SITE C FISHERIES STUDIES
HALFWAY RIVER AND MOBERLY RIVER SUMMER FISH SURVEY
(2009)

Prepared for

BC Hydro
Site C Project, Corporate Affairs

By

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Client: BC Hydro Site C Project, Corporate Affairs

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EXECUTIVE SUMMARY

BC Hydro is presently considering the Peace River Site C hydroelectric project (Site C) in north eastern British Columbia as a potential resource option to help meet BC's future electricity needs. Fisheries studies are presently underway to add to existing baseline information and to address data gaps.

A number of investigations completed between 2005 and 2008 described fish communities and fish habitats of several Peace River tributaries. This work suggested that the Moberly River and Halfway River were potentially important recruitment sources for Peace River fish populations. Because previous investigations were restricted to the lower section of each tributary, there was a lack of current information that described the fish community upstream of the sampled sections within each system. The main goal of the present study was to improve our understanding of the fish communities in the upstream portions of each river.

The purpose of the study was to collect baseline information to describe fish communities of the mainstem Moberly River and mainstem Halfway River, with the primary focus being young sportfish. The work was completed in August 2009 and included approximately 100 km of each watercourse from the headwaters to the confluence with the Peace River. On each tributary, ten evenly distributed sections were sampled using beach seine, backpack electrofisher, and small fish boat electrofisher fish capture methods.

The investigation documented environmental conditions (general water quality, water temperature, and discharge), measured physical characteristics of sampled habitats, and described the small fish community.

Environmental and physical characteristics of the tributaries influenced the availability and quality of fish habitats, and likely were factors that controlled fish species diversity, distribution, and abundance. The environmental and physical characteristics of the Moberly River and Halfway River, within the areas investigated, were different as were the fish communities.

Within the study area, the Moberly River is a relatively small system in terms of discharge, is subjected to elevated water temperatures during summer, receives its source water from Moberly Lake, and has no inputs from permanent tributaries. The Moberly River within the study area is consists of two major sections, which exhibit different physical characteristics. The upper section is a low to moderate gradient, meandering channel that traverses mature forest. Fish habitats are dominated by runs interspersed with

short riffle/rapid sections. Fish habitats in this section provide spawning, rearing, feeding, and overwintering areas for fish and portions of this section contain an abundance of high quality rearing areas. The lower section is primarily a higher gradient, largely unstable braided channel that is adjusting to a recent flood event that caused extensive bank erosion and damage to the riparian zone. Several active valley wall slumps are inputting sediments directly into the channel within this section. Fish habitats are dominated by high velocity runs and riffles. Rock substrates in this section are embedded with fines in low velocity areas.

The Moberly River supports a diverse fish community that includes sportfish, suckers, minnows, and sculpins. Young-of-the-year and juvenile sportfish recorded during the study included Arctic grayling, burbot, mountain whitefish, and northern pike. Most sportfish species were widely distributed, but the middle portion of the study area contained the highest numbers of fish. Adults of most large-fish species were recorded during the study suggesting the presence of resident fish populations. There also was evidence that populations from outside of the Moberly River were using the study area for spawning and rearing. These included burbot from Moberly Lake, and Arctic grayling and mountain whitefish from the Peace River. Others species populations potentially originating from the Peace River included longnose sucker, largescale sucker, and northern pikeminnow.

Notable findings of the Moberly River study were as follows:

1. Young mountain whitefish were the most numerous fish followed by young longnose sucker.
2. Young Arctic grayling were present, but catch rates were low.
3. Age 0 Arctic grayling, burbot, mountain whitefish, and northern pike were present indicating use of the system for spawning and early rearing.
4. The study area was not used by bull trout and rainbow trout for spawning and early rearing.
5. Substantial numbers of burbot were recorded suggesting that the system is important for this species.
6. Adult sportfish and sucker species were recorded suggesting that the study area supports resident large-fish populations.

Within the study area, the Halfway River is a much larger system in terms of discharge than the Moberly River. Like the Moberly River, it is subjected to elevated water temperatures during summer, but primarily in the lower section. Unlike the Moberly River, there are several permanent tributaries that enter the Halfway River in the upstream portion of the study area.

The Halfway River exhibits a constant gradient within the study area, but there are spatial changes to several physical characteristics. Based on these changes the study area can be separated into two major sections, with the break located at the confluence of the Cameron River. The Halfway River upstream of

the Cameron River is a relatively stable channel containing clean rock substrates that support a cold, clear-water fish community. The Halfway River downstream of the Cameron River is largely confined by steep valley walls and is influenced by sediment inputs from the Cameron River, bank erosion, and some active valley wall slumps. This section supports a fish community in transition from a cold, clear-water to a cool, turbid-water fish community.

The Halfway River supports a diverse fish community that includes sportfish, suckers, minnows, and sculpins. Young sportfish recorded during the study included Arctic grayling, bull trout, mountain whitefish, and rainbow trout. Young mountain whitefish were abundant and widespread; however, young Arctic grayling, bull trout, and rainbow trout were found primarily upstream of the Cameron River confluence. Of these three species only Age 0 Arctic grayling were recorded in the mainstem. This provided evidence that spawning and early rearing of bull trout and rainbow trout occurred in Halfway River tributaries rather than in the maintem. It is likely that this statement also applies to Arctic grayling.

Young mountain whitefish were abundant downstream of the Cameron River confluence, but other sportfish were not. The fish community structure shifted to suckers (longnose and largescale) and minnows (redside shiner and northern pikeminnow). There also was evidence that the fish community in the lower section contained fish that were part of Peace River fish populations. Species populations potentially originating from the Peace River included longnose sucker, largescale sucker, and northern pikeminnow.

Notable findings of the Halfway River study were as follows:

1. Young mountain whitefish were the most numerous fish in the study area followed by young longnose sucker.
2. Young Arctic grayling, bull trout, and rainbow trout catch rates were highest and these species were most widespread upstream of the Cameron River confluence.
3. Age 0 bull trout and Age 0 rainbow trout were not recorded in the mainstem river indicating that Halfway River was not used for spawning and early rearing.
4. Sucker and minnow species were most prominent downstream of the Cameron River confluence.

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The following persons Diversified Environmental Services assisted during the field program:

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1.0 INTRODUCTION

1.1 BACKGROUND

BC Hydro is presently considering the Peace River Site C hydroelectric project (Site C) in north eastern British Columbia as a potential resource option to help meet BC's future electricity needs. Fisheries studies are presently underway to add to existing baseline information and to address data gaps.

Investigations completed in 2005 and 2006 described fish communities and fish habitats of several Peace River tributaries (AMEC & LGL 2006 and 2007, Mainstream 2009a). The primary goal of these studies was to examine fish use and habitat characteristics in sections of each tributary that would be affected by the Site C Reservoir (i.e., twice the length of the predicted Site C Reservoir inundation zone). In 2008, Mainstream Aquatics Ltd. was contracted by BC Hydro to continue those investigations. Three studies were completed on Peace River tributaries. They included an assessment of fish use of tributaries in spring and fall (Mainstream 2009b), a juvenile fish and habitat survey in summer (Mainstream 2009c), and enumeration of bull trout spawners and redds (Diversified 2009).

The results of the 2005 to 2008 investigations suggested that the Moberly River and Halfway River were potentially important recruitment sources needed to sustain Peace River fish populations. Because the previous investigations were restricted to the lower section of each tributary, there was a lack of current information that described the fish community in upper sections of each system. Historical studies suggested that the upper portions of each river may provide rearing areas for Peace River fish populations (ARL 1991a, b).

In 2009, Mainstream Aquatics Ltd. was contracted by BC Hydro to continue investigations of the Moberly River and the Halfway River.

1.2 PURPOSE AND OBJECTIVES

The purpose of the study was to collect baseline information to describe fish communities of the mainstem Moberly River and mainstem Halfway River from the headwater areas to the confluence of the Peace River, with the primary focus being young sportfish.

The objectives of the study were as follows:

1. Measure water temperature during the open water period.
2. Sample the small fish community during summer in sections distributed from the headwater area to the Peace River confluence. Small fish are defined as ≤ 200 mm length.
3. Quantify the physical characteristics of sampled habitats.
4. Collect and record the incidental catch of large fish to document the presence of resident fish populations. Large fish are defined as > 200 mm length.
5. Present the information in a concise report.

1.3 STUDY AREA

1.3.1 Moberly River

The Moberly River study area included the mainstem river from 19 km downstream of Moberly Lake to the confluence of the Peace River, which represented a distance of approximately 102 km (Figure 1.1, Appendix A1). Sampling occurred in the ten evenly distributed sections. The study area was stratified into four zones based on physical characteristics that included difference in channel form, gradient, and bed material type (Table 1.1). The last zone was delineated based on the predicted inundation area of the proposed Site C Reservoir. Sampled sections were grouped according to zone designation.

Two thermographs were placed in the Moberly River (Figure 1.1). One was located near the confluence with the Peace River. The other was located at the CNRL bridge located 42 km upstream from the Peace River confluence.

1.3.2 Halfway River

The study area included the mainstem river from 18 km downstream of the confluence of the Chowade River to the confluence of the Peace River, which is a distance of approximately 110 km (Figure 1.2, Appendix A, Figure A2). Similar to activities on the Moberly River, sampling occurred in the ten sections evenly distributed within the study area. The study area was stratified into four zones based on major tributary inputs, channel form, gradient, and bed material type (Table 1.1). The last zone was delineated based on the predicted inundation zone of the proposed Site C Reservoir. Sampled sections were grouped according to zone designation.

Two thermographs were placed in the Halfway River (Figure 1.2). One was located near the confluence with the Peace River. The other was near the Graham River bridge located 93 km upstream from the Peace River confluence, which is immediately upstream of the confluence with the Graham River.

Table 1.1 Zone designations of the Moberly River and Halfway River, Halfway River and Moberly River summer fish survey 2009.

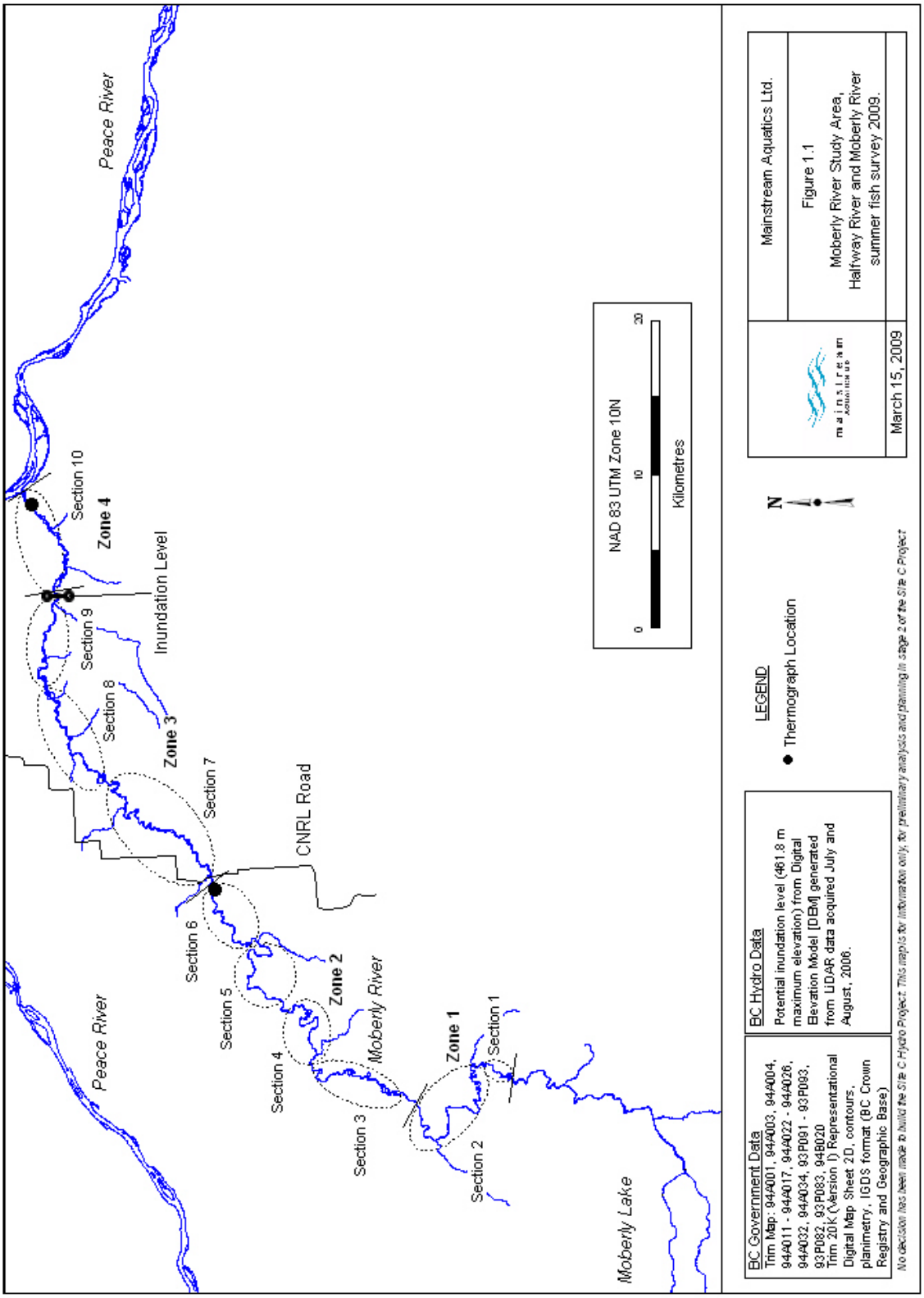
River	Zone	Sections	Description	Dominant Channel Form[a]	Gradient (m/km)	Dominant Bed Material	Location	Length (km)
Moberly	1	1 to 2	Dominated by low water velocities; flats with few riffle sections	Tortuous meanders	0.9	sand	Km 101.0 to 81.4	20.0
	2	3 to 6	Frequent riffle complexes interspersed with extended runs with some flats	Tortuous meanders	2.0	gravels, cobbles, and boulders	Km 81.4 to 42.9	38.5
	3	7 to 9	Large change in gradient; unstable channel and bed material	Irregular meandering; braided; frequently confined	4.4	sand, cobbles	Km 42.9 to 10.0	32.9
	4	10	Same as Reach 3[b]	Irregular meandering; braided; frequently confined	4.0	sand, cobbles	Km 10.0 to 0.0	10.0
Halfway	1	1 to 2	Upstream of the Graham River; numerous riffle - run complexes; some channel braiding and large woody debris	Regular meandering; occasionally confined	4.8	gravels, cobbles	Km 110.0 to 92.3	17.7
	2	3 to 7	Graham River to the Cameron River; dominated by runs interspersed with riffles and some rapids; frequently confined channel at upper end; some braiding at lower end	Irregular wandering; occasionally confined	2.5	gravels, cobbles, and boulders	Km 92.3 to 42.5	49.8
	3	8 to 9	Cameron River to inundation level; lower water velocities; long runs with riffle sections; extensive braiding in some portions	Regular meanders; confined	2.1	cobbles and sands	Km 42.5 to 12.4	30.1
	4[b]	10	Generally low water velocities; slow runs and flats interspersed by boulder garden rapids	Irregular meandering; confined	1.7	sands, cobbles, and boulders	Km 12.4 to 2.1	10.3

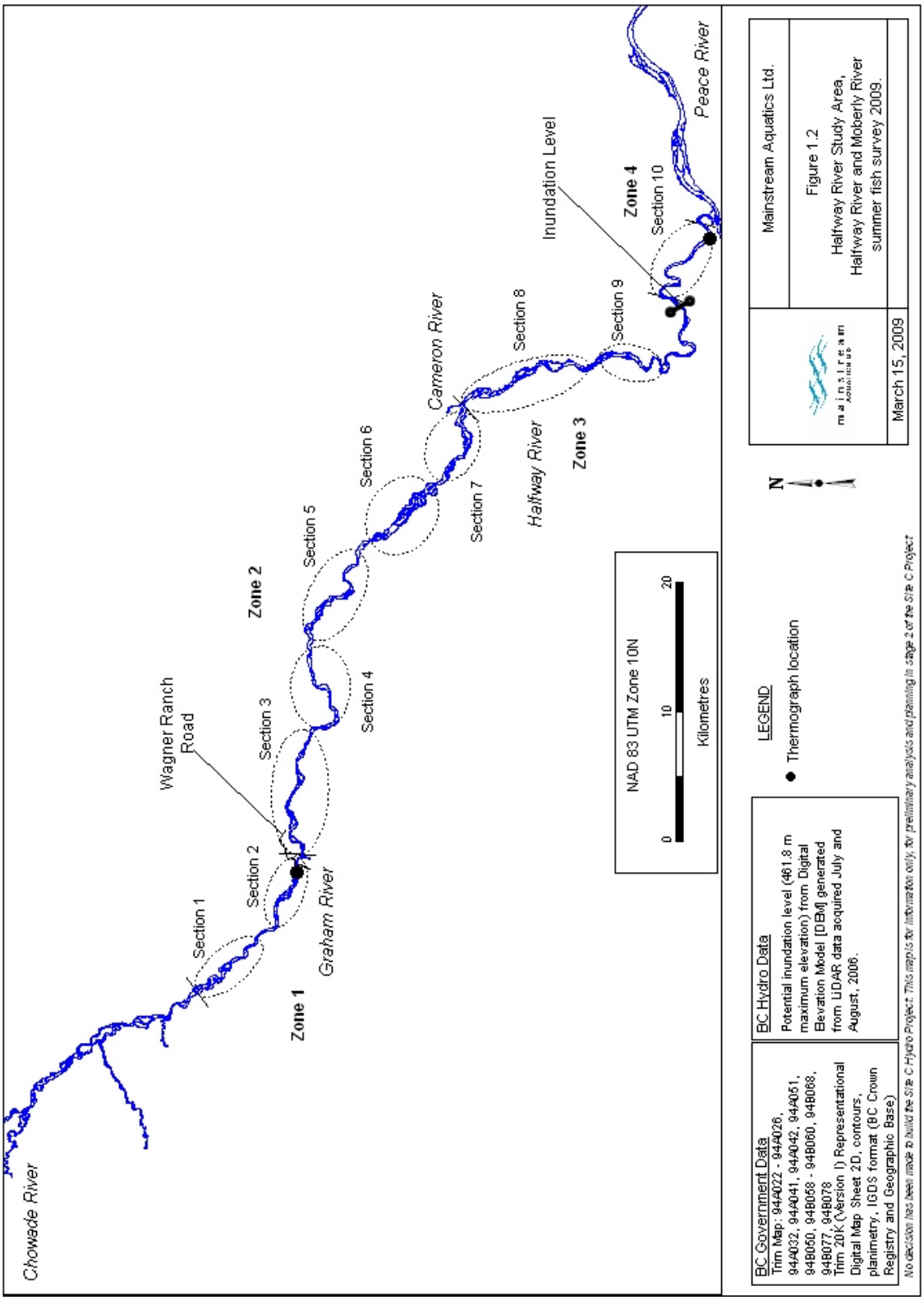
[a] Based on definitions presented in BCFISB (2001)
[b] Inundation level to confluence with the Peace River

1.4 STUDY PERIOD

The Moberly River survey was completed during a 10-day period from 6 to 15 August, 2009. The survey of the Halfway River was completed during an 8-day period from 13 to 20 August 2009. The difference between tributaries in sample period was caused by a large freshet on the the Halfway River that delayed sampling.

Water temperatures were monitored continuously during the open water period from 14 May to 23 October 2009 in the Moberly River and 13 May to 15 October in the Halfway River.


Peace River
Peace River
Moberly Lake
Moberly River
CNRL Road
Inundation Level
Zone 1
Zone 2
Zone 3
Zone 4
Section 1
Section 2
Section 3
Section 4
Section 5
Section 6
Section 7
Section 8
Section 9
Section 10
NAD 83 UTM Zone 10N
0
10
20
Kilometres
N
LEGEND
Thermograph Location
BC Hydro Data
Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LIDAR data acquired July and August, 2006.
BC Government Data
Trim Map: 94A001, 94A003, 94A004, 94A011 - 94A017, 94A022 - 94A026, 94A032, 94A034, 93P091 - 93P093, 93P082, 93P083, 94B020
Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)
No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project
Mainstream Aquatics Ltd.
Figure 1.1
Moberly River Study Area, Halfway River and Moberly River summer fish survey 2009.
March 15, 2009


Chowade River
Section 1
Section 2
Wagner Ranch Road
Section 3
Section 4
Graham River
Zone 1
Zone 2
Section 5
Section 6
Cameron River
Section 7
Section 8
Halfway River
Zone 3
Section 9
Inundation Level
Zone 4
Section 10
Peace River
NAD 83 UTM Zone 10N
0
10
20
Kilometres
N
LEGEND
Thermograph location
BC Government Data
Trim Map: 94A022 - 94A026, 94A032, 94A041, 94A042, 94A051, 94B050, 94B058 - 94B060, 94B068, 94B077, 94B078
Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)
BC Hydro Data
Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.
No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project
Mainstream Aquatics Ltd.
Figure 1.2
Halfway River Study Area, Halfway River and Moberly River summer fish survey 2009.
March 15, 2009

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2.0 METHODS

2.1 FIELD

Two two-person crews conducted the sampling program on each river. Each group put in at the upstream end of the study area and then sampled in a downstream direction until the work was completed. Attempts were made to sample all major habitat types encountered during the field program. Given the overview nature of this work, site selection was based on proportional availability within each study section.

2.1.1 Environmental Characteristics

Water Temperature

During the open water period water temperature (± 0.1^{o}C) was continuously monitored using Vemco Minilog 8 bit temperature data loggers. Data loggers recorded water temperatures at one hour intervals. In addition, water temperature was measured opportunistically using a Hanna HI98311 EC/TDS meter (± 0.1^{o}C).

Discharge

Preliminary discharge data (no quality assurance) were available from Water Survey of Canada for the Halfway River (Station 07FA006) and the Moberly River (Station 07FB008).

General Water Quality

Water clarity was measured to the nearest centimetre with a secchi rod at sampled locations. A Hanna HI98311 EC/TDS meter was used to measure pH (± 0.01) and conductivity (± 2% full scale).

2.1.2 Fish Habitat

Habitat types were classified according to O'Neil and Hildebrand (1986), which generally conform to channel morphology classifications (RISC 2001). The differences include the separation of grouped habitat complexes (i.e. riffle-pool, cascade-pool, step-pool) into riffle or pool or cascade. Physical characteristics of discrete habitat types were measured in each backpack electrofisher and beach seine site. Fish habitat assessment procedures followed those described in RISC (2001). Note that habitat specific parameters (e.g., water depth, water velocity, and D90) were not recorded at boat electrofisher sites due to variable conditions (i.e., multiple habitats were sampled within one fish sample site). Physical characteristics of each selected habitat unit were measured along a transect set perpendicular to the width of the sampled habitat.

Parameters measured (definitions presented in Appendix B) at site were as follows:

- Date and time
- Geodetic location
- Habitat type
- Water depth (m)
- Water velocity (m^3/s)
- Substrate composition (%)
- D90 (cm)
- Substrate embeddedness (low, moderate, high)
- Substrate compaction (low, moderate, high)
- Cover (%)

Water depth and water velocity were measured at ¼, ½, and ¾ the sampled width using a Swoffer Model 2100 velocity meter and staff rod. Percent substrate composition was visually estimated using a classification system based on the Modified Wentworth Scale (Cummins 1962). A 2 m wide band situated perpendicular to each transect was used to visually assess substrate characteristics. D90 represented the average size of substrate particle that was in the 90th percentile and followed procedures outlined in MOE (1995). Embeddedness is the amount of fine particles (sand, silt, and clay) present within the substrate. Compaction evaluates the density or looseness of the substrate within the channel. Compaction and embeddedness were evaluated as low (1), moderate (2), or high (3). The percent cover was visually estimated for overhead cover, rock cover, large organic debris, submergent vegetation, emergent vegetation, and algal cover. Finally, digital photographs were taken of representative habitat types in each site.

2.1.3 Fish Capture

Three capture methods were used to sample fish. These were boat electrofisher, backpack electrofisher, and beach seine. The method used was dependent on the physical characteristics of the area to be sampled. The boat electrofisher was used to sample nearshore, shallow-water mainstem habitats and focused on the capture of small fish (defined as ≤ 200 mm fork length); however, large fish (> 200 mm fork length) were also collected. Multiple habitat types were incorporated into each boat electrofisher site.

Backpack electrofisher and beach seine were used to sample wadeable shallow water areas (< 0.5 m depth) in side channels and along the mainstem channel margins. A backpack electrofisher was used to sample high velocity areas with abundant physical cover. A beach seine was used in low velocity zones in water depths not effectively sampled by backpack electrofisher. These methods were used to sample discrete habitat units.

Parameters measured at each fish sample site included date and time, geodetic location, sample method settings, and sample effort (i.e., seconds, length, and width sampled).

Attempts were made to sample a representative number of habitat types present in each section, but sample size was proportional to habitat availability. The amount and distribution of sample effort by zone is summarized in Table 2.1. The number of sites sampled each day (i.e., in each section) was based on section length and the type and number of available habitats. In general, six boat electrofisher and either six backpack electrofisher and/or beach seine sites were sampled per day. The number of discrete habitats sampled at backpack electrofisher and beach seine sites is summarized in Table 2.2. Discrete habitat types were not sampled by boat electrofisher.

Table 2.1 Number of fish sample sites by method in study zones of the Moberly River and Halfway River, Halfway River and Moberly River summer fish survey 2009.

Tributary	Zone	Method and Number of Sites			
		Boat Electrofish	Backpack Electrofish	Beach Seine	Total
Moberly River	1	15	7	3	25
	2	27	15	11	53
	3	18	18		36
	4	7	5		12
Total		*67*	*45*	*14*	*126*
Halfway River	1	12	10	4	26
	2	31	24	4	59
	3	14	12	2	28
	4	6	6		12
Total		*63*	*52*	*10*	*125*

Table 2.2 Number of sites by habitat and capture method in each zone of the Moberly River and Halfway River, Halfway River and Moberly River summer fish survey 2009.

River	Zone	Habitat Type[a]						Total
		Flat	Riffle/ Rapid	Run	Side channel	Back water	Tributary	
Moberly R.	1	6	2	2				**10**
	2	4	3	13	3	3		**26**
	3		3	15				**18**
	4		1	4				**5**
Total		*10*	*9*	*34*	*3*	*3*		*59*
Halfway R.	1		5	3	4	2		**14**
	2	1	9	2	8	4	4	**28**
	3		7	2	4		1	**14**
	4	2	2	2				**6**
Total		*3*	*23*	*9*	*16*	*6*	*5*	***62***

[a] See Appendix B for definitions.

Method Description

The boat electrofisher consisted of a double-bowed, inflatable drift boat equipped with a Smith-Root Type VIA electrofisher system, two fixed boom anodes on the bow and a cathode wire array on the stern. Electrofisher settings were maintained at an amperage output of 4.5 to 6.0 A, pulsed DC current and a frequency of 60 Hz. Voltage frequency was adjusted based on conductivity and sampling effectiveness. The sampling procedure involved an operator positioning the boat perpendicular to the channel margin while drifting downstream and outputting a continuous current of electricity. The boat electrofisher position alternated between banks in order to sample shallow water habitats frequented by small fish and to avoid navigation hazards. A single netter positioned at the bow of the boat captured the temporarily immobilized fish and placed them in a 30 L live well. The netter was equipped with a net with mesh size of 0.5 cm. The netter was instructed not to bias their catch towards a particular species in order to provide a representative sample of the fish community. Sampled width was 3.5 m and sampled length of each site consisted of a single pass of approximately 500 m.

Two types of backpack electrofishers were used during the survey. A Smith-Root LR24 high output backpack electrofisher was used on the Halfway River. Settings were maintained at an output of 250-350 VDC, 6 ms and a frequency of 60 Hz. Sampling on the Moberly River was completed using a Smith–Root Type XII high output backpack electrofisher. Settings were maintained at an output of 400 VDC, 6-8 ms and a frequency of 60-80 Hz. The backpack electrofisher operator waded upstream along the channel margin and sampled suspected fish holding areas. The netter, who was positioned in close proximity to the electrofisher operator, collected immobilized fish and placed them in a holding bucket. A single pass was used at each site. Sample width was 2.5 m and sampled length was approximately 100 m.

A beach seine was used in low velocity wadeable areas not effectively sampled with a backpack electrofisher. The beach seine was 4.5 m wide and 1.5 m high with a stretched mesh size of 5.0 mm (the depth of the capture bag was 1.4 m). A two-person crew sampled perpendicular to the channel margin for a predetermined distance (usually 25 m) before turning into shore. Depending on the habitat area available, one to three hauls were conducted with the distance of each haul being at least 25 m. Captured fish were placed in a holding bucket for processing. If sample effectiveness was low (e.g., snagged net), the site was sampled a second time.

2.1.4 Fish Processing

All captured fish were held in a holding tank/bucket prior to processing. Data recorded for fish included species (Table 2.3) and fork length (to the nearest 1 mm). Total lengths were measured for fish less than

20 mm, sculpin species and burbot. When the catch exceeded 10 individuals per species a sub-sample was measured. The first 10 individuals of each species were measured, while the remaining fish were identified and enumerated before release. A non-lethal ageing structure (scale or fin ray) was collected from a sub-sample of sportfish to confirm the age class (Age 0 or Age 1). Structures were placed in labeled envelopes and air-dried before storage.

Fish that could not be identified in the field were assigned a unique identifier and a subsample preserved for future identification. These fish were later assigned a species designation based on laboratory identifications. Smaller fish that included young-of-the-year suckers could not be identified to species using this method because a unique species identifier could not be assigned in the field. For these fish, the species percent composition of identified suckers was applied to the sample of unidentified suckers.

Table 2.3 Fish species recorded in the Moberly River and Halfway River, Halfway River and Moberly River summer fish survey 2009.

Group	Common Name	Scientific Name	Species Label
Sportfish	Arctic grayling	*Thymallus arcticus*	GR
	Bull trout	*Salvelinus confluentus*	BT
	Burbot	*Lota lota*	BB
	Lake whitefish	*Coregonus clupeaformis*	LW
	Mountain whitefish	*Prosopium williamsoni*	MW
	Northern pike	*Esox lucius*	NP
	Rainbow trout	*Oncorhynchus mykiss*	RB
Sucker	Largescale sucker	*Catostomus macrocheilus*	CSU
	Longnose sucker	*Catostomus catostomus*	LSU
	White sucker	*Catostomus commersoni*	WSC
Minnow/Trout-perch	Flathead chub	*Platygobio gracilis*	FHC
	Lake chub	*Couesius plumbeus*	LKC
	Longnose dace	*Rhinichthys cataractae*	LNC
	Northern pikeminnow	*Ptychocheilus oregonensis*	NSC
	Redside shiner	*Richardsonius balteatus*	RSC
	Trout-perch	*Percopsis omiscomaycus*	TP
Sculpin	Prickly sculpin	*Cottus asper*	CAS
	Slimy sculpin	*Cottus cognatus*	CCG

2.2 OFFICE

2.2.1 Quality Assurance

All data collected in the field were recorded on standardized forms. Forms were checked daily for errors or omissions. Data were entered into standardized data entry spreadsheets using Microsoft Excel™. These data were visually compared to the field forms for errors and subjected to several summary analyses including graphical examination to identify errors and outliers. The checked data were then imported into

a single Microsoft Access™ data management file for data management and storage. Water temperature and discharge data were stored in Microsoft Excel™.

2.2.2 Mapping

Geodetic location information (UTM coordinates) were tabulated and plotted onto geo-referenced base maps (BC TRIM, scale 1:20,000) using MapInfo Professional™. River kilometre locations were then plotted on base maps. Km 0 designated the confluence with the Peace River.

Reservoir inundation level locations on study tributaries were based on a maximum normal reservoir elevation of 461.8 metres plotted on orthophotos supplied by BC Hydro. Orthophotos were created from 1:20,000 and 1:40,000 scale photography; reservoir elevation was generated from BC Government TRIM mapping.

2.2.3 Fish Age Groups

Structures from selected sportfish species were aged to ascertain the range in length of Age 0 and Age 1 fish. Ageing procedures followed those described in Mackay *et al.* (1990). Scales were cleaned and placed on a microscope slide for viewing. All structures were read by two experienced individuals. If a discrepancy occurred between readers a third person examined the structure and a consensus reached as to the age of the structure.

Age data were then used to confirm age-group designations based on modal peaks illustrated by length frequency distributions. Age-groups of interest were Age 0, or young-of-the year (YOY), and Age 1 or juvenile.

2.2.4 Analyses and Summary Metrics

Data were analyzed using Microsoft® Excel and SPSS® software. Habitat parameters measured within discrete habitat units were summarized by habitat type. Catch rate, which is used synonymously with catch-per-unit-effort (CPUE) of fish was calculated for each site by dividing the number of fish captured by sampling effort. Catch rate was expressed as follows:

Boat electrofisher -	Number of fish/km
Backpack electrofisher -	Number of fish/100 m
Beach seine -	Number fish/100 m^2

Summary metrics for habitat and catch rate included mean ± standard error (SE) among sites within a zone.

Water temperature exceedence for the cold-water fish species were examined based on a tolerance threshold of 22^{o}C described in Oliver and Fidler (2001). Use of a temperature tolerance threshold assumes that cold-water species are generally less abundant in systems where this temperature threshold is commonly exceeded.

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3.0 RESULTS

3.1 MOBERLY RIVER

3.1.1 Environmental Characteristics

3.1.1.1 General Water Quality

Overall average pH of the Moberly River during the summer survey was 8.1 (Table 3.1, Appendix C1). Average pH increased slightly from 7.9 in Zone 1 to 8.3 in Zone 3, and then declined to 8.0 in Zone 4. Water conductivity increased from upstream to downstream. Average water conductivity increased from a low of 155 µS/cm in Zone 1 to a high of 297 µS/cm in Zone 4. Very high conductivity recorded at one site in Zone 4 (519 µS/cm) suggests input from ground water sources. Water clarity during the small fish survey averaged 56 cm. Water clarity decreased from upstream to downstream. The low clarity recorded in Zones 3 and 4 were caused by active valley wall slumping that introduced sediments into the river. Large active slumps were recorded at Km 16 and Km 12 in Zone 3 and Km 4 in Zone 4.

Table 3.1 General water quality of the Moberly River, Halfway River and Moberly River summer fish survey 2009.

Zone	pH			Conductivity (µS/cm)			Water clarity (cm)		
	n	**Average**	**Range**	***n***	**Average**	**Range**	***n***	**Average**	**Range**
1	6	7.9	6.8 - 8.4	6	155	145 - 165	1	200	
2	13	8.2	7.3 - 8.6	13	162	154 - 182	12	69	30 - 130
3	8	8.3	7.8 - 8.9	8	175	161 - 185	1	35	
4	3	8.0	7.4 - 8.5	3	297	183 - 519	2	18	15 - 20
Overall	**30**	**8.1**	**6.8 – 8.9**	**30**	**178**	**145 - 519**	**16**	**56**	**15 - 130**

3.1.1.2 Water Temperature

Water temperatures were continuously monitored at two stations on the Moberly River – the upper station and the lower station (Figure 1.1). During the monitoring period at the upper station (3 June to 14 October) water temperatures ranged between 0.4°C and 25.2°C (Appendix C, Table C2A and C2B). Average daily water temperatures were approximately 11.0°C at the beginning of the monitored period (Figure 3.1). They increased during June through July and then peaked in late July and early August (approximately 22°C to 24°C) before declining until mid October when the thermograph was removed. Water temperatures at the lower station were similar to water temperatures at the upper station during the monitored period (14 May and 23 October). The main difference between the stations was the slightly higher daily water temperature at the lower station in June and July (mean monthly difference ≤ 0.5°C)

and the slightly lower water temperature at the lower station in July and August (mean monthly difference ≤ - 0.5°C).

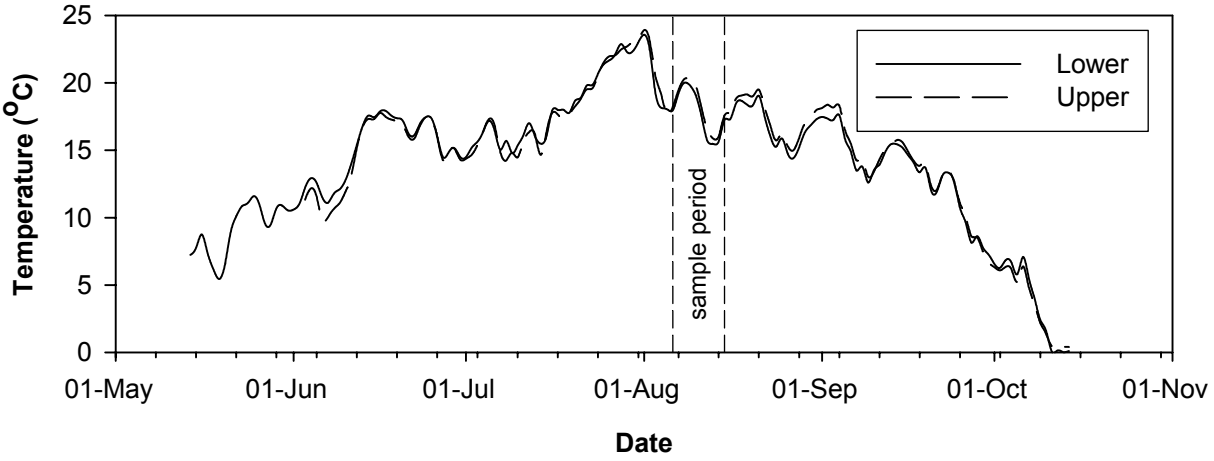

Figure 3.1 Mean daily water temperatures at lower and upper stations on the Moberly River, Halfway River and Moberly River summer fish survey 2009.

The range of Moberly River hourly water temperatures recorded each day differed between stations and between months (Figure 3.2). The lower station exhibited a mean daily temperature range of approximately 1.0°C higher than the upper station during June, July, and August, but the difference was < 0.5°C during other months. Hourly water temperatures each day ranged as high as 5.8°C at the lower station and as high as 5.0°C at the upper station. The range of hourly water temperatures each day was highest during May, June, and July.

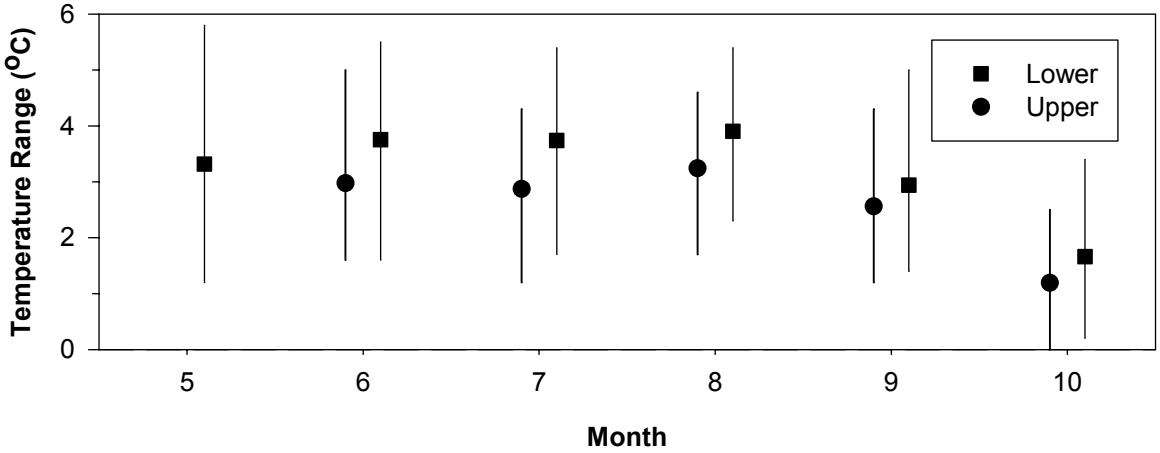

Figure 3.2 Daily range of water temperatures by month (mean, minimum, and maximum) at lower and upper stations on the Moberly River, Halfway River and Moberly River summer fish survey 2009.

Water temperatures exceeded the 22°C temperature threshold for cold water fish species on 12 days during the monitored period (11 at the lower station and 12 at the upper station) (Appendices C2A and C2B). Exceedence occurred on eleven consecutive days between 24 July and 3 August. The other exceedence occurred on 9 August in the upper section.

Water temperatures during the summer fish survey (6 to 15 August) ranged from 13.3°C to 22.1°C. Average water temperatures for this period were 17.8°C and 18.2°C at the upper and lower stations, respectively.

3.1.1.3 Discharge

Based on preliminary data, discharge of the Moberly River during 2009 ranged between 1.5 m^3/s and 59.0 m^3/s. Mean daily discharge slowly increased starting in early May before peaking at 47.6 m^3/s on June 7 (Figure 3.3). Discharge then decreased until early July when discharge again rose to 59.0 m^3/s on July 11 (presumably after a large rain event) before continuously decreasing until the end of October.

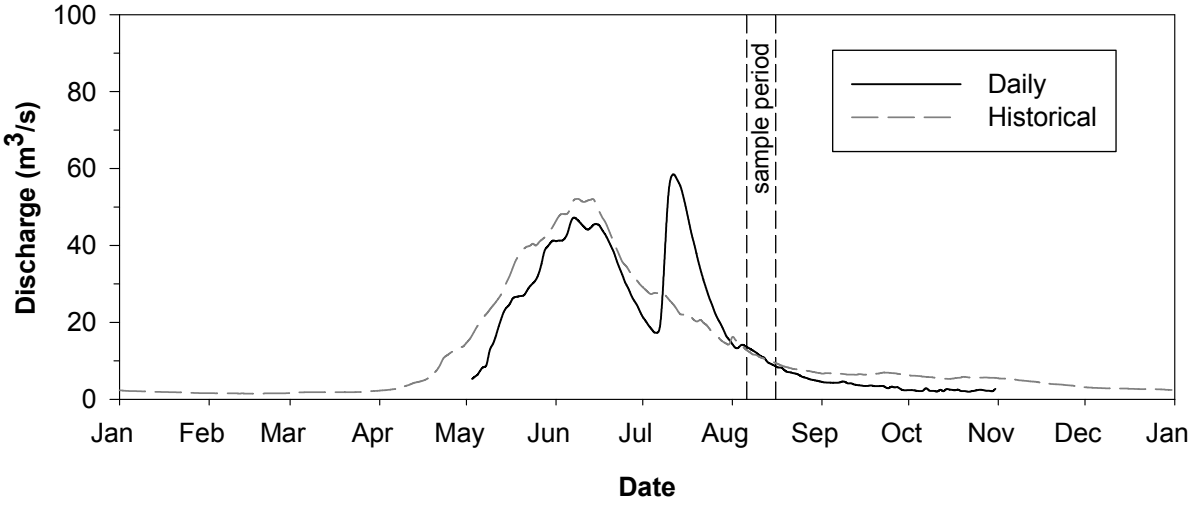

Figure 3.3 Mean daily discharge of the Moberly River in 2009 with comparison to historical mean daily discharge, Halfway River and Moberly River summer fish survey 2009.

Average daily discharge during the fish survey (6 to 15 August) was 11.3 m^3/s. Discharge gradually decreased from a high at the start of the survey (13.6 m^3/s) to a low at the end of the survey (8.9 m^3/s).

Hourly discharge of the Moberly River varied around the daily mean during the fish survey (Figure 3.4). Hourly values ranged between 3% and 8% of the daily average. The daily pattern was considered atypical for this unregulated river. Rain events that could explain the daily variation were not observed during the

survey. The source of the Moberly River is Moberly Lake (Figure 1.1); therefore, a possible explanation was seiche (i.e., standing wave) driven fluctuation of Moberly Lake water levels at its outlet.

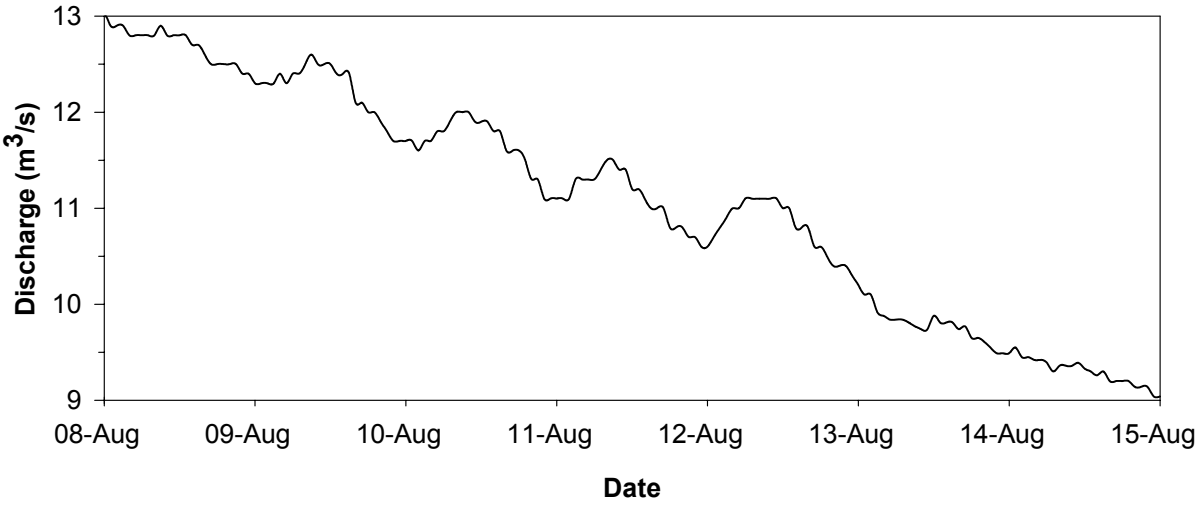

Figure 3.4 Hourly discharge of the Moberly River during the sample period, Halfway River and Moberly River summer fish survey 2009.

3.1.2 Fish Habitat

3.1.2.1 General Description

The Moberly River study area was stratified into four zones based on physical characteristics (Table 1.1). Zone 1 was different from the other sampled zones because it exhibited sections having very low gradient and bed material dominated by sand (Plate 1). These sections were separated by short riffle sections containing large cobbles and boulders. This zone contained numerous oxbows with emergent and submergent vegetation that provided off channel fish habitat (Plate 2). This zone had the potential to provide high quality habitats for species such as northern pike and lake whitefish. The non-riffle sections were considered marginal habitat for species such as Arctic grayling and mountain whitefish.

Zone 2 exhibited an increased gradient with an abundance of long runs separated by short riffle sections (Plate 3). The stable river channel meandered through mature forest, which was a source of large woody debris. There was an abundance of protected shallow water areas in this zone that provided an abundance of physical cover, which could be used as rearing habitat. Bed material in this zone consisted primarily of sands and gravels in runs, while cobbles interspersed with boulders dominated in riffles (Plate 4). This zone contained numerous physical features that provided good quality spawning, rearing, feeding, and overwintering habitats for fluvial fish species potentially found in the Moberly River (e.g., Arctic grayling, mountain whitefish, longnose sucker, and slimy sculpin).

The upstream boundary of Zone 3 was a major reach break in the study area. The Moberly River began its descent from foothills plateau to the Peace River. The river channel in Zone 3 was laterally unstable, which resulted in substantial bank erosion (Plate 5). Log jams and abandoned side channels were frequently encountered (Plate 6). The bed material consisted of gravels and small cobbles, interspersed with sand. This material was mobile as evidenced by numerous unstable gravel and cobble bars. This zone also contained two large, active valley wall slumps, one at Km 16.0 and one at Km 12.5, which introduced sands and silts into the river. The instability of the Moberly River channel in Zone 3 created increased habitat complexity, but most habitats likely were ephemeral. The high gradient and mobile bed material limited the amount of spawning and rearing habitats in the main channel, but there were numerous secondary channels that could be used by fish.

The physical characteristics of Zone 4, which represents the potential area of inundation by the proposed Site C Reservoir, were very similar to Zone 3 characteristics. However, this section of river frequently abutted against the valley walls resulting in bank erosion (Plate 7) that caused introduction of fine sediments (Plate 8). Zone 4 exhibited the same habitat potential as Zone 3, with the exception of a higher suspended sediment load during high flow periods.

3.1.2.2 Site Habitat Characteristics

Habitat types recorded at sampled sites on the Moberly River were Flat, Pool, Riffle/Rapid, Run, Backwater, and Side channel (Appendix D1). Several characteristics of measured fish habitats varied by zone (Table 3.2, Figure 3.5). Differences included water depth, D90, percent fines, and embeddedness, which decreased from upstream to downstream. Average depth declined from 0.33 m in Zone 1 to 0.16 m in Zone 4. Average D90 declined from 27.5 cm in Zone 1 to 13.2 cm in Zone 4. Percent fines decreased from 44% in Zone 1 to 23% in Zone 4. Embeddeddness decreased from 2.0 in Zone 1 to 1.7 in Zone 4. The changes reflected zone differences in bed material type and gradient. The absence of strong differences between zones for the remaining habitat parameters likely reflected small sample sizes rather than a lack of difference.

Table 3.2 Physical characteristics[a] of fish habitats sampled at backpack electrofish and beach seine sites on the Moberly River, Halfway River and Moberly River summer fish survey 2009.

Zone	Habitat Type	*n*	Water Depth (m)	Water Velocity (m/s)	D90 (cm)	Bed Material Type (%)				Substrate Condition	
						Fines	PE/GR	CO	BO/BE	Embeddedness	Compaction
1	Flat	6	0.35 ± 0.03	0.18 ± 0.03	0.8 ± 0.5	83 ± 13	53 ± 13			3.0	1.5 ± 0.3
	Pool	0									
	Riffle	2	0.36 ± 0.03	0.48 ± 0.15	32.5 ± 2.5	33 ± 28	30 ± 0	30 ± 20	15	2.0	1.5 ± 0.5
	Run	2	0.30 ± 0.02	0.43 ± 0.23	22.5 ± 22.5	55 ± 45	70	10	10	2.0	1.0
	Rapid	0									
2	Back channel	3	0.30 ± 0.08	0.06 ± 0.06	0 ± 0	100 ± 0					
	Backwater	3	0.37 ± 0.03	0.04 ± 0.03	6.7 ± 3.8	80 ± 15		28 ± 18	5	3.0	1.7 ± 0.7
	Flat	4	0.58 ± 0.06	0.15 ± 0.03	4.5 ± 3.6	93 ± 6	15 ± 4	80	10	2.3 ± 0.6	1.3 ± 0.3
	Pool	0									
	Riffle	2	0.30 ± 0.05	0.32 ± 0.06	40.0 ± 0	20	10	55 ± 15	30 ± 10	1.0	1.5 ± 0.5
	Run	14	0.29 ± 0.04	0.28 ± 0.04	15.9 ± 2.6	27 ± 7	38 ± 8	47 ± 8	12 ± 3	1.9 ± 0.2	1.9 ± 0.1
	Rapid	0									
3[b]	Flat	0									
	Pool	22	0.49 ± 0.04	0.26 ± 0.06	14.4 ± 0.8	34 ± 5	45 ± 4	19 ± 3	2 ± 1	2.3 ± 0.2	1.4 ± 0.1
	Riffle	30	0.20 ± 0.02	0.55 ± 0.03	17.3 ± 1.0	5 ± 1	52 ± 3	37 ± 3	6 ± 1	1.5 ± 0.1	1.3 ± 0.1
	Run	37	0.36 ± 0.02	0.32 ± 0.03	18.9 ± 1.3	14 ± 3	47 ± 3	34 ± 3	5 ± 1	1.9 ± 0.1	1.5 ± 0.1
	Rapid	1	0.37	0.85	33.0		10	45	45	1.0	1.0
4[a]	Flat	2	0.42 ± 0.18	0.06 ± 0.05	6.5 ± 0.5	65 ± 20	23 ± 13	13 ± 8	0	2.5 ± 0.5	2 .0± 1.0
	Pool	22	0.38 ± 0.03	0.09 ± 0.02	10.9 ± 1.4	57 ± 7	28 ± 5	14 ± 3	2 ± 1	2.2 ± 0.2	1.5 ± 0.1
	Riffle	31	0.11 ± 0.01	0.40 ± 0.04	13.8 ± 1.0	21 ± 4	47 ± 4	29 ± 4	4 ± 1	1.5 ± 0.1	1.6 ± 0.1
	Run	33	0.21 ± 0.02	0.28 ± 0.04	12.7 ± 0.9	26 ± 5	42 ± 4	29 ± 4	3 ± 1	2 .0± 0.1	1.7 ± 0.1
	Rapid	1	0.65	0.60	55.0			55	45	1.0	1.0

[a] See Appendix B for definitions.
[b] Data from Mainstream (2009c).

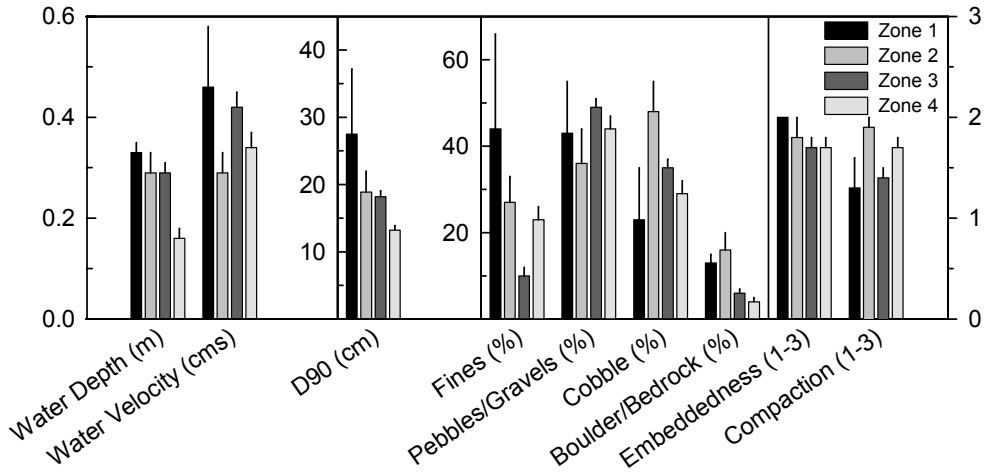

Figure 3.5 Physical and bed material characteristics (mean ± SE) of zones in the Moberly River, Halfway River and Moberly River summer fish survey 2009.

3.1.3 Fish Community

3.1.3.1 Species Composition

In total, 4506 fish were recorded during the small fish survey on the Moberly River (Table 3.3). The sample consisted of 16 species, which included 6 sportfish, 3 suckers, 5 minnows, and 2 sculpin species.

Table 3.3 Number and percent composition of fish species recorded in the Moberly River, Halfway River and Moberly River summer fish survey 2009.

Group	Species	Number	Percent
Sportfish	Arctic grayling	106	2.4
	Bull trout	1	<0.1
	Burbot	119	2.6
	Lake whitefish	1	<0.1
	Mountain whitefish	1,145	25.4
	Northern pike	64	1.4
	Subtotal	*1,436*	*31.9*
Suckers	Largescale sucker	114	2.5
	Longnose sucker	975	21.6
	White sucker	153	3.4
	Subtotal	*1,242*	*27.6*
Minnows/Trout-perch	Lake chub	139	3.1
	Longnose dace	547	12.1
	Northern pikeminnow	36	0.8
	Redside shiner	784	17.4
	Trout-perch	66	1.5
	Subtotal	*1,572*	*34.9*
Sculpins	Prickly sculpin	5	0.1
	Slimy sculpin	251	5.6
	Subtotal	*256*	*5.7*
Total		**4,506**	**100.0**

Sportfish accounted for 31.9% of the total sample. Mountain whitefish numerically dominated with 25.4% of the total sample. The remaining sportfish, which included burbot 2.6%, Arctic grayling 2.4%, and northern pike 1.4%, were well represented. Only one bull trout and one lake whitefish were captured during the program.

Suckers accounted for 27.6% of the total sample. Longnose sucker was the most abundant species in this group (21.6%), followed by white sucker (3.4%), and largescale sucker (2.5%). Minnows were the dominant group (34.9%) in the total sample. The minnow group was dominated by redside shiner (17.4%) and longnose dace (12.1%). The remaining minnow species each accounted for $\leq 3.1\%$ of the total sample. These included lake chub, northern pike minnow, and trout-perch. The sculpin group accounted for 5.7% of the total sample. Of the two species recorded, slimy sculpin numerically dominated (5.6%), while prickly sculpin was scarce (0.1%).

3.1.3.2 Species Diversity and Distribution

Of the 16 fish species recorded on the Moberly River, no more than 13 species were located in any one zone or section (Table 3.4). The uppermost (Section 1) and lowermost sections (Sections 8, 9, and 10) had slightly fewer species than the middle sections of the study area (11 versus 13 species, respectively).

Table 3.4 Fish species distribution present in each section of the Moberly River, Halfway River and Moberly River summer fish survey 2009.

Group	**Species**	**Zone and Section**									
		1		**2**				**3**			**4**
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Sportfish	Arctic grayling	x	x	x	x	x	x	x	x	x	x
	Bull trout										x
	Burbot	x	x	x	x	x	x	x	x	x	x
	Lake whitefish		x								
	Mountain whitefish	x	x	x	x	x	x	x	x	x	x
	Northern pike	x	x	x	x	x	x	x		x	
Suckers	Largescale sucker						x	x	x	x	x
	Longnose sucker	x	x	x	x	x	x	x	x	x	x
	White sucker	x	x	x	x	x	x	x			
Minnows/ Trout-perch	Lake chub			x	x	x	x	x	x	x	x
	Longnose dace	x	x	x	x	x	x	x	x	x	x
	Northern pikeminnow					x	x	x	x	x	x
	Redside shiner	x	x	x	x	x	x	x	x	x	x
	Trout-perch	x	x	x	x	x	x	x	x		
Sculpins	Prickly sculpin	x	x	x							
	Slimy sculpin	x	x	x	x	x	x	x	x	x	x
No. of Species per	Section	***11***	***12***	***12***	***11***	***13***	***13***	***13***	***11***	***11***	***11***
	Zone	***12***		***13***				***13***			***11***

Ten species were widely distributed and were recorded in most sections. These included Arctic grayling, burbot, mountain whitefish, northern pike, longnose sucker, lake chub, longnose dace, redside shiner, trout-perch, and slimy sculpin. A small number of species (3) were primarily restricted to the upper portion of the study area. Lake whitefish were recorded only in Section 2, white sucker occurred in Sections 1 through 7, and prickly sculpin were recorded in Sections 1 to 3. The remaining three species occurred only in the lower portion of the study area. Bull trout were recorded only in Section 10, largescale sucker occurred in Sections 6 to 10, while northern pikeminnow were in Sections 5 to 10.

3.1.3.3 Catch Rates

The survey targeted small fish ≤ 200 mm length. This section focuses on catch rates of selected species for this size range; all catch rate data are presented in Appendices E1 to E3. Catch rates generated using the three fish capture methods varied according to fish group. Species in the sportfish and sucker groups were most frequently encountered and catch rates were highest using boat electrofisher and backpack electrofisher (Figure 3.6). Species in these groups were rarely captured using beach seines. The only exceptions were northern pike, longnose sucker, and unidentified young-of-the-year suckers.

In general, species in the minnow and sculpin groups were recorded using all three fish capture methods; however, fish were most frequently encountered and exhibited highest catch rates using backpack electrofisher, followed by boat electrofisher, and beach seine methods (Figure 3.7).

<u>Sportfish</u>

Arctic grayling mean catch rates per section in the boat electrofisher catch varied from 0.33 fish/km to 3.54 fish/km. Arctic grayling catch rates were low in the upper portion of the study area (Sections 1 and 2) and in the lowermost portion of the study area (Section 10). Highest catch rates occurred in Sections 6 to 8. Backpack electrofisher catch rates were highly variable, as evidenced by the large range (i.e., 0 fish/100 m to 1 fish/100 m).

Burbot catch rates ranged from 0.17 fish/km to 5.11 fish/km in the boat electrofisher catch and 0.20 fish/100 m to 2.14 fish/100 m in the backpack electrofisher catch. In the boat electrofisher catch, burbot catch rates were highest in upstream Sections 1 to 6, but were very low in downstream Sections 7 to 10. Although variable, backpack electrofisher burbot catch rates were similar among sections.

