6	16.5	9.0	12.5	7.5	6.5	7.0	4.0	2.0	2.9	-0.5	-0.5	-0.5
31	20.0	16.0	18.0	20.0	13.0	16.4	—	—	—	8.0	6.0	6.8	—	—	—	-0.5	-0.5	-0.5
Month	22.0	13.0	17.3	22.0	10.0	17.1	24.0	6.5	14.7	15.5	-1.0	6.6	6.0	1.5	3.2	4.0	-0.5	0.0

Appendix F. Water temperature records for the North Fork Teton River at the Highway 20 bridge near St. Anthony, Idaho, 1999.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	4.0	2.5	3.1	3.5	2.0	2.4	10.0	8.5	9.0	9.5	6.0	7.8
2	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	4.0	1.0	2.6	5.5	1.0	3.0	8.5	8.0	8.1	10.0	8.5	9.2
3	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	3.0	2.0	2.6	5.0	2.0	3.5	8.0	6.5	7.1	10.5	8.0	9.0
4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	2.5	1.0	1.8	5.0	3.0	3.7	6.5	5.0	5.9	10.5	7.5	9.0
5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	2.5	0.0	1.3	4.0	1.5	3.0	7.0	4.0	5.6	11.0	8.0	9.5
6	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	2.5	-0.5	1.0	6.5	2.0	4.4	10.0	4.5	7.3	9.5	9.0	9.1
7	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	2.0	1.0	1.3	8.5	3.0	6.1	11.0	6.5	8.9	9.5	8.0	8.7
8	-0.5	-0.5	-0.5	0.0	-0.5	-0.3	3.0	0.5	1.5	8.0	5.0	6.3	12.0	7.5	9.5	10.0	7.5	8.6
9	-0.5	-0.5	-0.5	2.5	0.5	1.4	3.0	1.0	2.1	5.5	4.0	4.8	10.5	7.0	8.8	10.0	7.0	8.5
10	-0.5	-0.5	-0.5	1.0	-0.5	0.1	4.0	1.5	2.4	6.5	2.5	4.4	8.5	6.5	7.6	11.5	7.5	9.5
11	-0.5	-0.5	-0.5	0.0	-0.5	-0.4	5.0	1.5	3.1	8.5	3.0	5.4	9.5	5.5	7.4	12.0	8.5	10.4
12	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	5.5	2.0	3.8	10.0	3.0	7.5	9.0	6.0	7.4	13.5	9.5	11.5
13	0.0	-0.5	-0.4	0.5	-0.5	-0.2	6.0	2.5	4.1	10.0	4.5	7.1	9.5	7.0	8.0	15.0	10.5	12.5
14	1.0	0.5	0.7	0.5	-0.5	-0.1	6.5	3.0	4.7	10.0	4.5	6.9	10.5	5.5	7.9	15.5	11.5	13.2
15	2.0	0.5	1.1	0.5	-0.5	-0.1	7.0	4.0	5.3	10.0	4.5	7.2	7.5	6.0	6.9	15.0	12.0	13.2
16	1.0	0.0	0.7	1.0	-0.5	0.1	6.5	4.5	5.3	10.5	5.5	8.2	10.0	6.0	7.4	14.5	11.5	13.0
17	1.0	-0.5	0.1	1.5	0.0	0.5	7.0	3.0	4.9	11.0	6.5	8.8	11.0	6.5	8.6	14.5	12.0	13.0
18	1.5	0.0	0.7	2.0	-0.5	0.5	7.5	4.0	5.6	12.0	8.0	9.6	11.0	7.5	9.2	14.5	11.5	12.8
19	1.5	1.0	1.1	2.0	0.0	0.7	8.5	5.0	6.6	10.5	9.0	9.6	14.0	8.0	10.9	14.5	11.5	12.8
20	1.5	0.5	1.0	2.5	-0.5	0.9	9.0	5.5	7.0	9.0	8.0	8.5	15.5	9.0	12.3	14.5	11.0	12.6
21	1.5	0.5	1.0	1.5	0.0	0.8	7.0	6.0	6.3	8.5	7.0	7.5	14.5	10.5	12.5	15.5	12.0	13.8
22	1.0	0.0	0.5	1.0	-0.5	0.2	6.0	5.0	5.5	7.0	6.0	6.5	14.0	11.0	12.4	15.0	12.0	13.4
23	0.5	-0.5	0.1	2.0	0.0	0.9	7.5	4.5	5.9	6.5	4.0	5.3	13.5	10.0	11.8	14.5	11.5	12.7
24	1.0	-0.5	0.2	3.5	1.0	2.1	8.5	5.5	6.8	8.5	4.5	6.4	14.0	9.0	11.4	15.5	11.5	13.3
25	0.0	-0.5	-0.4	4.0	1.5	2.6	9.0	6.0	7.3	9.5	7.0	8.1	13.5	9.5	11.2	15.0	12.5	13.5
26	-0.5	-0.5	-0.5	2.5	0.0	1.1	7.5	5.5	6.5	10.5	7.0	8.8	12.5	9.5	10.8	14.5	12.0	13.1
27	-0.5	-0.5	-0.5	3.0	0.5	1.6	5.0	4.0	4.7	11.0	7.5	9.4	12.5	9.0	10.9	13.5	10.0	11.7
28	-0.5	-0.5	-0.5	4.5	2.0	3.0	4.0	3.0	3.5	9.5	8.5	9.1	13.0	9.0	10.8	14.0	10.0	12.0
29	-0.5	-0.5	-0.5	—	—	—	6.5	2.5	4.1	10.5	8.0	9.0	11.0	9.0	9.8	15.0	11.5	13.2
30	-0.5	-0.5	-0.5	—	—	—	4.5	3.5	4.1	11.0	8.0	9.5	8.5	7.5	8.0	15.5	12.0	13.4
31	-0.5	-0.5	-0.5	—	—	—	5.5	2.0	3.5	—	—	—	8.0	6.5	7.1	—	—	—
Month	2.0	-0.5	-0.1	4.5	-0.5	0.4	9.0	-0.5	4.1	12.0	1.0	6.7	15.5	4.0	9.0	15.5	6.0	11.5

Appendix F. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	16.0	9.0	13.3	18.5	14.0	16.8	13.5	10.0	12.2	10.0	7.5	8.8	—	—	—	—	—	—
2	16.5	8.5	13.5	19.5	16.5	18.2	14.0	12.0	12.9	8.5	4.0	6.4	—	—	—	—	—	—
3	16.0	13.0	14.3	20.0	16.5	17.9	13.0	11.0	12.1	7.5	3.5	5.5	—	—	—	—	—	—
4	16.5	12.5	14.1	19.0	16.5	17.5	13.0	10.5	12.0	8.5	3.5	6.0	—	—	—	—	—	—
5	16.0	12.0	13.9	19.0	15.0	17.4	14.0	10.0	12.0	11.0	4.5	7.4	—	—	—	—	—	—
6	16.0	12.5	14.1	18.0	16.0	17.2	15.0	10.0	12.9	9.0	5.5	7.7	—	—	—	—	—	—
7	16.0	13.5	14.6	20.5	14.5	17.3	12.5	9.5	11.2	8.5	5.0	7.2	—	—	—	—	—	—
8	16.0	13.0	14.4	18.0	15.0	16.5	12.5	8.5	10.4	9.5	5.5	7.9	—	—	—	—	—	—
9	16.0	12.0	14.1	18.5	14.5	16.5	13.5	9.0	11.6	12.0	7.0	9.5	—	—	—	—	—	—
10	17.0	12.5	14.8	18.5	14.5	16.6	13.5	10.0	12.0	12.0	7.5	9.7	—	—	—	—	—	—
11	17.5	13.5	15.4	16.5	15.5	16.0	13.0	9.0	11.2	12.0	7.0	9.6	—	—	—	—	—	—
12	17.5	13.5	15.8	17.0	14.5	15.7	12.0	7.5	10.0	12.0	8.0	10.1	—	—	—	—	—	—
13	17.5	14.5	16.2	17.0	14.0	15.6	12.5	8.0	10.2	10.5	6.5	8.9	—	—	—	—	—	—
14	17.0	14.0	15.5	17.5	14.5	15.8	13.0	9.0	11.3	11.0	8.0	9.3	—	—	—	—	—	—
15	14.5	12.0	13.6	16.0	14.5	15.1	13.5	8.5	11.2	7.0	4.0	5.2	—	—	—	—	—	—
16	15.5	9.0	12.8	16.0	11.5	14.0	14.0	8.5	11.6	4.5	1.5	3.1	—	—	—	—	—	—
17	17.0	12.0	14.7	18.0	12.0	15.4	14.0	9.0	11.7	4.5	-1.0	2.1	—	—	—	—	—	—
18	15.5	13.5	14.4	18.0	13.0	15.6	14.0	10.0	12.1	6.0	2.5	4.2	—	—	—	—	—	—
19	17.0	12.5	15.0	17.5	14.5	16.0	13.0	11.0	12.1	5.5	0.5	3.0	—	—	—	—	—	—
20	17.5	13.5	15.7	18.5	14.5	16.4	12.5	8.5	10.7	5.5	0.0	2.5	—	—	—	—	—	—
21	17.5	14.0	15.8	18.5	15.5	16.9	13.5	7.5	10.7	6.0	0.0	2.8	—	—	—	—	—	—
22	17.0	12.0	15.5	18.5	13.5	16.3	13.5	8.5	11.2	5.0	-0.5	2.4	—	—	—	—	—	—
23	18.5	13.5	16.2	19.0	14.0	16.5	14.0	9.0	11.7	5.5	0.5	2.8	—	—	—	—	—	—
24	17.5	15.5	16.6	18.5	15.0	16.7	14.0	12.0	12.8	7.0	1.0	4.0	—	—	—	—	—	—
25	17.0	14.0	15.1	18.5	14.5	16.6	13.0	9.5	11.2	4.5	1.5	3.0	—	—	—	—	—	—
26	18.5	12.0	15.3	18.5	13.5	16.3	8.5	7.0	7.8	—	—	—	—	—	—	—	—	—
27	18.5	13.0	16.5	17.5	14.0	16.2	7.0	4.0	5.4	—	—	—	—	—	—	—	—	—
28	19.5	15.0	17.7	19.0	16.0	17.2	5.5	2.0	3.4	—	—	—	—	—	—	—	—	—
29	20.5	18.0	18.8	18.0	14.0	16.0	6.5	1.5	4.3	—	—	—	—	—	—	—	—	—
30	19.5	16.0	17.7	17.0	14.0	15.9	9.0	3.0	6.1	—	—	—	—	—	—	—	—	—
31	20.0	15.5	17.6	14.0	11.0	12.2	—	—	—	—	—	—	—	—	—	—	—	—
Month	20.5	8.5	15.3	20.5	11.0	16.3	15.0	1.5	10.5	12.0	-1.0	6.0	—	—	—	—	—	—

Appendix G. Water temperature records for the South Fork Teton River at the fish ladder near Sugar City, Idaho, 1997.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	6.0	2.5	4.2	6.0	5.0	5.5	13.5	10.5	11.6
2	—	—	—	—	—	—	—	—	—	6.5	3.0	4.9	7.0	4.5	5.8	12.5	10.0	11.2
3	—	—	—	—	—	—	—	—	—	6.5	3.5	5.1	9.0	5.0	6.9	12.5	10.0	11.3
4	—	—	—	—	—	—	—	—	—	5.0	4.0	4.6	10.0	6.5	8.2	14.5	10.5	12.4
5	—	—	—	—	—	—	—	—	—	4.5	2.0	2.9	12.5	7.5	9.9	14.5	11.5	13.0
6	—	—	—	—	—	—	—	—	—	5.5	1.5	3.4	12.0	9.0	10.5	13.0	11.0	12.2
7	—	—	—	—	—	—	—	—	—	6.0	2.5	4.1	12.0	9.0	10.4	14.0	11.0	12.4
8	—	—	—	—	—	—	—	—	—	6.0	3.5	4.7	11.0	8.0	9.5	13.5	12.0	12.6
9	—	—	—	—	—	—	—	—	—	8.0	4.5	6.1	11.5	7.5	9.3	13.0	11.5	12.3
10	—	—	—	—	—	—	—	—	—	6.0	3.5	5.0	12.0	8.0	9.9	12.0	11.5	11.7
11	—	—	—	—	—	—	—	—	—	6.5	3.0	5.1	12.0	8.5	10.0	12.0	11.0	11.4
12	—	—	—	—	—	—	—	—	—	7.5	3.5	5.6	11.5	8.0	9.6	12.5	11.0	11.6
13	—	—	—	—	—	—	—	—	—	7.5	4.0	6.0	11.0	8.0	9.3	12.0	11.0	11.6
14	—	—	—	—	—	—	—	—	—	6.5	5.5	6.0	11.5	8.0	9.5	12.5	11.0	11.6
15	—	—	—	—	—	—	—	—	—	8.5	5.0	6.8	12.0	8.5	10.1	13.0	11.5	12.2
16	—	—	—	—	—	—	—	—	—	10.0	6.0	8.0	12.0	9.0	10.2	13.5	12.0	12.9
17	—	—	—	—	—	—	—	—	—	11.0	7.5	9.3	11.0	8.5	9.7	14.0	12.5	13.1
18	—	—	—	—	—	—	—	—	—	10.5	7.5	9.4	10.5	8.0	9.2	14.0	13.0	13.4
19	—	—	—	—	—	—	—	—	—	10.0	8.5	9.3	11.0	8.0	9.3	14.5	13.5	13.9
20	—	—	—	—	—	—	—	—	—	9.0	7.5	8.5	11.5	8.0	9.7	14.0	13.0	13.5
21	—	—	—	—	—	—	—	—	—	8.5	6.0	7.1	11.0	8.0	9.3	14.0	12.5	13.2
22	—	—	—	—	—	—	—	—	—	8.0	5.5	6.6	11.0	7.5	9.3	14.0	13.0	13.5
23	—	—	—	—	—	—	—	—	—	7.0	6.0	6.2	11.5	8.5	9.8	14.5	13.5	13.7
24	—	—	—	—	—	—	—	—	—	8.0	5.5	6.8	9.0	7.5	8.7	14.0	13.0	13.4
25	—	—	—	—	—	—	7.5	6.5	7.1	7.5	6.5	6.8	8.5	7.0	7.5	13.0	12.0	12.6
26	—	—	—	—	—	—	8.0	4.5	6.3	8.5	6.5	7.3	9.0	6.5	7.5	13.5	12.5	12.9
27	—	—	—	—	—	—	7.0	4.5	5.8	8.5	7.5	8.2	10.5	7.0	8.7	14.5	13.5	14.0
28	—	—	—	—	—	—	5.5	4.0	4.8	9.0	7.5	8.1	12.5	9.0	10.4	15.0	14.5	14.6
29	—	—	—	—	—	—	6.5	3.5	5.0	7.5	6.5	7.2	12.0	10.0	10.5	15.0	14.0	14.4
30	—	—	—	—	—	—	7.0	3.5	5.3	7.0	6.0	6.4	11.0	9.0	9.9	14.5	14.0	14.2
31	—	—	—	—	—	—	6.0	3.0	4.3	—	—	—	12.5	9.5	10.8	—	—	—
Month	—	—	—	—	—	—	8.0	3.0	5.5	11.0	1.5	6.3	12.5	4.5	9.2	15.0	10.0	12.7

Appendix G. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	14.5	13.0	13.6	19.0	15.5	17.3	19.5	15.0	17.2	13.5	10.5	12.0	5.5	4.0	4.7	—	—	—
2	13.0	12.5	12.6	19.5	15.5	17.6	17.0	15.5	16.2	12.0	10.5	11.1	5.5	3.0	4.3	—	—	—
3	12.5	11.5	12.0	20.0	16.0	18.2	17.0	14.5	15.8	12.0	9.0	10.5	4.5	3.5	3.9	—	—	—
4	13.0	12.0	12.2	18.5	17.0	17.6	18.0	14.5	16.3	11.5	9.5	10.3	5.0	3.0	3.8	—	—	—
5	14.5	13.0	13.4	17.5	16.5	16.8	17.5	14.5	16.0	11.0	8.5	9.5	5.0	2.5	3.8	—	—	—
6	15.5	14.5	14.8	19.5	15.5	17.4	18.5	14.5	16.3	11.0	8.0	9.4	5.0	3.0	4.0	—	—	—
7	17.5	15.0	15.9	19.5	15.5	17.5	18.5	14.5	16.3	9.5	7.5	8.4	5.0	3.0	4.2	—	—	—
8	17.5	14.0	15.7	19.5	16.5	17.8	18.5	14.5	16.6	7.5	6.5	6.9	5.0	3.5	4.1	—	—	—
9	17.5	14.0	15.8	19.5	15.5	17.6	19.0	15.0	16.7	7.0	6.0	6.5	4.5	3.0	3.8	—	—	—
10	16.0	14.5	15.2	18.0	16.0	16.7	18.0	15.5	16.5	8.5	6.5	7.4	3.5	2.5	3.0	—	—	—
11	16.5	13.0	14.7	19.0	15.0	16.6	17.0	14.5	15.5	8.0	5.0	6.4	—	—	—	—	—	—
12	14.0	12.0	13.0	17.0	14.5	15.9	16.5	13.5	14.6	6.5	4.5	5.4	—	—	—	—	—	—
13	15.0	11.0	12.8	17.0	14.0	15.6	17.0	13.0	15.1	6.5	4.0	5.2	—	—	—	—	—	—
14	16.0	11.0	13.5	17.0	14.0	15.5	17.0	14.0	15.4	7.0	4.5	5.7	—	—	—	—	—	—
15	18.5	13.5	15.9	18.0	14.5	16.0	15.0	12.0	13.6	7.5	4.5	6.0	—	—	—	—	—	—
16	19.5	15.0	17.4	18.0	14.0	16.2	13.5	10.0	11.5	8.0	5.0	6.5	—	—	—	—	—	—
17	18.5	16.0	17.4	18.0	14.5	16.2	14.5	10.5	12.4	8.5	5.5	7.1	—	—	—	—	—	—
18	18.0	16.0	16.8	18.5	15.0	16.6	12.5	10.0	11.0	8.5	6.0	7.3	—	—	—	—	—	—
19	17.5	14.5	15.9	19.0	14.5	16.8	13.0	9.0	11.1	8.5	6.5	7.5	—	—	—	—	—	—
20	18.5	14.5	16.4	19.5	15.0	17.2	12.5	10.0	11.4	8.5	6.5	7.5	—	—	—	—	—	—
21	19.0	14.5	16.9	20.0	16.0	18.0	13.5	11.0	12.1	8.0	5.5	6.9	—	—	—	—	—	—
22	20.0	15.5	17.7	20.0	16.0	17.9	13.5	10.0	11.9	7.0	5.5	6.4	—	—	—	—	—	—
23	20.0	16.5	18.3	19.5	16.0	17.7	14.5	10.5	12.5	6.0	3.5	5.3	—	—	—	—	—	—
24	19.5	17.0	18.3	19.5	16.5	17.9	14.5	10.5	12.7	5.0	3.5	4.0	—	—	—	—	—	—
25	19.0	16.0	17.4	20.0	15.5	17.8	14.5	11.0	12.9	4.5	2.0	3.3	—	—	—	—	—	—
26	18.5	15.0	16.6	20.5	16.5	18.3	15.0	12.5	13.4	4.5	2.0	3.3	—	—	—	—	—	—
27	18.5	14.5	16.7	20.0	16.5	18.3	14.0	11.5	12.6	4.5	2.5	3.5	—	—	—	—	—	—
28	19.0	15.5	17.4	19.5	16.0	17.8	13.5	10.0	11.8	4.0	2.5	3.4	—	—	—	—	—	—
29	19.5	17.0	18.1	19.0	16.0	17.5	13.5	10.0	11.8	4.0	3.0	3.5	—	—	—	—	—	—
30	19.5	16.5	17.9	19.5	15.5	17.3	13.5	10.0	11.8	6.0	4.0	4.8	—	—	—	—	—	—
31	19.0	16.0	17.5	18.5	15.5	17.0	—	—	—	6.0	4.5	5.3	—	—	—	—	—	—
Month	20.0	11.0	15.7	20.5	14.0	17.2	19.5	9.0	14.0	13.5	2.0	6.6	5.5	2.5	4.0	—	—	—

Appendix H. Water temperature records for the South Fork Teton River at the fish ladder near Sugar City, Idaho, 1999.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	3.5	2.5	3.0	10.0	8.5	9.3	9.5	6.0	7.7
2	—	—	—	—	—	—	—	—	—	5.0	2.0	3.3	8.5	7.5	8.3	10.0	8.5	9.2
3	—	—	—	—	—	—	—	—	—	5.0	3.0	3.8	8.0	7.0	7.3	9.0	8.0	8.6
4	—	—	—	—	—	—	—	—	—	5.0	4.0	4.3	6.5	5.5	6.1	—	—	—
5	—	—	—	—	—	—	—	—	—	4.5	3.0	3.8	7.0	3.5	5.3	—	—	—
6	—	—	—	—	—	—	—	—	—	6.0	3.5	4.5	9.5	4.5	7.0	—	—	—
7	—	—	—	—	—	—	—	—	—	7.5	4.0	5.9	10.5	6.5	8.5	—	—	—
8	—	—	—	—	—	—	—	—	—	7.5	6.0	6.7	11.5	7.0	9.4	—	—	—
9	—	—	—	—	—	—	—	—	—	6.5	4.5	5.4	10.0	7.5	8.9	—	—	—
10	—	—	—	—	—	—	—	—	—	6.5	3.5	4.9	9.0	7.0	8.0	—	—	—
11	—	—	—	—	—	—	—	—	—	7.5	4.0	6.0	9.0	6.0	7.5	—	—	—
12	—	—	—	—	—	—	—	—	—	9.0	5.0	7.0	9.0	5.5	7.4	—	—	—
13	—	—	—	—	—	—	—	—	—	9.0	6.0	7.5	9.0	7.0	7.9	—	—	—
14	—	—	—	—	—	—	—	—	—	9.5	6.0	7.8	9.5	6.0	8.0	—	—	—
15	—	—	—	—	—	—	—	—	—	9.5	5.5	7.6	8.5	6.5	7.4	—	—	—
16	—	—	—	—	—	—	—	—	—	10.0	6.5	8.3	9.0	6.5	7.5	—	—	—
17	—	—	—	—	—	—	—	—	—	10.5	7.0	8.9	10.0	6.5	8.4	—	—	—
18	—	—	—	—	—	—	—	—	—	11.5	8.0	9.8	10.5	7.5	8.9	—	—	—
19	—	—	—	—	—	—	—	—	—	10.5	9.0	9.8	12.5	8.0	10.3	—	—	—
20	—	—	—	—	—	—	—	—	—	9.5	8.0	8.9	14.0	9.5	11.9	—	—	—
21	—	—	—	—	—	—	—	—	—	8.5	6.0	7.7	14.0	11.0	12.5	—	—	—
22	—	—	—	—	—	—	—	—	—	7.5	5.0	6.6	14.0	11.0	12.3	—	—	—
23	—	—	—	—	—	—	—	—	—	6.5	4.5	5.4	13.5	10.0	11.7	—	—	—
24	—	—	—	—	—	—	—	—	—	8.5	4.5	6.4	13.5	9.5	11.4	—	—	—
25	—	—	—	—	—	—	—	—	—	9.0	7.0	8.0	13.0	9.5	11.1	—	—	—
26	—	—	—	—	—	—	—	—	—	10.0	7.5	8.8	12.5	9.5	10.8	—	—	—
27	—	—	—	—	—	—	—	—	—	11.0	7.5	9.3	12.5	9.5	10.8	—	—	—
28	—	—	—	—	—	—	—	—	—	10.0	8.5	9.2	13.0	9.5	10.8	—	—	—
29	—	—	—	—	—	—	—	—	—	10.0	8.0	9.1	11.0	9.0	9.9	—	—	—
30	—	—	—	—	—	—	—	—	—	11.0	8.0	9.6	9.0	7.5	8.1	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	—	7.5	6.5	7.1	—	—	—
Month	—	—	—	—	—	—	—	—	—	11.5	2.0	6.9	14.0	3.5	9.0	10.0	6.0	8.5

