Fisheries Habitat Evaluation on Tributaries of the Coeur D'Alene Indian Reservation

Coeur d'Alene Tribe Fish, Water, and Wildife Program

Annual Report
1997 - 1998

DOE/BP-10544-6

June 2003

This Document should be cited as follows:

Vitale, Angelo, Kelly Lillengreen, Dee Bailey, Ronald Peters, ''Fisheries Habitat Evaluation on Tributaries of the Coeur D'Alene Indian Reservation'', (BPA Report DOE/BP-10544-6)

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This report was funded by the Bonneville Power Administration (BPA), U.S. Department of Energy, as part of BPA's program to protect, mitigate, and enhance fish and wildlife affected by the development and operation of hydroelectric facilities on the Columbia River and its tributaries. The views in this report are the author's and do not necessarily represent the views of BPA.

Coeur d'Alene Tribe
Fish, Water, and Wildlife Program

BPA Annual Report, 1998

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Fish, Water, and Wildlife Program

BPA Annual Report, 1998

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Abstract

As part of an ongoing project to restore fisheries resources in tributaries located on the Coeur d'Alene Indian Reservation, this report details the activities of the Coeur d'Alene Tribe's Fisheries Program for FY 1997 and 1998. This report 1) analyses the effect introduced species and water quality have on the abundance of native trout in Coeur d'Alene Lake and selected target tributaries; 2) details results from an ongoing mark-recapture study on predatory game fish; 3) characterizes spawning habitats in target tributaries and evaluates the effects of fine sediment on substrate composition and estimated emergence success; and 4) provides population estimates for westslope cutthroat trout in target tributaries.

Low dissolved oxygen values in the hypolimnion of Coeur d'Alene Lake continue to be a cause for concern with regard to available fisheries habitat. Four sample sites in 1997 and eight sample sites in 1998 had measured levels of dissolved oxygen below what is considered optimum (6.0 mg/L) for cutthroat trout. As well, two sample points located north of the Coeur d'Alene River showed hypolimnetic dissolved oxygen deficits. This could lead to a more serious problem associated with the high concentration of heavy metals bound up in the sediment north of the Coeur d'Alene River. Most likely these oxygen deficits are a result of allochthonous input of organic matter and subsequent decomposition.

Sediment loading from tributaries continues to be a problem in the lake. The build up of sediments at the mouths of all incoming tributaries results in the modification of existing wetlands and provides ideal habitat for predators of cutthroat trout, such as northern pike and largemouth bass. Furthermore, increased sediment deposition provides additional substrate for colonization by aquatic macrophytes, which serve as forage and habitat for other non-native species.

There was no significant difference in the relative abundance of fishes in Coeur d'Alene Lake from 1997 to 1998. Four out of the six most commonly sampled species are non-native. Northern pikeminnow and largescale suckers are the only native species among the six most commonly sampled. Northern pikeminnow comprise 8-9% of the electroshocking catch and 18-20% of the gillnet catch. Largescale suckers comprise 24-28% of the electroshocking catch and 9-21% of the gillnet catch. Cutthroat trout and mountain whitefish, on the other hand, comprise less than 1% of the catch when using electroshocking methods and about 1.4% of the gillnet catch.

Since 1994, the Coeur d'Alene Tribe Fish, Water and Wildlife Program has conducted an extensive mark-recapture study (Peters et al. 1999). To date, 636 fish have been tagged and 23 fish have been recaptured. We are finding that northern pike have a tendency to migrate from the original sampling site, while largemouth bass appear very territorial, rarely moving from the site where they were tagged. Both species are most commonly associated with shallow, near-shore habitats, where the potential for encountering seasonal migrations of cutthroat trout is maximized.

Low-order tributaries provide the most important spawning habitat for cutthroat trout on the Reservation. The mapped distribution of potentially suitable spawning gravel was patchy and did not vary considerably within reaches or between watersheds. Furthermore, the quantity of spawning gravel was low, averaging just 4.1% of measured stream area. The lack of a strong association between spawning gravel abundance and several reach characteristics (gradient, proportion of gravel and pea gravel) corroborates the findings of other authors who suggest that local hydrologic features influence spawning gravel availability. Although the distribution of spawning substrate was patchy within the target watersheds, there is probably adequate habitat to support resident and adfluvial spawners because of currently depressed numbers.

Spawning gravels in target tributaries of the Reservation contained proportions of fine sediments comparable to those in egg pockets of salmonid redds in the Rocky Mountain region. At 23 of 29 sample sites, low levels of fine sediment led to high predictions of overall embryo survival (mean = 28.4%). The estimates of fry production potential at sample sites ranged widely (0.0 to 31.2 fry/100 square meters) due, primarily, to the quantity of suitable gravels present. Only in the mainstem of Lake Creek were the proportions of both small and coarse fines considered above the levels for these particle sizes (10% and 30%, respectively) shown to adversely affect salmonid emergence success. Of the 6 sites where high levels of small or coarse fines were recorded, only the sites located in the mainstem of Lake Creek showed supporting evidence for low recruitment. The other sites had juvenile and adults densities (range = 12.4 – 33.8/100 square meters) that were notably higher than the average density (9.2/100 square meters) reported for seven other westslope cutthroat trout populations in Idaho and Montana. The habitat areas that supported higher than average trout densities, however, comprise relatively small fractions of the available habitat in the respective watersheds.

Due to the persistence of adverse water quality and habitat conditions in Reservation streams, cutthroat trout populations are thought to be at least moderately damaged. The average spawning escapements fall between the minimum viable population and the number of adults needed to produce 50% of the carrying capacity of the stream environment. None of the populations on the Coeur d'Alene Reservation are thought to be greater than or equal to 50% of the historic potential. These weakened populations may be particularly susceptible to normal environmental variability (such as temperature and stream discharge patterns) and to the frequency of extreme events such as wildfires, floods, or debris torrents. On the other hand, very little hybridization has occurred, suggesting that preservation of the existing genetic diversity may continue to allow for genetic combinations that permit survival in highly variable environments.

Acknowledgements

Many individuals contributed to the completion of this report. A special thanks to:

George Aripa
Abel C. Sanchez
Richard Allen
John LaSarte
Sam Sanchez
Jeff Jordon
Kevin Brown
Darryl Trevino
Jim Whistocken
Charles Peone
Brian Harper
Carla Moore
And the rest of the Coeur d'Alene Tribe Fish, Water and Wildlife Program Staff
And the Coeur d'Alene Tribal Council, Ernie Stensgar Tribal Chairman

Funding was provided by the U.S. Department of Energy, Bonneville Power Administration.

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1.0 Introduction

The recent decline in native salmonid stocks, in particular cutthroat trout (Oncorhynchus clarki lewisi, Richardson) and bull trout (Salvelinus confluentus, Walbaum) throughout the Coeur d'Alene basin has eliminated the subsistence fisheries for the Coeur d'Alene Tribe. Historically, the Coeur d'Alene Tribe depended on runs of anadromous salmon and steelhead along the Spokane River and Hangman Creek, as well as resident and adfluvial forms of trout and char in Coeur d'Alene Lake. Dams constructed on the Spokane River at Monroe Street in the City of Spokane and at Little Falls further downstream, were the first dams that initially cut-off the anadromous fish runs from the Coeur d'Alene Tribe. These fisheries were further removed by the construction of Chief Joseph and Grand Coulee Dams on the Columbia River. Together, these actions forced the Tribe to rely solely on the resident fish resources of Coeur d'Alene Lake (Staff Communication).

Many factors contributed to the decline of native salmonid fish stocks in the Coeur d'Alene Basin. These factors include: construction of dams along the Spokane and Columbia Rivers, pollution caused by mining and municipal waste, increases in logging and agricultural activities and species interactions between introduced and native fish species in Coeur d'Alene Lake. Post Falls Dam, built on an exiting natural migration barrier in 1906 to supply hydroelectric power to the growing community, raised the water level of Coeur d'Alene Lake by approximately 3.6 meters. This higher lake level inundated traditional Coeur d'Alene Tribal fish traps like the one operated on the St. Joe River at Mission Point for over 50 years (Scholz et al. 1985) and forever changed the physical and hydrologic characteristics of Coeur d'Alene Lake. The higher lake level created conditions that favored introduced species, as well as, native species other than salmonids.

Fisheries Management History of the Coeur d'Alene System

Scholz et al. (1985) estimated that historically the Coeur d'Alene Indian Tribe harvested around 42,000 cutthroat per year. In 1967, Mallet (1968, 1969) reported that 3,329 cutthroat were harvested from the St. Joe River, and a catch of 887 was reported from Coeur d'Alene Lake. This catch is far less than the 42,000 fish per year the tribe harvested historically. Today, only limited opportunities exist to harvest cutthroat trout. Within the Reservation boundaries Lake Creek and its tributaries and Benewah Creek and its tributaries are closed to all fishing until further notice. Both of the above closures extend 100 yards into Coeur d'Alene Lake from the mouth of the respective streams. Bull trout were listed as threatened under the Endangered Species Act in 1998, eliminating harvest opportunities for this species. In other portions of the Spokane River basin, including Coeur d'Alene Lake, only one cutthroat trout over 14" may be harvested per day. The Coeur d'Alene Lake system has three very distinct stocks of cutthroat trout. They are adfluvial-lacustrine, fluvial and resident. Peters et al. (1999) and Graves et al. (1990) have a more detailed description of the different stock types.

In an attempt to diversify the fishery in Coeur d'Alene Lake and offset losses to native trout fisheries, kokanee salmon (Oncorhynchus nerka, Walbaum) were introduced into the Coeur d'Alene Lake system in 1937. As kokanee salmon numbers began to increase and stocking was no longer necessary they soon became the most abundant and sought after fish in the lake. By 1967, total harvest of kokanee salmon from Coeur d'Alene Lake was second only to Pend Oreille Lake within the State of Idaho. However, kokanee soon reached their carrying capacity within the lake and in 1982, the Idaho Department of Fish and Game introduced chinook salmon (Oncorhynchus tshawytscha, Walbaum) in an attempt to control the burgeoning yet stunted kokanee population. A hatchery run of chinook salmon was established in Wolf Lodge Creek. Attempts were made to control the establishment of naturally reproducing populations of chinook salmon in the lakes' tributaries, however, chinook salmon became established in both the Coeur d'Alene and St. Joe River systems. It is unclear what impacts spawning and rearing chinook salmon have or will have on native trout species.

In 1987, the Northwest Power Planning Council (NPPC) amended the Columbia River Basin Fish and Wildlife Program to include baseline stream survey of tributaries located on the Coeur d'Alene Indian Reservation [section 903 (g)(1)(B)]. Initial studies conducted in 1990 by the Coeur d'Alene Tribe identified twenty-one Reservation streams flowing into Coeur d'Alene Lake, the St. Joe River and the St. Maries River as having potentially suitable habitat for trout species. Data obtained from a subsequent aerial survey prioritized ten of the original twenty-one survey streams for further study, based geographic location, accessibility by trout, and acceptable gradient and habitat (Graves et al. 1990). After compiling data on trout abundance and distribution, growth rates, and benthic macroinvertebrate densities, four tributary streams including Lake, Benewah, Evans and Alder Creeks were selected as having the highest potential for improvement and enhancement. See Graves et al. (1990) and Lillengreen et al. (1993) for further discussions of the past history of the study area.

In 1994, the NPPC adopted the recommendations set forth by the Coeur d'Alene Tribe to improve the Reservation fisheries. These actions included: 1.) Implement habitat restoration and enhancement measures in Lake, Benewah, Evans, and Alder Creeks; 2.) Purchase critical watershed areas for protection of fisheries habitat; 3.) Conduct an educational/outreach program for the general public within the Coeur d'Alene Indian Reservation to facilitate a "holistic" watershed protection process; 4.) Develop an interim fishery for Tribal and non-Tribal members on the Reservation through construction, operation and maintenance of five trout ponds; 5.) Design, construct, operate and maintain a trout production facility; and 6.) Implement a five-year monitoring program to evaluate the effectiveness of the hatchery and habitat improvement projects. These principles, priorities, and objectives were also adopted into the 1995 Fish and Wildlife Program (Section 10 Resident Fish, see paragraph 10.8B.20).

Subsequent studies by the Coeur d'Alene Tribe have determined that the following factors effectively limit the population of cutthroat trout in natal streams and in Coeur d'Alene Lake:

- Stochastic events that result in increased mortality of embryo, fry, and juvenile lifestages (e.g. peak flow events) have been exacerbated by land use practices during the last 60 years;
- Competition for limited space and food during base flow conditions cause displacement of juveniles into water quality limited stream reaches;
- Competitive interactions with introduced salmonids may result in replacement of native trout in Alder Creek and Benewah Creek;
- Water temperatures in the upper ten meters of the water column in Coeur d'Alene Lake exceed the optimum as described in the Habitat Suitability Index for cutthroat trout;
- Sediment loading from tributaries in combination with large quantities of aquatic macrophyte growth and low dissolved oxygen concentrations in the hypolimnion promote conditions more favorable for introduced fish species in the lake; and
- Competitive interactions with introduced species for food, living space, and through predation limit cutthroat trout in both the littoral and limnetic zones of Coeur d'Alene Lake.

Spikes in peak flows exceeded the sheer stress for spawning gravels (5-cm geometric mean particle diameter) during the cutthroat trout egg incubation period in some tributaries during the last few years (Peters et al. 1999). It is conceivable that flow events of this magnitude could scour trout redds and result in complete year class failures. Water quality has been sampled on the four target tributaries since 1990 and studies show that conditions have remained fairly consistent for dissolved oxygen, temperature, pH and conductivity (Graves et al. 1990; Lillengreen et al. 1993 and 1996; Peters et al. 1999). Temperature appears to be the factor that is most influencing cutthroat trout production in the streams. All streams exceeded the optimum limit of 15.5^{o} C for cutthroat trout during low flow periods in each of the last nine years. Today, there are 21 identified fish species in Coeur d'Alene Lake. Of these 21, only seven are native to Coeur d'Alene Lake. They include cutthroat trout, bull trout, mountain whitefish (Prosopium williamsoni, Girard), sculpin (Cottus sp.), (there may be more than one species of sculpin in the lake), northern pikeminnow (Ptychocheilus oregonensis, Richardson), largescale sucker (Catostomus macrocheilus, Girard), and longnose sucker (Catostomus catostomus, Forster). For a list of the 14 non-native species and their scientific names see Peters et al. (1999).

Current Study Objectives

Objective 1: Estimate fisheries relative abundance in Coeur d'Alene Lake using electroshocking and gillnetting.

Tasks 1.1 Measure all fish species for length and weight, and take scale samples from game fish.

Objective 2: Examine the effects of introduced fishes on native species of cutthroat and bull trout in Coeur d'Alene Lake.

Tasks 2.1 Correlate population statistics with data on habitat types.

Objective 3: Conduct population estimates in Coeur d'Alene Lake using mark-recapture techniques.

Tasks 3.1 Game fish that are greater than 300g and/or 300mm mark with a floy tag to obtain density estimates and monitor movement.

Objective 4: Examine the age structure of sampled fish from scales taken during sampling periods.

Tasks 4.1 Scale data will be used to monitor the status of successive cohorts.

Objective 5: Continue collecting baseline water quality data on Coeur d'Alene Lake.

Tasks 5.1 Nutrients, total kjeldahl nitrogen, total phosphorus, turbidity, total suspended solids, metals and $chlorophyll_a$ will be sampled.

Tasks 5.2 Dissolved oxygen, temperature, pH, conductivity, depth and secchi readings will be taken.

Objective 6: Examine the effects of water quality parameters on the abundance and distribution of westslope cutthroat trout in target tributaries.

Tasks 6.1 Continue monitoring stream discharge, dissolved oxygen, temperature, pH and conductivity at selected sites in Alder, Benewah, Evans and Lake creeks.

Objective 7: Determine if fine sediment is limiting recruitment of cutthroat trout populations in target tributaries.

Tasks 7.1 Characterize spawning habitats of cutthroat trout in areas annually sampled for population estimation.

Tasks 7.2 Evaluate effects of sedimentation on substrate composition and estimated emergence success.

Objective 8: Characterize the abundance and distribution of westslope cutthroat trout and brook trout in target tributaries and compare results with previous sample efforts.

Tasks 8.1 Develop population estimates for selected sites using electroshocking techniques.

Tasks 8.2 Examine age class structure of resident trout.

Tasks 8.3 Monitor immigration and emigration of cutthroat trout in Lake and Benewah Creeks.

Study Area

The Coeur d'Alene Indian Reservation encompasses 139,005 hectares (343,478 acres) in the panhandle section of north Idaho. Many lakes, streams, and rivers are located on the Reservation. The principle waterbody on the Reservation is Coeur d'Alene Lake. Coeur d'Alene Lake is the second largest lake in Idaho and is located within the 1,730,023-hectare (4,274,888 acres) Spokane River drainage basin. The lake lies in a naturally dammed river valley with the outflow currently controlled by Post Falls Dam. Post Falls Dam also controls the level of the St. Joe River upstream to the town of St. Maries. At full pool (lake elevation 648.7 meters) the lake covers 129 square kilometers and at minimum pool level (lake elevation of 646.2 meters) the lake covers 122 square kilometers. The lake is 43 kilometers long and anywhere from 2 to 10 kilometers wide. Mean depth is 22 meters with a maximum depth of 63.7 meters (Woods and Berenbrock 1994). The lake is located in two Idaho counties: Kootenai and Benewah. Population centers around the lake are located on the northern most shoreline (Coeur d'Alene) and at the mouth of the Coeur d'Alene River (Harrison). The city of Coeur d'Alene is the largest in Kootenai County and Harrison is the second largest in Benewah County. The largest town in Benewah County (St. Maries) lies about 12 miles upstream of Coeur d'Alene Lake on the St. Joe River.

The two main tributaries of Coeur d'Alene Lake, the Coeur d'Alene and St. Joe Rivers, drain the Coeur d'Alene and St. Joe Mountains. These mountains are composed of primarily metasedimentary rocks of the belt group with local intrusions of granitics. Lower elevations are composed primarily of glaciofluvial deposits. This area receives some of the highest amounts of precipitation in Idaho. The lake receives about 25.4 inches of precipitation annually with more in the higher elevations around the lake (38.3 inches Wallace, ID). The southern end of Coeur d'Alene Lake is made up of four shallow lakes (Hidden, Round, Chatcolet, and Benewah) flooded as a result of construction of Post Falls Dam. Geological data was taken from U.S. Department of Agriculture (1984).

The four tributaries selected for restoration are located almost exclusively on the Reservation and have a combined basin area of 34,853 hectares (86,123 acres) and include 529 kilometers (328 miles) of intermittent and perennial stream channels. The climate and hydrology of the target watersheds are similar in that they are influenced by the maritime air masses from the pacific coast, which are modified by continental air masses from Canada. Summers are mild and relatively dry, while fall, winter, and spring brings abundant moisture in the form of both rain and snow. A seasonal snowpack generally covers the landscape at elevations above 4,500 feet from late November to May. Snowpack between elevations of 3,000 and 4,500 feet falls within the “rain-on-snow zone” and may accumulate and deplete several times during a given winter due to mild storms (US Forest Service 1998). The precipitation that often accompanies these mild storms is added directly to the runoff, since the soils are either saturated or frozen, causing significant flooding.

Anthropogenic disturbances are common in the target watersheds. Recent clearing of land for homesteads, logging, pasture, and agriculture has enhanced the rain-on-snow phenomenon and accelerated the rate of snow pack depletion. In Lake Creek for example, where nearly 40 percent of the basin area has been cleared for agriculture, peak discharges have increased by an estimated 55% for 100-year events when compared with the pre-settlement period (Peters et al. 1999). Lesser amounts of forest clearing have occurred in the other target watersheds, suggesting measurable increases in peak discharges for these areas as well. One of the more profound disturbances that the watersheds have been subjected to is from road construction. The road network includes five state highways, numerous county and municipal roads, and an extensive network of unimproved roads. Those areas with the highest density of roads occur on lands managed primarily for timber production. This road system has been constructed in many of the most sensitive locations (floodplains, and unstable land types) within the watersheds. The density of unimproved roads exceeds 2.5-miles/mile^2 in each of the affected watersheds.

2.0 Materials and Methods

2.1 Lake Studies

2.1.1 Water Quality

There are five distinct habitat areas in the southern third of Coeur d’Alene Lake that can be distinguished based on geomorphologic condition. The first of these areas is comprised of two shallow water stations

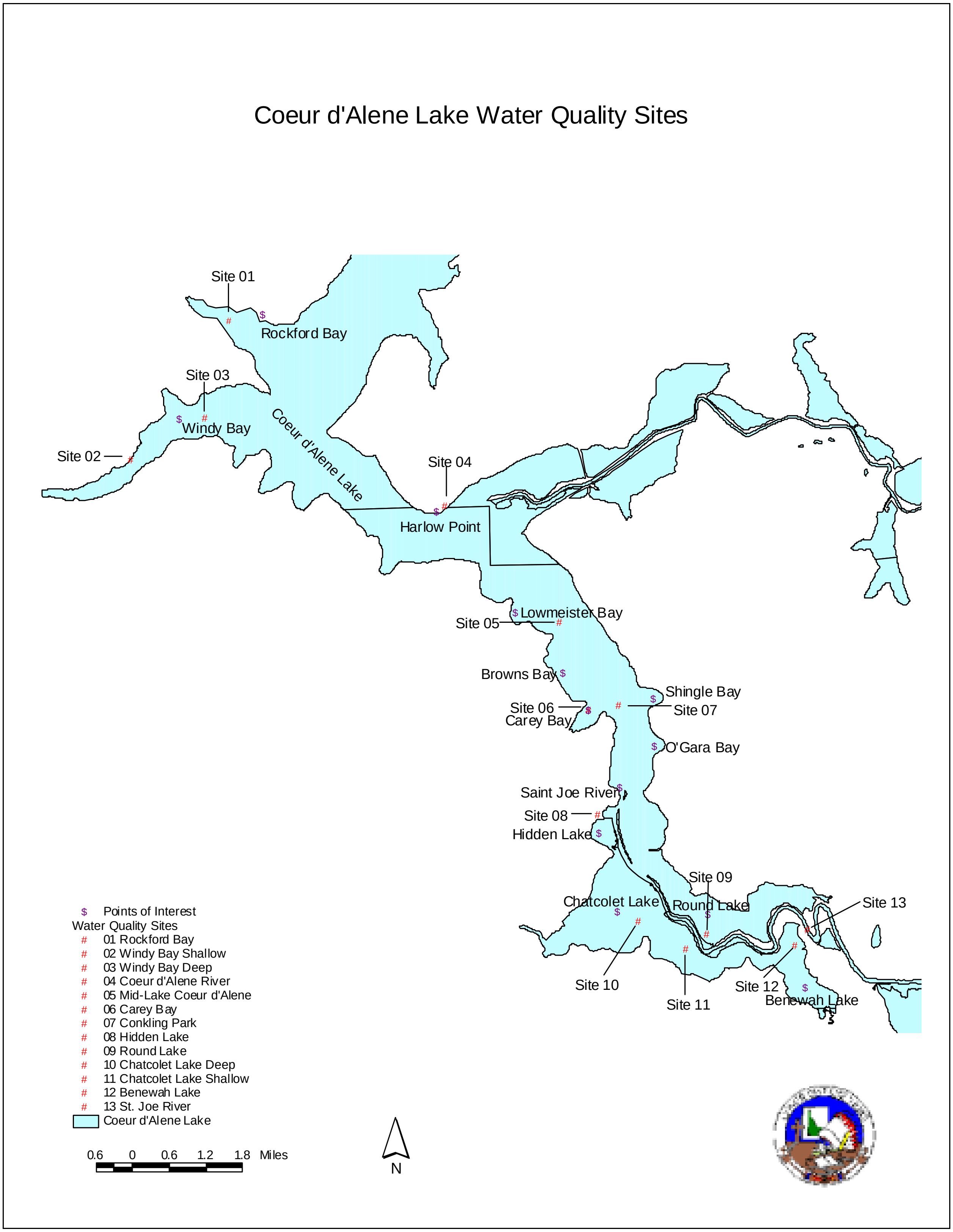


Figure 2.1 Water quality sites on Coeur d'Alene Lake, 1997 and 1998.

created entirely by inundation from Post Falls Dam. This area is dry during the drawdown period and wetted at full pool. The second habitat area is comprised of the three shallow, southern chain lakes of the St. Joe River. These lakes were separated from the Coeur d'Alene Lake system until the completion of Post Falls Dam. The third area consists of three deep, open water sections within the main body of Coeur d'Alene Lake. These areas are considered pelagic in nature. The fourth habitat area consists of three semi-isolated shallow bay areas located in the main Coeur d'Alene Lake. The fifth area is riverine habitat inundated by waters from Post Falls Dam.

A total of thirteen monitoring stations have been established to cover each distinct habitat area (Figure 2.1 and Table 2.1). Combinations of field and laboratory analytical methods were used to sample Coeur d'Alene Lake. See Peters et al. (1999) for a further description on the physical and chemical parameters being sampled as well as, methods used for sampling. A Hydrolab (trade name for a multi-parameter testing probe) was used to get vertical profiles of dissolved oxygen, temperature, pH and conductivity. A kemmerer bottle was used for sampling all other parameters except for water clarity, where a secchi disk was used.

2.1.2 Fisheries

The southern section of Coeur d'Alene Lake from Windy Bay south has twelve transect sampling areas that can be grouped based on similar geomorphology (Figure 2.2). Each transect is broken into sample reaches that encompass all habitat types within the transect. Each transect has from 1 to 4 sample reaches. The reach locations were determined by visual habitat characteristics and transect size. These reaches were chosen in order to best represent the shoreline habitat within the transect area. The collective submerged habitat within all reaches spans the range of conditions within each transect area (Peters et al. 1999).

Table 2.1 Water quality sample stations grouped by habitat area.

Habitat Area	Stations
Shallow Water	Round Lake Chatcolet Lake Shallow
Southern Chain Lakes	Benewah Lake Chatcolet Lake Hidden Lake
Interior Bays	Carey Bay Windy Bay Shallow Rockford Bay
Open Water	Conkling Point Mid Lake Windy Bay Deep
Inundated Rivers	Coeur d'Alene River St. Joe River

Shoreline Electrofishing

The sampling schedule for electroshocking and gillnetting is designed to capture data related to significant changes in relative abundance of various fish species throughout the year. A custom-built aluminum boat equipped with a Smith Root 7.5 GPP electroshock unit was used to conduct shoreline electrofishing. This technique is most effective in water less than 8 feet deep. Each reach was sampled for 5-10 minute, depending on fish density. After completion of the shocking effort, all captured fishes were measured for total length and weight, with scale samples taken only from game species.

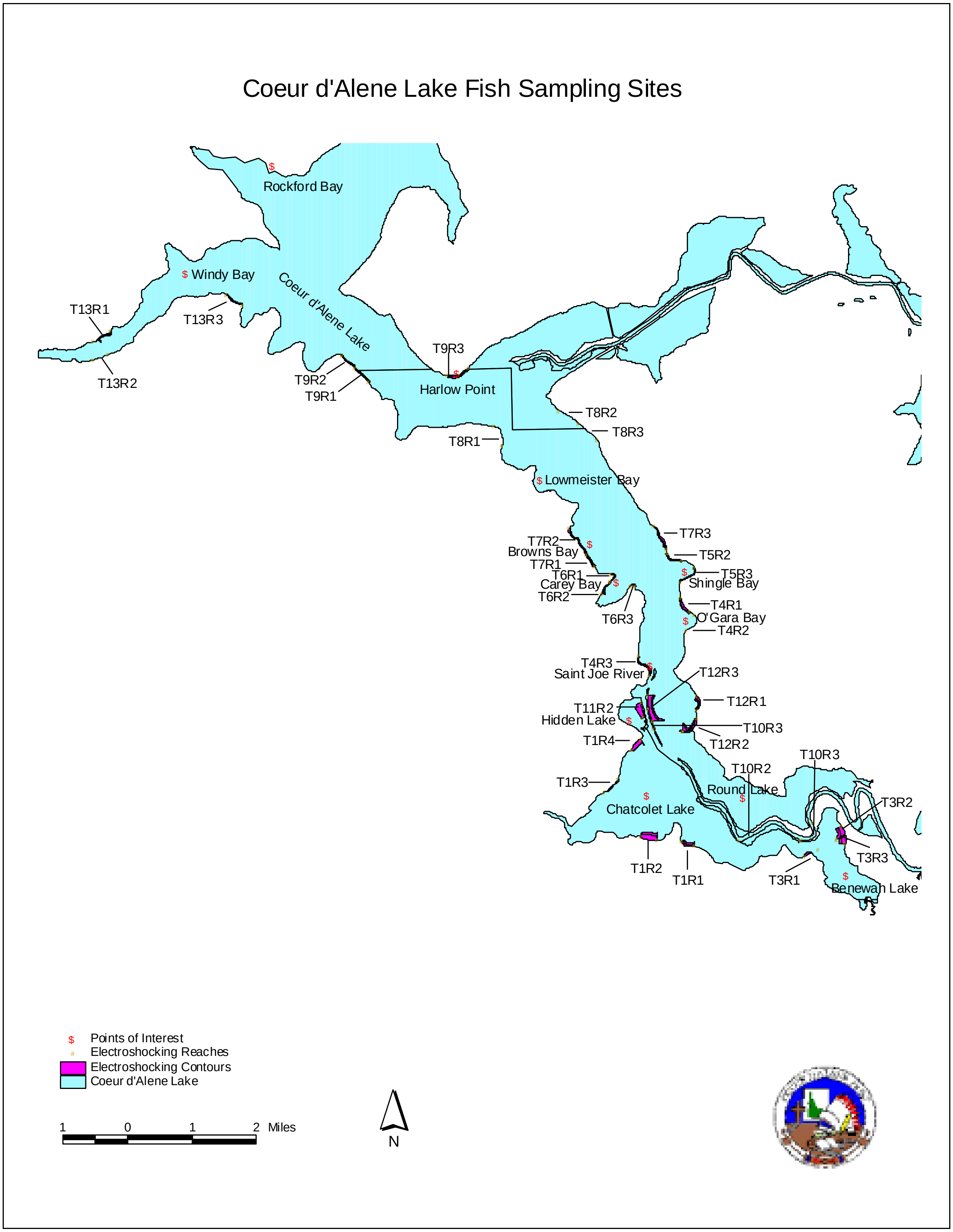


Figure 2.2 Electroshocking and gillnet sites on Coeur d'Alene Lake, 1997 and 1998.

Gillnet Sampling
Nets were used to sample areas that could not be efficiently sampled using the electrofishing technique, and helped examine species composition as well as seasonal usage in the littoral and limnetic zones. Two different types of nets were used for sampling fish in different habitat areas. Vertical gillnets were used in areas with water depths greater than 30 feet (pelagic zones), while horizontal gillnets were used in shallow areas (8-30 feet deep). The vertical gillnets were 6 feet wide and 120 feet in length with mesh sizes of 2.5", 3", 4", and 5 inches. Horizontal gillnets were made of graded mesh monofilamant 8'X200', 10'X200' and 12'X150'. Data recorded following the sample effort included depth of capture, total length, weight and scale samples.

Age Analysis
Age was determined for all game species captured using methods described by Jearld (1983). Age frequency distributions were plotted for each species to describe the status of successive cohorts. By examining age frequency over time, instances of mortality as well as overall population trends will be identifiable.

Habitat Suitability Index
The lacustrine habitat suitability index model developed by Hickman and Raleigh (1982) was used to predict suitable habitat for cutthroat trout in Coeur d'Alene Lake. The model consists of a water quality and a reproduction component. The lucustrine water quality component uses three variables: maximum temperature (V_1), average minimum dissolved oxygen (V_3) and pH (V_{13}). Individual suitability index (SI) values were calculated for each variable using curves published in Hickman and Raleigh (1982). The following equation was used to ascertain the final SI values:

$$C_{wq} = (V_1 x V_3 x V_{13})^{1/3}$$

Where C_{wq} = HSI for the water quality component, and
V_n = suitability index for water quality variables.

2.2 Stream Studies

2.2.1 Water Quality
Water quality monitoring was conducted on 13 streams in 1997 (Table 2.2). Each stream was sampled for the same parameters as described above for lake studies, except for chlorophyll$_a$. Metals analyses were only completed at the two Fighting Creek sample sites. Additional monitoring parameters are described below.

A stage/discharge relationship was developed for each stream based on a linear regression of staff gauge height vs. stream discharge. The rating curve was used to determine the annual water budget for each stream sampled. Staff gauge heights were recorded to the nearest 0.002 of a foot. Discharge measurements were taken at low, medium, and high flows in order to complete the rating curve. Discharge measurements were taken in accordance with standard IFIM methodologies (Bovee 1982). The wetted stream channel was divided into 20 equal cells and water velocity was measured in each cell using a Price model 622 digital flow meter. Discharge for each cell was calculated by multiplying the cell width by depth and velocity. All individual cell discharges were summed to determine total discharge in cubic feet per second. Channel profiles were measured to evaluate changing flow dynamics over time.

2.2.2 Spawning Gravel Survey and Analysis
Potential spawning tributaries were identified over the past six years based on trapping results and population surveys. Active migration into tributaries by adult fish and/or presence of young-of-the-year trout was used as an indication of spawning activity for the purposes of this survey. Habitat features and the area of potential spawning gravel were measured at established shock sites in each tributary.

Table 2.2 Stream water quality sites and monitoring parameters, 1998.

Location	Discharge	Temperature	DO	pH	Conductivity	Turbidity	TSS	Metals	Nutrients
Lower Plummer Creek	X	X	X	X	X	X	X		X
Little Plummer Creek	X	X	X	X	X	X	X		X
Lower Lake Creek	X	X	X	X	X	X	X		X
Upper Lake Creek	X	X	X	X	X	X	X		X
Lower Fighting Creek		X	X	X	X	X	X	X	X
Upper Fighting Creek		X	X	X	X	X	X	X	X
Evans Creek[a]	X	X	X	X	X	X	X		X
East Fork Evans	X	X	X	X	X	X	X		X
Cherry Creek	X	X	X	X	X	X	X		X
Benewah Creek[b]	X	X	X	X	X	X	X		X
Windfall Creek	X	X	X	X	X	X	X		X
School House Creek	X	X	X	X	X	X	X		X
West Fork Benewah Creek	X	X	X	X	X				
Northr Fork Alder	X	X	X	X	X	X	X		X
Alder Creek	X	X	X	X	X	X	X		X
Hangman Creek	X	X	X	X	X	X	X		X
Little Hangman Creek	X	X	X	X	X	X	X		X
Indian Creek	X	X	X	X	X	X	X		X
Moctileme Creek	X	X	X	X	X	X	X		X
North Fork Rock Creek	X	X	X	X	X	X	X		X

[a] Evans Creek had two sampling stations, Evans and Upper Evans.
[b] Benewah Creek had two sampling stations, Three Mile and Upper Benewah.

Habitat features were measured according to the procedures described by Hankin and Reeves (1988). Proceeding upstream, we described each channel unit (pool, riffle, etc.) and measured its length, mean wetted width, and mean and maximum depths. The area of potential spawning gravel was measured with a meter stick and expressed as a percent of the total surface area at bank full flow. Potential spawning gravel was defined according to Magee et al. (1996) as patches of substrate at least 0.25 m^2 in area with particles 2-35 mm in diameter. In pool tailouts and riffles, we measured substrate composition with the pebble count technique (Wolman 1954), using 100 data points at each site. Substrate was classified as sand-silt (<2 mm in diameter), pea gravel (2-16 mm), gravel (17-64 mm), rubble (65-128 mm), cobble (129-256 mm), or boulder (>256 mm).

To quantify substrate conditions near the time of emergence, we collected core samples using a McNeil hollow-core sampler (Platts et al. 1983) from pockets of potentially suitable spawning gravel. Cores were taken to a depth of 10-20 cm to mimic egg pocket depths observed in cutthroat trout redds (Magee et al. 1996). Oven-dried samples were weighed after being mechanically shaken through sieves of 63.5, 31.5, 16, 8, 6.3, 4.75, 2.0, 1.0, 0.85, 0.5, 0.125, and 0.25 mm. As recommended by Chapman (1988) and Young et al. (1991), we expressed substrate composition by two methods: the percentage of fine substrate smaller than a given size (6.3 and 0.85 mm), and by a measure of central tendency, the fredle index ($F_i = D_g/S_o$; where D_g is the geometric mean particle diameter and S_o is a sorting coefficient).

We predicted fry emergence success for each core sample using the equation developed by Weaver and Fraley (1993; Weaver personal communication, 2000) for westslope cutthroat trout:

$$\%\ \text{emergence} = -1.503 * \text{arcsine}\ (\%\ SP_{6.3})^{0.5} + 79.379$$

where, $SP_{6.3}$ = percentage of substrate particles smaller than 6.3 mm.

The maximum fry production potential for each shock reach was estimated by combining data on potential redd number, estimated egg deposition, and average substrate composition of core samples. Egg deposition (E) was calculated using a length-fecundity relation for westslope cutthroat trout: $E = 82.63e^{0.007958L}$, where L is fork length in millimeters (C. Downs and B. Shepard, Montana State University, personal communication). The average fork length for adfluvial females (310 mm), as measured at migration traps over the last four years, was used in the equation. Fry production was estimated by multiplying total estimated egg deposition by estimated emergence success.

2.2.3 Population Survey

The channel types delineated during previous surveys (Lillengreen, 1993) served as the basic geomorphic units for selecting sample sites for conducting fish population surveys. In these early channel type surveys, stream reaches were classified into relatively homogeneous types according to broad geomorphologic characteristics of stream morphology as defined by Rosgen (1994). Sample sites within each reach were selected to include habitat types representative of the reach as a whole (Figures 2.3 – 2.6). The length of each sample unit was defined as twenty times the average stream width, with a minimum sample distance of 100 meters. Longer stream reaches were sampled more intensively than shorter reaches. Sample sites were also selected in each of the tributaries known to have spawning activity, regardless of whether channel type surveys had been completed. In these cases, sample sites were distributed evenly at approximately 1,500 meter intervals.

Sites were sampled in the summer to quantify the abundance and distribution of fishes during base flow conditions (June 26 – August 12). Trout populations were estimated using the removal-depletion method (Seber and LeCren 1967, Zippen 1958). Blocknets were placed at the upstream and downstream boundaries to prevent immigration and emigration. Each sample site was electrofished using the standard guidelines and procedures described by Reynolds (1983). Fish were collected by spot shocking using a Smith-Root Type VII pulsed-DC backpack electrofisher. Two electrofishing passes were made for each sample site. Salmonid species, including cutthroat trout, brook trout, and bull trout, were the target species for this study. Captured fish were identified, enumerated, measured (TL to nearest mm), and weighed. Cutthroat trout greater than 200 mm in length were tagged with a Floy FD-6B numbered anchor tag. Other species such as longnose dace, redside shiner, longnose sucker, and sculpin (sp.) were considered incidental catch and were only counted.

Population estimates were calculated using the following equation (Armour et al. 1983):

$$N = \frac{U_1}{1-(U_2/U_1)}$$

where:

N = estimated population size;

U_1= number of fish collected in the first pass; and

U_2= number of fish collected in the second pass.

The standard error of the estimate was calculated as:

$$se(N) = \sqrt{\frac{M(1-M/N)}{A-\left[(2p)^2(U_2/U_1)\right]}}$$

where:

se(N) = standard error of the population estimate;

M= $U_1 + U_2$;

A= $(M/N)^2$; and

p= $1-\frac{U_2}{U_1}$.

The population estimates were converted into density values (# fish/100 square meters) for each sample site then extrapolated to the reach in which the samples were collected. The confidence intervals were converted in the same manner. Total reach lengths were obtained from the digital data layer maintained by the Tribal GIS Program.

Age Analysis

Raw scales were used for age determination and calculating growth rates. Salmonid scales were taken from the side of the body just behind the dorsal fin and above the lateral line (Jearld 1983). Scale samples were sorted by watershed to allow for independent determination of age and growth rate. In the laboratory, several dried scales were mounted between two glass microscope slides and viewed using a Realist, Inc., Vantage 5 microfiche reader. Age was determined by counting the number of annuli (Lux 1971, Jearld 1983). Simultaneous to age determination, a measurement was made from the center of the focus to the furthest edge of the scale. Along this line, measurements were made to each annulus under a constant magnification. Annual growth was then back calculated using the Lee method as described by Carlander (1981). The formula used:

$$L_i = a + \left(\frac{L_c - a}{S_c} \right) S_i$$

where:

Li = Length of fish (in mm) at each annulus;
a = intercept of the body scale regression line;
Lc = length of fish (in mm) at time of capture;
Sc = distance (in mm) from the focus to the edge of the scale; and
Si = scale measurement to each annulus.

The intercept (a) was obtained from the linear regression of body length versus scale length at time of capture. The proportional method of back-calculation was used for species with small sample sizes due to poor regression results. The following equation was used:

$$L_i = \left(\frac{S_i}{S_c} \right) L_c$$

This formula does not take into account the size of fish at scale formation as does the Lee method.
A linear regression of body length versus age was calculated independently for fish from each subject watershed and the resulting equation was used to determine the age of fish for which scale samples were not taken.

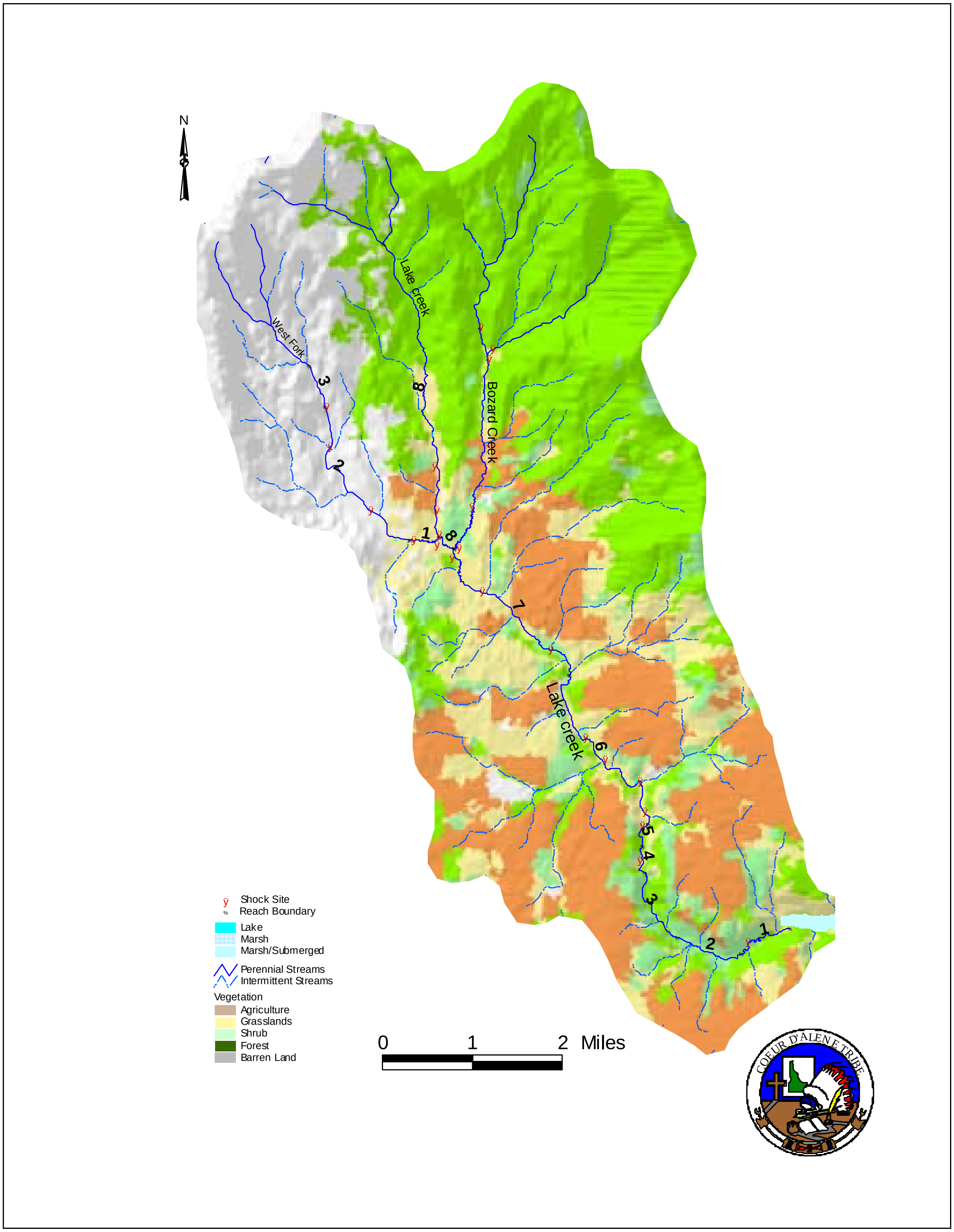


Figure 2.3 Lake Creek shock site locations.

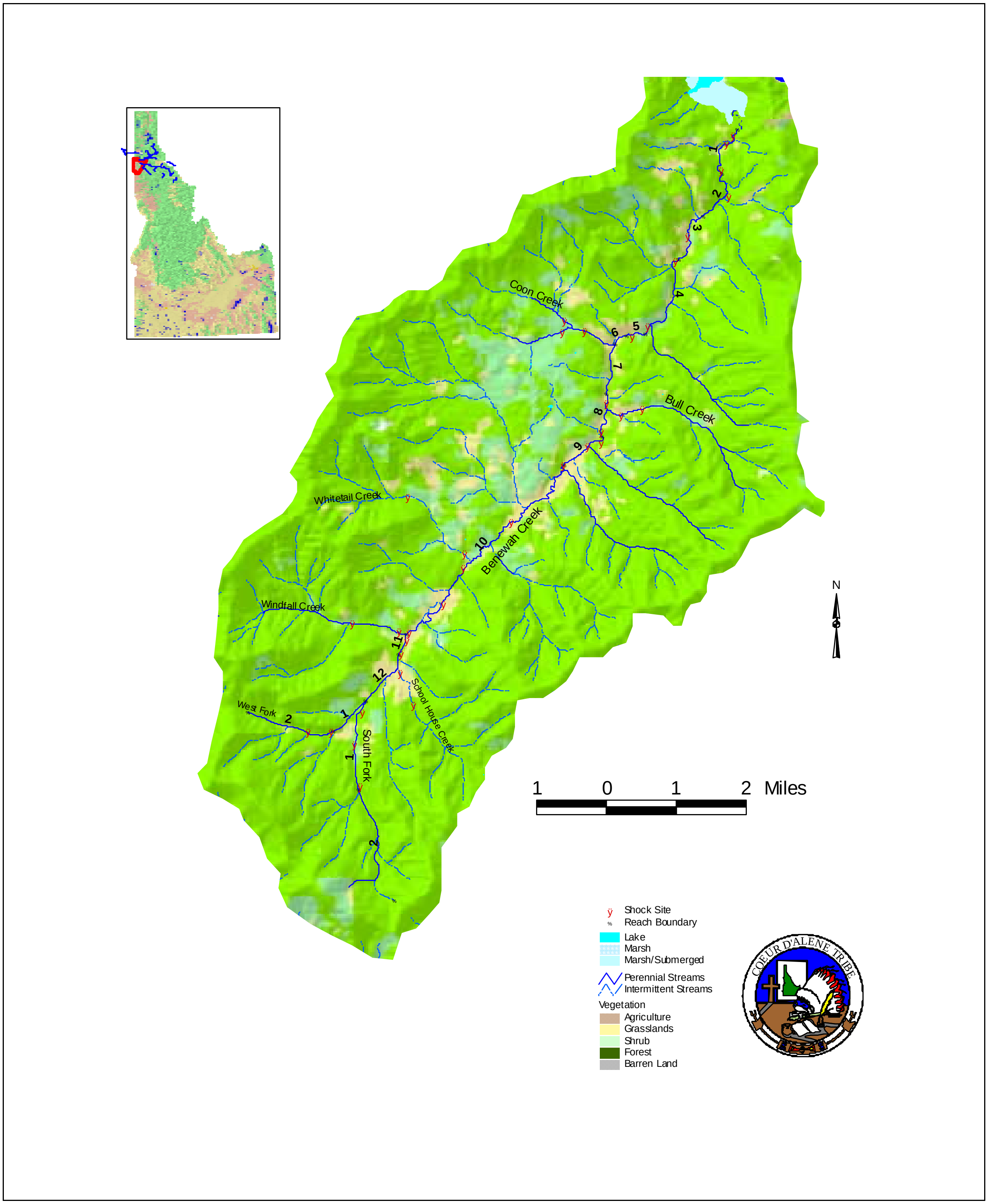


Figure 2.4 Benewah Creek shock site locations.

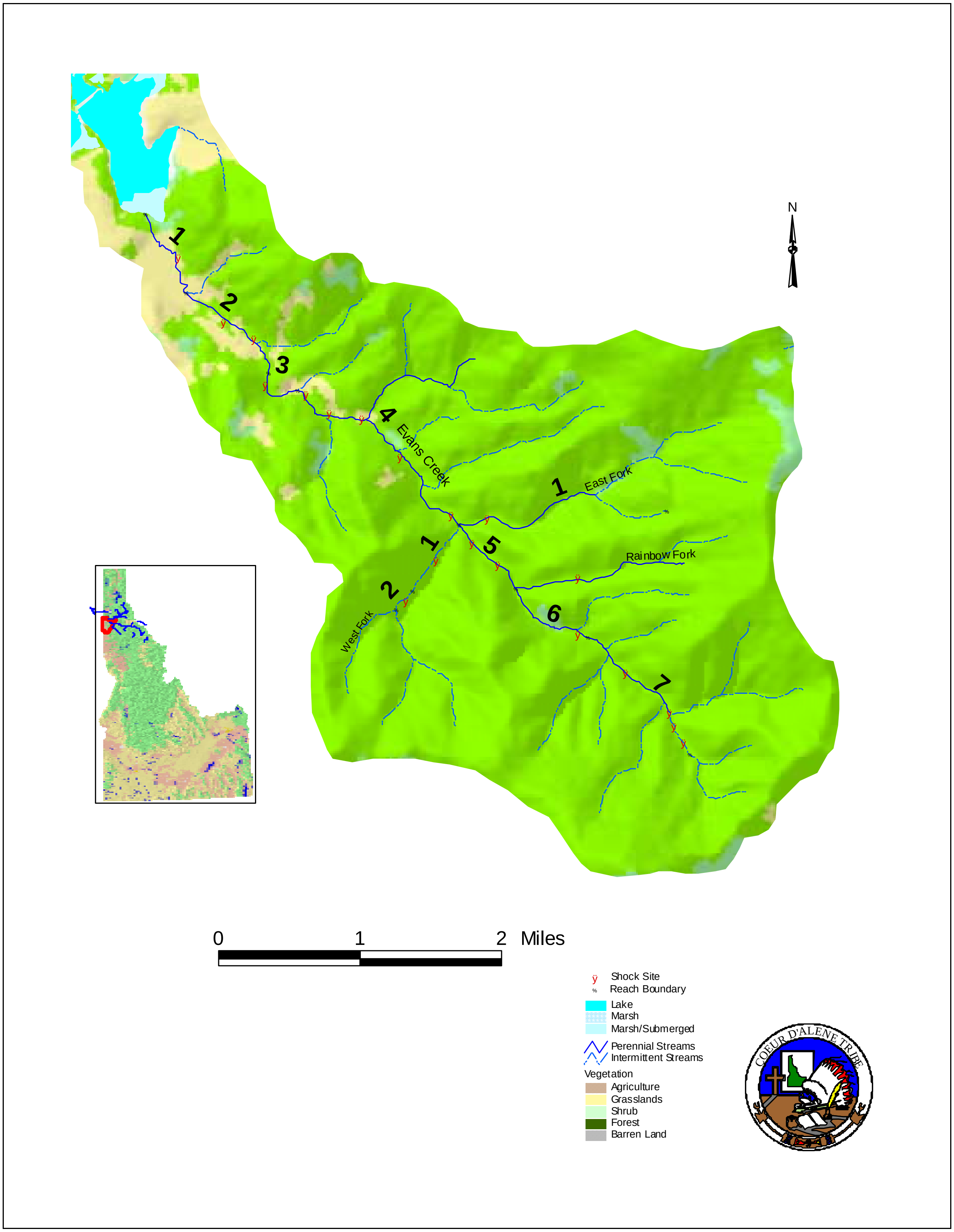


Figure 2.5 Evans Creek shock site locations.

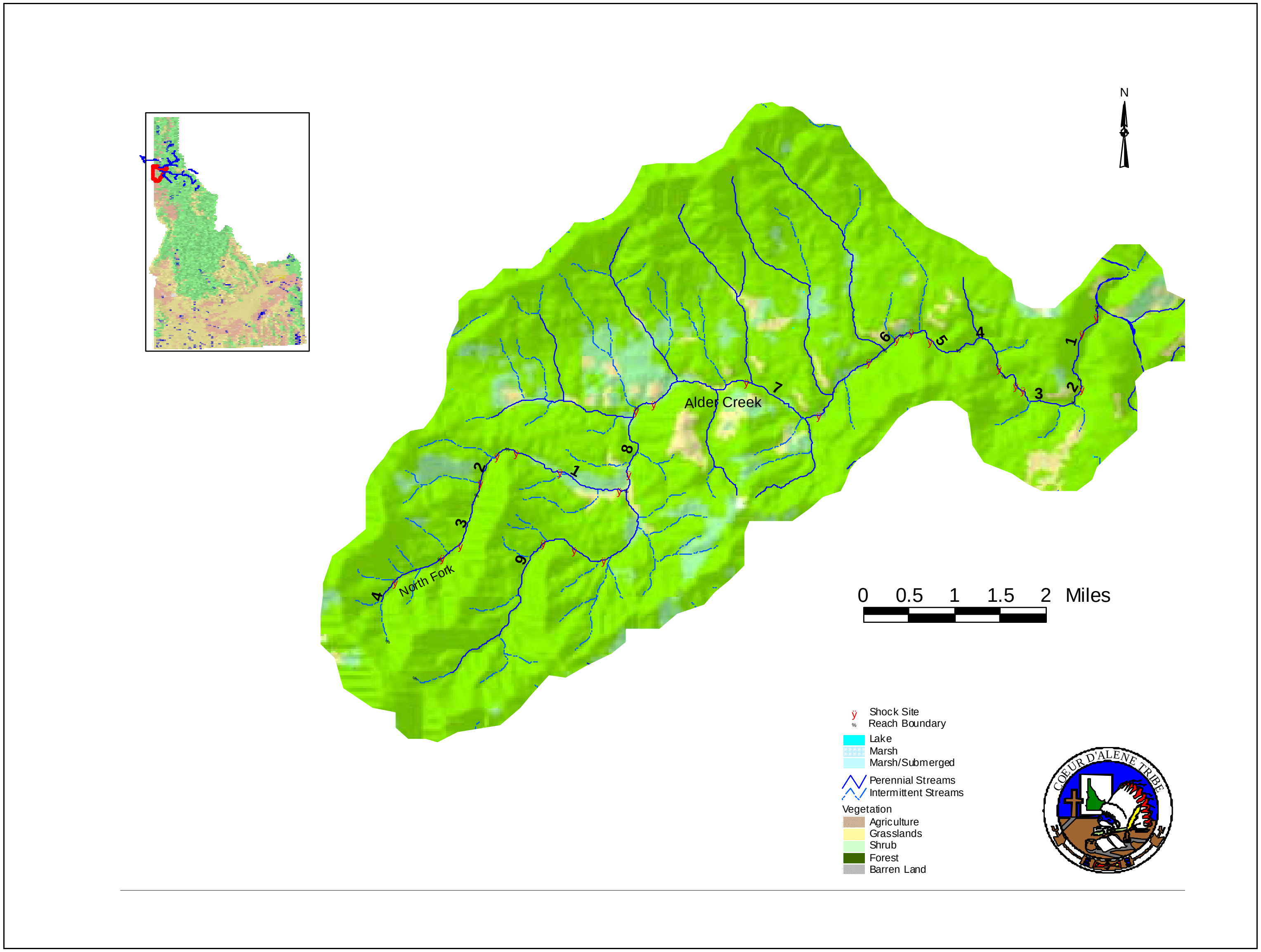


Figure 2.6 Alder Creek shock site locations.

Trout Migration

Migration traps were installed in Lake Creek, Benewah Creek and Cherry Creek to assess migratory patterns, reproductive cycles, distribution, and relative abundance. Traps were functional from March 24th – June 8th, 1996 and March 6th – June 5th, 1997, except during periods of high stream flow. The traps consisted of a weir, runway and a holding box. The design was a modification of the juvenile downstream trap found in Conlin and Tuty (1979). Traps were installed in pairs at some locations to allow monitoring of both upstream and downstream movements of fish (Table 2.3). Paired traps were placed approximately 20 meters apart.

Table 2.3 Fish trap locations in target watersheds, 1998.

Lake Creek	Benewah Creek	Evans Creek
At Hyw 95 crossing (p)	Mouth Benewah (p)	At mouth of creek
	Mouth W.F. Benewah	
	Mouth S.F. Benewah	
	Mouth Coon Creek	
	Mouth Whitetail Creek	
	Mouth Windfall Creek	

(p) Indicates a paired trap location.

Traps were checked at least once daily during peak spawning periods from mid-March through the middle of May and once daily afterwards until late June, when traps were removed. Fish captured in the traps were identified, counted, measured, and weighed. A scale sample was taken to assess the age, growth, and condition of the fish. Trap efficiency was calculated to allow for comparisons among years and was determined as catch per unit effort (CPUE), where one unit effort was defined as one 24-hour period.

3.0 Results

3.1 Lake Studies

3.1.1 Water Quality

Seven physical/chemical properties of water, two essential nutrients, and 11 dissolved metals were tested for on Coeur d'Alene Lake in 1997 and 1998 on a monthly basis. The testing program was directed primarily at the properties of water that most affected fish production and distribution within the lake. Vertical profiles were also taken for dissolved oxygen, temperature, pH and conductivity, using a multi-parameter water quality testing probe. Samples were taken on a bi-weekly basis during 1997 and 1998.

Dissolved Oxygen

Vertical profiles of dissolved oxygen were taken at each of the thirteen stations (Appendix A) during 1997 and 1998. Dissolved oxygen, when at low concentrations is an indication of high levels of organic decomposition. The surface water of every sampling station remained at acceptable levels (>6.0 mg/L) over the course of both years.

In 1997, four of the thirteen sampling stations showed dissolved oxygen concentrations of less than 6.0 mg/L in the hypolimnion, and in 1998, eight out of the thirteen water quality sites had dissolved oxygen concentrations below 6.0 mg/L in the hypolimnion (Table 3.1). Sites that were similar in geomorphology showed similar results in dissolved oxygen concentrations.

Table 3.1 Water quality stations on Coeur d'Alene Lake that had dissolved oxygen readings less than 6.0 mg/L in 1997 and 1998.

		1997	1998
Location	Depth (m)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)
Hidden Lake	9	0.25	0.12
Chatcolet Lake Deep	11	0.50	0.10
Benewah Lake	5	1.25	0.14
Mid Lake	13	4.5	3.75
Conkling Point	16	-	2.78
Windy Bay Deep	32	-	5.68
Carey Bay	14	-	4.6
St. Joe River	13	-	5.75

During 1997 and 1998, the lowest dissolved oxygen concentrations were recorded in the shallow southern lakes stations. In 1997, the lowest dissolved oxygen concentrations were recorded in Hidden Lake, where a reading of 0.25 mg/L was recorded in the lowest one meter of the lake. Dissolved oxygen concentrations in Hidden Lake were in violation of the 6.0 mg/L standard from 6.0 to 8.5 meters of the bottom from 7/24/97 to 8/27/97. Chatcolet Lake Deep had the second lowest reading of 0.50 mg/L and was in violation of the 6.0 mg/L standard from 7 to 13 meters of the bottom from 7/24/97 to 9/16/97. Benewah Lake was also in violation of the 6.0 mg/L standard in the bottom 1 meter with a reading of 1.25 mg/L. In 1998, Chatcolet Lake Deep had the lowest dissolved oxygen level at 0.10 mg/L on 9/2/98. Dissolved oxygen values were below the 6.0 mg/L standard in the lower 2-4 meters from 7/7/98 to 9/2/98. Hidden Lake had a low reading of 0.12 mg/L and the lowest 1-2 meters were in violation of the 6.0 mg/L standard from 6/22/98 to 9/3/98. Dissolved oxygen in Benewah Lake was in violation of the 6.0 mg/L standard in the bottom 1 meter from 6/8/98 to 9/3/98.

During 1997, the only station found in violation of the 6.0 mg/L standard within the main body of Coeur d'Alene Lake was the Mid-Lake Coeur d'Alene station where the 6.0 mg/L standard was violated in the bottom 1 meter with a reading of 4.5 mg/L. This drop in the dissolved oxygen level is a general indicator of increasing trophic status or eutrophication. The general trend was an increase in trophic status on a north to south axis. However, the Conkling Point sample station, which is between Mid-Lake Coeur d'Alene and Hidden Lake, did not violate the 6.0 mg/L dissolved oxygen standard.

In contrast to 1997, all three sites in the open water zone during 1998 had dissolved oxygen concentrations below 6.0 mg/L. Conkling Point had a low dissolved oxygen reading of 2.78 mg/L and the lower 2 to 3 meters had dissolved oxygen levels below the 6.0 mg/L standard from 8/10/98 through 9/3/98. Mid-Lake Coeur d'Alene was in violation of the 6.0 mg/L standard with a reading of 3.75 mg/L in the lower 1 to 4 meters on 9/30/98. Windy Bay Deep had only one day where the dissolved oxygen dropped below 6.0 mg/L in the lower 4 meters.

During 1998, Carey Bay was the only interior bay site in which dissolved oxygen values dropped below 6.0 mg/L. A value of 4.6 mg/L was recorded in the lower 1 meter on 9/3/98.

The St. Joe River had a dissolved oxygen reading of 5.75 mg/L on 9/3/98.

By October of 1998 all but two sites were isothermal with dissolved oxygen values greater than 8.0 mg/L. Windy Bay Deep and Mid- Lake Coeur d'Alene were the only two sites that had not turned over at this time. Turn over is when the thermocline begins to weaken and the epilimnion increases in depth as it decreases in temperature. The stratified structure is lost and the lake becomes homothermous; that is, it has a uniform temperature from surface to bottom.

Temperature

Optimum temperature requirements for cutthroat and bull trout range between 10^{o} C to 15^{o} C. Vertical profiles of temperature were taken at all thirteen stations during both years (Appendix A). Geomorphologically similar stations showed similarities in the temperature profiles in both timing of stratification and magnitude of the warming. Shallow stations heated up sooner than deeper water stations. The shallow southern lakes had more variability in the timing and magnitude of the change when compared to the other sample stations (Peters et al. 1999).

In 1997, the shallowest stations, (Round Lake and Chatcolet Lake Shallow @1.5m deep), the epilimnion extended to the bottom before May 16^{th} (Figure 3.1). Temperatures greater than the 15.0^{o} C temperature standard existed from July 8^{th} through September 29^{th} from surface to bottom. The temperature peaked at 26.5^{o} C on August 8^{th}.

In 1998, Round Lake and Chatcolet Lake Shallow (Figure 3.1) had temperatures above 15^{o} C from June 22^{nd} through September 17^{th}, and the epilimnion extended to the bottom. Round Lake had its warmest temperature of 23.86^{o} C on August 11^{th} and Chatcolet Lake Shallow reached a high of 26.62^{o} C on July 21^{st}.

In 1997, the shallow southern lake stations (Chatcolet Lake Deep, Benewah Lake, and Hidden Lake) the thermocline was present by May 16^{th} (Figure 3.2) and reached its deepest point on September 17^{th}. The temperature peaked at 26.5^{o} C on August 8^{th}.

In 1998, the thermocline varied between the three shallow southern lakes (Figure 3.2). By June 22^{nd} the thermocline was in place at Hidden Lake and the upper 3.5 meters had temperatures above 15^{o} C. The temperature peaked on August 11^{th} with a surface reading of 25.06^{o} C. Chatcolet Lake Deep had temperatures above 15^{o} C on June 8^{th} with a well-established thermocline. Peak temperature was reached on July 21^{st} with a reading of 25.45^{o} C at the surface. Benewah Lake had exceeded the optimum temperature requirements by May 21^{st} in the upper 2 meters. A thermocline was established at this time. Peak temperature was reached on July 21^{st} with a value of 25.92^{o} C at the surface.

Vertical profiles for the interior bay stations (Windy Bay Shallow, Rockford Bay, and Carry Bay) during 1997 showed that the thermocline had started to build in by May 16^{th} and the water nearest to the bottom had warmed from 5.5^{o} C to 7.0^{o} C (Figure 3.3). By June 26^{th} the thermocline had reached the bottom. The surface temperature peaked on August 5^{th} at 23.5^{o} C.

During 1998, all three interior bays sample sites had temperatures above 15^{o} C (Figure 3.3) and a well-established thermocline by June 8^{th}. Temperature in the interior bays peaked at 24.79^{o} C on July 7^{th}.

Temperature profiles for the 1997 deep-water stations (Conkling Point, Windy Bay Deep, Mid-Lake Coeur d'Alene) showed a definite thermocline by May 16^{th} (Figure 3.4) with complete thermal stratification by August 5^{th}. The thermocline was still present in the deepest sampling station on October 22^{nd} however; it was nearly broken down in the other two deep-water stations. The temperature criterion was never exceeded from surface to bottom however, the temperature standard was exceeded and habitat was limited.

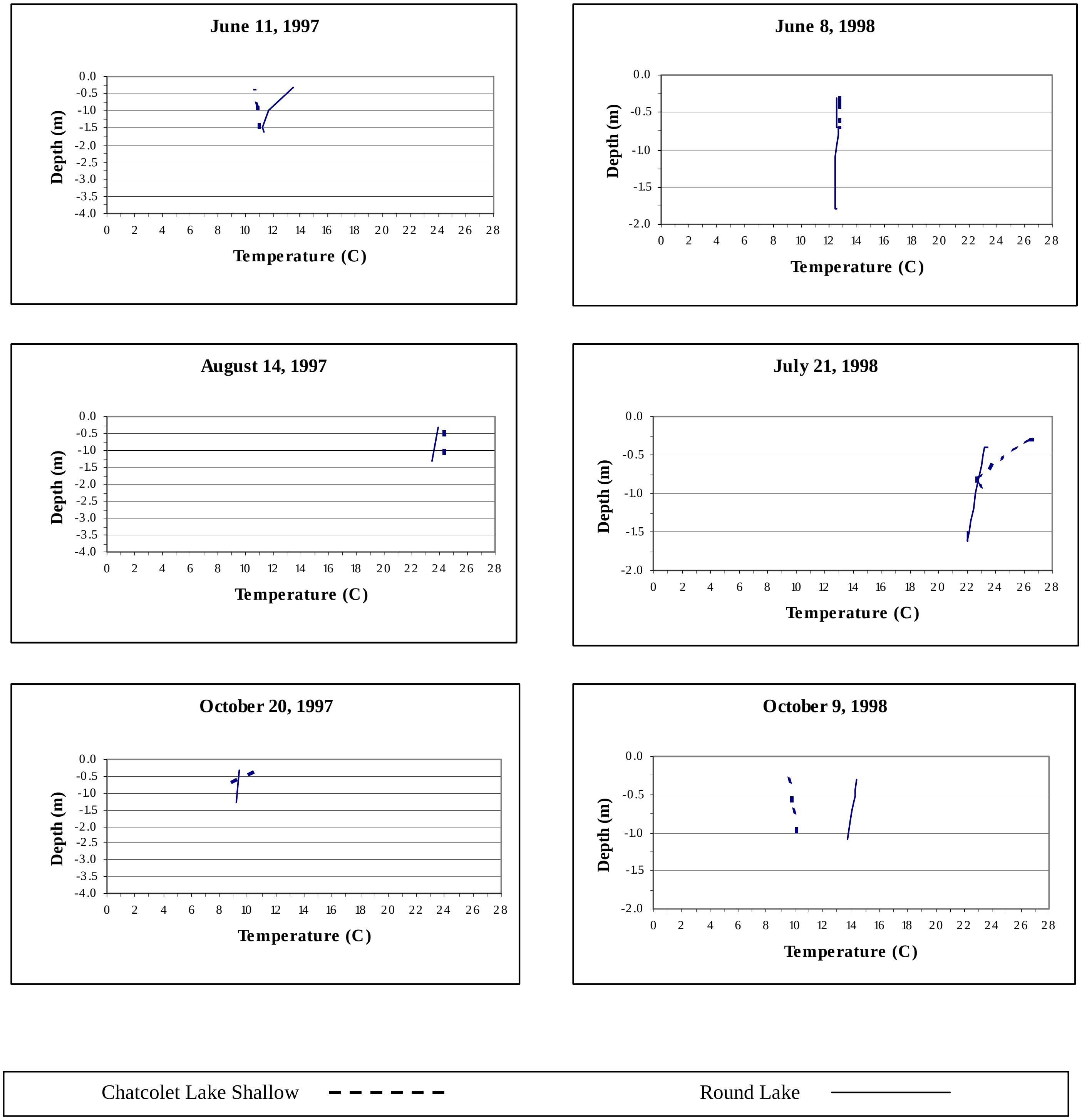


Figure 3.1 Peak spring, summer and fall temperature profiles vs. depth for two geomorphology similar sampling locations on Coeur d'Alene Lake during 1997 and 1998.

By June 8^{th} 1998, the deep water zones had temperatures that violated the standards and had well-established thermoclines (Figure 3.4). The depth of the thermoclines varied by site, Conkling Point's extended down 1.5 meters while Mid-Lake Coeur d'Alene's consisted of the upper 3 meters and Windy Bay Deep had the most pronounced thermocline, which encompassed the upper 8.5 meters. Peak temperature was reached on July 7^{th} with a reading of 24.51° C.

In 1997, Coeur d'Alene River's water temperature had exceeded 15° C by June 11^{th} and a thermocline was forming (Figure 3.5). Water temperature peaked on August 5^{th} (25.18° C) and the surface to bottom temperature was greater than 15° C. In 1998, water temperature in the Coeur d'Alene River had exceeded 15° C by June 8^{th} (Figure 3.5). Maximum water temperature was reached on August 10^{th} (24.59° C).

By July 8^{th} 1997 the water temperature in the St. Joe River had exceeded 15° C (Figure 3.6). Water temperature peaked in the St. Joe River on August 5^{th} with a reading of 23.01° C. In 1998, the St. Joe River exceeded 15° C by June 22^{nd} in the upper 2 meters (Figure 3.6). Peak temperature was reached on July 21^{st} (22.77° C).

In 1997, by the first of October all water quality sites were isothermal at 15° C. By mid October in 1998 water temperature at all thirteen stations was between the optimum temperature requirement of 10° C to 15° C.

pH

Cutthroat and bull trout have optimum pH limits of 6-8. The pH of Coeur d'Alene Lake does not change very much from season to season or on an annual basis. Observed values ranged from 6.8 to 8.0 (Appendix A), all within the optimal tolerance limits for cutthroat production.

In 1997, the only variation occurred at three stations in the southern lakes section (Chatcolet Lake Deep, Benewah Lake, and Hidden Lake) where the pH rose to 9.4 (Figure 3.7) in the upper 2 meters of the water column. The three stations that showed similar changes in pH were in geomorphologically similar areas.

During 1998, eleven out of the thirteen sites had pH values that exceeded the upper limit. pH values increased on a north to south axis as did the duration. The interior bays and the deep-water zones had pH values that exceeded eight from June 24^{th} through July 8^{th}. The shallow southern lakes had pH values above eight from July 7^{th} through September 3^{rd}. The peak pH during this time was 9.17 on August 11^{th} (Figure 3.7). On October 9^{th} and 19^{th} Round Lake exceed the upper pH limit with a reading of 8.63. Chatcolet Lake Shallow exceeded the upper pH limit on and off from July 7^{th} through October 19^{th}, with the maximum pH being 9.36 on October 19^{th} (Figure 3.8).

Conductivity

Vertical profiles of the specific conductance were taken concurrently with the other physical/chemical parameters during 1997 and 1998 (Appendix A). In 1997, all conductivities were within the tolerance limits for cutthroat trout production and ranged from 15.3 μg/L to 81.0 μg/L. Any variability to the conductivity was due to natural environmental conditions except at the mouth of the Coeur d'Alene River (Figure 3.9) where higher than normal levels of dissolved metals are flowing into the lake. Values remained very stable during the fall, winter, and spring months. Only during the peak summer conditions did variation occur.

In 1998, all thirteen water quality sites fell with in the conductivity limits. The shallow southern lakes and Coeur d'Alene River had the highest values. Hidden Lake (129.1μs/cm), Chatcolet Lake Deep (92.6μs/cm), Benewah Lake (75.7μs/cm) and the Coeur d'Alene River (85μs/cm). The rest of the sites had values ranging from 30-65 μs/cm.

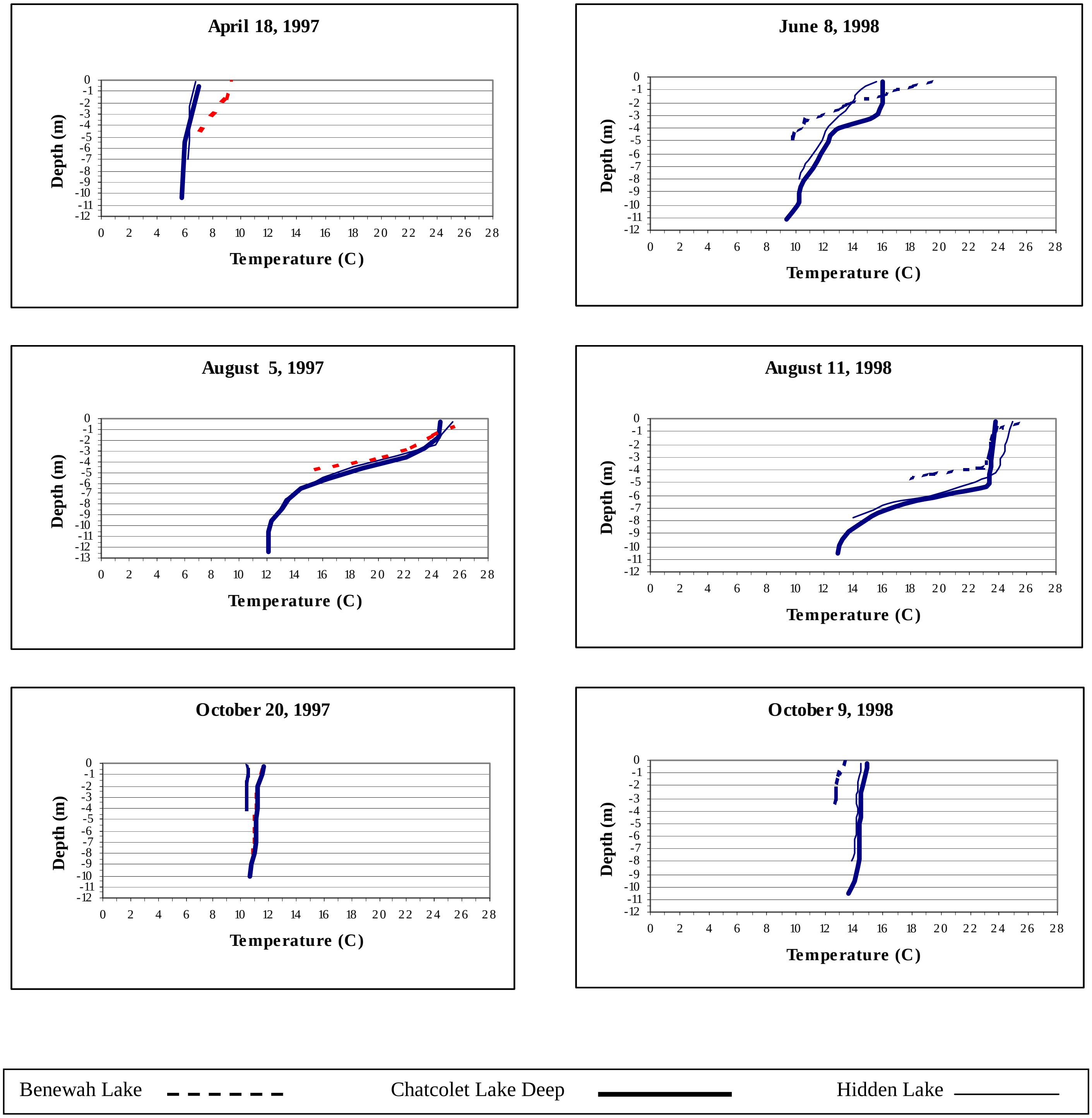


Figure 3.2 Peak spring, summer and fall temperature profiles vs depth for three geomorphology similar sampling locations on Coeur d'Alene Lake during 1997 and 1998.

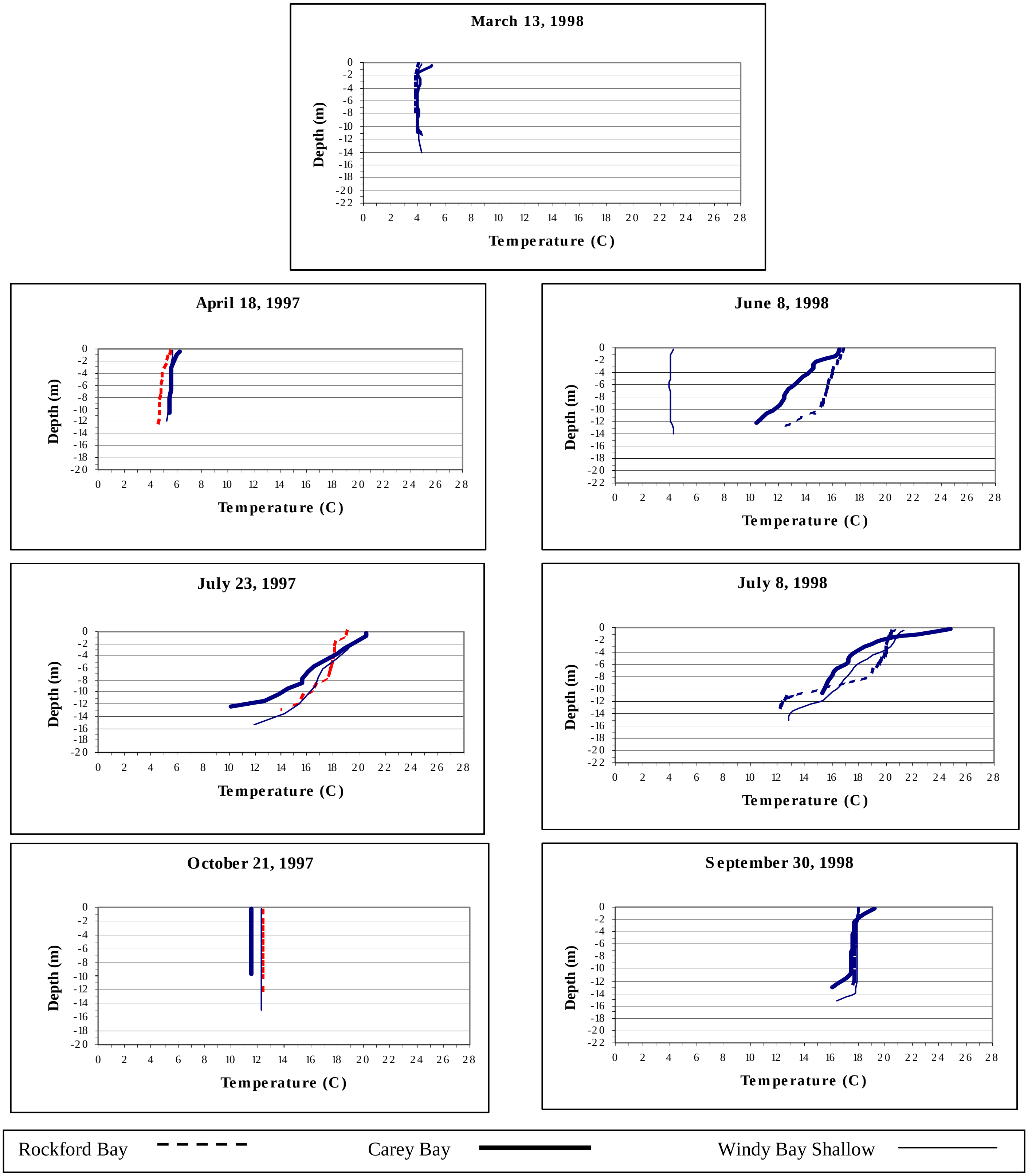


Figure 3.3 Peak winter, spring, summer and fall temperature profiles vs depth for three geomorphology similar stations on Coeur d'Alene Lake during 1997 and 1998. A winter sample was not taken in 1997.

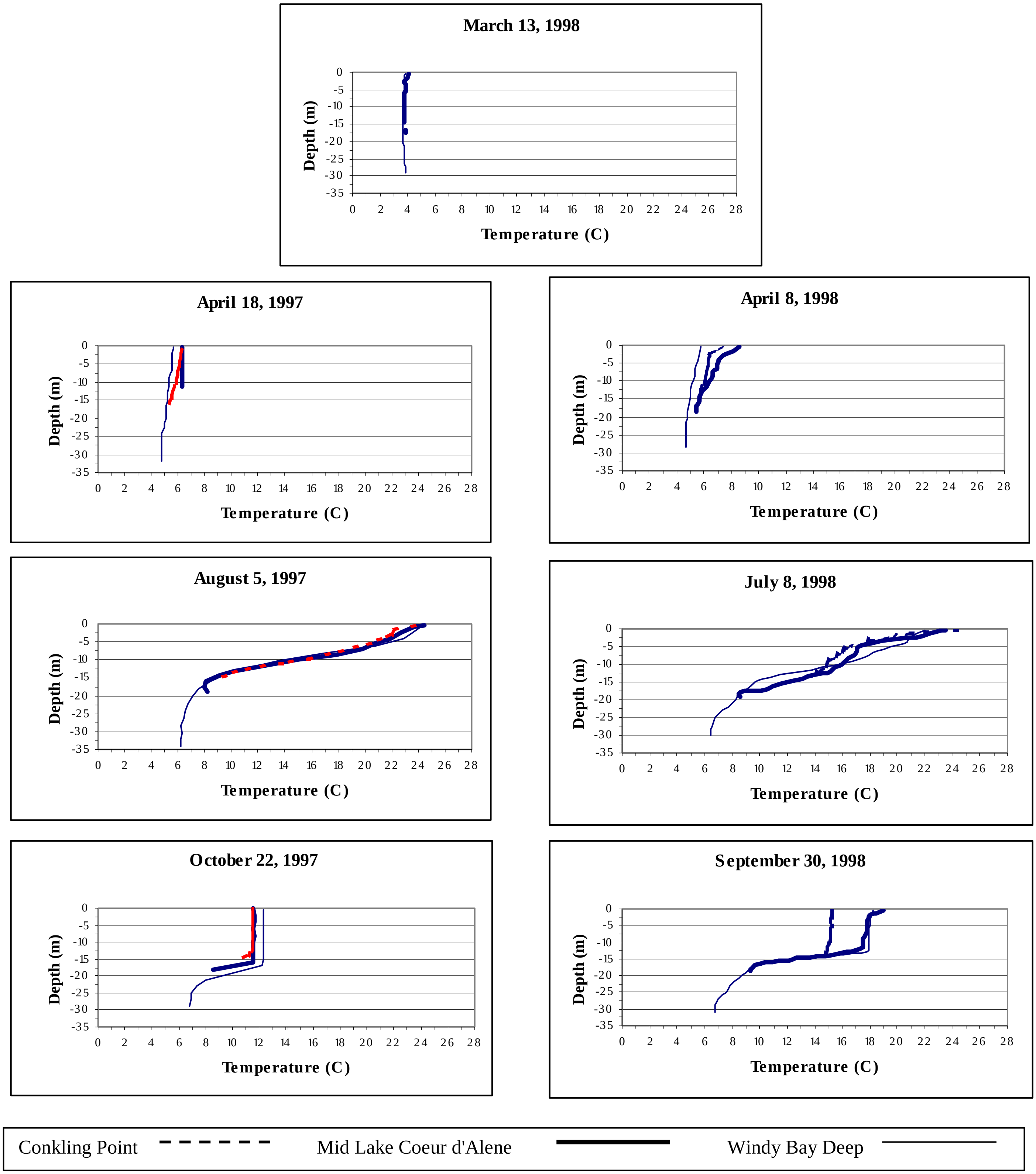


Figure 3.4 Peak winter, spring, summer and fall temperature profiles vs depth for three geomorphology similar sampling locations on Coeur d'Alene Lake during 1997 and 1998. A winter sample was not taken in 1997 and Conkling Point had no winter sample taken in 1998.

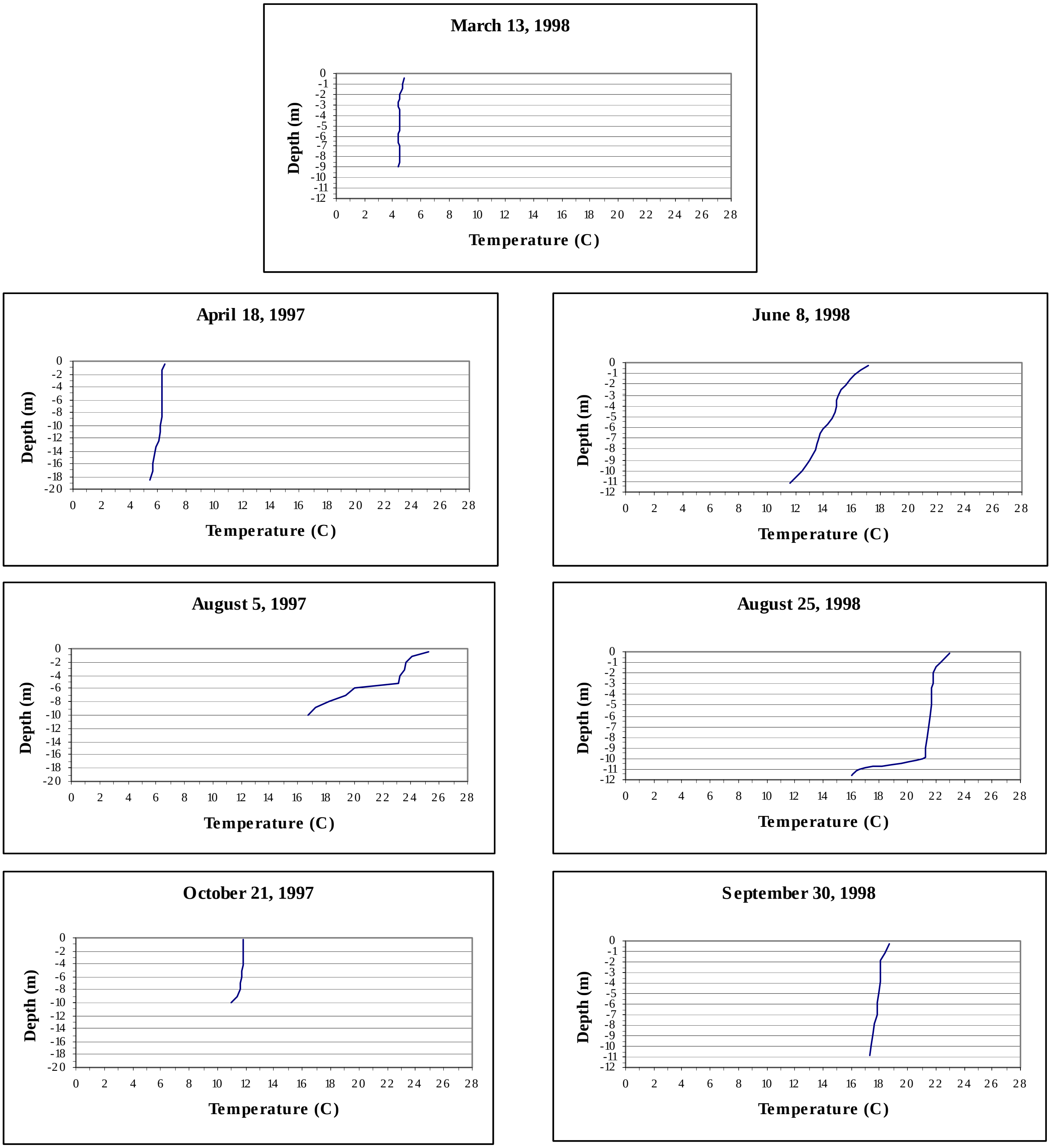


Figure 3.5 Peak winter, spring, summer and fall temperature profiles vs depth for the Coeur d'Alene River sampling location on Coeur d'Alene Lake during 1997 and 1998. There was no winter sample taken in 1997.

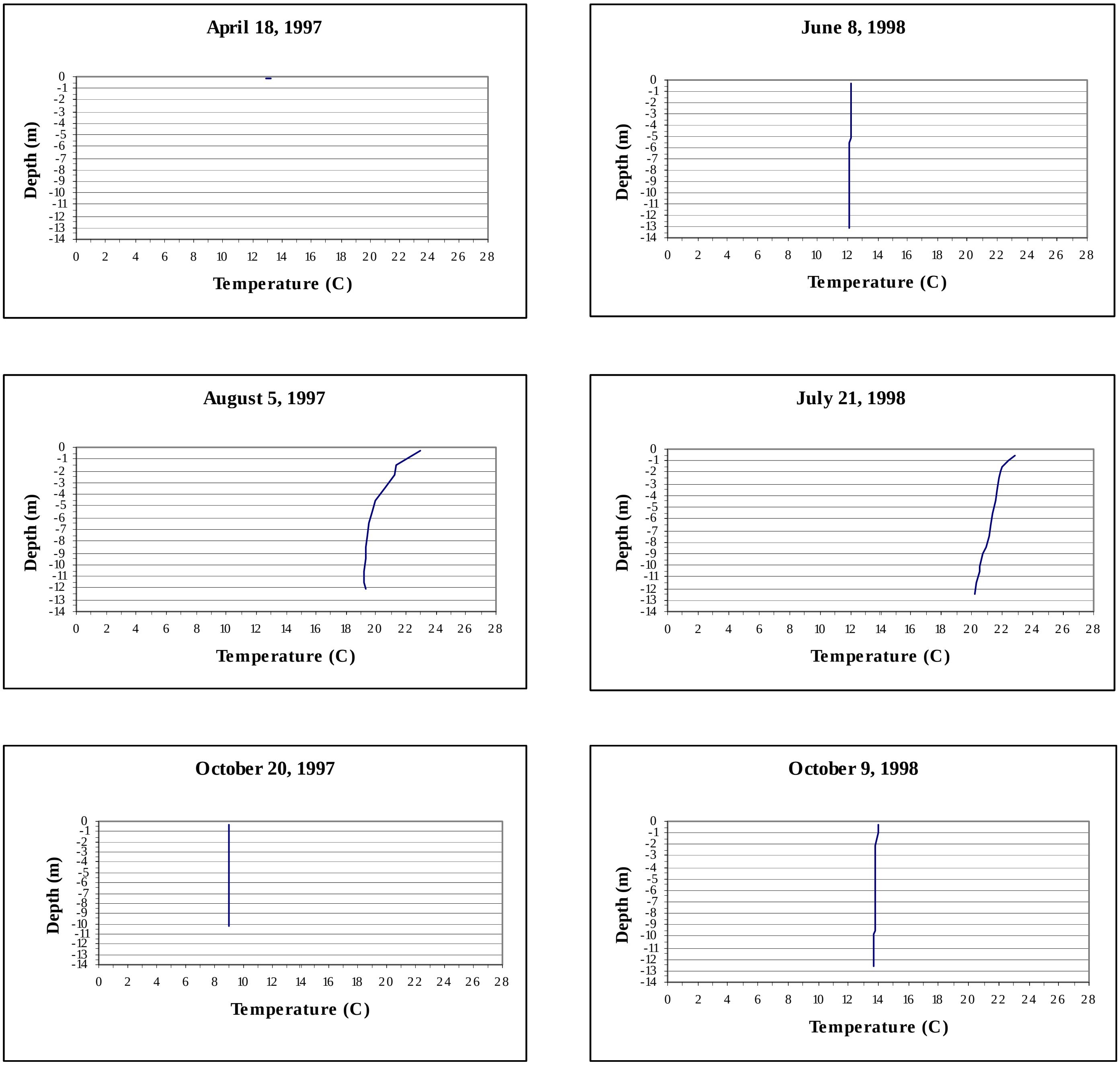


Figure 3.6 Peak spring, summer and fall temperature profiles vs depth for the St. Joe River sampling during 1997 and 1998.

Nitrogen
Nitrogen compounds follow regular seasonal patterns. For the most part nitrate concentrations sampled at the 13 stations (Appendix B) in 1997 and 1998, were below the detection limit (0.01 μg/L) thus, all data below detection limits were reported as half the detection limit. In only a few instances during 1997 (both stations in Windy Bay, Rockford Bay, and the two shallow stations) did nitrate concentrations exceed the detection limit in the epilimnion, reaching a high of 0.113 μg/L at the Rockford Bay sample station in the October sample period. However, in the hypolimnion concentrations of nitrate generally increased in the November sample over the October sample period reaching a high of 0.131 μg/L in the Windy Bay Deep sample station.

In the epilimnion during the months of April and November in 1998 half of the sites were above the detection limit. From June through October all sites were below the detection limit. Hidden Lake (0.210 μg/L) had the highest reading. In the hypolimnion, four out of the seven sampling months had values above the detection limit. Mid-Lake Coeur d'Alene (0.078 μg/L) had the highest reading in the hypolimnion.

Nitrite, the form of nitrogen found in the smallest quantities were all below the detection limit of 0.01 μg/L in the epilimnion and hypolimnion for both samples (Appendix B) at all thirteen stations in 1997. All data measured below the detection limit were recorded as half the detection limit.

During the sample months of April and June in 1998, nitrite values were <0.029 μg/L in both the epilimnion and hypolimnion (Appendix B). The rest of the time the values were below the detection limit. All data measured below the detection limit were recorded as half the detection limit.

Organic nitrogen is defined functionally as organically bound nitrogen in the tri-negative oxidation state. Analytically, organic nitrogen and ammonia can be determined together and have been referred to as "kjeldahl nitrogen", a term that reflects the technique used in their determination. Total kjeldahl nitrogen was added as a new water quality sampling method during the 1998 field season. The values in both the epilimnion and hypolimnion were fairly uniform throughout the thirteen stations (Appendix B).

Phosphate
During 1997 and 1998, ortho-phosphate concentrations were below the detection limit (0.026 μg/L) at all sites in both the epilimnion and hypolimnion (Appendix B). The data were reported as half of the detection limit so data point loss would not occur.

Total phosphorus was a new parameter that was added in 1998. Total phosphorus values increased on a north to south axis (Appendix B). All sites north of Hidden Lake in both the epilimnion and hypolimnion were below the detection limit of 0.005 μg/L. All data measured below the detection limit were recorded as half the detection limit. A few sites south of Hidden Lake had values slightly higher than the detection limit. Values in the epilimnion ranged from <0.005 μg/L in the northern sites to 0.065 μg/L at Chatcolet Lake Shallow. In the hypolimnion the values ranged from <0.005 μg/L in the northern sites to 0.026 μg/L at Benewah Lake.

Primary Productivity
Chlorophyll$_a$ is the pigment aquatic plants use for photosynthesis. In 1997 Chlorophyll$_a$ values ranged from 0.005 μg/L to 25.790 μg/L in the epilimnion while values ranged from 0.005 μg/L to 34.14 μg/L in the hypolimnion (Appendix B). The general trend is increasing values on a north to south axis. Higher levels of chlorophyll$_a$ is an indicator of increasing trophic status.

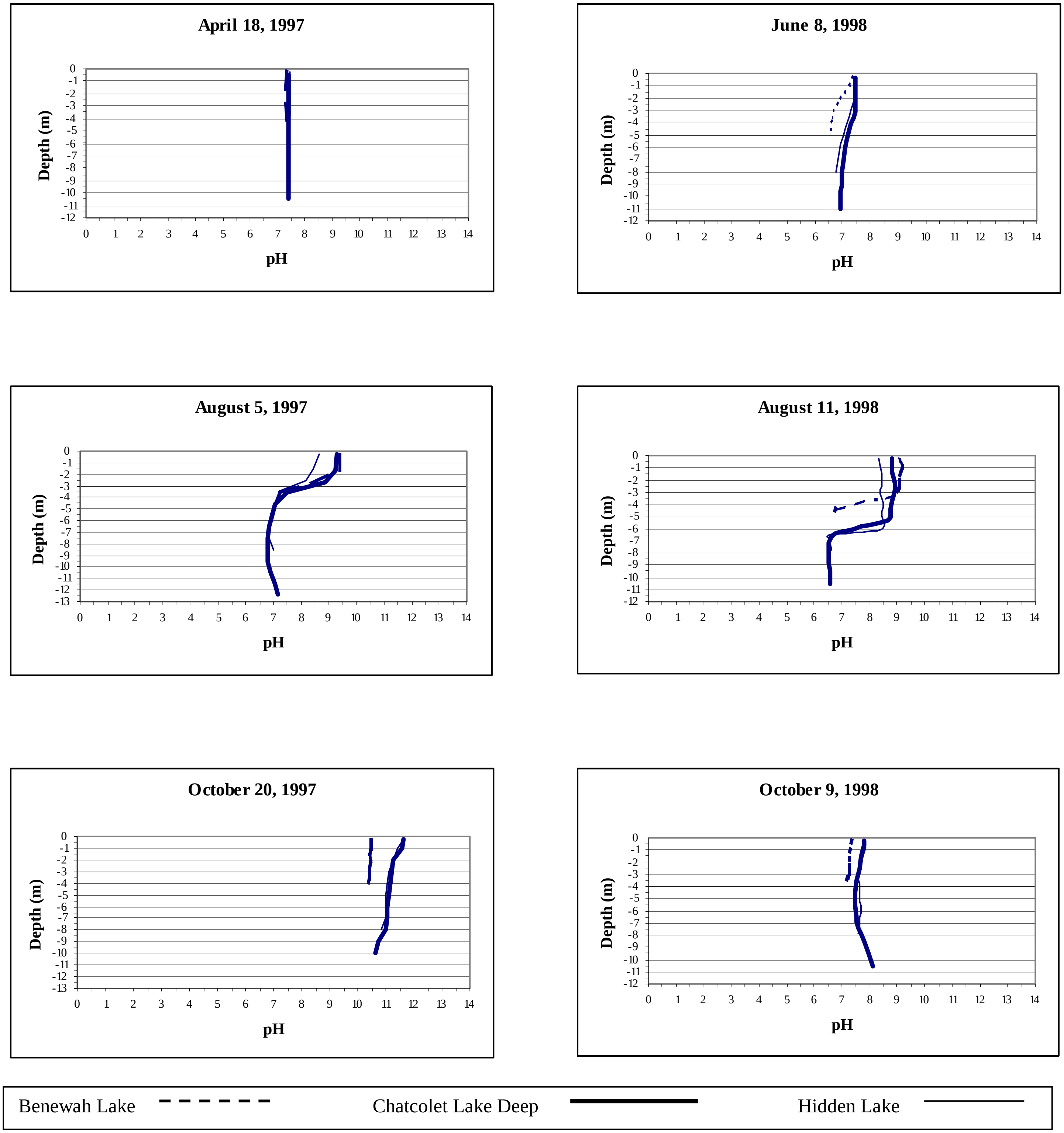
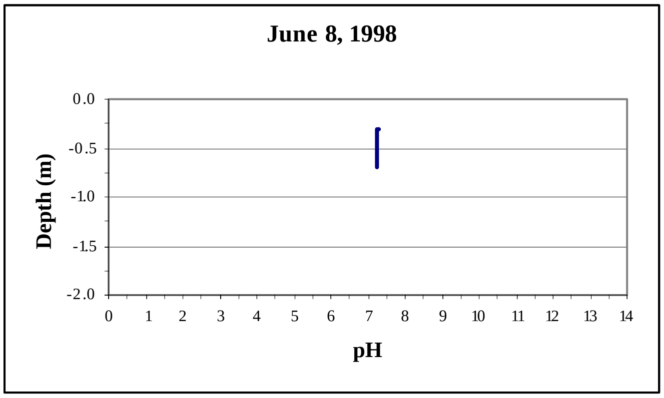
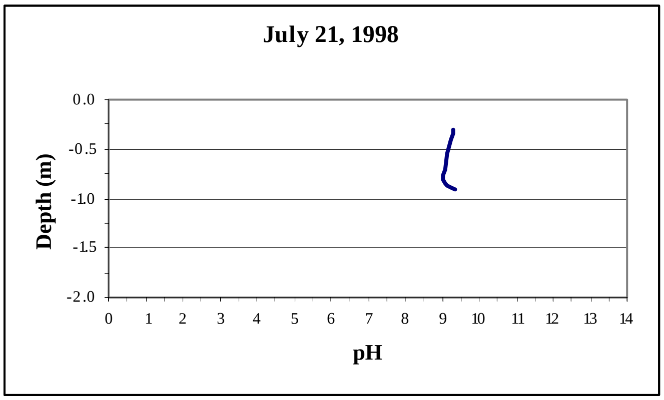


Figure 3.7 Peak spring, summer and fall pH profiles vs depth for three geomorphology similar sampling locations on Coeur d'Alene Lake during 1997 and 1998.





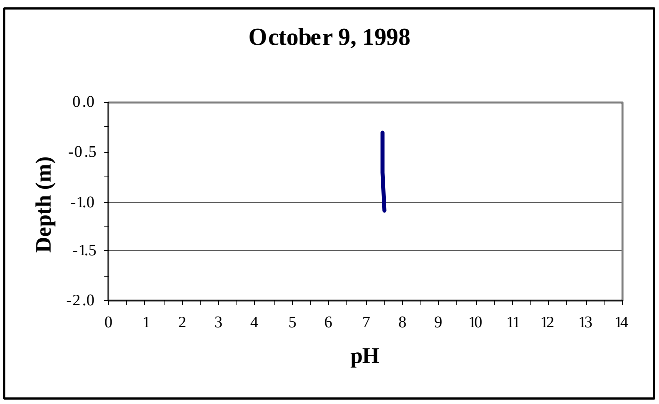
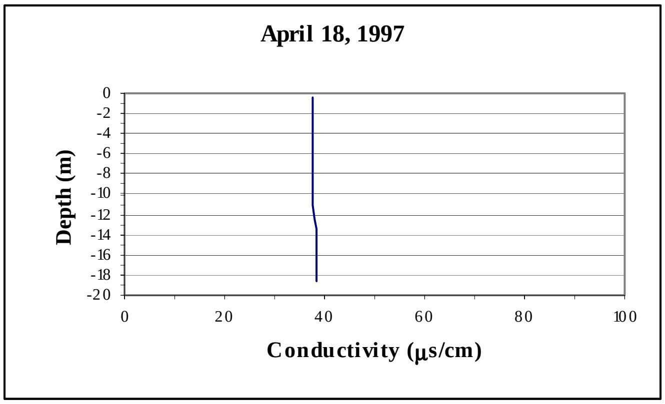
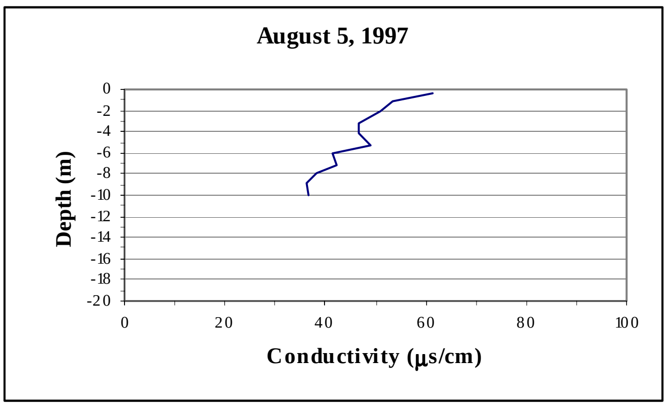


Figure 3.8 Peak spring, summer and fall pH profiles vs depth for the Chatcolet Lake Shallow sampling location on Coeur d'Alene Lake during 1998.





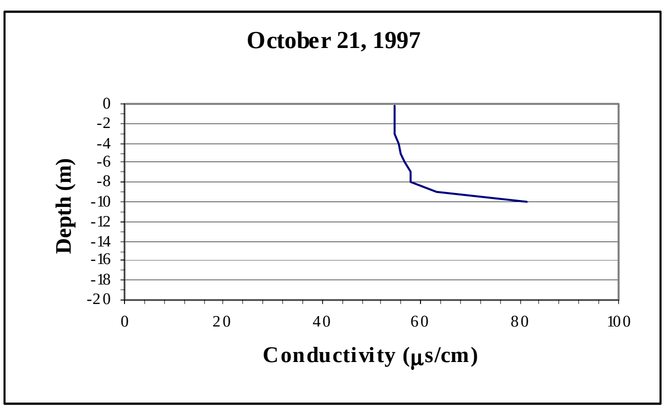


Figure 3.9 Peak spring, summer and fall conductivity profiles vs depth for the Coeur d'Alene River sampling location on Coeur d'Alene Lake during 1997.

In 1998, the same trend occurred as in 1997, $Chlorophyll_a$ values increased on a north to south axis. The values in the epilimnion ranged from <0.001 μg/L to 61.410 μg/L and the values in the hypolimnion ranged from <0.010 μg/L to 80.920 μg/L (Appendix B).

Physical

Total Suspended Solids (TSS) is defined as the residue left on a filter paper of 2 μm or smaller after a portion of the sample has been filtered through (APHA, 1992). The detection limit for TSS is 4.0 mg/L. In 1997, total suspended solids were fairly uniform throughout the epilimnion of the lake with only a few differences found (Appendix B). The shallow stations ran slightly higher than the other stations with Round Lake reaching a high of 16.0 mg/L. The southern lakes also ran slightly higher with Hidden Lake and Benewah Lake reaching a high of 10 mg/L. The hypolimnion was quite variable throughout the lake. Windy Bay Deep reached a high of 27.0 mg/L. Drinking water standards are set at 500 mg/L however; levels much lower can impart a foul taste to the water. No analysis of the composition of the suspended solids was completed. However, it was noted that high levels of suspended sediment was present in the southern lakes sample stations and that most likely the high suspended solids present in the Windy Bay Deep station was related to decomposing algae not sediment.