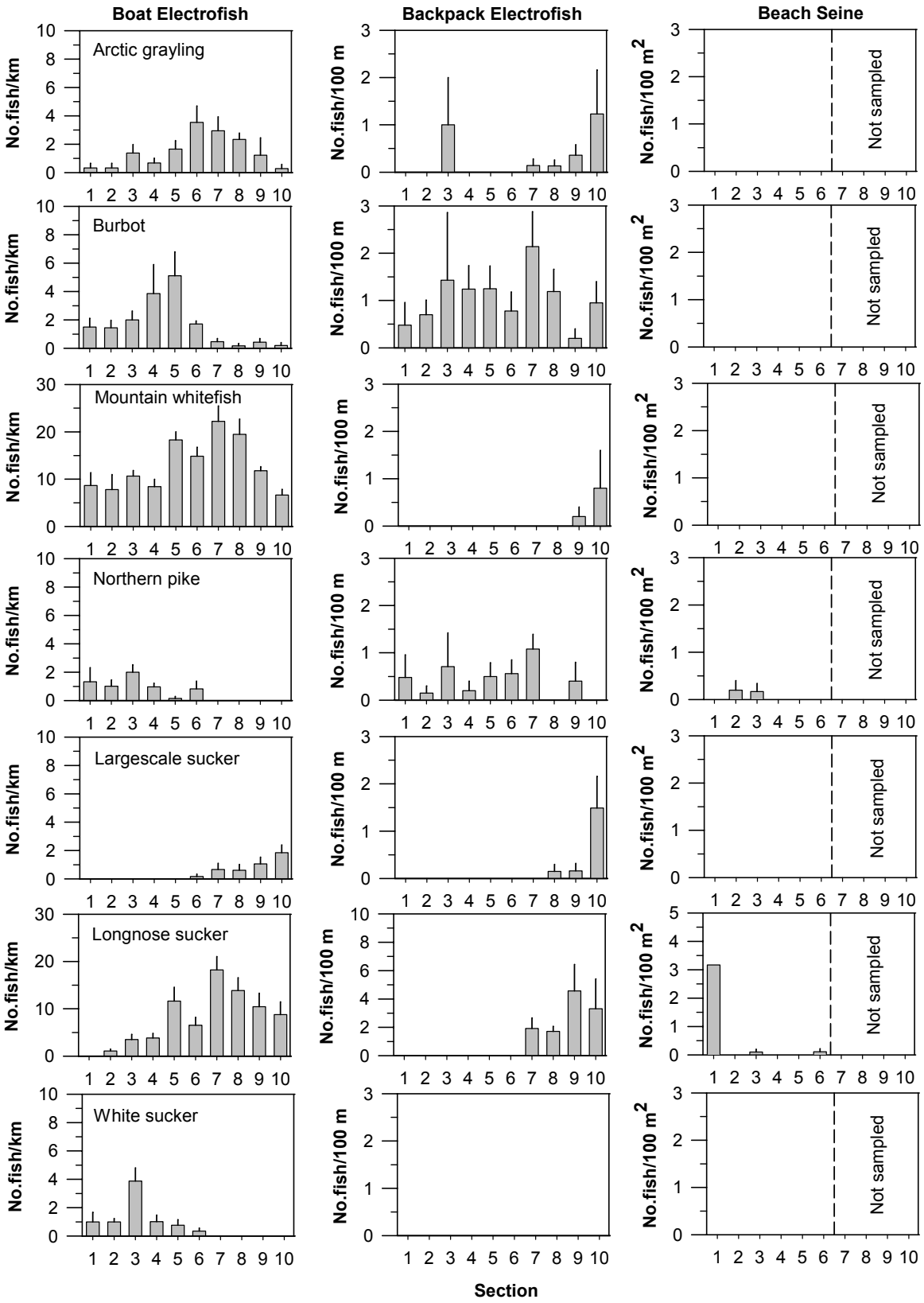

Figure 3.6 Catch rates (mean ± SE) of young (≤ 200 mm length) large-fish species in sampled sections on the Moberly River, Halfway River and Moberly River summer fish survey 2009.

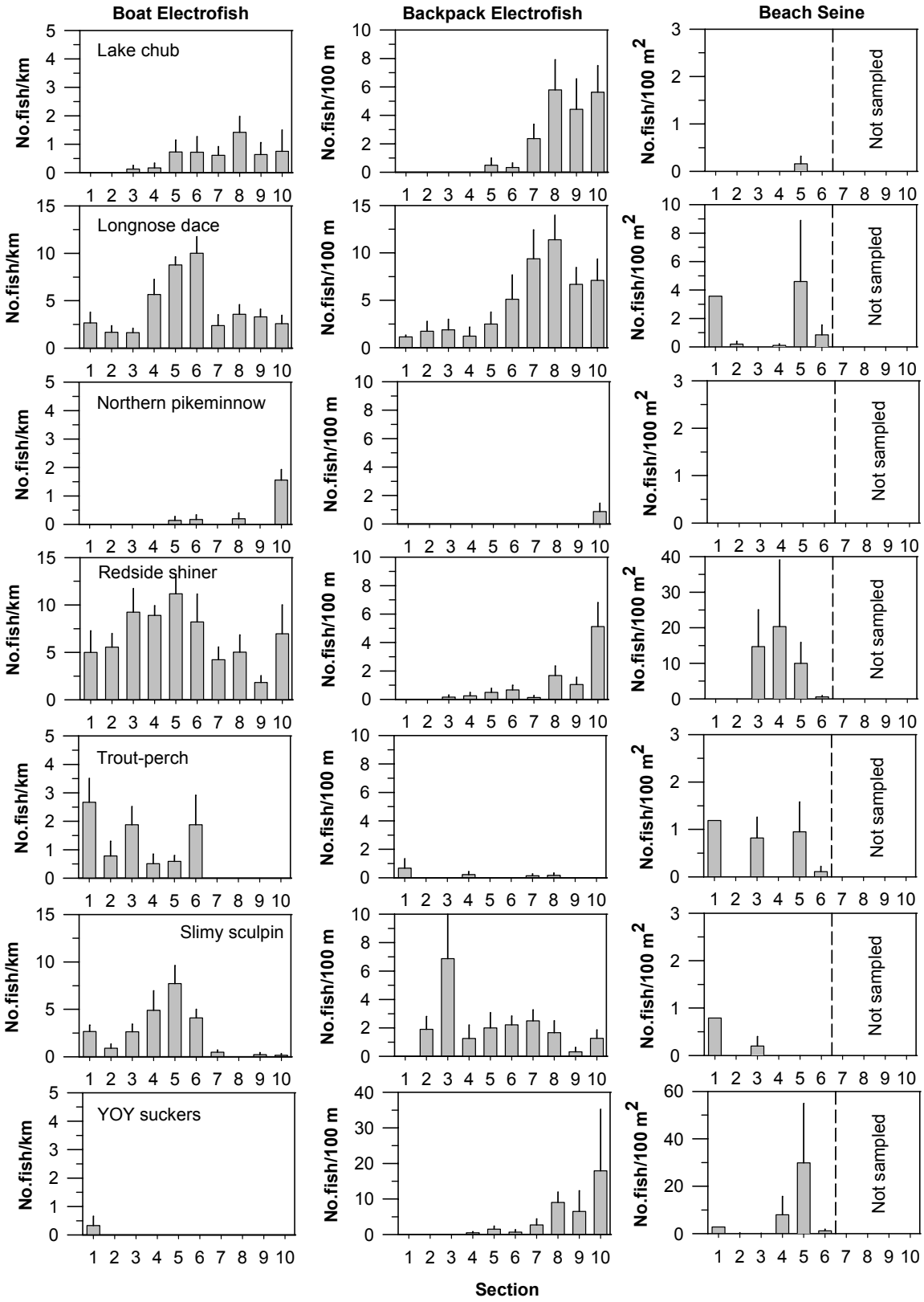

Figure 3.7 Catch rates (mean ± SE) of small-fish species in sampled sections on the Moberly River, Halfway River and Moberly River summer fish survey 2009.

Mountain whitefish were consistently encountered only with the boat electrofisher. Mean catch rates were high in all sections (range = 7.78 fish/km to 22.21 fish/km). Mountain whitefish catch rates varied spatially. Catch rates were approximately 10 fish/km in upper Sections 1 to 4. They increased to above 15 fish/km in Sections 5 to 8, and then progressively declined to 6.66 fish/km by Section 10.

Northern pike catch rates were low. Mean catch rates at sites that contained fish ranged from 0.15 fish/km to 2.00 fish/km using boat electrofisher and 0.15 fish/100 m to 1.08 fish/100 m using the backpack electrofisher. Northern pike were largely restricted to upper Sections 1 to 6.

Suckers

Largescale suckers catch rates were low in the study area and this species was only encountered downstream of Section 5. Mean catch rates at sites that contained fish ranged from 0.17 fish/km to 1.85 fish/km using boat electrofisher and 0.15 fish/100 m to 1.49 fish/100 m using the backpack electrofisher. Largescale sucker catch rates exhibited a spatial pattern.

Catch rates of longnose suckers were second only to mountain whitefish and this species was recorded in all sections. Mean catch rates at sites that contained fish ranged from 1.11 fish/km to 18.23 fish/km in the boat electrofisher catch and 1.72 fish/100 m to 4.57 fish/100 in the backpack electrofisher catch. The spatial pattern of longnose sucker boat electrofisher catch rates was similar to that of mountain whitefish. Boat electrofisher catch rates were ≤ 3.84 fish/km in upper Sections 2 to 4. They increased to above 14 fish/km in most sections between Sections 5 to 8 (all except Section 6), and then declined to 8.77 fish/km by Section 10.

Catch rates of white suckers were low. Mean boat electrofisher catch rates at sites that contained fish ranged from 0.35 fish/km to 3.88 fish/km. White suckers were restricted to upper Sections 1 to 6. There was a weak trend of declining catch rate from upstream to downstream.

Minnows and Sculpins

In the minnow group catch rates of redside shiner and longnose dace were high and these two species were widespread in the study area. In the sculpin group slimy sculpin exhibited the highest catch rates and were widespread. The spatial pattern of catch rates varied by species. Redside shiner, longnose dace, and slimy sculpin boat electrofisher catch rates tended to be highest in Sections 3 to 6. Lake chub and northern pike minnow catch rates were higher in the downstream Sections 5 to 10. In contrast, trout-perch catch rates tended to be highest from Sections 1 to 6.

3.1.3.4 Distribution of Age 0 Sportfish

Young-of-the-year (Age 0) fish of the sportfish species Arctic grayling, burbot, mountain whitefish, and northern pike were recorded during the survey (Table 3.5, Figure 3.8, Appendix E).

Table 3.5 Summary of Age 0 sportfish frequency and number encountered on the Moberly River, Halfway River and Moberly River summer fish survey 2009.

Species	Zone	Sections with Fish	No. Sites with Fish		Number of Fish per Site	
			No.	Percent	Mean	Range
Arctic grayling	1		0			
	2	3, 6	4	7.5	1.5	1 – 3
	3	7, 8, 9	5	13.9	1.4	1 – 3
	4	10	2	16.7	3.5	1 – 6
Burbot	1	2	2	8.0	1.0	1 – 1
	2	3, 4, 5	4	7.5	2.8	1 – 6
	3	7, 8, 9	6	16.7	1.3	1 – 2
	4	10	2	16.7	2.0	1 – 3
Mountain whitefish	1	1, 2	7	28.0	1.6	1 – 4
	2	3, 4, 5, 6	21	39.6	3.0	1 – 7
	3	7, 8, 9	11	30.6	2.8	1 – 5
	4	10	5	41.7	2.2	1 – 5
Northern pike	1	1, 2	7	28.0	1.9	1 – 3
	2	3, 4, 5, 6	16	30.2	1.8	1 – 4
	3	7	4	11.1	1.3	1 – 2
	4		0			

Age 0 Arctic grayling were not encountered from Zone 1 (Sections 1 and 2), nor from Sections 4 and 5 of Zone 2. They were recorded in all sections located in Zone 3 (Sections 7 to 9) and Zone 4 (Section 10). Age 0 Arctic grayling occurred at a low percentage of sites within each reach. Percent occurrence ranged from 7.5% in Zone 2 to 16.7% in Zone 4. The number of Age 0 Arctic grayling was low. The mean number of fish encountered per site was ≤ 3.5 and the maximum number recorded was 6 fish per site.

Age 0 burbot were widely distributed in the study area. Age 0 fish were absent only from Section 1 in Zone 1 and Section 6 in Zone 2. Although Age 0 burbot were widely distributed, they were not recorded at a large percentage of sampled sites within each reach. Percent occurrence ranged from 8.0% and 7.5% in Zones 1 and 2, respectively, to 16.7% in each of Zones 3 and 4. The mean number of Age 0 burbot per site recorded in each zone was low (mean range = 1.0 to 2.8 fish per site) and the maximum did not exceed 6 fish per site.

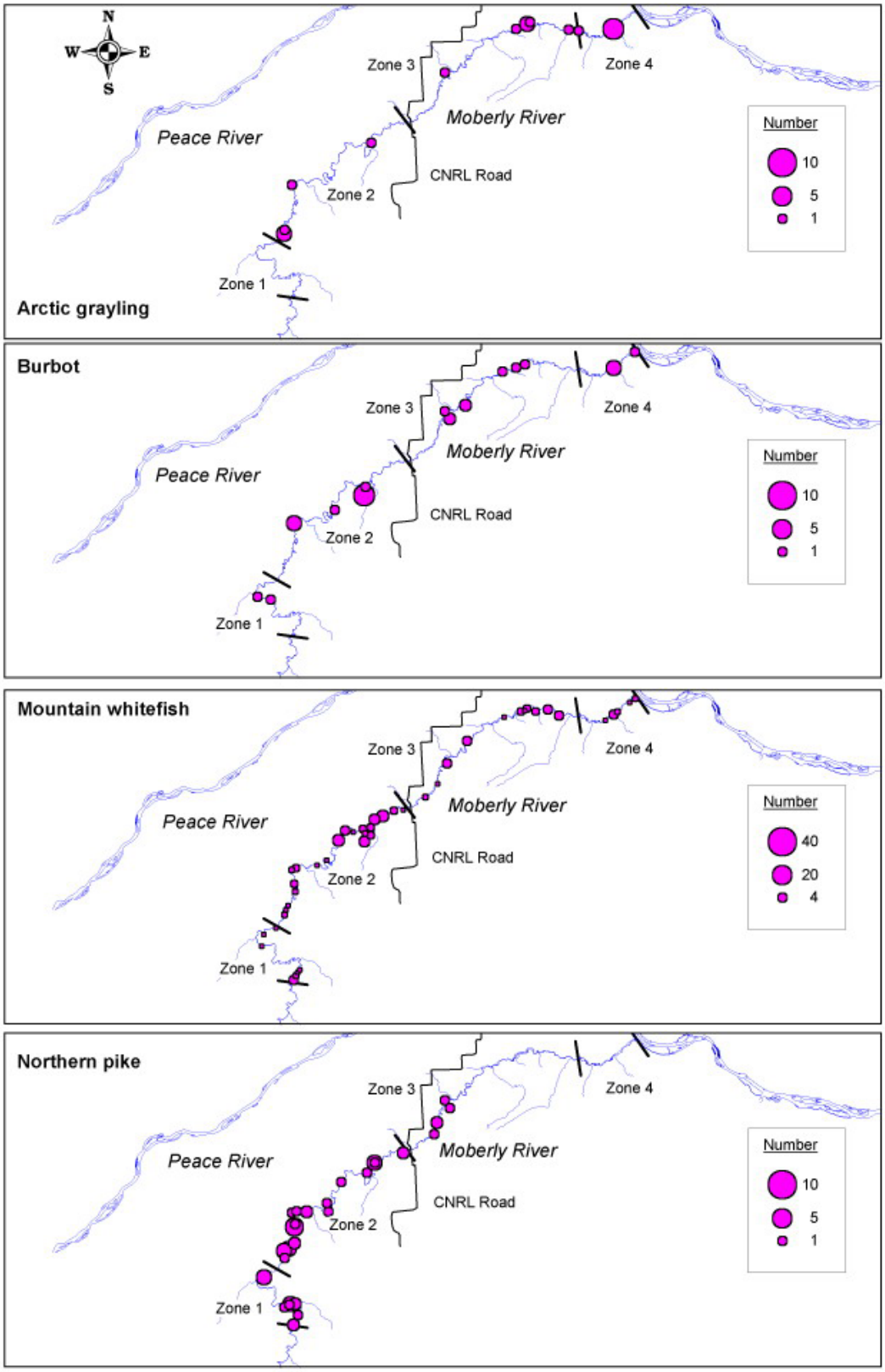

Figure 3.8 Distribution and number per site of Age 0 sportfish at sampled sites on the Moberly River, Halfway River and Moberly River summer fish survey 2009.

Age 0 mountain whitefish were the most widespread and numerous sportfish recorded in the study area. They were present in all sampled sections and the percent occurrence at sampled sites ranged from 28.0% (Zone 1) to 41.7% (Zone 4). The mean number of fish per site ranged from 1.6 (Zone 1) to 3.0 fish (Zone 2) and the maximum number recorded was 7 fish per site.

Age 0 northern pike were recorded from all sections of the upper portion of the study area (Sections 1 to 7), but were absent downstream of Section 7. Age 0 northern pike were more frequently encountered at sampled sites than Arctic grayling and burbot. Percent occurrence ranged from 28.0% and 30.2% in Zones 1 and 2, respectively to 11.1% in Zone 3.

3.1.3.5 Biological Characteristics

A wide size range of fish was recorded during the Moberly River fish survey (Table 3.6 and Figure 3.9, Appendix F1). Size distributions of sportfish and sucker species were dominated by smaller, younger fish. Age 0 and Age 1 classes (based on modal peaks) were well represented in the Arctic grayling, burbot, mountain whitefish, and northern pike samples. These two age classes were numerically dominant. Age 0 fish were not well represented in samples of the three sucker species, but poor representation was an artifact of small fish size that precluded identification to species, rather than the absence of this age class.

Table 3.6 Length characteristics of fish species recorded on the Moberly River, Site C large tributary summer fish study 2009 (all methods combined).

Group	Species	No.	Median Length (mm)	Range
Sportfish	Arctic grayling	105	147	51 – 354
	Bull trout	1	373	
	Burbot	116	149	46 – 322
	Lake whitefish	1	330	
	Mountain whitefish	1,122	158	50 – 383
	Northern pike	63	136	97 – 784
Suckers	Largescale sucker	50	168	100 – 480
	Longnose sucker	558	143	24 – 330
	White sucker	70	173	32 – 421
Minnows/ Trout-perch	Lake chub	42	91	21 – 127
	Longnose dace	309	60	14 – 150
	Northern pikeminnow	36	276	47 – 481
	Redside shiner	424	76	17 – 122
	Trout-perch	65	61	17 – 87
Sculpins	Prickly sculpin	5	73	67 – 82
	Slimy sculpin	217	63	14 - 89

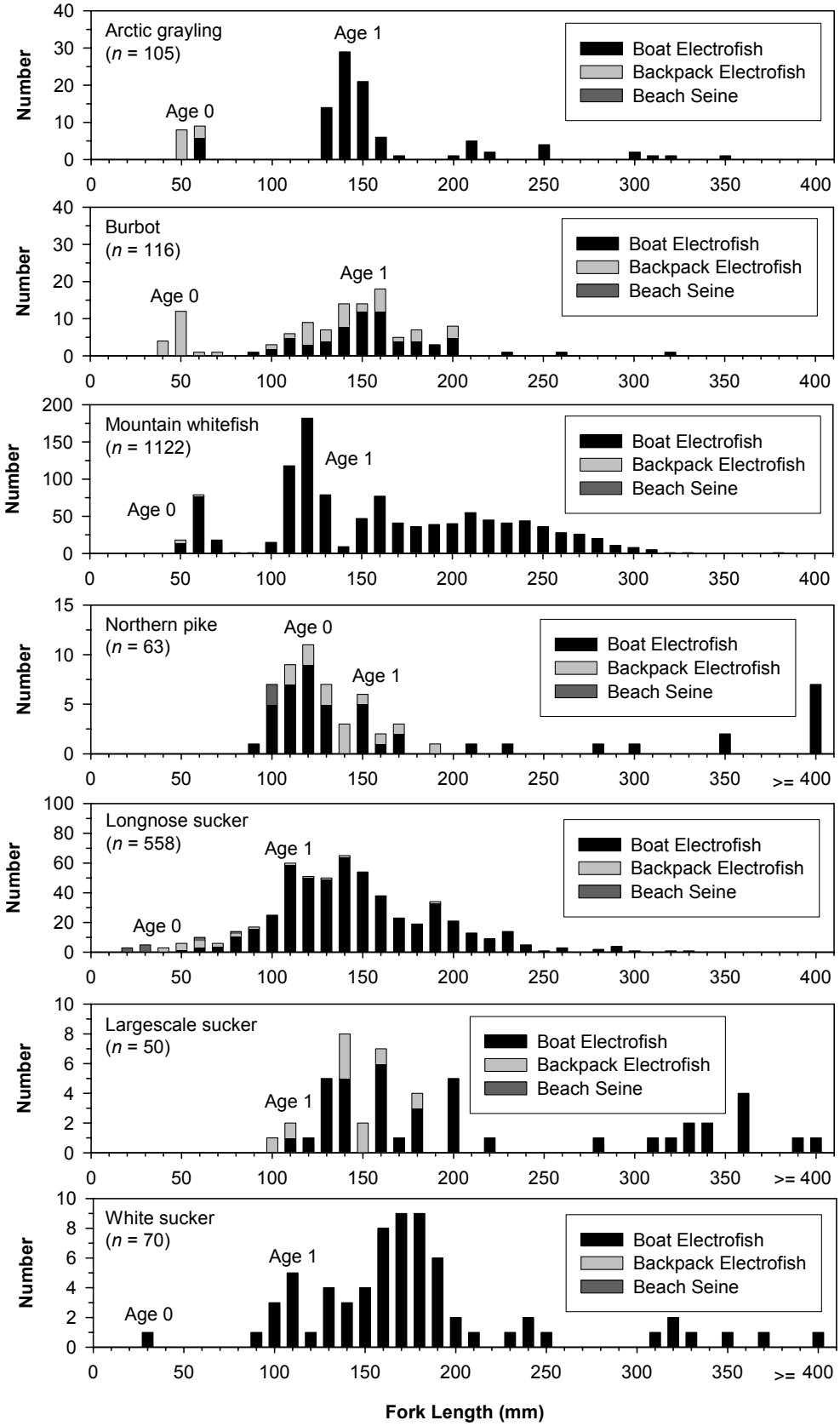

Figure 3.9 Size distribution of selected large-fish species sampled on the Moberly River, Site C large tributary summer fish survey 2009 (all methods and sample areas combined).

Larger (> 200 mm length), presumably older fish were recorded in all samples of sportfish and sucker species. This suggested the presence of older fish in the study area. These individuals may be adults of resident populations. It should be noted that the survey methods targeted small fish (≤ 200 mm length); therefore, adult fish may be under represented in the sample.

3.2.1 HALFWAY RIVER

3.2.1 Environmental Characteristics

3.2.1.1 General Water Quality

Overall average pH of the Halfway River during the summer survey was 8.5, overall average conductivity was 385.0 µS/cm, and overall water clarity was 42.4 cm (Table 3.7, Appendix C1). Water clarity, pH, and conductivity did not change substantially between zones during the survey. Water clarity declined slightly between Zones 3 and 4 (45.0 cm to 35.0 cm, respectively), but this decline was not sufficient to reduce fish sampling efficiency.

Table 3.7 General water quality of the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Zone	pH			Conductivity (µS/cm)			Water clarity (cm)		
	n	**Average**	**Range**	***n***	**Average**	**Range**	***n***	**Average**	**Range**
1	14	8.4	7.7 to 9.2	14	381.1	347 to 460			
2	28	8.5	8.0 to 8.7	28	385.9	182 to 640	7	42.7	12 to 60
3	14	8.5	8.4 to 8.6	14	386.0	351 to 640	2	45.0	40 to 50
4	6	8.6	8.5 to 8.7	6	387.8	380 to 394	1	35.0	
Overall	**62**	**8.5**	**7.7 to 9.2**	**62**	**385.0**	**182 to 640**	**10**	**42.4**	**12 to 60**

3.2.1.2 Water Temperature

Water temperatures were continuously monitored at two stations on the Halfway River – the upper station and the lower station (Figure 1.2). During the monitoring period at the upper station (25 May to 15 October) water temperatures ranged between 0.0°C and 21.8°C (Appendix C, Table C2C and C2D). Average daily water temperatures were approximately 8.0°C at the beginning of the monitored period (Figure 3.10). They increased during June through July. During the period of expected peak water temperatures the thermograph was dewatered (26 July to 2 August). After that period water temperatures declined until mid October when the thermograph was removed.

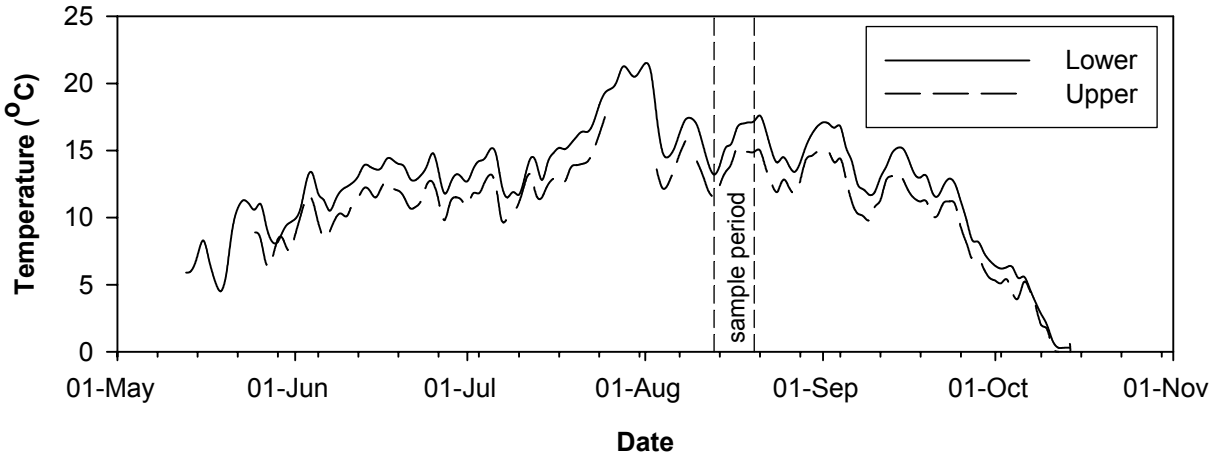

Figure 3.10 Mean daily water temperatures at lower and upper stations on the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Lower station water temperatures were monitored between 13 May and 14 October (Figure 3.10). During that time temperatures ranged between 0.0°C and 22.9°C with an average of 12.7°C. The seasonal pattern of daily water temperatures was similar to the upper station. The main difference between the stations was the higher daily water temperatures at the lower station. The mean monthly difference between stations exceeded 1.6°C during all months except October (0.7°C).

The range of Halfway River hourly water temperatures each day differed between stations and between months (Figure 3.11). The upper station exhibited a mean daily temperature range of approximately 1.0°C higher than the lower station from May to September. The daily range of hourly water temperatures was as high as 5.0°C at the lower station and as high as 7.3°C at the upper station. These results were opposite to what was recorded on the Moberly River, where the lower station exhibited a higher range in hourly water temperatures than the upper station. A potential explanation for the difference may be lower thermal mass of the river at the upper station caused by a smaller volume of water.

Water temperatures exceeded the 22°C temperature threshold for cold water fish species only at the lower station (Appendix C, Table C2D). Exceedence occurred on five consecutive days between 28 July and 2 August.

Water temperatures during the summer fish survey (13 to 20 August) ranged from 11.6°C to 17.2°C. Average water temperatures for this period were 13.9°C and 15.7°C at the upper and lower stations, respectively.

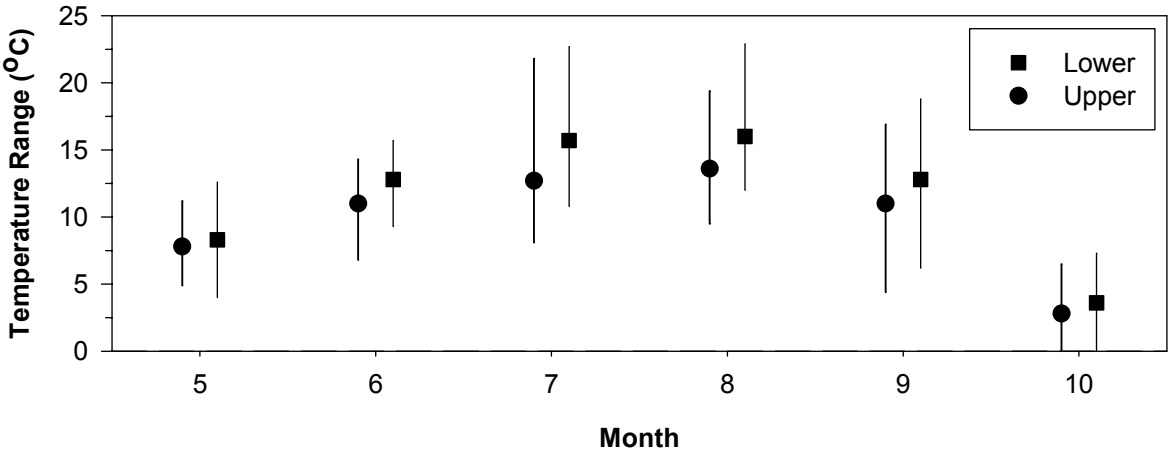

Figure 3.11 Daily range of water temperatures by month (mean, minimum, and maximum) at lower and upper stations on the Halfway River, Halfway River and Moberly River summer fish survey 2009.

3.2.1.3 Discharge

Based on preliminary data, daily discharge of the Halfway River during 2009 was similar to long term discharge. Recorded values ranged between 23.6 m^3/s and 262.0 m^3/s (Figure 3.12). Mean daily discharge increased starting in May to a peak discharge of 254.0 m^3/s in late May. This was followed by two similar peaks in June and July, followed by a smaller peak of 142.0 m^3/s in August. Discharge then declined to historical base flows by mid November.

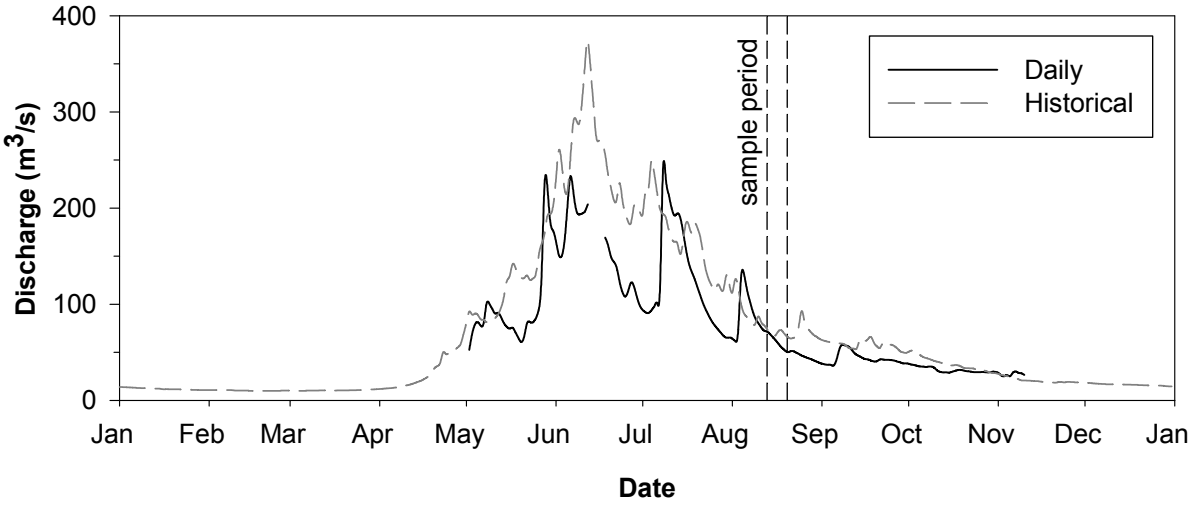

Figure 3.12 Mean daily discharge of the Halfway River in 2009 with comparison to historical mean daily discharge, Halfway River and Moberly River summer fish survey 2009.

Average daily discharge during the fish survey (13 to 20 August) was 60.5 m^3/s. Discharge gradually decreased from a high at the start of the survey (72.9 m^3/s) to a low at the end of the survey (48.6 m^3/s).

3.2.2 Fish Habitat

3.2.2.1 General Description

The Halfway River study area was stratified into four zones based on physical characteristics (Table 1.1). Zone 1 included the section of river between confluences of the Chowade River and the Graham River. Zone 1 represented a smaller watercourse than the other zones because it was located upstream of the Graham River, which is a major tributary to the Halfway River. Field observations suggested that the Graham River contributed approximately 50% of the Halfway River discharge at the time of the survey. Portions of the Halfway River channel were laterally unstable, water depths were generally shallow, and the bed material was dominated by clean cobbles and gravels (Plate 9). Several small named and unnamed tributaries entered the Halfway River in this zone. The dominant habitats in this zone were long runs interspersed with riffles. There were numerous side channels that provided protected areas for fish (Plate 10). This zone had the potential to provide high quality habitats for species such as Arctic grayling, bull trout, mountain whitefish, and rainbow trout.

Zone 2 was located downstream of the Graham River confluence. There was a short (approximately 10 km) section immediately downstream of the Graham River that contained numerous outcrops and a series of bedrock sills. The remainder of the zone consisted of an occasionally confined, wide channel with short braided sections (Plate 11) or riffle/rapid sections (Plate 12). Several small named and unnamed tributaries entered the Halfway River in this zone. There were numerous side channels containing physical features that provided good quality fish habitat (Plate 13). This zone contained an abundance of rearing, feeding, and overwintering habitats for fish species potentially found in the Halfway River (e.g., Arctic grayling, bull trout, mountain whitefish, and rainbow trout).

The upstream boundary of Zone 3 was the confluence of the Cameron River, which represented a major reach break in the study area. The Halfway River in this section received turbid water from the Cameron River and was mostly confined by high valley walls (Plate 14). Unlike the upstream zones, no permanent tributaries entered the Halfway River within Zone 3. The river channel in Zone 3 frequently abuts the valley wall, which results in erosion causing introduction of sediments. There was a large active slump at Km 14 in this zone. Side channels were not abundant in this section and bed material consisted of cobbles, gravels, interspersed with sands and silts (Plate 15). Bed material typically was highly embedded in low velocity areas.

The physical characteristics of Zone 4, which represents the potential area of inundation by the proposed Site C Reservoir, were very similar to Zone 3 characteristics (Plate 16). However, this section of river contained extended flats interspersed by short riffle/rapid sections containing an abundance of boulders (Plate 17). Zone 4 exhibited the same habitat potential as Zone 3, with the exception of a higher amount of fine sediments in low velocity areas (Plate 18).

3.2.2.2 Site Habitat Characteristics

Habitat types recorded at sampled sites on the Halfway River were Back channel, Backwater, Flat, Pool, Riffle/Rapid, Run, and Tributary confluence (Table 3.8 and Figure 3.13, Appendix D1). Several habitat parameters exhibit spatial differences between zones. D90, pebbles/gravels, and cobbles decreased from Zone 1 to Zone 4, while percent fines and substrate embeddedness increased. Average depth, average water velocity, and substrate compaction did not substantively change between zones.

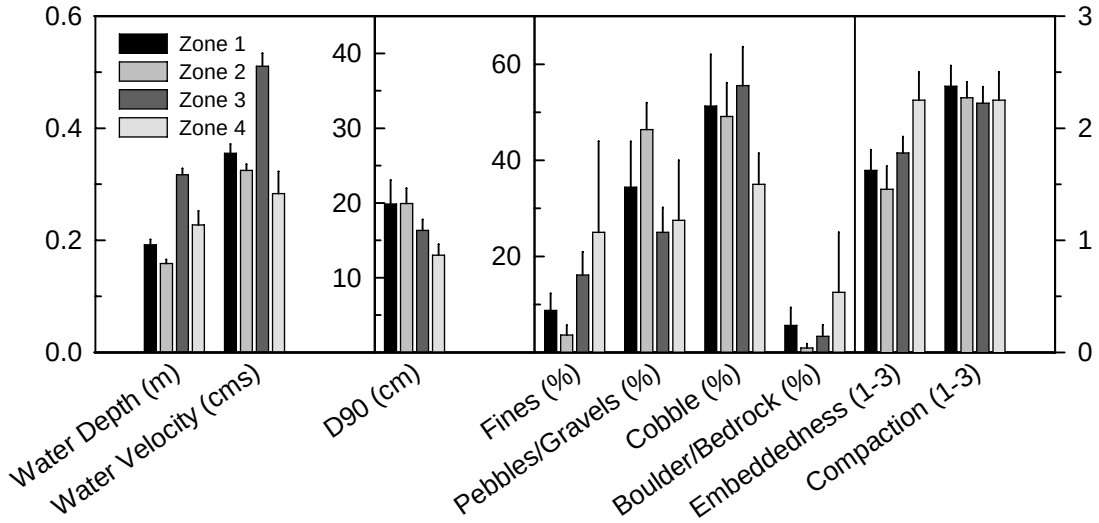

Figure 3.13 Physical and bed material characteristics (mean ± SE) of zones in the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Table 3.8 Physical characteristics[a] of fish habitats sampled at backpack electrofish and beach seine sites on the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Zone	Habitat Type	*n*	Water Depth (m)	Water Velocity (m/s)	D90 (cm)	Bed Material Type (%)				Substrate Condition	
						Fines	PE/GR	CO	BO/BE	Embeddedness	Compaction
1	Back channel	4	0.29 ± 0.05	0 ± 0	8.75 ± 5.5	60 ± 24	8 ± 8	20 ± 12	0	2.5 ± 0.5	2.0 ± 0.0
	Backwater	0									
	Flat	0									
	Pool	2	0.26 ± 0.11	0 ± 0	3.5 ± 3.5	55 ± 15	43 ± 18	3 ± 3	0	3.0	1.5 ± 0.5
	Riffle/Rapid	5	0.15 ± 0.02	0.32 ± 0.07	24.2 ± 3.9	10 ± 4	25 ± 11	56 ± 13	9 ± 6	1.4 ± 0.2	2.6 ± 0.2
	Run	3	0.27 ± 0.03	0.42 ± 0.05	12.67 ± 2	7 ± 7	50 ± 15	43 ± 22	0	2.00	2.0
	Tributary	0									
2	Back channel	8	0.35 ± 0.06	0.06 ± 0.06	9.38 ± 2.9	75 ± 13	12 ± 6	13 ± 7	1 ± 1	1.5 ± 0.5	2.5 ± 0.5
	Backwater	3	0.30 ± 0.06	0 ± 0	23.33 ± 4.1	60 ± 0	0 ± 0	33 ± 7	7 ± 7	3.0	1.3 ± 0.3
	Flat	1	0.40	0.25	24	20	30	50	0	2.0	3.0
	Pool	1	0.25	0	18	0	10	80	10	1.0	2.0
	Riffle/Rapid	9	0.16 ± 0.03	0.35 ± 0.04	21.33 ± 2.1	1 ± 1	43 ± 6	54 ± 7	1 ± 1	1.4 ± 0.2	2.2 ± 0.1
	Run	2	0.16 ± 0.03	0.19 ± 0.02	13.5 ± 4.5	15 ± 5	60 ± 10	25 ± 15	0	1.5 ± 0.5	2.5 ± 0.5
	Tributary	4	0.19 ± 0.07	0.28 ± 0.08	35.75 ± 4.3	14 ± 12	20 ± 7	25 ± 13	41 ± 10	1.8 ± 0.3	2.8 ± 0.3
3	Back channel	4	0.34 ± 0.10	0 ± 0	15 ± 2.5	16 ± 9	21 ± 3	63 ± 9	0	2.0 ± 0.4	2.0
	Backwater	0									
	Flat	0									
	Pool	0									
	Riffle/Rapid	7	0.32 ± 0.04	0.55 ± 0.08	17.14 ± 1.7	11 ± 4	21 ± 5	64 ± 7	4 ± 3	1.7 ± 0.2	2.3 ± 0.2
	Run	2	0.32 ± 0.08	0.38 ± 0.04	13.5 ± 1.5	35 ± 5	40 ± 10	25 ± 15	0	2.0	2.0
	Tributary	1	0.31	0	0	100	0	0	0		
4	Back channel	0									
	Backwater	0									
	Flat	2	0.18 ± 0.04	0.08 ± 0.01	5 ± 5	75 ± 5	0	15 ± 5	10 ± 10	3.0	2.0 ± 1.0
	Pool	0									
	Riffle/Rapid	2	0.20 ± 0.11	0.34 ± 0.17	12.5 ± 2.5	0	40 ± 20	35 ± 5	25 ± 25	2.0	2.0
	Run	2	0.26 ± 0.03	0.23 ± 0.04	13.5 ± 2.5	50 ± 30	15 ± 15	35 ± 15	0	2.5 ± 0.5	2.5 ± 0.5
	Tributary	0									

[a] See Appendix B for definitions.

3.2.3 Fish Community

3.2.3.1 Species Composition

In total, 4401 fish were recorded during the small fish survey on the Halfway River (Table 3.9). The sample consisted of 16 species, which included 5 sportfish, 3 suckers, 6 minnows, and 2 sculpin species. Sportfish were the dominant group and accounted for 43.5% of the total sample. Mountain whitefish numerically dominated with 36.7% of the total sample. The remaining sportfish, which included Arctic grayling (2.9%), bull trout (1.7%), and rainbow trout (2.1%), were well represented. Only two burbot were captured during the program.

Suckers accounted for 24.5% of the total sample. Longnose sucker was the most abundant species in this group (18.6%), followed by largescale sucker (5.8%). White suckers were rarely encountered (n = 5).

Minnows were the second most numerically dominant group (26.2%) in the total sample. The minnow group was dominated by redside shiner (16.7%), with lower contributions by longnose dace (4.5%), lake chub (3.1%), and northern pikeminnow (1.8%). The remaining minnow species, flathead chub and trout-perch, each accounted for 0.1% of the total sample.

Table 3.9 Number and percent composition of fish species recorded in the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Group	Species	Number	Percent
Sportfish	Arctic grayling	129	2.9
	Bull trout	73	1.7
	Burbot	2	<0.1
	Mountain whitefish	1,617	36.7
	Rainbow trout	92	2.1
	Subtotal	*1,913*	*43.5*
Suckers	Largescale sucker	255	5.8
	Longnose sucker	820	18.6
	White sucker	5	0.1
	Subtotal	*1,080*	*24.5*
Minnows/Trout-perch	Flathead chub	4	0.1
	Lake chub	136	3.1
	Longnose dace	197	4.5
	Northern pikeminnow	78	1.8
	Redside shiner	734	16.7
	Trout-perch	5	0.1
	Subtotal	*1,154*	*26.2*
Sculpins	Prickly sculpin	1	<0.1
	Slimy sculpin	253	5.7
	Subtotal	*254*	*5.8*
Total		**4,401**	**100**

The sculpin group accounted for 5.8% of the total sample. Of the two species recorded, slimy sculpin numerically dominated (5.7%), while prickly sculpin was scarce (n = 1).

3.2.3.2 Species Diversity and Distribution

Of the 16 fish species recorded on the Halfway River, no more than 13 species were located in any one zone or section (Table 3.10). The uppermost sections (1 and 2) of Zone 1 contained nine species of fish. Species diversity was slightly higher in Section 6 and Sections 8 to 10 (12 species). Nine species were widely distributed and were recorded in most sections. These included Arctic grayling, bull trout, mountain whitefish, rainbow trout, longnose sucker, lake chub, longnose dace, redside shiner, and slimy sculpin. Three species occurred primarily in the lower portion of the study area. These included largescale sucker, white sucker, and northern pikeminnow. The four remaining species were scarce and occurred in no more than two sections (burbot, flathead chub, trout-perch, and prickly sculpin).

Table 3.10 Fish species distribution on the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Group	**Species**	**Zone and Section**									
		1		**2**					**3**		**4**
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Sportfish	Arctic grayling	x	x	x	x	x	x	x	x	x	
	Bull trout	x	x	x	x	x	x	x	x	x	x
	Burbot			x	x		x				
	Mountain whitefish	x	x	x	x	x	x	x	x	x	x
	Rainbow trout	x	x	x	x	x	x	x		x	x
Suckers	Largescale sucker				x	x	x	x	x	x	x
	Longnose sucker	x	x	x	x	x	x	x	x	x	x
	White sucker						x		x	x	x
Minnows/ Trout-perch	Flathead chub									x	
	Lake chub	x	x	x	x	x	x	x	x	x	x
	Longnose dace	x	x	x	x	x	x	x	x	x	x
	Northern pikeminnow							x	x	x	x
	Reside shiner	x	x	x	x	x	x	x	x	x	x
	Trout-perch								x		
Sculpins	Prickly sculpin										x
	Slimy sculpin	x	x	x	x	x	x	x	x	x	x
No. of Species per	Section	***9***	***9***	***10***	***11***	***10***	***12***	***11***	***12***	***13***	***12***
	Zone	***9***		***12***					***13***		***12***

3.2.3.3 Catch Rates

The Halfway River survey targeted small fish ≤ 200 mm length. This section focuses on catch rates of selected species for this size range; all catch rate data are presented in Appendices E1 to E3. Catch rates generated using the three fish capture methods varied according to fish group. Species in the sportfish and sucker groups were most frequently encountered and catch rates were highest using boat electrofisher and backpack electrofisher (Figure 3.14). Species in these groups were rarely captured using beach seines.

Species in the minnow and sculpin groups were recorded using all three fish capture methods; however, the majority of species were most frequently encountered and exhibited highest catch rates using backpack electrofisher followed by boat electrofisher (Figure 3.15). Similar to the results for the sportfish and sucker groups, catch rates of most species in the minnow and sculpin groups were lowest using a beach seine.

Sportfish

Arctic grayling mean catch rates per section in the boat electrofisher catch varied from 0.0 fish/km to 4.98 fish/km. There was a clear spatial trend in catch rates. Arctic grayling catch rates were highest in the upstream sections and lowest in the downstream sections. Catch rates declined sharply after Section 6, which was just upstream of the Cameron River confluence. Backpack electrofisher catch rates were highly variable, but fish were most often encountered in the upstream sections. The highest backpack electrofisher catch rate was 11.0 fish/100 m, which was recorded at the mouth of Grayling Creek.

Bull trout catch rates were lower than Arctic grayling catch rates and this species was recorded primarily with the boat electrofisher. Bull trout catch rates ranged from 0.66 fish/km to 2.52 fish/km. Bull trout also exhibited a downward trend in catch rates from upstream to downstream; however, unlike Arctic grayling, bull trout catch rates were highest in Sections 3 and 4. Also bull trout catch rates did not strongly decline until Section 10.

Mountain whitefish were encountered primarily with the boat electrofisher and backpack electrofisher. Mean catch rates ranged from 5.23 fish/km to 52.90 fish/km using the boat electrofisher and 0.67 fish/100 m to 9.62 fish/100 m using the backpack electrofisher. Boat electrofisher mean catch rates were high in most sections, except Section 10 (≥ 11.07 fish/km). Mountain whitefish catch rates also varied spatially. Catch rates were highest in Sections 1 to 3, intermediate in Sections 4 to 6, and low in Sections 7 to 9, and lowest in Section 10.

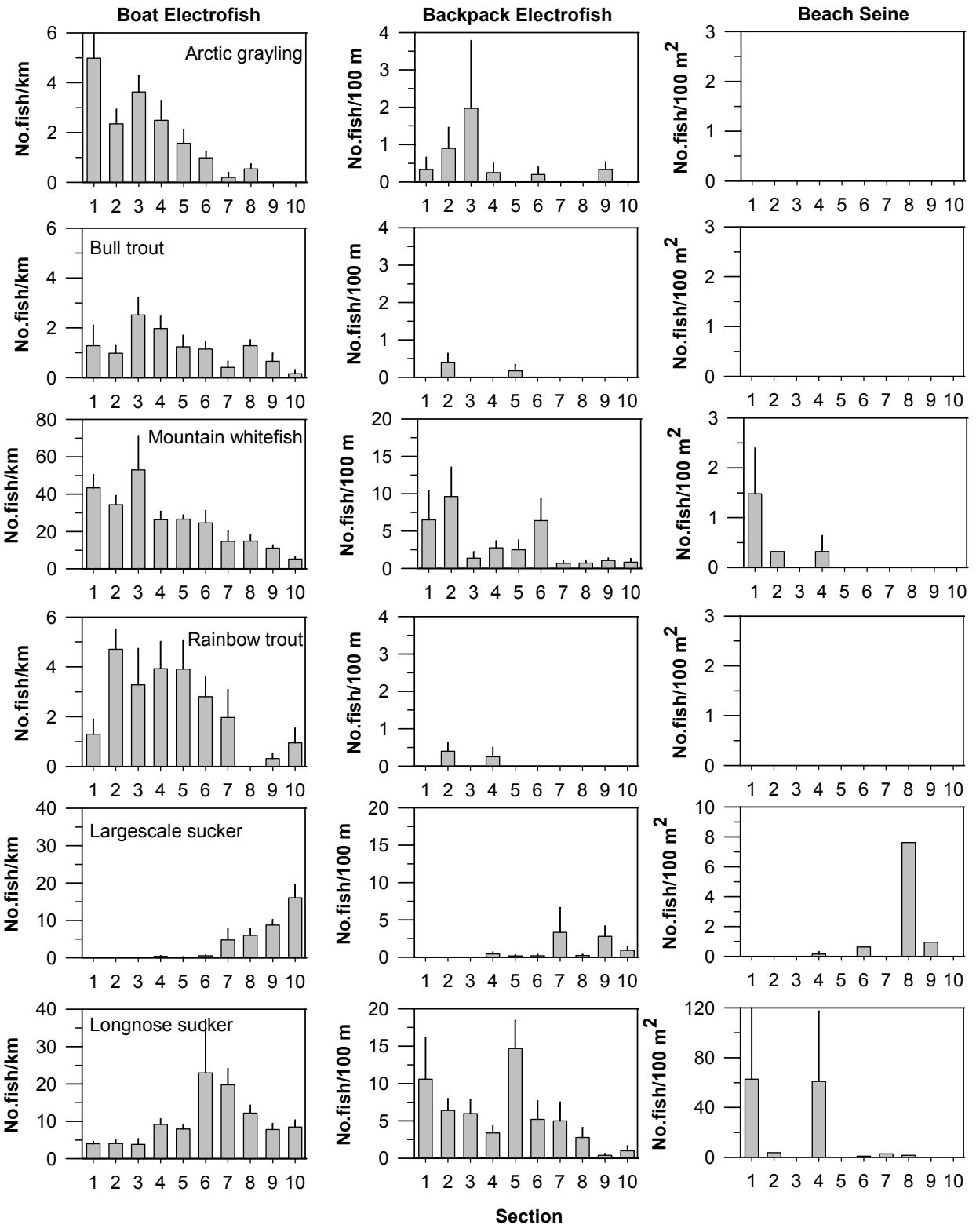

Figure 3.14 Catch rates (mean ± SE) of young (≤ 200 mm length) large-fish species in sampled sections on the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Catch rates of rainbow trout were generally the second highest in the sportfish group in most sections. Rainbow trout were primarily recorded in the boat electrofisher catch. Mean catch rates in sections that contained fish ranged from 0.32 fish/km to 4.71 fish/km. Rainbow trout catch rates exhibited a truncated distribution. Catch rates were high in Sections 2 to 7, but catch rates of this species were very low in the uppermost Section 1 and in the lowermost Sections 8 to 10. The low catch rate of rainbow trout in Section 1 was unexpected because it contained habitats similar to other upstream sections.

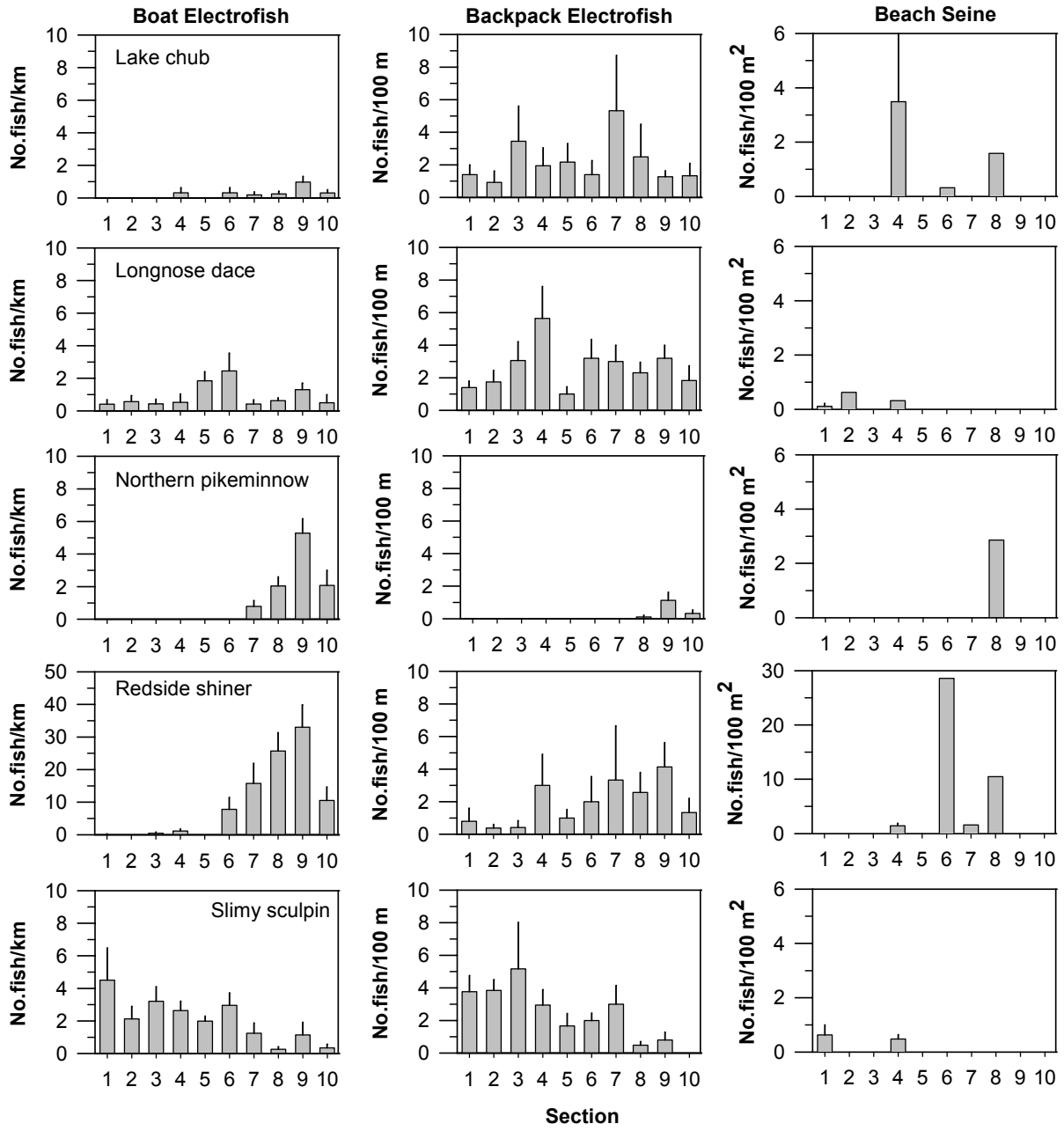

Figure 3.15 Catch rates (mean ± SE) of small-fish species in sampled sections on the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Suckers

Largescale suckers were largely restricted to downstream sections of the study area. They were recorded as far upstream as Section 4, but catch rates were high only from Section 7 downstream to Section 10. In these sections, mean boat electrofisher catch rates ranged from 4.73 fish/km to 16.01 fish/km and mean backpack electrofisher catch rates ranged from 0.24 fish/100 m to 3.33 fish/100 m. Largescale suckers were also in the beach seine catch -- the highest recorded mean value was 7.62 fish/100 m^2 in Section 8. Largescale sucker boat elctrofisher catch rates exhibited a spatial pattern. Catch rates were lowest in Section 7 and highest in Section 10.

Longnose suckers catch rates were second only to mountain whitefish and this species was recorded in all sections. Mean catch rates ranged from 3.82 fish/km to 22.94 fish/km in the boat electrofisher catch and 0.42 fish/100 m to 14.67 fish/100 m in the backpack electrofisher catch. Longnose suckers also were encountered using beach seine, although the catch was highly variable (range from 0.00 fish/100 m^2 to 62.75 fish/100 m^2). There was no consistent spatial pattern in longnose sucker catch rates. Peak boat electrofisher catch rates occurred in Sections 6 and 7, while peak backpack electrofisher catch rates occurred in Sections 1 and 5.

Minnows and Sculpins

Lake chub, longnose dace, and redside shiner exhibited the highest catch rates and were widespread species in the minnow group, while in the sculpin group slimy sculpin exhibited the highest catch rates and were widespread. The pattern of species catch rate varied by method. In the backpack electrofisher catch, there was no strong pattern for lake chub, longnose dace, and redside shiner. Boat electrofisher catch rates for redside shiner and northern pike minnow increased from Section 6 to Section 9, but catch rates of both species declined in Section 10. Slimy sculpin catch rates did exhibit a consistent trend in either the boat electrofisher and backpack electrofisher catch, but catch rates tended to decline from upstream to downstream.

3.2.3.4 Distribution of Age 0 Sportfish

Young Arctic grayling, bull trout, mountain whitefish, and rainbow trout were an important component of the catch. However, no young-of-the-year (Age 0) rainbow trout and bull trout were encountered in the Halfway River during the survey (Table 3.11, Figure 3.16, Appendix E). This is of interest because it suggested that early rearing by bull trout and rainbow trout occurred in Halfway River tributaries and not in the mainstem Halfway River.

Table 3.11 Summary[a] of Age 0 sportfish frequency and number encountered on the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Species	Zone	Sections with Fish	No. Sites with Fish		Number of Fish per Site	
			No.	Percent	Mean	Range
Arctic grayling	1	1, 2	7	26.9	1.4	1 – 3
	2	3, 4, 5, 6,	5	9.1	1.0	1 – 1
	3	8, 9	2	7.1	1.0	1 – 1
	4		0			
Bull trout	1		0			
	2		0			
	3		0			
	4		0			
Mountain whitefish	1	1, 2	23	88.5	11.4	1 – 35
	2	3, 4, 5, 6, 7	44	80.0	8.2	1 – 27
	3	8, 9	22	78.6	4.1	1 – 12
	4	10	8	66.7	2.4	1 – 8
Rainbow trout	1		0			
	2		0			
	3		0			
	4		0			

[a] Does not include data collected from tributary sites.