Appendix H. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Month	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix I. Water temperature records for the Teton River at the Hog Hollow bridge near Newdale, Idaho, 1997.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	6.5	4.5	5.3	6.0	5.5	5.6	11.5	10.5	11.1
2	—	—	—	—	—	—	—	—	—	6.5	4.0	5.1	6.5	5.0	5.6	11.0	10.0	10.5
3	—	—	—	—	—	—	—	—	—	6.5	4.0	5.2	8.0	5.5	6.7	11.5	10.5	11.0
4	—	—	—	—	—	—	—	—	—	6.0	4.5	5.2	9.5	7.0	8.2	12.5	11.5	12.2
5	—	—	—	—	—	—	—	—	—	5.0	4.0	4.5	11.0	8.5	9.9	13.5	11.5	12.6
6	—	—	—	—	—	—	—	—	—	5.5	3.5	4.4	11.0	9.5	10.3	13.0	11.0	11.8
7	—	—	—	—	—	—	—	—	—	5.5	3.0	4.2	10.5	9.0	9.9	13.0	11.5	12.2
8	—	—	—	—	—	—	—	—	—	6.0	3.5	4.8	10.0	8.0	8.8	13.0	11.5	12.0
9	—	—	—	—	—	—	—	—	—	8.0	5.0	6.3	10.0	8.0	9.0	12.5	11.0	11.7
10	—	—	—	—	—	—	—	—	—	7.0	5.0	5.8	10.5	8.5	9.4	11.5	10.5	11.0
11	—	—	—	—	—	—	—	—	—	7.0	5.0	5.9	10.5	8.5	9.4	11.0	10.5	10.6
12	—	—	—	—	—	—	—	—	—	7.5	4.5	6.0	10.0	8.5	9.0	12.0	11.0	11.4
13	—	—	—	—	—	—	—	—	—	7.5	5.0	6.3	9.5	8.5	8.9	11.5	10.5	10.9
14	—	—	—	—	—	—	—	—	—	7.0	5.5	6.2	9.5	8.5	9.0	12.0	11.0	11.4
15	—	—	—	—	—	—	—	—	—	8.0	6.0	6.9	10.0	9.0	9.5	13.0	11.5	12.3
16	—	—	—	—	—	—	—	—	—	9.5	6.5	7.9	10.0	9.0	9.6	14.0	12.5	13.0
17	—	—	—	—	—	—	—	—	—	10.0	7.5	8.7	10.0	8.5	9.2	13.5	12.5	12.9
18	—	—	—	—	—	—	—	—	—	10.0	8.5	9.4	9.0	8.5	8.8	14.5	12.5	13.7
19	—	—	—	—	—	—	—	—	—	9.5	8.5	9.0	9.5	8.5	8.8	13.5	12.5	13.2
20	—	—	—	—	—	—	—	—	—	8.5	7.0	8.1	10.0	9.0	9.4	13.5	12.0	12.8
21	—	—	—	—	—	—	—	—	—	7.0	6.0	6.5	9.0	8.0	8.7	13.5	12.0	13.0
22	—	—	—	—	—	—	—	—	—	7.0	5.5	6.3	9.0	8.0	8.9	14.0	12.5	13.3
23	—	—	—	—	—	—	—	—	—	6.5	6.0	6.4	10.5	9.0	9.6	15.0	12.5	13.7
24	—	—	—	—	—	—	—	—	—	7.0	5.5	6.4	9.5	7.5	8.4	13.0	11.0	12.2
25	—	—	—	—	—	—	—	—	—	7.5	6.5	7.0	7.5	7.0	7.1	13.5	11.5	12.4
26	—	—	—	—	—	—	—	—	—	9.0	7.0	7.9	7.5	6.5	7.2	14.5	12.0	13.4
27	—	—	—	—	—	—	—	—	—	8.5	7.5	8.2	9.0	7.5	8.5	15.0	13.0	14.2
28	—	—	—	—	—	—	—	—	—	8.5	7.0	8.0	11.0	9.5	10.2	15.0	13.0	14.0
29	—	—	—	—	—	—	—	—	—	7.0	6.5	6.7	10.0	9.0	9.6	14.0	12.5	13.4
30	—	—	—	—	—	—	—	—	—	6.5	5.5	5.9	9.5	8.5	9.1	15.0	13.0	13.9
31	—	—	—	—	—	—	5.0	4.5	4.7	—	—	—	11.0	10.0	10.4	—	—	—
Month	—	—	—	—	—	—	5.0	4.5	4.7	10.0	3.0	6.5	11.0	5.0	8.8	15.0	10.0	12.4

Appendix I. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.5	12.0	12.8	17.0	15.0	15.8	17.0	15.0	15.8	13.0	10.5	11.6	7.0	5.5	6.0	3.5	3.0	3.1
2	12.0	10.5	11.3	17.5	15.0	16.1	15.5	15.0	15.2	11.5	11.0	11.3	6.5	5.0	5.7	3.5	2.5	2.8
3	13.0	10.5	11.7	18.0	15.5	16.8	15.5	14.0	14.8	12.0	10.5	11.2	5.5	4.5	5.1	3.0	2.0	2.3
4	14.5	11.5	13.2	17.0	16.5	16.7	16.0	14.0	15.0	11.5	10.0	10.7	5.5	4.0	4.8	2.0	1.5	1.7
5	15.5	13.0	14.4	16.5	15.5	16.2	16.0	14.0	14.9	11.0	9.5	10.1	6.0	4.0	4.8	1.5	0.5	0.9
6	15.5	14.0	14.7	17.0	15.0	15.8	16.5	14.5	15.2	11.0	9.0	9.9	6.0	4.0	4.9	1.0	0.5	0.8
7	15.5	14.0	14.8	17.5	15.0	16.1	16.5	14.0	15.2	9.5	8.5	9.1	6.0	4.5	5.1	1.0	1.0	1.0
8	15.5	13.5	14.7	18.0	16.0	16.7	16.5	14.5	15.4	8.5	8.0	8.3	6.0	4.5	5.1	1.0	1.0	1.0
9	16.0	14.0	14.9	18.0	16.0	16.8	16.5	14.5	15.4	8.0	7.5	7.6	6.0	4.5	5.1	2.0	1.0	1.5
10	15.0	14.0	14.7	16.5	15.5	16.0	16.0	15.0	15.4	8.5	7.0	7.6	5.5	4.0	4.5	1.5	0.5	0.9
11	15.0	13.5	14.0	17.0	15.0	15.6	16.0	14.5	14.9	7.5	6.5	7.1	4.5	3.5	3.9	0.5	0.0	0.1
12	13.5	12.0	12.9	15.5	14.5	15.0	15.5	14.0	14.5	7.5	6.5	6.9	4.0	2.5	3.1	0.5	0.0	0.2
13	12.0	11.0	11.5	15.5	14.0	14.7	15.5	13.5	14.3	7.0	6.0	6.3	3.0	2.0	2.5	0.5	0.0	0.1
14	14.0	11.0	12.8	15.5	14.0	14.8	15.5	13.5	14.2	7.0	5.5	6.2	2.0	1.5	1.8	0.5	0.0	0.1
15	16.5	13.5	15.0	16.0	14.5	15.1	14.5	13.0	13.6	7.5	5.5	6.5	1.5	0.5	1.1	0.5	0.0	0.3
16	17.5	15.0	16.3	16.5	14.5	15.3	14.0	12.0	12.7	8.5	6.0	7.1	1.5	0.5	0.9	0.5	0.0	0.4
17	17.0	15.5	16.3	16.5	15.0	15.5	13.5	11.5	12.3	9.0	6.5	7.7	1.0	1.0	1.0	0.5	0.5	0.5
18	16.0	15.0	15.4	17.0	15.0	15.6	11.5	10.5	11.1	9.0	7.0	8.0	1.5	1.0	1.2	0.5	0.0	0.4
19	16.0	14.5	15.0	17.0	14.5	15.7	12.5	10.0	11.2	9.0	7.5	8.1	2.0	1.5	1.8	0.5	0.0	0.4
20	16.5	14.5	15.3	17.5	15.0	16.0	12.0	10.5	11.3	9.0	7.5	8.1	2.5	2.0	2.3	0.5	0.0	0.2
21	17.0	15.0	15.8	18.0	15.5	16.4	12.5	11.0	11.4	8.5	7.0	7.8	3.0	2.5	2.8	0.5	0.0	0.1
22	17.5	15.0	16.3	18.0	15.5	16.6	13.0	11.0	11.8	8.0	6.5	7.4	3.5	2.5	2.8	0.5	0.0	0.1
23	18.0	16.0	16.9	18.0	16.0	16.7	13.5	11.0	12.1	7.0	5.5	6.4	2.5	2.5	2.5	0.0	0.0	0.0
24	17.5	16.0	16.5	17.5	15.5	16.4	13.5	11.5	12.3	6.0	5.0	5.6	3.0	2.0	2.6	0.5	0.0	0.1
25	17.0	15.0	15.9	17.5	15.0	16.3	13.5	11.5	12.4	5.5	4.0	4.8	2.5	2.5	2.5	0.5	0.0	0.1
26	16.0	14.5	15.2	18.0	16.0	16.8	13.5	12.0	12.6	5.5	4.0	4.5	2.0	2.0	2.0	0.0	0.0	0.0
27	16.5	14.5	15.5	18.0	16.0	16.8	13.5	12.0	12.6	5.0	3.5	4.1	3.5	2.5	2.8	0.0	0.0	0.0
28	17.5	15.0	16.3	18.0	15.5	16.6	13.5	11.5	12.2	5.0	3.5	4.3	3.0	2.5	2.9	0.0	0.0	0.0
29	17.5	16.0	16.8	18.0	15.5	16.6	13.0	11.0	11.7	5.0	4.5	4.8	3.5	2.5	2.9	0.0	0.0	0.0
30	17.5	16.0	16.6	17.5	15.0	16.3	12.5	10.5	11.4	6.0	5.0	5.5	3.5	2.5	3.1	0.5	0.0	0.1
31	17.0	15.5	16.1	17.0	15.0	15.9	—	—	—	7.0	5.5	6.1	—	—	—	0.0	0.0	0.0
Month	18.0	10.5	14.8	18.0	14.0	16.1	17.0	10.0	13.4	13.0	3.5	7.4	7.0	0.5	3.3	3.5	0.0	0.6

Appendix J. Water temperature records for the Teton River at the Hog Hollow Bridge near Newdale, Idaho, 1998.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	0.0	0.0	0.0	2.5	1.0	1.7	3.0	1.5	2.1	7.5	5.0	6.1	12.0	10.5	11.1	11.5	9.5	10.5
2	0.5	0.0	0.1	2.5	1.5	1.9	3.5	1.5	2.4	7.5	6.0	6.8	10.5	9.5	10.0	12.0	10.5	11.1
3	1.0	0.5	0.8	2.5	1.5	2.0	3.0	2.0	2.4	8.0	6.5	7.0	10.5	8.5	9.4	10.5	9.0	10.0
4	2.0	1.0	1.6	2.5	1.5	2.0	3.5	1.5	2.4	7.5	6.5	6.8	10.5	8.5	9.3	8.5	8.0	8.1
5	2.0	1.5	1.8	3.5	2.0	2.7	3.5	1.5	2.6	7.0	6.5	6.8	9.5	8.0	8.9	8.5	7.0	7.8
6	2.0	1.0	1.5	4.0	2.5	3.1	2.5	1.5	1.9	7.5	6.0	6.5	10.5	8.5	9.3	10.0	8.5	9.2
7	1.5	0.5	1.0	3.5	3.0	3.3	3.0	1.0	1.7	7.5	5.5	6.3	10.5	9.0	9.6	10.5	9.0	9.7
8	1.0	0.5	0.8	3.5	2.5	3.2	2.0	0.5	1.3	7.0	6.0	6.3	10.0	8.5	9.2	11.0	9.5	10.4
9	0.5	0.0	0.3	3.0	2.0	2.6	2.5	0.5	1.6	7.0	5.5	6.2	9.5	8.5	9.1	12.0	10.0	11.0
10	0.5	0.0	0.1	4.0	2.5	3.0	2.5	1.0	1.7	7.5	5.5	6.6	9.0	8.0	8.6	11.5	10.5	10.9
11	0.5	0.0	0.4	3.5	2.5	2.8	4.0	1.5	2.6	8.0	6.0	7.0	8.5	7.0	7.6	11.5	10.0	10.8
12	1.0	0.0	0.6	4.0	2.5	3.2	4.5	2.0	3.3	7.0	6.5	6.9	8.0	7.0	7.6	12.0	10.5	11.4
13	1.0	0.5	0.7	4.0	2.5	3.3	5.5	2.5	4.1	7.5	6.0	6.5	8.0	7.0	7.6	12.0	10.5	11.2
14	1.5	0.5	1.1	3.5	2.5	3.1	6.5	3.5	5.1	7.5	6.0	6.5	7.5	7.0	7.1	10.0	9.5	9.9
15	2.0	1.0	1.4	4.5	3.0	3.6	7.0	4.5	5.7	7.0	5.5	6.4	7.5	6.5	7.0	10.0	9.0	9.6
16	1.0	1.0	1.0	4.0	3.5	3.8	7.0	5.5	6.3	7.5	6.0	6.6	8.0	7.0	7.5	9.0	8.0	8.5
17	2.0	1.0	1.2	4.5	3.0	3.8	7.5	5.0	6.0	8.0	6.0	6.7	9.0	7.5	8.2	9.0	8.0	8.4
18	1.5	0.5	1.1	4.5	3.5	4.0	7.5	4.5	5.9	8.5	5.5	6.9	9.5	8.0	8.7	10.0	8.5	9.2
19	1.5	1.0	1.2	4.5	3.0	3.9	7.5	4.5	6.0	8.0	6.0	7.1	10.0	8.5	9.3	10.5	9.0	9.8
20	2.0	1.0	1.5	4.5	3.0	3.6	7.0	4.5	5.8	10.0	6.5	8.4	11.0	9.5	10.3	11.5	10.0	10.7
21	2.0	1.0	1.4	4.5	3.0	3.7	7.0	5.0	6.0	11.0	7.5	9.1	10.5	10.0	10.3	12.0	10.0	10.9
22	1.5	1.0	1.2	4.0	2.5	3.3	6.5	5.5	6.0	12.0	8.5	9.9	9.0	7.5	8.1	13.5	11.0	12.3
23	2.0	1.0	1.4	4.0	2.5	3.3	7.0	6.0	6.3	12.0	9.5	10.7	7.5	6.5	7.0	12.5	11.0	12.0
24	2.0	1.5	1.8	3.5	3.0	3.3	7.0	6.0	6.4	10.0	9.5	9.9	8.5	7.0	7.9	11.0	10.5	10.6
25	2.5	2.0	2.1	4.0	2.5	3.2	6.0	5.0	5.7	9.0	8.0	8.6	10.0	8.0	9.3	11.0	10.0	10.5
26	2.5	1.5	2.1	4.0	2.0	2.8	6.0	5.0	5.4	8.0	6.5	7.1	11.0	9.5	10.2	10.0	9.5	9.8
27	3.0	2.0	2.4	3.5	2.0	2.6	5.5	4.5	5.0	9.0	6.5	7.6	10.0	9.0	9.7	11.0	9.5	10.4
28	3.0	2.0	2.4	2.5	1.0	1.9	5.5	4.5	4.8	10.5	7.5	8.9	9.5	8.0	9.0	12.0	10.0	11.3
29	2.5	1.5	2.1	—	—	—	4.5	4.0	4.3	11.5	9.0	10.4	11.5	9.0	10.5	13.5	11.5	12.5
30	2.5	2.0	2.3	—	—	—	5.5	4.0	4.7	12.5	10.5	11.5	11.5	10.5	10.9	14.5	12.5	13.3
31	2.5	2.0	2.1	—	—	—	6.5	4.5	5.5	—	—	—	10.5	9.5	10.0	—	—	—
Month	3.0	0.0	1.3	4.5	1.0	3.0	7.5	0.5	4.2	12.5	5.0	7.6	12.0	6.5	9.0	14.5	7.0	10.4

Appendix J. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	14.5	13.0	13.6	18.0	16.5	17.3	17.5	15.5	16.5	13.0	11.5	12.1	10.5	0.0	4.7	6.5	5.5	6.3
2	15.0	13.5	14.1	18.5	16.5	17.3	17.5	15.5	16.5	12.5	11.5	12.0	8.0	2.5	4.4	6.0	6.0	6.0
3	15.0	13.5	14.1	18.5	16.5	17.5	18.0	15.5	16.7	12.5	11.0	11.6	5.5	-1.5	2.2	6.5	6.0	6.1
4	15.5	14.0	14.9	19.0	16.5	17.5	18.0	15.5	16.7	11.5	10.0	10.8	13.0	-3.5	4.1	5.5	5.0	5.4
5	15.5	14.0	14.9	19.5	16.5	17.9	17.5	15.5	16.6	10.5	9.0	9.6	9.0	3.0	5.7	5.0	4.5	4.6
6	16.0	14.5	15.2	20.0	17.5	18.5	17.5	16.0	16.7	10.0	8.0	9.0	6.0	5.5	5.9	5.0	3.5	4.1
7	16.0	14.0	14.9	20.0	18.0	18.8	18.0	16.0	17.0	10.0	8.0	8.9	7.0	-2.0	3.1	4.0	3.5	3.6
8	15.5	14.0	14.7	20.0	17.5	18.8	18.5	16.0	17.1	10.0	8.0	9.0	6.5	5.5	6.1	3.0	2.5	2.8
9	16.0	14.0	15.1	20.0	17.5	18.7	17.5	16.0	16.8	10.5	8.0	9.2	6.0	5.0	5.5	3.0	2.0	2.6
10	15.0	14.5	14.9	20.0	17.0	18.5	16.5	16.0	16.2	9.5	8.5	9.1	5.0	4.0	4.5	3.5	1.5	2.8
11	15.5	14.0	14.6	20.5	17.5	18.9	16.5	15.0	15.7	9.0	8.0	8.5	3.0	-2.5	-0.1	3.5	2.0	2.6
12	15.5	14.0	14.7	20.5	18.0	19.0	16.0	15.5	15.6	9.5	7.5	8.5	6.0	-2.0	4.0	2.5	1.5	2.2
13	15.5	14.0	14.9	20.0	17.5	18.9	16.5	15.0	15.4	9.0	7.5	8.2	6.0	5.0	5.7	4.0	2.0	2.7
14	16.5	15.0	15.6	20.5	17.5	18.8	16.5	14.5	15.4	9.0	7.0	8.0	6.5	5.5	6.1	3.5	1.5	2.6
15	17.0	15.0	15.7	19.5	17.0	18.1	17.0	14.5	15.6	8.5	7.5	7.9	7.0	6.5	6.6	4.0	2.5	3.1
16	17.0	15.0	15.9	19.5	17.0	17.9	17.0	15.0	15.8	8.5	7.5	7.8	7.5	6.5	7.1	4.0	3.0	3.4
17	17.5	15.0	16.3	18.5	16.5	17.4	17.0	15.0	15.9	8.5	7.0	7.6	7.5	7.0	7.1	3.5	2.0	2.7
18	18.0	15.5	16.8	18.5	16.5	17.5	16.5	15.0	15.4	8.0	6.5	7.2	7.5	7.0	7.3	3.5	1.5	2.5
19	18.5	16.5	17.5	18.0	16.0	16.8	15.0	13.5	14.2	7.5	6.0	6.6	7.0	7.0	7.0	2.5	2.0	2.4
20	19.0	17.0	17.8	17.0	15.5	16.1	15.0	13.0	13.7	7.5	5.5	6.4	7.5	6.5	6.9	4.0	2.0	3.0
21	19.5	17.0	18.1	16.5	15.0	15.6	14.0	12.5	13.0	7.0	5.5	6.3	7.5	6.5	7.1	3.0	2.0	2.4
22	19.5	17.0	18.2	17.0	15.0	15.7	13.0	12.0	12.4	7.0	5.5	6.4	6.5	6.0	6.1	3.0	2.5	2.7
23	19.5	17.5	18.3	17.0	14.5	15.8	13.0	11.0	11.9	7.0	6.5	6.7	7.5	7.5	7.5	3.0	2.0	2.5
24	18.5	18.0	18.3	17.0	14.0	15.6	13.0	11.0	11.9	8.0	6.5	7.2	8.0	7.5	7.9	2.5	1.5	2.0
25	19.5	17.5	18.2	17.5	14.5	15.9	13.0	11.0	11.9	8.5	7.5	7.9	7.5	7.5	7.5	1.5	1.0	1.1
26	19.5	17.0	18.2	16.5	15.0	15.6	12.5	11.5	12.0	8.5	7.0	7.9	7.0	5.0	5.9	1.0	1.0	1.0
27	20.5	18.0	19.0	17.0	14.5	15.6	13.5	11.5	12.4	9.0	7.5	8.1	6.0	5.0	5.5	1.5	1.0	1.2
28	20.5	18.5	19.3	17.0	14.5	15.9	13.5	11.5	12.3	8.5	8.0	8.1	4.5	4.5	4.5	2.0	1.5	1.6
29	20.5	18.5	19.4	17.5	15.0	16.0	13.5	11.0	12.1	8.0	7.0	7.6	5.0	5.0	5.0	2.0	1.5	1.8
30	19.5	18.0	18.7	17.0	15.0	16.1	13.0	11.0	12.1	8.5	7.0	7.6	6.0	5.0	5.3	2.5	1.5	2.1
31	19.0	17.5	18.1	17.5	15.0	16.1	—	—	—	18.0	0.0	7.1	—	—	—	2.5	2.0	2.2
Month	20.5	13.0	16.5	20.5	14.0	17.2	18.5	11.0	14.7	18.0	0.0	8.4	13.0	-3.5	5.5	6.5	1.0	3.0

Appendix K. Water temperature records for the Teton River at the Hog Hollow Bridge near Newdale, Idaho, 1999.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	2.0	2.0	2.0	2.0	1.5	1.6	5.0	4.0	4.5	6.0	5.0	5.2	9.5	9.0	9.1	9.0	6.5	7.8
2	2.5	1.5	2.0	1.5	1.0	1.4	5.5	3.5	4.6	6.0	4.0	5.1	8.5	8.0	8.3	10.0	9.5	9.8
3	3.0	1.5	2.1	2.5	1.5	1.9	5.0	4.0	4.6	6.0	4.5	5.4	7.5	7.0	7.4	9.5	8.5	8.9
4	2.5	2.0	2.2	3.0	1.5	2.2	5.0	4.0	4.4	6.5	5.0	5.7	6.5	6.0	6.4	9.5	8.5	8.9
5	2.5	2.0	2.2	2.5	1.5	2.0	5.5	3.5	4.2	6.0	5.0	5.5	6.5	5.5	6.0	10.5	9.0	9.7
6	3.0	2.5	2.7	3.0	2.0	2.5	4.5	3.5	3.9	6.5	5.0	5.7	8.0	5.5	6.8	9.5	8.5	9.2
7	2.5	2.0	2.4	3.5	2.5	2.9	4.0	3.5	3.9	7.5	5.5	6.6	9.5	7.0	8.4	8.5	8.5	8.5
8	3.5	2.5	3.0	3.0	2.0	2.5	4.5	3.0	3.9	8.0	6.5	7.4	11.0	8.5	9.8	9.0	8.0	8.6
9	3.5	3.0	3.2	4.0	3.0	3.4	4.5	3.5	4.1	7.0	6.5	6.9	10.5	9.5	9.7	9.0	8.0	8.5
10	3.5	2.5	3.2	3.0	2.0	2.5	6.0	3.5	4.6	7.5	6.0	6.7	8.5	7.5	8.2	10.0	8.5	9.4
11	3.5	2.5	3.2	4.0	2.0	2.8	6.0	4.0	5.1	8.0	5.5	6.7	8.0	7.0	7.4	11.0	9.5	10.3
12	3.0	2.5	2.9	4.0	1.5	2.4	6.5	4.5	5.7	8.5	6.0	7.3	8.0	7.0	7.5	12.0	10.0	11.3
13	3.5	3.0	3.3	3.0	2.0	2.4	7.0	4.5	5.8	9.0	6.5	7.8	9.0	7.5	8.1	13.0	11.0	12.0
14	3.5	3.0	3.2	2.5	1.5	2.0	7.5	5.5	6.4	10.0	7.5	8.6	9.5	7.5	8.2	13.5	12.0	12.6
15	4.0	3.0	3.2	2.5	1.5	2.0	7.5	5.5	6.6	10.0	7.5	8.5	8.0	7.5	7.8	13.0	12.5	12.7
16	3.5	2.5	3.0	3.0	2.0	2.6	7.5	6.0	6.8	10.0	7.0	8.2	8.5	7.5	7.8	13.0	12.0	12.5
17	4.0	2.5	3.1	3.5	2.0	2.8	7.5	5.5	6.6	10.0	7.0	8.6	9.5	7.0	8.2	13.0	12.5	12.6
18	3.0	2.5	2.9	4.0	2.5	3.1	8.0	6.0	7.1	11.0	7.5	9.4	9.5	8.0	8.9	12.5	11.5	12.0
19	3.0	2.5	2.9	3.5	2.5	3.2	8.5	6.5	7.4	10.5	9.5	9.9	11.5	8.5	9.9	13.0	11.5	12.4
20	3.5	2.5	3.1	4.0	2.5	3.4	9.0	6.5	7.8	9.5	9.0	9.3	12.5	10.0	11.2	12.5	11.5	12.0
21	3.0	2.5	2.8	3.5	2.5	3.2	7.5	7.5	7.5	8.5	7.5	8.1	12.5	11.5	12.0	14.5	12.5	13.5
22	3.0	2.0	2.5	4.5	2.5	3.4	7.5	7.0	7.3	7.0	6.0	6.6	12.0	11.0	11.6	13.5	13.0	13.3
23	2.5	2.0	2.1	3.5	3.0	3.1	8.0	6.0	7.1	6.5	5.5	6.0	12.0	10.5	11.1	13.0	12.0	12.4
24	3.0	1.5	2.2	4.5	2.5	3.4	8.5	6.5	7.5	8.0	5.5	6.5	12.0	10.0	10.9	14.0	12.0	13.1
25	2.5	1.5	1.9	5.0	3.0	4.2	9.0	6.5	7.7	9.0	7.0	7.9	11.0	10.0	10.4	14.5	13.0	13.6
26	2.5	2.0	2.1	4.5	3.0	3.9	8.0	7.5	7.6	10.0	8.0	8.9	11.0	10.0	10.4	13.0	11.5	12.4
27	2.0	1.0	1.7	5.0	3.5	4.1	7.0	6.0	6.7	11.0	8.5	9.5	11.0	10.0	10.4	12.5	11.0	11.6
28	3.0	1.5	2.1	5.5	4.0	4.7	5.5	5.0	5.2	9.5	9.0	9.3	11.0	10.0	10.6	12.5	11.0	11.7
29	2.0	1.5	1.9	—	—	—	6.0	4.5	5.3	10.0	9.0	9.3	10.0	9.0	9.7	13.5	11.5	12.6
30	2.0	1.5	1.8	—	—	—	5.5	4.5	5.0	10.0	9.0	9.4	8.5	7.5	8.2	13.5	12.5	12.8
31	2.0	2.0	2.0	—	—	—	6.0	4.5	5.3	—	—	—	7.0	6.5	6.9	—	—	—
Month	4.0	1.0	2.5	5.5	1.0	2.8	9.0	3.0	5.8	11.0	4.0	7.5	12.5	5.5	8.9	14.5	6.5	11.2