During 1998, none of the water quality sites exceeded the drinking water standard but some sites did exceed the detection limit (Appendix B). Chatcolet Lake Shallow had a high reading of 10.500 mg/L in the epilimnion. TSS increased in the hypolimnion, with more sites having values over 4.0 mg/L. The southern lakes had some of the highest values. Chatcolet Lake Deep had a reading of 141.000 mg/L in June and Hidden Lake had a reading of 47.000 mg/L in April.

Turbidity is the amount of suspended inorganic and organic matter throughout the water column. In 1997, turbidity in the epilimnion and hypolimnion showed the same trend as suspended solids (Appendix B) with a general increase on a north to south axis. The highest turbidity reading was recorded at the Chatcolet Lake Shallow sample station (11.2 NTU). The next highest was Benewah Lake (5.810 NTU) followed by Hidden Lake (4.760 NTU). The lowest value was recorded at the Windy Bay Deep sample station (0.230 NTU). The high turbidity readings were due to suspended sediments flowing in from Plummer Creek a tributary to Chatcolet Lake.

In 1998, all of the turbidity readings in the epilimnion were above the detection limit (Appendix B). Benewah Lake (6.840 NTU) had some of the highest readings throughout the season. Windy Bay Deep (0.403 NTU) had the lowest turbidity reading. Turbidity values were higher in the hypolimnion than in the epilimnion. In June Chatcolet Lake Deep had a reading of 43.100 NTU. Windy Bay Deep (0.335 NTU) had the lowest turbidity value. As the field season continued there was a gradual decrease in turbidity values in the hypolimnion.

Dissolved Metals

Little variation in the concentrations of the eleven metals (Appendix B) sampled was observed during 1997 and 1998. Potassium (K) values in the hypolimnion during October of 1998 were slightly higher than October of 1997. The 1998 values ranged from 1.02 mg/L to 1.4 mg/L compared to 1997, which had values that were <0.850 mg/L.

Secchi disk readings were taken at each of the thirteen stations throughout 1997 and 1998 they were used to determine the euphotic zone depth. Graphs showing the measured secchi disk readings and the empirically derived euphotic zone depth are located in (Appendix C). In 1997 and 1998 the empirically derived euphotic zone depth was variable throughout the lake (Table 3.2 & 3.3) with each station having different depths based on variable site-specific conditions. Similarities existed between the five distinct habitat areas however; the general trend was decreasing secchi and euphotic zone depths on a north to south axis within the lake.

Table 3.2 Average annual and seasonal secchi measurements taken at thirteen stations on Coeur d'Alene Lake in 1997. Euphotic zone depths were empirically derived using the regression equation EZD=2.2302+1.4914(SD)R^2=.78 published by Alaska Fish and Game 1987. All measurements are in meters.

		Average		Spring		Summer		Fall	
Location	Station Depth	Annual Secchi[a]	Annual Euphotic Zone	Seasonal Secchi[b]	Seasonal Euphotic Zone	Seasonal Secchi[c]	Seasonal Euphotic Zone	Seasonal Secchi[d]	Seasonal Euphotic Zone
Round Lake	1.50	1.27	Bottom (1.5)[e]	1.20	Bottom (1.5)	1.31	Bottom (1.5)	1.23	Bottom (1.5)
Chatcolet Shallow	1.50	.89	Bottom (1.5)	1.00	Bottom (1.5)	0.87	Bottom (1.5)	0.77	Bottom (1.5)
Rockford Bay	13.00	5.29	10.11	153	4.50	6.43	11.81	7.63	13.61
Windy Bay Shallow	14.00	4.58	9.05	1.66	4.71	5.37	10.24	6.60	12.07
Carey Bay	12.00	4.10	8.34	1.73	4.80	5.13	9.87	4.87	9.48
Windy Bay Deep	33.00	5.44	10.35	1.75	4.84	6.77	12.33	7.27	13.07
Mid Lake	18.00	4.08	8.31	1.74	4.82	5.00	9.68	5.03	9.73
Conkling Point	16.00	3.44	7.36	1.43	4.36	4.16	8.43	4.47	8.89
Hidden Lake	8.00	3.02	6.81	1.58	4.65	3.94	8.18	2.80	6.48
Chatcolet Lake	11.50	2.56	6.04	1.65	4.69	3.01	6.73	2.70	6.26
Benewah Lake	4.50	2.42	5.84	1.60	4.62	2.96	6.64	2.20	5.51
Coeur d'Alene River	10.00	3.92	8.08	1.50	4.47	4.73	9.28	5.27	10.08
St. Joe River	12.50	2.25	5.58	1.08	3.83	3.18	6.98	1.93	5.11

[a] Average annual secchi was calculated from April 18, 1997 to November 4, 1997.
[b] Annual Spring secchi is from April 18, 1997 to June 11, 1997.
[c] Annual Summer secchi is from June 26, 1997 to September 17, 1997.
[d] Annual Fall secchi is from September 29, 1997 to November 4, 1997.
[e] Numbers in parenthesis represent the bottom in meters.

Table 3.3 Average annual and seasonal secchi measurements taken at thirteen stations on Coeur d'Alene Lake in 1998. Euphotic zone depths were empirically derived using the regression equation EZD=2.2302+1.4914(SD)R^2=.78 published by Alaska Fish and Game 1987. All measurements are in meters.

		Average		Spring		Summer		Fall		Winter	
Location	Station Depth	Annual Secchi[a]	Annual Euphotic Zone	Seasonal Secchi[b]	Seasonal Euphotic Zone	Seasonal Secchi[c]	Seasonal Euphotic Zone	Seasonal Secchi[d]	Seasonal Euphotic Zone	Seasonal Secchi[e]	Seasonal Euphotic Zone
Round Lake	2.00	1.27	Bottom (2.00)[f]	1.36	Bottom (2.00)[f]	1.29	Bottom (2.00)[f]	0.7	Bottom (2.00)[f]	-	-
Chatcolet Shallow	1.10	0.85	Bottom (1.10)	0.7	Bottom (1.10)	0.86	Bottom (1.10)	1	Bottom (1.10)	-	-
Rockford Bay	13.00	6.06	11.27	3.88	8.01	6.87	12.47	8.40	14.76	3.00	6.70
Windy Bay Shallow	15.00	5.47	10.39	3.43	7.34	6.22	11.50	7.87	13.96	2.00	5.21
Carey Bay	12.00	5.07	9.80	3.08	6.82	6.43	11.82	5.67	10.68	1.80	4.91
Windy Bay Deep	30.00	6.25	11.55	3.43	7.34	7.28	13.09	9.20	15.95	2.50	5.96
Mid Lake	18.00	5.27	10.09	2.90	6.56	6.93	12.57	6.23	11.53	1.90	5.06
Conkling Point	15.00	4.42	8.82	2.92	6.59	5.47	10.39	4.47	8.89	-	-
Chatcolet Lake	10.00	3.37	7.26	2.60	6.11	4.50	8.94	2.57	6.06	1.00	3.72
Hidden Lake	7.00	3.52	7.48	2.14	5.42	4.77	9.35	2.90	6.56	-	-
Benewah Lake	4.50	2.51	5.98	1.53	4.51	3.29	7.13	2.00	5.21	-	-
Coeur d'Alene River	10.00	5.05	9.76	3.15	6.93	6.02	11.20	6.67	12.17	2.00	5.21
St. Joe River	11.00	3.75	7.83	3.88	8.02	3.84	7.95	3.10	6.85	-	-

[a]Average annual secchi was calculated from March 13, 1998 through November 17, 1998.
[b]Annual Spring secchi is from March 22, 1998 to June 21, 1998.
[c]Annual Summer secchi is from June 22, 1998 to September 21, 1998.
[d]Annual Fall secchi is from September 22, 1998 to December 21, 1998.
[e]Annual Winter secchi is from December 22, 1998 to March 21, 1998.
[f]Numbers in parenthesis represent the bottom in meters.

3.1.2 Fisheries

Coeur d'Alene Lake has been sampled on a regular basis since 1994. In 1994, 1,418 fish were sampled by electrofishing and 211 fish were sampled using horizontal gillnets. During 1995, 1,727 fish were sampled by electrofishing and 78 fish were sampled using horizontal gillnets. In 1996, 536 fish were sampled by electroshocking and 286 fish were sampled using horizontal gillnets. Largescale suckers and yellow perch were the two most frequently sampled fish for all three years by electroshocking. Yellow perch, northern pikeminnow and largescale suckers were the most frequently sampled fish in the horizontal gillnets during all three years. Refer to Peters et al. (1999) for a detailed analysis of relative abundance data for all three years.

In 1994, 20 hours and 56 minutes were spent electroshocking and gillnets were set for 69 hours. During 1995, 24 hours and 53 minutes were spent electroshocking and gillnets were set for 79 hours. In 1996, 12 hours were spent electroshocking and gillnets were set for 170 hours and 50 minutes. Refer to Peters et al. (1999) for a detailed analysis of the CPUE data from 1994-1996.

During 1997 and 1998, Coeur d'Alene Lake was sampled a total of eleven times. 11,806 fish were sampled by electroshocking and 1,372 fish were sampled using horizontal and vertical gillnets. During both years largescale suckers were the most abundant fish sampled by electroshocking and yellow perch were the most abundant fish sampled in gillnets.

Table 3.4 Electroshocking relative abundance results from 1997 and 1998 for Coeur d'Alene Lake.

Species	1997 n=4599	Species	1998 n=7207
LSS	28.55% (1313)	LSS	24.6% (1771)
YP	22.94% (1055)	LMB	16.4% (1179)
PSS	10.55% (485)	YP	16% (1155)
LMB	09.92% (456)	BC	14.9% (1073)
SQW	09.35% (430)	PSS	09.4% (676)
BC	08.52% (392)	SQW	08.1% (585)
BBH	04.02% (185)	BBH	04.6% (333)
TCH	03.50% (161)	TCH	04.1% (297)
CTT	0.78% (36)	CTT	0.6% (40)
PIK	0.50% (23)	PIK	0.5% (36)
SCP	0.43% (20)	CHN	0.3% (21)
KOK	0.33% (15)	SMB	0.2% (17)
CHN	0.30% (14)	MWF	0.1% (10)
MWF	0.15% (7)	SCP	0.1% (9)
CCF	0.09% (4)	CCF	0.1% (5)
SMB	0.04% (2)		
RBT	0.02% (1)		
BLT	0		

In 1997, 4,599 fish were sampled over a four-month period (July – October). It's known that there are twenty-one different species of fish in the lake. Seventeen of the twenty-one fish species were sampled by electroshocking (Table 3.4). Largescale suckers were the most frequently sampled fish. They made up more than ¼ of the catch at 28.55% (1313). Yellow perch were second at 22.94% (1055), followed by pumpkinseed at 10.55% (485), largemouth bass 9.92% (456), northern pikeminnow 9.35% (430), black crappie 8.52% (392), brown bullhead 4.02% (185), tench 3.50% (161), cutthroat trout 0.78% (36), northern pike 0.50% (23), sculpin 0.43% (20), kokanee trout 0.33% (15), chinook salmon 0.30% (14), mountain whitefish 0.15% (7), channel catfish 0.09% (4), smallmouth bass 0.04% (2), and rainbow trout 0.02% (1).

In 1997, exotic species made up 60.73% of the electrofishing catch while native species made up the rest. Non-game native species made up 38.33% of the catch while native game fish made up only 0.93% of the catch.

During 1997, 42 hours and 27 minutes were spent electroshocking (Table 3.5). Largescale suckers had the highest CPUE (fish/hr) at 30.93. Yellow perch were next at 24.85, pumpkinseed 11.43, largemouth bass 10.74, northern pikeminnow 10.13, black crappie 9.23, brown bullhead 4.36, tench 3.79, cutthroat trout 0.85, northern pike 0.54, sculpin 0.47, kokanee salmon 0.35, chinook salmon 0.33, mountain whitefish 0.16, channel catfish 0.09, smallmouth bass 0.05, and rainbow trout 0.02.

In 1997, horizontal gillnets were used at all of the sites and a total of 636 fish were sampled (Table 3.6). Thirteen out of the twenty-one species were sampled. The species most frequently sampled was yellow perch at 34.28% (218). Largescale suckers were next at 21.23% (135), followed by northern pikeminnow 18.55% (118), kokanee salmon 10.06% (64), brown bullhead 7.39% (47), black crappie 2.52% (16), cutthroat trout 1.42% (9), tench 1.26% (8), pumpkinseed 0.94% (6), chinook salmon 0.79% (5), channel catfish 0.63% (4), and mountain whitefish 0.16% (1).

In 1997, exotic species made up 58.66% of the gillnet catch while native species made up the rest. Non-game native species made up 39.78% of the catch while native game fish made up 1.58% of the catch.

Horizontal gillnets were set for 677 hours in 1997 (Table 3.7). Yellow perch had the highest CPUE at 0.32 followed by largescale suckers 0.20. Next were northern pikeminnow 0.17, kokanee salmon 0.09, brown bullhead 0.07, black crappie 0.02, cutthroat trout 0.01, tench 0.01, pumpkinseed 0.01, chinook salmon 0.01, northern pike 0.01, channel catfish 0.01 and mountain whitefish 0.001.

Coeur d'Alene Lake was sampled seven times (April-October) during 1998. 7,207 fish were sampled during 1998 (Table 3.4) and fifteen out of the twenty-one species were sampled. The most frequently sampled fish was the largescale sucker 24.6% (1771). Largemouth bass typically not as abundant was the second most frequently taken fish 16.4% (1179). Next were yellow perch 16.0% (1155), black crappie 14.9% (1073), pumpkinseed 9.4% (676), northern pikeminnow 8.1% (585), brown bullhead 4.6% (333), tench 4.1% (297), cutthroat trout 0.6% (40), northern pike 0.5% (36), chinook salmon 0.3% (21), smallmouth bass 0.2% (17), mountain whitefish 0.1% (10), sculpin 0.1% (9), and channel catfish 0.1% (5).

In 1998, exotic species made up 66.5% of the electrofishing catch while native species made up the rest. Non-game native species made up 32.80% of the catch while native game fish made up 0.7% of the catch.

Table 35 Electroshocking catch per unit effort during 1997.

	1997	
Species	n=4599	Hr./min. **42.27**
LSS	1313	30.93
YP	1055	24.85
PSS	485	11.43
LMB	456	10.74
SQW	430	10.13
BC	392	9.23
BBH	185	4.36
TCH	161	3.79
CTT	36	0.85
PIK	23	0.54
SCP	20	0.47
KOK	15	0.35
CHN	14	0.33
MWF	7	0.16
CCF	4	0.09
SMB	2	0.05
RBT	1	0.02
BLT	0	0.00

Table 3.6 Gillnetting relative abundance results from 1997 and 1998 for Coeur d'Alene Lake.

1997		1998	
Species	n=636	Species	n=636
YP	34.28% (218)	YP	52.6% (335)
LSS	21.23% (135)	SQW	20.4% (130)
SQW	18.55% (118)	LSS	09.3% (59)
KOK	10.06% (64)	BBH	05.7% (36)
BBH	07.39% (47)	KOK	03.8% (24)
BC	02.52% (16)	BC	02.4% (15)
CTT	01.42% (9)	PIK	02.4% (15)
TCH	01.26% (8)	CTT	01.4% (9)
PSS	0.94% (6)	CHN	01.3% (8)
CHN	0.79% (5)	TCH	0.5% (3)
PIK	0.79% (5)	RBT	0.2% (1)
CCF	0.63% (4)	LMB	0.2% (1)
MWF	0.16% (1)		

In 1998, 64 hours and 36 minutes were spent electrofishing (Table 3.8). Largescale suckers had the highest CPUE at 27.52 fish/hour. Largemouth bass were second at 18.32 followed by yellow perch 17.95, black crappie 16.67, pumpkinseed 10.50, northern pikeminnow 9.09, brown bullhead 5.17, tench 4.61, cutthroat trout 0.62, northern pike 0.56, chinook salmon 0.33, smallmouth bass 0.26, mountain whitefish 0.16, sculpin 0.14, and channel catfish 0.08.

During 1998, vertical gillnets were used to sample deep open water and horizontal nets were used in shallow lakes and bays. In 1998, 636 fish were sampled using the vertical and horizontal gillnets (Table 3.5). Yellow perch were the most abundant fish species making up more than half of the catch 52.6% (335). Northern pikeminnow were the second most frequently sampled fish at 20.4% (130), followed by largescale suckers 9.3% (59), brown bullhead 5.7% (36), kokanee salmon 3.8% (24), black crappie 2.4% (15), northern pike 2.4% (15), cutthroat trout 1.4% (9), chinook salmon 1.39% (8), tench 0.5% (3), rainbow trout 0.2% (1), and largemouth bass 0.2% (1).

Table 3.7 Gillnetting catch per unit effort during 1997.

	1997	
Species	(n=636)	Hours **677**
YP	218	0.32
LSS	135	0.20
SQW	118	0.17
KOK	64	0.09
BBH	47	0.07
BC	16	0.02
CTT	9	0.01
TCH	8	0.01
PSS	6	0.01
CHN	5	0.01
PIK	5	0.01
CCF	4	0.01
MWF	1	0.00
BLT	0	0.00
LMB	0	0.00
RBT	0	0.00
SCP	0	0.00
SMB	0	0.00

Table 3.8 Electroshocking catch per unit effort during 1998.

	1998	
Species	N=7202	Hr./min. **64.36**
LSS	1771	27.52
LMB	1179	18.32
YP	1155	17.95
BC	1073	16.67
PSS	676	10.50
SQW	585	9.09
BBH	333	5.17
TCH	297	4.61
CTT	40	0.62
PIK	36	0.56
CHN	21	0.33
SMB	17	0.26
MWF	10	0.16
SCP	9	0.14
CCF	5	0.08

In 1998, exotic species made up 69.1% of the gillnet catch while native species made up the rest. Non-game native species made up 29.7% of the catch while native game fish made up 1.4% of the catch.

In 1998, 968 hours were spent having vertical and horizontal gillnets in the water (Table 3.9). Yellow perch had the highest CPUE at 0.346. Northern pikeminnow was second with 0.134, followed by largescale suckers 0.061, brown bullhead 0.037, kokanee salmon 0.025, black crappie 0.015, northern pike 0.015, cutthroat trout 0.009, chinook salmon 0.008, tench 0.003, rainbow trout 0.001, and largemouth bass 0.001.

Age Analysis

Total number of fish scaled in was 1,499 in 1997; and 2,582 in 1998. Graphs showing the age distribution, length and weight frequency distribution and length and weight regression analysis are in Appendix D. In order to perform a regression analysis on aged fish we needed at least four different age classes. Chinook salmon, mountain whitefish, and smallmouth bass were lacking the four-age class requirement, so the data was combined from 1997 and 1998 for these three species. There was no regression analysis done on rainbow trout because only two fish have been sampled. Channel catfish were sampled in 1997 but they were not aged. In 1998, Dr. Scarnecchia, professor at University of Idaho aged the five channel catfish spines.

When comparing the mean length and weight, standard deviation and range for aged fish during the two sample years, the results vary slightly (Appendix E). Roughly the same number of yellow perch were sampled in 1997 and 1998. The statistical results were almost identical for each age group. On the other hand the statistical analysis for kokanee salmon showed an increase in mean length and weight from 1997 to 1998.

Habitat Suitability Index

When comparing the 1997 and 1998 (Table 3.10 & 3.11) habitat suitability indexes, Carey Bay and Conkling Point provided the same cutthroat habitat both years and other sites saw a dramatic decrease in habitat suitability. Rockford Bay and Windy Bay Shallow saw a decrease in the depth range of 7-11 meters. Rockford Bay went from 0.845 SI to 0.0 SI and Windy Bay Shallow from 0.94 SI to 0.0 SI. Hidden Lake and Chatcolet Lake Deep both saw an improvement in their bottom depth zone. Hidden Lake went from 0.0 SI to 0.67 SI and Chatcolet Lake Deep from 0.0 SI to 0.88 SI.

Table 3.9 Gillnetting catch per unit effort during 1998.

	1998	
Species	n=636	Hours **968**
YP	335	0.346
SQW	130	0.134
LSS	59	0.061
BBH	36	0.037
KOK	24	0.025
BC	15	0.015
PIK	15	0.015
CTT	9	0.009
CHN	8	0.008
TCH	3	0.003
RBT	1	0.001
LMB	1	0.001

Except for only a few areas it appears that the upper ten meters of Coeur d'Alene Lake is unsuitable for cutthroat trout (Table 3.10 & 3.11). This is based primarily on summertime daily maximum temperatures exceeding what is considered optimum for cutthroat trout survival. HSI's calculated in 1995 and 1996 for the same sample areas showed similar results (Peters et. al. 1999). In areas where temperatures are within the tolerance limits for cutthroat trout (primarily the hypolimnion) dissolve oxygen content becomes a factor. When temperatures are reaching their maximum dissolved oxygen in the hypolimnion drops below what is considered optimum for cutthroat trout. Thus, cutthroat trout are unable to seek refuge from the high water temperatures in the lower depths of the lake due to suboptimal dissolved oxygen concentrations.

3.2 Stream Studies

3.2.1 Water Quality

Lake Creek
Water temperature measured at the lower Lake Creek station indicated an instantaneous maximum of 25.5° C on July 25th, 1998. The 7-day average maximum temperature at the same station exceeded 16° C from July 4th through September 10th. Daily temperature fluctuations ranged from 6.2° C to 8.6° C during this period, indicating that substantial over-night cooling did take place. Temperatures recorded at the upper Lake Creek station were considerably lower. The 7-day average maximum temperature exceeded 16° C from July 23rd to August 6th, with an instantaneous maximum temperature of 19°C. Gaps in data prior to July 23rd, however, may have missed several days of high temperatures. Measured levels of dissolved oxygen generally did not drop below 9 mg/L at the lower station, where the highest temperatures were recorded.

Benewah Creek
A maximum temperature of 26° C was recorded at the mouth of Benewah Creek on July 25th and 26th, 1998. The 7-day average maximum temperature exceeded 16° C from June 29th through September 6th, and minimum temperature did not fall below 16° C between July 8th and September 2nd. Dissolved oxygen did not fall below 9 mg/l during the period of highest water temperatures at this same site. Discharge at the 3 mile station ranged from 5.2 to 1.1 cfs from July through September.

Tributary habitats generally provided more suitable water temperatures than mainstem reaches however diminished water quality was frequently noted. In S.F. Benewah Creek, maximum instantaneous water temperature was 21°C and 7-day average maximum temperature exceeded 16° C for just 12 days. Measured levels of dissolved oxygen did not drop below 9 mg/l during the period of highest temperatures. Discharge, however, was less than 1.0 cfs from mid July through early November. School House Creek was also a source of cold water and the 7-day average maximum temperature exceeded 16° C for just 13 days. There were periods, however, where habitat consisted of stagnant pools from July through August and dissolved oxygen decreased from 5.8 to 2.3 mg/l during this time. The average daily temperature in Windfall Creek exceeded 16° C from July through mid August. A maximum temperature of 27.5° C was recorded on July 27. There was little flow in Windfall Creek from late July through August and dissolved oxygen dropped below 9 mg/l during this period. In Whitetail Creek, the average daily water temperature exceeded 16°C from mid-July through mid-August and stream flow decreased to zero.

Evans Creek
A maximum instantaneous water temperature of 18.5° C was recorded several times between July 26th and August 5th, 1998. The 7-day average maximum temperature exceeded 16° C for 12 days in late July and early August. Average daily water temperature may have exceeded 16°C in mid July as well, but temperature monitors were not deployed until July 23rd. Measured levels of dissolved oxygen did not drop below 9 mg/l during the period of highest water temperatures. Stream flow ranged from 4.5 to 2.7 cfs from mid-August through early October.

Alder Creek

The maximum instantaneous water temperature was 24° C on July 27th and 28th, 1998. The 7-day average maximum temperature exceeded 16° C from July through mid August. Measured levels of dissolved oxygen did not drop below 9 mg/l during the period of highest water temperatures and base flows ranged from 2.3 to 0.4 cfs during the same period.

Table 3.10 Habitat suitability index for lacustrine Cutthroat Trout based on water quality for 1997.

Location	Depth	HSI[a]		Suitability Index
Rockford Bay	0-7 Meters	$(0.25x1x1)^{1/3}$	=	0.25 SI
	7-11 Meters	$(0.60x1x1)^{1/3}$	=	0.845 SI
	11-Bottom (14)[b]	$(1x1x1)^{1/3}$	=	1.0 SI
Windy Bay Shallow	0-7 Meters	$(0.0x1x1)^{1/3}$	=	0.0 SI
	7-10 Meters	$(0.85x1x1)^{1/3}$	=	0.94 SI
	10-Bottom (15)	$(1x1x1)^{1/3}$	=	1.0 SI
Windy Bay Deep	0-10 Meters	$(0.0x1x1)^{1/3}$	=	0.0 SI
	10-15 Meters	$(0.85x1x1)^{1/3}$	=	0.94 SI
	15-Bottom (33)	$(1x1x1)^{1/3}$	=	1.0 SI
Coeur d'Alene River	0-Bottom	$(0.0x1x1)^{1/3}$	=	0.0 SI
Mid-Lake Coeur d'Alene	0-10 Meters	$(0.0x1x1)^{1/3}$	=	0.0 SI
	10-13 Meters	$(0.85x1x1)^{1/3}$	=	0.94 SI
	13-Bottom (17)	$(1x1x1)^{1/3}$	=	1.0 SI
Carey Bay	0-10 Meters	$(0.0x1x1)^{1/3}$	=	0.0 SI
	10-12 Meters	$(0.85x1x1)^{1/3}$	=	0.94 SI
	12-Bottom (13)	$(1x1x1)^{1/3}$	=	1.0 SI
Conkling Point	0-10 Meters	$(0.0x1x1)^{1/3}$	=	0.0 SI
	10-13 Meters	$(0.85x1x1)^{1/3}$	=	0.94 SI
	13-Bottom (16)	$(1x1x1)^{1/3}$	=	1.0 SI
Hidden Lake	0-5 Meters	$(0.0x1x1)^{1/3}$	=	0.0 SI
	5-7 Meters	$(0.8x1x1)^{1/3}$	=	0.92 SI
	7-Bottom (10)	$(1x0.0x1)^{1/3}$	=	0.0 SI
Round Lake	0-Bottom (1.5)	$(0.0x1x1)^{1/3}$	=	0.0 SI
Chatcolet Lake Deep	0-6 Meters	$(0.0x1x1)^{1/3}$	=	0.0 SI
	6-9 Meters	$(0.85x1x1)^{1/3}$	=	0.94 SI
	9-Bottom (11)	$(1x0.0x1)^{1/3}$	=	0.0 SI
Chatcolet Lake Shallow	0-Bottom (1.5)	$(0.0x1x1)^{1/3}$	=	0.0 SI
Benewah Lake	0-Bottom (4.5)	$(0.0x1x1)^{1/3}$	=	0.0 SI
St. Joe River	0-Bottom (12.5)	$(0.4x1x1)^{1/3}$	=	0.4 SI

[a] Habitat Suitability Index (HSI).
[b] Numbers in parenthesis represent the bottom in meters.

Table 3.11 Habitat suitability index for lacustrine cutthroat trout based on water quality for 1998.

Location	Depth	HSI[a]		Suitability Index
Rockford Bay	0-7 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	7-11 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	11-bottom (14)[b]	$(.7x1x1)^{1/3}$	=	0.89 SI
Windy Bay Shallow	0-7 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	7-10 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	10-bottom (16)	$(.45x1x1)^{1/3}$	=	0.77 SI
Windy Bay Deep	0-10 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	10-15 meters	$(.46x1x1)^{1/3}$	=	0.77 SI
	15-bottom (32)	$(1x1x1)^{1/3}$	=	1.0 SI
Coeur d'Alene River	0-bottom (12)	$(0x1x1)^{1/3}$	=	0.0 SI
Mid-Lake Coeur d'Alene	0-10 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	10-13 meters	$(.95x1x1)^{1/3}$	=	0.98 SI
	13-bottom (19)	$(1x.85x1)^{1/3}$	=	0.95 SI
Carey Bay	0-10 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	10-12 meters	$(.84x1x1)^{1/3}$	=	0.94 SI
	12-bottom (14)	$(1x1x.98)^{1/3}$	=	0.99 SI
Conkling Point	0-10 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	10-13 meters	$(.75x1x1)^{1/3}$	=	0.91 SI
	13-bottom (16)	$(1x.86x1)^{1/3}$	=	0.95 SI
Hidden Lake	0-5 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	5-7 meters	$(.24x.8x1)^{1/3}$	=	0.58 SI
	7-bottom (9)	$(1x.30x1)^{1/3}$	=	0.67 SI
Round Lake	0-bottom (2)	$(0x1x1)^{1/3}$	=	0.0 SI
Chatcolet Lake Deep	0-6 meters	$(0x1x1)^{1/3}$	=	0.0 SI
	6-9 meters	$(.65x.79x1)^{1/3}$	=	0.80 SI
	9-bottom (11)	$(1x.68x1)^{1/3}$	=	0.88 SI
Chatcolet Lake Shallow	0-bottom (1.1)	$(0x1x1)^{1/3}$	=	0.0 SI
Benewah Lake	0-bottom (5)	$(0x0x1)^{1/3}$	=	0.0 SI
St. Joe River	0-bottom (13)	$(0x1x1)^{1/3}$	=	0.0 SI

[a] Habitat Suitability Index (HSI).
[b] Numbers in parenthesis represent the bottom in meters.

3.2.2. Spawning Gravel Survey and Analysis

Cutthroat trout primarily reside and spawn in reaches of small (1-4 meters wide) tributaries with moderate gradients (1.0-4.4%) and suitable spawning gravels (Table 3.12). Substrate embeddedness was high at the sampled sites, averaging about 50 percent. Proportion of potential spawning gravel was low and did not vary much among sites (mean = 4.1±2.1). We found no association between abundance of suitable spawning gravels and reach gradient, proportion of riffle habitat, proportion of pea gravel, or proportion of gravel substrate.

Table 3.12 Means of habitat features in spawning reaches of Alder (A), Benewah (B), Evans (E), and Lake (L) creeks and their major tributaries.

Reach	Gra-dient (%)	Width (ft.)	Depth (ft.)	Embed-dedness [a]	Percent by Area					
					Spawning gravel	Riffle	Silt	Pea gravel	Gravel	Rubble
Alder										
A9	2.3	6.3	1.1	2.4	5.5	30	10	65	25	0
North Fork	2.3	11.6	1.5	2.6	2.8	9	10	51	33	6
Benewah										
B12	1.0	16.0	2.4	3.4	1.5	14	8	45	40	7
Bull	3.0	6.3	1.4	3.0	1.1	42	4	58	38	0
School House	1.6	5.9	1.5	4.0	5.7	14	7	64	28	1
South Fork	3.9	7.3	1.0	3.2	3.3	27	5	34	31	13
West Fork	4.4	5.0	0.9	2.6	6.9	20	9	61	27	2
Whitetail	4.2	6.3	1.0	2.2	8.9	31	7	34	49	10
Windfall	1.6	6.6	1.1	2.4	5.1	10	5	41	38	16
Evans										
R5	6.0	10.0	1.5	1.0	1.3	0	7	41	27	15
R6	7.5	3.5	0.9	1.5	2.4	0	10	46	33	8
R7	7.5	4.0	0.9	3.0	3.5	0	7	47	35	7
East Fork	4.0	4.5	1.5	1.0	3.9	0	6	46	48	0
South Fork	9.5	3.0	0.9	3.0	4.1	0	3	26	53	15
Lake										
L8	1.2	5.5	1.6	3.8	3.5	32	6	66	28	0
Bozard	2.4	5.7	1.4	3.3	4.9	40	5	36	48	11
West Fork	3.9	5.1	0.8	2.9	5.0	44	7	43	46	4

[a] Rated on a scale from1 to 4 for percent of substrate embedded: 1 = >75%; 2 = 50 – 75%; 3 = 25 – 50%; 4 = 0 – 25% (Platts et al. 1983).

Predicted emergence success was generally high, averaging 41.8 percent for all sampled sites (Table 3.13). Emergence success was positively correlated to the F_i at each site (r^2= 0.79). The lowest values were observed in upper Lake Creek, where silt and sand sized particles comprised 63 and 89 percent of the core samples, respectively at the two sampled sites. Fry production was also positively correlated to the availability of spawning gravel in the sampled reaches (r^2 = 0.77), except at the same two sites in upper Lake Creek where available gravels were heavily embedded with fines. The production potentials for sampled sites ranged from 0 to 5224 fry/100 square meters (mean=1544.1±867.8). The highest calculated values occurred in several tributaries to Benewah Creek.

3.2.3 Population Surveys

General patterns of cutthroat trout abundance and distribution vary among the target watersheds but are consistent from year to year and seem to be highly correlated to seasonal changes in water quality and quantity. As reported in past years (Peters et al. 1999; Lillengreen et al. 1996), cutthroat trout were sporadically distributed in the Lake, Benewah, and Alder Creek watersheds during base flow condition in the summer (Tables 3.14). Abundance in the second order tributaries was consistently much higher than in adjacent mainstem reaches for both Lake Creek (mean = 19.4 fish/100 sq. m. versus 1.2 fish/100 sq. m.) and Benewah Creek (mean = 14.5 fish/100 sq. m. versus 0.5 fish/100 sq. m.), despite the effects of low flow conditions. During base flow conditions, for example, cutthroat trout were observed crowding

(>15 fish/sq. m.) into small, isolated pools located in cool tributaries, rather than face conditions of high water temperatures in mainstem reaches. In contrast, favorable temperature and flow conditions in the Evans Creek watershed resulted in a more even distribution of cutthroat trout (mean = 2.7 fish/100 sq. m., range = 1.0-4.8) in the lower mainstem reaches. The highest recorded abundance still occurred in the upper mainstem and primary tributaries where the majority of spawning activity is thought to take place. Of all the target watersheds, abundance has been consistently lowest in Alder Creek, with much of the upper watershed and the North Fork devoid of cutthroat.

Brook trout have been found only in the Alder Creek and Benewah Creek watersheds--their respective dates of introduction are unknown. In Alder Creek, brook trout are found in greater numbers than cutthroat trout in all but the lowermost stream reaches (Table 3.15). Fish were distributed fairly evenly (mean = 3.6 fish/100 sq. m.) in 11 of 13 sampled stream reaches. The remaining two reaches are influenced by vast beaver dam complexes and supported significantly higher populations (17.0 and 18.8 fish/100 sq. m., respectively). Distribution in the Benewah Creek watershed was limited to the upper mainstem and Windfall Creek. Abundance of brook trout ranged from 0.4-17.7 fish/100 square meters, and was much lower than for cutthroat trout in all sampled reaches.

Analysis of the age frequency of cutthroat trout caught during population surveys indicated that 88% of the catch consisted of juveniles (age 0-3) when averaged across all watersheds (Table 3.16). Young of the year cutthroat comprised an unusually high percentage of the catch (50.2%) in the Lake Creek watershed.

Table 3.13 Number of cores, mean fredle index (F_i) of substrate composition of cores (range in parentheses), predicted mean emergence success, and mean estimated production potential for reaches in the Alder Creek, Benewah Creek, Evans Creek, and Lake Creek subbasins and their primary tributaries.

Reach or subbasin	Number of cores	F_i	Emergence success	Production potential (# of fry/ 100 square meters)
Alder	**5**	**7.8 (6.0-11.2)**	**47.9**	**1459**
A9	1	6.0	45.4	2271
North Fork	4	8.2 (7.0-11.2)	48.5	1256
Benewah	**9**	**7.1 (2.4-16.6)**	**42.4**	**1857**
B12	1	3.7	43.4	596
Bull	1	16.6	67.1	654
School House	1	5.3	40.8	2108
South Fork	2	2.8 (2.4-3.1)	27.7	814
West Fork	2	5.9 (4.7-7.1)	37.8	2859
Whitetail	1	7.6	39.7	3230
Windfall	1	13.8	59.7	2777
Evans	**8**	**8.8 (2.7-13.7)**	**49.3**	**1425**
R5	1	7.1	45.6	560
R6	2	11.1 (8.5-13.7)	58.4	1265
R7	2	10.4 (10.0-10.7)	54.1	1827
East Fork	1	2.7	15.8	558
South Fork	2	8.8 (6.6-11.0)	54.3	2051
Lake	**7**	**4.5 (0.8-7.1)**	**28.1**	**1338**
L8	2	0.9 (0.8-0.9)	0	0
Bozard	3	5.4 (4.1-6.7)	40.8	1991
West Fork	2	6.4 (5.9-7.1)	37.2	1698
Totals	**29**	**7.1**	**41.8**	**1544**

Age and Growth

A total of 614 cutthroat and brook trout scales were examined for age and growth determination in 1998. Growth and potential maximum size of cutthroat trout varied from stock to stock (Table 3.17). As in past years, the adfluvial stocks found in Benewah Creek and Lake Creek exhibit the maximum growth potential for this species. The largest cutthroat recorded in Lake Creek for 1998 measured 16.3 inches (415 mm TL) and 1.5 pounds (667 grams), while the largest fish in Benewah Creek measured 15.2 inches (385 mm TL) and 1.3 pounds (570 grams). Maximum growth for resident fish stocks ranged from 222 to 280mm total length and 102 to 180 grams. A complete tabular analysis of growth for cutthroat trout is provided in (Appendix F).

Table 3.14 Cutthroat trout abundance and distribution by watershed, 1998.

Lake Creek Cutthroat Trout		Summer 98			
Tributary	Reach	Area (sq. m)	N±(SE)	#/100 sq. m	Total #
Mainstem	1	5396	0.0	0.0	0
	4	2696	0.0	0.0	0
	5	2555	0.0	0.0	0
	6	11668	28(2.6)	4.9	572
	7	13284	7(0.0)	1.1	146
	8	9715	26(0.5)	6.1	593
West Fork	9,10	6270	125(1.7)	42.0	2633
Bozard	1,2,3	11085	28(2.5)	10.0	1109
Total		62669	214(4.0)		5053

Evans Creek Cutthroat Trout		Summer 98			
Tributary	Reach	Area (sq. m)	N±(SE)	#/100 sq. m	Total #
Mainstem	1	4977	4(0.0)	1.0	50
	2	7227	21(2.2)	2.2	159
	3	1970	8(0.0)	2.7	53
	4	10127	20(1.6)	2.8	284
	5	2692	16(2.2)	4.8	129
	6	1178	12(0.8)	9.2	108
	7	2231	12(0.6)	8.1	181
E.F.Evans	1	3990	23(3.6)	12.4	495
R.F.Evans	1	2099	6(0.8)	8.1	170
S.F.Evans	1,2	1126	14(3.0)	12.6	142
Total		37616	136(3.0)		1771

Benewah Creek Cutthroat Trout		Summer 98			
Tributary	Reach	Area (sq. m)	N±(SE)	#/100 sq. m	Total #
Mainstem	1	7422	0	0.0	0
	2	9419	1(0.0)	0.1	9
	3	5588	10(0.0)	1.3	73
	4	16104	0	0.0	0
	5	2318	0	0.0	0
	8	5656	10(2.9)	1.1	62
	9	5648	6(0.0)	1.1	62
	10	25981	3(0.0)	0.3	78
	11	1399	1(0.0)	0.3	4
South East Fork	13	6915	69(3.2)	17.7	1224
West Fork	14	3205	44(2.7)	33.8	1083
Bull	1	3685	14(2.2)	18.8	693
Coon	1,2	2149	0	0.0	0
School House	1	2741	2(0.0)	0.9	25
Whitetail	1,2	5204	10 (0.8)	6.7	349
Windfall	2	5531	35(4.5)	23.5	1300
Total		108966	205(7.2)		4962

Alder Creek Cutthroat Trout		Summer 98			
Tributary	Reach	Area (sq. m)	N±(SE)	#/100 sq. m	Total #
Mainstem	1	7052	0	0.0	0
	2	1825	0	0.0	0
	3	9446	2(0.0)	3.6	340
	4	4158	6(0.0)	2.2	91
	5	5064	2(0.0)	0.4	20
	6	1823	2(0.0)	0.7	13
	7	16860	13(1.0)	1.4	236
	8	4916	5(0.0)	1.4	69
	9	12635	0	0.0	0
N.Fork Alder	1	4475	0	0.0	0
	2	1403	0	0.0	0
	3	2058	0	0.0	0
	4	2503	0	0.0	0
Total		74216	30 (1.0)		769

Table 3.15 Brook trout abundance and distribution by watershed, 1998.

Benewah Creek Brook Trout		Summer 98			
Tributary	Reach	Area (sq. m)	N±(SE)	#/100 sq. m	Total #
Mainstem	1	7422	0	0.0	0
	2	9419	0	0.0	0
	3	5588	0	0.0	0
	4	16104	0	0.0	0
	5	2318	0	0.0	0
	8	5656	0	0.0	0
	9	5648	0	0.0	0
	10	25981	4(3.5)	0.4	104
	11	1399	4(0.0)	1.2	17
South East Fork	13	6915	11(1.4)	2.8	194
West Fork	14	3205	23(2.2)	17.7	567
Bull	1	3685	0	0.0	0
Coon	1,2	2149	0	0.0	0
School House	1	2741	0	0.0	0
Whitetail	1,2	5204	0	0.0	0
Windfall	2	5531	2(0.0)	1.3	72
Total		108966	44(4.3)		954

Alder Creek Brook Trout		Summer 98			
Tributary	Reach	Area (sq. m)	N±(SE)	#/100 sq. m	Total #
Mainstem	1	7052	0	0.0	0
	2	1825	0	0.0	0
	3	9446	2(0.0)	3.6	340
	4	4158	4(3.5)	2.2	91
	5	5064	16(0.6)	3.2	162
	6	1823	9(13.4)	3.2	58
	7	16860	64(12.8)	7.0	1180
	8	4916	60(5.3)	17.0	836
	9	12635	26(3.0)	7.4	935
N.F. Alder	1	4475	30(2.9)	8.5	380
	2	1403	16(3.0)	1.9	27
	3	2058	14(0.6)	3.1	64
	4	2503	14(2.2)	18.8	471
Total		74216	255(20.4)		4544

Table 3.16 Age frequency distribution of cutthroat trout in electrofishing samples by watershed, 1998.

Count by Age Class	Age Class						
	Cutthroat Trout						
Watershed	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Alder	2	1	17	7	5		
Benewah	8	35	91	16	5	3	
Evans	5	28	45	31	16	3	
Lake	88	18	22	22	15	7	3

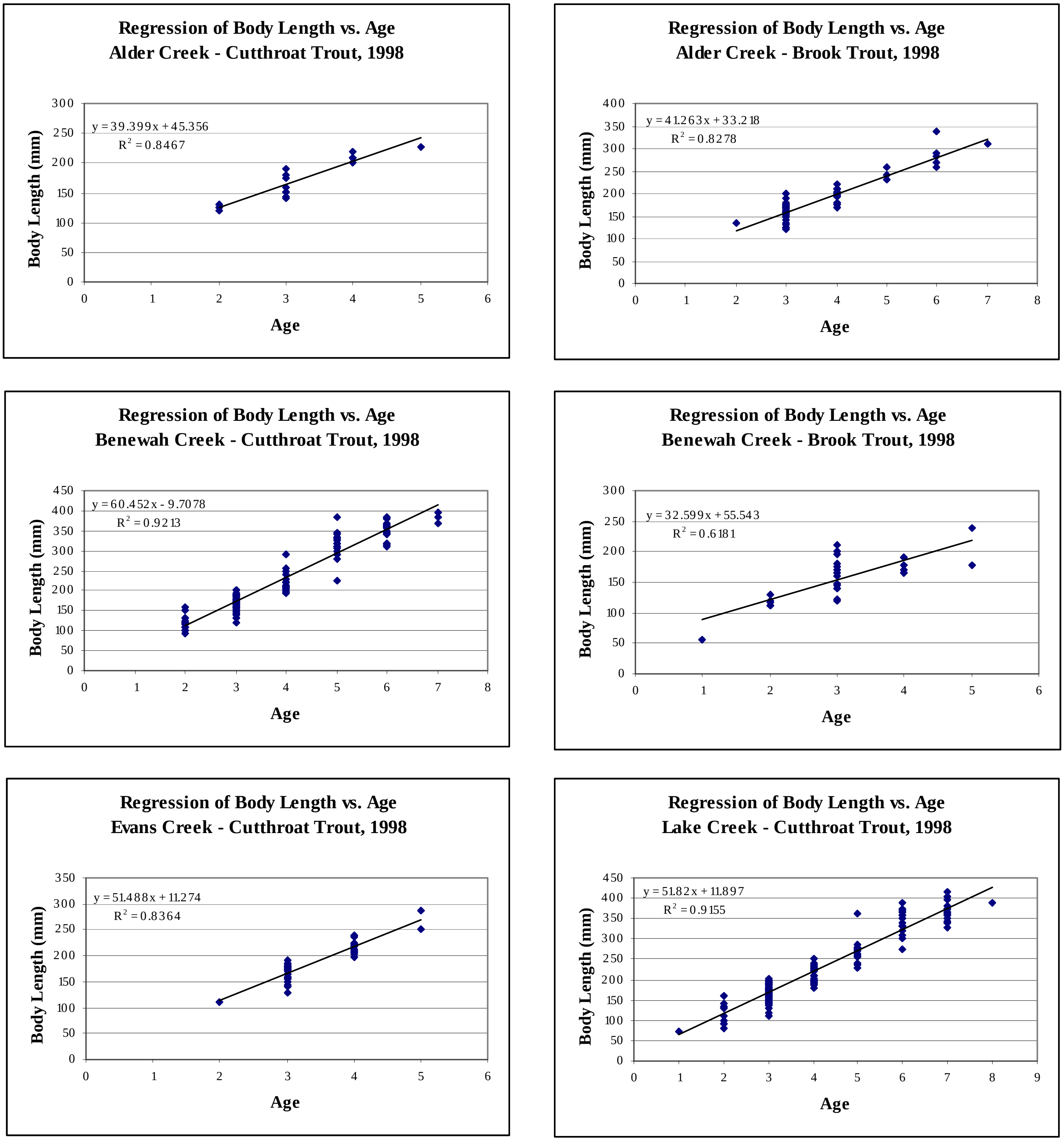


Figure 3.10 Regression equations of body length versus age for cutthroat and brook trout in four target watersheds, 1998.

Trout Migration

A total of 1277 cutthroat trout were caught in the lower Lake Creek trap in 1998 at a rate of 13.6 fish/day (Figure 3.10). Adult fish (age IV or older) accounted for 11.5% of the catch. Trapping success in Benewah Creek was considerably lower than in Lake Creek. A total of 535 cutthroat trout were caught in 1998 at a rate of 5.9 fish/day. Adult fish (age IV or older) accounted for 24.1% of the catch. Trapping efficiency for smolts was estimated to be high (>75%) at both trap locations, with the exception of a five day period at the end of May when the traps were covered with water and fish would have been able to swim around the weirs.

Upstream migration of adult fish into Benewah Creek and Lake Creek was documented for the period March 11 through April 24, 1998. Average daily water temperature during the documented period of upstream migration ranged from 3.1°C to 11.4°C (mean = 5.5°C) and 3.1°C to 9.9°C (mean = 5.1°C) in Benewah and Lake creeks, respectively. Residence time for adults in Benewah Creek ranged from 22 to 34 days (mean = 27 days), while residence time in Lake Creek averaged 44 days.

Outmigrant behavior, was observed predominantly in age II and III fish (Figures 3.11 and 3.12). These fish ranged in size from 9 to 54 grams and 120 to 162 mm long. More than 70 percent of these fish were greater than 18 grams and 125mm long. Migration by smaller fish was observed, however, mortality both from predation and physical damage likely increased with decreasing size and weight. Migration by smolts to Coeur d'Alene Lake began in mid-April, as water temperatures stabilized around 9°C, and was completed by early June. Peak migrations coincided with average daily water temperatures ranging from 9°C to 11°C and were often correlated with small spikes in the hydrograph.

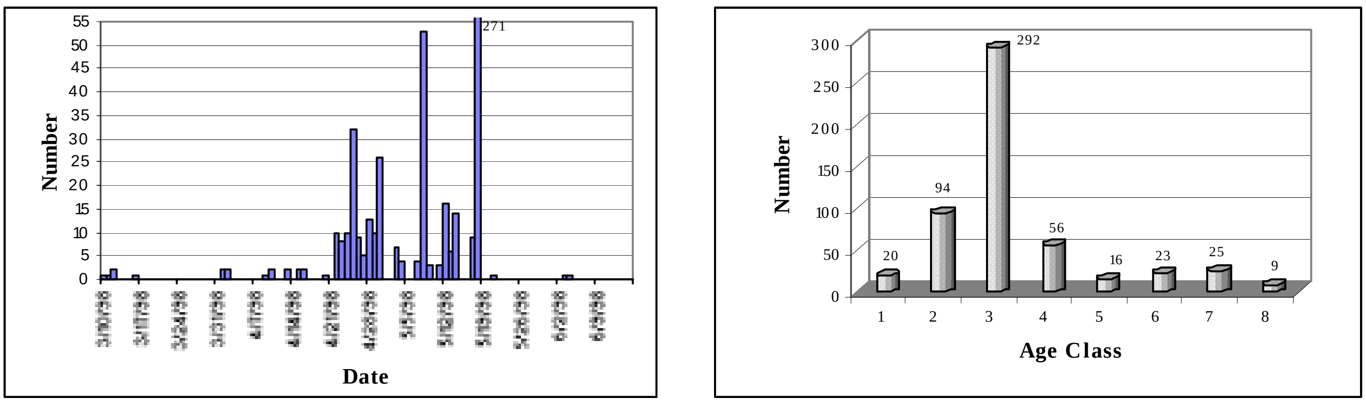


Figure 3.11 Analysis of cutthroat trout migration showing run timing and age frequency of migrants in Benewah Creek, 1998.

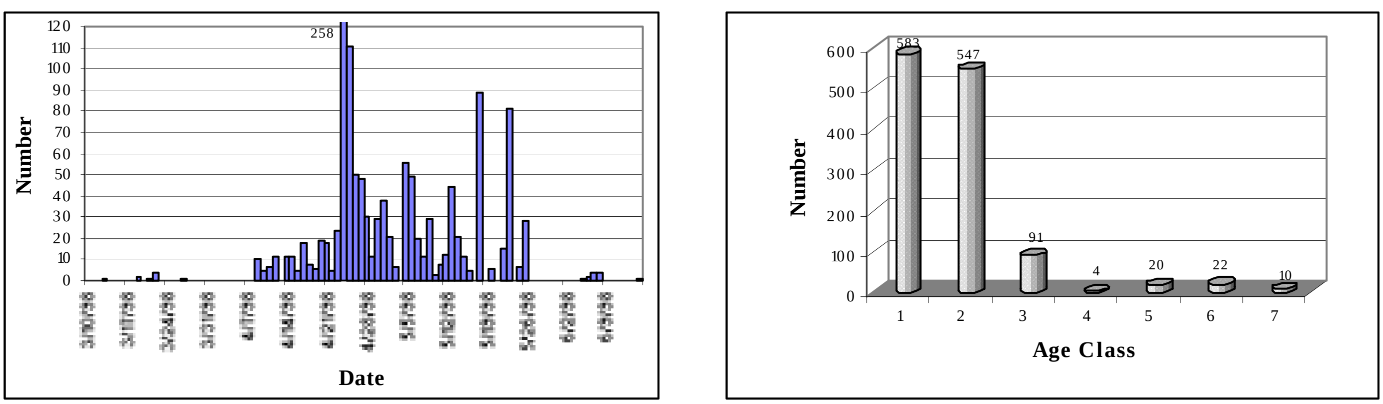


Figure 3.12 Analysis of cutthroat trut migration showing run timing and age frequency of migrants in Lake Creek, 1998.

4.0 Discussion

4.1 Lake Studies

Water Quality

Results from water quality sampling in 1998 did not differ much from results obtained in 1997. The main difference was in the number of sites with dissolved oxygen values below 6.0 mg/L. There were eight sites with values below 6.0 mg/L in 1998 and only four in 1997. A reason for the increase in the number of sites with dissolved oxygen readings below the optimum required for cutthroat trout survival was indirectly related to the weather. In 1998, from July to September there were 32 days with temperatures above 32.2^{o} C (90^{o} F), compared to only 10 days in 1997 (Personal communication with the National Weather Service). The more days with temperatures above 32.2^{o} C (90^{o} F) the warmer the water temperature will be. Upon comparing the water temperatures recorded in 1998 with the results from 1997 there was a noticeable difference. The thermoclines in both years seem to start around the end of May but it's the duration and depth at which the thermoclines occurred that was different. The thermoclines were much stronger and had a longer duration in 1998 compared to 1997. The surface temperatures also reached their peak at the end of July in 1998 compared to mid August in 1997. Due to the warmer air and water temperatures, and increased light penetration aquatic macrophyte growth most likely increased. Even though no direct measurements were taken. This in turn, led to more dead and decomposing material that sank and accumulated in the hypolimnion. Respiration and decomposition can easily deplete dissolved oxygen in the hypolimnion. Woods and Beckwith (1996) reported seeing low dissolved oxygen values in Coeur d'Alene Lake during the summer months of 1991 and 1992.

The low dissolved oxygen values that are seen in the hypolimnion is cause for concern when related to available fisheries habitat. The low dissolved oxygen values recorded in 1998 are not considered completely limiting for cutthroat trout suitability. The low dissolved oxygen values recorded, however, are thought to have indirect affects on cutthroat trout suitability in the southern lakes area (Peters et al. 1999). Peters et al. (1999) examined the habitat suitability and determined the lower 10 m in most areas is unsuitable habitat for cutthroat trout due to low dissolved oxygen values. This is not to say that cutthroat trout will not be found in these areas, but they most likely will have a hard time sustaining themselves for long periods of time.

Another more serious problem associated with decreases in dissolved oxygen values is the high concentration of metals that are bound up in the sediment north of the Coeur d'Alene River. Sediments to the south of the Coeur d'Alene River are relatively unaffected by heavy metal deposition from the Coeur d'Alene River. The deposition of trace elements in the sediments of Coeur d'Alene Lake is well documented by (Funk 1973; Rieman 1980; Woods 1989; Woods and Beckwith 1996). Lakebed geochemistry analyses revealed that most of the trace elements in surficial and subsurface sediments are associated with a ferric oxide phase and, thus, under reducing (anoxic) conditions, the trace elements would be readily solubilized and available for release to the overlying water column (Woods and Beckwith, 1996). The fact that trace metals are found in the sediments at the mouth of the river and north causes us to be concerned when sites like Windy Bay Deep and Mid-Lake Coeur d'Alene have dissolved oxygen values below 6.0 mg/L.

One hypothesis for the low dissolved oxygen values recorded is the presence of zinc in the water, which strongly inhibits phytoplankton growth. As phytoplankton drifts northward towards the mouth of the Coeur d'Alene River, it is thought to produce a sestonic "rain" of dead and dying phytoplankton that settles into the hypolimnion of the lake's northern basin and produces the hypolimnetic dissolved-oxygen deficit when the lake is thermally stratified (Woods and Beckwith, 1996). Monitoring dissolved oxygen levels in the hypolimnion is and will continue to be a high priority so that heavy metal contamination of the over lying water column will not occur.

Sediment transport to the lake from the tributaries continues to be a problem. The build up of these sediments at the mouths of all incoming tributaries to Coeur d'Alene Lake results in the loss of existing wetlands and provides prime habitat for predators of cutthroat trout. The increase in sediment also gives aquatic macrophytes more room to establish themselves along with providing more suitable forage habitat for non-native species. Sediment accumulation near the mouth of Plummer Creek, in Chatcolet Lake, has occurred at an average rate of 2.4 cm per year since the Mt. St. Helen's eruption of May 18, 1980 (Breithaupt, 1990). To examine the amount of sediment that has entered the Coeur d'Alene system aerial photos from 1933 and 1995 were compared. It was noted that the size of the deltas on four main tributaries that feed into Coeur d'Alene Lake are all increasing in size. Another interesting point to be made relates to the change in vegetation over the years. In 1933, the tributaries at their mouths had well defined channels that were lined with cottonwoods. Now the mouths of the tributaries and bays are largely overrun with submerged and emergent aquatic macrophytes.

Fisheries

In 1998, we hypothesized that there could be a significant difference in relative abundance results if we increased the sampling effort. Twenty-two more hours were spent electroshocking and two hundred and ninety-one more hours were spent gillnetting in 1998 than in 1997. We sampled approximately 7,800 fish in 1998 and 5,200 in 1997. The 1998 data reiterated the findings from 1994-1996 (Peters et. al. 1999) and 1997. Thus, we saw no significant difference in relative abundance by increasing our sampling effort. Species composition remained the same even though more fish were sampled.

Four out of the top six sampled species are non-native species. Northern pikeminnow and largescale suckers are the only native fish sampled in the top six. Northern pikeminnow make up 8-9% of the electroshocking catch and 18-20% of the gillnet catch. Largescale suckers make up 24-28% of the electroshocking catch and 9-21% of the gillnet catch. Cutthroat trout and mountain whitefish make up less than 1% of the catch when electroshocking and about 1.4% of the gillnet catch. When Post Falls Dam went on line in 1903 it inundated over 10 square kilometers of shoreline. This created prime habitat for exotic and non-salmonid native fish species.

Since 1994 the Coeur d'Alene Tribe Fish, Water and Wildlife program has conducted an extensive mark-recapture study (Peters et al. 1999). To date 636 fish have been tagged, there have been 23 recaptures between the Fish, Water and Wildlife program and anglers and anglers have harvested 15 fish. Eleven out of the 21 species have been tagged. The mark-recapture study relies heavily on the effectiveness of our sample gear and on angler's participation. We realize these results are biased because not all anglers report their catch, tags can be removed by anglers and they can fall out. During the 1997 and 1998 field season all game fish that were 300 mm and 300 g received a floy tag. Through the mark-recapture study we are finding that northern pike have a tendency to migrate from the original sampling site and largemouth bass are very territorial rarely moving from the site where they were tagged. It appears that both northern pike and largemouth tend to occupy shoreline habitat areas.

In general, northern pike are fairly sedentary, establishing a vague territory where cover and food are adequate (Scott and Crossman, 1973). Normally, this would be true because northern pike found on the northern end of Coeur d'Alene Lake tend not to migrate (Personal communication with Ned Horner IDF&G). However, northern pike in the southern 1/3 of Coeur d'Alene Lake appear to migrate over larger distances than would be normally expected. For example, a northern pike was sampled in September of 1997 in Chatcolet Lake and was harvested in March of 1998 in waters off of Harlow Point. This fish traveled approximately eight miles up the lake. Another northern pike was sampled in October of 1998 in O'Gara Bay and was harvested in March of 1999 in Chatcolet Lake; this fish migrated approximately 2-3 miles in a southerly direction. The reason we might be seeing this movement is due to the size of the littoral zone in the southern 1/3 of Coeur d'Alene Lake relative to the rest of the lake. When Post Falls Dam was built it raised Coeur d'Alene Lake by 3.6 m. This affected the southern 1/3 of

Coeur d'Alene Lake by turning small isolated lakes into a continuous body of water with Coeur d'Alene Lake. Because the inundated area has an average depth of 3.6 m or less, this led to the growth of aquatic macrophytes and suitable habitat for introduced non-native species. Due to the shallowness and the warm water temperatures in the southern 1/3 and near by bays of Coeur d'Alene Lake, northern pike tend not to restrict themselves to a specific forage area.

Scott and Crossman (1973) state that largemouth bass movement is not extensive usually less than five miles and summer territories are small. The majority of the largemouth bass in the southern 1/3 of Coeur d'Alene Lake appear to migrate less than one mile. A largemouth bass was originally sampled using electroshocking equipment in October of 1994 in Shingle Bay. The Fish, Water and Wildlife program sampled the same largemouth bass again in August of 1996 and June of 1998 in Shingle Bay. An example where anglers have played an important role in our mark-recapture study is with a largemouth that was sampled by the Fish, Water and Wildlife program in August of 1996 in O'Gara Bay. The same bass was caught and released in September of 1996 by an angler and was recently harvested in June of 1999 in O'Gara Bay by another angler.

Out of the 21 species inhabiting Coeur d'Alene Lake seven species have been shown to actively feed on cutthroat trout. They are chinook salmon, northern pike, northern pikeminnow, largemouth and smallmouth bass, bull trout and channel catfish. Of the non-native predators smallmouth bass are the newest addition. Smallmouth were illegally introduced into the northern part of Coeur d'Alene Lake. Peters et al. (1999) showed that during 1994- 1996 smallmouth bass were not sampled by electroshocking or gillnetting methods. In 1997 two smallmouth bass were sampled in waters off of Harlow Point. Current data is showing a gradual increase in smallmouth bass numbers in the littoral zone from Windy Bay south to O'Gara Bay where seventeen smallmouth were sampled during the 1998 field season. Most likely these fish will be found throughout the Coeur d'Alene system in a few years.

Smallmouth bass actively feed on crayfish and small fish from the age of two and older (Simpson and Wallace 1982). This could prove detrimental to cutthroat trout since they will occupy some of the same habitat as the smallmouth bass upon entry into the lake. The introduction of smallmouth bass may also have an effect on the existing largemouth bass population to what extent we do not know. This will be monitored in the future. Scott and Crossman (1973) state that the habitats of the smallmouth and largemouth bass seldom overlap even though the two species often occur in the same lake. Smallmouth prefer colder water than largemouth and they prefer rocky and sandy areas to the largemouth's vegetation habitat. Prior to the introduction of smallmouth into Coeur d'Alene Lake largemouth bass occupied some of the habitat currently occupied by smallmouth bass. This expansion of the smallmouth bass population could reduce the abundance of largemouth bass in certain parts of its former range within Coeur d'Alene Lake. The program will continue to monitor this in the future.

Kokanee salmon are not considered a predator on cutthroat trout but they may compete with the cutthroat for habitat and, on occasion, food. Kokanee in Coeur d'Alene Lake inhabit the middle to bottom layers of the limnetic zone, with the majority being sampled in the middle of the water column. Kokanee usually inhabit the upper and middle layers of the open lake (Scott and Crossman, 1973). According to our data cutthroat trout inhabit the bottom and middle layers of Coeur d'Alene Lake, thus it appears that these two species habitats over lap. Kokanee are mainly a pelagic, plankton feeder but it may derive a significant portion of its food from bottom organisms (Scott and Crossman, 1973). Cutthroat trout tend to be opportunistic in their food habits and are not highly piscivorous; instead they tend to specialize as invertebrate feeders (Roscoe 1974; Behnke 1979) thus, it is unlikely that they compete for food. However, Marnell (1988) determined that declines in westslope cutthroat trout populations in lakes in Glacier National Park where kokanee were introduced were caused by competition for planktivorous food. Unlike Marnell who showed that cutthroat trout numbers declined in the presents of kokanee salmon, in Coeur d'Alene Lake cutthroat trout and kokanee salmon are co-existing. The productivity of the low elevation lakes compared to the non-productive high mountain lakes is a possible reason for co-existence. The low elevation lakes provide greater abundance and more diverse food than the high mountain lakes.

The majority of cutthroat trout are sampled at night as they come inshore to feed. A possible reason for sampling more cutthroat trout at night is that the water temperature cools enough to allow them to come to the surface to forage for food. The age structure of the cutthroat trout we sample in the littoral zone range from 2-6 and the age structure of the cutthroat trout in the limnetic zone are 3-5. Our age data is slightly biased towards older fish. Age 0 & 1 fish from all species is lacking representation in our sampling efforts. Juvenile cutthroat trout rear in local tributaries for two years so it is not surprising that they are, absent from our lucustrine sampling efforts. In order to examine this hypothesis we are initiating a beach seine sampling project around the lake in order to try and capture fish not susceptible to our electrofishing or gillnet capture methods.

4.2 Stream Studies

Spawning Habitat

Other studies have documented low-order tributaries as important spawning habitat for cutthroat trout (Rieman and Apperson 1989, Magee et al. 1996). Previous work on the Coeur d'Alene Reservation suggests that this holds true for our target tributaries as well (Peters et al 1999). In a 1997 study, adfluvial cutthroat trout were fitted with radio tags and tracked to spawning areas located in 2^{nd} order tributaries within the Benewah Creek watershed. Spawning activity has been observed in the West Fork, a 2^{nd} order tributary of Benewah Creek, for the past 4 years. Additionally, young of the year cutthroat are most often found in association with 2^{nd} order tributaries in all target watersheds. The close associations between redd distribution and density of juvenile and sub-adult cutthroat trout has been reported by other investigators (Beard and Carline 1991). Therefore, we feel that the effort to map the abundance and distribution of gravels within 2^{nd} order tributaries should provide a good index of spawning potential for the respective watersheds.

The mapped distribution of potentially suitable spawning substrate within the spawning reaches of four target tributaries on the Coeur d'Alene Reservation was patchy and did not vary considerably within reaches or between watersheds (Figure 3.12). Furthermore, the quantity of spawning gravel was low, averaging just 4.1% of measured stream area. These results lie in contrast with those of Magee (1996), who reported a wide variance in proportion of spawning gravel for a Montana stream basin, even among nearby reaches, and documented much higher proportions of suitable spawning substrate (up to 25%). The lack of a strong association between spawning gravel abundance and several reach characteristics (gradient, proportion of gravel and pea gravel) in this study, however, corroborates the findings of Magee (1996), who suggested that local hydrologic features influenced spawning gravel availability. Although the distribution of spawning substrate was patchy within the target watersheds, there is probably adequate habitat to support resident and adfluvial spawners because of currently depressed numbers.

Abundance of potential spawning gravels has been reported as a key factor influencing redd density for westslope cutthroat trout at the reach scale (Magee et al. 1996). Similar relations between redd density and availability of spawning gravel was noted by Cope (1957) for Yellowstone cutthroat trout and by Beard and Carline (1991) for brown trout. Other important factors in determining redd density probably include temperature and fish density. Current population estimates for the target tributaries indicate wide variation in the abundance of juvenile fish (Figure 3.14), even though water temperatures and availability of spawning gravels are similar. Although redd densities were not estimated as part of this study, it is thought that fish density overrides other variables in determining redd density across the entire basin. Given the observed abundance and distribution of suitable spawning gravels in the target watersheds, redd superimposition could occur at relatively low population densities. This could have profound implications on projections for juvenile recruitment if the number of spawning adults increases over time, either as a result of improved juvenile to adult survival or initiation of a supplementation program. In any case, it would be prudent to monitor spawning activity to look for evidence of superimposition.

Is fine sediment limiting recruitment?

Spawning gravels in target tributaries of the Reservation contained proportions of fine sediments comparable to those in egg pockets of salmonid redds in the Rocky Mountain region (Table 4.1). Sites in the upper reaches of Alder, Benewah and Evans Creeks contained low proportions of fines that were reflective of stable habitats and low impact landuses. The erosive geology of the Lake Creek watershed, on the other hand, results in substrate conditions similar to those reported by Magee et al. (1996) in Montana. The proportion of small fines (<0.85 mm) averaged two to 20 times higher than in spawning gravels elsewhere on the Reservation.

Table 4.1 Mean proportion of fines smaller than 6.35 mm and 0.85 mm and the mean fredle index (F_i) of egg pockets in salmonid redds from the Rocky Mountain region, USA.

Target species	Location	Time of sampling	Percent fines Smaller than: 6.35 mm	0.85 mm	F_i	N	Reference
Cutthroat	Alder Creek	Post emergence	13.6	1.0	7.8	5	This study*
Cutthroat	Benewah Creek	Post emergence	18.9	3.7	7.1	9	This study*
Cutthroat	Evans Creek	Post emergence	13.5	0.5	8.8	8	This study*
Cutthroat	Lake Creek	Post emergence	39.0	10.1	4.5	7	This study*
Cutthroat	Idaho	Near emergence	24.4	6.5	7.6	13	R. Thurow and J. King unpublished data
Cutthroat	Montana	Near emergence	41.6	17.9	2.0	11	Magee et al. (1996)
Cutthroat	Montana	Near emergence	27.4	5.9		13	Weaver and Fraley (1993)
Steelhead	Idaho	Near emergence	15.4	3.7	10.5	9	R. Thurow and J. King unpublished data
Brook	Wyoming	Near spawning	12.1	6.4		31	Young et al. (1989)
Brook	Wyoming	Near spawning	15.0	3.0		69	Grost et al. (1991)

*Means calculated from suitable spawning gravels rather than egg pockets for this study.

Several factors may account for reported differences in gravel characteristics, including sampling method, geology, and sediment transport. Other investigators have sampled egg pockets, noting significantly lower concentrations of fines in the upper strata when compared with nearby gravels (Chapman 1988, Young et al. 1989). Because we were unable to identify actual redds to sample, our results are most likely representative of unaltered spawning substrate or unstratified redd samples, as described by Young et al. (1989). The timing of sampling effort also may have resulted in some particle size differences. We sampled spawning gravels as late as four weeks after emergence, whereas some authors sampled egg pockets near spawning or at the time of emergence. Streams on the Reservation, however, carry little sediment during the incubation period for embryos because flows (and hence sediment transport) rapidly decline during spring and early summer.

At 23 of 29 sample sites, low levels of fine sediment led to high predictions of overall embryo survival (mean = 41.8%). The estimates of fry production potential for all sample sites ranged widely (0 to 5224 fry/100 square meters) due, primarily, to the quantity of suitable gravels present (Table 3.13). Our estimates of emergence success were made by using proportions of fine sediment less than 6.35 mm in diameter, based on the experiments of Weaver and Fraley (1993) with artificial egg pockets planted in stream substrate. Actual emergence success may be lower in tributaries of Lake Creek and portions of South East Benewah Creek, where high proportions of small fines (<0.85 mm) were measured. Small fines are more detrimental to survival of incubating eggs and intrude deeper into spawning gravels than coarser fines (Reiser and White 1988, Beschta and Jackson 1979). Only in the mainstem of Lake Creek were the proportions of both small and coarse fines considered above the levels for these particle sizes (10% and 30%, respectively) shown to adversely affect salmonid emergence success (McNeil and Ahnell 1964, Shepard et al. 1984a, Cederhom and Reid 1987, Reiser and White 1988).

Previous studies have demonstrated that reduced emergence success from high sedimentation can result in low juvenile densities and low adult recruitment (Cederholm and Reid 1987, Scrivener and Brownlee 1989). Of the 6 sites where high levels of small or coarse fines were recorded, only the sites located in the mainstem of Lake Creek showed supporting evidence for low recruitment. The other sites had juvenile and adults densities (range = 12.4 – 33.8/100 square meters) that were notably higher than the average density (9.2/100 square meters) reported for seven other westslope cutthroat trout populations in Idaho and Montana (Shepard et al. 1984b, Ireland 1993). Several factors may buffer the effects of high sedimentation of redds. High fry mortality is common in resident salmonids, but low fry densities may result in decreased competition, increased growth, and compensatory survival (McFadden 1969). Three additional spawning tributaries (School House Creek, Whitetail Creek, and Rainbow Fork Evans Creek) showed evidence of low recruitment; however this is probably attributable to low numbers of spawning adults, low quantity of suitable gravels, or poor water quality conditions, rather than sedimentation of redds.

Population Trends

Due to the persistence of adverse water quality and habitat conditions in Reservation streams, cutthroat trout populations are thought to be at least moderately damaged (i.e. average spawning escapements fall between the minimum viable population and the number of adults needed to produce 50% of the carrying capacity of the stream environment). Reiman and Apperson (1989) estimated that populations considered as “strong” (greater than or equal to 50% of historic potential) by Idaho Department of Fish and Game (IDFG) remained in only 11% of the historic range within the State of Idaho. In contrast, none of the populations on the Coeur d'Alene Indian Reservation are considered “strong”.

Mean annual population estimates from 1996-1998 rank Benewah Creek, Lake Creek, Evans Creek, and then Alder Creek in order of decreasing population strength (Table 4.2). In Benewah Creek, four tributaries, comprising 32% of the usable stream area in the watershed, have cutthroat trout densities that are notably higher than the average density (9.2/100 square meters) reported for seven other westslope cutthroat trout populations in Idaho and Montana (Shepard et al. 1984b, Ireland 1993). In Lake Creek, 41% of the perennial stream area supports higher than average densities, while 26% of the stream area in Evans Creek supports higher than average densities. All reaches in the Alder Creek drainage have significantly lower than average densities.

The probability of persistence, as shown in table 4.2, was calculated based on methods described by Reiman and McIntyre (1993), but should be used only as an index of population resiliency. When used in this manner, probability of persistence improves as population size increases or when the inter-annual variance in population size decreases. Populations in Lake Creek and Benewah Creek demonstrate the most resiliency of our target stocks, because of both higher numbers of individuals and relatively low variances.

Despite the apparent instability of cutthroat trout populations, preliminary genetic analyses show that relatively pure stocks exist in Reservation waters. A study by Spruell et al. (1999) differentiated westslope cutthroat trout, rainbow trout and their hybrids at 16 sample sites. Six sites contained samples of westslope cutthroat trout with no evidence of hybridization. The remaining ten sites included at least one hybrid individual. When present, hybridization occurs at a low level and most likely represents episodic events of migration into these systems by rainbow trout or hybrid individuals. Thus, it appears that even though the populations are not “strong”, they are not threatened to a large extent with hybridization. These weakened populations may be particularly susceptible to normal environmental variability (such as temperature and stream discharge patterns) and to the frequency of extreme events such as wildfires, floods, or debris torrents. However, the existing genetic diversity may continue to allow for genetic combinations that permit survival in highly variable environments. Implications are that if the effect of limiting factors can be reduced, then genetically pure populations would have a chance to recover.

Table 4.2. Mean annual population estimates, the estimated mean annual variance in the infinitesimal rate of population growth, and probabilities of persistence over 100 years for westslope cutthroat trout populations monitored on the Coeur d'Alene Reservation. The 95% confidence interval is shown in parentheses.

Stream	Years	Mean Annual Population Estimate	Variance	Probability Of Persistence
Alder Creek	3	808	0.03 (0.02-0.04)	0.58
Benewah Creek	3	5,553	0.16 (0.04-0.36)	0.67
Evans Creek	3	2,675	0.33 (0.05-0.71)	0.45
Lake Creek	3	4,946	0.14 (0.02-0.26)	0.70

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Appendix A

Vertical hydrolab profiles of thirteen stations on Coeur d'Alene Lake, 1997 and 1998.

Appendix A.1 Vertical hydrolab profiles for thirteen sampling station on Coeur d'Alene Lake, 1997.

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Rockford Bay	1597	ASSS	4/18/97	-	1.7	11	0.4	12.58	5.64	7.34	42.4	0.03	*****	-	372
Rockford Bay	1597	ASSS	4/18/97	-	1.7	10	1.3	12.51	5.42	7.33	42.2	0.03	99	-	373
Rockford Bay	1597	ASSS	4/18/97	-	1.7	9	2.6	12.54	5.24	7.34	41.9	0.03	98.8	-	372
Rockford Bay	1597	ASSS	4/18/97	-	1.7	8	4	12.48	4.98	7.32	41.6	0.03	97.6	-	373
Rockford Bay	1597	ASSS	4/18/97	-	1.7	7	5.4	12.5	4.94	7.31	41.8	0.03	97.7	-	373
Rockford Bay	1597	ASSS	4/18/97	-	1.7	6	6.7	12.47	4.87	7.31	42.5	0.03	97.3	-	372
Rockford Bay	1597	ASSS	4/18/97	-	1.7	5	7.8	12.47	4.81	7.31	42.7	0.03	97.2	-	372
Rockford Bay	1597	ASSS	4/18/97	-	1.7	4	9	12.48	4.74	7.3	43.2	0.03	97	-	372
Rockford Bay	1597	ASSS	4/18/97	-	1.7	3	10.3	12.47	4.69	7.29	43.2	0.03	96.9	-	372
Rockford Bay	1597	ASSS	4/18/97	-	1.7	2	11.8	12.79	4.65	7.29	43.4	0.03	99.2	-	370
Rockford Bay	1597	ASSS	4/18/97	-	1.7	1	13	12.19	4.61	7.28	43.2	0.03	94.4	-	369
Rockford Bay	1997	DBSS	5/16/97	-	1.3	11	0.2	11.36	13.57	7.09	36.1	0.02	108.4	-	409
Rockford Bay	1997	DBSS	5/16/97	-	1.3	10	2	11.31	10.51	7.09	34.2	0.02	100.6	-	412
Rockford Bay	1997	DBSS	5/16/97	-	1.3	9	3.4	11.39	10.46	7.08	34.7	0.02	101.3	-	412
Rockford Bay	1997	DBSS	5/16/97	-	1.3	8	5	11.54	10.41	7.06	37.4	0.02	102.4	-	413
Rockford Bay	1997	DBSS	5/16/97	-	1.3	7	6.5	11.53	10.22	7.05	37.5	0.02	101.9	-	413
Rockford Bay	1997	DBSS	5/16/97	-	1.3	6	8	11.53	10	7.05	38	0.02	101.3	-	414
Rockford Bay	1997	DBSS	5/16/97	-	1.3	5	9.5	11.49	9.74	7.05	37.6	0.02	100.3	-	413
Rockford Bay	1997	DBSS	5/16/97	-	1.3	4	11	11.43	9.55	7.04	37.6	0.02	99.4	-	413
Rockford Bay	1997	DBSS	5/16/97	-	1.3	3	12.5	11.37	9.32	7.02	38.2	0.02	98.3	-	414
Rockford Bay	1997	DBSS	5/16/97	-	1.3	2	14	11.27	8.83	7.01	38.7	0.02	96.3	-	414
Rockford Bay	1997	DBSS	5/16/97	-	1.3	1	15.4	11.21	7.66	7.01	39.9	0.03	93.1	-	414
Rockford Bay	2197	DBSS	5/29/97	-	1.3	15	0.6	10.57	16.8	6.91	32.1	0.02	108.4	-	387
Rockford Bay	2197	DBSS	5/29/97	-	1.3	14	1.6	10.6	16.43	6.88	32	0.02	107.9	-	388
Rockford Bay	2197	DBSS	5/29/97	-	1.3	13	2.5	10.42	12.02	6.82	32.5	0.02	96.2	-	393
Rockford Bay	2197	DBSS	5/29/97	-	1.3	12	3.5	10.75	11.31	6.76	31	0.02	97.7	-	395
Rockford Bay	2197	DBSS	5/29/97	-	1.3	11	4.6	10.54	10.92	6.73	30.8	0.02	94.8	-	396
Rockford Bay	2197	DBSS	5/29/97	-	1.3	10	5.5	10.49	10.36	6.72	30.4	0.02	93.2	-	396
Rockford Bay	2197	DBSS	5/29/97	-	1.3	9	6.6	10.49	10.18	6.7	30.4	0.02	92.8	-	397
Rockford Bay	2197	DBSS	5/29/97	-	1.3	8	7.6	10.62	9.96	6.69	29	0.02	93.4	-	397
Rockford Bay	2197	DBSS	5/29/97	-	1.3	7	8.7	10.61	9.82	6.66	30.2	0.02	93.1	-	397
Rockford Bay	2197	DBSS	5/29/97	-	1.3	6	9.7	10.63	9.71	6.64	30.2	0.02	93	-	398
Rockford Bay	2197	DBSS	5/29/97	-	1.3	5	10.6	10.62	9.69	6.62	30.4	0.02	92.8	-	398
Rockford Bay	2197	DBSS	5/29/97	-	1.3	4	11.6	10.51	9.64	6.6	31.3	0.02	91.9	-	400
Rockford Bay	2197	DBSS	5/29/97	-	1.3	3	12.6	10.51	9.36	6.57	32	0.02	91.1	-	401
Rockford Bay	2197	DBSS	5/29/97	-	1.3	2	13.6	10.5	9.12	6.53	32.8	0.02	90.5	-	401
Rockford Bay	2197	DBSS	5/29/97	-	1.3	1	14.8	10.53	8.63	6.48	34	0.02	89.7	-	404

Rockford Bay	2397	DBAS	6/11/97	-	1.8	14	0.6	10.87	14.41	7.14	34.4	0.02	106.3	-	414
Rockford Bay	2397	DBAS	6/11/97	-	1.8	13	1.5	11.11	12.51	7.13	33.1	0.02	104.1	-	416
Rockford Bay	2397	DBAS	6/11/97	-	1.8	12	2.5	11.13	12.08	7.13	32.4	0.02	103.1	-	416
Rockford Bay	2397	DBAS	6/11/97	-	1.8	11	3.4	11.09	11.62	7.13	32	0.02	101.8	-	415
Rockford Bay	2397	DBAS	6/11/97	-	1.8	10	4.6	10.9	10.8	7.13	30.9	0.02	98.1	-	416
Rockford Bay	2397	DBAS	6/11/97	-	1.8	9	5.5	10.81	10.41	7.14	30	0.02	96.5	-	415
Rockford Bay	2397	DBAS	6/11/97	-	1.8	8	6.4	10.72	10.33	7.14	29.6	0.02	95.5	-	415
Rockford Bay	2397	DBAS	6/11/97	-	1.8	7	7.6	10.65	10.13	7.14	29.9	0.02	94.4	-	414
Rockford Bay	2397	DBAS	6/11/97	-	1.8	6	8.5	10.69	10.08	7.15	30.1	0.02	94.6	-	414
Rockford Bay	2397	DBAS	6/11/97	-	1.8	5	9.7	10.68	9.97	7.15	30.1	0.02	94.3	-	414
Rockford Bay	2397	DBAS	6/11/97	-	1.8	4	10.6	10.66	9.92	7.16	30	0.02	94.1	-	414
Rockford Bay	2397	DBAS	6/11/97	-	1.8	3	11.7	10.64	9.92	7.18	30	0.02	93.8	-	413
Rockford Bay	2397	DBAS	6/11/97	-	1.8	2	12.6	10.63	9.76	7.19	30.5	0.02	93.4	-	412
Rockford Bay	2397	DBAS	6/11/97	-	1.8	1	13.6	10.2	10.12	7.24	30.5	0.02	90.3	-	411
Rockford Bay	2597	DBSS	6/26/97	-	3.3	14	0.2	10.64	16.29	7.11	33.8	0.02	108.2	-	442
Rockford Bay	2597	DBSS	6/26/97	-	3.3	13	0.9	10.66	16.23	7.1	33.9	0.02	108.3	-	443
Rockford Bay	2597	DBSS	6/26/97	-	3.3	12	1.9	10.66	16.04	7.08	33.8	0.02	107.8	-	444
Rockford Bay	2597	DBSS	6/26/97	-	3.3	11	2.9	10.63	15.71	7.07	33.6	0.02	106.7	-	444
Rockford Bay	2597	DBSS	6/26/97	-	3.3	10	3.9	10.7	15.04	7.05	33.5	0.02	105.9	-	446
Rockford Bay	2597	DBSS	6/26/97	-	3.3	9	4.9	10.78	14.13	7.02	33.1	0.02	104.6	-	447
Rockford Bay	2597	DBSS	6/26/97	-	3.3	8	6	10.78	13.55	7	33.1	0.02	103.3	-	448
Rockford Bay	2597	DBSS	6/26/97	-	3.3	7	7	10.77	13.29	7	32.9	0.02	102.6	-	448
Rockford Bay	2597	DBSS	6/26/97	-	3.3	6	8	10.73	13.09	6.98	32.8	0.02	101.7	-	448
Rockford Bay	2597	DBSS	6/26/97	-	3.3	5	8.9	10.78	12.96	6.96	32.8	0.02	101.9	-	448
Rockford Bay	2597	DBSS	6/26/97	-	3.3	4	10	10.76	12.86	6.94	32.8	0.02	101.5	-	449
Rockford Bay	2597	DBSS	6/26/97	-	3.3	3	11	10.69	12.77	6.91	32.8	0.02	100.7	-	450
Rockford Bay	2597	DBSS	6/26/97	-	3.3	2	12	10.55	12.56	6.87	32.9	0.02	98.9	-	451
Rockford Bay	2597	DBSS	6/26/97	-	3.3	1	12.9	9.92	11.23	6.81	34	0.02	90.1	-	454
Rockford Bay	2797	DBSS	7/9/97	-	4.5	14	0.4	10.09	17.81	7.28	36.2	0.02	*****	-	381
Rockford Bay	2797	DBSS	7/9/97	-	4.5	13	1.2	10.26	16.91	7.27	36.1	0.02	*****	-	381
Rockford Bay	2797	DBSS	7/9/97	-	4.5	12	2.2	10.33	16.58	7.21	36.2	0.02	*****	-	382
Rockford Bay	2797	DBSS	7/9/97	-	4.5	11	3.2	10.35	16.38	7.17	36.1	0.02	*****	-	383
Rockford Bay	2797	DBSS	7/9/97	-	4.5	10	4.2	10.37	15.79	7.15	36.1	0.02	*****	-	383
Rockford Bay	2797	DBSS	7/9/97	-	4.5	9	5.2	10.36	15.4	7.09	35.8	0.02	*****	-	384
Rockford Bay	2797	DBSS	7/9/97	-	4.5	8	6.2	10.3	14.94	7.05	35.7	0.02	*****	-	385
Rockford Bay	2797	DBSS	7/9/97	-	4.5	7	7.2	10.01	13.61	7.02	34.8	0.02	96.9	-	385
Rockford Bay	2797	DBSS	7/9/97	-	4.5	6	8.2	9.88	13.17	7	34.9	0.02	94.7	-	385
Rockford Bay	2797	DBSS	7/9/97	-	4.5	5	9.2	9.74	12.26	6.99	34.6	0.02	91.5	-	385
Rockford Bay	2797	DBSS	7/9/97	-	4.5	4	10.2	9.68	11.16	7	35.2	0.02	88.6	-	384
Rockford Bay	2797	DBSS	7/9/97	-	4.5	3	11.1	9.79	10.66	7.03	35.5	0.02	88.5	-	382
Rockford Bay	2797	DBSS	7/9/97	-	4.5	2	12.3	9.81	10.31	7.04	35.9	0.02	88	-	380

Rockford Bay	2797	DBSS	7/9/97	-	4.5	1	13.2	10	10.02	7.09	36.4	0.02	89.1	-	377
Rockford Bay	2997	SSAS	7/23/97	-	5	14	0.2	10.78	19.13	7.56	37.2	0.02	109.3	-	398
Rockford Bay	2997	SSAS	7/23/97	-	5	13	0.9	10.82	18.87	7.56	37.1	0.02	109.2	-	398
Rockford Bay	2997	SSAS	7/23/97	-	5	12	1.9	10.96	18.2	7.56	36.8	0.02	109.1	-	398
Rockford Bay	2997	SSAS	7/23/97	-	5	11	2.8	11.01	18.05	7.57	36.8	0.02	109.3	-	396
Rockford Bay	2997	SSAS	7/23/97	-	5	10	3.9	11.02	18.03	7.53	36.7	0.02	109.3	-	396
Rockford Bay	2997	SSAS	7/23/97	-	5	9	5	11	18.01	7.48	36.7	0.02	109.1	-	395
Rockford Bay	2997	SSAS	7/23/97	-	5	8	5.9	11.01	17.9	7.44	36.8	0.02	109	-	395
Rockford Bay	2997	SSAS	7/23/97	-	5	7	6.9	10.99	17.74	7.38	36.8	0.02	108.5	-	396
Rockford Bay	2997	SSAS	7/23/97	-	5	6	7.9	10.87	17.49	7.32	36.8	0.02	106.7	-	396
Rockford Bay	2997	SSAS	7/23/97	-	5	5	8.9	11	16.68	7.24	36.6	0.02	106.1	-	395
Rockford Bay	2997	SSAS	7/23/97	-	5	4	9.9	10.77	16.38	7.16	36.5	0.02	103.2	-	396
Rockford Bay	2997	SSAS	7/23/97	-	5	3	10.9	10.68	15.74	7.08	36.3	0.02	101	-	394
Rockford Bay	2997	SSAS	7/23/97	-	5	2	11.9	10.59	15.24	7	36.2	0.02	99.1	-	389
Rockford Bay	2997	SSAS	7/23/97	-	5	1	12.9	10.21	14.03	6.91	35.8	0.02	93	-	385
Rockford Bay	3197	DBSS	8/5/97	-	7.7	14	0.5	9.03	23.66	7.42	41.2	0.03	105.1	-	365
Rockford Bay	3197	DBSS	8/5/97	-	7.7	13	1.1	9.11	23.37	7.42	41	0.03	105.5	-	365
Rockford Bay	3197	DBSS	8/5/97	-	7.7	12	2.1	9.24	23.08	7.39	40.8	0.03	106.5	-	365
Rockford Bay	3197	DBSS	8/5/97	-	7.7	11	3.1	9.29	22.99	7.36	40.6	0.03	106.5	-	365
Rockford Bay	3197	DBSS	8/5/97	-	7.7	10	4.1	9.3	22.86	7.34	40.4	0.03	106.7	-	365
Rockford Bay	3197	DBSS	8/5/97	-	7.7	9	5.1	9.34	22.66	7.29	40.3	0.03	106.8	-	365
Rockford Bay	3197	DBSS	8/5/97	-	7.7	8	6.1	9.53	21.58	7.27	39.4	0.03	106.7	-	365
Rockford Bay	3197	DBSS	8/5/97	-	7.7	7	7.1	9.52	21.44	7.14	39.5	0.03	106.3	-	369
Rockford Bay	3197	DBSS	8/5/97	-	7.7	6	8.1	9.85	19.73	7.05	37.9	0.02	106.4	-	372
Rockford Bay	3197	DBSS	8/5/97	-	7.7	5	9.1	9.99	15.56	6.85	34.6	0.02	99	-	379
Rockford Bay	3197	DBSS	8/5/97	-	7.7	4	10.1	9.29	12.25	6.69	34	0.02	85.5	-	382
Rockford Bay	3197	DBSS	8/5/97	-	7.7	3	11.1	9.15	10.74	6.63	34.4	0.02	81.3	-	383
Rockford Bay	3197	DBSS	8/5/97	-	7.7	2	12.1	9.18	10.3	6.61	34.8	0.02	80.8	-	381
Rockford Bay	3197	DBSS	8/5/97	-	7.7	1	13.1	9.08	10.02	6.57	35.4	0.02	79.4	-	385
Rockford Bay	3297	DBSS	8/14/97	-	8	14	0.3	8.54	22.49	7.43	42.7	0.03	97.9	-	378
Rockford Bay	3297	DBSS	8/14/97	-	8	13	1.7	8.55	22.45	7.37	42.7	0.03	97.9	-	379
Rockford Bay	3297	DBSS	8/14/97	-	8	12	2.7	8.65	22.25	7.35	41.9	0.03	98.8	-	380
Rockford Bay	3297	DBSS	8/14/97	-	8	11	3.7	8.68	22.06	7.33	41.1	0.03	98.7	-	379
Rockford Bay	3297	DBSS	8/14/97	-	8	10	4.7	8.67	21.88	7.28	41.2	0.03	98.2	-	381
Rockford Bay	3297	DBSS	8/14/97	-	8	9	5.7	8.62	21.69	7.19	41.3	0.03	97.3	-	384
Rockford Bay	3297	DBSS	8/14/97	-	8	8	6.7	8.64	21.35	7.13	41.3	0.03	97	-	385
Rockford Bay	3297	DBSS	8/14/97	-	8	7	7.7	8.72	20.58	7.04	39.5	0.03	96.3	-	388
Rockford Bay	3297	DBSS	8/14/97	-	8	6	8.7	9.23	17.2	6.92	36.6	0.02	95.2	-	395
Rockford Bay	3297	DBSS	8/14/97	-	8	5	9.7	9.25	16.24	6.87	35.9	0.02	93.6	-	397
Rockford Bay	3297	DBSS	8/14/97	-	8	4	10.7	9.12	14.81	6.84	35.3	0.02	89.4	-	398
Rockford Bay	3297	DBSS	8/14/97	-	8	3	11.7	9.02	13.12	6.82	34.9	0.02	85.2	-	399

Rockford Bay	3297	DBSS	8/14/97	-	8	2	12.8	8.61	12.44	6.79	35.3	0.02	80.2	-	401
Rockford Bay	3297	DBSS	8/14/97	-	8	1	13.7	8.22	10.67	6.81	36.1	0.02	73.5	-	401
Rockford Bay	3497	DBSS	8/27/97	-	8.5	14	0.3	9.16	21.23	7.43	47.7	0.03	102.6	-	372
Rockford Bay	3497	DBSS	8/27/97	-	8.5	13	1.2	9.17	21.23	7.39	47.6	0.03	102.7	-	373
Rockford Bay	3497	DBSS	8/27/97	-	8.5	12	2.2	9.19	21.16	7.37	47.8	0.03	102.9	-	374
Rockford Bay	3497	DBSS	8/27/97	-	8.5	11	3.1	9.23	21.11	7.35	47.8	0.03	103.1	-	374
Rockford Bay	3497	DBSS	8/27/97	-	8.5	10	4.1	9.24	21.06	7.31	47.9	0.03	103.4	-	375
Rockford Bay	3497	DBSS	8/27/97	-	8.5	9	5.2	9.21	21	7.26	47.7	0.03	102.8	-	377
Rockford Bay	3497	DBSS	8/27/97	-	8.5	8	6.1	9.19	20.91	7.18	47.8	0.03	102.3	-	380
Rockford Bay	3497	DBSS	8/27/97	-	8.5	7	7.2	9.17	20.76	7.09	47.7	0.03	101.8	-	383
Rockford Bay	3497	DBSS	8/27/97	-	8.5	6	8.2	9.26	18.17	6.96	42.3	0.03	97.6	-	389
Rockford Bay	3497	DBSS	8/27/97	-	8.5	5	9.2	9.23	16.83	6.9	40.5	0.03	94.8	-	392
Rockford Bay	3497	DBSS	8/27/97	-	8.5	4	10.2	9.09	15.66	6.82	39.7	0.03	90.9	-	396
Rockford Bay	3497	DBSS	8/27/97	-	8.5	3	11.3	8.94	14.06	6.79	39.1	0.03	86.3	-	398
Rockford Bay	3497	DBSS	8/27/97	-	8.5	2	12.3	8.74	11.82	6.76	39	0.03	80.4	-	400
Rockford Bay	3497	DBSS	8/27/97	-	8.5	1	13.2	8.8	11.23	6.78	39.2	0.03	79.8	-	400
Rockford Bay	3797	ASRP	9/17/97	-	8	13	0.2	9.33	16.91	7.31	48.4	0.03	97.3	-	392
Rockford Bay	3797	ASRP	9/17/97	-	8	12	1.8	9.34	16.9	7.31	48.5	0.03	97.5	-	392
Rockford Bay	3797	ASRP	9/17/97	-	8	11	2.8	9.33	16.89	7.31	48.4	0.03	97.3	-	392
Rockford Bay	3797	ASRP	9/17/97	-	8	10	3.8	9.33	16.86	7.3	48.4	0.03	97.3	-	392
Rockford Bay	3797	ASRP	9/17/97	-	8	9	4.8	9.35	16.85	7.31	48.4	0.03	97.5	-	391
Rockford Bay	3797	ASRP	9/17/97	-	8	8	5.8	9.33	16.83	7.29	48.5	0.03	97.2	-	392
Rockford Bay	3797	ASRP	9/17/97	-	8	7	6.8	9.34	16.82	7.29	48.3	0.03	97.4	-	392
Rockford Bay	3797	ASRP	9/17/97	-	8	6	7.8	9.35	16.8	7.28	48.5	0.03	97.6	-	392
Rockford Bay	3797	ASRP	9/17/97	-	8	5	8.8	9.34	16.63	7.27	47.7	0.03	96.9	-	393
Rockford Bay	3797	ASRP	9/17/97	-	8	4	9.8	9.31	16.6	7.25	47.6	0.03	96.5	-	393
Rockford Bay	3797	ASRP	9/17/97	-	8	3	10.8	9.37	16.55	7.25	47.4	0.03	97.1	-	394
Rockford Bay	3797	ASRP	9/17/97	-	8	2	11.8	9.34	16.36	7.26	46.8	0.03	96.5	-	393
Rockford Bay	3797	ASRP	9/17/97	-	8	1	12.8	9.38	16.33	7.25	46.6	0.03	96.8	-	393
Rockford Bay	3997	ASRA	9/29/97	-	8.2	10	0.2	9.72	15.81	7.19	43.5	0.03	99.1	-	446
Rockford Bay	3997	ASRA	9/29/97	-	8.2	9	1	9.68	15.72	7.18	43.6	0.03	98.5	-	446
Rockford Bay	3997	ASRA	9/29/97	-	8.2	8	2.5	9.66	15.67	7.15	43.6	0.03	98.2	-	447
Rockford Bay	3997	ASRA	9/29/97	-	8.2	7	4	9.65	15.61	7.12	43.6	0.03	98	-	447
Rockford Bay	3997	ASRA	9/29/97	-	8.2	6	5.5	9.58	15.54	7.1	43.5	0.03	97.1	-	447
Rockford Bay	3997	ASRA	9/29/97	-	8.2	5	7	9.52	15.36	7.06	43.6	0.03	96	-	448
Rockford Bay	3997	ASRA	9/29/97	-	8.2	4	8.5	9.48	15.19	7.04	43.6	0.03	95.4	-	447
Rockford Bay	3997	ASRA	9/29/97	-	8.2	3	10	9.44	15.13	6.98	43.6	0.03	94.9	-	446
Rockford Bay	3997	ASRA	9/29/97	-	8.2	2	11.3	9.51	14.94	6.95	43.6	0.03	95.1	-	444
Rockford Bay	3997	ASRA	9/29/97	-	8.2	1	12.8	9.42	14.71	6.89	43.5	0.03	93.8	-	441
Rockford Bay	4297	DBAS	10/21/97	-	7.5	12	0.4	10.03	12.41	7.16	48.2	0.03	92.9	-	396

Rockford Bay	4297	DBAS	10/21/97	-	7.5	11	1.8	10.02	12.41	7.13	48.2	0.03	92.9	-	398
Rockford Bay	4297	DBAS	10/21/97	-	7.5	10	2.8	10.02	12.41	7.13	48.2	0.03	92.9	-	397
Rockford Bay	4297	DBAS	10/21/97	-	7.5	9	3.8	10.02	12.41	7.12	48.2	0.03	92.9	-	398
Rockford Bay	4297	DBAS	10/21/97	-	7.5	8	4.8	10.02	12.41	7.09	48.3	0.03	92.9	-	399
Rockford Bay	4297	DBAS	10/21/97	-	7.5	7	5.9	10.02	12.41	7.09	48.2	0.03	92.9	-	399
Rockford Bay	4297	DBAS	10/21/97	-	7.5	6	6.8	10.02	12.41	7.07	48.3	0.03	92.9	-	399
Rockford Bay	4297	DBAS	10/21/97	-	7.5	5	7.8	10.04	12.41	7.04	48.3	0.03	93	-	400
Rockford Bay	4297	DBAS	10/21/97	-	7.5	4	8.8	10.04	12.41	7.02	48.3	0.03	92.9	-	400
Rockford Bay	4297	DBAS	10/21/97	-	7.5	3	9.8	10.02	12.41	7	48.2	0.03	92.9	-	401
Rockford Bay	4297	DBAS	10/21/97	-	7.5	2	11.8	10.03	12.4	6.93	48.2	0.03	92.9	-	402
Rockford Bay	4297	DBAS	10/21/97	-	7.5	1	12.8	10.05	12.38	6.88	48.3	0.03	93	-	404
Rockford Bay	4497	DBAS	11/4/97	-	7.2	13	0.3	10.68	10.28	7.1	46.8	0.03	94.4	39	420
Rockford Bay	4497	DBAS	11/4/97	-	7.2	12	1.7	10.69	10.15	7.07	46.9	0.03	94.1	41	423
Rockford Bay	4497	DBAS	11/4/97	-	7.2	11	2.7	10.66	10.14	7.08	46.9	0.03	93.9	46	422
Rockford Bay	4497	DBAS	11/4/97	-	7.2	10	3.8	10.67	10.12	7.07	47	0.03	93.9	122	423
Rockford Bay	4497	DBAS	11/4/97	-	7.2	9	4.7	10.73	10.09	7.04	46.8	0.03	94.4	50	425
Rockford Bay	4497	DBAS	11/4/97	-	7.2	8	5.8	10.66	10.09	7.05	46.9	0.03	93.8	49	424
Rockford Bay	4497	DBAS	11/4/97	-	7.2	7	6.7	10.66	10.07	7	46.9	0.03	93.7	101	427
Rockford Bay	4497	DBAS	11/4/97	-	7.2	6	7.7	10.66	10.07	7	46.9	0.03	93.7	108	427
Rockford Bay	4497	DBAS	11/4/97	-	7.2	5	8.7	10.66	10.05	7.01	47	0.03	93.7	124	427
Rockford Bay	4497	DBAS	11/4/97	-	7.2	4	9.7	10.72	10	6.99	47	0.03	94	101	428
Rockford Bay	4497	DBAS	11/4/97	-	7.2	3	10.7	10.75	10	6.95	47.2	0.03	94.3	42	431
Rockford Bay	4497	DBAS	11/4/97	-	7.2	2	11.7	10.71	9.99	6.96	47.2	0.03	93.9	53	430
Rockford Bay	4497	DBAS	11/4/97	-	7.2	1	12.6	10.66	9.99	6.88	47.2	0.03	93.5	730	434

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	10	0.2	12.97	5.69	7.39	42.6	0.03	*****	-	388
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	9	1.4	12.96	5.67	7.39	42.7	0.03	*****	-	388
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	8	2.5	12.99	5.62	7.38	42.7	0.03	*****	-	389
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	7	3.7	12.97	5.6	7.37	42.9	0.03	*****	-	389
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	6	5.2	12.93	5.52	7.37	43.1	0.03	*****	-	389
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	5	6.5	12.95	5.52	7.36	43.2	0.03	*****	-	390
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	4	7.8	12.95	5.47	7.36	42.8	0.03	*****	-	390
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	3	9.1	12.91	5.46	7.36	43.1	0.03	*****	-	390
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	2	10.5	12.89	5.42	7.35	43.3	0.03	*****	-	391
Windy Bay Shallow	1597	ASSS	4/18/97	-	1.4	1	11.9	12.85	5.22	7.36	43.7	0.03	*****	-	392
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	13	0.2	11.48	12.43	7.03	21	0.01	106.8	-	420
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	12	1.1	11.6	11.46	7	36.7	0.02	105.4	-	427
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	11	2.6	11.6	10.94	6.95	36	0.02	104.2	-	431
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	10	4.1	11.39	10.15	6.9	34.8	0.02	100.4	-	433

Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	9	5.6	11.34	9.74	6.89	35.3	0.02	99	-	433
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	8	7.1	11.39	9.53	6.86	36.5	0.02	99	-	434
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	7	8.6	11.4	9.15	6.84	38.2	0.02	98.2	-	434
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	6	10.1	11.38	8.69	6.81	38.7	0.02	97.1	-	435
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	5	11.6	11.36	8.17	6.8	40.8	0.03	95.5	-	436
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	4	13.1	11.34	8.04	6.77	41.4	0.03	95	-	436
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	3	14.6	11.45	7.47	6.76	43.4	0.03	94.6	-	437
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	2	16.1	11.4	7.19	6.73	43.4	0.03	93.5	-	437
Windy Bay Shallow	1997	DBSS	5/16/97	-	1.75	1	17.6	11.5	7.02	6.69	43.6	0.03	94	-	436
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	16	0.5	10.7	16.3	7.03	31.5	0.02	108.5	-	382
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	15	1.5	10.69	16.23	7.01	31.5	0.02	108.3	-	382
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	14	2.4	10.74	15.76	6.99	31.5	0.02	107.7	-	383
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	13	3.5	10.76	14.11	6.93	30.9	0.02	104.1	-	386
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	12	4.5	9.97	12.69	6.86	31.2	0.02	93.5	-	389
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	11	5.6	10.42	11.36	6.88	29.9	0.02	94.7	-	389
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	10	6.5	10.43	10.68	6.87	29.5	0.02	93.3	-	389
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	9	7.4	10.48	10.5	6.87	29.4	0.02	93.3	-	389
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	8	8.5	10.52	10.33	6.87	29.6	0.02	93.3	-	389
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	7	9.5	10.5	9.97	6.85	29.4	0.02	92.4	-	390
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	6	10.6	10.45	9.09	6.85	30.4	0.02	90	-	390
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	5	11.5	10.37	8.97	6.84	30.6	0.02	89.1	-	391
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	4	12.6	10.26	8.83	6.84	31.1	0.02	87.8	-	390
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	3	13.6	10.34	8.61	6.84	31.7	0.02	88.1	-	391
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	2	14.6	10.31	8.42	6.84	32.7	0.02	87.4	-	391
Windy Bay Shallow	2197	DBSS	5/29/97	-	1.5	1	15.5	10.34	8.27	6.84	33.3	0.02	87.3	-	391
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	16	0.5	10.8	13.95	7.02	34.9	0.02	104.5	-	423
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	15	1.4	10.67	12.79	7.01	34.6	0.02	100.6	-	425
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	14	2.3	10.89	11.64	6.98	32.6	0.02	100	-	426
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	13	3.3	10.84	11.1	6.98	32	0.02	98.3	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	12	4.4	10.74	10.53	6.98	32.5	0.02	96.1	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	11	5.3	10.78	10.22	6.97	30.8	0.02	95.8	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	10	6.3	10.69	10.04	6.97	30.5	0.02	94.7	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	9	7.5	10.66	9.96	6.96	30.6	0.02	94.3	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	8	8.3	10.58	9.89	6.96	31	0.02	93.3	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	7	9.5	10.63	9.66	6.96	30.9	0.02	93.2	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	6	10.4	10.6	9.63	6.96	31.4	0.02	92.8	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	5	11.6	10.61	9.5	6.96	31.5	0.02	92.7	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	4	12.5	10.61	9.32	6.95	32	0.02	92.2	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	3	13.6	10.56	9.1	6.95	33	0.02	91.3	-	427
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	2	14.7	10.65	8.68	6.95	34.5	0.02	91.1	-	428
Windy Bay Shallow	2397	DBAS	6/11/97	-	2	1	15.7	10.64	8.66	6.96	34.7	0.02	91	-	427

Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	16	0.4	10.71	14.84	7.13	35.5	0.02	105.6	-	440
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	15	0.8	10.71	14.83	7.14	35.4	0.02	105.5	-	438
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	14	1.7	10.72	14.74	7.11	35.4	0.02	105.5	-	440
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	13	2.7	10.74	14.21	7.11	35.4	0.02	104.4	-	440
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	12	3.7	10.81	13.65	7.09	34.9	0.02	103.8	-	441
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	11	4.7	10.83	13.22	7.08	34.3	0.02	103	-	442
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	10	5.6	10.82	12.61	7.08	34	0.02	101.4	-	442
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	9	6.5	10.8	12.73	7.07	34	0.02	101.4	-	442
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	8	7.9	10.81	12.12	7.05	33.5	0.02	100.2	-	442
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	7	8.5	10.77	12.05	7.05	33.6	0.02	99.8	-	442
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	6	9.7	10.81	11.61	7.04	33.5	0.02	99.1	-	442
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	5	10.6	10.82	11.56	7.04	33.4	0.02	99.1	-	442
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	4	11.5	10.79	11.41	7.03	33.7	0.02	98.4	-	442
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	3	12.5	10.78	11.2	7.03	33.7	0.02	97.9	-	441
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	2	13.6	10.81	11.12	7.03	33.7	0.02	98	-	441
Windy Bay Shallow	2597	DBSS	6/26/97	-	2.2	1	14.8	10.78	11.02	7.05	33.5	0.02	97.5	-	440
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	16	0.4	10.28	16.6	7.25	37.3	0.02	*****	-	411
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	15	1.1	10.28	16.59	7.24	37.3	0.02	*****	-	412
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	14	2	10.29	16.55	7.2	37.3	0.02	*****	-	414
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	13	2.9	10.28	16.53	7.18	37.3	0.02	*****	-	414
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	12	3.9	10.28	16.32	7.15	37.4	0.02	*****	-	414
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	11	5	10.39	15.56	7.12	36.7	0.02	*****	-	416
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	10	6	10.4	15.31	7.1	36.5	0.02	*****	-	416
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	9	7	10.35	15.03	7.06	36.8	0.02	*****	-	417
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	8	8	10.35	14.51	7.06	36	0.02	*****	-	418
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	7	9	10.3	14.21	7.03	36.3	0.02	*****	-	418
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	6	10.1	10.19	13.65	6.99	35.2	0.02	98.7	-	419
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	5	11	10.04	13.32	6.94	35.3	0.02	96.5	-	420
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	4	12	9.95	12.79	6.93	34.7	0.02	94.5	-	421
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	3	13	9.66	11.92	6.9	34.9	0.02	90	-	423
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	2	14	9.5	10.12	6.9	36.4	0.02	84.8	-	424
Windy Bay Shallow	2797	DBSS	7/9/97	-	3.5	1	15	9.57	9.74	6.94	37.4	0.02	84.7	-	422
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	10	1.6	10.61	19.64	7.58	39.1	0.03	108.7	-	437
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	9	3	10.74	19.09	7.58	38.8	0.02	108.9	-	437
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	8	4.7	11.09	18.2	7.53	37.9	0.02	110.4	-	439
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	7	6.1	11.2	17.22	7.43	37.5	0.02	109.3	-	442
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	6	7.6	11.19	16.86	7.34	37.3	0.02	108.3	-	444
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	5	9	11.06	16.59	7.26	37.2	0.02	106.5	-	445
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	4	10.5	10.86	15.92	7.17	36.6	0.02	103.1	-	447
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	3	12	10.67	15.4	7.05	36.6	0.02	100	-	449
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	2	13.5	9.73	14.29	6.93	36.9	0.02	89.2	-	453
Windy Bay Shallow	2997	SSJD	7/23/97	-	4.5	1	15.5	9.38	11.93	6.87	36.7	0.02	81.7	-	455

Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	12	0.4	8.97	24.09	7.47	42.1	0.03	105.3	-	369
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	11	1	8.97	24.06	7.47	42	0.03	105.3	-	370
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	10	2.5	9.06	23.78	7.42	42.1	0.03	105.8	-	372
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	9	4	9.06	23.38	7.4	42	0.03	105	-	373
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	8	5.5	9.39	22.43	7.35	41.3	0.03	106.8	-	374
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	7	7	9.93	20.42	7.23	39.5	0.03	108.6	-	378
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	6	8.5	10	17.76	7.11	36.1	0.02	103.5	-	383
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	5	10	9.48	14.74	6.98	34.9	0.02	92.2	-	389
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	4	11.5	9.06	12.82	6.95	34.6	0.02	84.5	-	392
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	3	13	8.88	10.21	6.94	35.4	0.02	78	-	394
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	2	14.5	8.99	9.33	6.97	36.2	0.02	77.3	-	394
Windy Bay Shallow	3197	DBSS	8/5/97	-	6.8	1	16	8.8	8.9	7.01	37.6	0.02	75.1	-	394
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	14	0.2	8.65	22.04	7.52	41.5	0.03	98.3	-	378
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	13	1.6	8.65	22.01	7.41	41.5	0.03	98.3	-	381
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	12	2.6	8.64	22.02	7.4	41.6	0.03	98.2	-	381
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	11	3.6	8.64	21.99	7.32	41.6	0.03	98.2	-	384
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	10	4.6	8.64	21.92	7.26	41.6	0.03	98	-	386
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	9	5.5	8.64	21.78	7.19	41.5	0.03	97.7	-	388
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	8	6.6	8.6	21.32	7.05	41.6	0.03	96.4	-	394
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	7	7.6	8.99	16.09	7.02	35.7	0.02	90.6	-	398
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	6	8.5	8.96	15.22	7.01	35.6	0.02	88.8	-	399
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	5	9.6	8.77	14.04	7.01	35.3	0.02	84.7	-	400
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	4	10.5	8.59	12.81	7.03	35	0.02	80.6	-	400
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	3	11.5	8.43	12.08	7.07	35.2	0.02	77.9	-	399
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	2	12.6	8.19	11.67	7.14	35.7	0.02	74.9	-	396
Windy Bay Shallow	3297	DBSS	8/14/97	-	4.5	1	13.7	8.03	10.82	7.13	36.3	0.02	72	-	398
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	12	0.4	9.26	20.74	7.51	46.5	0.03	102.8	-	368
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	11	1	9.27	20.76	7.5	46.4	0.03	102.9	-	368
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	10	2.5	9.26	20.74	7.48	46.5	0.03	102.8	-	369
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	9	3.9	9.27	20.74	7.45	46.4	0.03	102.8	-	370
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	8	5.5	9.23	20.7	7.38	46.6	0.03	102.4	-	372
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	7	7.1	9.21	20.65	7.27	46.8	0.03	102	-	377
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	6	8.6	9.02	17.29	6.94	39.9	0.03	93.4	-	389
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	5	10	9.19	14.11	6.9	38.6	0.02	88.9	-	392
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	4	11.5	8.86	12.31	6.86	38.7	0.02	82.3	-	395
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	3	13.1	8.52	10.95	6.86	39.6	0.03	76.7	-	396
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	2	14.4	8.44	9.36	6.9	41.3	0.03	73.2	-	396
Windy Bay Shallow	3497	DBSS	8/27/97	-	8	1	16.1	8.59	8.64	7.06	42.5	0.03	73.2	-	392
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	16	0.2	9.32	17.01	7.27	47.5	0.03	97.5	-	384
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	15	1.7	9.32	17.01	7.26	47.6	0.03	97.5	-	385

Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	14	2.7	9.32	17	7.24	47.6	0.03	97.5	-	385
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	13	3.7	9.3	17.01	7.24	47.5	0.03	97.3	-	385
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	12	4.7	9.3	16.98	7.23	47.6	0.03	97.2	-	385
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	11	5.7	9.31	16.96	7.22	47.6	0.03	97.2	-	385
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	10	6.7	9.29	16.91	7.19	47.3	0.03	97	-	385
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	9	7.7	9.28	16.81	7.18	47.2	0.03	96.8	-	385
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	8	8.7	9.29	16.75	7.15	47.1	0.03	96.8	-	385
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	7	9.7	9.31	16.58	7.13	46.5	0.03	96.5	-	385
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	6	10.7	9.33	16.52	7.1	46.3	0.03	96.6	-	385
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	5	11.7	9.31	16.48	7.07	46.1	0.03	96.3	-	386
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	4	12.7	9.3	16.38	7.05	45.9	0.03	96	-	386
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	3	13.7	9.24	16.04	7	45.6	0.03	94.7	-	387
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	2	14.7	9.23	15.25	6.96	43.7	0.03	93	-	388
Windy Bay Shallow	3797	ASRP	9/17/97	-	8.1	1	15.7	9.13	15.04	6.94	43.9	0.03	91.8	-	388
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	11	0.3	9.65	14.71	7.17	46.5	0.03	96.1	-	448
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	10	2	9.62	14.67	7.18	46.6	0.03	95.7	-	447
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	9	3.5	9.61	14.64	7.17	46.6	0.03	95.5	-	448
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	8	5	9.59	14.61	7.17	46.6	0.03	95.3	-	448
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	7	6.5	9.55	14.54	7.16	46.9	0.03	94.8	-	448
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	6	8	9.54	14.52	7.15	46.9	0.03	94.7	-	448
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	5	9.5	9.5	14.44	7.15	46.5	0.03	94	-	448
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	4	11	9.52	14.41	7.15	46.9	0.03	94.2	-	448
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	3	12.5	9.47	14.27	7.15	46.6	0.03	93.7	-	447
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	2	14	9.52	14.24	7.15	46.9	0.03	93.8	-	447
Windy Bay Shallow	3997	ASRA	9/29/97	-	7.5	1	15.2	9.48	14.16	7.15	46.8	0.03	93.2	-	447
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	16	0.3	10.06	12.32	7.24	49.9	0.03	93	-	387
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	15	1	10.07	12.33	7.25	49.8	0.03	93.1	-	387
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	14	2	10.05	12.33	7.25	49.8	0.03	93	-	387
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	13	3	10.05	12.33	7.24	49.9	0.03	93	-	388
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	12	4	10.06	12.32	7.24	49.9	0.03	93	-	387
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	11	5	10.05	12.33	7.23	50	0.03	93	-	387
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	10	6	10.05	12.33	7.21	49.9	0.03	93	-	388
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	9	7	10.05	12.33	7.2	49.9	0.03	93	-	388
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	8	8	10.04	12.33	7.19	49.8	0.03	93	-	389
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	7	9	10.06	12.32	7.18	49.9	0.03	93	-	389
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	6	10	10.07	12.32	7.15	49.9	0.03	93.1	-	390
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	5	11	10.07	12.33	7.16	49.9	0.03	93.1	-	389
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	4	12	10.08	12.32	7.13	49.9	0.03	93.2	-	390
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	3	13	10.09	12.33	7.12	49.9	0.03	93.3	-	391
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	2	14	10.1	12.32	7.1	49.9	0.03	93.3	-	391
Windy Bay Shallow	4297	DBAS	10/21/97	-	6.5	1	15	10.11	12.3	7.06	50	0.03	93.5	-	392

Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	11	0.4	10.55	10.17	7.05	47.6	0.03	93	57	409
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	10	1.7	10.53	9.89	7.14	47.7	0.03	92.2	105	406
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	9	3.2	10.53	9.78	7.1	48.2	0.03	91.9	144	408
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	8	4.7	10.53	9.74	7.12	48.6	0.03	91.8	117	407
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	7	6.2	10.51	9.66	7.14	49.1	0.03	91.5	141	406
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	6	7.7	10.52	9.55	7.1	49.7	0.03	91.4	134	408
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	5	9.2	10.55	9.51	7.12	49.8	0.03	91.5	100	407
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	4	10.7	10.56	9.46	7.09	50	0.03	91.5	138	408
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	3	12.2	10.49	9.42	7.09	50.2	0.03	90.8	152	408
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	2	13.7	10.53	9.33	7.08	50.2	0.03	90.9	115	409
Windy Bay Shallow	4497	DBAS	11/4/97	-	5.8	1	15.2	10.46	9.33	7.09	50.3	0.03	90.3	601	409

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	27	0.4	12.89	5.6	7.38	43.4	0.03	*****	-	385
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	26	1	12.89	5.6	7.36	43.5	0.03	*****	-	387
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	25	2	12.95	5.57	7.37	43.4	0.03	*****	-	387
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	24	3.2	12.96	5.54	7.37	43.5	0.03	*****	-	387
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	23	4.2	12.77	5.54	7.36	43.5	0.03	*****	-	386
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	22	5.5	12.88	5.51	7.35	43.6	0.03	*****	-	387
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	21	6.7	12.83	5.5	7.35	43.5	0.03	*****		387
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	20	7.8	12.98	5.39	7.34	43.6	0.03	*****	-	387
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	19	9	12.7	5.34	7.33	43.5	0.03	*****	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	18	10.1	12.87	5.32	7.33	43.5	0.03	*****	-	387
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	17	11.4	12.92	5.3	7.33	43.5	0.03	*****	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	16	12.8	12.72	5.24	7.33	43.5	0.03	*****	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	15	14	12.75	5.22	7.32	43.4	0.03	*****	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	14	15.3	12.86	5.17	7.32	43.3	0.03	*****	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	13	16.5	12.62	5.12	7.32	43.2	0.03	99	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	12	17.8	12.61	5.09	7.31	43.2	0.03	99	-	389
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	11	19	12.59	5.04	7.31	43.2	0.03	98.7	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	10	20.2	12.63	5.06	7.31	43.2	0.03	99	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	9	21.5	12.77	4.99	7.31	43.2	0.03	99.9	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	8	22.7	12.77	4.96	7.3	43.3	0.03	99.9	-	389
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	7	24	12.84	4.74	7.31	43.9	0.03	99.9	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	6	25.3	12.7	4.73	7.3	43.9	0.03	98.8	-	389
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	5	26.5	12.79	4.74	7.3	43.9	0.03	99.5	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	4	27.9	12.85	4.74	7.31	43.9	0.03	99.7	-	387
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	3	29.1	12.85	4.71	7.3	43.9	0.03	99.8	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	2	30.5	12.71	4.71	7.3	44	0.03	98.8	-	388
Windy Bay Deep	1597	ASSS	4/18/97	-	1.6	1	31.8	12.93	4.74	7.31	43.9	0.03	*****	-	387
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	19	0.2	11.55	12.53	7.06	36.7	0.02	107.6	-	413

Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	18	1.8	11.42	10.91	7.05	34.6	0.02	102.4	-	417
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	17	3.8	11.3	9.97	7.01	34.4	0.02	99.2	-	419
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	16	5.8	11.31	9.48	7	35	0.02	98.2	-	419
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	15	7.8	11.3	9.09	6.98	35.3	0.02	97.2	-	420
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	14	9.8	11.44	8.3	6.98	37.5	0.02	96.5	-	420
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	13	11.8	11.49	7.66	6.97	39.6	0.03	95.4		421
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	12	13.8	11.53	7.27	6.96	40.2	0.03	94.8	-	421
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	11	15.8	11.54	7.12	6.96	40.6	0.03	94.6	-	421
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	10	17.8	11.55	7.07	6.96	40.9	0.03	94.5	-	420
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	9	19.8	11.63	6.79	6.95	42.7	0.03	94.5	-	420
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	8	21.8	11.65	6.66	6.95	43.3	0.03	94.4	-	420
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	7	23.8	11.74	6.33	6.94	45.1	0.03	94.3	-	419
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	6	25.8	11.71	6.33	6.94	45.3	0.03	94.1	-	419
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	5	27.8	11.72	6.25	6.93	45.8	0.03	93.8	-	419
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	4	29.8	11.63	6.17	6.92	46	0.03	93	-	418
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	3	31.8	11.6	5.89	6.9	47	0.03	92.1	-	418
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	2	33.8	11.57	5.75	6.91	47.2	0.03	91.6	-	421
Windy Bay Deep	1997	DBSS	5/16/97	-	1.9	1	35.8	11.52	5.75	6.91	47.5	0.03	91.1	-	425
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	19	0.2	10.79	15.64	7.04	31.2	0.02	107.9	-	385
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	18	1	10.79	15.59	7.01	31.3	0.02	107.8	-	386
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	17	3	10.89	14.01	6.95	31.2	0.02	105.1	-	390
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	16	5	10.49	11.31	6.9	30.6	0.02	95.3	-	394
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	15	7	10.51	10.33	6.92	29.1	0.02	93.3	-	393
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	14	9	10.6	9.99	6.92	28.2	0.02	93.3	-	392
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	13	11.1	10.72	9.42	6.92	29.4	0.02	93.1		393
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	12	12.9	10.8	8.99	6.93	29.1	0.02	92.7	-	393
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	11	14.9	10.88	8.48	6.92	31.1	0.02	92.3	-	393
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	10	17	11.03	7.91	6.91	34.3	0.02	92.3	-	394
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	9	19	11.14	7.33	6.89	37.4	0.02	91.9	-	395
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	8	21	11.05	7.1	6.88	38.4	0.02	90.7	-	395
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	7	23	11.13	6.61	6.87	40.4	0.03	90.2	-	396
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	6	24.9	11.12	6.33	6.86	41.5	0.03	89.5	-	396
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	5	27.1	11.03	6.08	6.85	42.5	0.03	88.2	-	397
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	4	28.9	11.03	5.97	6.85	42.8	0.03	87.9	-	397
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	3	30.9	10.89	5.87	6.84	43.3	0.03	86.6	-	398
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	2	33.1	10.89	5.84	6.85	43.4	0.03	86.4	-	398
Windy Bay Deep	2197	DBSS	5/29/97	-	1.5	1	35	10.81	5.9	6.85	43.4	0.03	86.1	-	398
Windy Bay Deep	2397	DBAS	6/11/97	-	2	17	0.8	10.58	14.84	6.97	37	0.02	104.4	-	422
Windy Bay Deep	2397	DBAS	6/11/97	-	2	16	2.8	10.68	13.55	6.94	35.7	0.02	102.6	-	424
Windy Bay Deep	2397	DBAS	6/11/97	-	2	15	4.8	10.67	10.86	6.95	31.8	0.02	96.2	-	425
Windy Bay Deep	2397	DBAS	6/11/97	-	2	14	6.9	10.7	10.12	6.95	30.1	0.02	94.8	-	424
Windy Bay Deep	2397	DBAS	6/11/97	-	2	13	8.8	10.61	9.91	6.94	30.1	0.02	93.5	-	425

Windy Bay Deep	2397	DBAS	6/11/97	-	2	12	10.8	10.67	9.2	6.94	31.8	0.02	92.5	-	425
Windy Bay Deep	2397	DBAS	6/11/97	-	2	11	12.8	10.66	9.02	6.93	33.2	0.02	92	-	425
Windy Bay Deep	2397	DBAS	6/11/97	-	2	10	14.8	10.67	8.84	6.93	33.9	0.02	91.7	-	425
Windy Bay Deep	2397	DBAS	6/11/97	-	2	9	16.7	10.67	8.58	6.92	35.2	0.02	91.2	-	425
Windy Bay Deep	2397	DBAS	6/11/97	-	2	8	18.9	10.75	7.86	6.91	38.3	0.02	90.3	-	426
Windy Bay Deep	2397	DBAS	6/11/97	-	2	7	20.7	10.81	6.91	6.89	42.8	0.03	88.6	-	427
Windy Bay Deep	2397	DBAS	6/11/97	-	2	6	22.6	10.81	6.76	6.89	43.7	0.03	88.2	-	427
Windy Bay Deep	2397	DBAS	6/11/97	-	2	5	24.8	10.82	6.61	6.89	44.3	0.03	88	-	426
Windy Bay Deep	2397	DBAS	6/11/97	-	2	4	26.8	10.85	6.51	6.88	44.7	0.03	88	-	426
Windy Bay Deep	2397	DBAS	6/11/97	-	2	3	28.7	10.92	6.33	6.88	45.4	0.03	88.2	-	426
Windy Bay Deep	2397	DBAS	6/11/97	-	2	2	30.5	10.76	6.18	6.88	46.2	0.03	86.4	-	425
Windy Bay Deep	2397	DBAS	6/11/97	-	2	1	32.4	10.85	5.98	6.87	47.1	0.03	86.7	-	426
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	16	0.3	10.75	13.52	7.13	35	0.02	102.9	-	435
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	15	1.2	10.74	13.52	7.12	35	0.02	102.8	-	436
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	14	3.3	10.76	13.44	7.08	34.9	0.02	102.8	-	437
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	13	5.3	10.79	12.84	7.05	34.5	0.02	101.6	-	438
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	12	7.4	10.78	12.14	7.05	33.5	0.02	100	-	438
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	11	9.4	10.7	11.99	7.02	33.2	0.02	99	-	437
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	10	11.4	10.74	11.92	7	33.1	0.02	99.2	-	437
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	9	13.4	10.77	11.27	6.98	33.1	0.02	98	-	437
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	8	15.3	10.75	10.79	6.96	33	0.02	96.7	-	438
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	7	17.4	10.64	9.37	6.92	34.9	0.02	92.5	-	439
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	6	19.4	10.66	7.47	6.9	39.3	0.03	88.5	-	441
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	5	21.2	10.65	7.27	6.9	40.2	0.03	87.9	-	440
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	4	23.3	10.67	6.73	6.9	42.3	0.03	87	-	440
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	3	25.3	10.71	6.56	6.9	43	0.03	86.8	-	439
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	2	27.3	10.62	6.23	6.91	44.4	0.03	85.5	-	438
Windy Bay Deep	2597	DBSS	6/26/97	-	2.8	1	29.2	10.67	6.25	6.93	44.4	0.03	85.9	-	437
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	16	0.3	10.09	17.22	7.16	38.2	0.02	*****	-	421
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	15	1	10.11	17.17	7.15	38.1	0.02	*****	-	421
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	14	3	10.19	16.89	7.06	37.9	0.02	*****	-	425
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	13	5	10.35	15.28	7.04	36.2	0.02	*****	-	426
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	12	7	10.26	14.31	6.98	35.7	0.02	*****	-	428
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	11	9	10.18	13.32	6.93	35.2	0.02	97.9	-	429
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	10	11	9.93	12.73	6.86	34.4	0.02	94.3	-	431
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	9	13	9.88	11.56	6.83	34.5	0.02	91.5	-	433
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	8	15	9.83	9.32	6.78	37.1	0.02	86.2	-	435
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	7	17	10.07	7.65	6.79	40.5	0.03	84.7	-	436
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	6	18.9	10.12	7.43	6.78	41	0.03	84.7	-	436
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	5	20.9	10.3	7.1	6.79	41.4	0.03	85.5	-	436
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	4	23	10.31	6.79	6.79	42.7	0.03	84.8	-	436
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	3	25	10.32	6.69	6.79	43.1	0.03	84.8	-	436

Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	2	27	10.34	6.4	6.78	44.4	0.03	84.3	-	436
Windy Bay Deep	2797	DBSS	7/9/97	-	4.1	1	29.1	10.13	6.13	6.78	45.6	0.03	82.1	-	436
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	15	0.4	9.68	20.43	7.4	38.9	0.02	*****	-	417
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	14	1.5	9.88	19.74	7.38	38	0.02	*****	-	418
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	13	5.6	10.3	17.73	7.24	35.3	0.02	*****	-	423
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	12	7.6	10.39	16.87	7.14	35.4	0.02	*****	-	426
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	11	9.6	10.36	16.08	6.99	35.3	0.02	*****	-	431
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	10	11.6	9.99	14.64	6.85	34.2	0.02	97.7	-	437
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	9	13.6	9.49	13.24	6.75	33.4	0.02	90	-	441
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	8	15.6	8.99	10.54	6.69	34	0.02	80.2	-	444
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	7	17.6	9.71	8.29	6.67	37	0.02	82	-	446
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	6	19.6	9.92	7.28	6.67	39.2	0.03	81.7	-	446
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	5	21.6	9.99	6.87	6.66	40.4	0.03	81.4	-	447
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	4	23.6	10.1	6.66	6.66	41.1	0.03	81.8	-	447
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	3	25.5	10.09	6.51	6.66	41.5	0.03	81.5	-	446
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	2	27.7	10.07	6.31	6.66	42.2	0.03	81	-	446
Windy Bay Deep	2997	SSJD	7/24/97	-	6.5	1	29.6	9.6	6.33	6.65	42.7	0.03	77.2	-	447
Windy Bay Deep	3197	DBSS	8/5/97	-	8	18	0.3	8.91	24.3	7.42	42.5	0.03	105	-	371
Windy Bay Deep	3197	DBSS	8/5/97	-	8	17	2.3	9.05	23.52	7.4	43.6	0.03	105.1	-	372
Windy Bay Deep	3197	DBSS	8/5/97	-	8	16	4.2	9.24	22.92	7.31	43	0.03	106.1	-	375
Windy Bay Deep	3197	DBSS	8/5/97	-	8	15	6.3	9.79	20.85	7.2	40	0.03	108.1	-	378
Windy Bay Deep	3197	DBSS	8/5/97	-	8	14	8.3	10.19	16.78	7.03	35.7	0.02	103.5	-	385
Windy Bay Deep	3197	DBSS	8/5/97	-	8	13	10.4	9.31	13.48	6.87	34.2	0.02	88	-	392
Windy Bay Deep	3197	DBSS	8/5/97	-	8	12	12.3	8.86	11.15	6.84	34.7	0.02	79.6	-	394
Windy Bay Deep	3197	DBSS	8/5/97	-	8	11	14.2	8.98	9.66	6.85	35.4	0.02	77.8	-	395
Windy Bay Deep	3197	DBSS	8/5/97	-	8	10	16.2	9.21	8.37	6.85	37.6	0.02	77.4	-	395
Windy Bay Deep	3197	DBSS	8/5/97	-	8	9	18.3	9.66	7.5	6.87	38.7	0.02	79.5	-	395
Windy Bay Deep	3197	DBSS	8/5/97	-	8	8	20.3	9.78	7.05	6.87	40.3	0.03	79.5	-	395
Windy Bay Deep	3197	DBSS	8/5/97	-	8	7	22.3	9.96	6.79	6.89	40.8	0.03	80.4	-	394
Windy Bay Deep	3197	DBSS	8/5/97	-	8	6	24.2	10.08	6.57	6.89	41.3	0.03	81	-	394
Windy Bay Deep	3197	DBSS	8/5/97	-	8	5	26.3	10.1	6.38	6.91	42	0.03	80.7	-	394
Windy Bay Deep	3197	DBSS	8/5/97	-	8	4	28.3	10	6.23	6.92	42.7	0.03	79.7	-	394
Windy Bay Deep	3197	DBSS	8/5/97	-	8	3	30.3	9.74	6.26	6.93	43.2	0.03	77.7	-	394
Windy Bay Deep	3197	DBSS	8/5/97	-	8	2	32.3	9.57	6.21	6.94	43.2	0.03	76.2	-	393
Windy Bay Deep	3197	DBSS	8/5/97	-	8	1	34.3	9.56	6.18	6.98	44.8	0.03	76.1	-	392
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	16	0.3	8.72	22.94	7.3	41.9	0.03	100.8	-	382
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	15	1.3	8.77	22.33	7.2	42.6	0.03	100.2	-	388
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	14	3.3	8.8	22.03	7.13	43.1	0.03	100.1	-	391
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	13	5.3	8.9	21.82	7.43	42	0.03	100.7	-	384
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	12	7.3	8.87	21.61	7.31	41.5	0.03	100	-	388
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	11	9.3	8.96	20.73	7.4	41.3	0.03	99.4	-	383

Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	10	11.3	8.86	13.82	6.78	35.3	0.02	85.6	-	408
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	9	13.5	8.82	11.59	7.2	35.9	0.02	80.5	-	399
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	8	15.4	8.47	10.68	6.75	35.9	0.02	75.7	-	411
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	7	17.4	8.57	9.04	6.76	37.3	0.02	73.7	-	411
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	6	19.3	8.84	8.18	6.77	39	0.03	74.4	-	411
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	5	21.4	9.11	7.27	6.78	40.8	0.03	74.9	-	411
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	4	23.4	9.37	6.92	6.8	41.5	0.03	76.6	-	410
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	3	25.4	9.5	6.72	6.81	42.1	0.03	77.1	-	409
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	2	27.4	9.52	6.56	6.82	42.5	0.03	76.9	-	408
Windy Bay Deep	3297	DBSS	8/13/97	-	10.5	1	29.4	9.12	6.33	6.83	43.8	0.03	73.3	-	408
Windy Bay Deep	3497	DBSS	8/27/97	-	8	16	0.3	9.22	20.87	7.41	47	0.03	102.6	-	372
Windy Bay Deep	3497	DBSS	8/27/97	-	8	15	1.5	9.23	20.83	7.39	47.1	0.03	102.7	-	372
Windy Bay Deep	3497	DBSS	8/27/97	-	8	14	3.5	9.23	20.78	7.33	46.9	0.03	102.5	-	374
Windy Bay Deep	3497	DBSS	8/27/97	-	8	13	5.4	9.24	20.67	7.26	46.8	0.03	102.4	-	375
Windy Bay Deep	3497	DBSS	8/27/97	-	8	12	7.5	9.15	20.69	7.08	46.7	0.03	101.5	-	382
Windy Bay Deep	3497	DBSS	8/27/97	-	8	11	9.5	9.28	15.93	6.87	38.8	0.02	93.5	-	394
Windy Bay Deep	3497	DBSS	8/27/97	-	8	10	11.5	8.91	12.38	6.82	38.3	0.02	82.9	-	397
Windy Bay Deep	3497	DBSS	8/27/97	-	8	9	13.6	8.48	9.58	6.8	40.6	0.03	73.9	-	399
Windy Bay Deep	3497	DBSS	8/27/97	-	8	8	15.5	9.07	7.68	6.8	43.2	0.03	75.5	-	401
Windy Bay Deep	3497	DBSS	8/27/97	-	8	7	17.2	9.43	7.07	6.83	44.3	0.03	77.4	-	400
Windy Bay Deep	3497	DBSS	8/27/97	-	8	6	21.6	9.72	6.64	6.88	45.3	0.03	78.8	-	399
Windy Bay Deep	3497	DBSS	8/27/97	-	8	5	23.5	9.72	6.5	6.89	45.6	0.03	78.6	-	398
Windy Bay Deep	3497	DBSS	8/27/97	-	8	4	25.6	9.71	6.38	6.9	46.1	0.03	78.2	-	398
Windy Bay Deep	3497	DBSS	8/27/97	-	8	3	27.5	9.58	6.3	6.92	46.4	0.03	77	-	398
Windy Bay Deep	3497	DBSS	8/27/97	-	8	2	29.5	9.47	6.28	6.96	46.5	0.03	76.2	-	397
Windy Bay Deep	3497	DBSS	8/27/97	-	8	1	31.7	9.48	6.28	7.05	46.7	0.03	76.2	-	395
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	17	0.4	9.28	17.53	7.3	52	0.03	98.1	-	389
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	16	2.7	9.34	17.56	7.27	52	0.03	98.6	-	390
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	15	4.7	9.22	17.51	7.22	52	0.03	97.5	-	392
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	14	6.7	9.22	17.24	7.18	50.2	0.03	96.9	-	393
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	13	8.7	9.25	17.17	7.15	49.7	0.03	97.1	-	393
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	12	10.7	9.28	17.12	7.08	48.7	0.03	97.3	-	395
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	11	12.7	9.26	16.8	6.98	47.3	0.03	96.3	-	398
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	10	14.7	9.07	15.91	6.86	45	0.03	92.6	-	403
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	9	16.7	8.66	12.17	6.73	40.1	0.03	81.4	-	411
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	8	18.7	8.43	10.51	6.7	41.1	0.03	76.3	-	412
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	7	20.7	8.47	9.46	6.71	41.9	0.03	74.8	-	412
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	6	22.7	8.57	8.43	6.71	42.7	0.03	73.8	-	413
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	5	24.7	8.89	7.38	6.72	43.9	0.03	74.6	-	413
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	4	26.7	9.04	7.07	6.74	44.5	0.03	75.3	-	412
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	3	28.7	9.16	6.73	6.76	45.2	0.03	75.6	-	411
Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	2	30.7	9.21	6.64	6.8	45.2	0.03	75.9	-	410

Windy Bay Deep	3797	ASRP	9/17/97	-	7.5	1	32.7	9.23	6.64	6.84	45.2	0.03	76	-	408
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	17	0.2	9.77	15.09	7.16	46.3	0.03	98.1	-	444
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	16	2	9.65	15.03	7.16	46.4	0.03	96.8	-	444
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	15	4	9.6	14.96	7.15	46.2	0.03	96.2	-	444
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	14	6	9.59	14.78	7.11	46.6	0.03	95.7	-	445
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	13	8	9.57	14.66	7.09	46.5	0.03	95.2	-	446
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	12	10	9.57	14.66	7.07	46.6	0.03	95.2	-	446
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	11	12	9.5	14.58	7.02	46.5	0.03	94.3	-	447
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	10	14	9.39	14.35	6.97	45.9	0.03	92.8	-	448
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	9	16	9.34	13.92	6.94	45.4	0.03	91.4	-	449
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	8	18	9.28	13.6	6.91	45	0.03	90.2	-	450
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	7	20	9.23	13.3	6.85	44.7	0.03	89.1	-	451
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	6	22	8.88	11.2	6.78	42.2	0.03	81.7	-	455
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	5	23.9	8.9	8.48	6.75	41.4	0.03	76.8	-	457
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	4	26	8.91	7.97	6.74	41.8	0.03	75.9	-	457
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	3	28	8.94	7.6	6.76	42	0.03	75.5	-	457
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	2	30	8.93	7.28	6.8	42.2	0.03	74.8	-	455
Windy Bay Deep	3997	ASRA	9/29/97	-	7.5	1	31.8	9.05	7	6.83	42.6	0.03	75.3	-	454
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	16	0.3	9.92	12.28	7.14	49.7	0.03	91.7	-	386
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	15	1	9.94	12.28	7.14	49.7	0.03	91.8	-	387
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	14	3	9.92	12.3	7.14	49.7	0.03	91.6	-	386
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	13	5	9.91	12.3	7.12	49.7	0.03	91.5	-	387
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	12	7	9.91	12.28	7.1	49.9	0.03	91.6	-	387
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	11	9	9.92	12.27	7.07	49.8	0.03	91.6	-	388
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	10	11	9.91	12.27	7.03	49.7	0.03	91.5	-	388
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	9	13	9.88	12.27	6.99	49.7	0.03	91.2	-	389
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	8	15	9.82	12.27	6.91	49.8	0.03	90.7	-	392
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	7	17	9.74	12.18	6.8	49.8	0.03	89.7	-	395
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	6	19	8.21	10.1	6.64	48.8	0.03	72.1	-	401
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	5	21	8.3	7.99	6.64	47.5	0.03	69.2	-	402
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	4	23	8.4	7.35	6.64	47.5	0.03	69	-	402
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	3	25	8.27	6.96	6.65	47.6	0.03	67.3	-	402
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	2	27	8.28	6.91	6.65	47.9	0.03	67.2	-	402
Windy Bay Deep	4297	DBAS	10/21/97	-	7.3	1	29.1	8.27	6.84	6.71	47.9	0.03	67	-	401
Windy Bay Deep	4497	DBAS	11/4/97	-	7	16	0.6	10.6	10.33	7.11	46.8	0.03	93.7	57	411
Windy Bay Deep	4497	DBAS	11/4/97	-	7	15	2.8	10.56	10.23	7.1	46.9	0.03	93.1	142	413
Windy Bay Deep	4497	DBAS	11/4/97	-	7	14	4.8	10.5	10.22	7.11	46.9	0.03	92.6	207	413
Windy Bay Deep	4497	DBAS	11/4/97	-	7	13	6.8	10.43	10.07	7.09	47.1	0.03	91.6	56	414
Windy Bay Deep	4497	DBAS	11/4/97	-	7	12	8.8	10.46	10.07	7.08	47.1	0.03	91.9	46	415
Windy Bay Deep	4497	DBAS	11/4/97	-	7	11	10.8	10.45	10.09	7.09	47.2	0.03	91.9	40	415
Windy Bay Deep	4497	DBAS	11/4/97	-	7	10	12.8	10.46	10.07	7.09	47.2	0.03	91.9	117	415

Windy Bay Deep	4497	DBAS	11/4/97	-	7	9	14.8	10.47	10.05	7.09	47.2	0.03	92	159	415
Windy Bay Deep	4497	DBAS	11/4/97	-	7	8	16.8	10.42	10.04	7.08	47.4	0.03	91.5	132	415
Windy Bay Deep	4497	DBAS	11/4/97	-	7	7	18.8	10.44	10.04	7.08	47.3	0.03	91.7	102	415
Windy Bay Deep	4497	DBAS	11/4/97	-	7	6	20.8	10.45	10.02	7.07	47.3	0.03	91.7	112	416
Windy Bay Deep	4497	DBAS	11/4/97	-	7	5	22.8	10.43	9.97	7.07	47.5	0.03	91.5	52	416
Windy Bay Deep	4497	DBAS	11/4/97	-	7	4	24.8	10.39	9.91	7.04	47.7	0.03	91	55	417
Windy Bay Deep	4497	DBAS	11/4/97	-	7	3	26.8	10.34	9.71	7.03	48.3	0.03	90.1	119	418
Windy Bay Deep	4497	DBAS	11/4/97	-	7	2	28.8	10.24	9.33	7.02	49.5	0.03	88.5	111	419
Windy Bay Deep	4497	DBAS	11/4/97	-	7	1	30.8	10.05	9.02	7.01	50	0.03	86.1	631	421

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
CDA River	1597	ASSS	4/18/97	-	1.8	17	0.4	12.48	6.49	7.48	37.4	0.02	*****	-	372
CDA River	1597	ASSS	4/18/97	-	1.8	16	1.4	12.52	6.33	7.46	37.4	0.02	*****	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	15	2.4	12.46	6.3	7.46	37.4	0.02	*****	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	14	3.5	12.47	6.28	7.45	37.4	0.02	*****	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	13	4.6	12.42	6.28	7.44	37.4	0.02	*****	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	12	5.5	12.4	6.28	7.44	37.4	0.02	*****	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	11	6.6	12.41	6.26	7.43	37.5	0.02	*****	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	10	7.8	12.39	6.25	7.43	37.4	0.02	*****	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	9	8.8	12.45	6.23	7.42	37.5	0.02	*****	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	8	10	12.42	6.2	7.42	37.5	0.02	*****	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	7	11.1	12.38	6.17	7.42	37.6	0.02	99.9	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	6	12.4	12.34	6.08	7.41	38	0.02	99.3	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	5	13.5	12.32	5.88	7.41	38.4	0.02	98.6	-	374
CDA River	1597	ASSS	4/18/97	-	1.8	4	14.8	12.27	5.77	7.4	38.5	0.02	98	-	375
CDA River	1597	ASSS	4/18/97	-	1.8	3	16	12.23	5.67	7.39	38.4	0.02	97.4	-	376
CDA River	1597	ASSS	4/18/97	-	1.8	2	17.2	12.19	5.59	7.39	38.3	0.02	96.9	-	380
CDA River	1597	ASSS	4/18/97	-	1.8	1	18.6	12.59	5.44	7.38	38.4	0.02	99.9	-	382
CDA River	1997	DBSS	5/16/97	-	0.6	15	0.2	10.61	14.93	6.94	32	0.02	104.3	-	390
CDA River	1997	DBSS	5/16/97	-	0.6	14	1.6	10.56	12.51	6.86	32	0.02	98.3	-	399
CDA River	1997	DBSS	5/16/97	-	0.6	13	2.7	10.43	12.37	6.84	32.1	0.02	96.8	-	401
CDA River	1997	DBSS	5/16/97	-	0.6	12	3.7	10.41	12.27	6.83	32.3	0.02	96.4	-	402
CDA River	1997	DBSS	5/16/97	-	0.6	11	4.7	10.33	12.18	6.82	32.2	0.02	95.5	-	402
CDA River	1997	DBSS	5/16/97	-	0.6	10	5.7	10.25	11.91	6.82	32.4	0.02	94.1	-	404
CDA River	1997	DBSS	5/16/97	-	0.6	9	6.7	10.25	11.76	6.82	32.3	0.02	93.8	-	404
CDA River	1997	DBSS	5/16/97	-	0.6	8	7.7	10.24	11.64	6.85	32.3	0.02	93.5	-	403
CDA River	1997	DBSS	5/16/97	-	0.6	7	8.7	10.33	11.31	6.93	32	0.02	93.7	-	400
CDA River	1997	DBSS	5/16/97	-	0.6	6	9.7	10.67	10.4	6.99	31	0.02	94.6	-	396
CDA River	1997	DBSS	5/16/97	-	0.6	5	10.7	11.02	9.42	7.01	29.6	0.02	95.5	-	394
CDA River	1997	DBSS	5/16/97	-	0.6	4	11.7	11	9.06	7.01	31.9	0.02	94.5	-	394
CDA River	1997	DBSS	5/16/97	-	0.6	3	12.7	10.99	8.88	7.01	32.5	0.02	94	-	393

CDA River	1997	DBSS	5/16/97	-	0.6	2	13.7	11.02	8.77	7.01	32.9	0.02	94	-	392
CDA River	1997	DBSS	5/16/97	-	0.6	1	14.7	10.97	8.73	7.01	33	0.02	93.5	-	395
CDA River	2197	DBSS	5/29/97	-	1.7	12	0.5	10.55	14.36	6.93	35.9	0.02	102.5	-	389
CDA River	2197	DBSS	5/29/97	-	1.7	11	1.4	10.7	13.83	6.95	35.4	0.02	102.8	-	389
CDA River	2197	DBSS	5/29/97	-	1.7	10	2.3	10.71	13.67	6.94	34.6	0.02	102.5	-	390
CDA River	2197	DBSS	5/29/97	-	1.7	9	3.5	10.8	12.2	6.92	35.6	0.02	100.1	-	392
CDA River	2197	DBSS	5/29/97	-	1.7	8	4.3	10.8	12.05	6.91	35.7	0.02	99.8	-	392
CDA River	2197	DBSS	5/29/97	-	1.7	7	5.4	10.8	12	6.91	35.8	0.02	99.6	-	392
CDA River	2197	DBSS	5/29/97	-	1.7	6	6.3	10.78	11.94	6.91	35.8	0.02	99.3	-	392
CDA River	2197	DBSS	5/29/97	-	1.7	5	7.3	10.77	11.92	6.91	35.8	0.02	99.2	-	392
CDA River	2197	DBSS	5/29/97	-	1.7	4	8.3	10.65	11.2	6.94	33.3	0.02	96.4	-	392
CDA River	2197	DBSS	5/29/97	-	1.7	3	9.3	10.87	9.58	7.01	27.5	0.02	94.7	-	389
CDA River	2197	DBSS	5/29/97	-	1.7	2	10.3	10.87	9.33	7.02	26.8	0.02	94.2	-	390
CDA River	2197	DBSS	5/29/97	-	1.7	1	11.4	10.86	9.33	7.01	27.1	0.02	94.1	-	392
CDA River	2397	DBAS	6/11/97	-	1.9	13	0.4	10.07	16.99	6.99	43.2	0.03	104	-	420
CDA River	2397	DBAS	6/11/97	-	1.9	12	1	10.06	15.56	7	44.3	0.03	100.8	-	420
CDA River	2397	DBAS	6/11/97	-	1.9	11	2	10.06	15.31	6.98	44.8	0.03	100.3	-	421
CDA River	2397	DBAS	6/11/97	-	1.9	10	2.9	10	14.53	6.97	45	0.03	98	-	422
CDA River	2397	DBAS	6/11/97	-	1.9	9	4	10.02	14.59	6.98	45.1	0.03	98.3	-	421
CDA River	2397	DBAS	6/11/97	-	1.9	8	5	10.06	14.36	6.99	44.7	0.03	98.2	-	421
CDA River	2397	DBAS	6/11/97	-	1.9	7	5.9	10.05	14.28	6.99	44	0.03	97.9	-	421
CDA River	2397	DBAS	6/11/97	-	1.9	6	6.9	10.52	12.6	7.03	36.9	0.02	98.7	-	419
CDA River	2397	DBAS	6/11/97	-	1.9	5	7.8	10.59	12.22	7.05	34.8	0.02	98.6	-	417
CDA River	2397	DBAS	6/11/97	-	1.9	4	8.9	10.94	11.51	7.08	30.8	0.02	100.1	-	415
CDA River	2397	DBAS	6/11/97	-	1.9	3	9.9	11.04	11.3	7.08	30.1	0.02	100.5	-	414
CDA River	2397	DBAS	6/11/97	-	1.9	2	10.9	11.08	11.25	7.07	29.2	0.02	100.8	-	414
CDA River	2397	DBAS	6/11/97	-	1.9	1	11.9	10.86	10.87	7.07	29.1	0.02	98.1	-	414
CDA River	2597	DBSS	6/26/97	-	2.2	13	0.3	10.46	14.23	7.08	45.3	0.03	101.7	-	435
CDA River	2597	DBSS	6/26/97	-	2.2	12	1.2	10.46	14.25	7.07	45.3	0.03	101.7	-	437
CDA River	2597	DBSS	6/26/97	-	2.2	11	2.3	10.45	14.16	7.05	45	0.03	101.5	-	438
CDA River	2597	DBSS	6/26/97	-	2.2	10	3.3	10.49	13.73	7.01	44.6	0.03	100.7	-	439
CDA River	2597	DBSS	6/26/97	-	2.2	9	4.2	10.47	13.6	7.03	42.4	0.03	100.4	-	437
CDA River	2597	DBSS	6/26/97	-	2.2	8	5.2	10.52	13.4	7.02	37.8	0.02	100.5	-	436
CDA River	2597	DBSS	6/26/97	-	2.2	7	6.2	10.56	12.5	7	34.2	0.02	98.8	-	436
CDA River	2597	DBSS	6/26/97	-	2.2	6	7.2	10.55	12.18	7	32.4	0.02	98	-	435
CDA River	2597	DBSS	6/26/97	-	2.2	5	8.3	10.45	11.41	7	30.5	0.02	95.3	-	435
CDA River	2597	DBSS	6/26/97	-	2.2	4	9	10.39	11.36	7	30.4	0.02	94.7	-	435
CDA River	2597	DBSS	6/26/97	-	2.2	3	10.2	10.39	11.33	6.99	30.4	0.02	94.7	-	434
CDA River	2597	DBSS	6/26/97	-	2.2	2	11.5	10.22	11.12	6.98	30.4	0.02	92.6	-	434
CDA River	2597	DBSS	6/26/97	-	2.2	1	12.6	10.07	10.82	7	30.6	0.02	90.6	-	433

CDA River	2797	DBSS	7/9/97	-	3.3	11	0.4	9.72	18.54	7.11	49.9	0.03	*****	-	421
CDA River	2797	DBSS	7/9/97	-	3.3	10	1.1	9.72	18.53	7.09	50	0.03	*****	-	421
CDA River	2797	DBSS	7/9/97	-	3.3	9	2.1	9.73	18.5	7.06	52.1	0.03	*****	-	422
CDA River	2797	DBSS	7/9/97	-	3.3	8	3	9.78	18.37	7	54.8	0.04	*****	-	424
CDA River	2797	DBSS	7/9/97	-	3.3	7	4.1	9.6	18.03	6.91	69.8	0.04	*****	-	428
CDA River	2797	DBSS	7/9/97	-	3.3	6	5	9.65	17.73	6.86	75.4	0.05	*****	-	430
CDA River	2797	DBSS	7/9/97	-	3.3	5	6	9.96	14.99	-	43	0.03	99.4	-	426
CDA River	2797	DBSS	7/9/97	-	3.3	4	7	10	13.1	6.94	34.1	0.02	95.7	-	425
CDA River	2797	DBSS	7/9/97	-	3.3	3	9	9.76	11.94	6.91	33.4	0.02	90.9	-	426
CDA River	2797	DBSS	7/9/97	-	3.3	2	10.1	9.75	11.82	6.92	33.4	0.02	90.6	-	426
CDA River	2797	DBSS	7/9/97	-	3.3	1	11	9.71	11.82	6.94	33.4	0.02	90.3	-	430
CDA River	2997	SSJD	7/24/97	-	4.5	12	0.5	9.38	21.69	7.49	39.8	0.03	*****	-	395
CDA River	2997	SSJD	7/24/97	-	4.5	11	1.2	9.4	21.37	7.46	42.7	0.03	*****	-	396
CDA River	2997	SSJD	7/24/97	-	4.5	10	2.3	9.4	21.33	7.4	48.4	0.03	*****	-	398
CDA River	2997	SSJD	7/24/97	-	4.5	9	3.2	9.4	21.33	7.37	50.1	0.03	*****	-	398
CDA River	2997	SSJD	7/24/97	-	4.5	8	4.2	9.4	21.3	7.33	51.3	0.03	*****	-	398
CDA River	2997	SSJD	7/24/97	-	4.5	7	5.3	9.42	21.11	7.26	49.9	0.03	*****	-	398
CDA River	2997	SSJD	7/24/97	-	4.5	6	6.2	9.33	20.67	7.11	58.2	0.04	*****	-	402
CDA River	2997	SSJD	7/24/97	-	4.5	5	7.2	10.2	16.19	7.12	35.9	0.02	*****	-	401
CDA River	2997	SSJD	7/24/97	-	4.5	4	8.2	9.82	15.19	7.02	34.9	0.02	97.2	-	403
CDA River	2997	SSJD	7/24/97	-	4.5	3	9.2	9.45	14.18	6.98	34	0.02	91.5	-	402
CDA River	2997	SSJD	7/24/97	-	4.5	2	10.2	9.28	13.84	0	34	0.02	89.2	-	400
CDA River	2997	SSJD	7/24/97	-	4.5	1	11.2	8.84	13.68	7.01	34.2	0.02	84.7	-	397
CDA River	3197	DBSS	8/5/97	-	5.5	11	0.4	9.38	25.18	7.65	61.4	0.04	112.4	-	359
CDA River	3197	DBSS	8/5/97	-	5.5	10	1.1	9.29	24.06	7.58	53.3	0.03	109	-	361
CDA River	3197	DBSS	8/5/97	-	5.5	9	2.1	9.23	23.67	7.54	50.8	0.03	107.6	-	362
CDA River	3197	DBSS	8/5/97	-	5.5	8	3.2	9.1	23.53	7.5	46.6	0.03	105.8	-	363
CDA River	3197	DBSS	8/5/97	-	5.5	7	4.2	9.14	23.26	7.46	46.6	0.03	105.8	-	365
CDA River	3197	DBSS	8/5/97	-	5.5	6	5.2	9.22	23.15	7.39	49.1	0.03	106.3	-	366
CDA River	3197	DBSS	8/5/97	-	5.5	5	6	10.06	19.97	7.38	41.6	0.03	109.2	-	367
CDA River	3197	DBSS	8/5/97	-	5.5	4	7.1	9.71	19.4	7.31	42.1	0.03	0	-	369
CDA River	3197	DBSS	8/5/97	-	5.5	3	8	9.81	18.17	7.33	38.3	0.02	102.7	-	368
CDA River	3197	DBSS	8/5/97	-	5.5	2	8.9	10.49	17.23	7.35	36.1	0.02	107.7	-	366
CDA River	3197	DBSS	8/5/97	-	5.5	1	10	9.81	16.75	7.32	36.6	0.02	99.7	-	368
CDA River	3297	DBSS	8/13/97	-	6	10	0.2	8.82	23.38	7.74	54.8	0.04	102.8	-	363
CDA River	3297	DBSS	8/13/97	-	6	9	0.7	8.77	23.13	7.65	53.9	0.03	101.8	-	369
CDA River	3297	DBSS	8/13/97	-	6	8	1.7	8.74	22.74	7.66	47.7	0.03	100.7	-	368
CDA River	3297	DBSS	8/13/97	-	6	7	2.7	8.8	22.65	7.68	50.3	0.03	101.3	-	367
CDA River	3297	DBSS	8/13/97	-	6	6	3.7	8.88	22.63	7.66	52.9	0.03	102.2	-	367
CDA River	3297	DBSS	8/13/97	-	6	5	4.7	8.91	22.33	7.64	56	0.04	101.9	-	367
CDA River	3297	DBSS	8/13/97	-	6	4	5.6	8.95	22.24	7.58	61.9	0.04	102.2	-	368

CDA River	3297	DBSS	8/13/97	-	6	3	6.7	8.95	22.08	7.3	67.3	0.04	101.8	-	375
CDA River	3297	DBSS	8/13/97	-	6	2	7.7	8.67	19.88	7.15	46.5	0.03	94.5	-	381
CDA River	3297	DBSS	8/13/97	-	6	1	8.7	8.73	17.78	7.14	39.5	0.03	91.2	-	382
CDA River	3497	DBSS	8/27/97	-	6.1	13	0.3	9.13	20.86	7.53	52.7	0.03	101.5	-	346
CDA River	3497	DBSS	8/27/97	-	6.1	12	0.9	9.14	20.84	7.54	52.6	0.03	101.7	-	345
CDA River	3497	DBSS	8/27/97	-	6.1	11	2	9.14	20.84	7.54	52.5	0.03	101.7	-	344
CDA River	3497	DBSS	8/27/97	-	6.1	10	2.9	9.14	20.83	7.54	53.3	0.03	101.7	-	344
CDA River	3497	DBSS	8/27/97	-	6.1	9	4	9.14	20.81	7.52	55.2	0.04	101.6	-	345
CDA River	3497	DBSS	8/27/97	-	6.1	8	5.1	9.12	20.81	7.5	55.4	0.04	101.4	-	345
CDA River	3497	DBSS	8/27/97	-	6.1	7	6.1	9.11	20.77	7.48	58	0.04	101.2	-	346
CDA River	3497	DBSS	8/27/97	-	6.1	6	6.9	9.08	20.76	7.47	58.3	0.04	100.9	-	345
CDA River	3497	DBSS	8/27/97	-	6.1	5	7.9	9.09	20.72	7.44	60	0.04	100.9	-	346
CDA River	3497	DBSS	8/27/97	-	6.1	4	9	9.06	20.69	7.41	59.8	0.04	100.4	-	346
CDA River	3497	DBSS	8/27/97	-	6.1	3	10	9.03	20.67	7.39	59.1	0.04	100.2	-	345
CDA River	3497	DBSS	8/27/97	-	6.1	2	10.9	8.92	20.56	7.37	59	0.04	98.7	-	345
CDA River	3497	DBSS	8/27/97	-	6.1	1	12	8.08	16.69	7.11	42.1	0.03	82.6	-	359
CDA River	3797	ASRP	9/17/97	-	5.5	11	0.1	9.38	17.47	7.44	58.9	0.04	99.1	-	370
CDA River	3797	ASRP	9/17/97	-	5.5	10	1	9.32	17.49	7.43	58.9	0.04	98.4	-	369
CDA River	3797	ASRP	9/17/97	-	5.5	9	2	9.24	17.48	7.45	59.1	0.04	97.6	-	368
CDA River	3797	ASRP	9/17/97	-	5.5	8	3	9.35	17.49	7.42	59	0.04	98.8	-	369
CDA River	3797	ASRP	9/17/97	-	5.5	7	4	9.37	17.48	7.4	59.6	0.04	99	-	369
CDA River	3797	ASRP	9/17/97	-	5.5	6	5	9.35	17.49	7.39	59.3	0.04	98.8	-	369
CDA River	3797	ASRP	9/17/97	-	5.5	5	6	9.29	17.48	7.37	59.8	0.04	97.9	-	368
CDA River	3797	ASRP	9/17/97	-	5.5	4	7	9.28	17.43	7.34	61	0.04	97.8	-	368
CDA River	3797	ASRP	9/17/97	-	5.5	3	8	9.19	17.44	7.22	61	0.04	97	-	369
CDA River	3797	ASRP	9/17/97	-	5.5	2	9	8.59	9.82	7.04	50.3	0.03	76.9	-	380
CDA River	3797	ASRP	9/17/97	-	5.5	1	10.1	8.38	9.79	6.96	52.8	0.03	74.6	-	385
CDA River	3997	ASRA	9/29/97	-	6	11	0.2	9.72	16.01	7.37	52.6	0.03	99.4	-	414
CDA River	3997	ASRA	9/29/97	-	6	10	1.8	9.66	15.76	7.36	52.2	0.03	98.4	-	415
CDA River	3997	ASRA	9/29/97	-	6	9	2.8	9.66	15.71	7.33	53.3	0.03	98.3	-	415
CDA River	3997	ASRA	9/29/97	-	6	8	3.8	9.62	15.66	7.31	53.9	0.03	97.8	-	415
CDA River	3997	ASRA	9/29/97	-	6	7	4.8	9.59	15.61	7.29	53.4	0.03	97.4	-	415
CDA River	3997	ASRA	9/29/97	-	6	6	5.9	9.56	15.54	7.26	53.8	0.03	97	-	414
CDA River	3997	ASRA	9/29/97	-	6	5	6.8	9.62	15.52	7.23	56.7	0.04	97.5	-	414
CDA River	3997	ASRA	9/29/97	-	6	4	7.8	9.74	15.12	7.15	64.5	0.04	97.9	-	416
CDA River	3997	ASRA	9/29/97	-	6	3	8.8	9.62	14.99	7.03	68	0.04	96.5	-	419
CDA River	3997	ASRA	9/29/97	-	6	2	9.8	7.74	12.13	6.9	48.6	0.03	72.8	-	425
CDA River	3997	ASRA	9/29/97	-	6	1	10.8	7.85	10.26	6.97	44.5	0.03	70.6	-	424
CDA River	4297	DBAS	10/21/97	-	6	11	0.3	10.11	11.79	7.24	54.6	0.03	92.3	-	371
CDA River	4297	DBAS	10/21/97	-	6	10	1	10.1	11.81	7.27	54.6	0.03	92.2	-	369

CDA River	4297	DBAS	10/21/97	-	6	9	2	10.11	11.81	7.23	54.8	0.04	92.4	-	370
CDA River	4297	DBAS	10/21/97	-	6	8	3	10.08	11.81	7.24	54.7	0.04	92.1	-	369
CDA River	4297	DBAS	10/21/97	-	6	7	4.1	10.12	11.77	7.22	55.3	0.04	92.4	-	369
CDA River	4297	DBAS	10/21/97	-	6	6	5	10.13	11.74	7.19	55.7	0.04	92.4	-	370
CDA River	4297	DBAS	10/21/97	-	6	5	6	10.16	11.68	7.18	56.7	0.04	92.5	-	370
CDA River	4297	DBAS	10/21/97	-	6	4	7	10.17	11.59	7.17	57.9	0.04	92.5	-	369
CDA River	4297	DBAS	10/21/97	-	6	3	8	10.17	11.59	7.13	57.9	0.04	92.5	-	370
CDA River	4297	DBAS	10/21/97	-	6	2	9	10.22	11.41	7.1	63.2	0.04	92.5	-	371
CDA River	4297	DBAS	10/21/97	-	6	1	10	10.23	10.94	7.01	81.3	0.05	91.6	-	379
CDA River	4497	DBAS	11/4/97	-	3.8	11	0.4	10.87	10.02	7.35	53.9	0.03	95.5	54	392
CDA River	4497	DBAS	11/4/97	-	3.8	10	1.5	10.94	9.79	7.34	53.7	0.03	95.5	50	393
CDA River	4497	DBAS	11/4/97	-	3.8	9	2.5	10.87	9.79	7.37	53.7	0.03	94.9	146	392
CDA River	4497	DBAS	11/4/97	-	3.8	8	3.5	10.92	9.74	7.33	53.6	0.03	95.3	51	393
CDA River	4497	DBAS	11/4/97	-	3.8	7	4.5	10.88	9.68	7.28	53.7	0.03	94.8	102	395
CDA River	4497	DBAS	11/4/97	-	3.8	6	5.5	10.9	9.4	7.21	54.5	0.03	94.3	59	398
CDA River	4497	DBAS	11/4/97	-	3.8	5	6.5	10.91	9.38	7.26	54.6	0.03	94.3	121	395
CDA River	4497	DBAS	11/4/97	-	3.8	4	7.5	11	9.25	7.19	54.9	0.04	94.8	49	398
CDA River	4497	DBAS	11/4/97	-	3.8	3	8.5	11.23	8.55	7.14	57.3	0.04	95.1	42	401
CDA River	4497	DBAS	11/4/97	-	3.8	2	9.5	11.29	8.25	7.12	58.2	0.04	95	59	402
CDA River	4497	DBAS	11/4/97	-	3.8	1	10.5	11.26	8.17	7.1	58.6	0.04	94.5	536	404

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Mid Lake CDA	1597	ASSS	4/18/97	-	2	10	0.4	12.33	6.36	7.36	44.6	0.03	99.9	-	377
Mid Lake CDA	1597	ASSS	4/18/97	-	2	9	1.4	12.36	6.3	7.35	45.2	0.03	*****	-	378
Mid Lake CDA	1597	ASSS	4/18/97	-	2	8	2.6	12.27	6.33	7.35	44.4	0.03	99.4	-	379
Mid Lake CDA	1597	ASSS	4/18/97	-	2	7	3.8	12.31	6.28	7.34	45.3	0.03	99.6	-	379
Mid Lake CDA	1597	ASSS	4/18/97	-	2	6	5.1	12.32	6.3	7.34	45.4	0.03	99.7	-	379
Mid Lake CDA	1597	ASSS	4/18/97	-	2	5	6.4	12.35	6.31	7.34	44.9	0.03	*****	-	379
Mid Lake CDA	1597	ASSS	4/18/97	-	2	4	7.5	12.43	6.31	7.33	44.6	0.03	*****	-	379
Mid Lake CDA	1597	ASSS	4/18/97	-	2	3	8.7	12.4	6.31	7.33	44.7	0.03	*****	-	378
Mid Lake CDA	1597	ASSS	4/18/97	-	2	2	10.1	12.44	6.26	7.32	44.8	0.03	*****	-	379
Mid Lake CDA	1597	ASSS	4/18/97	-	2	1	11.2	12.57	6.28	7.32	44.8	0.03	*****	-	378
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	15	0.2	12.04	13.83	6.33	0.7	0	115.5	-	422
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	14	1.5	11.12	10.32	7	28.2	0.02	98.5	-	392
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	13	3	11.1	9.86	7	28.8	0.02	97.3	-	392
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	12	4.5	11.16	9.79	6.99	28.3	0.02	97.5	-	392
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	11	6	11.1	9.51	6.98	29	0.02	96.4	-	393
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	10	7.5	11.04	9.25	6.98	29.4	0.02	95.3	-	392
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	9	9	11.04	9.17	6.99	29.6	0.02	95	-	391
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	8	10.5	11.08	8.92	7.02	30.7	0.02	94.8	-	389

Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	7	12	11.29	8.45	7.01	33.4	0.02	95.6	-	389
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	6	13.5	11.32	7.81	6.99	34.7	0.02	94.3	-	390
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	5	15	11.28	7.47	6.98	34.9	0.02	93.2	-	389
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	4	16.5	11.25	6.66	6.96	37.2	0.02	91.1	-	390
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	3	18	11.12	6.08	6.94	40.1	0.03	88.7	-	391
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	2	19.5	11.15	5.69	6.93	45.9	0.03	88.1	-	391
Mid Lake CDA	1997	DBAC	5/16/97	-	1.25	1	20.9	10.91	5.6	6.92	47.2	0.03	85.9	-	390
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	13	0.2	11.32	12.63	7.06	27.6	0.02	105.9	-	351
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	12	0.9	11.33	12.51	7.05	27.6	0.02	105.8	-	352
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	11	2.5	11.19	10.72	7	26.8	0.02	100.2	-	353
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	10	4	10.83	10.3	6.97	26.6	0.02	96	-	354
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	9	5.5	10.7	10.07	6.96	26.4	0.02	94.4	-	353
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	8	7	10.68	9.64	6.95	26.3	0.02	93.2	-	352
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	7	8.5	10.71	9.45	6.95	26.5	0.02	93	-	349
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	6	9.9	10.73	9.25	6.96	26.6	0.02	92.8	-	348
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	5	12.5	10.75	8.84	6.95	27	0.02	92	-	346
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	4	14.4	10.82	8.38	6.94	28.3	0.02	91.6	-	343
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	3	16.1	10.73	7.96	6.92	30.2	0.02	89.9	-	342
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	2	18.7	10.48	6.49	6.87	40.5	0.03	84.7	-	339
Mid Lake CDA	2197	DBSS	5/29/97	-	1.7	1	20.2	10.17	6.71	6.87	40.7	0.03	82.6	-	332
Mid Lake CDA	2397	DBAS	6/11/97	-	2	14	0.4	10.81	15.76	7.1	30.6	0.02	108.8	-	411
Mid Lake CDA	2397	DBAS	6/11/97	-	2	13	1.3	10.86	15.58	7.11	30.7	0.02	108.9	-	411
Mid Lake CDA	2397	DBAS	6/11/97	-	2	12	2.9	10.9	13.8	7.1	29.8	0.02	105.2	-	411
Mid Lake CDA	2397	DBAS	6/11/97	-	2	11	4.3	10.86	13.09	7.05	29.4	0.02	103	-	414
Mid Lake CDA	2397	DBAS	6/11/97	-	2	10	5.9	11.2	11.54	7.04	28.9	0.02	102.6	-	415
Mid Lake CDA	2397	DBAS	6/11/97	-	2	9	7.4	11	10.45	7.02	29	0.02	98.2	-	416
Mid Lake CDA	2397	DBAS	6/11/97	-	2	8	9	10.92	10.12	7	28.6	0.02	96.8	-	417
Mid Lake CDA	2397	DBAS	6/11/97	-	2	7	10.5	10.84	9.71	6.99	28.6	0.02	95.2	-	417
Mid Lake CDA	2397	DBAS	6/11/97	-	2	6	11.9	10.62	8.94	6.96	31.6	0.02	91.4	-	419
Mid Lake CDA	2397	DBAS	6/11/97	-	2	5	13.4	10.6	8.42	6.95	34.4	0.02	90.1	-	420
Mid Lake CDA	2397	DBAS	6/11/97	-	2	4	15	10.23	7.81	6.92	37.7	0.02	85.7	-	421
Mid Lake CDA	2397	DBAS	6/11/97	-	2	3	16.4	10.36	7.05	6.92	41.9	0.03	85.2	-	421
Mid Lake CDA	2397	DBAS	6/11/97	-	2	2	17.9	10.31	6.82	6.92	43.2	0.03	84.3	-	425
Mid Lake CDA	2397	DBAS	6/11/97	-	2	1	19.5	10.02	6.99	6.93	43.2	0.03	82.3	-	424
Mid Lake CDA	2597	DBSS	6/26/97	-	3	13	0.4	10.7	15.09	7.14	31.7	0.02	106.1	-	405
Mid Lake CDA	2597	DBSS	6/26/97	-	3	12	1.9	10.69	14.89	7.12	31.8	0.02	105.4	-	405
Mid Lake CDA	2597	DBSS	6/26/97	-	3	11	3.5	10.74	14.36	7.1	31.9	0.02	104.8	-	406
Mid Lake CDA	2597	DBSS	6/26/97	-	3	10	5	10.68	13.32	6.97	30.2	0.02	101.8	-	410
Mid Lake CDA	2597	DBSS	6/26/97	-	3	9	6.6	10.73	12.33	6.96	30.5	0.02	100	-	410
Mid Lake CDA	2597	DBSS	6/26/97	-	3	8	8.1	10.36	11.45	6.92	30.4	0.02	94.6	-	411
Mid Lake CDA	2597	DBSS	6/26/97	-	3	7	9.6	10.26	10.59	6.89	29.6	0.02	91.8	-	412

Mid Lake CDA	2597	DBSS	6/26/97	-	3	6	10.9	10.14	9.27	6.86	30.8	0.02	88	-	413
Mid Lake CDA	2597	DBSS	6/26/97	-	3	5	12.5	10.11	8.25	6.83	34.6	0.02	85.6	-	414
Mid Lake CDA	2597	DBSS	6/26/97	-	3	4	14	9.57	7.53	6.81	38	0.02	79.6	-	414
Mid Lake CDA	2597	DBSS	6/26/97	-	3	3	15.6	9.44	7.05	6.8	40.5	0.03	77.7	-	413
Mid Lake CDA	2597	DBSS	6/26/97	-	3	2	17	9.03	6.82	6.8	42.4	0.03	73.8	-	411
Mid Lake CDA	2597	DBSS	6/26/97	-	3	1	18.6	9.08	6.81	6.86	42.4	0.03	74.1	-	407
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	13	0.3	9.95	19.4	7.02	35.5	0.02	*****	-	444
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	12	1.7	10.11	17.84	7	34.8	0.02	*****	-	445
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	11	3.3	10.29	17.17	6.92	35	0.02	*****	-	447
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	10	4.8	10.55	14.84	6.81	38.2	0.02	*****	-	451
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	9	6.2	10.41	13.81	6.77	35.6	0.02	99.9	-	451
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	8	7.8	10.26	13.02	6.7	34.6	0.02	96.7	-	451
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	7	9.2	10.03	12.2	6.66	33.4	0.02	92.8	-	451
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	6	10.8	9.78	10.8	6.6	33.3	0.02	87.6	-	450
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	5	12.2	9.53	9.76	6.57	34.5	0.02	83.3	-	450
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	4	13.7	9.55	8.95	6.54	36.6	0.02	82	-	448
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	3	15.3	9.33	8.46	6.52	38.2	0.02	79.1	-	447
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	2	16.6	9.28	7.91	6.49	39.8	0.03	77.7	-	445
Mid Lake CDA	2797	DBSS	7/8/97	-	2.4	1	18.2	9.37	7.51	6.47	42	0.03	77.6	-	447
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	13	1.3	9.57	21.01	7.48	38.8	0.02	*****	-	394
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	12	2.8	9.92	20.47	7.43	37.9	0.02	*****	-	393
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	11	4.3	10.52	17.56	7.27	37.7	0.02	*****	-	400
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	10	5.8	10.49	16.73	7.18	36.2	0.02	*****	-	402
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	9	7.3	10.22	15.79	7.03	35.2	0.02	*****	-	406
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	8	8.8	9.96	15.01	6.95	34.4	0.02	98.2	-	408
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	7	10.3	9.14	13.61	6.84	33.2	0.02	87.5	-	411
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	6	11.8	9.33	11.29	6.79	33.2	0.02	84.6	-	414
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	5	13.3	8.89	9.48	6.78	35.2	0.02	77.3	-	414
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	4	14.3	9.1	8.22	6.8	37.7	0.02	76.7	-	413
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	3	15.8	9.07	8.17	6.83	37.8	0.02	76.4	-	411
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	2	17.3	9.15	7.95	6.87	38.3	0.02	76.6	-	414
Mid Lake CDA	2997	SSJD	7/24/97	-	4.5	1	18.8	9.24	7.46	6.93	39.7	0.03	76.2	-	422
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	14	0.4	9.23	24.49	7.8	41.3	0.03	109.2	-	345
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	13	1	9.29	23.73	7.7	41.5	0.03	108.4	-	348
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	12	2.6	9.34	22.74	7.49	43.4	0.03	106.9	-	354
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	11	4	9.57	21.92	7.41	49.1	0.03	107.8	-	357
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	10	5.5	9.89	20.76	7.43	41.8	0.03	108.9	-	354
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	9	7	10.15	19.78	7.29	39.8	0.03	109.7	-	356
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	8	8.6	10.13	17.86	7.05	36.9	0.02	105.4	-	361
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	7	10	9.33	15.01	6.96	34.5	0.02	91.3	-	364
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	6	11.5	8.92	12.66	6.9	34.4	0.02	82.9	-	364

Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	5	13.1	8.74	10.18	6.88	35.9	0.02	76.7	-	361
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	4	14.5	8.58	9.05	6.91	37.2	0.02	73.3	-	357
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	3	16.1	8.76	8.04	6.94	38.9	0.02	73	-	354
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	2	17.5	8.83	7.94	6.99	39	0.03	73.5	-	347
Mid Lake CDA	3197	DBSS	8/5/97	-	5.6	1	18.9	8.88	8.18	7.08	39	0.03	74	-	374
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	13	0.5	8.7	22.93	7.65	45.4	0.03	100.6	-	361
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	12	2	8.72	22.56	7.6	45.2	0.03	100.1	-	362
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	11	3.5	8.77	22.29	7.56	45	0.03	100.2	-	362
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	10	5	8.81	22.12	7.44	45	0.03	100.4	-	365
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	9	6.5	8.87	21.44	7.28	49.4	0.03	99.7	-	370
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	8	8	9.05	20.09	7.19	42.6	0.03	99.1	-	373
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	7	9.5	9.2	18.61	7.05	38.7	0.02	97.7	-	374
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	6	11	8.12	14.03	6.91	35.4	0.02	78.3	-	379
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	5	12.5	7.96	10.62	6.9	36.8	0.02	71.1	-	380
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	4	14	7.79	9.22	6.93	38.5	0.02	67.3	-	378
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	3	15.5	7.71	8.49	6.97	39.3	0.03	65.4	-	376
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	2	17	7.29	8.15	7.08	40.1	0.03	61.3	-	370
Mid Lake CDA	3297	DBSS	8/13/97	-	6.5	1	18.7	8.21	7.69	6.92	41.3	0.03	68.3	-	393
Mid Lake CDA	3497	DBSS	8/27/97	-	8	13	0.4	9.08	21.49	7.54	50.5	0.03	102.3	-	353
Mid Lake CDA	3497	DBSS	8/27/97	-	8	12	1.1	9.08	21.48	7.54	50.4	0.03	102.2	-	353
Mid Lake CDA	3497	DBSS	8/27/97	-	8	11	2.4	9.08	21.42	7.53	50.4	0.03	102.1	-	353
Mid Lake CDA	3497	DBSS	8/27/97	-	8	10	4.1	9.09	21.28	7.52	50.7	0.03	102	-	353
Mid Lake CDA	3497	DBSS	8/27/97	-	8	9	5.6	9.1	21.18	7.5	50.7	0.03	101.9	-	353
Mid Lake CDA	3497	DBSS	8/27/97	-	8	8	6.9	9.1	21.11	7.46	50.7	0.03	101.7	-	354
Mid Lake CDA	3497	DBSS	8/27/97	-	8	7	8.5	8.96	21.05	7.33	49.9	0.03	100.1	-	358
Mid Lake CDA	3497	DBSS	8/27/97	-	8	6	10	8.48	20.3	7.17	48.7	0.03	93.4	-	363
Mid Lake CDA	3497	DBSS	8/27/97	-	8	5	11.5	8.19	19.32	7.01	45.8	0.03	88.4	-	370
Mid Lake CDA	3497	DBSS	8/27/97	-	8	4	12.9	8.39	15.84	6.91	40.1	0.03	84.2	-	375
Mid Lake CDA	3497	DBSS	8/27/97	-	8	3	14.4	6.45	12.02	6.88	40.9	0.03	59.5	-	379
Mid Lake CDA	3497	DBSS	8/27/97	-	8	2	15.9	6.81	9.48	6.95	42.1	0.03	59.2	-	377
Mid Lake CDA	3497	DBSS	8/27/97	-	8	1	17.4	6.69	9.22	7.07	42.6	0.03	57.8	-	373
Mid Lake CDA	3797	ASRP	9/17/97	-	5	11	0.2	8.99	16.75	7.02	49.9	0.03	93.5	-	384
Mid Lake CDA	3797	ASRP	9/17/97	-	5	10	1	8.9	16.75	6.94	49.9	0.03	92.6	-	386
Mid Lake CDA	3797	ASRP	9/17/97	-	5	9	3	8.75	16.43	6.79	49.7	0.03	90.4	-	392
Mid Lake CDA	3797	ASRP	9/17/97	-	5	8	5	8.08	10.87	6.71	43.5	0.03	73.4	-	398
Mid Lake CDA	3797	ASRP	9/17/97	-	5	7	7	8.27	9.37	6.69	42.7	0.03	72.8	-	399
Mid Lake CDA	3797	ASRP	9/17/97	-	5	6	9	8.19	8.88	6.7	43.4	0.03	71.3	-	399
Mid Lake CDA	3797	ASRP	9/17/97	-	5	5	10.9	9	7.66	6.71	43.9	0.03	76.1	-	398
Mid Lake CDA	3797	ASRP	9/17/97	-	5	4	13	8.96	7.58	6.74	44.1	0.03	75.6	-	396
Mid Lake CDA	3797	ASRP	9/17/97	-	5	3	15	9.05	7.43	6.75	44.2	0.03	76.2	-	395
Mid Lake CDA	3797	ASRP	9/17/97	-	5	2	16.9	9.45	7.12	6.78	44.6	0.03	78.8	-	393

Mid Lake CDA	3797	ASRP	9/17/97	-	5	1	18.6	9.41	6.89	6.84	45.1	0.03	78	-	390
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	10	0.5	9.59	16.46	7.17	50.6	0.03	99.2	-	407
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	9	2.7	9.45	15.86	7.07	50.1	0.03	96.5	-	411
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	8	4.6	9.24	15.24	6.92	50.3	0.03	93.1	-	417
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	7	6.6	8.62	13.82	6.82	49.6	0.03	84.2	-	421
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	6	8.6	8.64	12.23	6.78	46.7	0.03	81.4	-	423
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	5	10.6	8.58	9.81	6.74	42.5	0.03	76.4	-	425
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	4	12.6	8.65	8.46	6.74	42	0.03	74.5	-	424
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	3	14.6	9.04	7.79	6.74	42	0.03	77.4	-	424
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	2	16.6	8.92	7.46	6.81	42.2	0.03	75	-	420
Mid Lake CDA	3997	ASRA	9/29/97	-	6.5	1	18.6	8.91	7.47	6.87	42.1	0.03	75	-	417
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	10	0.2	10.5	11.58	7.09	49	0.03	96	-	413
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	9	2	10.48	11.59	7.1	48.9	0.03	95.8	-	412
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	8	4	10.47	11.59	7.06	49.1	0.03	95.7	-	413
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	7	6	10.45	11.58	7.02	49.1	0.03	95.5	-	414
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	6	8	10.43	11.59	7	49.2	0.03	95.3	-	414
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	5	10	10.42	11.58	6.94	49.2	0.03	95.2	-	415
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	4	12	10.4	11.56	6.88	49.2	0.03	95	-	417
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	3	14	10.37	11.56	6.82	49.2	0.03	94.8	-	418
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	2	16	10.21	11.51	6.69	49.3	0.03	93.2	-	421
Mid Lake CDA	4297	DBAS	10/22/97	-	4.6	1	18	4.53	8.53	6.32	45.1	0.03	38.5	-	434
Mid Lake CDA	4497	DBAS	11/4/97	-	4	13	0.5	10.64	10.18	7.08	53.4	0.03	93.8	104	396
Mid Lake CDA	4497	DBAS	11/4/97	-	4	12	2	10.49	9.51	7.02	53.4	0.03	91	56	398
Mid Lake CDA	4497	DBAS	11/4/97	-	4	11	3.5	10.25	9.4	6.97	53.7	0.03	88.7	55	401
Mid Lake CDA	4497	DBAS	11/4/97	-	4	10	5	10.05	9.32	6.94	53.7	0.03	86.7	49	401
Mid Lake CDA	4497	DBAS	11/4/97	-	4	9	6.5	9.89	9.24	6.9	53.4	0.03	85.2	120	402
Mid Lake CDA	4497	DBAS	11/4/97	-	4	8	8	8.86	9.01	6.85	52.9	0.03	75.9	119	403
Mid Lake CDA	4497	DBAS	11/4/97	-	4	7	9.5	9.57	8.71	6.85	54.6	0.03	81.4	102	403
Mid Lake CDA	4497	DBAS	11/4/97	-	4	6	11	9.28	8.6	6.84	53.2	0.03	78.8	58	403
Mid Lake CDA	4497	DBAS	11/4/97	-	4	5	12.5	9.13	8.5	6.79	52.6	0.03	77.3	102	405
Mid Lake CDA	4497	DBAS	11/4/97	-	4	4	14	9.01	8.43	6.75	52.1	0.03	76.2	227	406
Mid Lake CDA	4497	DBAS	11/4/97	-	4	3	15.5	8.76	7.68	6.72	47.9	0.03	72.6	51	407
Mid Lake CDA	4497	DBAS	11/4/97	-	4	2	17	8.81	7.38	6.72	46.3	0.03	72.6	58	408
Mid Lake CDA	4497	DBAS	11/4/97	-	4	1	18.4	8.78	7.27	6.75	46.2	0.03	72.1	713	407

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Carey Bay	1597	ASSS	4/18/97	-	1.9	10	0.4	12.31	6.22	7.43	38.4	0.02	99.4	-	374
Carey Bay	1597	ASSS	4/18/97	-	1.9	9	1	12.3	6.07	7.41	38.5	0.02	99	-	375
Carey Bay	1597	ASSS	4/18/97	-	1.9	8	2	12.29	5.77	7.41	38.2	0.02	98.1	-	375

Carey Bay	1597	ASSS	4/18/97	-	1.9	7	3.1	12.21	5.64	7.41	38.4	0.02	97.2	-	375
Carey Bay	1597	ASSS	4/18/97	-	1.9	6	4.3	12.2	5.6	7.4	38.3	0.02	97	-	375
Carey Bay	1597	ASSS	4/18/97	-	1.9	5	5.5	12.14	5.57	7.39	38.2	0.02	96.6	-	375
Carey Bay	1597	ASSS	4/18/97	-	1.9	4	6.8	12.15	5.56	7.39	38.3	0.02	96.5	-	375
Carey Bay	1597	ASSS	4/18/97	-	1.9	3	8.1	12.12	5.54	7.38	38.4	0.02	96.2	-	375
Carey Bay	1597	ASSS	4/18/97	-	1.9	2	9.3	12.12	5.49	7.38	38.4	0.02	96.1	-	374
Carey Bay	1597	ASSS	4/18/97	-	1.9	1	10.5	12.09	5.47	7.37	38.5	0.02	95.8	-	374
Carey Bay	1997	DBAC	5/16/97	-	1.6	12	0.2	11.52	15.54	7.11	35.1	0.02	114.7	-	389
Carey Bay	1997	DBAC	5/16/97	-	1.6	11	1	11.94	11.22	7.15	33.5	0.02	107.9	-	390
Carey Bay	1997	DBAC	5/16/97	-	1.6	10	2	12.11	10.1	7.1	33.6	0.02	106.7	-	392
Carey Bay	1997	DBAC	5/16/97	-	1.6	9	3.5	11.57	9.45	7.05	32.8	0.02	100.3	-	395
Carey Bay	1997	DBAC	5/16/97	-	1.6	8	5	11.39	9.02	7.02	33.9	0.02	97.7	-	395
Carey Bay	1997	DBAC	5/16/97	-	1.6	7	6.5	11.37	8.88	7.01	34.2	0.02	97.2	-	396
Carey Bay	1997	DBAC	5/16/97	-	1.6	6	8	11.34	8.69	7.01	34.6	0.02	96.6	-	395
Carey Bay	1997	DBAC	5/16/97	-	1.6	5	9.5	11.36	8.33	7	34.4	0.02	95.8	-	395
Carey Bay	1997	DBAC	5/16/97	-	1.6	4	11	11.32	8.07	6.99	34.8	0.02	95	-	395
Carey Bay	1997	DBAC	5/16/97	-	1.6	3	12.5	11.24	7.83	6.98	34.8	0.02	93.7	-	395
Carey Bay	1997	DBAC	5/16/97	-	1.6	2	14	10.99	7.61	6.96	35.2	0.02	91	-	396
Carey Bay	1997	DBAC	5/16/97	-	1.6	1	15.3	10.38	6.86	6.95	37.3	0.02	84.5	-	396
Carey Bay	2197	DBSS	5/29/97	-	1.4	14	0.3	10.67	14.15	6.97	28.5	0.02	103.3	-	366
Carey Bay	2197	DBSS	5/29/97	-	1.4	13	1	11.21	10.91	6.99	26.2	0.02	100.9	-	366
Carey Bay	2197	DBSS	5/29/97	-	1.4	12	2.1	10.88	10.38	6.97	26.3	0.02	96.7	-	367
Carey Bay	2197	DBSS	5/29/97	-	1.4	11	3.1	10.63	10.2	6.94	26.3	0.02	94.1	-	368
Carey Bay	2197	DBSS	5/29/97	-	1.4	10	4.1	10.64	9.86	6.91	26.2	0.02	93.3	-	369
Carey Bay	2197	DBSS	5/29/97	-	1.4	9	5.1	10.43	9.79	6.92	26.4	0.02	91.3	-	368
Carey Bay	2197	DBSS	5/29/97	-	1.4	8	6.2	10.43	9.74	6.93	26.5	0.02	91.3	-	368
Carey Bay	2197	DBSS	5/29/97	-	1.4	7	7.2	10.61	9.64	6.92	26.3	0.02	92.6	-	367
Carey Bay	2197	DBSS	5/29/97	-	1.4	6	8.2	10.61	9.53	6.94	26.4	0.02	92.4	-	366
Carey Bay	2197	DBSS	5/29/97	-	1.4	5	9.2	10.64	9.43	6.93	26.4	0.02	92.4	-	366
Carey Bay	2197	DBSS	5/29/97	-	1.4	4	10.2	10.64	9.3	6.93	26.5	0.02	92.1	-	366
Carey Bay	2197	DBSS	5/29/97	-	1.4	3	11.2	10.61	9.12	6.94	26.7	0.02	91.5	-	365
Carey Bay	2197	DBSS	5/29/97	-	1.4	2	12.3	10.56	8.86	6.93	27.5	0.02	90.3	-	365
Carey Bay	2197	DBSS	5/29/97	-	1.4	1	13.2	10.64	8.66	6.94	27.8	0.02	90.7	-	364
Carey Bay	2397	DBAS	6/11/97	-	2	14	0.7	10.87	15.48	7.17	31.2	0.02	108.7	-	411
Carey Bay	2397	DBAS	6/11/97	-	2	13	1.6	11.2	14.35	7.1	30.9	0.02	109.3	-	414
Carey Bay	2397	DBAS	6/11/97	-	2	12	2.5	11.22	11.79	7.09	29.1	0.02	103.4	-	415
Carey Bay	2397	DBAS	6/11/97	-	2	11	3.5	11.32	11.3	7.07	28.9	0.02	103.2	-	416
Carey Bay	2397	DBAS	6/11/97	-	2	10	4.5	11.27	11.22	7.06	28.8	0.02	102.5	-	417
Carey Bay	2397	DBAS	6/11/97	-	2	9	5.5	10.97	10.99	7.03	28.8	0.02	99.2	-	418
Carey Bay	2397	DBAS	6/11/97	-	2	8	6.5	10.9	10.38	7.01	28.8	0.02	97.2	-	419
Carey Bay	2397	DBAS	6/11/97	-	2	7	7.5	10.84	10.17	7.01	28.7	0.02	96.2	-	419

Carey Bay	2397	DBAS	6/11/97	-	2	6	8.5	10.69	9.91	6.98	28.9	0.02	94.2	-	420
Carey Bay	2397	DBAS	6/11/97	-	2	5	9.5	10.63	9.45	6.98	29.4	0.02	92.7	-	420
Carey Bay	2397	DBAS	6/11/97	-	2	4	10.5	10.61	9.22	6.97	30.2	0.02	92	-	421
Carey Bay	2397	DBAS	6/11/97	-	2	3	11.4	10.58	8.99	6.97	31.1	0.02	91.2	-	421
Carey Bay	2397	DBAS	6/11/97	-	2	2	12.5	10.56	8.84	6.96	31.9	0.02	90.6	-	421
Carey Bay	2397	DBAS	6/11/97	-	2	1	13.4	10.14	8.11	6.95	36.1	0.02	85.6	-	423
Carey Bay	2597	DBSS	6/26/97	-	2.5	12	0.3	10.81	14.98	7.2	30.4	0.02	106.8	-	427
Carey Bay	2597	DBSS	6/26/97	-	2.5	11	0.9	10.81	14.93	7.17	30.4	0.02	106.8	-	429
Carey Bay	2597	DBSS	6/26/97	-	2.5	10	1.8	10.85	14.49	7.11	30.2	0.02	106.1	-	432
Carey Bay	2597	DBSS	6/26/97	-	2.5	9	2.8	10.91	13.73	7.12	29.9	0.02	104.9	-	431
Carey Bay	2597	DBSS	6/26/97	-	2.5	8	3.8	10.94	13.11	7.1	29.8	0.02	103.8	-	432
Carey Bay	2597	DBSS	6/26/97	-	2.5	7	4.8	10.91	12.73	7.06	29.6	0.02	102.6	-	434
Carey Bay	2597	DBSS	6/26/97	-	2.5	6	5.7	10.84	12.33	6.99	29.8	0.02	101.1	-	436
Carey Bay	2597	DBSS	6/26/97	-	2.5	5	6.8	10.61	11.74	6.94	29.5	0.02	97.5	-	438
Carey Bay	2597	DBSS	6/26/97	-	2.5	4	7.7	10.42	10.66	6.92	29.3	0.02	93.4	-	440
Carey Bay	2597	DBSS	6/26/97	-	2.5	3	8.7	10.01	10.1	6.89	29.9	0.02	88.6	-	441
Carey Bay	2597	DBSS	6/26/97	-	2.5	2	9.7	9.88	9.97	6.91	30.4	0.02	87.1	-	440
Carey Bay	2597	DBSS	6/26/97	-	2.5	1	10.6	9.78	9.66	6.92	31.3	0.02	85.6	-	440
Carey Bay	2797	DBSS	7/8/97	-	2.9	13	0.3	10.09	18.7	7.18	36.8	0.02	*****	-	444
Carey Bay	2797	DBSS	7/8/97	-	2.9	12	1.1	10.09	18.66	7.17	36.9	0.02	*****	-	444
Carey Bay	2797	DBSS	7/8/97	-	2.9	11	1.9	10.24	17.47	7.13	36.3	0.02	*****	-	446
Carey Bay	2797	DBSS	7/8/97	-	2.9	10	2.9	10.39	16.41	7.09	37.1	0.02	*****	-	449
Carey Bay	2797	DBSS	7/8/97	-	2.9	9	3.9	10.25	16.19	7.04	37.4	0.02	*****	-	450
Carey Bay	2797	DBSS	7/8/97	-	2.9	8	5	10.47	15.01	7.01	36.9	0.02	*****	-	452
Carey Bay	2797	DBSS	7/8/97	-	2.9	7	5.9	10.37	14.42	6.97	35.9	0.02	*****	-	454
Carey Bay	2797	DBSS	7/8/97	-	2.9	6	7.1	10.16	13.17	6.94	34.3	0.02	96.2	-	455
Carey Bay	2797	DBSS	7/8/97	-	2.9	5	8	10	12.81	6.93	34.2	0.02	93.9	-	456
Carey Bay	2797	DBSS	7/8/97	-	2.9	4	9	9.91	12.15	6.91	33.4	0.02	91.7	-	457
Carey Bay	2797	DBSS	7/8/97	-	2.9	3	10	9.55	11.25	6.9	33	0.02	86.5	-	458
Carey Bay	2797	DBSS	7/8/97	-	2.9	2	11	9.03	9.98	6.91	34.7	0.02	79.4	-	460
Carey Bay	2797	DBSS	7/8/97	-	2.9	1	11.9	9.2	9.77	6.97	35.1	0.02	80.4	-	457
Carey Bay	2997	SSJD	7/24/97	-	5.5	14	0.3	9.94	20.53	7.53	40	0.03	*****	-	408
Carey Bay	2997	SSJD	7/24/97	-	5.5	13	0.8	9.99	20.55	7.51	40	0.03	*****	-	408
Carey Bay	2997	SSJD	7/24/97	-	5.5	12	1.8	10.43	19.63	7.5	39.7	0.03	*****	-	410
Carey Bay	2997	SSJD	7/24/97	-	5.5	11	2.8	10.53	18.87	7.48	38.4	0.02	*****	-	410
Carey Bay	2997	SSJD	7/24/97	-	5.5	10	3.7	10.45	18.25	7.34	38.9	0.02	*****	-	414
Carey Bay	2997	SSJD	7/24/97	-	5.5	9	4.8	10.36	17.29	7.24	37.6	0.02	*****	-	418
Carey Bay	2997	SSJD	7/24/97	-	5.5	8	5.8	10.3	16.48	7.19	36.7	0.02	*****	-	419
Carey Bay	2997	SSJD	7/24/97	-	5.5	7	6.7	10.29	16.07	7.16	36	0.02	*****	-	419
Carey Bay	2997	SSJD	7/24/97	-	5.5	6	7.9	9.77	15.61	7.07	35.2	0.02	97.7	-	422
Carey Bay	2997	SSJD	7/24/97	-	5.5	5	8.4	10.09	15.67	7.02	35.3	0.02	*****	-	422

Carey Bay	2997	SSJD	7/24/97	-	5.5	4	9.4	9.66	14.52	6.98	33.7	0.02	94.3	-	423
Carey Bay	2997	SSJD	7/24/97	-	5.5	3	10.4	9.48	13.88	6.94	33.3	0.02	91.2	-	424
Carey Bay	2997	SSJD	7/24/97	-	5.5	2	11.4	8.87	12.67	6.91	33.1	0.02	83	-	426
Carey Bay	2997	SSJD	7/24/97	-	5.5	1	12.4	7.87	10.18	6.93	36.1	0.02	69.6	-	427
Carey Bay	3197	DBSS	8/5/97	-	5.3	12	0.3	9.47	23.01	7.6	43.4	0.03	109	-	364
Carey Bay	3197	DBSS	8/5/97	-	5.3	11	1	9.51	22.72	7.59	43.5	0.03	108.8	-	365
Carey Bay	3197	DBSS	8/5/97	-	5.3	10	2.1	9.61	22.15	7.53	43.8	0.03	108.7	-	366
Carey Bay	3197	DBSS	8/5/97	-	5.3	9	3	9.66	21.88	7.5	42.6	0.03	108.8	-	367
Carey Bay	3197	DBSS	8/5/97	-	5.3	8	3.9	9.81	21.53	7.47	43.8	0.03	109.7	-	368
Carey Bay	3197	DBSS	8/5/97	-	5.3	7	4.9	9.89	21.11	7.42	43	0.03	109.5	-	369
Carey Bay	3197	DBSS	8/5/97	-	5.3	6	6	9.91	20.84	7.34	41.5	0.03	109.4	-	371
Carey Bay	3197	DBSS	8/5/97	-	5.3	5	6.9	9.66	19.4	7.27	39.5	0.03	103.6	-	374
Carey Bay	3197	DBSS	8/5/97	-	5.3	4	7.9	10.34	18.36	7.26	37.2	0.02	108.6	-	373
Carey Bay	3197	DBSS	8/5/97	-	5.3	3	9	9.68	17.1	7.14	36.6	0.02	99.1	-	377
Carey Bay	3197	DBSS	8/5/97	-	5.3	2	10	8.87	15.07	7.06	35.5	0.02	86.9	-	380
Carey Bay	3197	DBSS	8/5/97	-	5.3	1	11	7.89	14.19	7.1	35.6	0.02	75.9	-	381
Carey Bay	3297	DBSS	8/14/97	-	8	13	0.4	8.59	22.47	7.5	45.1	0.03	98.4	-	378
Carey Bay	3297	DBSS	8/14/97	-	8	12	1.4	8.6	22.43	7.54	45.1	0.03	98.5	-	376
Carey Bay	3297	DBSS	8/14/97	-	8	11	2.4	8.65	22.33	7.47	45.1	0.03	98.9	-	377
Carey Bay	3297	DBSS	8/14/97	-	8	10	3.3	8.67	22.22	7.42	45.3	0.03	98.8	-	378
Carey Bay	3297	DBSS	8/14/97	-	8	9	4.3	8.66	21.9	7.3	45.9	0.03	98.2	-	383
Carey Bay	3297	DBSS	8/14/97	-	8	8	5.3	8.61	21.55	7.25	45.7	0.03	97	-	385
Carey Bay	3297	DBSS	8/14/97	-	8	7	6.4	8.62	21.19	7.2	45.6	0.03	96.4	-	386
Carey Bay	3297	DBSS	8/14/97	-	8	6	7.4	8.39	20.53	7.15	43	0.03	92.6	-	388
Carey Bay	3297	DBSS	8/14/97	-	8	5	8.4	8.64	19.56	7.01	40.1	0.03	93.5	-	391
Carey Bay	3297	DBSS	8/14/97	-	8	4	9.4	8.27	18.94	6.95	39.7	0.03	88.4	-	393
Carey Bay	3297	DBSS	8/14/97	-	8	3	10.4	8.26	18.41	6.88	38.9	0.02	87.5	-	395
Carey Bay	3297	DBSS	8/14/97	-	8	2	11.5	7.89	15.96	6.83	36.5	0.02	79.3	-	398
Carey Bay	3297	DBSS	8/14/97	-	8	1	12.4	6.74	13.07	6.82	37.1	0.02	62.7	-	401
Carey Bay	3497	DBSS	8/27/97	-	8.2	14	0.3	8.97	21.76	7.5	49.7	0.03	101.6	-	356
Carey Bay	3497	DBSS	8/27/97	-	8.2	13	0.9	8.98	21.74	7.52	49.6	0.03	101.6	-	355
Carey Bay	3497	DBSS	8/27/97	-	8.2	12	1.9	8.99	21.67	7.5	49.6	0.03	101.6	-	356
Carey Bay	3497	DBSS	8/27/97	-	8.2	11	2.9	9	21.53	7.45	49.8	0.03	101.5	-	358
Carey Bay	3497	DBSS	8/27/97	-	8.2	10	3.9	8.93	21.37	7.43	49.3	0.03	100.4	-	358
Carey Bay	3497	DBSS	8/27/97	-	8.2	9	4.9	8.91	21.26	7.39	49.3	0.03	99.9	-	359
Carey Bay	3497	DBSS	8/27/97	-	8.2	8	6.1	8.89	21.09	7.36	49.3	0.03	99.4	-	360
Carey Bay	3497	DBSS	8/27/97	-	8.2	7	7	8.95	20.91	7.34	49.6	0.03	99.7	-	360
Carey Bay	3497	DBSS	8/27/97	-	8.2	6	8	8.92	20.84	7.28	49.5	0.03	99.2	-	362
Carey Bay	3497	DBSS	8/27/97	-	8.2	5	9	8.84	20.7	7.18	49.1	0.03	98.1	-	365
Carey Bay	3497	DBSS	8/27/97	-	8.2	4	10	8.6	20.42	7.08	48.3	0.03	95	-	370
Carey Bay	3497	DBSS	8/27/97	-	8.2	3	11	8.16	16.21	6.99	40.9	0.03	82.6	-	376

Carey Bay	3497	DBSS	8/27/97	-	8.2	2	11.9	8.02	15.24	7.04	40.2	0.03	79.5	-	374
Carey Bay	3497	DBSS	8/27/97	-	8.2	1	12.9	8.03	14.64	7.15	40.2	0.03	78.6	-	372
Carey Bay	3797	ASRP	9/17/97	-	3.5	13	0.5	8.05	14.69	6.76	44.3	0.03	80.1	-	408
Carey Bay	3797	ASRP	9/17/97	-	3.5	12	1.5	7.89	14.03	6.72	43.7	0.03	77.4	-	411
Carey Bay	3797	ASRP	9/17/97	-	3.5	11	2.5	7.64	11.22	6.71	42.5	0.03	70.3	-	413
Carey Bay	3797	ASRP	9/17/97	-	3.5	10	3.5	7.84	9.99	6.71	42.4	0.03	70.1	-	414
Carey Bay	3797	ASRP	9/17/97	-	3.5	9	4.6	8.21	9.33	6.7	42.9	0.03	72.1	-	415
Carey Bay	3797	ASRP	9/17/97	-	3.5	8	5.5	8.13	9.17	6.71	42.9	0.03	71.1	-	415
Carey Bay	3797	ASRP	9/17/97	-	3.5	7	6.5	8.2	9.1	6.72	43.1	0.03	71.8	-	415
Carey Bay	3797	ASRP	9/17/97	-	3.5	6	7.5	8.27	8.99	6.73	43.2	0.03	72.2	-	414
Carey Bay	3797	ASRP	9/17/97	-	3.5	5	8.5	8.31	8.89	6.75	43.3	0.03	72.3	-	414
Carey Bay	3797	ASRP	9/17/97	-	3.5	4	9.3	8.34	8.78	6.75	43.3	0.03	72.3	-	414
Carey Bay	3797	ASRP	9/17/97	-	3.5	3	10.7	8.67	8.6	6.77	43.5	0.03	75.2	-	413
Carey Bay	3797	ASRP	9/17/97	-	3.5	2	11.5	8.4	8.6	6.78	43.3	0.03	72.7	-	413
Carey Bay	3797	ASRP	9/17/97	-	3.5	1	12.5	8.46	8.48	6.82	43.4	0.03	73.3	-	412
Carey Bay	3997	ASRA	9/29/97	-	6.3	13	0.2	9.16	16.28	7.09	50	0.03	94.3	-	411
Carey Bay	3997	ASRA	9/29/97	-	6.3	12	1	9.09	15.89	7.08	49.9	0.03	92.9	-	411
Carey Bay	3997	ASRA	9/29/97	-	6.3	11	2	9.02	15.58	7.07	49.9	0.03	91.6	-	411
Carey Bay	3997	ASRA	9/29/97	-	6.3	10	3	8.95	15.44	7.04	50	0.03	90.6	-	412
Carey Bay	3997	ASRA	9/29/97	-	6.3	9	4	8.83	15.34	6.99	49.9	0.03	89.2	-	413
Carey Bay	3997	ASRA	9/29/97	-	6.3	8	5	8.59	15.11	6.92	49.4	0.03	86.3	-	415
Carey Bay	3997	ASRA	9/29/97	-	6.3	7	6	7.93	14.51	6.8	47.5	0.03	78.7	-	419
Carey Bay	3997	ASRA	9/29/97	-	6.3	6	7	7.68	12.41	6.77	44.2	0.03	72.7	-	421
Carey Bay	3997	ASRA	9/29/97	-	6.3	5	8	7.63	12.32	6.77	44.2	0.03	72.1	-	421
Carey Bay	3997	ASRA	9/29/97	-	6.3	4	9	7.56	12.14	6.77	43.9	0.03	71.1	-	420
Carey Bay	3997	ASRA	9/29/97	-	6.3	3	10	7.3	10.38	6.75	42.4	0.03	65.9	-	421
Carey Bay	3997	ASRA	9/29/97	-	6.3	2	11	7.79	8.86	6.84	42.2	0.03	67.8	-	419
Carey Bay	3997	ASRA	9/29/97	-	6.3	1	12	8.33	8.37	6.93	42.3	0.03	71.6	-	416
Carey Bay	4297	DBAS	10/22/97	-	4.5	10	0.3	10.25	11.54	7.25	49	0.03	93.6	-	401
Carey Bay	4297	DBAS	10/22/97	-	4.5	9	1.7	10.24	11.56	7.23	49.1	0.03	93.6	-	402
Carey Bay	4297	DBAS	10/22/97	-	4.5	8	2.7	10.24	11.54	7.24	49.2	0.03	93.5	-	401
Carey Bay	4297	DBAS	10/22/97	-	4.5	7	3.7	10.21	11.54	7.21	49.2	0.03	93.2	-	403
Carey Bay	4297	DBAS	10/22/97	-	4.5	6	4.7	10.18	11.54	7.23	49.1	0.03	93	-	402
Carey Bay	4297	DBAS	10/22/97	-	4.5	5	5.7	10.19	11.53	7.22	49.2	0.03	93	-	402
Carey Bay	4297	DBAS	10/22/97	-	4.5	4	6.7	10.19	11.53	7.22	49.3	0.03	93	-	402
Carey Bay	4297	DBAS	10/22/97	-	4.5	3	7.7	10.19	11.53	7.22	49.3	0.03	93	-	402
Carey Bay	4297	DBAS	10/22/97	-	4.5	2	8.7	10.1	11.53	7.21	49.3	0.03	92.2	-	403
Carey Bay	4297	DBAS	10/22/97	-	4.5	1	9.7	10.05	11.51	7.19	49.2	0.03	91.7	-	404
Carey Bay	4497	DBAS	11/4/97	-	3.8	13	0.4	10.06	9.87	7.07	53.3	0.03	88	56	389
Carey Bay	4497	DBAS	11/4/97	-	3.8	12	1.5	10.34	9.55	7.09	53.1	0.03	89.8	215	390

Carey Bay	4497	DBAS	11/4/97	-	3.8	11	2.5	10.46	9.5	7.12	52.9	0.03	90.7	54	390
Carey Bay	4497	DBAS	11/4/97	-	3.8	10	3.5	10.5	9.53	7.11	53	0.03	91.1	41	390
Carey Bay	4497	DBAS	11/4/97	-	3.8	9	4.5	10.5	9.45	7.12	52.9	0.03	90.9	56	389
Carey Bay	4497	DBAS	11/4/97	-	3.8	8	5.5	10.45	9.4	7.11	53	0.03	90.4	113	389
Carey Bay	4497	DBAS	11/4/97	-	3.8	7	6.5	10.28	9.33	7.06	53	0.03	88.8	103	390
Carey Bay	4497	DBAS	11/4/97	-	3.8	6	7.5	10.14	9.22	7.01	52.9	0.03	87.3	210	392
Carey Bay	4497	DBAS	11/4/97	-	3.8	5	8.5	9.65	8.89	6.93	53.1	0.03	82.5	101	393
Carey Bay	4497	DBAS	11/4/97	-	3.8	4	9.5	9.51	8.81	6.89	52.9	0.03	81.1	54	394
Carey Bay	4497	DBAS	11/4/97	-	3.8	3	10.6	9.08	8.58	6.86	52.4	0.03	77	37	395
Carey Bay	4497	DBAS	11/4/97	-	3.8	2	11.5	8.98	8.47	6.87	52.1	0.03	76	111	394