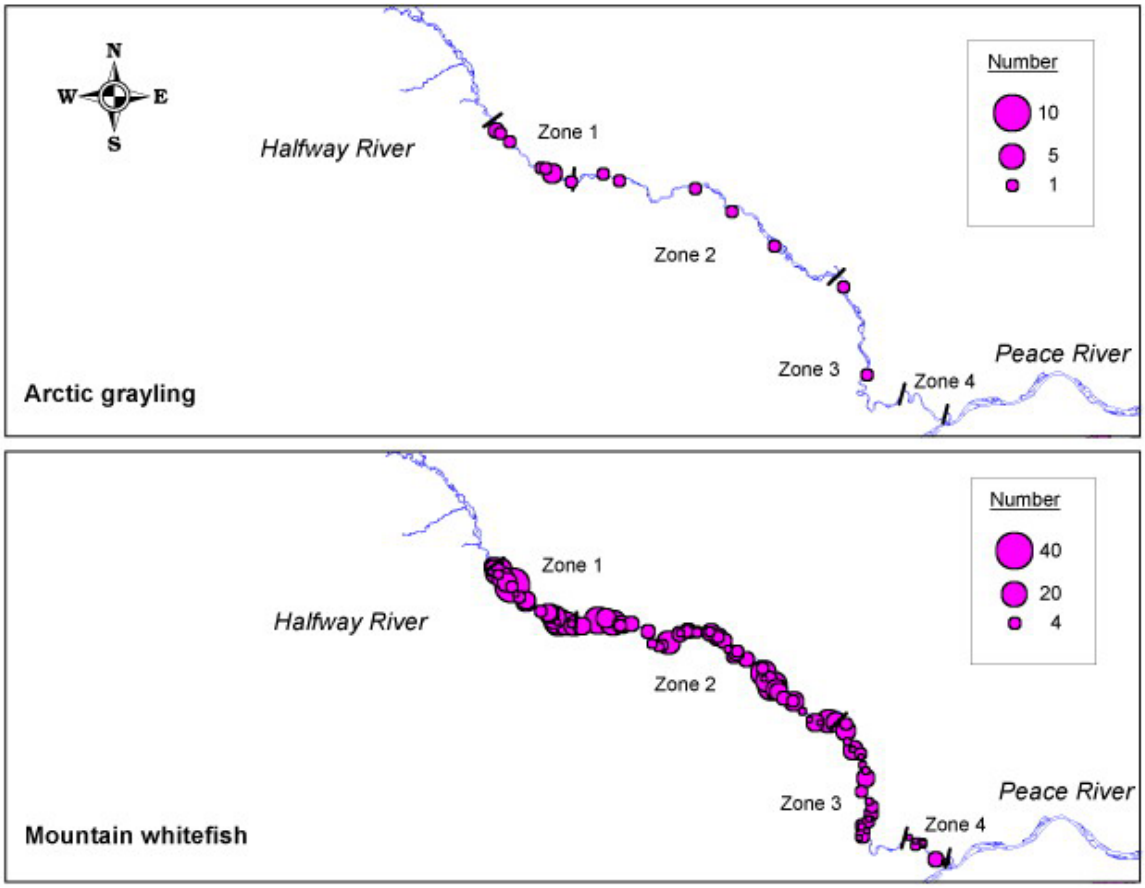

Figure 3.16 Distribution and number per site of Age 0 sportfish at sampled sites on the Halfway River, Halfway River and Moberly River summer fish survey 2009.

Age 0 Arctic grayling were located in all sections of Zone 1 (1 and 2) in most sections of Zone 2 (present in 3 to 6, absent in 7), and in both sections of Zone 3 (8 and 9). Age 0 Arctic grayling were not encountered in Zone 4. The occurrence of Age 0 Arctic grayling at sampled sites declined from a high 26.9% in Zone 1 to a low of 7.4% of sampled sites in Zone 3. The number of Age 0 Arctic grayling per site was low. Mean number of fish were ≤ 1.4 fish per site and the maximum number recorded was 3 fish per site.

Age 0 mountain whitefish were widespread in the study area. They were recorded in all sampled sections in all zones and occurred at a high percentage of sites. Percent occurrence was highest in Zone 1 (88.5%) and lowest in Zone 4 (66.7%) The number of Age 0 mountain whitefish per site was high, but the number of fish per site declined from upstream to downstream. The mean values ranged from 11.4 fish per site (Zone 1) to 2.4 fish per site (Zone 4). The maximum recorded was 35 fish per site.

3.2.3.5 Biological Characteristics

A wide size range of fish was recorded during the Halfway River fish survey (Table 3.12, Figure 3.17, Appendix F1). Size distributions of most sportfish and all sucker species were dominated by smaller, younger fish. Age 0 and Age 1 classes (based on modal peaks) were well represented in species such as Arctic grayling, mountain whitefish, longnose sucker, and largescale sucker. These two age classes were numerically dominant.

Table 3.12 Length characteristics of fish species recorded on the Halfway River, Site C large tributary summer fish study 2009 (all methods combined).

Group	Species	No.	Median Length (mm)	Range
Sportfish	Arctic grayling	129	135	39 – 231
	Bull trout	73	229	138 – 780
	Burbot	2	495	493 – 497
	Mountain whitefish	1,617	110	31 – 361
	Rainbow trout	92	153	101 – 273
Suckers	Largescale sucker	255	100	25 – 355
	Longnose sucker	820	108	10 – 265
	White sucker	5	103	85 – 155
Minnows/ Trout-perch	Flathead chub	4	120	88 – 124
	Lake chub	136	70	29 – 108
	Longnose dace	197	58	18 – 108
	Northern pikeminnow	78	101	24 – 395
	Redside shiner	734	81	21 – 130
	Trout-perch	5	32	20 – 42
Sculpins	Prickly sculpin	1	84	
	Slimy sculpin	253	69	17 – 125

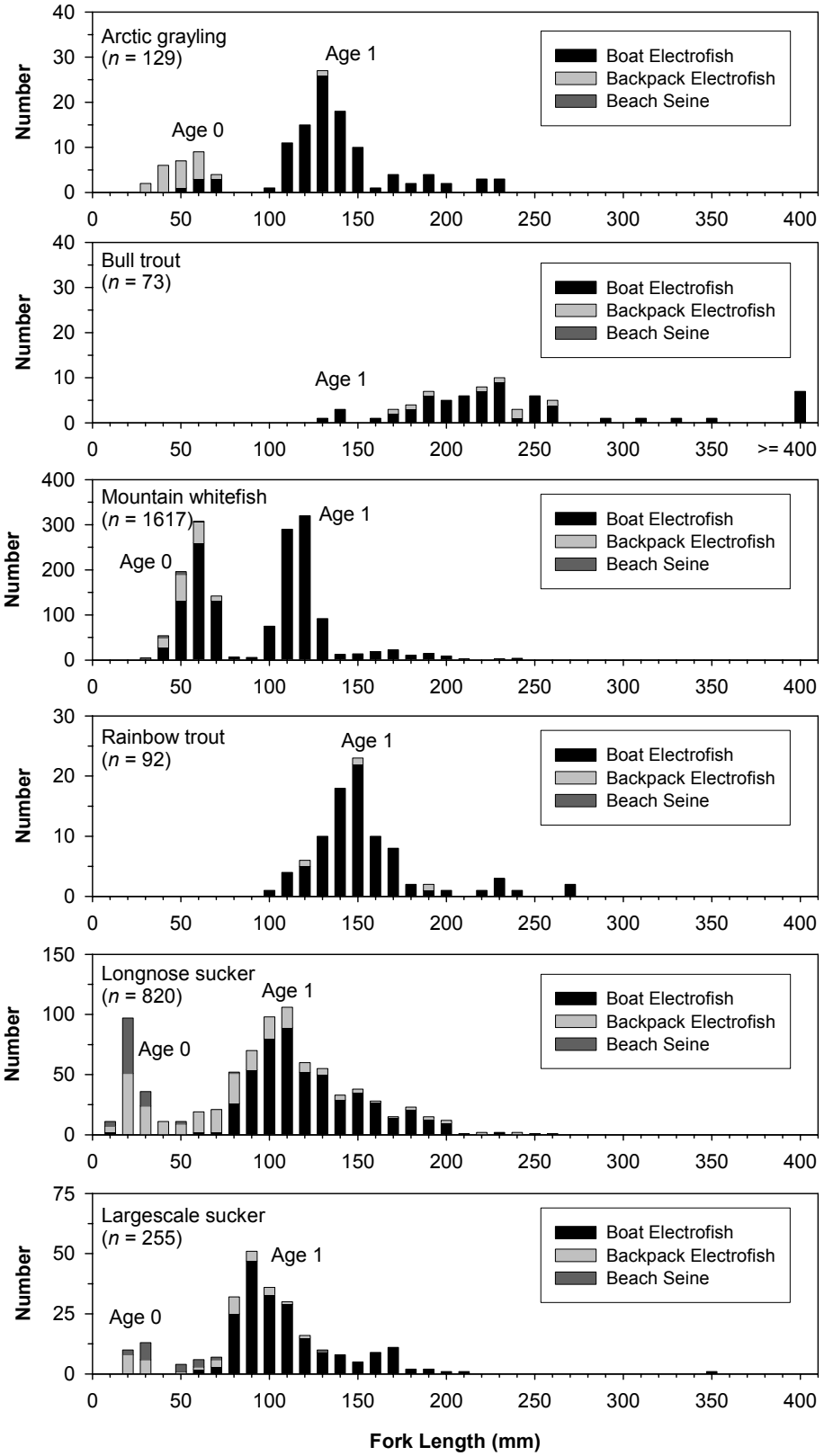

Figure 3.17 Size distribution and age of selected large-fish species sampled on the Halfway River, Site C large tributary summer fish survey 2009 (all methods and sample areas combined).

Age 0 fish were present in the rainbow trout sample, but Age 1 fish dominated. In the bull trout sample, Age 0 fish were absent and Age 1 fish were scarce. The size distribution indicated that the sample consisted primarily of subadults (Age 3 and 4); however, age data from Halfway River fish were not available to confirm this.

Larger (> 200 mm length), presumably older fish were not well represented in samples of suckers and most sportfish species. The only exception was the bull trout sample, which contained a substantial component of larger fish. The results are an artifact of the survey methods, which targeted small fish (≤ 200 mm length). Field observations indicated that numerous large fish were present and not collected; therefore, adult fish were represented in the sample.

4.0 DISCUSSION

4.1 MOBERLY RIVER

4.1.1 Environmental Characteristics

General Water Quality

Water quality parameters measured during the survey were similar to results of previous studies (AMEC and LGL 2006, Mainstream 2009c). Water pH indicated neutral to slightly alkaline conditions. Water conductivity increased slightly from upstream to downstream. High values recorded at some sites likely indicated groundwater inputs. Water clarity was moderate to high, but declined from upstream to downstream. This decline primarily was the result of sediment inputs of highly erodable materials from active valley wall slumps located in the lower section of the study area. During flows higher than those recorded during the fish survey, it is likely that water clarity would be affected by resuspension of the sand bed located in the upper section of the study area.

Water Temperature

Water temperatures exhibited a wide range and were elevated during much of the summer period. On several days, maximum temperatures were higher than the cold-water fish species critical tolerance threshold of 22^{o}C (Oliver and Fidler 2001). These elevated temperatures may explain the absence of bull trout and rainbow trout populations from the Moberly River, and the apparent low numbers of Arctic grayling recorded in this system during this and previous studies.

Daily water temperatures recorded at upper and lower stations, which were separated by a distance of 42 km, differed by less than 1^{o}C. At each station, water temperatures ranged by several degrees each day during most months. The temperature range was larger at the lower station.

Discharge

The Moberly River discharge in 2009 followed the historical seasonal pattern. A strong freshet was recorded during May and June followed by a rapid decrease to base flow conditions by late summer. The Moberly River also exhibited a flow pattern that reflected a rapid response to inputs from rainfall events.

4.1.2 Fish Habitat and Fish Community

Field observations in 2008 in the lower section of the Moberly River indicated the occurrence of a recent major flood event (Mainstream 2009c). A review of Water Survey of Canada (Station 07FB008) historical discharge data from 1980 to 2008 indicated that a major flood event occurred in June 2007. The peak flow at that time (121 m^3/s) was the second highest on record and represented 1.5 times the long term average for maximum flow. The flood event caused large scale bank erosion and removal of mature woody vegetation from the riparian zone. This resulted in deposition of large amounts of woody debris into the river channel and shifting of the river channel within the valley floor. These physical changes influenced fish habitats, which in turn influenced the Moberly River fish community.

Observations during the present investigation indicated that major disturbances were largely restricted to the lower 43 km section of river between the CNRL bridge and the Peace River. Upstream of this point the riparian vegetation was largely intact and most of the channel section was stable**.**

Zone 1

Zone 1 located in the upstream portion of the study area (Km 81 to Km 100), was characterized by a low gradient, meandering channel dominated by a sand bed. Short higher gradient sections characterized by riffle/runs and rock substrates also were present, but were infrequently encountered. A unique feature of Zone 1 was the presence of numerous protected side channels containing emergent and submergent vegetation. The fish community recorded in this zone reflected the available habitat.

Species that do well in slow-water habitats, such as northern pike, lake whitefish, white sucker, redside shiner, and trout-perch were well represented and some (i.e., lake whitefish) were only recorded in Zone 1. The numbers of fish encountered and size structure of the catch suggested that self-sustaining populations of these species reside in Zone 1. Species such as Arctic grayling, mountain whitefish, longnose sucker, longnose dace, and slimy sculpin, which prefer higher water velocities and rock substrates, were present in Zone 1, but occurred in the short riffle/run sections.

Zone 2

Zone 2 located between Km 43 and Km 81 differed from Zone 1. The irregular channel of Zone 2 traversed a valley floor dominated by mature forest. This section exhibited a higher gradient and contained extended runs interspersed with short riffle/rapid sections. Gravels and sands were the dominant bed material in the run sections, whereas cobbles and boulders were prominent in the riffle/rapid sections. Fish habitats potentially used by fluvial species were widespread and abundant.

Many areas sampled within this zone could be characterized as high quality, spawning, rearing, feeding, and overwintering habitats.

The fish community in Zone 2 included fluvial species such as Arctic grayling, mountain whitefish, longnose sucker, longnose dace, and slimy sculpin. Other species such as northern pike and burbot were also widespread and catch rates were relatively high. The presence of Age 0 fish indicated that Zone 2 likely was an important spawning and rearing area for sportfish species. Of note was the scarcity of Age 0 Arctic grayling and the complete absence of adult Arctic grayling in this zone, despite the apparent abundance of high quality habitat. These findings suggest that factors other than physical characteristics limit the Arctic grayling population in Zone 2. High water temperatures recorded during the summer period may be an important limiting factor.

Of equal interest was the presence of young burbot in Zone 2. Age 0 and Age 1 fish were widespread and were consistently recorded in preferred habitats (i.e., riffle/rapids that contained an abundance of physical cover). Moberly Lake located upstream of the study area supports a burbot population, but spawning areas used by this population are not known (Brendan Anderson, Peace Region Fisheries Biologist, BC Ministry of Environment, pers. comm.). The presence of Age 0 burbot in Zone 2 suggests that either Moberly Lake burbot use Zone 2 for spawning, or recently emerged pelagic burbot drift downstream from spawning sites near the outlet of Moberly Lake to take up residence in preferred habitats located in Zone 2.

Zone 3

Zone 3 (Km 10 to Km 43) represents a distinct transition from a stable singular channel in Zone 2, to a higher gradient, laterally unstable, braided channel located within an incised valley. Unlike Zones 1 and 2 extensive sections of the Moberly River in Zone 3 were unstable, exhibited large scale bank erosion, and contained numerous secondary channels. Woody debris accumulations were common in Zone 3. Bed material also changed to small and medium sized cobble with boulders located in high velocity zones. These features became progressively more pronounced from upstream to downstream. One other feature that occurred in the lower section of Zone 3, but was not recorded in Zones 1 and 2, was active valley wall slumping into the channel. The highly erodable material of these slumps likely introduces sands and silts into the river during high flows.

The physical characteristics of Zone 3 generated a large amount of habitat complexity and many of the sampled habitats were considered good quality.

The fish community recorded in Zone 3 was generally similar to that recorded in Zone 2, but there were some differences. Northern pike, burbot, longnose dace, and redside shiner catch rates decreased in Zone 3, while Arctic grayling, mountain whitefish, and longnose sucker catch rates increased. Other species that were not numerically important in the upstream zones became more prominent. These were largescale sucker, northern pikeminnow, and lake chub. The shift in fish community structure likely reflected changes in fish habitat, as well as the influence of Peace River fish populations.

There is evidence that Peace River populations of Arctic grayling, mountain whitefish, longnose sucker, largescale sucker, and northern pikeminnow use the Moberly River for spawning and rearing (AMEC and LGL 2006, 2007, Mainstream 2009b, c). The distribution and abundance of good quality rearing habitats in Zone 3 was considerably less than that observed in Zone 2; however, catch rates of species such as Arctic grayling and mountain whitefish, which included Age 0 fish, were higher in Zone 2 compared to Zone 3. These findings provided indirect evidence supporting the assumption that the Moberly River is used by Peace River fish populations.

Zone 4

Zone 4 was a short section between Km 10 and the Peace River, which included the inundation level of the proposed Site C Reservoir. Channel characteristics in this zone were similar to Zone 3. The river channel was unstable, there was large scale bank erosion, and woody debris accumulations were common. Valley wall slumps also were present. At the time of the survey, reduction in water clarity suggests that valley wall slumps in Zone 4 can introduce fine sediments into the river channel.

Fish habitats and the fish community in Zone 4 were similar to Zone 3. There was a decrease in catch rates of most species, which included Arctic grayling, mountain whitefish, burbot and longnose sucker. The exceptions were increased numbers of largescale sucker, northern pikeminnow, and redside shiner. The results may reflect a reduction in sportfish use of this section of the Moberly River. Or, they may reflect reduced capture efficiency of fish collection methods caused by low water clarity. Although catch rates of sportfish were lower, the frequency of occurrence of Age 0 fish did not decline in Zone 4.

4.1.3 Comparisons to Previous Investigations

The results of the present study are consistent with findings by other investigations of the Moberly River. Historical work in 1989 by ARL (1991a) included the portion of the Moberly River surveyed during the present study. The authors indicated that the Moberly River contained several discrete reaches, which corresponded to Zones 1 to 3 of the present study (Zone 4 was not delineated by ARL [1991a]). In 1989,

the lower portion of the Moberly River was described as unstable, braided, exhibiting bank erosion and debris accumulations. Based on this information, the lower section of the Moberly River appears to be inherently unstable, at least for the last 20 years. The characteristics of the upper Moberly River documented by ARL (1991a) were consistent with findings by the present study.

Work by ARL (1991a) in 1989 and ARL (1991b) recorded 14 species in the Moberly River. The only difference in species composition between the studies was the presence of peamouth (*Mylocheilus caurinus*) and the absence of bull trout and trout-perch in 1989. The sportfish species distribution and catch rates were similar between studies. Northern pike and lake whitefish were most often encountered in the upstream section. Mountain whitefish were the most numerous and widespread species. Arctic grayling and a few small burbot were recorded in all areas except the extreme upstream portion. Non-sportfish results were also consistent between studies. Suckers and northern pikeminnow were most abundant in the downstream section of the Moberly River.

The Arctic grayling and mountain whitefish encountered during the 1989 survey included Age 0 and Age 1 fish. Based on this information, ARL (1991a, b) suggested that the Moberly River could be used for spawning and rearing by Peace River populations.

More recent investigations were restricted to the lowermost 20 km section of the Moberly River (AMEC and LGL 2006, 2007; Mainstream 2009c). A review of this information in Mainstream (2009c) and the results of the Mainstream (2009c) study were consistent with the findings of the present investigation and those of ARL (1991a, b).

4.2 HALFWAY RIVER

4.2.1 Environmental Characteristics

General Water Quality

Water quality parameters measured during the survey were similar to results of other recent studies (AMEC and LGL 2006, Mainstream 2009a, 2009c). Water pH was similar among sampled sections within the study area and indicated neutral to slightly alkaline conditions. Water conductivity also was similar among sampled sections. Water clarity declined from upstream to downstream. This decline primarily was a result of sediment inputs from tributaries such as the Cameron River and highly erodable bank materials from active valley wall slumps located in the lower section of the study area. It should be noted that pH, conductivity, and water clarity were largely influenced by the low flow conditions at the time of the survey. As such, they do not reflect water quality conditions throughout the entire year.

Water Temperature

Water temperatures exhibited a wide range and were elevated during a portion of the sample period. Water temperatures recorded at upper and lower stations differed by several degrees. The upper station was consistently cooler than the lower station. Maximum temperatures recorded in 2009 exceeded the cold-water fish species critical tolerance threshold of 22^{o}C during five consecutive days – exceedence occurred only at the lower station. Water temperatures recorded each day ranged by several degrees; however, water temperatures at the upper station exhibited a larger range than the lower station. The results recorded at the lower station during the present study were similar to results recorded in 2008 (Mainstream 2009c). The one difference was cooler water temperatures in 2008. The maximum recorded value was 18.9^{o}C.

Discharge

The Halfway River discharge in 2009 followed the historical seasonal pattern. Discharge increased during May and June followed by a rapid decline until mid July. Additional peaks occurred in late July and early August in response to rain events, after which discharge continuously declined until November.

4.2.2 Fish Habitat and Fish Community

The Halfway River is a much larger system than the Moberly River. Mean daily discharge at the time of the survey was 60.5 m^3/s in the Halfway River compared to 11.3 m^3/s in the Moberly River. Unlike the Moberly River, there was no evidence to indicate the occurrence of a recent flood event on the Halfway River. A review of historical discharge data from 1984 to 2008 from Water Survey of Canada (Station 07FB006) indicated that the last major flood event occurred in June 2001. The peak flow in 2007 (726 m^3/s) was similar to the long term average of 687 m^3/s.

The difference in river size, as well as water temperature, channel form, and bed material type resulted in differences in fish habitat and fish community characteristics between the Moberly River and the Halfway River.

Zone 1

Zone 1 (Km 110 to Km 92) included the section of river from the confluences of the Chowade River and the Graham River. Zone 1 represented a smaller watercourse than the other zones because it was located upstream of the Graham River. Portions of the channel in Zone 1 were laterally unstable and the bed material was dominated by clean cobbles and gravels. This section also contained several small named and unnamed tributaries. The dominant habitats in this zone were long runs interspersed with riffles,

although there were numerous side channels that provided protected areas for fish. This zone had the potential to provide high quality habitats for species such as Arctic grayling, bull trout, mountain whitefish, and rainbow trout.

The fish community in Zone 1 was dominated by cold water species. Arctic grayling, bull trout, and rainbow trout were well represented, as were slimy sculpins. Other species such as longnose suckers, longnose dace, and redside shiner were present, but catch rates were not high. Age 0 Arctic grayling and mountain whitefish were most often encountered in Zone 1. Although rainbow trout and bull trout were numerically important in Zone 1, and other zones of the study area, Age 0 fish of these species were not recorded. These results provide evidence that rainbow trout and bull trout spawn and rear in tributaries to the Halfway River, rather than in the mainstem Halfway River.

Zone 2

Zone 2 was located from Km 92 to Km 43, between the Graham River confluence and the Cameron River confluence. With the exception of being a larger system (due to inputs from the Graham River) and the presence of a short section dominated by bedrock sills immediately downstream of the Graham River, Zone 2 physical characteristics and fish habitats were similar to those recorded in Zone 1. This zone contained an abundance of rearing, feeding, and overwintering habitats for fish species potentially found in the Halfway River.

The fish community reflected the habitat conditions in Zone 2. Catch rates of coldwater sportfish, which included Arctic grayling, bull trout, mountain whitefish, and rainbow trout, were highest in this zone. Catch rates of other species such as longnose sucker, longnose dace, and redside shiner also increased. The unique species burbot was recorded only in Zone 2. Similar to Zone 1, Age 0 Arctic grayling and mountain whitefish were present, but the number of fish per site decreased.

Zone 3

The upstream boundary of Zone 3 was the confluence of the Cameron River, which represented a major reach break. The Halfway River in this section (Km 43 to Km 14) exhibited characteristics of a system affected by sediment inputs. The section receives turbid water from the Cameron River. It is largely confined by high valley walls and the river frequently abuts the valley walls resulting in erosion causing introduction of sediments. There also is a large active slump at Km 17 that contributes sediments. Unlike upstream zones, no permanent tributaries entered the Halfway River and side channels were much less abundant. The bed material in Zone 3 consisted of cobbles, gravels, interspersed with sands and silts. The material typically was highly embedded in low velocity areas.

The fish community in Zone 3 represented a transition from a clear, cold-water fish community to a turbid, cool-water fish community. Arctic grayling, bull trout, mountain whitefish, and rainbow trout catch rates were reduced compared to upstream zones, while catch rates of species such as redside shiner increased. Northern pikeminnow and largescale sucker, two species not recorded in upstream zones, were prominent in Zone 3. Despite the change in fish community structure Age 0 Arctic grayling and mountain whitefish were present, which suggested that the area still provided rearing habitat.

Zone 4

Zone 4 (Km 14 to Km 0) represents the potential area of inundation by the proposed Site C Reservoir. The physical characteristics of Zone 4 were very similar to Zone 3; however, this section of river contained extended flats interspersed by short riffle/rapid sections containing boulders. Zone 4 exhibited similar habitat characteristics as Zone 3, but the effects of sedimentation on rock substrates were greater.

The fish community also was similar to Zone 3; however, Arctic grayling were not recorded. Bull trout and rainbow trout were scarce, and mountain whitefish were the lowest recorded during the study. In contrast, catch rates of species such as largescale sucker were high. Age 0 mountain whitefish were present, but the number of fish per site was much lower compared to upstream zones.

4.2.3 Comparisons to Previous Investigations

In 1989, ARL (1991a) completed a synoptic survey of Halfway River fish habitats. Their Reach 1 to 4 designations coincided with Zones 1 to 3 of the present study. Zone 4 was not delineated by ARL (1991a) and their Reach 3 was included in Zone 2.

ARL (1991a) did not investigate fish populations in the Halfway River. Pattenden *et al.* (1990) completed a synoptic level fisheries investigation of the lower 42 km of river. As such, there are no detailed historical data that describes fish populations in the mainstem Halfway River. ARL (1991a, b) completed inventories of several tributaries to the Halfway River, several of which entered the Halfway River in Zones 1 and 2 of the present study. The authors concluded that many of these tributaries were suitable as sportfish habitat; particularly Arctic grayling, bull trout, and rainbow trout. It is not known whether these tributaries are used as spawning and rearing habitat by Peace River populations, but they are potential sources of recruitment to the Halfway River and possibly the Peace River. Work by the BC Ministry of Environment and others have established that two tributaries to the Halfway River, the Chowade River, and Cypress Creek, are important spawning areas for the Peace River bull trout population (Diversified 2009).

The results of the present study were consistent with findings by AMEC and LGL (2006) and Mainstream (2009a, c), which investigated fish habitat and fish communities in the lower section of the Halfway River (Zones 3 and 4 of the present study). Because these investigations were restricted to the lower section of the Halfway River they are not applicable to the findings made for Zones 1 and 2.

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5.0 CONCLUSIONS

The present study described habitat characteristics and fish communities of two major tributaries to the Peace River during summer – the Moberly River and Halfway River. The primary focus of the study was young-of-the-year and juvenile sportfish. The investigation documented environmental conditions (general water quality, water temperature, and discharge), measured physical characteristics of sampled habitats, and described the small fish community (composition, distribution, and catch rate). The main goal of the study was to improve our understanding of the fish communities in the upstream portions of each river, which were areas that have not been intensively studied to date.

Environmental and physical characteristics of the tributaries influenced the availability and quality of fish habitats, and likely were factors that controlled fish species diversity, distribution, and catch rates recorded in each study area. The environmental and physical characteristics of the Moberly River and Halfway River, within the areas investigated, were different as were the fish communities.

5.1 MOBERLY RIVER

The Moberly River is a relatively small system in terms of discharge, is subjected to elevated water temperatures during summer, receives its source water from Moberly Lake, and has no permanent tributaries. The Moberly River in the study area was divided into four zones that represent two major sections, which exhibit different physical characteristics. The upper section is a low to moderate gradient, meandering channel that traverses mature forest. Fish habitats are dominated by runs interspersed with short riffle/rapid sections. Fish habitats in this section provide spawning, rearing, feeding, and overwintering areas for fish and portions of this section contain an abundance of high quality rearing areas. The lower section is primarily a higher gradient, largely unstable braided channel that is adjusting to a recent flood event that caused extensive bank erosion and damage to the riparian zone. Several active valley wall slumps into the channel in this section introduce sediments into the system. Fish habitats are dominated by high velocity runs and riffles. Rock substrates in this section are embedded with fines in low velocity areas.

The Moberly River supports a diverse fish community that includes sportfish, suckers, minnows, and sculpins. Young-of-the-year and juvenile sportfish recorded during the study included Arctic grayling, burbot, mountain whitefish, and northern pike. Most sportfish species were widely distributed, but the middle portion of the study area contained the highest catch rates of fish. Adults of most large-fish species were recorded during the study suggesting the presence of resident fish populations. There also was

evidence that populations from outside of the Moberly River were using the study area for spawning and rearing. These included burbot from Moberly Lake, as well as Arctic grayling and mountain whitefish from the Peace River. Other species populations potentially originating from the Peace River included longnose sucker, largescale sucker, and northern pikeminnow.

Notable findings of the Moberly River study were as follows:

1. Young mountain whitefish were the most abundant fish followed by young longnose sucker.
2. Young Arctic grayling were present, but were not abundant.
3. Age 0 Arctic grayling, burbot, mountain whitefish, and northern pike were present indicating use of the system for spawning and early rearing.
4. The study area was not used by bull trout and rainbow trout for spawning and early rearing.
5. Substantial numbers of burbot were recorded suggesting that the system is important for this species.
6. Adult fish of all sportfish and sucker species were recorded suggesting that the study area supports resident large-fish populations.

5.2 HALFWAY RIVER

The Halfway River is a much larger system in terms of discharge than the Moberly River. Like the Moberly River, it is subjected to elevated water temperatures during summer, but primarily in the lower section. Unlike the Moberly River, there are several permanent tributaries that enter the Halfway River in the upstream portion of the study area.

The Halfway River in the study area was divided into 4 zones. In general, the river exhibited constant gradient, but the physical characteristics changed. The study area can be separated into two major sections, with the break located at the confluence of the Cameron River. The Halfway River upstream of the Cameron River was a relatively stable channel containing clean rock substrates that supported a cold, clear-water fish community. The Halfway River downstream of the Cameron River was largely confined by the steep valley walls and was influenced by sediment inputs from the Cameron River, bank erosion, and some active valley wall slumping. This section represented a fish community in transition to cool, turbid-water fish populations.

The Halfway River supports a diverse fish community that includes sportfish, suckers, minnows, and sculpins. Young sportfish recorded during the study included Arctic grayling, bull trout, mountain whitefish, and rainbow trout. Young mountain whitefish were widespread; however, young Arctic grayling, bull trout, and rainbow trout were found primarily upstream of the Cameron River confluence. Of these three species only Age 0 Arctic grayling were recorded in the mainstem. This provided strong

evidence that spawning and early rearing of bull trout and rainbow trout occurred in Halfway River tributaries. It is likely that this statement also applies to Arctic grayling.

Young mountain whitefish were prominent downstream of the Cameron River confluence, but other sportfish were not. The fish community structure shifted to suckers (longnose and largescale) and minnows (redside shiner and northern pikeminnow). There also was evidence that the fish community in the lower section could contain fish that were part of Peace River fish populations. Species populations potentially originating from the Peace River included longnose sucker, largescale sucker, and northern pikeminnow.

Notable findings of the Halfway River study were as follows:

1. Young mountain whitefish were the most numerous fish in the study area followed by young longnose sucker.
2. Young Arctic grayling, bull trout, and rainbow trout were most numerous and widespread upstream of the Cameron River confluence.
3. Age 0 bull trout and Age 0 rainbow trout were not recorded in the mainstem river indicating that Halfway River tributaries were used for spawning and rearing.
4. Sucker and minnow species were most prominent downstream of the Cameron River confluence.

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PLATES

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Plate 1 Zone 1. Flat habitat and sand bed material in main channel of Moberly River, 2009.

Plate 2 Zone 1. Side channel with submergent and emergent plants on the Moberly River, 2009.

Plate 3 Zone 2. Typical riffle/run habitat on the Moberly River, 2009.

Plate 4 Zone 2. Good quality rearing habitat on the Moberly River, 2009.

Plate 5 Zone 3. Example of bank erosion and unstable channel on the Moberly River, 2009.

Plate 6 Zone 3. Large woody debris and unstable channel on Moberly River, 2009.

Plate 7 Zone 4. Example of valley wall erosion on the Moberly River, 2009.

Plate 10 Zone 1. Side channel characteristics of the Halfway River 2009.

Plate 8 Zone 4. Example of abundant fines in secondary channel on Moberly River, 2009.

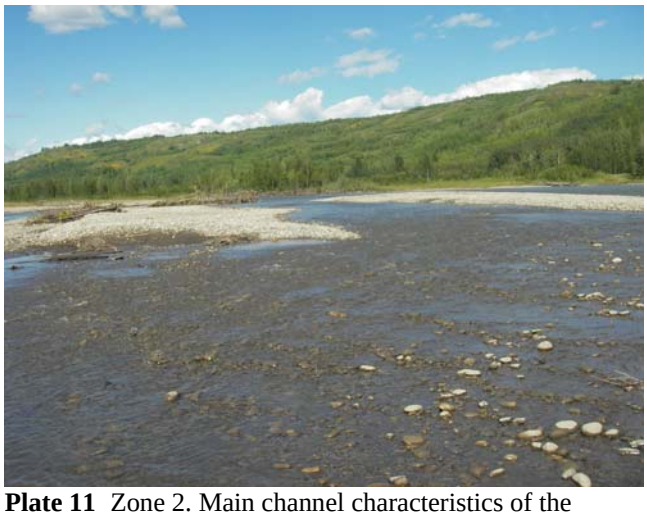

Plate 11 Zone 2. Main channel characteristics of the Halfway River 2009.

Plate 9 Zone 1. Predominance of clean cobbles and gravels on the Halfway River, 2009.

Plate 12 Zone 2, Typical wide riffle/rapid on Halfway River 2009**.**

Plate 13 **Zone 2**, good quality rearing habitat on Halfway River 2009.

Plate 14 **Zone 3**, high valley walls on Halfway River 2009.

Plate 15 **Zone 3**, Typical run habitat on Halfway River 2009.

Plate 16 **Zone 4**, Fine bed materials on Halfway River 2009.

Plate 17 **Zone 4**, Flat habitat with short Rapid habitat containing boulders on Halfway River 2009

Plate 18 **Zone 4**, Abundance of fine sediments in a low velocity area on Halfway River 2009.

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APPENDICES

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APPENDIX A
Site and Sample Data

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Appendix A Table A1. Sample site information (Nad 83, Zone 10), Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Method	Site	Easting	Northing	Upper Easting	Upper Northing	Lower Easting	Lower Northing
HALFWAY RIVER								
01								
	BACKPACK ELECTROFISH	HEF0101	536578	6270391				
	BACKPACK ELECTROFISH	HEF0102	536586	6270431				
	BACKPACK ELECTROFISH	HEF0103	537230	6269451				
	BACKPACK ELECTROFISH	HEF0104	538335	6268474				
	BACKPACK ELECTROFISH	HEF0105	538986	6267849				
	BEACH SEINE	HBS0101	537123	6270206				
	BEACH SEINE	HBS0102	538903	6267978				
	BEACH SEINE	HBS0103	540870	6266098				
	SMALL FISH BOAT ELECTROFISH	HSF0101	537211	6269851	536653	6270280	537211	6269851
	SMALL FISH BOAT ELECTROFISH	HSF0102	537742	6269052	537251	6269790	537742	6269052
	SMALL FISH BOAT ELECTROFISH	HSF0103	538291	6268412	537795	6268952	538291	6268412
	SMALL FISH BOAT ELECTROFISH	HSF0104	538961	6267982	538549	6268608	538961	6267982
	SMALL FISH BOAT ELECTROFISH	HSF0105	539485	6266898	539077	6267818	539485	6266898
	SMALL FISH BOAT ELECTROFISH	HSF0106	539947	6266476	539503	6266785	539947	6266476
	SMALL FISH BOAT ELECTROFISH	HSF0107	540759	6265884	540423	6266110	540759	6265884
02								
	BACKPACK ELECTROFISH	HEF0201	543082	6264530				
	BACKPACK ELECTROFISH	HEF0202	543706	6264439				
	BACKPACK ELECTROFISH	HEF0203	544510	6263809				
	BACKPACK ELECTROFISH	HEF0204	544807	6263300				
	BACKPACK ELECTROFISH	HEF0205	546759	6262964				
	BEACH SEINE	HBS0201	544923	6263160				
	SMALL FISH BOAT ELECTROFISH	HSF0201	542694	6264626	541797	6264493	542694	6264626
	SMALL FISH BOAT ELECTROFISH	HSF0202	543856	6264307	543081	6264593	543856	6264307
	SMALL FISH BOAT ELECTROFISH	HSF0203	545104	6263095	544464	6263772	545104	6263095
	SMALL FISH BOAT ELECTROFISH	HSF0204	546138	6262944	545245	6263110	546138	6262944
	SMALL FISH BOAT ELECTROFISH	HSF0205	547048	6262685	546262	6263011	547048	6262685
03								
	BACKPACK ELECTROFISH	HEF0301	549236	6263406				
	BACKPACK ELECTROFISH	HEF0302	551375	6263764				
	BACKPACK ELECTROFISH	HEF0303	553188	6262736				
	BACKPACK ELECTROFISH	HEF0304	553474	6262930				
	BACKPACK ELECTROFISH	HEF0305	556249	6261987				
	BACKPACK ELECTROFISH	HEF0306	556567	6261821				
	SMALL FISH BOAT ELECTROFISH	HSF0206	548135	6262658	547307	6262586	548135	6262658
	SMALL FISH BOAT ELECTROFISH	HSF0301	550242	6263341	549290	6263474	550242	6263341
	SMALL FISH BOAT ELECTROFISH	HSF0302	551249	6263719	550440	6263535	551249	6263719
	SMALL FISH BOAT ELECTROFISH	HSF0303	552248	6263101	551465	6263604	552248	6263101
	SMALL FISH BOAT ELECTROFISH	HSF0304	553365	6262828	552413	6263050	553365	6262828
	SMALL FISH BOAT ELECTROFISH	HSF0305	554662	6262938	553682	6262925	554662	6262938
	SMALL FISH BOAT ELECTROFISH	HSF0306	556804	6261915	555960	6262192	556804	6261915
04								
	BACKPACK ELECTROFISH	HEF0401	557687	6259766				
	BACKPACK ELECTROFISH	HEF0402	558627	6260106				
	BACKPACK ELECTROFISH	HEF0403	561900	6261932				
	BACKPACK ELECTROFISH	HEF0404	563272	6261789				
	BEACH SEINE	HBS0401	561046	6261727				
	BEACH SEINE	HBS0402	559876	6260401				
	SMALL FISH BOAT ELECTROFISH	HSF0401	557359	6260332	557079	6261222	557359	6260332
	SMALL FISH BOAT ELECTROFISH	HSF0402	558258	6259894	557490	6260122	558258	6259894
	SMALL FISH BOAT ELECTROFISH	HSF0403	559464	6260444	558661	6260169	559464	6260444
	SMALL FISH BOAT ELECTROFISH	HSF0404	561016	6261633	560302	6261320	561016	6261633
	SMALL FISH BOAT ELECTROFISH	HSF0405	562080	6262052	561120	6261729	562080	6262052
	SMALL FISH BOAT ELECTROFISH	HSF0406	563124	6261862	562252	6262017	563124	6261862

Appendix A Table A1. Sample site information (Nad 83, Zone 10), Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Method	Site	Easting	Northing	Upper Easting	Upper Northing	Lower Easting	Lower Northing
05								
	BACKPACK ELECTROFISH	HEF0501	564873	6261899				
	BACKPACK ELECTROFISH	HEF0502	564941	6261915				
	BACKPACK ELECTROFISH	HEF0503	565950	6261228				
	BACKPACK ELECTROFISH	HEF0504	568184	6258821				
	BACKPACK ELECTROFISH	HEF0505	568387	6259163				
	BACKPACK ELECTROFISH	HEF0506	570792	6258273				
	SMALL FISH BOAT ELECTROFISH	HSF0501	565080	6261802	564068	6261853	565080	6261802
	SMALL FISH BOAT ELECTROFISH	HSF0502	565937	6261213	565051	6261644	565937	6261213
	SMALL FISH BOAT ELECTROFISH	HSF0503	566845	6260696	566136	6261276	566845	6260696
	SMALL FISH BOAT ELECTROFISH	HSF0504	567292	6259636	566928	6260473	567292	6259636
	SMALL FISH BOAT ELECTROFISH	HSF0505	568117	6258743	567616	6259001	568117	6258743
	SMALL FISH BOAT ELECTROFISH	HSF0506	568487	6259312	568268	6258866	568487	6259312
	SMALL FISH BOAT ELECTROFISH	HSF0507	569734	6258300	569297	6259122	569734	6258300
06								
	BACKPACK ELECTROFISH	HEF0601	571773	6257089				
	BACKPACK ELECTROFISH	HEF0602	572054	6255717				
	BACKPACK ELECTROFISH	HEF0603	573694	6254229				
	BACKPACK ELECTROFISH	HEF0604	574201	6253232				
	BACKPACK ELECTROFISH	HEF0605	575881	6252737				
	BEACH SEINE	HBS0601	573106	6254612				
	SMALL FISH BOAT ELECTROFISH	HSF0601	571978	6256458	571639	6257262	571978	6256458
	SMALL FISH BOAT ELECTROFISH	HSF0602	572366	6255398	571858	6256204	572366	6255398
	SMALL FISH BOAT ELECTROFISH	HSF0603	573091	6254729	572386	6255371	573091	6254729
	SMALL FISH BOAT ELECTROFISH	HSF0604	573910	6253975	573153	6254505	573910	6253975
	SMALL FISH BOAT ELECTROFISH	HSF0605	574571	6253088	574052	6253774	574571	6253088
	SMALL FISH BOAT ELECTROFISH	HSF0606	575791	6252797	574830	6253136	575791	6252797
07								
	BACKPACK ELECTROFISH	HEF0701	578005	6250291				
	BACKPACK ELECTROFISH	HEF0702	579395	6249891				
	BACKPACK ELECTROFISH	HEF0703	579895	6250336				
	BEACH SEINE	HBS0701	578229	6249953				
	SMALL FISH BOAT ELECTROFISH	HSF0701	577043	6251439	576258	6251707	577043	6251439
	SMALL FISH BOAT ELECTROFISH	HSF0702	577862	6250627	577309	6251409	577862	6250627
	SMALL FISH BOAT ELECTROFISH	HSF0703	578692	6249927	578080	6250298	578692	6249927
	SMALL FISH BOAT ELECTROFISH	HSF0704	580460	6250098	579618	6250161	580460	6250098
	SMALL FISH BOAT ELECTROFISH	HSF0705	581415	6249990	580597	6250128	581415	6249990
08								
	BACKPACK ELECTROFISH	HEF0704	582915	6249438				
	BACKPACK ELECTROFISH	HEF0801	583495	6246501				
	BACKPACK ELECTROFISH	HEF0802	583600	6246377				
	BACKPACK ELECTROFISH	HEF0803	584720	6245396				
	BACKPACK ELECTROFISH	HEF0804	585336	6243624				
	BACKPACK ELECTROFISH	HEF0805	585118	6241289				
	BACKPACK ELECTROFISH	HEF0806	584701	6240544				
	BEACH SEINE	HBS0702	582022	6250184				
	SMALL FISH BOAT ELECTROFISH	HSF0706	582791	6249751	582003	6249991	582791	6249751
	SMALL FISH BOAT ELECTROFISH	HSF0707	582721	6248832	582831	6249629	582721	6248832
	SMALL FISH BOAT ELECTROFISH	HSF0801	582963	6247399	582661	6248301	582963	6247399
	SMALL FISH BOAT ELECTROFISH	HSF0802	583670	6246281	583080	6247040	583670	6246281
	SMALL FISH BOAT ELECTROFISH	HSF0803	584649	6245827	583907	6246147	584649	6245827
	SMALL FISH BOAT ELECTROFISH	HSF0804	584952	6244351	584722	6245225	584952	6244351
	SMALL FISH BOAT ELECTROFISH	HSF0805	585319	6242576	585354	6243523	585319	6242576
	SMALL FISH BOAT ELECTROFISH	HSF0806	584779	6240832	585310	6241609	584779	6240832
09								

Appendix A Table A1. Sample site information (Nad 83, Zone 10), Halfway River and Moberly River summer fish survey 2009.

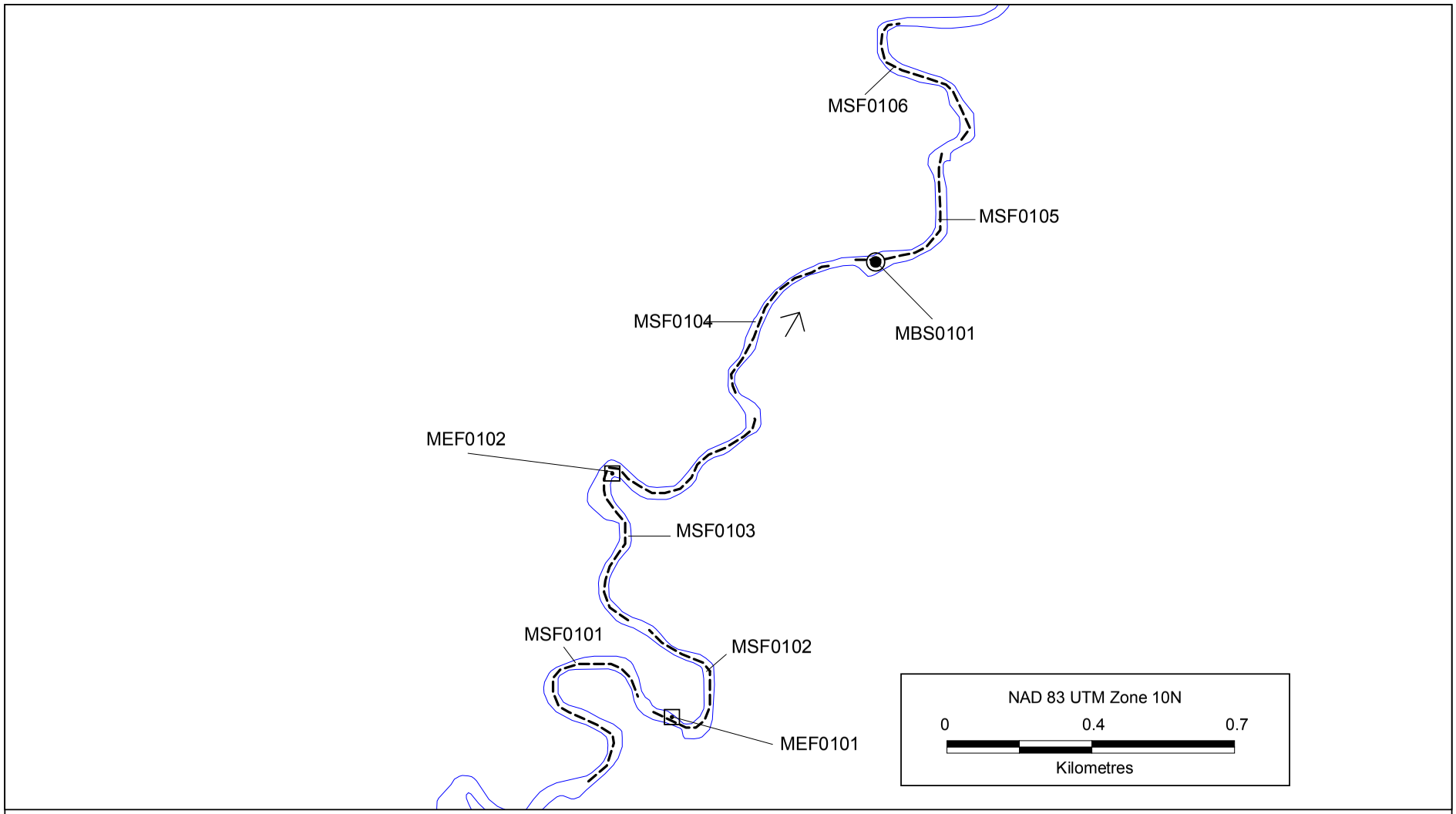
Waterbody Section	Method	Site	Easting	Northing	Upper Easting	Upper Northing	Lower Easting	Lower Northing
	BACKPACK ELECTROFISH	HEF0901	585790	6239531				
	BACKPACK ELECTROFISH	HEF0902	585804	6237193				
	BACKPACK ELECTROFISH	HEF0903	584804	6236169				
	BACKPACK ELECTROFISH	HEF0904	585636	6235503				
	BACKPACK ELECTROFISH	HEF0905	584538	6234710				
	BEACH SEINE	HBS0901	585854	6238450				
	SMALL FISH BOAT ELECTROFISH	HSF0901	586153	6238822	585759	6239597	586153	6238822
	SMALL FISH BOAT ELECTROFISH	HSF0902	586002	6237864	586124	6238757	586002	6237864
	SMALL FISH BOAT ELECTROFISH	HSF0903	585702	6236861	585988	6237746	585702	6236861
	SMALL FISH BOAT ELECTROFISH	HSF0904	584868	6236240	585604	6236836	584868	6236240
	SMALL FISH BOAT ELECTROFISH	HSF0905	585476	6235646	584726	6236086	585476	6235646
	SMALL FISH BOAT ELECTROFISH	HSF0906	584884	6234903	585674	6235325	584884	6234903
10								
	BACKPACK ELECTROFISH	HEF1001	590515	6234687				
	BACKPACK ELECTROFISH	HEF1002	591870	6233693				
	BACKPACK ELECTROFISH	HEF1003	591950	6234378				
	BACKPACK ELECTROFISH	HEF1004	592829	6234071				
	BACKPACK ELECTROFISH	HEF1005	593397	6232629				
	BACKPACK ELECTROFISH	HEF1006	595936	6231604				
	SMALL FISH BOAT ELECTROFISH	HSF1001	591900	6234321	591456	6233490	591900	6234321
	SMALL FISH BOAT ELECTROFISH	HSF1002	592760	6233981	592053	6234473	592760	6233981
	SMALL FISH BOAT ELECTROFISH	HSF1003	593335	6232817	592938	6233570	593335	6232817
	SMALL FISH BOAT ELECTROFISH	HSF1004	594588	6231895	593762	6232380	594588	6231895
	SMALL FISH BOAT ELECTROFISH	HSF1005	595700	6231448	594791	6231172	595700	6231448
	SMALL FISH BOAT ELECTROFISH	HSF1006	591053	6234790	590349	6234537	591053	6234790
MOBERLY RIVER								
01								
	BACKPACK ELECTROFISH	MEF0101	590743	6198609				
	BACKPACK ELECTROFISH	MEF0102	590598	6199201				
	BEACH SEINE	MBS0101	591238	6199715				
	SMALL FISH BOAT ELECTROFISH	MSF0101	590684	6198637	590538	6198457	590684	6198637
	SMALL FISH BOAT ELECTROFISH	MSF0102	590665	6198849	590684	6198640	590665	6198849
	SMALL FISH BOAT ELECTROFISH	MSF0103	590924	6199372	590671	6198847	590924	6199372
	SMALL FISH BOAT ELECTROFISH	MSF0104	591150	6199716	590920	6199370	591150	6199716
	SMALL FISH BOAT ELECTROFISH	MSF0105	591402	6199992	591162	6199732	591402	6199992
	SMALL FISH BOAT ELECTROFISH	MSF0106	591305	6200296	591414	6199999	591305	6200296
02								
	BACKPACK ELECTROFISH	MEF0201	590694	6201067				
	BACKPACK ELECTROFISH	MEF0202	589704	6200600				
	BACKPACK ELECTROFISH	MEF0203	588610	6202172				
	BACKPACK ELECTROFISH	MEF0204	588126	6202650				
	BACKPACK ELECTROFISH	MEF0205	586698	6202944				
	BEACH SEINE	MBS0201	590508	6201138				
	BEACH SEINE	MBS0202	590192	6200869				
	SMALL FISH BOAT ELECTROFISH	MSF0201	590880	6200991	591353	6200907	590880	6200991
	SMALL FISH BOAT ELECTROFISH	MSF0202	590323	6200936	590700	6200885	590323	6200936
	SMALL FISH BOAT ELECTROFISH	MSF0203	589665	6200601	590279	6200708	589665	6200601
	SMALL FISH BOAT ELECTROFISH	MSF0204	588738	6200731	589261	6200600	588738	6200731
	SMALL FISH BOAT ELECTROFISH	MSF0205	588669	6201557	588295	6200720	588669	6201557
	SMALL FISH BOAT ELECTROFISH	MSF0206	588633	6202415	588607	6201930	588633	6202415
	SMALL FISH BOAT ELECTROFISH	MSF0207	587143	6202590	588057	6202614	587143	6202590
	SMALL FISH BOAT ELECTROFISH	MSF0208	587400	6203911	586690	6204012	587400	6203911
	SMALL FISH BOAT ELECTROFISH	MSF0209	588750	6204589	587867	6204313	588750	6204589
03								
	BACKPACK ELECTROFISH	MEF0301	589584	6205640				
	BACKPACK ELECTROFISH	MEF0302	589611	6206825				

Appendix A Table A1. Sample site information (Nad 83, Zone 10), Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Method	Site	Easting	Northing	Upper Easting	Upper Northing	Lower Easting	Lower Northing
	BACKPACK ELECTROFISH	MEF0303	590109	6206940				
	BACKPACK ELECTROFISH	MEF0304	590683	6211101				
	BEACH SEINE	MBS0301	589443	6205773				
	BEACH SEINE	MBS0302	590105	6207011				
	BEACH SEINE	MBS0303	590824	6209819				
	SMALL FISH BOAT ELECTROFISH	MSF0301	589676	6206066	589581	6205647	589676	6206066
	SMALL FISH BOAT ELECTROFISH	MSF0302	589843	6206603	589613	6206283	589843	6206603
	SMALL FISH BOAT ELECTROFISH	MSF0303	590098	6207083	589623	6206861	590098	6207083
	SMALL FISH BOAT ELECTROFISH	MSF0304	590822	6207681	590425	6207423	590822	6207681
	SMALL FISH BOAT ELECTROFISH	MSF0305	590863	6208645	590553	6208270	590863	6208645
	SMALL FISH BOAT ELECTROFISH	MSF0306	590754	6209477	590767	6208926	590754	6209477
	SMALL FISH BOAT ELECTROFISH	MSF0307	590468	6211064	590570	6210385	590468	6211064
	SMALL FISH BOAT ELECTROFISH	MSF0308	590978	6211234	590719	6211054	590978	6211234
04								
	BACKPACK ELECTROFISH	MEF0401	592316	6211168				
	BACKPACK ELECTROFISH	MEF0402	593198	6211613				
	BACKPACK ELECTROFISH	MEF0403	594379	6212196				
	BACKPACK ELECTROFISH	MEF0404	595236	6212566				
	BEACH SEINE	MBS0401	592421	6211341				
	BEACH SEINE	MBS0402	594392	6211067				
	BEACH SEINE	MBS0403	594407	6212176				
	SMALL FISH BOAT ELECTROFISH	MSF0401	592136	6211172	591396	6211520	592136	6211172
	SMALL FISH BOAT ELECTROFISH	MSF0402	593280	6211566	592454	6211378	593280	6211566
	SMALL FISH BOAT ELECTROFISH	MSF0403	594489	6211191	593747	6211367	594489	6211191
	SMALL FISH BOAT ELECTROFISH	MSF0404	594366	6212117	594050	6211648	594366	6212117
	SMALL FISH BOAT ELECTROFISH	MSF0405	594902	6211759	594678	6211831	594902	6211759
	SMALL FISH BOAT ELECTROFISH	MSF0406	594766	6212871	595116	6212253	594766	6212871
05								
	BACKPACK ELECTROFISH	MEF0501	595946	6214459				
	BACKPACK ELECTROFISH	MEF0502	596737	6215479				
	BACKPACK ELECTROFISH	MEF0503	598769	6215479				
	BACKPACK ELECTROFISH	MEF0504	598629	6215119				
	BEACH SEINE	MBS0501	597771	6215226				
	BEACH SEINE	MBS0502	599019	6214756				
	SMALL FISH BOAT ELECTROFISH	MSF0501	595674	6214335	595511	6213371	595674	6214335
	SMALL FISH BOAT ELECTROFISH	MSF0502	596363	6215403	596100	6214567	596363	6215403
	SMALL FISH BOAT ELECTROFISH	MSF0503	597281	6215218	596598	6215564	597281	6215218
	SMALL FISH BOAT ELECTROFISH	MSF0504	598337	6215557	597538	6215123	598337	6215557
	SMALL FISH BOAT ELECTROFISH	MSF0505	598569	6215071	598487	6215558	598569	6215071
	SMALL FISH BOAT ELECTROFISH	MSF0506	598463	6214148	598497	6214961	598463	6214148
	SMALL FISH BOAT ELECTROFISH	MSF0507	599237	6214872	598776	6214168	599237	6214872
06								
	BACKPACK ELECTROFISH	MEF0601	599552	6215054				
	BACKPACK ELECTROFISH	MEF0602	599653	6216592				
	BACKPACK ELECTROFISH	MEF0603	602812	6217822				
	BEACH SEINE	MBS0601	599311	6216052				
	BEACH SEINE	MBS0602	600320	6216479				
	BEACH SEINE	MBS0603	602885	6217962				
	SMALL FISH BOAT ELECTROFISH	MSF0601	599229	6215712	599573	6215159	599229	6215712
	SMALL FISH BOAT ELECTROFISH	MSF0602	599606	6216605	599188	6215950	599606	6216605
	SMALL FISH BOAT ELECTROFISH	MSF0603	600579	6217004	599959	6216451	600579	6217004
	SMALL FISH BOAT ELECTROFISH	MSF0604	601325	6217323	600595	6217191	601325	6217323
	SMALL FISH BOAT ELECTROFISH	MSF0605	601770	6217576	601326	6217472	601770	6217576
	SMALL FISH BOAT ELECTROFISH	MSF0606	602814	6217692	602143	6217869	602814	6217692
07								
	BACKPACK ELECTROFISH	MEF0701	604329	6218148				

Appendix A Table A1. Sample site information (Nad 83, Zone 10), Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Method	Site	Easting	Northing	Upper Easting	Upper Northing	Lower Easting	Lower Northing
	BACKPACK ELECTROFISH	MEF0702	604871	6218833				
	BACKPACK ELECTROFISH	MEF0703	606214	6219748				
	BACKPACK ELECTROFISH	MEF0704	606516	6221067				
	BACKPACK ELECTROFISH	MEF0705	607943	6222652				
	BACKPACK ELECTROFISH	MEF0706	607397	6223494				
	BACKPACK ELECTROFISH	MEF0707	609683	6224153				
	SMALL FISH BOAT ELECTROFISH	MSF0701	604271	6218497	603949	6218026	604271	6218497
	SMALL FISH BOAT ELECTROFISH	MSF0702	605229	6219132	604731	6218897	605229	6219132
	SMALL FISH BOAT ELECTROFISH	MSF0703	606591	6220573	606172	6219757	606591	6220573
	SMALL FISH BOAT ELECTROFISH	MSF0704	606788	6221626	606528	6221008	606788	6221626
	SMALL FISH BOAT ELECTROFISH	MSF0705	607640	6222831	607108	6222368	607640	6222831
	SMALL FISH BOAT ELECTROFISH	MSF0706	608235	6223462	607393	6223492	608235	6223462
	SMALL FISH BOAT ELECTROFISH	MSF0707	609580	6224536	609306	6224072	609580	6224536
08								
	BACKPACK ELECTROFISH	MEF0801	609822	6224940				
	BACKPACK ELECTROFISH	MEF0802	610454	6225583				
	BACKPACK ELECTROFISH	MEF0803	611619	6226475				
	BACKPACK ELECTROFISH	MEF0804	611538	6226845				
	BACKPACK ELECTROFISH	MEF0805	613746	6227901				
	BACKPACK ELECTROFISH	MEF0806	615259	6228339				
	SMALL FISH BOAT ELECTROFISH	MSF0801	609815	6225314	610199	6224993	609815	6225314
	SMALL FISH BOAT ELECTROFISH	MSF0802	611607	6226556	610851	6226140	611607	6226556
	SMALL FISH BOAT ELECTROFISH	MSF0803	612595	6227027	611851	6227059	612595	6227027
	SMALL FISH BOAT ELECTROFISH	MSF0804	613071	6227355	612645	6227199	613071	6227355
	SMALL FISH BOAT ELECTROFISH	MSF0805	613958	6227947	613274	6227602	613958	6227947
	SMALL FISH BOAT ELECTROFISH	MSF0806	615794	6228571	615154	6228171	615794	6228571
09								
	BACKPACK ELECTROFISH	MEF0901	616227	6228665				
	BACKPACK ELECTROFISH	MEF0902	616789	6229076				
	BACKPACK ELECTROFISH	MEF0903	617088	6228660				
	BACKPACK ELECTROFISH	MEF0904	621035	6228237				
	BACKPACK ELECTROFISH	MEF0905	621448	6227974				
	SMALL FISH BOAT ELECTROFISH	MSF0901	616465	6228888	615936	6228568	616465	6228888
	SMALL FISH BOAT ELECTROFISH	MSF0902	617440	6228570	616878	6229071	617440	6228570
	SMALL FISH BOAT ELECTROFISH	MSF0903	618753	6228821	617958	6228687	618753	6228821
	SMALL FISH BOAT ELECTROFISH	MSF0904	619995	6228151	619391	6228759	619995	6228151
	SMALL FISH BOAT ELECTROFISH	MSF0905	621482	6227965	620727	6228143	621482	6227965
10								
	BACKPACK ELECTROFISH	MEF1001	626847	6228818				
	BACKPACK ELECTROFISH	MEF1002	628367	6230059				
	BACKPACK ELECTROFISH	MEF1003	622161	6228130				
	BACKPACK ELECTROFISH	MEF1004	624124	6227353				
	BACKPACK ELECTROFISH	MEF1005	626025	6228269				
	SMALL FISH BOAT ELECTROFISH	MSF1001	627026	6229197	626719	6228674	627026	6229197
	SMALL FISH BOAT ELECTROFISH	MSF1002	627794	6229584	627230	6229314	627794	6229584
	SMALL FISH BOAT ELECTROFISH	MSF1003	628436	6230008	627898	6229723	628436	6230008
	SMALL FISH BOAT ELECTROFISH	MSF1004	622846	6227876	622143	6228168	622846	6227876
	SMALL FISH BOAT ELECTROFISH	MSF1005	624487	6227243	623911	6227493	624487	6227243
	SMALL FISH BOAT ELECTROFISH	MSF1006	625110	6227598	624584	6227206	625110	6227598
	SMALL FISH BOAT ELECTROFISH	MSF1007	626447	6228555	625715	6227979	626447	6228555