Appendix K. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.0	11.5	12.4	19.0	16.5	17.8	16.5	14.0	15.2	10.0	8.0	8.9	6.5	5.5	6.1	4.5	4.5	4.5
2	13.5	12.0	12.8	19.0	17.0	17.8	15.5	14.0	14.6	10.0	8.0	9.0	6.0	4.5	5.3	4.0	3.5	3.9
3	14.0	12.0	13.0	19.0	17.0	17.9	15.0	13.5	14.3	10.5	8.0	9.3	6.0	4.5	5.4	4.0	3.0	3.5
4	15.0	13.5	14.1	18.5	17.0	17.5	14.5	13.0	13.8	10.5	8.5	9.5	6.0	4.5	5.4	3.0	2.0	2.5
5	14.5	13.0	13.7	18.5	16.5	17.4	15.0	12.5	13.8	10.5	8.5	9.4	7.0	5.5	6.1	2.5	1.5	1.8
6	14.5	12.5	13.4	19.0	16.5	17.6	15.0	12.5	13.6	9.5	8.5	9.2	7.5	5.5	6.5	1.5	1.0	1.2
7	15.0	13.5	14.4	18.5	16.5	17.4	15.0	12.0	13.4	10.0	8.0	9.0	7.5	6.0	6.8	1.5	1.0	1.2
8	14.5	13.5	14.0	18.5	16.5	17.3	15.0	12.5	13.5	10.5	8.5	9.3	7.5	6.5	7.0	1.5	0.5	0.9
9	14.5	13.0	13.8	19.0	16.0	17.4	14.5	12.5	13.5	10.5	8.5	9.7	7.5	6.0	6.6	1.5	1.0	1.3
10	15.0	13.0	14.1	19.0	16.5	17.6	14.0	12.5	13.4	11.0	9.0	10.1	7.0	6.0	6.5	1.5	1.0	1.4
11	15.5	14.0	14.8	17.5	16.5	17.0	14.5	12.0	13.3	11.0	9.5	10.3	7.5	6.5	6.8	1.5	1.5	1.5
12	16.0	14.5	15.3	18.0	16.0	16.6	14.5	12.0	13.1	11.5	9.5	10.3	7.0	6.0	6.5	2.0	1.5	1.7
13	17.0	14.5	15.6	17.0	15.5	16.1	14.5	11.5	12.9	11.5	9.5	10.4	7.0	5.5	6.2	1.5	1.5	1.5
14	16.5	15.0	15.7	17.0	15.0	15.9	14.0	11.5	12.7	10.5	9.5	9.9	6.5	5.5	5.9	1.5	1.0	1.2
15	15.5	14.0	14.9	17.0	15.0	16.0	14.0	12.0	13.0	10.0	8.5	9.3	6.0	5.0	5.5	1.5	1.5	1.5
16	15.0	13.0	14.0	17.5	14.5	16.1	14.5	12.0	13.1	9.0	8.0	8.4	6.0	4.5	5.3	1.5	1.0	1.1
17	14.0	13.5	13.8	18.0	15.0	16.4	15.0	12.0	13.4	8.0	7.0	7.5	5.5	4.5	5.0	2.0	1.0	1.4
18	15.0	13.0	13.9	18.5	15.0	16.6	14.5	12.5	13.4	7.5	6.5	6.9	5.0	4.0	4.5	2.0	1.5	1.8
19	16.5	13.5	15.0	17.5	16.0	16.6	14.5	12.5	13.4	7.0	5.5	6.4	4.5	3.5	4.1	2.0	1.5	1.8
20	16.5	15.0	15.8	18.0	15.5	16.9	14.5	12.5	13.5	7.5	5.5	6.6	5.0	4.0	4.4	2.0	1.5	1.8
21	16.5	14.5	15.6	18.5	16.5	17.6	14.5	12.5	13.4	8.0	6.0	6.9	4.0	3.5	3.9	2.0	1.5	1.6
22	17.5	15.0	16.3	19.0	16.0	17.5	14.5	12.0	13.1	8.0	6.0	6.9	4.0	3.5	3.6	2.0	1.5	1.6
23	18.0	15.5	16.7	19.5	16.5	17.7	14.0	12.0	13.1	7.5	5.5	6.6	3.5	3.0	3.2	1.5	1.0	1.2
24	18.0	16.0	16.9	19.0	16.5	17.6	13.5	12.0	12.8	7.5	6.0	6.8	3.0	2.0	2.6	1.5	0.5	0.9
25	18.0	16.0	16.9	19.0	16.5	17.6	12.5	11.5	11.9	7.5	6.0	6.6	2.5	2.0	2.3	1.0	0.5	0.9
26	18.0	16.0	17.0	19.0	16.0	17.6	12.0	10.5	11.3	8.0	6.5	7.1	3.5	2.5	3.0	1.0	0.5	0.8
27	18.5	16.0	17.3	18.0	16.5	17.3	11.0	10.0	10.4	8.0	6.5	7.3	4.0	3.0	3.6	1.0	0.5	0.7
28	19.0	16.5	17.7	18.5	16.0	17.2	10.5	8.5	9.5	7.5	7.0	7.1	5.0	3.5	4.2	1.0	0.5	0.9
29	19.5	17.5	18.2	18.5	16.0	17.3	10.0	8.0	9.0	7.5	6.5	7.0	5.0	4.0	4.5	1.0	0.5	0.9
30	19.5	17.5	18.2	17.0	16.0	16.5	9.5	7.5	8.6	8.0	6.5	7.0	5.0	4.5	4.8	1.0	0.5	0.9
31	18.5	16.5	17.5	16.5	15.0	15.8	—	—	—	7.5	6.0	6.8	—	—	—	1.0	1.0	1.0
Month	19.5	11.5	15.2	19.5	14.5	17.1	16.5	7.5	12.8	11.5	5.5	8.2	7.5	2.0	5.1	4.5	0.5	1.6

Appendix L. Water temperature records for the Teton River at the Hog Hollow Bridge near Newdale, Idaho, 2000.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	1.0	0.5	0.9	1.5	1.0	1.1	6.0	4.5	5.3	7.0	6.0	6.5	10.0	8.0	9.0	11.5	10.0	10.8
2	1.0	1.0	1.0	1.5	1.0	1.2	6.5	5.5	5.8	7.0	6.0	6.5	11.0	9.5	10.3	12.5	10.0	11.4
3	1.0	1.0	1.0	2.0	1.0	1.5	6.5	5.0	5.9	8.0	6.0	6.9	11.5	10.5	10.9	14.0	11.5	12.6
4	1.0	1.0	1.0	2.0	1.0	1.5	6.5	5.5	6.0	8.5	6.5	7.5	10.5	10.0	10.4	14.5	12.0	13.2
5	1.0	1.0	1.0	3.0	2.0	2.3	6.5	5.5	6.1	9.0	7.0	8.1	10.0	8.5	9.2	14.0	12.5	13.2
6	1.0	1.0	1.0	3.0	1.5	2.3	7.0	5.5	6.2	8.0	7.5	7.9	8.0	7.0	7.6	14.5	12.5	13.4
7	1.0	1.0	1.0	3.5	2.0	2.8	6.5	5.5	6.2	8.5	7.0	7.6	7.0	6.5	6.8	15.0	13.0	14.0
8	1.0	0.5	0.9	3.5	2.5	3.0	6.5	5.5	6.2	8.5	6.5	7.6	7.5	6.5	6.9	14.5	13.0	13.7
9	1.0	1.0	1.0	3.5	3.0	3.2	6.0	6.0	6.0	8.0	7.0	7.6	8.5	7.0	7.8	12.5	11.5	12.1
10	1.0	1.0	1.0	4.0	3.0	3.6	6.0	5.5	5.6	9.5	7.5	8.4	9.0	7.5	8.2	12.5	11.5	11.8
11	1.5	1.0	1.2	4.0	3.5	3.7	5.5	4.5	5.0	10.5	8.0	9.3	8.0	7.0	7.4	12.0	10.5	11.2
12	1.0	1.0	1.0	4.0	3.5	3.8	5.5	4.5	5.1	10.5	9.0	9.7	7.5	6.0	6.7	11.5	11.0	11.4
13	1.5	1.0	1.3	3.5	3.0	3.4	6.0	4.5	5.3	10.5	9.5	10.0	8.0	5.5	6.9	13.0	11.5	12.1
14	1.5	1.0	1.3	4.0	3.0	3.4	5.5	5.0	5.3	11.0	9.5	10.2	10.0	7.0	8.5	13.5	11.5	12.5
15	1.5	1.0	1.2	4.0	3.0	3.4	6.5	5.0	5.6	10.5	9.5	9.8	11.5	9.0	10.1	14.5	12.5	13.4
16	2.5	1.5	2.0	3.5	2.5	3.1	6.5	5.0	5.8	9.5	8.5	8.9	11.5	10.0	10.7	14.5	13.0	13.6
17	3.0	2.0	2.4	3.5	2.5	3.1	6.5	5.5	6.0	9.5	8.5	8.9	11.5	10.0	10.7	14.0	12.5	13.1
18	3.0	2.0	2.6	3.5	2.5	3.1	6.5	5.0	5.7	9.0	8.5	8.8	11.5	10.0	10.6	14.5	12.0	13.2
19	3.0	2.5	2.8	3.5	2.5	3.0	5.5	5.0	5.1	9.5	8.5	8.9	11.5	10.0	10.7	13.0	12.5	12.9
20	3.0	2.5	2.8	3.5	2.0	2.8	6.0	4.5	5.1	10.5	9.0	9.6	12.5	10.5	11.3	14.0	12.5	13.1
21	3.5	3.0	3.2	4.0	3.0	3.5	6.0	4.0	5.0	11.5	9.0	10.2	12.0	10.5	11.5	14.0	12.0	13.0
22	3.5	3.0	3.3	4.5	3.5	3.9	6.0	4.5	5.4	11.0	10.0	10.5	12.5	11.5	12.0	15.5	12.5	14.1
23	3.5	3.0	3.2	4.5	3.5	3.9	5.5	4.5	5.1	10.5	10.0	10.3	12.5	11.5	11.9	17.0	14.5	15.6
24	3.0	2.5	2.8	4.5	4.0	4.4	6.0	4.5	5.3	9.5	9.0	9.2	13.0	11.0	12.0	17.5	15.0	16.1
25	3.0	2.5	2.8	4.5	3.5	4.0	6.5	5.0	5.7	8.5	8.0	8.1	12.0	11.0	11.6	17.5	15.5	16.3
26	3.5	2.5	3.0	4.0	3.0	3.6	7.5	6.0	6.8	9.5	7.5	8.3	11.5	10.5	10.8	17.0	15.0	15.9
27	3.0	2.0	2.5	4.5	3.5	4.1	8.5	6.5	7.6	11.0	8.0	9.6	10.0	9.5	9.7	17.0	15.0	15.9
28	2.5	2.0	2.4	4.5	4.0	4.3	8.5	8.0	8.1	12.0	10.5	11.3	11.0	9.5	10.3	18.0	14.5	16.0
29	2.0	1.5	1.6	5.5	4.0	4.6	8.0	7.5	7.8	11.0	10.0	10.7	11.5	10.0	10.8	18.0	15.0	16.5
30	2.0	1.0	1.5	—	—	—	8.0	6.5	7.3	9.5	8.5	9.0	12.0	10.5	11.2	18.5	15.5	17.0
31	1.0	1.0	1.0	—	—	—	8.0	6.0	7.1	—	—	—	12.0	10.5	11.2	—	—	—
Month	3.5	0.5	1.8	5.5	1.0	3.2	8.5	4.0	5.9	12.0	6.0	8.9	13.0	5.5	9.8	18.5	10.0	13.6

Appendix L. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	18.5	16.0	17.1	20.5	17.5	19.0	16.0	14.5	15.3	11.5	11.5	11.5	—	—	—	—	—	—
2	19.0	15.5	17.5	20.5	17.5	18.8	16.0	14.0	14.8	12.5	10.5	11.7	—	—	—	—	—	—
3	19.0	16.0	17.5	19.5	17.0	18.4	15.5	13.0	14.3	13.0	10.5	11.6	—	—	—	—	—	—
4	18.0	15.5	16.7	19.5	17.5	18.3	16.0	13.5	14.6	12.5	10.5	11.2	—	—	—	—	—	—
5	18.5	15.5	16.8	20.5	18.0	19.0	16.0	13.5	14.6	12.0	10.0	10.8	—	—	—	—	—	—
6	18.0	15.5	16.6	20.0	17.5	18.8	14.5	13.0	13.6	11.5	9.0	10.2	—	—	—	—	—	—
7	18.5	15.0	17.0	20.0	17.5	18.7	15.0	12.5	13.8	10.5	8.5	9.6	—	—	—	—	—	—
8	19.0	15.5	17.6	19.0	16.5	17.9	15.0	12.5	13.7	10.0	8.0	9.1	—	—	—	—	—	—
9	20.0	16.5	18.3	19.5	16.5	17.9	13.5	12.5	12.8	10.0	8.0	8.9	—	—	—	—	—	—
10	18.0	16.5	17.4	19.0	17.0	18.0	13.5	12.0	12.8	9.0	8.5	8.8	—	—	—	—	—	—
11	19.0	16.5	17.7	19.5	17.0	17.9	14.5	12.0	13.3	8.5	8.0	8.1	—	—	—	—	—	—
12	19.5	16.0	18.0	18.5	15.0	16.8	14.5	12.0	13.4	8.5	7.5	7.9	—	—	—	—	—	—
13	20.0	16.0	18.3	18.5	15.5	17.1	16.0	12.5	14.1	8.0	7.5	7.8	—	—	—	—	—	—
14	19.5	17.0	18.5	18.5	16.0	17.1	16.5	13.5	14.5	8.0	7.5	7.7	—	—	—	—	—	—
15	20.5	17.0	18.6	17.5	15.5	16.2	17.0	13.5	15.0	8.5	7.5	7.9	—	—	—	—	—	—
16	20.5	18.0	19.2	18.0	14.5	16.1	16.5	13.5	14.9	9.0	7.0	8.0	—	—	—	—	—	—
17	20.5	18.5	19.3	17.0	14.0	15.7	16.5	14.0	15.3	9.5	7.5	8.6	—	—	—	—	—	—
18	19.5	18.0	18.9	16.5	14.5	15.4	15.5	14.0	14.9	9.5	8.0	8.9	—	—	—	—	—	—
19	20.0	17.0	18.7	18.0	15.0	16.2	15.5	13.0	14.4	9.5	8.0	8.7	—	—	—	—	—	—
20	19.5	17.0	18.6	17.5	15.0	15.8	15.0	12.5	13.6	10.0	8.0	9.0	—	—	—	—	—	—
21	20.0	17.5	18.7	17.5	14.5	15.9	14.0	12.0	13.2	9.0	8.5	8.7	—	—	—	—	—	—
22	20.5	17.5	19.0	17.5	14.5	16.0	11.0	10.5	10.6	9.0	7.5	8.2	—	—	—	—	—	—
23	20.5	17.5	19.1	17.5	14.5	16.0	11.5	9.5	10.6	9.0	7.5	8.4	—	—	—	—	—	—
24	20.0	17.0	18.6	18.5	15.0	16.4	11.5	9.5	10.1	8.5	7.5	8.2	—	—	—	—	—	—
25	19.5	16.5	18.4	18.0	15.5	16.5	11.5	9.0	10.1	9.0	8.0	8.3	—	—	—	—	—	—
26	18.5	17.5	18.1	18.0	15.5	16.6	11.5	9.0	10.3	—	—	—	—	—	—	—	—	—
27	20.0	17.0	18.6	17.5	15.0	16.1	12.0	9.0	10.6	—	—	—	—	—	—	—	—	—
28	20.0	17.0	18.7	17.0	14.5	16.0	12.5	9.5	11.1	—	—	—	—	—	—	—	—	—
29	20.5	17.5	18.9	17.5	14.5	15.8	13.0	10.5	11.6	—	—	—	—	—	—	—	—	—
30	20.5	17.5	19.2	15.5	14.0	14.7	12.5	11.0	11.6	—	—	—	—	—	—	—	—	—
31	20.5	18.5	19.2	17.0	14.0	15.4	—	—	—	—	—	—	—	—	—	—	—	—
Month	20.5	15.0	18.2	20.5	14.0	16.9	17.0	9.0	13.1	13.0	7.0	9.1	—	—	—	—	—	—

Appendix M. Water temperature records for the Teton River at Felt Dam near Felt, Idaho, 1998.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	—	—	14.0	12.5	13.4	13.5	10.5	12.0	
2	—	—	—	—	—	—	—	—	—	—	—	13.0	10.0	11.4	12.5	11.0	11.9	
3	—	—	—	—	—	—	—	—	—	—	—	12.5	10.0	11.2	11.0	9.0	10.1	
4	—	—	—	—	—	—	—	—	—	—	—	12.5	10.0	11.1	9.0	8.0	8.3	
5	—	—	—	—	—	—	—	—	—	—	—	12.0	9.5	10.6	11.5	7.0	9.2	
6	—	—	—	—	—	—	—	—	—	—	—	14.0	10.0	11.9	10.5	9.5	10.0	
7	—	—	—	—	—	—	—	—	—	—	—	13.0	11.0	11.8	11.0	9.0	10.1	
8	—	—	—	—	—	—	—	—	—	—	—	12.5	10.0	11.3	12.5	9.5	10.8	
9	—	—	—	—	—	—	—	—	—	—	—	11.0	10.0	10.6	11.5	10.5	11.0	
10	—	—	—	—	—	—	—	—	—	—	—	10.5	8.0	9.3	11.5	10.0	10.6	
11	—	—	—	—	—	—	—	—	—	—	—	9.5	7.5	8.5	12.5	10.5	11.4	
12	—	—	—	—	—	—	—	—	—	—	—	9.5	7.5	8.7	13.5	11.5	12.4	
13	—	—	—	—	—	—	—	—	—	—	—	9.0	8.0	8.4	12.5	10.0	11.7	
14	—	—	—	—	—	—	—	—	—	—	—	8.5	7.0	7.6	12.0	9.5	10.5	
15	—	—	—	—	—	—	—	—	—	—	—	9.5	7.0	8.2	11.5	9.5	10.4	
16	—	—	—	—	—	—	—	—	—	—	—	10.5	8.0	9.2	9.0	8.0	8.4	
17	—	—	—	—	—	—	—	—	—	—	—	10.0	9.0	9.4	10.5	8.5	9.3	
18	—	—	—	—	—	—	—	—	—	—	—	11.5	7.5	9.4	10.5	8.5	9.3	
19	—	—	—	—	—	—	—	—	—	—	—	12.5	9.0	11.1	12.0	10.5	11.1	
20	—	—	—	—	—	—	—	—	—	—	—	14.5	11.0	12.6	12.0	9.5	10.8	
21	—	—	—	—	—	—	—	—	—	—	—	13.0	10.5	11.9	14.0	10.5	12.2	
22	—	—	—	—	—	—	—	—	—	—	—	10.5	8.0	8.9	13.5	12.5	12.9	
23	—	—	—	—	—	—	—	—	—	—	—	8.5	7.5	7.8	12.0	11.0	11.5	
24	—	—	—	—	—	—	—	—	—	—	—	10.5	7.5	8.9	12.5	10.0	11.0	
25	—	—	—	—	—	—	—	—	—	—	—	13.0	9.5	11.4	11.5	10.0	10.8	
26	—	—	—	—	—	—	—	—	—	—	—	13.0	11.0	12.2	13.0	9.5	10.9	
27	—	—	—	—	—	—	—	—	—	—	—	11.0	9.0	10.0	13.5	10.0	11.8	
28	—	—	—	—	—	—	—	—	—	—	—	12.5	9.0	10.5	14.5	10.5	12.4	
29	—	—	—	—	—	—	—	—	—	—	—	14.0	10.5	12.2	15.5	12.5	13.8	
30	—	—	—	—	—	—	—	—	—	—	—	13.0	10.5	11.7	15.5	13.0	13.9	
31	—	—	—	—	—	—	—	—	—	—	—	12.0	9.0	10.6	—	—	—	
Month	—	—	—	—	—	—	—	—	—	—	—	14.5	7.0	10.4	15.5	7.0	11.0	

Appendix M. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	17.0	13.5	14.8	16.5	14.5	15.5	17.5	13.5	15.4	12.5	11.0	11.7	6.5	5.0	5.9	—	—	—
2	16.5	13.5	15.0	17.0	13.5	15.3	17.0	14.0	15.5	11.5	10.0	10.6	6.0	5.5	5.8	—	—	—
3	17.5	13.0	15.2	17.5	13.5	15.6	17.5	13.5	15.6	10.5	9.0	9.4	5.5	5.5	5.5	—	—	—
4	18.0	14.0	15.9	19.0	14.5	16.8	17.0	14.0	15.4	9.0	7.5	8.2	—	—	—	—	—	—
5	17.5	14.0	15.8	19.5	15.5	17.5	16.5	14.5	15.3	8.0	6.0	7.1	—	—	—	—	—	—
6	17.5	14.0	15.6	20.0	16.0	17.9	17.5	14.5	15.9	10.0	7.0	8.1	—	—	—	—	—	—
7	16.5	14.0	15.1	18.5	16.0	17.4	18.0	15.0	16.5	10.5	7.5	9.0	—	—	—	—	—	—
8	16.5	13.0	14.7	18.5	15.0	16.8	17.0	15.5	16.1	10.5	8.0	9.1	—	—	—	—	—	—
9	16.0	13.5	14.8	20.0	15.5	17.5	15.5	14.0	14.8	10.0	7.5	8.8	—	—	—	—	—	—
10	15.0	14.0	14.5	19.0	15.0	17.1	15.5	14.5	14.9	9.0	7.5	8.2	—	—	—	—	—	—
11	16.0	13.0	14.5	19.0	15.0	17.0	15.5	12.5	14.0	8.0	6.0	7.2	—	—	—	—	—	—
12	16.0	13.5	14.7	19.0	15.5	17.1	15.0	14.0	14.4	8.5	5.5	7.1	—	—	—	—	—	—
13	16.0	13.5	14.9	19.0	15.0	17.2	15.5	13.5	14.4	9.5	7.0	8.0	—	—	—	—	—	—
14	16.5	14.0	15.4	19.0	15.0	17.0	16.0	13.0	14.5	9.0	7.0	8.1	—	—	—	—	—	—
15	16.5	14.0	15.1	17.0	14.5	16.0	16.5	13.0	14.9	8.0	7.0	7.6	—	—	—	—	—	—
16	17.0	14.0	15.6	18.0	14.0	15.9	16.5	13.5	14.9	7.5	6.0	6.7	—	—	—	—	—	—
17	17.5	14.5	15.9	17.0	15.0	16.1	16.0	13.0	14.4	6.5	4.5	5.6	—	—	—	—	—	—
18	18.5	15.0	16.8	16.5	15.5	15.9	15.0	13.0	14.0	7.0	5.0	5.9	—	—	—	—	—	—
19	18.5	15.5	17.3	15.5	13.5	14.5	13.5	12.0	12.7	7.5	4.5	6.0	—	—	—	—	—	—
20	19.0	16.0	17.6	16.0	14.0	14.8	13.0	11.0	11.9	7.5	4.5	5.8	—	—	—	—	—	—
21	19.5	16.0	17.8	15.5	13.0	14.3	12.0	9.5	10.6	8.0	5.0	6.3	—	—	—	—	—	—
22	19.0	16.0	17.6	17.0	13.0	14.9	11.0	10.0	10.5	8.0	6.5	7.1	—	—	—	—	—	—
23	19.5	15.5	17.5	17.0	13.5	15.1	12.0	9.0	10.5	8.0	7.5	7.7	—	—	—	—	—	—
24	18.5	16.5	17.1	16.0	12.5	14.4	12.5	10.0	11.1	8.5	6.5	7.4	—	—	—	—	—	—
25	19.0	14.5	16.9	16.5	12.5	14.4	12.5	10.5	11.5	9.0	7.0	7.9	—	—	—	—	—	—
26	20.5	16.0	18.2	15.5	14.0	14.8	11.5	10.5	10.8	9.0	7.0	8.0	—	—	—	—	—	—
27	21.0	17.0	18.6	16.0	13.0	14.5	12.0	8.5	10.3	8.5	6.5	7.6	—	—	—	—	—	—
28	20.0	16.5	18.1	17.5	12.5	14.6	13.0	10.0	11.2	8.5	8.0	8.2	—	—	—	—	—	—
29	19.0	15.5	17.5	16.5	13.5	15.0	13.0	10.0	11.4	8.0	7.0	7.4	—	—	—	—	—	—
30	18.0	16.0	17.0	17.0	13.5	15.1	13.0	10.0	11.5	7.0	6.0	6.4	—	—	—	—	—	—
31	17.5	15.0	16.4	17.5	13.5	15.5	—	—	—	7.0	5.5	6.3	—	—	—	—	—	—
Month	21.0	13.0	16.2	20.0	12.5	15.9	18.0	8.5	13.5	12.5	4.5	7.7	6.5	5.0	5.7	—	—	—