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Conkling Point	1597	ASSS	4/18/97	-	1.1	13	0.4	12.35	6.31	7.45	36.4	0.02	99.9	-	372
Conkling Point	1597	ASSS	4/18/97	-	1.1	12	1.9	12.27	6.23	7.43	36.4	0.02	99.2	-	373
Conkling Point	1597	ASSS	4/18/97	-	1.1	11	3.2	12.29	6.2	7.43	36.6	0.02	99.2	-	373
Conkling Point	1597	ASSS	4/18/97	-	1.1	10	4.5	12.27	6.13	7.43	36.7	0.02	98.7	-	373
Conkling Point	1597	ASSS	4/18/97	-	1.1	9	5.7	12.23	6.05	7.42	37	0.02	98.4	-	373
Conkling Point	1597	ASSS	4/18/97	-	1.1	8	7	12.26	5.97	7.41	37.4	0.02	98.4	-	374
Conkling Point	1597	ASSS	4/18/97	-	1.1	7	8.2	12.24	5.97	7.4	37.3	0.02	98.2	-	373
Conkling Point	1597	ASSS	4/18/97	-	1.1	6	9.4	12.26	5.9	7.4	37.6	0.02	98.2	-	373
Conkling Point	1597	ASSS	4/18/97	-	1.1	5	10.4	12.24	5.82	7.39	37.8	0.02	97.9	-	374
Conkling Point	1597	ASSS	4/18/97	-	1.1	4	11.8	12.21	5.62	7.38	38.2	0.02	97.1	-	374
Conkling Point	1597	ASSS	4/18/97	-	1.1	3	13.1	12.2	5.57	7.37	38.3	0.02	96.9	-	374
Conkling Point	1597	ASSS	4/18/97	-	1.1	2	14.4	12.14	5.51	7.36	38.2	0.02	96.3	-	374
Conkling Point	1597	ASSS	4/18/97	-	1.1	1	15.9	12.16	5.29	7.36	38.5	0.02	95.9	-	374
Conkling Point	1997	DBAC	5/16/97	-	0.8	12	0.2	10.99	11.35	6.99	28	0.02	99.6	-	367
Conkling Point	1997	DBAC	5/16/97	-	0.8	11	2.1	11.1	9.61	6.98	27.8	0.02	96.7	-	369
Conkling Point	1997	DBAC	5/16/97	-	0.8	10	3.9	11.09	9.46	7	27.8	0.02	96.2	-	368
Conkling Point	1997	DBAC	5/16/97	-	0.8	9	5.5	11.08	9.42	6.98	27.7	0.02	96	-	369
Conkling Point	1997	DBAC	5/16/97	-	0.8	8	7	11.05	9.35	6.97	27.9	0.02	95.6	-	369
Conkling Point	1997	DBAC	5/16/97	-	0.8	7	8.6	11.04	9.28	6.98	28.2	0.02	95.3	-	368
Conkling Point	1997	DBAC	5/16/97	-	0.8	6	10.1	11.03	9.28	6.97	28.2	0.02	95.3	-	368
Conkling Point	1997	DBAC	5/16/97	-	0.8	5	11.6	11.01	9.15	6.97	28.6	0.02	94.7	-	368
Conkling Point	1997	DBAC	5/16/97	-	0.8	4	13	11.03	8.35	6.95	31.4	0.02	93.1	-	369
Conkling Point	1997	DBAC	5/16/97	-	0.8	3	14.5	11.15	7.45	6.93	34.8	0.02	92.1	-	369
Conkling Point	1997	DBAC	5/16/97	-	0.8	2	16	10.71	6.08	6.89	41	0.03	85.6	-	372
Conkling Point	1997	DBAC	5/16/97	-	0.8	1	17.5	10.51	5.9	6.89	44.8	0.03	83.4	-	370
Conkling Point	2197	DBSS	5/29/97	-	1.8	12	0.2	11.09	11.41	7.01	26.9	0.02	101	-	362
Conkling Point	2197	DBSS	5/29/97	-	1.8	11	1.4	11.11	10.79	7.02	26.9	0.02	99.7	-	363
Conkling Point	2197	DBSS	5/29/97	-	1.8	10	2.9	11.16	10.36	7	26.8	0.02	99	-	364

Conkling Point	2197	DBSS	5/29/97	-	1.8	9	4.5	11.12	10.22	6.98	26.8	0.02	98.4	-	365
Conkling Point	2197	DBSS	5/29/97	-	1.8	8	6	11.12	10.05	6.96	26.9	0.02	98	-	365
Conkling Point	2197	DBSS	5/29/97	-	1.8	7	7.4	11.05	9.74	6.94	26.8	0.02	96.6	-	364
Conkling Point	2197	DBSS	5/29/97	-	1.8	6	8.9	11.01	9.61	6.93	26.9	0.02	96	-	364
Conkling Point	2197	DBSS	5/29/97	-	1.8	5	10.4	10.97	9.43	6.92	26.9	0.02	95.3	-	363
Conkling Point	2197	DBSS	5/29/97	-	1.8	4	12.1	10.89	8.96	6.91	27.2	0.02	93.5	-	362
Conkling Point	2197	DBSS	5/29/97	-	1.8	3	13.4	10.75	8.71	6.9	27.8	0.02	91.8	-	362
Conkling Point	2197	DBSS	5/29/97	-	1.8	2	15	10.75	7.97	6.88	31.3	0.02	90.1	-	361
Conkling Point	2197	DBSS	5/29/97	-	1.8	1	16.8	10.29	7.01	6.86	36	0.02	84.3	-	360
Conkling Point	2397	DBAS	6/11/97	-	2	12	0.2	10.9	15.61	7.09	30.8	0.02	109.4	-	395
Conkling Point	2397	DBAS	6/11/97	-	2	11	1	10.7	14.08	7.08	30.1	0.02	103.8	-	396
Conkling Point	2397	DBAS	6/11/97	-	2	10	2.5	10.95	12.4	7.06	29.4	0.02	102.2	-	398
Conkling Point	2397	DBAS	6/11/97	-	2	9	4	10.98	11.91	7.04	29.1	0.02	101.5	-	398
Conkling Point	2397	DBAS	6/11/97	-	2	8	5.3	10.87	11.77	6.99	29.2	0.02	100.1	-	399
Conkling Point	2397	DBAS	6/11/97	-	2	7	6.9	10.85	10.68	6.99	29.6	0.02	97.3	-	400
Conkling Point	2397	DBAS	6/11/97	-	2	6	8.3	10.82	9.94	6.98	29.1	0.02	95.5	-	399
Conkling Point	2397	DBAS	6/11/97	-	2	5	9.9	10.78	9.78	6.97	28.9	0.02	94.7	-	399
Conkling Point	2397	DBAS	6/11/97	-	2	4	11.4	10.73	9.33	6.96	29.8	0.02	93.3	-	398
Conkling Point	2397	DBAS	6/11/97	-	2	3	13	10.53	8.72	6.94	32.2	0.02	90.2	-	398
Conkling Point	2397	DBAS	6/11/97	-	2	2	14.5	10.48	8.47	6.93	33.3	0.02	89.3	-	398
Conkling Point	2397	DBAS	6/11/97	-	2	1	16.2	10.17	7.86	6.93	37.1	0.02	85.3	-	395
Conkling Point	2597	DBSS	6/26/97	-	2.5	16	0.4	10.79	15.18	7.23	30.6	0.02	107.1	-	421
Conkling Point	2597	DBSS	6/26/97	-	2.5	15	1	10.79	15.14	7.23	30.6	0.02	107.1	-	422
Conkling Point	2597	DBSS	6/26/97	-	2.5	14	2.2	10.8	14.94	7.21	30.7	0.02	106.7	-	424
Conkling Point	2597	DBSS	6/26/97	-	2.5	13	3.3	10.82	14.66	7.15	31	0.02	106.2	-	426
Conkling Point	2597	DBSS	6/26/97	-	2.5	12	4.2	10.75	14.46	7.11	30.9	0.02	105	-	427
Conkling Point	2597	DBSS	6/26/97	-	2.5	11	5.2	10.87	13.07	7.06	31.2	0.02	103	-	430
Conkling Point	2597	DBSS	6/26/97	-	2.5	10	6.2	10.75	12.66	7.02	30.8	0.02	101	-	431
Conkling Point	2597	DBSS	6/26/97	-	2.5	9	7.2	10.78	12.17	7	30.6	0.02	100.1	-	431
Conkling Point	2597	DBSS	6/26/97	-	2.5	8	8.2	10.73	12	6.95	30.8	0.02	99.3	-	431
Conkling Point	2597	DBSS	6/26/97	-	2.5	7	9.3	10.02	10.77	6.9	29.5	0.02	90	-	434
Conkling Point	2597	DBSS	6/26/97	-	2.5	6	10.2	10.21	9.2	6.83	31.2	0.02	88.4	-	435
Conkling Point	2597	DBSS	6/26/97	-	2.5	5	11.3	9.97	8.66	6.8	32.7	0.02	85.2	-	435
Conkling Point	2597	DBSS	6/26/97	-	2.5	4	12.4	9.36	8.27	6.78	35.8	0.02	79.3	-	436
Conkling Point	2597	DBSS	6/26/97	-	2.5	3	13.3	9.52	7.91	6.8	37.2	0.02	79.9	-	434
Conkling Point	2597	DBSS	6/26/97	-	2.5	2	14.4	9.05	7.56	6.8	38.9	0.02	75.3	-	434
Conkling Point	2597	DBSS	6/26/97	-	2.5	1	15.3	8.74	7.43	6.82	40.2	0.03	72.5	-	433
Conkling Point	2797	DBSS	7/8/97	-	2.8	16	0.3	10.17	18.54	7.16	36.5	0.02	*****	-	434
Conkling Point	2797	DBSS	7/8/97	-	2.8	15	1.1	10.15	18	7.13	35.6	0.02	*****	-	436
Conkling Point	2797	DBSS	7/8/97	-	2.8	14	2	10.31	17.25	7.11	36.3	0.02	*****	-	437
Conkling Point	2797	DBSS	7/8/97	-	2.8	13	3	10.36	16.56	7.09	36.9	0.02	*****	-	438

Conkling Point	2797	DBSS	7/8/97	-	2.8	12	3.9	10.45	16.12	7.06	36.7	0.02	*****	-	439
Conkling Point	2797	DBSS	7/8/97	-	2.8	11	5	10.41	15.54	7.02	36.3	0.02	*****	-	440
Conkling Point	2797	DBSS	7/8/97	-	2.8	10	6	10.41	14.52	7	35.3	0.02	*****	-	441
Conkling Point	2797	DBSS	7/8/97	-	2.8	9	7.1	10.1	13.28	6.92	33.6	0.02	95.9	-	444
Conkling Point	2797	DBSS	7/8/97	-	2.8	8	8	10.03	12.71	6.89	33.8	0.02	93.9	-	445
Conkling Point	2797	DBSS	7/8/97	-	2.8	7	9	9.76	12.11	6.87	33.3	0.02	90.2	-	446
Conkling Point	2797	DBSS	7/8/97	-	2.8	6	10	9.26	11.34	6.84	33.2	0.02	84	-	447
Conkling Point	2797	DBSS	7/8/97	-	2.8	5	11	8.94	10.69	6.84	33.3	0.02	79.9	-	447
Conkling Point	2797	DBSS	7/8/97	-	2.8	4	11.9	8.68	9.59	6.84	35	0.02	75.5	-	448
Conkling Point	2797	DBSS	7/8/97	-	2.8	3	12.8	8.73	8.72	6.86	36.7	0.02	74.5	-	447
Conkling Point	2797	DBSS	7/8/97	-	2.8	2	13.9	8.74	8.45	6.88	37.7	0.02	73.9	-	448
Conkling Point	2797	DBSS	7/8/97	-	2.8	1	14.9	8.73	8.22	6.92	38.6	0.02	73.6	-	446
Conkling Point	2997	SSJD	7/24/97	-	4.5	10	0.4	9.56	21.37	7.46	39.7	0.03	*****	-	408
Conkling Point	2997	SSJD	7/24/97	-	4.5	9	2	9.59	20.79	7.37	37.6	0.02	*****	-	411
Conkling Point	2997	SSJD	7/24/97	-	4.5	8	3.5	10.4	18.18	7.26	38.4	0.02	*****	-	417
Conkling Point	2997	SSJD	7/24/97	-	4.5	7	5	10.43	17.3	7.13	38	0.02	*****	-	420
Conkling Point	2997	SSJD	7/24/97	-	4.5	6	6.5	10	16.31	7.05	35.9	0.02	*****	-	422
Conkling Point	2997	SSJD	7/24/97	-	4.5	5	8	10.02	15.41	6.93	34.8	0.02	99.8	-	427
Conkling Point	2997	SSJD	7/24/97	-	4.5	4	9.5	9.46	12.97	6.83	32.6	0.02	89.2	-	431
Conkling Point	2997	SSJD	7/24/97	-	4.5	3	11	9.31	12.3	6.77	32	0.02	86.4	-	433
Conkling Point	2997	SSJD	7/24/97	-	4.5	2	12.5	8.63	9.87	6.74	33.2	0.02	75.8	-	435
Conkling Point	2997	SSJD	7/24/97	-	4.5	1	14	8.17	8.72	6.74	36.4	0.02	69.7	-	435
Conkling Point	3197	DBSS	8/5/97	-	4.1	15	0.3	9.57	24	8.18	41.5	0.03	112.2	-	329
Conkling Point	3197	DBSS	8/5/97	-	4.1	14	1.8	9.56	22.25	7.5	43.2	0.03	108.4	-	350
Conkling Point	3197	DBSS	8/5/97	-	4.1	13	2.7	9.49	22.04	7.46	42.3	0.03	107.2	-	350
Conkling Point	3197	DBSS	8/5/97	-	4.1	12	3.6	9.48	21.7	7.39	41.4	0.03	106.4	-	352
Conkling Point	3197	DBSS	8/5/97	-	4.1	11	4.7	9.88	21.04	7.33	43.5	0.03	109.5	-	352
Conkling Point	3197	DBSS	8/5/97	-	4.1	10	5.6	9.4	20.23	7.19	40.7	0.03	102.5	-	356
Conkling Point	3197	DBSS	8/5/97	-	4.1	9	6.7	9.32	19.21	7.13	39.5	0.03	99.6	-	356
Conkling Point	3197	DBSS	8/5/97	-	4.1	8	7.7	9.69	18.15	7.13	37.4	0.02	101.4	-	354
Conkling Point	3197	DBSS	8/5/97	-	4.1	7	8.7	10.04	17.18	7.09	36.3	0.02	103	-	353
Conkling Point	3197	DBSS	8/5/97	-	4.1	6	9.7	9.28	15.82	6.99	35.4	0.02	92.4	-	354
Conkling Point	3197	DBSS	8/5/97	-	4.1	5	10.7	8.73	14.39	6.93	34.7	0.02	84.3	-	354
Conkling Point	3197	DBSS	8/5/97	-	4.1	4	11.8	8.22	12.28	6.91	33.7	0.02	75.9	-	350
Conkling Point	3197	DBSS	8/5/97	-	4.1	3	12.6	8.21	11.23	6.93	34.5	0.02	73.8	-	346
Conkling Point	3197	DBSS	8/5/97	-	4.1	2	13.7	8	10.16	6.95	35.9	0.02	70.2	-	342
Conkling Point	3197	DBSS	8/5/97	-	4.1	1	14.8	7.22	9.44	7.02	38.4	0.02	62.2	-	388
Conkling Point	3297	DBSS	8/14/97	-	5	11	0.3	8.64	22.75	7.98	44.7	0.03	99.5	-	368
Conkling Point	3297	DBSS	8/14/97	-	5	10	2.1	8.73	22.56	8.11	44.7	0.03	100.3	-	361
Conkling Point	3297	DBSS	8/14/97	-	5	9	3.6	8.81	22.33	7.87	44.3	0.03	100.7	-	363
Conkling Point	3297	DBSS	8/14/97	-	5	8	5	8.57	21.86	7.31	45.2	0.03	97.1	-	384

Conkling Point	3297	DBSS	8/14/97	-	5	7	6.5	8.56	21.26	7.14	46.4	0.03	95.9	-	389
Conkling Point	3297	DBSS	8/14/97	-	5	6	8	8.56	20.65	7.06	43.6	0.03	94.7	-	391
Conkling Point	3297	DBSS	8/14/97	-	5	5	9.6	8.58	18.75	6.94	39	0.03	91.4	-	396
Conkling Point	3297	DBSS	8/14/97	-	5	4	11	7.69	15.02	6.9	35.7	0.02	75.8	-	399
Conkling Point	3297	DBSS	8/14/97	-	5	3	12.6	6.19	15.07	6.87	36.5	0.02	77	-	399
Conkling Point	3297	DBSS	8/14/97	-	5	2	14	6.57	9.2	6.95	39.1	0.03	56.7	-	401
Conkling Point	3297	DBSS	8/14/97	-	5	1	15.6	6.79	8.9	7.08	39.3	0.03	58.2	-	398
Conkling Point	3497	DBSS	8/27/97	-	7.2	11	0.4	9.02	21.92	7.53	50	0.03	102.3	-	346
Conkling Point	3497	DBSS	8/27/97	-	7.2	10	2	9.03	21.7	7.51	50	0.03	102.1	-	346
Conkling Point	3497	DBSS	8/27/97	-	7.2	9	3.6	9	21.56	7.45	50	0.03	101.6	-	347
Conkling Point	3497	DBSS	8/27/97	-	7.2	8	5	9.01	21.44	7.4	50.3	0.03	101.4	-	349
Conkling Point	3497	DBSS	8/27/97	-	7.2	7	6.6	8.84	21.14	7.33	49.2	0.03	98.9	-	350
Conkling Point	3497	DBSS	8/27/97	-	7.2	6	8	8.73	21	7.17	49.5	0.03	97.4	-	355
Conkling Point	3497	DBSS	8/27/97	-	7.2	5	9.5	8.19	20.49	6.96	49.5	0.03	90.5	-	363
Conkling Point	3497	DBSS	8/27/97	-	7.2	4	11	7.84	17.3	6.89	42.7	0.03	81.2	-	368
Conkling Point	3497	DBSS	8/27/97	-	7.2	3	12.6	8.37	15.61	6.88	40.2	0.03	83.6	-	368
Conkling Point	3497	DBSS	8/27/97	-	7.2	2	14.1	7.65	12.49	6.86	39.9	0.03	71.3	-	369
Conkling Point	3497	DBSS	8/27/97	-	7.2	1	15.8	6.43	9.48	6.87	42.8	0.03	56	-	369
Conkling Point	3797	ASRP	9/17/97	-	3	16	0.2	8.46	14.83	6.87	47.6	0.03	84.4	-	392
Conkling Point	3797	ASRP	9/17/97	-	3	15	1	8.42	14.86	6.86	47.6	0.03	84.1	-	392
Conkling Point	3797	ASRP	9/17/97	-	3	14	2	8.3	14.58	6.79	46.9	0.03	82.4	-	395
Conkling Point	3797	ASRP	9/17/97	-	3	13	3	7.76	13.75	6.68	45.7	0.03	76.9	-	399
Conkling Point	3797	ASRP	9/17/97	-	3	12	4	7.6	10.69	6.62	42.6	0.03	69.1	-	404
Conkling Point	3797	ASRP	9/17/97	-	3	11	5	7.76	9.81	6.62	42.7	0.03	69.1	-	404
Conkling Point	3797	ASRP	9/17/97	-	3	10	6	7.91	9.5	6.63	42.7	0.03	69.9	-	403
Conkling Point	3797	ASRP	9/17/97	-	3	9	7	7.78	9.43	6.63	43.1	0.03	68.6	-	402
Conkling Point	3797	ASRP	9/17/97	-	3	8	8	7.61	9.37	6.63	42.9	0.03	67.2	-	402
Conkling Point	3797	ASRP	9/17/97	-	3	7	9	7.5	9.06	6.62	43	0.03	65.7	-	401
Conkling Point	3797	ASRP	9/17/97	-	3	6	10	7.18	8.74	6.63	43.3	0.03	62.5	-	400
Conkling Point	3797	ASRP	9/17/97	-	3	5	11	7.35	8.68	6.66	43.4	0.03	63.7	-	398
Conkling Point	3797	ASRP	9/17/97	-	3	4	12	8.42	8.29	6.71	43.8	0.03	72.1	-	395
Conkling Point	3797	ASRP	9/17/97	-	3	3	13	8.59	8.2	6.74	43.8	0.03	74.2	-	392
Conkling Point	3797	ASRP	9/17/97	-	3	2	14.1	8.63	8.19	6.76	43.8	0.03	73.9	-	391
Conkling Point	3797	ASRP	9/17/97	-	3	1	15.2	8.7	8.19	6.79	43.8	0.03	74.5	-	389
Conkling Point	3997	ASRA	9/29/97	-	6.2	10	0.2	9.53	16.26	7.21	50.8	0.03	98.2	-	388
Conkling Point	3997	ASRA	9/29/97	-	6.2	9	1.5	9.3	15.79	7.13	50.3	0.03	94.8	-	391
Conkling Point	3997	ASRA	9/29/97	-	6.2	8	3	9.24	15.61	7.06	50.2	0.03	93.9	-	392
Conkling Point	3997	ASRA	9/29/97	-	6.2	7	4.5	8.78	14.69	6.94	48.9	0.03	87.4	-	395
Conkling Point	3997	ASRA	9/29/97	-	6.2	6	6	8.32	13.67	6.83	47.1	0.03	81	-	397
Conkling Point	3997	ASRA	9/29/97	-	6.2	5	7.5	7.78	12.38	6.77	44.3	0.03	73.6	-	399
Conkling Point	3997	ASRA	9/29/97	-	6.2	4	9	7.84	10.9	6.76	44	0.03	71.7	-	398

Conkling Point	3997	ASRA	9/29/97	-	6.2	3	10.5	7.38	9.64	6.77	42.2	0.03	65.1	-	397
Conkling Point	3997	ASRA	9/29/97	-	6.2	2	12	7.86	8.4	6.82	42.3	0.03	67.6	-	395
Conkling Point	3997	ASRA	9/29/97	-	6.2	1	13.4	8.18	8.22	6.92	42.4	0.03	70.1	-	389
Conkling Point	4297	DBAS	10/22/97	-	4.1	16	0.2	10.3	11.54	7.28	48	0.03	94	-	378
Conkling Point	4297	DBAS	10/22/97	-	4.1	15	1	10.28	11.56	7.31	49	0.03	93.9	-	376
Conkling Point	4297	DBAS	10/22/97	-	4.1	14	2	10.27	11.57	7.29	49.1	0.03	93.8	-	377
Conkling Point	4297	DBAS	10/22/97	-	4.1	13	3	10.26	11.54	7.31	49.2	0.03	93.7	-	376
Conkling Point	4297	DBAS	10/22/97	-	4.1	12	4	10.28	11.54	7.29	49.3	0.03	93.8	-	376
Conkling Point	4297	DBAS	10/22/97	-	4.1	11	5	10.25	11.54	7.29	49.1	0.03	93.6	-	376
Conkling Point	4297	DBAS	10/22/97	-	4.1	10	6	10.28	11.54	7.29	49.2	0.03	93.8	-	376
Conkling Point	4297	DBAS	10/22/97	-	4.1	9	7	10.26	11.54	7.28	49.3	0.03	93.7	-	376
Conkling Point	4297	DBAS	10/22/97	-	4.1	8	8	10.25	11.54	7.29	49.3	0.03	93.6	-	375
Conkling Point	4297	DBAS	10/22/97	-	4.1	7	9	10.23	11.53	7.27	49.1	0.03	93.4	-	375
Conkling Point	4297	DBAS	10/22/97	-	4.1	6	10	10.24	11.53	7.27	49.1	0.03	93.5	-	375
Conkling Point	4297	DBAS	10/22/97	-	4.1	5	11	10.25	11.51	7.31	49.3	0.03	93.5	-	372
Conkling Point	4297	DBAS	10/22/97	-	4.1	4	12	10.26	11.5	7.3	49.3	0.03	93.4	-	372
Conkling Point	4297	DBAS	10/22/97	-	4.1	3	13	10.25	11.43	7.3	49.3	0.03	93.4	-	372
Conkling Point	4297	DBAS	10/22/97	-	4.1	2	14	10.63	11.15	7.31	49.5	0.03	96.2	-	371
Conkling Point	4297	DBAS	10/22/97	-	4.1	1	14.9	10.61	10.86	7.32	50	0.03	95.3	-	370
Conkling Point	4497	DBAS	11/3/97	-	3.1	11	0.3	10.59	7.04	9.79	53	0.03	93.2	*****	441
Conkling Point	4497	DBAS	11/3/97	-	3.1	10	1.5	10.54	7.05	9.74	53	0.03	92.5	*****	441
Conkling Point	4497	DBAS	11/3/97	-	3.1	9	3	10.52	7.02	9.6	53.1	0.03	92	*****	442
Conkling Point	4497	DBAS	11/3/97	-	3.1	8	4.5	10.75	6.99	9.24	52.9	0.03	93.3	*****	441
Conkling Point	4497	DBAS	11/3/97	-	3.1	7	6	10.97	6.93	8.74	53.7	0.03	94	*****	440
Conkling Point	4497	DBAS	11/3/97	-	3.1	6	7.5	9.25	6.79	8.48	52.9	0.03	78.8	*****	442
Conkling Point	4497	DBAS	11/3/97	-	3.1	5	9	9.27	6.77	8.48	52.8	0.03	78.9	*****	441
Conkling Point	4497	DBAS	11/3/97	-	3.1	4	10.5	9.32	6.75	8.43	52.5	0.03	79.3	*****	439
Conkling Point	4497	DBAS	11/3/97	-	3.1	3	12	8.81	6.66	7.73	48.8	0.03	73.7	*****	441
Conkling Point	4497	DBAS	11/3/97	-	3.1	2	13.6	8.64	6.66	7.41	47	0.03	71.6	*****	439
Conkling Point	4497	DBAS	11/3/97	-	3.1	1	14.9	8.65	6.71	7.37	46.7	0.03	71.7	*****	441

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Hidden Lake	1597	ASSS	4/18/97	-	1.9	5	0.2	12.49	6.73	7.46	38.6	0.02	*****	-	374
Hidden Lake	1597	ASSS	4/18/97	-	1.9	4	2.3	12.51	6.31	7.45	38.4	0.02	*****	-	375
Hidden Lake	1597	ASSS	4/18/97	-	1.9	3	3.7	12.54	6.28	7.45	38.4	0.02	*****	-	375
Hidden Lake	1597	ASSS	4/18/97	-	1.9	2	5.3	12.47	6.26	7.43	38.5	0.02	*****	-	375
Hidden Lake	1597	ASSS	4/18/97	-	1.9	1	6.9	12.38	6.23	7.42	38.3	0.02	99.9	-	375
Hidden Lake	1997	DBAC	5/16/97	-	0.7	11	0.2	11.1	11.97	7	29.9	0.02	102.2	-	371
Hidden Lake	1997	DBAC	5/16/97	-	0.7	10	1.4	11	10.64	6.97	28.7	0.02	98.1	-	376

Hidden Lake	1997	DBAC	5/16/97	-	0.7	9	2.4	11.06	9.38	6.97	28.8	0.02	95.8	-	377
Hidden Lake	1997	DBAC	5/16/97	-	0.7	8	3.4	11.03	9.3	6.97	29	0.02	95.3	-	377
Hidden Lake	1997	DBAC	5/16/97	-	0.7	7	4.5	11.03	9.27	6.96	29.3	0.02	95.3	-	377
Hidden Lake	1997	DBAC	5/16/97	-	0.7	6	5.4	11.01	9.25	6.98	29.4	0.02	95	-	375
Hidden Lake	1997	DBAC	5/16/97	-	0.7	5	6.4	10.95	9.17	6.96	30.2	0.02	94.4	-	376
Hidden Lake	1997	DBAC	5/16/97	-	0.7	4	7.5	10.89	9.1	6.98	29.1	0.02	93.6	-	375
Hidden Lake	1997	DBAC	5/16/97	-	0.7	3	8.5	10.87	9.07	6.98	28.8	0.02	93.4	-	374
Hidden Lake	1997	DBAC	5/16/97	-	0.7	2	9.3	10.86	9.04	6.99	28.9	0.02	93.3	-	373
Hidden Lake	1997	DBAC	5/16/97	-	0.7	1	10.4	10.86	8.97	6.99	30	0.02	93.1	-	373
Hidden Lake	2197	DBSS	5/29/97	-	1.7	10	0.7	10.91	12.61	6.99	26.6	0.02	101.9	-	361
Hidden Lake	2197	DBSS	5/29/97	-	1.7	9	1.8	11.25	9.84	7	26.9	0.02	98.6	-	361
Hidden Lake	2197	DBSS	5/29/97	-	1.7	8	2.8	11.18	9.53	6.99	26.7	0.02	97.3	-	361
Hidden Lake	2197	DBSS	5/29/97	-	1.7	7	3.7	11.14	9.3	6.97	26.6	0.02	96.5	-	362
Hidden Lake	2197	DBSS	5/29/97	-	1.7	6	4.7	11.13	9.19	6.95	26.6	0.02	96.1	-	362
Hidden Lake	2197	DBSS	5/29/97	-	1.7	5	5.7	11.03	9.12	6.95	26.4	0.02	95.3	-	361
Hidden Lake	2197	DBSS	5/29/97	-	1.7	4	6.8	10.74	8.45	6.92	26.4	0.02	91.1	-	361
Hidden Lake	2197	DBSS	5/29/97	-	1.7	3	7.7	10.76	8.38	6.92	26.3	0.02	91.1	-	360
Hidden Lake	2197	DBSS	5/29/97	-	1.7	2	8.8	10.62	8.33	6.91	26.5	0.02	89.8	-	359
Hidden Lake	2197	DBSS	5/29/97	-	1.7	1	9.8	10	8.3	6.91	27	0.02	84.5	-	367
Hidden Lake	2397	DBAS	6/11/97	-	2	10	0.5	11.03	13.17	7.09	29.3	0.02	104.9	-	405
Hidden Lake	2397	DBAS	6/11/97	-	2	9	1.6	11.24	12.28	7.11	29.1	0.02	104.7	-	405
Hidden Lake	2397	DBAS	6/11/97	-	2	8	2.6	11.15	11.98	7.1	29	0.02	103.2	-	405
Hidden Lake	2397	DBAS	6/11/97	-	2	7	3.6	11.13	11.91	7.06	29	0.02	102.9	-	407
Hidden Lake	2397	DBAS	6/11/97	-	2	6	4.3	11.1	10.59	7.02	28.5	0.02	99.5	-	409
Hidden Lake	2397	DBAS	6/11/97	-	2	5	5.3	10.97	10.02	7.01	28.2	0.02	97.1	-	410
Hidden Lake	2397	DBAS	6/11/97	-	2	4	6.3	10.96	9.61	6.99	27.7	0.02	96	-	410
Hidden Lake	2397	DBAS	6/11/97	-	2	3	7.2	10.72	9.35	6.98	27.7	0.02	93.3	-	411
Hidden Lake	2397	DBAS	6/11/97	-	2	2	8.1	10.16	9.13	6.98	28.1	0.02	88	-	411
Hidden Lake	2397	DBAS	6/11/97	-	2	1	8.2	10.15	9.12	6.98	28.1	0.02	87.8	-	411
Hidden Lake	2597	DBSS	6/26/97	-	2.4	11	0.4	10.75	13.72	7.16	30.6	0.02	103.3	-	406
Hidden Lake	2597	DBSS	6/26/97	-	2.4	10	0.3	10.75	13.77	7.15	30.6	0.02	103.5	-	406
Hidden Lake	2597	DBSS	6/26/97	-	2.4	9	1.2	10.78	13.3	7.14	30.4	0.02	102.7	-	409
Hidden Lake	2597	DBSS	6/26/97	-	2.4	8	2.4	10.8	12.94	7.13	30.5	0.02	102	-	409
Hidden Lake	2597	DBSS	6/26/97	-	2.4	7	3.4	10.75	12.74	7.11	30.2	0.02	101	-	410
Hidden Lake	2597	DBSS	6/26/97	-	2.4	6	4.5	10.52	12.44	7.06	30.3	0.02	98.3	-	411
Hidden Lake	2597	DBSS	6/26/97	-	2.4	5	4.5	10.54	12.36	7.02	30.3	0.02	98.3	-	411
Hidden Lake	2597	DBSS	6/26/97	-	2.4	4	5.5	10.38	11.89	6.98	30	0.02	95.8	-	411
Hidden Lake	2597	DBSS	6/26/97	-	2.4	3	6.5	7.98	11.15	6.83	29.8	0.02	72.3	-	416
Hidden Lake	2597	DBSS	6/26/97	-	2.4	2	7.5	6.41	10.43	6.86	30.3	0.02	57.2	-	418
Hidden Lake	2597	DBSS	6/26/97	-	2.4	1	7.4	6.45	10.38	6.88	30.3	0.02	57.4	-	419
Hidden Lake	2797	DBSS	7/8/97	-	2.4	12	0.3	10.08	18.56	7.14	34.7	0.02	*****	-	392

Hidden Lake	2797	DBSS	7/8/97	-	2.4	11	1.4	10.29	16.49	7.1	34.2	0.02	*****	-	395
Hidden Lake	2797	DBSS	7/8/97	-	2.4	10	2.1	10.45	16.29	7.08	34.2	0.02	*****	-	393
Hidden Lake	2797	DBSS	7/8/97	-	2.4	9	2.7	10.27	15.84	7.02	34.1	0.02	*****	-	394
Hidden Lake	2797	DBSS	7/8/97	-	2.4	8	3.4	10.49	15.25	6.98	33.8	0.02	*****	-	394
Hidden Lake	2797	DBSS	7/8/97	-	2.4	7	4.1	10.27	14.49	6.89	33.2	0.02	*****	-	396
Hidden Lake	2797	DBSS	7/8/97	-	2.4	6	4.8	9.94	13.4	6.84	32.4	0.02	94.5	-	396
Hidden Lake	2797	DBSS	7/8/97	-	2.4	5	5.4	9.42	13.18	6.77	32.6	0.02	89.2	-	396
Hidden Lake	2797	DBSS	7/8/97	-	2.4	4	6.1	8.57	12.67	6.72	32.4	0.02	80.2	-	395
Hidden Lake	2797	DBSS	7/8/97	-	2.4	3	6.9	7.84	12.2	6.7	32.5	0.02	72.4	-	392
Hidden Lake	2797	DBSS	7/8/97	-	2.4	2	7.6	6.94	11.93	6.7	32.6	0.02	63.7	-	388
Hidden Lake	2797	DBSS	7/8/97	-	2.4	1	8.3	6.46	11.82	6.82	32.8	0.02	59.3	-	375
Hidden Lake	2997	SSJD	7/24/97	-	3.5	10	0.5	9.66	22.27	7.88	35.2	0.02	*****	-	391
Hidden Lake	2997	SSJD	7/24/97	-	3.5	9	1	9.74	22.11	7.9	35.3	0.02	*****	-	390
Hidden Lake	2997	SSJD	7/24/97	-	3.5	8	1.5	9.8	21.99	7.82	35.2	0.02	*****	-	391
Hidden Lake	2997	SSJD	7/24/97	-	3.5	7	2.5	9.96	21.67	7.59	35.5	0.02	*****	-	395
Hidden Lake	2997	SSJD	7/24/97	-	3.5	6	3.5	10.45	17.59	7.02	32.7	0.02	*****	-	417
Hidden Lake	2997	SSJD	7/24/97	-	3.5	5	4.5	10	16.07	6.88	32	0.02	*****	-	421
Hidden Lake	2997	SSJD	7/24/97	-	3.5	4	5.4	8.64	14.36	6.67	31.6	0.02	84	-	425
Hidden Lake	2997	SSJD	7/24/97	-	3.5	3	6.5	6.29	13.18	6.61	33.2	0.02	59.8	-	427
Hidden Lake	2997	SSJD	7/24/97	-	3.5	2	7.3	5.5	12.9	6.65	33.7	0.02	51.8	-	424
Hidden Lake	2997	SSJD	7/24/97	-	3.5	1	8	4.83	12.77	6.82	34	0.02	45.4	-	432
Hidden Lake	3197	DBSS	8/5/97	-	5.1	10	0.3	10.19	25.4	8.67	38.8	0.02	122.5	-	256
Hidden Lake	3197	DBSS	8/5/97	-	5.1	9	1.5	10	24.66	8.44	38.2	0.02	118.5	-	258
Hidden Lake	3197	DBSS	8/5/97	-	5.1	8	2.5	10	24.16	8.19	38.2	0.02	117.4	-	258
Hidden Lake	3197	DBSS	8/5/97	-	5.1	7	3.5	10.08	21.44	7.21	35.1	0.02	112.5	-	289
Hidden Lake	3197	DBSS	8/5/97	-	5.1	6	4.5	10.33	18.29	7.05	32.4	0.02	108.5	-	293
Hidden Lake	3197	DBSS	8/5/97	-	5.1	5	5.5	8.93	16.04	6.89	32.7	0.02	89.4	-	284
Hidden Lake	3197	DBSS	8/5/97	-	5.1	4	6.6	5.91	14.49	6.83	36.5	0.02	57.1	-	269
Hidden Lake	3197	DBSS	8/5/97	-	5.1	3	7.5	2.2	13.35	6.85	40.1	0.03	20.7	-	237
Hidden Lake	3197	DBSS	8/5/97	-	5.1	2	8.5	0.44	12.85	7.02	52.9	0.03	4.1	-	178
Hidden Lake	3197	DBSS	8/5/97	-	5.1	1	8.5	0.48	12.82	7.09	52.2	0.03	4.5	-	174
Hidden Lake	3297	DBSS	8/14/97	-	6	10	0.3	8.76	23.28	7.95	39.9	0.03	101.9	-	275
Hidden Lake	3297	DBSS	8/14/97	-	6	9	1	8.77	23.22	7.89	39.8	0.03	101.9	-	271
Hidden Lake	3297	DBSS	8/14/97	-	6	8	2	8.82	22.95	7.8	39.9	0.03	102.1	-	269
Hidden Lake	3297	DBSS	8/14/97	-	6	7	3	8.91	22.74	7.54	40.3	0.03	102.6	-	271
Hidden Lake	3297	DBSS	8/14/97	-	6	6	4	8.64	21.72	6.98	38.8	0.02	97.6	-	290
Hidden Lake	3297	DBSS	8/14/97	-	6	5	5	8.67	18.32	6.76	34.5	0.02	91.6	-	296
Hidden Lake	3297	DBSS	8/14/97	-	6	4	6	6.25	16.11	6.67	37.6	0.02	63	-	288
Hidden Lake	3297	DBSS	8/14/97	-	6	3	6.9	2.37	14.47	6.6	41.7	0.03	22.7	-	266
Hidden Lake	3297	DBSS	8/14/97	-	6	2	8	0.46	13.43	6.59	50.7	0.03	4.4	-	242
Hidden Lake	3297	DBSS	8/14/97	-	6	1	8	0.81	13.86	6.92	47.1	0.03	8.1	-	225

Hidden Lake	3497	DBSS	8/27/97	-	5.7	10	0.5	9.39	22.02	7.9	44.9	0.03	106.8	-	235
Hidden Lake	3497	DBSS	8/27/97	-	5.7	9	0.3	9.39	22.02	7.9	44.9	0.03	106.8	-	235
Hidden Lake	3497	DBSS	8/27/97	-	5.7	8	1.6	9.41	21.92	7.88	45	0.03	106.9	-	231
Hidden Lake	3497	DBSS	8/27/97	-	5.7	7	2.4	9.43	21.88	7.83	45	0.03	107	-	223
Hidden Lake	3497	DBSS	8/27/97	-	5.7	6	3.5	9.45	21.85	7.74	45.1	0.03	107.2	-	219
Hidden Lake	3497	DBSS	8/27/97	-	5.7	5	4.6	9.33	21.58	7.44	44.9	0.03	105.3	-	218
Hidden Lake	3497	DBSS	8/27/97	-	5.7	4	5.4	10.33	19.92	7.05	42.8	0.03	112.9	-	228
Hidden Lake	3497	DBSS	8/27/97	-	5.7	3	6.5	3.7	17.44	6.73	47.1	0.03	38.4	-	208
Hidden Lake	3497	DBSS	8/27/97	-	5.7	2	7.5	0.3	14.92	6.67	57.7	0.04	2.9	-	147
Hidden Lake	3497	DBSS	8/27/97	-	5.7	1	8.4	0.4	13.88	6.6	79.9	0.05	3.9	-	139
Hidden Lake	3797	DBAS	9/16/97	-	2.5	9	0.2	8.74	18.01	7.31	47.1	0.03	92.1	-	296
Hidden Lake	3797	DBAS	9/16/97	-	2.5	8	1.2	8.75	18	7.3	47.2	0.03	92.3	-	295
Hidden Lake	3797	DBAS	9/16/97	-	2.5	7	2.2	8.68	17.9	7.27	47.1	0.03	91.3	-	294
Hidden Lake	3797	DBAS	9/16/97	-	2.5	6	3.2	8.57	17.84	7.27	47.1	0.03	90	-	290
Hidden Lake	3797	DBAS	9/16/97	-	2.5	5	4.2	8.63	17.79	7.27	47.1	0.03	90.4	-	286
Hidden Lake	3797	DBAS	9/16/97	-	2.5	4	5.2	8.75	17.73	7.24	47.1	0.03	91.7	-	281
Hidden Lake	3797	DBAS	9/16/97	-	2.5	3	6.2	8	17.44	7.12	49.2	0.03	83.4	-	278
Hidden Lake	3797	DBAS	9/16/97	-	2.5	2	7.2	7.77	17.12	7.07	50.9	0.03	80.4	-	264
Hidden Lake	3797	DBAS	9/16/97	-	2.5	1	8.2	7.96	17.05	7.05	51	0.03	82.3	-	245
Hidden Lake	3997	ASRA	9/29/97	-	3.5	10	0.2	9.65	17.34	7.45	48.2	0.03	101.6	-	350
Hidden Lake	3997	ASRA	9/29/97	-	3.5	9	1.6	9.68	16.21	7.44	48.1	0.03	99.6	-	349
Hidden Lake	3997	ASRA	9/29/97	-	3.5	8	2.4	9.67	15.91	7.44	48.2	0.03	98.8	-	348
Hidden Lake	3997	ASRA	9/29/97	-	3.5	7	3.2	9.61	15.86	7.42	48.2	0.03	98.1	-	347
Hidden Lake	3997	ASRA	9/29/97	-	3.5	6	4	9.5	15.82	7.4	48.2	0.03	97.1	-	346
Hidden Lake	3997	ASRA	9/29/97	-	3.5	5	4.7	9.4	15.77	7.37	48.3	0.03	95.7	-	344
Hidden Lake	3997	ASRA	9/29/97	-	3.5	4	5.6	9.36	15.67	7.34	48.1	0.03	95.2	-	340
Hidden Lake	3997	ASRA	9/29/97	-	3.5	3	6.4	8.83	15.47	7.33	48.7	0.03	89.4	-	333
Hidden Lake	3997	ASRA	9/29/97	-	3.5	2	7.2	9.16	15.34	7.35	48.9	0.03	92.4	-	328
Hidden Lake	3997	ASRA	9/29/97	-	3.5	1	8	9.44	15.32	7.36	48.6	0.03	95.2	-	319
Hidden Lake	4297	DBAS	10/20/97	-	2.5	9	0.3	10.76	11.63	7.44	54.2	0.03	97.8	-	350
Hidden Lake	4297	DBAS	10/20/97	-	2.5	8	1	10.76	11.43	7.46	54	0.03	97.5	-	349
Hidden Lake	4297	DBAS	10/20/97	-	2.5	7	2	10.76	11.25	7.42	54.2	0.03	97.1	-	351
Hidden Lake	4297	DBAS	10/20/97	-	2.5	6	3	10.64	11.12	7.39	54.3	0.03	95.7	-	351
Hidden Lake	4297	DBAS	10/20/97	-	2.5	5	4	10.71	11.05	7.38	54.1	0.03	96.2	-	350
Hidden Lake	4297	DBAS	10/20/97	-	2.5	4	5	10.72	11.02	7.37	54.2	0.03	96.2	-	349
Hidden Lake	4297	DBAS	10/20/97	-	2.5	3	6	10.75	11	7.31	54.3	0.03	96.5	-	351
Hidden Lake	4297	DBAS	10/20/97	-	2.5	2	7	10.77	11	7.28	54.2	0.03	96.6	-	351
Hidden Lake	4297	DBAS	10/20/97	-	2.5	1	8	10.89	10.86	7.25	54.3	0.03	97.4	-	350
Hidden Lake	4497	DBAS	11/3/97	-	2.4	9	0.2	11.64	7.48	8.83	53.2	0.03	100	*****	425
Hidden Lake	4497	DBAS	11/3/97	-	2.4	8	1	11.57	7.44	8.73	53.2	0.03	99.1	*****	427
Hidden Lake	4497	DBAS	11/3/97	-	2.4	7	2	11.5	7.44	8.65	53.1	0.03	98.3	*****	426

Hidden Lake	4497	DBAS	11/3/97	-	2.4	6	3	11.5	7.41	8.61	53.3	0.03	98.2	*****	425
Hidden Lake	4497	DBAS	11/3/97	-	2.4	5	4	11.48	7.43	8.61	53.2	0.03	98.1	*****	422
Hidden Lake	4497	DBAS	11/3/97	-	2.4	4	5	11.38	7.37	8.6	53.2	0.03	97.2	*****	423
Hidden Lake	4497	DBAS	11/3/97	-	2.4	3	6	11.17	7.36	8.45	53.5	0.03	95	*****	422
Hidden Lake	4497	DBAS	11/3/97	-	2.4	2	7	11.03	7.35	8.32	53.6	0.03	93.6	*****	422
Hidden Lake	4497	DBAS	11/3/97	-	2.4	1	7.8	11.02	7.36	8.32	53.7	0.03	93.3	*****	433

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Round Lake	1597	DBAC	5/16/97	-	0.4	12	0.2	11.03	10.79	7	26.7	0.02	99	-	372
Round Lake	1597	DBAC	5/16/97	-	0.4	11	0.2	11.11	10.63	7.03	27	0.02	99	-	372
Round Lake	1597	DBAC	5/16/97	-	0.4	10	0.2	11.09	10.63	7.05	27	0.02	98.9	-	371
Round Lake	1597	DBAC	5/16/97	-	0.4	9	1.7	11.09	10.33	7.04	26.9	0.02	98.3	-	373
Round Lake	1597	DBAC	5/16/97	-	0.4	8	1.7	11.06	10.35	7.03	26.8	0.02	98	-	373
Round Lake	1597	DBAC	5/16/97	-	0.4	7	1.7	11.07	10.36	7.02	26.9	0.02	98.2	-	374
Round Lake	1597	DBAC	5/16/97	-	0.4	6	2.8	11.15	8.61	7.06	26.5	0.02	94.7	-	373
Round Lake	1597	DBAC	5/16/97	-	0.4	5	2.8	11.13	8.6	7.06	26.5	0.02	94.5	-	373
Round Lake	1597	DBAC	5/16/97	-	0.4	4	2.8	11.1	8.59	7.06	26.5	0.02	94.2	-	373
Round Lake	1597	DBAC	5/16/97	-	0.4	3	3.9	11.17	8.33	7.06	26.4	0.02	94.3	-	373
Round Lake	1597	DBAC	5/16/97	-	0.4	2	3.9	11.2	8.32	7.06	26.3	0.02	94.5	-	373
Round Lake	1597	DBAC	5/16/97	-	0.4	1	3.9	11.24	8.3	7.06	26.6	0.02	94.8	-	373
Round Lake	2197	DBSS	5/29/97	-	1.4	12	0.3	11.02	10.86	7.11	26.5	0.02	99	-	365
Round Lake	2197	DBSS	5/29/97	-	1.4	11	0.3	11.03	10.92	7.1	26.4	0.02	99.3	-	366
Round Lake	2197	DBSS	5/29/97	-	1.4	10	0.2	11.01	11	7.1	26.2	0.02	99.3	-	366
Round Lake	2197	DBSS	5/29/97	-	1.4	9	1.2	11.39	9.71	7.11	26.6	0.02	99.7	-	366
Round Lake	2197	DBSS	5/29/97	-	1.4	8	1.2	11.37	9.69	7.13	26.7	0.02	99.4	-	366
Round Lake	2197	DBSS	5/29/97	-	1.4	7	1.2	11.35	9.73	7.12	26.7	0.02	99.4	-	366
Round Lake	2197	DBSS	5/29/97	-	1.4	6	2.4	11.44	9.5	7.09	26.7	0.02	99.5	-	368
Round Lake	2197	DBSS	5/29/97	-	1.4	5	2.4	11.44	9.51	7.1	26.3	0.02	99.4	-	368
Round Lake	2197	DBSS	5/29/97	-	1.4	4	2.4	11.5	9.45	7.1	26.7	0.02	99.8	-	367
Round Lake	2197	DBSS	5/29/97	-	1.4	3	3.3	11.53	9.2	7.09	26.7	0.02	99.6	-	368
Round Lake	2197	DBSS	5/29/97	-	1.4	2	3.3	11.54	9.22	7.08	26.4	0.02	99.7	-	369
Round Lake	2197	DBSS	5/29/97	-	1.4	1	3.3	11.54	9.23	7.09	26.4	0.02	99.8	-	368
Round Lake	2397	DBAS	6/11/97	-	1.8	10	0.3	10.67	13.47	7.14	29.4	0.02	102.1	-	398
Round Lake	2397	DBAS	6/11/97	-	1.8	9	0.3	10.65	13.45	7.15	29.6	0.02	101.9	-	397
Round Lake	2397	DBAS	6/11/97	-	1.8	8	0.3	10.67	13.45	7.15	29.5	0.02	102.1	-	398
Round Lake	2397	DBAS	6/11/97	-	1.8	7	1	11.08	11.69	7.19	29	0.02	101.9	-	398
Round Lake	2397	DBAS	6/11/97	-	1.8	6	1	11.02	11.81	7.19	29.1	0.02	101.6	-	398
Round Lake	2397	DBAS	6/11/97	-	1.8	5	1	10.99	12	7.19	29	0.02	101.8	-	398
Round Lake	2397	DBAS	6/11/97	-	1.8	4	0.9	10.85	12.21	7.19	29	0.02	100.9	-	398
Round Lake	2397	DBAS	6/11/97	-	1.8	3	1.5	11.29	11.28	7.21	28.6	0.02	102.8	-	401
Round Lake	2397	DBAS	6/11/97	-	1.8	2	1.5	11.25	11.38	7.22	28.7	0.02	102.7	-	400

Round Lake	2397	DBAS	6/11/97	-	1.8	1	1.6	11.27	11.43	7.21	28.6	0.02	103	-	401
Round Lake	2597	DBSS	6/26/97	-	1.5	10	0.3	11.34	11.69	7.21	32.4	0.02	104.1	-	398
Round Lake	2597	DBSS	6/26/97	-	1.5	9	0.3	11.37	11.7	7.21	31.9	0.02	104.3	-	398
Round Lake	2597	DBSS	6/26/97	-	1.5	8	0.3	11.26	11.95	7.2	32.1	0.02	104.2	-	399
Round Lake	2597	DBSS	6/26/97	-	1.5	7	0.9	11.34	11.21	7.18	32.1	0.02	103	-	401
Round Lake	2597	DBSS	6/26/97	-	1.5	6	0.9	11.25	11.23	7.19	32	0.02	102.2	-	400
Round Lake	2597	DBSS	6/26/97	-	1.5	5	1	11.3	11.02	7.2	31.9	0.02	102.2	-	401
Round Lake	2597	DBSS	6/26/97	-	1.5	4	1.4	11.28	10.98	7.19	31.7	0.02	101.9	-	401
Round Lake	2597	DBSS	6/26/97	-	1.5	3	1.4	11.32	10.92	7.2	31.9	0.02	102.1	-	402
Round Lake	2597	DBSS	6/26/97	-	1.5	2	1.5	11.31	10.95	7.2	31.9	0.02	102.1	-	402
Round Lake	2597	DBSS	6/26/97	-	1.5	1	1.6	11.32	10.95	7.19	31.8	0.02	102.1	-	403
Round Lake	2797	DBSS	7/8/97	-	0.6	2	0.2	9.73	16.76	7.33	35.3	0.02	99.6	-	399
Round Lake	2797	DBSS	7/8/97	-	0.6	1	0.6	10.33	16.11	7.36	35.1	0.02	*****	-	397
Round Lake	2997	SSJD	7/24/97	-	1.7	10	0.3	9.48	19.4	7.27	37.9	0.02	*****	-	405
Round Lake	2997	SSJD	7/24/97	-	1.7	9	0.3	9.47	19.26	7.26	37.9	0.02	*****	-	405
Round Lake	2997	SSJD	7/24/97	-	1.7	8	0.3	9.49	19.28	7.25	38	0.02	*****	-	406
Round Lake	2997	SSJD	7/24/97	-	1.7	7	0.9	9.37	18.66	7.25	37.8	0.02	99.8	-	408
Round Lake	2997	SSJD	7/24/97	-	1.7	6	0.9	9.31	18.63	7.26	37.8	0.02	99	-	408
Round Lake	2997	SSJD	7/24/97	-	1.7	5	0.9	9.36	18.66	7.25	37.8	0.02	99.6	-	408
Round Lake	2997	SSJD	7/24/97	-	1.7	4	0.9	9.37	18.7	7.25	37.9	0.02	99.6	-	408
Round Lake	2997	SSJD	7/24/97	-	1.7	3	1.7	9.47	18.51	7.32	37.8	0.02	*****	-	406
Round Lake	2997	SSJD	7/24/97	-	1.7	2	1.7	9.48	18.51	7.34	37.9	0.02	*****	-	408
Round Lake	2997	SSJD	7/24/97	-	1.7	1	1.7	9.56	18.51	7.38	37.9	0.02	*****	-	411
Round Lake	3197	DBSS	8/5/97	-	1.7	2	0.3	9.22	22.77	7.55	44.2	0.03	105.6	-	334
Round Lake	3197	DBSS	8/5/97	-	1.7	1	1.5	9.56	21.9	7.68	44.2	0.03	107.6	-	329
Round Lake	3297	DBSS	8/14/97	-	1.4	2	0.3	9.3	23.91	7.92	48.7	0.03	109.5	-	292
Round Lake	3297	DBSS	8/14/97	-	1.4	1	1.3	9.75	23.42	8.12	49.1	0.03	113.8	-	280
Round Lake	3497	DBSS	8/27/97	-	2.1	3	0.3	9.01	21.21	7.35	55.7	0.04	100.9	-	294
Round Lake	3497	DBSS	8/27/97	-	2.1	2	1	8.93	20.84	7.35	55.5	0.04	99.5	-	292
Round Lake	3497	DBSS	8/27/97	-	2.1	1	1.9	9.11	20.72	7.38	55.6	0.04	101.1	-	287
Round Lake	3797	DBAS	9/16/97	-	1.3	2	0.2	8.62	17.39	7.29	55.6	0.04	89.7	-	286
Round Lake	3797	DBAS	9/16/97	-	1.3	1	1	8.87	17.39	7.31	55.5	0.04	92.2	-	285
Round Lake	3997	ASRA	9/29/97	-	1.5	8	0.3	11.35	15.24	7.44	51.9	0.03	114.5	-	377
Round Lake	3997	ASRA	9/29/97	-	1.5	7	0.3	11.35	15.25	7.45	51.9	0.03	114.3	-	376
Round Lake	3997	ASRA	9/29/97	-	1.5	6	0.3	11.37	15.27	7.45	51.9	0.03	114.6	-	376
Round Lake	3997	ASRA	9/29/97	-	1.5	5	0.3	11.36	15.29	7.46	51.9	0.03	114.6	-	376

Round Lake	3997	ASRA	9/29/97	-	1.5	4	1.5	11.38	14.79	7.49	51.9	0.03	113.5	-	375
Round Lake	3997	ASRA	9/29/97	-	1.5	3	1.5	11.28	14.69	7.5	52.1	0.03	112.3	-	374
Round Lake	3997	ASRA	9/29/97	-	1.5	2	1.5	10.91	14.71	7.5	51.9	0.03	108.6	-	374
Round Lake	3997	ASRA	9/29/97	-	1.5	1	1.5	11.51	14.67	7.51	51.9	0.03	115.9	-	373
Round Lake	4297	DBAS	10/20/97	-	1.2	3	0.3	10.65	9.38	6.97	57.2	0.04	91.9	-	381
Round Lake	4297	DBAS	10/20/97	-	1.2	2	0.8	10.68	9.35	6.96	57.1	0.04	92.2	-	382
Round Lake	4297	DBAS	10/20/97	-	1.2	1	1.3	10.87	9.19	6.93	57.1	0.04	93.4	-	384
Round Lake	4497	DBAS	11/3/97	-	1	2	0.3	11.93	7.13	6.68	38.7	0.02	97.1	*****	429
Round Lake	4497	DBAS	11/3/97	-	1	1	1.2	11.99	7.11	6.68	38.5	0.02	97.6	*****	431

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Chatcolet Lake DP	1597	ASSS	4/18/97	-	1.5	3	0.5	12.66	6.96	7.41	38.3	0.02	*****	-	380
Chatcolet Lake DP	1597	ASSS	4/18/97	-	1.5	2	5.4	12.37	5.98	7.41	36.3	0.02	99.3	-	381
Chatcolet Lake DP	1597	ASSS	4/18/97	-	1.5	1	10.4	12.45	5.7	7.41	33.5	0.02	99	-	381
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	14	0.2	11.31	14.46	7.12	33.7	0.02	110	-	368
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	13	0.8	11.32	13.83	7.08	33.3	0.02	108.6	-	371
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	12	1.8	11.46	12.2	7.03	32.6	0.02	106.3	-	373
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	11	2.7	11.37	11.66	7.01	32	0.02	103.9	-	374
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	10	3.7	11	10.94	6.95	30.5	0.02	98.7	-	376
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	9	4.7	10.91	9.76	6.93	28.8	0.02	95.4	-	378
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	8	5.6	10.84	9.3	6.9	10.84	****	5.6	-	376
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	7	6.7	10.87	9.09	6.95	27.9	0.02	93.4	-	376
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	6	7.7	10.88	9.02	6.95	27.9	0.02	93.4	-	376
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	5	8.7	10.89	8.6	6.94	30.2	0.02	92.5	-	377
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	4	9.7	10.86	8.5	6.94	30.3	0.02	92.1	-	377
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	3	10.6	10.75	8.32	6.94	31	0.02	90.7	-	376
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	2	11.6	10.03	7.54	6.92	35.2	0.02	83.2	-	378
Chatcolet Lake DP	1997	DBSS	5/16/97	-	1.4	1	12.7	10.04	7.48	6.92	35.4	0.02	83	-	377
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	11	0.3	10.62	13.44	6.98	27.4	0.02	101.2	-	360
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	10	2.3	10.9	9.6	6.97	26.8	0.02	95	-	363
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	9	3.4	10.8	8.6	6.98	26.7	0.02	91.9	-	362
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	8	4.5	10.85	8.55	6.96	26.6	0.02	92.2	-	363
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	7	6.5	10.88	8.35	6.96	26.5	0.02	92.1	-	362
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	6	7.4	10.88	8.29	6.95	26.4	0.02	91.9	-	362
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	5	8.4	11.07	8.11	6.95	26.5	0.02	93.1	-	361
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	4	9.3	11.05	7.88	6.95	26.4	0.02	92.4	-	360
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	3	10.4	11.03	7.86	6.93	26.4	0.02	92.2	-	360
Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	2	11.4	11	7.78	6.92	26.4	0.02	91.8	-	359

Chatcolet Lake DP	2197	DBSS	5/29/97	-	1.6	1	12.3	10.3	7.73	6.91	27.3	0.02	85.8	-	359
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	12	0.1	11.24	12.99	7.2	29.1	0.02	106.4	-	417
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	11	1	11.23	11.66	7.23	28.3	0.02	103.2	-	417
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	10	1.9	11.08	10.38	7.21	27.5	0.02	98.8	-	419
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	9	3	11.09	10	7.19	27.5	0.02	98	-	421
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	8	3.9	11.16	9.82	7.19	27.2	0.02	98.1	-	421
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	7	4.9	11.2	9.72	7.19	27.1	0.02	98.2	-	421
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	6	6	11.07	9.67	7.2	27.1	0.02	97	-	421
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	5	7	11.15	9.15	7.21	26.9	0.02	96.5	-	421
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	4	8	11.07	9.02	7.21	27	0.02	95.5	-	421
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	3	8.9	10.94	8.99	7.23	27.1	0.02	94.3	-	421
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	2	9.8	10.84	9.04	7.26	27.3	0.02	93.5	-	419
Chatcolet Lake DP	2397	DBAS	6/13/97	-	2.1	1	10.9	10.85	8.99	7.29	27.3	0.02	93.4	-	417
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	11	0.3	10.94	14.59	7.21	31.5	0.02	107.3	-	373
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	10	1.4	10.94	14.45	7.17	31.5	0.02	106.9	-	375
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	9	2.5	11.03	13.45	7.17	31.5	0.02	105.5	-	375
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	8	3.6	10.97	13.25	7.15	31.4	0.02	104.4	-	375
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	7	4.6	10.99	12.95	7.12	31.2	0.02	103.8	-	375
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	6	5.6	10.93	12.74	7.09	31.5	0.02	102.8	-	374
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	5	6.6	10.97	12.1	7.04	31.6	0.02	101.8	-	375
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	4	7.7	10.35	10.92	7	30.9	0.02	93.4	-	375
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	3	8.7	9.68	10.68	6.98	30.2	0.02	86.8	-	374
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	2	9.7	9.38	10.12	6.99	30.4	0.02	83	-	372
Chatcolet Lake DP	2597	DBSS	6/26/97	-	2.5	1	10.6	9.44	10.1	7.02	30.6	0.02	83.5	-	370
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	12	0.3	10.25	17.45	7.19	35.2	0.02	*****	-	411
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	11	0.9	10.23	17.39	7.17	35.2	0.02	*****	-	411
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	10	2.1	10.2	17.17	7.11	35.1	0.02	*****	-	413
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	9	3.1	9.99	16.11	7.05	35.1	0.02	*****	-	416
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	8	4	9.88	15.35	7.02	34.9	0.02	98.1	-	417
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	7	5	9.83	14.71	6.97	33.8	0.02	96.2	-	418
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	6	6	9.84	13.13	6.94	33.3	0.02	93	-	420
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	5	7	9.5	12.69	6.91	33.1	0.02	88.9	-	421
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	4	8.1	8.93	12.39	6.89	33.3	0.02	83	-	421
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	3	9	9.12	12.25	6.89	33.2	0.02	84.5	-	421
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	2	10.1	8.4	11.77	6.9	33.3	0.02	77	-	418
Chatcolet Lake DP	2797	DBSS	7/8/97	-	1.8	1	11	8.23	11.64	7	33.7	0.02	75.2	-	423
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	12	0.6	9.86	22.15	7.99	36.4	0.02	*****	-	378
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	11	1.8	9.85	22.15	7.96	36.4	0.02	*****	-	378
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	10	2.9	9.97	21.67	7.85	36.8	0.02	*****	-	379
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	9	3.9	9.81	19.33	7.18	35.8	0.02	*****	-	402

Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	8	4.9	10.24	16.32	7.08	33.2	0.02	*****	-	406
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	7	5.9	9.79	14.49	6.93	32.4	0.02	95.4	-	410
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	6	6.9	8.29	13.58	6.84	32.1	0.02	79.2	-	413
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	5	7.9	7.71	13.1	6.82	32.2	0.02	72.9	-	413
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	4	8.9	6.88	12.72	6.82	32.4	0.02	64.5	-	411
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	3	10	5.03	12.03	6.87	34.1	0.02	46.5	-	408
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	2	10.9	5.19	12.08	6.97	34.1	0.02	47.9	-	402
Chatcolet Lake DP	2997	SSJD	7/24/97	-	3.7	1	0	0	0	0	0	0	0	-	0
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	13	0.3	11.59	24.51	9.28	42.3	0.03	137.1	-	289
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	12	1.7	11.55	24.37	9.22	42.2	0.03	136.3	-	290
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	11	2.7	10.64	23.4	8.86	40.4	0.03	123.3	-	299
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	10	3.6	10.13	22.02	7.49	39.2	0.03	114.4	-	331
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	9	4.6	9.8	18.9	7.05	35.8	0.02	104.2	-	349
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	8	5.6	9.77	16.32	6.97	33	0.02	98.4	-	351
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	7	6.5	8.09	14.44	6.84	33	0.02	78.2	-	353
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	6	7.5	6.42	13.55	6.79	33.4	0.02	60.9	-	353
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	5	8.4	5.49	13.15	6.79	33.6	0.02	51.6	-	351
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	4	9.5	3.45	12.3	6.81	36.1	0.02	31.8	-	347
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	3	10.5	3.05	12.11	6.89	36.7	0.02	28	-	342
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	2	11.5	2.57	12.07	7.03	38.4	0.02	23.5	-	335
Chatcolet Lake DP	3197	DBSS	8/5/97	-	3	1	12.4	2.5	12.13	7.18	39.3	0.03	23	-	343
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	10	0.8	9.41	22.99	8.77	42.9	0.03	108.9	-	339
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	9	1.8	9.41	22.58	8.71	42.7	0.03	108.2	-	341
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	8	2.8	9.27	21.79	8.4	42	0.03	104.7	-	348
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	7	3.8	8.8	21	7.58	39.8	0.03	98	-	371
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	6	4.8	8.7	20.35	7.29	39.1	0.03	95.7	-	379
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	5	5.8	8.91	18.18	6.95	35.4	0.02	93.9	-	392
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	4	6.8	6.33	15.19	6.8	34.4	0.02	62.6	-	399
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	3	7.9	5.85	14.18	6.8	34.9	0.02	56.6	-	399
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	2	8.8	4.53	13.48	6.82	35.8	0.02	43.2	-	399
Chatcolet Lake DP	3297	DBSS	8/13/97	-	3.5	1	9.8	2.8	13.1	6.87	39.2	0.03	26.5	-	398
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	12	0.4	9.51	21.99	8.48	47.3	0.03	108.2	-	271
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	11	0.7	9.54	21.97	8.49	47.4	0.03	108.4	-	267
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	10	1.7	9.55	21.93	8.47	47.4	0.03	108.5	-	267
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	9	2.7	9.52	21.65	8.38	47.3	0.03	107.5	-	267
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	8	3.7	9.54	21.51	8.34	48.8	0.03	107.5	-	265
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	7	4.7	9.29	21.19	7.74	45.6	0.03	104.1	-	276
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	6	5.7	8.58	20.37	7.14	44.4	0.03	94.7	-	297
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	5	6.7	5.59	17.27	6.77	40.6	0.03	57.9	-	313
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	4	7.7	4.07	16.17	6.73	40.6	0.03	41.1	-	311
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	3	8.8	1.34	13.79	6.75	42.7	0.03	12.9	-	305

Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	2	9.8	0.64	13.33	6.84	46.9	0.03	6.1	-	296
Chatcolet Lake DP	3497	DBSS	8/27/97	-	4.4	1	10.7	0.52	13.09	6.98	49	0.03	4.9	-	284
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	11	0.3	9.12	17.71	7.49	46.4	0.03	95.6	-	251
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	10	1.7	9.11	17.71	7.48	46.4	0.03	95.4	-	248
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	9	2.7	9.05	17.69	7.45	46.4	0.03	94.8	-	246
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	8	3.7	9.02	17.67	7.42	46.4	0.03	94.4	-	244
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	7	4.7	8.93	17.66	7.39	46.3	0.03	93.5	-	241
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	6	5.7	9.01	17.56	7.31	46.1	0.03	93.8	-	231
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	5	6.7	8.67	17.49	7.23	45.9	0.03	90.4	-	219
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	4	7.7	8.58	17.49	7.15	45.8	0.03	89.5	-	205
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	3	8.7	2.12	16.21	6.79	46.4	0.03	21	-	156
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	2	9.7	0.27	12.49	6.72	74.3	0.05	2.4	-	34
Chatcolet Lake DP	3797	DBAS	9/16/97	-	2.2	1	10.7	0.35	12.36	6.69	77.1	0.05	3.3	-	42
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	11	0.6	9.55	16.12	7.43	48.5	0.03	98	-	362
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	10	1.6	9.51	15.72	7.41	48.3	0.03	96.8	-	362
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	9	2.6	9.25	15.67	7.37	48.3	0.03	94.1	-	363
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	8	3.6	9.15	15.54	7.35	48.4	0.03	92.8	-	362
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	7	4.6	8.95	15.47	7.31	48.4	0.03	90.7	-	362
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	6	5.6	8.67	15.37	7.3	48.7	0.03	87.6	-	362
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	5	6.6	8.63	15.32	7.3	48.7	0.03	87.1	-	361
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	4	7.6	8.53	15.27	7.3	48.8	0.03	86.2	-	359
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	3	8.6	8.41	15.22	7.3	48.9	0.03	84.7	-	358
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	2	9.6	8.06	15.06	7.29	49.4	0.03	80.8	-	356
Chatcolet Lake DP	3997	ASRA	9/29/97	-	3.3	1	10.6	7.99	14.99	7.32	50.4	0.03	80	-	353
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	11	0.3	11.17	11.63	7.54	54.9	0.04	101.7	-	372
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	10	1	11.1	11.56	7.5	55	0.04	100.9	-	373
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	9	2	11.08	11.25	7.5	54.7	0.04	100	-	373
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	8	3	11.05	11.23	7.45	54.9	0.04	99.6	-	375
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	7	4	10.97	11.17	7.4	54.6	0.03	98.8	-	376
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	6	5	10.89	11.13	7.32	54.5	0.03	98	-	378
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	5	6	10.81	11.07	7.24	54.5	0.03	97.1	-	381
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	4	7	10.67	11.04	7.15	54.6	0.03	95.8	-	384
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	3	8	10.53	11	7.08	54.6	0.03	94.5	-	386
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	2	9	9.17	10.74	6.92	56.4	0.04	81.8	-	392
Chatcolet Lake DP	4297	DBAS	10/20/97	-	2.8	1	10	8.97	10.64	6.88	56.8	0.04	79.8	-	393
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	11	0.2	11.7	7.53	8.55	53.1	0.03	99.8	*****	418
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	10	1	11.7	7.5	8.55	53.3	0.03	99.8	*****	419
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	9	2	11.69	7.45	8.5	53.2	0.03	99.5	*****	421
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	8	3	11.69	7.43	8.4	53.2	0.03	99.3	*****	419
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	7	4	11.69	7.39	8.38	53.1	0.03	99.3	*****	420

Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	6	5	11.7	7.38	8.37	53.1	0.03	99.4	*****	417
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	5	6	11.72	7.37	8.33	53.1	0.03	99.4	*****	416
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	4	7	11.77	7.31	8.19	52.5	0.03	99.5	*****	417
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	3	8	11.73	7.29	7.97	52	0.03	98.6	*****	416
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	2	9	11.46	7.25	7.55	52.2	0.03	95.4	*****	415
Chatcolet Lake DP	4497	DBAS	11/3/97	-	2	1	9.8	11.55	7.26	6.91	47.7	0.03	94.6	*****	414

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Chatcolet Lake SH	1597	ASSS	4/18/97	-	0.5	2	0.2	12.75	5.46	7.43	32.4	0.02	*****	-	325
Chatcolet Lake SH	1597	ASSS	4/18/97	-	0.5	1	0.7	13.38	5.47	7.41	32.6	0.02	*****	-	320
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	13	0.3	11.04	10.48	6.99	27.2	0.02	98.1	-	369
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	12	0.3	11.05	10.49	7	27.2	0.02	98.2	-	369
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	11	0.3	11.04	10.44	7.01	27.3	0.02	98	-	369
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	10	0.3	11.03	10.46	7.01	27.2	0.02	98	-	369
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	9	1.3	11.02	9.97	6.97	27	0.02	95.7	-	374
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	8	1.3	11	9.89	6.96	27.1	0.02	96.4	-	374
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	7	1.3	11.01	9.51	6.99	27	0.02	95.6	-	373
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	6	1.3	10.97	10.15	6.95	27.4	0.02	96.7	-	375
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	5	3.1	11.21	8.56	7	26.4	0.02	95.1	-	375
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	4	3.1	11.21	8.58	6.99	26.3	0.02	95.2	-	375
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	3	3.1	11.22	8.55	6.99	26.3	0.02	95.2	-	376
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	2	3.1	11.22	8.59	7	26.3	0.02	95.3	-	375
Chatcolet Lake SH	1997	DBSS	5/16/97	-	0.3	1	3.1	11.21	8.56	7.01	26.4	0.02	95.1	-	375
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	10	0.2	10.8	11.38	7.04	26.8	0.02	98.2	-	368
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	9	0.2	10.85	11.72	7.1	18.3	0.01	99.5	-	363
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	8	0.2	10.87	11.59	7.1	15.3	0.01	99.3	-	364
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	7	1.4	11.32	9.74	7.07	26.7	0.02	99	-	368
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	6	1.4	11.32	9.69	7.07	26.7	0.02	99.1	-	368
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	5	1.4	11.35	9.68	7.08	26.6	0.02	99.4	-	368
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	4	2.3	11.51	9.32	7.08	26.5	0.02	99.7	-	369
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	3	2.3	11.53	9.32	7.08	26.5	0.02	99.9	-	369
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	2	2.3	11.52	9.33	7.07	26.5	0.02	100	-	369
Chatcolet Lake SH	2197	DBSS	5/29/97	-	1.6	1	2.4	11.57	9.35	7.08	26.6	0.02	100.3	-	368
Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	10	0.4	10.75	11.8	7.09	28.7	0.02	99.1	-	394
Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	9	0.4	10.7	11.74	7.1	28.8	0.02	98.5	-	395
Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	8	0.3	10.71	11.86	7.11	28.7	0.02	98.8	-	394
Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	7	0.9	10.95	11.15	7.1	28.7	0.02	99.4	-	396
Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	6	0.9	10.93	11.31	7.11	28.5	0.02	99.6	-	396
Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	5	0.9	10.94	11.18	7.12	28.3	0.02	99.4	-	395

Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	4	0.9	10.97	11.1	7.11	28.4	0.02	99.5	-	396
Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	3	1.5	11.07	10.98	7.11	28.3	0.02	100.1	-	398
Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	2	1.5	11.12	10.89	7.11	28.4	0.02	100.4	-	398
Chatcolet Lake SH	2397	DBAS	6/11/97	-	1.6	1	1.5	11.16	10.88	7.12	28.3	0.02	100.7	-	398
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	10	0.2	11.42	11.88	7.25	31.8	0.02	105.4	-	388
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	9	0.2	11.38	11.97	6.9	0.7	0	105.1	-	405
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	8	0.2	11.43	11.9	7.25	31.8	0.02	105.4	-	389
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	7	0.2	11.44	11.88	7.26	31.8	0.02	105.6	-	389
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	6	0.2	11.44	11.92	7.26	31.8	0.02	105.5	-	389
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	5	0.7	11.39	11.87	7.24	31.9	0.02	105	-	392
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	4	0.7	11.41	11.85	7.27	31.8	0.02	105.2	-	391
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	3	0.7	11.43	11.84	7.27	31.8	0.02	105.3	-	391
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	2	0.7	11.4	11.87	7.27	31.8	0.02	105.2	-	391
Chatcolet Lake SH	2597	DBAC	6/26/97	-	0.7	1	0.7	11.44	11.87	7.27	31.8	0.02	105.5	-	391
Chatcolet Lake SH	2797	DBSS	7/8/97	-	0.7	2	0.2	10.12	16.22	7.28	35.2	0.02	*****	-	406
Chatcolet Lake SH	2797	DBSS	7/8/97	-	0.7	1	0.8	10.17	16.19	7.29	35.2	0.02	*****	-	409
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	10	0.3	11.24	22.77	9.09	38.9	0.02	*****	-	356
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	9	0.3	11.33	22.93	9.1	39	0.02	*****	-	357
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	8	0.3	11.39	23.04	9.12	39	0.03	*****	-	356
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	7	0.3	11.5	22.99	9.1	39	0.03	*****	-	357
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	6	0.2	11.19	22.95	9.03	39	0.02	*****	-	361
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	5	1	11.36	20.13	8.43	38.2	0.02	*****	-	382
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	4	1	11.45	20.09	8.47	38	0.02	*****	-	379
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	3	1	11.51	20.11	8.49	38.1	0.02	*****	-	378
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	2	0	11.47	20.18	8.45	38.1	0.02	*****	-	379
Chatcolet Lake SH	2997	SSJD	7/24/97	-	0.8	1	1	11.55	20.09	8.47	38	0.02	*****	-	378
Chatcolet Lake SH	3197	DBSS	8/5/97	-	1	2	0.3	12.26	25.72	9.28	46	0.03	148.1	-	295
Chatcolet Lake SH	3197	DBSS	8/5/97	-	1	1	0.9	12.94	22.95	9.04	46.6	0.03	148.9	-	304
Chatcolet Lake SH	3297	DBSS	8/14/97	-	1.1	2	0.3	11.62	24.37	9.54	53.3	0.03	138	-	279
Chatcolet Lake SH	3297	DBSS	8/14/97	-	1.1	1	1.1	11.73	24.29	9.63	52.4	0.03	139.1	-	276
Chatcolet Lake SH	3497	DBSS	8/27/97	-	0.8	1	0.8	11.39	21.49	8.62	56.9	0.04	128.4	-	277
Chatcolet Lake SH	3797	DBAS	9/16/97	-	1	1	0.8	10.41	15.56	7.79	54.3	0.03	104.2	-	256
Chatcolet Lake SH	3997	ASRA	9/29/97	-	0.4	1	0.4	12.26	16.46	8.31	53.6	0.03	126.8	-	362
Chatcolet Lake SH	4297	DBAS	10/20/97	-	1	2	0.3	10.98	10.61	7.11	53.4	0.03	97.6	-	372
Chatcolet Lake SH	4297	DBAS	10/20/97	-	1	1	0.7	10.16	9.02	7	57.2	0.04	87	-	379

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Chatcolet Lake SH	4497	DBAS	11/3/97	-	0.9	2	0.2	11.72	7.28	6.97	42.6	0.03	96.2	*****	418
Chatcolet Lake SH	4497	DBAS	11/3/97	-	0.9	1	0.8	11.86	7.26	6.96	43	0.03	97.3	*****	424
Benewah Lake	1597	ASSS	4/18/97	-	0.8	3	0.2	11.66	9.27	7.36	28.1	0.02	*****	-	363
Benewah Lake	1597	ASSS	4/18/97	-	0.8	2	1.6	11.46	8.92	7.32	27.9	0.02	99	-	367
Benewah Lake	1597	ASSS	4/18/97	-	0.8	1	4.3	11.42	7.02	7.36	24.8	0.02	*****	-	366
Benewah Lake	1997	DBSS	5/16/97	-	1.1	10	0.3	10.12	16.39	6.97	31.6	0.02	102.6	-	369
Benewah Lake	1997	DBSS	5/16/97	-	1.1	9	1.1	9.81	15.1	6.95	31.2	0.02	96.8	-	371
Benewah Lake	1997	DBSS	5/16/97	-	1.1	8	1.8	11.11	8.71	7	26.6	0.02	94.8	-	372
Benewah Lake	1997	DBSS	5/16/97	-	1.1	7	2.5	11.1	8.53	7.02	26.6	0.02	94.1	-	372
Benewah Lake	1997	DBSS	5/16/97	-	1.1	6	3.3	11.07	8.4	7.01	26.5	0.02	93.6	-	372
Benewah Lake	1997	DBSS	5/16/97	-	1.1	5	3.9	11.04	8.38	7.01	26.7	0.02	93.3	-	372
Benewah Lake	1997	DBSS	5/16/97	-	1.1	4	4.7	11	8.36	7.02	26.7	0.02	92.9	-	372
Benewah Lake	1997	DBSS	5/16/97	-	1.1	3	5.6	10.94	8.36	7.03	27	0.02	92.5	-	371
Benewah Lake	1997	DBSS	5/16/97	-	1.1	2	6.2	10.8	8.35	7.02	27.2	0.02	91	-	371
Benewah Lake	1997	DBSS	5/16/97	-	1.1	1	7	10.47	8.25	7.04	27.7	0.02	88.2	-	371
Benewah Lake	2197	DBSS	5/29/97	-	2	12	0.8	10.09	13.9	6.97	28	0.02	97.1	-	351
Benewah Lake	2197	DBSS	5/29/97	-	2	11	0.8	10.05	13.88	6.97	27.6	0.02	96.7	-	350
Benewah Lake	2197	DBSS	5/29/97	-	2	10	1.8	10.85	9.35	6.97	27	0.02	94.1	-	351
Benewah Lake	2197	DBSS	5/29/97	-	2	9	1.8	11.02	9.17	6.96	27	0.02	95.1	-	351
Benewah Lake	2197	DBSS	5/29/97	-	2	8	2.8	11.1	8.71	6.94	26.7	0.02	94.8	-	351
Benewah Lake	2197	DBSS	5/29/97	-	2	7	2.8	11.08	8.65	6.96	26.7	0.02	94.4	-	350
Benewah Lake	2197	DBSS	5/29/97	-	2	6	3.9	10.82	8.37	6.92	26.8	0.02	91.6	-	350
Benewah Lake	2197	DBSS	5/29/97	-	2	5	3.9	10.83	8.35	6.93	26.6	0.02	91.6	-	349
Benewah Lake	2197	DBSS	5/29/97	-	2	4	4.9	10.54	7.89	6.92	26.5	0.02	88.2	-	346
Benewah Lake	2197	DBSS	5/29/97	-	2	3	4.9	10.59	7.89	6.92	26.7	0.02	88.6	-	347
Benewah Lake	2197	DBSS	5/29/97	-	2	2	5.9	10.3	7.66	6.92	26.6	0.02	85.7	-	352
Benewah Lake	2197	DBSS	5/29/97	-	2	1	5.9	10.35	7.65	6.92	26.5	0.02	86.1	-	350
Benewah Lake	2397	DBAS	6/11/97	-	2.5	10	0.4	9.39	17.73	6.99	32.6	0.02	98.5	-	399
Benewah Lake	2397	DBAS	6/11/97	-	2.5	9	0.4	9.43	17.83	7	32.5	0.02	99.1	-	399
Benewah Lake	2397	DBAS	6/11/97	-	2.5	8	0.3	9.43	17.9	7	32.4	0.02	99.2	-	399
Benewah Lake	2397	DBAS	6/11/97	-	2.5	7	0.9	9.82	15.89	7.01	32.7	0.02	99.1	-	399
Benewah Lake	2397	DBAS	6/11/97	-	2.5	6	1.9	10.25	14.21	7	30.3	0.02	99.8	-	400
Benewah Lake	2397	DBAS	6/11/97	-	2.5	5	2.8	11.19	11.04	6.95	28.6	0.02	101.4	-	402
Benewah Lake	2397	DBAS	6/11/97	-	2.5	4	3.9	9.41	8.78	6.86	28.8	0.02	80.9	-	407
Benewah Lake	2397	DBAS	6/11/97	-	2.5	3	4.8	8.36	8.6	6.85	30.2	0.02	71.5	-	407
Benewah Lake	2397	DBAS	6/11/97	-	2.5	2	4.8	8.38	8.6	6.86	29.9	0.02	71.6	-	407

Benewah Lake	2397	DBAS	6/11/97	-	2.5	1	4.8	8.41	8.56	6.87	29.7	0.02	71.8	-	406
Benewah Lake	2597	DBSS	6/26/97	-	3.1	12	0.3	10.31	18.63	7.36	33.9	0.02	110	-	384
Benewah Lake	2597	DBSS	6/26/97	-	3.1	11	0.3	10.3	18.65	7.36	33.9	0.02	110	-	383
Benewah Lake	2597	DBSS	6/26/97	-	3.1	10	0.9	10.32	18.57	7.34	33.9	0.02	110	-	384
Benewah Lake	2597	DBSS	6/26/97	-	3.1	9	0.9	10.31	18.59	7.32	33.9	0.02	109.9	-	384
Benewah Lake	2597	DBSS	6/26/97	-	3.1	8	1.9	10.39	17.97	7.22	34	0.02	109.4	-	386
Benewah Lake	2597	DBSS	6/26/97	-	3.1	7	1.9	10.33	18.02	7.21	33.8	0.02	108.9	-	386
Benewah Lake	2597	DBSS	6/26/97	-	3.1	6	2.8	11.07	13.35	7.02	31.1	0.02	105.6	-	391
Benewah Lake	2597	DBSS	6/26/97	-	3.1	5	2.8	11.04	13.35	7	30.9	0.02	105.3	-	391
Benewah Lake	2597	DBSS	6/26/97	-	3.1	4	3.7	8.49	10.92	6.78	30.5	0.02	76.6	-	398
Benewah Lake	2597	DBSS	6/26/97	-	3.1	3	3.7	8.43	10.9	6.78	30.3	0.02	76	-	398
Benewah Lake	2597	DBSS	6/26/97	-	3.1	2	4.7	5.4	9.84	6.77	33.7	0.02	47.5	-	398
Benewah Lake	2597	DBSS	6/26/97	-	3.1	1	4.7	5.43	9.84	6.78	33.7	0.02	47.7	-	398
Benewah Lake	2797	DBSS	7/8/97	-	2.3	6	0.3	10.59	21.76	8.31	35.9	0.02	*****	-	370
Benewah Lake	2797	DBSS	7/8/97	-	2.3	5	0.8	10.62	21.56	7.85	36	0.02	*****	-	377
Benewah Lake	2797	DBSS	7/8/97	-	2.3	4	1.8	11.49	17.39	7.29	35.3	0.02	*****	-	398
Benewah Lake	2797	DBSS	7/8/97	-	2.3	3	2.7	11.51	14.86	7.09	33.8	0.02	*****	-	408
Benewah Lake	2797	DBSS	7/8/97	-	2.3	2	3.6	9.61	13.13	6.92	33.1	0.02	90.9	-	417
Benewah Lake	2797	DBSS	7/8/97	-	2.3	1	4.6	5.87	11.66	6.9	36	0.02	53.6	-	421
Benewah Lake	2997	SSJD	7/24/97	-	3	10	0.4	10.59	23.51	9.06	37.8	0.02	*****	-	356
Benewah Lake	2997	SSJD	7/24/97	-	3	9	0	10.66	23.29	9.02	37.8	0.02	*****	-	358
Benewah Lake	2997	SSJD	7/24/97	-	3	8	1	10.58	23.37	9.03	37.8	0.02	*****	-	358
Benewah Lake	2997	SSJD	7/24/97	-	3	7	1.9	10.62	23.2	8.9	37.5	0.02	*****	-	361
Benewah Lake	2997	SSJD	7/24/97	-	3	6	2	10.67	23.01	8.72	37.6	0.02	*****	-	366
Benewah Lake	2997	SSJD	7/24/97	-	3	5	3	11.46	18.22	7.41	34	0.02	*****	-	407
Benewah Lake	2997	SSJD	7/24/97	-	3	4	3	11.38	18.08	7.31	33.6	0.02	*****	-	409
Benewah Lake	2997	SSJD	7/24/97	-	3	3	4	10.54	15.01	7.05	33	0.02	*****	-	421
Benewah Lake	2997	SSJD	7/24/97	-	3	2	4	9.11	14.54	6.99	34.9	0.02	88.9	-	426
Benewah Lake	2997	SSJD	7/24/97	-	3	1	4.8	5.06	13.37	6.97	40.5	0.03	48.2	-	437
Benewah Lake	3197	DBSS	8/5/97	-	2.7	5	0.3	11.3	26.45	9.38	42.4	0.03	138.4	-	259
Benewah Lake	3197	DBSS	8/5/97	-	2.7	4	1.6	11.69	24.11	9.41	42.5	0.03	137.3	-	256
Benewah Lake	3197	DBSS	8/5/97	-	2.7	3	2.8	10.7	22.54	8.41	39.8	0.03	122	-	276
Benewah Lake	3197	DBSS	8/5/97	-	2.7	2	3.6	10.2	20.44	7.28	37.3	0.02	111.7	-	309
Benewah Lake	3197	DBSS	8/5/97	-	2.7	1	4.7	2.78	15.59	7.06	47.9	0.03	27.2	-	337
Benewah Lake	3297	DBSS	8/14/97	-	4.3	9	0.4	8.91	23.87	8.9	42	0.03	104.8	-	260
Benewah Lake	3297	DBSS	8/14/97	-	4.3	8	0.9	8.91	23.86	8.9	42	0.03	104.8	-	256
Benewah Lake	3297	DBSS	8/14/97	-	4.3	7	1.4	8.89	23.86	8.91	42	0.03	104.6	-	251
Benewah Lake	3297	DBSS	8/14/97	-	4.3	6	1.9	8.89	23.76	8.83	42.1	0.03	104.4	-	250
Benewah Lake	3297	DBSS	8/14/97	-	4.3	5	2.3	8.88	23.75	8.74	42	0.03	104.3	-	248

Benewah Lake	3297	DBSS	8/14/97	-	4.3	4	2.9	7.94	22.77	8.28	41.6	0.03	91.6	-	254
Benewah Lake	3297	DBSS	8/14/97	-	4.3	3	3.4	8.65	20.97	7.3	41.2	0.03	96.3	-	277
Benewah Lake	3297	DBSS	8/14/97	-	4.3	2	3.9	8.53	20.2	7.12	41.6	0.03	93.4	-	277
Benewah Lake	3297	DBSS	8/14/97	-	4.3	1	4.4	2.15	18.22	6.93	49.6	0.03	22.7	-	293
Benewah Lake	3497	DBSS	8/27/97	-	3.8	10	0.3	9.39	22.33	8.27	46.4	0.03	107.6	-	271
Benewah Lake	3497	DBSS	8/27/97	-	3.8	9	0.8	9.41	22.18	8.36	46.5	0.03	107.5	-	264
Benewah Lake	3497	DBSS	8/27/97	-	3.8	8	1.3	9.42	22.08	8.35	46.6	0.03	107.3	-	263
Benewah Lake	3497	DBSS	8/27/97	-	3.8	7	1.8	9.46	21.85	8.37	46.6	0.03	107.3	-	260
Benewah Lake	3497	DBSS	8/27/97	-	3.8	6	2.3	9.64	21.58	8.49	46.6	0.03	108.8	-	253
Benewah Lake	3497	DBSS	8/27/97	-	3.8	5	2.8	9.6	21.49	8.45	46.6	0.03	108.1	-	250
Benewah Lake	3497	DBSS	8/27/97	-	3.8	4	3.3	9.59	21.44	8.39	46.7	0.03	108	-	248
Benewah Lake	3497	DBSS	8/27/97	-	3.8	3	3.7	9.2	21.32	8.03	46.6	0.03	103.3	-	248
Benewah Lake	3497	DBSS	8/27/97	-	3.8	2	4.3	3.62	19.73	6.74	54.2	0.03	39.4	-	292
Benewah Lake	3497	DBSS	8/27/97	-	3.8	1	4.8	1.44	18.97	6.69	57.1	0.04	15.5	-	280
Benewah Lake	3797	DBAS	9/16/97	-	1.5	10	0.2	8.58	17.07	7.22	46.1	0.03	88.5	-	308
Benewah Lake	3797	DBAS	9/16/97	-	1.5	9	0.5	8.57	17.07	7.22	46	0.03	88.6	-	308
Benewah Lake	3797	DBAS	9/16/97	-	1.5	8	1	8.56	17.05	7.22	46.1	0.03	88.4	-	307
Benewah Lake	3797	DBAS	9/16/97	-	1.5	7	1.5	8.53	17.07	7.23	46	0.03	88.3	-	306
Benewah Lake	3797	DBAS	9/16/97	-	1.5	6	2	8.57	17.07	7.23	46	0.03	88.6	-	304
Benewah Lake	3797	DBAS	9/16/97	-	1.5	5	2.5	8.64	17.05	7.23	46.1	0.03	89.3	-	302
Benewah Lake	3797	DBAS	9/16/97	-	1.5	4	3	8.7	17.05	7.23	46	0.03	90	-	300
Benewah Lake	3797	DBAS	9/16/97	-	1.5	3	3.5	8.73	17.03	7.23	46.1	0.03	90.2	-	297
Benewah Lake	3797	DBAS	9/16/97	-	1.5	2	4	8.71	17.03	7.24	46	0.03	90	-	296
Benewah Lake	3797	DBAS	9/16/97	-	1.5	1	4.5	8.73	17.03	7.23	46	0.03	90.2	-	300
Benewah Lake	3997	ASRA	9/29/97	-	2.2	8	0.3	9.77	16.41	7.41	45.9	0.03	100.9	-	382
Benewah Lake	3997	ASRA	9/29/97	-	2.2	7	1	9.9	15.76	7.41	46	0.03	100.8	-	382
Benewah Lake	3997	ASRA	9/29/97	-	2.2	6	1.5	9.87	15.4	7.39	45.8	0.03	99.8	-	383
Benewah Lake	3997	ASRA	9/29/97	-	2.2	5	2	9.78	15.3	7.37	45.8	0.03	98.7	-	383
Benewah Lake	3997	ASRA	9/29/97	-	2.2	4	2.5	9.49	15.19	7.33	45.8	0.03	95.5	-	385
Benewah Lake	3997	ASRA	9/29/97	-	2.2	3	3	9.42	15.1	7.32	45.8	0.03	94.6	-	384
Benewah Lake	3997	ASRA	9/29/97	-	2.2	2	3.5	9.16	15.04	7.3	45.8	0.03	91.9	-	385
Benewah Lake	3997	ASRA	9/29/97	-	2.2	1	4	9.09	15.04	7.31	45.9	0.03	91.2	-	384
Benewah Lake	4297	DBAS	10/20/97	-	2.2	9	0.3	10.61	10.45	7.15	49.1	0.03	94	-	369
Benewah Lake	4297	DBAS	10/20/97	-	2.2	8	0.6	10.61	10.48	7.12	49.3	0.03	94	-	372
Benewah Lake	4297	DBAS	10/20/97	-	2.2	7	1.1	10.63	10.48	7.11	49.3	0.03	94.2	-	372
Benewah Lake	4297	DBAS	10/20/97	-	2.2	6	1.6	10.63	10.43	7.11	49.4	0.03	94.1	-	372
Benewah Lake	4297	DBAS	10/20/97	-	2.2	5	2.1	10.6	10.45	7.08	49.3	0.03	93.8	-	372
Benewah Lake	4297	DBAS	10/20/97	-	2.2	4	2.6	10.55	10.41	7.04	49.3	0.03	93.3	-	373
Benewah Lake	4297	DBAS	10/20/97	-	2.2	3	3.1	10.17	10.41	7.02	49.5	0.03	90	-	373
Benewah Lake	4297	DBAS	10/20/97	-	2.2	2	3.6	9.84	10.4	6.97	49.8	0.03	87	-	375

Benewah Lake	4297	DBAS	10/20/97	-	2.2	1	4.1	9.71	10.38	6.86	49.8	0.03	85.8	-	378

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
St. Joe River	1597	AS SS	4/18/97	-	1.1	2	0.2	12.89		7.41	32.4	0.02	102.6	-	-
St. Joe River	1597	AS SS	4/18/97	-	1.1	1	5	13.21	5.54	7.41	32.3	0.02	*****	-	356
St. Joe River	1997	DBSS	5/16/97	-	0.4	12	0.2	11.4	8.54	6.99	25.9	0.02	96.7	-	356
St. Joe River	1997	DBSS	5/16/97	-	0.4	11	1	11.41	8.46	6.96	25.9	0.02	96.6	-	364
St. Joe River	1997	DBSS	5/16/97	-	0.4	10	1.9	11.44	8.36	6.97	25.9	0.02	96.6	-	365
St. Joe River	1997	DBSS	5/16/97	-	0.4	9	3	11.44	8.36	6.96	25.9	0.02	96.4	-	365
St. Joe River	1997	DBSS	5/16/97	-	0.4	8	4.1	11.44	8.36	6.96	25.9	0.02	96.5	-	366
St. Joe River	1997	DBSS	5/16/97	-	0.4	7	5	11.44	8.35	6.95	25.9	0.02	96.6	-	367
St. Joe River	1997	DBSS	5/16/97	-	0.4	6	6	11.46	8.35	6.96	26	0.02	96.7	-	367
St. Joe River	1997	DBSS	5/16/97	-	0.4	5	6.9	11.43	8.38	6.96	25.9	0.02	96.5	-	368
St. Joe River	1997	DBSS	5/16/97	-	0.4	4	8	11.43	8.38	6.96	26	0.02	96.6	-	369
St. Joe River	1997	DBSS	5/16/97	-	0.4	3	9.2	11.39	8.4	6.97	26	0.02	96.3	-	369
St. Joe River	1997	DBSS	5/16/97	-	0.4	2	10	11.44	8.4	6.99	25.9	0.02	96.7	-	371
St. Joe River	1997	DBSS	5/16/97	-	0.4	1	11.2	11.45	8.4	6.99	25.9	0.02	96.8	-	373
St. Joe River	2197	DBSS	5/29/97	-	1.1	10	0.3	11.53	8.97	7.08	26.3	0.02	99.1	-	363
St. Joe River	2197	DBSS	5/29/97	-	1.1	9	0.3	11.53	8.99	7.09	26.4	0.02	99.1	-	362
St. Joe River	2197	DBSS	5/29/97	-	1.1	8	0.3	11.51	8.99	7.08	26.6	0.02	98.9	-	363
St. Joe River	2197	DBSS	5/29/97	-	1.1	7	0.3	11.53	8.97	7.09	26.1	0.02	99.1	-	363
St. Joe River	2197	DBSS	5/29/97	-	1.1	6	0.3	11.53	8.99	7.09	26.4	0.02	99.1	-	363
St. Joe River	2197	DBSS	5/29/97	-	1.1	5	9.1	11.53	8.97	7.06	26.5	0.02	98.7	-	366
St. Joe River	2197	DBSS	5/29/97	-	1.1	4	10	11.51	8.97	7.06	26.5	0.02	98.9	-	366
St. Joe River	2197	DBSS	5/29/97	-	1.1	3	10.1	11.51	8.99	7.07	26.7	0.02	98.8	-	366
St. Joe River	2197	DBSS	5/29/97	-	1.1	2	10.5	11.5	8.97	7.06	26.4	0.02	98.9	-	366
St. Joe River	2197	DBSS	5/29/97	-	1.1	1	10.6	11.49	8.97	7.06	26.6	0.02	99.1	-	366
St. Joe River	2397	DBAS	6/11/97	-	1.7	10	0.8	11.35	10.28	7.13	28.1	0.02	100.9	-	394
St. Joe River	2397	DBAS	6/11/97	-	1.7	9	0.8	11.33	10.3	7.13	28.1	0.02	100.9	-	394
St. Joe River	2397	DBAS	6/11/97	-	1.7	8	0.9	11.33	10.3	7.13	28.1	0.02	100.9	-	394
St. Joe River	2397	DBAS	6/11/97	-	1.7	7	0.9	11.33	10.3	7.13	28.1	0.02	100.9	-	394
St. Joe River	2397	DBAS	6/11/97	-	1.7	6	0.8	11.35	10.3	7.12	28.1	0.02	101	-	395
St. Joe River	2397	DBAS	6/11/97	-	1.7	5	0.9	11.35	10.3	7.13	28.1	0.02	101	-	395
St. Joe River	2397	DBAS	6/11/97	-	1.7	4	0.9	11.36	10.3	7.13	28.1	0.02	101.1	-	395
St. Joe River	2397	DBAS	6/11/97	-	1.7	3	0.9	11.37	10.28	7.13	28.1	0.02	101.1	-	395
St. Joe River	2397	DBAS	6/11/97	-	1.7	2	1.1	11.37	10.28	7.14	28.1	0.02	101.2	-	395
St. Joe River	2397	DBAS	6/11/97	-	1.7	1	0.9	11.38	10.3	7.11	28	0.02	101.3	-	398
St. Joe River	2597	DBSS	6/26/97	-	3.1	11	0.2	11.21	10.68	7.18	32.1	0.02	100.6	-	399

St. Joe River	2597	DBSS	6/26/97	-	3.1	10	1	11.17	10.66	7.17	32.1	0.02	100.1	-	400
St. Joe River	2597	DBSS	6/26/97	-	3.1	9	1.9	11.2	10.64	7.17	32.1	0.02	100.4	-	402
St. Joe River	2597	DBSS	6/26/97	-	3.1	8	2.9	11.17	10.64	7.17	32.1	0.02	100.2	-	402
St. Joe River	2597	DBSS	6/26/97	-	3.1	7	4	11.19	10.64	7.17	32	0.02	100.3	-	402
St. Joe River	2597	DBSS	6/26/97	-	3.1	6	4.9	11.17	10.64	7.17	32.1	0.02	100.2	-	402
St. Joe River	2597	DBSS	6/26/97	-	3.1	5	6.1	11.19	10.64	7.17	32	0.02	100.3	-	402
St. Joe River	2597	DBSS	6/26/97	-	3.1	4	7.1	11.18	10.61	7.18	32	0.02	100.1	-	401
St. Joe River	2597	DBSS	6/26/97	-	3.1	3	8.1	11.18	10.62	7.17	32.1	0.02	100	-	401
St. Joe River	2597	DBSS	6/26/97	-	3.1	2	9	11.18	10.62	7.18	32	0.02	100.2	-	400
St. Joe River	2597	DBSS	6/26/97	-	3.1	1	11.2	11.2	10.67	7.19	32	0.02	100.4	-	400
St. Joe River	2797	DBSS	7/8/97	-	2.5	13	0.4	9.9	15.06	7.14	34.6	0.02	97.6	-	414
St. Joe River	2797	DBSS	7/8/97	-	2.5	12	1.3	9.89	15.04	7.16	34.6	0.02	97.5	-	414
St. Joe River	2797	DBSS	7/8/97	-	2.5	11	2.4	9.9	15.07	7.15	34.6	0.02	97.6	-	415
St. Joe River	2797	DBSS	7/8/97	-	2.5	10	3.5	9.92	15.02	7.15	34.6	0.02	97.7	-	415
St. Joe River	2797	DBSS	7/8/97	-	2.5	9	4.4	9.9	15.09	7.15	34.6	0.02	97.8	-	415
St. Joe River	2797	DBSS	7/8/97	-	2.5	8	5.4	9.9	15.06	7.15	34.6	0.02	97.7	-	416
St. Joe River	2797	DBSS	7/8/97	-	2.5	7	6.4	9.89	15.02	7.15	34.6	0.02	97.5	-	416
St. Joe River	2797	DBSS	7/8/97	-	2.5	6	7.4	9.88	15.02	7.16	34.6	0.02	97.4	-	416
St. Joe River	2797	DBSS	7/8/97	-	2.5	5	8.3	9.9	15.02	7.16	34.6	0.02	97.6	-	416
St. Joe River	2797	DBSS	7/8/97	-	2.5	4	9.4	9.89	15.06	7.16	34.6	0.02	97.5	-	416
St. Joe River	2797	DBSS	7/8/97	-	2.5	3	10.4	9.91	15.06	7.18	34.6	0.02	97.7	-	416
St. Joe River	2797	DBSS	7/8/97	-	2.5	2	11.4	9.93	15.06	7.19	34.6	0.02	98	-	416
St. Joe River	2797	DBSS	7/8/97	-	2.5	1	12.3	10.07	15.07	7.22	34.6	0.02	99.3	-	416
St. Joe River	2997	SSJD	7/24/97	-	3	11	0.3	9.37	18.94	7.2	38.3	0.02	*****	-	430
St. Joe River	2997	SSJD	7/24/97	-	3	10	1.3	9.42	18.47	7.2	38.2	0.02	99.9	-	431
St. Joe River	2997	SSJD	7/24/97	-	3	9	2.3	9.4	18.22	7.21	38.1	0.02	99.2	-	432
St. Joe River	2997	SSJD	7/24/97	-	3	8	3.3	9.42	18.15	7.21	38.2	0.02	99.2	-	432
St. Joe River	2997	SSJD	7/24/97	-	3	7	4.3	9.43	18.22	7.21	38.2	0.02	99.5	-	433
St. Joe River	2997	SSJD	7/24/97	-	3	6	5.3	9.41	18.22	7.2	38.1	0.02	99.3	-	434
St. Joe River	2997	SSJD	7/24/97	-	3	5	6.3	9.4	18.1	7.21	38.1	0.02	99	-	433
St. Joe River	2997	SSJD	7/24/97	-	3	4	7.3	9.41	18.22	7.21	38.1	0.02	99.3	-	434
St. Joe River	2997	SSJD	7/24/97	-	3	3	8.3	9.4	18.18	7.22	38.1	0.02	99.1	-	434
St. Joe River	2997	SSJD	7/24/97	-	3	2	9.3	9.43	18.1	7.25	38.1	0.02	99.3	-	434
St. Joe River	2997	SSJD	7/24/97	-	3	1	10.3	9.47	18.08	7.29	38.1	0.02	99.7	-	434
St. Joe River	3197	DBSS	8/5/97	-	3	13	0.3	9.07	23.01	7.3	44.8	0.03	104.4	-	351
St. Joe River	3197	DBSS	8/5/97	-	3	12	1.5	9.11	21.37	7.26	44.5	0.03	101.5	-	354
St. Joe River	3197	DBSS	8/5/97	-	3	11	2.4	9	21.28	7.25	44.7	0.03	100.2	-	355
St. Joe River	3197	DBSS	8/5/97	-	3	10	3.4	8.91	20.55	7.22	44.3	0.03	97.8	-	356
St. Joe River	3197	DBSS	8/5/97	-	3	9	4.5	8.64	19.94	7.19	44	0.03	93.7	-	357
St. Joe River	3197	DBSS	8/5/97	-	3	8	5.5	8.62	19.71	7.19	44.1	0.03	93.1	-	356
St. Joe River	3197	DBSS	8/5/97	-	3	7	6.5	8.54	19.57	7.19	43.7	0.03	92	-	356

St. Joe River	3197	DBSS	8/5/97	-	3	6	7.5	8.51	19.45	7.19	43.7	0.03	91.3	-	356
St. Joe River	3197	DBSS	8/5/97	-	3	5	8.5	8.46	19.33	7.19	43.8	0.03	90.6	-	356
St. Joe River	3197	DBSS	8/5/97	-	3	4	9.5	8.44	19.26	7.19	43.6	0.03	90.3	-	356
St. Joe River	3197	DBSS	8/5/97	-	3	3	10.5	8.43	19.25	7.19	43.7	0.03	90.2	-	356
St. Joe River	3197	DBSS	8/5/97	-	3	2	11.5	8.4	19.25	7.19	43.7	0.03	89.8	-	355
St. Joe River	3197	DBSS	8/5/97	-	3	1	12.1	8.4	19.3	7.2	43.6	0.03	89.9	-	354
St. Joe River	3497	DBSS	8/27/97	-	4	14	0.2	8.47	20.77	7.23	55.6	0.04	94.3	-	317
St. Joe River	3497	DBSS	8/27/97	-	4	13	0.8	8.49	20.27	7.25	55.8	0.04	93.4	-	316
St. Joe River	3497	DBSS	8/27/97	-	4	12	1.7	8.47	20.2	7.24	55.7	0.04	93.1	-	317
St. Joe River	3497	DBSS	8/27/97	-	4	11	2.7	8.49	20.2	7.25	55.6	0.04	93.2	-	316
St. Joe River	3497	DBSS	8/27/97	-	4	10	3.7	8.49	20.2	7.24	55.7	0.04	93.3	-	316
St. Joe River	3497	DBSS	8/27/97	-	4	9	4.6	8.48	20.15	7.24	55.6	0.04	93	-	316
St. Joe River	3497	DBSS	8/27/97	-	4	8	5.6	8.46	20.09	7.24	55.6	0.04	92.9	-	316
St. Joe River	3497	DBSS	8/27/97	-	4	7	6.4	8.41	20.08	7.23	55.5	0.04	92.3	-	316
St. Joe River	3497	DBSS	8/27/97	-	4	6	7.5	8.4	20.02	7.23	55.6	0.04	92	-	316
St. Joe River	3497	DBSS	8/27/97	-	4	5	8.5	8.39	20.02	7.24	55.5	0.04	91.9	-	315
St. Joe River	3497	DBSS	8/27/97	-	4	4	9.6	8.38	20.01	7.24	55.6	0.04	91.7	-	315
St. Joe River	3497	DBSS	8/27/97	-	4	3	10.4	8.38	20.01	7.25	55.5	0.04	91.7	-	314
St. Joe River	3497	DBSS	8/27/97	-	4	2	11.5	8.41	20.01	7.26	55.7	0.04	92	-	313
St. Joe River	3497	DBSS	8/27/97	-	4	1	12.7	8.43	20.04	7.27	55.6	0.04	92.3	-	313
St. Joe River	3797	DBAS	9/16/97	-	3.5	13	0.2	8.51	17.45	7.2	54.9	0.04	88.7	-	308
St. Joe River	3797	DBAS	9/16/97	-	3.5	12	0.9	8.48	17.51	7.21	55.2	0.04	88.5	-	307
St. Joe River	3797	DBAS	9/16/97	-	3.5	11	1.9	8.47	17.47	7.2	55.1	0.04	88.3	-	308
St. Joe River	3797	DBAS	9/16/97	-	3.5	10	2.9	8.47	17.45	7.19	55.2	0.04	88.3	-	307
St. Joe River	3797	DBAS	9/16/97	-	3.5	9	3.9	8.48	17.44	7.21	55.1	0.04	88.3	-	305
St. Joe River	3797	DBAS	9/16/97	-	3.5	8	4.9	8.49	17.43	7.2	55.1	0.04	88.5	-	305
St. Joe River	3797	DBAS	9/16/97	-	3.5	7	5.9	8.51	17.44	7.2	55.3	0.04	88.6	-	305
St. Joe River	3797	DBAS	9/16/97	-	3.5	6	6.9	8.49	17.42	7.2	55.2	0.04	88.6	-	303
St. Joe River	3797	DBAS	9/16/97	-	3.5	5	7.9	8.48	17.42	7.21	55.2	0.04	88.3	-	303
St. Joe River	3797	DBAS	9/16/97	-	3.5	4	8.9	8.51	17.42	7.21	55.3	0.04	88.6	-	302
St. Joe River	3797	DBAS	9/16/97	-	3.5	3	9.9	8.51	17.42	7.21	55.2	0.04	88.6	-	301
St. Joe River	3797	DBAS	9/16/97	-	3.5	2	10.9	8.53	17.44	7.22	55.2	0.04	88.8	-	300
St. Joe River	3797	DBAS	9/16/97	-	3.5	1	11.9	8.54	17.41	7.23	55.2	0.04	89	-	299
St. Joe River	3997	ASRA	9/29/97	-	2.7	11	0.2	9.83	16.29	7.24	52.9	0.03	101.3	-	397
St. Joe River	3997	ASRA	9/29/97	-	2.7	10	1.6	9.77	14.01	7.22	52.5	0.03	95.8	-	400
St. Joe River	3997	ASRA	9/29/97	-	2.7	9	2.6	9.71	13.91	7.22	52.4	0.03	95	-	400
St. Joe River	3997	ASRA	9/29/97	-	2.7	8	3.6	9.72	13.88	7.23	52.5	0.03	95.1	-	400
St. Joe River	3997	ASRA	9/29/97	-	2.7	7	4.6	9.66	13.86	7.23	52.4	0.03	94.4	-	399
St. Joe River	3997	ASRA	9/29/97	-	2.7	6	5.6	9.47	13.86	7.24	52.5	0.03	92.6	-	399
St. Joe River	3997	ASRA	9/29/97	-	2.7	5	6.6	9.44	13.86	7.25	52.3	0.03	92.3	-	399
St. Joe River	3997	ASRA	9/29/97	-	2.7	4	7.6	9.46	13.83	7.25	52.3	0.03	92.3	-	398

St. Joe River	3997	ASRA	9/29/97	-	2.7	3	8.6	9.43	13.88	7.27	52.2	0.03	92.1	-	398
St. Joe River	3997	ASRA	9/29/97	-	2.7	2	9.6	9.55	13.83	7.27	52.3	0.03	93.3	-	398
St. Joe River	3997	ASRA	9/29/97	-	2.7	1	10.6	9.5	13.83	7.29	52.3	0.03	92.7	-	397
St. Joe River	4297	DBAS	10/20/97	-	2.1	11	0.3	10.77	9.06	6.97	56.7	0.04	92.3	-	399
St. Joe River	4297	DBAS	10/20/97	-	2.1	10	1.3	10.75	9.07	6.95	56.7	0.04	92.1	-	402
St. Joe River	4297	DBAS	10/20/97	-	2.1	9	2.3	10.76	9.06	6.93	56.7	0.04	92.1	-	403
St. Joe River	4297	DBAS	10/20/97	-	2.1	8	3.3	10.76	9.06	6.91	56.7	0.04	92.1	-	404
St. Joe River	4297	DBAS	10/20/97	-	2.1	7	4.3	10.74	9.06	6.91	56.6	0.04	92	-	405
St. Joe River	4297	DBAS	10/20/97	-	2.1	6	5.3	10.76	9.06	6.88	56.6	0.04	92.1	-	406
St. Joe River	4297	DBAS	10/20/97	-	2.1	5	6.3	10.76	9.04	6.87	56.7	0.04	92.2	-	406
St. Joe River	4297	DBAS	10/20/97	-	2.1	4	7.3	10.78	9.02	6.85	56.6	0.04	92.3	-	407
St. Joe River	4297	DBAS	10/20/97	-	2.1	3	8.3	10.78	9.04	6.83	56.6	0.04	92.3	-	408
St. Joe River	4297	DBAS	10/20/97	-	2.1	2	9.3	10.8	9.02	6.81	56.5	0.04	92.4	-	408
St. Joe River	4297	DBAS	10/20/97	-	2.1	1	10.3	10.83	9.04	6.76	56.7	0.04	92.8	-	411
St. Joe River	4497	DBAS	11/3/97	-	1	11	0.4	11.9	7.03	6.63	39.7	0.03	96.8	*****	436
St. Joe River	4497	DBAS	11/3/97	-	1	10	1.8	11.93	7.02	6.61	39.9	0.03	96.9	*****	438
St. Joe River	4497	DBAS	11/3/97	-	1	9	2.8	11.9	7.03	6.63	39.8	0.03	96.8	*****	438
St. Joe River	4497	DBAS	11/3/97	-	1	8	3.8	11.92	7.03	6.61	39.8	0.03	96.9	*****	438
St. Joe River	4497	DBAS	11/3/97	-	1	7	4.8	11.89	7.04	6.61	39.9	0.03	96.6	*****	437
St. Joe River	4497	DBAS	11/3/97	-	1	6	5.8	11.93	7.06	6.61	39.8	0.03	96.9	*****	436
St. Joe River	4497	DBAS	11/3/97	-	1	5	6.8	11.93	7.06	6.61	39.9	0.03	96.9	*****	436
St. Joe River	4497	DBAS	11/3/97	-	1	4	7.8	11.95	7.07	6.61	40.2	0.03	97.1	*****	438
St. Joe River	4497	DBAS	11/3/97	-	1	3	8.8	11.96	7.08	6.61	39.9	0.03	97.3	*****	438
St. Joe River	4497	DBAS	11/3/97	-	1	2	9.8	12	7.08	6.61	39.9	0.03	97.6	*****	438
St. Joe River	4497	DBAS	11/3/97	-	1	1	10.7	11.99	7.09	6.63	39.9	0.03	97.5	*****	441

Appendix A.2 Vertical hydrolab profiles for all thirteen station on Coeur d'Alene Lake, 1998.