BC Government Data

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Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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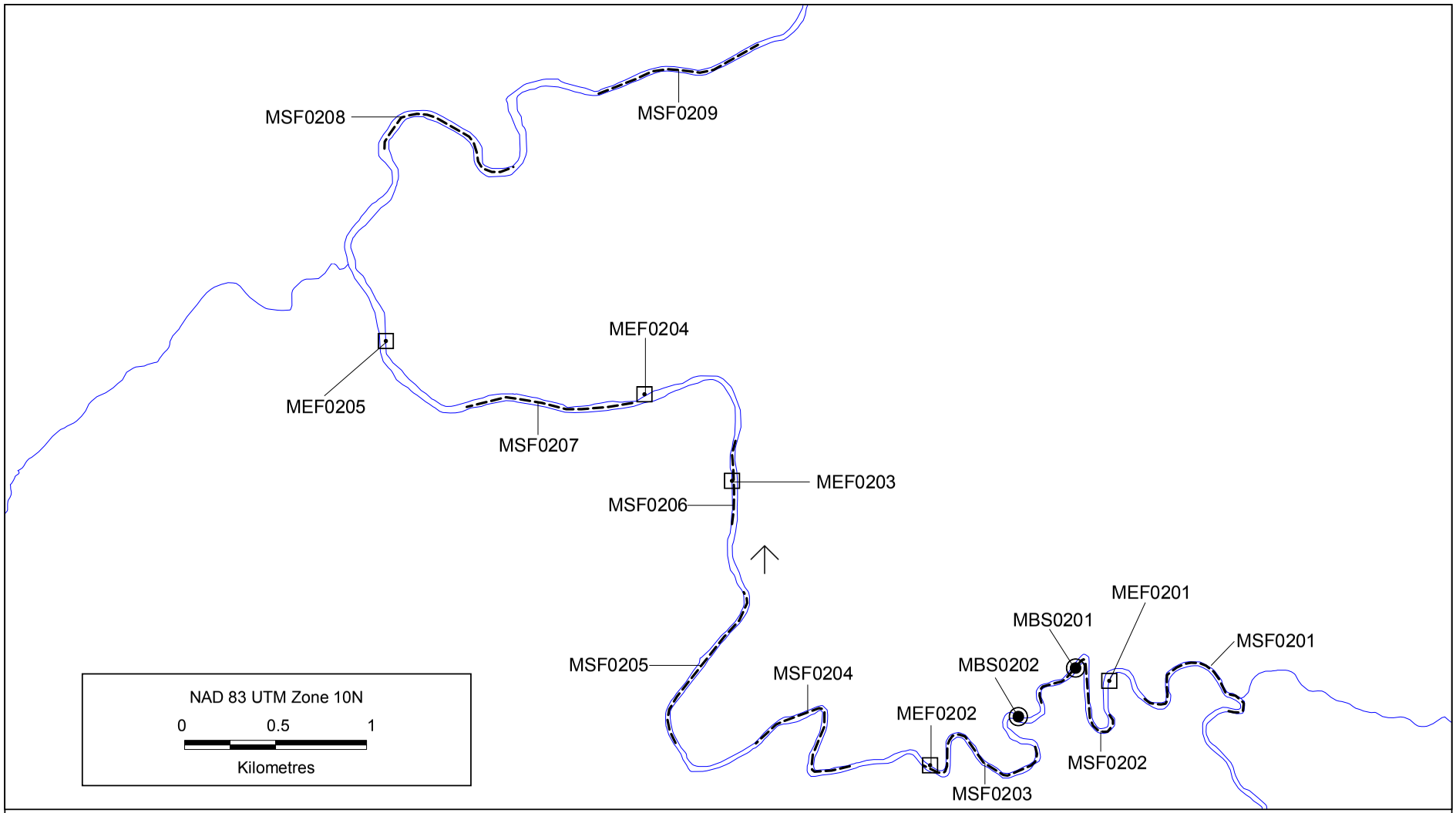
Figure A1

Moberly River Section 1 Fish Sampling Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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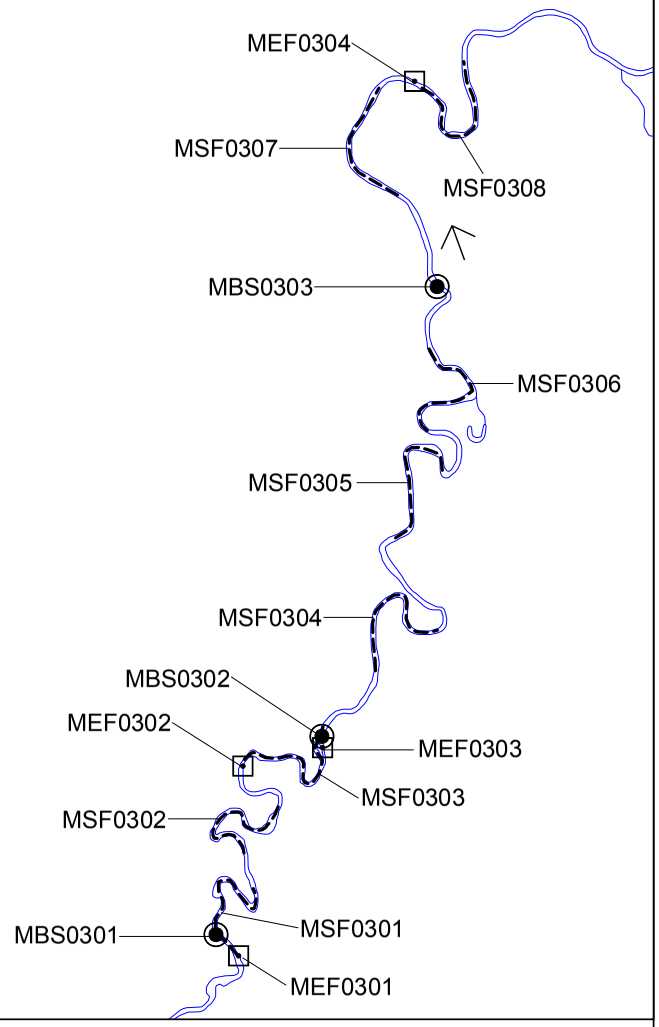
Figure A2

Moberly River Section 2 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



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BC Government Data

Trim Map: 94A001, 94A003, 94A004, 94A011 - 94A017, 94A022 - 94A026, 94A032, 94A034, 93P091 - 93P093, 93P082, 93P083, 94B020

Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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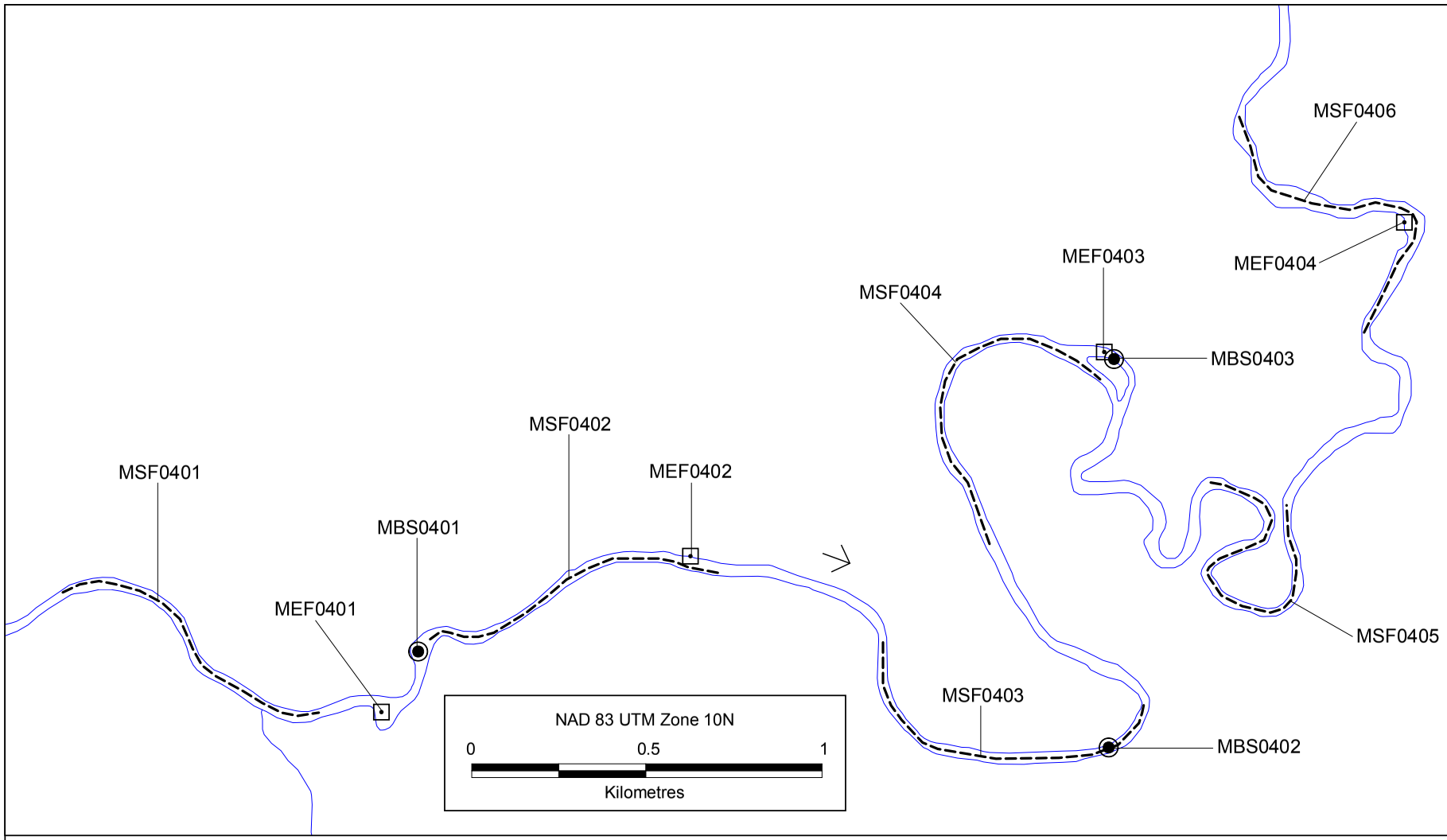
Figure A3

Moberly River Section 3 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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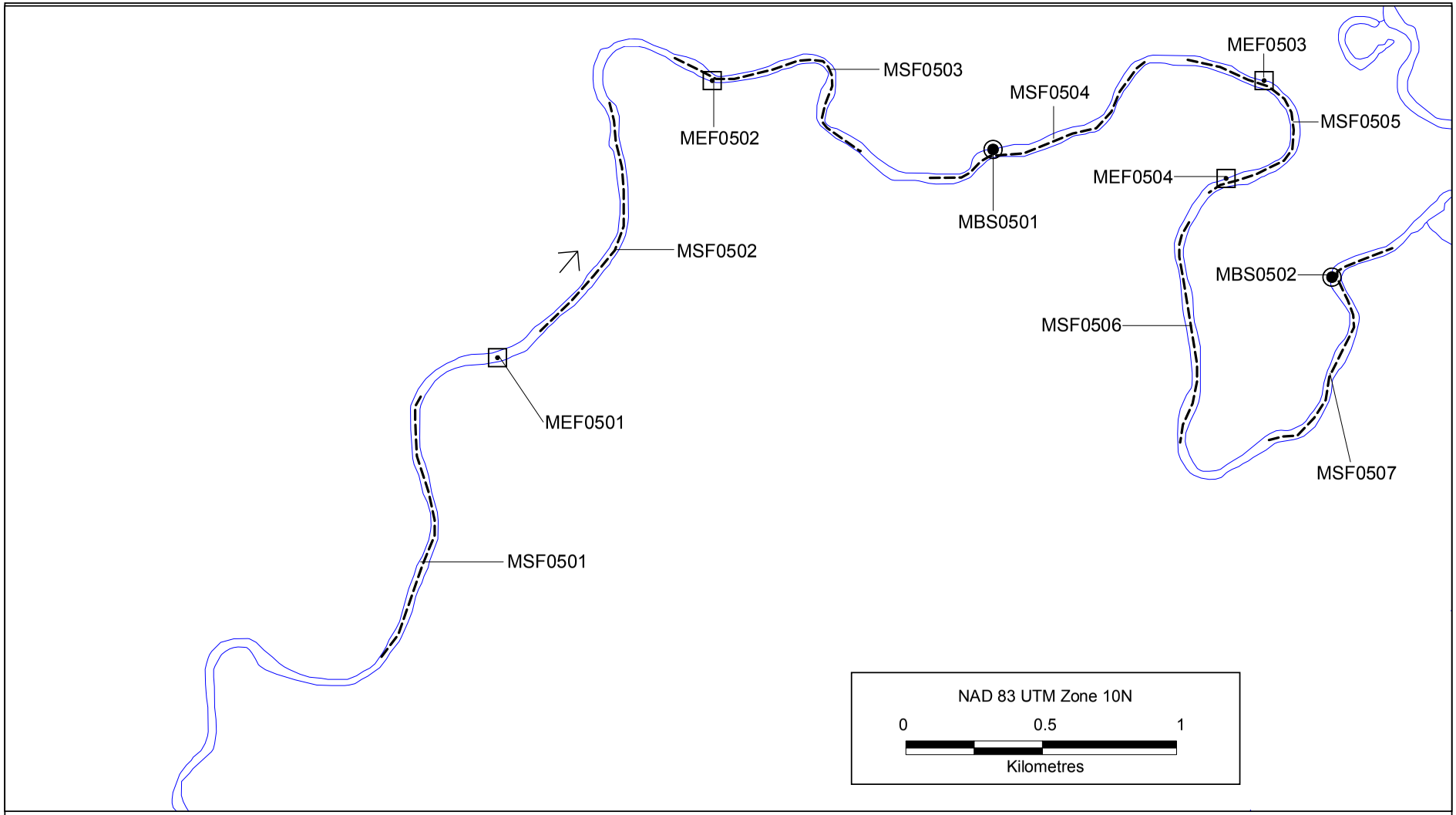
Figure A4

Moberly River Section 4 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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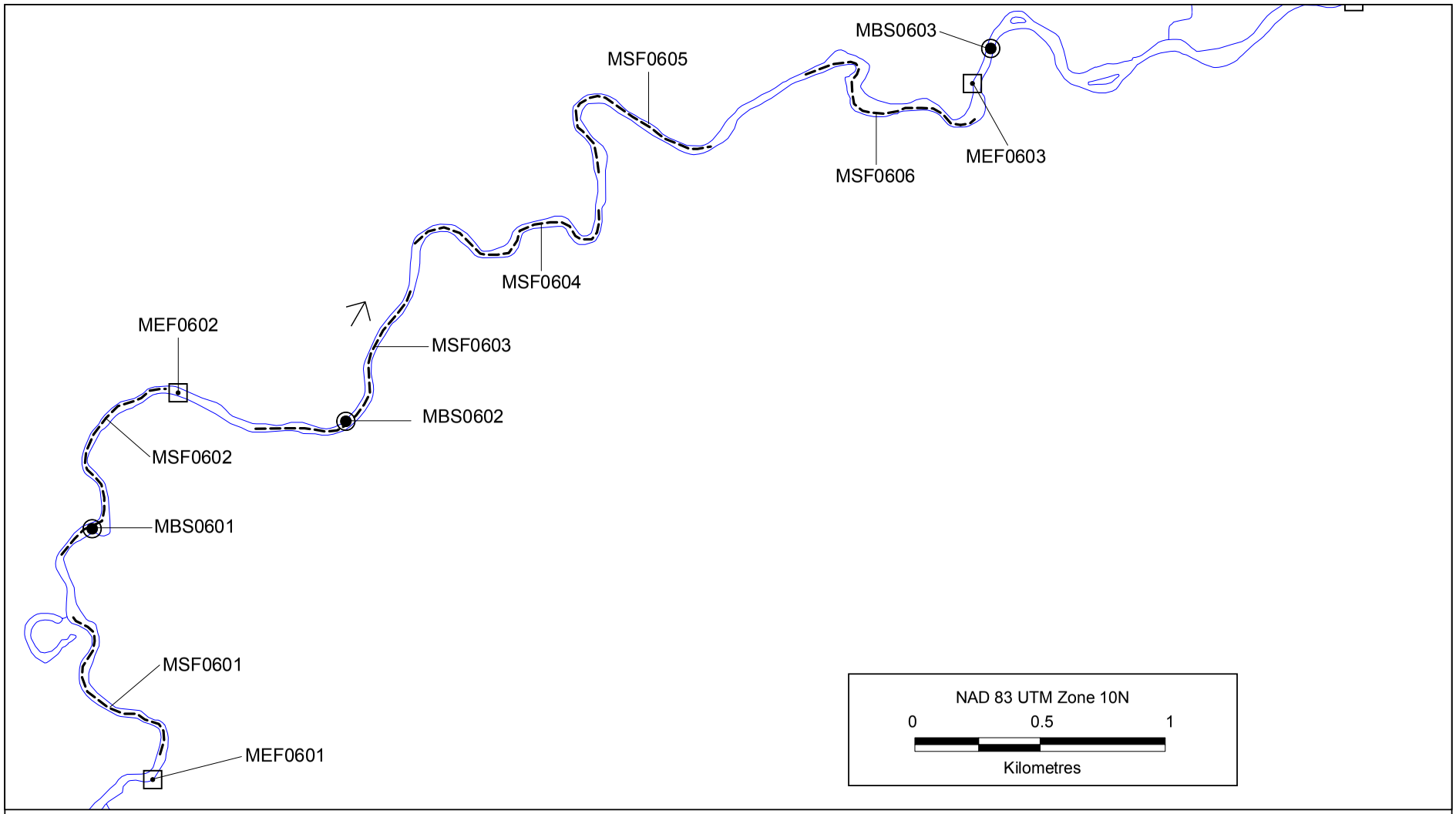
Figure A5

Moberly River Section 5 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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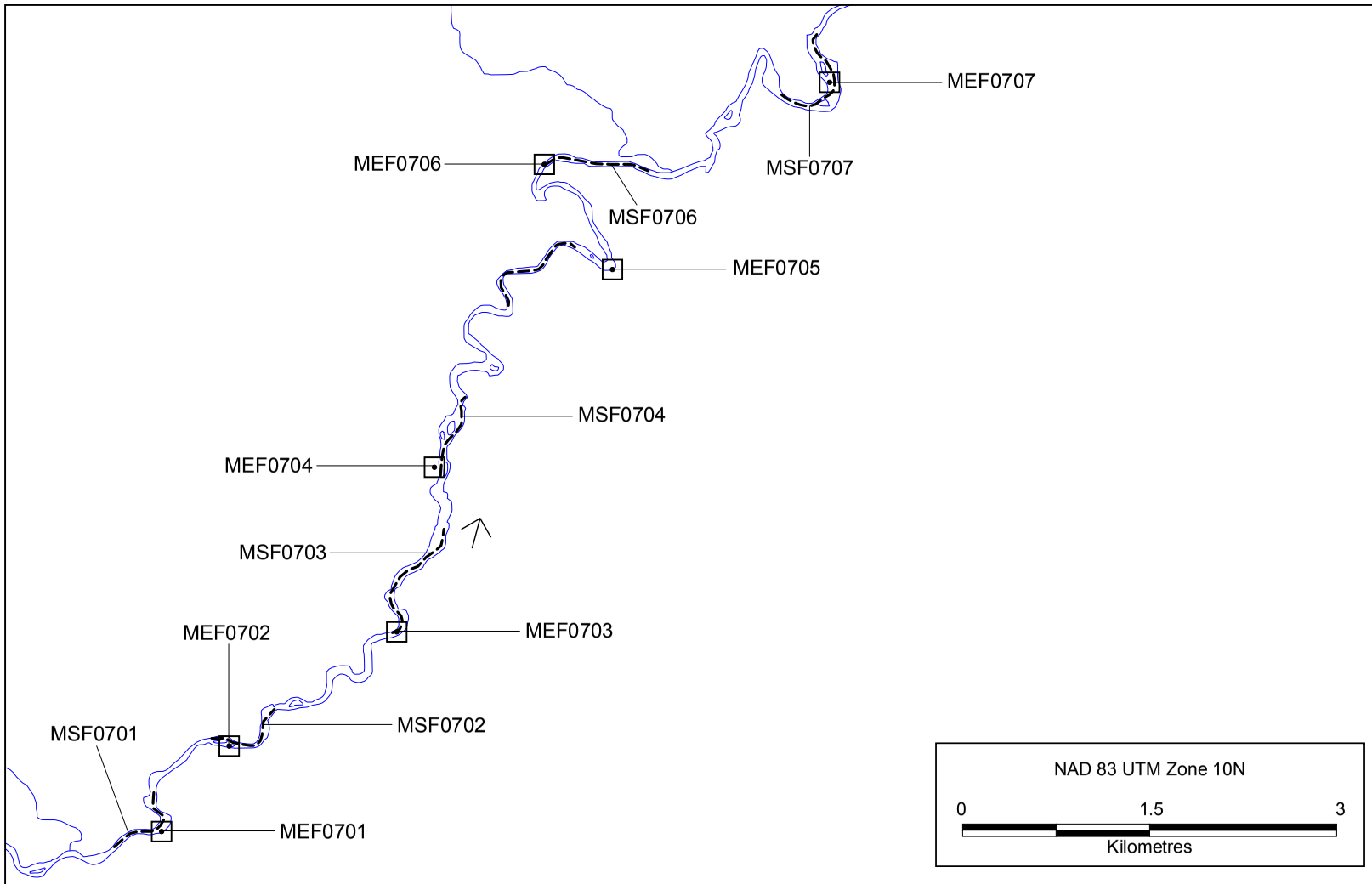
Figure A6

Moberly River Section 6 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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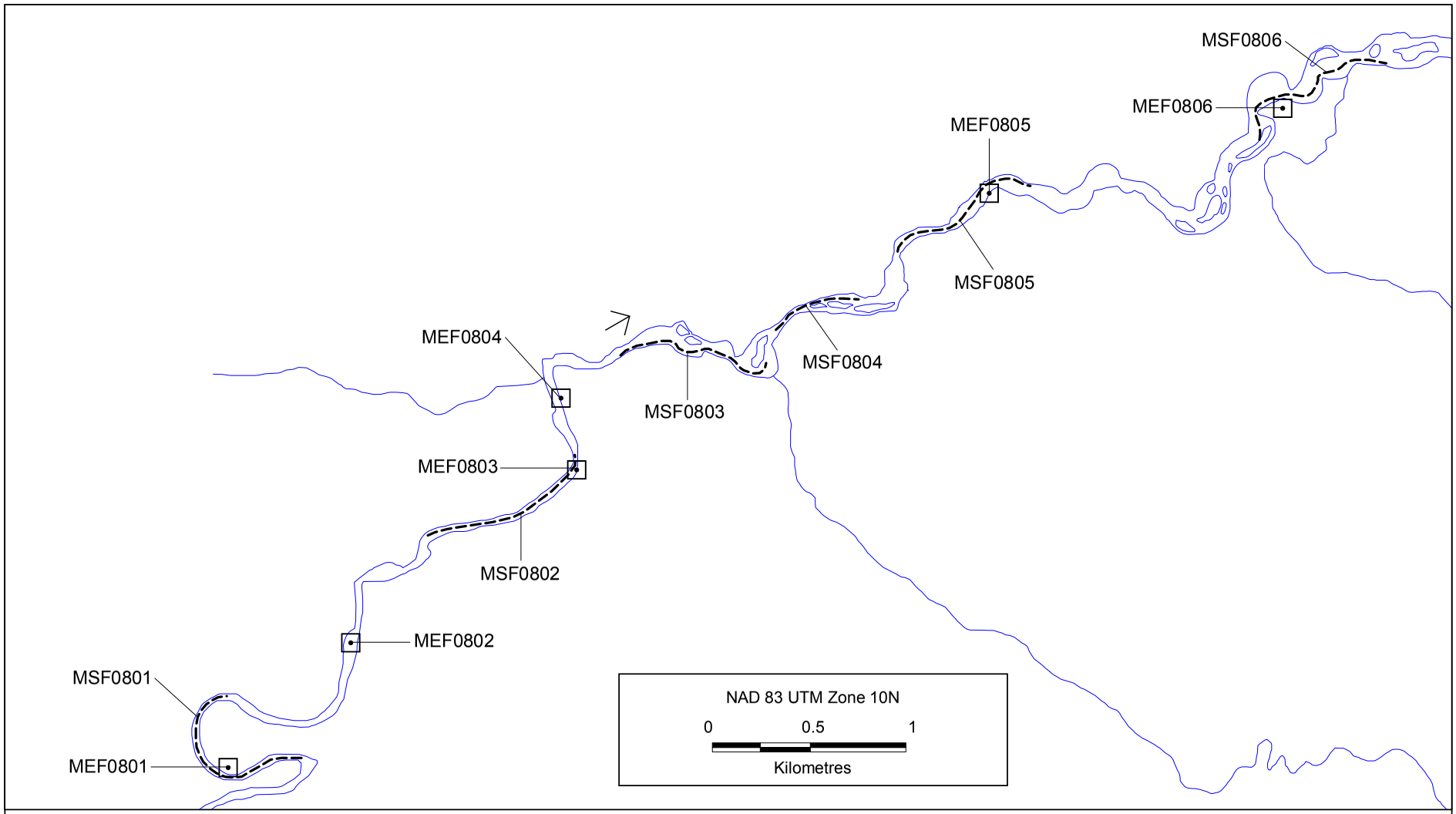
Figure A7

Moberly River Section 7 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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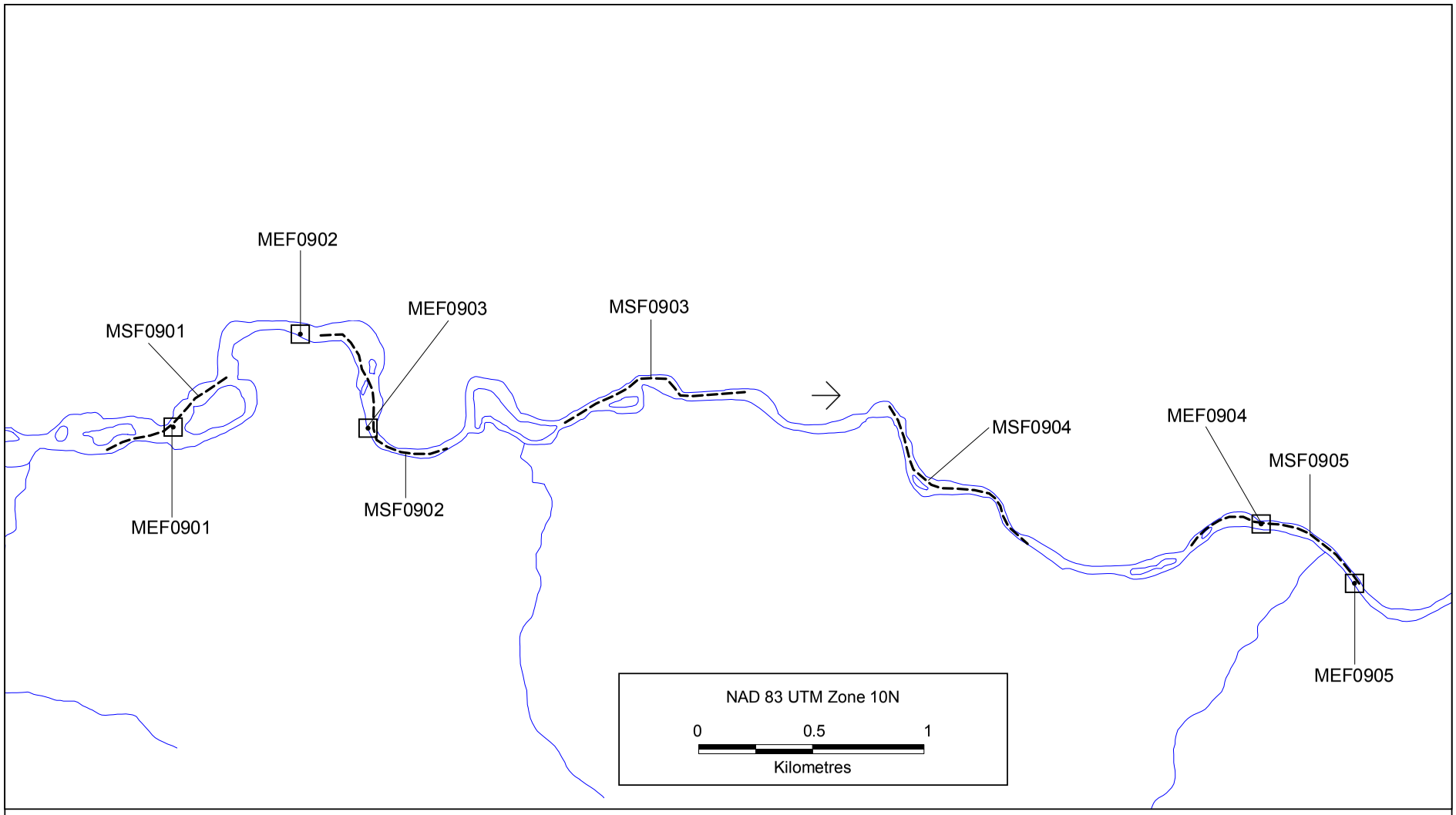
Figure A8

Moberly River Section 8 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



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BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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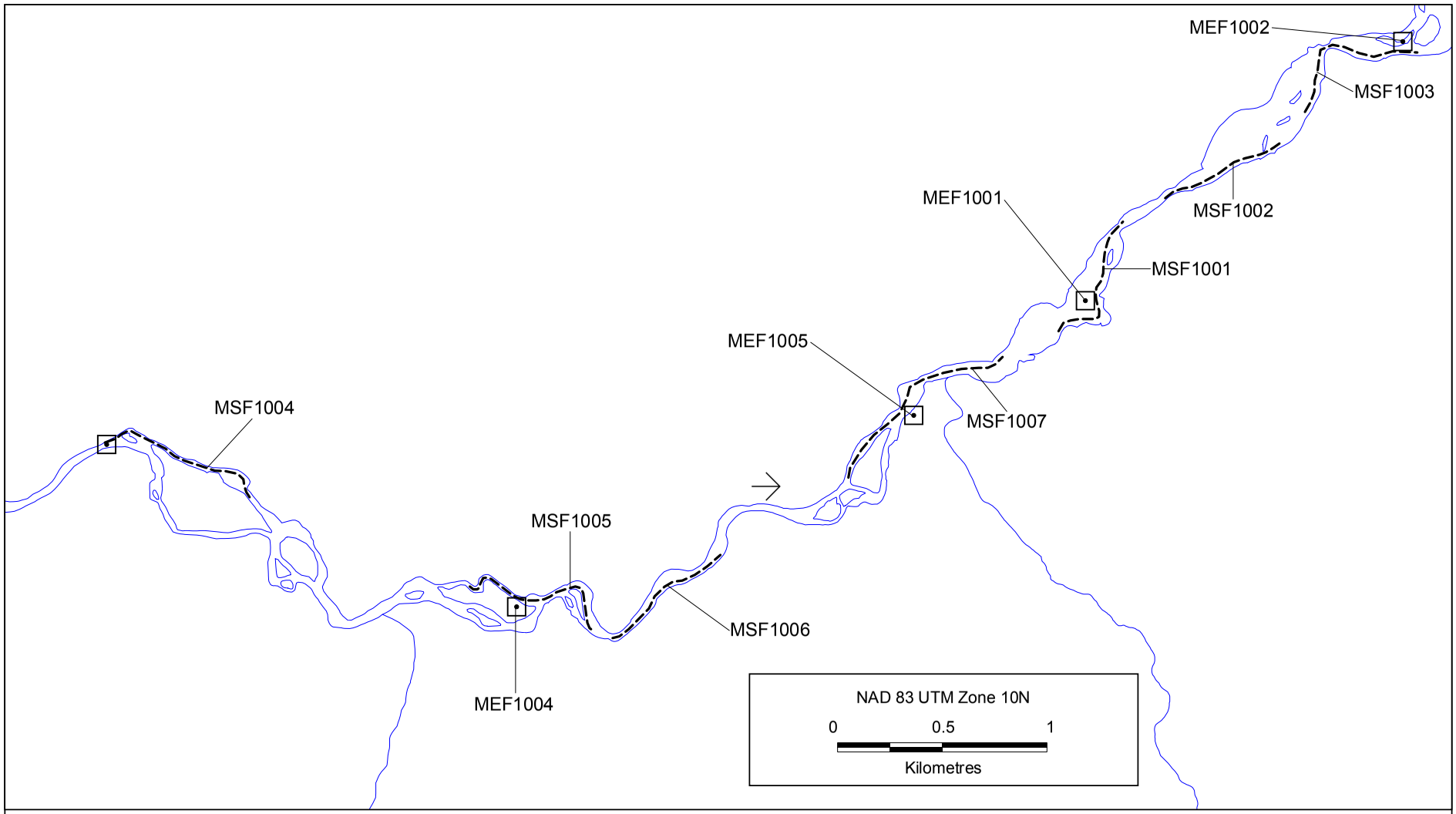
Figure A9

Moberly River Section 9 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



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BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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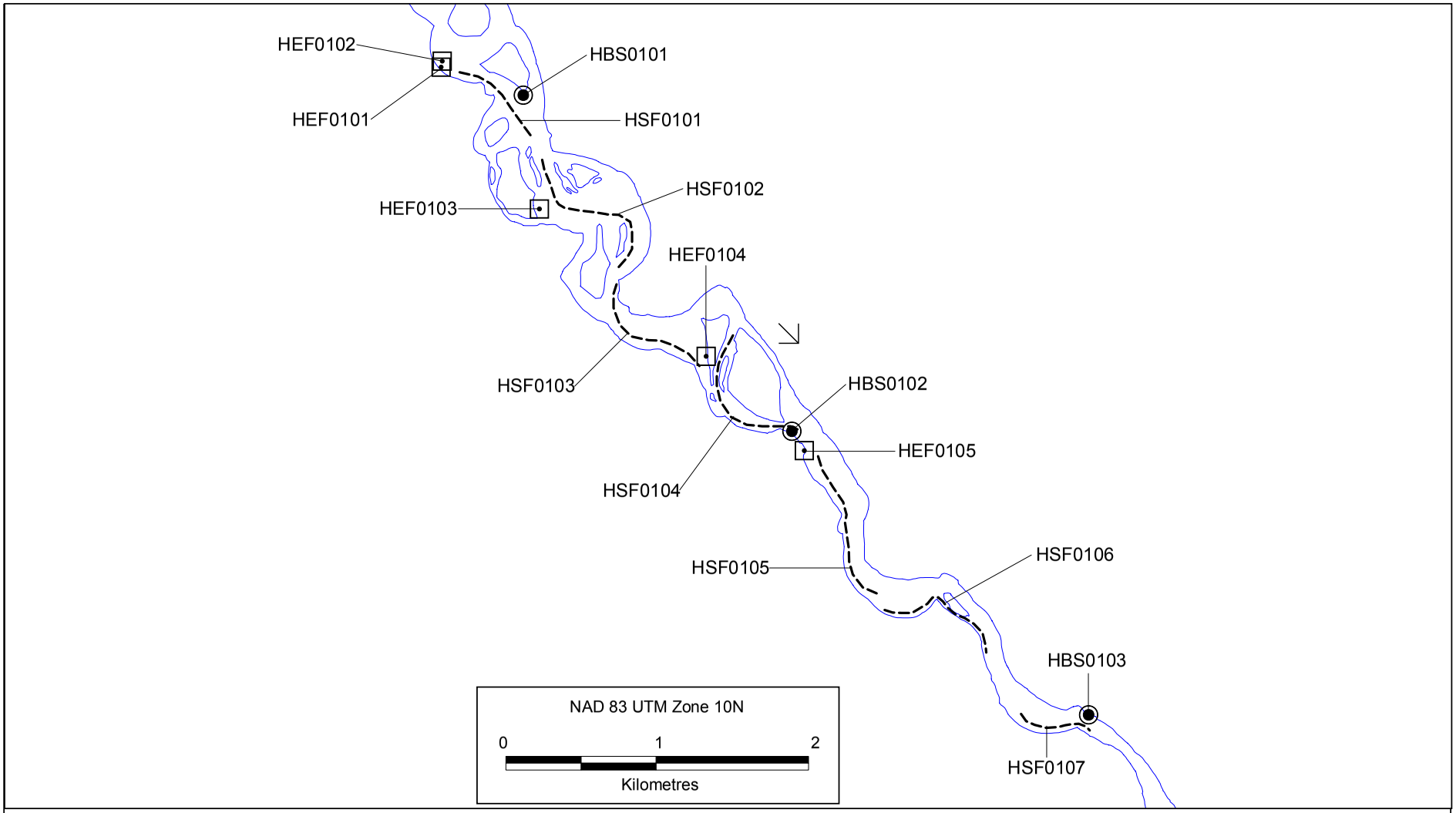
Figure A10

Moberly River Section 10 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



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BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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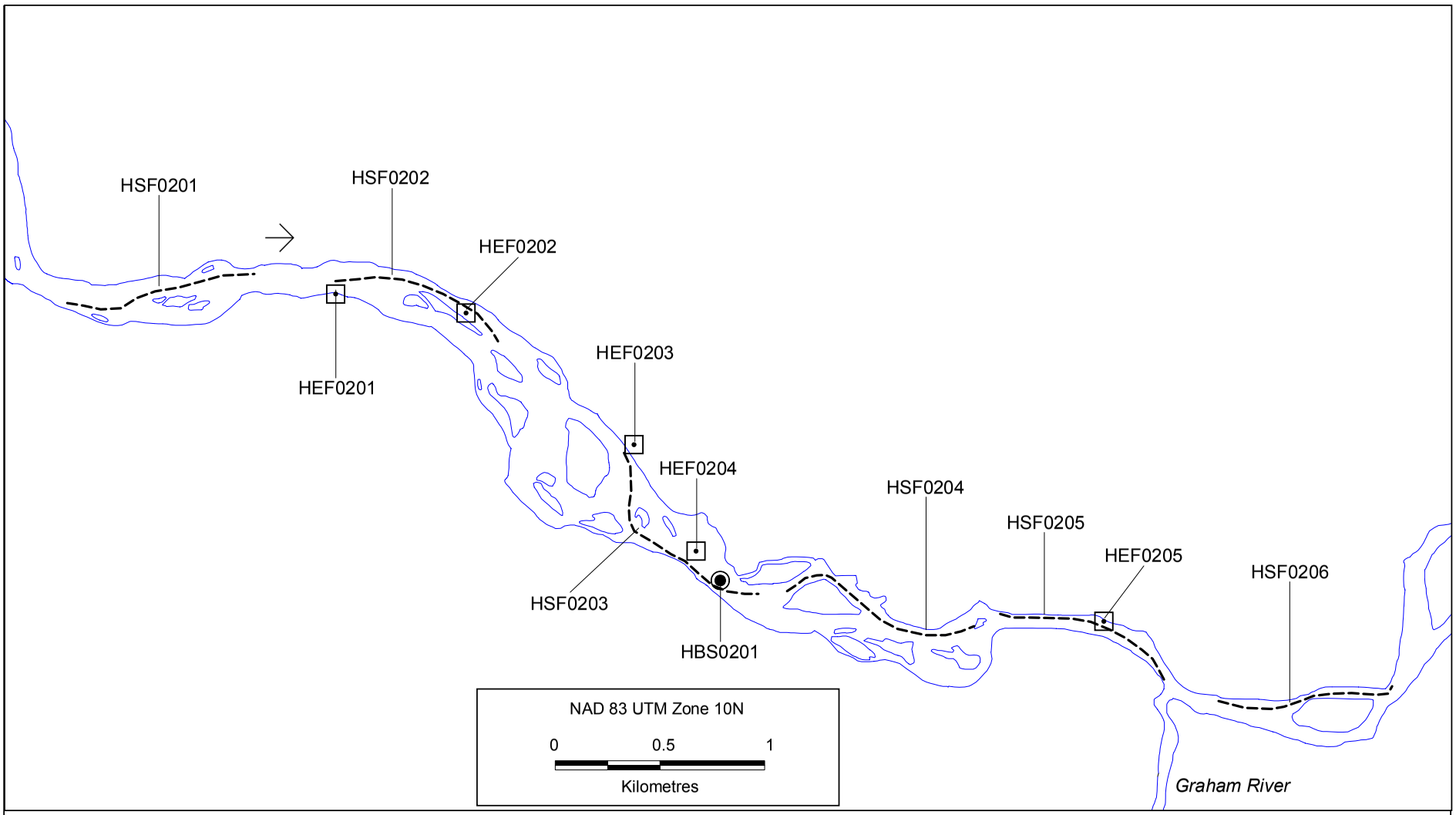
Figure A11

Halfway River Section 1 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



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BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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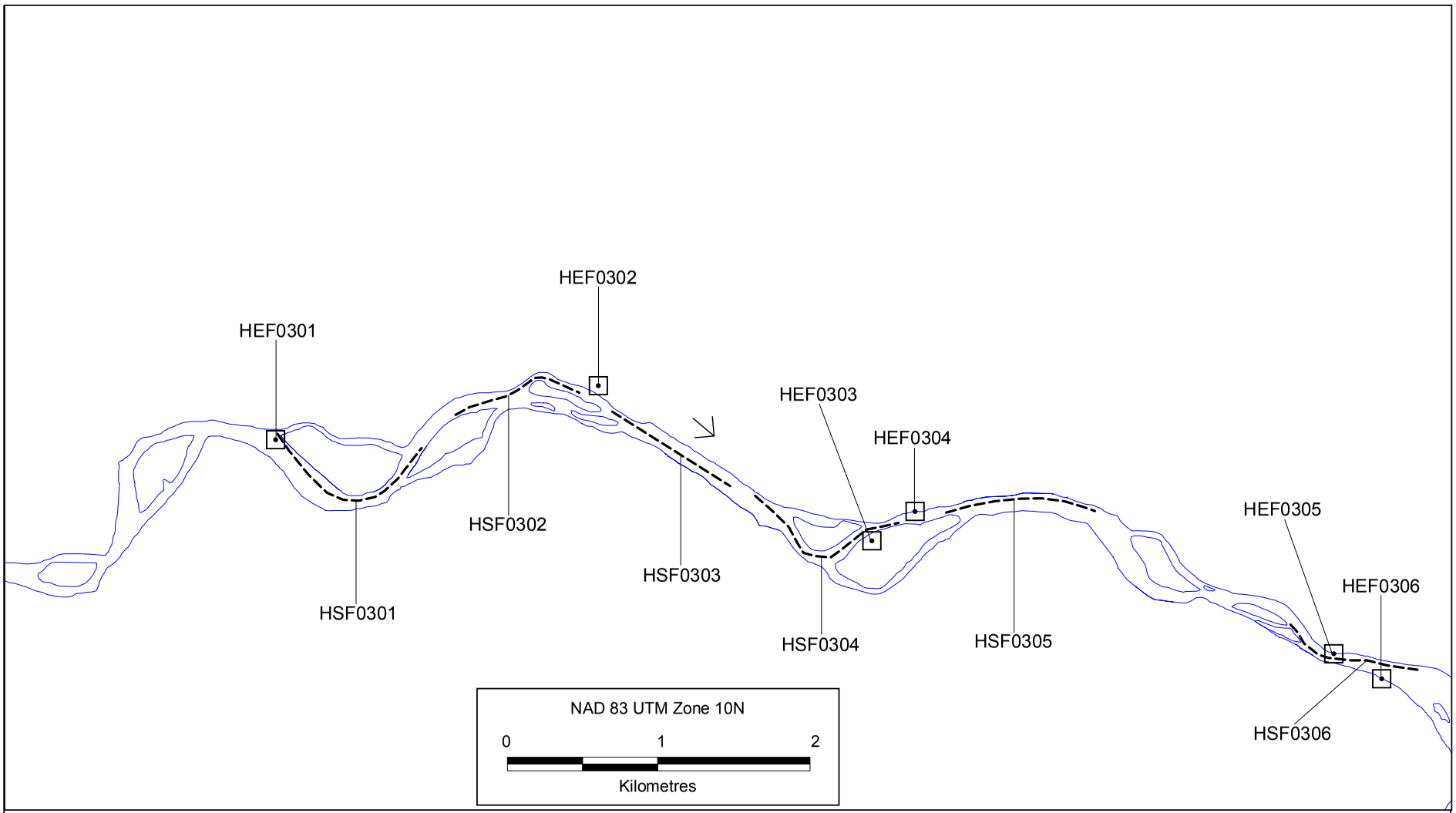
Figure A12

Halfway River Section 2 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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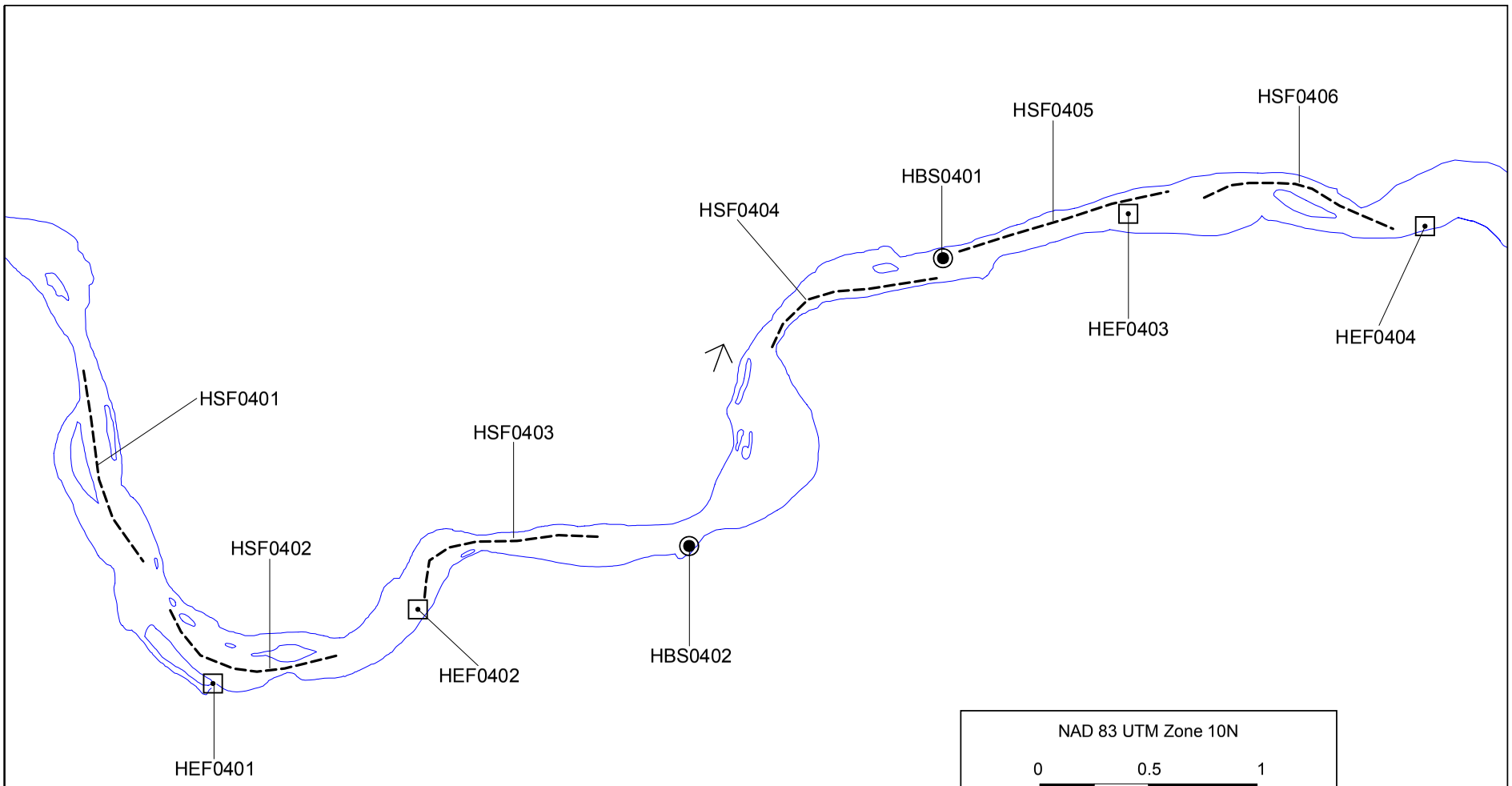
Figure A13

Halfway River Section 3 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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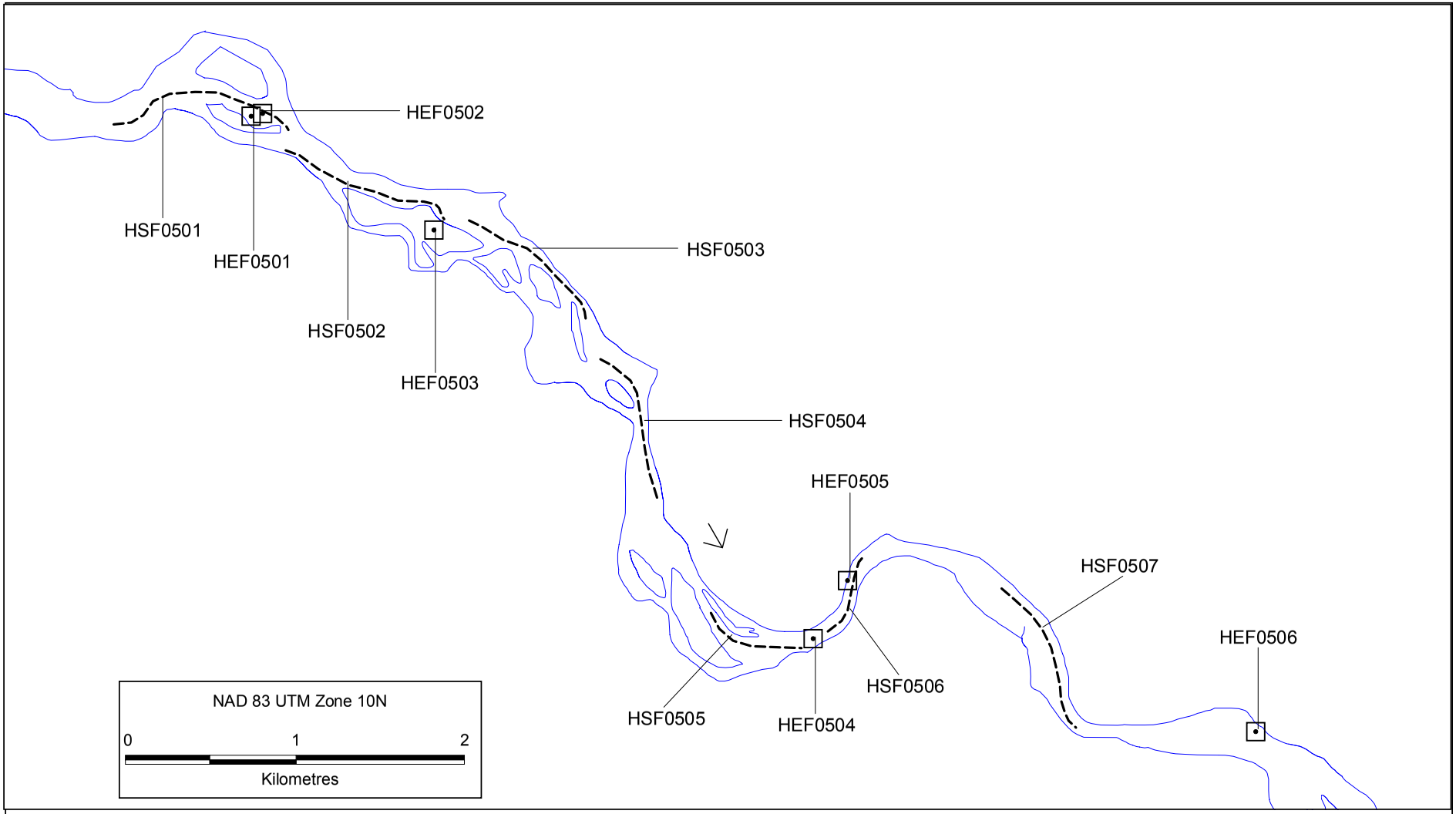
Figure A14

Halfway River Section 4 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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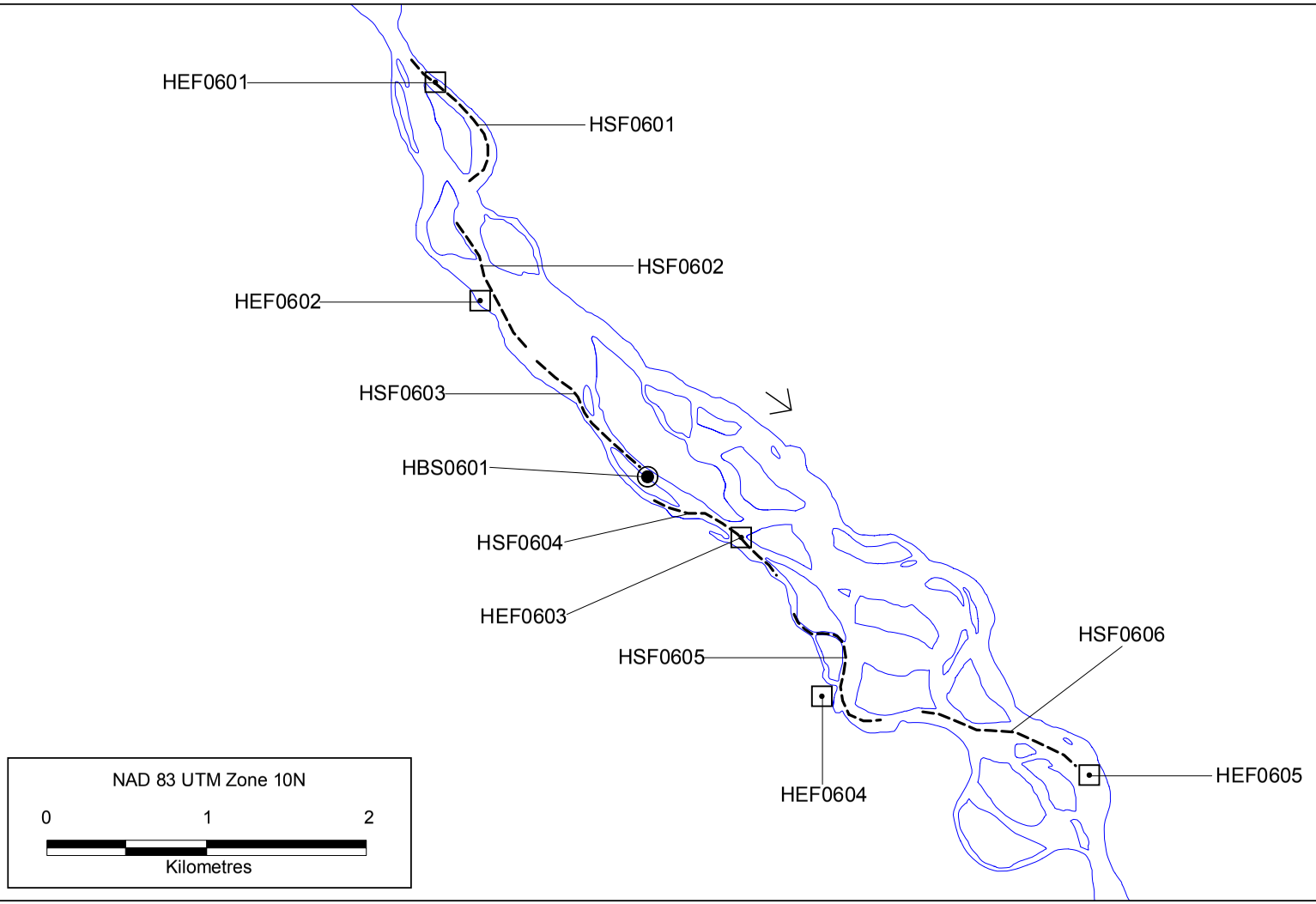
Figure A15

Halfway River Section 5 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

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BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project

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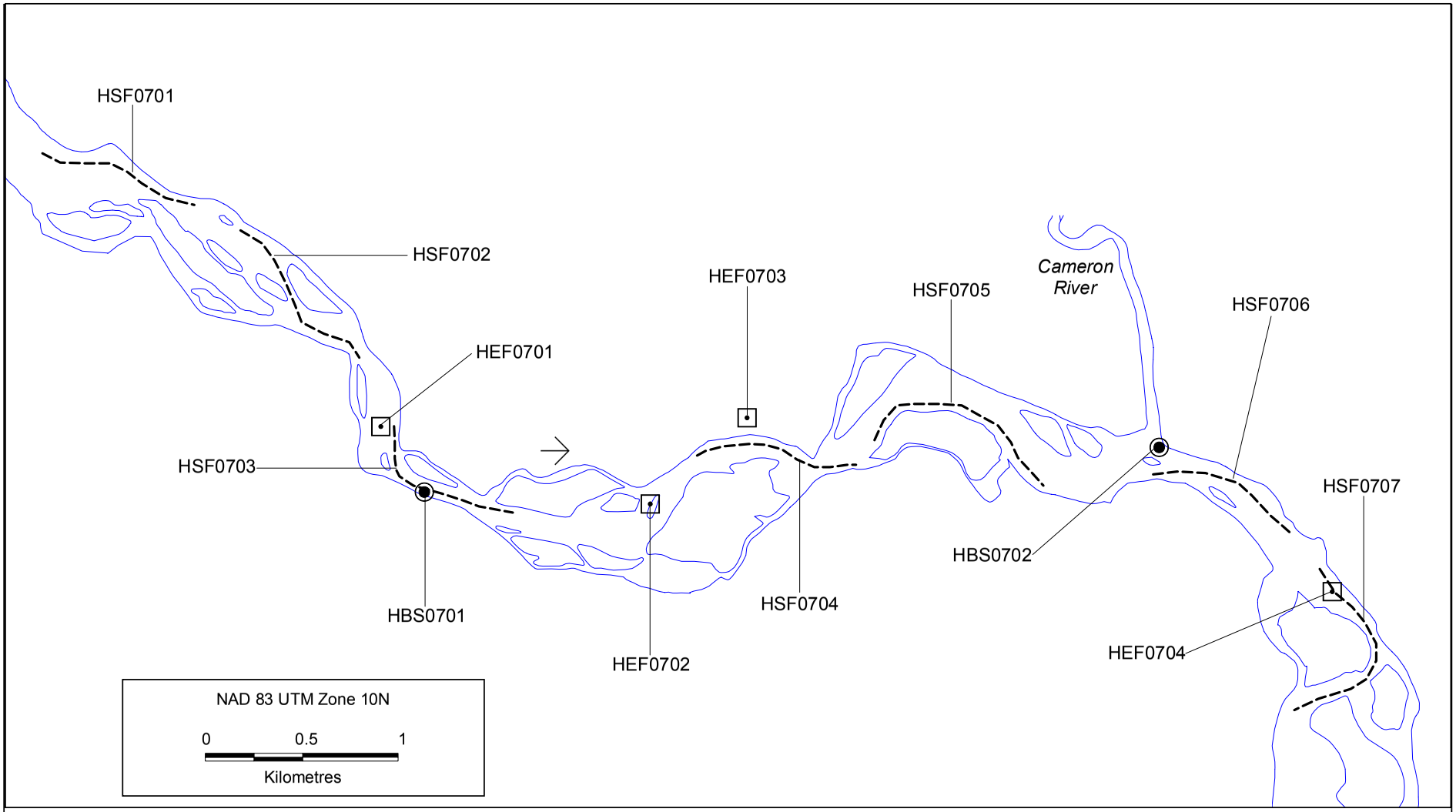
Figure A16