Appendix N. Water temperature records for the Teton River at Felt Dam near Felt, Idaho, 1999.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	5.5	4.5	5.2	11.5	9.0	10.2	12.0	7.0	9.1
2	—	—	—	—	—	—	—	—	—	7.0	3.5	5.0	10.0	8.0	9.3	11.5	9.0	9.9
3	—	—	—	—	—	—	—	—	—	6.5	4.5	5.4	8.0	7.0	7.3	11.5	8.5	9.6
4	—	—	—	—	—	—	—	—	—	6.5	4.0	5.1	7.5	5.5	6.5	12.0	9.0	10.5
5	—	—	—	—	—	—	—	—	—	6.5	3.5	5.1	7.5	5.0	6.2	10.5	9.0	9.7
6	—	—	—	—	—	—	—	—	—	6.5	5.0	5.7	10.5	5.5	7.8	10.0	8.5	9.3
7	—	—	—	—	—	—	—	—	—	8.0	4.0	5.8	12.5	8.0	10.2	10.0	8.0	8.8
8	—	—	—	—	—	—	—	—	—	7.5	6.0	6.8	11.5	9.5	10.5	10.0	8.5	9.2
9	—	—	—	—	—	—	—	—	—	6.5	4.0	5.4	10.0	7.5	8.8	11.0	7.5	9.2
10	—	—	—	—	—	—	—	—	—	6.5	3.0	4.5	8.5	6.0	7.5	11.5	9.0	10.2
11	—	—	—	—	—	—	—	—	—	8.0	3.0	5.4	9.5	5.5	7.3	13.0	9.0	10.9
12	—	—	—	—	—	—	—	—	—	10.0	5.0	7.4	9.5	7.0	8.0	14.0	10.5	12.4
13	—	—	—	—	—	—	—	—	—	9.5	6.5	8.0	9.0	7.0	8.1	14.0	11.5	12.8
14	—	—	—	—	—	—	—	—	—	8.5	5.5	7.1	10.0	6.5	8.2	14.5	12.0	13.2
15	—	—	—	—	—	—	—	—	—	8.0	4.5	6.2	9.0	7.5	7.9	13.5	12.5	13.0
16	—	—	—	—	—	—	—	—	—	8.5	4.5	6.6	9.0	6.0	7.1	—	—	—
17	—	—	—	—	—	—	—	—	—	10.5	5.5	8.0	10.0	6.0	7.8	—	—	—
18	—	—	—	—	—	—	—	—	—	11.5	7.5	9.5	11.0	8.5	9.7	—	—	—
19	—	—	—	—	—	—	—	—	—	10.0	8.5	9.4	13.5	8.5	10.9	—	—	—
20	—	—	—	—	—	—	—	—	—	8.0	6.5	7.5	14.0	9.5	11.9	—	—	—
21	—	—	—	—	—	—	—	—	—	7.0	5.5	6.1	15.5	11.5	13.2	—	—	—
22	—	—	—	—	—	—	—	—	—	7.5	5.0	6.3	15.0	11.5	13.4	—	—	—
23	—	—	—	—	—	—	—	—	—	7.5	5.5	6.4	15.5	11.0	13.5	—	—	—
24	—	—	—	—	—	—	—	—	—	10.5	5.5	7.7	15.0	12.0	13.6	—	—	—
25	—	—	—	—	—	—	—	—	—	11.0	8.5	9.2	14.5	11.5	12.9	—	—	—
26	—	—	—	—	—	—	—	—	—	9.0	6.5	7.9	13.0	11.0	12.1	—	—	—
27	—	—	—	—	—	—	—	—	—	10.5	7.0	8.7	13.5	10.5	12.0	—	—	—
28	—	—	—	—	—	—	—	—	—	11.5	8.5	9.9	12.5	10.5	11.4	—	—	—
29	—	—	—	—	—	—	—	—	—	11.0	9.0	9.7	10.5	9.5	9.9	—	—	—
30	—	—	—	—	—	—	—	—	—	11.5	8.5	10.0	9.5	8.0	8.5	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	—	8.0	6.5	7.2	—	—	—
Month	—	—	—	—	—	—	—	—	—	11.5	3.0	7.0	15.5	5.0	9.6	14.5	7.0	10.5

Appendix N. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Month	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix O. Water temperature records for the Teton River at the Narrows screw trap near Teton, Idaho, 1998.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	7.0	4.5	5.7	14.0	10.5	12.0	13.5	10.0	11.7
2	—	—	—	—	—	—	—	—	—	6.0	4.5	5.3	12.5	9.0	10.8	12.0	10.5	11.2
3	—	—	—	—	—	—	—	—	—	7.0	4.5	5.8	12.5	9.5	11.0	10.5	8.5	9.4
4	—	—	—	—	—	—	—	—	—	6.5	4.5	5.6	12.0	9.5	10.6	8.5	7.0	7.7
5	—	—	—	—	—	—	—	—	—	6.0	4.5	5.1	12.0	8.5	10.3	12.0	6.5	9.1
6	—	—	—	—	—	—	—	—	—	6.5	5.0	5.8	14.0	10.0	11.7	10.0	8.5	9.5
7	—	—	—	—	—	—	—	—	—	7.5	5.0	6.1	13.0	10.5	11.4	11.0	8.5	9.7
8	—	—	—	—	—	—	—	—	—	7.5	5.0	5.9	12.5	9.0	10.7	12.5	8.5	10.5
9	—	—	—	—	—	—	—	—	—	6.0	4.0	5.1	10.5	9.0	9.9	11.5	10.0	10.6
10	—	—	—	—	—	—	—	—	—	8.5	4.0	6.2	10.0	7.5	8.5	11.5	9.0	10.2
11	—	—	—	—	—	—	—	—	—	8.5	6.5	7.4	9.0	6.5	7.8	13.0	10.0	11.3
12	—	—	—	—	—	—	—	—	—	7.0	4.5	6.1	9.0	7.0	8.1	14.0	11.0	12.2
13	—	—	—	—	—	—	—	—	—	6.0	3.5	4.7	8.5	7.0	7.7	12.0	9.0	11.0
14	—	—	—	—	—	—	—	—	—	7.5	4.5	5.8	7.5	6.0	6.9	9.5	8.5	8.9
15	—	—	—	—	—	—	—	—	—	7.5	4.0	5.4	9.5	6.5	7.8	—	—	—
16	—	—	—	—	—	—	—	—	—	7.5	6.0	6.6	10.5	7.0	8.8	—	—	—
17	—	—	—	—	—	—	—	—	—	7.5	5.0	6.2	9.5	8.0	8.9	—	—	—
18	—	—	—	—	—	—	—	—	—	8.5	4.5	6.5	12.0	7.5	9.3	10.5	10.5	10.5
19	—	—	—	—	—	—	—	—	—	8.5	6.5	7.5	13.0	9.5	11.0	12.5	9.5	10.9
20	—	—	—	—	—	—	—	—	—	10.5	5.0	7.9	14.5	11.0	12.6	12.0	8.5	10.4
21	—	—	—	—	—	—	—	—	—	12.0	7.5	9.6	13.0	10.0	11.5	14.5	10.0	12.0
22	—	—	—	—	—	—	—	—	—	13.0	8.0	10.5	9.5	7.0	8.0	13.5	12.0	12.5
23	—	—	—	—	—	—	—	—	—	13.0	9.5	11.4	8.0	6.5	7.1	12.0	10.0	11.0
24	—	—	—	—	—	—	—	—	—	11.0	6.0	8.9	10.5	6.5	8.5	12.5	9.5	10.8
25	—	—	—	—	—	—	—	—	—	7.0	4.5	5.8	13.0	9.0	11.3	11.0	9.5	10.2
26	—	—	—	—	—	—	—	—	—	9.0	3.0	6.2	12.5	10.0	11.6	13.5	8.5	10.8
27	—	—	—	—	—	—	—	—	—	12.0	7.0	9.3	10.5	8.0	9.4	14.0	9.5	11.5
28	—	—	—	—	—	—	—	—	—	13.5	8.5	10.9	12.5	8.0	10.1	14.5	10.0	12.2
29	—	—	—	—	—	—	—	—	—	14.0	9.5	11.9	13.5	10.5	11.9	16.0	12.0	13.7
30	—	—	—	—	—	—	—	—	—	14.5	10.0	12.1	12.5	10.0	11.0	15.5	12.0	13.6
31	—	—	—	—	—	—	7.0	5.5	6.4	—	—	—	12.0	8.0	10.1	—	—	—
Month	—	—	—	—	—	—	7.0	5.5	6.4	14.5	3.0	7.2	14.5	6.0	9.9	16.0	6.5	10.9

Appendix O. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	17.0	13.0	14.7	17.0	14.5	15.6	18.5	14.0	16.2	12.5	10.5	11.6	5.5	4.0	4.9	—	—	—
2	16.5	13.0	14.8	17.0	13.5	15.2	18.0	14.0	16.1	11.0	9.0	10.1	5.0	4.5	4.7	—	—	—
3	18.0	12.5	15.2	18.5	13.5	15.9	18.5	14.0	16.3	10.0	8.0	8.8	—	—	—	—	—	—
4	18.0	13.5	15.6	20.0	14.5	17.3	17.5	14.5	15.9	8.0	7.0	7.6	—	—	—	—	—	—
5	18.0	13.5	15.5	20.5	15.5	18.0	16.5	14.5	15.8	8.0	4.5	6.5	—	—	—	—	—	—
6	17.5	13.5	15.4	21.0	16.0	18.5	18.5	14.5	16.7	9.5	6.0	7.9	—	—	—	—	—	—
7	16.0	13.5	14.8	19.0	16.5	17.6	19.5	15.5	17.5	10.5	7.0	8.9	—	—	—	—	—	—
8	16.5	12.5	14.5	19.5	15.0	17.3	17.5	15.5	16.5	10.5	7.0	8.9	—	—	—	—	—	—
9	16.0	13.0	14.5	20.0	16.0	18.0	17.0	14.0	15.6	9.5	7.0	8.4	—	—	—	—	—	—
10	14.5	13.5	14.1	19.5	15.5	17.6	16.0	14.5	15.3	8.5	7.0	7.6	—	—	—	—	—	—
11	16.5	12.5	14.3	19.5	15.5	17.5	15.5	12.5	14.2	7.5	5.5	6.6	—	—	—	—	—	—
12	16.0	13.0	14.4	20.0	15.5	17.8	15.0	14.0	14.6	8.0	4.5	6.5	—	—	—	—	—	—
13	16.0	13.0	14.6	20.5	15.5	18.0	16.0	13.0	14.5	9.0	6.0	7.6	—	—	—	—	—	—
14	16.5	14.0	15.2	20.0	15.5	17.6	17.0	13.0	15.0	8.5	6.0	7.5	—	—	—	—	—	—
15	16.5	13.5	14.9	17.5	15.0	16.3	17.0	13.0	15.3	7.5	6.0	6.8	—	—	—	—	—	—
16	17.0	14.0	15.4	18.5	14.0	16.2	17.0	13.5	15.3	6.5	5.0	5.8	—	—	—	—	—	—
17	17.5	14.0	15.8	18.0	15.0	16.5	16.0	13.0	14.8	6.0	3.5	4.7	—	—	—	—	—	—
18	19.0	15.0	16.8	16.5	15.0	15.9	16.5	13.0	14.5	6.5	3.5	5.0	—	—	—	—	—	—
19	19.0	15.5	17.3	17.0	13.0	14.9	14.0	12.0	13.0	6.5	3.5	5.1	—	—	—	—	—	—
20	19.0	16.0	17.5	16.0	14.0	15.0	13.0	10.5	11.7	6.5	3.5	5.1	—	—	—	—	—	—
21	20.0	16.0	18.0	16.5	13.0	14.5	11.5	9.0	10.3	7.0	4.0	5.6	—	—	—	—	—	—
22	19.0	16.0	17.5	18.0	13.0	15.5	11.0	9.0	10.1	7.0	5.5	6.3	—	—	—	—	—	—
23	20.5	15.5	17.9	17.5	13.5	15.6	12.0	8.0	10.3	7.5	6.5	7.0	—	—	—	—	—	—
24	18.0	16.0	17.0	17.0	12.5	14.8	12.5	9.0	11.0	7.5	5.5	6.7	—	—	—	—	—	—
25	19.5	14.5	17.0	17.0	12.5	14.9	12.5	10.0	11.2	9.0	6.5	7.6	—	—	—	—	—	—
26	20.5	16.5	18.5	16.0	14.0	15.1	11.0	10.0	10.3	8.5	6.0	7.5	—	—	—	—	—	—
27	20.5	17.5	18.9	17.0	12.5	14.8	12.0	8.0	10.2	7.5	5.5	6.9	—	—	—	—	—	—
28	19.5	16.5	18.0	17.5	12.5	15.2	13.0	9.5	11.3	8.5	7.0	7.6	—	—	—	—	—	—
29	20.0	15.5	17.6	17.0	13.5	15.3	13.0	9.5	11.5	7.5	6.0	6.6	—	—	—	—	—	—
30	18.0	16.0	17.0	17.5	13.5	15.6	13.0	9.5	11.6	5.5	4.5	5.3	—	—	—	—	—	—
31	18.0	15.0	16.5	18.5	14.0	16.1	—	—	—	6.5	5.0	5.6	—	—	—	—	—	—
Month	20.5	12.5	16.1	21.0	12.5	16.3	19.5	8.0	13.7	12.5	3.5	7.1	5.5	4.0	4.8	—	—	—

Appendix P. Water temperature records for the Teton River at the USGS Leigh gauge near Driggs, Idaho, 1996.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	7.5	10.0
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	8.5	11.0
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	9.5	11.5
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	9.5	11.4
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	9.0	11.0
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	8.0	10.6
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	9.0	11.6
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	10.0	12.4
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	10.0	12.6
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	10.5	12.9
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	10.5	12.8
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	10.5	12.8
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	11.0	12.8
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	10.5	12.5
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	10.5	12.4
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	10.5	13.0
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	11.0	13.3
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	10.0	11.6
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	8.0	10.2
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5	9.0	10.7
21	—	—	—	—	—	—	—	—	—	—	—	11.0	10.5	10.7	13.0	9.0	11.0	
22	—	—	—	—	—	—	—	—	—	—	—	10.5	8.0	9.5	12.5	10.0	11.3	
23	—	—	—	—	—	—	—	—	—	—	—	9.5	6.0	7.1	12.0	8.5	10.4	
24	—	—	—	—	—	—	—	—	—	—	—	10.0	5.5	7.8	14.5	10.0	12.2	
25	—	—	—	—	—	—	—	—	—	—	—	11.5	8.0	9.9	14.0	10.5	12.4	
26	—	—	—	—	—	—	—	—	—	—	—	11.0	8.5	9.0	13.5	10.0	11.4	
27	—	—	—	—	—	—	—	—	—	—	—	10.5	7.5	9.1	13.0	9.5	11.3	
28	—	—	—	—	—	—	—	—	—	—	—	10.5	8.5	9.1	12.5	9.0	10.2	
29	—	—	—	—	—	—	—	—	—	—	—	9.5	6.5	8.0	14.0	8.5	11.1	
30	—	—	—	—	—	—	—	—	—	—	—	10.0	7.0	8.6	14.5	10.0	12.4	
31	—	—	—	—	—	—	—	—	—	—	—	11.0	7.0	9.2	—	—	—	
Month	—	—	—	—	—	—	—	—	—	—	—	11.5	5.5	8.9	15.0	7.5	11.7	

Appendix P. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	15.0	11.0	13.1	18.0	14.0	15.9	16.0	11.5	13.8	13.0	9.0	11.0	—	—	—	—	—	—
2	15.0	11.0	13.0	17.5	13.5	15.6	15.0	10.5	13.0	12.5	9.0	10.9	—	—	—	—	—	—
3	15.5	10.5	13.1	16.0	13.0	14.7	15.0	10.0	12.9	12.0	8.5	10.6	—	—	—	—	—	—
4	15.5	12.5	14.2	15.0	11.5	13.1	15.5	11.0	13.4	12.0	8.5	10.3	—	—	—	—	—	—
5	15.5	12.0	14.0	—	—	—	14.5	12.0	13.1	12.0	8.5	10.4	—	—	—	—	—	—
6	15.0	11.0	13.0	—	—	—	13.5	8.5	11.2	12.5	9.0	10.8	—	—	—	—	—	—
7	15.0	11.0	13.1	—	—	—	13.5	8.5	11.3	11.5	8.5	10.2	—	—	—	—	—	—
8	15.5	11.5	13.7	17.0	15.0	16.0	15.0	9.5	12.3	11.5	7.5	9.8	—	—	—	—	—	—
9	15.0	12.0	13.4	18.5	13.0	15.7	15.0	10.0	12.8	11.5	7.5	9.8	—	—	—	—	—	—
10	15.5	11.5	13.7	18.5	13.0	15.8	15.0	10.5	13.2	12.0	8.0	10.1	—	—	—	—	—	—
11	15.0	12.0	13.9	18.5	13.0	16.1	14.5	12.0	13.3	12.0	9.0	10.5	—	—	—	—	—	—
12	15.5	12.0	14.1	18.5	13.5	16.1	15.5	12.0	13.6	11.0	8.0	9.8	—	—	—	—	—	—
13	16.0	12.5	14.4	18.5	14.0	16.3	15.0	12.0	13.4	10.5	7.5	9.2	—	—	—	—	—	—
14	16.0	12.5	14.6	17.5	13.5	15.8	13.0	11.0	12.0	10.0	7.5	8.6	—	—	—	—	—	—
15	15.5	13.5	14.5	19.0	13.5	16.3	12.0	9.0	10.8	8.0	5.5	6.6	—	—	—	—	—	—
16	15.0	13.0	13.9	18.5	13.5	16.0	11.0	8.5	9.7	5.5	4.5	4.9	—	—	—	—	—	—
17	17.0	11.5	14.3	17.5	13.5	15.5	8.5	7.0	7.7	5.5	2.5	4.2	—	—	—	—	—	—
18	18.0	14.0	16.0	16.0	13.0	14.3	8.5	5.5	7.1	5.0	3.0	4.3	—	—	—	—	—	—
19	17.0	14.0	15.6	16.0	11.0	13.6	9.0	6.5	7.9	5.5	4.0	4.7	—	—	—	—	—	—
20	16.0	13.0	14.6	16.5	11.0	13.8	10.5	7.0	8.9	4.5	3.0	3.7	—	—	—	—	—	—
21	17.0	12.5	14.7	16.5	12.0	14.3	10.5	8.0	9.5	4.5	2.0	3.4	—	—	—	—	—	—
22	17.5	13.5	15.5	16.5	11.0	13.9	11.0	9.0	9.8	4.0	3.0	3.4	—	—	—	—	—	—
23	18.0	14.0	16.1	17.0	11.0	14.1	10.0	6.0	8.4	—	—	—	—	—	—	—	—	—
24	17.0	14.0	15.7	17.5	11.5	14.6	10.0	6.5	8.4	—	—	—	—	—	—	—	—	—
25	18.0	14.0	15.8	17.0	12.0	14.6	11.0	8.0	9.2	—	—	—	—	—	—	—	—	—
26	17.0	14.0	15.6	16.5	12.0	14.3	8.5	6.0	7.3	—	—	—	—	—	—	—	—	—
27	17.5	13.5	15.7	17.0	13.0	15.1	8.5	4.5	6.5	—	—	—	—	—	—	—	—	—
28	17.5	15.0	16.0	17.0	13.0	15.1	10.5	5.5	8.1	—	—	—	—	—	—	—	—	—
29	16.0	14.0	15.0	17.0	12.5	14.8	11.5	7.5	9.7	—	—	—	—	—	—	—	—	—
30	17.5	13.5	15.7	17.5	12.0	14.8	12.5	8.0	10.4	—	—	—	—	—	—	—	—	—
31	18.0	14.0	16.0	16.5	12.5	14.6	—	—	—	—	—	—	—	—	—	—	—	—
Month	18.0	10.5	14.6	19.0	11.0	15.0	16.0	4.5	10.6	13.0	2.0	8.1	—	—	—	—	—	—

Appendix Q. Water temperature records for the Teton River at the USGS Leigh gauge near Driggs, Idaho, 1997.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	4.5	1.0	3.1	5.5	4.0	4.7	12.0	9.5	11.1
2	—	—	—	—	—	—	—	—	—	6.0	2.0	4.3	7.5	3.0	4.9	11.0	9.5	10.3
3	—	—	—	—	—	—	—	—	—	6.5	3.0	5.2	10.5	5.5	8.2	11.5	10.0	10.7
4	—	—	—	—	—	—	—	—	—	6.0	4.0	4.7	10.5	7.5	9.2	13.0	11.0	11.8
5	—	—	—	—	—	—	—	—	—	4.0	2.0	2.8	12.0	7.0	9.8	13.0	12.0	12.4
6	—	—	—	—	—	—	—	—	—	4.5	0.5	2.7	11.5	8.5	9.8	12.5	10.5	11.5
7	—	—	—	—	—	—	—	—	—	5.5	2.5	4.0	11.0	6.5	8.9	13.5	12.0	12.6
8	—	—	—	—	—	—	—	—	—	5.5	3.5	4.6	11.0	7.0	9.4	13.0	11.0	12.1
9	—	—	—	—	—	—	—	—	—	7.0	4.5	5.9	11.5	7.5	9.7	12.0	11.0	11.7
10	—	—	—	—	—	—	—	—	—	6.0	3.5	4.6	11.0	8.5	10.1	11.5	10.0	10.9
11	—	—	—	—	—	—	—	—	—	5.0	3.0	4.2	11.5	9.0	10.4	13.5	9.5	11.1
12	—	—	—	—	—	—	—	—	—	6.5	3.0	4.9	11.5	7.5	9.6	12.0	10.0	11.2
13	—	—	—	—	—	—	—	—	—	6.5	4.0	5.6	11.0	8.0	9.4	12.0	8.5	10.6
14	—	—	—	—	—	—	—	—	—	6.0	4.5	5.1	11.5	7.5	9.5	13.0	9.5	11.5
15	—	—	—	—	—	—	—	—	—	7.5	3.5	5.3	11.0	8.0	9.7	13.5	10.5	12.3
16	—	—	—	—	—	—	—	—	—	10.0	4.5	7.4	11.0	8.0	9.5	13.5	11.0	12.4
17	—	—	—	—	—	—	—	—	—	9.5	5.5	7.4	11.0	8.0	9.3	14.5	10.0	12.6
18	—	—	—	—	—	—	—	—	—	9.0	5.5	7.4	10.5	7.5	9.0	15.0	12.0	13.4
19	—	—	—	—	—	—	—	—	—	8.5	5.5	6.4	11.0	7.0	9.1	14.0	11.0	12.7
20	—	—	—	—	—	—	7.5	5.0	5.8	6.5	4.5	5.8	10.5	8.0	8.8	14.5	11.0	12.7
21	—	—	—	—	—	—	6.5	3.0	4.3	7.0	3.0	5.1	9.5	7.0	8.4	13.5	10.5	12.4
22	—	—	—	—	—	—	6.0	1.5	3.5	7.5	5.0	6.3	11.5	7.0	9.2	15.5	12.0	13.7
23	—	—	—	—	—	—	5.0	1.5	3.5	7.0	5.0	5.7	11.0	8.5	9.2	14.0	11.5	12.5
24	—	—	—	—	—	—	5.0	1.5	3.6	8.5	3.5	6.0	9.0	7.0	7.7	13.0	9.5	11.5
25	—	—	—	—	—	—	5.0	1.0	3.3	8.0	6.0	6.9	7.5	6.5	7.0	13.5	9.5	11.8
26	—	—	—	—	—	—	7.0	2.0	4.9	10.5	5.0	7.8	8.0	6.5	7.3	14.5	10.5	12.6
27	—	—	—	—	—	—	6.0	3.0	3.9	10.5	8.0	8.6	10.5	7.0	8.7	14.0	11.0	12.6
28	—	—	—	—	—	—	3.0	1.0	1.8	7.5	5.5	6.7	10.5	8.5	9.3	13.5	10.5	12.4
29	—	—	—	—	—	—	4.5	0.0	2.5	6.5	4.5	5.5	10.0	8.0	8.8	14.5	10.5	12.5
30	—	—	—	—	—	—	7.0	2.5	5.1	6.0	3.5	4.8	12.5	8.0	10.1	14.0	10.5	12.4
31	—	—	—	—	—	—	6.5	3.0	4.3	—	—	—	12.5	9.5	11.1	—	—	—
Month	—	—	—	—	—	—	7.5	0.0	3.9	10.5	0.5	5.5	12.5	3.0	8.9	15.5	8.5	12.0