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	13	0.3	13.29	4.16	6.94	49.5	0.03	101	59	405
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	12	1.2	13.33	4.03	6.98	49.5	0.03	101	43	403
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	11	2.2	13.39	3.91	6.98	49.6	0.03	101.1	113	403
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	10	3.2	13.38	3.91	6.91	49.7	0.03	101	101	407
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	9	4.2	13.43	3.88	6.91	49.8	0.03	101.3	149	406
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	8	5.2	13.5	3.88	6.9	49.8	0.03	101.8	59	405
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	7	6.2	13.52	3.91	6.86	49.8	0.03	102.1	131	406
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	6	7.2	13.53	3.94	6.81	49.7	0.03	102.2	51	406
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	5	8.2	13.54	3.98	6.82	49.9	0.03	102.4	154	405
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	4	9.2	13.5	3.96	6.72	49.6	0.03	102.1	103	407
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	3	10.2	13.49	4.01	6.69	49.8	0.03	102.1	158	407
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	2	11.2	13.39	4.26	6.58	49.7	0.03	102	201	408
Rockford Bay	1098	DBRP	3/13/98	10:09:11	3	1	12.2	13.08	4.54	6.42	50.9	0.03	100.4	215	409
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	14	0.3	12.86	5.87	7.09	51.3	0.03	103	124	441
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	13	1.3	12.9	5.77	7.05	51.5	0.03	103.1	128	444
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	12	2.3	12.88	5.6	7.06	51.2	0.03	102.5	53	444
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	11	3.3	12.82	5.36	6.97	51	0.03	101.4	121	448
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	10	4.3	12.79	5.41	6.95	51.2	0.03	101.3	111	449
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	9	5.2	12.76	5.14	6.96	51.1	0.03	100.3	141	447
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	8	6.2	12.75	5.03	6.97	51.7	0.03	100	114	446
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	7	7.1	12.75	5.03	6.92	51.5	0.03	100	107	448
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	6	8.1	12.71	4.99	6.92	51.7	0.03	99.5	120	447
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	5	9.2	12.68	4.96	6.91	51.8	0.03	99.2	104	447
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	4	10.2	12.49	4.88	6.87	52.2	0.03	97.6	137	447
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	3	11.3	12.43	4.79	6.85	52.2	0.03	96.9	110	447
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	2	12.3	12.3	4.81	6.86	52.5	0.03	95.9	242	446
Rockford Bay	1498	DBAS	4/8/98	9:40:15	2.9	1	13.2	11.97	4.96	6.79	53.9	0.03	93.7	433	447
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	13	0.1	11.7	15	7	47.4	0.03	114.2	129	390
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	12	1.6	12.33	10.3	7.17	45.9	0.03	108.3	40	383
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	11	2.6	12.33	9.86	7.15	46.5	0.03	107.1	34	383
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	10	3.6	12.33	9.2	7.11	47.1	0.03	105.4	40	385
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	9	4.5	12.33	8.79	7.05	47.1	0.03	104.4	56	387
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	8	5.6	12.36	8.3	7.04	47.5	0.03	103.4	34	387
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	7	6.6	12.36	8.25	7.03	47.7	0.03	103.3	38	386
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	6	7.4	12.36	7.53	6.98	47.9	0.03	101.4	57	388
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	5	8.5	12.36	7.4	6.99	48.3	0.03	101.1	44	387
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	4	9.4	12.36	6.94	6.91	48.4	0.03	100	59	391

Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	3	10.6	12.36	6.82	6.94	48.6	0.03	99.7	56	388
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	2	11.6	12.29	6.69	6.89	48.4	0.03	98.8	132	390
Rockford Bay	1698	DBASRP	4/23/98	13:24:29	5	1	12.5	12.4	6.44	6.87	48.8	0.03	99.1	157	390
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	14	0.3	11.57	10.9	7.25	42.3	0.03	105.6	119	399
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	13	1.6	11.6	10.8	7.23	42.2	0.03	105.8	101	401
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	12	2.6	11.6	10.7	7.21	42.2	0.03	105.5	135	401
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	11	3.6	11.66	10.5	7.22	42.5	0.03	105.5	327	399
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	10	4.6	11.61	10.3	7.23	41.9	0.03	104.5	118	395
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	9	5.6	11.65	10.2	7.12	43.1	0.03	104.8	120	398
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	8	6.6	11.49	10	7.08	43.2	0.03	102.8	301	398
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	7	7.6	11.43	9.74	7.08	42.8	0.03	101.6	112	394
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	6	8.6	11.49	9.51	7.02	43.4	0.03	101.6	133	395
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	5	9.6	11.39	9.02	6.96	44.2	0.03	99.5	147	395
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	4	10.6	11.39	8.92	7	44.4	0.03	99.3	235	390
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	3	11.6	11.42	8.6	6.89	44.8	0.03	98.8	118	391
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	2	12.6	11.42	8.07	6.88	45.6	0.03	97.5	57	388
Rockford Bay	2198	ASJLDT	5/26/98	11:37:29	3.6	1	13.6	11.4	7.86	6.89	46.2	0.03	96.8	318	386
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	14	0.3	10.87	16.9	7.63	44.2	0.03	112.2	54	442
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	13	1.4	10.89	16.7	7.62	44.2	0.03	112.1	52	445
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	12	2.4	10.92	16.4	7.61	44.3	0.03	111.7	56	447
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	11	3.4	11	16.1	7.6	44.1	0.03	111.8	53	450
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	10	4.4	10.98	16	7.57	43.6	0.03	111.2	125	451
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	9	5.4	11.04	15.8	7.55	43.7	0.03	111.5	43	454
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	8	6.4	11.1	15.7	7.54	44.3	0.03	111.9	128	455
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	7	7.4	11.11	15.6	7.51	44.3	0.03	111.7	111	458
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	6	8.4	11.2	15.4	7.5	44.1	0.03	112	52	460
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	5	9.4	11.3	15.2	7.49	44.3	0.03	112.7	57	462
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	4	10.4	11.47	14.7	7.46	44.8	0.03	113.2	46	464
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	3	11.4	11.53	13.7	7.37	44.3	0.03	111.3	101	468
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	2	12.4	11.13	12.9	7.16	44.1	0.03	105.5	116	475
Rockford Bay	2398	DTJLAS	6/8/98	10:30	4	1	13.4	11	11.9	7.02	43.5	0.03	101.9	231	483
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	14	0.2	10.9	17	7.89	42.7	0.03	113.5	32	437
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	13	1.6	11.09	16.1	7.79	42.5	0.03	113.3	41	443
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	12	2.6	11.1	15.8	7.76	42.5	0.03	112.7	42	445
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	11	3.6	11.02	15.7	7.66	42.6	0.03	111.7	52	448
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	10	4.6	11	15.6	7.63	42.2	0.03	111.1	105	451
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	9	5.6	10.99	15.5	7.53	42.3	0.03	110.8	44	455
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	8	6.6	10.61	15.4	7.33	43.2	0.03	106.8	49	459
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	7	7.6	10.76	15.2	7.35	42.7	0.03	107.8	105	461
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	6	8.6	10.61	14.5	7.15	42.3	0.03	104.6	38	467
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	5	9.6	10.41	13.1	7.04	42.2	0.03	99.6	59	470

Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	4	10.6	10.21	12.4	6.96	42.4	0.03	96.1	58	472
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	3	11.6	10.19	11.3	6.91	41.7	0.03	93.6	124	474
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	2	12.6	9.92	10.7	6.84	42	0.03	89.8	133	477
Rockford Bay	2598	DTASBH	6/24/98	11:01	3.3	1	13.6	9.85	9.92	6.78	42.3	0.03	87.5	619	480
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	14	0.4	10.13	20.7	8.12	44.5	0.03	112.8	133	359
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	13	1.2	10.2	20.3	8.16	44.4	0.03	112.8	134	359
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	12	2.2	10.27	20.2	8.19	44.4	0.03	113.1	131	359
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	11	3.2	10.37	20	8.22	44.4	0.03	113.9	123	359
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	10	4.2	10.38	20	8.22	44.5	0.03	114	125	360
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	9	5.2	10.52	19.7	8.27	44	0.03	114.9	111	360
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	8	6.2	10.64	19.4	8.31	43.7	0.03	115.5	135	360
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	7	7.2	10.73	19.1	8.31	43.6	0.03	115.7	136	361
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	6	8.2	10.81	18.5	8.18	43.4	0.03	115.2	130	366
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	5	9.2	10.77	17	7.88	43.3	0.03	111.1	109	375
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	4	10.2	9.98	14.8	7.21	42.2	0.03	98.3	136	386
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	3	11.2	9.47	13.2	6.98	41.6	0.03	90	159	389
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	2	12.2	9.27	12.4	6.89	41.6	0.03	86.5	19	392
Rockford Bay	2798	ASDNBH	7/8/98	9:03:16	3.3	1	13.2	9	12.2	6.85	41.6	0.03	83.6	412	394
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	13	0.7	9.39	22	7.84	50.7	0.03	107	115	333
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	12	1.7	9.46	21.6	7.84	50.3	0.03	107	101	332
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	11	2.7	9.55	21.3	7.84	50.3	0.03	107.3	101	332
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	10	3.7	9.59	21.1	7.84	49.8	0.03	107.4	104	332
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	9	4.7	9.7	20.6	7.83	49.6	0.03	107.6	112	332
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	8	5.7	9.78	20.3	7.85	49.3	0.03	107.8	110	330
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	7	6.7	9.89	19.9	7.85	49.2	0.03	108.2	58	330
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	6	7.7	9.91	19.7	7.81	49.1	0.03	108	58	329
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	5	8.7	9.94	19.6	7.76	48.9	0.03	108	104	329
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	4	9.7	10.18	18.5	7.72	48.2	0.03	108.4	122	329
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	3	10.7	10.29	17.2	7.54	47.5	0.03	106.7	118	330
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	2	11.7	10.08	14.8	7.34	46.3	0.03	99.1	133	329
Rockford Bay	2998	ASBH	7/20/98	10:54:42	6.5	1	12.7	9.9	13.4	7.16	45.7	0.03	94.6	207	326
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	14	0.3	8.77	24	7.81	55	0.04	103.8	43	334
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	13	1.7	8.79	23.9	7.81	55	0.04	103.7	46	333
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	12	2.8	8.82	23.8	7.82	54.8	0.04	103.9	37	333
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	11	3.9	8.85	23.7	7.81	54.9	0.04	104.1	51	333
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	10	4.9	8.87	23.6	7.8	54.9	0.04	104.2	37	333
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	9	5.8	8.86	23.5	7.78	54.7	0.04	103.8	101	333
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	8	6.9	8.87	23.4	7.77	54.7	0.04	103.8	102	332
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	7	7.9	8.87	23.4	7.68	54.6	0.04	103.7	117	332
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	6	8.8	8.49	23.1	7.45	54.3	0.03	98.8	113	335
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	5	9.7	9.36	20.9	7.48	50.8	0.03	104.4	159	333

Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	4	10.9	10.52	16.9	7.39	47.9	0.03	108.3	124	330
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	3	11.7	9.81	15.3	7.19	47.1	0.03	97.5	143	328
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	2	12.7	9.66	13.8	7.06	46.8	0.03	93	117	316
Rockford Bay	3298	DBAS	8/10/98	10:22:34	9.9	1	13.7	8.63	12.3	7.03	46.8	0.03	80.3	131	376
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	18	0.4	9.09	21.9	7.74	54.6	0.03	103.6	51	347
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	17	1.5	9.07	21.8	7.78	54.5	0.03	103.2	123	348
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	16	2.2	9.06	21.7	7.78	54.8	0.04	103	111	348
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	15	3	9.12	21.4	7.77	54.8	0.04	103	59	350
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	14	3.7	9.12	21.4	7.77	54.6	0.04	102.9	125	350
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	13	4.5	9.13	21.3	7.73	54.8	0.04	102.9	52	352
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	12	5.2	9.13	21.3	7.71	54.7	0.04	102.8	102	352
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	11	6	9.1	21.2	7.67	54.7	0.04	102.4	117	354
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	10	6.7	9.08	21.2	7.64	54.8	0.04	102.2	103	355
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	9	7.5	9.04	21.2	7.56	54.9	0.04	101.6	103	357
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	8	8.2	9.02	21.1	7.49	55	0.04	101.2	113	359
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	7	9	8.92	20.5	7.34	54	0.03	99	109	364
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	6	9.7	9.51	19.3	7.22	51.9	0.03	103.1	47	368
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	5	10.5	10.19	17.3	7.13	47.9	0.03	105.9	133	370
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	4	11.2	9.73	15.4	6.95	46.9	0.03	97.3	110	375
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	3	12	8.71	12.9	6.76	46.7	0.03	82.4	50	378
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	2	12.7	8.56	11.5	6.73	47	0.03	78.4	131	379
Rockford Bay	3498	DTAS	8/24/98	15:12:19	10	1	13.5	8.74	11.5	6.77	47.1	0.03	80	239	377
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	14	0.3	8.93	21.9	7.83	53.6	0.03	102.1	58	330
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	13	1.6	8.95	21.8	7.79	53.4	0.03	102	57	333
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	12	2.6	8.98	21.5	7.78	53.5	0.03	101.8	108	335
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	11	3.6	8.99	21.4	7.76	53.4	0.03	101.8	109	336
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	10	4.6	8.99	21.4	7.73	53.6	0.03	101.7	55	337
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	9	5.6	8.98	21.3	7.7	53.4	0.03	101.5	58	339
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	8	6.6	8.99	21.3	7.69	53.5	0.03	101.6	131	339
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	7	7.6	8.98	21.3	7.66	53.2	0.03	101.4	58	341
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	6	8.6	8.91	21.2	7.56	53.8	0.03	100.4	103	345
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	5	9.6	8.8	21.1	7.46	53.5	0.03	99	123	349
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	4	10.6	8.88	20.4	7.34	53	0.03	98.6	132	353
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	3	11.6	8.79	19	7.01	50	0.03	94.8	54	365
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	2	12.6	8.5	14.1	6.74	46.1	0.03	82.7	38	370
Rockford Bay	3598	DTAS	9/2/98	10:48:53	8.2	1	13.6	7.11	12.3	6.64	47.2	0.03	66.5	715	372
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	14	0.2	9.21	18	7.66	55.4	0.04	97.2	52	361
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	13	1.3	9.21	18	7.61	55.4	0.04	97.2	142	365
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	12	2.3	9.18	17.9	7.59	55.6	0.04	96.7	52	366
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	11	3.2	9.15	17.9	7.57	55.3	0.04	96.3	110	367
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	10	4.3	9.14	17.9	7.55	55.2	0.04	96.1	136	369

Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	9	5.3	9.09	17.8	7.52	55.4	0.04	95.6	116	371
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	8	6.3	9.07	17.8	7.49	55.7	0.04	95.3	213	372
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	7	7.2	9.04	17.8	0	55.4	0.04	94.9	122	372
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	6	8.3	9.06	17.8	7.48	55.7	0.04	95.1	210	374
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	5	9.3	9.03	17.7	7.48	55.3	0.04	94.7	332	374
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	4	10.3	9.03	17.7	7.45	55.6	0.04	94.7	234	376
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	3	11.3	8.97	17.7	7.43	55.7	0.04	94.1	346	378
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	2	12.3	8.93	17.7	7.33	55.5	0.04	93.6	203	382
Rockford Bay	3998	ASKB	9/30/98	10:40:23	7.9	1	13.3	7.81	17.3	7.11	55.5	0.04	81.1	850	389
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	14	0.4	9.39	12.9	7.37	52	0.03	87.7	39	355
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	13	0.9	9.35	12.9	7.37	52	0.03	87.4	37	355
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	12	1.9	9.36	12.9	7.39	52	0.03	87.5	26	354
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	11	2.9	9.32	12.9	7.34	52.1	0.03	87.1	50	356
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	10	3.9	9.35	12.9	7.36	52.1	0.03	87.4	39	356
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	9	4.9	9.33	12.9	7.34	52	0.03	87.2	25	356
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	8	5.9	9.33	12.9	7.34	52.1	0.03	87.1	37	356
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	7	6.9	9.35	12.9	7.34	51.8	0.03	87.4	33	356
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	6	7.9	9.35	12.9	7.35	52.2	0.03	87.4	33	355
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	5	8.9	9.36	12.9	7.34	51.8	0.03	87.5	37	355
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	4	9.9	9.35	12.8	7.34	51.8	0.03	87.3	42	355
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	3	10.9	9.37	12.8	7.32	51.9	0.03	87.3	37	355
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	2	11.9	9.4	12.7	7.32	51.7	0.03	87.6	49	354
Rockford Bay	4298	DTASKB	10/20/98	10:13:09	8.2	1	12.9	9.4	12.6	7.29	52.1	0.03	87.4	138	363
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	17	0.5	8.58	10	7.26	52.7	0.03	75.5	30	385
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	16	1.7	8.59	10	7.24	52.7	0.03	75.6	35	387
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	15	2.7	8.58	10	7.22	52.6	0.03	75.5	32	388
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	14	2.7	8.57	0	7.23	52.7	0.03	82.5	6	390
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	13	3.6	8.56	10	7.24	52.7	0.03	75.4	32	387
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	12	4.6	8.56	10	7.22	52.6	0.03	75.4	37	388
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	11	5.7	8.58	10	7.2	52.7	0.03	75.5	37	390
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	10	6.6	8.58	10	7.21	52.7	0.03	96.8	5	389
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	9	6.7	8.56	0	7.2	52.6	0.03	94.9	8	390
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	8	7.7	8.56	10	7.19	52.9	0.03	75.3	34	390
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	7	8.7	8.56	10	7.2	52.3	0.03	75.3	41	390
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	6	9.7	8.57	9.99	0	52.9	0.03	75.4	52	390
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	5	10.6	8.59	9.92	7.2	52.8	0.03	75.4	107	390
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	3	11.7	8.51	9.82	7.16	52.5	0.03	74.6	101	391
Rockford Bay	4598	KB AS	11/12/98	10:46:32	9.1	2	12.7	8.49	9.78	7.14	52.8	0.03	74.3	59	392

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	15	0.3	13.5	4.31	7.03	53.4	0.03	103.3	36	394
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	14	1	13.6	4.09	7.09	53.3	0.03	102.8	53	393
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	13	2	13.5	4.08	7.06	53.4	0.03	102.6	46	395
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	12	3	13.5	4.04	7.08	53.2	0.03	102.5	55	393
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	11	4	13.5	4.06	7.07	53.5	0.03	102.3	208	393
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	10	5	13.5	4.03	7.01	53.4	0.03	102.2	107	395
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	9	6	13.5	4.01	6.97	53.7	0.03	102.2	114	395
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	8	7	13.5	4.03	6.99	53.9	0.03	102.1	39	394
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	7	8	13.4	4.06	6.94	53.9	0.03	101.9	110	396
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	6	9	13.5	4.04	6.97	54.3	0.03	102	136	393
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	5	10	13.5	4.08	6.93	54.3	0.03	102.2	102	393
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	4	11	13.5	4.08	6.91	54.5	0.03	102.2	116	392
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	3	12	13.5	4.11	6.85	54.5	0.03	102.2	118	394
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	2	13	13.5	4.24	6.79	55.2	0.04	102.6	120	395
Windy Bay Shallow	1098	DBRP	3/13/98	10:42:36	2	1	14	13.6	4.29	6.74	55.4	0.04	103.5	147	394
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	16	0.3	12.6	5.49	6.97	52.4	0.03	100.2	109	437
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	15	1	12.6	5.5	7.01	52.4	0.03	100.2	108	436
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	14	2	12.6	5.41	7.05	52.5	0.03	99.7	54	435
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	13	3	12.6	5.29	7.08	52.4	0.03	99.5	109	434
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	12	4	12.6	5.34	7	52.4	0.03	99.6	142	438
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	11	4.9	12.7	5.26	7.03	52.7	0.03	99.9	41	438
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	10	5.9	12.7	5.17	7.02	52.7	0.03	99.8	100	438
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	9	7	12.7	5.12	6.99	52.7	0.03	99.6	50	439
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	8	8	12.7	5.09	7	52.7	0.03	99.6	134	438
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	7	9	12.7	5.11	7	52.8	0.03	99.4	138	438
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	6	10	12.7	5.11	7.02	52.9	0.03	99.6	59	437
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	5	11	12.7	5.09	6.95	52.9	0.03	99.8	108	440
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	4	12	12.7	5.06	6.95	53	0.03	99.7	157	440
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	3	13	12.7	5.06	6.95	53	0.03	99.8	216	439
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	2	14	12.8	5.08	6.96	52.9	0.03	100.2	140	438
Windy Bay Shallow	1498	DBAS	4/8/98	10:45:10	2.8	1	15	12.8	5.19	6.92	52.8	0.03	100.6	250	439
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	11	0.3	12.2	6.05	7.08	49	0.03	99.9	103	418
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	10	1.7	12.2	6.05	7.12	49	0.03	99.4	59	422
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	9	2.9	12.2	6.02	7.05	49	0.03	99.8	114	425
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	8	4.6	12.2	6.03	6.96	49.2	0.03	99.4	48	431
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	7	6.1	12.2	5.79	7.01	49.3	0.03	98.7	124	428
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	6	7.7	12.2	5.77	6.95	49.2	0.03	98.7	107	431
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	5	9	12.1	5.82	6.95	49.2	0.03	98.5	41	431
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	4	10.4	12.1	5.67	6.99	49.4	0.03	97.6	134	428
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	3	11.9	12.2	4.88	6.88	50.5	0.03	96.3	130	433

Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	2	14	12.2	5.56	6.91	49.6	0.03	98.4	56	431
Windy Bay Shallow	1698	DBASRP	4/24/98	9:31:58	3.5	1	15.7	12.8	5.14	6.93	50.1	0.03	102	116	430
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	13	0.3	11.7	10.51	7.15	42.2	0.03	106.2	52	396
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	12	1.5	11.7	10.48	7.19	42.2	0.03	106.1	108	394
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	11	3	11.7	10.45	7.14	42.2	0.03	105.8	128	395
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	10	4.5	11.7	10.09	7.04	42.9	0.03	104.9	141	397
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	9	6	11.6	9.91	7.05	43	0.03	103.5	153	392
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	8	7.5	11.6	9.73	7	43.1	0.03	102.7	204	391
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	6	9	11.5	9.58	6.94	43.3	0.03	101.9	258	390
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	5	10.5	11.5	9.5	6.93	43.5	0.03	101.7	245	384
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	4	12	11.5	9.4	6.88	43.7	0.03	101.4	125	378
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	3	13.5	11.5	9.22	6.77	44.1	0.03	100.9	147	379
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	2	15	11.5	9.09	6.77	44.1	0.03	100.4	156	370
Windy Bay Shallow	2198	ASJLDT	5/26/98	10:33:29	3.4	1	16.2	11	8.81	6.73	44.7	0.03	95.9	604	383
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	11	0.3	11	17.22	7.82	43.8	0.03	114.8	28	420
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	10	2	11	16.69	7.79	43.7	0.03	113	47	423
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	9	3.5	11	16.36	7.77	43.8	0.03	112.9	37	424
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	8	5	11	16.21	7.75	43.8	0.03	112.5	116	426
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	7	6.5	11.2	15.71	7.71	43.6	0.03	112.4	140	428
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	6	8	11.3	15.39	7.69	43.5	0.03	112.7	143	430
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	5	9.5	11.3	15.01	7.61	43.4	0.03	112	129	433
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	4	11	11.3	13.86	7.45	43	0.03	109.7	50	437
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	3	12.5	11.3	13.33	7.38	43.2	0.03	107.9	114	440
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	2	14	11	12.89	7.27	43.3	0.03	103.9	128	443
Windy Bay Shallow	2398	DTJLAS	6/8/98	10:36:03	4	1	15.5	10.8	12.36	7.21	43.5	0.03	101.1	240	445
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	16	0.3	10.9	16.73	8.09	43.1	0.03	112.5	104	399
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	15	1.6	10.9	16.72	8.07	43.2	0.03	112.6	102	402
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	14	2.6	10.9	16.68	8.04	43	0.03	112.4	59	404
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	13	3.6	10.9	16.63	8.02	43	0.03	112.7	32	405
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	12	4.6	10.9	16.55	7.95	43	0.03	112.5	56	408
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	11	5.6	11	15.79	7.78	42.9	0.03	111.2	54	411
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	10	6.6	10.9		7.65	42.1	0.03	109.3	134	415
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	9	7.6	10.8	15.23	7.58	42.2	0.03	108.6	101	417
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	8	8.6	10.8	15.04	7.48	42	0.03	107.9	101	419
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	7	9.6	10.4	14.03	7.28	41.8	0.03	101.5	121	424
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	6	10.6	10.3	13.55	7.17	42	0.03	99.7	137	427
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	5	11.6	9.78	9.92	6.97	42.4	0.03	86.9	155	431
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	4	12.6	9.97	12.04	6.97	41.7	0.03	93.1	122	432
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	3	13.6	9.71	9.06	6.87	43.6	0.03	84.5	120	434
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	2	14.6	9.7	9.1	6.85	43.4	0.03	84.5	206	436
Windy Bay Shallow	2598	DTASBH	6/24/98	11:03:05	3.1	1	15.6	9.7	9.02	6.86	43.5	0.03	84.4	256	436

Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	16	0.4	9.83	21.33	7.89	46.5	0.03	110.8	134	323
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	15	1.1	10.1	20.86	8	46.2	0.03	112.9	103	318
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	14	2.1	10.1	20.67	8.04	46.3	0.03	112.2	50	318
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	13	3.1	10.2	20.35	8.05	46	0.03	112.9	140	317
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	12	4.1	10.5	19.59	8.17	45.9	0.03	113.9	114	314
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	11	5.1	10.8	18.63	8.23	44.6	0.03	115	107	313
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	10	6.1	10.9	17.86	8.27	44.4	0.03	115	57	313
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	9	7.1	10.5	17.47	8.21	44	0.03	109.6	130	313
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	8	8.1	10.8	17.1	8.05	44	0.03	112.2	122	316
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	7	9.1	10.7	16.66	7.84	43.8	0.03	109.9	118	319
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	6	10.1	10.5	16.39	7.63	43.6	0.03	107.2	126	322
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	5	11.1	9.94	15.74	7.29	43.2	0.03	100	146	326
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	4	12.1	9.73	15.22	7.16	43	0.03	96.7	112	326
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	3	13.1	9.1	13.53	6.96	42	0.03	87.3	109	326
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	2	14.1	9.03	12.89	6.93	41.4	0.03	85.3	153	323
Windy Bay Shallow	2798	ASDNBH	7/8/98	9:04:55	3.1	1	15.1	8.55	12.82	6.93	41.5	0.03	80.6	301	316
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	15	0.4	9.71	20.91	7.89	50.9	0.03	108.4	116	399
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	14	1.4	9.73	20.9	7.92	50.8	0.03	108.5	114	400
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	13	2.4	9.81	20.49	7.94	50.7	0.03	108.6	23	401
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	12	3.4	9.93	20.13	7.97	50.3	0.03	109.2	33	402
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	11	4.4	10.1	19.76	8.09	50.1	0.03	110.4	112	402
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	10	5.4	10.3	19.18	7.94	49.5	0.03	110.5	25	407
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	9	6.4	10.3	18.8	7.8	49	0.03	110.7	36	412
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	8	7.4	10.2	18.39	7.63	48.7	0.03	108.3	112	418
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	7	8.4	10.4	17.96	7.58	48.2	0.03	109.3	117	420
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	6	9.4	10.6	17.34	7.58	47.6	0.03	109.7	111	422
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	5	10.4	10.5	17.07	7.49	47.8	0.03	108.6	112	426
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	4	11.4	10.5	16.78	7.31	47.6	0.03	107.3	55	430
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	3	12.4	9.92	16.17	7.08	47	0.03	100.5	100	435
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	2	13.4	8.85	14.16	6.8	46.8	0.03	85.9	117	440
Windy Bay Shallow	2998	ASBH	7/20/98	10:30	6	1	14.4	7.95	11.31	6.61	46.4	0.03	72.4	238	444
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	17	0.4	8.85	23.46	7.74	55.6	0.04	103.6	21	383
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	16	0.9	8.85	23.46	7.75	55.5	0.04	103.6	39	383
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	15	1.9	8.86	23.42	7.74	55.6	0.04	103.7	54	385
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	14	2.9	8.86	23.4	7.7	55.5	0.04	103.6	35	387
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	13	3.9	8.85	23.37	7.67	55.5	0.04	103.5	104	391
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	12	4.9	8.85	23.37	7.66	55.5	0.04	103.4	105	392
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	11	5.9	8.85	23.33	7.64	55.4	0.04	103.4	114	395
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	10	6.9	8.85	23.31	7.6	55.4	0.04	103.3	57	398
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	9	7.9	8.91	22.92	7.5	54.7	0.04	103.3	104	403
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	8	8.9	9.09	22.02	7.39	53.6	0.03	103.5	122	407

Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	7	9.9	9.28	20.27	7.23	50.9	0.03	102.2	122	414
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	6	10.9	9.69	16.98	7.06	48.1	0.03	99.9	101	420
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	5	11.9	9.83	14.71	6.95	47.1	0.03	96.5	102	424
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	4	12.9	8.9	13.37	6.78	47	0.03	84.8	115	430
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	3	13.9	8.24	12.62	6.65	47.2	0.03	77.2	101	434
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	2	14.9	8.24	11.49	6.6	46.9	0.03	75.2	59	435
Windy Bay Shallow	3298	DBAS	8/10/98	9:29:19	7.9	1	15.9	7.59	10.59	6.53	48	0.03	67.8	226	438
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	22	0.3	9.11	21.99	7.78	55.7	0.04	104	123	345
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	21	1.5	9.09	21.79	7.81	55.5	0.04	103.4	131	346
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	20	2.2	9.19	21.3	7.83	55.5	0.04	103.6	157	346
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	19	3	9.2	21.18	7.82	55.6	0.04	103.4	119	347
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	18	3.7	9.2	21.09	7.81	55.6	0.04	103.2	150	349
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	17	4.5	9.19	21.04	7.78	55.6	0.04	103.1	48	350
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	16	5.2	9.18	20.98	7.76	55.7	0.04	102.8	111	351
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	15	6	9.15	20.97	7.72	55.3	0.04	102.4	122	352
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	14	6.7	9.13	20.95	7.72	55.1	0.04	102.2	100	351
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	13	7.5	9.11	20.9	7.68	55.6	0.04	101.8	207	352
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	12	8.2	9.12	20.86	7.66	55.3	0.04	101.9	136	353
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	11	9	9.06	20.84	7.59	55.1	0.04	101.2	57	356
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	10	9.7	8.91	20.62	7.46	55.3	0.04	99.1	113	359
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	8	10.5	8.49	20.15	7.29	54.9	0.04	93.5	154	363
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	7	11.2	9.51	17.23	7.08	49.4	0.03	98.8	147	369
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	6	12	9.7	15.97	7.07	47.5	0.03	98.1	140	369
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	5	12.7	9.79	15.57	7.07	47.1	0.03	98.1	240	368
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	4	13.5	9.85	15.01	7.03	46.6	0.03	97.6	150	368
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	3	14.2	8.71	14.41	6.88	47.6	0.03	85.1	126	370
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	2	15	8.17	13.71	6.85	47.9	0.03	78.7	221	369
Windy Bay Shallow	3498	DTAS	8/24/98	12:44:32	9	1	15.7	8.39	13.46	6.92	46.9	0.03	80.3	116	365
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	17	0.3	9.07	21.51	7.79	55.7	0.04	102.9	28	336
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	16	1.2	9.07	21.48	7.79	55.7	0.04	102.8	50	336
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	15	2.2	9.07	21.39	7.83	55.6	0.04	102.7	48	334
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	14	3.2	9.08	21.37	7.78	55.5	0.04	102.7	113	337
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	13	4.2	9.08	21.35	7.8	55.6	0.04	102.7	104	336
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	12	5.2	9.09	21.33	7.76	55.6	0.04	102.8	103	339
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	11	6.2	9.08	21.33	7.75	55.6	0.04	102.7	119	339
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	10	7.2	9.1	21.3	7.7	55.4	0.04	102.8	121	343
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	9	8.2	9.1	21.29	7.64	55.7	0.04	102.8	117	346
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	8	9.2	9.07	21.17	7.49	55.5	0.04	102.2	108	353
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	7	10.2	8.53	19.93	7.17	53.5	0.03	93.8	114	363
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	6	11.2	9.17	17.05	6.92	46.9	0.03	95.1	100	371
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	5	12.2	8.61	14.96	6.81	46.5	0.03	85.4	114	373
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	4	13.2	8.52	13.46	6.73	45.8	0.03	81.8	122	376

Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	3	14.2	7.79	12.25	6.62	45.9	0.03	72.8	141	379
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	2	15.2	7.39	11.21	6.55	46.3	0.03	67.4	130	382
Windy Bay Shallow	3598	DTAS	9/2/98	13:02:24	8.2	1	16.2	6.13	11.11	6.49	46.5	0.03	55.8	856	383
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	16	0.2	9.32	18	7.7	54.9	0.04	98.2	151	348
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	15	1.1	9.27	18.1	7.75	57.7	0.04	98	49	349
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	14	2.1	9.27	18.03	7.73	57.8	0.04	97.8	47	350
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	13	3.1	9.26	17.98	7.69	58.1	0.04	97.7	52	353
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	12	4.1	9.28	17.95	7.69	58.1	0.04	97.8	35	352
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	11	5.1	9.26	17.95	7.67	58.1	0.04	97.6	53	354
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	10	6.1	9.26	17.95	7.66	57.7	0.04	97.5	33	354
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	9	7.1	9.26	17.93	7.66	57.8	0.04	97.5	53	354
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	8	8.1	9.26	17.93	7.65	58.2	0.04	97.5	103	354
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	7	9.1	9.25	17.93	7.63	57.7	0.04	97.4	38	356
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	6	10.1	9.24	17.91	7.63	57.6	0.04	97.3	50	356
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	5	11.1	9.23	17.91	7.61	57.9	0.04	97.2	129	356
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	4	12.1	9.23	17.9	7.57	57.9	0.04	97.1	114	358
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	3	13.1	9.18	17.86	7.5	58.2	0.04	96.5	108	359
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	2	14.1	9.15	17.74	7.42	58.8	0.04	96	102	363
Windy Bay Shallow	3998	ASKB	9/30/98	11:21:17	8.5	1	15.1	8.18	16.38	7.19	56.7	0.04	83.4	17	368
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	16	0.4	9.33	13.06	7.41	53.4	0.03	87.5	29	347
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	15	1	9.31	13.04	7.4	53.4	0.03	87.4	36	348
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	14	2	9.34	13.02	7.44	53.4	0.03	87.6	39	346
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	13	3	9.36	13.02	7.41	53.3	0.03	87.8	39	348
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	12	4	9.33	13.01	7.4	53.4	0.03	87.5	26	349
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	11	5	9.36	12.99	7.42	53.4	0.03	87.7	21	347
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	10	6	9.34	12.99	7.41	53.2	0.03	87.5	51	348
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	9	7	9.35	12.97	7.4	53.2	0.03	87.5	48	348
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	8	8	9.34	12.96	7.39	53.2	0.03	87.5	34	348
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	7	9	9.34	12.96	7.39	53.1	0.03	87.5	38	348
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	6	10	9.34	12.94	7.4	53.5	0.03	87.4	34	347
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	5	11	9.35	12.94	7.39	53.2	0.03	87.5	37	347
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	4	12	9.34	12.94	7.39	53.5	0.03	87.4	44	347
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	3	13	9.35	12.94	7.38	53.1	0.03	87.5	39	347
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	2	14	9.34	12.94	7.38	53.4	0.03	87.4	114	346
Windy Bay Shallow	4298	DTASKB	10/20/98	10:40:14	7.1	1	15	9.33	12.92	7.37	53.5	0.03	87.3	311	351
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	15	0.5	8.61	10.05	7.31	53.3	0.03	75.9	52	375
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	14	1.5	8.6	10.07	7.33	53.4	0.03	75.8	42	375
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	13	2.5	8.6	10.07	7.32	53.3	0.03	75.8	37	375
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	12	3.5	8.59	10.07	7.3	53.2	0.03	75.7	111	376
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	11	4.5	8.6	10.07	7.31	53.2	0.03	75.8	46	375
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	10	5.5	8.59	10.07	7.3	53.2	0.03	75.7	50	376

Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	9	6.5	8.59	10.07	7.29	53.1	0.03	75.7	49	376
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	8	7.6	8.59	10.07	7.27	53	0.03	75.7	41	378
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	7	8.5	8.59	10.05	7.29	53.1	0.03	75.7	36	377
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	6	9.5	8.58	10.04	7.3	53.3	0.03	75.6	36	376
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	5	10.5	8.58	10.02	7.29	53.5	0.03	75.5	36	377
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	4	11.5	8.58	10.02	7.29	53.1	0.03	75.5	37	377
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	3	12.5	8.57	10.02	7.3	53.3	0.03	75.4	105	377
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	2	13.4	8.56	9.99	7.29	53.2	0.03	75.3	35	377
Windy Bay Shallow	4598	KB AS	11/12/98	11:22:39	8	1	14.5	8.55	9.73	7.31	53.8	0.03	74.7	1114	377

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	16	0.3	13.02	3.89	7	52.1	0.03	98.2	55	394
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	15	1.2	13.11	3.74	7.05	52	0.03	98.5	215	396
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	14	3.2	13.19	3.73	7.04	52	0.03	99.1	131	398
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	13	5.2	13.18	3.73	7.02	52.1	0.03	99	213	398
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	12	7.2	13.12	3.69	7.01	52.2	0.03	98.5	139	398
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	11	9.2	13.14	3.69	7.03	52.1	0.03	98.6	147	395
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	10	11.2	13.12	3.74	7.02	52.2	0.03	98.7	205	395
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	9	13.2	13.14	3.69	6.98	52.2	0.03	98.6	335	397
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	8	15.2	13.13	3.71	6.99	52.1	0.03	98.6	224	394
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	7	17.2	13.16	3.71	7	52.1	0.03	98.8	133	392
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	6	19.2	13.12	3.69	6.95	52.1	0.03	98.5	129	393
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	5	21.2	13.1	3.73	6.93	52.1	0.03	98.5	136	393
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	4	23.2	13.1	3.78	6.93	52.2	0.03	98.6	224	391
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	3	25.2	13.15	3.79	6.92	52.1	0.03	99	142	389
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	2	27.2	13.17	3.86	6.91	52.1	0.03	99.3	139	388
Windy Bay Deep	1098	DBRP	3/13/98	11:09:06	2.5	1	29.2	13.29	3.83	6.87	52.3	0.03	100.1	137	388
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	15	0.5	12.87	5.77	7.06	51.5	0.03	102.9	201	421
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	14	2.5	12.92	5.64	7.01	51.5	0.03	102.9	246	425
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	13	4.6	12.82	5.49	7.05	51.6	0.03	101.7	200	423
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	12	6.5	12.76	5.36	7.08	51.6	0.03	100.9	102	420
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	11	8.6	12.68	5.29	7.03	51.5	0.03	100	103	422
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	10	10.5	12.68	5.08	6.99	51.6	0.03	99.5	115	423
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	9	12.5	12.63	5.04	7	51.7	0.03	99.1	217	422
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	8	14.6	12.67	5.01	7.02	52	0.03	99.3	206	420
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	7	16.6	12.65	4.91	6.97	52.1	0.03	98.8	100	421
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	6	18.5	12.65	4.76	6.96	52.1	0.03	98.5	117	421
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	5	20.6	12.64	4.76	6.99	52.1	0.03	98.4	133	418
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	4	22.5	12.64	4.71	6.99	52.4	0.03	98.3	116	417
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	3	24.5	12.6	4.71	6.96	52.3	0.03	98	110	417
Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	2	26.5	12.46	4.69	6.96	52.8	0.03	96.8	141	415

Windy Bay Deep	1498	DBAS	4/8/98	11:26:34	3	1	28.5	12.46	4.69	6.96	53	0.03	96.8	217	413
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	15	0.3	12.4	6.79	6.97	48.5	0.03	103.1	43	444
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	14	1.4	12.3	6.59	7.03	48.4	0.03	101.8	58	441
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	13	3.4	12.22	6.81	6.99	48.4	0.03	101.7	100	443
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	12	5.5	12.27	6.63	6.98	48.4	0.03	101.6	49	444
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	11	7.7	12.3	6.56	6.95	48.5	0.03	101.7	125	445
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	10	9.6	12.27	6.33	6.95	48.4	0.03	100.8	138	444
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	9	11.8	12.21	6.13	6.92	48.5	0.03	99.9	150	445
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	8	13.8	12.12	5.85	6.89	48.9	0.03	98.5	122	446
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	7	15.8	11.96	5.34	6.8	50	0.03	95.9	110	449
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	6	17.7	11.96	5.17	6.8	50.1	0.03	95.4	107	449
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	5	19.6	11.98	4.88	6.8	50.1	0.03	94.9	133	449
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	4	21.6	11.98	4.79	6.77	50.2	0.03	94.6	139	450
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	3	23.7	11.95	4.78	6.77	50.1	0.03	94.4	240	450
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	2	25.7	12.02	4.78	6.75	50.2	0.03	94.9	109	450
Windy Bay Deep	1698	DBASRP	4/23/98	8:48:30	3.1	1	27.7	12.02	4.78	6.71	50.1	0.03	94.9	346	451
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	16	0.3	11.7	10.53	7.21	42	0.03	105.9	53	412
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	15	2.3	11.67	10.48	7.2	42.1	0.03	105.6	105	411
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	14	4.3	11.64	10.43	7.17	42.1	0.03	105.2	133	412
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	13	6.3	11.62	10.35	7.16	42.1	0.03	104.7	201	411
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	12	8.3	11.41	9.76	7.1	43	0.03	101.4	9	410
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	11	10.3	11.44	9.4	7.03	43.5	0.03	100.8	153	411
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	10	12.3	11.4	8.68	6.9	44.7	0.03	98.7	227	416
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	9	14.3	11.4	8.61	6.92	44.8	0.03	98.6	244	413
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	8	16.3	11.12		6.85	45.9	0.03	94.6	153	412
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	7	18.3	11.35	7.14	6.79	47.3	0.03	94.6	137	415
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	6	20.3	11.28	6.94	6.82	47.7	0.03	93.6	124	411
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	5	22.3	11.29	6.69	6.81	48	0.03	93.1	119	411
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	4	24.3	11.19	6.61	6.72	48.1	0.03	92.1	159	414
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	3	26.3	11.05	6.23	6.7	48.8	0.03	90.1	118	412
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	2	28.3	11.05	6.15	6.65	49	0.03	89.9	427	414
Windy Bay Deep	2198	JLDTAS	5/26/98	11:37	3.4	1	30.3	11.12	6.18	6.65	48.9	0.03	90.6	227	411
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	11	0.4	10.91	17.52	7.78	43.9	0.03	113.5	52	399
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	10	2.6	11.07	16.07	7.73	43.4	0.03	112.4	54	403
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	9	5.6	11.06	15.49	7.66	43.5	0.03	110.9	100	406
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	8	8.6	11.12	15.28	7.62	43.5	0.03	111.1	105	407
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	7	11.6	11.55	13.87	7.62	43.1	0.03	111.8	128	408
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	6	14.6	11.15	12.04	7.28	43.4	0.03	103.6	203	416
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	5	17.6	10.83	9.74	7.1	44.3	0.03	95.3	204	420
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	4	20.6	10.7	8.61	7.04	45	0.03	91.6	151	421
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	3	23.6	10.64	8.22	7.02	46.6	0.03	90.3	117	421

Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	2	26.6	10.59	7.63	6.99	48.2	0.03	88.5	115	421
Windy Bay Deep	2398	DTJLAS	6/8/98	11:07:23	4.2	1	29.6	10.11	8.1	7	47.8	0.03	85.6	216	432
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	12	0.5	10.5	18.17	8.02	43.4	0.03	112	126	391
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	11	1.5	10.55	18.05	7.99	43.3	0.03	112.2	115	395
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	10	4.5	11.1	15.86	7.88	42.4	0.03	112.8	124	400
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	9	7.5	10.78	14.43	7.46	41.8	0.03	106.2	212	409
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	8	10.5	10.49	12.94	7.21	41.3	0.03	100	143	415
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	7	13.5	10.22	10.81	7.04	41.1	0.03	92.7	244	418
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	6	16.5	9.88	8.37	6.9	43.5	0.03	84.6	212	421
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	5	19.5	10.12	7.43	6.89	45.7	0.03	84.7	53	422
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	4	22.5	10.18	7.15	6.89	46.2	0.03	84.6	46	422
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	3	25.5	10.25	6.89	6.9	46.7	0.03	84.6	206	422
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	2	28.5	10.24	6.71	6.9	47.2	0.03	84.1	207	421
Windy Bay Deep	2598	DTASBH	6/24/98	11:43:39	4.5	1	31.5	9.98	6.71	6.91	47.4	0.03	82	455	421
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	16	0.5	9.56	21.94	7.83	47.3	0.03	109	105	330
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	15	2.2	9.66	21.06	7.91	47.1	0.03	108.3	142	326
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	14	4.2	10.07	20.47	7.97	46.3	0.03	111.6	216	326
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	13	6.2	10.77	18.6	8.23	44.8	0.03	115	205	323
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	12	8.2	10.98	17.36	8.23	44.2	0.03	114.2	138	325
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	11	10.2	10.37	15.91	7.57	43.2	0.03	104.6	225	338
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	10	12.2	9.1	13.02	6.97	41.7	0.03	86.2	155	348
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	9	14.2	9.06	10.18	6.83	41.1	0.03	80.4	135	349
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	8	16.2	9.07	9.32	6.81	41.8	0.03	78.8	142	348
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	7	18.2	9	8.47	6.78	43.2	0.03	76.6	133	347
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	6	20.2	9.06	8.25	6.78	43.5	0.03	76.8	208	345
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	5	22.2	9.35	7.7	6.79	44.7	0.03	78.1	131	343
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	4	24.2	9.67	6.96	6.78	46	0.03	79.4	104	342
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	3	26.2	9.38	6.66	6.76	47	0.03	76.4	128	340
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	2	28.2	9.36	6.48	6.76	47.4	0.03	75.9	144	339
Windy Bay Deep	2798	ASDNBH	7/8/98	9:49:41	4.5	1	30.2	9.38	6.48	6.77	47.4	0.03	76.1	416	336
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	17	0.4	9.39	21.93	7.86	51.8	0.03	106.9	50	372
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	16	1	9.45	21.62	7.88	51.5	0.03	107	110	373
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	15	3	9.75	20.66	7.9	50.2	0.03	108.4	107	373
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	14	5	9.71	20.05	7.89	49.6	0.03	106.6	113	375
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	13	7	10.12	19.22	7.77	49.2	0.03	109.3	101	378
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	12	9	10.44	16.9	7.54	47.6	0.03	107.5	112	384
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	11	11	10.19	15.36	7.23	46.2	0.03	101.5	103	390
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	10	13	9.24	13.45	6.94	45.5	0.03	88.3	221	394
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	9	15	8.53	10.76	6.76	45.2	0.03	76.6	50	397
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	8	17	8.54	9.56	6.71	46	0.03	74.6	55	397
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	7	19	8.85	9.06	6.72	46.4	0.03	76.3	104	396

Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	6	21	8.48	8.81	6.72	47.2	0.03	72.7	117	395
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	5	23	8.89	8.22	6.75	47.9	0.03	75.2	105	394
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	4	25	9.29	7.43	6.77	49.7	0.03	77	51	394
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	3	27	9.27	6.9	6.77	50.7	0.03	75.8	122	393
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	2	29	9.35	6.67	6.79	51	0.03	76	204	392
Windy Bay Deep	2998	ASBH	7/20/98	10:06:45	8.2	1	31	8.76	7.22	6.83	51.3	0.03	72.2	315	393
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	16	0.4	8.78	23.55	7.81	57.5	0.04	103	42	362
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	15	1.8	8.8	23.5	7.8	57.5	0.04	103.1	46	364
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	14	3.9	8.86	23.27	7.81	58.2	0.04	103.4	121	365
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	13	5.8	8.89	23.17	7.76	57.9	0.04	103.5	116	367
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	12	7.8	8.87	23.12	7.67	57.7	0.04	103.1	128	371
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	11	9.9	9.98	19.39	7.36	49.6	0.03	108	108	379
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	10	11.8	9.98	14.05	6.96	46.8	0.03	96.6	100	389
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	9	13.8	9.01	12.02	6.8	46.3	0.03	83.2	128	391
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	8	15.8	8.34	10.49	6.7	46.6	0.03	74.4	110	393
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	7	17.8	7.77	9.1	6.63	48.1	0.03	67	104	394
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	6	19.8	8.22	8.17	6.65	49.3	0.03	69.4	114	393
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	5	21.8	8.76	7.61	6.69	49.8	0.03	72.9	117	391
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	4	23.8	8.89	7.07	6.69	51.4	0.03	73	123	391
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	3	25.8	8.69	6.79	6.69	51.8	0.03	70.8	125	389
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	2	27.8	8.21	6.64	6.68	52.4	0.03	66.7	101	387
Windy Bay Deep	3298	DBAS	8/10/98	9:53:02	8.8	1	29.8	7.72	7.04	6.7	53.6	0.03	63.3	252	385
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	16	0.9	9.13	21.8	7.8	53.4	0.03	104.1	116	355
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	15	2.9	9.21	21.41	7.8	53.6	0.03	104.2	55	359
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	14	4.9	9.18	21.38	7.76	53.6	0.03	103.8	46	360
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	13	6.9	9.19	21.31	7.69	53.4	0.03	103.7	48	364
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	12	8.9	9.18	21.22	7.59	52.8	0.03	103.4	37	368
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	11	10.9	9.04	20.76	7.45	52.7	0.03	101	200	373
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	10	12.9	9.49	15.33	6.93	45.1	0.03	94.8	142	387
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	9	14.9	8.71	12.04	6.74	44.2	0.03	80.9	126	392
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	8	16.9	7.48	9.99	6.59	45.9	0.03	66.3	113	395
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	7	18.9	7.5	9.15	6.57	45.8	0.03	65.1	110	396
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	6	20.9	7.64	8.42	6.57	46.6	0.03	65.2	126	396
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	5	22.9	8.13	7.97	6.58	46.9	0.03	68.6	228	395
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	4	24.9	8.54	7.28	6.59	48.1	0.03	70.8	301	395
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	3	26.9	8.47	7.02	6.57	48.5	0.03	69.8	226	395
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	2	28.9	8.27	6.71	6.54	49.4	0.03	67.6	142	396
Windy Bay Deep	3498	ASDNGL	8/24/98	13:50:30	9	1	30.9	7.93	7.15	6.54	48.7	0.03	65.5	820	401
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	16	0.3	9.07	21.96	7.89	56.1	0.04	103.7	31	336
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	15	2.2	9.05	21.55	7.79	55.8	0.04	102.7	44	342
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	14	4.2	9.08	21.41	7.79	55.9	0.04	102.8	51	343

Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	13	6.2	9.08	21.36	7.74	55.9	0.04	102.7	54	347
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	12	8.2	9.04	21.25	7.6	55.8	0.04	102	110	353
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	11	10.2	8.76	20.59	7.22	55	0.04	97.6	54	366
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	10	12.2	9.24	13.72	6.81	46	0.03	89.2	115	376
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	9	14.2	7.86	11.48	6.65	45.5	0.03	72.1	111	380
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	8	16.2	7.26	9.94	6.56	46.6	0.03	64.2	110	382
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	7	18.2	7.4	8.96	6.57	46.9	0.03	64	122	381
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	6	20.2	7.67	8.13	6.56	48.2	0.03	65	109	381
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	5	22.2	8.12	7.66	6.58	49.1	0.03	68	103	381
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	4	24.2	8.23	7.35	6.57	49.3	0.03	68.4	53	381
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	3	26.2	8.31	7.05	6.57	50	0.03	68.6	158	381
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	2	28.2	7.92	6.76	6.54	51	0.03	64.9	122	382
Windy Bay Deep	3598	DTAS	9/2/98	10:03:06	8.7	1	30.2	7.39	7.08	6.54	50.5	0.03	61	606	382
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	16	0.5	9.27	18.28	7.7	57.5	0.04	98.3	111	347
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	15	2.9	9.29	18	7.69	57.3	0.04	98	121	348
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	14	4.9	9.29	17.97	7.66	57.5	0.04	98	130	351
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	13	6.9	9.27	17.95	7.63	57.8	0.04	97.7	109	352
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	12	8.9	9.27	17.88	7.58	57.8	0.04	97.5	121	354
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	11	10.9	9.25	17.87	7.52	58.2	0.04	97.3	152	356
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	10	12.9	9.12	17.85	7.33	57.6	0.04	95.9	140	363
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	9	14.9	6.72	12.6	6.64	47.7	0.03	63.1	122	377
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	8	16.9	6.29	9.92	6.6	48.5	0.03	55.5	141	377
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	7	18.9	6.58	9.01	6.59	48.8	0.03	56.8	157	377
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	6	20.9	7.02	8.48	6.62	49.2	0.03	59.8	153	375
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	5	22.9	7.6	7.88	6.64	49.7	0.03	63.8	142	374
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	4	24.9	7.87	7.63	6.66	49.8	0.03	65.6	143	373
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	3	26.9	7.92	6.92	6.65	51	0.03	64.9	135	373
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	2	28.8	7.26	6.73	6.63	51.8	0.03	59.2	124	372
Windy Bay Deep	3998	ASKB	9/30/98	12:07:00	10	1	30.9	6.89	6.76	6.63	52	0.03	56.3	549	374
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	16	0.4	9.2	13.14	7.36	53.3	0.03	86.5	41	353
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	15	2.3	9.18	13.12	7.36	53.3	0.03	86.3	31	354
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	14	4.3	9.18	13.06	7.33	53.1	0.03	86.2	30	356
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	13	6.3	9.18	13.06	7.31	53.3	0.03	86.2	35	357
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	12	8.3	9.19	13.04	7.31	53.1	0.03	86.2	34	357
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	11	10.3	9.17	13.02	7.3	53.3	0.03	86	46	358
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	10	12.3	9.17	13.02	7.26	52.9	0.03	86	30	359
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	9	14.3	9.15	13.02	7.24	52.9	0.03	85.8	32	360
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	8	16.3	9.14	12.99	7.2	53.1	0.03	85.6	34	361
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	7	18.3	9.03	13.01	7.1	52.9	0.03	84.6	54	364
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	6	20.3	6.75	11.54	6.67	49.1	0.03	61.2	40	370
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	5	22.3	6.13	9.69	6.6	47.2	0.03	53.2	113	370
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	4	24.3	6.89	8.2	6.62	46.8	0.03	57.7	53	369

Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	3	26.3	7.02	7.63	6.62	47.3	0.03	57.9	53	369
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	2	28.3	7.14	7.24	6.63	47.7	0.03	58.3	50	367
Windy Bay Deep	4298	DTASKB	10/20/98	11:14:13	9	1	30.3	7.05	7.04	6.64	48.2	0.03	57.4	113	367
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	16	0.4	8.51	10.2	7.28	53.2	0.03	75.2	37	377
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	15	1.4	8.5	10.2	7.28	53.1	0.03	75.1	53	377
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	14	3.5	8.47	10.22	7.23	53.3	0.03	74.9	108	379
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	13	5.5	8.49	10.2	7.23	52.9	0.03	75	114	379
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	12	7.5	8.47	10.22	7.18	52.9	0.03	74.9	104	381
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	11	9.5	8.46	10.22	7.14	53.2	0.03	74.8	46	382
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	10	11.5	8.46	10.22	7.13	53.1	0.03	74.8	50	382
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	9	13.5	8.45	10.23	7.08	53.1	0.03	74.8	104	383
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	8	15.5	8.4	10.2	6.98	53.8	0.03	74.3	145	385
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	7	17.4	6.04	8.55	6.6	50.9	0.03	51.3	147	391
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	6	19.5	6.07	7.4	6.56	48.4	0.03	50.1	115	391
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	5	21.5	5.94	7.04	6.55	48.4	0.03	48.6	104	392
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	4	23.5	5.71	6.99	6.54	49	0.03	46.7	51	391
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	3	25.5	5.68	6.97	6.55	49	0.03	46.4	32	391
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	2	27.7	5.74	6.92	6.55	48.9	0.03	46.9	112	391
Windy Bay Deep	4598	KB AS	11/12/98	11:44:00	8.6	1	29.5	5.69	6.92	6.56	48.8	0.03	46.5	1828	390

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
CDA River	1098	DBRP	3/13/98	11:54:53	2	18	0.4	13.07	4.76	6.9	58.3	0.04	100.9	59	395
CDA River	1098	DBRP	3/13/98	11:54:53	2	17	1	13.08	4.72	6.9	58.3	0.04	100.9	51	396
CDA River	1098	DBRP	3/13/98	11:54:53	2	16	1.5	13.08	4.66	6.9	57.8	0.04	100.7	50	397
CDA River	1098	DBRP	3/13/98	11:54:53	2	15	2	13.09	4.54	6.91	57	0.04	100.5	42	396
CDA River	1098	DBRP	3/13/98	11:54:53	2	14	2.5	13.08	4.49	6.9	58.2	0.04	100.3	50	396
CDA River	1098	DBRP	3/13/98	11:54:53	2	13	3	13.09	4.41	6.93	57.5	0.04	100.1	40	394
CDA River	1098	DBRP	3/13/98	11:54:53	2	12	3.5	13.09	4.44	6.94	57.4	0.04	100.3	57	393
CDA River	1098	DBRP	3/13/98	11:54:53	2	11	4	13.08	4.44	6.94	58	0.04	100.2	104	393
CDA River	1098	DBRP	3/13/98	11:54:53	2	10	4.5	13.11	4.44	6.92	57.9	0.04	100.4	122	393
CDA River	1098	DBRP	3/13/98	11:54:53	2	9	5	13.14	4.51	6.9	60.9	0.04	100.8	105	393
CDA River	1098	DBRP	3/13/98	11:54:53	2	8	5.5	13.14	4.47	6.87	61.4	0.04	100.7	103	393
CDA River	1098	DBRP	3/13/98	11:54:53	2	7	6	13.14	4.38	6.88	61.5	0.04	100.4	44	392
CDA River	1098	DBRP	3/13/98	11:54:53	2	6	6.5	13.09	4.43	6.86	61.7	0.04	100.2	121	393
CDA River	1098	DBRP	3/13/98	11:54:53	2	5	7	13.14	4.47	6.82	61.7	0.04	100.7	102	393
CDA River	1098	DBRP	3/13/98	11:54:53	2	4	7.5	13.15	4.44	6.83	62	0.04	100.7	108	392
CDA River	1098	DBRP	3/13/98	11:54:53	2	3	8	13.2	4.46	6.77	62.1	0.04	101.1	52	394
CDA River	1098	DBRP	3/13/98	11:54:53	2	2	8.5	13.22	4.49	6.77	62.1	0.04	101.4	102	393
CDA River	1098	DBRP	3/13/98	11:54:53	2	1	9	13.25	4.39	6.76	63.3	0.04	101.3	151	392

CDA River	1498	DBAS	4/8/98	13:19:28	3.2	10	0.3	12.28	7.14	7.04	43.5	0.03	101.6	110	411
CDA River	1498	DBAS	4/8/98	13:19:28	3.2	9	1.6	12.23	7.04	7.01	43.6	0.03	100.9	139	414
CDA River	1498	DBAS	4/8/98	13:19:28	3.2	8	2.6	12.26	6.96	6.99	43.6	0.03	100.9	111	415
CDA River	1498	DBAS	4/8/98	13:19:28	3.2	7	3.6	12.26	7.04	7.04	43.5	0.03	101.2	118	413
CDA River	1498	DBAS	4/8/98	13:19:28	3.2	6	4.6	12.26	6.96	6.93	43.6	0.03	100.9	140	418
CDA River	1498	DBAS	4/8/98	13:19:28	3.2	5	5.6	12.23	6.96	6.99	43.7	0.03	100.7	110	415
CDA River	1498	DBAS	4/8/98	13:19:28	3.2	4	6.6	12.23	6.87	6.98	43.9	0.03	100.5	109	415
CDA River	1498	DBAS	4/8/98	13:19:28	3.2	3	7.6	12.23	6.86	6.95	44	0.03	100.4	56	415
CDA River	1498	DBAS	4/8/98	13:19:28	3.2	2	8.6	12.23	6.84	6.95	43.9	0.03	100.4	100	415
CDA River	1498	DBAS	4/8/98	13:19:28	3.2	1	9.6	12.24	6.78	6.93	44.4	0.03	100.3	407	415
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	11	0.1	11.53	12.99	7.01	47.1	0.03	107.6	57	376
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	10	1.3	11.68	10.12	7.04	49.1	0.03	102.1	53	373
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	9	2.3	11.7	9.56	6.98	50.3	0.03	100.9	42	374
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	8	3.3	11.72	9.49	6.91	50.3	0.03	100.9	34	377
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	7	4.3	11.65	9.35	6.89	50.2	0.03	99.9	53	377
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	6	5.3	11.54	8.28	6.82	49.8	0.03	96.5	51	378
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	5	6.2	11.5	7.46	6.8	48.4	0.03	94.3	108	378
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	4	7.2	11.39	7.02	6.75	48.5	0.03	92.3	107	378
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	3	8.2	11.3	6.59	6.77	47.9	0.03	90.6	59	375
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	2	9.3	11.35	6.08	6.73	48.5	0.03	89.8	109	375
CDA River	1698	DBASRP	4/23/98	12:46:10	2.3	1	10.3	11.42	5.67	6.7	49.4	0.03	89.4	207	374
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	11	0.3	11.07	11.13	7.03	40.5	0.03	101.7	42	395
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	10	1.8	11.08	11.15	6.98	40.5	0.03	101.8	49	397
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	9	2.8	11.05	11.12	6.98	40.4	0.03	101.5	103	396
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	8	3.8	11.04	11.05	7.06	39.9	0.03	101.2	112	389
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	7	4.8	11.01	11	7	40	0.03	100.9	119	390
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	6	5.8	10.99	10.94	7.02	40.2	0.03	100.5	55	386
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	5	6.8	10.98	10.68	6.92	42.7	0.03	99.7	120	390
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	4	7.8	11.03	10.58	6.89	44	0.03	100	128	389
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	3	8.8	11.09	10.12	6.85	49.1	0.03	99.4	57	387
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	2	9.8	10.99	9.66	6.76	49.5	0.03	97.5	118	389
CDA River	2198	ASJLDT	5/26/98	12:34:22	3.5	1	10.8	11.14	8.47	6.78	44.5	0.03	96	200	387
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	12	0.3	10.65	17.18	7.58	42.6	0.03	110.7	129	399
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	11	1.1	10.75	16.19	7.55	42.9	0.03	109.5	118	403
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	10	2.1	10.85	15.56	7.54	42.9	0.03	109	113	405
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	9	3.1	10.92	14.96	7.52	42.2	0.03	108.3	56	407
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	8	4.1	10.85	14.86	7.49	43.4	0.03	107.4	150	408
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	7	5.1	10.84	14.56	7.38	49.4	0.03	106.6	119	412
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	6	6.1	10.6	13.98	7.25	53.8	0.03	102.9	115	416
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	5	7.1	10.64	13.63	7.21	55.1	0.04	102.5	49	417
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	4	8.1	10.64	13.4	7.22	53.1	0.03	102	115	417

CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	3	9.1	10.68	12.94	7.25	44.1	0.03	101.3	119	415
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	2	10.1	10.76	12.43	7.24	41.4	0.03	100.8	132	415
CDA River	2398	DTJLAS	6/8/98	11:39:46	3.6	1	11.1	10.57	11.58	7.2	40.8	0.03	97.2	244	416
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	12	0.6	9.81	19.83	7.59	45.2	0.03	107.9	46	385
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	11	1.9	9.98	18.92	7.6	47.1	0.03	107.7	46	387
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	10	2.9	10.01	18.85	7.59	47.2	0.03	107.9	33	388
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	9	3.9	10	18.85	7.56	47.3	0.03	107.8	105	390
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	8	4.9	10.58	17.54	7.46	62	0.04	111	53	395
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	7	5.9	10.4	16.69	7.36	50.3	0.03	107.2	50	395
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	6	6.9	10.44	15.79	7.33	45.2	0.03	105.6	50	396
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	5	7.9	10.5	15.54	7.28	48	0.03	105.6	112	397
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	4	8.9	10.49	14.86	7.21	47.1	0.03	104	54	399
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	3	9.9	10.46	14.74	7.15	48.1	0.03	103.4	42	400
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	2	10.9	10.32	14.16	7.08	48.3	0.03	100.8	126	401
CDA River	2598	DTASJL	6/23/98	13:30:13	5.4	1	11.9	9.96	12.44	6.94	42.5	0.03	93.6	29	407
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	11	0.4	9.23	22.99	7.87	50.4	0.03	107.4	126	324
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	10	1.4	9.26	22.92	7.96	51.2	0.03	107.5	112	319
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	9	2.4	9.26	22.45	7.89	52.2	0.03	106.6	133	321
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	8	3.4	9.59	21.86	7.9	56.9	0.04	109.1	129	322
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	7	4.4	9.52	21.39	7.81	48.4	0.03	107.4	100	322
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	6	5.4	10.51	19.06	7.87	54.2	0.03	113.3	208	322
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	5	6.4	10.68	17.95	7.92	47.6	0.03	112.5	201	320
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	4	7.4	10.64	16.93	7.72	45.5	0.03	109.8	112	323
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	3	8.4	10.45	16.19	7.54	44.1	0.03	106.2	138	325
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	2	9.4	10.16	15.96	7.41	43.8	0.03	102.7	153	326
CDA River	2798	ASDNBH	7/8/98	10:29:22	5.4	1	10.4	9.81	16.09	7.3	43.3	0.03	99.4	550	327
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	12	0.3	9.01	23.86	7.85	54.8	0.04	106.4	47	333
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	11	1.3	9.05	23.6	7.87	55	0.04	106.3	108	332
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	10	2.3	9.13	23.37	7.89	59.5	0.04	106.8	51	333
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	9	3.3	9.15	23.29	7.88	63.1	0.04	106.9	56	333
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	8	4.3	9.05	23.08	7.81	63.3	0.04	105.2	57	336
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	7	5.3	8.94	22.31	7.59	65.3	0.04	102.5	34	339
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	6	6.3	10.21	19.61	7.9	49.5	0.03	111.1	141	335
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	5	7.3	10.35	18.9	7.87	48.8	0.03	111	102	334
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	4	8.3	10.54	18.25	7.76	48.3	0.03	111.6	108	338
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	3	9.3	9.66	16.91	7.21	48.7	0.03	99.4	110	346
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	2	10.3	9.16	14.81	7.06	46.3	0.03	90.2	138	347
CDA River	2998	ASBH	7/20/98	10:55:07	4.6	1	11.3	8.12	13.91	6.95	46.4	0.03	78.4	244	347
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	13	0.3	8.62	24.59	7.71	64.6	0.04	103.1	47	343
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	12	1	8.67	24.09	7.73	64.6	0.04	102.7	46	342

CDA River	3298	DBAS	8/10/98	10:52:11	6.6	11	1.9	8.7	23.84	7.71	65.5	0.04	102.6	27	343
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	10	2.8	8.7	23.82	7.71	65.9	0.04	102.5	44	343
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	9	3.7	8.71	23.78	7.71	65.5	0.04	102.6	102	343
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	8	4.8	8.72	23.76	7.7	66.2	0.04	102.7	37	344
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	7	5.7	8.73	23.75	7.67	67.3	0.04	102.8	36	345
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	6	6.7	8.73	23.75	7.64	68.5	0.04	102.8	47	346
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	5	7.7	8.17	23.53	7.44	71	0.05	95.8	125	351
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	4	8.7	9.57	19.38	7.33	50.7	0.03	103.6	42	353
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	3	9.8	9.75	18.95	7.33	50	0.03	104.6	50	353
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	2	10.8	9.69	17.86	7.28	49	0.03	101.6	132	353
CDA River	3298	DBAS	8/10/98	10:52:11	6.6	1	11.8	9.14	16.86	7.21	48.7	0.03	93.9	206	354
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	13	0.2	9.13	22.93	7.93	57.7	0.04	106.4	34	331
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	12	1	9.17	22.29	7.96	57.5	0.04	105.5	42	330
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	11	2	9.26	21.83	7.95	57.7	0.04	105.6	51	332
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	10	3	9.24	21.76	7.91	58.6	0.04	105.2	107	333
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	9	4	9.24	21.7	7.9	59.2	0.04	105.1	116	333
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	8	5	9.24	21.65	7.87	59.8	0.04	105	118	333
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	7	6	9.23	21.6	7.85	59.2	0.04	104.8	108	334
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	6	7	9.19	21.48	7.73	62.3	0.04	104.1	55	338
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	5	8	9.01	21.39	7.59	70	0.04	101.9	29	342
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	4	9	8.9	21.26	7.5	80.4	0.05	100.4	107	345
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	3	10	8.8	21.09	7.33	85.9	0.06	98.9	118	350
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	2	11	8.74	16.59	6.82	47	0.03	89.8	114	357
CDA River	3498	ASDNGL	8/25/98	11:44:46	7	1	11.6	7.89	16.04	6.78	46.2	0.03	80	737	358
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	12	0.3	9.2	22.43	7.96	59.9	0.04	106.2	101	323
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	11	1.3	9.23	21.99	7.9	61	0.04	105.6	47	327
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	10	2.3	9.05	21.55	7.75	69.5	0.04	102.7	47	333
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	9	3.3	8.95	21.46	7.72	73.7	0.05	101.5	112	334
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	8	4.3	9.13	21.39	7.82	64.4	0.04	103.4	47	330
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	7	5.3	9.21	21.37	7.87	60.3	0.04	104.2	51	329
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	6	6.3	9.2	21.32	7.84	59.6	0.04	104	122	330
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	5	7.3	9.23	21.3	7.81	59.2	0.04	104.3	130	331
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	4	8.3	9.15	21.25	7.62	59.6	0.04	103.2	51	338
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	3	9.3	9.06	21.21	7.41	60.4	0.04	102.2	100	345
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	2	10.3	7.94	19.4	6.96	56.1	0.04	86.4	118	356
CDA River	3598	DTAS	9/2/98	11:23:48	7.1	1	11.3	7.74	17.32	6.87	48.7	0.03	80.8	759	356
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	11	0.3	9.24	18.73	7.76	62.9	0.04	98.9	52	335
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	10	1.9	9.28	18.08	7.77	63	0.04	98	104	336
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	9	2.9	9.29	18.05	7.75	63.5	0.04	98.1	133	338
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	8	3.9	9.32	18.03	7.75	65.3	0.04	98.4	108	338
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	7	4.9	9.34	17.98	7.73	65.1	0.04	98.5	119	339

CDA River	3998	ASKB	9/30/98	12:55:00	7.4	6	5.9	9.33	17.9	7.7	66	0.04	98.2	123	340
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	5	7	9.32	17.83	7.63	72.4	0.05	98	107	343
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	4	7.9	9.26	17.62	7.57	74.8	0.05	96.9	104	345
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	3	8.9	9.23	17.52	7.53	78.2	0.05	96.4	140	345
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	2	9.9	8.96	17.37	7.45	87.7	0.06	93.2	135	347
CDA River	3998	ASKB	9/30/98	12:55:00	7.4	1	10.9	8.85	17.32	7.39	89.7	0.06	92.1	818	353
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	12	0.4	9.37	12.45	7.36	58.5	0.04	86.8	34	357
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	11	0.8	9.38	12.43	7.38	58.5	0.04	86.8	30	356
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	10	1.8	9.36	12.43	7.38	58.6	0.04	86.6	44	356
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	9	2.8	9.36	12.41	7.34	58.6	0.04	86.5	39	358
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	8	3.8	9.34	12.4	7.34	58.3	0.04	86.4	30	357
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	7	4.8	9.26	12.37	7.32	58.3	0.04	85.6	46	357
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	6	5.8	9.23	12.3	7.31	59	0.04	85.1	47	356
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	5	6.8	9.23	12.2	7.3	59.2	0.04	85	31	356
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	4	7.8	9.36	11.84	7.3	61.3	0.04	85.4	42	356
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	3	8.8	9.51	11.4	7.27	66.5	0.04	86	30	356
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	2	9.8	9.63	11.17	7.25	68.4	0.04	86.5	26	354
CDA River	4298	DTASKB	10/20/98	9:51:12	7.1	1	10.8	9.73	10.63	7.22	74.3	0.05	86.3	218	353
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	12	0.3	8.53	9.55	7.37	57.2	0.04	74.3	30	340
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	11	1	8.51	9.55	7.33	57.3	0.04	74.1	43	342
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	10	2	8.52	9.55	7.36	57.4	0.04	74.2	38	340
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	9	3	8.53	9.55	7.33	57.7	0.04	74.3	42	341
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	8	4	8.52	9.55	7.31	57.6	0.04	74.2	46	342
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	7	5	8.51	9.53	7.3	57.8	0.04	74.1	46	343
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	6	6	8.55	9.43	7.3	58.6	0.04	74.2	42	342
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	5	7	8.53	9.46	7.28	58.2	0.04	74.1	112	343
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	4	8	8.65	9.07	7.3	63.1	0.04	74.4	119	340
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	3	9	8.74	8.68	7.28	66.5	0.04	74.5	101	339
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	2	9.9	9.21	6.91	7.22	88.4	0.06	75.2	307	339
CDA River	4598	KB AS	11/12/98	12:34:00	5.5	1	11	9.23	6.99	7.21	90	0.06	81.1	9	342

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	18	0.5	12.84	4.14	6.84	44.3	0.01	149.5	4	375
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	17	1.6	12.87	3.98	7.01	44.3	0.03	97.3	115	392
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	16	2.6	12.79	3.79	6.96	44.3	0.03	96.3	116	395
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	15	3.6	12.79	3.84	7	44.1	0.03	96.4	108	392
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	14	4.6	12.83	3.89	6.89	44.3	0.03	96.8	121	398
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	13	5.6	12.79	3.86	6.96	44.3	0.03	96.5	53	392
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	12	6.6	12.78	3.76	6.92	44.5	0.03	96.1	102	395
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	11	7.6	12.78	3.76	6.99	44.4	0.03	96.1	126	390

Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	10	8.6	12.8	3.76	7	44.5	0.03	96.2	50	389
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	9	9.6	12.77	3.78	6.96	44.3	0.03	96.1	111	391
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	8	10.6	12.77	3.79	6.94	44.4	0.03	96.2	114	391
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	7	11.6	12.76	3.79	6.96	44.5	0.03	96.1	159	389
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	6	12.6	12.79	3.78	6.95	44.6	0.03	96.2	120	389
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	5	13.6	12.79	3.79	6.88	44.6	0.03	96.3	107	391
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	4	14.6	12.79	3.78	6.9	44.6	0.03	96.2	109	390
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	3	15.7	12.74		6.9	44.5	0.03	96	146	388
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	2	16.6	12.73	3.83	6.87	44.6	0.03	95.9	135	388
Mid Lake CDA	1098	DBRP	3/13/98	12:25:26	1.9	1	17.6	12.77	3.83	6.88	44.7	0.03	96.2	227	387
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	19	0.5	12.45	8.56	7.14	39.4	0.03	106.7	111	410
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	18	1.5	12.41	8.15	7.08	39.1	0.03	105.2	133	415
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	17	2.5	12.6	7.6	7.08	39.2	0.03	105.4	126	416
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	16	3.5	12.56	7.12	7.08	39	0.02	103.8	39	415
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	15	4.6	12.48	7.02	7.02	39	0.02	102.9	110	417
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	14	5.5	12.31	6.99	7.06	39.1	0.03	101.5	141	415
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	13	6.4	12.3	6.91	7.02	39.2	0.03	101.2	112	416
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	12	7.4	12.21	6.66	6.96	39.3	0.03	99.8	103	418
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	11	8.6	12.24	6.61	6.92	39.4	0.03	99.9	109	419
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	10	9.5	12.21	6.53	6.94	39.5	0.03	99.5	113	417
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	9	10.5	12.05	6.3	6.94	39.9	0.03	97.6	121	416
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	8	11.6	12.03	6.23	6.9	39.9	0.03	97.3	135	417
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	7	12.5	12.02	5.97	6.88	39.8	0.03	96.6	121	417
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	6	13.6	12.02	5.8	6.83	40.9	0.03	96.1	225	419
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	5	14.5	12.08	5.64	6.9	42.7	0.03	96.2	119	415
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	4	15.5	12	5.59	6.87	43	0.03	95.4	202	415
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	3	16.5	11.95	5.57	6.87	43.2	0.03	95	103	414
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	2	17.5	11.51	5.46	6.84	43.9	0.03	91.2	129	414
Mid Lake CDA	1498	DBAS	4/8/98	13:44:51	2.2	1	18.5	11.51	5.46	6.82	44	0.03	91.2	358	414
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	13	0.3	12.01	11.69	7.24	42.7	0.03	110.3	52	396
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	12	1.5	12.01	9.63	7.19	42.2	0.03	105.1	113	402
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	11	3	12.12	8.58	7.13	42.1	0.03	103.4	109	405
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	10	4.4	12	7.32	7.04	43.1	0.03	99.3	55	405
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	9	6	11.88	6.69	6.95	45	0.03	96.8	103	409
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	8	7.4	11.88	6.53	6.93	46.2	0.03	96.4	133	409
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	7	9	11.9	6.36	6.88	47.1	0.03	96.2	112	410
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	6	10.5	11.87	6.31	6.88	47.2	0.03	95.8	154	409
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	5	12	11.87	6.2	6.91	47.7	0.03	95.5	130	406
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	4	13.5	11.82	6.15	6.91	48.2	0.03	95	134	405
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	3	15	11.72	6	6.82	47.8	0.03	93.8	124	407
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	2	16.6	11.62	5.42	6.87	49.9	0.03	91.7	144	402
Mid Lake CDA	1698	DBASRP	4/21/98	14:41:39	2.7	1	18.2	11.21	5.36	6.83	51	0.03	88.3	235	404

Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	13	0.3	11.17	11.95	7.17	35	0.02	104.5	49	382
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	12	2	11.16	11.89	7.17	35.5	0.02	104.3	54	382
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	11	3.5	11.13	11.43	7.06	36.8	0.02	102.9	40	384
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	10	5	11.12	11.13	7.08	34.5	0.02	102.1	50	381
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	9	6.5	11.12	11.1	7.07	34.2	0.02	102.1	129	379
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	8	8	11.15	10.97	7.04	33.5	0.02	102	113	378
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	7	9.5	11.05	9.76	6.96	35.5	0.02	98.2	102	378
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	6	11	11.18	8.96	6.86	40.7	0.03	97.5	119	381
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	5	12.5	11.22	8.45	6.88	43.3	0.03	96.7	111	377
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	4	14	11.19	7.92	6.8	44.8	0.03	95.1	140	378
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	3	15.5	11.09	7.32	6.77	46.5	0.03	92.9	152	375
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	2	17	11.05	7.1	6.74	47.1	0.03	92.1	145	369
Mid Lake CDA	2198	ASJLDT	5/26/98	12:58:43	3.4	1	18.8	10.3	6.26	6.61	49	0.03	84	156	366
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	11	0.4	10.86	16.72	7.61	38.6	0.02	111.9	49	375
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	10	1.5	11.02	15.73	7.6	38.7	0.02	111.1	110	376
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	9	3	10.94	15.39	7.51	39.2	0.03	109.5	103	379
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	8	5	10.96	13.09	7.32	37.7	0.02	104.3	110	382
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	7	7	10.97	12.5	7.26	41.8	0.03	103	114	385
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	6	9	10.97	12.28	7.2	41.9	0.03	102.5	33	384
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	5	11	10.88	11.5	7.17	36.7	0.02	99.8	121	383
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	4	13	10.87	10.77	7.11	35.9	0.02	98.1	50	383
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	3	15	10.54	8.92	7.02	39.9	0.03	91	118	385
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	2	17	10.01	7.69	6.92	46.5	0.03	83.9	125	386
Mid Lake CDA	2398	DTJLAS	6/8/98	12:11:07	2.9	1	19	9.63	8.04	6.92	47	0.03	81.3	236	383
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	11	0.2	9.91	19.71	7.53	45.7	0.03	108.7	49	417
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	10	1	9.97	19.06	7.54	46	0.03	107.9	102	423
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	9	3	10.62	17.15	7.49	48	0.03	110.5	53	428
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	8	5	10.88	15.76	7.44	52.7	0.03	110	48	431
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	7	7	10.84	14.86	7.35	46.3	0.03	107.5	118	434
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	6	9	10.84	14.47	7.24	46.1	0.03	106.6	47	438
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	5	11	10.88	13.81	7.16	45.8	0.03	105.4	102	440
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	4	13	10.72	12.31	6.97	43.8	0.03	100.5	100	446
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	3	15	9.99	10.51	6.79	43	0.03	89.7	130	450
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	2	17	9.14	8.46	6.65	46.4	0.03	78.2	131	454
Mid Lake CDA	2598	DTJLAS	6/23/98	14:06:28	5	1	19	8.81	8.02	6.59	47.9	0.03	74.5	152	457
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	20	0.4	9.49	24.64	8.03	50.7	0.03	113.5	100	337
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	19	1	9.48	23.4	7.92	50.5	0.03	110.8	203	343
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	18	2	10.36	19.56	7.89	50.4	0.03	112.5	126	345
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	17	3	10.67	18.5	8.03	50.7	0.03	113.4	114	343
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	16	4	11.01	17.51	8.34	49.4	0.03	114.6	149	338

Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	15	5	11	16.75	8.11	49.3	0.03	112.8	122	343
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	14	6	10.95	16.58	8.08	48.3	0.03	111.9	124	344
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	13	7	10.92	16.53	8.07	47.8	0.03	111.5	115	346
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	12	8	10.76	16.27	7.8	47.5	0.03	109.2	112	352
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	11	9	10.42	15.61	7.48	46.7	0.03	104.3	105	356
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	10	10	10.23	14.91	7.27	46.6	0.03	100.9	117	359
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	9	11	10.21	14.72	7.24	46.6	0.03	100.3	223	359
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	8	12	9.93	14.03	7.08	45.5	0.03	96	136	361
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	7	13.1	9.53	12.84	6.93	44.3	0.03	89.8	122	362
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	6	14	9.24	12.07	6.89	43.2	0.03	85.5	53	362
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	5	15	8.96	10.85	6.77	43.8	0.03	80.6	113	362
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	4	16	8.85	10.46	6.75	43.9	0.03	78.9	123	362
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	3	17	8.66	9.72	6.72	45.4	0.03	75.9	118	361
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	2	18	7.82	8.76	6.64	47.2	0.03	66.9	145	360
Mid Lake CDA	2798	DTASBH	7/7/98	13:23:07	5.6	1	19	7.73	8.71	6.66	47.5	0.03	66.1	315	357
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	20	0.4	9.47	23.5	8.11	46.3	0.03	111.2	39	325
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	19	1	9.41	22.88	7.97	46.3	0.03	109.3	102	330
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	18	2	9.42	21.74	7.83	46.3	0.03	107	59	332
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	17	3	10.25	19.88	8.08	47.1	0.03	112.3	101	329
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	16	4	10.8	18.07	8.37	44.4	0.03	114.1	51	325
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	15	5	10.93	17.13	8.38	43.1	0.03	113.2	110	325
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	14	6	10.95	17.08	8.29	43.9	0.03	113.3	121	328
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	13	7	10.9	16.95	8.16	44.4	0.03	112.4	128	331
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	12	8	10.7	16.63	8.01	43.8	0.03	109.7	111	335
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	11	9	10.58	16.23	7.71	43.6	0.03	107.6	56	341
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	10	10	10.47	15.96	7.6	43.1	0.03	105.8	116	343
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	9	11	10.32	15.42	7.42	43	0.03	103.1	122	346
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	8	12	10.18	15.12	7.3	42.5	0.03	101	116	348
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	7	13	9.77	14.1	7.11	41.5	0.03	94.8	152	351
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	6	14	9.44	13.12	6.98	40.4	0.03	89.7	205	352
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	5	15	8.86	11.99	6.85	39.2	0.03	82	217	353
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	4	16	8.41	11.25	6.77	39.2	0.03	76.5	154	353
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	3	17	7.92	10.48	6.71	39.7	0.03	70.8	215	352
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	2	18	7.29	8.63	6.62	43.9	0.03	62.4	146	352
Mid Lake CDA	2798	ASDNBH	7/8/98	11:24:33	5.6	1	19	7.25	8.59	6.63	43.9	0.03	62	555	351
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	19	0.3	9.18	24.55	7.93	54.1	0.03	109.8	56	334
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	18	1.8	9.26	23.15	7.9	53.6	0.03	107.8	134	334
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	17	2.8	9.35	22.64	7.9	53.7	0.03	107.9	123	335
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	16	3.8	9.68	22.09	7.97	53.3	0.03	110.5	219	335
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	15	4.8	9.98	20.97	8.02	51.4	0.03	111.5	125	336
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	14	5.8	10.2	19.95	8.01	50.1	0.03	111.7	125	337
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	13	6.8	10.52	18.74	7.85	49	0.03	112.5	155	342

Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	12	7.8	10.08	16.31	7.27	47.5	0.03	102.5	135	354
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	11	8.8	9.14	13.96	6.94	45.8	0.03	88.3	121	359
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	10	9.8	8.59	12.87	6.8	45	0.03	81	111	361
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	9	10.8	8.6	11.7	6.76	44.9	0.03	79	139	360
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	8	11.8	8.44	11.21	6.73	45.2	0.03	76.6	151	360
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	7	12.8	8.37	10.84	6.71	45.4	0.03	75.4	157	359
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	6	13.8	8.3	10.05	6.67	46	0.03	73.4	155	358
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	5	14.8	7.79	9.28	6.63	47.2	0.03	67.6	128	357
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	4	15.8	7.75	8.97	6.63	47.3	0.03	66.7	32	356
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	3	16.8	8.21	8.74	6.68	47.9	0.03	70.3	55	351
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	2	17.8	8.42	8.72	6.71	47.8	0.03	72	22	349
Mid Lake CDA	2998	ASBH	7/20/98	11:13:27	8.7	1	18.8	8.49	8.66	6.77	47.9	0.03	72.6	222	343
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	13	0.3	8.5	24.59	7.73	59	0.04	101.6	48	343
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	12	1.9	8.56	23.87	7.73	58.8	0.04	101	39	343
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	11	3.4	8.59	23.64	7.71	59.1	0.04	100.9	49	343
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	10	4.9	8.7	23.49	7.7	58.8	0.04	102	110	344
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	9	6.6	8.7	23.4	7.62	59.2	0.04	101.8	104	347
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	8	7.8	9.57	20.65	7.39	52.7	0.03	106.2	54	355
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	7	9.8	10.06	19.06	7.33	49.8	0.03	108.1	46	356
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	6	11.1	9.85	17.61	7.12	48.5	0.03	102.8	25	361
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	5	12.4	9.14	15.99	6.95	47.8	0.03	92.2	103	365
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	4	14.1	7.96	12.74	6.76	47	0.03	74.8	108	368
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	3	15.4	7.03	11.16	6.69	47.7	0.03	63.7	46	368
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	2	17.1	6.06	9.58	6.66	49.1	0.03	52.9	56	368
Mid Lake CDA	3298	DBAS	8/10/98	11:21:08	9.8	1	18.8	4.84	10.07	6.71	50.9	0.03	42.7	130	369
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	20	0.3	9.16	22.36	7.92	56	0.04	105.6	105	334
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	19	1	9.25	21.95	7.98	55.3	0.04	105.7	107	334
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	18	2	9.25	21.78	7.96	55.3	0.04	105.4	113	337
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	17	3	9.25	21.54	7.92	55.2	0.04	104.9	100	336
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	16	4	9.24	21.46	7.87	55.3	0.04	104.6	102	338
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	15	5	9.25	21.39	7.82	55.3	0.04	104.6	44	339
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	14	6	9.19	21.33	7.79	55.4	0.04	103.8	56	340
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	13	7	9.14	21.4	7.73	55.1	0.04	103.4	51	343
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	12	8	9.13	21.32	7.58	55.3	0.04	103.1	28	349
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	11	9	9.04	20.84	7.34	53.5	0.03	101.1	113	355
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	10	10	9.31	19.37	7.11	49.2	0.03	101.2	115	361
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	9	11	8.07	16.51	6.82	45.9	0.03	82.7	107	368
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	8	12	7.71	14.82	6.73	45.6	0.03	76.2	152	370
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	7	13	6.98	13.2	6.63	44.8	0.03	66.6	224	372
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	6	14	6.93	11.79	6.54	45.6	0.03	64	30	374
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	5	15	6.46	10.72	6.5	46	0.03	58.2	37	375
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	4	16	6.34	9.9	6.48	46.5	0.03	56.1	123	375

Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	3	17	6.02	9.59	6.47	46.4	0.03	52.8	132	374
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	2	18	6.5	9.18	6.48	46.8	0.03	56.5	223	373
Mid Lake CDA	3498	ASDNGL	8/25/98	12:13:57	7.5	1	18.8	6.2	9.08	6.47	47.2	0.03	53.7	408	372
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	19	0.5	9.21	21.94	7.9	58.3	0.04	105.3	14	330
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	18	1.8	9.33	21.39	7.94	57.9	0.04	105.6	15	330
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	17	2.8	9.3	21.28	7.87	58.1	0.04	105	28	333
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	16	3.8	9.27	21.23	7.82	58.2	0.04	104.6	28	335
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	15	4.8	9.29	21.18	7.78	58.1	0.04	104.7	29	337
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	14	5.8	9.26	21.16	7.69	58.2	0.04	104.3	34	342
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	13	6.8	9.17	21.11	7.52	57.7	0.04	103.2	32	347
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	12	7.8	8.72	20.41	7.15	55.8	0.04	96.8	33	359
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	11	8.8	8.5	18.7	6.97	49.8	0.03	91.2	49	362
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	10	9.8	7.98	17.41	6.82	47.4	0.03	83.4	46	366
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	9	10.8	8.18	15.41	6.77	47	0.03	81.9	114	368
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	8	11.8	7.44	13.53	6.65	46.7	0.03	71.5	55	370
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	7	12.8	6.77	12.22	6.56	46.9	0.03	63.2	121	372
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	6	13.8	7.14	11.38	6.56	46.8	0.03	65.4	111	372
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	5	14.8	6.76	10.87	6.53	47.3	0.03	61.1	139	372
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	4	15.8	6.15	9.84	6.45	48.1	0.03	54.3	108	374
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	3	16.8	6.07	9.74	6.44	48	0.03	53.4	49	374
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	2	17.8	5.78	9.71	6.43	48.1	0.03	50.9	115	374
Mid Lake CDA	3598	DTAS	9/2/98	13:11:01	7.5	1	18.8	5.36	9.46	6.41	48.6	0.03	46.9	1017	374
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	19	0.3	9.25	18.94	7.77	61.1	0.04	99.5	34	335
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	18	1.6	9.31	18.05	7.77	61.1	0.04	98.3	40	338
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	17	2.6	9.28	17.93	7.74	61.1	0.04	97.7	102	340
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	16	3.6	9.29	17.86	7.73	60.8	0.04	97.7	55	340
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	15	4.6	9.23	17.84	7.71	60.8	0.04	97.1	51	341
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	14	5.6	9.21	17.81	7.68	60.7	0.04	96.8	124	343
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	13	6.6	9.19	17.76	7.63	61	0.04	96.5	132	345
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	12	7.6	9.17	17.73	7.56	62.5	0.04	96.1	52	348
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	11	8.6	9.09	17.58	7.53	62.6	0.04	95.1	102	348
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	10	9.6	9.1	17.54	7.5	63.6	0.04	95.1	105	350
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	9	10.6	9.1	17.54	0	64	0.04	95.1	100	351
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	8	11.6	9.06	17.49	7.42	64.4	0.04	94.5	156	353
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	7	12.6	8.37	16.92	7.09	64.6	0.04	86.3	108	363
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	6	13.6	7.35	15.38	6.82	57.8	0.04	73.4	115	368
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	5	14.6	5.53	13.04	6.58	49.5	0.03	52.4	124	373
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	4	15.6	4.79	11.81	6.54	49.6	0.03	44.1	119	374
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	3	16.6	4.51	10.09	6.51	49.9	0.03	39.9	154	375
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	2	17.6	3.75	9.48	6.48	50.7	0.03	32.7	246	375
Mid Lake CDA	3998	ASKB	9/30/98	13:31:00	5.9	1	18.6	4.07	9.33	6.5	51.1	0.03	35.4	831	373

Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	19	0.4	9.11	12.65	7.32	57.5	0.04	84.7	59	385
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	18	1.3	9.12	12.66	7.31	57.7	0.04	84.8	42	387
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	17	2.3	9.11	12.66	7.32	57.7	0.04	84.7	119	387
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	16	3.3	9.1	12.66	7.29	57.7	0.04	84.6	129	390
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	15	4.3	9.11	12.63	7.32	57.4	0.04	84.7	109	388
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	14	5.3	9.1	12.63	7.31	57.7	0.04	84.6	53	389
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	13	6.3	9.11	12.6	7.3	57.7	0.04	84.6	117	389
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	12	7.3	9.13	12.56	7.3	57	0.04	84.7	59	390
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	11	8.3	9.11	12.58	7.3	57.3	0.04	84.5	131	390
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	10	9.3	9.13	12.55	7.3	56.8	0.04	84.7	47	390
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	9	10.3	9.13	12.55	7.29	57.3	0.04	84.7	57	391
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	8	11.3	9.07	12.55	7.27	57.3	0.04	84.1	51	392
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	7	12.3	9.03	12.5	7.26	56.6	0.04	83.6	124	392
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	6	13.3	8.98	12.46	7.22	56.7	0.04	83.1	104	393
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	5	14.3	8.76	11.81	7.17	56.7	0.04	79.9	151	395
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	4	15.3	7.23	11.2	6.91	55.1	0.04	65.1	215	399
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	3	16.3	4.21	10.12	6.56	50.9	0.03	36.9	152	409
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	2	17.3	5.14	8.73	6.48	49.2	0.03	43.6	315	411
Mid Lake CDA	4298	DTASKB	10/20/98	9:38:00	7.5	1	18.3	5.42	8.09	6.5	49.1	0.03	45.3	357	410
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	19	0.4	8.58	8.78	7.31	54.7	0.04	74.6	31	324
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	18	0.9	8.58	8.79	7.33	54.8	0.04	74.6	38	323
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	17	1.9	8.58	8.79	7.31	54.8	8.57	325	47	11.3
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	16	2.9	8.55	8.78	7.28	54.8	0.04	74.3	111	325
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	15	3.9	8.57	8.78	7.27	55	0	8.56	58	4
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	14	4.9	8.52	8.78	7.23	55.2	0.04	74	41	327
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	13	5.9	8.52	8.79	7.22	54.7	0.04	74.1	40	327
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	12	6.9	8.48	8.78	7.19	55.3	0.04	73.7	43	327
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	11	7.9	8.3	8.74	7.14	55.3	0.04	72.1	53	329
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	10	8.9	8.19	8.71	7.1	55.4	0.04	71	43	329
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	9	9.9	8.19	8.69	7.09	55.7	0.04	71.1	55	329
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	8	10.9	8.04	8.69	7.05	55.7	0.04	69.7	39	329
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	7	11.9	7.87	8.66	6.99	56	0.04	69.1	25	331
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	6	12.9	7.49	8.48	6.89	55.6	0.04	64.6	42	331
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	5	13.9	7.14	8.3	6.83	54.7	0.04	61.3	42	331
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	4	14.9	7.11	8.2	6.82	54.2	0.03	60.9	54	331
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	3	16	6.95	8.06	6.77	53.8	0.03	59.4	50	330
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	2	16.9	6.37	7.7	6.72	50.9	0.03	53.9	59	330
Mid Lake CDA	4698	KBAS	11/17/98	13:20:00	5.3	1	17.9	6.07	7.45	6.71	49.5	0.03	51	505	328

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	12	0.4	12.8	5.07	6.92	44.8	0.03	99.4	104	391

Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	11	0.8	12.7	4.74	6.9	44.6	0.03	98.3	37	397
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	10	1.8	12.8	4.01	6.99	44.8	0.03	96.6	116	392
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	9	2.8	12.8	4.19	6.93	44.6	0.03	97.2	43	395
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	8	3.8	12.8	4.14	6.96	44.6	0.03	96.9	57	393
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	7	4.8	12.8	3.98	6.95	44.7	0.03	96.6	56	393
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	6	5.8	12.7	3.99	6.99	44.7	0.03	96.4	108	391
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	5	6.8	12.8	4.01	6.96	44.7	0.03	96.8	110	392
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	4	7.8	12.8	4.06	6.92	44.7	0.03	96.8	146	393
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	3	8.8	12.8	3.98	6.86	44.6	0.03	96.5	32	394
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	2	9.8	12.7	4.04	6.84	46.3	0.03	96.2	121	393
Carey Bay	1098	DBRP	3/13/98	13:01:20	1.8	1	10.8	12.4	3.98	6.75	48.1	0.03	93.4	144	395
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	13	0.3	12.4	7.7	7.04	40.3	0.03	103.8	113	411
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	12	1.2	12.3	7.7	7.02	40.4	0.03	103.4	126	414
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	11	2.3	12.3	7.71	7.03	40.3	0.03	103.3	104	414
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	10	3.3	12.3	7.63	7	40	0.03	103	121	415
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	9	4.3	12.3	7.05	7.06	40.2	0.03	101.4	140	411
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	8	5.4	12.2	6.61	6.93	40.6	0.03	99.6	55	417
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	7	6.4	12.2	6.5	6.87	41	0.03	99.1	107	419
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	6	7.4	12.1	6.45	6.91	40.9	0.03	98.4	116	416
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	5	8.4	11.9	6.13	6.88	42.2	0.03	95.8	139	416
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	4	9.4	11.8	5.97	6.84	42.7	0.03	94.4	115	417
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	3	10.4	11.8	5.85	6.8	42.9	0.03	94.1	125	418
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	2	11.4	11.8	5.75	6.84	43	0.03	94.1	46	415
Carey Bay	1498	DBAS	4/8/98	14:24:27	2.2	1	12.5	11.7	5.75	6.79	43.2	0.03	93.2	203	418
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	13	0.3	11.7	13.63	7.2	43.7	0.03	111.9	120	391
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	12	1.6	12.3	9.86	7.24	43.2	0.03	107.9	108	392
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	11	2.6	12.4	8.22	7.24	42.8	0.03	104.8	105	392
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	10	3.5	12.4	7.78	7.13	42.2	0.03	103.5	50	396
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	9	4.5	12.2	7.42	7.15	42.4	0.03	101.3	115	393
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	8	5.6	12	7.14	7	42.9	0.03	98.8	142	398
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	7	6.6	11.9	6.97	7.03	43.4	0.03	97.4	154	394
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	6	7.7	11.8	6.79	6.95	43.9	0.03	96.5	118	395
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	5	8.6	11.7	6.54	6.96	44.5	0.03	95	210	393
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	4	9.7	11.7	6.13	6.94	45.7	0.03	93.7	116	391
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	3	10.6	11.7	6.08	6.92	46.2	0.03	93.6	131	390
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	2	11.5	11.6	5.9	6.85	47	0.03	92.9	124	391
Carey Bay	1698	DBASRP	4/21/98	15:07:34	2.8	1	12.6	11.6	5.87	6.93	47.4	0.03	92.2	217	385
Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	10	0.3	11.2	11.87	7.19	33.7	0.02	104.6	46	380
Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	9	1	11.2	11.86	7.18	33.7	0.02	104.3	124	380
Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	8	2.5	11.2	11.86	7.13	33.7	0.02	104.4	55	381
Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	7	4	11.2	11.82	7.15	33.9	0.02	104.5	48	379

Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	6	5.5	11.2	11.66	7.14	33.8	0.02	104.1	49	376
Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	5	7	11.2	11.02	7.07	34.1	0.02	102.7	114	377
Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	4	8.5	11.3	10.82	7.06	34.5	0.02	102.8	117	375
Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	3	10	11.2	9.99	6.99	35.9	0.02	100.4	40	374
Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	2	11.5	11.3	9.56	6.9	37.9	0.02	99.6	40	377
Carey Bay	2198	ASJLDT	5/26/98	13:24:59	3.9	1	13	11.2	9.3	6.9	38.8	0.02	98.8	202	375
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	13	0.3	10.9	16.57	7.64	38.5	0.02	112.2	50	375
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	12	1.3	10.9	16.25	7.62	38.5	0.02	111	52	378
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	11	2.3	11.1	14.81	7.6	38.5	0.02	109.8	56	379
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	10	3.3	11.1	14.54	7.55	38.4	0.02	109.4	43	381
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	9	4.3	11.2	14.21	7.49	38.7	0.02	108.7	56	383
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	8	5.3	11.1	13.56	7.4	38.6	0.02	106.8	55	385
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	7	6.3	11.1	13.14	7.34	38.6	0.02	105.5	56	386
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	6	7.3	10.9	12.55	7.25	38.2	0.02	102	41	387
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	5	8.3	10.8	12.45	7.23	37.9	0.02	101.6	57	387
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	4	9.3	10.8	12.14	7.2	37.2	0.02	100.3	109	388
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	3	10.3	10.2	11.58	7.11	37.6	0.02	93.9	58	389
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	2	11.3	10.3	10.86	7.08	37.8	0.02	93.1	58	389
Carey Bay	2398	DTJLAS	6/8/98	12:38:40	3.1	1	12.3	10.2	10.43	7.06	38.6	0.02	91.1	143	391
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	14	0.2	10.1	19.38	7.55	42.7	0.03	110	32	355
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	13	1.6	10.1	19.16	7.54	42.8	0.03	109.2	107	356
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	12	2.6	10.6	16.73	7.58	43.5	0.03	109.4	59	358
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	11	3.6	10.7	16.61	7.59	43.6	0.03	109.7	116	357
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	10	4.6	10.8	16.39	7.6	45.6	0.03	110.8	46	357
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	9	5.6	10.9	16.11	7.6	46.3	0.03	111	108	357
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	8	6.6	10.8	15.86	7.49	46.7	0.03	109	52	359
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	7	7.6	10.8	15.54	7.45	43.6	0.03	108.1	137	359
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	6	8.6	10.9	14.57	7.38	42.6	0.03	107.1	104	359
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	5	9.6	11	13.89	7.33	42.2	0.03	106.1	115	360
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	4	10.6	10.9	13.17	7.23	40.3	0.03	103.7	114	361
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	3	11.6	10.5	12.79	7.15	39.7	0.03	99.6	118	361
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	2	12.6	10.6	12.16	7.13	39.7	0.03	98.7	155	359
Carey Bay	2598	DTASBH	6/22/98	13:41:37	4.3	1	13.6	10	11.29	7.05	38.9	0.02	91.7	129	358
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	13	0.3	9.02	24.79	7.68	51.4	0.03	108.2	200	338
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	12	1.7	10.3	20.18	7.78	51.1	0.03	113.6	103	340
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	11	2.7	10.6	18.99	7.84	50.5	0.03	114	103	339
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	10	3.7	10.7	17.88	7.8	50.5	0.03	112.3	126	341
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	9	4.7	11	17.3	7.96	50.2	0.03	113.5	114	339
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	8	5.7	10.9	17.1	7.81	50.3	0.03	112.3	125	342
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	7	6.7	10.4	16.41	7.54	48.2	0.03	105.6	123	346
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	6	7.7	10.6	16.02	7.53	47.7	0.03	107.1	138	346

Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	5	8.7	10.4	15.67	7.4	47.2	0.03	104	113	347
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	4	9.7	10.3	15.49	7.37	47.2	0.03	103.2	119	347
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	3	10.7	10.2	15.32	7.29	47	0.03	101.6	143	348
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	2	11.7	9.97		7.21	46.2	0.03	98.2	246	348
Carey Bay	2798	DTASBH	7/7/98	12:50:28	5.1	1	12.7	9.41	14.14	7.05	45.9	0.03	91.2	218	348
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	14	0.5	8.93	23.64	7.79	51.7	0.03	105	120	395
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	13	1.5	9.24	22.7	7.86	51.2	0.03	106.7	124	398
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	12	2.5	9.42	22.29	7.95	50.9	0.03	108	102	398
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	11	3.5	10.2	20.83	8.11	48.7	0.03	113.2	152	398
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	10	4.5	10.4	19.82	8.02	47.5	0.03	113.4	110	403
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	9	5.5	10.3	19.75	7.91	47.7	0.03	112.1	135	406
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	8	6.5	10.6	19.06	7.93	46.7	0.03	113.7	51	408
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	7	7.5	10.5	18.58	7.7	46.3	0.03	111.4	204	416
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	6	8.5	10.1	17.69	7.32	45.7	0.03	105.5	44	427
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	5	9.5	9.84	16.27	7.09	45.4	0.03	100	131	431
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	4	10.5	9.27	15.45	6.94	45.1	0.03	92.6	136	434
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	3	11.5	9.16	13.88	6.83	43.5	0.03	88.4	59	438
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	2	12.5	8.32	12.74	6.65	42.9	0.03	78.2	40	445
Carey Bay	2998	ASBH	7/20/98	11:26:44	8.6	1	13.5	7.51	12.15	6.59	42.7	0.03	69.7	252	447
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	14	0.6	8.54	24.09	7.66	58.5	0.04	101.1	52	346
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	13	1.7	8.59	23.62	7.63	58.3	0.04	100.9	49	347
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	12	2.7	8.67	23.42	7.62	57.6	0.04	101.4	40	347
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	11	3.6	8.81	23.13	7.63	57.7	0.04	102.5	124	348
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	10	4.5	8.84	22.99	7.59	57	0.04	102.6	51	350
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	9	5.6	9.06	22.22	7.52	55.6	0.04	103.7	54	353
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	8	6.7	9.38	21.16	7.46	53.2	0.03	105.1	58	355
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	7	7.8	9.63	20.32	7.4	50.8	0.03	106.2	39	356
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	6	8.8	9.61	19.8	7.37	50.7	0.03	104.9	56	357
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	5	9.7	9.69	19.5	7.31	50.4	0.03	105.1	104	358
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	4	10.8	9.59	18.65	7.18	49.5	0.03	102.2	114	361
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	3	11.8	8.84	17.25	6.96	49.2	0.03	91.6	41	366
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	2	12.7	7.87	15.27	6.84	48.4	0.03	78.2	144	368
Carey Bay	3298	DBAS	8/10/98	11:43:00	9.1	1	13.7	6.62	13.55	6.77	48.8	0.03	63.3	23	369
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	14	0.2	9.14	22.49	7.89	55.5	0.04	105.6	101	332
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	13	1.2	9.16	22.49	7.93	55.5	0.04	105.8	101	329
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	12	2.2	9.19	22.4	7.93	55.6	0.04	105.9	40	329
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	11	3.2	9.28	21.85	7.94	55.4	0.04	105.9	56	329
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	10	4.2	9.2	21.72	7.89	55.1	0.04	104.7	52	331
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	9	5.2	9.25	21.55	7.82	55.3	0.04	105	59	333
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	8	6.2	8.89	21.49	7.61	55.3	0.04	100.7	56	339
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	7	7.2	9.04	21.37	7.62	55.3	0.04	102.2	130	339

Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	6	8.2	8.65	21.26	7.33	55.2	0.04	97.6	115	346
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	5	9.2	8.43	19.87	7.06	50.7	0.03	92.6	108	352
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	4	10.2	8.05	18.94	6.96	48.9	0.03	86.8	210	354
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	3	11.2	7.39	16.69	6.77	46.5	0.03	76	125	358
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	2	12.2	5.61	14.03	6.59	47.5	0.03	54.5	128	361
Carey Bay	3498	ASDNGL	8/25/98	13:20:35	6.8	1	13.2	4.67	12.41	6.54	48.5	0.03	43.8	330	362
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	14	0.3	8.96	22.9	7.78	58.7	0.04	104.4	50	300
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	13	1.3	8.98	22.43	7.87	58.6	0.04	103.8	38	296
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	12	2.3	9.23	21.48	7.93	58.7	0.04	104.8	30	295
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	11	3.3	9.21	21.26	7.92	58.4	0.04	104.1	133	296
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	10	4.3	9.23	21.14	7.86	58.4	0.04	104.1	107	297
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	9	5.3	9.25	21.05	7.83	58.4	0.04	104.2	118	297
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	8	6.3	9.19	21.07	7.73	58.3	0.04	103.5	147	300
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	7	7.3	9.06	20.97	7.6	58	0.04	101.8	323	303
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	6	8.3	8.78	20.27	7.17	55.7	0.04	97.3	57	319
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	5	9.3	7.54	19.09	6.9	52.3	0.03	81.7	120	325
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	4	10.3	7.08	16.44	6.76	47.4	0.03	72.6	111	328
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	3	11.3	6.29	15.04	6.65	48.5	0.03	62.6	115	328
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	2	12.3	4.6	11.46	0	49.9	0.03	42.2	204	329
Carey Bay	3598	DTAS	9/3/98	14:16:15	6.8	1	13.3	4.88	11.2	6.57	49.5	0.03	44.6	159	317
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	13	0.3	9.04	19.23	7.66	61.1	0.04	97.8	56	336
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	12	1.9	9.14	17.95	7.62	61	0.04	96.3	44	339
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	11	2.9	9.1	17.76	7.6	61.1	0.04	95.5	53	340
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	10	3.9	9.1	17.76	7.55	61.2	0.04	95.5	111	342
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	9	4.9	8.89	17.61	7.47	60.8	0.04	93	43	344
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	8	5.9	8.82	17.57	7.43	60.7	0.04	92.2	28	346
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	7	6.9	8.81	17.57	7.42	60.9	0.04	92.1	104	345
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	6	8	8.8	17.56	7.39	61.3	0.04	92	53	347
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	5	8.9	8.78	17.56	7.35	60.6	0.04	91.8	112	348
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	4	9.9	8.49	17.51	7.23	60.7	0.04	88.6	34	351
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	3	11	8.13	17.37	7.17	61	0.04	84.7	154	352
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	2	11.9	7.35	16.91	6.98	60	0.04	75.8	128	356
Carey Bay	3998	ASKB	9/30/98	14:15:00	6	1	12.9	5.88	16.12	6.86	57.2	0.04	59.7	636	358
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	13	0.4	9.13	13.25	7.35	58.7	0.04	86.2	30	334
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	12	1.4	9.04	12.99	7.36	58.6	0.04	84.8	245	334
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	11	2.4	9	12.78	7.35	58.6	0.04	84.1	133	333
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	10	3.4	9.02	12.71	7.35	58.4	0.04	84	46	332
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	9	4.4	9	12.68	7.32	58.7	0.04	83.8	49	333
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	8	5.4	8.98	12.68	7.31	58.6	0.04	83.6	39	333
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	7	6.4	8.99	12.68	7.3	58.6	0.04	83.7	42	333
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	6	7.4	8.98	12.66	7.29	58.7	0.04	83.6	35	333

Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	5	8.4	8.93	12.66	7.29	58.6	0.04	83.2	109	332
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	4	9.4	8.94	12.65	7.29	58.2	0.04	83.2	59	330
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	3	10.4	8.92	12.65	7.3	58.8	0.04	83	103	328
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	2	11.4	8.98	12.6	7.3	58.4	0.04	83.5	56	327
Carey Bay	4298	DTASJB	10/19/98	12:57:51	6.2	1	12.4	8.96	12.56	7.3	58.7	0.04	83.2	624	329
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	12	0.6	8.25	8.47	7.21	55	0.04	71.1	26	320
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	11	1.7	8.23	8.45	7.19	54.9	0.04	71	37	321
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	10	2.7	8.2	8.46	7.14	54.9	0.04	70.7	35	323
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	9	3.7	8.19	8.47	7.14	55	0.04	70.6	37	323
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	8	4.7	8.2	8.47	7.14	54.9	0.04	70.7	46	322
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	7	5.7	8.19	8.47	0	55.3	0.04	70.6	115	322
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	6	6.7	8.13	8.45	7.11	54.9	0.04	70.1	103	322
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	5	7.7	8.17	8.45	7.1	55.4	0.04	70.5	51	322
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	4	8.7	8.15	8.45	7.08	54.9	0.04	70.3	130	321
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	3	9.7	7.79	8.3	7.01	54.5	0.03	66.9	57	320
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	2	10.8	7.61	8.2	6.99	54.3	0.03	65.2	105	318
Carey Bay	4698	KBAS	11/17/98	12:50:00	4.8	1	11.7	7.65	8.17	7.02	55.1	0.04	65.5	659	320

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	15	0.5	12.6	7.37	7	41.8	0.03	105.6	44	428
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	14	1.5	12.6	6.79	6.98	39.5	0.03	103.7	56	431
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	13	2.5	12.6	6.41	6.99	38.7	0.02	102.9	101	431
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	12	3.5	12.6	6.36	6.97	38.9	0.02	102.8	32	432
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	11	4.5	12.6	6.31	6.91	38.8	0.02	102.6	32	435
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	10	5.5	12.6	6.26	6.91	38.9	0.02	102.4	39	435
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	9	6.5	12.6	6.25	6.87	39	0.02	102.3	31	438
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	8	7.5	12.5	6.22	6.9	39.1	0.03	101.4	103	436
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	7	8.5	12.5	6.17	6.83	39	0.02	101.6	43	439
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	6	9.5	12.4	6.07	6.83	39.1	0.03	100.6	46	439
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	5	10.5	12.5	6.05	6.77	39	0.03	100.6	25	442
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	4	11.5	12.4	5.85	6.75	39.3	0.03	99.7	48	443
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	3	12.5	12.3	5.77	6.73	40	0.03	98.6	34	445
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	2	13.5	12.2	5.77	6.7	41.1	0.03	97.7	44	447
Conkling Point	1398	DBRP	4/3/98	10:42:23	3.1	1	14.5	11.8	5.8	6.67	43.4	0.03	95	228	449
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	16	0.3	11.9	11.12	7.08	42.8	0.03	107.7	100	402
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	15	0.8	11.8	10.68	7.13	42.6	0.03	105.9	132	403
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	14	1.7	12	8.65	7.09	42.2	0.03	103	121	404
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	13	2.8	11.9	7.88	7.08	42.4	0.03	100.1	105	407
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	12	3.7	11.9	7.35	6.99	42.7	0.03	98.5	56	410
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	11	4.8	11.8	7.14	6.9	42.8	0.03	97.2	125	414

Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	10	5.8	11.8	7.01	6.95	42.8	0.03	97	145	410
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	9	6.8	11.7	6.71	6.96	43.2	0.03	95.4	142	407
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	8	7.8	11.7	6.64	6.89	43.5	0.03	95.5	140	409
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	7	8.8	11.7	6.51	6.85	44.2	0.03	94.9	118	410
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	6	9.8	11.7	6.38	6.9	44.6	0.03	94.6	142	405
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	5	10.8	11.7	6.17	6.85	45.5	0.03	94	145	406
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	4	11.8	11.7	5.92	6.83	46.8	0.03	93.1	104	404
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	3	12.7	11.3	5.89	6.77	47.4	0.03	90.3	117	405
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	2	13.7	11.1	5.8	6.72	47.9	0.03	88.5	113	406
Conkling Point	1698	DBASRP	4/21/98	14:06:07	2.6	1	14.8	11	5.59	6.72	49.3	0.03	87.3	325	406
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	11	0.3	11.2	11.87	7.08	33.4	0.02	104.3	23	385
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	10	1.5	11.2	11.89	7.15	33.5	0.02	104.3	32	379
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	9	3	11.2	11.45	7.09	33.4	0.02	103.5	44	379
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	8	4.5	11.2	11.1	7.15	33.3	0.02	103.2	38	374
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	7	6	11.3	10.99	7.07	33.2	0.02	103	46	377
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	6	7.5	11.3	10.74	6.99	33.1	0.02	102.6	33	378
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	5	9	11.2	10.25	6.99	32.6	0.02	100.7	40	376
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	4	10.5	11.2	9.45	6.9	32.5	0.02	98.6	44	378
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	3	12	11.2	9.25	6.89	32	0.02	98.4	104	377
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	2	13.5	11.3	9.24	6.93	32	0.02	99	107	373
Conkling Point	2198	ASJLDT	5/26/98	13:45:03	3.8	1	15.2	11.2	9.15	6.9	32.8	0.02	98.5	153	376
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	11	0.4	10.7	15.62	7.52	38.9	0.02	108	28	362
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	10	1.5	10.7	15.51	7.5	38.9	0.02	107.3	101	363
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	9	3	10.6	14.84	7.43	38.5	0.02	105	125	365
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	8	4.5	10.8	13.06	7.3	38	0.02	102.6	109	367
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	7	6	10.6	12.73	7.24	37.9	0.02	100	117	367
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	6	7.5	10.8	12.22	7.22	37.7	0.02	100.9	55	366
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	5	9	10.7	12	7.19	37	0.02	99.3	132	366
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	4	10.5	10.5	11.79	7.13	36.7	0.02	97.4	46	363
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	3	12	10.7	10.77	7.1	35.9	0.02	96.8	130	363
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	2	13.5	10.3	9.94	7	37.9	0.02	91.1	158	362
Conkling Point	2398	DTJLAS	6/8/98	13:00:22	2.5	1	15.1	9.16	8.71	6.85	42.2	0.03	78.7	242	361
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	16	0.3	10.1	19.54	7.54	42.2	0.03	109.9	28	355
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	15	1.1	10.1	19.28	7.54	42.1	0.03	109.2	100	356
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	14	2.1	10.3	18.39	7.57	41.9	0.03	109.3	57	356
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	13	3.1	10.5	17.56	7.61	41.7	0.03	109.5	135	356
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	12	4.1	10.6	16.63	7.6	42	0.03	108.7	115	357
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	11	5.1	10.8	16.09	7.61	51	0.03	109.8	214	358
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	10	6.1	10.9	15.25	7.46	49.8	0.03	108.8	159	362
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	9	7.1	10.9	14.79	7.45	43.6	0.03	108.1	53	360
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	8	8.1	11	14.06	7.36	42.9	0.03	106.6	108	362

Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	7	9.1	11	13.81	7.31	41.7	0.03	106.2	206	362
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	6	10.1	11	13.41	7.26	41.5	0.03	105.8	131	362
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	5	11.1	10.8	12.99	7.12	40	0.03	102.7	114	363
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	4	12.1	10.2	12.57	6.98	37.5	0.02	95.6	153	364
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	3	13.1	10.2	12.33	6.95	38.1	0.02	95.7	110	362
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	2	14.1	9.61	11.64	6.87	37.4	0.02	88.5	227	362
Conkling Point	2598	DTASBH	6/22/98	12:17:57	4.3	1	15.1	8.96	11.16	6.81	37.8	0.02	81.5	207	376
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	16	0.3	10.1	24.35	8.72	51.2	0.03	120.3	56	307
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	15	1.3	9.63	20.88	7.56	50.7	0.03	107.3	108	334
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	14	2.3	9.85	19.32	7.46	50.9	0.03	106.4	115	335
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	13	3.3	10.5	18.17	7.7	49.9	0.03	111	130	332
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	12	4.3	10.6	17.57	7.81	50	0.03	110.9	118	328
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	11	5.3	10.7	16.39	7.71	48.5	0.03	108.5	314	331
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	10	6.3	10.6	16.12	7.61	48.2	0.03	107.5	145	332
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	9	7.2	10.5	15.86	7.5	47.5	0.03	105.7	229	332
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	8	8.3	10.3	15.44	7.34	46.8	0.03	102.9	116	333
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	7	9.3	10.2	15.04	7.24	46.4	0.03	100.5	123	333
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	6	10.3	10.1	14.94	7.2	46.3	0.03	99.7	50	333
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	5	11.3	10.1	14.72	7.14	46.5	0.03	98.6	123	332
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	4	12.3	9.79	14.21	7.04	45.8	0.03	95.1	120	332
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	3	13.3	9.63	13.86	6.96	44.9	0.03	92.8	136	330
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	2	14.3	8.31	13.13	6.78	45	0.03	78.8	116	328
Conkling Point	2798	DTASBH	7/7/98	12:07:14	3.2	1	15.3	7.28	11.98	6.71	45.5	0.03	67.2	211	316
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	15	0.9	8.96	23.31	7.81	51.3	0.03	104.7	143	354
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	14	1.9	9.12	22.92	7.92	51.4	0.03	105.8	117	354
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	13	2.9	9.14	22.59	7.86	51.2	0.03	105.3	112	356
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	12	3.9	9.91	21.23	7.94	49.4	0.03	111.3	126	355
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	11	4.9	10.2	20.55	7.99	48.2	0.03	112.5	103	355
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	10	5.9	10.3	19.8	7.95	47.5	0.03	112.8	118	357
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	9	6.9	10.5	18.58	7.77	46.7	0.03	111.4	128	360
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	8	7.9	10.4	16.93	7.48	45.5	0.03	107.4	125	366
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	7	8.9	10.1	16.14	7.27	44.8	0.03	102.6	132	369
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	6	9.9	9.34	14.94	7	44.3	0.03	92.2	132	372
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	5	10.9	8.95	13.78	6.86	43.2	0.03	86.1	116	373
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	4	11.9	7.93	12.54	6.72	43	0.03	74.2	55	373
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	3	12.9	7.84	11.88	6.7	42.5	0.03	72.3	112	372
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	2	13.9	6.95	10.97	6.63	43.8	0.03	62.7	132	372
Conkling Point	2998	ASBH	7/20/98	11:44:42	6.3	1	14.9	6.66	10.25	6.64	44.5	0.03	59.1	304	369
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	16	0.3	8.29	24.51	7.53	59	0.04	99	30	343
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	15	1	8.28	24.09	7.56	59.1	0.04	98.1	35	343
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	14	2.1	8.27	23.8	7.55	59.1	0.04	97.4	29	345

Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	13	3.2	8.26	23.29	7.55	58.6	0.04	96.4	35	346
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	12	4.3	8.44	22.84	7.49	57.1	0.04	97.7	48	347
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	11	5.4	9.08	22.2	7.52	55.7	0.04	103.8	35	347
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	10	6.5	9.19	21.74	7.49	54.3	0.03	104.2	109	348
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	9	7.4	9.46	20.91	7.44	52.3	0.03	105.5	122	349
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	8	8.5	9.58	20.34	7.35	51.3	0.03	105.6	44	352
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	7	9.5	9.61	19.13	7.27	49.7	0.03	103.5	131	353
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	6	10.5	8.5	18.27	7.04	50.3	0.03	89.9	101	356
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	5	11.5	9.45	17.4	7.1	49.1	0.03	98.2	100	356
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	4	12.4	8.77	15.66	6.93	48.1	0.03	87.8	128	358
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	3	13.2	8.29	14.08	6.81	47.2	0.03	80.3	118	359
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	2	14.4	5.74	12.61	6.63	49.2	0.03	53.8	120	359
Conkling Point	3298	DBAS	8/10/98	12:10:22	9.2	1	15.5	4.81	10.31	6.61	52	0.03	42.8	253	359
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	16	0.5	9.01	21.81	7.87	54.1	0.03	102.8	30	362
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	15	1.5	9.01	21.72	7.84	54	0.03	102.6	107	365
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	14	2.5	8.99	21.76	7.86	54.1	0.03	102.4	125	364
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	13	3.5	8.99	21.63	7.82	53.8	0.03	102.1	110	367
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	12	4.5	8.98	21.53	7.81	53.8	0.03	101.9	234	368
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	11	5.5	8.83	21.46	7.71	53.6	0.03	100	137	372
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	10	6.5	8.76	21.44	7.59	54.5	0.03	99.2	147	376
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	9	7.5	8.5	21.29	7.45	54.8	0.04	95.9	138	381
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	8	8.5	7.61	20.76	7.09	53.4	0.03	85.1	208	391
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	7	9.5	8.61	19.68	7.03	47.9	0.03	94.1	112	393
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	6	10.5	8.18	18.42	6.88	45.7	0.03	87.3	221	397
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	5	11.5	8.34	16.63	6.84	44.1	0.03	85.7	316	398
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	4	12.5	6.9	14.91	6.63	44.2	0.03	68.3	203	401
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	3	13.5	6.86	13.55	6.54	43.8	0.03	66	154	401
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	2	14.5	4.84	12.85	6.44	45.8	0.03	45.8	235	401
Conkling Point	3498	ASGL	8/26/98	13:49:11	5.3	1	15.4	3.48	11.23	6.36	49.2	0.03	31.8	434	404
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	16	0.4	9.04	22.58	7.83	59.2	0.04	104.8	33	290
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	15	1.6	9.11	21.56	7.86	59.7	0.04	103.5	52	289
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	14	2.6	9.07	21.42	7.78	58.9	0.04	102.8	41	292
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	13	3.6	9.15	21.28	7.8	58.7	0.04	103.5	42	292
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	12	4.6	9.18	21.14	7.75	58.8	0.04	103.5	40	294
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	11	5.6	9.09	20.97	7.65	58.6	0.04	102.2	37	298
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	10	6.6	9.08	20.97	7.55	58.5	0.04	102	54	303
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	9	7.6	8.87	20.48	7.26	56.9	0.04	98.7	101	312
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	8	8.6	8.6	19.66	6.96	55.2	0.04	94.2	44	321
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	7	9.6	7.21	17.76	6.74	49.4	0.03	76	36	326
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	6	10.6	7.06	16.14	6.7	47.4	0.03	72	100	326
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	5	11.6	6.4	14.56	6.62	47.8	0.03	63	100	328
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	4	12.6	5.45	13.25	6.54	49.1	0.03	52.1	113	327

Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	3	13.6	4.68	12.77	6.51	49.4	0.03	44.3	35	323
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	2	14.6	5.79	11.47	6.52	48.2	0.03	53.2	123	320
Conkling Point	3598	DTAS	9/3/98	13:43:10	5.7	1	15.6	2.78	10.69	6.49	53.3	0.03	25.1	210	313
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	16	0.3	9.07	15.24	7.42	58.7	0.04	90.2	50	325
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	15	0.7	9.07	15.23	7.4	58.6	0.04	90.2	43	326
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	14	1.7	9.05	15.24	7.38	58.5	0.04	90	48	326
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	13	2.7	9.02	15.22	7.38	58.6	0.04	89.7	58	326
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	12	3.7	8.96	15.18	7.35	58.8	0.04	89	58	326
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	11	4.7	8.91	15.19	7.35	58.5	0.04	88.6	54	326
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	10	5.8	8.93	15.17	7.34	58.5	0.04	88.7	56	326
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	9	6.6	8.96	15.16	7.34	59	0.04	89	134	326
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	8	7.7	8.98	15.16	7.35	58.3	0.04	89.2	114	324
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	7	8.7	9	15.14	7.35	58.4	0.04	89.3	142	323
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	6	9.7	9.08	15.14	7.36	59.2	0.04	90.1	123	321
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	5	10.7	9.15	15.04	7.36	58.6	0.04	90.7	135	321
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	4	11.7	9.1	14.91	7.33	58.6	0.04	89.8	109	320
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	3	12.7	9.12	14.88	7.31	58.3	0.04	90	125	319
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	2	13.7	9.2	14.84	7.29	58.6	0.04	90.7	156	318
Conkling Point	4098	KBDB	10/9/98	11:50:00	4.5	1	14.7	8.64	14.59	7.13	59.7	0.04	84.7	344	318
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	15	0.5	9.13	12.92	7.39	58.6	0.04	85.5	115	343
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	14	1.5	9.14	12.81	7.41	58.6	0.04	85.4	47	342
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	13	2.5	9.15	12.71	7.38	58.7	0.04	85.3	53	343
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	12	3.5	9.13	12.63	7.34	58.7	0.04	84.9	114	346
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	11	4.5	9.07	12.58	7.33	58.8	0.04	84.3	125	346
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	10	5.5	9.01	12.56	7.32	58.3	0.04	83.7	41	345
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	9	6.5	9.01	12.55	7.31	58.4	0.04	83.7	52	345
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	8	7.5	8.98	12.51	7.32	58.7	0.04	83.3	126	343
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	7	8.5	9.05	12.46	7.33	58.3	0.04	83.8	39	343
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	6	9.5	9.06	12.4	7.33	58.7	0.04	83.8	156	343
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	5	10.5	9.11	12.27	7.34	58.8	0.04	84.1	110	341
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	4	11.5	9.17	12.17	7.36	58.7	0.04	84.4	58	339
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	3	12.5	9.49	11.91	7.39	58.4	0.04	86.8	57	338
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	2	13.5	9.51	11.46	7.32	59	0.04	86.2	43	339
Conkling Point	4298	DTASJB	10/19/98	11:49:36	4.8	1	14.5	9.26	11.35	7.28	59	0.04	83.6	645	340
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	15	0.3	8.23	8.32	7.16	54.7	0.04	70.7	44	327
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	14	1	8.21	8.33	7.15	54.9	0.04	70.6	46	328
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	13	2	8.21	8.33	7.17	54.7	0.04	70.6	48	326
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	12	3	8.21	8.32	7.11	54.5	0.03	70.5	57	329
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	11	4	8.19	8.32	7.12	54.6	0.03	70.4	101	4
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	10	5	8.15	8.3	7.09	54.7	0.04	70	41	329
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	9	6	8.11	8.29	7.09	54.4	0.03	71.9	8	328

Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	8	7	8.07	8.22	7.06	54.2	0.03	69.2	51	328
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	7	8	7.86	8.11	7.01	54.1	0.03	67.2	120	327
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	6	9	7.48	8.04	6.96	54.4	0.03	63.8	116	326
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	5	10	7.61	7.99	7	54	0.03	64.9	112	324
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	4	10.9	7.97	7.88	7.05	54.5	0.03	67.8	123	321
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	3	12	8.29	7.76	0	54.1	0.03	70.3	149	319
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	2	13	8.9	6.73	7.15	54.8	0.04	73.6	44	316
Conkling Point	4698	KBAS	11/17/98	12:18:00	4.1	1	14	8.9	6.73	7.16	54.5	0.03	73.6	555	315

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	10	0.3	12.2	7.79	7.06	37.8	0.02	103.2	43	389
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	9	0.3	12.2	7.79	7.04	37.8	0.02	103.2	105	390
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	8	1	12.4	6.69	7.08	37.7	0.02	101.6	124	388
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	7	2	12.5	6.26	7.08	37.9	0.02	101.2	46	387
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	6	3	12.4	6.18	7.04	37.6	0.02	100.9	114	389
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	5	4	12.4	6.15	7	37.9	0.02	100.7	143	390
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	4	5	12.5	6.1	6.94	37.7	0.02	100.7	144	391
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	3	6	12.5	6.03	6.96	38	0.02	100.5	134	389
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	2	7	12.5	5.98	6.91	37.9	0.02	100.4	137	389
Hidden Lake	1398	DBRP	4/3/98	10:57:54	2	1	7.9	12.2	6.22	6.92	37.6	0.02	99	400	387
Hidden Lake	1698	DBASRP	4/21/98	13:37:37	2.2	9	0.3	12	10.09	7.15	41.9	0.03	106.2	121	398
Hidden Lake	1698	DBASRP	4/21/98	13:37:37	2.2	8	1.3	11.9	9.69	7.25	41.7	0.03	104.5	207	394
Hidden Lake	1698	DBASRP	4/21/98	13:37:37	2.2	7	2.3	12.1	8.89	7.18	41.5	0.03	103.9	46	394
Hidden Lake	1698	DBASRP	4/21/98	13:37:37	2.2	6	3.3	12	8.68	7.15	41.5	0.03	102.7	111	394
Hidden Lake	1698	DBASRP	4/21/98	13:37:37	2.2	5	4.3	11.9	8.4	7.11	41.4	0.03	101.3	132	393
Hidden Lake	1698	DBASRP	4/21/98	13:37:37	2.2	4	5.4	11.9	8	7.07	40.9	0.03	100	121	391
Hidden Lake	1698	DBASRP	4/21/98	13:37:37	2.2	3	6.4	11.7	7.76	6.99	41	0.03	97.5	141	389
Hidden Lake	1698	DBASRP	4/21/98	13:37:37	2.2	2	7.4	10.3	7.36	6.79	41.3	0.03	85.1	55	388
Hidden Lake	1698	DBASRP	4/21/98	13:37:37	2.2	1	7.3	10.6	7.48	6.84	41.1	0.03	87.8	216	391
Hidden Lake	2198	ASJLDT	5/26/98	14:05:25	2.1	9	0.3	11.1	9.51	6.95	32.5	0.02	98.4	40	339
Hidden Lake	2198	ASJLDT	5/26/98	14:05:25	2.1	8	1.3	11.1	9.42	6.92	32.8	0.02	98.2	36	337
Hidden Lake	2198	ASJLDT	5/26/98	14:05:25	2.1	7	2.3	11.1	9.33	6.96	32.9	0.02	98.1	43	331
Hidden Lake	2198	ASJLDT	5/26/98	14:05:25	2.1	6	3.3	11.2	9.3	6.94	33.1	0.02	98.1	35	328
Hidden Lake	2198	ASJLDT	5/26/98	14:05:25	2.1	5	4.3	11.1	9.28	6.86	33.1	0.02	97.8	39	328
Hidden Lake	2198	ASJLDT	5/26/98	14:05:25	2.1	4	5.3	11.1	9.25	6.96	33	0.02	97.4	39	316
Hidden Lake	2198	ASJLDT	5/26/98	14:05:25	2.1	3	6.3	11.1	9.27	6.81	32.9	0.02	97.5	37	318
Hidden Lake	2198	ASJLDT	5/26/98	14:05:25	2.1	2	7.3	11.1	9.25	6.95	32.8	0.02	97.3	37	309
Hidden Lake	2198	ASJLDT	5/26/98	14:05:25	2.1	1	8.3	11.1	9.22	6.95	32.8	0.02	97.1	107	318
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	11	0.4	11	15.62	7.51	38.7	0.02	110.5	29	352
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	10	1.2	11.1	14.27	7.47	38.6	0.02	108.4	44	355

Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	9	2	11.1	13.89	7.45	38.2	0.02	107.4	103	355
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	8	2.7	11	13.51	7.34	38.2	0.02	105.1	108	357
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	7	3.5	11	12.57	7.22	36.7	0.02	103.6	103	358
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	6	4.2	10.6	12.11	7.11	36.3	0.02	98.2	59	359
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	5	5	10.4	11.85	7.02	36.3	0.02	95.9	39	359
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	4	5.7	9.68	11.46	6.94	36.4	0.02	88.8	129	359
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	3	6.5	9.13	10.85	6.87	36.5	0.02	82.5	130	357
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	2	7.2	8.76	10.62	6.83	36.3	0.02	78.7	122	353
Hidden Lake	2398	DTJLAS	6/8/98	13:26:09	2.4	1	8	7.97	10.21	6.77	37	0.02	71	233	347
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	10	0.3	10.1	19.32	7.68	40.6	0.03	110	36	336
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	9	1.2	10.2	18.75	7.64	40.7	0.03	109.2	112	338
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	8	2	10.2	18.29	7.6	40.8	0.03	108.4	105	339
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	7	2.7	10.2	17.41	7.53	40	0.03	106.8	117	340
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	6	3.5	10.2	16.31	7.34	39.5	0.03	104.3	156	344
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	5	4.2	10.6		7.15	37.2	0.02	105.9	135	348
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	4	5	8.81	12.82	6.81	35.9	0.02	83.3	143	354
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	3	5.7	7.14	12.03	6.6	36.3	0.02	66.3	146	356
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	2	6.5	4.53	11.28	6.47	37.7	0.02	41.3	236	354
Hidden Lake	2598	DTASBH	6/22/98	12:17:57	3.2	1	7.2	4.15	11.18	6.45	38	0.02	37.8	506	344
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	11	0.4	9.9	24.13	8.46	49.2	0.03	117.3	151	320
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	10	1	9.91	23.67	8.48	49.2	0.03	116.4	139	322
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	9	1.7	10.2	22.84	8.52	48.8	0.03	117.6	117	323
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	8	2.5	10.9	21.28	8.48	47.9	0.03	122.8	110	326
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	7	3.2	11.1	19.38	8.19	45.9	0.03	119.5	141	334
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	6	4	10.7	17.54	7.58	44.7	0.03	111.6	111	349
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	5	4.7	10.8	15.86	7.19	40.8	0.03	108.3	39	353
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	4	5.5	8.58	14.59	6.79	39.9	0.03	84	112	359
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	3	6.2	6.08	13.13	6.52	41.1	0.03	57.6	109	361
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	2	7	4.01	12.46	6.46	42.2	0.03	37.5	121	359
Hidden Lake	2798	DTASBH	7/7/98	11:36:34	4.6	1	7.6	2.9	12.33	6.45	45.9	0.03	27	320	358
Hidden Lake	2998	ASBH	7/21/98	9:51:57	6.8	9	0.4	9.31	24.51	8.39	49.4	0.03	111.2	123	258
Hidden Lake	2998	ASBH	7/21/98	9:51:57	6.8	8	1.4	9.16	24.27	8.31	49.3	0.03	109	122	255
Hidden Lake	2998	ASBH	7/21/98	9:51:57	6.8	7	2.4	9.23	23.89	8.28	49.4	0.03	109	138	250
Hidden Lake	2998	ASBH	7/21/98	9:51:57	6.8	6	3.4	9.19	23.84	8.18	49.2	0.03	108.4	158	245
Hidden Lake	2998	ASBH	7/21/98	9:51:57	6.8	5	4.4	10.9	19.8	7.47	42.1	0.03	118.8	111	259
Hidden Lake	2998	ASBH	7/21/98	9:51:57	6.8	4	5.4	11.4	17.3	7.21	40.4	0.03	117.9	133	259
Hidden Lake	2998	ASBH	7/21/98	9:51:57	6.8	3	6.4	7.73	14.94	6.66	42.1	0.03	76.3	136	256
Hidden Lake	2998	ASBH	7/21/98	9:51:57	6.8	2	7.4	3.6	13.65	6.46	44.2	0.03	34.6	133	222
Hidden Lake	2998	ASBH	7/21/98	9:51:57	6.8	1	8.4	0.25	13.27	6.47	57.6	0.04	2.3	202	168
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	13	0.3	9.19	25.06	8.36	53.4	0.03	110.8	50	253
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	12	0.8	9.27	24.79	8.4	53.3	0.03	111.2	131	250

Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	11	1.4	9.34	24.66	8.42	53.2	0.03	111.8	50	248
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	10	2	9.4	24.49	8.46	53.3	0.03	112.2	44	244
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	9	2.6	9.49	24.42	8.45	53.4	0.03	113.1	132	243
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	8	3.2	9.37	24.13	8.39	53.1	0.03	111	133	237
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	7	3.9	9.61	24.02	8.5	53.8	0.03	113.7	111	228
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	6	4.6	10.5	23.35	8.45	51.9	0.03	122.9	157	222
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	5	5.3	13.3	21.42	8.52	44.9	0.03	149.5	132	202
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	4	6	13.2	19.3	8.42	48.7	0.03	142.7	104	160
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	3	6.6	0.21	16.81	6.51	56	0.04	2.1	111	163
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	2	7.1	0.19	15.35	6.55	56.7	0.04	1.9	130	134
Hidden Lake	3298	DBAS	8/11/98	13:00:48	5.6	1	7.7	0.23	14.04	6.65	76.9	0.05	2.2	323	99
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	12	0.3	9.41	22.01	8.34	53.3	0.03	107.7	141	231
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	11	1	9.43	21.97	8.32	53.3	0.03	107.8	129	230
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	10	1.7	9.43	21.85	8.28	53.3	0.03	107.6	117	229
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	9	2.5	9.42	21.62	8.29	53.3	0.03	107	112	223
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	8	3.2	9.42	21.58	8.28	53	0.03	106.9	203	221
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	7	4	9.41	21.55	8.27	53.1	0.03	106.8	129	214
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	6	4.7	9.37	21.55	8.25	53.1	0.03	106.3	149	202
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	5	5.5	9.69	21.32	8.37	53.9	0.03	109.4	132	176
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	4	6.2	2.34	20.16	6.86	58.8	0.04	25.9	203	185
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	3	7	0.13	17.95	6.7	67.5	0.04	1.4	201	123
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	2	7.7	0.12	15.42	6.89	83.7	0.05	1.2	132	55
Hidden Lake	3498	ASGL	8/26/98	11:45:08	3.8	1	8.5	0.15	13.55	7.04	129.1	0.08	1.4	318	32
Hidden Lake	3598	DTAS	9/3/98	13:09:26	6.2	9	0.3	9.46	22.13	8.26	57.9	0.04	108.7	40	238
Hidden Lake	3598	DTAS	9/3/98	13:09:26	6.2	8	1	9.48	21.97	8.27	57.9	0.04	108.6	41	232
Hidden Lake	3598	DTAS	9/3/98	13:09:26	6.2	7	2	9.48	21.74	8.21	57.7	0.04	108.2	42	231
Hidden Lake	3598	DTAS	9/3/98	13:09:26	6.2	6	3	9.47	21.6	8.17	57.7	0.04	107.7	151	224
Hidden Lake	3598	DTAS	9/3/98	13:09:26	6.2	5	4	9.42	21.53	8.02	58.1	0.04	107	38	209
Hidden Lake	3598	DTAS	9/3/98	13:09:26	6.2	4	5	9.34	21.46	7.9	57.8	0.04	106	129	206
Hidden Lake	3598	DTAS	9/3/98	13:09:26	6.2	3	6	4.92	20.83	7	59.6	0.04	55.2	125	217
Hidden Lake	3598	DTAS	9/3/98	13:09:26	6.2	2	7	0.12	17.86	6.64	77.7	0.05	1.3	58	184
Hidden Lake	3598	DTAS	9/3/98	13:09:26	6.2	1	7.8	0.17	15.2	6.93	116.9	0.07	1.7	309	90
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	12	0.3	9.83	14.5	7.84	57.7	0.04	96.2	53	313
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	11	0.9	9.88	14.45	7.83	57.7	0.04	96.6	59	314
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	10	1.7	9.84	14.27	7.75	57.6	0.04	95.9	43	316
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	9	2.4	9.64	14.23	7.69	57.7	0.04	93.8	54	317
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	8	3.1	9.48	14.21	7.61	57.6	0.04	92.2	103	320
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	7	3.8	9.48	14.22	7.65	57.8	0.04	92.2	111	317
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	6	4.5	9.46	14.2	7.63	57.7	0.04	92	122	318
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	5	5.2	9.47	14.18	7.65	57.9	0.04	92.1	55	317
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	4	5.9	9.69	14.13	7.68	57.2	0.04	94.1	153	317
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	3	6.6	9.76	14.08	7.66	57.4	0.04	94.7	113	317

Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	2	7.3	9.76	14.03	7.63	57.7	0.04	94.6	143	317
Hidden Lake	4098	KBDB	10/9/98	12:22:00	2.7	1	7.9	9.94	13.86	7.58	57.6	0.04	95.9	401	323
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	13	0.4	10.4	11.18	7.89	57.8	0.04	93.4	39	335
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	12	1	10.4	11.13	7.9	57.9	0.04	93.2	52	335
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	11	1.5	10.4	11	7.9	57.5	0.04	92.9	42	336
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	10	2	10.4	10.95	7.86	57.8	0.04	92.9	116	338
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	9	2.5	10.4	10.79	7.86	57.5	0.04	92.5	38	337
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	8	3	10.4	10.77	7.82	57.6	0.04	92.3	56	339
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	7	3.5	10.3	10.76	7.8	57.5	0.04	92	119	339
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	6	4	10.3	10.71	7.75	57.6	0.04	91.7	47	340
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	5	4.5	10.3	10.68	7.76	57.3	0.04	91.4	38	339
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	4	5	10.3	10.66	7.76	57.5	0.04	91.6	37	339
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	3	5.5	10.4	10.64	7.77	57.4	0.04	92.3	46	339
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	2	6	10.4	10.58	7.76	57.6	0.04	92.5	119	339
Hidden Lake	4298	DTASJB	10/19/98	11:09:03	2.7	1	6.5	10.4	10.58	7.69	57.6	0.04	92.5	228	346
Hidden Lake	4698	KBAS	11/17/98	11:23:00	3.3	8	0.3	9.83	6.86	7.7	53.4	0.03	81.4	100	277
Hidden Lake	4698	KBAS	11/17/98	11:23:00	3.3	7	1.2	9.81	6.85	7.73	53.7	0.03	81.3	125	273
Hidden Lake	4698	KBAS	11/17/98	11:23:00	3.3	6	2.2	9.75	6.82	7.68	53.4	0.03	80.8	130	272
Hidden Lake	4698	KBAS	11/17/98	11:23:00	3.3	5	3.3	9.72	6.79	7.64	53.4	0.03	80.4	121	270
Hidden Lake	4698	KBAS	11/17/98	11:23:00	3.3	4	4.2	9.72	6.79	7.61	53.6	0.03	80.4	55	267
Hidden Lake	4698	KBAS	11/17/98	11:23:00	3.3	3	5.2	9.7	6.78	7.61	53.4	0.03	80.2	134	264
Hidden Lake	4698	KBAS	11/17/98	11:23:00	3.3	2	6.2	9.63	6.79	7.56	53.5	0.03	79.7	115	261
Hidden Lake	4698	KBAS	11/17/98	11:23:00	3.3	1	7.2	9.6	6.79	7.54	53.3	0.03	79.4	713	256

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Round Lake	1398	DBRP	4/3/98	13:04:20	1.3	4	0.2	12.5	6.13	7.04	41.8	0.03	101.5	46	396
Round Lake	1398	DBRP	4/3/98	13:04:20	1.3	3	0.5	12.6	6.05	7.02	41.7	0.03	101.4	57	399
Round Lake	1398	DBRP	4/3/98	13:04:20	1.3	2	0.9	12.5	6.1	7.02	41.6	0.03	101.4	154	401
Round Lake	1398	DBRP	4/3/98	13:04:20	1.3	1	1.3	12.7	6.36	6.98	41.8	0.03	103.5	153	405
Round Lake	1698	DBASRP	4/21/98	12:28:46	1.0	4	0.4	11.8	9.13	7.05	44.1	0.03	102.4	57	376
Round Lake	1698	DBASRP	4/21/98	12:28:46	1.0	3	0.6	11.8	8.97	7.1	44	0.03	101.9	54	374
Round Lake	1698	DBASRP	4/21/98	12:28:46	1.0	2	0.8	11.8	8.99	7.07	44	0.03	101.6	213	376
Round Lake	1698	DBASRP	4/21/98	12:28:46	1.0	1	1	11.7	9.2	7.08	43.7	0.03	101.1	250	395
Round Lake	2098	ASJLDT	5/21/98	14:04:17	1.7	6	0.3	11.9	9.68	7.04	35.3	0.02	104.4	54	410
Round Lake	2098	ASJLDT	5/21/98	14:04:17	1.7	5	0.3	11.9	9.76	7.07	35.2	0.02	105.1	50	410
Round Lake	2098	ASJLDT	5/21/98	14:04:17	1.7	4	1	11.9	9.66	7.06	35.3	0.02	104.9	58	410
Round Lake	2098	ASJLDT	5/21/98	14:04:17	1.7	3	1	11.9	9.64	7.02	35.2	0.02	105	102	414
Round Lake	2098	ASJLDT	5/21/98	14:04:17	1.7	2	1.7	11.9	9.66	7.03	35.3	0.02	105.1	57	414
Round Lake	2098	ASJLDT	5/21/98	14:04:17	1.7	1	1.7	11.9	9.68	7.05	35.3	0.02	105	340	413

Round Lake	2398	DTJLAS	6/8/98	14:10:07	1.8	8	0.3	10.7	12.62	7.3	39.2	0.03	100.9	35	368
Round Lake	2398	DTJLAS	6/8/98	14:10:07	1.8	7	0.3	10.7	12.62	7.3	39.2	0.03	100.3	44	369
Round Lake	2398	DTJLAS	6/8/98	14:10:07	1.8	6	0.7	10.7	12.58	7.27	39.2	0.03	100.8	47	371
Round Lake	2398	DTJLAS	6/8/98	14:10:07	1.8	5	0.7	10.7	12.64	7.29	39.3	0.03	100.4	122	370
Round Lake	2398	DTJLAS	6/8/98	14:10:07	1.8	4	1.2	10.8	12.46	7.28	39.2	0.03	100.9	43	371
Round Lake	2398	DTJLAS	6/8/98	14:10:07	1.8	3	1.2	10.8	12.48	7.28	39.2	0.03	101	116	372
Round Lake	2398	DTJLAS	6/8/98	14:10:07	1.8	2	1.8	10.9	12.49	7.28	39.3	0.03	101.9	44	372
Round Lake	2398	DTJLAS	6/8/98	14:10:07	1.8	1	1.8	10.9	12.54	7.27	39.2	0.03	102.1	215	372
Round Lake	2598	DTASBH	6/22/98	10:57:51	1.6	6	0.3	10.3	16.71	7.36	43.9	0.03	106.2	123	343
Round Lake	2598	DTASBH	6/22/98	10:57:51	1.6	5	0.3	10.3	16.36	7.33	44	0.03	105.1	49	343
Round Lake	2598	DTASBH	6/22/98	10:57:51	1.6	4	0.9	9.99	15.66	7.28	43.6	0.03	100.6	213	345
Round Lake	2598	DTASBH	6/22/98	10:57:51	1.6	3	0.9	10.1	15.83	7.28	43.6	0.03	101.8	143	343
Round Lake	2598	DTASBH	6/22/98	10:57:51	1.6	2	1.6	10	15.39	7.25	43.6	0.03	100.5	112	343
Round Lake	2598	DTASBH	6/22/98	10:57:51	1.6	1	1.6	10.1	15.4	7.25	43.8	0.03	100.6	323	343
Round Lake	2798	DTASBH	7/7/98	9:38:04	2.0	4	0.4	9.08	20.76	7.32	53.3	0.03	100.9	135	340
Round Lake	2798	DTASBH	7/7/98	9:38:04	2.0	3	1	9.13	20.08	7.27	53.1	0.03	100.2	236	343
Round Lake	2798	DTASBH	7/7/98	9:38:04	2.0	2	1.5	9.18	19.9	7.26	53	0.03	100.4	203	342
Round Lake	2798	DTASBH	7/7/98	9:38:04	2.0	1	2	9.23	19.9	7.3	52.8	0.03	100.9	403	350
Round Lake	2998	ASBH	7/21/98	10:20:54	1.5	4	0.4	8.75	23.47	7.41	54.5	0.03	102.6	56	306
Round Lake	2998	ASBH	7/21/98	10:20:54	1.5	3	0.4	8.86	23.29	7.38	54.6	0.03	103.5	126	307
Round Lake	2998	ASBH	7/21/98	10:20:54	1.5	2	1.6	9.43	22.04	7.47	54.1	0.03	107.6	104	303
Round Lake	2998	ASBH	7/21/98	10:20:54	1.5	1	1.5	9.38	22.02	7.42	53.9	0.03	107	311	304
Round Lake	3298	DBAS	8/11/98	10:29:32	1.2	3	0.4	8.24	23.86	7.4	60.7	0.04	97.2	53	306
Round Lake	3298	DBAS	8/11/98	10:29:32	1.2	2	0.8	8.43	23.64	7.4	60.6	0.04	99	132	306
Round Lake	3298	DBAS	8/11/98	10:29:32	1.2	1	1.2	8.46	23.49	7.42	60.7	0.04	99.1	25	306
Round Lake	3498	ASGL	8/26/98	12:18:56	.8	4	0.3	9.37	22.9	7.69	60.2	0.04	109.1	33	258
Round Lake	3498	ASGL	8/26/98	12:18:56	.8	3	0.3	9.41	22.9	7.7	60.2	0.04	109.6	53	256
Round Lake	3498	ASGL	8/26/98	12:18:56	.8	2	0.8	9.53	22.83	7.7	60.2	0.04	110.8	41	256
Round Lake	3498	ASGL	8/26/98	12:18:56	.8	1	0.8	9.55	22.83	7.7	60.2	0.04	111.1	216	255
Round Lake	3598	DTAS	9/3/98	11:19:20	1.1	4	0.2	8.49	21.95	7.38	65.4	0.04	97.3	120	258
Round Lake	3598	DTAS	9/3/98	11:19:20	1.1	3	0.2	8.42	21.78	7.34	65.4	0.04	96.1	109	258
Round Lake	3598	DTAS	9/3/98	11:19:20	1.1	2	1.1	8.35	21.35	7.35	65.3	0.04	94.5	227	254
Round Lake	3598	DTAS	9/3/98	11:19:20	1.1	1	1.1	8.45	21.37	7.38	65.2	0.04	95.7	142	251
Round Lake	4098	KBDB	10/9/98	13:55:00	1.0	3	0.3	11.2	14.38	8.2	61.5	0.04	109.2	104	287
Round Lake	4098	KBDB	10/9/98	13:55:00	1.0	2	0.6	11.6	14.21	8.39	61.3	0.04	112.9	131	284
Round Lake	4098	KBDB	10/9/98	13:55:00	1.0	1	1.1	12.6	13.78	8.63	61	0.04	121.5	101	274

Round Lake	4298	DTASJB	10/19/98	10:22:53	.7	3	0.7	11.9	9.63	8.28	61.1	0.04	103.1	40	334
Round Lake	4298	DTASJB	10/19/98	10:22:53	.7	2	0.7	11.9	9.63	8.29	61	0.04	103.4	43	335
Round Lake	4298	DTASJB	10/19/98	10:22:53	.7	1	0.7	12.1	9.58	8.3	61.1	0.04	104.7	114	336

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	11	0.3	13.5	5.65	7.07	45.1	0.03	106.2	37	390
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	10	1.1	13.4	5.46	7.1	45	0.03	105.4	47	388
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	9	2.1	13.3	5.04	7.07	44.6	0.03	103.8	119	389
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	8	3.1	13.3	4.93	6.99	44.5	0.03	102.8	55	391
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	7	4.1	13.3	4.59	7	44.3	0.03	102.1	113	389
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	6	5.1	13.3	4.34	7.07	44.8	0.03	101.2	103	385
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	5	6.1	13.3	4.34	6.97	45	0.03	101.2	55	389
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	4	7.1	13.3	4.31	7	45.1	0.03	101.3	116	386
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	3	8.1	13.3	4.31	6.95	45.5	0.03	101.3	139	387
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	2	9.1	13.3	4.24	6.84	45.3	0.03	101.1	125	391
Chatcolet Lake DP	1098	DBRP	3/13/98	13:19:09	1.0	1	10.1	13	4.34	6.79	44.8	0.03	99.3	237	392
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	11	0.3	12.3	7.43	7.1	39.2	0.03	102.3	54	398
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	10	1.1	12.3	7.43	7.04	39.4	0.03	102.2	38	402
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	9	2.1	12.3	7.4	7.07	39.1	0.03	102.2	56	401
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	8	3.1	12.3	7.33	7.13	39.1	0.03	101.9	53	398
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	7	4.1	12.3	7.24	7.06	39.1	0.03	101.6	59	401
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	6	5.2	12.3	7.19	7.09	38.9	0.02	101.6	40	398
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	5	6.2	12.3	7.04	7.12	38.6	0.02	101.3	100	396
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	4	7.2	12.2	7.02	7.01	38.9	0.02	100.9	50	401
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	3	8.1	12.2	6.89	7.03	38.7	0.02	100.6	37	398
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	2	9.2	12.2	6.39	6.95	38.3	0.02	99	29	401
Chatcolet Lake DP	1498	DBAS	4/8/98	14:53:37	2.0	1	10.1	12.2	6.36	6.98	38	0.02	99	204	403
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	11	0.4	11.9	10.53	7.14	42.5	0.03	106.4	50	392
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	10	1.4	11.9	10.33	7.21	42.4	0.03	106	111	391
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	9	2.4	12	9.79	7.16	42.3	0.03	105	100	394
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	8	3.5	11.9	9.14	7.16	42.1	0.03	103	102	394
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	7	4.4	11.8	8.61	7.08	42.8	0.03	101.2	117	397
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	6	5.4	11.8	8.46	7.08	43.1	0.03	100	111	395
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	5	6.4	11.6	7.95	6.98	43	0.03	97.3	105	400
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	4	7.4	11.6	7.43	6.97	42.4	0.03	96	114	399
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	3	8.4	11.3	6.9	6.91	41.1	0.03	92.8	134	401
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	2	9.4	11.2	6.89	6.92	41.1	0.03	91.6	146	401
Chatcolet Lake DP	1698	DBASRP	4/21/98	13:04:35	2.6	1	10.4	11	7.27	6.95	40.9	0.03	90.9	218	401

Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	12	0.3	11.7	11.76	7.17	34.3	0.02	108.1	152	417
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	11	1.3	11.7	11.76	7.23	34.4	0.02	108.1	107	415
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	10	2.3	11.7	11.64	7.13	34.3	0.02	108.1	101	421
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	9	3.3	11.7	11.56	7.12	34.3	0.02	108.1	115	421
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	8	4.3	11.7	11.4	7.13	34.4	0.02	107.4	107	418
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	7	5.3	11.6	10.95	6.9	34.6	0.02	105.7	47	428
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	6	6.3	11.4	9.73	6.88	34.6	0.02	100.5	156	427
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	5	7.3	11.3	9.37	6.85	33.8	0.02	99.2	151	427
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	4	8.4	11.1	8.97	6.82	33.7	0.02	95.9	247	426
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	3	9.2	11.1	8.97	6.76	33.6	0.02	96.2	206	427
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	2	10.3	11.1	8.91	6.7	33.7	0.02	96.1	155	428
Chatcolet Lake DP	2098	ASJLDT	5/21/98	12:25:30	2.6	1	11.3	10.9	8.65	6.62	33.6	0.02	93.5	437	429
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	12	0.4	10.7	16.06	7.46	39.6	0.03	108.5	25	355
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	11	1.1	10.7	16.06	7.45	39.6	0.03	108.6	28	356
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	10	2.1	10.5	16.03	7.45	39.7	0.03	106.8	34	355
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	9	3.1	10.7	15.34	7.43	39.4	0.03	107.4	56	355
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	8	4.1	10.9	12.86	7.3	38.4	0.02	103	128	358
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	7	5.1	10.6	12.3	7.17	37.8	0.02	98.6	55	359
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	6	6.1	10.2	11.75	7.09	37.4	0.02	93.8	51	359
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	5	7.1	10.1	11.2	7.04	37	0.02	91.8	48	358
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	4	8.1	9.76	10.56	6.98	36.7	0.02	87.6	48	356
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	3	9.1	9.73	10.21	6.96	36.4	0.02	86.6	37	354
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	2	10.1	9.67	10.1	6.94	36.3	0.02	85.8	40	352
Chatcolet Lake DP	2398	DTJLAS	6/8/98	15:35:20	2.9	1	11.1	9.17	9.38	6.9	36.6	0.02	80.1	225	371
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	11	0.4	10.5	19.09	7.66	41.9	0.03	113.2	1021	339
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	10	1.4	10.7	18.1	7.62	41.7	0.03	113.6	131	343
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	9	2.4	11.1	16.44	7.59	41.6	0.03	113.2	52	346
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	8	3.4	10.3	15.52	7.3	40.9	0.03	103.3	227	352
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	7	4.4	9.42	14.44	7.07	39.9	0.03	92.4	117	356
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	6	5.4	9.42	13.86	7.03	39.9	0.03	91.2	105	356
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	5	6.4	8.9	13.18	6.88	38.6	0.02	84.8	55	358
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	4	7.4	8.13	12.15	6.78	37.3	0.02	75.7	120	359
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	3	8.4	7.63	11.33	6.72	36.8	0.02	69.7	200	358
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	2	9.4	7.14	11.11	6.7	37.3	0.02	64.9	141	355
Chatcolet Lake DP	2598	DTASBH	6/22/98	11:40:57	3.1	1	10.4	6.46	10.57	6.7	37.3	0.02	58	228	351
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	11	0.4	10.1	23.28	8.48	50.5	0.03	117.5	39	329
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	10	1.7	10.4	21.67	8.51	49.8	0.03	117.7	152	333
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	9	2.7	10.6	20.77	8.37	49.3	0.03	117.3	134	337
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	8	3.7	10.2	19.44	7.61	49.5	0.03	110.3	151	354
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	7	4.7	10.2	17.79	7.55	47.2	0.03	106.8	231	356
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	6	5.7	9.25	15.62	7.14	45.1	0.03	92.6	204	364

Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	5	6.7	7.9	14.66	6.9	44.1	0.03	77.4	304	367
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	4	7.7	7.16	13.71	6.74	43.3	0.03	68.8	102	369
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	3	8.7	5.81	12.85	6.64	42.6	0.03	54.7	247	369
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	2	9.7	4.78	12.16	6.58	42.9	0.03	44.4	126	367
Chatcolet Lake DP	2798	DTASBH	7/7/98	10:48:54	3.6	1	10.7	4.21	12.16	6.59	43.4	0.03	39	309	364
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	11	0.6	9.15	25.45	8.49	51.1	0.03	111.3	144	283
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	10	1.6	9.13	24	8.28	50.2	0.03	108.1	101	287
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	9	2.6	9.15	23.53	8.26	50.1	0.03	107.4	120	289
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	8	3.6	9.15	23.22	8.13	49.8	0.03	106.7	128	293
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	7	4.6	9.16	22.63	7.86	49	0.03	105.7	121	302
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	6	5.6	9.15	19.82	7.21	45.9	0.03	100	102	315
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	5	6.6	7.22	16.49	6.78	43.3	0.03	73.7	120	322
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	4	7.6	5.34	13.88	6.57	42.4	0.03	51.5	120	324
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	3	8.6	3.24	13.02	6.48	43.9	0.03	30.7	122	323
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	2	9.6	1.63	12.25	6.45	46	0.03	15.1	130	320
Chatcolet Lake DP	2998	ASBH	7/21/98	12:25:45	6.8	1	10.6	0.97	12.44	6.49	47.9	0.03	9	528	317
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	11	0.3	9.4	23.84	8.81	54.5	0.03	110.8	35	245
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	10	1.3	9.49	23.76	8.84	54.6	0.03	111.8	213	243
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	9	2.3	9.62	23.6	8.9	55	0.04	112.9	53	234
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	8	3.3	9.6	23.55	8.86	55	0.04	112.5	58	231
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	7	4.4	9.42	23.38	8.78	54.2	0.03	110.1	120	228
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	6	5.3	8.93	23.2	8.66	53.8	0.03	104	325	221
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	5	6.4	5.71	18.37	6.71	46.6	0.03	60.6	212	238
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	4	7.4	2.52	15.69	6.54	46.5	0.03	25.3	235	212
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	3	8.4	0.79	14.32	6.51	48.6	0.03	7.7	130	167
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	2	9.4	0.16	13.28	6.55	55.3	0.04	1.5	116	131
Chatcolet Lake DP	3298	DBAS	8/11/98	9:27:45	4.8	1	10.5	0.16	12.94	6.59	61.1	0.04	1.5	818	118
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	12	0.3	8.99	21.11	8.36	51.6	0.03	100.7	26	192
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	11	0.9	8.92	21.12	8.3	51.7	0.03	100	55	192
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	10	1.9	8.92	21.11	8.29	51.6	0.03	99.9	59	187
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	9	2.9	8.92	21.01	8.22	51.5	0.03	99.7	51	182
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	8	3.9	8.79	20.95	8.13	51.4	0.03	98.2	56	177
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	7	4.9	8.7	20.67	7.89	51.5	0.03	96.7	115	174
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	6	5.9	7.11	20.08	7.27	50.9	0.03	78.1	135	179
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	5	6.9	5.12	19.13	6.9	50.5	0.03	55.2	151	157
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	4	7.9	0.13	15.84	6.61	53.7	0.03	1.3	118	101
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	3	8.9	0.16	13.73	6.66	61.6	0.04	1.5	107	73
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	2	9.9	0.2	13.38	6.68	66.9	0.04	1.9	46	73
Chatcolet Lake DP	3498	DTAS	8/26/98	13:25:04	4.0	1	10.9	0.23	13	6.68	73.2	0.05	2.2	212	77
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	12	0.3	9.23	22.17	8.35	57.8	0.04	106.1	35	205

Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	11	1	9.3	21.74	8.38	58	0.04	106.1	140	202
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	10	1.9	9.24	21.49	8.34	57.8	0.04	104.9	142	198
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	9	2.9	9.07	21.04	8.25	57.3	0.04	102.1	153	193
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	8	3.9	8.92	20.9	8.09	57.1	0.04	100.2	140	188
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	7	4.9	7.84	20.63	7.65	56.5	0.04	87.6	235	190
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	6	5.9	7.39	20.32	7.27	56.6	0.04	82	145	176
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	5	6.9	2.71	19.35	6.84	55.3	0.04	29.5	129	135
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	4	7.9	0.1	16.96	6.71	61.7	0.04	1.1	120	74
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	3	8.9	0.11	14.47	6.74	70.2	0.04	1.1	220	42
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	2	9.9	0.14	12.87	6.82	86	0.06	1.3	238	36
Chatcolet Lake DP	3598	DTAS	9/2/98	13:51:50	6.1	1	10.9	0.17	12.62	6.81	92.6	0.06	1.6	345	45
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	12	0.3	9.63	14.91	7.82	58.4	0.04	95.2	34	302
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	11	0.6	9.63	14.91	7.79	58.3	0.04	95.2	42	303
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	10	1.6	9.59	14.66	7.72	58.1	0.04	94.2	57	304
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	9	2.6	9.17	14.53	7.62	58.1	0.04	89.9	134	307
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	8	3.5	8.87	14.49	7.53	58.2	0.04	86.8	44	308
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	7	4.5	8.72	14.43	7.49	58.3	0.04	85.2	50	309
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	6	5.6	8.53	14.38	7.48	58.7	0.04	83.2	15	308
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	5	6.6	8.4	14.36	7.53	58.6	0.04	82	52	307
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	4	7.4	8.44	14.35	7.61	58.4	0.04	82.4	54	304
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	3	8.5	9	14.31	7.79	58.7	0.04	87.8	108	300
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	2	9.5	9.11	14	7.97	58.8	0.04	88.2	123	297
Chatcolet Lake DP	4098	KBDB	10/9/98	14:29:00	2.7	1	10.5	8.8	13.68	8.14	58.5	0.04	84.6	358	292
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	11	0.5	9.92	11.4	7.69	57.8	0.04	89.7	48	359
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	10	1.3	9.91	11.4	7.66	57.8	0.04	89.6	37	361
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	9	2.3	10.2	11.38	7.65	57.8	0.04	91.8	11	361
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	8	3.3	9.82	11.38	7.63	58.1	0.04	88.8	48	362
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	7	4.3	9.82	11.38	7.61	58.1	0.04	88.8	37	362
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	6	5.3	9.83	11.38	7.63	58.1	0.04	88.9	44	361
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	5	6.3	9.82	11.36	7.62	57.6	0.04	88.7	41	361
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	4	7.3	9.83	11.31	7.62	57.7	0.04	88.7	44	361
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	3	8.3	9.89	0	7.64	57.8	0.04	89.1	0	359
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	2	9.3	9.92	11.2	7.64	58.1	0.04	89.3	110	360
Chatcolet Lake DP	4298	DTASJB	10/19/98	10:05	2.3	1	10.3	9.82	0	7.58	57.7	0.04	88.4	1837	360
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	11	0.5	9.87	7.25	7.96	53.5	0.03	82.6	102	383
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	10	1.5	9.86	7.27	7.94	53.5	0.03	82.5	100	384
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	9	2.5	9.86	7.24	7.88	53.5	0.03	82.5	104	388
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	8	3.5	9.84	7.22	7.86	53.3	0.03	82.3	108	389
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	7	4.5	9.82	7.22	7.82	53.8	0.03	82.1	59	390
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	6	5.5	9.79	7.2	7.8	53.6	0.03	81.8	54	391
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	5	6.5	9.8	7.17	7.79	53.6	0.03	104.1	4	391

Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	4	6.5	9.79	0	7.78	53.8	0.03	81.8	40	392
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	3	7.6	9.79	7.14	7.76	53.3	0.03	81.7	150	392
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	2	8.5	9.71	7.17	7.73	53.3	0.03	81.1	120	393
Chatcolet Lake DP	4698	KBAS	11/17/98	10:40:00	2.7	1	9.5	9.75	7.1	7.7	52.9	0.03	81.3	913	394

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Chatcolet Lake SH	2098	ASJLDT	5/21/98	12:15:55	0.7	4	0.3	11.8	9.35	6.95	35	0.02	102.8	47	407
Chatcolet Lake SH	2098	ASJLDT	5/21/98	12:15:55	0.7	3	0.3	11.8	9.35	6.96	35	0.02	102.7	109	408
Chatcolet Lake SH	2098	ASJLDT	5/21/98	12:15:55	0.7	2	0.7	11.8	9.37	6.98	35.7	0.02	103.1	122	409
Chatcolet Lake SH	2098	ASJLDT	5/21/98	12:15:55	0.7	1	0.7	11.9	9.37	6.9	35.2	0.02	103.9	203	415
Chatcolet Lake SH	2398	DTJLAS	6/8/98	15:18:55	0.7	4	0.3	10.8	12.77	7.28	39.3	0.03	102.2	25	365
Chatcolet Lake SH	2398	DTJLAS	6/8/98	15:18:55	0.7	3	0.3	10.8	12.79	7.27	39.3	0.03	102	32	365
Chatcolet Lake SH	2398	DTJLAS	6/8/98	15:18:55	0.7	2	0.7	10.8	12.79	7.26	39.3	0.03	102.2	54	373
Chatcolet Lake SH	2398	DTJLAS	6/8/98	15:18:55	0.7	1	0.7	11	12.77	7.24	39.3	0.03	103.4	155	375
Chatcolet Lake SH	2598	DTASBH	6/22/98	12:03	0.8	4	0.2	10.1	16.16	7.3	43.8	0.03	102.8	57	320
Chatcolet Lake SH	2598	DTASBH	6/22/98	12:03	0.8	3	0.2	10.1		7.31	43.7	0.03	102.8	246	316
Chatcolet Lake SH	2598	DTASBH	6/22/98	12:03	0.8	2	0.8	10.2	16.17	7.3	43.8	0.03	103.4	709	339
Chatcolet Lake SH	2598	DTASBH	6/22/98	12:03	0.8	1	0.8	10.4	16.29	7.25	43.7	0.03	105.6	142	333
Chatcolet Lake SH	2798	DTASBH	7/7/98	10:37:02	0.8	4	0.3	11.3	22.86	9.01	52.1	0.03	130.6	101	302
Chatcolet Lake SH	2798	DTASBH	7/7/98	10:37:02	0.8	3	0.3	11.4	22.65	9.02	52.2	0.03	131.3	137	303
Chatcolet Lake SH	2798	DTASBH	7/7/98	10:37:02	0.8	2	0.8	11.8	22.15	8.95	52.4	0.03	134.3	102	308
Chatcolet Lake SH	2798	DTASBH	7/7/98	10:37:02	0.8	1	0.8	11.6	22.06	8.88	52.2	0.03	132.5	510	314
Chatcolet Lake SH	2998	ASBH	7/21/98	12:09:39	0.9	4	0.3	12.1	26.62	9.3	56.2	0.04	149.7	56	259
Chatcolet Lake SH	2998	ASBH	7/21/98	12:09:39	0.9	3	0.3	11.9	26.43	9.3	56.4	0.04	146.9	57	257
Chatcolet Lake SH	2998	ASBH	7/21/98	12:09:39	0.9	2	0.8	12.1	22.66	9.02	54.3	0.03	139.8	159	266
Chatcolet Lake SH	2998	ASBH	7/21/98	12:09:39	0.9	1	0.9	12.6	23.06	9.34	54.2	0.03	146	249	261
Chatcolet Lake SH	3298	DBAS	8/11/98	9:53:29	0.9	3	0.3	8.63	23.31	8.12	62.3	0.04	100.7	57	280
Chatcolet Lake SH	3298	DBAS	8/11/98	9:53:29	0.9	2	0.6	8.32	23.11	7.83	62.3	0.04	96.8	110	284
Chatcolet Lake SH	3298	DBAS	8/11/98	9:53:29	0.9	1	0.9	7.92	22.86	7.62	63.1	0.04	91.8	232	287
Chatcolet Lake SH	3498	DTAS	8/27/98	8:52:58	1.0	4	0.3	8.05	20.02	7.28	59.2	0.04	88.3	28	237
Chatcolet Lake SH	3498	DTAS	8/27/98	8:52:58	1.0	3	0.3	8.05	20.06	7.25	59.3	0.04	88.3	104	237
Chatcolet Lake SH	3498	DTAS	8/27/98	8:52:58	1.0	2	1	8.04	20.04	7.3	59	0.04	88.2	48	232
Chatcolet Lake SH	3498	DTAS	8/27/98	8:52:58	1.0	1	1	8.11	19.94	7.27	59.1	0.04	88.8	103	235
Chatcolet Lake SH	3598	DTAS	9/3/98	11:06:09	0.8	4	0.2	10.3	22.34	8.62	64.7	0.04	119	51	225
Chatcolet Lake SH	3598	DTAS	9/3/98	11:06:09	0.8	3	0.2	10.2	22.33	8.59	64.5	0.04	117.8	57	223

Chatcolet Lake SH	3598	DTAS	9/3/98	11:06:09	0.8	2	0.8	10.4	21.92	8.45	64.6	0.04	119.1	114	218
Chatcolet Lake SH	3598	DTAS	9/3/98	11:06:09	0.8	1	0.8	10.3	21.95	8.37	64.5	0.04	118.2	325	215
Chatcolet Lake SH	4098	KBDB	10/9/98	14:10:00	1.1	3	0.3	9.54	14.06	7.47	61.9	0.04	92.5	103	307
Chatcolet Lake SH	4098	KBDB	10/9/98	14:10:00	1.1	2	0.7	9.9	13.93	7.49	61.7	0.04	95.7	120	308
Chatcolet Lake SH	4098	KBDB	10/9/98	14:10:00	1.1	1	1.1	10.2	13.72	7.5	61.4	0.04	98.1	29	309
Chatcolet Lake SH	4298	DTASJB	10/19/98	10:13:52	0.9	3	0.9	13.7	8.37	9.36	59.8	0.04	115.2	107	313
Chatcolet Lake SH	4298	DTASJB	10/19/98	10:13:52	0.9	2	0.9	13.7		9.33	59.7	0.04	115.3	56	314
Chatcolet Lake SH	4298	DTASJB	10/19/98	10:13:52	0.9	1	0.9	13.7	8.29	9.33	59.9	0.04	115.3	158	314

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	10	0.2	11.88	10.32	6.95	34.2	0.02	106.5	43	395
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	9	0.5	11.77	10.3	7.09	34.1	0.02	105.6	114	388
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	8	1	11.75	10.25	7.12	34.1	0.02	105.2	52	386
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	7	1.5	11.72	10.25	6.96	33.9	0.02	105	120	394
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	6	2	11.44	9.82	6.98	34.1	0.02	101.4	125	391
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	5	2.5	11.48	8.78	6.93	33.9	0.02	99.2	54	392
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	4	3	11.3	8.47	6.91	33.9	0.02	97	58	391
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	3	3.5	11.26	8.35	6.81	34	0.02	96.4	49	395
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	2	4	11.13	8.17	6.78	33.9	0.02	94.8	107	396
Benewah Lake	1398	DBRP	4/3/98	12:37:53	0.95	1	4.4	10.68	7.76	6.72	34.1	0.02	90.1	214	403
Benewah Lake	1698	DBASRP	4/21/98	11:47:22	1.0	8	0.3	10.84	14.46	6.96	36.8	0.02	106	222	384
Benewah Lake	1698	DBASRP	4/21/98	11:47:22	1.0	7	1	10.84	12.38	6.82	36.4	0.02	101.2	237	398
Benewah Lake	1698	DBASRP	4/21/98	11:47:22	1.0	6	1.5	10.81	12.05	6.9	36.4	0.02	100.2	202	391
Benewah Lake	1698	DBASRP	4/21/98	11:47:22	1.0	5	2	10.64	11.76	6.82	36.5	0.02	97.9	212	392
Benewah Lake	1698	DBASRP	4/21/98	11:47:22	1.0	4	2.5	10.53	11.29	6.75	36.3	0.02	95.9	104	389
Benewah Lake	1698	DBASRP	4/21/98	11:47:22	1.0	3	3	10.09	10.18	6.6	36.7	0.02	89.5	140	392
Benewah Lake	1698	DBASRP	4/21/98	11:47:22	1.0	2	3.5	9.31	9.26	6.56	36.8	0.02	80.8	204	390
Benewah Lake	1698	DBASRP	4/21/98	11:47:22	1.0	1	4	7.42	8.82	6.53	37.1	0.02	63.7	302	400
Benewah Lake	2098	ASJLDT	5/21/98	13:35:46	3.2	9	0.4	10.3	15.33	7.01	37.1	0.02	103.1	35	408
Benewah Lake	2098	ASJLDT	5/21/98	13:35:46	3.2	8	1	10.28	15.21	7.01	37.1	0.02	102.7	39	408
Benewah Lake	2098	ASJLDT	5/21/98	13:35:46	3.2	7	1.5	10.27	15.14	7.01	37.1	0.02	102.5	58	407
Benewah Lake	2098	ASJLDT	5/21/98	13:35:46	3.2	6	2	10.27	15.09	6.98	37.2	0.02	102.3	48	407
Benewah Lake	2098	ASJLDT	5/21/98	13:35:46	3.2	5	2.5	9.62	13.77	6.71	38.1	0.02	93.1	57	419
Benewah Lake	2098	ASJLDT	5/21/98	13:35:46	3.2	4	3	9.71	12.2	6.73	37.4	0.02	90.7	125	414
Benewah Lake	2098	ASJLDT	5/21/98	13:35:46	3.2	3	3.5	8.55	11.41	6.52	37.8	0.02	78.5	57	420
Benewah Lake	2098	ASJLDT	5/21/98	13:35:46	3.2	2	4	7.96	11.07	6.52	38.7	0.02	72.4	427	418
Benewah Lake	2098	ASJLDT	5/21/98	13:35:46	3.2	1	4.5	5	10.51	6.21	40.1	0.03	44.9	331	429

Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	10	0.4	9.88	19.44	7.32	40.3	0.03	107.5	28	365
Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	9	1	9.82	17.07	7.25	39.9	0.03	101.8	39	369
Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	8	1.5	9.77	15.99	7.09	39.9	0.03	99.1	44	374
Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	7	2	9.55	13.82	6.93	39.1	0.03	92.4	28	377
Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	6	2.5	8.69	13.09	6.82	38.9	0.02	82.7	35	379
Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	5	3	7.03	11.87	6.68	38.7	0.02	65	110	381
Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	4	3.5	6.5	10.66	6.61	38.9	0.02	58.5	21	380
Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	3	4	6.4	10.45	6.6	38.6	0.02	57.3	42	378
Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	2	4.5	4.95	9.89	6.55	40	0.03	43.8	135	376
Benewah Lake	2398	DTJLAS	6/8/98	15:00:18	1.4	1	4.8	4.13	9.84	6.56	41	0.03	36.4	205	388
Benewah Lake	2598	DTASBH	6/22/98	10:35	2.8	8	0.4	10.17	20.46	7.71	40.9	0.03	112.9	38	330
Benewah Lake	2598	DTASBH	6/22/98	10:35	2.8	7	1	10.41	19.56	7.69	40.8	0.03	113.5	126	331
Benewah Lake	2598	DTASBH	6/22/98	10:35	2.8	6	1.5	10.87	17.71	7.55	40.8	0.03	114.3	203	334
Benewah Lake	2598	DTASBH	6/22/98	10:35	2.8	5	2	10.53	16.95	7.36	41	0.03	109	208	336
Benewah Lake	2598	DTASBH	6/22/98	10:35	2.8	4	2.5	10.42	15.99	7.22	41.1	0.03	105.6	201	336
Benewah Lake	2598	DTASBH	6/22/98	10:35	2.8	3	3	10.39	15.47	7.18	41.2	0.03	104.2	232	335
Benewah Lake	2598	DTASBH	6/22/98	10:35	2.8	2	3.5	7.77	14.18	6.79	40.3	0.03	75.7	320	336
Benewah Lake	2598	DTASBH	6/22/98	10:35	2.8	1	4.5	0.38	11.25	6.29	50.4	0.03	3.5	519	332
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	10	0.3	10.28	23.49	8.55	49.7	0.03	120.5	40	356
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	9	0.7	10.19	23.15	8.49	49.3	0.03	118.6	111	358
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	8	1.2	10.12	22.93	8.44	49.4	0.03	117.3	48	359
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	7	1.7	10.2	22.52	8.25	50.1	0.03	117.3	125	365
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	6	2.2	10.85	21.85	8.21	49.9	0.03	123.2	107	366
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	5	2.7	11	20.35	7.76	50.1	0.03	121.3	140	372
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	4	3.2	10.47	18.18	7.41	48.5	0.03	110.6	153	375
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	3	3.7	10.6	15.96	7.37	47.3	0.03	106.9	309	369
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	2	4.2	3.79	13.73	6.56	50.1	0.03	36.4	204	368
Benewah Lake	2798	DTASBH	7/7/98	6:47:21	3.2	1	4.7	0.31	12.44	6.35	60.1	0.04	2.9	232	355
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	10	0.3	9.2	25.92	8.41	50.1	0.03	112.8	103	254
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	9	0.8	9.22	25.86	8.41	50.1	0.03	112.9	131	251
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	8	1.3	9.28	25.36	8.47	50.3	0.03	112.6	59	245
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	7	1.8	9.59	24.9	8.53	50.1	0.03	115.4	109	238
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	6	2.3	9.24	24.64	8.45	50.1	0.03	110.7	20	232
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	5	2.8	9.22	24.35	8.51	50.2	0.03	109.9	110	218
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	4	3.5	10.19	20.83	7.63	48.2	0.03	113.5	113	229
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	3	3.8	10.48	18.85	7.86	46.8	0.03	112.4	115	209
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	2	4.3	9.77	16.69	7.75	49.5	0.03	100.2	248	199
Benewah Lake	2998	ASBH	7/21/98	10:47:28	4.1	1	4.8	0.35	13.6	6.48	69.4	0.04	3.3	314	186
Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	10	0.4	10.35	25.42	9.11	54.8	0.04	125.5	101	248
Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	9	0.9	10.77	23.91	9.17	54.5	0.03	127.1	102	245

Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	8	1.4	10.7	23.6	9.14	54.5	0.03	125.6	40	240
Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	7	1.9	10.51	23.53	9.09	54.4	0.03	123.2	54	238
Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	6	2.4	10.6	23.47	9.1	54.4	0.03	124.2	52	231
Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	5	2.9	10.42	23.37	9.01	54.1	0.03	121.8	58	225
Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	4	3.4	9.89	23.15	8.74	53.8	0.03	115.1	108	219
Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	3	3.9	9	22.75	7.65	53.7	0.03	104	128	230
Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	2	4.4	4.94	19.14	6.9	56.8	0.04	53.2	321	248
Benewah Lake	3298	DBAS	8/11/98	11:35:09	2.7	1	4.9	0.17	17.42	6.57	69	0.04	1.8	359	196
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	10	0.4	9.3	20.88	8.53	52	0.03	103.7	31	224
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	9	1	9.29	20.67	8.49	51.9	0.03	103.2	108	226
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	8	1.5	9.24	20.62	8.47	51.8	0.03	102.6	49	222
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	7	2	9.32	20.56	8.47	51.8	0.03	103.4	49	218
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	6	2.5	9.38	20.48	8.44	52.2	0.03	103.7	112	214
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	5	3	8.95	20.28	8.04	52.2	0.03	98.7	111	216
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	4	3.5	8.71	20.23	7.76	52.6	0.03	95.9	128	220
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	3	4	7.72	20.04	7.28	52.9	0.03	84.7	124	225
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	2	4.5	2.98	19.71	6.79	54.8	0.04	32.4	223	218
Benewah Lake	3498	DTAS	8/27/98	9:04:12	3.3	1	4.9	0.14	18.46	6.6	75.7	0.05	1.4	322	163
Benewah Lake	3598	DTAS	9/3/98	11:34:53	4.1	9	0.4	9.9	22.22	8.5	57.9	0.04	114	101	228
Benewah Lake	3598	DTAS	9/3/98	11:34:53	4.1	8	1	9.87	21.76	8.41	57.9	0.04	112.6	41	224
Benewah Lake	3598	DTAS	9/3/98	11:34:53	4.1	7	1.5	9.85	21.46	8.35	57.7	0.04	111.8	58	221
Benewah Lake	3598	DTAS	9/3/98	11:34:53	4.1	6	2	9.56	21.37	8.13	57.6	0.04	108.3	103	221
Benewah Lake	3598	DTAS	9/3/98	11:34:53	4.1	5	2.5	9.44	21.23	7.93	57.7	0.04	106.6	102	220
Benewah Lake	3598	DTAS	9/3/98	11:34:53	4.1	4	3	9.22	21.09	7.66	57.5	0.04	103.8	41	221
Benewah Lake	3598	DTAS	9/3/98	11:34:53	4.1	3	3.5	9.07	20.93	7.57	57.7	0.04	101.9	124	218
Benewah Lake	3598	DTAS	9/3/98	11:34:53	4.1	2	4	8.84	20.53	7.52	58.9	0.04	98.6	241	204
Benewah Lake	3598	DTAS	9/3/98	11:34:53	4.1	1	4.7	2.07	19.28	6.67	69.3	0.04	22.5	329	207
Benewah Lake	4098	KBDB	10/9/98	13:33:00	2.0	7	0.3	9.7	13.39	7.37	55.4	0.04	92.7	120	299
Benewah Lake	4098	KBDB	10/9/98	13:33:00	2.0	6	1	9.47	12.96	7.34	55.3	0.04	89.5	117	305
Benewah Lake	4098	KBDB	10/9/98	13:33:00	2.0	5	1.6	9.2	12.89	7.27	54.9	0.04	86.9	53	305
Benewah Lake	4098	KBDB	10/9/98	13:33:00	2.0	4	2.2	9.23	12.81	7.27	55.2	0.04	87	105	304
Benewah Lake	4098	KBDB	10/9/98	13:33:00	2.0	3	2.6	9.22	12.78	7.26	55.1	0.04	86.8	110	303
Benewah Lake	4098	KBDB	10/9/98	13:33:00	2.0	2	3.2	9.62	12.73	7.28	55.3	0.04	90.5	244	302
Benewah Lake	4098	KBDB	10/9/98	13:33:00	2.0	1	3.7	8.88	12.69	7.09	55.1	0.04	83.5	320	301

Location	Phase	Samplers	Date	Time	Secchi (m)	Sequence	Depth (m)	Dissolved Oxygen (mg/L)	Temperature (C)	pH	Conductivity (µs/cm)	TDS	Saturated Dissolved Oxygen	Stabilization Time	Redox
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	12	0.4	12.6	5.98	7.03	41.8	0.03	101.7	46	392
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	11	2.1	12.4	5.98	7.04	41.9	0.03	100.1	629	392
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	10	3.2	12.4	6	7.02	41.9	0.03	100.1	458	396

St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	9	4.2	12.4	5.98	7.02	41.9	0.03	100.3	821	398
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	8	5.1	12.7	5.97	7.03	42	0.03	102.3	26	402
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	7	6.1	12.6	5.97	7.04	41.9	0.03	101.8	44	403
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	6	7.1	12.6	5.97	7.02	41.9	0.03	101.5	50	404
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	5	8.3	12.6	5.98	7.01	42	0.03	101.5	104	405
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	4	9.2	12.7	5.98	7.02	41.9	0.03	102.2	128	406
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	3	10.3	12.7	5.97	7.02	42.1	0.03	102.1	34	408
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	2	11.2	12.8	5.97	7.03	42	0.03	102.8	25	408
St. Joe River	1398	DBRP	4/3/98	11:51:33	3.5	1	12.3	12.8	5.97	7.05	42	0.03	103.4	131	408
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	11	0.4	11.8	7.94	6.97	43.7	0.03	98.7	142	412
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	10	1.3	11.8	7.92	6.93	43.7	0.03	99.1	53	419
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	9	2.2	11.8	7.94	6.92	43.8	0.03	99.2	126	421
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	8	3.3	11.8	7.94	6.93	43.7	0.03	99.2	104	422
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	7	4.3	11.8	7.91	6.93	44	0.03	99.1	103	424
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	6	5.3	11.8	7.91	6.9	43.7	0.03	99.1	52	427
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	5	6.2	11.8	7.91	6.88	43.7	0.03	99.1	125	429
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	4	6.9	11.8	7.91	6.87	43.7	0.03	99	124	431
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	3	8.1	11.8	7.92	6.85	43.9	0.03	99.4	159	433
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	2	9.6	11.9	7.94	6.79	43.6	0.03	99.7	134	437
St. Joe River	1698	DBASRP	4/21/98	11:16:26	4.5	1	10.3	11.9	7.94	6.72	43.7	0.03	100.1	212	441
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	12	0.4	11.8	9.76	7.05	35.4	0.02	104	134	400
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	11	1.3	11.7	9.76	7.06	35.4	0.02	103.3	109	402
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	10	2.3	11.7	9.78	7.11	35.4	0.02	103.4	55	402
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	9	3.3	11.7	9.76	7.08	35.4	0.02	103.5	115	404
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	8	4.3	11.7	9.74	7.08	35.4	0.02	103.6	102	405
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	7	5.3	11.8	9.74	7.06	35.5	0.02	103.7	113	406
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	6	6.3	11.7	9.74	7.04	35.5	0.02	103.1	129	407
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	5	7.3	11.7	9.73	7.07	35.4	0.02	103.5	116	406
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	4	8.2	11.7	9.76	7.06	35.5	0.02	103.4	142	406
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	3	9.2	11.8	9.73	7.07	35.4	0.02	103.7	139	406
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	2	10.2	11.7	9.76	7.01	35.4	0.02	103.5	255	409
St. Joe River	2098	ASJLDT	5/21/98	12:56:22	4.0	1	11.2	11.8	9.73	7	35.5	0.02	104.1	337	411
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	14	0.3	11	12.27	7.34	39.4	0.03	103.1	28	370
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	13	1.1	11	12.23	7.35	39.4	0.03	102.9	42	371
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	12	2.1	11	12.21	7.34	39.4	0.03	102.6	57	372
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	11	3.1	11	12.26	7.34	39.5	0.03	102.6	38	373
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	10	4.1	11	12.2	7.34	39.5	0.03	102.5	53	373
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	9	5.1	11	12.18	7.34	39.4	0.03	102.4	133	373
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	8	6.1	11	12.13	7.32	39.5	0.03	102.3	44	374
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	7	7.1	11	12.12	7.33	39.6	0.03	102.4	48	374
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	6	8.1	11	12.16	7.33	39.6	0.03	102.1	59	374

St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	5	9.1	11	12.11	7.32	39.4	0.03	102.4	47	375
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	4	10.1	11	12.15	7.32	39.6	0.03	102.1	122	375
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	3	11.1	11	12.13	7.31	39.7	0.03	102.6	35	376
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	2	12.1	11	12.15	7.31	39.6	0.03	102.4	43	377
St. Joe River	2398	DTJLAS	6/8/98	14:34:30	4.4	1	13.1	10.9	12.16	7.3	39.6	0.03	101.6	223	377
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	12	0.3	9.85	15.1	7.24	43.9	0.03	98	36	360
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	11	1.8	9.84	15.02	7.24	44	0.03	97.7	57	362
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	10	2.8	9.84	14.97	7.23	44	0.03	97.6	130	362
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	9	3.8	9.85		7	44	0.03	97.5	128	362
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	8	4.8	9.84	14.87	7.23	43.9	0.03	97.3	205	362
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	7	5.8	9.84	14.86	7.22	43.8	0.03	97.4	220	363
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	6	6.8	9.85	14.86	7.22	44	0.03	97.5	122	363
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	5	7.8	9.87	14.86	7.22	43.9	0.03	97.7	143	363
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	4	8.8	9.88	14.84	7.22	43.8	0.03	97.7	224	364
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	3	9.8	9.89	14.87	7.22	43.9	0.03	97.9	205	364
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	2	10.8	9.91	14.87	7.21	43.9	0.03	98.1	122	364
St. Joe River	2598	DTASBH	6/22/98	10:22:51	4.1	1	11.8	9.96	14.84	7.2	43.9	0.03	98.5	227	365
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	13	0.3	9.13	20.97	7.39	53.5	0.03	101.9	134	362
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	12	1.2	9.24	20.51	7.34	53.3	0.03	102.2	124	367
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	11	2.2	9.21	20.15	7.31	53.2	0.03	101.2	134	370
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	10	3.2	9.16	19.94	7.31	53.2	0.03	100.2	140	372
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	9	4.2	9.16	19.9	7.29	53.2	0.03	100.1	235	373
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	8	5.2	9.17	19.85	7.29	53	0.03	100.1	130	374
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	7	6.2	9.16	19.8	7.29	53.3	0.03	99.9	146	375
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	6	7.2	9.07	19.38	7.26	53.1	0.03	98.1	130	377
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	5	8.2	9	19.19	7.24	53.2	0.03	97.1	119	378
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	4	9.2	9.01	19.19	7.23	53.6	0.03	97.2	103	380
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	3	10.2	9.03	19.21	7.23	53	0.03	97.3	112	381
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	2	11.2	9.01	19.19	7.23	53	0.03	97.2	201	382
St. Joe River	2798	DTASBH	7/7/98	9:26:52	4.0	1	12.2	9.06	19.19	7.23	53	0.03	97.7	220	383
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	13	0.5	8.52	22.77	7.28	54.9	0.04	98.6	140	325
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	12	1.5	8.51	21.99	7.27	54.7	0.04	96.9	117	326
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	11	2.5	8.46	21.79	7.26	54.7	0.04	96.1	130	326
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	10	3.5	8.43	21.69	7.25	54.5	0.03	95.5	120	326
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	9	4.5	8.36	21.51	7.24	54.8	0.04	94.4	117	326
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	8	5.5	8.25	21.37	7.2	54.6	0.03	92.9	122	326
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	7	6.5	8.17	21.26	7.18	54.6	0.03	91.9	141	326
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	6	7.5	8.12	21.18	7.15	54.6	0.04	91.1	114	327
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	5	8.5	7.95	20.95	7.13	54.4	0.03	88.8	129	326
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	4	9.5	7.74	20.63	7.08	54.2	0.03	86	58	327
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	3	10.5	7.54	20.48	7.04	54.6	0.03	83.5	57	327

St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	2	11.5	7.53	20.28	7.03	54.2	0.03	83	111	327
St. Joe River	2998	ASBH	7/21/98	10:31:40	3.9	1	12.5	7.26	20.21	6.99	54.6	0.03	79.9	414	327
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	13	0.4	7.89	22.59	7.31	60.8	0.04	91.3	56	290
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	12	1.2	7.54	22.15	7.22	60.9	0.04	86.5	122	294
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	11	2.2	7.38	21.83	7.2	60.8	0.04	84.2	139	294
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	10	3.2	7.28	21.67	7.17	60.6	0.04	82.8	143	295
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	9	4.2	7.23	21.62	7.19	60.6	0.04	82.2	218	293
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	8	5.2	7.22	21.58	7.18	60.8	0.04	82	219	291
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	7	6.2	7.2	21.53	7.16	60.9	0.04	81.6	58	290
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	6	7.2	7.17	21.51	7.16	60.8	0.04	81.3	145	289
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	5	8.2	7.16	21.49	7.16	60.8	0.04	81.2	141	288
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	4	9.2	7.08	21.48	7.15	61	0.04	80.2	123	286
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	3	10.2	7.03	21.46	7.14	60.9	0.04	79.6	126	285
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	2	11.2	6.96	21.44	7.13	61	0.04	78.8	133	283
St. Joe River	3498	ASGL	8/26/98	12:44:53	4.0	1	12.2	6.92	21.42	7.13	60.6	0.04	78.3	529	281
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	13	0.3	7.89	21.6	7.25	65.2	0.04	89.7	19	281
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	12	1.7	7.84	20.93	7.22	65	0.04	88	21	281
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	11	2.7	7.7	20.72	7.21	64.9	0.04	86.2	20	281
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	10	3.7	7.68	20.7	7.16	65.1	0.04	85.8	17	283
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	9	4.7	7.65	20.7	7.15	65.2	0.04	85.5	28	283
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	8	5.7	7.55	20.65	7.13	64.8	0.04	84.3	15	282
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	7	6.7	7.5	20.65	7.14	65.2	0.04	83.8	19	281
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	6	7.7	7.35	20.65	7.12	65	0.04	82.1	29	281
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	5	8.7	7.33	20.63	7.11	65.3	0.04	81.9	44	280
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	4	9.7	7.18	20.6	7.08	65.3	0.04	80.1	42	280
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	3	10.7	6.83	20.53	7.03	65.4	0.04	76.1	54	278
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	2	11.7	6.35	20.39	6.99	65.9	0.04	70.6	54	276
St. Joe River	3598	DTAS	9/3/98	12:00:53	4.1	1	12.7	5.75	20.28	6.93	67.1	0.04	63.8	157	274
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	14	0.3	9.26	14.01	7.33	61.7	0.04	89.7	48	329
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	13	0.6	9.21	14	7.31	61.7	0.04	89.1	130	330
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	12	1.6	9.11	13.93	7.28	61.5	0.04	88	49	331
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	11	2.6	8.97	13.77	7.23	61.5	0.04	86.4	110	333
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	10	3.5	8.96	13.76	7.23	61.6	0.04	86.3	54	333
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	9	4.5	8.96	13.75	7.22	61.6	0.04	86.3	105	333
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	8	5.4	8.96	13.75	7.22	61.5	0.04	86.3	126	333
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	7	6.5	8.96	13.75	7.22	61.8	0.04	86.3	121	332
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	6	7.6	8.96	13.75	7.22	61.6	0.04	86.3	137	331
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	5	8.6	8.96	13.75	7.22	61.4	0.04	86.3	113	331
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	4	9.5	8.94	13.75	7.23	61.8	0.04	86.1	120	330
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	3	10.1	8.94	13.73	7.22	61.5	0.04	86	217	331
St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	2	11.6	8.95	13.73	7.21	61.4	0.04	86.2	155	331

St. Joe River	4098	KBDB	10/9/98	12:58:00	2.8	1	12.6	8.96	13.73	7.19	61.8	0.04	86.3	338	332
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	12	0.5	9.79	10.66	7.29	60	0.04	87	129	355
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	11	1.6	9.78	0	7.27	60.1	0.04	86.5	31	357
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	10	2.6	9.75	10.4	7.27	59.9	0.04	86.2	42	357
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	9	3.6	9.74	10.4	7.26	59.9	0.04	86.1	34	358
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	8	4.6	9.73	10.36	7.23	60.2	0.04	85.9	32	359
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	7	5.6	9.73	10.35	7.25	59.9	0.04	85.8	32	358
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	6	6.6	9.72	10.35	7.24	60	0.04	85.7	35	358
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	5	7.6	9.73	10.33	7.25	60.2	0.04	85.9	34	357
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	4	8.6	9.73	10.35	7.25	60.1	0.04	85.8	31	357
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	3	9.6	9.74	10.33	7.25	60.2	0.04	86	42	356
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	2	10.6	9.63	10.2	7.25	59.9	0.04	84.7	517	356
St. Joe River	4298	DTASJB	10/19/98	10:41:51	2.6	1	10.6	9.82	10.22	7.33	59.9	0.04	86.4	122	353
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	10	0.5	9.68	5.24	7.19	53.9	0.03	77	110	401
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	9	1.7	9.68	5.26	7.19	54	0.03	77	49	402
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	8	2.7	9.66	5.29	7.16	53.9	0.03	77	48	405
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	7	3.7	9.66	5.29	7.15	53.8	0.03	77	103	405
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	6	4.7	9.67	5.27	7.16	53.8	0.03	77	52	405
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	5	5.7	9.68	5.29	7.16	53.8	0.03	77.1	49	405
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	4	6.7	9.7	5.24	7.16	54.2	0.03	77.1	100	406
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	3	7.7	9.7	5.24	7.16	54.1	0.03	77.1	107	407
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	2	8.7	9.72	5.22	7.15	54.1	0.03	77.3	117	409
St. Joe River	4698	KB AS	11/17/98	9:48:00	3.6	1	9.7	9.65	5.29	7.14	54	0.03	76.9	857	410

Appendix B

Water quality results from Coeur d'Alene Lake during 1997 and 1998.

Appendix B.1 Nitrate (µg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1997.

	Date	
Location	10/20/97	11/4/97
Rockford Bay	113	53
Windy Bay Shallow	<5	59
Windy Bay Deep	<5	53
Coeur d'Alene River	<5	<5
Mid Lake Coeur d'Alene	<5	49
Carey Bay	<5	<5
Conkling Point	<5	<5
Hidden Lake	<5	<5
Round Lake	<5	67
Chatcolet Lake Deep	<5	<5
Chatcolet Lake Shallow	<5	43
Benewah Lake	<5	-
St. Joe River	<5	66

- No samples taken to Spokane Tribal Laboratory.

Appendix B.2 Nitrate (µg/L) results from the hypolimnion taken at ten stations on Coeur d'Alene Lake, Idaho, 1997.

	Date	
Location	10/20/97	11/4/97
Rockford Bay	<5	50
Windy Bay Shallow	<5	63
Windy Bay Deep	131	75
Coeur d'Alene River	<5	101
Mid Lake Coeur d'Alene	54	128
Carey Bay	<5	92
Conkling Point	<5	125
Hidden Lake	<5	<5
Chatcolet Lake Deep	<5	<5
St. Joe River	<5	<5

Appendix B.3 Nitrate (µg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1998.

Location	4/28/98	6/26/98	7/8/98	Date 8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	33	<5	<5	<5	<5	<5	<5
Windy Bay Shallow	53	<5	<5	<5	<5	<5	<5
Windy Bay Deep	37	<5	<5	<5	<5	<5	<5
Coeur d'Alene River	8	<5	<5	<5	<5	39	6
Mid Lake Coeur d'Alene	<5	<5	<5	<5	<5	<5	7
Carey Bay	16	<5	<5	<5	<5	<5	35
Conkling Point	57	<5	<5	<5	<5	<5	18
Hidden Lake	210	<5	<5	<5	<5	<5	<5
Round Lake	8	<5	<5	<5	<5	<5	-
Chatcolet Lake Deep	<5	<5	<5	<5	<5	<5	<5
Chatcolet Lake Shallow	-	<5	<5	<5	<5	<5	-
Benewah Lake	<5	<5	<5	<5	<5	-	-
St. Joe River	<5	<5	<5	<5	<5	<5	6

-No samples taken to Spokane Tribal Lab.

Appendix B.4 Nitrate (µg/L) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1998.

Location	4/28/98	6/26/98	7/8/98	Date 8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	50	<5	<5	<5	<5	<5	<5
Windy Bay Shallow	52	<5	<5	<5	<5	<5	<5
Windy Bay Deep	49	<5	<5	<5	29	39	51
Coeur d'Alene River	19	<5	<5	<5	<5	<5	28
Mid Lake Coeur d'Alene	62	<5	<5	<5	<5	78	65
Carey Bay	8	<5	<5	<5	<5	<5	11
Conkling Point	36	<5	<5	<5	<5	<5	16
Hidden Lake	<5	<5	<5	<5	<5	-	<5
Chatcolet Lake Deep	21	<5	<5	<5	<5	<5	<5
Benewah Lake	<5	<5	<5	<5	<5	-	-
St. Joe River	<5	<5	<5	<5	<5	<5	6

-No samples taken to Spokane Tribal Lab.

Appendix B.5 Nitrite (µg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1997.

Location	Date 10/20/97	11/4/97
Rockford Bay	<29	<29
Windy Bay Shallow	<29	<29
Windy Bay Deep	<29	<29
Coeur d'Alene River	<29	<29
Mid Lake Coeur d'Alene	<29	<29
Carey Bay	<29	<29
Conkling Point	<29	<29
Hidden Lake	<29	<29
Round Lake	<29	<29
Chatcolet Lake Deep	<29	<29
Chatcolet Lake Shallow	<29	<29
Benewah Lake	<29	-
St. Joe River	<29	<29

- No sample taken to Spokane Tribal Laboratory.

Appendix B.6 Nitrite (µg/L) results from the hypolimnion taken at ten stations on Coeur d'Alene Lake, Idaho, 1997.

Location	Date 10/20/97	11/4/97
Rockford Bay	<29	<29
Windy Bay Shallow	<29	<29
Windy Bay Deep	<29	<29
Coeur d'Alene River	<29	<29
Mid Lake Coeur d'Alene	<29	<29
Carey Bay	<29	<29
Conkling Point	<29	<29
Hidden Lake	<29	<29
Chatcolet Lake Deep	<29	<29
St. Joe River	<29	<29

Appendix B.7 Nitrite (µg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1998.

	Date						
Location	4/28/98	6/26/98	7/8/98	8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	<29	<29	<10	<10	<10	<10	<10
Windy Bay Shallow	<29	<29	<10	<10	<10	<10	<10
Windy Bay Deep	<29	<29	<10	<10	<10	<10	<10
Coeur d'Alene River	<29	<29	<10	<10	<10	<10	<10
Mid Lake Coeur d'Alene	<29	<29	<10	<10	<10	<10	<10
Carey Bay	<29	<29	<10	<10	<10	<10	<10
Conkling Point	<29	<29	<10	<10	<10	<10	<10
Hidden Lake	<29	<29	<10	<10	<10	<10	<10
Round Lake	<29	<29	<10	<10	<10	<10	<10
Chatcolet Lake Deep	<29	<29	<10	<10	<10	<10	<10
Chatcolet Lake Shallow	-	<29	<10	<10	<10	<10	<10
Benewah Lake	<29	<29	<10	<10	<10	-	-
St. Joe River	<29	<29	<10	<10	<10	<10	<10

-No samples taken to Spokane Tribal Lab.

Appendix B.8 Nitrite (µg/L) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1998.