Halfway River Section 6 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010



BC Government Data

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BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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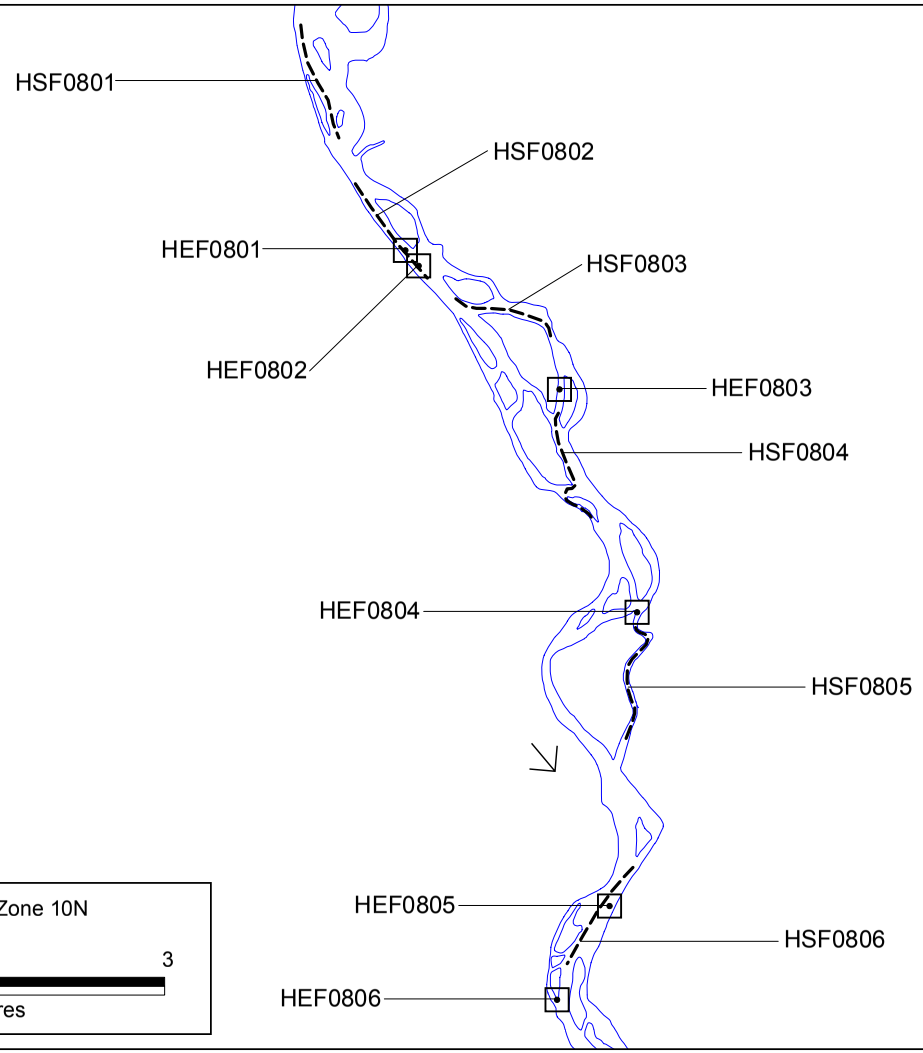
Figure A17

Halfway River Section 7 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



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BC Government Data

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Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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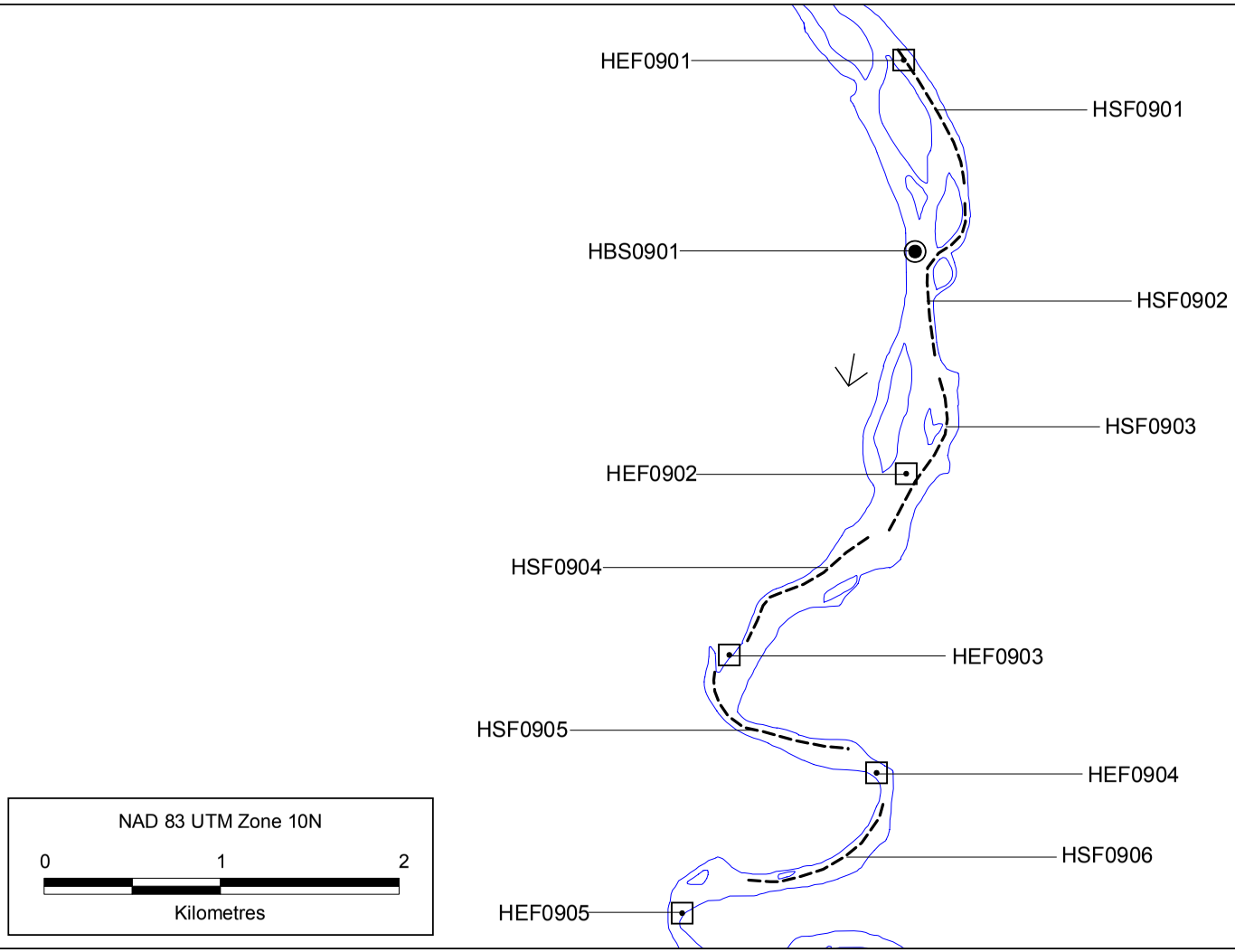
Figure A18

Halfway River Section 8 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



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Kilometres

BC Government Data

Trim Map: 94A022 - 94A026, 94A032, 94A041, 94A042, 94A051, 94B050, 94B058 - 94B060, 94B068, 94B077, 94B078

Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

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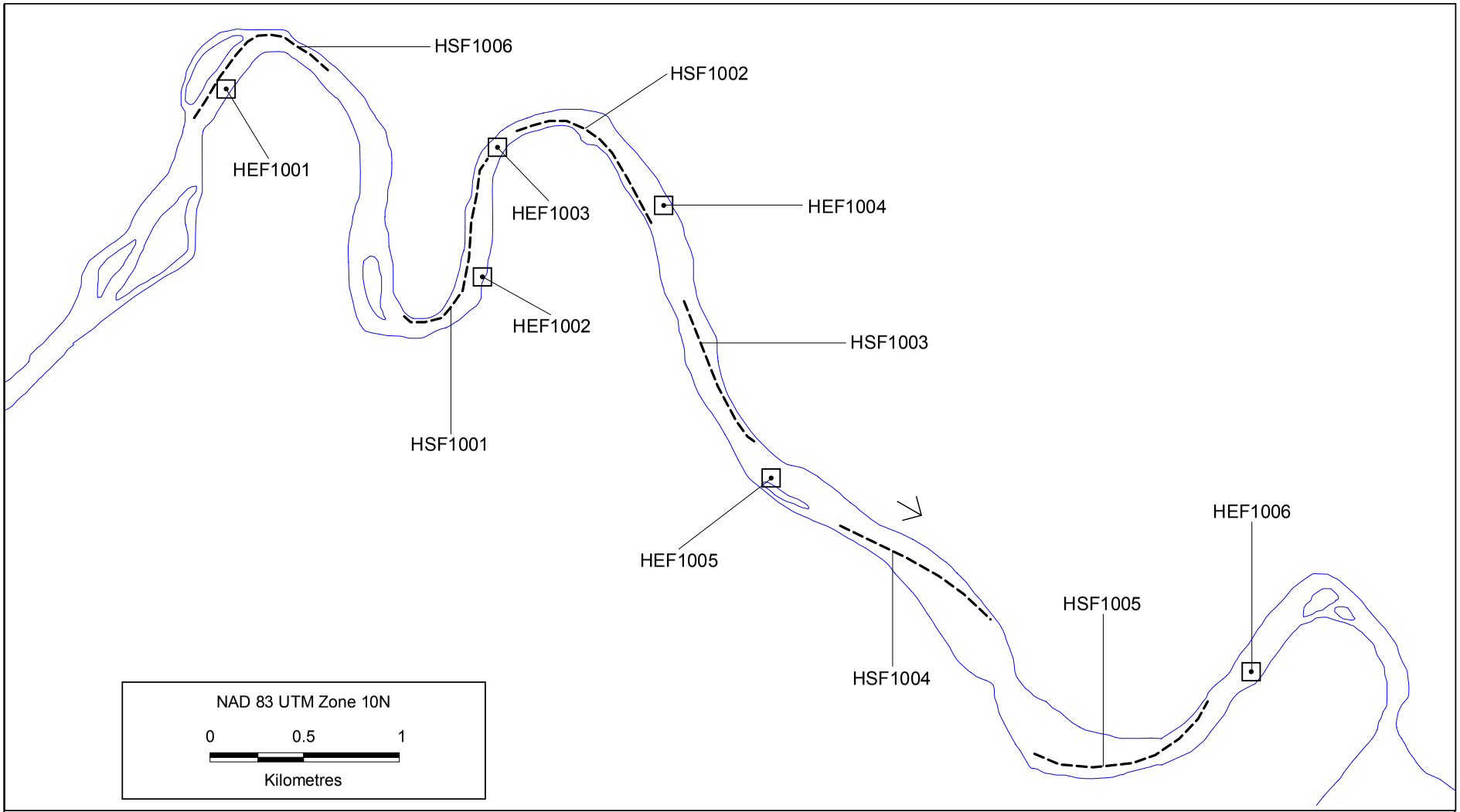
Figure A19

Halfway River Section 9 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project



BC Government Data

Trim Map: 94A022 - 94A026, 94A032, 94A041, 94A042, 94A051, 94B050, 94B058 - 94B060, 94B068, 94B077, 94B078

Trim 20K (Version I) Representational Digital Map Sheet 2D, contours, planimetry, IGDS format (BC Crown Registry and Geographic Base)

BC Hydro Data

Potential inundation level (461.8 m maximum elevation) from Digital Elevation Model [DEM] generated from LiDAR data acquired July and August, 2006.

LEGEND

- Beach Seine Sites
- Backpack Electrofishing Sites
- Small Fish Electrofishing Sites
- Flow Direction

N

mainstream AQUATICS LTD

Mainstream Aquatics Ltd.

Figure A20

Halfway River Section 10 Fish Sample Sites, Site C large tributaries summer fish survey 2009.

March 2010

No decision has been made to build the Site C Hydro Project. This map is for information only, for preliminary analysis and planning in stage 2 of the Site C Project

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APPENDIX B
Definitions

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Appendix – B1
Habitat and Substrate Type Classification Systems

Instream Habitat

Provides a qualitative assessment of the physical characteristics of a stream and its potential as fish habitat.

Riffle - Portion of channel with increased velocity relative to Run and Pool habitat types; broken water surface due to effects of submerged or exposed bed materials; shallow (less than 25 cm). Limited value as habitat for larger juveniles and adults (i.e., feeding), but may be used extensively by young-of-the-year and small juveniles.

RF - Typical riffle habitat type; provides limited cover for all life stages.

RF/BG - Riffle habitat type with abundance of large cobble and boulder substrates. Limited cover for juveniles and adults; but, may be used extensively by young-of-the-year fish.

Rapids (RA) - Portion of channel with highest velocity relative to other habitat types. Deep (>25 cm); often formed by channel constriction. Substrate extremely coarse; dominated by large cobble and boulder substrates. Habitat provided for juveniles and adults in pocket eddies associated with substrate.

Run - Portion of channel characterized by moderate to high current velocity relative to Pool and Flat habitats; water surface largely unbroken. Potentially high habitat value for all life stages. Can be differentiated into five types based on depth and cover.

R1 - Maximum depth exceeding 1.5 m; average depth 1.0 m. High cover at all flow conditions. Highest quality habitat for larger juveniles and adults; limited value for young-of-the-year-fish.

R2/BG - Maximum depth reaching 1.0 m and generally exceeding 0.75 m; presence of large cobble or boulder substrates in channel. High cover at all flows. Moderate to high quality habitat for larger juveniles and adults.

R2 - Maximum depth reaching 1.0 m and generally exceeding 0.75 m. High cover during most flows, but not during base flows. Moderate quality habitat for juveniles and adults; limited value for young-of-the-year-fish.

R3/BG - Maximum depth of 0.75 m, but averaging <0.50 m; presence of large cobble or boulder substrates in channel. Moderate cover at all flows. Moderate quality habitat for juveniles and adults; but, the value to young-of-the-year-fish is potentially high.

R3 - Maximum depth of 0.75 m, but averaging <0.50 m. Low cover at all flows. Lowest quality habitat for juveniles and adults; but, the value to young-of-the-year-fish is potentially high.

Flat - Area of channel characterized by low current velocities (relative to RF and Run cover types); near-laminar (i.e., non-turbulent) flow. Depositional area dominated sand/silt substrates. Differentiated from Pool habitat type by high channel uniformity and lack of direct association with riffle/run complex. Potential habitat value for all life stages is moderate to high. Can be differentiated into five types based on depth and cover.

F1 - Maximum depth exceeding 1.5 m; average depth 1.0 m or greater. High cover at all flows. Highest quality habitat for larger juveniles and adults; limited value for young-of-the-year-fish.

F2/BG - Maximum depth reaching 1.0 m and generally exceeding 0.75 m; presence of large cobble or boulder substrates in channel. High cover at all flows. Moderate to high quality habitat for larger juveniles and adults.

F2 - Maximum depth exceeding 1.0 m; generally exceeding 0.75 m. High cover during most flows, but not during base flows. Moderate quality habitat for juveniles and adults; limited value for young-of-the-year-fish.

F3/BG - Maximum depth of 0.75 m, but averaging <0.50 m; presence of large cobble or boulder substrates in channel. Moderate cover at all flows. Moderate quality habitat for juveniles and adults; but, the value to young-of-the-year-fish is potentially high.

F3 - Maximum depth of 0.75 m, averaging less than 0.50 m. Low cover at all flows. Lowest quality habitat for juveniles and adults; but, the value to young-of-the-year-fish is potentially high.

Pool - Discrete portion of channel featuring increased depth and reduced velocity (downstream oriented) relative to Riffle and Run habitat types. Normally featuring Riffle/Run associations. Principal habitat value for all life stages is cover. When in close association with Riffle/Run habitats, value can be very high. Can be differentiated into three types based on depth.

P1 - Maximum depth exceeding 1.5 m; average depth 1.0 m or greater; high cover at all flow conditions. Often intergrades with deep-slow type of R1. Highest quality habitat for larger juveniles and adults; limited value for young-of-the-year-fish.

P2 - Maximum depth reaching or exceeding 1.0 m, generally exceeding 0.75 m. High cover at all but base flows. Moderate quality habitat for juveniles and adults; limited value for young-of-the-year-fish.

P3 - Maximum depth of 0.75 m, averaging <0.50 m. Low instream cover; includes small pocket eddies. Lowest quality habitat for all life stages.

Special Features - Includes the following instream features:

Ledges (LG) - Areas of bedrock intrusion into the channel; often creates Chutes and Pool habitat.

Falls (FAL) - Channel section exhibiting distinct vertical falls over boulder and bedrock. Often a barrier to fish.

Cascade (CAS) - Area of channel exhibiting distinct drop over boulder and bedrock, but, no defined falls. Often a barrier to fish.

Tributary Confluence (TC) - Area of main river channel directly affected by tributary confluence.

Backwater (BW) - Well-defined zone of zero or reverse flow water velocity associated with a large bank irregularity.

Tributary Confluence/Backwater (TCBW) – area of main channel and backwater associated with bank irregularities formed by tributary confluence.

Snye (SN) - Well-defined back channel not subjected to mainstem currents.

Oxbow (OX) – Bend or meander in a stream or river that becomes detached from the stream channel from natural fluvial processes.

Bank Habitat

The zone within the immediate hydraulic influence of the bank-water interface. Typically extends from the annual high-water to low-water mark.

Armoured
Bank is stable and is composed of armoured cobble to boulder substrates that are not subjected to movement during annual floods; can be differentiated into categories based on the amount of bank roughness.
(A1 very rough, A2 moderately rough, A3 not rough)

Canyon
Bank is stable, is near vertical, and is composed of boulder to bedrock substrates; can be differentiated into categories based on the amount of bank roughness (C1 very rough, C2 moderately rough, C3 not rough).

Depositional
Bank exhibits low relief and is composed of silt to cobble substrates; characterized by high substrate mobility and low bank roughness (D1 cobble; D2 gravel; D3 sand and silts). Differentiated into tributary (TD) and mainstem (MD) depositional zones.

Erosional
Bank is dominated silt to gravel substrates that exhibit evidence of active erosion; note that large rock substrates can be present; can be differentiated into categories based on the amount of bank roughness
(E1 very rough, E2 moderately rough, E3 not rough).

Mesohabitat

To address issues caused by sampling several habitat types within on site using small fish and large fish boat electrofisher methods , sampled instream and bank habitat types were categorized into discrete groups based on differences in physical characteristics that included bank slope, water velocity, and the presence of physical cover (see table).

Four mesohabitat types sampled during the program were as follows:

- SFC - Moderate slope; shallow water; high water; velocity; physical cover
- SFN - Gradual slope; shallow water; high water velocity; no physical cover
- SSC - Moderate slope; shallow water; slow; physical cover
- SSN - Gradual slope; shallow water; slow; no physical cover

MesoHabitat Category	Bank Habitat[a]	Instream Habitat	Water Velocity[a]	Channel Bed Slope[a]	Physical Instream Cover	Substrate
SFN	A3	Run	Moderate to High	Low	Absent	Rock
SFC	A1/A2	Run	Moderate to High	Moderate	Present	Rock
SSN	A3	Flat	Low	Low	Absent	Rock or Sand
SSC	A1/A2	Flat	Low	Moderate	Present	Rock or Sand

[a] Based on subjective measure by field biologist.

Substrate Classification System

Modified Wentworth classification for substrate particle sizes (from Cummins 1962)

Category	Particle Size Range (mm)
Bedrock	-
Boulder	>256
Cobble	32 - 256
Gravel	1 - 32
Sand	0.0625 - 0.2-1
Silt	0.0039-0.0625
Clay	<0.0039
Organics	-

Appendix – B2
Site Characteristics Definitions

Habitat type:	See Appendix B1 for definitions.
Water conductivity:	Measured using Hanna HI98311 EC/TDS meter (μ*S*/cm) (± 2% full scale).
Water temperature:	Measured using Hanna HI98311 EC/TDS meter (± 0.1^{o}C).
Water pH:	Measured using Hanna HI98311 EC/TDS meter (± 0.01).
Water clarity:	Measured to the nearest centimetre using a secchi plate mounted on a pole (plate was 2.5 cm wide x 21 cm long partitioned into three equal sections of black, white, and black).
Sample effort:	Dependent on sample method. Boat electrofishing measured as number of fish/km, backpack electrofishing effort measured as number of fish/m, beach seine effort measured as number fish/100 m^2, gill net effort measured as number fish/100 m^2/24 h, and minnow trap effort measured as number of fish/trap/24 h.
Substrate type (%):	Material forming the bottom of the stream bed (see Substrate Classification System, Appendix B1). Visually rated within a predetermined area of stream bed.
Fish Cover (%):	Overhead (Ovh) cover, rock cover, large organic debris (LOD) cover, submergent (Sub) vegetation cover, emergent (Emer) vegetation cover, algal cover, that provide protection for fish within a predetermined area.
D90 (cm):	Represented the average size of substrate particle that is in the 90th percentile.
Embeddedness:	Degree to which rock substrates are surrounded and/or are covered by fines (Low, Moderate, High).
Compaction:	Looseness of substrate; ability to be moved during high flow (Low, Moderate, High).
Depth (m):	Depth of water at a point measured to nearest centimetre. At beach seines sites depth is measured at ¼, ½, and ¾ of the haul width. Depth at electrofisher sites depth is measured in the same manner across the width of sampled area.
Velocity (m/s):	Measured in the same place depth is taken at beach seine and backpack electrofisher sites. Measured with Swoffer Model 2100 flow meter wading wand (wand automatically determines depth at 0.6 m from water surface – best place to determine average velocity of water column in relatively shallow water) (m/s every 6.0 seconds).

Appendix – B3
Fish Life History Data Abbreviations and Codes

BC Label	Alberta Label	Common Name	Scientific Name	BC Label	Alberta Label	Common Name	Scientific Name
RB	RBTR	Rainbow trout	*Oncorhynchus mykiss*	BB	BURB	Burbot	*Lota lota*
GB	BNTR	Brown trout	*Salmo trutta*	CCG	SLSC	Slimy sculpin	*Cottus cognatus*
CT	CTTR	Cutthroat trout	*Oncorhynchus clarkii*	CRI	SPSC	Spoonhead sculpin	*Cottus ricei*
BT	BLTR	Bull trout	*Salvelinus confluentus*	CAS	PRSC	Prickly sculpin	*Cottus asper*
DV	DOVR	Dolly varden	*Salvelinus malma*	CAL	CSSC	Coastrange sculpin	*Cottus aleuticus*
LT	LKTR	Lake trout	*Salvelinus namaycush*	CCN	SHSC	Shorthead sculpin	*Cottus confusus*
AC	ARCH	Arctic char	*Salvelinus alpinus*	CLA	PSSC	Pacific staghorn sculpin	*Leptocottus armatus*
EB	BKTR	Brook trout	*Salvelinus fontinalis*	CBA	MTSC	Mottled sculpin	*Cottus bairdii*
GR	ARGR	Arctic grayling	*Thymallus arcticus*	CRH	TRSC	Torrent sculpin	*Cottus rhotheus*
MW	MNWH	Mountain whitefish	*Prosopium williamsoni*	BSB	BRST	Brook stickleback	*Culaea inconstans*
RW	RNWH	Round whitefish	*Prosopium cylindraceum*	NSB	NNST	Ninespine stickleback	*Pungitius pungitius*
PW	PGWH	Pygmy whitefish	*Prosopium coulterii*	TSB	THST	Threespine stickleback	*Gasterosteus aculeatus*
LW	LKWH	Lake whitefish	*Coregonus clupeaformis*	RSC	RDSH	Redside shiner	*Richardsonius balteatus*
KO	KOKA	Kokanee	*Oncorhynchus nerka*	NSC	NPMN	Northern pikeminnow	*Ptychocheilus oregonensis*
LSU	LNSC	Longnose sucker	*Catostomus catostomus*	PDC	PRDC	Pearl dace	*Margariscus margarita*
WSU	WHSC	White sucker	*Catostomus commersonii*	PCC	PEAM	Peamouth	*Mylocheilus caurinus*
CSU	LSSC	Largescale sucker	*Catostomus macrocheilus*	FHC	FLCH	Flathead chub	*Platygobio gracilis*
BSC	BRSC	Bridgelip sucker	*Catostomus columbianus*	LKC	LKCH	Lake chub	*Couesius plumbeus*
MSC	MNSC	Mountain sucker	*Catostomus platyrhynchus*	LNC	LNDC	Longnose dace	*Rhinichthys cataractae*
CMC	CHIS	Chiselmouth	*Acrocheilus alutaceus*	FDC	FNDC	Finescale dace	*Phoxinus neogaeus*
LSG	LKST	Lake sturgeon	*Acipenser fulvescens*	RDC	NRDC	Northern redbelly dace	*Phoxinus eos*
WSG	WHST	White sturgeon	*Acipenser transmontanus*	LDC	LPDC	Leopard dace	*Rhinichthys falcatus*
GE	GOLD	Goldeye	*Hiodon alosoides*	ESC	EMSH	Emerald shiner	*Notropis atherinoides*
NP	NRPK	Northern pike	*Esox lucius*	STC	SPSH	Spottail shiner	*Notropis hudsonius*
WP	WALL	Walleye	*Sander vitreus*	FM	FTMN	Fathead minnow	*Pimephales promelas*
	SAUG	Sauger	*Sander canadensis*	TP	TRPR	Trout-perch	*Percopsis omiscomaycus*
YP	YLPR	Yellow perch	*Perca flavescens*		IWDR	Iowa darter	*Etheostoma exile*

Sex and Maturity Descriptions

M	F	Class	Description
99		Immature A	Sex indeterminable due to small gonad size.
01	11	Immature B	Small gonad size; fish has never spawned and will not spawn during the coming spawning season.
02	12		Maturing but not ready to spawn; will spawn this year
06	16	Alternate	Small gonad size associated with large size; suggests alternate year spawner.
07	17	Gravid	Sexual organs fill cavity testes white, drops of milt fall with pressure; eggs completely round, some already translucent.
08	18	Ripe	Roe or milt are extruded by slight pressure on the belly.
09	19	Spent	Spawning completed; resorbtion of residual ovarian tissue is not yet complete.
10	20	External	Sex determined by external characteristics
97		Adult	Based on fish size; sex not determined.
98		Juvenile	Based on fish size; sex not determined.

Capture Method Codes

Code	Capture Method	Code	Capture Method
SL	Set line	ES	Boat electrofisher
DN	Dip net	EF	Backpack electrofisher
GN	Gill net	AL	Angling
BS	Beach seine	GE	Gee minnow trap
HN	Hoop net	RST	Rotary screw trap
TR	Trap		

Tag Codes

Code	Tag Code
Y, W, O	Color code for tag (Yellow, White, Orange)

Tag Type
PIT (Passive Integrated Transponder)
Radio (Radio transmitter tags)
Floy

Capture Codes

Code	Capture Code
0	First capture, released
1	First capture, mortality
2	Recapture, released
3	Recapture, mortality
5	Recapture, fin clip and lost tag

Age Structure Codes

Code	Age Structure	Code	Age Structure
SC	Scales	CL	Cleithra
OT	Otoliths	CS	Cleithra and scales
SO	Scales and otoliths	SF	Scales and fin rays
FR	Fin ray		

Identified to Family

BC/Alberta Label	Family
SU/SUCK	Catostomidae
CC/SCUL	Cottidae
MINN	Cyprinidae

Appendix – B4
Observed and Release-No-Data (RND)
Definitions

Small Fish Catch:	Count of small fish (≤ 200 mm fork length) caught and measured.
Total Catch:	Total count of fish caught and measured.
Adult Observed:	Adult fish (> 200 mm fork length) observed, but not caught.
Small Fish Observed:	Small fish observed, but not caught.
YOY Observed:	YOY (young-of-the-year) observed, but not caught.
All RND:	All age groups caught with (RND, released-no-data) no measurements taken.
Adult RND:	Adult fish caught with no measurements taken.
Small Fish RND:	Small fish caught with no measurements taken.
YOY RND:	YOY fish caught with no measurements taken.
Small Fish Number:	Count of small fish catch, small fish observed, YOY observed, small fish RND, and YOY RND.
Total Number:	Total count of all caught, observed and RND fish.

APPENDIX C
Water and Temperature Data

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Appendix C Table C1. Water quality information, Halfway River and Moberly River summer fish survey 2009.

Waterbody	Section	Site	Date	pH	Conductivity (µS/cm)	Clarity (cm)
HALFWAY RIVER						
	01					
		HBS0101	8/13/2009	9.16	348	44
		HBS0102	8/13/2009	8.46	379	
		HBS0103	8/14/2009	8.53	384	41
		HEF0101	8/13/2009	8.30	347	32
		HEF0102	8/13/2009	8.26	379	21
		HEF0103	8/13/2009	8.60	359	14
		HEF0104	8/13/2009	7.70	412	70
		HEF0105	8/13/2009	8.47	370	27
		HSF0101	8/13/2009	8.30	341	60
		HSF0102	8/13/2009	8.20	332	60
		HSF0103	8/13/2009	8.20	327	60
		HSF0104	8/13/2009	8.26	357	50
		HSF0105	8/13/2009		352	40
		HSF0106	8/13/2009	8.35	334	40
		HSF0107	8/14/2009	8.50	346	
	02					
		HBS0201	8/14/2009	8.48	387	54
		HEF0201	8/14/2009	8.13	460	26
		HEF0202	8/14/2009	8.55	381	17
		HEF0203	8/14/2009	8.63	366	23
		HEF0204	8/14/2009	8.46	383	13
		HEF0205	8/14/2009	8.50	380	28
		HSF0201	8/14/2009	8.40	359	40
		HSF0202	8/14/2009	8.47	344	30
		HSF0203	8/14/2009	8.55	345	35
		HSF0204	8/14/2009	8.50	348	50
		HSF0205	8/14/2009	8.49	344	50
	03					
		HEF0301	8/14/2009	8.50	364	16
		HEF0302	8/15/2009	8.02	519	12
		HEF0303	8/15/2009	8.47	371	15
		HEF0304	8/15/2009	8.35	640	9
		HEF0305	8/15/2009	8.51	373	1
		HEF0306	8/15/2009	8.58	370	47
		HSF0206	8/14/2009	8.54	334	50
		HSF0301	8/14/2009	8.56	327	40
		HSF0302	8/15/2009	8.47	357	50
		HSF0303	8/15/2009	8.60	337	50
		HSF0304	8/15/2009	8.58	339	50
		HSF0305	8/15/2009	8.60	336	80
		HSF0306	8/15/2009	8.65	329	120
	04					
		HBS0401	8/16/2009	8.48	381	60
		HBS0402	8/15/2009	8.19	410	32
		HEF0401	8/15/2009	8.25	182	55
		HEF0402	8/15/2009	8.52	370	16
		HEF0403	8/16/2009	8.54	371	14
		HEF0404	8/16/2009	8.58	370	30
		HSF0401	8/15/2009	8.67	334	80
		HSF0402	8/15/2009	8.64	323	90

Appendix C Table C1. Water quality information, Halfway River and Moberly River summer fish survey 2009.

Waterbody	Section	Site	Date	pH	Conductivity (µS/cm)	Clarity (cm)
		HSF0403	8/15/2009	8.68	333	100
		HSF0404	8/16/2009	8.70	350	50
		HSF0405	8/16/2009	8.70	333	100
		HSF0406	8/16/2009	8.60	334	100
	05					
		HEF0501	8/16/2009	8.67	363	45
		HEF0502	8/15/2009	8.62	353	20
		HEF0503	8/16/2009	8.19	376	48
		HEF0504	8/16/2009	8.30	378	24
		HEF0505	8/16/2009	8.40	384	14
		HEF0506	8/16/2009	8.47	389	36
		HSF0501	8/16/2009	8.69	330	100
		HSF0502	8/16/2009	8.70	333	100
		HSF0503	8/16/2009	8.70	328	100
		HSF0504	8/16/2009	8.70	323	100
		HSF0505	8/16/2009	8.70	322	100
		HSF0506	8/16/2009	8.60	326	100
		HSF0507	8/16/2009	8.70	327	100
	06					
		HBS0601	8/17/2009	8.64	361	60
		HEF0601	8/17/2009	8.60	371	15
		HEF0602	8/17/2009	8.52	371	44
		HEF0603	8/17/2009	8.27	373	20
		HEF0604	8/17/2009	8.56	470	27
		HEF0605	8/17/2009	8.60	370	14
		HSF0601	8/17/2009	8.60	353	80
		HSF0602	8/17/2009	8.60	344	80
		HSF0603	8/17/2009	8.70	338	50
		HSF0604	8/17/2009	8.70	318	60
		HSF0605	8/17/2009	8.60	321	20
		HSF0606	8/17/2009	8.60	325	100
	07					
		HBS0701	8/17/2009	8.40	395	55
		HEF0701	8/17/2009	8.49	375	19
		HEF0702	8/17/2009	8.52	376	24
		HEF0703	8/18/2009	8.55	378	54
		HSF0701	8/17/2009	8.70	336	20
		HSF0702	8/17/2009	8.70	342	20
		HSF0703	8/17/2009	8.60	337	20
		HSF0704	8/18/2009	8.70	338	10
		HSF0705	8/18/2009	8.70	331	20
	08					
		HBS0702	8/18/2009	8.41	476	40
		HEF0704	8/18/2009	8.58	382	17
		HEF0801	8/18/2009	8.48	386	
		HEF0802	8/18/2009	8.52	380	33
		HEF0803	8/18/2009	8.64	375	
		HEF0804	8/18/2009	8.48	351	17
		HEF0805	8/18/2009	8.51	380	35
		HEF0806	8/18/2009	8.51	383	
		HSF0706	8/18/2009	8.70	331	20
		HSF0707	8/18/2009	8.70	339	20

Appendix C Table C1. Water quality information, Halfway River and Moberly River summer fish survey 2009.

Waterbody	Section	Site	Date	pH	Conductivity (µS/cm)	Clarity (cm)
		HSF0801	8/18/2009	8.70	333	10
		HSF0802	8/18/2009	8.70	338	20
		HSF0803	8/18/2009	8.70	336	20
		HSF0804	8/18/2009	8.70	332	20
		HSF0805	8/17/2009	8.70	341	30
		HSF0806	8/17/2009	8.70	336	30
	09					
		HBS0901	8/19/2009	8.50	387	35
		HEF0901	8/19/2009	8.63	394	26
		HEF0902	8/19/2009	8.40	386	25
		HEF0903	8/19/2009	8.54	378	34
		HEF0904	8/19/2009	8.51	364	46
		HEF0905	8/19/2009	8.57	382	50
		HSF0901	8/19/2009	8.60	378	20
		HSF0902	8/19/2009	8.60	360	20
		HSF0903	8/19/2009	8.60	351	20
		HSF0904	8/19/2009	8.70	355	
		HSF0905	8/19/2009	8.60	347	20
		HSF0906	8/19/2009	8.70	345	20
	10					
		HEF1001	8/19/2009	8.47	382	35
		HEF1002	8/20/2009	8.69	394	14
		HEF1003	8/20/2009	8.61	393	
		HEF1004	8/20/2009	8.51	392	25
		HEF1005	8/20/2009	8.60	386	
		HEF1006	8/20/2009	8.64	380	26
		HSF1001	8/20/2009	8.60	373	10
		HSF1002	8/20/2009	8.60	364	10
		HSF1003	8/20/2009	8.70	358	15
		HSF1004	8/20/2009	8.70	351	15
		HSF1005	8/20/2009	8.70	347	20
		HSF1006	8/19/2009	8.69	334	15
MOBERLY RIVER						
	01					
		MBS0101	8/6/2009			
		MEF0101	8/6/2009	6.83	153	
		MEF0102	8/6/2009			
		MSF0101	8/6/2009	8.40	145	
		MSF0102	8/6/2009			
		MSF0103	8/6/2009			
		MSF0104	8/6/2009			
		MSF0105	8/6/2009			
		MSF0106	8/6/2009	8.35	156	
	02					
		MBS0201	8/7/2009			
		MBS0202	8/7/2009			
		MEF0201	8/7/2009	6.89	165	2
		MEF0202	8/7/2009			
		MEF0203	8/7/2009			
		MEF0204	8/7/2009			
		MEF0205	8/7/2009			
		MSF0201	8/7/2009	8.22	155	

Appendix C Table C1. Water quality information, Halfway River and Moberly River summer fish survey 2009.

Waterbody	Section	Site	Date	pH	Conductivity (µS/cm)	Clarity (cm)
		MSF0202	8/7/2009			
		MSF0203	8/7/2009			
		MSF0204	8/7/2009			
		MSF0205	8/7/2009			
		MSF0206	8/7/2009			
		MSF0207	8/7/2009			
		MSF0208	8/7/2009			
		MSF0209	8/7/2009	8.43	155	
	03					
		MBS0301	8/8/2009			
		MBS0302	8/8/2009			
		MBS0303	8/8/2009			
		MEF0301	8/8/2009	7.70	161	130
		MEF0302	8/8/2009			
		MEF0303	8/8/2009			
		MEF0304	8/8/2009			
		MSF0301	8/8/2009	8.37	157	
		MSF0302	8/8/2009			
		MSF0303	8/8/2009			
		MSF0304	8/8/2009			
		MSF0305	8/8/2009			
		MSF0306	8/8/2009			
		MSF0307	8/8/2009			
		MSF0308	8/8/2009	8.50	158	
	04					
		MBS0401	8/9/2009	7.92	160	73
		MBS0402	8/9/2009			70
		MBS0403	8/9/2009			82
		MEF0401	8/9/2009	7.25	182	30
		MEF0402	8/9/2009			
		MEF0403	8/9/2009			36
		MEF0404	8/9/2009	8.09	163	54
		MSF0401	8/9/2009	8.40	155	
		MSF0402	8/9/2009			
		MSF0403	8/9/2009			
		MSF0404	8/9/2009			
		MSF0405	8/9/2009			
		MSF0406	8/9/2009			
	05					
		MBS0501	8/10/2009			38
		MBS0502	8/10/2009	8.09	165	102
		MEF0501	8/10/2009	8.57	164	60
		MEF0502	8/10/2009			
		MEF0503	8/10/2009			
		MEF0504	8/10/2009			65
		MSF0501	8/10/2009	8.46	154	
		MSF0502	8/10/2009			
		MSF0503	8/10/2009			
		MSF0504	8/10/2009			
		MSF0505	8/10/2009			
		MSF0506	8/10/2009			
		MSF0507	8/10/2009			

Appendix C Table C1. Water quality information, Halfway River and Moberly River summer fish survey 2009.

Waterbody	Section	Site	Date	pH	Conductivity (µS/cm)	Clarity (cm)
	06					
		MBS0601	8/11/2009			
		MBS0602	8/11/2009			
		MBS0603	8/11/2009			
		MEF0601	8/11/2009	8.20	164	90
		MEF0602	8/11/2009			
		MEF0603	8/11/2009	8.60	165	
		MSF0601	8/11/2009	8.10	164	
		MSF0602	8/11/2009			
		MSF0603	8/11/2009			
		MSF0604	8/11/2009			
		MSF0605	8/11/2009			
		MSF0606	8/11/2009			
	07					
		MEF0701	8/12/2009	7.80	168	
		MEF0702	8/12/2009			
		MEF0703	8/12/2009			
		MEF0704	8/12/2009			
		MEF0705	8/12/2009			
		MEF0706	8/12/2009	8.87	175	
		MEF0707	8/12/2009			
		MSF0701	8/12/2009	8.58	161	
		MSF0702	8/12/2009			
		MSF0703	8/12/2009			
		MSF0704	8/12/2009			
		MSF0705	8/12/2009			
		MSF0706	8/12/2009			
		MSF0707	8/12/2009			
	08					
		MEF0801	8/13/2009	8.28	178	
		MEF0802	8/13/2009			
		MEF0803	8/13/2009			
		MEF0804	8/13/2009			
		MEF0805	8/13/2009			
		MEF0806	8/13/2009	8.03	182	
		MSF0801	8/13/2009	8.54	172	
		MSF0802	8/13/2009			
		MSF0803	8/13/2009			
		MSF0804	8/13/2009			
		MSF0805	8/13/2009			
		MSF0806	8/13/2009			
	09					
		MEF0901	8/14/2009	8.07	185	
		MEF0902	8/14/2009			
		MEF0903	8/14/2009			
		MEF0904	8/14/2009			
		MEF0905	8/14/2009			
		MSF0901	8/14/2009	8.46	177	
		MSF0902	8/14/2009			
		MSF0903	8/14/2009			
		MSF0904	8/14/2009			35
		MSF0905	8/14/2009			

Appendix C Table C1. Water quality information, Halfway River and Moberly River summer fish survey 2009.

Waterbody	Section	Site	Date	pH	Conductivity (µS/cm)	Clarity (cm)
	10					
		MEF1001	8/15/2009	7.96	188	
		MEF1002	8/15/2009			
		MEF1003	8/14/2009			
		MEF1004	8/14/2009			
		MEF1005	8/14/2009	7.45	519	
		MSF1001	8/15/2009	8.51	183	20
		MSF1002	8/15/2009			
		MSF1003	8/15/2009			
		MSF1004	8/14/2009			
		MSF1005	8/14/2009			
		MSF1006	8/14/2009			
		MSF1007	8/14/2009			15

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
3-Jun-09	00:00:00	10.3	6-Jul-09	12:00:00	16.5	9-Aug-09	00:00:00	20.8	11-Sep-09	12:00:00	13.3
3-Jun-09	01:00:00	10.1	6-Jul-09	13:00:00	16.3	9-Aug-09	01:00:00	20.6	11-Sep-09	13:00:00	13.9
3-Jun-09	02:00:00	9.8	6-Jul-09	14:00:00	16.2	9-Aug-09	02:00:00	20.3	11-Sep-09	14:00:00	14.5
3-Jun-09	03:00:00	9.5	6-Jul-09	15:00:00	16.2	9-Aug-09	03:00:00	19.9	11-Sep-09	15:00:00	15.4
3-Jun-09	04:00:00	9.3	6-Jul-09	16:00:00	16.0	9-Aug-09	04:00:00	19.5	11-Sep-09	16:00:00	16.0
3-Jun-09	05:00:00	9.2	6-Jul-09	17:00:00	15.9	9-Aug-09	05:00:00	19.4	11-Sep-09	17:00:00	16.3
3-Jun-09	06:00:00	9.0	6-Jul-09	18:00:00	16.0	9-Aug-09	06:00:00	19.1	11-Sep-09	18:00:00	16.6
3-Jun-09	07:00:00	9.0	6-Jul-09	19:00:00	16.2	9-Aug-09	07:00:00	18.8	11-Sep-09	19:00:00	16.6
3-Jun-09	08:00:00	9.2	6-Jul-09	20:00:00	16.2	9-Aug-09	08:00:00	18.6	11-Sep-09	20:00:00	16.5
3-Jun-09	09:00:00	9.5	6-Jul-09	21:00:00	16.0	9-Aug-09	09:00:00	18.6	11-Sep-09	21:00:00	16.2
3-Jun-09	10:00:00	9.9	6-Jul-09	22:00:00	15.9	9-Aug-09	10:00:00	18.6	11-Sep-09	22:00:00	15.9
3-Jun-09	11:00:00	10.5	6-Jul-09	23:00:00	15.9	9-Aug-09	11:00:00	18.9	11-Sep-09	23:00:00	15.7
3-Jun-09	12:00:00	11.1	7-Jul-09	00:00:00	15.7	9-Aug-09	12:00:00	19.4	12-Sep-09	00:00:00	15.5
3-Jun-09	13:00:00	11.7	7-Jul-09	01:00:00	15.5	9-Aug-09	13:00:00	19.9	12-Sep-09	01:00:00	15.2
3-Jun-09	14:00:00	12.3	7-Jul-09	02:00:00	15.4	9-Aug-09	14:00:00	20.5	12-Sep-09	02:00:00	15.1
3-Jun-09	15:00:00	12.9	7-Jul-09	03:00:00	15.2	9-Aug-09	15:00:00	21.0	12-Sep-09	03:00:00	14.8
3-Jun-09	16:00:00	13.3	7-Jul-09	04:00:00	15.1	9-Aug-09	16:00:00	21.4	12-Sep-09	04:00:00	14.6
3-Jun-09	17:00:00	13.6	7-Jul-09	05:00:00	14.9	9-Aug-09	17:00:00	21.8	12-Sep-09	05:00:00	14.3
3-Jun-09	18:00:00	13.9	7-Jul-09	06:00:00	14.9	9-Aug-09	18:00:00	22.1	12-Sep-09	06:00:00	13.9
3-Jun-09	19:00:00	14.0	7-Jul-09	07:00:00	14.8	9-Aug-09	19:00:00	21.9	12-Sep-09	07:00:00	13.6
3-Jun-09	20:00:00	13.8	7-Jul-09	08:00:00	14.6	9-Aug-09	20:00:00	21.8	12-Sep-09	08:00:00	13.3
3-Jun-09	21:00:00	13.6	7-Jul-09	09:00:00	14.6	9-Aug-09	21:00:00	21.4	12-Sep-09	09:00:00	13.0
3-Jun-09	22:00:00	13.3	7-Jul-09	10:00:00	14.6	9-Aug-09	22:00:00	21.1	12-Sep-09	10:00:00	13.0
3-Jun-09	23:00:00	13.0	7-Jul-09	11:00:00	14.6	9-Aug-09	23:00:00	21.0	12-Sep-09	11:00:00	13.3
4-Jun-09	00:00:00	12.6	7-Jul-09	12:00:00	14.5	10-Aug-09	00:00:00	20.6	12-Sep-09	12:00:00	13.8
4-Jun-09	01:00:00	12.1	7-Jul-09	13:00:00	14.6	10-Aug-09	01:00:00	20.3	12-Sep-09	13:00:00	14.5
4-Jun-09	02:00:00	11.8	7-Jul-09	14:00:00	14.6	10-Aug-09	02:00:00	20.2	12-Sep-09	14:00:00	15.1
4-Jun-09	03:00:00	11.5	7-Jul-09	15:00:00	14.8	10-Aug-09	03:00:00	19.9	12-Sep-09	15:00:00	15.7
4-Jun-09	04:00:00	11.1	7-Jul-09	16:00:00	14.6	10-Aug-09	04:00:00	19.7	12-Sep-09	16:00:00	16.3
4-Jun-09	05:00:00	10.9	7-Jul-09	17:00:00	14.9	10-Aug-09	05:00:00	19.5	12-Sep-09	17:00:00	16.8
4-Jun-09	06:00:00	10.8	7-Jul-09	18:00:00	14.9	10-Aug-09	06:00:00	19.4	12-Sep-09	18:00:00	17.1
4-Jun-09	07:00:00	10.6	7-Jul-09	19:00:00	15.1	10-Aug-09	07:00:00	19.1	12-Sep-09	19:00:00	16.8
4-Jun-09	08:00:00	10.8	7-Jul-09	20:00:00	14.9	10-Aug-09	08:00:00	19.1	12-Sep-09	20:00:00	16.8
4-Jun-09	09:00:00	10.8	7-Jul-09	21:00:00	14.8	10-Aug-09	09:00:00	18.9	12-Sep-09	21:00:00	16.5
4-Jun-09	10:00:00	11.2	7-Jul-09	22:00:00	14.6	10-Aug-09	10:00:00	19.1	12-Sep-09	22:00:00	16.2
4-Jun-09	11:00:00	11.5	7-Jul-09	23:00:00	14.5	10-Aug-09	11:00:00	19.2	12-Sep-09	23:00:00	16.0
4-Jun-09	12:00:00	12.0	8-Jul-09	00:00:00	14.3	10-Aug-09	12:00:00	19.4	13-Sep-09	00:00:00	15.9
4-Jun-09	13:00:00	12.4	8-Jul-09	01:00:00	14.2	10-Aug-09	13:00:00	19.5	13-Sep-09	01:00:00	15.5
4-Jun-09	14:00:00	12.7	8-Jul-09	02:00:00	14.0	10-Aug-09	14:00:00	19.9	13-Sep-09	02:00:00	15.4
4-Jun-09	15:00:00	13.0	8-Jul-09	03:00:00	13.9	10-Aug-09	15:00:00	20.2	13-Sep-09	03:00:00	14.9
4-Jun-09	16:00:00	13.3	8-Jul-09	04:00:00	13.6	10-Aug-09	16:00:00	20.2	13-Sep-09	04:00:00	14.8
4-Jun-09	17:00:00	13.6	8-Jul-09	05:00:00	13.5	10-Aug-09	17:00:00	20.3	13-Sep-09	05:00:00	14.6
4-Jun-09	18:00:00	13.8	8-Jul-09	06:00:00	13.2	10-Aug-09	18:00:00	20.6	13-Sep-09	06:00:00	14.3
4-Jun-09	19:00:00	13.8	8-Jul-09	07:00:00	13.0	10-Aug-09	19:00:00	20.5	13-Sep-09	07:00:00	14.0
4-Jun-09	20:00:00	13.5	8-Jul-09	08:00:00	12.9	10-Aug-09	20:00:00	20.0	13-Sep-09	08:00:00	13.8
4-Jun-09	21:00:00	13.2	8-Jul-09	09:00:00	12.9	10-Aug-09	21:00:00	20.0	13-Sep-09	09:00:00	13.5
4-Jun-09	22:00:00	12.6	8-Jul-09	10:00:00	12.9	10-Aug-09	22:00:00	19.9	13-Sep-09	10:00:00	13.5
4-Jun-09	23:00:00	12.3	8-Jul-09	11:00:00	13.2	10-Aug-09	23:00:00	19.7	13-Sep-09	11:00:00	13.8
5-Jun-09	00:00:00	12.0	8-Jul-09	12:00:00	13.5	11-Aug-09	00:00:00	19.4	13-Sep-09	12:00:00	14.2
5-Jun-09	01:00:00	11.5	8-Jul-09	13:00:00	13.9	11-Aug-09	01:00:00	18.9	13-Sep-09	13:00:00	14.8
5-Jun-09	02:00:00	11.2	8-Jul-09	14:00:00	14.3	11-Aug-09	02:00:00	18.8	13-Sep-09	14:00:00	15.5
5-Jun-09	03:00:00	11.1	8-Jul-09	15:00:00	14.8	11-Aug-09	03:00:00	18.3	13-Sep-09	15:00:00	16.2
5-Jun-09	04:00:00	10.9	8-Jul-09	16:00:00	15.1	11-Aug-09	04:00:00	18.0	13-Sep-09	16:00:00	16.6
5-Jun-09	05:00:00	10.8	8-Jul-09	17:00:00	15.5	11-Aug-09	05:00:00	17.7	13-Sep-09	17:00:00	17.1
5-Jun-09	06:00:00	10.6	8-Jul-09	18:00:00	15.7	11-Aug-09	06:00:00	17.4	13-Sep-09	18:00:00	17.2
5-Jun-09	07:00:00	10.6	8-Jul-09	19:00:00	15.7	11-Aug-09	07:00:00	17.2	13-Sep-09	19:00:00	17.2
5-Jun-09	08:00:00	10.6	8-Jul-09	20:00:00	15.7	11-Aug-09	08:00:00	16.9	13-Sep-09	20:00:00	16.9
5-Jun-09	09:00:00	10.8	8-Jul-09	21:00:00	15.5	11-Aug-09	09:00:00	16.9	13-Sep-09	21:00:00	16.6
5-Jun-09	10:00:00	11.1	8-Jul-09	22:00:00	15.2	11-Aug-09	10:00:00	17.1	13-Sep-09	22:00:00	16.5

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
5-Jun-09	11:00:00	11.2	8-Jul-09	23:00:00	15.1	11-Aug-09	11:00:00	17.2	13-Sep-09	23:00:00	16.3
5-Jun-09	12:00:00	11.7	9-Jul-09	00:00:00	14.9	11-Aug-09	12:00:00	17.5	14-Sep-09	00:00:00	16.0
5-Jun-09	13:00:00	12.1	9-Jul-09	01:00:00	14.8	11-Aug-09	13:00:00	17.8	14-Sep-09	01:00:00	15.9
5-Jun-09	14:00:00	12.4	9-Jul-09	02:00:00	14.5	11-Aug-09	14:00:00	18.1	14-Sep-09	02:00:00	15.5
5-Jun-09	15:00:00	12.6	9-Jul-09	03:00:00	14.2	11-Aug-09	15:00:00	18.4	14-Sep-09	03:00:00	15.2
5-Jun-09	16:00:00	12.6	9-Jul-09	04:00:00	14.0	11-Aug-09	16:00:00	18.9	14-Sep-09	04:00:00	14.9
5-Jun-09	17:00:00	12.6	9-Jul-09	05:00:00	13.9	11-Aug-09	17:00:00	19.4	14-Sep-09	05:00:00	14.8
5-Jun-09	18:00:00	12.4	9-Jul-09	06:00:00	13.8	11-Aug-09	18:00:00	19.4	14-Sep-09	06:00:00	14.6
5-Jun-09	19:00:00	12.4	9-Jul-09	07:00:00	13.6	11-Aug-09	19:00:00	19.4	14-Sep-09	07:00:00	14.5
5-Jun-09	20:00:00	12.1	9-Jul-09	08:00:00	13.8	11-Aug-09	20:00:00	19.1	14-Sep-09	08:00:00	14.2
5-Jun-09	21:00:00	11.8	9-Jul-09	09:00:00	13.8	11-Aug-09	21:00:00	18.8	14-Sep-09	09:00:00	14.0
5-Jun-09	22:00:00	11.4	9-Jul-09	10:00:00	13.9	11-Aug-09	22:00:00	18.6	14-Sep-09	10:00:00	14.0
5-Jun-09	23:00:00	11.1	9-Jul-09	11:00:00	14.0	11-Aug-09	23:00:00	18.3	14-Sep-09	11:00:00	14.3
6-Jun-09	00:00:00	10.8	9-Jul-09	12:00:00	14.5	12-Aug-09	00:00:00	18.1	14-Sep-09	12:00:00	14.6
6-Jun-09	01:00:00	10.3	9-Jul-09	13:00:00	14.6	12-Aug-09	01:00:00	17.8	14-Sep-09	13:00:00	15.2
6-Jun-09	02:00:00	9.9	9-Jul-09	14:00:00	14.9	12-Aug-09	02:00:00	17.5	14-Sep-09	14:00:00	16.0
6-Jun-09	03:00:00	9.6	9-Jul-09	15:00:00	14.9	12-Aug-09	03:00:00	17.2	14-Sep-09	15:00:00	16.6
6-Jun-09	04:00:00	9.2	9-Jul-09	16:00:00	15.2	12-Aug-09	04:00:00	16.9	14-Sep-09	16:00:00	17.1
6-Jun-09	05:00:00	8.9	9-Jul-09	17:00:00	15.5	12-Aug-09	05:00:00	16.8	14-Sep-09	17:00:00	17.5
6-Jun-09	06:00:00	8.6	9-Jul-09	18:00:00	15.7	12-Aug-09	06:00:00	16.5	14-Sep-09	18:00:00	17.5
6-Jun-09	07:00:00	8.4	9-Jul-09	19:00:00	16.0	12-Aug-09	07:00:00	16.3	14-Sep-09	19:00:00	17.5
6-Jun-09	08:00:00	8.4	9-Jul-09	20:00:00	16.3	12-Aug-09	08:00:00	16.2	14-Sep-09	20:00:00	17.2
6-Jun-09	09:00:00	8.4	9-Jul-09	21:00:00	16.3	12-Aug-09	09:00:00	16.2	14-Sep-09	21:00:00	17.1
6-Jun-09	10:00:00	8.7	9-Jul-09	22:00:00	16.2	12-Aug-09	10:00:00	16.2	14-Sep-09	22:00:00	16.9
6-Jun-09	11:00:00	8.9	9-Jul-09	23:00:00	15.9	12-Aug-09	11:00:00	16.0	14-Sep-09	23:00:00	16.8
6-Jun-09	12:00:00	9.3	10-Jul-09	00:00:00	15.5	12-Aug-09	12:00:00	16.0	15-Sep-09	00:00:00	16.8
6-Jun-09	13:00:00	9.8	10-Jul-09	01:00:00	15.2	12-Aug-09	13:00:00	16.2	15-Sep-09	01:00:00	16.5
6-Jun-09	14:00:00	10.1	10-Jul-09	02:00:00	14.9	12-Aug-09	14:00:00	16.2	15-Sep-09	02:00:00	16.2
6-Jun-09	15:00:00	10.5	10-Jul-09	03:00:00	14.5	12-Aug-09	15:00:00	16.3	15-Sep-09	03:00:00	15.9
6-Jun-09	16:00:00	10.8	10-Jul-09	04:00:00	14.2	12-Aug-09	16:00:00	16.5	15-Sep-09	04:00:00	15.5
6-Jun-09	17:00:00	11.1	10-Jul-09	05:00:00	13.9	12-Aug-09	17:00:00	16.5	15-Sep-09	05:00:00	15.2
6-Jun-09	18:00:00	11.1	10-Jul-09	06:00:00	13.6	12-Aug-09	18:00:00	16.6	15-Sep-09	06:00:00	14.9
6-Jun-09	19:00:00	11.1	10-Jul-09	07:00:00	13.5	12-Aug-09	19:00:00	16.5	15-Sep-09	07:00:00	14.6
6-Jun-09	20:00:00	11.1	10-Jul-09	08:00:00	13.5	12-Aug-09	20:00:00	16.3	15-Sep-09	08:00:00	14.3
6-Jun-09	21:00:00	10.8	10-Jul-09	09:00:00	13.5	12-Aug-09	21:00:00	16.3	15-Sep-09	09:00:00	14.2
6-Jun-09	22:00:00	10.6	10-Jul-09	10:00:00	13.6	12-Aug-09	22:00:00	16.2	15-Sep-09	10:00:00	14.2
6-Jun-09	23:00:00	10.2	10-Jul-09	11:00:00	13.8	12-Aug-09	23:00:00	16.0	15-Sep-09	11:00:00	14.5
7-Jun-09	00:00:00	9.9	10-Jul-09	12:00:00	13.9	13-Aug-09	00:00:00	15.9	15-Sep-09	12:00:00	14.6
7-Jun-09	01:00:00	9.6	10-Jul-09	13:00:00	14.2	13-Aug-09	01:00:00	15.7	15-Sep-09	13:00:00	15.1
7-Jun-09	02:00:00	9.3	10-Jul-09	14:00:00	14.6	13-Aug-09	02:00:00	15.4	15-Sep-09	14:00:00	15.5
7-Jun-09	03:00:00	9.0	10-Jul-09	15:00:00	15.1	13-Aug-09	03:00:00	15.2	15-Sep-09	15:00:00	15.9
7-Jun-09	04:00:00	8.7	10-Jul-09	16:00:00	15.4	13-Aug-09	04:00:00	15.1	15-Sep-09	16:00:00	16.3
7-Jun-09	05:00:00	8.6	10-Jul-09	17:00:00	15.4	13-Aug-09	05:00:00	14.9	15-Sep-09	17:00:00	16.5
7-Jun-09	06:00:00	8.3	10-Jul-09	18:00:00	15.4	13-Aug-09	06:00:00	14.8	15-Sep-09	18:00:00	16.5
7-Jun-09	07:00:00	8.1	10-Jul-09	19:00:00	15.1	13-Aug-09	07:00:00	14.8	15-Sep-09	19:00:00	16.5
7-Jun-09	08:00:00	8.1	10-Jul-09	20:00:00	14.5	13-Aug-09	08:00:00	14.6	15-Sep-09	20:00:00	16.3
7-Jun-09	09:00:00	8.3	10-Jul-09	21:00:00	14.6	13-Aug-09	09:00:00	14.5	15-Sep-09	21:00:00	16.2
7-Jun-09	10:00:00	8.7	10-Jul-09	22:00:00	14.6	13-Aug-09	10:00:00	14.5	15-Sep-09	22:00:00	16.0
7-Jun-09	11:00:00	9.3	10-Jul-09	23:00:00	14.6	13-Aug-09	11:00:00	14.6	15-Sep-09	23:00:00	15.9
7-Jun-09	12:00:00	9.8	11-Jul-09	00:00:00	14.6	13-Aug-09	12:00:00	14.8	16-Sep-09	00:00:00	15.7
7-Jun-09	13:00:00	10.3	11-Jul-09	01:00:00	14.6	13-Aug-09	13:00:00	14.9	16-Sep-09	01:00:00	15.7
7-Jun-09	14:00:00	10.9	11-Jul-09	02:00:00	14.6	13-Aug-09	14:00:00	15.9	16-Sep-09	02:00:00	15.5
7-Jun-09	15:00:00	11.4	11-Jul-09	03:00:00	14.5	13-Aug-09	15:00:00	16.6	16-Sep-09	03:00:00	15.4
7-Jun-09	16:00:00	11.7	11-Jul-09	04:00:00	14.5	13-Aug-09	16:00:00	17.1	16-Sep-09	04:00:00	15.2
7-Jun-09	17:00:00	12.0	11-Jul-09	05:00:00	14.5	13-Aug-09	17:00:00	17.5	16-Sep-09	05:00:00	15.1
7-Jun-09	18:00:00	12.0	11-Jul-09	06:00:00	14.5	13-Aug-09	18:00:00	17.7	16-Sep-09	06:00:00	14.9
7-Jun-09	19:00:00	12.0	11-Jul-09	07:00:00	14.6	13-Aug-09	19:00:00	17.8	16-Sep-09	07:00:00	14.6
7-Jun-09	20:00:00	11.7	11-Jul-09	08:00:00	14.6	13-Aug-09	20:00:00	17.7	16-Sep-09	08:00:00	14.5
7-Jun-09	21:00:00	11.4	11-Jul-09	09:00:00	14.9	13-Aug-09	21:00:00	17.4	16-Sep-09	09:00:00	14.5