Appendix Q. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.0	9.0	10.1	15.5	12.5	14.3	15.0	11.0	13.3	13.0	9.0	11.0	5.0	3.0	4.2	2.5	2.0	2.4
2	11.0	7.5	9.6	17.0	13.0	15.0	13.5	12.0	12.9	11.5	9.0	10.0	4.5	2.0	3.3	2.0	1.0	1.4
3	13.5	8.5	11.1	17.0	14.0	15.8	13.0	11.0	12.2	10.0	7.0	8.5	4.0	2.0	3.2	0.0	-0.5	-0.3
4	14.5	10.5	12.5	16.5	13.0	14.5	15.0	11.5	13.3	10.5	7.0	8.9	5.5	2.5	4.0	0.0	-0.5	-0.4
5	14.5	11.0	12.9	13.5	12.0	12.8	14.0	11.5	12.9	10.0	6.5	8.3	5.5	3.0	4.1	0.0	-0.5	-0.4
6	14.5	11.5	13.2	16.5	12.0	14.3	15.5	11.5	13.5	10.0	6.0	8.1	5.5	3.0	4.3	-0.5	-0.5	-0.5
7	14.5	10.5	12.8	16.5	13.5	15.3	15.0	11.0	13.0	9.0	6.5	7.6	5.5	3.0	4.5	0.0	-0.5	-0.1
8	15.0	11.0	13.0	17.0	14.0	15.5	15.5	11.5	13.6	6.5	5.5	5.9	5.0	4.0	4.6	2.0	0.0	1.1
9	14.5	11.5	13.1	15.0	13.0	14.3	15.5	11.5	13.4	6.5	4.0	5.2	4.5	2.5	3.6	1.5	0.0	0.8
10	14.0	11.5	12.8	14.5	12.0	13.1	14.5	12.0	13.3	8.0	5.5	6.8	4.0	1.5	2.6	0.0	-0.5	-0.4
11	13.5	10.5	12.1	14.5	10.5	12.4	13.5	12.0	12.8	7.5	4.5	6.3	3.0	1.5	2.2	-0.5	-0.5	-0.5
12	13.5	8.5	10.2	14.0	11.0	12.6	13.5	10.5	11.8	5.5	3.5	4.6	2.5	0.5	1.5	-0.5	-0.5	-0.5
13	13.5	7.5	10.6	14.5	11.5	13.1	13.5	9.5	11.8	5.0	3.5	4.1	2.5	0.5	1.4	0.0	-0.5	-0.2
14	15.5	11.0	13.2	14.5	12.0	13.0	15.0	11.5	13.1	7.0	3.0	5.0	1.5	-0.5	0.3	0.0	0.0	0.0
15	16.0	12.5	14.5	16.0	11.5	13.8	13.5	10.5	12.2	8.0	4.5	6.4	0.0	-0.5	-0.4	0.0	0.0	0.0
16	16.0	12.5	14.7	15.0	12.5	13.9	11.0	7.5	9.4	8.5	5.0	7.0	0.0	-0.5	-0.4	0.0	0.0	0.0
17	16.0	13.0	14.0	14.5	11.5	13.0	12.0	8.0	10.0	9.0	5.5	7.2	1.5	0.0	1.0	0.0	0.0	0.0
18	14.5	12.0	13.4	16.5	12.5	14.4	11.0	9.0	10.0	8.5	5.5	7.2	2.5	1.5	2.0	0.0	0.0	0.0
19	14.0	11.5	13.1	16.0	12.5	14.5	11.0	7.5	9.4	8.5	5.0	7.0	3.0	2.0	2.5	0.0	-0.5	-0.1
20	15.5	12.0	14.0	16.5	12.5	14.4	12.0	9.0	10.3	8.5	5.5	6.9	3.0	2.0	2.5	0.0	0.0	0.0
21	16.0	12.5	14.5	17.5	13.5	15.4	12.0	10.0	10.8	7.5	4.5	6.0	2.5	1.5	1.9	0.0	-0.5	-0.1
22	15.5	13.0	14.7	16.0	13.5	14.7	11.0	9.0	10.0	6.5	4.0	5.3	2.0	1.0	1.5	0.0	-0.5	-0.3
23	15.5	13.5	14.3	14.5	12.0	13.3	12.5	8.0	10.3	5.0	3.5	4.4	0.5	0.0	0.4	0.0	-0.5	-0.2
24	14.5	13.0	13.9	16.5	13.0	14.7	13.0	8.5	10.8	3.5	2.0	2.8	3.5	1.0	2.5	0.0	-0.5	-0.3
25	13.5	12.0	13.1	16.0	13.5	14.9	13.0	9.0	11.2	3.5	0.0	1.8	3.5	2.0	2.8	0.0	-0.5	-0.1
26	15.0	11.0	13.2	17.0	13.0	15.1	13.0	11.0	11.9	4.0	1.0	2.7	1.0	-0.5	0.3	0.0	-0.5	-0.2
27	17.0	13.0	15.1	18.0	14.0	15.8	12.0	9.5	10.6	5.0	2.5	3.7	3.0	0.5	1.8	0.0	0.0	0.0
28	16.0	13.5	15.0	16.5	13.5	15.0	11.0	7.0	9.2	5.0	3.0	4.2	2.5	2.5	2.5	0.0	0.0	0.0
29	15.5	13.5	14.6	16.5	13.0	14.8	11.5	7.5	9.5	4.5	4.0	4.3	3.5	2.0	2.7	0.0	0.0	0.0
30	15.0	13.0	14.0	16.0	12.0	14.2	12.5	8.0	10.2	5.0	4.0	4.5	2.5	1.0	1.9	0.0	0.0	0.0
31	15.0	12.0	13.9	14.5	12.0	13.4	—	—	—	6.5	4.5	5.2	—	—	—	0.0	0.0	0.0
Month	17.0	7.5	13.1	18.0	10.5	14.2	15.5	7.0	11.6	13.0	0.0	6.0	5.5	-0.5	2.3	2.5	-0.5	0.0

Appendix R. Water temperature records for the Teton River at the USGS Leigh gauge near Driggs, Idaho, 1998.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	0.0	0.0	0.0	1.5	0.0	0.6	1.5	0.0	0.5	6.5	3.0	5.1	12.0	10.0	11.1	12.5	9.0	11.0
2	0.0	0.0	0.0	0.5	0.0	0.2	3.0	0.5	1.5	5.5	3.5	4.6	11.0	8.5	9.9	10.5	9.0	10.1
3	0.0	0.0	0.0	2.0	1.0	1.5	3.0	2.0	2.3	7.0	3.5	5.6	11.0	8.5	10.0	9.0	7.5	8.1
4	0.0	0.0	0.0	3.0	1.5	2.2	2.5	1.0	1.6	5.0	4.0	4.6	9.5	9.0	9.4	8.0	6.0	7.0
5	0.0	-0.5	-0.1	3.5	2.5	2.8	2.0	0.5	1.0	5.5	4.0	4.7	11.0	8.5	9.5	11.0	6.0	8.4
6	0.0	0.0	0.0	2.0	1.0	1.6	1.5	0.0	0.5	7.0	4.0	5.6	12.0	9.0	10.8	9.5	7.5	8.6
7	0.0	0.0	0.0	3.5	2.0	2.7	1.5	0.0	0.4	6.0	4.5	5.4	11.0	9.5	10.4	10.0	7.5	9.0
8	0.0	0.0	0.0	4.0	3.0	3.4	0.5	0.0	0.1	6.0	4.0	5.3	11.0	8.5	9.9	10.5	8.5	9.4
9	0.0	0.0	0.0	3.5	2.5	3.1	0.5	0.0	0.1	5.5	4.5	5.0	9.5	8.5	8.9	10.5	9.0	9.8
10	0.0	0.0	0.0	3.5	2.0	2.5	2.0	0.0	0.9	7.0	4.5	5.7	8.5	7.5	7.9	10.5	8.0	9.5
11	0.0	0.0	0.0	2.5	1.5	1.9	4.5	1.5	2.7	8.0	5.5	6.9	8.0	6.0	7.2	12.0	9.0	10.6
12	0.0	0.0	0.0	3.0	1.5	2.3	5.0	2.5	3.7	6.0	4.5	5.0	8.0	7.0	7.7	12.0	9.5	11.1
13	0.0	0.0	0.0	3.0	2.0	2.5	5.0	2.5	3.9	6.0	2.5	4.3	7.5	6.5	7.3	10.0	9.0	9.3
14	0.0	0.0	0.0	3.0	2.0	2.3	5.5	3.0	4.3	6.0	4.5	5.3	7.0	6.0	6.4	10.5	8.0	9.2
15	0.0	0.0	0.0	3.0	1.0	1.9	5.5	3.5	4.5	6.5	4.0	5.0	9.0	6.5	7.5	10.0	8.0	8.5
16	0.0	0.0	0.0	4.0	2.5	3.2	5.5	4.5	4.9	7.0	5.0	6.3	9.5	7.0	8.2	9.0	6.0	7.3
17	0.0	0.0	0.0	4.0	2.5	3.3	6.0	4.5	5.1	6.0	4.5	5.5	9.0	7.5	8.1	9.0	7.0	8.2
18	0.0	0.0	0.0	3.5	2.0	2.8	5.0	2.5	3.8	7.5	4.0	6.2	10.5	7.0	9.0	10.5	7.0	8.3
19	0.0	0.0	0.0	3.5	1.5	2.4	5.0	3.0	4.0	7.0	6.0	6.5	12.5	8.5	10.1	10.5	9.0	9.9
20	0.0	0.0	0.0	2.5	1.0	1.6	5.0	2.5	3.9	9.0	5.5	7.2	13.0	10.5	11.7	12.0	7.5	9.6
21	0.0	0.0	0.0	3.0	1.0	2.0	6.0	3.5	4.7	10.0	7.0	8.8	12.5	10.0	10.8	13.0	8.5	10.9
22	0.0	0.0	0.0	3.5	1.0	2.4	5.5	5.0	5.4	11.0	7.5	9.6	9.0	6.5	7.4	12.0	10.0	11.5
23	0.0	0.0	0.0	3.0	1.0	2.1	4.5	3.5	4.1	11.5	9.0	10.6	7.5	6.0	6.8	10.5	8.5	9.6
24	0.0	0.0	0.0	2.5	1.5	2.1	3.5	2.5	3.0	10.0	6.5	7.9	10.5	6.5	8.1	10.5	8.0	9.6
25	0.0	0.0	0.0	2.5	1.5	1.9	3.5	2.5	2.9	5.5	4.5	4.9	12.5	9.0	10.7	10.5	8.5	9.2
26	0.0	0.0	0.0	2.5	0.5	1.3	4.5	2.0	3.1	8.5	3.5	6.0	12.0	10.0	10.8	12.0	7.5	9.9
27	0.0	0.0	0.0	2.0	0.0	0.8	4.0	2.0	3.0	10.5	6.5	8.8	9.5	7.0	8.5	12.0	8.0	10.3
28	1.0	0.0	0.5	1.5	0.0	0.6	4.5	2.0	3.3	12.0	8.0	10.3	12.0	7.0	9.5	13.0	9.0	10.8
29	0.5	0.0	0.1	—	—	—	4.0	2.0	3.3	12.0	9.5	10.9	13.0	9.5	11.0	14.0	10.5	12.3
30	1.5	0.0	0.7	—	—	—	5.5	2.5	3.9	12.0	9.5	10.9	12.5	9.0	10.2	14.0	10.0	12.1
31	2.5	1.5	1.9	—	—	—	6.5	3.5	5.2	—	—	—	12.0	7.0	9.4	—	—	—
Month	2.5	-0.5	0.1	4.0	0.0	2.1	6.5	0.0	3.0	12.0	2.5	6.6	13.0	6.0	9.2	14.0	6.0	9.6

Appendix R. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	14.5	11.0	13.0	15.0	13.5	14.2	15.5	13.0	14.3	11.0	10.0	10.6	5.0	4.0	4.8	3.5	3.0	3.2
2	14.0	11.0	13.0	15.0	13.0	14.1	15.5	13.0	14.3	10.5	9.5	9.7	5.0	4.5	4.8	3.5	3.0	3.2
3	16.0	11.5	13.5	17.0	12.5	14.7	16.0	13.0	14.6	9.0	8.0	8.4	4.5	4.0	4.4	4.5	3.5	4.0
4	15.0	12.0	13.7	18.5	13.5	16.1	15.0	13.0	14.2	8.0	7.0	7.6	4.5	3.0	3.7	4.0	2.0	2.9
5	15.0	12.0	13.7	19.0	14.5	16.8	15.0	13.0	14.1	7.5	5.5	6.8	5.0	3.5	4.1	1.0	0.0	0.4
6	15.0	11.5	13.6	18.5	15.5	17.1	15.5	13.5	14.4	9.0	6.5	7.8	4.5	3.0	3.9	1.0	0.0	0.2
7	14.0	11.0	12.9	16.5	15.5	16.1	15.5	14.5	15.0	9.5	7.5	8.5	4.0	2.5	3.2	0.0	0.0	0.0
8	14.0	11.0	12.5	18.0	14.0	16.1	15.0	14.0	14.5	9.5	7.5	8.5	3.0	2.5	2.8	0.0	0.0	0.0
9	14.5	11.5	13.0	18.0	15.0	16.5	14.5	13.0	13.9	9.0	7.0	8.1	3.0	2.0	2.3	0.0	0.0	0.0
10	14.5	11.5	12.8	18.5	14.0	16.4	13.5	13.0	13.4	8.0	7.0	7.5	2.5	1.5	1.9	0.0	-0.5	-0.1
11	14.5	11.0	13.0	17.5	14.0	15.9	13.5	12.0	12.8	7.0	6.0	6.6	2.0	1.0	1.4	0.0	-0.5	-0.4
12	14.5	11.0	13.1	18.0	14.5	16.4	13.0	12.5	12.9	7.5	5.5	6.5	2.5	1.5	2.0	0.0	-0.5	-0.1
13	15.0	11.5	13.3	18.5	14.5	16.6	13.0	12.0	12.6	8.5	6.5	7.4	3.0	1.5	2.4	0.0	-0.5	-0.1
14	15.0	12.5	13.9	18.0	14.5	16.3	13.5	12.0	12.9	8.0	6.5	7.3	4.5	3.0	3.6	0.0	-0.5	-0.2
15	15.5	11.5	13.6	15.5	13.5	14.6	16.0	12.5	13.7	7.0	6.5	6.8	5.0	4.0	4.2	0.5	0.0	0.2
16	15.5	12.0	14.2	17.0	13.0	15.1	15.5	13.0	14.1	6.5	5.5	6.0	4.5	3.0	3.8	1.5	0.5	1.0
17	16.5	12.5	14.8	16.5	14.0	15.1	15.0	12.5	13.7	5.5	4.5	5.2	4.0	3.0	3.8	1.0	0.0	0.6
18	17.0	13.5	15.4	15.5	14.0	14.5	15.0	12.0	13.4	6.0	4.5	5.3	4.0	2.5	3.0	0.0	0.0	0.0
19	17.5	14.5	16.0	16.0	12.0	14.0	13.0	11.0	12.0	6.0	4.5	5.4	3.5	2.0	2.7	0.0	-0.5	-0.2
20	17.5	14.5	16.2	14.5	13.0	13.8	11.5	9.5	10.7	6.5	4.5	5.5	2.5	1.5	1.9	0.0	-0.5	-0.4
21	18.5	14.5	16.7	14.5	12.0	13.4	10.0	9.0	9.6	6.5	4.5	5.6	2.5	2.0	2.2	0.0	-0.5	-0.2
22	17.0	14.5	16.0	16.0	12.5	14.4	10.5	9.0	9.6	7.0	5.5	6.1	3.0	1.5	2.3	0.0	0.0	0.0
23	18.0	15.0	16.4	16.0	13.0	14.3	11.0	8.5	9.9	7.0	6.5	6.8	3.5	1.0	2.3	0.0	0.0	0.0
24	17.0	14.5	15.6	15.5	12.0	13.7	12.0	9.0	10.4	7.0	6.0	6.5	4.0	1.5	3.0	0.0	0.0	0.0
25	18.5	13.5	16.0	15.5	11.5	13.6	11.0	9.5	10.3	8.5	6.5	7.4	2.0	1.0	1.3	0.0	0.0	0.0
26	18.5	15.5	17.2	14.5	13.0	13.7	10.0	9.5	9.8	7.5	6.5	7.1	3.5	1.0	2.3	0.0	0.0	0.0
27	18.5	16.5	17.4	15.0	12.0	13.5	11.0	8.5	9.6	7.0	6.0	6.7	3.5	2.0	3.0	0.0	0.0	0.0
28	17.5	15.5	16.4	15.0	12.5	13.8	12.0	9.0	10.5	8.0	7.0	7.3	4.0	3.5	3.8	0.0	0.0	0.0
29	18.5	14.5	16.4	14.5	12.5	13.5	12.0	9.0	10.6	7.0	6.5	6.6	4.0	3.0	3.3	0.0	0.0	0.0
30	16.5	15.0	15.8	15.5	12.5	14.0	12.0	9.0	10.7	5.5	5.0	5.4	4.0	2.5	3.1	0.0	0.0	0.0
31	16.5	13.5	15.1	15.0	12.5	14.0	—	—	—	6.5	5.0	5.6	—	—	—	0.0	0.0	0.0
Month	18.5	11.0	14.6	19.0	11.5	14.9	16.0	8.5	12.4	11.0	4.5	7.0	5.0	1.0	3.0	4.5	-0.5	0.5

Appendix S. Water temperature records for the Teton River at the USGS Leigh gauge near Driggs, Idaho, 1999.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	0.0	0.0	0.0	0.5	0.5	0.5	4.0	3.5	3.6	4.0	3.5	3.7	8.0	7.5	7.7	9.5	6.0	7.4
2	0.0	0.0	0.0	0.5	0.5	0.5	2.5	1.5	2.2	4.5	3.5	4.0	8.0	7.5	7.6	9.5	7.5	8.3
3	0.0	0.0	0.0	1.0	0.5	0.6	3.0	2.0	2.6	4.5	3.5	4.0	7.0	6.5	6.7	9.5	7.5	8.3
4	0.0	0.0	0.0	0.5	0.5	0.5	2.5	1.5	2.0	4.0	3.5	3.8	6.5	6.0	6.1	9.5	7.5	8.7
5	0.0	0.0	0.0	0.5	0.5	0.5	2.0	1.0	1.4	4.5	3.5	4.0	6.0	5.5	5.8	9.0	7.5	8.0
6	0.5	0.0	0.1	1.0	0.5	0.6	2.0	0.5	1.2	4.5	4.0	4.3	7.5	5.5	6.4	9.0	7.5	8.3
7	0.5	0.0	0.3	0.5	0.5	0.5	2.0	0.5	1.2	5.0	3.5	4.3	8.5	7.0	7.8	8.5	6.5	7.7
8	0.5	0.5	0.5	1.0	0.5	0.6	3.0	1.5	2.3	5.0	4.5	4.8	8.5	8.0	8.2	9.0	7.0	8.0
9	0.5	0.0	0.4	0.5	0.5	0.5	3.0	2.5	2.9	5.0	4.0	4.3	8.0	7.0	7.6	10.0	6.5	8.1
10	0.5	0.0	0.3	0.5	0.5	0.5	4.0	2.5	3.3	4.0	3.5	3.7	7.5	6.5	6.7	10.0	7.5	8.8
11	0.5	0.0	0.4	0.5	0.5	0.5	4.0	2.5	3.3	5.0	4.0	4.4	7.0	5.5	6.3	11.5	8.0	9.4
12	0.5	0.5	0.5	0.5	0.5	0.5	4.5	3.0	3.7	6.0	4.5	5.1	7.0	6.5	6.6	12.0	9.5	10.8
13	1.0	0.5	0.7	0.5	0.5	0.5	4.5	2.5	3.5	6.0	5.0	5.7	7.0	6.5	6.7	12.0	10.0	11.0
14	1.5	1.0	1.2	0.5	0.5	0.5	5.0	3.0	4.0	6.0	5.0	5.5	8.0	6.5	7.1	12.5	9.5	11.2
15	2.0	1.5	1.7	0.5	0.5	0.5	5.5	4.0	4.6	5.5	4.5	4.9	7.5	6.0	6.7	12.5	10.0	11.2
16	1.0	0.5	0.8	0.5	0.5	0.5	5.0	4.5	4.7	6.0	4.5	5.1	6.5	5.5	6.0	11.5	10.0	10.6
17	1.0	0.5	0.6	0.5	0.5	0.5	4.5	3.0	3.9	6.5	5.0	5.6	7.5	5.5	6.5	11.5	9.5	10.7
18	1.0	0.5	0.7	0.5	0.5	0.5	5.5	3.5	4.4	7.0	6.0	6.6	8.0	7.5	7.9	13.5	9.0	10.9
19	1.5	1.0	1.2	0.5	0.5	0.5	5.5	4.0	4.9	7.5	6.5	6.8	9.0	8.0	8.4	12.5	9.5	11.2
20	2.0	1.5	1.6	0.5	0.0	0.4	5.5	4.5	5.0	6.5	6.0	6.2	10.5	8.5	9.4	14.0	9.5	11.8
21	1.5	1.5	1.5	0.5	0.0	0.3	5.0	4.5	4.7	5.5	5.0	5.4	11.0	9.5	10.4	14.0	10.5	12.4
22	2.0	1.0	1.6	0.5	0.5	0.5	4.0	4.0	4.0	5.5	5.0	5.3	11.5	10.0	10.6	13.5	10.0	11.6
23	1.5	0.5	0.9	0.5	0.5	0.5	5.0	3.0	3.9	5.5	5.0	5.4	11.5	10.0	10.9	13.0	10.0	11.6
24	1.0	0.5	0.6	1.0	0.5	0.7	5.5	3.5	4.5	6.5	5.5	5.8	11.5	10.5	11.2	13.5	10.0	11.8
25	1.0	0.5	0.6	2.5	1.0	1.8	5.5	4.0	4.9	7.0	6.5	6.7	11.0	10.0	10.5	12.5	10.5	11.9
26	0.5	0.5	0.5	2.0	1.0	1.5	5.0	4.0	4.2	6.5	6.0	6.3	10.5	9.5	10.0	11.0	8.5	9.9
27	0.5	0.5	0.5	1.5	0.5	1.1	3.5	2.5	2.9	7.0	6.0	6.5	11.0	9.0	9.9	11.0	8.5	10.0
28	1.0	0.5	0.6	3.5	1.0	2.0	2.5	2.0	2.1	7.5	7.0	7.4	11.0	8.5	9.6	12.0	9.0	10.4
29	0.5	0.5	0.5	—	—	—	4.0	2.0	2.8	7.5	7.0	7.4	9.5	7.5	8.4	11.5	9.5	10.4
30	0.5	0.5	0.5	—	—	—	4.0	3.5	3.7	7.5	7.0	7.4	8.5	6.5	7.3	11.0	9.0	10.0
31	0.5	0.5	0.5	—	—	—	4.0	3.0	3.5	—	—	—	7.0	6.0	6.4	—	—	—
Month	2.0	0.0	0.6	3.5	0.0	0.7	5.5	0.5	3.4	7.5	3.5	5.3	11.5	5.5	8.0	14.0	6.0	10.0