	Date						
Location	4/28/98	6/26/98	7/8/98	8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	<29	<29	<10	<10	<10	<10	<10
Windy Bay Shallow	<29	<29	<10	<10	<10	<10	<10
Windy Bay Deep	<29	<29	<10	<10	<10	<10	<10
Coeur d'Alene River	<29	<29	<10	<10	<10	<10	<10
Mid Lake Coeur d'Alene	<29	<29	<10	<10	<10	<10	<10
Carey Bay	<29	<29	<10	<10	<10	<10	<10
Conkling Point	<29	<29	<10	<10	<10	<10	<10
Hidden Lake	<29	<29	<10	<10	<10	<10	<10
Chatcolet Lake Deep	<29	<29	<10	<10	<10	<10	<10
Benewah Lake	<29	<29	<10	<10	<10	-	-
St. Joe River	<29	<29	<10	<10	<10	<10	<10

-No samples taken to Spokane Tribal Lab.

Appendix B.9 Total kjeldahl nitrogen (µg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1998.

Location	7/8/98	Date 8/10/98	10/20/98
Rockford Bay	200	132	160
Windy Bay Shallow	<120	124	227
Windy Bay Deep	140	<120	212
Coeur d'Alene River	<120	232	157
Mid Lake Coeur d'Alene	<120	<120	<120
Carey Bay	240	<120	<120
Conkling Point	136	<120	<120
Hidden Lake	256	<120	<120
Round Lake	<120	120	<120
Chatcolet Lake Deep	172	<120	<120
Chatcolet Lake Shallow	228	<120	<120
Benewah Lake	<120	160	-
St. Joe River	<120	<120	<120

-No samples taken to Spokane Tribal Lab.

Appendix B.10 Total kjeldahl nitrogen (µg/L) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1998.

Location	7/8/98	Date 8/10/98	10/20/98
Rockford Bay	316	<120	156
Windy Bay Shallow	<120	124	<120
Windy Bay Deep	<120	188	157
Coeur d'Alene River	<120	132	124
Mid Lake Coeur d'Alene	<120	<120	489
Carey Bay	248	<120	<120
Conkling Point	148	<120	<120
Hidden Lake	312	<120	-
Chatcolet Lake Deep	232	120	<120
Benewah Lake	<120	136	-
St. Joe River	<120	<120	<120

-No samples taken to Spokane Tribal Lab.

Appendix B.11 Ortho-Phosphate (µg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1997.

Location	Date 10/20/97	11/4/97
Rockford Bay	<26	<26
Windy Bay Shallow	<26	<26
Windy Bay Deep	<26	<26
Coeur d'Alene River	<26	<26
Mid Lake Coeur d'Alene	<26	<26
Carey Bay	<26	<26
Conkling Point	<26	<26
Hidden Lake	<26	<26
Round Lake	<26	<26
Chatcolet Lake Deep	<26	<26
Chatcolet Lake Shallow	<26	<26
Benewah Lake	<26	-
St. Joe River	<26	<26

- No sample taken to Spokane Tribal Laboratory.

Appendix B.12 Ortho-Phosphate (µg/L) results from the hypolimnion taken at ten stations on Coeur d'Alene Lake, Idaho, 1997.

Location	Date 10/20/97	11/4/97
Rockford Bay	<26	<26
Windy Bay Shallow	<26	<26
Windy Bay Deep	<26	<26
Coeur d'Alene River	<26	<26
Mid Lake Coeur d'Alene	<26	<26
Carey Bay	<26	<26
Conkling Point	<26	<26
Hidden Lake	<26	<26
Chatcolet Lake Deep	<26	<26
St. Joe River	<26	<26

Appendix B.13 Ortho-phosphate (µg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1998.

Location	4/28/98	6/25/98	7/8/98	Date 8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	<26	<26	<20	<20	<20	<20	<20
Windy Bay Shallow	<26	<26	<20	<20	<20	<20	<20
Windy Bay Deep	<26	<26	<20	<20	<20	<20	<20
Coeur d'Alene River	<26	<26	<20	<20	<20	<20	<20
Mid Lake Coeur d'Alene	<26	<26	<20	<20	<20	<20	<20
Carey Bay	<26	<26	<20	<20	<20	<20	<20
Conkling Point	<26	<26	<20	<20	<20	<20	<20
Hidden Lake	<26	<26	<20	<20	<20	<20	<20
Round Lake	<26	<26	<20	<20	<20	<20	-
Chatcolet Lake Deep	<26	<26	<20	<20	<20	<20	<20
Chatcolet Lake Shallow	-	<26	<20	<20	<20	<20	-
Benewah Lake	<26	<26	<20	<20	<20	-	-
St. Joe River	<26	<26	<20	<20	<20	<20	<20

-No sample taken to Spokane Tribal Lab.

Appendix B.14 Ortho-phosphate (µg/L) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1998.

Location	4/28/98	6/26/98	7/8/98	Date 8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	<26	<26	<20	<20	<20	<20	<20
Windy Bay Shallow	<26	<26	<20	<20	<20	<20	<20
Windy Bay Deep	<26	<26	<20	<20	<20	<20	<20
Coeur d'Alene River	<26	<26	<20	<20	<20	<20	<20
Mid Lake Coeur d'Alene	<26	<26	<20	<20	<20	<20	<20
Carey Bay	<26	<26	<20	<20	<20	<20	<20
Conkling Point	<26	<26	<20	<20	<20	<20	<20
Hidden Lake	<26	<26	<20	<20	<20	<20	<20
Chatcolet Lake Deep	<26	<26	<20	<20	<20	<20	<20
Benewah Lake	<26	<26	<20	<20	<20	-	-
St. Joe River	<26	<26	<20	<20	<20	<20	<20

-No sample taken to Spokane Tribal Lab.

Appendix B.15 Total phosphorous (µg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1998.

Location	4/28/98	6/26/98	7/8/98	Date 8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	<5	<5	<5	<5	<5	<5	<5
Windy Bay Shallow	<5	<5	<5	<5	<5	<5	<5
Windy Bay Deep	<5	<5	<5	<5	<5	<5	<5
Coeur d'Alene River	<5	<5	<5	<5	<5	6	<5
Mid Lake Coeur d'Alene	<5	<5	<5	<5	<5	5	<5
Carey Bay	<5	<5	<5	<5	<5	<5	<5
Conkling Point	<5	<5	<5	<5	<5	<5	<5
Hidden Lake	<5	<5	<5	14	<5	<5	<5
Round Lake	<5	<5	<5	<5	<5	<5	-
Chatcolet Lake Deep	<5	<5	<5	<5	<5	<5	5
Chatcolet Lake Shallow	-	<5	<5	65	8	<5	-
Benewah Lake	8	6	<5	<5	<5	-	-
St. Joe River	<5	<5	<5	<5	<5	<5	<5

-No samples taken to Spokane Tribal Lab.

Appendix B.16 Total phosphorous (µg/L) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1998.

Location	4/28/98	6/26/98	7/8/98	Date 8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	<5	<5	<5	<5	<5	<5	<5
Windy Bay Shallow	<5	<5	<5	<5	<5	<5	<5
Windy Bay Deep	<5	<5	6	<5	<5	<5	<5
Coeur d'Alene River	<5	<5	<5	<5	<5	<5	<5
Mid Lake Coeur d'Alene	<5	<5	<5	<5	<5	<5	<5
Carey Bay	<5	<5	<5	<5	<5	<5	<5
Conkling Point	<5	<5	<5	<5	<5	<5	<5
Hidden Lake	<5	<5	16	25	9	-	<5
Chatcolet Lake Deep	<5	<5	<5	8	14	20	<5
Benewah Lake	8	26	8	13	<5	-	-
St. Joe River	<5	<5	<5	<5	<5	<5	<5

Appendix B.17 Chlorophyll$_a$ (µg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1997.

Location	Date			
	8/13/97	9/16/97	10/20/97	11/4/97[a]
Rockford Bay	<0.01	0.70	<0.01	3.30
Windy Bay Shallow	<0.01	<0.01	0.74	2.14
Windy Bay Deep	<0.01	1.34	2.23	1.38
Coeur d'Alene River	0.65	<0.01	-	2.96
Mid Lake Coeur d'Alene	1.42	0.64	1.90	2.91
Carey Bay	0.64	<0.01	-	1.28
Conkling Point	<0.01	2.16	1.38	3.39
Hidden Lake	<0.01	Contaminated	3.62	6.89
Round Lake	<0.01	1.54	0.67	0.64
Chatcolet Lake Deep	3.14	2.81	4.26	7.66
Chatcolet Lake Shallow	5.32	4.89	2.78	0.69
Benewah Lake	0.64	25.79	3.54	-
St. Joe River	-	Contaminated	1.40	<0.01

- No sample taken to Spokane Tribal Laboratory.

[a] Coeur d'Alene Lake was isothermal.

Appendix B.18 Chlorophyll$_a$ (µg/L) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1997.

Location	Date			
	8/13/97	9/16/97	10/20/97	11/4/97[a]
Rockford Bay	1.40	2.09	-	-
Windy Bay Shallow	2.14	0.68	-	-
Windy Bay Deep	0.64	0.64	<0.01	-
Coeur d'Alene River	0.69	1.32	<0.01	-
Mid Lake Coeur d'Alene	0.69	2.07	1.38	-
Carey Bay	<0.01	1.33	1.4	-
Conkling Point	0.005	1.37	<0.01	-
Hidden Lake	11.92	20.25	1.98	-
Chatcolet Lake Deep	6.03	Contaminated	14.04	-
Benewah Lake	34.14	28.78	-	-
St. Joe River	-	0.70	<0.01	-

- No sample taken to Spokane Tribal Laboratory.

[a] Coeur d'Alene Lake was isothermal.

Appendix B.19 Chlorophyll$_a$ (μg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1998.

				Date			
Location	4/28/98	6/26/98	7/8/98	8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	1.240	1.49	<0.01	<0.01	1.31	1.89	0.71
Windy Bay Shallow	2.080	2.11	<0.01	0.71	0.066	<0.01	1.85
Windy Bay Deep	1.290	0.7	2.85	2.01	2.25	<0.01	1.24
Coeur d'Alene River	1.310	1.22	0.73	<0.01	<0.01	<0.01	2.46
Mid Lake Coeur d'Alene	1.890	2.22	0.69	<0.01	1.43	0.7	0.66
Carey Bay	1.920	3.14	1.79	2	2.09	0.69	1.26
Conkling Point	<0.01	1.4	2.58	<0.01	2.78	0.63	2.63
Hidden Lake	<0.01	1.88	3.57	30.84	1.38	6.04	2.87
Round Lake	<0.01	<0.01	1.29	0.67	3.49	3.25	-
Chatcolet Lake Deep	<0.01	2.55	4.69	4.09	3.42	0.69	7.21
Chatcolet Lake Shallow	-	0.75	8.96	2.61	2.77	8.38	-
Benewah Lake	1.470	4.05	23.6	61.41	0.65	-	-
St. Joe River	0.640	1.47	0.67	<0.01	2.68	3.91	1.38

-No samples taken to Spokane Tribal Laboratory.

Appendix B.20 Chlorophyll$_a$ (μg/L) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1998.

				Date			
Location	4/28/98	6/26/98	7/8/98	8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	1.930	0.7	2.1	4.09	1.41	2.17	0.65
Windy Bay Shallow	3.440	<0.01	1.44	2.07	0.71	<0.01	<0.01
Windy Bay Deep	1.250	2.96	0.67	<0.01	2.86	<0.01	0.66
Coeur d'Alene River	<0.01	<0.01	1.99	0.65	2.67	1.42	2.84
Mid Lake Coeur d'Alene	0.590	0.7	<0.01	0.62	2.02	<0.01	<0.01
Carey Bay	1.260	<0.01	0.72	2.08	2.65	1.97	1.26
Conkling Point	<0.01	<0.01	0.7	0.68	2.24	3.43	2.75
Hidden Lake	5.490	6.16	16.84	80.92	18.72	-	5.22
Chatcolet Lake Deep	2.030	<0.01	3.31	4.42	3.06	8.47	6.76
Benewah Lake	2.05	9.18	15.26	54.46	15.95	-	-
St. Joe River	<0.01	1.27	0.74	4.69	<0.01	5.83	0.63

-No samples taken to Spokane Tribal Laboratory.

Appendix B.21 Total suspended solids (mg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho 1997.

	Date			
Location	8/13/97	9/16/97	10/20/97	11/4/97
Rockford Bay	<2	2	<0.5	<0.5
Windy Bay Shallow	<2	2	<0.5	<0.5
Windy Bay Deep	<2	2	<0.5	<0.5
Coeur d'Alene River	2	2	<0.5	<0.5
Mid Lake Coeur d'Alene	<2	2	<0.5	1.5
Carey Bay	<2	2	<0.5	4.0
Conkling Point	<2	2	<0.5	6.5
Hidden Lake	10	97	2.5	<0.5
Round Lake	<2	2	1.5	16.0
Chatcolet Lake Deep	<2	2	2.0	<0.5
Chatcolet Lake Shallow	10	16	6.5	4.0
Benewah Lake	10	3	8.0	-
St. Joe River	-	2	5.0	3.0

- No sample taken to Spokane Tribal Laboratory.

Appendix B.22 Total suspended solids (mg/L) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1997.

	Date			
Location	8/13/97	9/16/97	10/20/97	11/4/97
Rockford Bay	<2	2.0	<0.5	<0.5
Windy Bay Shallow	<2	2.0	<0.5	<0.5
Windy Bay Deep	2	2.0	<0.5	29.0
Coeur d'Alene River	3	2.0	<0.5	1.5
Mid Lake Coeur d'Alene	<2	2.0	1.0	3.0
Carey Bay	210	2.0	2.5	4.0
Conkling Point	<2	2.0	<0.5	7.5
Hidden Lake	10	2.000	3.000 3.0	<0.5
Chatcolet Lake Deep	20	5.0	12.5	<0.5
Benewah Lake	20	7	-	-
St. Joe River	-	2.0	4.5	<0.5

- No sample taken to Spokane Tribal Laboratory.

Appendix B. 23 Total suspended solids (mg/L) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1998.

Location	4/28/98	6/26/98	7/8/98	Date 8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	<2	2	3	<2	<2	<2	<2
Windy Bay Shallow	<2	3	2	2	<2	<2	<2
Windy Bay Deep	5.5	2	3	3	<2	<2	<2
Coeur d'Alene River	3	3	2	<2	<2	<2	<2
Mid Lake Coeur d'Alene	3	<2	2	<2	<2	<2	2.5
Carey Bay	4	<2	2	10	<2	2	<2
Conkling Point	3	<2	3	2	<2	<2	<2
Hidden Lake	3	<2	4	7.5	<2	6.5	3.5
Round Lake	4.5	4	<2	<2	2.5	9	-
Chatcolet Lake Deep	<2	2	2	<2	<2	5.5	6.75
Chatcolet Lake Shallow	-	3	<2	<2	<2	10.500	-
Benewah Lake	4	4	8	4.5	<2	-	-
St. Joe River	3	2	2	2.5	<2	2.5	3.75

-No samples taken to Spokane Tribal Lab.

Appendix B.24 Total suspended solids (mg/L) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1998.

Location	4/28/98	6/26/98	7/8/98	Date 8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	10	4	3	4.5	2	<2	<2
Windy Bay Shallow	<2	3	<2	12	3	2.5	<2
Windy Bay Deep	27	<2	3	2.5	<2	<2	<2
Coeur d'Alene River	8	3	4	2	2.5	7.75	3.75
Mid Lake Coeur d'Alene	<2	<2	14	<2	<2	4.25	3.25
Carey Bay	<2	<2	4	10	11	5.5	<2
Conkling Point	<2	<2	3	<2	2	4.5	4.5
Hidden Lake	47	4	9	11	14.5	-	3.25
Chatcolet Lake Deep	28.5	141	4	3	3	3	7
Benewah Lake	4.5	16	7	<2	3.5	-	-
St. Joe River	3.5	2	9	3	<2	2.5	3

-No samples taken to Spokane Tribal Lab.

Appendix B.25 Turbidity (NTU) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1997.

	Date			
Location	8/13/97	9/16/97	10/20/97	11/4/97
Rockford Bay	0.35	0.30	0.27	0.24
Windy Bay Shallow	0.63	0.33	0.27	0.25
Windy Bay Deep	0.28	0.4	0.23	0.27
Coeur d'Alene River	0.87	0.51	0.51	0.43
Mid Lake Coeur d'Alene	0.33	1.99	0.84	0.38
Carey Bay	0.56	0.84	0.88	0.49
Conkling Point	0.54	0.96	0.76	0.86
Hidden Lake	4.76	1.56	0.96	1.42
Round Lake	3.820	0.45	1.88	0.93
Chatcolet Lake Deep	1.01	1.39	1.08	1.61
Chatcolet Lake Shallow	3.69	0.77	2.01	11.20
Benewah Lake	5.81	1.55	1.60	-
St. Joe River	-	0.62	1.87	7.86

- No sample taken to Spokane Tribal Laboratory.

Appendix B.26 Turbidity (NTU) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1997.

	Date			
Location	8/13/97	9/16/97	10/20/97	11/4/97
Rockford Bay	0.6	0.37	0.24	0.27
Windy Bay Shallow	0.92	0.42	0.28	0.85
Windy Bay Deep	0.86	0.87	0.67	0.74
Coeur d'Alene River	1.02	0.51	0.85	0.88
Mid Lake Coeur d'Alene	1.3	0.82	1.13	0.76
Carey Bay	1.32	1.34	2.23	0.70
Conkling Point	1.87	2.00	0.92	1.01
Hidden Lake	1.31	3.60	1.06	1.39
Chatcolet Lake Deep	3.52	1.90	2.63	3.68
Benewah Lake	0.81	2.01	-	-
St. Joe River	-	0.76	1.83	7.68

- No sample taken to Spokane Tribal Laboratory.

Appendix B.27 Turbidity (NTU) results from the epilimnion taken at thirteen stations on Coeur d'Alene Lake, Idaho, 1998.

				Date			
Location	4/28/98	6/26/98	7/8/98	8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	0.790	1.65	0.507	1.06	0.668	0.811	0.404
Windy Bay Shallow	1.700	2.61	0.492	0.505	0.956	0.832	0.536
Windy Bay Deep	1.560	0.89	0.667	0.316	0.592	0.68	0.403
Coeur d'Alene River	1.920	1.48	1.26	1.06	0.563	0.752	0.775
Mid Lake Coeur d'Alene	1.690	0.782	0.935	0.441	2.3	0.89	0.902
Carey Bay	1.800	1.06	0.577	0.44	1.21	1.03	1.33
Conkling Point	1.720	1.09	1.19	0.464	0.862	0.946	1.12
Hidden Lake	2.630	1.1	1.96	5.53	0.85	2.76	2.02
Round Lake	1.700	2.31	0.915	1.24	1.53	2	-
Chatcolet Lake Deep	2.430	1.98	1.74	1.73	1.33	2.88	0.963
Chatcolet Lake Shallow	-	1.7	2.08	2.3	2.1	4.28	-
Benewah Lake	6.84	2.41	4.39	3.37	1.72	-	-
St. Joe River	1.34	1.82	0.865	1.18	1.57	2.57	2.21

-No samples taken to Spokane Tribal Lab.

Appendix B.28 Turbidity (NTU) results from the hypolimnion taken at eleven stations on Coeur d'Alene Lake, Idaho, 1998.

				Date			
Location	4/28/98	6/26/98	7/8/98	8/10/98	9/2/98	10/20/98	11/12/98
Rockford Bay	1.890	3.61	2.24	1.73	1.19	0.806	0.465
Windy Bay Shallow	1.130	3.8	4.72	6.72	1.24	1.06	0.597
Windy Bay Deep	12.000	1.53	1.26	0.54	1.07	0.752	0.335
Coeur d'Alene River	2.680	2.85	2.16	1.31	1.65	4.21	1.74
Mid Lake Coeur d'Alene	1.340	2.88	0.947	0.89	1.98	3.2	1.42
Carey Bay	2.090	1.6	2.06	0.722	5.06	2.27	1.21
Conkling Point	1.700	1.93	1.38	1	1.76	3.48	2.23
Hidden Lake	6.200	4.45	4.56	9.7	18.5	-	1.69
Chatcolet Lake Deep	9.700	43.1	1.78	1.75	4.06	0.886	2.95
Benewah Lake	8.23	12.4	9.35	4.02	3.19	-	-
St. Joe River	1.920	1.96	1.1	1.9	1.6	2.19	2.01

-No samples taken to Spokane Tribal Lab.

Appendix B.29 Results from trace metal analysis (mg/L). Water samples taken from the epilimnion at three sites on Coeur d'Alene Lake, Idaho, 1997.

Metals	Location	Date 10/20/97	11/4/97
As	Site 1[a]	<0.050	<0.050
	Site 2[b]	<0.050	<0.050
	Site 3[c]	<0.050	<0.050
Ca	Site 1[a]	5.92	5.81
	Site 2[b]	6.70	6.94
	Site 3[c]	6.73	6.94
Cd	Site 1[a]	<0.010	<0.010
	Site 2[b]	<0.010	<0.010
	Site 3[c]	<0.010	<0.010
Fe	Site 1[a]	0.054	<0.020
	Site 2[b]	0.043	0.108
	Site 3[c]	0.065	0.102
K	Site 1[a]	0.888	<0.850
	Site 2[b]	<0.850	<0.850
	Site 3[c]	1.21	1.16
Mg	Site 1[a]	1.690	1.67
	Site 2[b]	1.950	1.91
	Site 3[c]	1.85	1.87
Mn	Site 1[a]	<0.005	<0.005
	Site 2[b]	0.018	0.022
	Site 3[c]	0.007	0.022
Na	Site 1[a]	1.51	1.48
	Site 2[b]	1.61	1.59
	Site 3[c]	1.58	1.68
Pb	Site 1[a]	<0.001	<0.001
	Site 2[b]	0.004	0.005
	Site 3[c]	0.002	0.003
Si	Site 1[a]	5.120	5.24
	Site 2[b]	5.070	4.46
	Site 3[c]	4.52	4.69
Zn	Site 1[a]	0.094	0.101
	Site 2[b]	0.132	0.105
	Site 3[c]	0.097	0.090

[a] Station Windy Bay Deep.
[b] Station Coeur d'Alene River.
[c] Station Mid Lake Coeur d'Alene.

Appendix B.30 Results from trace metal analysis (mg/L). Water samples taken from the hypolimnion at three sites on Coeur d'Alene Lake, Idaho, 1997.

Metals	Location	Date 10/20/97	11/4/97
As	Site 1[a]	<0.050	<0.050
	Site 2[b]	<0.050	<0.050
	Site 3[c]	<0.050	<0.050
Ca	Site 1[a]	5.48	6.07
	Site 2[b]	7.38	6.92
	Site 3[c]	6.95	5.59
Cd	Site 1[a]	<0.010	<0.010
	Site 2[b]	<0.010	<0.010
	Site 3[c]	<0.010	<0.010
Fe	Site 1[a]	0.066	0.681
	Site 2[b]	0.134	0.145
	Site 3[c]	0.108	0.140
K	Site 1[a]	<0.850	<0.850
	Site 2[b]	<0.850	<0.850
	Site 3[c]	<0.850	<0.850
Mg	Site 1[a]	1.660	1.81
	Site 2[b]	2.320	2.34
	Site 3[c]	1.86	1.67
Mn	Site 1[a]	0.013	0.183
	Site 2[b]	0.050	0.058
	Site 3[c]	0.019	0.037
Na	Site 1[a]	1.72	1.64
	Site 2[b]	1.78	1.53
	Site 3[c]	1.65	1.67
Pb	Site 1[a]	0.003	0.032
	Site 2[b]	0.013	0.016
	Site 3[c]	<0.001	0.004
Si	Site 1[a]	6.740	5.97
	Site 2[b]	4.710	4.68
	Site 3[c]	4.78	6.42
Zn	Site 1[a]	0.133	0.159
	Site 2[b]	0.185	0.226
	Site 3[c]	0.078	0.124

[a] Station Windy Bay Deep.
[b] Station Coeur d'Alene River.
[c] Station Mid Lake Coeur d'Alene.

Appendix B.31 Results from trace metal analysis. Water samples taken from the epilimnion at three sites on Coeur d'Alene Lake, Idaho, 1998.

					Date			
Metals	Location	4/28/98	6/26/98	7/8/98	8/10/98	9/2/98	10/20/98	11/12/98
As	Site 1[a]	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Site 2[b]	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Site 3[c]	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ca	Site 1[a]	6.007	5.955	5.768	6.306	6.176	6.609	6.231
	Site 2[b]	4.923	6.16	6.48	7.58	6.317	7.722	7
	Site 3[c]	5.623	5.638	5.842	6.844	6.532	7.473	6.591
Cd	Site 1[a]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	Site 2[b]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0059
	Site 3[c]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fe	Site 1[a]	0.130	0.013	0.1291	0.0177	0.0376	0.0252	0.0214
	Site 2[b]	0.175	<0.010	0.1048	0.0984	0.0379	0.0912	0.074
	Site 3[c]	0.162	0.0104	0.0664	0.0399	0.0707	0.0558	0.0783
K	Site 1[a]	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900
	Site 2[b]	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900	1.023
	Site 3[c]	<0.900	<0.900	<0.900	<0.900	<0.900	1.535	<0.900
Mg	Site 1[a]	1.869	1.54	1.643	1.768	1.757	1.956	1.765
	Site 2[b]	1.688	1.448	1.803	2.178	1.776	2.306	1.92
	Site 3[c]	1.431	1.459	1.532	1.804	1.768	2.092	1.734
Mn	Site 1[a]	0.017	<0.003	0.0371	0.0044	0.0071	0.0072	0.0083
	Site 2[b]	0.053	<0.003	0.0274	0.0355	0.0089	0.0273	0.0298
	Site 3[c]	0.017	<0.003	0.0125	0.0073	0.0134	0.0054	0.035
Na	Site 1[a]	1.848	1.355	1.469	1.58	1.559	1.597	1.586
	Site 2[b]	1.256	1.315	1.495	1.717	1.588	1.783	1.819
	Site 3[c]	1.458	1.348	1.413	1.641	1.605	1.886	1.505
Pb	Site 1[a]	0.005	0.002	0.007	<0.001	<0.001	0.002	<0.001
	Site 2[b]	0.021	0.002	0.007	0.011	0.002	0.007	0.002
	Site 3[c]	0.002	<0.001	0.002	<0.001	0.004	0.003	0.002
Si	Site 1[a]	5.323	4.246	4.17	3.956	3.816	3.659	3.43
	Site 2[b]	4.646	4.458	4.154	3.927	3.492	3.392	3.27
	Site 3[c]	5.423	4.193	4.066	4.1	3.681	3.311	3.029
Zn	Site 1[a]	0.114	0.0706	0.0847	0.0668	0.0537	0.0782	0.0702
	Site 2[b]	0.140	0.0393	0.0728	0.0914	0.0498	0.124	0.0693
	Site 3[c]	0.037	0.055	0.0532	0.0583	0.0546	0.0664	0.0611

[a] Station Windy Bay Deep.
[b] Station Coeur d'Alene River.
[c] Station Mid Lake Coeur d'Alene.

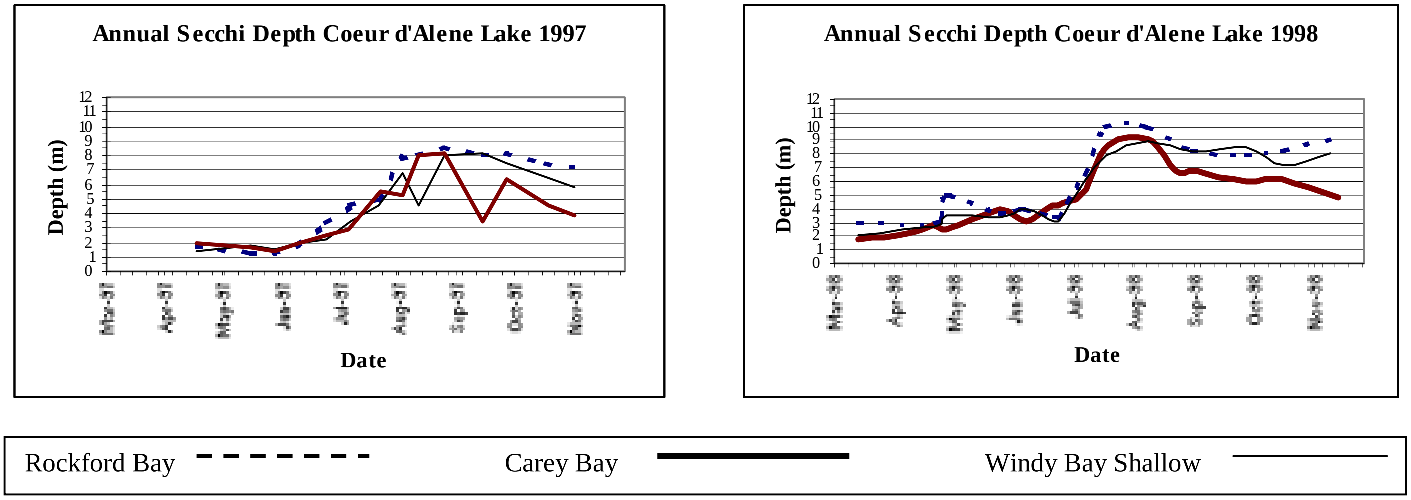
Appendix B.32 Results from trace metal analysis. Water samples taken from the hypolimnion at three sites on Coeur d'Alene Lake, Idaho, 1998.

		Date						
Metals	Location	4/28/98	6/26/98	7/8/98	8/10/98	9/2/98	10/20/98	11/12/98
As	Site 1[a]	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Site 2[b]	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Site 3[c]	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ca	Site 1[a]	5.909	5.744	5.66	5.909	5.576	6.105	6.21
	Site 2[b]	5.062	5.984	5.594	5.727	6.888	8.355	7.218
	Site 3[c]	6.085	5.691	5.313	6.339	5.539	6.068	6.485
Cd	Site 1[a]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	Site 2[b]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	Site 3[c]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0078
Fe	Site 1[a]	0.126	0.0152	0.0737	0.0839	0.1562	0.0273	0.0205
	Site 2[b]	0.369	0.0152	0.1564	0.0882	0.1475	0.453	0.0645
	Site 3[c]	0.115	0.0133	0.2067	0.0502	0.0536	0.2738	0.0825
K	Site 1[a]	<0.900	0.908	<0.900	<0.900	<0.900	1.025	<0.900
	Site 2[b]	<0.900	<0.900	<0.900	<0.900	<0.900	1.407	<0.900
	Site 3[c]	<0.900	<0.900	<0.900	<0.900	<0.900	1.03	<0.900
Mg	Site 1[a]	1.866	1.58	1.713	1.715	1.667	1.845	1.758
	Site 2[b]	1.744	1.441	1.607	1.62	1.906	2.651	1.978
	Site 3[c]	1.895	1.527	1.51	1.72	1.551	1.816	1.865
Mn	Site 1[a]	0.033	<0.003	0.0081	0.0274	0.0526	0.0126	0.0136
	Site 2[b]	0.080	<0.003	0.0395	0.0371	0.0294	0.0992	0.0309
	Site 3[c]	0.012	<0.003	0.0419	0.0564	0.0406	0.2789	0.0768
Na	Site 1[a]	1.728	1.536	1.671	1.66	1.645	1.623	1.634
	Site 2[b]	1.290	1.389	1.421	1.502	1.638	2.093	1.666
	Site 3[c]	1.730	1.537	1.492	1.626	1.521	1.683	1.724
Pb	Site 1[a]	0.005	0.002	0.001	0.005	0.003	0.002	<0.001
	Site 2[b]	0.058	0.007	0.015	0.013	0.013	0.063	0.002
	Site 3[c]	0.005	<0.001	0.001	0.002	0.004	0.006	0.003
Si	Site 1[a]	5.225	4.687	4.759	4.476	4.605	4.522	4.044
	Site 2[b]	4.663	4.616	4.092	3.773	3.765	3.467	3.347
	Site 3[c]	5.223	4.703	4.659	4.456	4.367	5.317	4.217
Zn	Site 1[a]	0.131	0.1011	0.1077	0.1213	0.1261	0.1077	0.0965
	Site 2[b]	0.159	0.0585	0.0873	0.0881	0.0681	0.2367	0.0734
	Site 3[c]	0.122	0.0748	0.0788	0.0949	0.0962	0.1147	0.1096

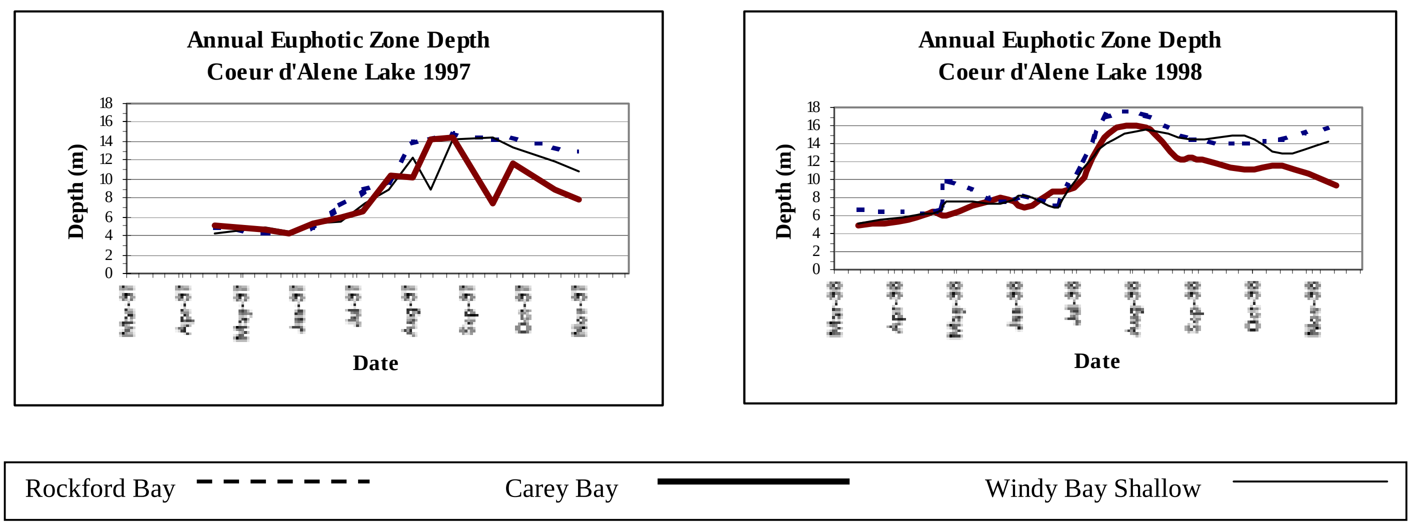
[a] Station Windy Bay Deep.
[b] Station Coeur d'Alene River.
[c] Station Mid Lake Coeur d'Alene.

Appendix C

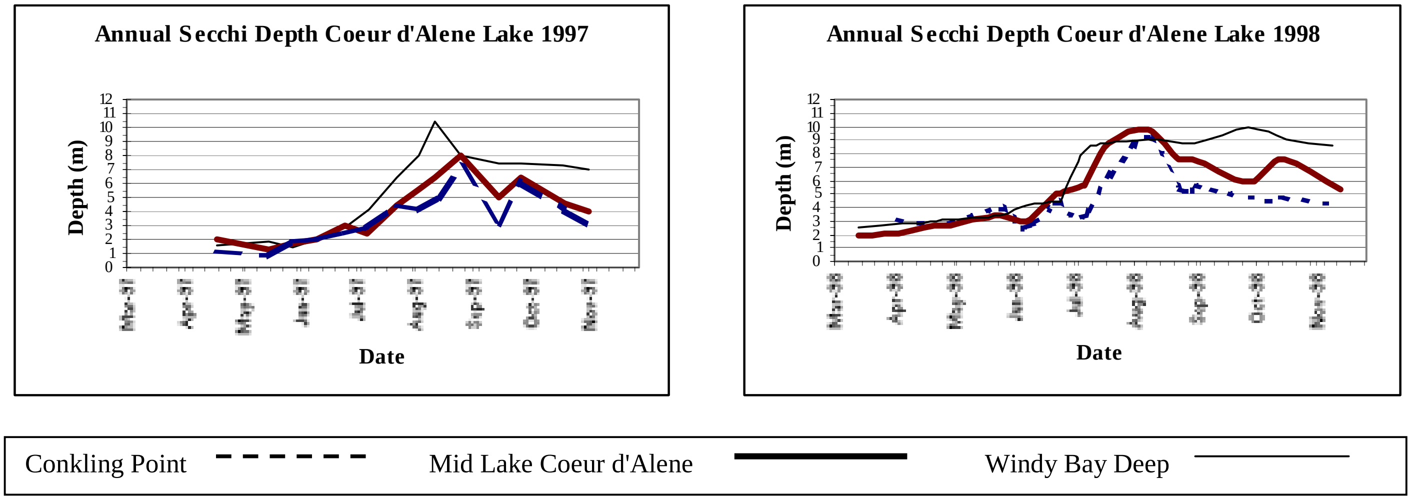
Secchi readings and empirically derived estimates of euphotic zone depth for thirteen stations in Coeur d'Alene Lake, 1997 and 1998.



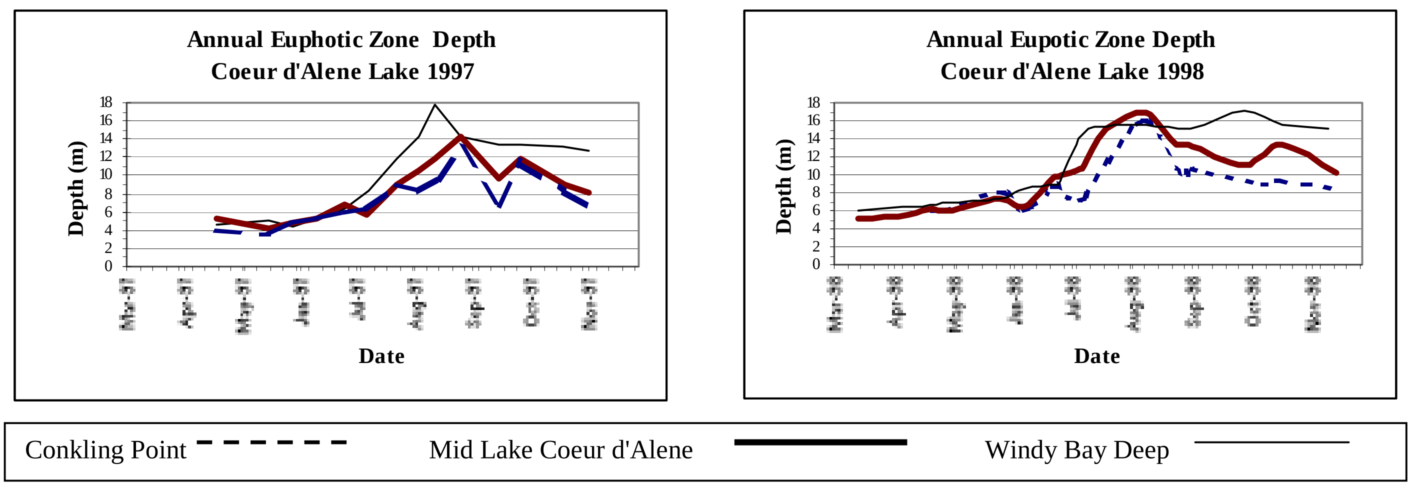
Appendix C.1 Annual secchi readings (SD) for three geomorphology similar sampling locations on Coeur d'Alene Lake during 1997 and 1998.



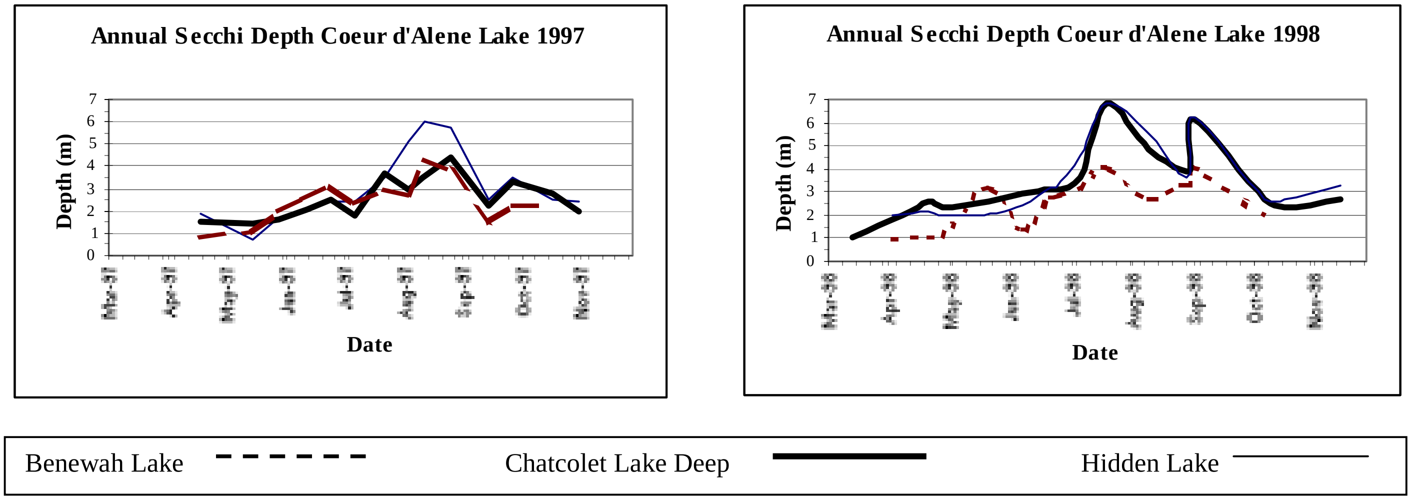
Appendix C.2 Empirically derived estimate of euphotic zone depth (EZD) during 1997 and 1998. Values are calculated using the following regression equation published by Alaska Department of Fish and Game (1987): EZD=2.2303 + 1.4914SD (r^2 = .78).



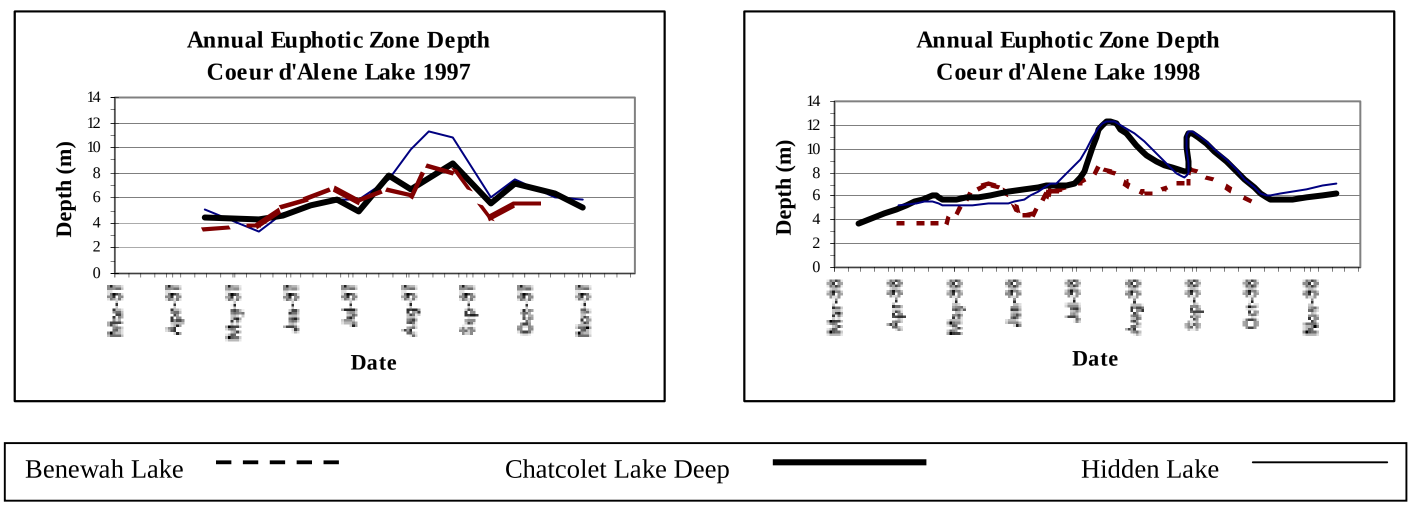
Appendix C.3 Annual secchi readings (SD) for three geomorphology similar sampling locations on Coeur d'Alene Lake during 1997 and 1998.



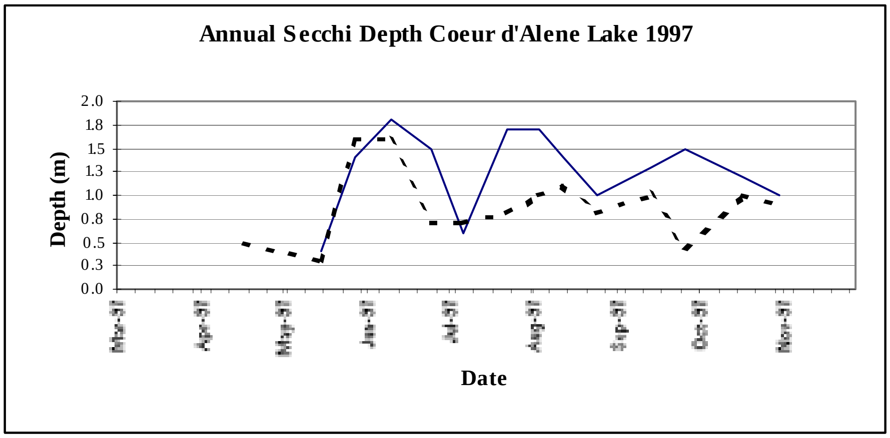
Appendix C.4 Empirically derived estimate of euphotic zone depth (EZD) during 1997 and 1998. Values are calculated using the following regression equation published by Alaska Department of Fish and Game (1987): EZD=2.2303 + 1.4914SD (r^2 = .78).

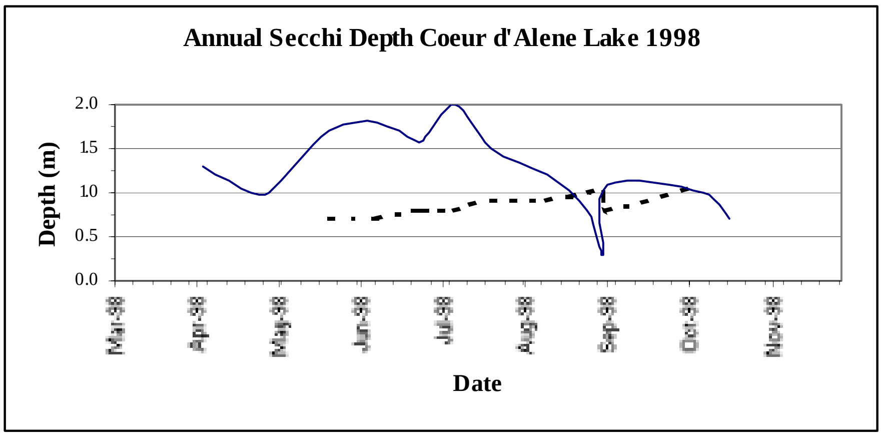


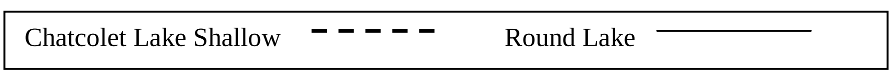
Appendix C.5 Annual secchi readings (SD) for three geomorphology similar sampling locations on Coeur d'Alene Lake during 1997 and 1998.



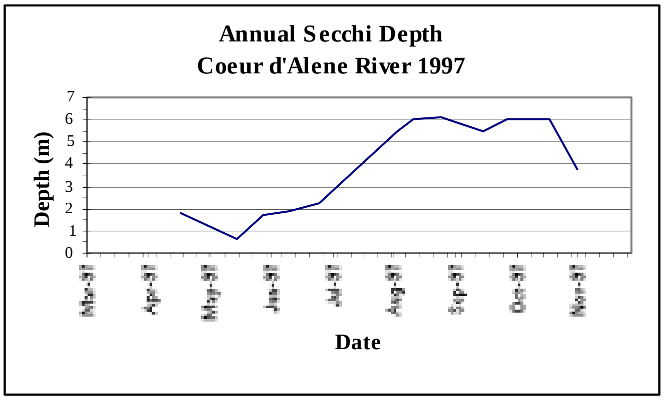
Appendix C.6 Empirically derived estimate of euphotic zone depth (EZD) during 1997 and 1998. Values are calculated using the following regression equation published by Alaska Department of Fish and Game (1987): $EZD = 2.2303 + 1.4914SD$ ($r^2 = .78$).

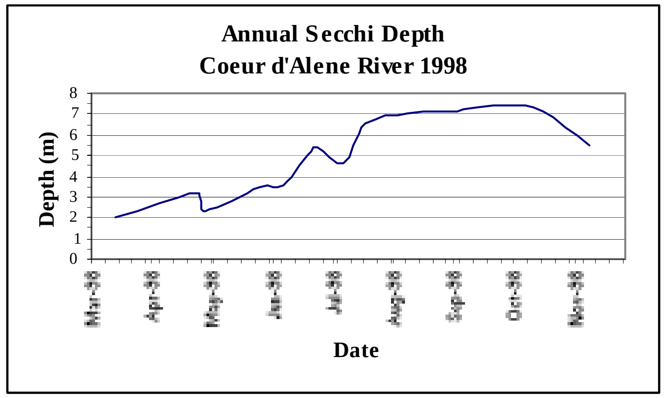




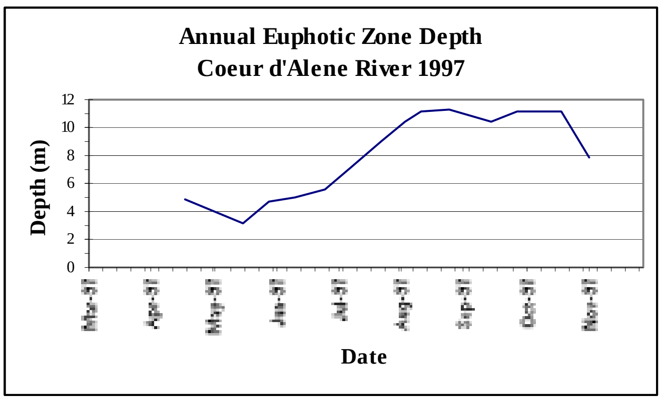


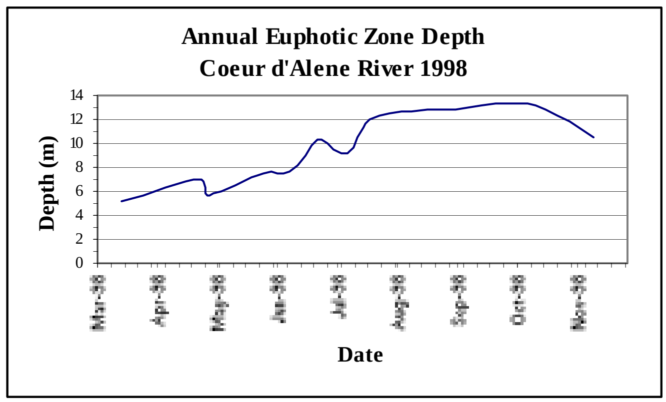
Appendix C.7 Annual secchi readings (SD) for two geomorphically similar sampling locations on Coeur d’Alene Lake during 1997 and 1998. Due to the shallowness of these lakes, the euphotic zone depth encompasses the entire water column.



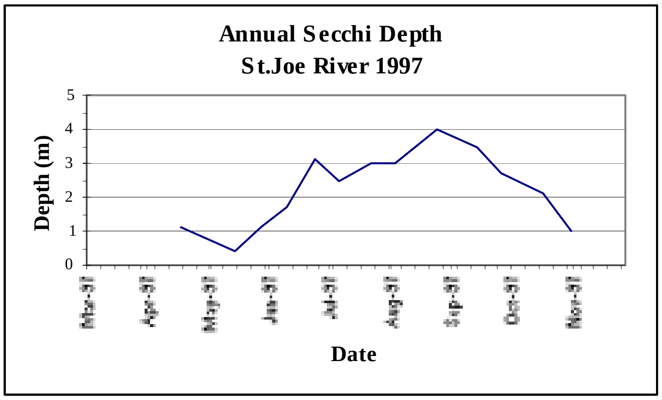


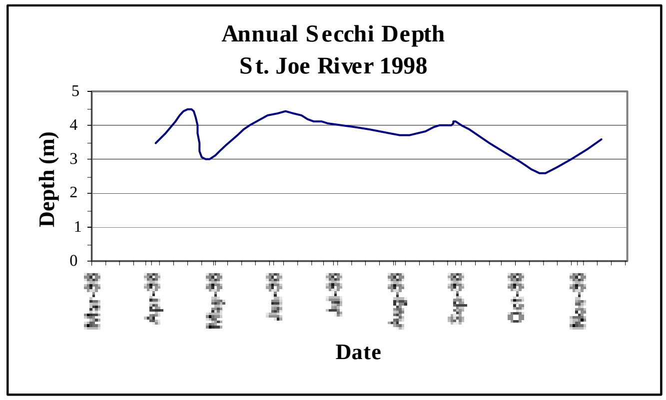
Appendix C.8 Annual secchi readings (SD) for the mouth of the Coeur d'Alene River during 1997 and 1998.



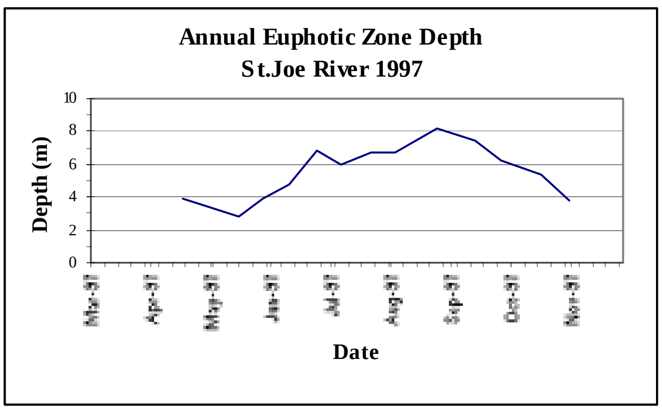


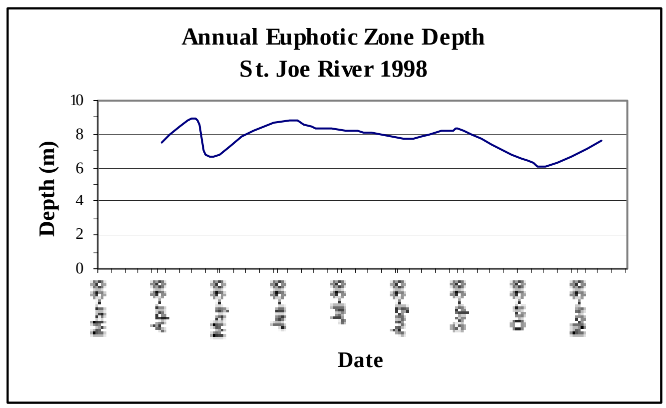
Appendix C.9 Empirically derived estimate of euphotic zone depth (EZD). Values are calculated using the following regression equation published by Alaska Department of Fish and Game (1987): EZD=2.2303 + 1.4914SD (r^2 = .78).





Appendix C.10 Annual secchi readings (SD) for the mouth of the St. Joe River during 1997 and 1998.

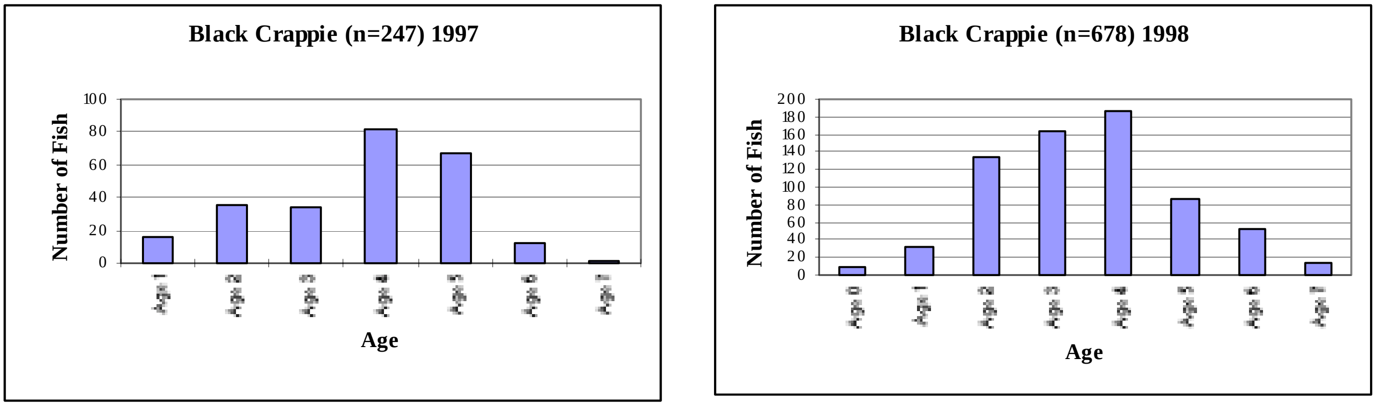




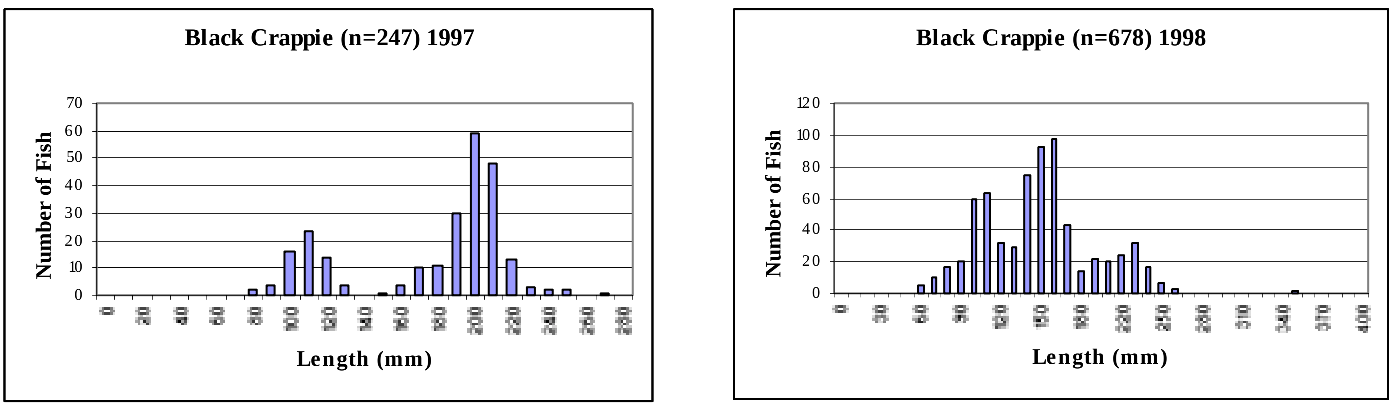
Appendix C.11 Empirically derived estimate of euphotic zone depth (EZD). Values are calculated using the following regression equation published by Alaska Department of Fish and Game (1987): EZD=2.2303 + 1.4914SD ($r^2 = .78$).

Appendix D

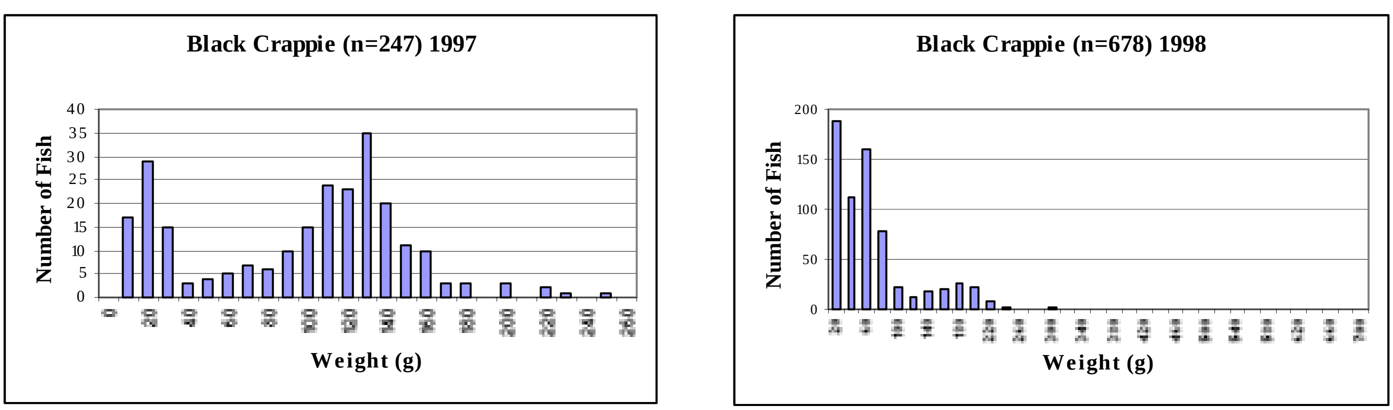
Age distribution, length and weight frequencies and length and weight regression graphs for aged fish species sampled in Coeur d'Alene Lake, 1997 and 1998.



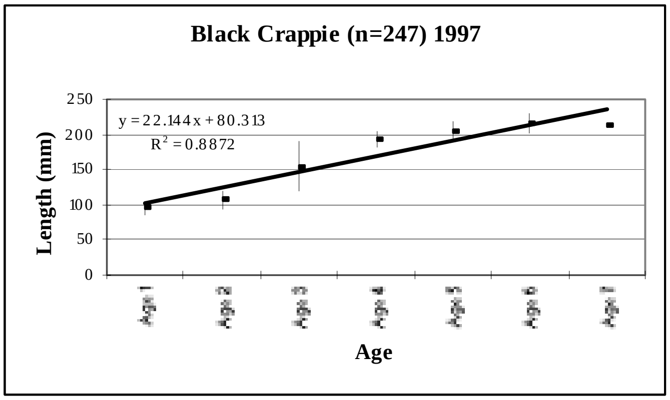
Appendix D.1 Age distribution of the number of Black Crappie versus age, in 1997 and 1998.

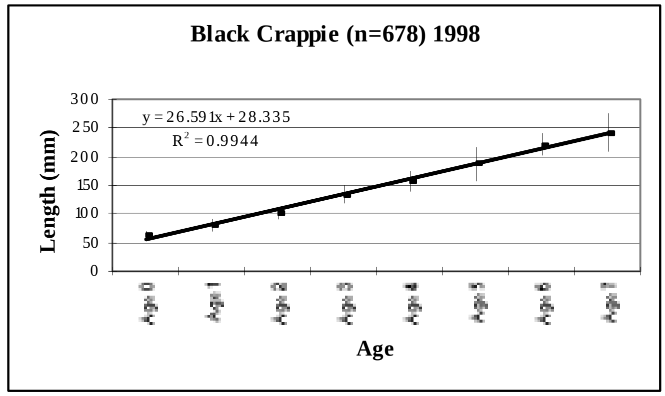


Appendix D.2 Frequency distribution of the number of Black Crappie sampled versus body length in 1997 and 1998.

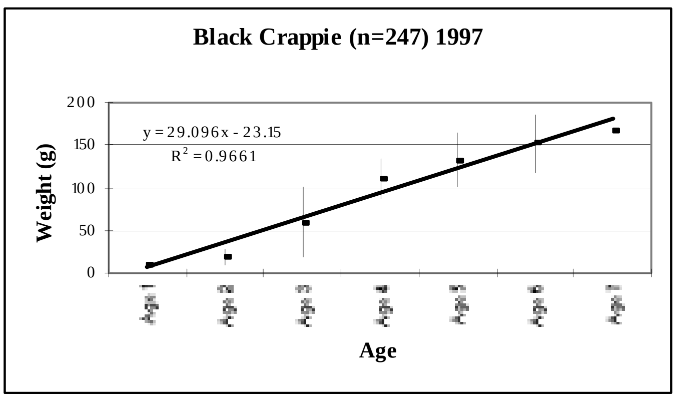


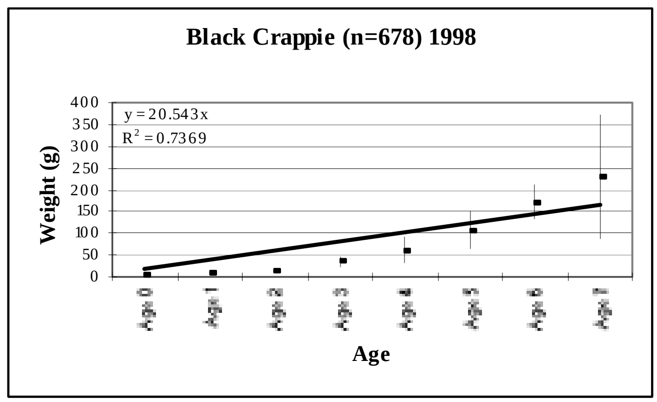
Appendix D.3 Frequency distribution of the number of Black Crappie sampled versus weight in 1997 and 1998.



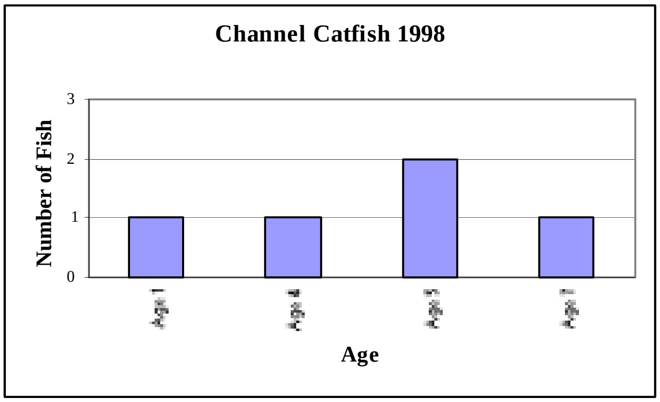


Appendix D.4 Regression equations of body length versus age for Black Crappie, in 1997 and 1998.

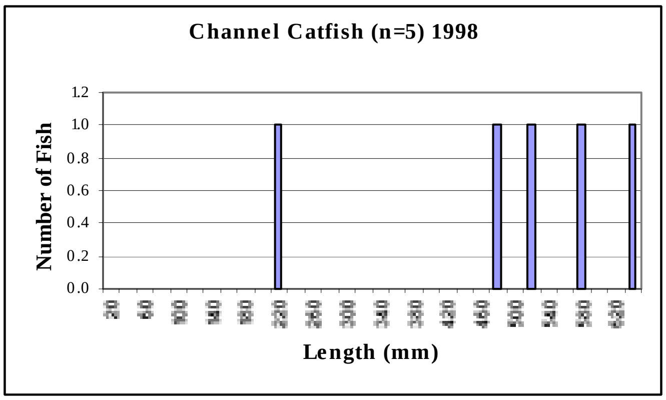


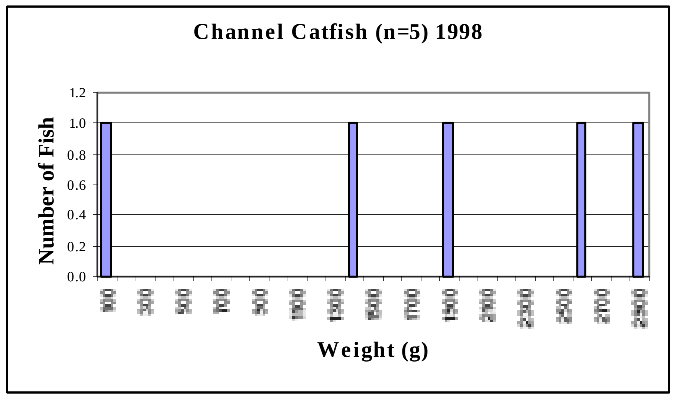


Appendix D.5 Regression equations of weight versus age for Black Crappie, in 1997 and 1998.

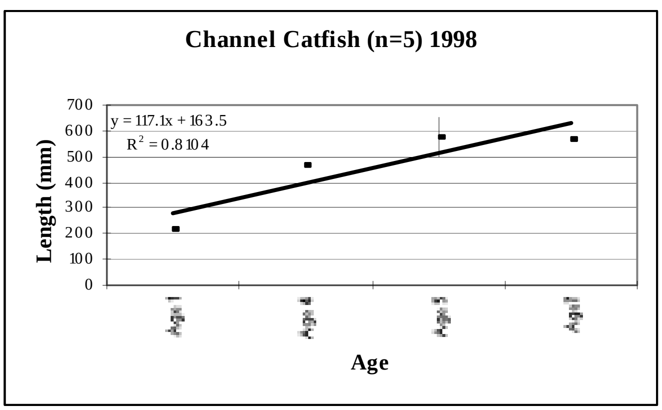


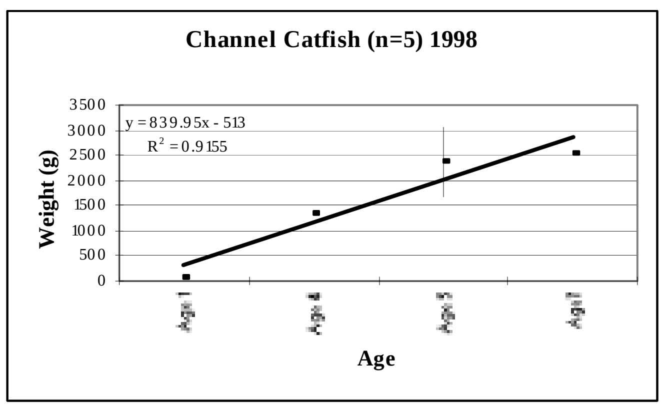
Appendix D.6 Age distribution of the number of Channel Catfish sampled versus age in 1998.



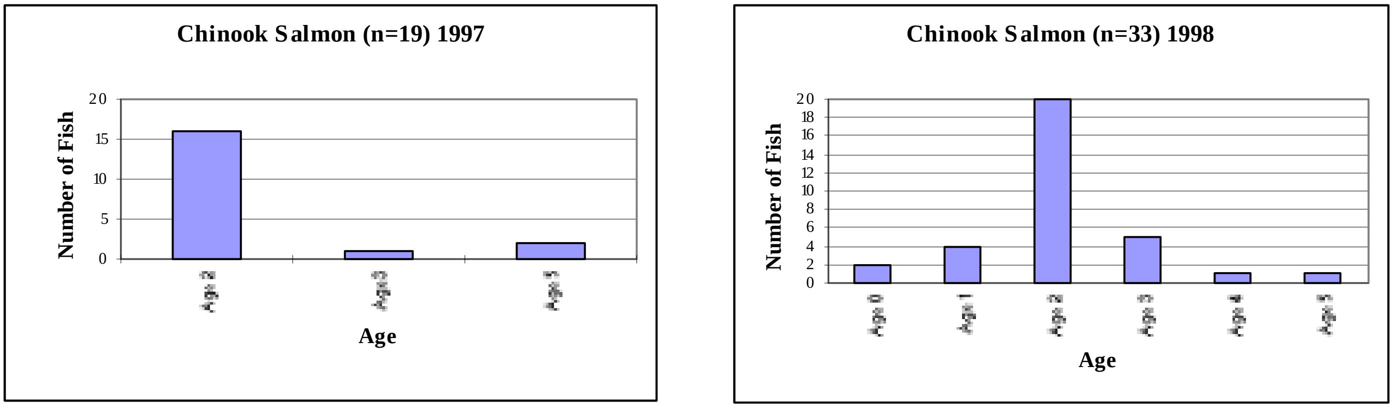


Appendix D.7 Frequency distribution of the number of Channel Catfish sampled versus body length and weight in 1998.

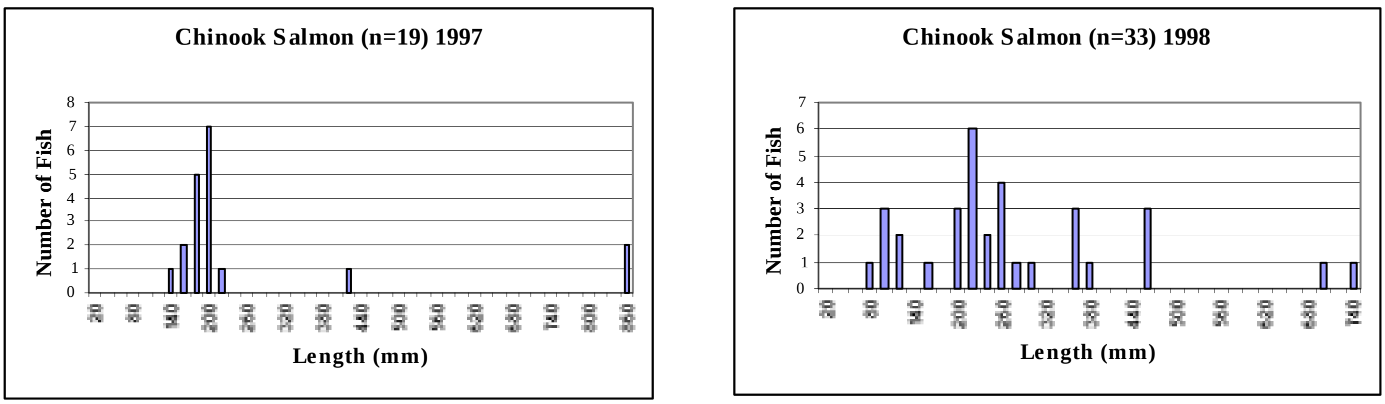




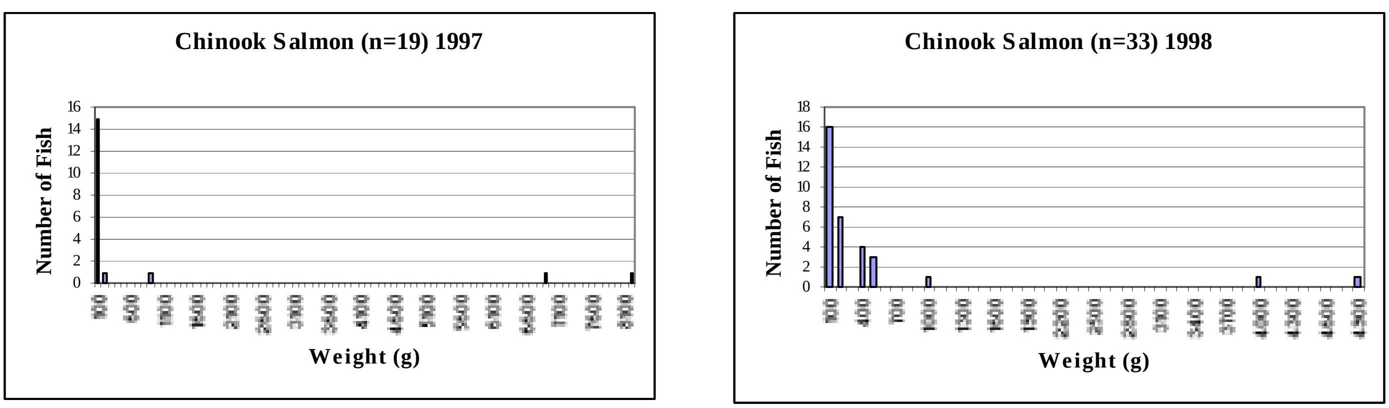
Appendix D.8 Regression equations of body length and weight versus age for Channel Catfish, in 1998.



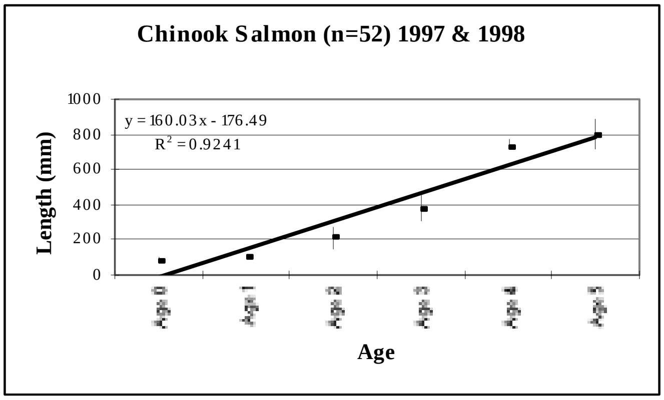
Appendix D.9 Age distribution of the number of Chinook Salmon sampled versus age in 1997 and 1998.

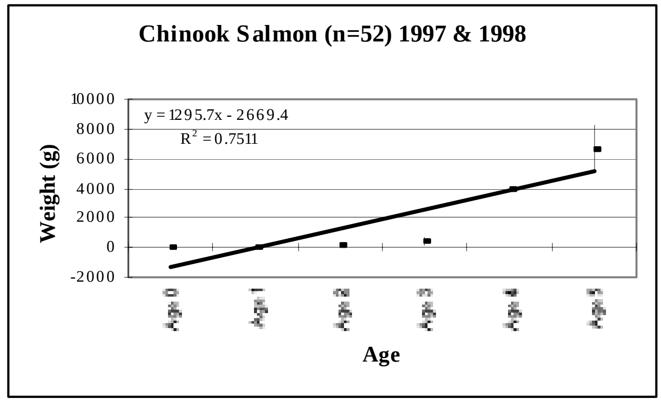


Appendix D.10 Frequency distribution of the number of Chinook Salmon sampled versus body length in 1997 and 1998.

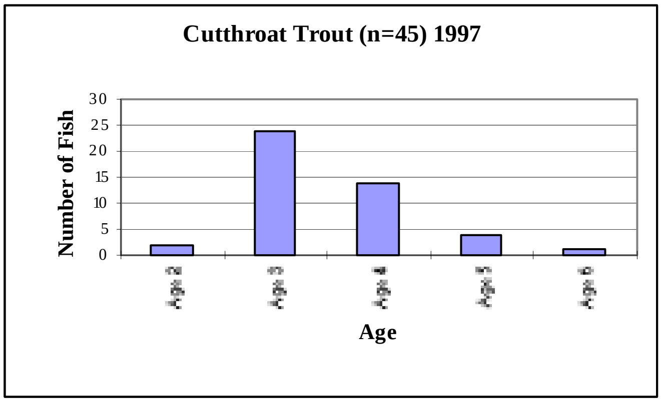


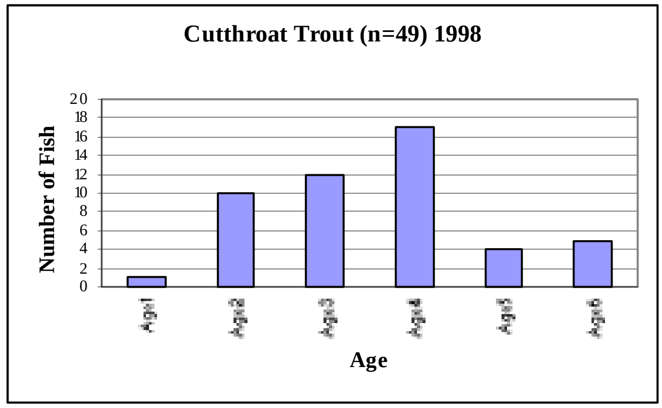
Appendix D.11 Frequency distribution of the number of Chinook Salmon sampled versus weight in 1997 and 1998.



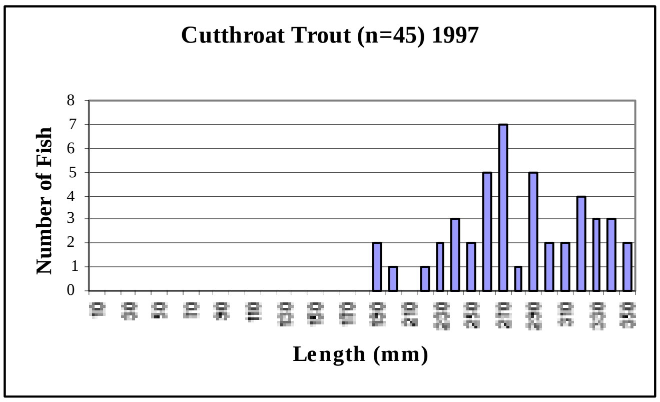


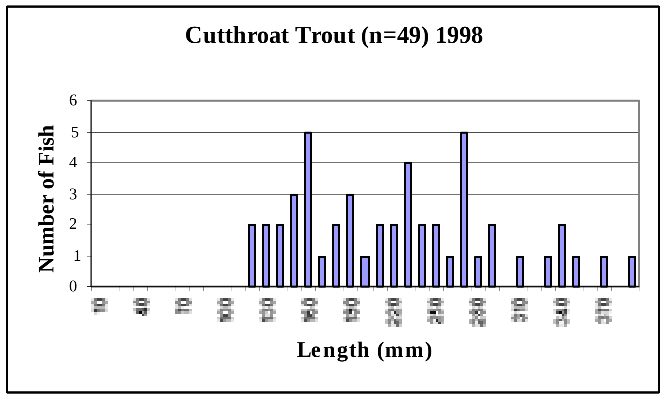
Appendix D.12 Regression equations of body length and weight versus age for Chinook Salmon, combined 1997 and 1998 data.



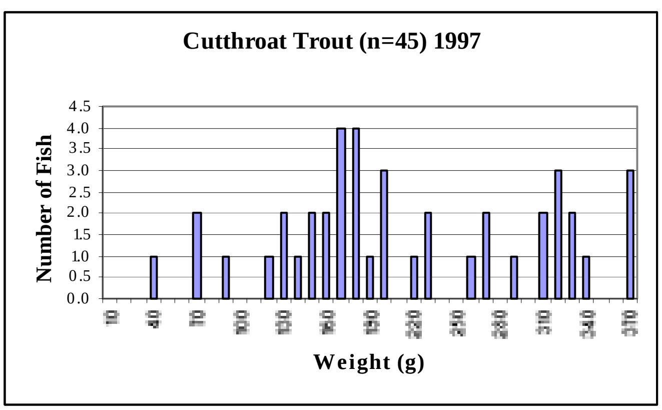


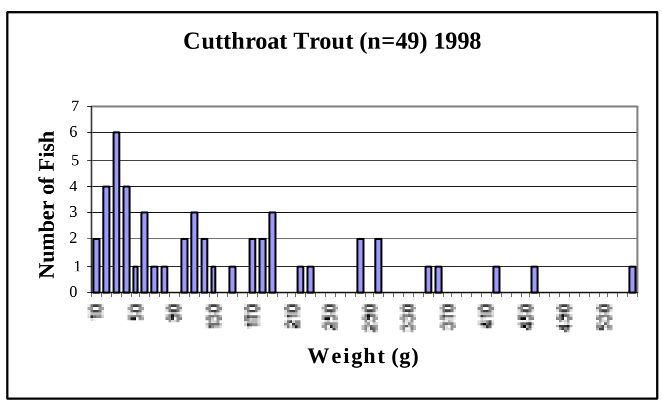
Appendix D.13 Age distribution of the number of Cutthroat Trout sampled versus age in 1997 and 1998.



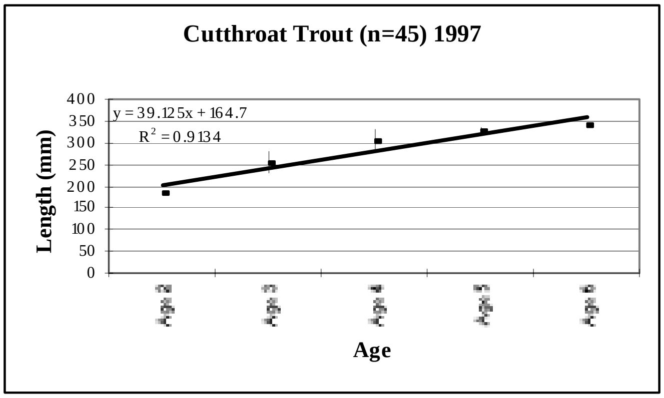


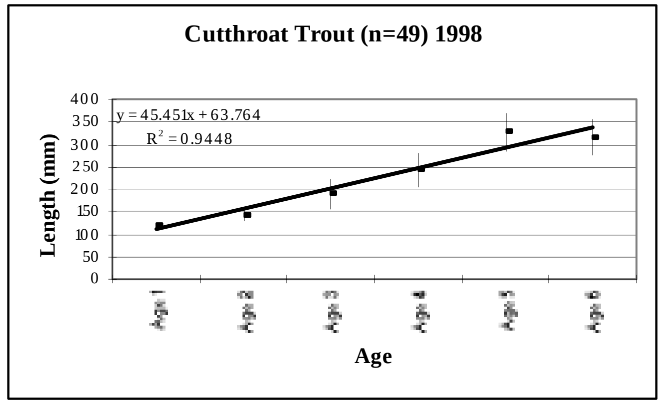
Appendix D.14 Frequency distribution of the number of Cutthroat Trout sampled versus body length in 1997 and 1998.



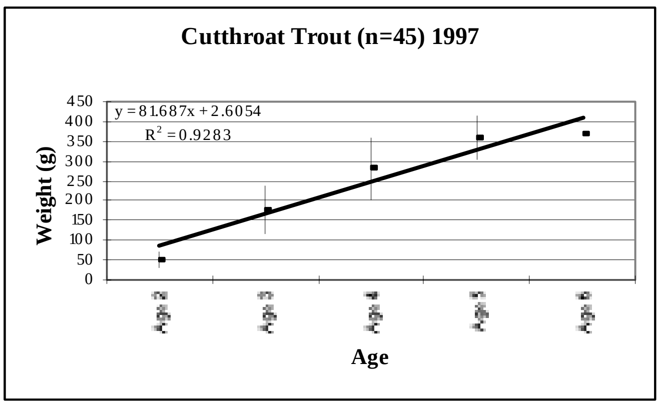


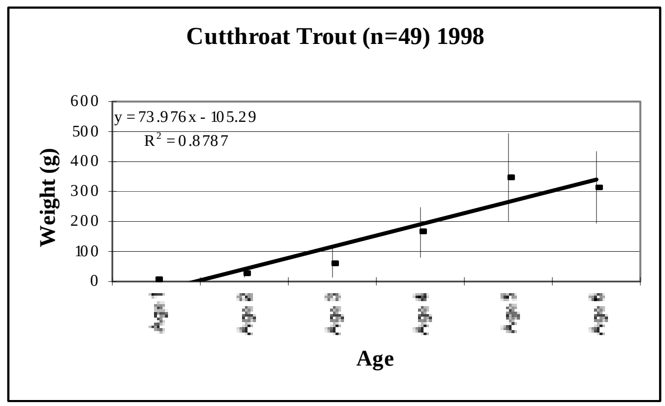
Appendix D.15 Frequency distribution of the number of Cutthroat Trout sampled versus weight in 1997 and 1998.



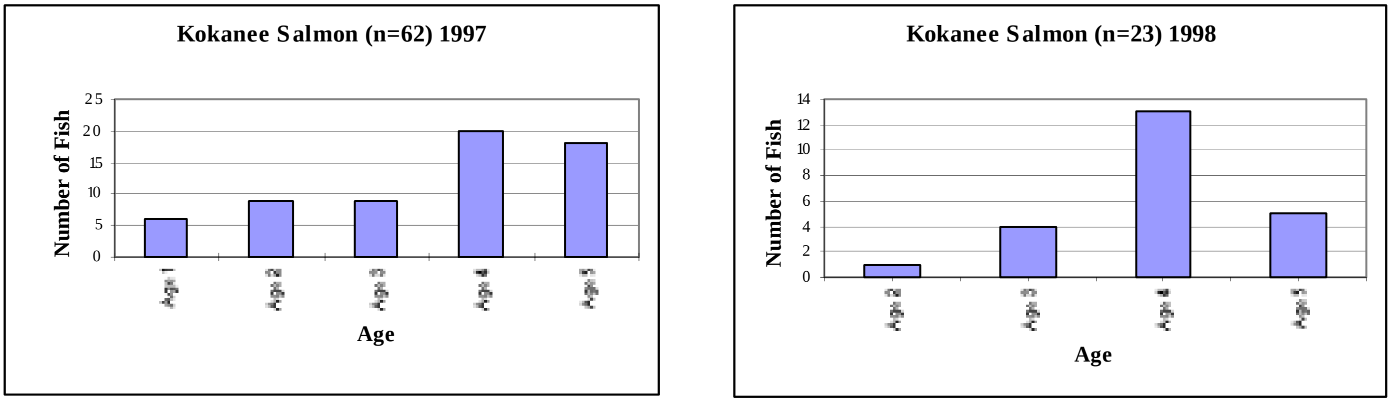


Appendix D.16 Regression equations of body length versus age for Cutthroat Trout, in 1997 and 1998.

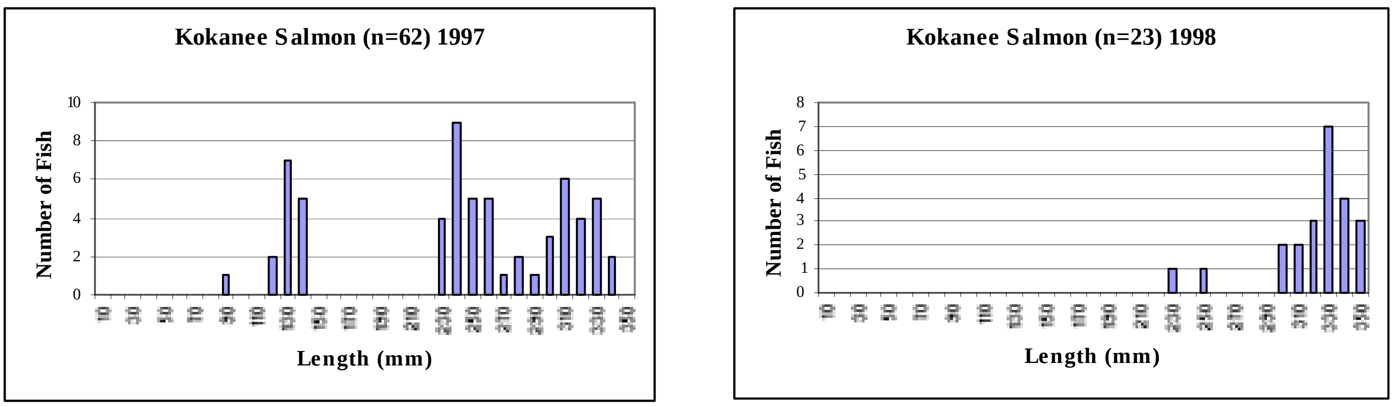




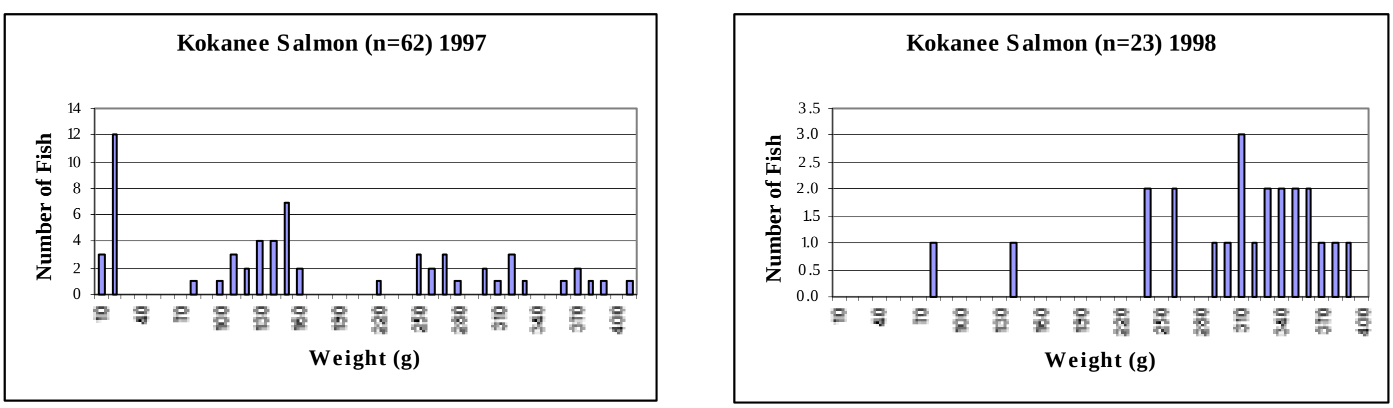
Appendix D.17 Regression equations of and weight versus age for Cutthroat Trout, in 1997 and 1998.



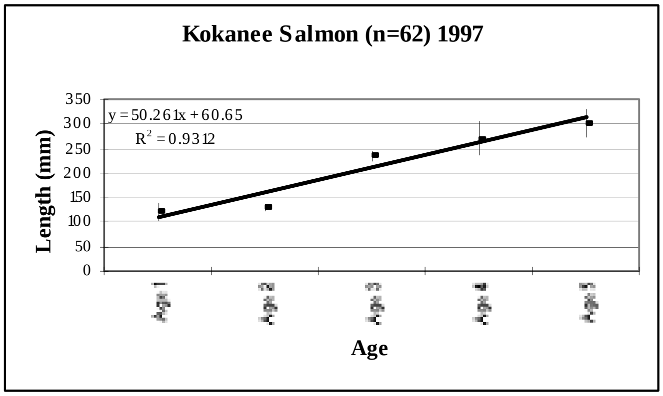
Appendix D.18 Age distribution of the number of Kokanee Salmon sampled versus age in 1997 and 1998.

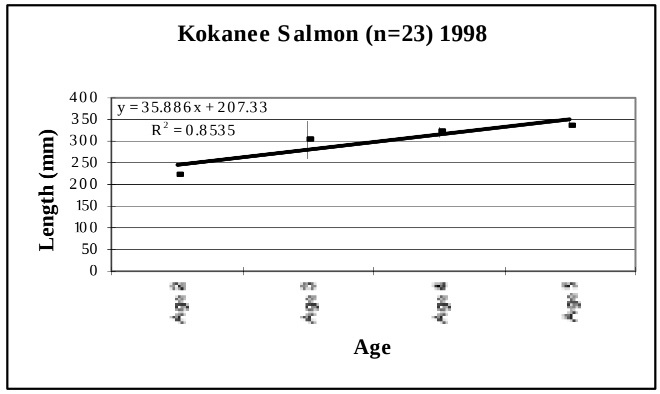


Appendix D.19 Frequency distribution of the number of Kokanee Salmon sampled versus body length in 1997 and 1998.

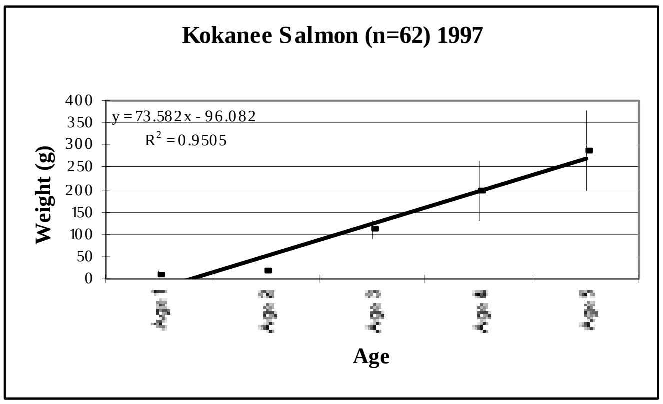


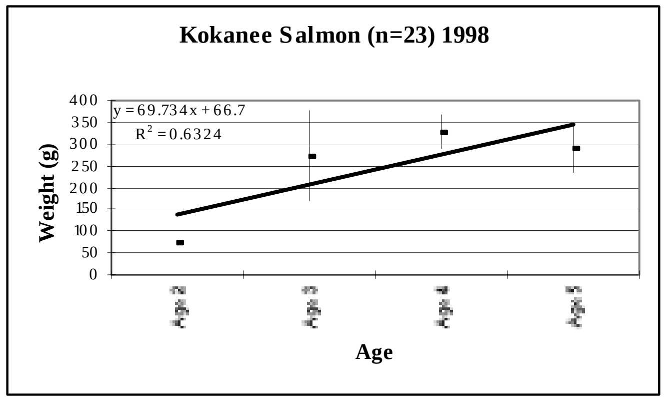
Appendix D.20 Frequency distribution of the number of Kokanee Salmon sampled versus weight in 1997 and 1998.



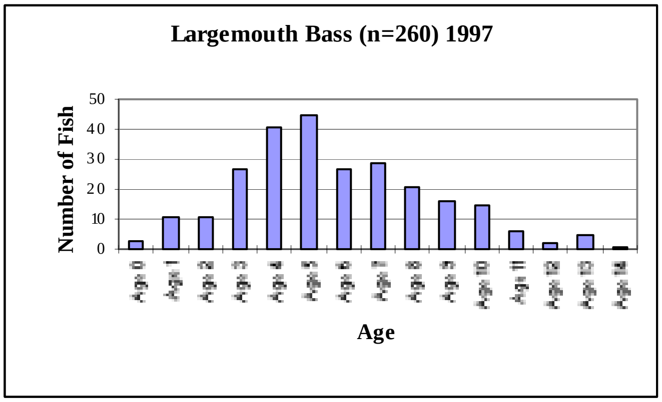


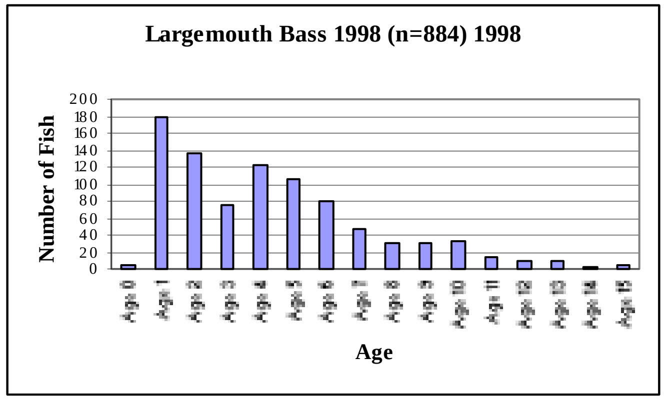
Appendix D.21 Regression equations of body length versus age for Kokanee Salmon, in 1997 and 1998.



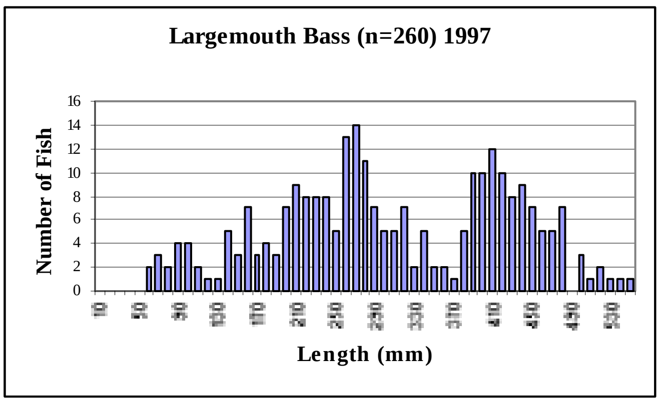


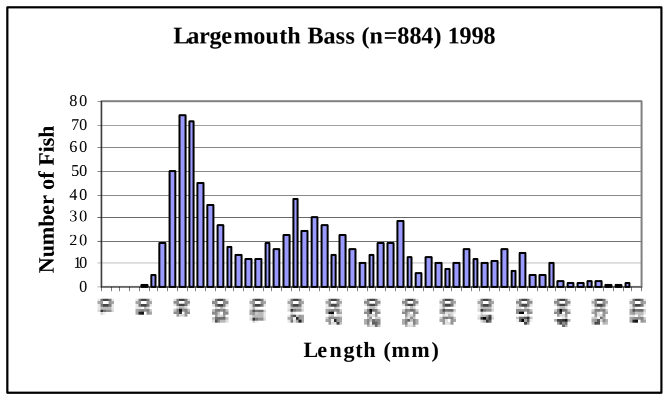
Appendix D.22 Regression equations of weight versus age for Kokanee Salmon, in 1997 and 1998.



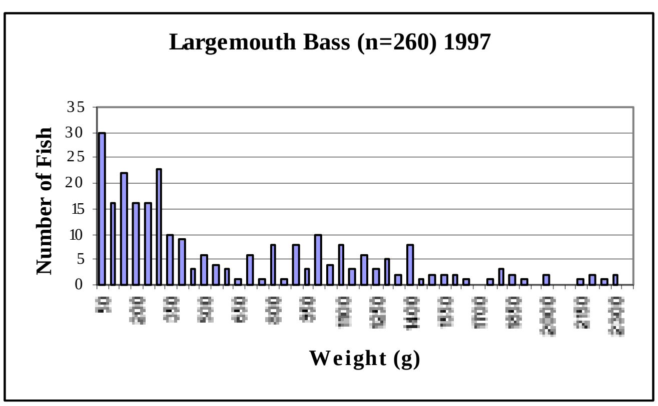


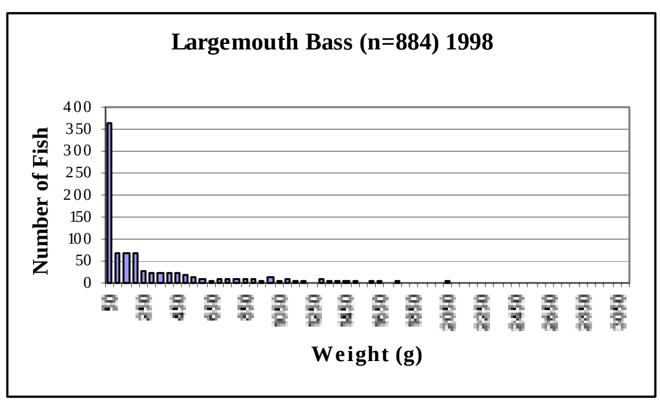
Appendix D.23 Age distribution of the number of Largemouth Bass sampled versus age in 1997 and 1998.



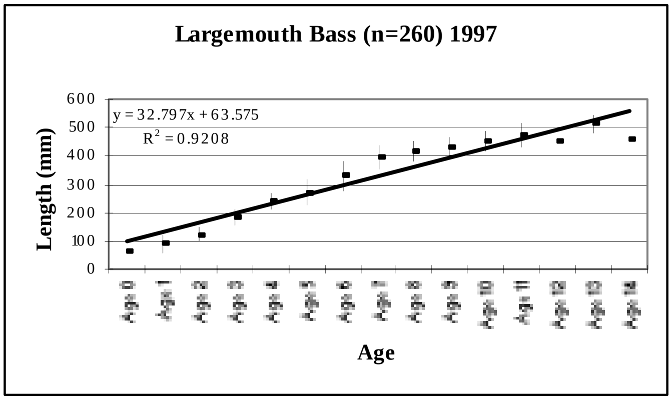


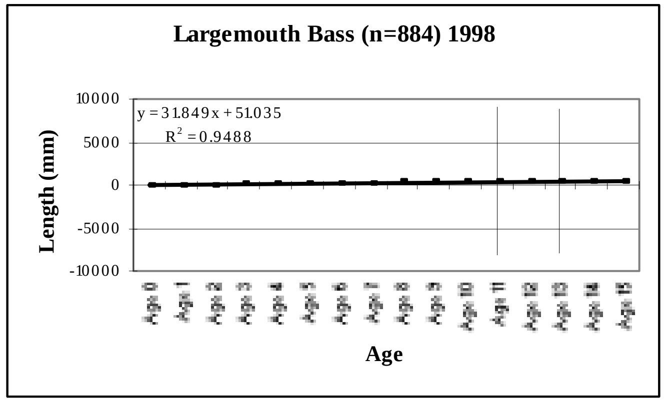
Appendix D.24 Frequency distribution of the number of Largemouth Bass sampled versus body length in 1997 and 1998.



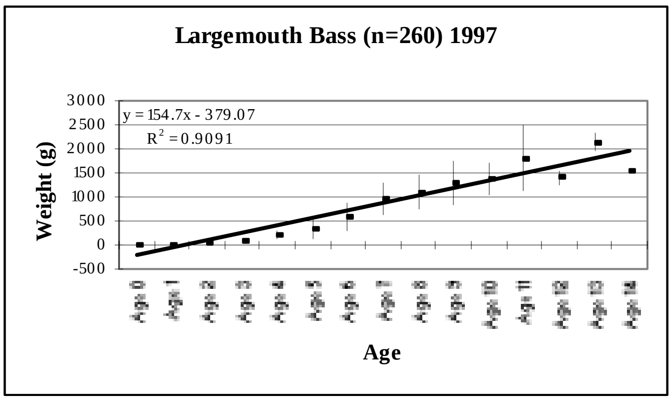


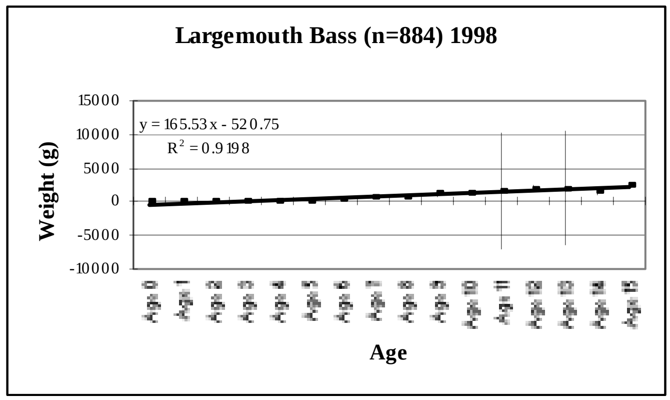
Appendix D.25 Frequency distribution of the number of Largemouth Bass sampled versus weight in 1997 and 1998.



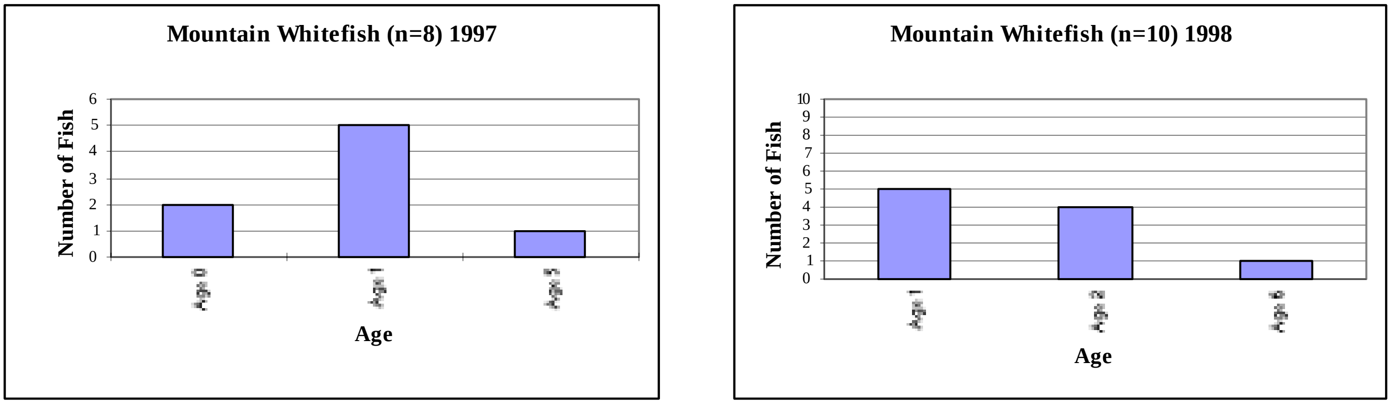


Appendix D.26 Regression equations of body length versus age for Largemouth Bass, in 1997 and 1998.