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
7-Jun-09	22:00:00	11.1	11-Jul-09	10:00:00	14.9	13-Aug-09	22:00:00	17.1	16-Sep-09	10:00:00	14.5
7-Jun-09	23:00:00	10.8	11-Jul-09	11:00:00	15.1	13-Aug-09	23:00:00	16.6	16-Sep-09	11:00:00	14.5
8-Jun-09	00:00:00	10.6	11-Jul-09	12:00:00	15.5	14-Aug-09	00:00:00	16.3	16-Sep-09	12:00:00	14.5
8-Jun-09	01:00:00	10.3	11-Jul-09	13:00:00	16.0	14-Aug-09	01:00:00	16.0	16-Sep-09	13:00:00	14.6
8-Jun-09	02:00:00	10.1	11-Jul-09	14:00:00	16.5	14-Aug-09	02:00:00	15.7	16-Sep-09	14:00:00	14.6
8-Jun-09	03:00:00	9.9	11-Jul-09	15:00:00	16.8	14-Aug-09	03:00:00	15.2	16-Sep-09	15:00:00	14.8
8-Jun-09	04:00:00	9.8	11-Jul-09	16:00:00	17.1	14-Aug-09	04:00:00	14.9	16-Sep-09	16:00:00	14.9
8-Jun-09	05:00:00	9.5	11-Jul-09	17:00:00	16.9	14-Aug-09	05:00:00	14.8	16-Sep-09	17:00:00	14.9
8-Jun-09	06:00:00	9.5	11-Jul-09	18:00:00	17.1	14-Aug-09	06:00:00	14.5	16-Sep-09	18:00:00	14.9
8-Jun-09	07:00:00	9.3	11-Jul-09	19:00:00	17.1	14-Aug-09	07:00:00	14.2	16-Sep-09	19:00:00	14.9
8-Jun-09	08:00:00	9.3	11-Jul-09	20:00:00	16.9	14-Aug-09	08:00:00	14.0	16-Sep-09	20:00:00	14.9
8-Jun-09	09:00:00	9.5	11-Jul-09	21:00:00	16.9	14-Aug-09	09:00:00	13.9	16-Sep-09	21:00:00	14.8
8-Jun-09	10:00:00	9.8	11-Jul-09	22:00:00	16.6	14-Aug-09	10:00:00	14.0	16-Sep-09	22:00:00	14.6
8-Jun-09	11:00:00	10.2	11-Jul-09	23:00:00	16.5	14-Aug-09	11:00:00	14.2	16-Sep-09	23:00:00	14.6
8-Jun-09	12:00:00	10.6	12-Jul-09	00:00:00	16.2	14-Aug-09	12:00:00	14.8	17-Sep-09	00:00:00	14.5
8-Jun-09	13:00:00	10.9	12-Jul-09	01:00:00	15.9	14-Aug-09	13:00:00	15.4	17-Sep-09	01:00:00	14.5
8-Jun-09	14:00:00	11.4	12-Jul-09	02:00:00	15.9	14-Aug-09	14:00:00	16.0	17-Sep-09	02:00:00	14.5
8-Jun-09	15:00:00	11.8	12-Jul-09	03:00:00	15.7	14-Aug-09	15:00:00	16.8	17-Sep-09	03:00:00	14.2
8-Jun-09	16:00:00	12.1	12-Jul-09	04:00:00	15.4	14-Aug-09	16:00:00	17.5	17-Sep-09	04:00:00	14.0
8-Jun-09	17:00:00	12.3	12-Jul-09	05:00:00	15.4	14-Aug-09	17:00:00	18.1	17-Sep-09	05:00:00	13.9
8-Jun-09	18:00:00	12.1	12-Jul-09	06:00:00	15.4	14-Aug-09	18:00:00	18.3	17-Sep-09	06:00:00	13.6
8-Jun-09	19:00:00	12.0	12-Jul-09	07:00:00	15.4	14-Aug-09	19:00:00	18.3	17-Sep-09	07:00:00	13.3
8-Jun-09	20:00:00	11.7	12-Jul-09	08:00:00	15.5	14-Aug-09	20:00:00	18.1	17-Sep-09	08:00:00	13.2
8-Jun-09	21:00:00	11.2	12-Jul-09	09:00:00	15.5	14-Aug-09	21:00:00	18.0	17-Sep-09	09:00:00	13.0
8-Jun-09	22:00:00	10.9	12-Jul-09	10:00:00	15.9	14-Aug-09	22:00:00	17.8	17-Sep-09	10:00:00	12.9
8-Jun-09	23:00:00	10.6	12-Jul-09	11:00:00	16.2	14-Aug-09	23:00:00	17.5	17-Sep-09	11:00:00	13.0
9-Jun-09	00:00:00	10.5	12-Jul-09	12:00:00	16.3	15-Aug-09	00:00:00	17.4	17-Sep-09	12:00:00	13.5
9-Jun-09	01:00:00	10.2	12-Jul-09	13:00:00	16.6	15-Aug-09	01:00:00	17.1	17-Sep-09	13:00:00	13.9
9-Jun-09	02:00:00	10.1	12-Jul-09	14:00:00	16.9	15-Aug-09	02:00:00	16.9	17-Sep-09	14:00:00	14.5
9-Jun-09	03:00:00	9.9	12-Jul-09	15:00:00	17.2	15-Aug-09	03:00:00	16.8	17-Sep-09	15:00:00	14.9
9-Jun-09	04:00:00	9.8	12-Jul-09	16:00:00	17.5	15-Aug-09	04:00:00	16.8	17-Sep-09	16:00:00	15.4
9-Jun-09	05:00:00	9.8	12-Jul-09	17:00:00	17.4	15-Aug-09	05:00:00	16.8	17-Sep-09	17:00:00	15.5
9-Jun-09	06:00:00	9.6	12-Jul-09	18:00:00	17.4	15-Aug-09	06:00:00	16.6	17-Sep-09	18:00:00	15.5
9-Jun-09	07:00:00	9.6	12-Jul-09	19:00:00	16.9	15-Aug-09	07:00:00	16.5	17-Sep-09	19:00:00	15.2
9-Jun-09	08:00:00	9.8	12-Jul-09	20:00:00	16.9	15-Aug-09	08:00:00	16.5	17-Sep-09	20:00:00	14.8
9-Jun-09	09:00:00	10.1	12-Jul-09	21:00:00	16.9	15-Aug-09	09:00:00	16.5	17-Sep-09	21:00:00	14.5
9-Jun-09	10:00:00	10.3	12-Jul-09	22:00:00	16.9	15-Aug-09	10:00:00	16.6	17-Sep-09	22:00:00	14.2
9-Jun-09	11:00:00	10.6	12-Jul-09	23:00:00	16.9	15-Aug-09	11:00:00	16.9	17-Sep-09	23:00:00	14.0
9-Jun-09	12:00:00	11.1	13-Jul-09	00:00:00	16.6	15-Aug-09	12:00:00	17.2	18-Sep-09	00:00:00	14.0
9-Jun-09	13:00:00	11.5	13-Jul-09	01:00:00	16.6	15-Aug-09	13:00:00	17.5	18-Sep-09	01:00:00	13.8
9-Jun-09	14:00:00	12.0	13-Jul-09	02:00:00	16.6	15-Aug-09	14:00:00	17.8	18-Sep-09	02:00:00	13.8
9-Jun-09	15:00:00	12.3	13-Jul-09	03:00:00	16.5	15-Aug-09	15:00:00	18.1	18-Sep-09	03:00:00	13.5
9-Jun-09	16:00:00	12.6	13-Jul-09	04:00:00	16.5	15-Aug-09	16:00:00	18.3	18-Sep-09	04:00:00	13.5
9-Jun-09	17:00:00	12.7	13-Jul-09	05:00:00	16.3	15-Aug-09	17:00:00	19.1	18-Sep-09	05:00:00	13.3
9-Jun-09	18:00:00	12.7	13-Jul-09	06:00:00	16.5	15-Aug-09	18:00:00	19.2	18-Sep-09	06:00:00	13.2
9-Jun-09	19:00:00	12.6	13-Jul-09	07:00:00	16.5	15-Aug-09	19:00:00	19.2	18-Sep-09	07:00:00	12.9
9-Jun-09	20:00:00	12.4	13-Jul-09	08:00:00	16.5	15-Aug-09	20:00:00	18.9	18-Sep-09	08:00:00	12.6
9-Jun-09	21:00:00	12.1	13-Jul-09	09:00:00	16.5	15-Aug-09	21:00:00	18.6	18-Sep-09	09:00:00	12.3
9-Jun-09	22:00:00	11.8	13-Jul-09	10:00:00	16.3	15-Aug-09	22:00:00	18.3	18-Sep-09	10:00:00	12.3
9-Jun-09	23:00:00	11.5	13-Jul-09	11:00:00	16.3	15-Aug-09	23:00:00	18.0	18-Sep-09	11:00:00	12.4
10-Jun-09	00:00:00	11.2	13-Jul-09	12:00:00	16.3	16-Aug-09	00:00:00	17.8	18-Sep-09	12:00:00	13.0
10-Jun-09	01:00:00	10.9	13-Jul-09	13:00:00	16.2	16-Aug-09	01:00:00	17.5	18-Sep-09	13:00:00	13.5
10-Jun-09	02:00:00	10.6	13-Jul-09	14:00:00	16.0	16-Aug-09	02:00:00	17.2	18-Sep-09	14:00:00	14.2
10-Jun-09	03:00:00	10.3	13-Jul-09	15:00:00	15.9	16-Aug-09	03:00:00	17.1	18-Sep-09	15:00:00	14.6
10-Jun-09	04:00:00	10.1	13-Jul-09	16:00:00	15.9	16-Aug-09	04:00:00	16.8	18-Sep-09	16:00:00	15.1
10-Jun-09	05:00:00	9.9	13-Jul-09	17:00:00	16.0	16-Aug-09	05:00:00	16.5	18-Sep-09	17:00:00	15.4
10-Jun-09	06:00:00	9.8	13-Jul-09	18:00:00	16.0	16-Aug-09	06:00:00	16.3	18-Sep-09	18:00:00	15.2
10-Jun-09	07:00:00	9.6	13-Jul-09	19:00:00	16.0	16-Aug-09	07:00:00	16.0	18-Sep-09	19:00:00	14.9
10-Jun-09	08:00:00	9.8	13-Jul-09	20:00:00	16.0	16-Aug-09	08:00:00	16.0	18-Sep-09	20:00:00	14.8

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
10-Jun-09	09:00:00	10.1	13-Jul-09	21:00:00	15.9	16-Aug-09	09:00:00	15.9	18-Sep-09	21:00:00	14.8
10-Jun-09	10:00:00	10.5	13-Jul-09	22:00:00	15.5	16-Aug-09	10:00:00	16.0	18-Sep-09	22:00:00	14.6
10-Jun-09	11:00:00	11.2	13-Jul-09	23:00:00	15.4	16-Aug-09	11:00:00	16.3	18-Sep-09	23:00:00	14.6
10-Jun-09	12:00:00	11.8	14-Jul-09	00:00:00	15.2	16-Aug-09	12:00:00	16.8	19-Sep-09	00:00:00	14.5
10-Jun-09	13:00:00	12.6	14-Jul-09	01:00:00	14.9	16-Aug-09	13:00:00	17.4	19-Sep-09	01:00:00	14.3
10-Jun-09	14:00:00	13.2	14-Jul-09	02:00:00	14.9	16-Aug-09	14:00:00	18.1	19-Sep-09	02:00:00	14.2
10-Jun-09	15:00:00	13.6	14-Jul-09	03:00:00	14.6	16-Aug-09	15:00:00	18.6	19-Sep-09	03:00:00	14.0
10-Jun-09	16:00:00	14.0	14-Jul-09	04:00:00	14.5	16-Aug-09	16:00:00	19.2	19-Sep-09	04:00:00	13.9
10-Jun-09	17:00:00	14.2	14-Jul-09	05:00:00	14.3	16-Aug-09	17:00:00	19.7	19-Sep-09	05:00:00	13.8
10-Jun-09	18:00:00	14.3	14-Jul-09	06:00:00	14.2	16-Aug-09	18:00:00	20.2	19-Sep-09	06:00:00	13.6
10-Jun-09	19:00:00	14.2	14-Jul-09	07:00:00	14.0	16-Aug-09	19:00:00	20.0	19-Sep-09	07:00:00	13.3
10-Jun-09	20:00:00	13.8	14-Jul-09	08:00:00	13.9	16-Aug-09	20:00:00	20.0	19-Sep-09	08:00:00	13.2
10-Jun-09	21:00:00	13.5	14-Jul-09	09:00:00	13.9	16-Aug-09	21:00:00	19.9	19-Sep-09	09:00:00	13.0
10-Jun-09	22:00:00	13.2	14-Jul-09	10:00:00	13.9	16-Aug-09	22:00:00	19.5	19-Sep-09	10:00:00	13.0
10-Jun-09	23:00:00	12.9	14-Jul-09	11:00:00	14.0	16-Aug-09	23:00:00	19.2	19-Sep-09	11:00:00	13.0
11-Jun-09	00:00:00	12.4	14-Jul-09	12:00:00	14.2	17-Aug-09	00:00:00	18.9	19-Sep-09	12:00:00	13.3
11-Jun-09	01:00:00	12.1	14-Jul-09	13:00:00	14.2	17-Aug-09	01:00:00	18.8	19-Sep-09	13:00:00	13.8
11-Jun-09	02:00:00	11.7	14-Jul-09	14:00:00	14.6	17-Aug-09	02:00:00	18.6	19-Sep-09	14:00:00	14.3
11-Jun-09	03:00:00	11.5	14-Jul-09	15:00:00	14.8	17-Aug-09	03:00:00	18.3	19-Sep-09	15:00:00	14.6
11-Jun-09	04:00:00	11.4	14-Jul-09	16:00:00	14.8	17-Aug-09	04:00:00	18.1	19-Sep-09	16:00:00	15.1
11-Jun-09	05:00:00	11.2	14-Jul-09	17:00:00	15.2	17-Aug-09	05:00:00	17.8	19-Sep-09	17:00:00	14.9
11-Jun-09	06:00:00	11.1	14-Jul-09	18:00:00	15.4	17-Aug-09	06:00:00	17.7	19-Sep-09	18:00:00	14.9
11-Jun-09	07:00:00	11.2	14-Jul-09	19:00:00	15.5	17-Aug-09	07:00:00	17.5	19-Sep-09	19:00:00	14.8
11-Jun-09	08:00:00	11.4	14-Jul-09	20:00:00	15.4	17-Aug-09	08:00:00	17.5	19-Sep-09	20:00:00	14.3
11-Jun-09	09:00:00	11.5	14-Jul-09	21:00:00	15.2	17-Aug-09	09:00:00	17.5	19-Sep-09	21:00:00	13.9
11-Jun-09	10:00:00	11.8	14-Jul-09	22:00:00	15.2	17-Aug-09	10:00:00	17.7	19-Sep-09	22:00:00	13.8
11-Jun-09	11:00:00	12.3	14-Jul-09	23:00:00	14.9	17-Aug-09	11:00:00	18.0	19-Sep-09	23:00:00	13.5
11-Jun-09	12:00:00	12.9	15-Jul-09	00:00:00	14.9	17-Aug-09	12:00:00	18.4	20-Sep-09	00:00:00	13.3
11-Jun-09	13:00:00	13.5	15-Jul-09	01:00:00	14.8	17-Aug-09	13:00:00	18.9	20-Sep-09	01:00:00	13.2
11-Jun-09	14:00:00	14.0	15-Jul-09	02:00:00	14.8	17-Aug-09	14:00:00	19.2	20-Sep-09	02:00:00	12.9
11-Jun-09	15:00:00	14.8	15-Jul-09	03:00:00	14.6	17-Aug-09	15:00:00	19.5	20-Sep-09	03:00:00	12.6
11-Jun-09	16:00:00	14.9	15-Jul-09	04:00:00	14.6	17-Aug-09	16:00:00	20.0	20-Sep-09	04:00:00	12.3
11-Jun-09	17:00:00	15.1	15-Jul-09	05:00:00	14.6	17-Aug-09	17:00:00	20.3	20-Sep-09	05:00:00	12.1
11-Jun-09	18:00:00	15.1	15-Jul-09	06:00:00	14.6	17-Aug-09	18:00:00	20.5	20-Sep-09	06:00:00	11.8
11-Jun-09	19:00:00	15.1	15-Jul-09	07:00:00	14.6	17-Aug-09	19:00:00	20.3	20-Sep-09	07:00:00	11.5
11-Jun-09	20:00:00	14.9	15-Jul-09	08:00:00	14.6	17-Aug-09	20:00:00	20.0	20-Sep-09	08:00:00	11.2
11-Jun-09	21:00:00	14.6	15-Jul-09	09:00:00	14.8	17-Aug-09	21:00:00	19.7	20-Sep-09	09:00:00	11.1
11-Jun-09	22:00:00	14.5	15-Jul-09	10:00:00	15.1	17-Aug-09	22:00:00	19.4	20-Sep-09	10:00:00	10.9
11-Jun-09	23:00:00	14.0	15-Jul-09	11:00:00	15.4	17-Aug-09	23:00:00	18.9	20-Sep-09	11:00:00	11.1
12-Jun-09	00:00:00	13.9	15-Jul-09	12:00:00	16.0	18-Aug-09	00:00:00	18.8	20-Sep-09	12:00:00	11.5
12-Jun-09	01:00:00	13.6	15-Jul-09	13:00:00	16.5	18-Aug-09	01:00:00	18.3	20-Sep-09	13:00:00	12.0
12-Jun-09	02:00:00	13.5	15-Jul-09	14:00:00	16.9	18-Aug-09	02:00:00	18.3	20-Sep-09	14:00:00	12.6
12-Jun-09	03:00:00	13.3	15-Jul-09	15:00:00	17.5	18-Aug-09	03:00:00	18.0	20-Sep-09	15:00:00	13.0
12-Jun-09	04:00:00	13.2	15-Jul-09	16:00:00	18.0	18-Aug-09	04:00:00	18.0	20-Sep-09	16:00:00	13.3
12-Jun-09	05:00:00	13.2	15-Jul-09	17:00:00	18.1	18-Aug-09	05:00:00	17.7	20-Sep-09	17:00:00	13.5
12-Jun-09	06:00:00	13.2	15-Jul-09	18:00:00	18.4	18-Aug-09	06:00:00	17.5	20-Sep-09	18:00:00	13.5
12-Jun-09	07:00:00	13.3	15-Jul-09	19:00:00	18.6	18-Aug-09	07:00:00	17.4	20-Sep-09	19:00:00	13.2
12-Jun-09	08:00:00	13.5	15-Jul-09	20:00:00	18.6	18-Aug-09	08:00:00	17.4	20-Sep-09	20:00:00	12.9
12-Jun-09	09:00:00	13.8	15-Jul-09	21:00:00	18.4	18-Aug-09	09:00:00	17.4	20-Sep-09	21:00:00	12.6
12-Jun-09	10:00:00	14.2	15-Jul-09	22:00:00	18.1	18-Aug-09	10:00:00	17.7	20-Sep-09	22:00:00	12.4
12-Jun-09	11:00:00	14.6	15-Jul-09	23:00:00	17.8	18-Aug-09	11:00:00	18.0	20-Sep-09	23:00:00	12.3
12-Jun-09	12:00:00	15.2	16-Jul-09	00:00:00	17.4	18-Aug-09	12:00:00	18.4	21-Sep-09	00:00:00	12.1
12-Jun-09	13:00:00	15.7	16-Jul-09	01:00:00	17.1	18-Aug-09	13:00:00	19.1	21-Sep-09	01:00:00	11.8
12-Jun-09	14:00:00	16.3	16-Jul-09	02:00:00	16.8	18-Aug-09	14:00:00	19.5	21-Sep-09	02:00:00	11.7
12-Jun-09	15:00:00	16.8	16-Jul-09	03:00:00	16.5	18-Aug-09	15:00:00	20.0	21-Sep-09	03:00:00	11.5
12-Jun-09	16:00:00	17.2	16-Jul-09	04:00:00	16.5	18-Aug-09	16:00:00	20.6	21-Sep-09	04:00:00	11.5
12-Jun-09	17:00:00	17.4	16-Jul-09	05:00:00	16.6	18-Aug-09	17:00:00	21.1	21-Sep-09	05:00:00	11.4
12-Jun-09	18:00:00	17.5	16-Jul-09	06:00:00	16.6	18-Aug-09	18:00:00	21.3	21-Sep-09	06:00:00	11.4
12-Jun-09	19:00:00	17.4	16-Jul-09	07:00:00	16.8	18-Aug-09	19:00:00	21.3	21-Sep-09	07:00:00	11.2

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
12-Jun-09	20:00:00	17.1	16-Jul-09	08:00:00	16.9	18-Aug-09	20:00:00	21.0	21-Sep-09	08:00:00	11.1
12-Jun-09	21:00:00	16.8	16-Jul-09	09:00:00	17.1	18-Aug-09	21:00:00	20.5	21-Sep-09	09:00:00	10.9
12-Jun-09	22:00:00	16.3	16-Jul-09	10:00:00	17.2	18-Aug-09	22:00:00	20.2	21-Sep-09	10:00:00	11.1
12-Jun-09	23:00:00	15.9	16-Jul-09	11:00:00	17.5	18-Aug-09	23:00:00	19.9	21-Sep-09	11:00:00	11.1
13-Jun-09	00:00:00	15.5	16-Jul-09	12:00:00	18.0	19-Aug-09	00:00:00	19.5	21-Sep-09	12:00:00	11.4
13-Jun-09	01:00:00	15.2	16-Jul-09	13:00:00	18.3	19-Aug-09	01:00:00	19.2	21-Sep-09	13:00:00	11.8
13-Jun-09	02:00:00	15.2	16-Jul-09	14:00:00	18.6	19-Aug-09	02:00:00	18.9	21-Sep-09	14:00:00	12.3
13-Jun-09	03:00:00	15.1	16-Jul-09	15:00:00	18.9	19-Aug-09	03:00:00	18.6	21-Sep-09	15:00:00	12.9
13-Jun-09	04:00:00	14.9	16-Jul-09	16:00:00	19.1	19-Aug-09	04:00:00	18.3	21-Sep-09	16:00:00	13.5
13-Jun-09	05:00:00	14.9	16-Jul-09	17:00:00	19.1	19-Aug-09	05:00:00	18.0	21-Sep-09	17:00:00	13.6
13-Jun-09	06:00:00	14.9	16-Jul-09	18:00:00	18.9	19-Aug-09	06:00:00	17.7	21-Sep-09	18:00:00	13.5
13-Jun-09	07:00:00	15.1	16-Jul-09	19:00:00	18.8	19-Aug-09	07:00:00	17.4	21-Sep-09	19:00:00	13.3
13-Jun-09	08:00:00	15.2	16-Jul-09	20:00:00	18.6	19-Aug-09	08:00:00	17.2	21-Sep-09	20:00:00	13.0
13-Jun-09	09:00:00	15.5	16-Jul-09	21:00:00	18.4	19-Aug-09	09:00:00	17.1	21-Sep-09	21:00:00	12.7
13-Jun-09	10:00:00	15.9	16-Jul-09	22:00:00	18.3	19-Aug-09	10:00:00	17.2	21-Sep-09	22:00:00	12.6
13-Jun-09	11:00:00	16.2	16-Jul-09	23:00:00	18.1	19-Aug-09	11:00:00	17.5	21-Sep-09	23:00:00	12.6
13-Jun-09	12:00:00	16.8	17-Jul-09	00:00:00	17.7	19-Aug-09	12:00:00	18.1	22-Sep-09	00:00:00	12.6
13-Jun-09	13:00:00	17.1	17-Jul-09	01:00:00	17.5	19-Aug-09	13:00:00	18.6	22-Sep-09	01:00:00	12.4
13-Jun-09	14:00:00	17.7	17-Jul-09	02:00:00	17.4	19-Aug-09	14:00:00	19.2	22-Sep-09	02:00:00	12.4
13-Jun-09	15:00:00	18.1	17-Jul-09	03:00:00	17.1	19-Aug-09	15:00:00	19.9	22-Sep-09	03:00:00	12.1
13-Jun-09	16:00:00	18.4	17-Jul-09	04:00:00	17.1	19-Aug-09	16:00:00	20.5	22-Sep-09	04:00:00	12.1
13-Jun-09	17:00:00	18.8	17-Jul-09	05:00:00	16.9	19-Aug-09	17:00:00	21.0	22-Sep-09	05:00:00	12.0
13-Jun-09	18:00:00	18.8	17-Jul-09	06:00:00	16.8	19-Aug-09	18:00:00	21.3	22-Sep-09	06:00:00	11.8
13-Jun-09	19:00:00	18.8	17-Jul-09	07:00:00	16.6	19-Aug-09	19:00:00	21.3	22-Sep-09	07:00:00	11.7
13-Jun-09	20:00:00	18.6	17-Jul-09	08:00:00	16.6	19-Aug-09	20:00:00	21.1	22-Sep-09	08:00:00	11.7
13-Jun-09	21:00:00	18.4	17-Jul-09	09:00:00	16.8	19-Aug-09	21:00:00	20.8	22-Sep-09	09:00:00	11.5
13-Jun-09	22:00:00	18.1	17-Jul-09	10:00:00	16.9	19-Aug-09	22:00:00	20.6	22-Sep-09	10:00:00	11.7
13-Jun-09	23:00:00	17.8	17-Jul-09	11:00:00	17.2	19-Aug-09	23:00:00	20.3	22-Sep-09	11:00:00	11.8
14-Jun-09	00:00:00	17.5	17-Jul-09	12:00:00	17.5	20-Aug-09	00:00:00	19.9	22-Sep-09	12:00:00	12.3
14-Jun-09	01:00:00	17.2	17-Jul-09	13:00:00	18.0	20-Aug-09	01:00:00	19.5	22-Sep-09	13:00:00	13.0
14-Jun-09	02:00:00	17.1	17-Jul-09	14:00:00	18.3	20-Aug-09	02:00:00	19.2	22-Sep-09	14:00:00	13.8
14-Jun-09	03:00:00	16.8	17-Jul-09	15:00:00	18.4	20-Aug-09	03:00:00	18.8	22-Sep-09	15:00:00	14.5
14-Jun-09	04:00:00	16.5	17-Jul-09	16:00:00	18.6	20-Aug-09	04:00:00	18.4	22-Sep-09	16:00:00	14.9
14-Jun-09	05:00:00	16.3	17-Jul-09	17:00:00	18.8	20-Aug-09	05:00:00	18.1	22-Sep-09	17:00:00	15.2
14-Jun-09	06:00:00	16.2	17-Jul-09	18:00:00	18.6	20-Aug-09	06:00:00	17.8	22-Sep-09	18:00:00	15.4
14-Jun-09	07:00:00	16.2	17-Jul-09	19:00:00	18.4	20-Aug-09	07:00:00	17.7	22-Sep-09	19:00:00	15.2
14-Jun-09	08:00:00	16.2	17-Jul-09	20:00:00	18.4	20-Aug-09	08:00:00	17.4	22-Sep-09	20:00:00	14.9
14-Jun-09	09:00:00	16.3	17-Jul-09	21:00:00	18.1	20-Aug-09	09:00:00	17.4	22-Sep-09	21:00:00	14.6
14-Jun-09	10:00:00	16.5	17-Jul-09	22:00:00	18.0	20-Aug-09	10:00:00	17.4	22-Sep-09	22:00:00	14.5
14-Jun-09	11:00:00	16.8	17-Jul-09	23:00:00	17.7	20-Aug-09	11:00:00	17.5	22-Sep-09	23:00:00	14.3
14-Jun-09	12:00:00	17.1	18-Jul-09	00:00:00	17.4	20-Aug-09	12:00:00	17.8	23-Sep-09	00:00:00	14.2
14-Jun-09	13:00:00	17.5	18-Jul-09	01:00:00	17.2	20-Aug-09	13:00:00	18.3	23-Sep-09	01:00:00	13.9
14-Jun-09	14:00:00	17.8	18-Jul-09	02:00:00	16.9	20-Aug-09	14:00:00	18.8	23-Sep-09	02:00:00	13.8
14-Jun-09	15:00:00	18.1	18-Jul-09	03:00:00	16.9	20-Aug-09	15:00:00	19.2	23-Sep-09	03:00:00	13.5
14-Jun-09	16:00:00	18.4	18-Jul-09	04:00:00	16.8	20-Aug-09	16:00:00	19.9	23-Sep-09	04:00:00	13.2
14-Jun-09	17:00:00	18.6	18-Jul-09	05:00:00	16.6	20-Aug-09	17:00:00	20.3	23-Sep-09	05:00:00	13.0
14-Jun-09	18:00:00	18.6	18-Jul-09	06:00:00	16.5	20-Aug-09	18:00:00	20.6	23-Sep-09	06:00:00	12.7
14-Jun-09	19:00:00	18.6	18-Jul-09	07:00:00	16.3	20-Aug-09	19:00:00	20.8	23-Sep-09	07:00:00	12.6
14-Jun-09	20:00:00	18.3	18-Jul-09	08:00:00	16.3	20-Aug-09	20:00:00	20.8	23-Sep-09	08:00:00	12.3
14-Jun-09	21:00:00	18.1	18-Jul-09	09:00:00	16.5	20-Aug-09	21:00:00	20.6	23-Sep-09	09:00:00	12.0
14-Jun-09	22:00:00	17.7	18-Jul-09	10:00:00	16.6	20-Aug-09	22:00:00	20.3	23-Sep-09	10:00:00	11.8
14-Jun-09	23:00:00	17.4	18-Jul-09	11:00:00	16.9	20-Aug-09	23:00:00	20.0	23-Sep-09	11:00:00	12.0
15-Jun-09	00:00:00	17.2	18-Jul-09	12:00:00	17.2	21-Aug-09	00:00:00	19.9	23-Sep-09	12:00:00	12.4
15-Jun-09	01:00:00	16.8	18-Jul-09	13:00:00	17.7	21-Aug-09	01:00:00	19.5	23-Sep-09	13:00:00	13.0
15-Jun-09	02:00:00	16.6	18-Jul-09	14:00:00	18.1	21-Aug-09	02:00:00	19.2	23-Sep-09	14:00:00	13.6
15-Jun-09	03:00:00	16.3	18-Jul-09	15:00:00	18.4	21-Aug-09	03:00:00	18.9	23-Sep-09	15:00:00	14.3
15-Jun-09	04:00:00	16.2	18-Jul-09	16:00:00	18.6	21-Aug-09	04:00:00	18.8	23-Sep-09	16:00:00	14.8
15-Jun-09	05:00:00	16.0	18-Jul-09	17:00:00	18.6	21-Aug-09	05:00:00	18.6	23-Sep-09	17:00:00	15.1
15-Jun-09	06:00:00	15.9	18-Jul-09	18:00:00	18.3	21-Aug-09	06:00:00	18.3	23-Sep-09	18:00:00	15.1

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
15-Jun-09	07:00:00	15.9	18-Jul-09	19:00:00	18.0	21-Aug-09	07:00:00	18.3	23-Sep-09	19:00:00	14.9
15-Jun-09	08:00:00	15.9	18-Jul-09	20:00:00	18.0	21-Aug-09	08:00:00	18.0	23-Sep-09	20:00:00	14.8
15-Jun-09	09:00:00	16.0	18-Jul-09	21:00:00	17.8	21-Aug-09	09:00:00	18.0	23-Sep-09	21:00:00	14.5
15-Jun-09	10:00:00	16.3	18-Jul-09	22:00:00	17.7	21-Aug-09	10:00:00	18.0	23-Sep-09	22:00:00	14.2
15-Jun-09	11:00:00	16.6	18-Jul-09	23:00:00	17.5	21-Aug-09	11:00:00	18.4	23-Sep-09	23:00:00	14.2
15-Jun-09	12:00:00	17.1	19-Jul-09	00:00:00	17.2	21-Aug-09	12:00:00	18.9	24-Sep-09	00:00:00	14.0
15-Jun-09	13:00:00	17.5	19-Jul-09	01:00:00	17.1	21-Aug-09	13:00:00	19.4	24-Sep-09	01:00:00	13.8
15-Jun-09	14:00:00	17.8	19-Jul-09	02:00:00	16.9	21-Aug-09	14:00:00	20.0	24-Sep-09	02:00:00	13.6
15-Jun-09	15:00:00	18.3	19-Jul-09	03:00:00	16.8	21-Aug-09	15:00:00	20.2	24-Sep-09	03:00:00	13.3
15-Jun-09	16:00:00	18.6	19-Jul-09	04:00:00	16.5	21-Aug-09	16:00:00	20.3	24-Sep-09	04:00:00	13.0
15-Jun-09	17:00:00	18.9	19-Jul-09	05:00:00	16.5	21-Aug-09	17:00:00	20.8	24-Sep-09	05:00:00	12.6
15-Jun-09	18:00:00	18.9	19-Jul-09	06:00:00	16.3	21-Aug-09	18:00:00	21.1	24-Sep-09	06:00:00	12.3
15-Jun-09	19:00:00	18.8	19-Jul-09	07:00:00	16.3	21-Aug-09	19:00:00	21.3	24-Sep-09	07:00:00	12.0
15-Jun-09	20:00:00	18.8	19-Jul-09	08:00:00	16.5	21-Aug-09	20:00:00	21.0	24-Sep-09	08:00:00	11.7
15-Jun-09	21:00:00	18.6	19-Jul-09	09:00:00	16.6	21-Aug-09	21:00:00	20.6	24-Sep-09	09:00:00	11.4
15-Jun-09	22:00:00	18.4	19-Jul-09	10:00:00	16.9	21-Aug-09	22:00:00	20.5	24-Sep-09	10:00:00	11.4
15-Jun-09	23:00:00	18.1	19-Jul-09	11:00:00	17.2	21-Aug-09	23:00:00	20.0	24-Sep-09	11:00:00	11.4
16-Jun-09	00:00:00	17.8	19-Jul-09	12:00:00	17.7	22-Aug-09	00:00:00	19.5	24-Sep-09	12:00:00	11.7
16-Jun-09	01:00:00	17.7	19-Jul-09	13:00:00	17.8	22-Aug-09	01:00:00	19.2	24-Sep-09	13:00:00	12.1
16-Jun-09	02:00:00	17.4	19-Jul-09	14:00:00	18.4	22-Aug-09	02:00:00	19.1	24-Sep-09	14:00:00	12.6
16-Jun-09	03:00:00	17.2	19-Jul-09	15:00:00	18.4	22-Aug-09	03:00:00	18.6	24-Sep-09	15:00:00	13.0
16-Jun-09	04:00:00	17.1	19-Jul-09	16:00:00	18.6	22-Aug-09	04:00:00	18.3	24-Sep-09	16:00:00	13.5
16-Jun-09	05:00:00	16.9	19-Jul-09	17:00:00	19.2	22-Aug-09	05:00:00	18.0	24-Sep-09	17:00:00	13.5
16-Jun-09	06:00:00	16.8	19-Jul-09	18:00:00	18.9	22-Aug-09	06:00:00	17.5	24-Sep-09	18:00:00	13.5
16-Jun-09	07:00:00	16.8	19-Jul-09	19:00:00	19.2	22-Aug-09	07:00:00	17.2	24-Sep-09	19:00:00	13.2
16-Jun-09	08:00:00	16.8	19-Jul-09	20:00:00	19.1	22-Aug-09	08:00:00	17.1	24-Sep-09	20:00:00	12.9
16-Jun-09	09:00:00	16.8	19-Jul-09	21:00:00	18.9	22-Aug-09	09:00:00	16.9	24-Sep-09	21:00:00	12.6
16-Jun-09	10:00:00	16.9	19-Jul-09	22:00:00	18.9	22-Aug-09	10:00:00	16.9	24-Sep-09	22:00:00	12.3
16-Jun-09	11:00:00	17.1	19-Jul-09	23:00:00	18.6	22-Aug-09	11:00:00	17.1	24-Sep-09	23:00:00	12.1
16-Jun-09	12:00:00	17.5	20-Jul-09	00:00:00	18.4	22-Aug-09	12:00:00	17.1	25-Sep-09	00:00:00	12.0
16-Jun-09	13:00:00	17.8	20-Jul-09	01:00:00	18.1	22-Aug-09	13:00:00	17.4	25-Sep-09	01:00:00	11.8
16-Jun-09	14:00:00	18.3	20-Jul-09	02:00:00	18.0	22-Aug-09	14:00:00	18.0	25-Sep-09	02:00:00	11.5
16-Jun-09	15:00:00	18.3	20-Jul-09	03:00:00	17.7	22-Aug-09	15:00:00	18.6	25-Sep-09	03:00:00	11.4
16-Jun-09	16:00:00	18.8	20-Jul-09	04:00:00	17.4	22-Aug-09	16:00:00	18.8	25-Sep-09	04:00:00	11.1
16-Jun-09	17:00:00	18.8	20-Jul-09	05:00:00	17.2	22-Aug-09	17:00:00	19.2	25-Sep-09	05:00:00	10.9
16-Jun-09	18:00:00	18.9	20-Jul-09	06:00:00	16.9	22-Aug-09	18:00:00	19.2	25-Sep-09	06:00:00	10.8
16-Jun-09	19:00:00	18.9	20-Jul-09	07:00:00	16.8	22-Aug-09	19:00:00	19.1	25-Sep-09	07:00:00	10.6
16-Jun-09	20:00:00	18.8	20-Jul-09	08:00:00	16.8	22-Aug-09	20:00:00	18.9	25-Sep-09	08:00:00	10.5
16-Jun-09	21:00:00	18.6	20-Jul-09	09:00:00	16.8	22-Aug-09	21:00:00	18.6	25-Sep-09	09:00:00	10.5
16-Jun-09	22:00:00	18.3	20-Jul-09	10:00:00	16.9	22-Aug-09	22:00:00	18.1	25-Sep-09	10:00:00	10.3
16-Jun-09	23:00:00	18.0	20-Jul-09	11:00:00	17.2	22-Aug-09	23:00:00	18.0	25-Sep-09	11:00:00	10.5
17-Jun-09	00:00:00	17.7	20-Jul-09	12:00:00	17.7	23-Aug-09	00:00:00	17.7	25-Sep-09	12:00:00	10.8
17-Jun-09	01:00:00	17.4	20-Jul-09	13:00:00	18.1	23-Aug-09	01:00:00	17.2	25-Sep-09	13:00:00	10.9
17-Jun-09	02:00:00	17.1	20-Jul-09	14:00:00	18.4	23-Aug-09	02:00:00	16.9	25-Sep-09	14:00:00	11.4
17-Jun-09	03:00:00	16.9	20-Jul-09	15:00:00	19.1	23-Aug-09	03:00:00	16.8	25-Sep-09	15:00:00	11.5
17-Jun-09	04:00:00	16.6	20-Jul-09	16:00:00	19.4	23-Aug-09	04:00:00	16.5	25-Sep-09	16:00:00	11.5
17-Jun-09	05:00:00	16.6	20-Jul-09	17:00:00	19.7	23-Aug-09	05:00:00	16.2	25-Sep-09	17:00:00	11.5
17-Jun-09	06:00:00	16.5	20-Jul-09	18:00:00	20.0	23-Aug-09	06:00:00	15.9	25-Sep-09	18:00:00	11.5
17-Jun-09	07:00:00	16.3	20-Jul-09	19:00:00	20.0	23-Aug-09	07:00:00	15.7	25-Sep-09	19:00:00	11.5
17-Jun-09	08:00:00	16.5	20-Jul-09	20:00:00	19.7	23-Aug-09	08:00:00	15.5	25-Sep-09	20:00:00	11.4
17-Jun-09	09:00:00	16.5	20-Jul-09	21:00:00	19.5	23-Aug-09	09:00:00	15.5	25-Sep-09	21:00:00	11.1
17-Jun-09	10:00:00	16.8	20-Jul-09	22:00:00	19.2	23-Aug-09	10:00:00	15.7	25-Sep-09	22:00:00	10.8
17-Jun-09	11:00:00	17.1	20-Jul-09	23:00:00	19.1	23-Aug-09	11:00:00	15.9	25-Sep-09	23:00:00	10.8
17-Jun-09	12:00:00	17.4	21-Jul-09	00:00:00	18.9	23-Aug-09	12:00:00	16.3	26-Sep-09	00:00:00	10.6
17-Jun-09	13:00:00	17.5	21-Jul-09	01:00:00	18.8	23-Aug-09	13:00:00	16.8	26-Sep-09	01:00:00	10.5
17-Jun-09	14:00:00	18.0	21-Jul-09	02:00:00	18.4	23-Aug-09	14:00:00	17.2	26-Sep-09	02:00:00	10.2
17-Jun-09	15:00:00	18.1	21-Jul-09	03:00:00	18.3	23-Aug-09	15:00:00	17.4	26-Sep-09	03:00:00	10.1
17-Jun-09	16:00:00	18.4	21-Jul-09	04:00:00	18.0	23-Aug-09	16:00:00	18.0	26-Sep-09	04:00:00	9.9
17-Jun-09	17:00:00	18.6	21-Jul-09	05:00:00	17.8	23-Aug-09	17:00:00	18.0	26-Sep-09	05:00:00	9.8

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
17-Jun-09	18:00:00	18.6	21-Jul-09	06:00:00	17.7	23-Aug-09	18:00:00	18.0	26-Sep-09	06:00:00	9.6
17-Jun-09	19:00:00	18.8	21-Jul-09	07:00:00	17.5	23-Aug-09	19:00:00	17.8	26-Sep-09	07:00:00	9.6
17-Jun-09	20:00:00	18.4	21-Jul-09	08:00:00	17.5	23-Aug-09	20:00:00	17.7	26-Sep-09	08:00:00	9.3
17-Jun-09	21:00:00	18.1	21-Jul-09	09:00:00	17.5	23-Aug-09	21:00:00	17.4	26-Sep-09	09:00:00	9.3
17-Jun-09	22:00:00	18.0	21-Jul-09	10:00:00	17.7	23-Aug-09	22:00:00	17.1	26-Sep-09	10:00:00	9.3
17-Jun-09	23:00:00	17.7	21-Jul-09	11:00:00	18.1	23-Aug-09	23:00:00	16.8	26-Sep-09	11:00:00	9.3
18-Jun-09	00:00:00	17.5	21-Jul-09	12:00:00	18.6	24-Aug-09	00:00:00	16.5	26-Sep-09	12:00:00	9.8
18-Jun-09	01:00:00	17.2	21-Jul-09	13:00:00	18.9	24-Aug-09	01:00:00	16.0	26-Sep-09	13:00:00	9.9
18-Jun-09	02:00:00	16.9	21-Jul-09	14:00:00	19.2	24-Aug-09	02:00:00	15.5	26-Sep-09	14:00:00	10.1
18-Jun-09	03:00:00	16.8	21-Jul-09	15:00:00	19.4	24-Aug-09	03:00:00	15.2	26-Sep-09	15:00:00	10.5
18-Jun-09	04:00:00	16.6	21-Jul-09	16:00:00	19.5	24-Aug-09	04:00:00	14.9	26-Sep-09	16:00:00	10.9
18-Jun-09	05:00:00	16.3	21-Jul-09	17:00:00	19.9	24-Aug-09	05:00:00	14.5	26-Sep-09	17:00:00	11.2
18-Jun-09	06:00:00	16.3	21-Jul-09	18:00:00	20.0	24-Aug-09	06:00:00	14.3	26-Sep-09	18:00:00	11.2
18-Jun-09	07:00:00	16.2	21-Jul-09	19:00:00	20.0	24-Aug-09	07:00:00	14.0	26-Sep-09	19:00:00	10.8
18-Jun-09	08:00:00	16.0	21-Jul-09	20:00:00	20.0	24-Aug-09	08:00:00	13.9	26-Sep-09	20:00:00	10.3
18-Jun-09	09:00:00	16.2	21-Jul-09	21:00:00	20.0	24-Aug-09	09:00:00	13.8	26-Sep-09	21:00:00	10.2
18-Jun-09	10:00:00	16.5	21-Jul-09	22:00:00	19.9	24-Aug-09	10:00:00	13.9	26-Sep-09	22:00:00	9.9
18-Jun-09	11:00:00	16.8	21-Jul-09	23:00:00	19.9	24-Aug-09	11:00:00	14.3	26-Sep-09	23:00:00	9.8
18-Jun-09	12:00:00	16.9	22-Jul-09	00:00:00	19.7	24-Aug-09	12:00:00	14.6	27-Sep-09	00:00:00	9.6
18-Jun-09	13:00:00	17.4	22-Jul-09	01:00:00	19.5	24-Aug-09	13:00:00	15.4	27-Sep-09	01:00:00	9.3
18-Jun-09	14:00:00	17.7	22-Jul-09	02:00:00	19.4	24-Aug-09	14:00:00	15.9	27-Sep-09	02:00:00	9.2
18-Jun-09	15:00:00	18.1	22-Jul-09	03:00:00	19.2	24-Aug-09	15:00:00	16.5	27-Sep-09	03:00:00	8.9
18-Jun-09	16:00:00	18.3	22-Jul-09	04:00:00	18.9	24-Aug-09	16:00:00	16.8	27-Sep-09	04:00:00	8.6
18-Jun-09	17:00:00	18.4	22-Jul-09	05:00:00	18.8	24-Aug-09	17:00:00	17.2	27-Sep-09	05:00:00	8.3
18-Jun-09	18:00:00	18.4	22-Jul-09	06:00:00	18.6	24-Aug-09	18:00:00	17.4	27-Sep-09	06:00:00	8.1
18-Jun-09	19:00:00	18.4	22-Jul-09	07:00:00	18.4	24-Aug-09	19:00:00	17.4	27-Sep-09	07:00:00	7.8
18-Jun-09	20:00:00	18.3	22-Jul-09	08:00:00	18.4	24-Aug-09	20:00:00	17.5	27-Sep-09	08:00:00	7.5
18-Jun-09	21:00:00	18.1	22-Jul-09	09:00:00	18.4	24-Aug-09	21:00:00	17.4	27-Sep-09	09:00:00	7.4
18-Jun-09	22:00:00	17.8	22-Jul-09	10:00:00	18.6	24-Aug-09	22:00:00	17.2	27-Sep-09	10:00:00	7.3
18-Jun-09	23:00:00	17.5	22-Jul-09	11:00:00	18.8	24-Aug-09	23:00:00	17.1	27-Sep-09	11:00:00	7.4
19-Jun-09	00:00:00	17.4	22-Jul-09	12:00:00	18.9	25-Aug-09	00:00:00	16.9	27-Sep-09	12:00:00	7.7
19-Jun-09	01:00:00	17.1	22-Jul-09	13:00:00	19.2	25-Aug-09	01:00:00	16.6	27-Sep-09	13:00:00	8.3
19-Jun-09	02:00:00	16.9	22-Jul-09	14:00:00	19.7	25-Aug-09	02:00:00	16.5	27-Sep-09	14:00:00	8.7
19-Jun-09	03:00:00	16.8	22-Jul-09	15:00:00	19.9	25-Aug-09	03:00:00	16.3	27-Sep-09	15:00:00	9.2
19-Jun-09	04:00:00	16.5	22-Jul-09	16:00:00	20.5	25-Aug-09	04:00:00	16.0	27-Sep-09	16:00:00	9.2
19-Jun-09	05:00:00	16.3	22-Jul-09	17:00:00	20.5	25-Aug-09	05:00:00	15.7	27-Sep-09	17:00:00	9.3
19-Jun-09	06:00:00	16.2	22-Jul-09	18:00:00	20.6	25-Aug-09	06:00:00	15.7	27-Sep-09	18:00:00	9.5
19-Jun-09	07:00:00	16.0	22-Jul-09	19:00:00	20.8	25-Aug-09	07:00:00	15.5	27-Sep-09	19:00:00	9.5
19-Jun-09	08:00:00	16.0	22-Jul-09	20:00:00	20.8	25-Aug-09	08:00:00	15.2	27-Sep-09	20:00:00	9.2
19-Jun-09	09:00:00	16.2	22-Jul-09	21:00:00	20.5	25-Aug-09	09:00:00	15.2	27-Sep-09	21:00:00	9.0
19-Jun-09	10:00:00	16.3	22-Jul-09	22:00:00	20.2	25-Aug-09	10:00:00	15.2	27-Sep-09	22:00:00	9.0
19-Jun-09	11:00:00	16.6	22-Jul-09	23:00:00	20.0	25-Aug-09	11:00:00	15.2	27-Sep-09	23:00:00	9.0
19-Jun-09	12:00:00	16.9	23-Jul-09	00:00:00	19.7	25-Aug-09	12:00:00	15.4	28-Sep-09	00:00:00	8.9
19-Jun-09	13:00:00	17.4	23-Jul-09	01:00:00	19.5	25-Aug-09	13:00:00	15.4	28-Sep-09	01:00:00	8.7
19-Jun-09	14:00:00	17.8	23-Jul-09	02:00:00	19.2	25-Aug-09	14:00:00	15.7	28-Sep-09	02:00:00	8.7
19-Jun-09	15:00:00	17.8	23-Jul-09	03:00:00	19.1	25-Aug-09	15:00:00	16.0	28-Sep-09	03:00:00	8.6
19-Jun-09	16:00:00	18.1	23-Jul-09	04:00:00	18.8	25-Aug-09	16:00:00	16.8	28-Sep-09	04:00:00	8.4
19-Jun-09	17:00:00	18.4	23-Jul-09	05:00:00	18.3	25-Aug-09	17:00:00	17.2	28-Sep-09	05:00:00	8.3
19-Jun-09	18:00:00	18.3	23-Jul-09	06:00:00	18.1	25-Aug-09	18:00:00	17.4	28-Sep-09	06:00:00	8.3
19-Jun-09	19:00:00	18.1	23-Jul-09	07:00:00	17.8	25-Aug-09	19:00:00	17.5	28-Sep-09	07:00:00	8.1
19-Jun-09	20:00:00	18.1	23-Jul-09	08:00:00	17.8	25-Aug-09	20:00:00	17.2	28-Sep-09	08:00:00	8.0
19-Jun-09	21:00:00	17.8	23-Jul-09	09:00:00	17.8	25-Aug-09	21:00:00	17.1	28-Sep-09	09:00:00	8.0
19-Jun-09	22:00:00	17.7	23-Jul-09	10:00:00	18.0	25-Aug-09	22:00:00	16.8	28-Sep-09	10:00:00	8.0
19-Jun-09	23:00:00	17.4	23-Jul-09	11:00:00	18.3	25-Aug-09	23:00:00	16.6	28-Sep-09	11:00:00	7.8
20-Jun-09	00:00:00	17.1	23-Jul-09	12:00:00	18.8	26-Aug-09	00:00:00	16.3	28-Sep-09	12:00:00	8.0
20-Jun-09	01:00:00	16.8	23-Jul-09	13:00:00	19.2	26-Aug-09	01:00:00	16.0	28-Sep-09	13:00:00	8.3
20-Jun-09	02:00:00	16.6	23-Jul-09	14:00:00	19.7	26-Aug-09	02:00:00	15.7	28-Sep-09	14:00:00	8.6
20-Jun-09	03:00:00	16.5	23-Jul-09	15:00:00	20.2	26-Aug-09	03:00:00	15.4	28-Sep-09	15:00:00	8.7
20-Jun-09	04:00:00	16.3	23-Jul-09	16:00:00	20.6	26-Aug-09	04:00:00	14.9	28-Sep-09	16:00:00	9.0

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
20-Jun-09	05:00:00	16.3	23-Jul-09	17:00:00	21.3	26-Aug-09	05:00:00	14.5	28-Sep-09	17:00:00	9.0
20-Jun-09	06:00:00	16.2	23-Jul-09	18:00:00	21.6	26-Aug-09	06:00:00	14.0	28-Sep-09	18:00:00	9.2
20-Jun-09	07:00:00	16.2	23-Jul-09	19:00:00	21.6	26-Aug-09	07:00:00	13.8	28-Sep-09	19:00:00	9.2
20-Jun-09	08:00:00	16.2	23-Jul-09	20:00:00	21.4	26-Aug-09	08:00:00	13.5	28-Sep-09	20:00:00	9.0
20-Jun-09	09:00:00	16.2	23-Jul-09	21:00:00	21.3	26-Aug-09	09:00:00	13.5	28-Sep-09	21:00:00	8.7
20-Jun-09	10:00:00	16.3	23-Jul-09	22:00:00	21.1	26-Aug-09	10:00:00	13.5	28-Sep-09	22:00:00	8.6
20-Jun-09	11:00:00	16.6	23-Jul-09	23:00:00	20.8	26-Aug-09	11:00:00	13.9	28-Sep-09	23:00:00	8.4
20-Jun-09	12:00:00	16.8	24-Jul-09	00:00:00	20.6	26-Aug-09	12:00:00	14.3	29-Sep-09	00:00:00	8.4
20-Jun-09	13:00:00	16.9	24-Jul-09	01:00:00	20.3	26-Aug-09	13:00:00	14.9	29-Sep-09	01:00:00	8.3
20-Jun-09	14:00:00	17.2	24-Jul-09	02:00:00	20.0	26-Aug-09	14:00:00	15.5	29-Sep-09	02:00:00	8.1
20-Jun-09	15:00:00	17.5	24-Jul-09	03:00:00	19.9	26-Aug-09	15:00:00	16.0	29-Sep-09	03:00:00	8.0
20-Jun-09	16:00:00	17.8	24-Jul-09	04:00:00	19.7	26-Aug-09	16:00:00	16.3	29-Sep-09	04:00:00	7.7
20-Jun-09	17:00:00	18.0	24-Jul-09	05:00:00	19.4	26-Aug-09	17:00:00	16.6	29-Sep-09	05:00:00	7.5
20-Jun-09	18:00:00	18.1	24-Jul-09	06:00:00	19.1	26-Aug-09	18:00:00	16.8	29-Sep-09	06:00:00	7.5
20-Jun-09	19:00:00	17.8	24-Jul-09	07:00:00	18.9	26-Aug-09	19:00:00	16.9	29-Sep-09	07:00:00	7.4
20-Jun-09	20:00:00	17.5	24-Jul-09	08:00:00	18.8	26-Aug-09	20:00:00	16.8	29-Sep-09	08:00:00	7.4
20-Jun-09	21:00:00	17.1	24-Jul-09	09:00:00	18.8	26-Aug-09	21:00:00	16.6	29-Sep-09	09:00:00	7.3
20-Jun-09	22:00:00	16.9	24-Jul-09	10:00:00	18.9	26-Aug-09	22:00:00	16.3	29-Sep-09	10:00:00	7.3
20-Jun-09	23:00:00	16.8	24-Jul-09	11:00:00	19.1	26-Aug-09	23:00:00	16.0	29-Sep-09	11:00:00	7.4
21-Jun-09	00:00:00	16.5	24-Jul-09	12:00:00	19.5	27-Aug-09	00:00:00	15.7	29-Sep-09	12:00:00	7.4
21-Jun-09	01:00:00	16.0	24-Jul-09	13:00:00	20.2	27-Aug-09	01:00:00	15.4	29-Sep-09	13:00:00	7.4
21-Jun-09	02:00:00	15.7	24-Jul-09	14:00:00	20.8	27-Aug-09	02:00:00	15.2	29-Sep-09	14:00:00	7.4
21-Jun-09	03:00:00	15.4	24-Jul-09	15:00:00	21.3	27-Aug-09	03:00:00	14.8	29-Sep-09	15:00:00	7.5
21-Jun-09	04:00:00	15.2	24-Jul-09	16:00:00	21.9	27-Aug-09	04:00:00	14.5	29-Sep-09	16:00:00	7.5
21-Jun-09	05:00:00	15.1	24-Jul-09	17:00:00	22.2	27-Aug-09	05:00:00	14.0	29-Sep-09	17:00:00	7.5
21-Jun-09	06:00:00	14.9	24-Jul-09	18:00:00	22.4	27-Aug-09	06:00:00	13.6	29-Sep-09	18:00:00	7.4
21-Jun-09	07:00:00	14.9	24-Jul-09	19:00:00	22.6	27-Aug-09	07:00:00	13.5	29-Sep-09	19:00:00	7.4
21-Jun-09	08:00:00	14.9	24-Jul-09	20:00:00	22.4	27-Aug-09	08:00:00	13.0	29-Sep-09	20:00:00	7.3
21-Jun-09	09:00:00	14.9	24-Jul-09	21:00:00	22.4	27-Aug-09	09:00:00	13.0	29-Sep-09	21:00:00	7.1
21-Jun-09	10:00:00	15.1	24-Jul-09	22:00:00	22.1	27-Aug-09	10:00:00	13.0	29-Sep-09	22:00:00	7.0
21-Jun-09	11:00:00	15.5	24-Jul-09	23:00:00	21.9	27-Aug-09	11:00:00	13.3	29-Sep-09	23:00:00	7.0
21-Jun-09	12:00:00	15.7	25-Jul-09	00:00:00	21.8	27-Aug-09	12:00:00	13.8	30-Sep-09	00:00:00	6.8
21-Jun-09	13:00:00	16.2	25-Jul-09	01:00:00	21.4	27-Aug-09	13:00:00	14.3	30-Sep-09	01:00:00	6.7
21-Jun-09	14:00:00	16.5	25-Jul-09	02:00:00	21.3	27-Aug-09	14:00:00	14.8	30-Sep-09	02:00:00	6.7
21-Jun-09	15:00:00	16.8	25-Jul-09	03:00:00	21.0	27-Aug-09	15:00:00	15.4	30-Sep-09	03:00:00	6.7
21-Jun-09	16:00:00	16.9	25-Jul-09	04:00:00	20.8	27-Aug-09	16:00:00	15.9	30-Sep-09	04:00:00	6.5
21-Jun-09	17:00:00	17.4	25-Jul-09	05:00:00	20.5	27-Aug-09	17:00:00	16.3	30-Sep-09	05:00:00	6.5
21-Jun-09	18:00:00	17.2	25-Jul-09	06:00:00	20.2	27-Aug-09	18:00:00	16.8	30-Sep-09	06:00:00	6.4
21-Jun-09	19:00:00	17.2	25-Jul-09	07:00:00	19.9	27-Aug-09	19:00:00	16.8	30-Sep-09	07:00:00	6.2
21-Jun-09	20:00:00	16.9	25-Jul-09	08:00:00	19.7	27-Aug-09	20:00:00	16.9	30-Sep-09	08:00:00	6.1
21-Jun-09	21:00:00	16.8	25-Jul-09	09:00:00	19.7	27-Aug-09	21:00:00	16.8	30-Sep-09	09:00:00	5.9
21-Jun-09	22:00:00	16.3	25-Jul-09	10:00:00	19.9	27-Aug-09	22:00:00	16.6	30-Sep-09	10:00:00	5.8
21-Jun-09	23:00:00	16.0	25-Jul-09	11:00:00	20.0	27-Aug-09	23:00:00	16.3	30-Sep-09	11:00:00	5.9
22-Jun-09	00:00:00	15.9	25-Jul-09	12:00:00	20.5	28-Aug-09	00:00:00	16.2	30-Sep-09	12:00:00	6.4
22-Jun-09	01:00:00	15.4	25-Jul-09	13:00:00	21.1	28-Aug-09	01:00:00	16.0	30-Sep-09	13:00:00	7.0
22-Jun-09	02:00:00	15.1	25-Jul-09	14:00:00	21.6	28-Aug-09	02:00:00	15.7	30-Sep-09	14:00:00	7.3
22-Jun-09	03:00:00	14.9	25-Jul-09	15:00:00	22.1	28-Aug-09	03:00:00	15.4	30-Sep-09	15:00:00	7.1
22-Jun-09	04:00:00	14.6	25-Jul-09	16:00:00	22.6	28-Aug-09	04:00:00	15.1	30-Sep-09	16:00:00	7.3
22-Jun-09	05:00:00	14.5	25-Jul-09	17:00:00	23.1	28-Aug-09	05:00:00	14.8	30-Sep-09	17:00:00	7.3
22-Jun-09	06:00:00	14.3	25-Jul-09	18:00:00	23.4	28-Aug-09	06:00:00	14.5	30-Sep-09	18:00:00	7.3
22-Jun-09	07:00:00	14.2	25-Jul-09	19:00:00	23.6	28-Aug-09	07:00:00	14.2	30-Sep-09	19:00:00	7.3
22-Jun-09	08:00:00	14.0	25-Jul-09	20:00:00	23.6	28-Aug-09	08:00:00	13.9	30-Sep-09	20:00:00	7.1
22-Jun-09	09:00:00	14.2	25-Jul-09	21:00:00	23.2	28-Aug-09	09:00:00	13.8	30-Sep-09	21:00:00	6.8
22-Jun-09	10:00:00	14.5	25-Jul-09	22:00:00	22.9	28-Aug-09	10:00:00	13.8	30-Sep-09	22:00:00	6.5
22-Jun-09	11:00:00	14.9	25-Jul-09	23:00:00	22.6	28-Aug-09	11:00:00	14.0	30-Sep-09	23:00:00	6.4
22-Jun-09	12:00:00	15.4	26-Jul-09	00:00:00	22.2	28-Aug-09	12:00:00	14.5	1-Oct-09	00:00:00	6.2
22-Jun-09	13:00:00	15.9	26-Jul-09	01:00:00	21.9	28-Aug-09	13:00:00	15.2	1-Oct-09	01:00:00	5.9
22-Jun-09	14:00:00	16.5	26-Jul-09	02:00:00	21.8	28-Aug-09	14:00:00	15.9	1-Oct-09	02:00:00	5.9
22-Jun-09	15:00:00	16.9	26-Jul-09	03:00:00	21.4	28-Aug-09	15:00:00	16.6	1-Oct-09	03:00:00	5.9