Appendix S. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	12.0	8.5	10.1	15.5	13.5	14.6	13.5	10.5	12.1	10.0	8.0	8.8	5.0	3.5	4.3	3.5	3.0	3.2
2	12.5	9.5	11.0	16.0	13.0	14.6	12.5	11.5	11.8	8.5	7.0	7.8	4.0	1.5	2.8	2.5	1.0	1.7
3	13.0	10.5	11.7	16.0	14.5	15.2	11.5	10.0	10.8	8.5	5.5	7.2	5.0	2.0	3.6	1.0	0.0	0.4
4	13.0	11.0	12.2	15.0	13.5	14.5	12.0	9.5	10.6	8.5	5.5	7.1	6.5	4.0	5.4	0.5	0.0	0.1
5	13.0	9.5	11.3	15.0	13.5	14.3	13.0	9.5	11.2	9.0	6.5	7.6	7.5	5.0	6.3	0.0	0.0	0.0
6	14.0	10.0	11.8	15.0	13.5	14.2	14.0	10.5	12.1	8.0	7.0	7.6	7.5	5.0	6.1	0.0	0.0	0.0
7	14.5	11.0	12.9	15.5	13.0	14.2	13.0	9.5	11.2	9.0	6.0	7.5	6.0	4.0	5.1	0.0	0.0	0.0
8	13.5	10.5	12.0	16.5	13.0	14.8	13.0	9.0	11.0	9.5	6.5	8.0	7.0	5.5	6.2	0.0	0.0	0.0
9	13.5	10.5	12.0	15.5	13.5	14.6	13.0	9.5	11.1	10.0	7.5	8.8	6.5	4.5	5.5	0.0	0.0	0.0
10	14.0	10.5	12.5	15.5	13.0	14.4	12.5	10.5	11.7	10.0	8.0	9.1	5.5	3.5	4.6	0.0	0.0	0.0
11	14.0	11.0	12.4	14.5	12.5	13.4	13.0	9.5	11.3	9.5	8.5	9.1	7.5	5.5	6.1	0.0	0.0	0.0
12	14.5	11.0	13.0	13.5	11.5	12.5	12.0	8.5	10.4	9.5	8.0	8.7	6.5	4.5	5.4	0.0	0.0	0.0
13	14.5	12.0	13.3	15.0	12.0	13.5	12.0	8.0	10.3	9.5	7.0	8.4	6.0	4.0	4.9	0.0	0.0	0.0
14	14.0	12.0	12.4	15.5	12.0	13.9	12.5	9.0	10.8	9.0	7.5	8.4	5.0	3.0	4.1	0.0	0.0	0.0
15	13.5	10.5	12.1	14.5	12.5	13.8	13.0	10.0	11.3	7.5	6.0	6.9	4.5	2.0	3.5	0.0	0.0	0.0
16	12.0	10.0	11.4	15.0	12.0	13.4	12.0	9.5	11.1	6.0	4.5	5.4	5.0	3.0	3.8	0.0	0.0	0.0
17	12.5	11.0	11.6	16.0	12.5	14.1	12.5	9.5	11.2	5.5	3.5	4.5	5.0	3.0	4.0	0.0	0.0	0.0
18	13.5	10.5	12.2	16.0	12.5	14.4	12.5	9.5	11.1	7.0	5.0	5.8	4.5	3.0	3.9	0.0	0.0	0.0
19	14.0	11.5	12.9	15.5	13.0	14.1	12.5	10.0	11.4	6.5	4.5	5.6	2.5	1.0	2.0	0.5	0.0	0.1
20	14.5	12.0	13.5	14.5	13.0	13.9	11.5	9.0	10.3	6.5	4.5	5.5	4.0	2.0	2.9	0.0	0.0	0.0
21	15.5	12.5	13.9	15.5	13.5	14.4	12.5	9.0	10.8	6.5	5.0	5.7	2.5	1.5	1.9	0.0	0.0	0.0
22	15.0	12.5	13.9	16.5	13.0	14.7	12.5	9.0	10.9	6.5	4.5	5.6	2.0	1.0	1.4	0.0	0.0	0.0
23	15.5	13.0	14.3	17.0	13.0	15.0	12.0	9.0	10.6	6.5	4.5	5.6	1.0	0.0	0.3	0.0	0.0	0.0
24	16.0	13.5	15.0	15.5	13.5	14.5	11.0	9.5	10.4	6.5	4.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0
25	15.0	13.0	14.2	16.0	13.0	14.5	10.0	8.0	8.9	6.5	5.0	5.9	1.0	0.0	0.4	0.0	0.0	0.0
26	15.5	12.0	13.9	16.5	13.5	14.9	8.5	7.0	7.7	7.5	5.5	6.1	4.0	1.5	2.7	0.0	0.0	0.0
27	15.5	13.5	14.7	15.5	14.0	14.9	7.0	5.5	6.5	8.5	6.0	6.9	3.5	3.0	3.1	0.0	0.0	0.0
28	15.5	13.5	14.5	15.5	13.5	14.4	7.0	4.0	5.6	6.5	5.5	6.1	3.5	2.0	2.9	0.0	0.0	0.0
29	15.0	14.0	14.4	16.0	12.5	14.3	8.0	5.0	6.4	5.5	4.0	4.8	4.0	3.0	3.5	0.0	0.0	0.0
30	15.5	12.0	13.9	14.0	13.0	13.6	8.5	6.0	7.1	6.0	3.0	4.7	5.0	4.0	4.4	0.0	0.0	0.0
31	16.5	13.0	14.8	13.5	11.5	12.6	—	—	—	6.5	3.5	5.0	—	—	—	0.0	0.0	0.0
Month	16.5	8.5	12.9	17.0	11.5	14.2	14.0	4.0	10.3	10.0	3.0	6.8	7.5	0.0	3.7	3.5	0.0	0.2

Appendix T. Water temperature records for the Teton River at the USGS Leigh gauge near Driggs, Idaho, 2000.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	0.0	0.0	0.0	0.0	0.0	0.0	4.5	3.5	3.8	5.0	3.5	4.5	14.0	9.0	11.5	12.0	7.0	9.7
2	0.0	0.0	0.0	0.5	0.0	0.1	6.0	3.5	4.5	6.0	4.0	5.2	13.0	11.0	12.0	12.5	9.0	10.8
3	0.0	0.0	0.0	0.5	0.0	0.1	5.0	2.5	3.7	7.0	2.5	4.8	14.0	10.5	12.3	13.5	10.0	11.7
4	0.0	0.0	0.0	0.0	0.0	0.0	5.0	2.0	3.6	8.5	5.0	6.8	13.5	11.5	12.7	13.5	10.0	11.8
5	0.0	0.0	0.0	0.0	0.0	0.0	5.0	3.5	4.2	7.5	4.5	6.1	12.0	8.0	9.7	13.5	10.0	11.7
6	0.0	0.0	0.0	0.5	0.0	0.1	7.0	4.0	5.1	5.5	3.5	4.2	7.0	6.0	6.6	14.0	10.5	12.4
7	0.0	0.0	0.0	1.0	0.0	0.2	6.0	4.0	4.8	7.0	2.5	4.9	7.0	6.0	6.4	13.5	10.5	12.0
8	0.0	0.0	0.0	1.0	0.0	0.5	4.0	2.5	3.5	8.5	4.5	6.6	8.5	6.0	7.3	14.0	10.0	11.8
9	0.0	0.0	0.0	3.0	1.0	1.9	4.0	3.5	3.8	8.0	6.0	7.3	8.5	7.0	7.9	12.5	9.5	10.5
10	0.0	0.0	0.0	4.0	2.5	2.9	4.0	2.5	3.4	9.5	5.0	7.0	8.5	6.5	7.6	10.0	8.0	9.1
11	0.0	0.0	0.0	3.0	2.0	2.5	4.5	2.5	3.2	10.5	7.5	9.1	7.0	4.5	5.1	13.0	9.0	11.2
12	0.0	0.0	0.0	3.0	1.5	2.2	4.0	1.0	2.6	11.0	8.5	9.9	6.5	3.5	5.3	12.0	10.0	10.8
13	0.0	0.0	0.0	2.5	1.5	2.0	5.0	2.5	3.8	10.0	9.0	9.6	8.5	5.5	6.8	12.0	9.0	10.3
14	0.0	0.0	0.0	3.0	1.0	1.6	4.0	3.0	3.5	9.5	7.5	8.3	11.5	8.5	9.7	13.5	10.0	11.8
15	0.0	0.0	0.0	1.0	0.0	0.4	4.5	2.0	3.3	10.0	6.0	8.0	12.0	9.5	10.7	13.5	11.5	12.5
16	0.0	0.0	0.0	0.5	0.0	0.2	5.0	2.0	3.4	9.0	7.5	8.4	11.5	9.5	10.7	12.5	8.5	10.9
17	0.0	0.0	0.0	3.0	1.0	2.0	4.5	3.5	4.1	9.0	7.5	8.3	10.0	8.5	9.2	12.0	9.5	10.6
18	0.0	0.0	0.0	2.5	0.5	1.5	5.0	1.0	3.4	8.5	7.0	7.9	12.0	8.0	9.8	15.0	10.5	12.4
19	0.0	0.0	0.0	2.5	0.0	1.1	4.0	2.0	3.0	10.0	7.0	8.3	12.5	11.0	11.6	14.5	10.5	12.1
20	0.0	0.0	0.0	2.0	0.0	0.6	2.5	0.0	1.2	10.0	8.0	9.1	13.0	9.0	11.2	13.0	8.0	10.6
21	0.0	0.0	0.0	4.5	1.0	2.7	4.5	0.5	2.4	11.5	8.0	10.0	14.0	11.0	12.7	15.0	11.0	13.3
22	0.0	0.0	0.0	5.5	4.5	4.9	6.0	1.5	3.7	11.5	10.0	10.9	12.5	11.5	11.9	16.5	13.5	14.9
23	0.5	0.0	0.1	4.0	3.0	3.6	5.0	3.0	4.0	10.0	9.0	9.8	13.5	10.5	11.8	16.0	13.5	14.9
24	0.5	0.0	0.1	3.5	2.5	3.0	5.5	2.5	4.0	9.5	7.0	8.2	13.0	10.0	11.6	16.0	13.5	14.9
25	0.5	0.0	0.1	2.5	0.5	1.4	6.5	3.5	4.9	7.5	6.5	7.2	11.5	9.0	10.1	15.5	13.0	14.4
26	0.5	0.0	0.1	2.0	0.0	1.0	9.0	5.5	7.0	12.0	7.0	9.5	10.0	8.5	9.2	16.0	12.5	14.5
27	0.5	0.0	0.1	5.0	1.5	3.3	8.5	5.0	6.7	14.0	9.5	11.9	10.5	7.0	9.0	15.5	13.0	14.4
28	0.0	0.0	0.0	4.5	3.5	4.1	7.0	5.0	5.8	13.5	11.0	12.5	10.5	8.5	9.9	17.0	13.5	15.3
29	0.5	0.0	0.1	5.0	3.0	3.8	4.0	3.0	3.8	12.5	9.0	10.4	12.0	8.5	10.0	17.5	14.0	15.9
30	0.0	0.0	0.0	—	—	—	5.5	2.5	4.0	10.5	5.5	8.1	12.0	8.5	10.4	18.0	14.0	16.3
31	0.0	0.0	0.0	—	—	—	6.5	3.5	4.8	—	—	—	11.5	9.0	10.3	—	—	—
Month	0.5	0.0	0.0	5.5	0.0	1.6	9.0	0.0	4.0	14.0	2.5	8.1	14.0	3.5	9.7	18.0	7.0	12.4

Appendix T. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	16.0	14.5	15.3	20.0	16.5	18.4	13.5	12.0	12.8	11.0	10.0	10.5	—	—	—	—	—	—
2	17.0	13.0	14.9	20.0	16.5	18.1	14.5	11.0	12.7	11.5	8.5	10.0	—	—	—	—	—	—
3	18.0	14.0	16.1	19.0	16.5	18.0	14.5	11.0	12.8	11.5	8.0	9.8	—	—	—	—	—	—
4	15.5	13.5	14.3	18.5	15.5	16.8	15.5	10.5	13.1	10.0	7.0	8.8	—	—	—	—	—	—
5	17.5	12.0	14.7	19.0	15.5	17.4	15.5	12.0	13.6	9.5	7.0	8.1	—	—	—	—	—	—
6	18.0	13.5	15.7	19.0	15.0	17.0	13.5	11.0	12.2	8.5	5.5	6.7	—	—	—	—	—	—
7	19.0	15.0	16.8	19.5	16.0	17.7	14.0	9.0	11.3	8.0	4.0	5.9	—	—	—	—	—	—
8	17.0	14.5	16.1	20.0	15.0	17.6	14.0	10.0	12.0	8.5	4.5	6.5	—	—	—	—	—	—
9	19.5	15.0	17.1	18.5	15.0	17.1	12.5	9.5	11.2	8.5	4.5	6.8	—	—	—	—	—	—
10	16.5	13.5	14.8	19.0	15.5	17.3	12.5	9.0	10.8	8.5	6.5	7.4	—	—	—	—	—	—
11	17.5	12.0	14.7	19.0	16.0	17.6	15.0	11.5	13.0	7.0	6.0	6.4	—	—	—	—	—	—
12	19.0	15.0	16.9	18.5	14.5	16.5	16.0	11.5	13.7	6.5	4.5	5.4	—	—	—	—	—	—
13	19.0	15.5	17.4	18.5	14.0	16.3	16.5	12.0	14.4	6.0	5.0	5.3	—	—	—	—	—	—
14	19.5	15.0	17.4	19.0	13.5	16.3	16.5	12.5	14.6	6.5	4.5	5.4	—	—	—	—	—	—
15	20.0	15.0	17.7	18.5	14.0	16.3	16.0	13.0	14.5	7.5	6.0	6.8	—	—	—	—	—	—
16	20.5	16.0	18.4	19.5	15.5	17.5	16.0	12.5	14.4	8.5	6.0	6.9	—	—	—	—	—	—
17	20.0	17.0	18.4	17.0	15.0	15.9	16.0	13.5	14.6	9.0	6.0	7.4	—	—	—	—	—	—
18	17.5	15.5	16.5	15.0	13.0	14.2	15.0	12.0	13.4	9.0	6.0	7.7	—	—	—	—	—	—
19	18.0	13.5	15.9	18.0	12.0	14.9	14.0	11.0	12.8	8.0	7.0	7.5	—	—	—	—	—	—
20	19.0	14.0	16.4	16.5	13.0	14.7	12.0	9.0	10.6	8.0	5.5	6.8	—	—	—	—	—	—
21	19.5	14.0	16.8	16.5	12.5	14.5	11.5	10.5	10.8	7.5	7.0	7.1	—	—	—	—	—	—
22	19.5	15.0	17.3	16.0	13.0	14.5	9.0	7.0	7.9	7.5	5.0	6.0	—	—	—	—	—	—
23	19.5	15.5	17.5	16.5	12.0	14.4	7.5	5.5	6.7	7.5	4.5	6.2	—	—	—	—	—	—
24	19.0	15.0	17.1	18.0	14.5	16.0	9.5	5.0	7.4	6.0	6.0	6.0	—	—	—	—	—	—
25	19.5	14.5	17.1	18.0	14.0	16.0	10.0	6.5	8.3	7.0	6.0	6.3	—	—	—	—	—	—
26	16.5	15.5	16.1	16.5	15.0	15.6	11.5	7.5	9.2	—	—	—	—	—	—	—	—	—
27	18.5	14.0	16.0	17.5	13.5	15.3	12.0	7.5	9.6	—	—	—	—	—	—	—	—	—
28	18.0	14.5	16.4	17.5	13.5	15.4	11.5	8.0	10.0	—	—	—	—	—	—	—	—	—
29	20.0	14.5	17.2	17.5	12.5	15.0	12.5	9.5	11.1	—	—	—	—	—	—	—	—	—
30	21.0	15.5	18.4	14.5	13.0	13.7	12.0	9.5	10.8	—	—	—	—	—	—	—	—	—
31	21.0	16.5	18.8	13.5	11.5	12.5	—	—	—	—	—	—	—	—	—	—	—	—
Month	21.0	12.0	16.6	20.0	11.5	16.1	16.5	5.0	11.7	11.5	4.0	7.1	—	—	—	—	—	—

Appendix U. Water temperature records for Bitch Creek at the Highway 32 bridge near Felt, Idaho, 1996.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.5	3.5	5.7
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.5	3.5	6.3
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.0	3.5	6.2
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.5	4.0	6.0
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.5	3.5	5.7
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.5	3.0	5.4
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.5	3.0	6.1
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.5	4.0	6.3
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.0	4.0	6.1
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.0	3.5	6.0
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.0	3.5	6.0
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.0	4.0	6.2
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.5	4.0	6.4
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.0	4.5	6.6
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.5	4.5	6.1
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.0	4.0	6.4
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.0	4.0	6.8
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.0	4.5	6.0
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.5	3.5	5.7
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.0	4.0	6.4
21	—	—	—	—	—	—	—	—	—	—	—	—	6.5	5.5	6.0	9.0	4.0	6.6
22	—	—	—	—	—	—	—	—	—	—	—	—	6.0	4.0	5.0	8.5	5.5	6.7
23	—	—	—	—	—	—	—	—	—	—	—	—	4.5	2.5	3.4	8.5	4.0	6.1
24	—	—	—	—	—	—	—	—	—	—	—	—	7.5	2.5	5.1	11.0	5.0	7.7
25	—	—	—	—	—	—	—	—	—	—	—	—	8.0	4.0	6.1	10.5	4.5	7.6
26	—	—	—	—	—	—	—	—	—	—	—	—	5.5	4.5	5.0	9.0	5.0	7.0
27	—	—	—	—	—	—	—	—	—	—	—	—	7.0	4.0	5.2	9.0	5.5	7.1
28	—	—	—	—	—	—	—	—	—	—	—	—	6.0	4.0	4.7	7.5	5.0	6.1
29	—	—	—	—	—	—	—	—	—	—	—	—	6.0	3.0	4.5	10.5	4.5	7.4
30	—	—	—	—	—	—	—	—	—	—	—	—	6.5	4.0	5.0	11.5	5.0	8.1
31	—	—	—	—	—	—	—	—	—	—	—	—	8.0	3.5	5.3	—	—	—
Month	—	—	—	—	—	—	—	—	—	—	—	—	8.0	2.5	5.0	11.5	3.0	6.4

Appendix U. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	12.0	5.5	8.6	18.0	11.0	14.4	17.0	9.0	12.2	13.5	5.5	8.6	—	—	—	—	—	—
2	11.5	6.0	8.8	16.5	11.5	13.7	16.0	7.0	10.9	13.5	5.5	8.5	—	—	—	—	—	—
3	12.0	6.0	8.8	15.0	10.5	12.1	15.5	7.0	10.7	13.0	5.0	8.1	—	—	—	—	—	—
4	11.5	7.0	9.2	14.5	8.5	11.2	16.0	8.0	11.5	13.0	4.5	7.9	—	—	—	—	—	—
5	12.0	6.5	9.2	—	—	—	14.5	8.0	11.0	13.0	5.5	8.2	—	—	—	—	—	—
6	11.5	6.0	8.6	—	—	—	14.0	5.5	9.1	12.5	5.5	8.1	—	—	—	—	—	—
7	12.5	6.0	9.3	—	—	—	14.5	5.5	9.3	12.5	4.5	7.5	—	—	—	—	—	—
8	13.0	7.0	9.9	15.5	12.5	13.8	15.5	6.5	10.0	12.5	4.0	7.3	—	—	—	—	—	—
9	13.0	8.0	10.4	17.5	10.0	13.7	16.5	6.5	10.5	12.5	4.0	7.4	—	—	—	—	—	—
10	13.5	7.5	10.6	18.0	10.5	14.0	17.0	7.0	11.2	12.5	4.5	7.6	—	—	—	—	—	—
11	13.0	8.0	10.4	18.5	10.5	14.2	15.0	9.5	11.8	12.5	5.0	8.1	—	—	—	—	—	—
12	13.5	8.0	10.8	17.5	11.0	14.2	17.0	10.0	12.6	11.0	4.5	7.3	—	—	—	—	—	—
13	14.0	8.5	11.1	18.5	11.5	14.5	16.0	9.5	12.1	11.5	4.0	7.2	—	—	—	—	—	—
14	14.0	8.5	11.3	17.5	11.5	14.2	13.0	9.0	10.7	10.5	4.0	6.7	—	—	—	—	—	—
15	13.5	9.5	11.6	19.0	11.5	14.8	13.0	7.0	9.8	6.0	3.5	4.6	—	—	—	—	—	—
16	13.5	9.5	11.2	19.0	11.0	14.7	9.0	7.0	8.4	8.0	2.5	4.6	—	—	—	—	—	—
17	13.5	8.0	10.8	18.5	11.5	14.4	7.5	4.0	5.6	6.5	0.0	2.3	—	—	—	—	—	—
18	15.0	9.5	11.8	15.0	10.5	12.4	10.0	3.0	5.7	4.5	0.5	2.5	—	—	—	—	—	—
19	14.5	9.0	11.8	16.0	8.0	11.6	10.0	5.0	7.0	5.5	2.0	3.3	—	—	—	—	—	—
20	14.0	8.5	11.2	16.5	9.0	12.3	10.5	5.0	7.5	5.5	0.5	2.3	—	—	—	—	—	—
21	15.0	8.5	11.6	17.0	9.0	12.4	10.5	7.0	8.4	6.5	-0.5	1.9	—	—	—	—	—	—
22	16.0	9.0	12.5	17.0	8.0	11.9	10.0	5.5	8.0	4.5	1.0	2.3	—	—	—	—	—	—
23	16.5	10.0	13.1	17.5	8.0	12.3	10.0	3.5	6.2	—	—	—	—	—	—	—	—	—
24	16.0	10.0	13.1	18.0	8.5	12.8	9.5	3.0	6.1	—	—	—	—	—	—	—	—	—
25	17.0	10.5	13.7	17.5	9.0	12.7	11.0	5.0	7.2	—	—	—	—	—	—	—	—	—
26	17.0	10.5	13.8	18.0	9.5	13.3	9.0	3.0	5.3	—	—	—	—	—	—	—	—	—
27	17.0	10.5	13.9	18.0	11.0	13.9	10.0	2.5	5.6	—	—	—	—	—	—	—	—	—
28	17.0	11.5	14.3	18.0	11.0	13.8	11.5	3.0	6.4	—	—	—	—	—	—	—	—	—
29	15.5	12.0	13.3	18.0	10.5	13.6	12.5	4.0	7.4	—	—	—	—	—	—	—	—	—
30	17.0	11.5	14.1	18.5	9.5	13.4	13.0	4.5	7.9	—	—	—	—	—	—	—	—	—
31	17.5	11.5	14.4	18.0	9.5	12.9	—	—	—	—	—	—	—	—	—	—	—	—
Month	17.5	5.5	11.4	19.0	8.0	13.3	17.0	2.5	8.9	13.5	-0.5	6.0	—	—	—	—	—	—

Appendix V. Water temperature records for Bitch Creek at the Highway 32 bridge near Felt, Idaho, 1997.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	6.2	-0.8	1.6	4.2	1.2	2.6	—	—	—
2	—	—	—	—	—	—	—	—	—	8.2	-0.8	2.0	5.2	1.7	3.2	—	—	—
3	—	—	—	—	—	—	—	—	—	7.2	-0.8	2.2	8.2	1.7	4.7	—	—	—
4	—	—	—	—	—	—	—	—	—	4.7	0.7	2.6	7.7	2.7	5.1	—	—	—
5	—	—	—	—	—	—	—	—	—	3.2	0.2	1.3	7.2	2.2	3.9	—	—	—
6	—	—	—	—	—	—	—	—	—	6.2	-0.8	1.6	—	—	—	—	—	—
7	—	—	—	—	—	—	—	—	—	6.7	-0.3	2.7	—	—	—	—	—	—
8	—	—	—	—	—	—	—	—	—	7.2	1.7	3.8	—	—	—	—	—	—
9	—	—	—	—	—	—	—	—	—	9.2	2.2	4.6	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	8.2	1.2	3.8	—	—	—	—	—	—
11	—	—	—	—	—	—	—	—	—	8.2	1.2	3.7	—	—	—	—	—	—
12	—	—	—	—	—	—	—	—	—	10.2	-0.3	3.6	—	—	—	—	—	—
13	—	—	—	—	—	—	—	—	—	8.2	-0.8	3.0	—	—	—	—	—	—
14	—	—	—	—	—	—	—	—	—	5.2	2.2	3.4	—	—	—	—	—	—
15	—	—	—	—	—	—	—	—	—	8.7	1.7	4.7	—	—	—	—	—	—
16	—	—	—	—	—	—	—	—	—	10.7	1.7	5.3	—	—	—	—	—	—
17	—	—	—	—	—	—	—	—	—	7.7	2.7	4.9	—	—	—	—	—	—
18	—	—	—	—	—	—	—	—	—	4.7	0.2	2.5	—	—	—	—	—	—
19	—	—	—	—	—	—	—	—	—	2.7	0.7	1.7	—	—	—	—	—	—
20	—	—	—	—	—	—	6.2	1.7	3.6	3.2	0.2	1.3	—	—	—	—	—	—
21	—	—	—	—	—	—	6.7	0.2	2.6	4.7	0.2	2.1	—	—	—	—	—	—
22	—	—	—	—	—	—	5.2	-0.3	1.5	4.7	1.2	2.8	—	—	—	—	—	—
23	—	—	—	—	—	—	5.2	-0.3	1.5	4.2	1.7	2.8	—	—	—	—	—	—
24	—	—	—	—	—	—	5.7	-0.3	1.7	6.7	2.2	4.0	—	—	—	—	—	—
25	—	—	—	—	—	—	5.2	-0.8	1.3	4.7	2.7	3.4	—	—	—	—	—	—
26	—	—	—	—	—	—	6.2	-0.3	1.9	7.7	1.7	4.3	—	—	—	—	—	—
27	—	—	—	—	—	—	4.2	-0.3	1.3	5.2	2.2	3.9	—	—	—	—	—	—
28	—	—	—	—	—	—	2.2	-0.8	0.4	3.7	2.7	3.2	—	—	—	—	—	—
29	—	—	—	—	—	—	7.2	-0.8	1.3	4.2	1.7	2.8	—	—	—	—	—	—
30	—	—	—	—	—	—	7.2	-0.3	2.1	4.7	1.7	2.8	—	—	—	—	—	—
31	—	—	—	—	—	—	3.2	-0.8	1.1	—	—	—	—	—	—	—	—	—
Month	—	—	—	—	—	—	7.2	-0.8	1.7	10.7	-0.8	3.1	8.2	1.2	3.9	—	—	—