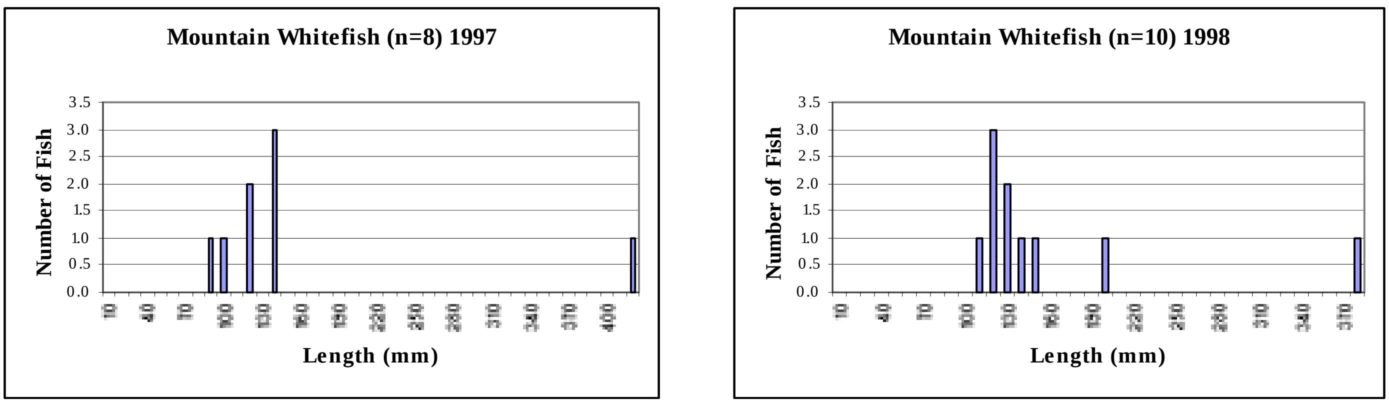




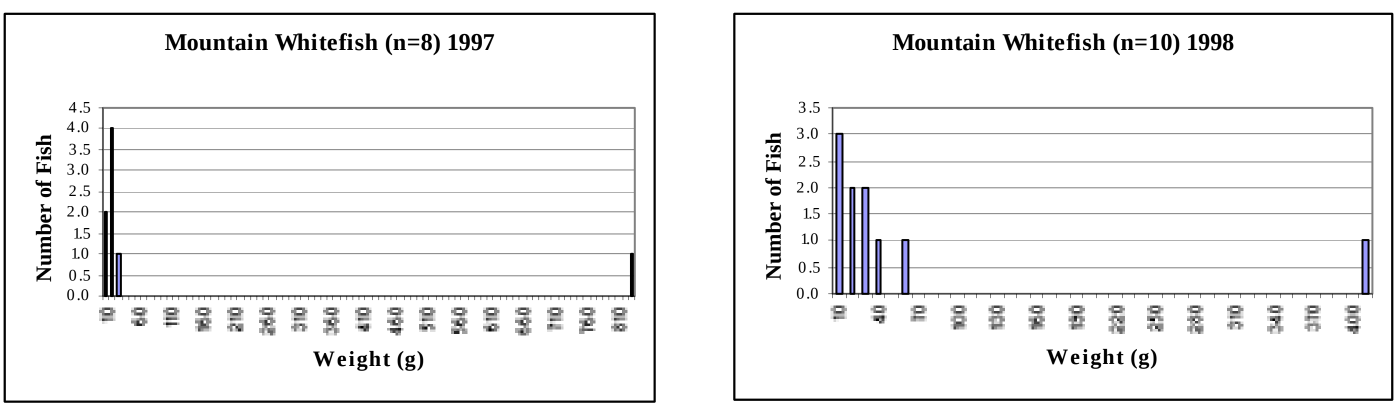
Appendix D.27 Regression equations of weight versus age for Largemouth Bass, in 1997 and 1998.



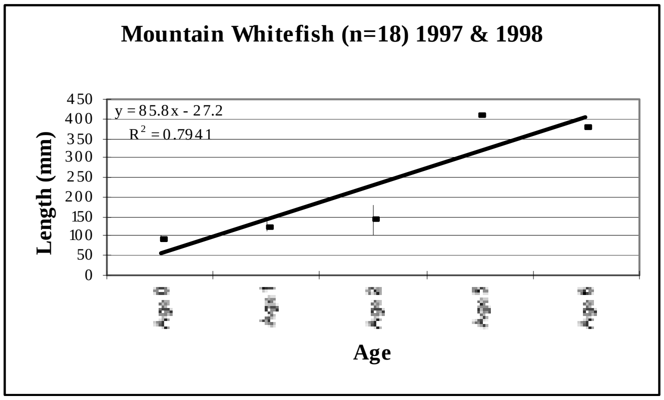
Appendix D.28 Age distribution of the number of Mountain Whitefish sampled versus age in 1997 and 1998.

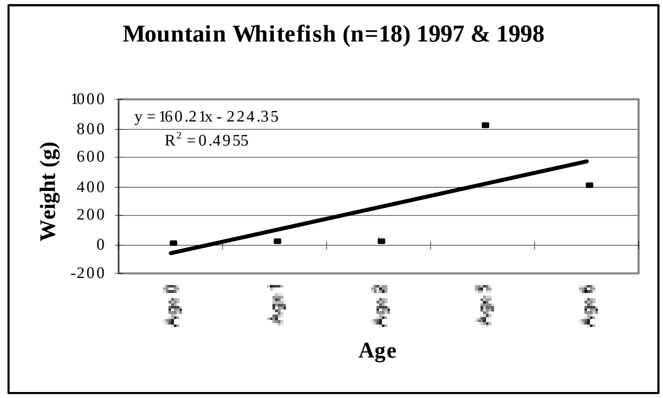


Appendix D.29 Frequency distribution of the number of Mountain Whitefish sampled versus body length in 1997 and 1998.

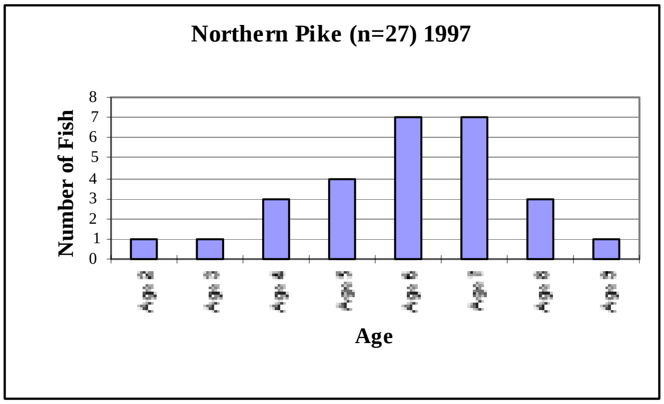


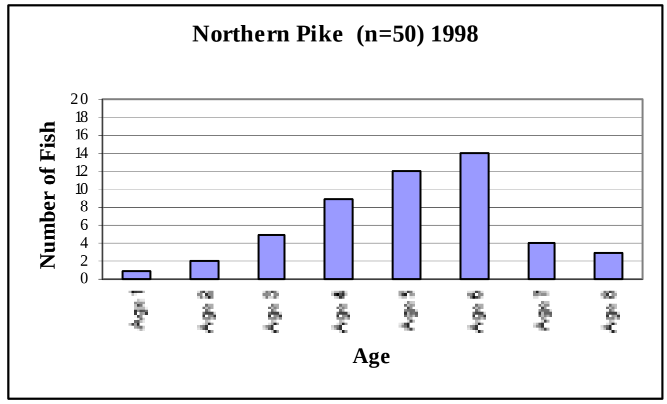
Appendix D.30 Frequency distribution of the number of Mountain Whitefish sampled versus weight in 1997 and 1998.



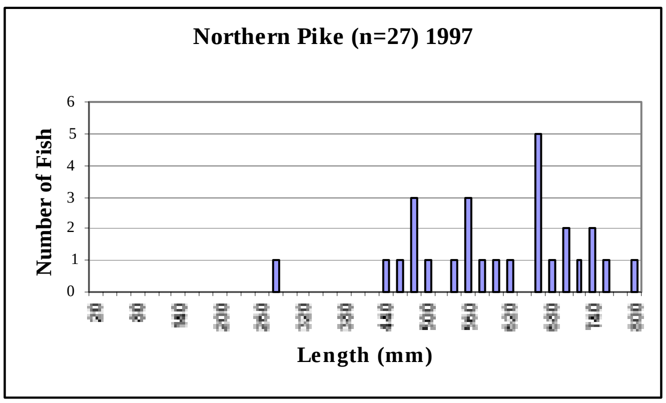


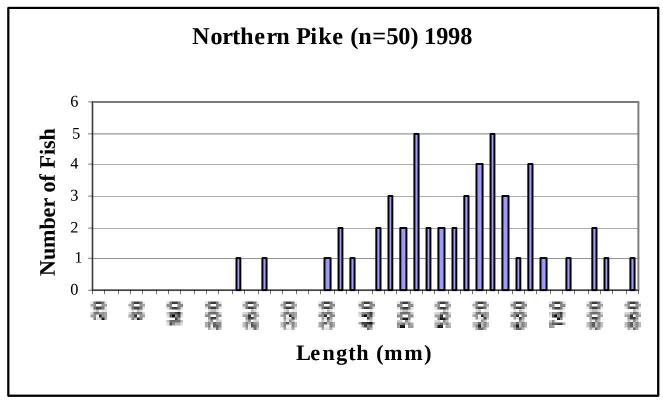
Appendix D.31 Regression equations of body length and weight versus age for Mountain Whitefish, combined 1997 and 1998 data.



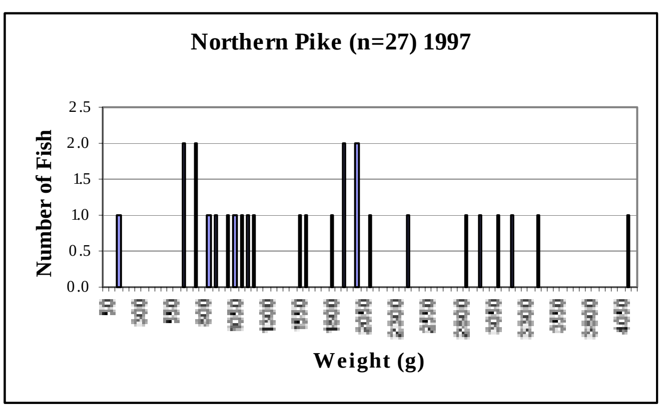


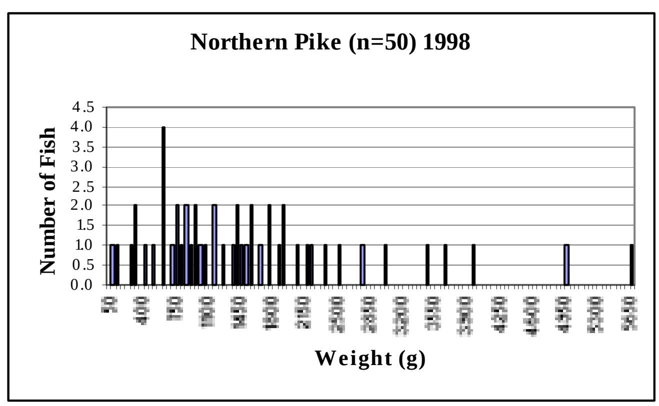
Appendix D.32 Age distribution of the number of Northern Pike sampled versus age in 1997 and 1998.



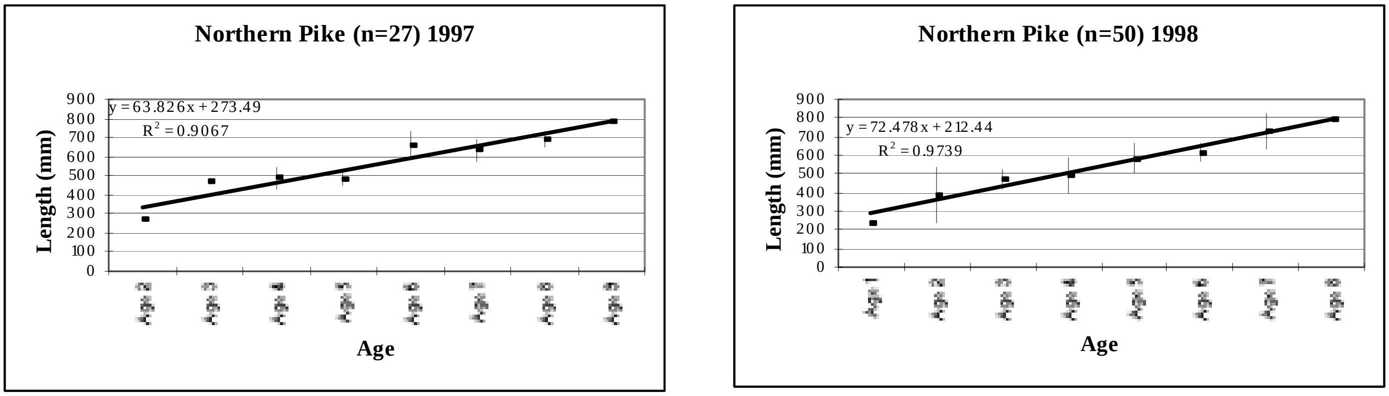


Appendix D.33 Frequency distribution of the number of Northern Pike sampled versus body length in 1997 and 1998.

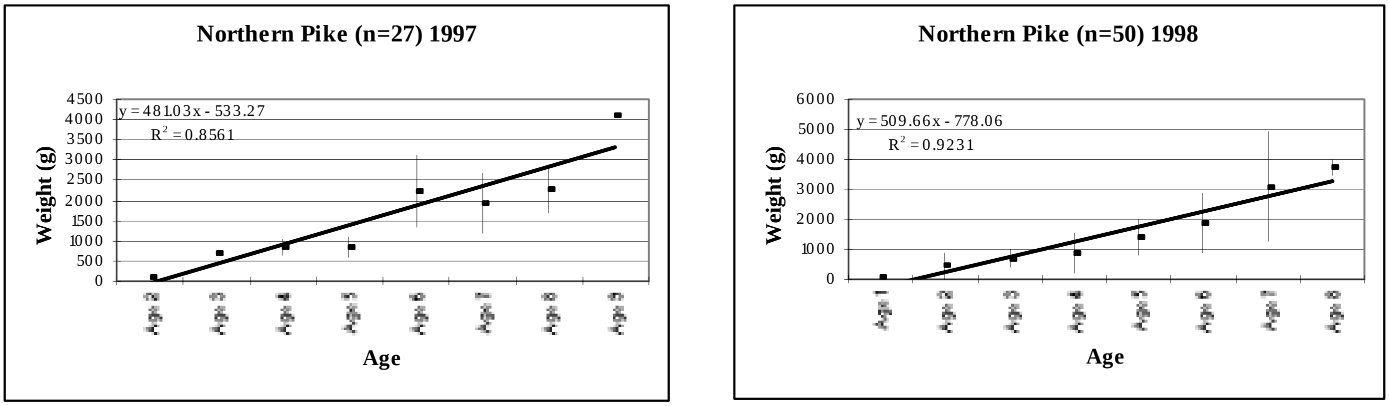




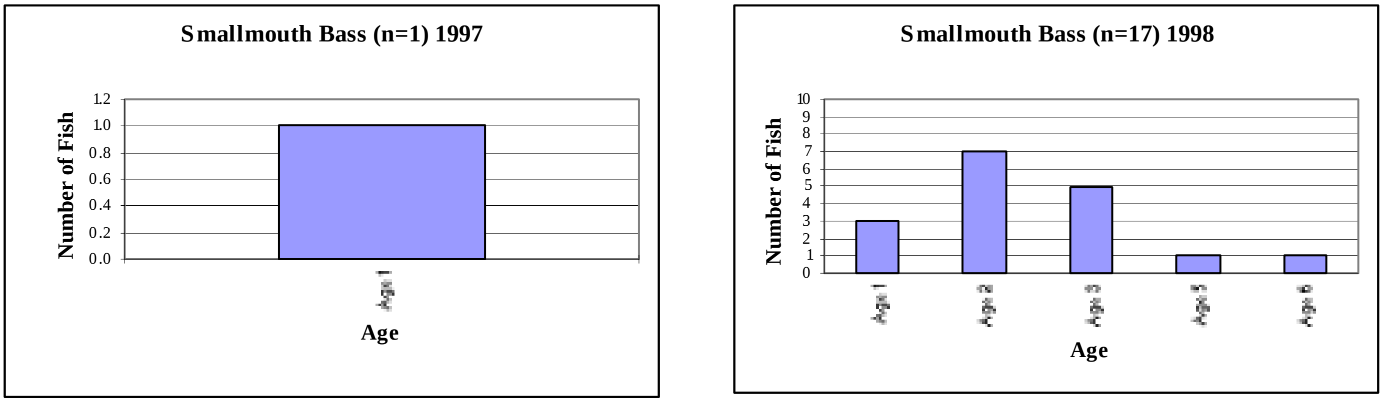
Appendix D.34 Frequency distribution of the number of Northern Pike sampled versus weight in 1997 and 1998.



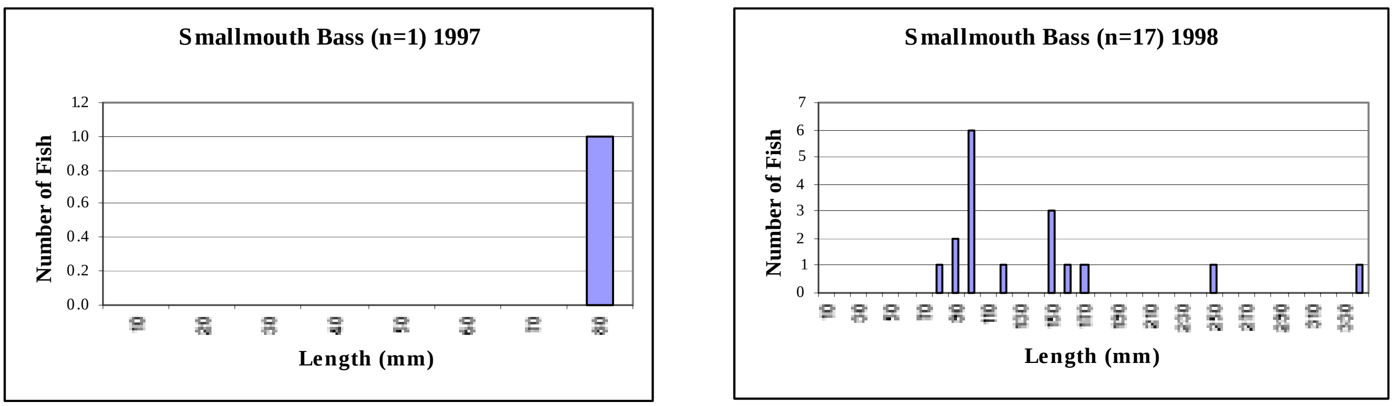
Appendix D.35 Regression equations of body length versus age for Northern Pike, in 1997 and 1998.



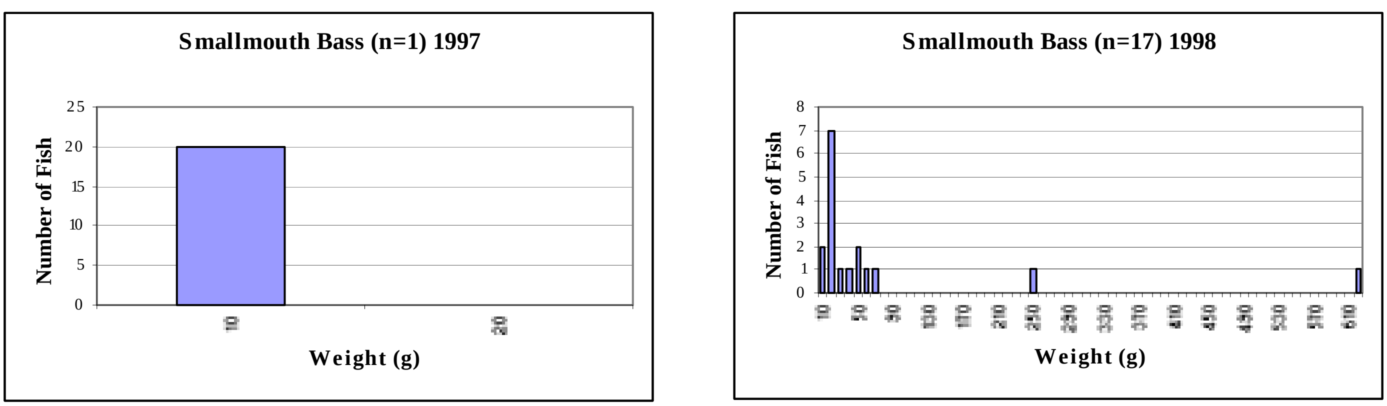
Appendix D.36 Regression equations of weight versus age for Northern Pike, in 1997 and 1998.



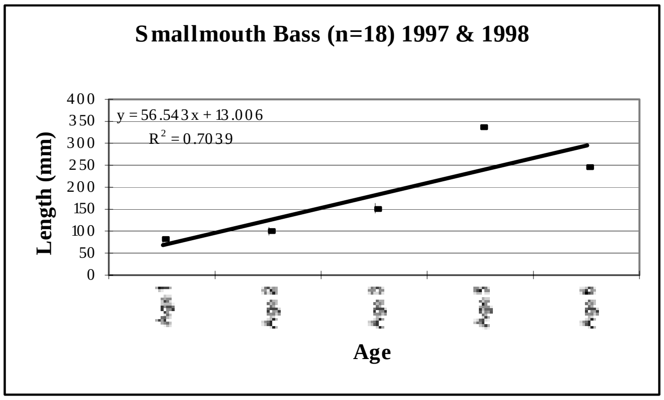
Appendix D.37 Age distribution of the number of Smallmouth Bass sampled versus age during 1997 and 1998.

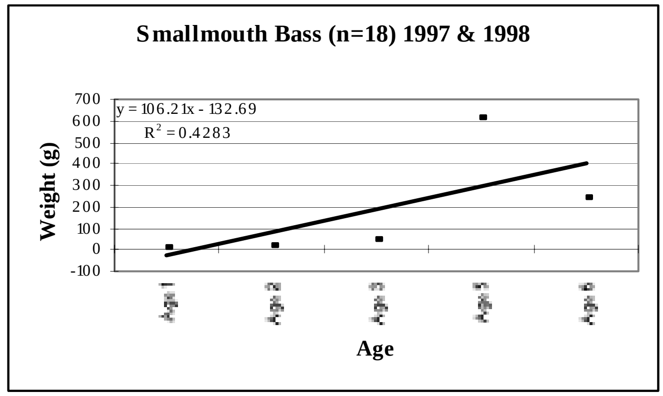


Appendix D.38 Frequency distribution of the number of Smallmouth Bass sampled versus body length during 1997 and 1998.

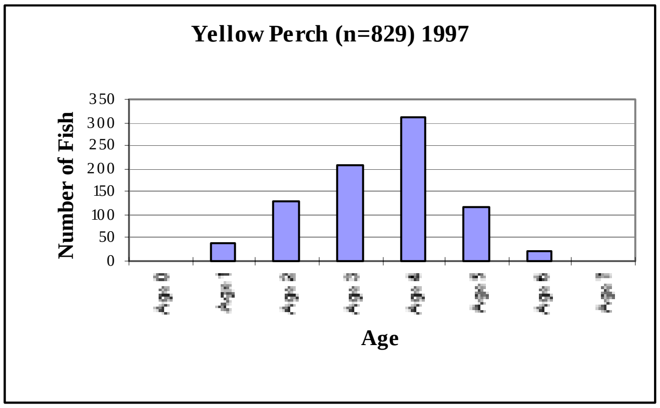


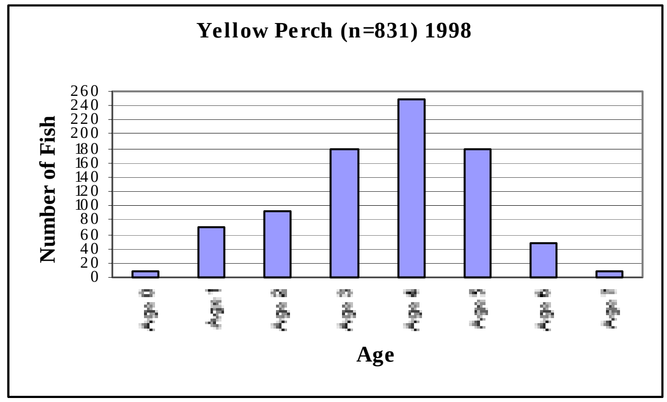
Appendix D.39 Frequency distribution of the number of Smallmouth Bass sampled versus weight during 1997 and 1998.



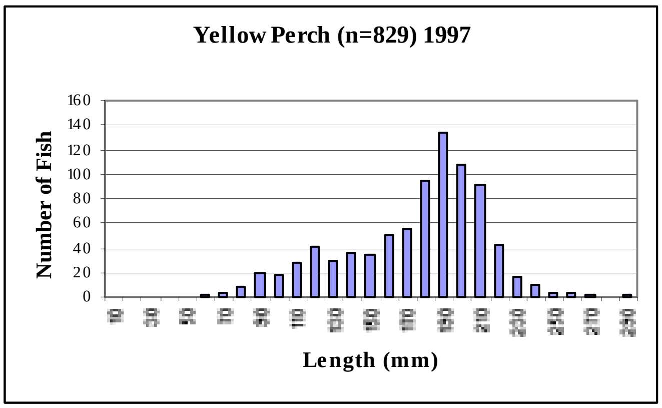


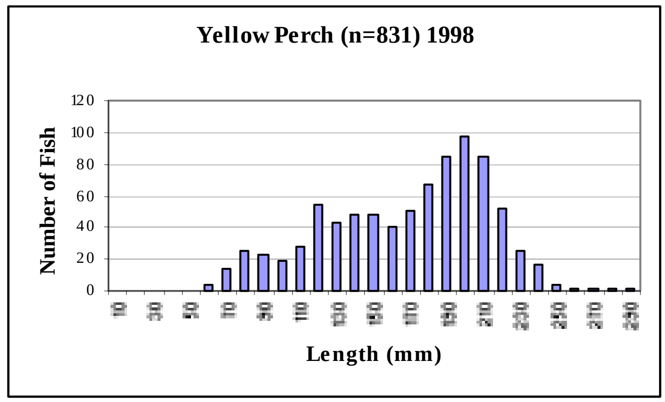
Appendix D.40 Regression equations of body length and weight versus age for Smallmouth Bass, combined 1997 and 1998 data.



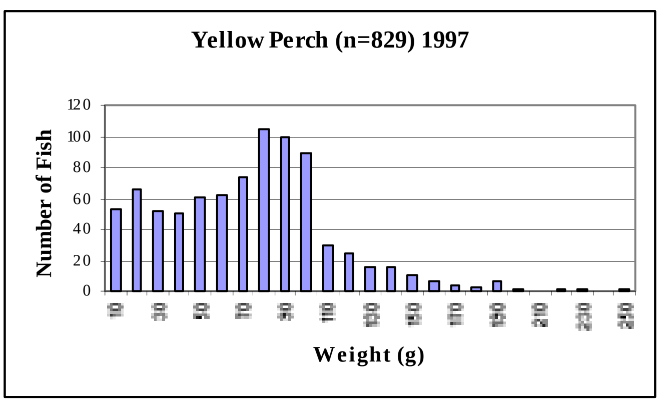


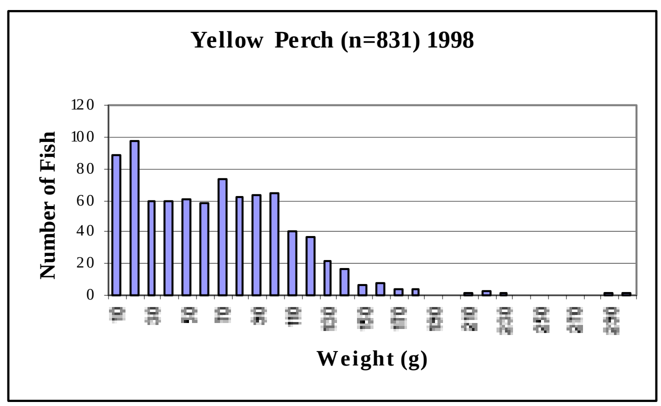
Appendix D.41 Age distribution of the number of Yellow Perch sampled versus age in 1997 and 1998.



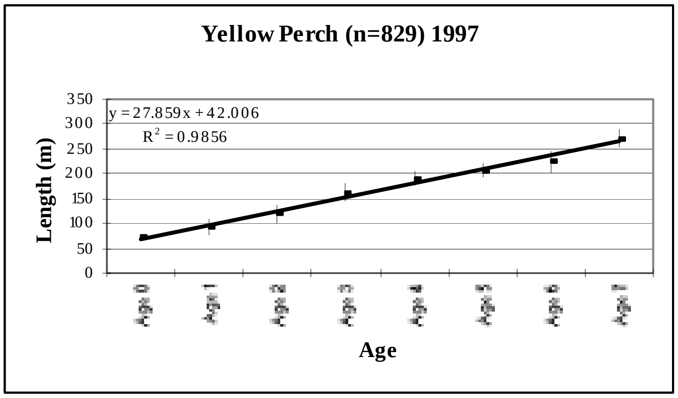


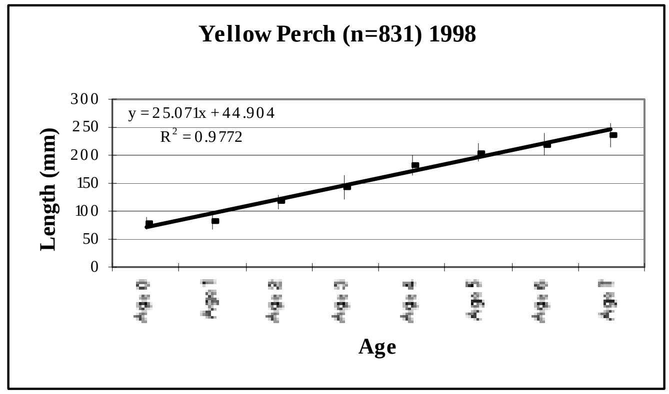
Appendix D.42 Frequency distribution of the number of Yellow Perch sampled versus body length in 1997 and 1998.



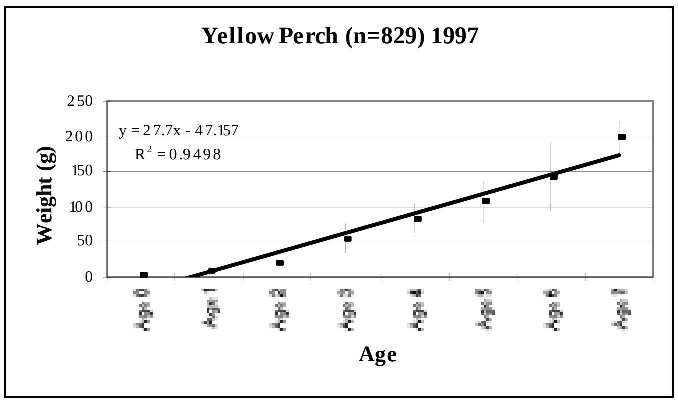


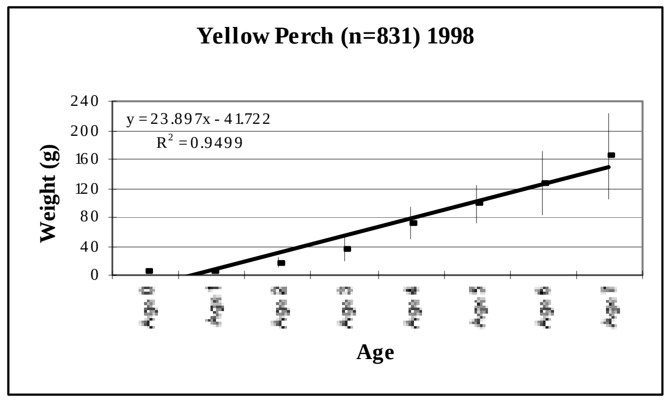
Appendix D.43 Frequency distribution of the number of Yellow Perch sampled versus weight in 1997 and 1998.





Appendix D.44 Regression equations of body length versus age for Yellow Perch, in 1997 and 1998.





Appendix D.45 Regression equations of weight versus age for Yellow Perch, in 1997 and 1998.

Appendix E

Statistics of mean length and weight, standard deviation and range for all aged species sampled in Coeur d'Alene Lake, 1997 and 1998.

Appendix E.1 Mean length and weight, standard deviation and range for aged Black Crappie in 1997 and 1998.

		1997 (n=247)		1998 (n=678)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 0	Mean	-	-	62.60	3.00
	Standard Deviation	-	-	6.85	1.33
	Range	-	-	53-75	1-5
Age 1	Mean	95.25	9.63	79.47	7.25
	Standard Deviation	9.64	3.03	10.46	2.65
	Range	77-107	6-17	56-102	4-13
Age 2	Mean	106.60	19.46	102.35	13.75
	Standard Deviation	13.89	9.68	10.42	6.70
	Range	81-118	8-62	75-150	3-54
Age 3	Mean	154.56	59.79	133.99	35.73
	Standard Deviation	34.85	41.39	14.63	12.42
	Range	34.85	41.39	97-183	10-70
Age 4	Mean	192.61	110.16	156.36	61.41
	Standard Deviation	11.61	23.15	18.05	30.08
	Range	160-214	50-191	115-229	26-314
Age 5	Mean	204.87	132.94	187.03	106.15
	Standard Deviation	14.25	31.62	28.33	43.43
	Range	14.25	31.62	148-240	50-207
Age 6	Mean	216.33	152.67	221.15	171.38
	Standard Deviation	13.85	33.93	18.59	38.91
	Range	199-247	100-226	170-260	76-297
Age 7	Mean	212.00	168.00	241.00	230.69
	Standard Deviation	-	-	33.02	141.99
	Range	-	-	200-342	118-690

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.2 Mean length and weight, standard deviation and range for aged Channel Catfish during 1998.

		1998 (n=5)	
Age	Statistics	Length (mm)	Weight (g)
Age 1	Mean	216	75
	Standard Deviation	-	-
	Range	-	-
Age 4	Mean	465	1365
	Standard Deviation	-	-
	Range	-	-
Age 5	Mean	574.00	2366.50
	Standard Deviation	79.20	702.16
	Range	518-630	1870-2863
Age 7	Mean	570	2541
	Standard Deviation	-	-
	Range	-	-

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.3 Mean length and weight, standard deviation and range for aged Chinook Salmon in 1997 and 1998.

		1997 (n=19)		1998 (n=33)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 0	Mean	-	-	85	4.5
	Standard Deviation	-	-	14.14	0.71
	Range	-	-	75-95	4-5
Age 1	Mean	-	-	100.00	5.25
	Standard Deviation	-	-	12.25	2.63
	Range	-	-	85-110	3-8
Age 2	Mean	177.69	64.88	245.35	188.20
	Standard Deviation	19.30	36.25	68.48	216.32
	Range	138-210	27-185	143-443	30-972
Age 3	Mean	413	830	374	353.2
	Standard Deviation	-	-	83.20	141.91
	Range	-	-	250-449	116-500
Age 4	Mean	-	-	722	4000
	Standard Deviation	-	-	-	-
	Range	-	-	-	-
Age 5	Mean	848.5	7483.5	700	4886
	Standard Deviation	9.19	962.37	-	-
	Range	842-855	6803-8164	-	-

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.4 Mean length and weight, standard deviation and range for aged Cutthroat Trout in 1997 and 1998.

		1997 (n=45)		1998 (n=49)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 1	Mean	-	-	120	10
	Standard Deviation	-	-	-	-
	Range	-	-	-	-
Age 2	Mean	182.50	51.50	141.40	24.70
	Standard Deviation	0.71	19.09	13.53	8.67
	Range	182-183	38-65	120-160	10-36
Age 3	Mean	254.75	176.88	189.08	62.00
	Standard Deviation	27.12	60.70	33.46	49.00
	Range	194-315	63-312	152-267	16-186
Age 4	Mean	304.14	281.21	243.82	163.76
	Standard Deviation	25.80	76.46	37.28	83.32
	Range	260-344	154-374	185-290	59-300
Age 5	Mean	327.00	360.75	326.75	347.50
	Standard Deviation	10.61	55.16	43.15	148.68
	Range	312-335	308-420	280-382	215-555
Age 6	Mean	342	368	316.00	313.80
	Standard Deviation	-	-	41.70	118.56
	Range	-	-	265-367	184-455

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.5 Mean length and weight, standard deviation and range for aged Kokanee Salmon in 1997 and 1998.

		1997 (n=62)		1998 (n=23)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 1	Mean	120.83	11.00	-	-
	Standard Deviation	17.88	5.10	-	-
	Range	87-140	4-15	-	-
Age 2	Mean	129.22	15.78	225	75
	Standard Deviation	6.12	2.68	-	-
	Range	120-135	14-19	-	-
Age 3	Mean	235.11	110.67	303.25	272
	Standard Deviation	9.91	19.09	42.14	103.94
	Range	222-250	74-135	245-338	132-352
Age 4	Mean	235.11	110.67	321.31	328.54
	Standard Deviation	9.91	19.09	11.44	37.63
	Range	222-250	74-135	300-343	257-390
Age 5	Mean	301.50	287.72	338.60	288.60
	Standard Deviation	28.11	89.05	5.90	52.19
	Range	251-340	140-402	333-345	232-338

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.6 Mean length and weight, standard deviation and range for aged Largemouth Bass in 1997 and 1998.

		1997 (n=260)		1998 (n=884)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 0	Mean	64.33	4.67	66.00	3.50
	Standard Deviation	4.04	2.52	14.94	1.29
	Range	60-68	2-7	49-85	2-5
Age 1	Mean	90.55	14.91	84.92	8.03
	Standard Deviation	31.55	25.82	14.46	3.35
	Range	58-175	1-92	54-196	1-18
Age 2	Mean	122.18	29.55	107.98	16.74
	Standard Deviation	23.65	15.51	16.15	8.88
	Range	90-156	11-59	80-175	5-64
Age 3	Mean	180.15	82.81	158.41	53.45
	Standard Deviation	28.16	43.66	29.19	31.06
	Range	134-270	34-250	100-240	12-156
Age 4	Mean	240.80	209.95	212.17	137.23
	Standard Deviation	29.91	81.56	39.58	75.90
	Range	159-290	56-415	147-421	38-457
Age 5	Mean	271.40	325.47	252.13	231.49
	Standard Deviation	47.97	202.41	33.34	104.71
	Range	162-404	120-1000	186-346	79-630
Age 6	Mean	330.59	572.93	302.90	444.00
	Standard Deviation	53.87	281.38	42.32	220.24
	Range	249-410	222-1040	210-380	116-1255
Age 7	Mean	392.69	966.72	338.02	598.81
	Standard Deviation	42.99	342.13	42.73	285.62
	Range	310-470	400-1820	250-460	241-1600
Age 8	Mean	413.48	1091.71	372.10	796.87
	Standard Deviation	35.58	353.08	37.09	232.48
	Range	338-473	544-2000	290-445	342-1465
Age 9	Mean	428.69	1291.00	422.26	1161.32
	Standard Deviation	35.33	456.60	31.18	346.08
	Range	361-480	700-2200	365-492	411-2016
Age 10	Mean	449.40	1385.67	428.50	1281.63
	Standard Deviation	35.58	335.54	26.11	292.96
	Range	406-515	884-1850	380-494	705-1960
Age 11	Mean	476.00	1812.50	452.93	1507.79
	Standard Deviation	42.09	676.71	8676.44	8676.44
	Range	428-536	1075-2600	396-560	452-2832
Age 12	Mean	455.00	1400.00	489.80	1953.70
	Standard Deviation	7.07	141.42	27.35	477.91
	Range	450-460	1300-1500	460-530	1396-2800
Age 13	Mean	512.00	2140.00	495.44	2031.44
	Standard Deviation	28.84	181.66	8445.62	8445.62
	Range	468-546	1900-2300	410-560	1183-3073
Age 14	Mean	462	1550	460.00	1528.50
	Standard Deviation	-	-	28.28	535.28
	Range	-	-	440-480	1150-1907
Age 15	Mean	-	-	504.50	2426.00
	Standard Deviation	-	-	21.93	380.59
	Range	-	-	484-532	1893-2744

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.7 Mean length and weight, standard deviation and range for aged Mountain Whitefish in 1997 and 1998.

		1997 (n=8)		1998 (n=10)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 0	Mean	94.00	9.50	-	-
	Standard Deviation	8.49	2.12	-	-
	Range	88-100	8-11	-	-
Age 1	Mean	126.20	15.80	123.80	16.00
	Standard Deviation	11.90	5.40	14.41	11.07
	Range	112-138	7-21	104-141	4-32
Age 2	Mean	-	-	141.00	25.00
	Standard Deviation	-	-	36.99	20.35
	Range	-	-	117-195	9-54
Age 5	Mean	411	825	-	-
	Standard Deviation	-	-	-	-
	Range	-	-	-	-
Age 6	Mean	-	-	380	406
	Standard Deviation	-	-	-	-
	Range	-	-	-	-

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.8 Mean length and weight, standard deviation and range for aged Northern Pike in 1997 and 1998.

		1997 (n=27)		1998 (n=50)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 1	Mean	-	-	240	74
	Standard Deviation	-	-	-	-
	Range	-	-	-	-
Age 2	Mean	267.00	120.00	385.50	445.00
	Standard Deviation	-	-	149.20	431.34
	Range	-	-	280-491	140-750
Age 3	Mean	470.00	710.00	472.60	679.00
	Standard Deviation	-	-	53.42	308.90
	Range	-	-	400-550	350-1191
Age 4	Mean	491.67	833.33	492.44	866.89
	Standard Deviation	57.50	201.08	91.76	667.08
	Range	434-549	610-1000	380-690	271-2520
Age 5	Mean	485.75	845.00	583.75	1387.58
	Standard Deviation	38.80	250.53	83.89	610.26
	Range	448-540	620-1200	415-705	431-2377
Age 6	Mean	655.57	2226.43	615.36	1860.07
	Standard Deviation	74.47	881.83	49.02	1008.42
	Range	550-750	1120-3390	505-691	983-4960
Age 7	Mean	636.29	1932.86	728.75	3092.50
	Standard Deviation	57.74	750.48	98.17	1845.63
	Range	545-716	1030-3200	620-851	1442-5690
Age 8	Mean	689.33	2283.33	790.33	3718.33
	Standard Deviation	39.00	579.51	9.24	272.96
	Range	650-728	1900-2950	785-801	3455-4000
Age 9	Mean	790	4100	-	-
	Standard Deviation	-	-	-	-
	Range	-	-	-	-

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.9 Mean length and weight, standard deviation and range for aged Rainbow Trout in 1997 and 1998.

		1997 (n=1)		1998 (n=1)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 3	Mean	-	-	430	630
	Standard Deviation	-	-	-	-
	Range	-	-	-	-
Age 6	Mean	370	508	-	-
	Standard Deviation	-	-	-	-
	Range	-	-	-	-

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.10 Mean length and weight, standard deviation and range for aged Smallmouth Bass in 1997 and 1998.

		1997 (n=1)		1998 (n=17)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 1	Mean	75	6	83.00	10.67
	Standard Deviation	-	-	5.57	6.35
	Range	-	-	77-88	7-18
Age 2	Mean	-	-	99.57	16.86
	Standard Deviation	-	-	9.29	5.61
	Range	-	-	92-120	12-28
Age 3	Mean	-	-	151.60	48.40
	Standard Deviation	-	-	10.71	10.36
	Range	-	-	143-168	35-62
Age 5	Mean	-	-	335	612
	Standard Deviation	-	-	-	-
	Range	-	-	-	-
Age 6	Mean	-	-	246	243
	Standard Deviation	-	-	-	-
	Range	-	-	-	-

- Only one fish was caught in this age class or zero fish were sampled.

Appendix E.11 Mean length and weight, standard deviation and range for aged Yellow Perch in 1997 and 1998.

		1997 (n=829)		1998 (n=831)	
Age	Statistics	Length (mm)	Weight (g)	Length (mm)	Weight (g)
Age 0	Mean	73	3	78.00	4.57
	Standard Deviation	-	-	10.86	1.99
	Range	-	-	61-90	2-7
Age 1	Mean	91.74	9.29	80.49	6.11
	Standard Deviation	16.34	5.58	13.12	3.21
	Range	59-124	0-20	57-115	1-18
Age 2	Mean	119.23	20.81	116.15	17.03
	Standard Deviation	18.66	11.41	13.37	6.78
	Range	80-159	4-55	85-154	4-38
Age 3	Mean	162.62	54.86	144.19	36.25
	Standard Deviation	19.38	21.49	21.06	17.35
	Range	116-208	15-165	98-215	10-116
Age 4	Mean	190.72	83.72	183.46	72.34
	Standard Deviation	14.05	20.94	17.82	22.78
	Range	125-230	24-180	126-234	18-175
Age 5	Mean	205.95	106.73	203.72	98.07
	Standard Deviation	14.78	28.64	16.18	25.85
	Range	170-251	40-190	154-244	38-180
Age 6	Mean	224.22	141.52	219.04	127.15
	Standard Deviation	22.00	47.65	18.95	44.57
	Range	186-267	72-242	190-280	63-284
Age 7	Mean	271.50	200.00	236.75	165.00
	Standard Deviation	16.26	22.63	21.02	58.91
	Range	260-283	184-216	215-283	123-293

- Only one fish was caught in this age class or zero fish were sampled.

Appendix F

Analysis of spawning gravel beds in select tributaries of the Coeur d’Alene Reservation, 1998.

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/27/98	**Location :**	EVANS, East Fork
Initials:		**Reach:**	5A
		Site Number:	1

Spawning Gravel Analysis

% Usable Spawning Area = 3.9

Est. % Survival to Emergence: 15.8

Redd Potential (#):	45	**Production Index:**	964	**#fry/100m^2**	558
Bankfull Area (ft^2):	1860.0	**Gravel Quantity (ft^2):**	72.0		

	Bankfull Width
1	11.0
2	10.0
3	10.0
4	12.0
5	11.0
6	10.0
7	7.0
8	8.0
9	8.0
10	6.0
Avg. Width (ft.) =	9.3

McNeil Core Sample

Date Processed: 10-Nov-98 **Total Dry Weight (g):** 3608

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	3.5	0	0
Fine Sand	0.250	8.5	0	0
Medium Sand	0.500	40	1	1
Coarse Sand	0.850	27.5	1	2
Vry Coarse Sand	1.0	298.5	8	11
Vry Fine Gravel	2.0	839	23	34
Fine Gravel	4.75	408	11	45
Fine Gravel	6.3	336.5	9	55
Medium Gravel	8.0	795	22	77
Coarse Gravel	16.0	460	13	90
Vry Coarse Gravel	31.5	367	10	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**3583.5**	**100**	

***D$_g$* =**	5.3	**% < 6.3mm**	45
***F$_i$* =**	2.7	**% < 0.88mm**	2

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	6	6	6
2-4	14	14	20
4-8	19	19	39
8-16	13	13	52
16-32	32	32	84
32-64	16	16	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	19	11	26	21	66
2	62	12	38	22	91
3	11	13	36	23	85
4	70	14	34	24	98
5	90	15	36	25	17
6	120	16	18	26	10
7	140	17	96	27	8
8	105	18	80	28	26
9	92	19	70	29	58
10	17	20	75	30	69

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	09/03/98	**Location :**	EVANS, South Fork		
Initials:	JL RA	**Reach:**	5B	**Site Number:**	1

Spawning Gravel Analysis

% Usable Spawning Area =	6.3				
Est. % Survival to Emergence:	42.1				
Redd Potential (#):	61	**Production Index:**	3493	**#fry/100m^2**	2410
Bankfull Area (ft^2):	1560.0	**Gravel Quantity (ft^2):**	97.6		

	Bankfull Width
1	8.0
2	10.0
3	12.0
4	7.0
5	5.0
6	7.0
7	10.0
8	6.0
9	8.0
10	5.0
Avg. Width (ft.) =	7.8

McNeil Core Sample

Date Processed: 09-Nov-98 **Total Dry Weight (g):** 3405.5

Particle	**Diameter (mm)**	**Weight (grams)**	**%Total**	**%Cumm.**
Vry Fine Sand	0.125	7.5	0	0
Fine Sand	0.250	16	0	1
Medium Sand	0.500	35.5	1	2
Coarse Sand	0.850	15.5	0	2
Vry Coarse Sand	1.0	138.5	4	6
Vry Fine Gravel	2.0	266	8	14
Fine Gravel	4.75	115	3	18
Fine Gravel	6.3	141	4	22
Medium Gravel	8.0	630	19	40
Coarse Gravel	16.0	1283.5	38	78
Vry Coarse Gravel	31.5	733.5	22	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**3382**	**100**	

***D_g* =**	10.5	**% < 6.3mm**	18
***F_i* =**	6.6	**% < 0.88mm**	2

Wolman Pebble Count

Size Range (mm)	**Item Count**	**%Total**	**%Cumm.**
0-2	3	3	3
2-4	6	6	9
4-8	6	6	15
8-16	14	14	29
16-32	26	26	55
32-64	27	27	82
64-128	15	15	97
128-256	3	3	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	66	11	98	21	78
2	15	12	91	22	85
3	78	13	28	23	110
4	21	14	7	24	65
5	34	15	5	25	40
6	36	16	10	26	16
7	49	17	24	27	25
8	76	18	29	28	16
9	107	19	47	29	31
10	124	20	56	30	28

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981): $D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ; P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected: 08/27/98 **Location :** EVANS, South Fork

Initials: RA JL **Reach:** 6B **Site Number:** 1

Spawning Gravel Analysis

% Usable Spawning Area = 2.8

Est. % Survival to Emergence: 66.4

Redd Potential (#): 47 **Production Index:** 4242 **#fry/100m^2** 1691

Bankfull Area (ft^2): 2700.0 **Gravel Quantity (ft^2):** 75.2

	Bankfull Width
1	14.0
2	10.0
3	8.0
4	6.0
5	25.0
6	30.0
7	15.0
8	9.0
9	10.0
10	8.0
Avg. Width (ft.) =	13.5

McNeil Core Sample

Date Processed: 10-Nov-98 **Total Dry Weight (g):** 4070

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	1	0	0
Fine Sand	0.250	1	0	0
Medium Sand	0.500	1	0	0
Coarse Sand	0.850	0.5	0	0
Vry Coarse Sand	1.0	3.5	0	0
Vry Fine Gravel	2.0	31	1	1
Fine Gravel	4.75	51.5	1	2
Fine Gravel	6.3	125.5	3	5
Medium Gravel	8.0	977	25	30
Coarse Gravel	16.0	1549	39	69
Vry Coarse Gravel	31.5	1242	31	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**3983**	**100**	

D_g = 15.6 **% < 6.3mm** 2

F_i = 11.0 **% < 0.88mm** 0

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	0	0	0
2-4	0	0	0
4-8	0	0	0
8-16	0	0	0
16-32	0	0	0
32-64	0	0	0
64-128	0	0	0
128-256	0	0	0
256-512	0	0	0
512-1024	0	0	0
1024-2048	0	0	0
2048-4096	0	0	0
Total	0		

30 Count Results

1	86	11	40	21	88
2	111	12	35	22	61
3	107	13	44	23	39
4	90	14	16	24	40
5	64	15	12	25	49
6	29	16	13	26	12
7	32	17	94	27	7
8	36	18	51	28	4
9	48	19	46	29	9
10	45	20	49	30	16

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i*;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i*.

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/28/98	**Location :**	EVANS		
Initials:	RA GL	**Reach:**	5	**Site Number:**	S2

Spawning Gravel Analysis

% Usable Spawning Area =	1.3				
Est. % Survival to Emergence:	45.6				
Redd Potential (#):	22	**Production Index:**	1364	**#fry/100m^2**	560
Bankfull Area (ft^2):	2620.0	**Gravel Quantity (ft^2):**	35.2		

	Bankfull Width
1	13.0
2	15.0
3	18.0
4	12.0
5	10.0
6	16.0
7	15.0
8	10.0
9	12.0
10	10.0
Avg. Width (ft.) =	13.1

McNeil Core Sample

Date Processed: 12-Nov-98 **Total Dry Weight (g):** 4899

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	3	0	0
Fine Sand	0.250	3.5	0	0
Medium Sand	0.500	5.5	0	0
Coarse Sand	0.850	4	0	0
Vry Coarse Sand	1.0	60	1	1
Vry Fine Gravel	2.0	416	8	9
Fine Gravel	4.75	294	5	15
Fine Gravel	6.3	337.5	6	21
Medium Gravel	8.0	1501.5	28	49
Coarse Gravel	16.0	1334.5	25	73
Vry Coarse Gravel	31.5	1428.5	27	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**5388**	**100**	

***D$_g$* =**	11.4	**% < 6.3mm**	15
***F$_i$* =**	7.1	**% < 0.88mm**	0

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	7	7	7
2-4	11	11	18
4-8	12	12	30
8-16	18	18	48
16-32	17	17	64
32-64	10	10	74
64-128	15	15	89
128-256	11	11	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	101		

30 Count Results

1	71	11	101	21	55
2	110	12	40	22	58
3	92	13	39	23	30
4	64	14	38	24	44
5	60	15	20	25	62
6	88	16	36	26	27
7	91	17	66	27	20
8	47	18	92	28	18
9	55	19	84	29	35
10	82	20	60	30	41

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/28/98	**Location :**	EVANS		
Initials:	GA,GL	**Reach:**	R6	**Site Number:**	S1

Spawning Gravel Analysis

% Usable Spawning Area =	2.6				
Est. % Survival to Emergence:	52.8				
Redd Potential (#):	42	**Production Index:**	3016	**#fry/100m^2**	1278
Bankfull Area (ft^2):	2540.0	**Gravel Quantity (ft^2):**	67.2		

	Bankfull Width
1	14.0
2	17.0
3	17.0
4	12.0
5	8.0
6	8.0
7	10.0
8	14.0
9	15.0
10	12.0
Avg. Width (ft.) =	12.7

McNeil Core Sample

Date Processed: 11-Oct-98 **Total Dry Weight (g):** 4689

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	1	0	0
Fine Sand	0.250	2	0	0
Medium Sand	0.500	5.5	0	0
Coarse Sand	0.850	3	0	0
Vry Coarse Sand	1.0	43.5	1	1
Vry Fine Gravel	2.0	245.5	5	6
Fine Gravel	4.75	152.5	3	9
Fine Gravel	6.3	444.5	9	18
Medium Gravel	8.0	910.5	18	37
Coarse Gravel	16.0	1496	30	67
Vry Coarse Gravel	31.5	1620	33	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**4924**	**100**	

***D_g* =**	13.6	**% < 6.3mm**	9
***F_i* =**	8.5	**% < 0.88mm**	0

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	12	12	12
2-4	10	10	22
4-8	10	10	32
8-16	12	12	44
16-32	14	14	58
32-64	16	16	74
64-128	16	16	90
128-256	10	10	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	86	11	64	21	61
2	151	12	79	22	67
3	73	13	93	23	83
4	62	14	57	24	88
5	77	15	63	25	54
6	101	16	99	26	61
7	83	17	49	27	75
8	61	18	62	28	80
9	95	19	53	29	59
10	90	20	78	30	70

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/31/98	**Location :**	EVANS		
Initials:	GA GL	**Reach:**	6	**Site Number:**	S2

Spawning Gravel Analysis

% Usable Spawning Area =	2.1				
Est. % Survival to Emergence:	63.9				
Redd Potential (#):	26	**Production Index:**	2256	**#fry/100m^2**	1252
Bankfull Area (ft^2):	1940.0	**Gravel Quantity (ft^2):**	41.6		

	Bankfull Width
1	14.0
2	10.0
3	12.0
4	12.0
5	9.0
6	8.0
7	10.0
8	7.0
9	8.0
10	7.0
Avg. Width (ft.) =	9.7

McNeil Core Sample

Date Processed: 09-Nov-98 **Total Dry Weight (g):** 3851

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	0.5	0	0
Fine Sand	0.250	1	0	0
Medium Sand	0.500	2	0	0
Coarse Sand	0.850	0.5	0	0
Vry Coarse Sand	1.0	10.5	0	0
Vry Fine Gravel	2.0	64.5	2	2
Fine Gravel	4.75	50.5	1	3
Fine Gravel	6.3	61.5	2	5
Medium Gravel	8.0	480	12	17
Coarse Gravel	16.0	536	13	30
Vry Coarse Gravel	31.5	1591	39	69
Small Cobble	63.5	1230	31	100
	Total Weight (g)	**4028**	**100**	

D_g =	27.2	**% < 6.3mm**	3
F_i =	13.7	**% < 0.88mm**	0

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	7	7	7
2-4	15	15	22
4-8	22	22	44
8-16	20	20	64
16-32	25	25	89
32-64	11	11	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	24	11	64	21	7
2	32	12	69	22	101
3	25	13	52	23	120
4	21	14	25	24	10
5	8	15	18	25	5
6	12	16	74	26	3
7	76	17	65	27	24
8	84	18	21	28	17
9	101	19	18	29	10
10	95	20	10	30	12

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981): $D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i*; P_i = the proportion by weight of the entire sample made up of material retained on sieve *i*.

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected: 08/31/98 **Location :** EVANS

Initials: RA JL **Reach:** 7 **Site Number:** 1

Spawning Gravel Analysis

% Usable Spawning Area = 2.7

Est. % Survival to Emergence: 54.1

Redd Potential (#): 29 **Production Index:** 2133 **#fry/100m^2** 1335

Bankfull Area (ft^2): 1720.0 **Gravel Quantity (ft^2):** 46.4

	Bankfull Width
1	10.0
2	10.0
3	12.0
4	9.0
5	8.0
6	10.0
7	7.0
8	7.0
9	7.0
10	6.0
Avg. Width (ft.) =	8.6

McNeil Core Sample

Date Processed: **Total Dry Weight (g):**

Particle	**Diameter (mm)**	**Weight (grams)**	**%Total**	**%Cumm.**
Vry Fine Sand	0.125	0.5	0	0
Fine Sand	0.250	2	0	0
Medium Sand	0.500	5	0	0
Coarse Sand	0.850	3.5	0	0
Vry Coarse Sand	1.0	39	1	1
Vry Fine Gravel	2.0	177	5	6
Fine Gravel	4.75	89.5	2	8
Fine Gravel	6.3	104	3	11
Medium Gravel	8.0	469.5	12	23
Coarse Gravel	16.0	812.5	21	45
Vry Coarse Gravel	31.5	1444	38	83
Small Cobble	63.5	644	17	100
Total Weight (g)		**3790.5**	**100**	

***D_g* =** 19.9 **% < 6.3mm** 8

***F_i* =** 10.0 **% < 0.88mm** 0

Wolman Pebble Count

Size Range (mm)	**Item Count**	**%Total**	**%Cumm.**
0-2	8	8	8
2-4	10	10	18
4-8	18	18	36
8-16	20	20	56
16-32	26	26	82
32-64	14	14	96
64-128	4	4	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100

Total 100

30 Count Results

1	31	11	102	21	62
2	26	12	120	22	60
3	104	13	98	23	96
4	10	14	96	24	8
5	28	15	18	25	4
6	36	16	20	26	16
7	34	17	26	27	24
8	67	18	34	28	26
9	70	19	73	29	68
10	66	20	80	30	3

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	09/01/98	**Location :**	EVANS		
Initials:	GA,RA	**Reach:**	R7	**Site Number:**	S2

Spawning Gravel Analysis

% Usable Spawning Area =	4.7				
Est. % Survival to Emergence:	54.0				
Redd Potential (#):	37	**Production Index:**	2714	**#fry/100m^2**	2319
Bankfull Area (ft^2):	1260.0	**Gravel Quantity (ft^2):**	59.2		

	Bankfull Width
1	6.0
2	8.0
3	6.0
4	10.0
5	9.0
6	5.0
7	5.0
8	4.0
9	4.0
10	6.0
Avg. Width (ft.) =	6.3

McNeil Core Sample

Date Processed: 09-Nov-98 **Total Dry Weight (g):** 2449

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	1	0	0
Fine Sand	0.250	2	0	0
Medium Sand	0.500	4	0	0
Coarse Sand	0.850	2.5	0	0
Vry Coarse Sand	1.0	20.5	1	1
Vry Fine Gravel	2.0	107	4	6
Fine Gravel	4.75	70	3	8
Fine Gravel	6.3	87.5	4	12
Medium Gravel	8.0	432	18	30
Coarse Gravel	16.0	787.5	32	62
Vry Coarse Gravel	31.5	936	38	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2450**	**100**	

D_g =	15.1	**% < 6.3mm**	8
F_i =	10.7	**% < 0.88mm**	0

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	5	5	5
2-4	15	15	20
4-8	15	15	35
8-16	16	16	51
16-32	17	17	68
32-64	12	12	80
64-128	10	10	90
128-256	10	10	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	91	11	45	21	40
2	102	12	44	22	51
3	80	13	88	23	57
4	85	14	28	24	62
5	60	15	76	25	41
6	58	16	61	26	140
7	34	17	50	27	100
8	38	18	47	28	38
9	20	19	21	29	44
10	29	20	60	30	57

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected: 08/26/98 **Location :** WHITETAIL

Initials: JL RA **Reach:** 2 **Site Number:** 2

Spawning Gravel Analysis

% Usable Spawning Area = 8.9

Est. % Survival to Emergence: 39.7

Redd Potential (#): 90 **Production Index:** 4861 **#fry/100m^2** 3230

Bankfull Area (ft^2): 1620.0 **Gravel Quantity (ft^2):** 144.0

	Bankfull Width
1	12.0
2	7.0
3	9.0
4	10.0
5	9.0
6	10.0
7	7.0
8	6.0
9	5.0
10	6.0
Avg. Width (ft.) =	8.1

McNeil Core Sample

Date Processed: 10-Nov-98 **Total Dry Weight (g):** 4514

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	10	0	0
Fine Sand	0.250	25	1	1
Medium Sand	0.500	62.5	1	2
Coarse Sand	0.850	33	1	3
Vry Coarse Sand	1.0	224.5	5	7
Vry Fine Gravel	2.0	435	9	16
Fine Gravel	4.75	185	4	20
Fine Gravel	6.3	165.5	3	23
Medium Gravel	8.0	618.5	13	36
Coarse Gravel	16.0	1319.5	27	62
Vry Coarse Gravel	31.5	1670	34	96
Small Cobble	63.5	193.5	4	100
Total Weight (g)		**4942**	**100**	

***D_g* =** 12.0 **% < 6.3mm** 20

***F_i* =** 7.6 **% < 0.88mm** 3

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	7	7	7
2-4	5	5	12
4-8	13	13	25
8-16	16	16	41
16-32	22	22	63
32-64	27	27	90
64-128	10	10	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100

Total 100

30 Count Results

1	150	11	14	21	72
2	121	12	26	22	80
3	46	13	13	23	66
4	43	14	35	24	145
5	35	15	7	25	203
6	10	16	6	26	26
7	2	17	7	27	30
8	105	18	14	28	32
9	84	19	21	29	4
10	300	20	24	30	16

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/26/98	**Location :**	WINDFALL		
Initials:	RA JL	**Reach:**	2	**Site Number:**	2

Spawning Gravel Analysis

% Usable Spawning Area = 5.1

Est. % Survival to Emergence: 59.7

Redd Potential (#):	68	**Production Index:**	5521	**#fry/100m²**	2777
Bankfull Area (ft²):	2140.0	**Gravel Quantity (ft²):**	108.8		

	Bankfull Width
1	11.0
2	12.0
3	14.0
4	10.0
5	10.0
6	9.0
7	8.0
8	12.0
9	11.0
10	10.0
Avg. Width (ft.) =	10.7

McNeil Core Sample

Date Processed: 10-Nov-98 **Total Dry Weight (g):** 4127

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	5.5	0	0
Fine Sand	0.250	7.5	0	0
Medium Sand	0.500	10	0	1
Coarse Sand	0.850	4	0	1
Vry Coarse Sand	1.0	43	1	2
Vry Fine Gravel	2.0	98.5	2	4
Fine Gravel	4.75	53	1	5
Fine Gravel	6.3	56	1	6
Medium Gravel	8.0	375.5	9	15
Coarse Gravel	16.0	1253.5	29	44
Vry Coarse Gravel	31.5	2430	56	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**4336.5**	**100**	

D_g =	19.4	**% < 6.3mm**	5
F_i =	13.8	**% < 0.88mm**	1

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	5	5	5
2-4	11	11	16
4-8	15	15	31
8-16	15	15	46
16-32	20	20	66
32-64	18	18	84
64-128	16	16	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	83	11	108	21	56
2	74	12	120	22	91
3	69	13	80	23	15
4	54	14	62	24	74
5	30	15	75	25	71
6	57	16	90	26	64
7	28	17	30	27	87
8	40	18	31	28	21
9	48	19	70	29	28
10	55	20	71	30	23

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i*;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i*.

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/26/98	**Location :**	BULL CREEK		
Initials:	RA JL	**Reach:**	R1	**Site Number:**	S1

Spawning Gravel Analysis

% Usable Spawning Area =	1.1				
Est. % Survival to Emergence:	67.1				
Redd Potential (#):	12	**Production Index:**	1094	**#fry/100m^2**	654
Bankfull Area (ft^2):	1800.0	**Gravel Quantity (ft^2):**	19.2		

	Bankfull Width
1	13.0
2	10.0
3	12.0
4	9.0
5	8.0
6	10.0
7	6.0
8	8.0
9	4.0
10	10.0
Avg. Width (ft.) =	9

McNeil Core Sample

Date Processed: 12-Nov-98 **Total Dry Weight (g):** 2649.5

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	0.5	0	0
Fine Sand	0.250	1	0	0
Medium Sand	0.500	1	0	0
Coarse Sand	0.850	0.5	0	0
Vry Coarse Sand	1.0	2	0	0
Vry Fine Gravel	2.0	48	2	2
Fine Gravel	4.75	1.5	0	2
Fine Gravel	6.3	6	0	2
Medium Gravel	8.0	91.5	3	6
Coarse Gravel	16.0	755	28	34
Vry Coarse Gravel	31.5	1774.5	66	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2681.5**	**100**	

***D_g* =**	23.4	**% < 6.3mm**	2
***F_i* =**	16.6	**% < 0.88mm**	0

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	4	4	4
2-4	6	6	10
4-8	20	20	30
8-16	32	32	62
16-32	18	18	80
32-64	20	20	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	27	11	16	21	28
2	26	12	66	22	36
3	65	13	124	23	16
4	72	14	106	24	12
5	14	15	60	25	10
6	19	16	58	26	17
7	26	17	52	27	21
8	24	18	40	28	19
9	8	19	32	29	16
10	4	20	24	30	24

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/25/98	**Location :**	SCHOOL HOUSE
Initials:	GA,RA	**Reach:**	R-2
		Site Number:	S-2

Spawning Gravel Analysis

% Usable Spawning Area = 5.7

Est. % Survival to Emergence: 40.8

Redd Potential (#):	70	**Production Index:**	3877	**#fry/100m²**	2108
Bankfull Area (ft^2):	1980.0	**Gravel Quantity (ft^2):**	112.0		

	Bankfull Width
1	9.0
2	12.0
3	15.0
4	8.0
5	7.0
6	10.0
7	14.0
8	10.0
9	8.0
10	6.0
Avg. Width (ft.) =	9.9

McNeil Core Sample

Date Processed: 03-Dec-98 **Total Dry Weight (g):** 2959.5

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	7.5	0	0
Fine Sand	0.250	17	1	1
Medium Sand	0.500	32	1	2
Coarse Sand	0.850	13	0	2
Vry Coarse Sand	1.0	95.5	3	6
Vry Fine Gravel	2.0	240.5	8	14
Fine Gravel	4.75	149	5	19
Fine Gravel	6.3	207.5	7	26
Medium Gravel	8.0	863.5	29	55
Coarse Gravel	16.0	1197.5	41	96
Vry Coarse Gravel	31.5	125	4	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2948.5**	**100**	

D_g =	8.4	**% < 6.3mm**	19
F_i =	5.3	**% < 0.88mm**	2

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	7	7	7
2-4	23	23	30
4-8	19	19	49
8-16	22	22	71
16-32	16	16	87
32-64	12	12	99
64-128	1	1	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	15	11	71	21	38
2	31	12	84	22	27
3	29	13	56	23	20
4	41	14	50	24	19
5	50	15	27	25	40
6	33	16	37	26	52
7	39	17	41	27	62
8	28	18	50	28	77
9	60	19	90	29	64
10	68	20	92	30	51

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981): $D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ; P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected: 08/20/98 **Location :** S.E. BENEWAH

Initials: JL,GL **Reach:** 13A **Site Number:** 1

Spawning Gravel Analysis

% Usable Spawning Area = 2.1

Est. % Survival to Emergence: 31.5

Redd Potential (#): 29 **Production Index:** 1242 **#fry/100m^2** 619

Bankfull Area (ft^2): 2160.0 **Gravel Quantity (ft^2):** 46.4

	Bankfull Width
1	14.0
2	10.0
3	12.0
4	18.0
5	9.0
6	8.0
7	6.0
8	12.0
9	13.0
10	6.0
Avg. Width (ft.) =	10.8

McNeil Core Sample

Date Processed: 20-Aug-98 **Total Dry Weight (g):** 4108

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	37.5	1	1
Fine Sand	0.250	127.5	3	4
Medium Sand	0.500	248	6	10
Coarse Sand	0.850	66.5	2	12
Vry Coarse Sand	1.0	258.5	6	18
Vry Fine Gravel	2.0	297.5	7	25
Fine Gravel	4.75	108.5	3	28
Fine Gravel	6.3	96	2	30
Medium Gravel	8.0	517.5	13	43
Coarse Gravel	16.0	999	24	67
Vry Coarse Gravel	31.5	933	23	90
Small Cobble	63.5	418.5	10	100
Total Weight (g)		**4108**	**100**	

***D_g* =** 8.8 **% < 6.3mm** 28

***F_i* =** 3.1 **% < 0.88mm** 12

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	1	1	1
2-4	7	7	8
4-8	16	16	24
8-16	20	20	44
16-32	25	25	69
32-64	20	20	89
64-128	10	10	99
128-256	1	1	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	90	11	70	21	64
2	95	12	80	22	47
3	100	13	97	23	60
4	103	14	83	24	56
5	86	15	79	25	115
6	80	16	58	26	80
7	78	17	100	27	80
8	74	18	87	28	85
9	41	19	78	29	64
10	83	20	50	30	87

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots . x\ D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/20/98	**Location :**	S.E. BENEWAH		
Initials:		**Reach:**	13A	**Site Number:**	3

Spawning Gravel Analysis

% Usable Spawning Area =	4.6				
Est. % Survival to Emergence:	23.9				
Redd Potential (#):	56	**Production Index:**	1818	**#fry/100m^2**	1009
Bankfull Area (ft^2):	1940.0	**Gravel Quantity (ft^2):**	89.6		

	Bankfull Width
1	8.0
2	7.0
3	8.5
4	9.0
5	8.0
6	9.0
7	16.0
8	12.0
9	10.0
10	10.0
Avg. Width (ft.) =	9.7

McNeil Core Sample

Date Processed: 20-Aug-98 **Total Dry Weight (g):** 4313

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	65.5	1	1
Fine Sand	0.250	112	2	4
Medium Sand	0.500	125.5	3	7
Coarse Sand	0.850	40	1	8
Vry Coarse Sand	1.0	522	12	19
Vry Fine Gravel	2.0	520	11	31
Fine Gravel	4.75	250.5	6	36
Fine Gravel	6.3	226	5	41
Medium Gravel	8.0	885	20	61
Coarse Gravel	16.0	764	17	77
Vry Coarse Gravel	31.5	539.5	12	89
Small Cobble	63.5	483.5	11	100
Total Weight (g)		**4533**	**100**	

***D_g* =**	6.7	**% < 6.3mm**	36
***F_i* =**	2.4	**% < 0.88mm**	8

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	8	8	8
2-4	7	7	15
4-8	8	8	24
8-16	9	9	33
16-32	8	8	41
32-64	9	9	51
64-128	16	16	67
128-256	12	12	79
256-512	10	10	90
512-1024	10	10	100
1024-2048		0	100
2048-4096		0	100
Total	97		

30 Count Results

1	50	11	93	21	30
2	58	12	60	22	36
3	49	13	34	23	30
4	53	14	45	24	33
5	65	15	28	25	27
6	40	16	40	26	38
7	90	17	40	27	40
8	50	18	35	28	24
9	41	19	41	29	60
10	56	20	34	30	40

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	09/02/98	**Location :**	BENEWAH
Initials:	GL, GA	**Reach:**	12
		Site Number:	1

Spawning Gravel Analysis

% Usable Spawning Area = 1.5

Est. % Survival to Emergence: 43.4

Redd Potential (#):	30	**Production Index:**	1771	**#fry/100m²**	596
Bankfull Area (ft²):	3200.0	**Gravel Quantity (ft²):**	48.0		

	Bankfull Width
1	27.0
2	24.0
3	14.0
4	12.0
5	18.0
6	20.0
7	12.0
8	11.0
9	10.0
10	12.0
Avg. Width (ft.) =	16

McNeil Core Sample

Date Processed: 02-Sep-98 **Total Dry Weight (g):** 2816.5

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	8.5	0	0
Fine Sand	0.250	21	1	1
Medium Sand	0.500	42	2	3
Coarse Sand	0.850	15.5	1	3
Vry Coarse Sand	1.0	132.5	5	8
Vry Fine Gravel	2.0	168	6	14
Fine Gravel	4.75	66	2	16
Fine Gravel	6.3	84	3	19
Medium Gravel	8.0	707.5	26	45
Coarse Gravel	16.0	762	28	73
Vry Coarse Gravel	31.5	753	27	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2760**	**100**	

D_g =	10.5	**% < 6.3mm**	16
F_i =	3.7	**% < 0.88mm**	3

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	8	8	8
2-4	13	13	21
4-8	15	15	36
8-16	17	17	53
16-32	25	25	78
32-64	15	15	93
64-128	7	7	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	32	11	52	21	104
2	64	12	12	22	112
3	200	13	18	23	15
4	164	14	25	24	94
5	12	15	16	25	99
6	29	16	13	26	86
7	30	17	14	27	74
8	42	18	18	28	75
9	63	19	29	29	26
10	75	20	78	30	29

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i*;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i*.

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected: 08/25/98 **Location :** BENEWAH

Initials: GA,RA **Reach:** 14A **Site Number:** 1

Spawning Gravel Analysis

% Usable Spawning Area = 1.8

Est. % Survival to Emergence: 30.8

Redd Potential (#): 18 **Production Index:** 753 **#fry/100m^2** 494

Bankfull Area (ft^2): 1640.0 **Gravel Quantity (ft^2):** 28.8

	Bankfull Width
1	5.0
2	7.0
3	10.0
4	13.0
5	9.0
6	5.0
7	5.0
8	8.0
9	8.0
10	12.0
Avg. Width (ft.) =	8.2

McNeil Core Sample

Date Processed: 13-Nov-98 **Total Dry Weight (g):** 3444

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	7.5	0	0
Fine Sand	0.250	18.5	1	1
Medium Sand	0.500	43	1	2
Coarse Sand	0.850	20	1	3
Vry Coarse Sand	1.0	136	4	7
Vry Fine Gravel	2.0	455	13	20
Fine Gravel	4.75	300	9	29
Fine Gravel	6.3	274.5	8	37
Medium Gravel	8.0	1470.5	43	80
Coarse Gravel	16.0	701.5	20	100
Vry Coarse Gravel	31.5	0	0	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**3426.5**	**100**	

***D$_g$* =** 6.1 **% < 6.3mm** 29

***F$_i$* =** 4.7 **% < 0.88mm** 3

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	0	0	0
2-4	11	11	11
4-8	14	14	25
8-16	21	21	46
16-32	26	26	72
32-64	20	20	92
64-128	4	4	96
128-256	4	4	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100

Total 100

30 Count Results

1	80	11	101	21	42
2	65	12	90	22	62
3	46	13	60	23	75
4	74	14	37	24	31
5	30	15	41	25	30
6	48	16	29	26	51
7	51	17	25	27	58
8	52	18	60	28	64
9	76	19	57	29	88
10	35	20	38	30	41

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981): $D_g = D_a^{Pa} x \ldots x D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ; P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Analysis and Results

Date Collected: 08/25/98 **Location:** BENEWAH

Initials: GA, RA **Reach:** 14A **Site Number:** 2

Spawning Gravel Analysis

% Usable Spawning Area = 12.8

Est. % Survival to Emergence: 44.7

Redd Potential (#): 115 **Production Index:** 6989 **#fry/100m^2** 5224

Bankfull Area (ft^2): 1440.0 **Gravel Quantity (ft^2):** 184.0

	Bankfull Width
1	6.0
2	6.0
3	10.0
4	12.0
5	4.0
6	5.0
7	4.0
8	10.0
9	9.0
10	10.0
Avg. Width (ft.) =	7.2

McNeil Core Sample

Date Processed: 25-Aug-98 **Total Dry Weight (g):** 3353

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	2	0	0
Fine Sand	0.250	6.5	0	0
Medium Sand	0.500	15	0	1
Coarse Sand	0.850	7	0	1
Vry Coarse Sand	1.0	60.5	2	3
Vry Fine Gravel	2.0	245.5	7	10
Fine Gravel	4.75	178	5	15
Fine Gravel	6.3	208.5	6	22
Medium Gravel	8.0	890	27	48
Coarse Gravel	16.0	770.5	23	71
Vry Coarse Gravel	31.5	969.5	29	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**3353**	**100**	

***D_g* =** 11.3 **% < 6.3mm** 15

***F_i* =** 7.1 **% < 0.88mm** 1

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	18	18	18
2-4	27	27	45
4-8	26	26	71
8-16	22	22	93
16-32	7	7	100
32-64		0	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	29	11	40	21	19
2	34	12	59	22	27
3	42	13	65	23	38
4	58	14	60	24	42
5	50	15	71	25	50
6	49	16	76	26	61
7	31	17	30	27	68
8	28	18	34	28	70
9	25	19	28	29	77
10	37	20	20	30	32

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/24/98	**Location :**	ALDER		
Initials:	GA RA	**Reach:**	9	**Site Number:**	3

Spawning Gravel Analysis

% Usable Spawning Area =	5.5				
Est. % Survival to Emergence:	45.4				
Redd Potential (#):	41	**Production Index:**	2532	**#fry/100m^2**	2271
Bankfull Area (ft^2):	1200.0	**Gravel Quantity (ft^2):**	65.6		

	Bankfull Width
1	5.0
2	6.0
3	4.0
4	6.0
5	5.0
6	8.0
7	6.0
8	4.0
9	7.0
10	9.0
Avg. Width (ft.) =	6

McNeil Core Sample

Date Processed: 12-Nov-98 **Total Dry Weight (g):** 1412

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	3	0	0
Fine Sand	0.250	3.5	0	0
Medium Sand	0.500	4.5	0	1
Coarse Sand	0.850	2	0	1
Vry Coarse Sand	1.0	15.5	1	2
Vry Fine Gravel	2.0	99.5	7	9
Fine Gravel	4.75	79.5	6	15
Fine Gravel	6.3	85.5	6	21
Medium Gravel	8.0	409.5	29	50
Coarse Gravel	16.0	655.5	47	96
Vry Coarse Gravel	31.5	49.5	4	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**1407.5**	**100**	

D_g =	9.5	**% < 6.3mm**	15
F_i =	6.0	**% < 0.88mm**	1

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	10	10	10
2-4	15	15	25
4-8	20	20	45
8-16	30	30	75
16-32	20	20	95
32-64	5	5	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	41	11	69	21	34
2	29	12	80	22	20
3	55	13	71	23	28
4	31	14	47	24	48
5	28	15	29	25	50
6	62	16	35	26	51
7	68	17	46	27	67
8	53	18	72	28	30
9	43	19	68	29	35
10	70	20	60	30	40

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/12/98	**Location :**	N.F. ALDER		
Initials:	GA RA	**Reach:**	1A	**Site Number:**	1

Spawning Gravel Analysis

% Usable Spawning Area =	4.2				
Est. % Survival to Emergence:	43.7				
Redd Potential (#):	55	**Production Index:**	3263	**#fry/100m^2**	1689
Bankfull Area (ft^2):	2080.0	**Gravel Quantity (ft^2):**	88.0		

	Bankfull Width
1	14.0
2	10.0
3	10.0
4	8.0
5	6.0
6	11.0
7	13.0
8	14.0
9	10.0
10	8.0
Avg. Width (ft.) =	10.4

McNeil Core Sample

Date Processed: 12-Nov-98 **Total Dry Weight (g):** 3468

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	11	0	0
Fine Sand	0.250	19.5	1	1
Medium Sand	0.500	32	1	2
Coarse Sand	0.850	12	0	2
Vry Coarse Sand	1.0	94	3	5
Vry Fine Gravel	2.0	246.5	7	12
Fine Gravel	4.75	147	4	16
Fine Gravel	6.3	147.5	4	20
Medium Gravel	8.0	645.5	19	39
Coarse Gravel	16.0	1019.5	29	69
Vry Coarse Gravel	31.5	1086.5	31	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**3461**	**100**	

***D$_g$* =**	11.7	**% < 6.3mm**	16
***F$_i$* =**	7.3	**% < 0.88mm**	2

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	1	1	1
2-4	10	10	11
4-8	15	15	26
8-16	25	25	50
16-32	20	20	70
32-64	20	20	90
64-128	10	10	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	101		

30 Count Results

1	50	11	97	21	41
2	74	12	120	22	32
3	91	13	40	23	44
4	38	14	72	24	77
5	69	15	40	25	62
6	78	16	62	26	90
7	44	17	59	27	71
8	50	18	81	28	63
9	50	19	70	29	47
10	110	20	40	30	55

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/24/98	**Location :**	N.F. ALDER		
Initials:		**Reach:**	1A	**Site Number:**	2

Spawning Gravel Analysis

% Usable Spawning Area =	2.6				
Est. % Survival to Emergence:	45.0				
Redd Potential (#):	26	**Production Index:**	1589	**#fry/100m^2**	1056
Bankfull Area (ft^2):	1620.0	**Gravel Quantity (ft^2):**	41.6		

	Bankfull Width
1	6.0
2	8.0
3	5.0
4	5.0
5	10.0
6	8.0
7	9.0
8	12.0
9	10.0
10	8.0
Avg. Width (ft.) =	8.1

McNeil Core Sample

Date Processed: 13-Nov-98 **Total Dry Weight (g):** 1798

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	3.5	0	0
Fine Sand	0.250	3	0	0
Medium Sand	0.500	6	0	1
Coarse Sand	0.850	4.5	0	1
Vry Coarse Sand	1.0	42	2	3
Vry Fine Gravel	2.0	142	8	11
Fine Gravel	4.75	70.5	4	15
Fine Gravel	6.3	75.5	4	19
Medium Gravel	8.0	330	18	38
Coarse Gravel	16.0	787	44	82
Vry Coarse Gravel	31.5	329	18	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**1793**	**100**	

D_g =	11.2	**% < 6.3mm**	15
F_i =	7.0	**% < 0.88mm**	1

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	10	10	10
2-4	10	10	20
4-8	25	25	45
8-16	20	20	65
16-32	25	25	90
32-64	10	10	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	72	11	31	21	52
2	50	12	40	22	51
3	99	13	78	23	60
4	84	14	49	24	68
5	29	15	59	25	77
6	30	16	77	26	30
7	47	17	110	27	48
8	88	18	86	28	70
9	100	19	40	29	30
10	66	20	44	30	49

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/24/98	**Location :**	N.F.ALDER		
Initials:		**Reach:**	1A	**Site Number:**	3

Spawning Gravel Analysis

% Usable Spawning Area =	1.4				
Est. % Survival to Emergence:	40.9				
Redd Potential (#):	19	**Production Index:**	1056	**#fry/100m^2**	512
Bankfull Area (ft^2):	2220.0	**Gravel Quantity (ft^2):**	30.4		

	Bankfull Width
1	14.0
2	12.0
3	10.0
4	10.0
5	12.0
6	14.0
7	13.0
8	9.0
9	10.0
10	7.0
Avg. Width (ft.) =	11.1

McNeil Core Sample

Date Processed: 13-Nov-98 **Total Dry Weight (g):** 1573

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	2.5	0	0
Fine Sand	0.250	3	0	0
Medium Sand	0.500	5	0	1
Coarse Sand	0.850	3	0	1
Vry Coarse Sand	1.0	35	2	3
Vry Fine Gravel	2.0	153.5	10	13
Fine Gravel	4.75	89.5	6	19
Fine Gravel	6.3	79	5	24
Medium Gravel	8.0	294.5	19	43
Coarse Gravel	16.0	368.5	24	66
Vry Coarse Gravel	31.5	527.5	34	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**1561**	**100**	

***D_g* =**	11.6	**% < 6.3mm**	19
***F_i* =**	7.3	**% < 0.88mm**	1

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	18	18	18
2-4	20	20	38
4-8	20	20	58
8-16	20	20	78
16-32	15	15	93
32-64	7	7	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	46	11	65	21	74
2	72	12	60	22	62
3	101	13	51	23	90
4	80	14	50	24	81
5	67	15	70	25	64
6	60	16	94	26	48
7	49	17	38	27	41
8	58	18	40	28	52
9	34	19	29	29	57
10	38	20	70	30	30

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981): $D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i*; P_i = the proportion by weight of the entire sample made up of material retained on sieve *i*.

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	08/21/98	**Location :**	N.F. ALDER		
Initials:	GL GA	**Reach:**	4A	**Site Number:**	1

Spawning Gravel Analysis

% Usable Spawning Area =	3.0				
Est. % Survival to Emergence:	64.4				
Redd Potential (#):	30	**Production Index:**	2627	**#fry/100m^2**	1767
Bankfull Area (ft^2):	1600.0	**Gravel Quantity (ft^2):**	48.0		

	Bankfull Width
1	5.0
2	6.0
3	8.0
4	7.0
5	4.0
6	14.0
7	10.0
8	12.0
9	4.0
10	5.0
Avg. Width (ft.) =	8

McNeil Core Sample

Date Processed: 13-Nov-98 **Total Dry Weight (g):** 2200

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	1	0	0
Fine Sand	0.250	1	0	0
Medium Sand	0.500	1	0	0
Coarse Sand	0.850	1	0	0
Vry Coarse Sand	1.0	4	0	0
Vry Fine Gravel	2.0	29	1	2
Fine Gravel	4.75	28.5	1	3
Fine Gravel	6.3	42	2	5
Medium Gravel	8.0	259	12	17
Coarse Gravel	16.0	602.5	27	44
Vry Coarse Gravel	31.5	909	41	86
Small Cobble	63.5	318	14	100
Total Weight (g)		**2196**	**100**	

***D_g* =**	22.1	**% < 6.3mm**	3
***F_i* =**	11.2	**% < 0.88mm**	0

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	10	10	10
2-4	10	10	20
4-8	15	15	35
8-16	15	15	50
16-32	18	18	68
32-64	15	15	83
64-128	15	15	98
128-256	2	2	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	61	11	50	21	20
2	90	12	39	22	65
3	71	13	41	23	81
4	55	14	59	24	110
5	62	15	72	25	52
6	80	16	93	26	66
7	49	17	102	27	49
8	71	18	40	28	81
9	100	19	35	29	54
10	120	20	29	30	30

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	09/09/98	**Location :**	LAKE		
Initials:	RA JL	**Reach:**	8	**Site Number:**	1

Spawning Gravel Analysis

% Usable Spawning Area =	9.5				
Est. % Survival to Emergence:	0.0				
Redd Potential (#):	37	**Production Index:**	0	**#fry/100m^2**	0
Bankfull Area (ft^2):	620.0	**Gravel Quantity (ft^2):**	59.2		

	Bankfull Width
1	2.0
2	3.0
3	3.0
4	2.0
5	4.0
6	3.0
7	5.0
8	4.0
9	3.0
10	2.0
Avg. Width (ft.) =	3.1

McNeil Core Sample

Date Processed: 09-Nov-98 **Total Dry Weight (g):** 2323.5

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	23.5	1	1
Fine Sand	0.250	112	5	6
Medium Sand	0.500	350	15	21
Coarse Sand	0.850	36	2	22
Vry Coarse Sand	1.0	273	12	34
Vry Fine Gravel	2.0	658	28	63
Fine Gravel	4.75	326	14	77
Fine Gravel	6.3	285	12	89
Medium Gravel	8.0	259.5	11	100
Coarse Gravel	16.0	0	0	100
Vry Coarse Gravel	31.5	0	0	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2323**	**100**	

D_g =	2.0	**% < 6.3mm**	77
F_i =	0.8	**% < 0.88mm**	22

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	3	3	3
2-4	12	12	15
4-8	18	18	33
8-16	20	20	53
16-32	17	17	70
32-64	30	30	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	36	11	16	21	32
2	32	12	34	22	41
3	40	13	36	23	16
4	45	14	31	24	34
5	31	15	41	25	33
6	10	16	30	26	24
7	16	17	56	27	31
8	18	18	32	28	24
9	16	19	41	29	36
10	32	20	48	30	42

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	09/04/98	**Location :**	LAKE		
Initials:	JL RA	**Reach:**	8	**Site Number:**	3

Spawning Gravel Analysis

% Usable Spawning Area =	1.2				
Est. % Survival to Emergence:	0.0				
Redd Potential (#):	12	**Production Index:**	0	**#fry/100m^2**	0
Bankfull Area (ft^2):	1640.0	**Gravel Quantity (ft^2):**	19.2		

	Bankfull Width
1	8.0
2	12.0
3	6.0
4	7.0
5	5.0
6	8.0
7	10.0
8	9.0
9	5.0
10	12.0
Avg. Width (ft.) =	8.2

McNeil Core Sample

Date Processed: 10-Nov-98 **Total Dry Weight (g):** 938.5

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	14.5	2	2
Fine Sand	0.250	62	7	8
Medium Sand	0.500	91	10	18
Coarse Sand	0.850	21.5	2	20
Vry Coarse Sand	1.0	172.5	18	39
Vry Fine Gravel	2.0	472	50	89
Fine Gravel	4.75	69.5	7	96
Fine Gravel	6.3	25.5	3	99
Medium Gravel	8.0	10	1	100
Coarse Gravel	16.0	0	0	100
Vry Coarse Gravel	31.5	0	0	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**938.5**	**100**	

D_g =	1.4	**% < 6.3mm**	96
F_i =	0.9	**% < 0.88mm**	20

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	8	8	8
2-4	21	21	29
4-8	31	31	60
8-16	30	30	90
16-32	10	10	100
32-64		0	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	3	11	14	21	8
2	4	12	8	22	6
3	7	13	10	23	13
4	12	14	24	24	20
5	4	15	25	25	27
6	16	16	17	26	31
7	24	17	11	27	20
8	32	18	9	28	14
9	18	19	5	29	5
10	12	20	3	30	4

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	09/08/98	**Location :**	WF LAKE		
Initials:	JL GL	**Reach:**	9B	**Site Number:**	S3

Spawning Gravel Analysis

% Usable Spawning Area =	6.2				
Est. % Survival to Emergence:	33.5				
Redd Potential (#):	52	**Production Index:**	2368	**#fry/100m²**	1902
Bankfull Area (ft²):	1340.0	**Gravel Quantity (ft²):**	83.2		

	Bankfull Width
1	12.0
2	7.0
3	3.0
4	8.0
5	8.0
6	5.0
7	6.0
8	8.0
9	7.0
10	3.0
Avg. Width (ft.) =	6.7

McNeil Core Sample

Date Processed: 09-Nov-98 **Total Dry Weight (g):** 2654

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	8.5	0	0
Fine Sand	0.250	42	2	2
Medium Sand	0.500	118.5	4	6
Coarse Sand	0.850	36	1	8
Vry Coarse Sand	1.0	155.5	6	13
Vry Fine Gravel	2.0	224.5	8	22
Fine Gravel	4.75	104	4	26
Fine Gravel	6.3	121.5	5	30
Medium Gravel	8.0	494.5	19	49
Coarse Gravel	16.0	1088.5	41	90
Vry Coarse Gravel	31.5	278.5	10	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2672**	**100**	

D_g =	7.5	**% < 6.3mm**	26
F_i =	4.1	**% < 0.88mm**	8

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	12	12	12
2-4	15	15	27
4-8	16	16	43
8-16	22	22	65
16-32	30	30	95
32-64	5	5	100
64-128		0	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	56	11	34	21	7
2	61	12	39	22	8
3	45	13	46	23	25
4	44	14	48	24	28
5	12	15	49	25	46
6	14	16	66	26	66
7	67	17	91	27	72
8	58	18	18	28	59
9	26	19	10	29	60
10	28	20	8	30	41

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i*;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i*.

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected: 09/08/98 **Location :** WF Lake
Initials: JL GL **Reach:** 10B **Site Number:** S1

Spawning Gravel Analysis

% Usable Spawning Area = 4.0

Est. % Survival to Emergence: 40.8

Redd Potential (#): 40 **Production Index:** 2219 **#fry/100m^2** 1493

Bankfull Area (ft^2): 1600.0 **Gravel Quantity (ft^2):** 64.0

	Bankfull Width
1	13.0
2	9.0
3	8.0
4	15.0
5	6.0
6	5.0
7	6.0
8	5.0
9	7.0
10	5.0
Avg. Width (ft.) =	8

McNeil Core Sample

Date Processed: 09-Nov-98 **Total Dry Weight (g):** 2900.5

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	15	1	1
Fine Sand	0.250	39.5	1	2
Medium Sand	0.500	77	3	5
Coarse Sand	0.850	19.5	1	5
Vry Coarse Sand	1.0	110.5	4	9
Vry Fine Gravel	2.0	188	6	15
Fine Gravel	4.75	96.5	3	19
Fine Gravel	6.3	102.5	4	22
Medium Gravel	8.0	418	14	37
Coarse Gravel	16.0	1000	34	71
Vry Coarse Gravel	31.5	847	29	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2913.5**	**100**	

***D_g* =** 10.6 **% < 6.3mm** 19

***F_i* =** 6.7 **% < 0.88mm** 5

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	2	2	2
2-4	6	6	8
4-8	5	5	13
8-16	22	22	35
16-32	25	25	60
32-64	31	31	91
64-128	9	9	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	45	11	109	21	18
2	40	12	12	22	12
3	61	13	72	23	94
4	58	14	60	24	80
5	50	15	62	25	62
6	26	16	58	26	64
7	12	17	44	27	26
8	19	18	50	28	33
9	76	19	26	29	19
10	70	20	34	30	16

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	09/02/98	**Location :**	BOZARD		
Initials:	JL RA	**Reach:**	R1	**Site Number:**	S1

Spawning Gravel Analysis

% Usable Spawning Area =	2.0				
Est. % Survival to Emergence:	38.9				
Redd Potential (#):	25	**Production Index:**	1323	**#fry/100m^2**	705
Bankfull Area (ft^2):	2020.0	**Gravel Quantity (ft^2):**	40.0		

	Bankfull Width
1	12.0
2	9.0
3	10.0
4	7.0
5	8.0
6	11.0
7	10.0
8	12.0
9	10.0
10	12.0
Avg. Width (ft.) =	10.1

McNeil Core Sample

Date Processed: 02-Sep-98 **Total Dry Weight (g):** 2567.5

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	6	0	0
Fine Sand	0.250	23	1	1
Medium Sand	0.500	65	3	4
Coarse Sand	0.850	17	1	4
Vry Coarse Sand	1.0	90	4	8
Vry Fine Gravel	2.0	183	7	15
Fine Gravel	4.75	142	6	20
Fine Gravel	6.3	132	5	26
Medium Gravel	8.0	411	16	42
Coarse Gravel	16.0	1036	40	82
Vry Coarse Gravel	31.5	464	18	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2567**	**100**	

D_g =	9.7	**% < 6.3mm**	20
F_i =	6.1	**% < 0.88mm**	4

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	5	5	5
2-4	8	8	13
4-8	15	15	28
8-16	16	16	44
16-32	34	34	78
32-64	20	20	98
64-128	2	2	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100	100	

30 Count Results

1	98	11	24	21	66
2	64	12	12	22	61
3	36	13	7	23	58
4	45	14	8	24	79
5	109	15	14	25	124
6	70	16	18	26	110
7	66	17	26	27	98
8	75	18	31	28	65
9	40	19	28	29	41
10	45	20	70	30	36

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981): $D_g = D_a^{Pa} \times \ldots . \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i*; P_i = the proportion by weight of the entire sample made up of material retained on sieve *i*.

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	09/01/98	**Location :**	BOZARD		
Initials:	RA GA	**Reach:**	1	**Site Number:**	3

Spawning Gravel Analysis

% Usable Spawning Area =	7.3				
Est. % Survival to Emergence:	43.6				
Redd Potential (#):	52	**Production Index:**	3080	**#fry/100m^2**	2908
Bankfull Area (ft^2):	1140.0	**Gravel Quantity (ft^2):**	83.2		

	Bankfull Width
1	4.0
2	6.0
3	4.0
4	8.0
5	5.0
6	3.0
7	6.0
8	6.0
9	8.0
10	7.0
Avg. Width (ft.) =	5.7

McNeil Core Sample

Date Processed: 09-Nov-98 **Total Dry Weight (g):** 2129.5

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	4	0	0
Fine Sand	0.250	16.5	1	1
Medium Sand	0.500	34	2	3
Coarse Sand	0.850	11.5	1	3
Vry Coarse Sand	1.0	58	3	6
Vry Fine Gravel	2.0	128.5	6	13
Fine Gravel	4.75	76	4	16
Fine Gravel	6.3	78.5	4	20
Medium Gravel	8.0	312	15	36
Coarse Gravel	16.0	789.5	39	75
Vry Coarse Gravel	31.5	506.5	25	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2015**	**100**	

D_g =	11.3	**% < 6.3mm**	16
F_i =	7.1	**% < 0.88mm**	3

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	9	10	10
2-4	7	8	18
4-8	15	17	34
8-16	16	18	52
16-32	18	20	72
32-64	15	17	89
64-128	10	11	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	90		

30 Count Results

1	40	11	66	21	28
2	37	12	78	22	40
3	29	13	85	23	62
4	31	14	64	24	80
5	49	15	51	25	65
6	55	16	40	26	35
7	52	17	42	27	41
8	71	18	31	28	40
9	79	19	20	29	24
10	64	20	22	30	24

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):

$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;

P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Spawning Gravel Survey, 1998 - Results and Analysis

Date Collected:	09/03/98	**Location :**	BOZARD, East Fork
Initials:	RA JL	**Reach:**	1
		Site Number:	2

Spawning Gravel Analysis

% Usable Spawning Area = 6.5

Est. % Survival to Emergence: 40.0

Redd Potential (#): 89 | **Production Index:** 4825 | **#fry/100m^2** 2361

Bankfull Area (ft^2): 2200.0 | **Gravel Quantity (ft^2):** 142.0

	Bankfull Width
1	10.0
2	8.0
3	6.0
4	8.0
5	15.0
6	24.0
7	12.0
8	10.0
9	8.0
10	9.0
Avg. Width (ft.) =	11

McNeil Core Sample

Date Processed: 10-Nov-98 **Total Dry Weight (g):** 2811.5

Particle	Diameter (mm)	Weight (grams)	%Total	%Cumm.
Vry Fine Sand	0.125	13	0	0
Fine Sand	0.250	59.5	2	3
Medium Sand	0.500	151.5	5	8
Coarse Sand	0.850	36.5	1	9
Vry Coarse Sand	1.0	122.5	4	14
Vry Fine Gravel	2.0	109	4	17
Fine Gravel	4.75	57	2	19
Fine Gravel	6.3	62.5	2	22
Medium Gravel	8.0	380.5	14	35
Coarse Gravel	16.0	1253.5	44	80
Vry Coarse Gravel	31.5	572	20	100
Small Cobble	63.5	0	0	100
Total Weight (g)		**2817.5**	**100**	

D_g = 9.4 | **% < 6.3mm** 19

F_i = 5.9 | **% < 0.88mm** 9

Wolman Pebble Count

Size Range (mm)	Item Count	%Total	%Cumm.
0-2	1	1	1
2-4	5	5	6
4-8	11	11	17
8-16	10	10	27
16-32	30	30	57
32-64	22	22	79
64-128	21	21	100
128-256		0	100
256-512		0	100
512-1024		0	100
1024-2048		0	100
2048-4096		0	100
Total	100		

30 Count Results

1	46	11	40	21	58
2	121	12	5	22	50
3	17	13	4	23	36
4	24	14	29	24	47
5	26	15	36	25	48
6	24	16	31	26	65
7	10	17	29	27	34
8	18	18	74	28	39
9	16	19	81	29	6
10	96	20	86	30	12

* Estimated % survival to emergence was calculated using the equation published by Weaver and Fraley, 1993.

** Redd potential was determined by dividing area of suitable spawning gravel by average redd size (Thurow and King, 1994)

*** Production Index is an estimate of fry production calculated by multiplying redd potential by the estimated % survival to emergence and the calculated egg deposition (E) for the average sized female (310mm), using a length-fecundity relation for westslope cutthorat trout ($E=82.63e^{0.007958L}$), where L is fork length in millimeters (Downs and Shepard).· Total egg deposition is assumed to be distributed between 3 redds for every 2 spawning females (Scott and Crossman 1973).

**** Geometric mean diameter (D_g) was calculated by a method of moments using the formula of Lotspeich and Everest (1981):
$D_g = D_a^{Pa} \times \ldots \times D_i^{Pi}$; where D_g = the meometric mean (mm); D_i = the mean diameter (mm) of material retained on sieve *i* ;
P_i = the proportion by weight of the entire sample made up of material retained on sieve *i* .

***** The fredle index (F_i) was calculated using the formula: $F_i = D_g/S_o$; where S_o = a sorting coefficient

Appendix G

Cohort analysis of growth for cutthroat trout and brook trout in select tributaries of the Coeur d'Alene Reservation, 1998.

Mean back-calculated lengths at annulus formation by age class and cohort - 1998.

SPECIES

Cutthroat Trout

LOCATION	Cohort	**Number**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
ALDER	1996	3	77	112						
	1995	8	82	117	154					
	1994	5	86	127	165	203				
	1993	1	82	111	147	183	220			
ALDER Total		17	82	119	158	200	220			
BENEWAH	1996	17	45	104						
	1995	55	43	97	157					
	1994	24	41	95	151	208				
	1993	18	45	103	166	238	297			
	1992	24	40	98	163	224	281	340		
	1991	3	32	76	124	182	237	305	367	
BENEWAH Total		141	43	98	157	220	285	336	367	
EVANS	1996	1	38	92						
	1995	27	61	108	155					
	1994	15	64	112	161	209				
	1993	2	67	116	159	209	258			
EVANS Total		45	62	109	157	209	258			
LAKE	1997	1	43							
	1996	11	58	105						
	1995	98	61	110	156					
	1994	32	60	107	156	203				
	1993	14	61	116	162	212	261			
	1992	20	65	119	165	216	267	325		
	1991	16	61	104	158	206	256	304	350	
	1990	1	61	108	155	202	258	305	352	390
LAKE Total		193	61	110	158	208	262	315	350	390
Grand Total		396	56	106	157	213	272	324	352	390

Standard deviation of mean back-calculated lengths at annulus formation - 1998.

SPECIES

Cutthroat Trout

LOCATION	Cohort	**Number**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
ALDER	1996	3	2	4						
	1995	8	8	6	10					
	1994	5	4	11	8	11				
	1993	1	#####	#####	#####	#####	#####			
ALDER Total		17	7	9	11	13	#####			
BENEWAH	1996	17	8	12						
	1995	55	10	14	15					
	1994	24	9	15	12	18				
	1993	18	10	15	17	30	32			
	1992	24	7	13	16	22	21	22		
	1991	3	12	34	29	28	32	32	18	
BENEWAH Total		141	9	15	16	27	30	25	18	
EVANS	1996	1	#####	#####						
	1995	27	15	17	14					
	1994	15	15	16	18	18				
	1993	2	20	15	19	30	26			
EVANS Total		45	15	17	16	18	26			
LAKE	1997	1	#####							
	1996	11	11	18						
	1995	98	10	16	20					
	1994	32	7	11	14	14				
	1993	14	7	28	27	37	36			
	1992	20	9	13	17	19	35	31		
	1991	16	7	22	9	15	17	20	24	
	1990	1	#####	#####	#####	#####	#####	#####	#####	#####
LAKE Total		193	9	17	19	21	30	28	24	#####
Grand Total		396	15	17	17	24	32	28	23	#####

Mean back-calculated lengths at annulus formation by age class and cohort - 1998.

SPECIES

Brook Trout **Age Class**

LOCATION	Cohort	**Number**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
ALDER	1996	1	70	124						
	1995	36	71	107	145					
	1994	20	73	112	150	186				
	1993	3	74	122	170	207	239			
	1992	5	72	115	156	202	241	281		
	1991	1	76	108	150	182	225	267	299	
ALDER Total		66	72	110	148	191	238	279	299	
BENEWAH	1997	1	55							
	1996	6	79	105						
	1995	14	84	121	153					
	1994	7	84	114	144	172				
	1993	2	81	118	154	182	209			
BENEWAH Total		30	82	116	150	175	209			
Grand Total		96	75	112	149	187	233	279	299	

Standard deviation of mean back-calculated lengths at annulus formation - 1998.

SPECIES

Brook Trout **Age Class**

LOCATION	Cohort	**Number**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
ALDER	2	1	#####	#####						
	3	36	7	11	15					
	4	20	6	10	9	13				
	5	3	9	12	12	13	9			
	6	5	7	6	17	25	29	32		
	7	1	#####	#####	#####	#####	#####	#####	#####	
ALDER Total		66	7	11	15	17	22	29	#####	
BENEWAH	1	1	#####							
	2	6	6	7						
	3	14	8	16	24					
	4	7	5	8	10	11				
	5	2	8	18	28	36	44			
BENEWAH Total		30	9	14	20	17	44			
Grand Total		96	9	12	16	18	27	29	#####	