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
22-Jun-09	16:00:00	17.4	26-Jul-09	04:00:00	21.3	28-Aug-09	16:00:00	17.1	1-Oct-09	04:00:00	5.8
22-Jun-09	17:00:00	17.7	26-Jul-09	05:00:00	21.0	28-Aug-09	17:00:00	17.5	1-Oct-09	05:00:00	5.6
22-Jun-09	18:00:00	17.7	26-Jul-09	06:00:00	20.6	28-Aug-09	18:00:00	17.8	1-Oct-09	06:00:00	5.6
22-Jun-09	19:00:00	17.5	26-Jul-09	07:00:00	20.5	28-Aug-09	19:00:00	18.0	1-Oct-09	07:00:00	5.5
22-Jun-09	20:00:00	17.5	26-Jul-09	08:00:00	20.2	28-Aug-09	20:00:00	18.0	1-Oct-09	08:00:00	5.5
22-Jun-09	21:00:00	17.4	26-Jul-09	09:00:00	20.2	28-Aug-09	21:00:00	17.8	1-Oct-09	09:00:00	5.2
22-Jun-09	22:00:00	17.2	26-Jul-09	10:00:00	20.3	28-Aug-09	22:00:00	17.7	1-Oct-09	10:00:00	5.2
22-Jun-09	23:00:00	17.1	26-Jul-09	11:00:00	20.6	28-Aug-09	23:00:00	17.5	1-Oct-09	11:00:00	5.3
23-Jun-09	00:00:00	16.8	26-Jul-09	12:00:00	21.0	29-Aug-09	00:00:00	17.4	1-Oct-09	12:00:00	5.8
23-Jun-09	01:00:00	16.6	26-Jul-09	13:00:00	21.4	29-Aug-09	01:00:00	17.2	1-Oct-09	13:00:00	6.2
23-Jun-09	02:00:00	16.3	26-Jul-09	14:00:00	21.9	29-Aug-09	02:00:00	17.1	1-Oct-09	14:00:00	6.8
23-Jun-09	03:00:00	16.0	26-Jul-09	15:00:00	22.6	29-Aug-09	03:00:00	16.8	1-Oct-09	15:00:00	7.4
23-Jun-09	04:00:00	15.7	26-Jul-09	16:00:00	23.1	29-Aug-09	04:00:00	16.5	1-Oct-09	16:00:00	7.7
23-Jun-09	05:00:00	15.5	26-Jul-09	17:00:00	23.6	29-Aug-09	05:00:00	16.3	1-Oct-09	17:00:00	7.7
23-Jun-09	06:00:00	15.2	26-Jul-09	18:00:00	23.9	29-Aug-09	06:00:00	16.2	1-Oct-09	18:00:00	7.7
23-Jun-09	07:00:00	15.1	26-Jul-09	19:00:00	24.0	29-Aug-09	07:00:00	15.9	1-Oct-09	19:00:00	7.4
23-Jun-09	08:00:00	15.1	26-Jul-09	20:00:00	23.9	29-Aug-09	08:00:00	15.7	1-Oct-09	20:00:00	7.3
23-Jun-09	09:00:00	15.2	26-Jul-09	21:00:00	23.7	29-Aug-09	09:00:00	15.5	1-Oct-09	21:00:00	7.0
23-Jun-09	10:00:00	15.4	26-Jul-09	22:00:00	23.2	29-Aug-09	10:00:00	15.4	1-Oct-09	22:00:00	6.7
23-Jun-09	11:00:00	15.9	26-Jul-09	23:00:00	23.1	29-Aug-09	11:00:00	15.5	1-Oct-09	23:00:00	6.4
23-Jun-09	12:00:00	16.3	27-Jul-09	00:00:00	22.7	29-Aug-09	12:00:00	15.7	2-Oct-09	00:00:00	6.2
23-Jun-09	13:00:00	16.8	27-Jul-09	01:00:00	22.4	29-Aug-09	13:00:00	15.9	2-Oct-09	01:00:00	6.2
23-Jun-09	14:00:00	17.4	27-Jul-09	02:00:00	22.2	29-Aug-09	14:00:00	16.6	2-Oct-09	02:00:00	6.1
23-Jun-09	15:00:00	17.8	27-Jul-09	03:00:00	21.9	29-Aug-09	15:00:00	17.4	2-Oct-09	03:00:00	5.8
23-Jun-09	16:00:00	18.3	27-Jul-09	04:00:00	21.8	29-Aug-09	16:00:00	17.8	2-Oct-09	04:00:00	5.6
23-Jun-09	17:00:00	18.6	27-Jul-09	05:00:00	21.4	29-Aug-09	17:00:00	18.4	2-Oct-09	05:00:00	5.5
23-Jun-09	18:00:00	18.6	27-Jul-09	06:00:00	21.0	29-Aug-09	18:00:00	18.6	2-Oct-09	06:00:00	5.3
23-Jun-09	19:00:00	18.6	27-Jul-09	07:00:00	20.6	29-Aug-09	19:00:00	18.6	2-Oct-09	07:00:00	5.3
23-Jun-09	20:00:00	18.4	27-Jul-09	08:00:00	20.3	29-Aug-09	20:00:00	18.4	2-Oct-09	08:00:00	5.2
23-Jun-09	21:00:00	18.1	27-Jul-09	09:00:00	20.2	29-Aug-09	21:00:00	18.3	2-Oct-09	09:00:00	5.2
23-Jun-09	22:00:00	17.8	27-Jul-09	10:00:00	20.2	29-Aug-09	22:00:00	18.1	2-Oct-09	10:00:00	5.2
23-Jun-09	23:00:00	17.7	27-Jul-09	11:00:00	20.2	29-Aug-09	23:00:00	18.0	2-Oct-09	11:00:00	5.3
24-Jun-09	00:00:00	17.5	27-Jul-09	12:00:00	20.6	30-Aug-09	00:00:00	17.8	2-Oct-09	12:00:00	5.5
24-Jun-09	01:00:00	17.4	27-Jul-09	13:00:00	21.1	30-Aug-09	01:00:00	17.7	2-Oct-09	13:00:00	5.9
24-Jun-09	02:00:00	16.9	27-Jul-09	14:00:00	21.6	30-Aug-09	02:00:00	17.4	2-Oct-09	14:00:00	6.2
24-Jun-09	03:00:00	16.8	27-Jul-09	15:00:00	22.2	30-Aug-09	03:00:00	17.1	2-Oct-09	15:00:00	6.7
24-Jun-09	04:00:00	16.5	27-Jul-09	16:00:00	22.9	30-Aug-09	04:00:00	16.8	2-Oct-09	16:00:00	6.8
24-Jun-09	05:00:00	16.3	27-Jul-09	17:00:00	23.4	30-Aug-09	05:00:00	16.5	2-Oct-09	17:00:00	6.8
24-Jun-09	06:00:00	16.0	27-Jul-09	18:00:00	23.9	30-Aug-09	06:00:00	16.2	2-Oct-09	18:00:00	7.1
24-Jun-09	07:00:00	16.0	27-Jul-09	19:00:00	24.0	30-Aug-09	07:00:00	15.7	2-Oct-09	19:00:00	7.1
24-Jun-09	08:00:00	15.9	27-Jul-09	20:00:00	24.0	30-Aug-09	08:00:00	15.4	2-Oct-09	20:00:00	7.0
24-Jun-09	09:00:00	16.0	27-Jul-09	21:00:00	23.7	30-Aug-09	09:00:00	15.2	2-Oct-09	21:00:00	6.8
24-Jun-09	10:00:00	16.2	27-Jul-09	22:00:00	23.6	30-Aug-09	10:00:00	15.2	2-Oct-09	22:00:00	6.7
24-Jun-09	11:00:00	16.6	27-Jul-09	23:00:00	23.2	30-Aug-09	11:00:00	15.7	2-Oct-09	23:00:00	6.5
24-Jun-09	12:00:00	17.1	28-Jul-09	00:00:00	22.9	30-Aug-09	12:00:00	16.2	3-Oct-09	00:00:00	6.5
24-Jun-09	13:00:00	17.5	28-Jul-09	01:00:00	22.6	30-Aug-09	13:00:00	16.8	3-Oct-09	01:00:00	6.5
24-Jun-09	14:00:00	18.1	28-Jul-09	02:00:00	22.6	30-Aug-09	14:00:00	17.5	3-Oct-09	02:00:00	6.5
24-Jun-09	15:00:00	18.4	28-Jul-09	03:00:00	22.4	30-Aug-09	15:00:00	18.1	3-Oct-09	03:00:00	6.5
24-Jun-09	16:00:00	18.9	28-Jul-09	04:00:00	22.2	30-Aug-09	16:00:00	18.8	3-Oct-09	04:00:00	6.5
24-Jun-09	17:00:00	18.9	28-Jul-09	05:00:00	21.9	30-Aug-09	17:00:00	19.2	3-Oct-09	05:00:00	6.4
24-Jun-09	18:00:00	19.2	28-Jul-09	06:00:00	21.6	30-Aug-09	18:00:00	19.4	3-Oct-09	06:00:00	6.4
24-Jun-09	19:00:00	19.1	28-Jul-09	07:00:00	21.3	30-Aug-09	19:00:00	19.4	3-Oct-09	07:00:00	6.2
24-Jun-09	20:00:00	18.9	28-Jul-09	08:00:00	21.0	30-Aug-09	20:00:00	19.2	3-Oct-09	08:00:00	6.1
24-Jun-09	21:00:00	18.6	28-Jul-09	09:00:00	20.8	30-Aug-09	21:00:00	19.1	3-Oct-09	09:00:00	5.9
24-Jun-09	22:00:00	18.3	28-Jul-09	10:00:00	20.8	30-Aug-09	22:00:00	18.9	3-Oct-09	10:00:00	5.9
24-Jun-09	23:00:00	18.1	28-Jul-09	11:00:00	21.0	30-Aug-09	23:00:00	18.6	3-Oct-09	11:00:00	5.9
25-Jun-09	00:00:00	17.8	28-Jul-09	12:00:00	21.1	31-Aug-09	00:00:00	18.4	3-Oct-09	12:00:00	5.9
25-Jun-09	01:00:00	17.7	28-Jul-09	13:00:00	21.6	31-Aug-09	01:00:00	18.1	3-Oct-09	13:00:00	6.1
25-Jun-09	02:00:00	17.4	28-Jul-09	14:00:00	22.1	31-Aug-09	02:00:00	17.8	3-Oct-09	14:00:00	6.2

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
25-Jun-09	03:00:00	17.2	28-Jul-09	15:00:00	22.6	31-Aug-09	03:00:00	17.7	3-Oct-09	15:00:00	6.4
25-Jun-09	04:00:00	17.1	28-Jul-09	16:00:00	23.1	31-Aug-09	04:00:00	17.4	3-Oct-09	16:00:00	6.5
25-Jun-09	05:00:00	16.8	28-Jul-09	17:00:00	23.7	31-Aug-09	05:00:00	17.1	3-Oct-09	17:00:00	6.7
25-Jun-09	06:00:00	16.6	28-Jul-09	18:00:00	23.9	31-Aug-09	06:00:00	16.8	3-Oct-09	18:00:00	6.7
25-Jun-09	07:00:00	16.3	28-Jul-09	19:00:00	24.2	31-Aug-09	07:00:00	16.5	3-Oct-09	19:00:00	6.7
25-Jun-09	08:00:00	16.3	28-Jul-09	20:00:00	24.4	31-Aug-09	08:00:00	16.3	3-Oct-09	20:00:00	6.5
25-Jun-09	09:00:00	16.3	28-Jul-09	21:00:00	24.0	31-Aug-09	09:00:00	16.2	3-Oct-09	21:00:00	6.5
25-Jun-09	10:00:00	16.6	28-Jul-09	22:00:00	23.9	31-Aug-09	10:00:00	16.3	3-Oct-09	22:00:00	6.4
25-Jun-09	11:00:00	16.9	28-Jul-09	23:00:00	23.6	31-Aug-09	11:00:00	16.5	3-Oct-09	23:00:00	6.4
25-Jun-09	12:00:00	17.1	29-Jul-09	00:00:00	23.4	31-Aug-09	12:00:00	16.9	4-Oct-09	00:00:00	6.4
25-Jun-09	13:00:00	17.5	29-Jul-09	01:00:00	23.1	31-Aug-09	13:00:00	17.5	4-Oct-09	01:00:00	6.4
25-Jun-09	14:00:00	17.5	29-Jul-09	02:00:00	22.9	31-Aug-09	14:00:00	18.1	4-Oct-09	02:00:00	6.2
25-Jun-09	15:00:00	17.8	29-Jul-09	03:00:00	22.6	31-Aug-09	15:00:00	18.8	4-Oct-09	03:00:00	6.4
25-Jun-09	16:00:00	18.0	29-Jul-09	04:00:00	22.4	31-Aug-09	16:00:00	19.2	4-Oct-09	04:00:00	6.2
25-Jun-09	17:00:00	18.0	29-Jul-09	05:00:00	22.1	31-Aug-09	17:00:00	19.7	4-Oct-09	05:00:00	6.2
25-Jun-09	18:00:00	18.0	29-Jul-09	06:00:00	21.8	31-Aug-09	18:00:00	19.7	4-Oct-09	06:00:00	5.9
25-Jun-09	19:00:00	17.8	29-Jul-09	07:00:00	21.4	31-Aug-09	19:00:00	19.9	4-Oct-09	07:00:00	5.8
25-Jun-09	20:00:00	17.7	29-Jul-09	08:00:00	21.3	31-Aug-09	20:00:00	19.5	4-Oct-09	08:00:00	5.5
25-Jun-09	21:00:00	17.5	29-Jul-09	09:00:00	21.0	31-Aug-09	21:00:00	19.2	4-Oct-09	09:00:00	5.3
25-Jun-09	22:00:00	17.4	29-Jul-09	10:00:00	21.0	31-Aug-09	22:00:00	19.1	4-Oct-09	10:00:00	5.2
25-Jun-09	23:00:00	17.2	29-Jul-09	11:00:00	21.1	31-Aug-09	23:00:00	18.8	4-Oct-09	11:00:00	5.2
26-Jun-09	00:00:00	17.1	29-Jul-09	12:00:00	21.4	1-Sep-09	00:00:00	18.4	4-Oct-09	12:00:00	5.5
26-Jun-09	01:00:00	16.8	29-Jul-09	13:00:00	21.9	1-Sep-09	01:00:00	18.3	4-Oct-09	13:00:00	6.1
26-Jun-09	02:00:00	16.6	29-Jul-09	14:00:00	22.4	1-Sep-09	02:00:00	18.0	4-Oct-09	14:00:00	6.4
26-Jun-09	03:00:00	16.3	29-Jul-09	15:00:00	22.9	1-Sep-09	03:00:00	17.8	4-Oct-09	15:00:00	6.8
26-Jun-09	04:00:00	16.2	29-Jul-09	16:00:00	23.4	1-Sep-09	04:00:00	17.4	4-Oct-09	16:00:00	7.1
26-Jun-09	05:00:00	15.9	29-Jul-09	17:00:00	23.9	1-Sep-09	05:00:00	17.1	4-Oct-09	17:00:00	7.3
26-Jun-09	06:00:00	15.7	29-Jul-09	18:00:00	24.2	1-Sep-09	06:00:00	16.9	4-Oct-09	18:00:00	7.1
26-Jun-09	07:00:00	15.7	29-Jul-09	19:00:00	24.4	1-Sep-09	07:00:00	16.6	4-Oct-09	19:00:00	6.8
26-Jun-09	08:00:00	15.5	29-Jul-09	20:00:00	24.2	1-Sep-09	08:00:00	16.3	4-Oct-09	20:00:00	6.5
26-Jun-09	09:00:00	15.5	29-Jul-09	21:00:00	24.2	1-Sep-09	09:00:00	16.2	4-Oct-09	21:00:00	6.1
26-Jun-09	10:00:00	15.5	29-Jul-09	22:00:00	23.9	1-Sep-09	10:00:00	16.2	4-Oct-09	22:00:00	5.8
26-Jun-09	11:00:00	15.5	29-Jul-09	23:00:00	23.6	1-Sep-09	11:00:00	16.5	4-Oct-09	23:00:00	5.5
26-Jun-09	12:00:00	15.9	30-Jul-09	00:00:00	23.2	1-Sep-09	12:00:00	16.9	5-Oct-09	00:00:00	5.3
26-Jun-09	13:00:00	15.9	30-Jul-09	01:00:00	22.9	1-Sep-09	13:00:00	17.7	5-Oct-09	01:00:00	5.2
26-Jun-09	14:00:00	15.9	30-Jul-09	02:00:00	22.7	1-Sep-09	14:00:00	18.3	5-Oct-09	02:00:00	5.0
26-Jun-09	15:00:00	16.0	30-Jul-09	03:00:00	22.6	1-Sep-09	15:00:00	18.9	5-Oct-09	03:00:00	4.9
26-Jun-09	16:00:00	16.0	30-Jul-09	04:00:00	22.4	1-Sep-09	16:00:00	19.5	5-Oct-09	04:00:00	4.9
26-Jun-09	17:00:00	16.2	30-Jul-09	05:00:00	22.2	1-Sep-09	17:00:00	19.9	5-Oct-09	05:00:00	4.7
26-Jun-09	18:00:00	16.3	30-Jul-09	06:00:00	22.1	1-Sep-09	18:00:00	20.0	5-Oct-09	06:00:00	4.7
26-Jun-09	19:00:00	16.2	30-Jul-09	07:00:00	21.9	1-Sep-09	19:00:00	20.0	5-Oct-09	07:00:00	4.6
26-Jun-09	20:00:00	16.2	30-Jul-09	08:00:00	21.9	1-Sep-09	20:00:00	19.9	5-Oct-09	08:00:00	4.4
26-Jun-09	21:00:00	16.0	30-Jul-09	09:00:00	21.8	1-Sep-09	21:00:00	19.7	5-Oct-09	09:00:00	4.3
26-Jun-09	22:00:00	15.9	30-Jul-09	10:00:00	21.8	1-Sep-09	22:00:00	19.4	5-Oct-09	10:00:00	4.1
26-Jun-09	23:00:00	15.5	30-Jul-09	11:00:00	21.8	1-Sep-09	23:00:00	19.2	5-Oct-09	11:00:00	4.1
27-Jun-09	00:00:00	15.2	30-Jul-09	12:00:00	22.1	2-Sep-09	00:00:00	19.1	5-Oct-09	12:00:00	4.4
27-Jun-09	01:00:00	14.9	30-Jul-09	13:00:00	22.4	2-Sep-09	01:00:00	18.9	5-Oct-09	13:00:00	4.9
27-Jun-09	02:00:00	14.6	30-Jul-09	14:00:00	22.9	2-Sep-09	02:00:00	18.8	5-Oct-09	14:00:00	5.5
27-Jun-09	03:00:00	14.5	30-Jul-09	15:00:00	23.4	2-Sep-09	03:00:00	18.8	5-Oct-09	15:00:00	5.8
27-Jun-09	04:00:00	14.0	30-Jul-09	16:00:00	23.9	2-Sep-09	04:00:00	18.6	5-Oct-09	16:00:00	6.1
27-Jun-09	05:00:00	13.8	30-Jul-09	17:00:00	24.4	2-Sep-09	05:00:00	18.4	5-Oct-09	17:00:00	6.1
27-Jun-09	06:00:00	13.5	30-Jul-09	18:00:00	24.4	2-Sep-09	06:00:00	18.1	5-Oct-09	18:00:00	6.1
27-Jun-09	07:00:00	13.3	30-Jul-09	19:00:00	24.5	2-Sep-09	07:00:00	18.0	5-Oct-09	19:00:00	6.2
27-Jun-09	08:00:00	13.2	30-Jul-09	20:00:00	24.5	2-Sep-09	08:00:00	17.7	5-Oct-09	20:00:00	6.1
27-Jun-09	09:00:00	13.3	30-Jul-09	21:00:00	24.4	2-Sep-09	09:00:00	17.7	5-Oct-09	21:00:00	6.1
27-Jun-09	10:00:00	13.3	30-Jul-09	22:00:00	24.2	2-Sep-09	10:00:00	17.7	5-Oct-09	22:00:00	6.1
27-Jun-09	11:00:00	13.3	30-Jul-09	23:00:00	24.0	2-Sep-09	11:00:00	17.8	5-Oct-09	23:00:00	5.9
27-Jun-09	12:00:00	13.5	31-Jul-09	00:00:00	23.7	2-Sep-09	12:00:00	18.0	6-Oct-09	00:00:00	6.1
27-Jun-09	13:00:00	13.8	31-Jul-09	01:00:00	23.4	2-Sep-09	13:00:00	18.0	6-Oct-09	01:00:00	6.1

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
27-Jun-09	14:00:00	13.9	31-Jul-09	02:00:00	23.1	2-Sep-09	14:00:00	18.0	6-Oct-09	02:00:00	6.4
27-Jun-09	15:00:00	14.2	31-Jul-09	03:00:00	22.7	2-Sep-09	15:00:00	18.0	6-Oct-09	03:00:00	6.4
27-Jun-09	16:00:00	14.5	31-Jul-09	04:00:00	22.4	2-Sep-09	16:00:00	18.1	6-Oct-09	04:00:00	6.5
27-Jun-09	17:00:00	14.8	31-Jul-09	05:00:00	22.4	2-Sep-09	17:00:00	18.6	6-Oct-09	05:00:00	6.7
27-Jun-09	18:00:00	15.1	31-Jul-09	06:00:00	22.1	2-Sep-09	18:00:00	19.2	6-Oct-09	06:00:00	6.8
27-Jun-09	19:00:00	15.2	31-Jul-09	07:00:00	21.9	2-Sep-09	19:00:00	19.2	6-Oct-09	07:00:00	6.7
27-Jun-09	20:00:00	15.4	31-Jul-09	08:00:00	21.6	2-Sep-09	20:00:00	19.1	6-Oct-09	08:00:00	6.8
27-Jun-09	21:00:00	15.2	31-Jul-09	09:00:00	21.6	2-Sep-09	21:00:00	18.8	6-Oct-09	09:00:00	6.7
27-Jun-09	22:00:00	15.1	31-Jul-09	10:00:00	21.6	2-Sep-09	22:00:00	18.4	6-Oct-09	10:00:00	6.7
27-Jun-09	23:00:00	14.9	31-Jul-09	11:00:00	21.8	2-Sep-09	23:00:00	18.1	6-Oct-09	11:00:00	6.5
28-Jun-09	00:00:00	14.8	31-Jul-09	12:00:00	22.1	3-Sep-09	00:00:00	18.1	6-Oct-09	12:00:00	6.4
28-Jun-09	01:00:00	14.6	31-Jul-09	13:00:00	22.6	3-Sep-09	01:00:00	18.0	6-Oct-09	13:00:00	6.4
28-Jun-09	02:00:00	14.5	31-Jul-09	14:00:00	23.1	3-Sep-09	02:00:00	17.8	6-Oct-09	14:00:00	6.2
28-Jun-09	03:00:00	14.2	31-Jul-09	15:00:00	23.6	3-Sep-09	03:00:00	17.7	6-Oct-09	15:00:00	6.4
28-Jun-09	04:00:00	14.2	31-Jul-09	16:00:00	24.0	3-Sep-09	04:00:00	17.5	6-Oct-09	16:00:00	6.5
28-Jun-09	05:00:00	13.9	31-Jul-09	17:00:00	24.5	3-Sep-09	05:00:00	17.4	6-Oct-09	17:00:00	6.5
28-Jun-09	06:00:00	13.9	31-Jul-09	18:00:00	24.9	3-Sep-09	06:00:00	17.1	6-Oct-09	18:00:00	6.7
28-Jun-09	07:00:00	13.8	31-Jul-09	19:00:00	25.1	3-Sep-09	07:00:00	16.9	6-Oct-09	19:00:00	6.5
28-Jun-09	08:00:00	13.6	31-Jul-09	20:00:00	25.1	3-Sep-09	08:00:00	16.8	6-Oct-09	20:00:00	6.2
28-Jun-09	09:00:00	13.6	31-Jul-09	21:00:00	25.1	3-Sep-09	09:00:00	16.6	6-Oct-09	21:00:00	5.9
28-Jun-09	10:00:00	13.8	31-Jul-09	22:00:00	24.9	3-Sep-09	10:00:00	16.8	6-Oct-09	22:00:00	5.6
28-Jun-09	11:00:00	13.8	31-Jul-09	23:00:00	24.5	3-Sep-09	11:00:00	17.1	6-Oct-09	23:00:00	5.5
28-Jun-09	12:00:00	13.9	1-Aug-09	00:00:00	24.4	3-Sep-09	12:00:00	17.5	7-Oct-09	00:00:00	5.2
28-Jun-09	13:00:00	14.3	1-Aug-09	01:00:00	24.0	3-Sep-09	13:00:00	17.8	7-Oct-09	01:00:00	5.0
28-Jun-09	14:00:00	14.9	1-Aug-09	02:00:00	23.9	3-Sep-09	14:00:00	18.4	7-Oct-09	02:00:00	4.9
28-Jun-09	15:00:00	15.5	1-Aug-09	03:00:00	23.6	3-Sep-09	15:00:00	19.1	7-Oct-09	03:00:00	4.7
28-Jun-09	16:00:00	15.7	1-Aug-09	04:00:00	23.2	3-Sep-09	16:00:00	19.4	7-Oct-09	04:00:00	4.6
28-Jun-09	17:00:00	16.0	1-Aug-09	05:00:00	23.1	3-Sep-09	17:00:00	19.9	7-Oct-09	05:00:00	4.6
28-Jun-09	18:00:00	16.5	1-Aug-09	06:00:00	22.9	3-Sep-09	18:00:00	19.7	7-Oct-09	06:00:00	4.6
28-Jun-09	19:00:00	16.6	1-Aug-09	07:00:00	22.7	3-Sep-09	19:00:00	19.5	7-Oct-09	07:00:00	4.4
28-Jun-09	20:00:00	16.6	1-Aug-09	08:00:00	22.6	3-Sep-09	20:00:00	19.5	7-Oct-09	08:00:00	4.4
28-Jun-09	21:00:00	16.3	1-Aug-09	09:00:00	22.6	3-Sep-09	21:00:00	19.4	7-Oct-09	09:00:00	4.3
28-Jun-09	22:00:00	16.0	1-Aug-09	10:00:00	22.7	3-Sep-09	22:00:00	19.1	7-Oct-09	10:00:00	4.3
28-Jun-09	23:00:00	15.7	1-Aug-09	11:00:00	22.9	3-Sep-09	23:00:00	19.1	7-Oct-09	11:00:00	4.4
29-Jun-09	00:00:00	15.5	1-Aug-09	12:00:00	23.2	4-Sep-09	00:00:00	18.8	7-Oct-09	12:00:00	4.6
29-Jun-09	01:00:00	15.2	1-Aug-09	13:00:00	23.7	4-Sep-09	01:00:00	18.6	7-Oct-09	13:00:00	4.7
29-Jun-09	02:00:00	14.9	1-Aug-09	14:00:00	24.0	4-Sep-09	02:00:00	18.4	7-Oct-09	14:00:00	4.9
29-Jun-09	03:00:00	14.6	1-Aug-09	15:00:00	24.4	4-Sep-09	03:00:00	18.3	7-Oct-09	15:00:00	5.2
29-Jun-09	04:00:00	14.5	1-Aug-09	16:00:00	24.7	4-Sep-09	04:00:00	18.1	7-Oct-09	16:00:00	5.5
29-Jun-09	05:00:00	14.2	1-Aug-09	17:00:00	25.1	4-Sep-09	05:00:00	18.0	7-Oct-09	17:00:00	5.6
29-Jun-09	06:00:00	13.9	1-Aug-09	18:00:00	25.2	4-Sep-09	06:00:00	17.8	7-Oct-09	18:00:00	5.8
29-Jun-09	07:00:00	13.8	1-Aug-09	19:00:00	25.2	4-Sep-09	07:00:00	17.7	7-Oct-09	19:00:00	5.5
29-Jun-09	08:00:00	13.6	1-Aug-09	20:00:00	25.2	4-Sep-09	08:00:00	17.7	7-Oct-09	20:00:00	5.3
29-Jun-09	09:00:00	13.5	1-Aug-09	21:00:00	25.1	4-Sep-09	09:00:00	17.5	7-Oct-09	21:00:00	5.0
29-Jun-09	10:00:00	13.6	1-Aug-09	22:00:00	24.7	4-Sep-09	10:00:00	17.4	7-Oct-09	22:00:00	4.9
29-Jun-09	11:00:00	13.9	1-Aug-09	23:00:00	24.7	4-Sep-09	11:00:00	17.4	7-Oct-09	23:00:00	4.6
29-Jun-09	12:00:00	14.3	2-Aug-09	00:00:00	24.4	4-Sep-09	12:00:00	17.4	8-Oct-09	00:00:00	4.4
29-Jun-09	13:00:00	14.8	2-Aug-09	01:00:00	24.2	4-Sep-09	13:00:00	17.5	8-Oct-09	01:00:00	4.4
29-Jun-09	14:00:00	15.4	2-Aug-09	02:00:00	23.9	4-Sep-09	14:00:00	18.0	8-Oct-09	02:00:00	4.4
29-Jun-09	15:00:00	15.7	2-Aug-09	03:00:00	23.7	4-Sep-09	15:00:00	18.8	8-Oct-09	03:00:00	4.4
29-Jun-09	16:00:00	16.2	2-Aug-09	04:00:00	23.6	4-Sep-09	16:00:00	19.2	8-Oct-09	04:00:00	4.4
29-Jun-09	17:00:00	16.6	2-Aug-09	05:00:00	23.2	4-Sep-09	17:00:00	19.5	8-Oct-09	05:00:00	4.3
29-Jun-09	18:00:00	16.8	2-Aug-09	06:00:00	23.2	4-Sep-09	18:00:00	19.7	8-Oct-09	06:00:00	4.1
29-Jun-09	19:00:00	16.8	2-Aug-09	07:00:00	22.9	4-Sep-09	19:00:00	19.5	8-Oct-09	07:00:00	3.8
29-Jun-09	20:00:00	16.5	2-Aug-09	08:00:00	22.7	4-Sep-09	20:00:00	19.2	8-Oct-09	08:00:00	3.5
29-Jun-09	21:00:00	16.3	2-Aug-09	09:00:00	22.9	4-Sep-09	21:00:00	18.8	8-Oct-09	09:00:00	3.4
29-Jun-09	22:00:00	16.2	2-Aug-09	10:00:00	22.9	4-Sep-09	22:00:00	18.3	8-Oct-09	10:00:00	3.2
29-Jun-09	23:00:00	15.7	2-Aug-09	11:00:00	23.1	4-Sep-09	23:00:00	18.1	8-Oct-09	11:00:00	3.2
30-Jun-09	00:00:00	15.5	2-Aug-09	12:00:00	23.1	5-Sep-09	00:00:00	17.8	8-Oct-09	12:00:00	3.2

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
30-Jun-09	01:00:00	15.4	2-Aug-09	13:00:00	23.1	5-Sep-09	01:00:00	17.4	8-Oct-09	13:00:00	3.4
30-Jun-09	02:00:00	15.1	2-Aug-09	14:00:00	23.1	5-Sep-09	02:00:00	17.1	8-Oct-09	14:00:00	3.4
30-Jun-09	03:00:00	14.8	2-Aug-09	15:00:00	23.1	5-Sep-09	03:00:00	16.8	8-Oct-09	15:00:00	3.4
30-Jun-09	04:00:00	14.3	2-Aug-09	16:00:00	23.2	5-Sep-09	04:00:00	16.6	8-Oct-09	16:00:00	3.5
30-Jun-09	05:00:00	14.0	2-Aug-09	17:00:00	23.1	5-Sep-09	05:00:00	16.3	8-Oct-09	17:00:00	3.5
30-Jun-09	06:00:00	13.8	2-Aug-09	18:00:00	22.9	5-Sep-09	06:00:00	16.0	8-Oct-09	18:00:00	3.4
30-Jun-09	07:00:00	13.6	2-Aug-09	19:00:00	22.7	5-Sep-09	07:00:00	15.7	8-Oct-09	19:00:00	3.4
30-Jun-09	08:00:00	13.6	2-Aug-09	20:00:00	22.7	5-Sep-09	08:00:00	15.4	8-Oct-09	20:00:00	3.1
30-Jun-09	09:00:00	13.5	2-Aug-09	21:00:00	22.7	5-Sep-09	09:00:00	15.1	8-Oct-09	21:00:00	2.9
30-Jun-09	10:00:00	13.5	2-Aug-09	22:00:00	22.7	5-Sep-09	10:00:00	15.1	8-Oct-09	22:00:00	2.8
30-Jun-09	11:00:00	13.5	2-Aug-09	23:00:00	22.4	5-Sep-09	11:00:00	15.2	8-Oct-09	23:00:00	2.6
30-Jun-09	12:00:00	13.5	3-Aug-09	00:00:00	22.4	5-Sep-09	12:00:00	15.7	9-Oct-09	00:00:00	2.5
30-Jun-09	13:00:00	13.5	3-Aug-09	01:00:00	22.1	5-Sep-09	13:00:00	16.3	9-Oct-09	01:00:00	2.3
30-Jun-09	14:00:00	13.9	3-Aug-09	02:00:00	21.9	5-Sep-09	14:00:00	16.8	9-Oct-09	02:00:00	2.3
30-Jun-09	15:00:00	13.9	3-Aug-09	03:00:00	21.8	5-Sep-09	15:00:00	17.2	9-Oct-09	03:00:00	2.3
30-Jun-09	16:00:00	14.0	3-Aug-09	04:00:00	21.6	5-Sep-09	16:00:00	17.4	9-Oct-09	04:00:00	2.2
30-Jun-09	17:00:00	14.6	3-Aug-09	05:00:00	21.4	5-Sep-09	17:00:00	17.4	9-Oct-09	05:00:00	2.2
30-Jun-09	18:00:00	14.8	3-Aug-09	06:00:00	21.3	5-Sep-09	18:00:00	17.1	9-Oct-09	06:00:00	2.0
30-Jun-09	19:00:00	14.9	3-Aug-09	07:00:00	21.0	5-Sep-09	19:00:00	17.1	9-Oct-09	07:00:00	2.0
30-Jun-09	20:00:00	14.9	3-Aug-09	08:00:00	20.8	5-Sep-09	20:00:00	16.9	9-Oct-09	08:00:00	1.9
30-Jun-09	21:00:00	14.9	3-Aug-09	09:00:00	20.6	5-Sep-09	21:00:00	16.8	9-Oct-09	09:00:00	1.9
30-Jun-09	22:00:00	14.9	3-Aug-09	10:00:00	20.5	5-Sep-09	22:00:00	16.8	9-Oct-09	10:00:00	1.7
30-Jun-09	23:00:00	14.8	3-Aug-09	11:00:00	20.2	5-Sep-09	23:00:00	16.6	9-Oct-09	11:00:00	1.7
1-Jul-09	00:00:00	14.6	3-Aug-09	12:00:00	20.0	6-Sep-09	00:00:00	16.6	9-Oct-09	12:00:00	1.9
1-Jul-09	01:00:00	14.5	3-Aug-09	13:00:00	19.9	6-Sep-09	01:00:00	16.5	9-Oct-09	13:00:00	2.0
1-Jul-09	02:00:00	14.5	3-Aug-09	14:00:00	19.7	6-Sep-09	02:00:00	16.3	9-Oct-09	14:00:00	2.2
1-Jul-09	03:00:00	14.3	3-Aug-09	15:00:00	19.7	6-Sep-09	03:00:00	16.3	9-Oct-09	15:00:00	2.3
1-Jul-09	04:00:00	14.2	3-Aug-09	16:00:00	19.7	6-Sep-09	04:00:00	16.2	9-Oct-09	16:00:00	2.6
1-Jul-09	05:00:00	13.9	3-Aug-09	17:00:00	19.7	6-Sep-09	05:00:00	16.0	9-Oct-09	17:00:00	2.6
1-Jul-09	06:00:00	13.8	3-Aug-09	18:00:00	19.9	6-Sep-09	06:00:00	15.9	9-Oct-09	18:00:00	2.6
1-Jul-09	07:00:00	13.5	3-Aug-09	19:00:00	19.9	6-Sep-09	07:00:00	15.7	9-Oct-09	19:00:00	2.6
1-Jul-09	08:00:00	13.5	3-Aug-09	20:00:00	19.9	6-Sep-09	08:00:00	15.5	9-Oct-09	20:00:00	2.3
1-Jul-09	09:00:00	13.5	3-Aug-09	21:00:00	19.7	6-Sep-09	09:00:00	15.5	9-Oct-09	21:00:00	2.3
1-Jul-09	10:00:00	13.3	3-Aug-09	22:00:00	19.5	6-Sep-09	10:00:00	15.4	9-Oct-09	22:00:00	2.2
1-Jul-09	11:00:00	13.6	3-Aug-09	23:00:00	19.4	6-Sep-09	11:00:00	15.2	9-Oct-09	23:00:00	2.0
1-Jul-09	12:00:00	13.9	4-Aug-09	00:00:00	19.2	6-Sep-09	12:00:00	15.2	10-Oct-09	00:00:00	1.9
1-Jul-09	13:00:00	13.9	4-Aug-09	01:00:00	19.1	6-Sep-09	13:00:00	15.2	10-Oct-09	01:00:00	1.7
1-Jul-09	14:00:00	14.0	4-Aug-09	02:00:00	18.9	6-Sep-09	14:00:00	15.1	10-Oct-09	02:00:00	1.7
1-Jul-09	15:00:00	14.5	4-Aug-09	03:00:00	18.9	6-Sep-09	15:00:00	15.4	10-Oct-09	03:00:00	1.7
1-Jul-09	16:00:00	14.6	4-Aug-09	04:00:00	18.6	6-Sep-09	16:00:00	15.4	10-Oct-09	04:00:00	1.6
1-Jul-09	17:00:00	15.1	4-Aug-09	05:00:00	18.4	6-Sep-09	17:00:00	15.4	10-Oct-09	05:00:00	1.6
1-Jul-09	18:00:00	15.4	4-Aug-09	06:00:00	18.3	6-Sep-09	18:00:00	15.4	10-Oct-09	06:00:00	1.4
1-Jul-09	19:00:00	15.2	4-Aug-09	07:00:00	18.1	6-Sep-09	19:00:00	15.2	10-Oct-09	07:00:00	1.4
1-Jul-09	20:00:00	15.5	4-Aug-09	08:00:00	18.0	6-Sep-09	20:00:00	15.1	10-Oct-09	08:00:00	1.3
1-Jul-09	21:00:00	15.4	4-Aug-09	09:00:00	18.0	6-Sep-09	21:00:00	14.8	10-Oct-09	09:00:00	1.1
1-Jul-09	22:00:00	15.2	4-Aug-09	10:00:00	18.1	6-Sep-09	22:00:00	14.6	10-Oct-09	10:00:00	1.1
1-Jul-09	23:00:00	14.9	4-Aug-09	11:00:00	18.3	6-Sep-09	23:00:00	14.6	10-Oct-09	11:00:00	1.1
2-Jul-09	00:00:00	14.6	4-Aug-09	12:00:00	18.4	7-Sep-09	00:00:00	14.6	10-Oct-09	12:00:00	1.1
2-Jul-09	01:00:00	14.5	4-Aug-09	13:00:00	18.8	7-Sep-09	01:00:00	14.5	10-Oct-09	13:00:00	1.3
2-Jul-09	02:00:00	14.3	4-Aug-09	14:00:00	19.2	7-Sep-09	02:00:00	14.3	10-Oct-09	14:00:00	1.6
2-Jul-09	03:00:00	14.2	4-Aug-09	15:00:00	19.9	7-Sep-09	03:00:00	14.2	10-Oct-09	15:00:00	1.7
2-Jul-09	04:00:00	13.9	4-Aug-09	16:00:00	20.2	7-Sep-09	04:00:00	14.0	10-Oct-09	16:00:00	2.0
2-Jul-09	05:00:00	13.9	4-Aug-09	17:00:00	20.5	7-Sep-09	05:00:00	13.9	10-Oct-09	17:00:00	1.9
2-Jul-09	06:00:00	13.6	4-Aug-09	18:00:00	20.6	7-Sep-09	06:00:00	13.8	10-Oct-09	18:00:00	1.6
2-Jul-09	07:00:00	13.5	4-Aug-09	19:00:00	20.5	7-Sep-09	07:00:00	13.5	10-Oct-09	19:00:00	1.6
2-Jul-09	08:00:00	13.3	4-Aug-09	20:00:00	20.3	7-Sep-09	08:00:00	13.3	10-Oct-09	20:00:00	1.1
2-Jul-09	09:00:00	13.2	4-Aug-09	21:00:00	20.0	7-Sep-09	09:00:00	13.3	10-Oct-09	21:00:00	0.8
2-Jul-09	10:00:00	13.3	4-Aug-09	22:00:00	19.9	7-Sep-09	10:00:00	13.3	10-Oct-09	22:00:00	0.7
2-Jul-09	11:00:00	13.5	4-Aug-09	23:00:00	19.4	7-Sep-09	11:00:00	13.6	10-Oct-09	23:00:00	0.5

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
2-Jul-09	12:00:00	14.0	5-Aug-09	00:00:00	19.1	7-Sep-09	12:00:00	13.8	11-Oct-09	00:00:00	0.4
2-Jul-09	13:00:00	14.6	5-Aug-09	01:00:00	18.8	7-Sep-09	13:00:00	14.2	11-Oct-09	01:00:00	0.4
2-Jul-09	14:00:00	14.9	5-Aug-09	02:00:00	18.3	7-Sep-09	14:00:00	14.6	11-Oct-09	02:00:00	0.4
2-Jul-09	15:00:00	15.2	5-Aug-09	03:00:00	17.8	7-Sep-09	15:00:00	14.8	11-Oct-09	03:00:00	0.4
2-Jul-09	16:00:00	15.5	5-Aug-09	04:00:00	17.5	7-Sep-09	16:00:00	14.9	11-Oct-09	04:00:00	0.4
2-Jul-09	17:00:00	15.7	5-Aug-09	05:00:00	17.1	7-Sep-09	17:00:00	14.9	11-Oct-09	05:00:00	0.4
2-Jul-09	18:00:00	15.9	5-Aug-09	06:00:00	16.8	7-Sep-09	18:00:00	14.9	11-Oct-09	06:00:00	0.4
2-Jul-09	19:00:00	16.2	5-Aug-09	07:00:00	16.5	7-Sep-09	19:00:00	14.9	11-Oct-09	07:00:00	0.4
2-Jul-09	20:00:00	16.2	5-Aug-09	08:00:00	16.2	7-Sep-09	20:00:00	14.8	11-Oct-09	08:00:00	0.7
2-Jul-09	21:00:00	16.2	5-Aug-09	09:00:00	16.0	7-Sep-09	21:00:00	14.6	11-Oct-09	09:00:00	0.4
2-Jul-09	22:00:00	15.9	5-Aug-09	10:00:00	15.9	7-Sep-09	22:00:00	14.6	11-Oct-09	10:00:00	0.5
2-Jul-09	23:00:00	15.7	5-Aug-09	11:00:00	16.2	7-Sep-09	23:00:00	14.5	11-Oct-09	11:00:00	0.4
3-Jul-09	00:00:00	15.4	5-Aug-09	12:00:00	16.5	8-Sep-09	00:00:00	14.3	11-Oct-09	12:00:00	0.5
3-Jul-09	01:00:00	15.1	5-Aug-09	13:00:00	16.9	8-Sep-09	01:00:00	14.2	11-Oct-09	13:00:00	0.5
3-Jul-09	02:00:00	14.9	5-Aug-09	14:00:00	17.1	8-Sep-09	02:00:00	14.0	11-Oct-09	14:00:00	0.5
3-Jul-09	03:00:00	14.9	5-Aug-09	15:00:00	17.5	8-Sep-09	03:00:00	14.0	11-Oct-09	15:00:00	0.7
3-Jul-09	04:00:00	14.8	5-Aug-09	16:00:00	18.1	8-Sep-09	04:00:00	13.8	11-Oct-09	16:00:00	0.4
3-Jul-09	05:00:00	14.5	5-Aug-09	17:00:00	18.4	8-Sep-09	05:00:00	13.8	11-Oct-09	17:00:00	0.5
3-Jul-09	06:00:00	14.3	5-Aug-09	18:00:00	18.9	8-Sep-09	06:00:00	13.5	11-Oct-09	18:00:00	0.4
3-Jul-09	07:00:00	14.2	5-Aug-09	19:00:00	19.1	8-Sep-09	07:00:00	13.5	11-Oct-09	19:00:00	0.4
3-Jul-09	08:00:00	14.0	5-Aug-09	20:00:00	18.9	8-Sep-09	08:00:00	13.3	11-Oct-09	20:00:00	0.4
3-Jul-09	09:00:00	14.0	5-Aug-09	21:00:00	18.6	8-Sep-09	09:00:00	13.3	11-Oct-09	21:00:00	0.4
3-Jul-09	10:00:00	14.0	5-Aug-09	22:00:00	18.4	8-Sep-09	10:00:00	13.5	11-Oct-09	22:00:00	0.4
3-Jul-09	11:00:00	14.2	5-Aug-09	23:00:00	18.3	8-Sep-09	11:00:00	13.6	11-Oct-09	23:00:00	0.4
3-Jul-09	12:00:00	14.6	6-Aug-09	00:00:00	18.0	8-Sep-09	12:00:00	13.9	12-Oct-09	00:00:00	0.4
3-Jul-09	13:00:00	14.8	6-Aug-09	01:00:00	17.7	8-Sep-09	13:00:00	14.2	12-Oct-09	01:00:00	0.4
3-Jul-09	14:00:00	15.1	6-Aug-09	02:00:00	17.5	8-Sep-09	14:00:00	14.6	12-Oct-09	02:00:00	0.4
3-Jul-09	15:00:00	15.5	6-Aug-09	03:00:00	17.4	8-Sep-09	15:00:00	15.1	12-Oct-09	03:00:00	0.4
3-Jul-09	16:00:00	16.0	6-Aug-09	04:00:00	17.2	8-Sep-09	16:00:00	15.1	12-Oct-09	04:00:00	0.4
3-Jul-09	17:00:00	16.6	6-Aug-09	05:00:00	17.1	8-Sep-09	17:00:00	15.4	12-Oct-09	05:00:00	0.4
3-Jul-09	18:00:00	16.9	6-Aug-09	06:00:00	16.8	8-Sep-09	18:00:00	15.5	12-Oct-09	06:00:00	0.4
3-Jul-09	19:00:00	17.2	6-Aug-09	07:00:00	16.5	8-Sep-09	19:00:00	15.4	12-Oct-09	07:00:00	0.4
3-Jul-09	20:00:00	17.4	6-Aug-09	08:00:00	16.2	8-Sep-09	20:00:00	15.1	12-Oct-09	08:00:00	0.4
3-Jul-09	21:00:00	17.2	6-Aug-09	09:00:00	16.0	8-Sep-09	21:00:00	14.8	12-Oct-09	09:00:00	0.4
3-Jul-09	22:00:00	16.8	6-Aug-09	10:00:00	16.2	8-Sep-09	22:00:00	14.5	12-Oct-09	10:00:00	0.4
3-Jul-09	23:00:00	16.5	6-Aug-09	11:00:00	16.5	8-Sep-09	23:00:00	14.3	12-Oct-09	11:00:00	0.4
4-Jul-09	00:00:00	16.3	6-Aug-09	12:00:00	16.9	9-Sep-09	00:00:00	14.2	12-Oct-09	12:00:00	0.4
4-Jul-09	01:00:00	16.2	6-Aug-09	13:00:00	17.7	9-Sep-09	01:00:00	13.9	12-Oct-09	13:00:00	0.4
4-Jul-09	02:00:00	16.0	6-Aug-09	14:00:00	18.3	9-Sep-09	02:00:00	13.6	12-Oct-09	14:00:00	0.4
4-Jul-09	03:00:00	15.9	6-Aug-09	15:00:00	18.9	9-Sep-09	03:00:00	13.3	12-Oct-09	15:00:00	0.4
4-Jul-09	04:00:00	15.7	6-Aug-09	16:00:00	19.5	9-Sep-09	04:00:00	13.2	12-Oct-09	16:00:00	0.4
4-Jul-09	05:00:00	15.5	6-Aug-09	17:00:00	20.0	9-Sep-09	05:00:00	12.9	12-Oct-09	17:00:00	0.4
4-Jul-09	06:00:00	15.4	6-Aug-09	18:00:00	20.5	9-Sep-09	06:00:00	12.6	12-Oct-09	18:00:00	0.4
4-Jul-09	07:00:00	15.1	6-Aug-09	19:00:00	20.6	9-Sep-09	07:00:00	12.3	12-Oct-09	19:00:00	0.4
4-Jul-09	08:00:00	15.1	6-Aug-09	20:00:00	20.5	9-Sep-09	08:00:00	12.1	12-Oct-09	20:00:00	0.4
4-Jul-09	09:00:00	15.1	6-Aug-09	21:00:00	20.5	9-Sep-09	09:00:00	12.1	12-Oct-09	21:00:00	0.4
4-Jul-09	10:00:00	15.2	6-Aug-09	22:00:00	20.2	9-Sep-09	10:00:00	12.1	12-Oct-09	22:00:00	0.4
4-Jul-09	11:00:00	15.4	6-Aug-09	23:00:00	19.9	9-Sep-09	11:00:00	12.3	12-Oct-09	23:00:00	0.4
4-Jul-09	12:00:00	15.7	7-Aug-09	00:00:00	19.7	9-Sep-09	12:00:00	12.6	13-Oct-09	00:00:00	0.4
4-Jul-09	13:00:00	15.9	7-Aug-09	01:00:00	19.4	9-Sep-09	13:00:00	12.7	13-Oct-09	01:00:00	0.4
4-Jul-09	14:00:00	16.3	7-Aug-09	02:00:00	19.1	9-Sep-09	14:00:00	13.0	13-Oct-09	02:00:00	0.4
4-Jul-09	15:00:00	16.8	7-Aug-09	03:00:00	18.8	9-Sep-09	15:00:00	13.3	13-Oct-09	03:00:00	0.4
4-Jul-09	16:00:00	16.9	7-Aug-09	04:00:00	18.4	9-Sep-09	16:00:00	13.5	13-Oct-09	04:00:00	0.4
4-Jul-09	17:00:00	17.4	7-Aug-09	05:00:00	18.3	9-Sep-09	17:00:00	13.5	13-Oct-09	05:00:00	0.4
4-Jul-09	18:00:00	17.7	7-Aug-09	06:00:00	18.1	9-Sep-09	18:00:00	13.5	13-Oct-09	06:00:00	0.4
4-Jul-09	19:00:00	18.0	7-Aug-09	07:00:00	17.8	9-Sep-09	19:00:00	13.5	13-Oct-09	07:00:00	0.4
4-Jul-09	20:00:00	18.1	7-Aug-09	08:00:00	17.7	9-Sep-09	20:00:00	13.3	13-Oct-09	08:00:00	0.4
4-Jul-09	21:00:00	18.0	7-Aug-09	09:00:00	17.7	9-Sep-09	21:00:00	13.3	13-Oct-09	09:00:00	0.4
4-Jul-09	22:00:00	17.8	7-Aug-09	10:00:00	17.7	9-Sep-09	22:00:00	13.2	13-Oct-09	10:00:00	0.4

Appendix C Table C2A. Temperature data collected on the upper Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
4-Jul-09	23:00:00	17.7	7-Aug-09	11:00:00	18.0	9-Sep-09	23:00:00	13.2	13-Oct-09	11:00:00	0.4
5-Jul-09	00:00:00	17.4	7-Aug-09	12:00:00	18.4	10-Sep-09	00:00:00	13.0	13-Oct-09	12:00:00	0.4
5-Jul-09	01:00:00	17.1	7-Aug-09	13:00:00	18.9	10-Sep-09	01:00:00	13.0	13-Oct-09	13:00:00	0.4
5-Jul-09	02:00:00	16.8	7-Aug-09	14:00:00	19.4	10-Sep-09	02:00:00	12.7	13-Oct-09	14:00:00	0.4
5-Jul-09	03:00:00	16.5	7-Aug-09	15:00:00	20.0	10-Sep-09	03:00:00	12.7	13-Oct-09	15:00:00	0.4
5-Jul-09	04:00:00	16.2	7-Aug-09	16:00:00	20.6	10-Sep-09	04:00:00	12.4	13-Oct-09	16:00:00	0.4
5-Jul-09	05:00:00	15.9	7-Aug-09	17:00:00	21.0	10-Sep-09	05:00:00	12.3	13-Oct-09	17:00:00	0.4
5-Jul-09	06:00:00	15.7	7-Aug-09	18:00:00	21.3	10-Sep-09	06:00:00	12.3	13-Oct-09	18:00:00	0.4
5-Jul-09	07:00:00	15.5	7-Aug-09	19:00:00	21.4	10-Sep-09	07:00:00	12.1	13-Oct-09	19:00:00	0.4
5-Jul-09	08:00:00	15.2	7-Aug-09	20:00:00	21.3	10-Sep-09	08:00:00	12.1	13-Oct-09	20:00:00	0.4
5-Jul-09	09:00:00	15.4	7-Aug-09	21:00:00	21.3	10-Sep-09	09:00:00	12.1	13-Oct-09	21:00:00	0.4
5-Jul-09	10:00:00	15.5	7-Aug-09	22:00:00	21.1	10-Sep-09	10:00:00	12.3	13-Oct-09	22:00:00	0.4
5-Jul-09	11:00:00	15.9	7-Aug-09	23:00:00	20.8	10-Sep-09	11:00:00	12.6	13-Oct-09	23:00:00	0.4
5-Jul-09	12:00:00	16.3	8-Aug-09	00:00:00	20.6	10-Sep-09	12:00:00	13.0	14-Oct-09	00:00:00	0.4
5-Jul-09	13:00:00	16.8	8-Aug-09	01:00:00	20.5	10-Sep-09	13:00:00	13.5	14-Oct-09	01:00:00	0.4
5-Jul-09	14:00:00	17.4	8-Aug-09	02:00:00	20.2	10-Sep-09	14:00:00	14.0	14-Oct-09	02:00:00	0.4
5-Jul-09	15:00:00	18.1	8-Aug-09	03:00:00	19.9	10-Sep-09	15:00:00	14.5	14-Oct-09	03:00:00	0.4
5-Jul-09	16:00:00	18.8	8-Aug-09	04:00:00	19.7	10-Sep-09	16:00:00	14.8	14-Oct-09	04:00:00	0.4
5-Jul-09	17:00:00	19.1	8-Aug-09	05:00:00	19.5	10-Sep-09	17:00:00	14.9	14-Oct-09	05:00:00	0.4
5-Jul-09	18:00:00	19.4	8-Aug-09	06:00:00	19.2	10-Sep-09	18:00:00	14.8	14-Oct-09	06:00:00	0.4
5-Jul-09	19:00:00	19.5	8-Aug-09	07:00:00	19.1	10-Sep-09	19:00:00	14.6	14-Oct-09	07:00:00	0.4
5-Jul-09	20:00:00	19.5	8-Aug-09	08:00:00	18.8	10-Sep-09	20:00:00	14.5	14-Oct-09	08:00:00	0.4
5-Jul-09	21:00:00	19.5	8-Aug-09	09:00:00	18.8	10-Sep-09	21:00:00	14.5	14-Oct-09	09:00:00	0.4
5-Jul-09	22:00:00	19.2	8-Aug-09	10:00:00	18.9	10-Sep-09	22:00:00	14.3	14-Oct-09	10:00:00	0.4
5-Jul-09	23:00:00	18.8	8-Aug-09	11:00:00	19.2	10-Sep-09	23:00:00	14.0	14-Oct-09	11:00:00	0.4
6-Jul-09	00:00:00	18.4	8-Aug-09	12:00:00	19.5	11-Sep-09	00:00:00	13.9	14-Oct-09	12:00:00	0.4
6-Jul-09	01:00:00	18.1	8-Aug-09	13:00:00	20.0	11-Sep-09	01:00:00	13.6	14-Oct-09	13:00:00	0.4
6-Jul-09	02:00:00	18.0	8-Aug-09	14:00:00	20.6	11-Sep-09	02:00:00	13.5	14-Oct-09	14:00:00	0.4
6-Jul-09	03:00:00	17.8	8-Aug-09	15:00:00	21.3	11-Sep-09	03:00:00	13.3	14-Oct-09	15:00:00	0.4
6-Jul-09	04:00:00	17.8	8-Aug-09	16:00:00	21.3	11-Sep-09	04:00:00	13.2	14-Oct-09	16:00:00	0.4
6-Jul-09	05:00:00	17.7	8-Aug-09	17:00:00	21.4	11-Sep-09	05:00:00	13.0	14-Oct-09	17:00:00	0.4
6-Jul-09	06:00:00	17.5	8-Aug-09	18:00:00	21.6	11-Sep-09	06:00:00	12.9	14-Oct-09	18:00:00	0.4
6-Jul-09	07:00:00	17.4	8-Aug-09	19:00:00	21.6	11-Sep-09	07:00:00	12.6	14-Oct-09	19:00:00	0.4
6-Jul-09	08:00:00	17.4	8-Aug-09	20:00:00	21.4	11-Sep-09	08:00:00	12.4	14-Oct-09	20:00:00	0.4
6-Jul-09	09:00:00	17.2	8-Aug-09	21:00:00	21.3	11-Sep-09	09:00:00	12.3	14-Oct-09	21:00:00	0.4
6-Jul-09	10:00:00	16.9	8-Aug-09	22:00:00	21.3	11-Sep-09	10:00:00	12.6	14-Oct-09	22:00:00	0.4
6-Jul-09	11:00:00	16.6	8-Aug-09	23:00:00	21.1	11-Sep-09	11:00:00	12.7	14-Oct-09	23:00:00	0.4