Appendix V. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	13.5	10.0	12.0	14.5	10.0	12.2	—	—	—	—	—	—	—	—	—
2	—	—	—	16.0	10.5	13.3	14.0	10.5	12.2	—	—	—	—	—	—	—	—	—
3	11.5	8.5	10.1	16.5	11.0	13.6	14.5	10.5	12.4	—	—	—	—	—	—	—	—	—
4	12.0	6.0	8.8	14.0	12.0	12.9	17.0	11.0	13.1	—	—	—	—	—	—	—	—	—
5	12.0	6.5	9.3	12.0	11.0	11.4	14.5	9.5	12.1	—	—	—	—	—	—	—	—	—
6	12.0	6.5	9.2	14.5	10.0	12.4	16.0	11.0	13.1	—	—	—	—	—	—	—	—	—
7	11.5	5.5	8.5	16.0	11.0	13.5	16.0	10.0	12.6	—	—	—	—	—	—	—	—	—
8	12.5	6.0	9.0	16.0	11.5	13.8	16.5	10.0	12.7	—	—	—	—	—	—	—	—	—
9	10.5	6.5	8.9	15.5	11.0	13.3	17.0	10.0	12.9	—	—	—	—	—	—	—	—	—
10	10.5	7.0	8.6	13.5	11.0	12.1	15.5	11.5	13.2	—	—	—	—	—	—	—	—	—
11	10.5	6.5	8.3	14.0	10.0	12.0	15.0	11.5	12.5	—	—	—	—	—	—	—	—	—
12	8.5	5.5	6.6	12.5	10.5	11.7	12.5	10.0	11.2	—	—	—	—	—	—	—	—	—
13	11.0	5.0	7.8	13.5	10.0	11.9	15.0	8.5	11.1	—	—	—	—	—	—	—	—	—
14	13.0	6.5	9.5	13.5	11.0	12.0	16.0	10.0	12.3	—	—	—	—	—	—	—	—	—
15	14.0	7.5	10.5	14.5	10.0	12.3	12.0	8.5	10.5	—	—	—	—	—	—	—	—	—
16	13.5	8.0	10.7	15.0	11.0	12.8	11.0	7.5	8.3	—	—	—	—	—	—	—	—	—
17	11.5	8.0	10.0	13.0	10.0	11.9	—	—	—	—	—	—	—	—	—	—	—	—
18	12.0	8.5	9.9	15.5	11.0	13.1	—	—	—	—	—	—	—	—	—	—	—	—
19	11.5	8.0	9.8	15.5	10.5	13.0	—	—	—	—	—	—	—	—	—	—	—	—
20	13.5	8.0	10.6	15.0	10.5	12.8	—	—	—	—	—	—	—	—	—	—	—	—
21	14.0	8.0	10.9	17.0	11.5	14.2	—	—	—	—	—	—	—	—	—	—	—	—
22	14.0	8.5	11.2	16.5	11.5	13.8	—	—	—	—	—	—	—	—	—	—	—	—
23	12.0	9.5	10.8	16.5	11.0	13.6	—	—	—	—	—	—	—	—	—	—	—	—
24	11.0	9.5	10.2	16.5	12.5	14.1	—	—	—	—	—	—	—	—	—	—	—	—
25	11.5	9.0	10.3	16.5	11.5	13.7	—	—	—	—	—	—	—	—	—	—	—	—
26	14.0	8.0	10.9	17.0	11.5	13.9	—	—	—	—	—	—	—	—	—	—	—	—
27	14.5	9.0	11.9	17.5	12.0	14.3	—	—	—	—	—	—	—	—	—	—	—	—
28	14.0	10.5	12.2	16.5	11.0	13.6	—	—	—	—	—	—	—	—	—	—	—	—
29	13.0	11.0	11.8	17.0	11.5	13.7	—	—	—	—	—	—	—	—	—	—	—	—
30	13.0	9.5	11.3	16.5	10.0	12.9	—	—	—	—	—	—	—	—	—	—	—	—
31	14.5	10.0	12.2	15.5	10.0	12.4	—	—	—	—	—	—	—	—	—	—	—	—
Month	14.5	5.0	10.0	17.5	10.0	13.0	17.0	7.5	12.0	—	—	—	—	—	—	—	—	—

Appendix W. Water temperature records for Badger Creek at the Bull Elk road bridge near Felt, Idaho, 1996.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.5	4.0	7.1
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.5	4.5	8.0
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	5.0	8.3
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.5	5.5	8.6
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.5	5.0	8.1
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	4.0	7.6
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	4.5	8.4
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5	6.0	8.9
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	5.5	8.8
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	5.5	8.7
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	5.5	8.7
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	5.5	8.7
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5	6.0	9.0
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	6.0	9.4
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	6.5	9.2
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5	6.0	9.4
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.5	6.5	10.0
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	6.5	8.7
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.5	5.0	8.4
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5	6.5	9.2
21	—	—	—	—	—	—	—	—	—	—	—	—	7.5	7.0	7.2	13.0	6.5	9.9
22	—	—	—	—	—	—	—	—	—	—	—	—	8.5	5.0	6.3	13.0	8.0	10.4
23	—	—	—	—	—	—	—	—	—	—	—	—	5.5	3.0	4.3	11.5	6.5	9.3
24	—	—	—	—	—	—	—	—	—	—	—	—	8.5	3.0	5.7	15.5	8.0	11.6
25	—	—	—	—	—	—	—	—	—	—	—	—	10.5	4.5	7.4	16.5	9.0	12.5
26	—	—	—	—	—	—	—	—	—	—	—	—	7.0	5.5	6.2	14.0	9.5	11.8
27	—	—	—	—	—	—	—	—	—	—	—	—	9.0	4.5	6.5	14.0	9.5	11.7
28	—	—	—	—	—	—	—	—	—	—	—	—	7.0	4.5	5.8	12.5	9.0	10.6
29	—	—	—	—	—	—	—	—	—	—	—	—	7.0	3.5	5.4	16.0	7.5	11.8
30	—	—	—	—	—	—	—	—	—	—	—	—	8.5	4.5	6.2	17.0	9.0	13.0
31	—	—	—	—	—	—	—	—	—	—	—	—	10.0	4.0	6.5	—	—	—
Month	—	—	—	—	—	—	—	—	—	—	—	—	10.5	3.0	6.1	17.0	4.0	9.5

Appendix W. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	18.0	10.0	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	18.0	10.5	14.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	18.0	11.0	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	17.5	12.5	14.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	18.5	12.0	15.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	17.5	11.0	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	18.0	11.0	14.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	19.0	11.5	15.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	18.5	13.5	15.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	19.0	12.5	15.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	19.5	12.5	16.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	20.0	12.5	16.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	20.5	13.5	17.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	20.5	13.5	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	19.5	14.5	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	19.5	15.0	16.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	20.5	13.0	16.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18	20.5	14.5	17.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19	20.5	13.5	17.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20	20.0	12.5	16.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21	18.5	11.5	15.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Month	20.5	10.0	15.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix X. Water temperature records for Teton Creek at the steel bridge near Driggs, Idaho, 1996.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	4.0	7.8
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5	5.0	8.4
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	5.0	8.1
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	5.5	8.3
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	5.0	8.5
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	4.0	8.1
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.5	4.5	8.5
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	5.5	9.0
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	5.0	9.0
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.5	5.0	8.9
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.5	5.0	8.9
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	5.0	8.8
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5	5.5	8.6
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	5.5	8.9
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	5.5	8.9
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.5	5.5	9.3
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.5	5.5	9.3
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	5.5	7.6
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	4.0	7.3
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.5	5.0	7.8
21	—	—	—	—	—	—	—	—	—	—	—	—	8.5	7.5	8.0	11.5	5.0	8.1
22	—	—	—	—	—	—	—	—	—	—	—	—	11.0	5.5	7.7	11.0	6.0	8.2
23	—	—	—	—	—	—	—	—	—	—	—	—	6.5	4.5	5.6	11.0	4.5	7.6
24	—	—	—	—	—	—	—	—	—	—	—	—	10.0	4.0	7.0	13.0	6.0	8.9
25	—	—	—	—	—	—	—	—	—	—	—	—	12.5	5.5	8.6	12.0	5.5	8.7
26	—	—	—	—	—	—	—	—	—	—	—	—	8.5	6.5	7.4	10.5	5.5	7.9
27	—	—	—	—	—	—	—	—	—	—	—	—	10.5	5.5	7.7	11.0	6.5	8.3
28	—	—	—	—	—	—	—	—	—	—	—	—	8.0	5.5	6.7	9.5	5.5	7.3
29	—	—	—	—	—	—	—	—	—	—	—	—	8.5	4.0	6.1	12.5	5.5	8.4
30	—	—	—	—	—	—	—	—	—	—	—	—	9.0	4.5	6.5	12.5	5.5	8.8
31	—	—	—	—	—	—	—	—	—	—	—	—	11.0	4.5	7.1	—	—	—
Month	—	—	—	—	—	—	—	—	—	—	—	—	12.5	4.0	7.1	13.5	4.0	8.4

Appendix X. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.0	6.0	9.4	15.5	8.5	11.8	14.5	7.5	10.7	12.0	7.0	9.5	—	—	—	—	—	—
2	12.5	6.0	9.2	16.0	9.0	12.2	13.5	6.5	10.0	11.5	6.5	9.2	—	—	—	—	—	—
3	13.0	6.5	9.3	13.5	8.5	10.9	13.5	6.5	10.0	11.5	6.0	8.9	—	—	—	—	—	—
4	13.0	7.0	9.8	13.0	7.5	10.0	14.0	7.5	10.8	11.5	6.0	8.7	—	—	—	—	—	—
5	13.5	7.0	9.9	—	—	—	12.0	8.5	10.1	12.0	6.5	9.2	—	—	—	—	—	—
6	12.5	6.0	9.1	—	—	—	12.5	5.5	9.0	12.0	7.0	9.3	—	—	—	—	—	—
7	13.0	6.0	9.3	—	—	—	13.0	6.0	9.5	11.0	6.0	8.5	—	—	—	—	—	—
8	13.5	6.5	9.8	16.0	11.0	14.0	14.0	7.0	10.3	11.0	5.5	8.3	—	—	—	—	—	—
9	12.0	7.5	9.5	16.0	8.0	11.6	14.0	7.0	10.4	11.0	5.5	8.6	—	—	—	—	—	—
10	13.5	7.0	10.0	16.0	8.0	11.7	13.5	7.0	10.4	11.5	6.0	8.9	—	—	—	—	—	—
11	13.5	7.0	10.0	16.0	8.0	11.8	12.0	8.5	10.4	11.0	6.5	9.1	—	—	—	—	—	—
12	14.0	7.0	10.1	15.5	8.5	11.8	14.0	8.5	11.0	10.5	6.0	8.3	—	—	—	—	—	—
13	14.5	7.0	10.4	15.0	9.0	11.8	13.0	8.5	10.5	10.0	5.5	8.1	—	—	—	—	—	—
14	14.5	7.0	10.5	14.5	8.5	11.4	11.0	8.0	9.4	9.0	6.0	7.6	—	—	—	—	—	—
15	13.5	8.0	10.5	16.0	8.5	12.0	11.5	6.5	9.2	6.5	5.0	5.8	—	—	—	—	—	—
16	12.5	8.5	10.3	15.0	8.0	11.6	9.0	7.0	8.1	6.5	4.0	5.1	—	—	—	—	—	—
17	14.0	8.0	10.7	14.0	8.5	11.2	9.0	5.5	7.1	6.5	2.5	4.5	—	—	—	—	—	—
18	15.5	8.5	11.7	14.0	8.5	10.9	8.5	5.0	6.8	6.5	3.0	5.0	—	—	—	—	—	—
19	15.5	8.0	11.3	14.0	6.5	10.2	9.5	6.0	7.9	6.0	3.5	4.9	—	—	—	—	—	—
20	15.0	7.5	11.0	15.0	7.5	11.0	11.0	6.0	8.5	5.0	3.0	4.0	—	—	—	—	—	—
21	16.0	8.0	11.5	14.5	8.0	10.9	11.0	7.5	9.1	5.5	2.0	3.8	—	—	—	—	—	—
22	16.0	8.0	11.8	14.5	7.0	10.5	10.0	7.0	8.5	5.0	3.0	3.7	—	—	—	—	—	—
23	16.5	8.5	12.1	15.0	7.0	10.9	10.5	4.5	7.4	—	—	—	—	—	—	—	—	—
24	16.0	8.5	11.9	15.5	7.5	11.2	10.0	5.0	7.6	—	—	—	—	—	—	—	—	—
25	16.0	8.5	12.0	14.5	7.5	10.9	10.5	6.5	8.2	—	—	—	—	—	—	—	—	—
26	15.0	8.5	11.6	15.0	8.0	11.3	8.0	5.0	6.2	—	—	—	—	—	—	—	—	—
27	16.0	8.5	11.9	14.5	9.0	11.6	9.0	4.0	6.4	—	—	—	—	—	—	—	—	—
28	14.5	9.5	11.8	14.5	9.0	11.5	11.0	5.0	8.0	—	—	—	—	—	—	—	—	—
29	14.0	9.5	11.5	15.0	8.0	11.1	12.0	6.0	8.8	—	—	—	—	—	—	—	—	—
30	16.0	9.0	12.2	15.0	8.0	11.2	12.0	6.5	9.4	—	—	—	—	—	—	—	—	—
31	15.0	9.0	11.9	15.0	8.0	11.3	—	—	—	—	—	—	—	—	—	—	—	—
Month	16.5	6.0	10.7	16.0	6.5	11.4	14.5	4.0	9.0	12.0	2.0	7.2	—	—	—	—	—	—

Appendix Y. Water temperature records for Teton Creek at the steel bridge near Driggs, Idaho, 1997.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	6.5	1.0	3.3	5.0	3.0	4.1	11.5	5.5	7.9
2	—	—	—	—	—	—	—	—	—	8.0	0.0	3.7	9.0	3.0	5.5	11.5	4.5	7.8
3	—	—	—	—	—	—	—	—	—	8.0	1.0	4.6	13.0	3.0	7.8	13.0	4.5	8.4
4	—	—	—	—	—	—	—	—	—	6.0	2.0	4.4	12.5	5.0	8.5	14.0	6.0	9.4
5	—	—	—	—	—	—	—	—	—	5.0	1.5	3.1	14.5	5.0	9.7	12.0	5.5	8.2
6	—	—	—	—	—	—	—	—	—	6.5	0.0	3.2	12.5	6.0	9.2	13.0	5.0	8.2
7	—	—	—	—	—	—	—	—	—	7.0	1.0	3.8	13.5	5.0	9.2	12.5	5.5	8.4
8	—	—	—	—	—	—	—	—	—	8.0	2.0	4.6	14.5	4.5	9.5	12.0	5.5	8.1
9	—	—	—	—	—	—	—	—	—	8.5	3.0	5.3	15.0	4.5	10.0	10.0	5.5	7.6
10	—	—	—	—	—	—	—	—	—	6.5	1.5	4.0	13.5	5.5	9.9	8.5	6.0	7.0
11	—	—	—	—	—	—	—	—	—	7.0	1.0	4.1	13.5	6.0	9.4	12.0	5.5	8.0
12	—	—	—	—	—	—	—	—	—	9.0	1.0	4.9	12.5	4.0	7.9	9.0	5.5	7.2
13	—	—	—	—	—	—	—	—	—	8.0	1.0	4.7	10.5	4.0	7.1	10.5	5.0	7.7
14	—	—	—	—	—	—	—	—	—	5.5	3.0	4.0	11.5	4.0	7.4	12.5	5.0	8.3
15	—	—	—	—	—	—	—	—	—	9.0	2.0	5.2	10.0	4.0	6.9	12.5	5.5	8.5
16	—	—	—	—	—	—	—	—	—	11.0	2.5	6.5	11.0	4.0	7.2	11.5	6.0	8.4
17	—	—	—	—	—	—	—	—	—	10.0	3.5	6.7	9.5	4.5	6.8	13.5	5.5	9.2
18	—	—	—	—	—	—	—	—	—	9.5	3.5	6.9	10.5	4.0	6.7	12.0	7.0	8.8
19	—	—	—	—	—	—	—	—	—	7.5	5.0	6.3	12.0	3.0	7.0	11.5	6.0	8.1
20	—	—	—	—	—	—	8.0	5.0	6.4	7.5	5.0	6.1	9.5	3.5	6.2	13.0	5.5	9.0
21	—	—	—	—	—	—	8.0	3.0	5.0	9.5	3.0	6.3	10.0	4.0	6.6	13.0	4.5	8.6
22	—	—	—	—	—	—	7.5	1.0	4.0	8.5	4.0	6.4	12.0	3.5	7.5	14.0	6.5	9.7
23	—	—	—	—	—	—	7.0	1.5	3.9	7.0	4.0	5.5	8.5	4.5	6.4	11.5	6.0	8.2
24	—	—	—	—	—	—	6.5	1.0	3.6	10.0	3.0	6.2	6.5	5.0	5.6	12.5	4.5	8.3
25	—	—	—	—	—	—	6.5	0.0	3.3	8.0	4.5	6.4	7.0	4.0	5.5	13.0	5.0	8.7
26	—	—	—	—	—	—	8.5	1.5	4.6	12.5	3.0	7.7	7.5	4.0	5.7	13.5	5.5	9.4
27	—	—	—	—	—	—	6.0	2.5	4.0	9.0	5.0	7.7	11.0	4.5	7.4	13.0	6.5	9.4
28	—	—	—	—	—	—	4.5	0.5	2.5	8.5	4.5	6.3	10.0	5.5	7.5	13.0	6.0	9.0
29	—	—	—	—	—	—	6.5	-0.5	2.8	6.5	4.0	5.1	8.0	6.0	6.7	13.5	6.0	9.4
30	—	—	—	—	—	—	9.0	1.5	5.0	6.5	2.5	4.7	12.0	5.0	8.0	13.5	5.5	9.3
31	—	—	—	—	—	—	5.0	2.5	3.8	—	—	—	12.5	5.0	8.1	—	—	—
Month	—	—	—	—	—	—	9.0	-0.5	4.1	12.5	0.0	5.3	15.0	3.0	7.4	14.0	4.5	8.5

Appendix Y. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	9.0	6.0	7.4	15.5	8.5	11.5	14.0	8.0	10.9	13.0	7.0	9.7	6.0	3.5	4.6	3.0	2.5	2.8
2	11.0	5.0	7.7	16.5	9.0	12.2	12.0	9.0	10.4	9.0	7.5	8.3	6.0	2.0	3.9	3.0	1.5	2.1
3	16.5	6.0	9.5	16.5	8.5	12.2	12.5	8.5	10.5	10.5	6.0	7.9	5.5	2.0	4.0	0.0	-0.5	-0.2
4	14.0	6.0	9.8	11.5	10.0	10.6	15.0	9.0	11.4	11.0	6.0	8.2	6.5	3.0	4.9	0.0	-0.5	-0.3
5	13.5	6.5	9.8	12.0	9.5	10.5	13.5	8.0	10.6	10.5	5.5	7.9	6.5	2.5	4.5	0.0	-0.5	-0.3
6	13.5	7.0	9.9	15.5	9.0	11.9	13.0	9.0	10.8	10.5	5.0	7.8	6.5	2.5	4.6	2.5	-0.5	0.8
7	13.5	6.5	9.8	16.0	9.0	12.1	15.0	8.0	11.0	8.0	6.5	6.9	7.0	2.5	4.8	3.5	2.5	2.9
8	14.0	6.5	9.9	16.0	9.5	12.2	14.0	8.0	10.8	7.0	5.0	5.9	6.0	3.5	4.9	3.0	2.0	2.7
9	13.5	7.0	9.9	14.5	8.5	11.2	13.5	8.0	10.8	8.0	4.0	6.0	5.5	2.5	4.0	2.0	1.0	1.5
10	12.5	8.0	9.8	11.0	9.0	10.1	13.5	8.5	11.0	8.5	5.5	7.1	5.0	1.5	2.8	0.5	-0.5	-0.2
11	12.5	7.0	9.4	13.5	8.0	10.4	12.5	9.0	10.5	7.5	4.5	6.0	4.5	1.5	3.0	-0.5	-0.5	-0.5
12	8.0	6.5	7.4	14.0	8.0	10.7	12.0	8.5	9.9	6.5	4.5	5.3	4.0	0.5	2.4	-0.5	-0.5	-0.5
13	12.5	6.0	9.1	14.5	8.0	10.8	14.5	7.5	10.6	6.5	3.5	4.8	4.0	1.0	2.6	-0.5	-0.5	-0.5
14	14.5	7.0	10.4	13.0	9.0	10.6	14.5	8.5	11.1	9.0	4.0	6.2	2.5	0.0	1.4	-0.5	-0.5	-0.5
15	15.0	8.0	11.1	15.5	8.5	11.5	12.0	8.0	9.8	9.5	4.0	6.6	2.5	-0.5	1.0	1.0	-0.5	0.0
16	15.0	8.0	11.1	14.5	8.0	10.9	12.0	6.5	8.9	9.5	4.0	6.9	3.0	-0.5	1.2	2.5	1.0	1.6
17	13.0	8.5	10.5	13.5	7.5	10.6	12.5	6.5	9.3	9.5	4.0	6.8	3.5	2.5	3.1	2.5	2.0	2.2
18	13.0	8.5	10.3	16.0	9.0	11.9	9.5	8.0	8.7	9.5	4.5	6.9	3.5	2.5	3.2	2.5	2.0	2.2
19	13.0	8.0	10.3	15.5	8.0	11.3	11.0	6.5	8.7	9.0	4.0	6.6	4.0	2.0	3.1	0.5	-0.5	-0.1
20	15.0	8.0	11.2	15.5	8.0	11.4	11.5	7.5	9.3	8.5	4.5	6.5	4.0	2.5	3.3	-0.5	-0.5	-0.5
21	15.5	8.0	11.3	16.5	9.0	12.2	11.5	8.0	9.6	8.0	3.5	5.8	4.0	2.0	2.8	-0.5	-0.5	-0.5
22	15.0	8.5	11.5	14.5	8.5	11.0	11.0	7.0	8.8	7.5	3.5	5.5	3.0	1.5	2.3	—	—	—
23	14.0	9.0	11.2	13.5	8.5	10.9	12.5	6.5	9.3	5.5	3.5	4.5	3.0	0.0	1.6	—	—	—
24	13.5	9.0	11.1	15.0	9.5	11.9	13.0	6.0	9.3	5.5	3.0	3.9	5.0	2.5	3.8	—	—	—
25	13.5	9.0	10.8	15.5	8.5	11.7	12.5	6.5	9.6	5.5	1.0	3.3	3.5	2.5	3.0	—	—	—
26	15.0	8.0	11.3	15.5	8.5	11.8	11.5	9.0	10.1	6.5	2.0	4.0	3.0	0.5	1.5	—	—	—
27	16.0	8.5	12.0	16.5	9.5	12.5	11.0	7.5	9.2	7.0	3.0	4.8	4.0	2.5	3.3	—	—	—
28	15.0	8.5	11.5	16.0	8.5	11.7	11.5	5.5	8.4	6.5	3.0	5.0	3.5	3.0	3.3	—	—	—
29	14.5	9.5	11.7	15.5	9.0	11.6	12.0	5.5	8.6	5.5	4.0	4.8	4.0	2.0	3.0	—	—	—
30	14.0	9.0	11.0	15.5	8.0	11.3	12.5	6.0	9.0	5.5	4.5	5.1	3.5	1.5	2.6	—	—	—
31	15.0	9.0	11.5	13.0	8.0	10.5	—	—	—	7.5	4.5	5.7	—	—	—	—	—	—
Month	16.5	5.0	10.3	16.5	7.5	11.3	15.0	5.5	9.9	13.0	1.0	6.2	7.0	-0.5	3.1	3.5	-0.5	0.7

Appendix Z. Water temperature records for Fox Creek at the IDFG fence line near Victor, Idaho, 1996.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	5.5	9.8
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.5	6.0	10.7
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.5	6.5	10.7
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	7.5	10.6
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	6.5	10.1
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	5.5	9.5
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	5.5	10.2
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	7.5	10.8
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	7.0	10.6
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	6.5	10.4
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	6.0	10.2
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	6.5	10.3
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	7.0	10.1
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.5	7.0	10.3
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	7.0	10.2
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	7.5	10.9
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	7.5	10.7
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5	7.0	9.1
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.5	5.5	9.0
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	6.0	9.7
21	—	—	—	—	—	—	—	—	—	—	—	—	9.0	8.0	8.5	14.0	6.5	10.3
22	—	—	—	—	—	—	—	—	—	—	—	—	13.0	7.0	9.1	14.0	7.5	10.3
23	—	—	—	—	—	—	—	—	—	—	—	—	9.0	5.5	7.0	13.5	6.0	9.7
24	—	—	—	—	—	—	—	—	—	—	—	—	12.0	6.0	8.6	16.0	7.5	11.2
25	—	—	—	—	—	—	—	—	—	—	—	—	14.5	6.5	9.7	15.0	7.5	10.8
26	—	—	—	—	—	—	—	—	—	—	—	—	11.0	7.0	8.5	12.5	7.5	9.9
27	—	—	—	—	—	—	—	—	—	—	—	—	14.0	7.0	9.7	14.0	8.0	10.5
28	—	—	—	—	—	—	—	—	—	—	—	—	11.5	7.0	8.7	12.0	7.5	9.1
29	—	—	—	—	—	—	—	—	—	—	—	—	12.0	5.0	8.4	15.0	6.5	10.5
30	—	—	—	—	—	—	—	—	—	—	—	—	12.0	6.5	8.7	15.5	7.0	10.9
31	—	—	—	—	—	—	—	—	—	—	—	—	14.5	5.5	9.4	—	—	—
Month	—	—	—	—	—	—	—	—	—	—	—	—	14.5	5.0	8.8	16.5	5.5	10.2

Appendix Z. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	16.0	7.5	11.4	17.0	8.5	12.0	15.5	7.5	11.0	13.0	7.5	9.6	—	—	—	—	—	—
2	15.0	7.5	11.0	17.0	9.0	12.4	15.0	7.0	10.5	13.5	6.5	9.7	—	—	—	—	—	—
3	16.0	8.0	11.5	15.0	8.0	11.1	15.0	7.0	10.7	13.0	6.5	9.3	—	—	—	—	—	—
4	15.0	9.0	11.9	15.0	7.5	10.6	15.5	7.5	11.1	13.0	6.0	9.0	—	—	—	—	—	—
5	16.0	8.5	11.8	—	—	—	13.0	8.0	10.3	13.0	7.0	9.5	—	—	—	—	—	—
6	15.0	7.5	10.9	—	—	—	14.0	5.5	9.3	13.0	7.0	9.4	—	—	—	—	—	—
7	16.0	7.5	11.3	—	—	—	14.5	6.5	9.9	12.5	6.0	8.8	—	—	—	—	—	—
8	15.5	7.5	11.5	17.5	11.0	15.1	15.0	7.0	10.5	12.5	6.0	8.8	—	—	—	—	—	—
9	14.0	9.0	11.1	17.5	8.0	12.1	15.5	7.0	10.7	12.5	6.0	8.9	—	—	—	—	—	—
10	16.0	8.5	11.9	18.0	8.0	12.3	14.5	7.0	10.7	13.0	6.0	9.2	—	—	—	—	—	—
11	16.0	8.0	11.7	18.0	8.0	12.5	13.0	9.0	10.7	12.5	7.0	9.3	—	—	—	—	—	—
12	16.0	8.0	11.8	17.5	8.5	12.5	15.0	9.0	11.4	12.0	6.0	8.6	—	—	—	—	—	—
13	17.0	8.5	12.2	17.5	9.0	12.8	14.0	9.0	10.9	11.5	6.0	8.5	—	—	—	—	—	—
14	16.5	8.5	12.1	16.0	9.0	12.3	11.5	8.0	9.6	10.5	6.0	7.8	—	—	—	—	—	—
15	15.5	9.0	11.8	17.5	9.0	12.9	12.5	6.5	9.5	7.5	5.5	6.4	—	—	—	—	—	—
16	15.0	9.5	11.8	17.0	8.5	12.4	9.0	7.5	8.3	7.5	4.5	5.9	—	—	—	—	—	—
17	17.5	9.0	12.6	16.0	9.0	12.3	10.0	6.0	7.6	8.0	3.0	5.4	—	—	—	—	—	—
18	17.5	9.5	12.9	16.0	9.0	11.8	9.5	5.0	7.3	7.5	4.0	5.6	—	—	—	—	—	—
19	17.5	8.5	12.3	15.5	7.0	10.8	10.0	6.5	8.0	7.0	5.0	5.9	—	—	—	—	—	—
20	16.0	7.5	11.4	16.5	7.5	11.4	12.0	6.5	8.8	7.0	4.5	5.5	—	—	—	—	—	—
21	16.5	8.0	11.7	16.0	8.0	11.3	11.5	7.5	9.1	7.5	3.0	5.0	—	—	—	—	—	—
22	17.0	8.0	12.0	16.5	6.5	11.0	10.5	7.0	8.6	6.0	4.5	4.7	—	—	—	—	—	—
23	17.0	8.5	12.2	16.5	7.0	11.3	12.0	4.5	8.0	—	—	—	—	—	—	—	—	—
24	16.5	8.0	11.8	16.5	7.5	11.5	12.0	5.5	8.3	—	—	—	—	—	—	—	—	—
25	17.0	8.5	12.2	16.5	7.5	11.3	11.5	7.0	8.5	—	—	—	—	—	—	—	—	—
26	17.0	8.0	12.1	16.0	8.0	11.3	9.0	5.5	6.8	—	—	—	—	—	—	—	—	—
27	17.0	8.5	12.2	16.0	9.0	12.1	10.5	4.5	7.1	—	—	—	—	—	—	—	—	—
28	14.5	9.5	11.7	16.0	9.0	11.8	12.5	5.5	8.6	—	—	—	—	—	—	—	—	—
29	14.5	9.5	11.5	16.0	8.0	11.5	13.0	6.0	9.3	—	—	—	—	—	—	—	—	—
30	16.0	9.5	12.2	16.5	7.5	11.6	13.5	6.5	9.6	—	—	—	—	—	—	—	—	—
31	17.5	9.0	12.4	16.5	8.0	11.6	—	—	—	—	—	—	—	—	—	—	—	—
Month	17.5	7.5	11.8	18.0	6.5	11.9	15.5	4.5	9.4	13.5	3.0	7.8	—	—	—	—	—	—

Appendix AA. Water temperature records for Fox Creek at the IDFG fence line near Victor, Idaho, 1997.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	—	—	—	—	—	—	—	—	—	10.7	2.2	5.2	7.7	4.2	5.3	13.2	6.7	9.1
2	—	—	—	—	—	—	—	—	—	11.2	1.2	5.5	13.2	4.2	7.8	12.7	5.7	8.7
3	—	—	—	—	—	—	—	—	—	10.7	1.7	5.6	15.2	3.7	8.6	14.2	5.7	9.3
4	—	—	—	—	—	—	—	—	—	7.7	2.2	5.0	14.2	5.2	8.5	14.7	6.7	10.1
5	—	—	—	—	—	—	—	—	—	6.7	2.2	3.9	15.7	4.7	9.1	12.7	6.7	9.1
6	—	—	—	—	—	—	—	—	—	10.2	1.2	5.0	13.2	5.7	8.8	13.7	5.7	9.0
7	—	—	—	—	—	—	—	—	—	10.2	1.7	5.3	15.2	4.7	9.3	13.2	6.7	9.2
8	—	—	—	—	—	—	—	—	—	10.7	2.7	5.6	16.2	4.2	9.5	12.7	6.7	9.2
9	—	—	—	—	—	—	—	—	—	10.7	3.7	5.9	16.7	4.7	10.0	10.7	7.2	8.7
10	—	—	—	—	—	—	—	—	—	9.7	2.7	5.2	17.2	5.2	10.4	9.7	7.2	8.4
11	—	—	—	—	—	—	—	—	—	10.7	2.2	5.5	16.2	5.7	10.2	12.2	6.7	8.8
12	—	—	—	—	—	—	—	—	—	11.7	2.2	5.9	16.7	4.7	10.2	9.7	6.7	8.0
13	—	—	—	—	—	—	—	—	—	10.7	1.7	5.3	15.2	5.7	10.1	11.2	5.7	8.3
14	—	—	—	—	—	—	—	—	—	7.2	3.2	4.9	15.7	6.2	10.3	12.7	6.2	8.7
15	—	—	—	—	—	—	—	—	—	9.7	3.2	5.7	15.7	6.2	10.5	12.2	6.7	9.0
16	—	—	—	—	—	—	—	—	—	11.7	3.2	6.6	14.2	6.2	9.8	11.7	6.7	9.0
17	—	—	—	—	—	—	—	—	—	12.2	4.2	7.3	11.7	6.2	8.8	13.2	6.2	9.6
18	—	—	—	—	—	—	—	—	—	12.7	4.2	7.8	12.7	5.7	8.7	12.2	8.2	9.8
19	—	—	—	—	—	—	—	—	—	8.7	5.2	6.7	14.7	4.2	9.1	12.7	7.2	9.2
20	—	—	—	—	—	—	7.7	4.2	5.9	8.2	5.2	6.5	10.7	5.2	7.8	13.7	6.7	9.6
21	—	—	—	—	—	—	8.7	3.2	5.1	11.7	3.7	7.1	12.2	5.7	8.5	12.7	5.7	9.1
22	—	—	—	—	—	—	8.7	1.7	4.6	12.2	4.2	7.6	14.7	5.2	9.3	14.2	7.2	10.2
23	—	—	—	—	—	—	9.2	2.2	4.6	8.7	4.2	6.2	9.7	6.2	8.0	12.7	6.7	9.0
24	—	—	—	—	—	—	7.7	1.2	4.1	11.7	4.2	7.1	7.2	6.2	6.7	12.7	5.7	8.8
25	—	—	—	—	—	—	9.2	1.7	4.7	9.7	5.2	7.2	9.2	5.2	6.9	13.7	5.7	9.3
26	—	—	—	—	—	—	10.7	2.2	5.6	15.2	4.2	8.8	10.7	5.2	7.5	14.2	6.2	10.0
27	—	—	—	—	—	—	6.7	2.7	4.1	12.2	5.2	8.0	12.2	5.7	8.7	13.2	7.2	9.9
28	—	—	—	—	—	—	7.2	1.7	3.8	9.2	4.7	6.7	12.7	6.2	9.2	13.2	6.7	9.5
29	—	—	—	—	—	—	10.7	0.7	4.7	7.7	4.7	6.0	10.2	7.2	8.3	14.2	6.7	9.9
30	—	—	—	—	—	—	11.7	2.7	6.1	8.7	3.7	6.0	12.7	6.2	9.2	13.7	6.2	9.7
31	—	—	—	—	—	—	6.2	2.2	4.3	—	—	—	13.7	6.2	9.5	—	—	—
Month	—	—	—	—	—	—	11.7	0.7	4.8	15.2	1.2	6.2	17.2	3.7	8.9	14.7	5.7	9.2

Appendix AA. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	9.2	6.2	7.5	15.7	8.2	11.4	14.2	8.2	10.7	13.7	7.2	9.8	7.7	4.2	5.5	4.7	4.2	4.6
2	11.7	5.7	8.2	17.2	8.7	12.2	11.7	8.7	10.1	9.2	7.7	8.3	7.7	3.2	5.2	5.2	2.7	4.0
3	13.7	6.7	9.7	16.7	8.2	12.0	12.7	8.2	10.1	11.2	6.2	8.3	7.2	3.2	5.2	3.2	0.7	2.2
4	14.2	6.7	10.1	11.7	9.7	10.5	13.7	8.7	10.8	11.7	5.7	8.3	8.7	4.2	5.9	3.2	1.2	2.0
5	14.7	6.7	10.5	12.2	9.2	10.2	13.7	7.7	10.3	11.2	5.7	7.8	8.2	3.7	5.6	3.2	1.2	2.0
6	14.2	7.7	10.6	16.2	8.7	11.8	13.2	8.7	10.5	11.2	4.7	7.7	8.7	3.7	5.8	4.7	1.7	3.2
7	14.2	6.7	10.1	16.7	8.7	12.1	14.7	7.7	10.8	7.7	6.2	6.9	8.7	3.7	6.0	5.2	4.2	4.7
8	14.7	6.7	10.5	16.2	9.2	12.1	15.7	7.7	11.1	7.7	5.2	6.2	7.7	4.2	5.8	4.7	4.2	4.6
9	14.7	7.2	10.6	15.2	7.7	11.2	14.7	8.2	11.1	8.2	4.2	6.2	7.7	3.7	5.4	4.2	3.2	3.6
10	12.7	8.2	10.2	10.7	8.7	9.9	14.2	8.7	11.0	9.2	5.7	7.3	7.2	2.7	4.4	2.7	1.2	1.9
11	13.7	7.7	10.0	14.2	7.7	10.5	12.2	9.2	10.2	7.2	4.7	6.0	5.7	3.2	4.2	1.7	0.2	0.7
12	8.7	7.2	8.0	14.2	7.7	10.6	12.2	8.2	9.7	7.2	4.7	5.7	5.7	2.2	4.0	2.2	-0.3	0.9
13	14.2	6.2	9.9	14.2	7.7	10.6	14.2	7.2	10.3	7.2	3.7	5.2	6.2	2.7	4.5	2.7	0.2	1.5
14	15.2	7.2	10.9	13.2	8.7	10.5	14.7	8.2	10.9	9.7	4.2	6.6	5.2	2.2	3.5	3.2	0.7	1.9
15	16.2	7.7	11.5	15.7	8.2	11.5	12.2	7.7	9.8	10.7	4.2	7.0	5.2	1.2	3.0	5.2	3.2	3.8
16	15.7	8.2	11.6	14.2	8.2	10.7	11.7	6.2	8.3	10.7	4.7	7.4	5.2	1.7	3.5	4.7	3.2	4.0
17	14.7	8.7	11.3	14.7	7.7	10.7	13.7	6.2	9.3	10.7	4.7	7.3	5.2	4.2	4.5	4.2	4.2	4.2
18	14.2	8.7	10.7	16.2	8.7	11.7	9.7	7.7	8.6	10.2	5.2	7.3	5.7	4.2	5.0	4.7	3.7	4.2
19	14.2	8.2	10.8	15.7	7.7	11.2	11.7	6.7	8.9	10.2	4.7	7.2	4.7	3.7	4.4	3.7	1.7	2.6
20	15.7	8.2	11.6	16.2	7.7	11.5	11.2	7.2	9.2	10.2	4.7	7.0	5.2	3.7	4.5	2.2	0.7	1.3
21	16.2	7.7	11.6	16.7	8.7	12.1	11.7	8.2	9.5	9.7	3.7	6.5	5.2	2.7	4.0	2.7	0.7	1.7
22	15.7	8.2	11.6	14.7	8.2	10.8	11.7	6.7	9.0	8.7	4.2	6.2	4.7	2.7	3.7	2.7	1.2	1.9
23	14.2	8.7	11.0	13.7	8.2	10.7	13.2	6.2	9.4	6.2	3.7	5.1	5.2	1.7	3.6	1.7	0.2	0.8
24	13.2	9.2	10.7	16.2	9.7	12.1	13.7	6.2	9.5	6.2	3.2	4.5	6.7	4.2	5.1	2.2	1.2	1.8
25	13.7	8.7	10.4	15.7	8.7	11.6	13.2	6.7	9.7	7.2	1.7	4.3	4.7	3.7	4.2	1.7	0.7	1.2
26	15.7	7.7	11.4	16.2	8.2	11.7	11.7	8.7	9.9	7.7	2.7	4.9	4.2	1.7	2.7	1.2	0.2	0.7
27	16.7	8.7	12.0	16.7	9.7	12.4	11.2	7.2	8.8	8.2	3.7	5.5	5.2	3.7	4.4	2.2	0.2	1.1
28	15.7	8.7	11.5	16.2	8.2	11.6	12.2	5.7	8.5	7.7	3.7	5.7	5.2	4.2	4.7	2.2	0.7	1.3
29	15.2	9.7	11.8	15.7	8.7	11.5	12.7	5.7	8.7	6.2	4.7	5.4	5.7	3.7	4.6	3.7	2.2	2.7
30	14.2	8.7	10.9	15.7	7.7	11.1	13.2	6.2	9.1	7.2	5.2	5.8	5.7	3.2	4.3	4.7	3.7	4.0
31	15.7	8.7	11.5	13.7	7.7	10.5	—	—	—	7.7	5.2	6.1	—	—	—	3.2	2.2	2.8
Month	16.7	5.7	10.6	17.2	7.7	11.3	15.7	5.7	9.8	13.7	1.7	6.6	8.7	1.2	4.6	5.2	-0.3	2.5

Appendix BB. Water temperature records for Fox Creek at the IDFG fence line near Victor, Idaho, 1998.

Day	January			February			March			April			May			June		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	4.2	2.2	3.2	3.7	0.7	2.5	6.7	1.7	3.7	8.7	2.7	5.5	12.7	6.2	9.1	14.7	6.2	10.5
2	4.2	3.7	3.8	5.7	1.7	3.5	6.7	2.2	4.2	7.7	3.2	5.2	15.7	5.2	10.5	14.2	6.2	9.5
3	5.2	3.7	4.3	4.7	2.2	3.4	5.2	2.7	4.0	9.2	3.7	5.7	15.2	5.7	9.8	9.7	6.2	7.8
4	4.7	3.2	3.9	6.2	3.2	4.5	6.2	2.2	3.7	7.2	2.7	4.7	11.7	5.2	8.6	9.2	5.7	6.9
5	4.2	2.7	3.6	6.2	3.7	4.6	6.2	0.7	3.2	7.2	3.2	5.1	14.7	6.7	10.0	13.2	5.7	8.7
6	3.2	1.2	2.2	5.2	1.7	3.5	4.7	1.7	3.1	9.7	3.2	5.6	15.2	7.2	10.7	10.7	5.7	8.1
7	4.2	2.2	3.1	6.7	3.7	5.0	5.2	0.2	2.4	9.7	3.2	6.0	13.7	6.7	10.0	11.2	6.2	8.6
8	3.2	1.2	2.3	6.2	4.2	5.0	4.7	-0.3	2.0	9.7	2.7	5.4	14.7	5.7	9.7	12.2	5.7	8.6
9	2.7	1.2	1.9	5.7	3.2	4.4	6.7	1.7	3.7	9.2	2.7	5.3	10.7	6.2	8.1	9.7	7.2	8.4
10	2.7	0.7	2.3	6.2	3.2	4.4	6.2	1.7	3.6	7.7	3.2	5.2	11.2	5.7	7.5	10.7	6.7	8.5
11	0.7	0.2	0.3	5.7	2.7	4.1	8.7	3.2	5.3	8.2	3.7	5.1	11.7	5.2	8.0	12.2	7.2	9.8
12	0.2	0.2	0.2	6.2	3.2	4.3	8.7	2.2	5.1	6.7	3.2	4.7	10.2	4.7	7.5	13.7	7.2	10.0
13	0.2	-0.3	-0.2	6.7	3.2	4.5	8.2	2.2	5.1	9.7	2.2	5.2	9.7	6.2	7.4	10.2	6.2	8.5
14	2.2	0.2	1.0	3.7	1.7	3.0	9.2	2.2	5.3	8.7	3.7	5.6	8.7	4.2	6.3	11.2	6.2	8.6
15	2.2	1.7	1.8	6.2	2.2	4.3	8.7	2.7	5.2	9.2	3.2	5.8	11.7	5.2	7.7	8.2	6.2	7.0
16	2.2	0.7	1.5	6.7	4.2	5.2	8.7	4.2	6.0	9.7	4.2	6.4	12.7	4.7	8.2	10.2	4.7	7.5
17	3.2	2.2	2.6	6.2	3.7	4.6	7.2	3.2	5.0	8.7	3.7	6.1	11.2	6.2	8.2	8.7	6.2	7.3
18	4.2	2.2	3.2	6.7	2.7	4.4	8.7	1.7	5.2	12.2	2.7	6.7	15.2	5.2	9.2	10.7	5.7	8.1
19	3.7	2.7	3.3	6.7	2.2	4.3	8.2	2.2	4.9	9.7	3.7	6.2	15.7	4.7	9.6	10.7	7.2	8.4
20	4.7	2.7	3.4	5.7	1.2	3.3	9.7	1.7	5.2	13.7	3.7	7.9	13.7	6.7	9.9	12.2	5.7	8.7
21	4.2	2.7	3.3	5.7	2.7	4.2	9.7	2.2	5.8	12.7	3.7	8.0	12.7	6.7	8.8	14.2	5.7	10.1
22	4.2	2.2	3.1	5.7	1.2	3.2	6.7	4.7	5.4	14.7	4.2	9.6	8.2	5.7	6.8	12.7	6.7	9.6
23	4.7	2.7	3.5	6.2	2.2	3.8	6.7	4.7	5.5	15.2	5.2	9.4	8.7	5.7	7.1	11.2	6.7	8.5
24	4.7	3.2	4.0	6.2	1.7	3.8	6.2	3.2	4.4	7.7	5.7	6.8	12.2	5.2	8.6	11.7	6.2	8.5
25	5.2	3.2	3.9	5.7	2.7	3.9	6.2	3.7	4.7	7.2	4.2	5.1	14.7	6.2	10.0	9.2	7.2	7.7
26	5.7	2.7	4.0	6.2	1.7	3.8	6.7	3.7	4.9	12.7	3.2	7.7	12.2	7.2	8.9	12.2	6.2	9.0
27	4.7	3.2	4.0	6.2	1.2	3.2	7.2	2.7	4.7	14.2	4.2	9.2	11.7	5.7	8.6	13.2	5.2	8.8
28	5.7	3.2	4.1	5.2	0.2	2.3	7.7	2.7	5.1	15.7	4.7	9.5	14.7	5.2	9.3	14.2	5.2	9.3
29	4.7	1.7	2.9	—	—	—	7.7	2.7	4.8	15.7	4.7	9.5	13.7	6.2	9.7	14.7	6.7	10.2
30	5.7	2.7	4.2	—	—	—	10.2	2.2	5.4	16.7	5.2	10.2	10.7	6.2	8.3	14.2	6.7	9.9
31	5.2	3.7	4.3	—	—	—	9.7	3.2	5.7	—	—	—	13.7	5.2	9.3	—	—	—
Month	5.7	-0.3	2.9	6.7	0.2	4.0	10.2	-0.3	4.6	16.7	2.2	6.6	15.7	4.2	8.8	14.7	4.7	8.7

Appendix BB. Continued.

Day	July			August			September			October			November			December		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	14.2	7.2	10.8	13.2	8.7	10.9	15.2	8.2	11.5	10.7	7.7	9.1	—	—	—	—	—	—
2	13.2	6.7	9.7	12.7	9.2	10.9	15.7	8.2	11.5	9.7	7.7	8.5	—	—	—	—	—	—
3	15.2	7.2	10.6	16.7	8.2	11.9	15.7	8.2	11.5	8.7	6.7	7.6	—	—	—	—	—	—
4	14.2	6.7	10.0	16.7	8.7	12.2	14.2	8.7	11.1	7.7	6.2	7.1	—	—	—	—	—	—
5	13.7	7.2	10.1	16.7	9.2	13.1	12.7	9.2	11.1	8.7	5.2	6.8	—	—	—	—	—	—
6	14.2	7.2	11.0	17.2	9.2	12.9	15.7	9.2	12.3	10.2	6.2	8.0	—	—	—	—	—	—
7	12.7	7.2	9.9	15.2	9.2	12.1	15.2	9.2	12.0	10.7	5.7	8.0	—	—	—	—	—	—
8	14.2	6.7	10.2	16.7	9.2	12.4	14.2	9.2	11.6	10.2	5.7	7.9	—	—	—	—	—	—
9	15.7	7.2	10.9	15.7	9.7	12.3	14.2	9.2	11.5	9.7	5.7	7.6	—	—	—	—	—	—
10	13.2	8.2	10.2	15.7	9.7	12.6	12.2	9.7	11.0	8.2	6.2	7.3	—	—	—	—	—	—
11	13.7	8.2	11.2	14.7	8.7	11.6	13.2	8.2	10.6	8.2	5.7	6.9	—	—	—	—	—	—
12	14.2	7.2	10.5	17.2	9.2	12.5	12.2	9.7	10.7	9.2	5.2	7.1	—	—	—	—	—	—
13	15.2	7.2	10.9	17.2	8.7	12.3	13.7	9.2	11.0	9.2	6.2	7.6	—	—	—	—	—	—
14	15.2	7.7	11.1	15.7	8.7	12.0	14.2	8.2	11.0	8.7	5.7	7.1	—	—	—	—	—	—
15	15.2	8.2	11.2	12.7	9.2	11.0	14.2	8.7	11.2	7.7	6.2	7.0	—	—	—	—	—	—
16	15.2	8.2	11.8	15.7	9.2	12.3	14.2	8.2	11.2	6.7	5.7	6.3	—	—	—	—	—	—
17	16.2	8.2	12.1	14.2	9.2	11.6	13.7	8.2	10.8	7.2	5.2	6.0	—	—	—	—	—	—
18	17.7	8.7	12.7	12.2	9.7	10.7	13.2	8.7	10.6	8.2	5.2	6.5	—	—	—	—	—	—
19	17.7	9.2	13.0	15.2	9.2	11.8	10.7	7.7	9.1	7.7	4.7	6.1	—	—	—	—	—	—
20	17.2	10.2	13.1	13.2	8.7	11.0	10.7	7.2	8.9	8.2	4.7	6.4	—	—	—	—	—	—
21	17.2	10.2	13.8	14.7	8.7	11.5	9.7	6.2	8.0	8.2	5.2	6.6	—	—	—	—	—	—
22	17.2	9.2	12.7	16.2	8.7	11.8	10.7	7.7	9.0	8.2	5.7	7.0	—	—	—	—	—	—
23	17.2	9.7	12.8	15.7	7.7	11.2	12.2	6.2	8.9	7.7	6.7	7.1	—	—	—	—	—	—
24	13.7	10.2	11.5	15.2	7.7	11.0	11.7	7.2	9.2	8.7	5.7	7.1	—	—	—	—	—	—
25	17.2	9.7	12.9	15.2	7.7	11.0	10.2	7.7	8.9	8.2	6.7	7.5	—	—	—	—	—	—
26	16.7	9.7	13.5	12.2	9.7	11.1	9.7	7.7	8.6	8.2	5.7	7.0	—	—	—	—	—	—
27	17.2	10.7	13.5	15.2	8.2	11.2	12.2	6.2	9.0	8.2	5.7	7.1	—	—	—	—	—	—
28	16.7	10.2	12.9	15.7	7.2	11.1	12.7	6.7	9.4	8.7	7.2	7.7	—	—	—	—	—	—
29	17.2	9.7	12.8	14.7	8.2	10.9	12.2	6.7	9.1	7.2	5.2	6.2	—	—	—	—	—	—
30	14.2	9.7	11.8	14.7	9.2	11.7	12.2	7.2	9.5	6.7	5.7	6.1	—	—	—	—	—	—
31	15.2	9.7	12.5	14.7	8.7	11.6	—	—	—	—	—	—	—	—	—	—	—	—
Month	17.7	6.7	11.7	17.2	7.2	11.7	15.7	6.2	10.3	10.7	4.7	7.1	—	—	—	—	—	—

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