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
14-May-09	00:00:00	7.0	23-Jun-09	18:00:00	19.1	3-Aug-09	12:00:00	18.9	13-Sep-09	06:00:00	14.0
14-May-09	01:00:00	6.8	23-Jun-09	19:00:00	19.2	3-Aug-09	13:00:00	18.8	13-Sep-09	07:00:00	13.9
14-May-09	02:00:00	6.5	23-Jun-09	20:00:00	18.9	3-Aug-09	14:00:00	18.6	13-Sep-09	08:00:00	13.8
14-May-09	03:00:00	6.4	23-Jun-09	21:00:00	18.8	3-Aug-09	15:00:00	18.4	13-Sep-09	09:00:00	13.6
14-May-09	04:00:00	6.1	23-Jun-09	22:00:00	18.4	3-Aug-09	16:00:00	18.4	13-Sep-09	10:00:00	13.8
14-May-09	05:00:00	5.8	23-Jun-09	23:00:00	18.3	3-Aug-09	17:00:00	18.4	13-Sep-09	11:00:00	13.9
14-May-09	06:00:00	5.6	24-Jun-09	00:00:00	18.0	3-Aug-09	18:00:00	18.6	13-Sep-09	12:00:00	14.3
14-May-09	07:00:00	5.5	24-Jun-09	01:00:00	17.5	3-Aug-09	19:00:00	18.6	13-Sep-09	13:00:00	14.9
14-May-09	08:00:00	5.3	24-Jun-09	02:00:00	17.2	3-Aug-09	20:00:00	18.6	13-Sep-09	14:00:00	15.7
14-May-09	09:00:00	5.3	24-Jun-09	03:00:00	16.9	3-Aug-09	21:00:00	18.6	13-Sep-09	15:00:00	16.5
14-May-09	10:00:00	5.5	24-Jun-09	04:00:00	16.6	3-Aug-09	22:00:00	18.4	13-Sep-09	16:00:00	17.1
14-May-09	11:00:00	5.8	24-Jun-09	05:00:00	16.3	3-Aug-09	23:00:00	18.1	13-Sep-09	17:00:00	17.7
14-May-09	12:00:00	6.4	24-Jun-09	06:00:00	15.9	4-Aug-09	00:00:00	18.1	13-Sep-09	18:00:00	17.8
14-May-09	13:00:00	7.1	24-Jun-09	07:00:00	15.5	4-Aug-09	01:00:00	17.8	13-Sep-09	19:00:00	17.8
14-May-09	14:00:00	7.8	24-Jun-09	08:00:00	15.5	4-Aug-09	02:00:00	17.7	13-Sep-09	20:00:00	17.4
14-May-09	15:00:00	8.0	24-Jun-09	09:00:00	15.5	4-Aug-09	03:00:00	17.5	13-Sep-09	21:00:00	16.8
14-May-09	16:00:00	8.4	24-Jun-09	10:00:00	15.7	4-Aug-09	04:00:00	17.4	13-Sep-09	22:00:00	16.5
14-May-09	17:00:00	9.2	24-Jun-09	11:00:00	16.2	4-Aug-09	05:00:00	17.1	13-Sep-09	23:00:00	16.2
14-May-09	18:00:00	9.3	24-Jun-09	12:00:00	16.6	4-Aug-09	06:00:00	16.9	14-Sep-09	00:00:00	15.7
14-May-09	19:00:00	9.3	24-Jun-09	13:00:00	17.2	4-Aug-09	07:00:00	16.8	14-Sep-09	01:00:00	15.5
14-May-09	20:00:00	9.5	24-Jun-09	14:00:00	17.7	4-Aug-09	08:00:00	16.6	14-Sep-09	02:00:00	15.2
14-May-09	21:00:00	9.2	24-Jun-09	15:00:00	18.3	4-Aug-09	09:00:00	16.6	14-Sep-09	03:00:00	14.9
14-May-09	22:00:00	9.0	24-Jun-09	16:00:00	18.8	4-Aug-09	10:00:00	16.6	14-Sep-09	04:00:00	14.6
14-May-09	23:00:00	8.7	24-Jun-09	17:00:00	19.1	4-Aug-09	11:00:00	16.9	14-Sep-09	05:00:00	14.5
15-May-09	00:00:00	8.3	24-Jun-09	18:00:00	19.2	4-Aug-09	12:00:00	17.2	14-Sep-09	06:00:00	14.2
15-May-09	01:00:00	7.8	24-Jun-09	19:00:00	19.4	4-Aug-09	13:00:00	18.0	14-Sep-09	07:00:00	13.9
15-May-09	02:00:00	7.4	24-Jun-09	20:00:00	19.2	4-Aug-09	14:00:00	18.4	14-Sep-09	08:00:00	13.8
15-May-09	03:00:00	7.0	24-Jun-09	21:00:00	19.1	4-Aug-09	15:00:00	18.8	14-Sep-09	09:00:00	13.6
15-May-09	04:00:00	6.7	24-Jun-09	22:00:00	18.9	4-Aug-09	16:00:00	19.4	14-Sep-09	10:00:00	13.5
15-May-09	05:00:00	6.4	24-Jun-09	23:00:00	18.6	4-Aug-09	17:00:00	19.5	14-Sep-09	11:00:00	13.6
15-May-09	06:00:00	6.1	25-Jun-09	00:00:00	18.4	4-Aug-09	18:00:00	19.7	14-Sep-09	12:00:00	14.2
15-May-09	07:00:00	5.8	25-Jun-09	01:00:00	18.3	4-Aug-09	19:00:00	20.0	14-Sep-09	13:00:00	14.8
15-May-09	08:00:00	5.5	25-Jun-09	02:00:00	18.0	4-Aug-09	20:00:00	20.0	14-Sep-09	14:00:00	15.5
15-May-09	09:00:00	5.5	25-Jun-09	03:00:00	17.7	4-Aug-09	21:00:00	19.7	14-Sep-09	15:00:00	16.3
15-May-09	10:00:00	5.8	25-Jun-09	04:00:00	17.5	4-Aug-09	22:00:00	19.5	14-Sep-09	16:00:00	16.9
15-May-09	11:00:00	6.4	25-Jun-09	05:00:00	17.2	4-Aug-09	23:00:00	19.2	14-Sep-09	17:00:00	17.4
15-May-09	12:00:00	7.1	25-Jun-09	06:00:00	17.1	5-Aug-09	00:00:00	19.1	14-Sep-09	18:00:00	17.7
15-May-09	13:00:00	7.5	25-Jun-09	07:00:00	16.8	5-Aug-09	01:00:00	18.8	14-Sep-09	19:00:00	17.7
15-May-09	14:00:00	8.0	25-Jun-09	08:00:00	16.6	5-Aug-09	02:00:00	18.3	14-Sep-09	20:00:00	17.4
15-May-09	15:00:00	8.6	25-Jun-09	09:00:00	16.6	5-Aug-09	03:00:00	17.8	14-Sep-09	21:00:00	16.9
15-May-09	16:00:00	8.9	25-Jun-09	10:00:00	16.8	5-Aug-09	04:00:00	17.5	14-Sep-09	22:00:00	16.6
15-May-09	17:00:00	9.2	25-Jun-09	11:00:00	16.8	5-Aug-09	05:00:00	17.2	14-Sep-09	23:00:00	16.3
15-May-09	18:00:00	9.8	25-Jun-09	12:00:00	17.1	5-Aug-09	06:00:00	16.9	15-Sep-09	00:00:00	16.2
15-May-09	19:00:00	10.1	25-Jun-09	13:00:00	17.4	5-Aug-09	07:00:00	16.8	15-Sep-09	01:00:00	15.9
15-May-09	20:00:00	9.9	25-Jun-09	14:00:00	17.2	5-Aug-09	08:00:00	16.6	15-Sep-09	02:00:00	15.5
15-May-09	21:00:00	9.8	25-Jun-09	15:00:00	17.1	5-Aug-09	09:00:00	16.3	15-Sep-09	03:00:00	15.2
15-May-09	22:00:00	9.5	25-Jun-09	16:00:00	17.4	5-Aug-09	10:00:00	16.3	15-Sep-09	04:00:00	14.9
15-May-09	23:00:00	9.2	25-Jun-09	17:00:00	17.4	5-Aug-09	11:00:00	16.5	15-Sep-09	05:00:00	14.6
16-May-09	00:00:00	9.0	25-Jun-09	18:00:00	17.8	5-Aug-09	12:00:00	16.9	15-Sep-09	06:00:00	14.3
16-May-09	01:00:00	8.9	25-Jun-09	19:00:00	17.5	5-Aug-09	13:00:00	17.5	15-Sep-09	07:00:00	14.0
16-May-09	02:00:00	8.7	25-Jun-09	20:00:00	17.5	5-Aug-09	14:00:00	18.1	15-Sep-09	08:00:00	13.8
16-May-09	03:00:00	8.6	25-Jun-09	21:00:00	17.5	5-Aug-09	15:00:00	18.6	15-Sep-09	09:00:00	13.5
16-May-09	04:00:00	8.4	25-Jun-09	22:00:00	17.4	5-Aug-09	16:00:00	18.4	15-Sep-09	10:00:00	13.5
16-May-09	05:00:00	8.3	25-Jun-09	23:00:00	17.4	5-Aug-09	17:00:00	19.1	15-Sep-09	11:00:00	13.6
16-May-09	06:00:00	8.0	26-Jun-09	00:00:00	17.1	5-Aug-09	18:00:00	19.5	15-Sep-09	12:00:00	13.9
16-May-09	07:00:00	7.7	26-Jun-09	01:00:00	16.9	5-Aug-09	19:00:00	19.5	15-Sep-09	13:00:00	14.5
16-May-09	08:00:00	7.5	26-Jun-09	02:00:00	16.8	5-Aug-09	20:00:00	19.7	15-Sep-09	14:00:00	15.1
16-May-09	09:00:00	7.5	26-Jun-09	03:00:00	16.5	5-Aug-09	21:00:00	19.5	15-Sep-09	15:00:00	15.7
16-May-09	10:00:00	7.8	26-Jun-09	04:00:00	16.3	5-Aug-09	22:00:00	19.1	15-Sep-09	16:00:00	16.3

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
16-May-09	11:00:00	8.3	26-Jun-09	05:00:00	16.0	5-Aug-09	23:00:00	18.8	15-Sep-09	17:00:00	16.8
16-May-09	12:00:00	8.7	26-Jun-09	06:00:00	15.9	6-Aug-09	00:00:00	18.6	15-Sep-09	18:00:00	16.8
16-May-09	13:00:00	9.2	26-Jun-09	07:00:00	15.7	6-Aug-09	01:00:00	18.1	15-Sep-09	19:00:00	16.6
16-May-09	14:00:00	9.3	26-Jun-09	08:00:00	15.5	6-Aug-09	02:00:00	17.5	15-Sep-09	20:00:00	16.5
16-May-09	15:00:00	9.8	26-Jun-09	09:00:00	15.5	6-Aug-09	03:00:00	17.1	15-Sep-09	21:00:00	16.2
16-May-09	16:00:00	9.6	26-Jun-09	10:00:00	15.5	6-Aug-09	04:00:00	16.8	15-Sep-09	22:00:00	15.7
16-May-09	17:00:00	9.6	26-Jun-09	11:00:00	15.5	6-Aug-09	05:00:00	16.5	15-Sep-09	23:00:00	15.5
16-May-09	18:00:00	9.5	26-Jun-09	12:00:00	15.7	6-Aug-09	06:00:00	16.0	16-Sep-09	00:00:00	15.4
16-May-09	19:00:00	9.3	26-Jun-09	13:00:00	15.7	6-Aug-09	07:00:00	15.7	16-Sep-09	01:00:00	15.2
16-May-09	20:00:00	9.3	26-Jun-09	14:00:00	15.7	6-Aug-09	08:00:00	15.5	16-Sep-09	02:00:00	14.9
16-May-09	21:00:00	9.2	26-Jun-09	15:00:00	15.9	6-Aug-09	09:00:00	15.5	16-Sep-09	03:00:00	14.9
16-May-09	22:00:00	9.0	26-Jun-09	16:00:00	16.2	6-Aug-09	10:00:00	15.5	16-Sep-09	04:00:00	14.8
16-May-09	23:00:00	8.9	26-Jun-09	17:00:00	16.2	6-Aug-09	11:00:00	15.7	16-Sep-09	05:00:00	14.5
17-May-09	00:00:00	8.7	26-Jun-09	18:00:00	16.3	6-Aug-09	12:00:00	16.3	16-Sep-09	06:00:00	14.3
17-May-09	01:00:00	8.4	26-Jun-09	19:00:00	16.2	6-Aug-09	13:00:00	17.1	16-Sep-09	07:00:00	14.0
17-May-09	02:00:00	8.4	26-Jun-09	20:00:00	16.0	6-Aug-09	14:00:00	17.8	16-Sep-09	08:00:00	14.0
17-May-09	03:00:00	8.1	26-Jun-09	21:00:00	16.0	6-Aug-09	15:00:00	18.8	16-Sep-09	09:00:00	14.0
17-May-09	04:00:00	8.0	26-Jun-09	22:00:00	15.9	6-Aug-09	16:00:00	19.5	16-Sep-09	10:00:00	14.0
17-May-09	05:00:00	7.8	26-Jun-09	23:00:00	15.5	6-Aug-09	17:00:00	20.2	16-Sep-09	11:00:00	14.0
17-May-09	06:00:00	7.5	27-Jun-09	00:00:00	15.4	6-Aug-09	18:00:00	20.5	16-Sep-09	12:00:00	14.2
17-May-09	07:00:00	7.1	27-Jun-09	01:00:00	15.1	6-Aug-09	19:00:00	20.8	16-Sep-09	13:00:00	14.3
17-May-09	08:00:00	7.0	27-Jun-09	02:00:00	14.9	6-Aug-09	20:00:00	20.6	16-Sep-09	14:00:00	14.5
17-May-09	09:00:00	6.8	27-Jun-09	03:00:00	14.6	6-Aug-09	21:00:00	20.5	16-Sep-09	15:00:00	14.6
17-May-09	10:00:00	6.7	27-Jun-09	04:00:00	14.3	6-Aug-09	22:00:00	20.3	16-Sep-09	16:00:00	14.9
17-May-09	11:00:00	7.0	27-Jun-09	05:00:00	14.0	6-Aug-09	23:00:00	20.0	16-Sep-09	17:00:00	15.2
17-May-09	12:00:00	7.0	27-Jun-09	06:00:00	13.8	7-Aug-09	00:00:00	19.9	16-Sep-09	18:00:00	15.2
17-May-09	13:00:00	7.0	27-Jun-09	07:00:00	13.5	7-Aug-09	01:00:00	19.4	16-Sep-09	19:00:00	15.1
17-May-09	14:00:00	7.0	27-Jun-09	08:00:00	13.3	7-Aug-09	02:00:00	19.1	16-Sep-09	20:00:00	14.9
17-May-09	15:00:00	7.0	27-Jun-09	09:00:00	13.3	7-Aug-09	03:00:00	18.6	16-Sep-09	21:00:00	14.8
17-May-09	16:00:00	7.1	27-Jun-09	10:00:00	13.5	7-Aug-09	04:00:00	18.1	16-Sep-09	22:00:00	14.6
17-May-09	17:00:00	7.1	27-Jun-09	11:00:00	13.5	7-Aug-09	05:00:00	17.8	16-Sep-09	23:00:00	14.5
17-May-09	18:00:00	7.1	27-Jun-09	12:00:00	13.6	7-Aug-09	06:00:00	17.4	17-Sep-09	00:00:00	14.5
17-May-09	19:00:00	7.1	27-Jun-09	13:00:00	13.9	7-Aug-09	07:00:00	17.1	17-Sep-09	01:00:00	14.3
17-May-09	20:00:00	7.3	27-Jun-09	14:00:00	14.0	7-Aug-09	08:00:00	16.9	17-Sep-09	02:00:00	14.2
17-May-09	21:00:00	7.3	27-Jun-09	15:00:00	14.3	7-Aug-09	09:00:00	16.8	17-Sep-09	03:00:00	13.9
17-May-09	22:00:00	7.1	27-Jun-09	16:00:00	14.8	7-Aug-09	10:00:00	16.9	17-Sep-09	04:00:00	13.9
17-May-09	23:00:00	7.0	27-Jun-09	17:00:00	15.2	7-Aug-09	11:00:00	17.2	17-Sep-09	05:00:00	13.6
18-May-09	00:00:00	6.8	27-Jun-09	18:00:00	15.5	7-Aug-09	12:00:00	17.7	17-Sep-09	06:00:00	13.5
18-May-09	01:00:00	6.7	27-Jun-09	19:00:00	15.4	7-Aug-09	13:00:00	18.3	17-Sep-09	07:00:00	13.2
18-May-09	02:00:00	6.5	27-Jun-09	20:00:00	15.5	7-Aug-09	14:00:00	19.1	17-Sep-09	08:00:00	12.9
18-May-09	03:00:00	6.2	27-Jun-09	21:00:00	15.5	7-Aug-09	15:00:00	19.9	17-Sep-09	09:00:00	12.7
18-May-09	04:00:00	6.1	27-Jun-09	22:00:00	15.4	7-Aug-09	16:00:00	20.6	17-Sep-09	10:00:00	12.7
18-May-09	05:00:00	5.9	27-Jun-09	23:00:00	15.1	7-Aug-09	17:00:00	21.3	17-Sep-09	11:00:00	12.7
18-May-09	06:00:00	5.8	28-Jun-09	00:00:00	14.9	7-Aug-09	18:00:00	21.6	17-Sep-09	12:00:00	13.2
18-May-09	07:00:00	5.6	28-Jun-09	01:00:00	14.6	7-Aug-09	19:00:00	21.8	17-Sep-09	13:00:00	13.6
18-May-09	08:00:00	5.6	28-Jun-09	02:00:00	14.5	7-Aug-09	20:00:00	21.8	17-Sep-09	14:00:00	14.2
18-May-09	09:00:00	5.6	28-Jun-09	03:00:00	14.3	7-Aug-09	21:00:00	21.6	17-Sep-09	15:00:00	14.8
18-May-09	10:00:00	5.8	28-Jun-09	04:00:00	14.0	7-Aug-09	22:00:00	21.3	17-Sep-09	16:00:00	15.2
18-May-09	11:00:00	5.8	28-Jun-09	05:00:00	13.9	7-Aug-09	23:00:00	21.1	17-Sep-09	17:00:00	15.7
18-May-09	12:00:00	5.8	28-Jun-09	06:00:00	13.8	8-Aug-09	00:00:00	20.8	17-Sep-09	18:00:00	15.7
18-May-09	13:00:00	5.9	28-Jun-09	07:00:00	13.6	8-Aug-09	01:00:00	20.3	17-Sep-09	19:00:00	15.5
18-May-09	14:00:00	6.2	28-Jun-09	08:00:00	13.5	8-Aug-09	02:00:00	20.0	17-Sep-09	20:00:00	14.9
18-May-09	15:00:00	6.4	28-Jun-09	09:00:00	13.6	8-Aug-09	03:00:00	19.5	17-Sep-09	21:00:00	14.5
18-May-09	16:00:00	6.4	28-Jun-09	10:00:00	13.8	8-Aug-09	04:00:00	19.2	17-Sep-09	22:00:00	14.0
18-May-09	17:00:00	6.5	28-Jun-09	11:00:00	14.0	8-Aug-09	05:00:00	18.9	17-Sep-09	23:00:00	13.6
18-May-09	18:00:00	6.5	28-Jun-09	12:00:00	14.2	8-Aug-09	06:00:00	18.6	18-Sep-09	00:00:00	13.3
18-May-09	19:00:00	6.5	28-Jun-09	13:00:00	14.3	8-Aug-09	07:00:00	18.1	18-Sep-09	01:00:00	13.2
18-May-09	20:00:00	6.5	28-Jun-09	14:00:00	14.6	8-Aug-09	08:00:00	18.0	18-Sep-09	02:00:00	13.0
18-May-09	21:00:00	6.5	28-Jun-09	15:00:00	15.4	8-Aug-09	09:00:00	17.8	18-Sep-09	03:00:00	12.9

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
18-May-09	22:00:00	6.4	28-Jun-09	16:00:00	16.0	8-Aug-09	10:00:00	18.0	18-Sep-09	04:00:00	12.7
18-May-09	23:00:00	6.2	28-Jun-09	17:00:00	16.0	8-Aug-09	11:00:00	18.1	18-Sep-09	05:00:00	12.6
19-May-09	00:00:00	6.1	28-Jun-09	18:00:00	16.2	8-Aug-09	12:00:00	18.8	18-Sep-09	06:00:00	12.4
19-May-09	01:00:00	5.9	28-Jun-09	19:00:00	16.3	8-Aug-09	13:00:00	19.4	18-Sep-09	07:00:00	12.1
19-May-09	02:00:00	5.8	28-Jun-09	20:00:00	16.5	8-Aug-09	14:00:00	20.2	18-Sep-09	08:00:00	11.8
19-May-09	03:00:00	5.8	28-Jun-09	21:00:00	16.3	8-Aug-09	15:00:00	20.8	18-Sep-09	09:00:00	11.5
19-May-09	04:00:00	5.6	28-Jun-09	22:00:00	16.2	8-Aug-09	16:00:00	21.3	18-Sep-09	10:00:00	11.5
19-May-09	05:00:00	5.5	28-Jun-09	23:00:00	15.9	8-Aug-09	17:00:00	21.8	18-Sep-09	11:00:00	11.7
19-May-09	06:00:00	5.3	29-Jun-09	00:00:00	15.5	8-Aug-09	18:00:00	21.9	18-Sep-09	12:00:00	12.1
19-May-09	07:00:00	5.2	29-Jun-09	01:00:00	15.1	8-Aug-09	19:00:00	22.1	18-Sep-09	13:00:00	13.0
19-May-09	08:00:00	5.2	29-Jun-09	02:00:00	14.8	8-Aug-09	20:00:00	22.1	18-Sep-09	14:00:00	13.5
19-May-09	09:00:00	5.0	29-Jun-09	03:00:00	14.3	8-Aug-09	21:00:00	21.8	18-Sep-09	15:00:00	14.2
19-May-09	10:00:00	5.0	29-Jun-09	04:00:00	14.2	8-Aug-09	22:00:00	21.4	18-Sep-09	16:00:00	14.9
19-May-09	11:00:00	5.0	29-Jun-09	05:00:00	13.9	8-Aug-09	23:00:00	21.1	18-Sep-09	17:00:00	15.4
19-May-09	12:00:00	5.0	29-Jun-09	06:00:00	13.6	9-Aug-09	00:00:00	21.0	18-Sep-09	18:00:00	15.4
19-May-09	13:00:00	4.9	29-Jun-09	07:00:00	13.3	9-Aug-09	01:00:00	20.6	18-Sep-09	19:00:00	15.2
19-May-09	14:00:00	5.0	29-Jun-09	08:00:00	13.2	9-Aug-09	02:00:00	20.2	18-Sep-09	20:00:00	14.9
19-May-09	15:00:00	5.2	29-Jun-09	09:00:00	13.3	9-Aug-09	03:00:00	19.9	18-Sep-09	21:00:00	14.6
19-May-09	16:00:00	5.3	29-Jun-09	10:00:00	13.3	9-Aug-09	04:00:00	19.4	18-Sep-09	22:00:00	14.5
19-May-09	17:00:00	5.5	29-Jun-09	11:00:00	13.8	9-Aug-09	05:00:00	19.1	18-Sep-09	23:00:00	14.2
19-May-09	18:00:00	5.6	29-Jun-09	12:00:00	14.3	9-Aug-09	06:00:00	18.6	19-Sep-09	00:00:00	14.0
19-May-09	19:00:00	5.8	29-Jun-09	13:00:00	14.9	9-Aug-09	07:00:00	18.1	19-Sep-09	01:00:00	13.8
19-May-09	20:00:00	5.8	29-Jun-09	14:00:00	15.4	9-Aug-09	08:00:00	18.0	19-Sep-09	02:00:00	13.6
19-May-09	21:00:00	5.8	29-Jun-09	15:00:00	15.9	9-Aug-09	09:00:00	17.8	19-Sep-09	03:00:00	13.5
19-May-09	22:00:00	5.6	29-Jun-09	16:00:00	16.2	9-Aug-09	10:00:00	17.8	19-Sep-09	04:00:00	13.5
19-May-09	23:00:00	5.5	29-Jun-09	17:00:00	16.8	9-Aug-09	11:00:00	18.1	19-Sep-09	05:00:00	13.3
20-May-09	00:00:00	5.3	29-Jun-09	18:00:00	17.2	9-Aug-09	12:00:00	18.4	19-Sep-09	06:00:00	13.3
20-May-09	01:00:00	5.0	29-Jun-09	19:00:00	17.4	9-Aug-09	13:00:00	19.2	19-Sep-09	07:00:00	13.2
20-May-09	02:00:00	4.9	29-Jun-09	20:00:00	17.1	9-Aug-09	14:00:00	19.9	19-Sep-09	08:00:00	13.0
20-May-09	03:00:00	4.7	29-Jun-09	21:00:00	16.8	9-Aug-09	15:00:00	20.5	19-Sep-09	09:00:00	12.9
20-May-09	04:00:00	4.4	29-Jun-09	22:00:00	16.6	9-Aug-09	16:00:00	21.1	19-Sep-09	10:00:00	12.9
20-May-09	05:00:00	4.3	29-Jun-09	23:00:00	16.5	9-Aug-09	17:00:00	21.4	19-Sep-09	11:00:00	13.0
20-May-09	06:00:00	4.1	30-Jun-09	00:00:00	16.2	9-Aug-09	18:00:00	21.6	19-Sep-09	12:00:00	13.0
20-May-09	07:00:00	4.0	30-Jun-09	01:00:00	15.9	9-Aug-09	19:00:00	21.4	19-Sep-09	13:00:00	13.5
20-May-09	08:00:00	4.0	30-Jun-09	02:00:00	15.4	9-Aug-09	20:00:00	21.3	19-Sep-09	14:00:00	14.0
20-May-09	09:00:00	4.0	30-Jun-09	03:00:00	15.1	9-Aug-09	21:00:00	21.0	19-Sep-09	15:00:00	14.5
20-May-09	10:00:00	4.3	30-Jun-09	04:00:00	14.8	9-Aug-09	22:00:00	20.8	19-Sep-09	16:00:00	14.6
20-May-09	11:00:00	4.9	30-Jun-09	05:00:00	14.5	9-Aug-09	23:00:00	20.3	19-Sep-09	17:00:00	14.9
20-May-09	12:00:00	5.6	30-Jun-09	06:00:00	14.2	10-Aug-09	00:00:00	20.0	19-Sep-09	18:00:00	14.9
20-May-09	13:00:00	6.4	30-Jun-09	07:00:00	14.0	10-Aug-09	01:00:00	19.5	19-Sep-09	19:00:00	14.6
20-May-09	14:00:00	7.3	30-Jun-09	08:00:00	13.9	10-Aug-09	02:00:00	19.2	19-Sep-09	20:00:00	14.2
20-May-09	15:00:00	8.0	30-Jun-09	09:00:00	13.8	10-Aug-09	03:00:00	18.8	19-Sep-09	21:00:00	13.8
20-May-09	16:00:00	8.4	30-Jun-09	10:00:00	13.8	10-Aug-09	04:00:00	18.6	19-Sep-09	22:00:00	13.5
20-May-09	17:00:00	9.2	30-Jun-09	11:00:00	13.9	10-Aug-09	05:00:00	18.3	19-Sep-09	23:00:00	13.2
20-May-09	18:00:00	9.5	30-Jun-09	12:00:00	13.9	10-Aug-09	06:00:00	18.1	20-Sep-09	00:00:00	12.7
20-May-09	19:00:00	9.8	30-Jun-09	13:00:00	14.0	10-Aug-09	07:00:00	17.8	20-Sep-09	01:00:00	12.4
20-May-09	20:00:00	9.6	30-Jun-09	14:00:00	14.2	10-Aug-09	08:00:00	17.7	20-Sep-09	02:00:00	12.3
20-May-09	21:00:00	9.3	30-Jun-09	15:00:00	14.2	10-Aug-09	09:00:00	17.5	20-Sep-09	03:00:00	12.0
20-May-09	22:00:00	9.0	30-Jun-09	16:00:00	14.2	10-Aug-09	10:00:00	17.7	20-Sep-09	04:00:00	11.8
20-May-09	23:00:00	8.6	30-Jun-09	17:00:00	14.3	10-Aug-09	11:00:00	18.0	20-Sep-09	05:00:00	11.5
21-May-09	00:00:00	8.3	30-Jun-09	18:00:00	14.5	10-Aug-09	12:00:00	18.3	20-Sep-09	06:00:00	11.2
21-May-09	01:00:00	8.1	30-Jun-09	19:00:00	14.6	10-Aug-09	13:00:00	18.8	20-Sep-09	07:00:00	10.9
21-May-09	02:00:00	7.8	30-Jun-09	20:00:00	14.6	10-Aug-09	14:00:00	19.2	20-Sep-09	08:00:00	10.6
21-May-09	03:00:00	7.5	30-Jun-09	21:00:00	14.6	10-Aug-09	15:00:00	19.7	20-Sep-09	09:00:00	10.5
21-May-09	04:00:00	7.4	30-Jun-09	22:00:00	14.6	10-Aug-09	16:00:00	20.0	20-Sep-09	10:00:00	10.3
21-May-09	05:00:00	7.1	30-Jun-09	23:00:00	14.6	10-Aug-09	17:00:00	20.5	20-Sep-09	11:00:00	10.5
21-May-09	06:00:00	7.0	1-Jul-09	00:00:00	14.3	10-Aug-09	18:00:00	20.6	20-Sep-09	12:00:00	10.8
21-May-09	07:00:00	6.7	1-Jul-09	01:00:00	14.2	10-Aug-09	19:00:00	20.3	20-Sep-09	13:00:00	11.4
21-May-09	08:00:00	6.7	1-Jul-09	02:00:00	14.0	10-Aug-09	20:00:00	20.2	20-Sep-09	14:00:00	12.1

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
21-May-09	09:00:00	6.7	1-Jul-09	03:00:00	13.9	10-Aug-09	21:00:00	20.0	20-Sep-09	15:00:00	12.6
21-May-09	10:00:00	6.8	1-Jul-09	04:00:00	13.8	10-Aug-09	22:00:00	19.7	20-Sep-09	16:00:00	13.3
21-May-09	11:00:00	7.3	1-Jul-09	05:00:00	13.6	10-Aug-09	23:00:00	19.4	20-Sep-09	17:00:00	13.8
21-May-09	12:00:00	7.8	1-Jul-09	06:00:00	13.5	11-Aug-09	00:00:00	19.1	20-Sep-09	18:00:00	13.8
21-May-09	13:00:00	8.6	1-Jul-09	07:00:00	13.5	11-Aug-09	01:00:00	18.8	20-Sep-09	19:00:00	13.6
21-May-09	14:00:00	9.5	1-Jul-09	08:00:00	13.5	11-Aug-09	02:00:00	18.3	20-Sep-09	20:00:00	13.2
21-May-09	15:00:00	10.2	1-Jul-09	09:00:00	13.5	11-Aug-09	03:00:00	17.8	20-Sep-09	21:00:00	12.6
21-May-09	16:00:00	10.8	1-Jul-09	10:00:00	13.6	11-Aug-09	04:00:00	17.5	20-Sep-09	22:00:00	12.1
21-May-09	17:00:00	11.2	1-Jul-09	11:00:00	13.8	11-Aug-09	05:00:00	17.1	20-Sep-09	23:00:00	11.8
21-May-09	18:00:00	11.5	1-Jul-09	12:00:00	13.9	11-Aug-09	06:00:00	16.6	21-Sep-09	00:00:00	11.5
21-May-09	19:00:00	11.7	1-Jul-09	13:00:00	14.2	11-Aug-09	07:00:00	16.3	21-Sep-09	01:00:00	11.2
21-May-09	20:00:00	11.4	1-Jul-09	14:00:00	14.5	11-Aug-09	08:00:00	16.0	21-Sep-09	02:00:00	11.1
21-May-09	21:00:00	11.2	1-Jul-09	15:00:00	14.9	11-Aug-09	09:00:00	15.9	21-Sep-09	03:00:00	10.9
21-May-09	22:00:00	10.9	1-Jul-09	16:00:00	14.9	11-Aug-09	10:00:00	15.9	21-Sep-09	04:00:00	10.9
21-May-09	23:00:00	10.6	1-Jul-09	17:00:00	15.4	11-Aug-09	11:00:00	16.0	21-Sep-09	05:00:00	10.8
22-May-09	00:00:00	10.3	1-Jul-09	18:00:00	15.5	11-Aug-09	12:00:00	16.5	21-Sep-09	06:00:00	10.8
22-May-09	01:00:00	10.1	1-Jul-09	19:00:00	15.5	11-Aug-09	13:00:00	16.8	21-Sep-09	07:00:00	10.8
22-May-09	02:00:00	9.6	1-Jul-09	20:00:00	15.9	11-Aug-09	14:00:00	17.1	21-Sep-09	08:00:00	10.6
22-May-09	03:00:00	9.2	1-Jul-09	21:00:00	15.9	11-Aug-09	15:00:00	17.5	21-Sep-09	09:00:00	10.6
22-May-09	04:00:00	8.9	1-Jul-09	22:00:00	16.0	11-Aug-09	16:00:00	18.3	21-Sep-09	10:00:00	10.6
22-May-09	05:00:00	8.6	1-Jul-09	23:00:00	15.7	11-Aug-09	17:00:00	18.8	21-Sep-09	11:00:00	10.9
22-May-09	06:00:00	8.1	2-Jul-09	00:00:00	15.5	11-Aug-09	18:00:00	18.9	21-Sep-09	12:00:00	11.2
22-May-09	07:00:00	7.8	2-Jul-09	01:00:00	15.2	11-Aug-09	19:00:00	18.8	21-Sep-09	13:00:00	11.8
22-May-09	08:00:00	7.7	2-Jul-09	02:00:00	14.8	11-Aug-09	20:00:00	18.6	21-Sep-09	14:00:00	12.7
22-May-09	09:00:00	7.7	2-Jul-09	03:00:00	14.3	11-Aug-09	21:00:00	18.3	21-Sep-09	15:00:00	13.0
22-May-09	10:00:00	7.8	2-Jul-09	04:00:00	13.9	11-Aug-09	22:00:00	18.1	21-Sep-09	16:00:00	13.2
22-May-09	11:00:00	8.3	2-Jul-09	05:00:00	13.6	11-Aug-09	23:00:00	17.8	21-Sep-09	17:00:00	13.9
22-May-09	12:00:00	9.0	2-Jul-09	06:00:00	13.5	12-Aug-09	00:00:00	17.5	21-Sep-09	18:00:00	13.9
22-May-09	13:00:00	9.8	2-Jul-09	07:00:00	13.2	12-Aug-09	01:00:00	17.2	21-Sep-09	19:00:00	13.6
22-May-09	14:00:00	10.5	2-Jul-09	08:00:00	13.0	12-Aug-09	02:00:00	16.8	21-Sep-09	20:00:00	13.5
22-May-09	15:00:00	11.2	2-Jul-09	09:00:00	13.2	12-Aug-09	03:00:00	16.5	21-Sep-09	21:00:00	13.2
22-May-09	16:00:00	11.8	2-Jul-09	10:00:00	13.3	12-Aug-09	04:00:00	16.2	21-Sep-09	22:00:00	13.0
22-May-09	17:00:00	12.3	2-Jul-09	11:00:00	13.8	12-Aug-09	05:00:00	15.7	21-Sep-09	23:00:00	12.9
22-May-09	18:00:00	12.6	2-Jul-09	12:00:00	14.2	12-Aug-09	06:00:00	15.5	22-Sep-09	00:00:00	12.9
22-May-09	19:00:00	12.4	2-Jul-09	13:00:00	15.1	12-Aug-09	07:00:00	15.2	22-Sep-09	01:00:00	12.7
22-May-09	20:00:00	12.3	2-Jul-09	14:00:00	15.9	12-Aug-09	08:00:00	15.1	22-Sep-09	02:00:00	12.6
22-May-09	21:00:00	12.6	2-Jul-09	15:00:00	16.8	12-Aug-09	09:00:00	14.9	22-Sep-09	03:00:00	12.4
22-May-09	22:00:00	12.0	2-Jul-09	16:00:00	16.9	12-Aug-09	10:00:00	14.9	22-Sep-09	04:00:00	12.3
22-May-09	23:00:00	11.7	2-Jul-09	17:00:00	17.1	12-Aug-09	11:00:00	14.9	22-Sep-09	05:00:00	12.1
23-May-09	00:00:00	11.4	2-Jul-09	18:00:00	17.4	12-Aug-09	12:00:00	15.1	22-Sep-09	06:00:00	12.0
23-May-09	01:00:00	10.9	2-Jul-09	19:00:00	17.1	12-Aug-09	13:00:00	15.1	22-Sep-09	07:00:00	11.7
23-May-09	02:00:00	10.5	2-Jul-09	20:00:00	17.1	12-Aug-09	14:00:00	15.1	22-Sep-09	08:00:00	11.5
23-May-09	03:00:00	10.2	2-Jul-09	21:00:00	16.8	12-Aug-09	15:00:00	15.4	22-Sep-09	09:00:00	11.4
23-May-09	04:00:00	10.1	2-Jul-09	22:00:00	16.5	12-Aug-09	16:00:00	15.4	22-Sep-09	10:00:00	11.4
23-May-09	05:00:00	9.8	2-Jul-09	23:00:00	16.3	12-Aug-09	17:00:00	15.5	22-Sep-09	11:00:00	11.5
23-May-09	06:00:00	9.5	3-Jul-09	00:00:00	16.0	12-Aug-09	18:00:00	16.0	22-Sep-09	12:00:00	12.0
23-May-09	07:00:00	9.2	3-Jul-09	01:00:00	15.7	12-Aug-09	19:00:00	16.0	22-Sep-09	13:00:00	12.6
23-May-09	08:00:00	9.0	3-Jul-09	02:00:00	15.2	12-Aug-09	20:00:00	16.0	22-Sep-09	14:00:00	13.5
23-May-09	09:00:00	9.0	3-Jul-09	03:00:00	14.9	12-Aug-09	21:00:00	15.9	22-Sep-09	15:00:00	14.2
23-May-09	10:00:00	9.2	3-Jul-09	04:00:00	14.6	12-Aug-09	22:00:00	15.7	22-Sep-09	16:00:00	14.9
23-May-09	11:00:00	9.6	3-Jul-09	05:00:00	14.3	12-Aug-09	23:00:00	15.5	22-Sep-09	17:00:00	15.4
23-May-09	12:00:00	10.1	3-Jul-09	06:00:00	14.2	13-Aug-09	00:00:00	15.4	22-Sep-09	18:00:00	15.5
23-May-09	13:00:00	10.6	3-Jul-09	07:00:00	14.0	13-Aug-09	01:00:00	15.2	22-Sep-09	19:00:00	15.4
23-May-09	14:00:00	10.9	3-Jul-09	08:00:00	13.9	13-Aug-09	02:00:00	15.1	22-Sep-09	20:00:00	14.9
23-May-09	15:00:00	11.2	3-Jul-09	09:00:00	14.0	13-Aug-09	03:00:00	14.9	22-Sep-09	21:00:00	14.5
23-May-09	16:00:00	11.7	3-Jul-09	10:00:00	14.0	13-Aug-09	04:00:00	14.8	22-Sep-09	22:00:00	14.2
23-May-09	17:00:00	12.3	3-Jul-09	11:00:00	14.2	13-Aug-09	05:00:00	14.6	22-Sep-09	23:00:00	13.9
23-May-09	18:00:00	12.6	3-Jul-09	12:00:00	14.5	13-Aug-09	06:00:00	14.5	23-Sep-09	00:00:00	13.6
23-May-09	19:00:00	12.9	3-Jul-09	13:00:00	15.2	13-Aug-09	07:00:00	14.3	23-Sep-09	01:00:00	13.3

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
23-May-09	20:00:00	12.9	3-Jul-09	14:00:00	15.5	13-Aug-09	08:00:00	14.2	23-Sep-09	02:00:00	13.2
23-May-09	21:00:00	12.4	3-Jul-09	15:00:00	16.2	13-Aug-09	09:00:00	14.0	23-Sep-09	03:00:00	13.0
23-May-09	22:00:00	12.3	3-Jul-09	16:00:00	16.8	13-Aug-09	10:00:00	14.0	23-Sep-09	04:00:00	12.7
23-May-09	23:00:00	12.3	3-Jul-09	17:00:00	17.1	13-Aug-09	11:00:00	14.0	23-Sep-09	05:00:00	12.6
24-May-09	00:00:00	11.8	3-Jul-09	18:00:00	17.4	13-Aug-09	12:00:00	14.2	23-Sep-09	06:00:00	12.4
24-May-09	01:00:00	11.5	3-Jul-09	19:00:00	18.0	13-Aug-09	13:00:00	14.6	23-Sep-09	07:00:00	12.1
24-May-09	02:00:00	11.1	3-Jul-09	20:00:00	17.8	13-Aug-09	14:00:00	15.4	23-Sep-09	08:00:00	12.0
24-May-09	03:00:00	10.8	3-Jul-09	21:00:00	17.5	13-Aug-09	15:00:00	16.0	23-Sep-09	09:00:00	11.7
24-May-09	04:00:00	10.5	3-Jul-09	22:00:00	17.2	13-Aug-09	16:00:00	16.8	23-Sep-09	10:00:00	11.5
24-May-09	05:00:00	10.1	3-Jul-09	23:00:00	16.8	13-Aug-09	17:00:00	17.1	23-Sep-09	11:00:00	11.5
24-May-09	06:00:00	9.9	4-Jul-09	00:00:00	16.6	13-Aug-09	18:00:00	17.4	23-Sep-09	12:00:00	12.0
24-May-09	07:00:00	9.6	4-Jul-09	01:00:00	16.3	13-Aug-09	19:00:00	17.7	23-Sep-09	13:00:00	12.6
24-May-09	08:00:00	9.5	4-Jul-09	02:00:00	16.0	13-Aug-09	20:00:00	17.4	23-Sep-09	14:00:00	13.3
24-May-09	09:00:00	9.6	4-Jul-09	03:00:00	15.7	13-Aug-09	21:00:00	16.9	23-Sep-09	15:00:00	14.0
24-May-09	10:00:00	9.8	4-Jul-09	04:00:00	15.4	13-Aug-09	22:00:00	16.6	23-Sep-09	16:00:00	14.6
24-May-09	11:00:00	10.2	4-Jul-09	05:00:00	15.1	13-Aug-09	23:00:00	16.2	23-Sep-09	17:00:00	15.2
24-May-09	12:00:00	10.8	4-Jul-09	06:00:00	14.9	14-Aug-09	00:00:00	15.9	23-Sep-09	18:00:00	15.5
24-May-09	13:00:00	11.5	4-Jul-09	07:00:00	14.8	14-Aug-09	01:00:00	15.7	23-Sep-09	19:00:00	15.4
24-May-09	14:00:00	11.7	4-Jul-09	08:00:00	14.8	14-Aug-09	02:00:00	15.2	23-Sep-09	20:00:00	14.9
24-May-09	15:00:00	11.5	4-Jul-09	09:00:00	14.6	14-Aug-09	03:00:00	14.9	23-Sep-09	21:00:00	14.6
24-May-09	16:00:00	11.7	4-Jul-09	10:00:00	14.8	14-Aug-09	04:00:00	14.5	23-Sep-09	22:00:00	14.2
24-May-09	17:00:00	11.8	4-Jul-09	11:00:00	14.9	14-Aug-09	05:00:00	14.2	23-Sep-09	23:00:00	13.9
24-May-09	18:00:00	11.8	4-Jul-09	12:00:00	15.2	14-Aug-09	06:00:00	13.9	24-Sep-09	00:00:00	13.6
24-May-09	19:00:00	12.0	4-Jul-09	13:00:00	15.7	14-Aug-09	07:00:00	13.6	24-Sep-09	01:00:00	13.5
24-May-09	20:00:00	12.0	4-Jul-09	14:00:00	16.3	14-Aug-09	08:00:00	13.5	24-Sep-09	02:00:00	13.2
24-May-09	21:00:00	12.3	4-Jul-09	15:00:00	16.9	14-Aug-09	09:00:00	13.3	24-Sep-09	03:00:00	13.0
24-May-09	22:00:00	12.3	4-Jul-09	16:00:00	17.8	14-Aug-09	10:00:00	13.3	24-Sep-09	04:00:00	12.7
24-May-09	23:00:00	12.1	4-Jul-09	17:00:00	18.3	14-Aug-09	11:00:00	13.5	24-Sep-09	05:00:00	12.4
25-May-09	00:00:00	12.1	4-Jul-09	18:00:00	18.3	14-Aug-09	12:00:00	13.9	24-Sep-09	06:00:00	12.1
25-May-09	01:00:00	11.8	4-Jul-09	19:00:00	18.3	14-Aug-09	13:00:00	14.6	24-Sep-09	07:00:00	12.0
25-May-09	02:00:00	11.5	4-Jul-09	20:00:00	18.6	14-Aug-09	14:00:00	15.5	24-Sep-09	08:00:00	11.7
25-May-09	03:00:00	10.9	4-Jul-09	21:00:00	18.3	14-Aug-09	15:00:00	16.5	24-Sep-09	09:00:00	11.5
25-May-09	04:00:00	10.6	4-Jul-09	22:00:00	18.0	14-Aug-09	16:00:00	17.2	24-Sep-09	10:00:00	11.4
25-May-09	05:00:00	10.3	4-Jul-09	23:00:00	17.8	14-Aug-09	17:00:00	17.8	24-Sep-09	11:00:00	11.4
25-May-09	06:00:00	10.1	5-Jul-09	00:00:00	17.4	14-Aug-09	18:00:00	18.3	24-Sep-09	12:00:00	11.7
25-May-09	07:00:00	9.8	5-Jul-09	01:00:00	17.1	14-Aug-09	19:00:00	18.3	24-Sep-09	13:00:00	12.1
25-May-09	08:00:00	9.6	5-Jul-09	02:00:00	16.6	14-Aug-09	20:00:00	18.1	24-Sep-09	14:00:00	12.6
25-May-09	09:00:00	9.6	5-Jul-09	03:00:00	16.3	14-Aug-09	21:00:00	18.0	24-Sep-09	15:00:00	13.2
25-May-09	10:00:00	9.9	5-Jul-09	04:00:00	15.9	14-Aug-09	22:00:00	17.8	24-Sep-09	16:00:00	13.8
25-May-09	11:00:00	10.2	5-Jul-09	05:00:00	15.4	14-Aug-09	23:00:00	17.7	24-Sep-09	17:00:00	13.9
25-May-09	12:00:00	10.8	5-Jul-09	06:00:00	14.9	15-Aug-09	00:00:00	17.5	24-Sep-09	18:00:00	14.0
25-May-09	13:00:00	11.5	5-Jul-09	07:00:00	14.6	15-Aug-09	01:00:00	17.4	24-Sep-09	19:00:00	13.8
25-May-09	14:00:00	12.1	5-Jul-09	08:00:00	14.5	15-Aug-09	02:00:00	17.1	24-Sep-09	20:00:00	13.3
25-May-09	15:00:00	12.6	5-Jul-09	09:00:00	14.5	15-Aug-09	03:00:00	16.8	24-Sep-09	21:00:00	13.0
25-May-09	16:00:00	13.3	5-Jul-09	10:00:00	14.8	15-Aug-09	04:00:00	16.6	24-Sep-09	22:00:00	12.6
25-May-09	17:00:00	13.3	5-Jul-09	11:00:00	15.2	15-Aug-09	05:00:00	16.5	24-Sep-09	23:00:00	12.1
25-May-09	18:00:00	13.2	5-Jul-09	12:00:00	16.0	15-Aug-09	06:00:00	16.3	25-Sep-09	00:00:00	11.8
25-May-09	19:00:00	13.3	5-Jul-09	13:00:00	16.8	15-Aug-09	07:00:00	16.2	25-Sep-09	01:00:00	11.5
25-May-09	20:00:00	13.0	5-Jul-09	14:00:00	17.5	15-Aug-09	08:00:00	15.9	25-Sep-09	02:00:00	11.2
25-May-09	21:00:00	13.0	5-Jul-09	15:00:00	18.3	15-Aug-09	09:00:00	15.9	25-Sep-09	03:00:00	10.9
25-May-09	22:00:00	13.0	5-Jul-09	16:00:00	19.1	15-Aug-09	10:00:00	16.0	25-Sep-09	04:00:00	10.6
25-May-09	23:00:00	12.7	5-Jul-09	17:00:00	19.5	15-Aug-09	11:00:00	16.2	25-Sep-09	05:00:00	10.3
26-May-09	00:00:00	12.3	5-Jul-09	18:00:00	19.9	15-Aug-09	12:00:00	16.3	25-Sep-09	06:00:00	10.2
26-May-09	01:00:00	12.0	5-Jul-09	19:00:00	19.9	15-Aug-09	13:00:00	16.6	25-Sep-09	07:00:00	9.9
26-May-09	02:00:00	11.8	5-Jul-09	20:00:00	19.9	15-Aug-09	14:00:00	17.2	25-Sep-09	08:00:00	9.8
26-May-09	03:00:00	11.5	5-Jul-09	21:00:00	19.7	15-Aug-09	15:00:00	17.7	25-Sep-09	09:00:00	9.6
26-May-09	04:00:00	11.4	5-Jul-09	22:00:00	19.4	15-Aug-09	16:00:00	18.1	25-Sep-09	10:00:00	9.8
26-May-09	05:00:00	11.1	5-Jul-09	23:00:00	19.2	15-Aug-09	17:00:00	18.6	25-Sep-09	11:00:00	9.9
26-May-09	06:00:00	10.9	6-Jul-09	00:00:00	18.9	15-Aug-09	18:00:00	19.2	25-Sep-09	12:00:00	10.2

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
26-May-09	07:00:00	10.8	6-Jul-09	01:00:00	18.6	15-Aug-09	19:00:00	19.1	25-Sep-09	13:00:00	10.8
26-May-09	08:00:00	10.6	6-Jul-09	02:00:00	18.1	15-Aug-09	20:00:00	18.6	25-Sep-09	14:00:00	11.1
26-May-09	09:00:00	10.5	6-Jul-09	03:00:00	17.7	15-Aug-09	21:00:00	18.3	25-Sep-09	15:00:00	11.5
26-May-09	10:00:00	10.3	6-Jul-09	04:00:00	17.4	15-Aug-09	22:00:00	18.0	25-Sep-09	16:00:00	11.4
26-May-09	11:00:00	10.5	6-Jul-09	05:00:00	17.1	15-Aug-09	23:00:00	17.7	25-Sep-09	17:00:00	11.4
26-May-09	12:00:00	10.5	6-Jul-09	06:00:00	16.8	16-Aug-09	00:00:00	17.4	25-Sep-09	18:00:00	11.4
26-May-09	13:00:00	10.6	6-Jul-09	07:00:00	16.6	16-Aug-09	01:00:00	17.1	25-Sep-09	19:00:00	11.2
26-May-09	14:00:00	10.6	6-Jul-09	08:00:00	16.6	16-Aug-09	02:00:00	16.8	25-Sep-09	20:00:00	11.1
26-May-09	15:00:00	10.8	6-Jul-09	09:00:00	16.5	16-Aug-09	03:00:00	16.6	25-Sep-09	21:00:00	10.8
26-May-09	16:00:00	10.9	6-Jul-09	10:00:00	16.3	16-Aug-09	04:00:00	16.3	25-Sep-09	22:00:00	10.6
26-May-09	17:00:00	10.9	6-Jul-09	11:00:00	16.2	16-Aug-09	05:00:00	15.9	25-Sep-09	23:00:00	10.5
26-May-09	18:00:00	11.1	6-Jul-09	12:00:00	16.0	16-Aug-09	06:00:00	15.5	26-Sep-09	00:00:00	10.2
26-May-09	19:00:00	11.1	6-Jul-09	13:00:00	15.9	16-Aug-09	07:00:00	15.2	26-Sep-09	01:00:00	9.9
26-May-09	20:00:00	11.1	6-Jul-09	14:00:00	15.9	16-Aug-09	08:00:00	14.9	26-Sep-09	02:00:00	9.8
26-May-09	21:00:00	10.9	6-Jul-09	15:00:00	15.7	16-Aug-09	09:00:00	14.9	26-Sep-09	03:00:00	9.5
26-May-09	22:00:00	10.9	6-Jul-09	16:00:00	15.7	16-Aug-09	10:00:00	14.9	26-Sep-09	04:00:00	9.3
26-May-09	23:00:00	10.8	6-Jul-09	17:00:00	15.7	16-Aug-09	11:00:00	15.4	26-Sep-09	05:00:00	9.3
27-May-09	00:00:00	10.8	6-Jul-09	18:00:00	15.7	16-Aug-09	12:00:00	15.9	26-Sep-09	06:00:00	9.0
27-May-09	01:00:00	10.6	6-Jul-09	19:00:00	15.7	16-Aug-09	13:00:00	16.6	26-Sep-09	07:00:00	8.9
27-May-09	02:00:00	10.5	6-Jul-09	20:00:00	15.5	16-Aug-09	14:00:00	17.4	26-Sep-09	08:00:00	8.9
27-May-09	03:00:00	10.3	6-Jul-09	21:00:00	15.4	16-Aug-09	15:00:00	18.3	26-Sep-09	09:00:00	8.9
27-May-09	04:00:00	10.2	6-Jul-09	22:00:00	15.2	16-Aug-09	16:00:00	19.1	26-Sep-09	10:00:00	8.9
27-May-09	05:00:00	10.1	6-Jul-09	23:00:00	15.1	16-Aug-09	17:00:00	19.5	26-Sep-09	11:00:00	8.9
27-May-09	06:00:00	9.9	7-Jul-09	00:00:00	14.9	16-Aug-09	18:00:00	19.9	26-Sep-09	12:00:00	9.3
27-May-09	07:00:00	9.8	7-Jul-09	01:00:00	14.8	16-Aug-09	19:00:00	19.9	26-Sep-09	13:00:00	9.8
27-May-09	08:00:00	9.6	7-Jul-09	02:00:00	14.6	16-Aug-09	20:00:00	19.9	26-Sep-09	14:00:00	10.1
27-May-09	09:00:00	9.5	7-Jul-09	03:00:00	14.5	16-Aug-09	21:00:00	19.4	26-Sep-09	15:00:00	10.1
27-May-09	10:00:00	9.3	7-Jul-09	04:00:00	14.5	16-Aug-09	22:00:00	19.2	26-Sep-09	16:00:00	10.3
27-May-09	11:00:00	9.3	7-Jul-09	05:00:00	14.3	16-Aug-09	23:00:00	19.1	26-Sep-09	17:00:00	10.5
27-May-09	12:00:00	9.2	7-Jul-09	06:00:00	14.3	17-Aug-09	00:00:00	18.8	26-Sep-09	18:00:00	10.6
27-May-09	13:00:00	9.3	7-Jul-09	07:00:00	14.2	17-Aug-09	01:00:00	18.6	26-Sep-09	19:00:00	10.5
27-May-09	14:00:00	9.3	7-Jul-09	08:00:00	14.0	17-Aug-09	02:00:00	18.4	26-Sep-09	20:00:00	10.2
27-May-09	15:00:00	9.2	7-Jul-09	09:00:00	14.2	17-Aug-09	03:00:00	18.1	26-Sep-09	21:00:00	9.8
27-May-09	16:00:00	9.2	7-Jul-09	10:00:00	14.2	17-Aug-09	04:00:00	17.8	26-Sep-09	22:00:00	9.5
27-May-09	17:00:00	9.2	7-Jul-09	11:00:00	14.2	17-Aug-09	05:00:00	17.4	26-Sep-09	23:00:00	9.2
27-May-09	18:00:00	9.0	7-Jul-09	12:00:00	14.5	17-Aug-09	06:00:00	17.2	27-Sep-09	00:00:00	8.9
27-May-09	19:00:00	9.0	7-Jul-09	13:00:00	14.8	17-Aug-09	07:00:00	16.9	27-Sep-09	01:00:00	8.6
27-May-09	20:00:00	9.0	7-Jul-09	14:00:00	14.9	17-Aug-09	08:00:00	16.8	27-Sep-09	02:00:00	8.3
27-May-09	21:00:00	9.2	7-Jul-09	15:00:00	15.2	17-Aug-09	09:00:00	16.6	27-Sep-09	03:00:00	8.0
27-May-09	22:00:00	9.0	7-Jul-09	16:00:00	15.7	17-Aug-09	10:00:00	16.8	27-Sep-09	04:00:00	7.7
27-May-09	23:00:00	8.9	7-Jul-09	17:00:00	16.0	17-Aug-09	11:00:00	17.1	27-Sep-09	05:00:00	7.4
28-May-09	00:00:00	8.7	7-Jul-09	18:00:00	16.3	17-Aug-09	12:00:00	17.5	27-Sep-09	06:00:00	7.3
28-May-09	01:00:00	8.4	7-Jul-09	19:00:00	16.3	17-Aug-09	13:00:00	18.1	27-Sep-09	07:00:00	7.0
28-May-09	02:00:00	8.3	7-Jul-09	20:00:00	16.3	17-Aug-09	14:00:00	18.8	27-Sep-09	08:00:00	6.7
28-May-09	03:00:00	8.1	7-Jul-09	21:00:00	16.2	17-Aug-09	15:00:00	19.2	27-Sep-09	09:00:00	6.5
28-May-09	04:00:00	8.0	7-Jul-09	22:00:00	16.0	17-Aug-09	16:00:00	19.9	27-Sep-09	10:00:00	6.4
28-May-09	05:00:00	7.8	7-Jul-09	23:00:00	15.7	17-Aug-09	17:00:00	20.3	27-Sep-09	11:00:00	6.4
28-May-09	06:00:00	7.7	8-Jul-09	00:00:00	15.7	17-Aug-09	18:00:00	20.3	27-Sep-09	12:00:00	6.8
28-May-09	07:00:00	7.5	8-Jul-09	01:00:00	15.4	17-Aug-09	19:00:00	20.3	27-Sep-09	13:00:00	7.3
28-May-09	08:00:00	7.4	8-Jul-09	02:00:00	15.2	17-Aug-09	20:00:00	20.0	27-Sep-09	14:00:00	8.0
28-May-09	09:00:00	7.5	8-Jul-09	03:00:00	14.9	17-Aug-09	21:00:00	19.7	27-Sep-09	15:00:00	8.7
28-May-09	10:00:00	7.7	8-Jul-09	04:00:00	14.6	17-Aug-09	22:00:00	19.4	27-Sep-09	16:00:00	9.5
28-May-09	11:00:00	8.1	8-Jul-09	05:00:00	14.5	17-Aug-09	23:00:00	19.1	27-Sep-09	17:00:00	9.8
28-May-09	12:00:00	8.7	8-Jul-09	06:00:00	14.0	18-Aug-09	00:00:00	18.9	27-Sep-09	18:00:00	9.9
28-May-09	13:00:00	9.3	8-Jul-09	07:00:00	13.9	18-Aug-09	01:00:00	18.6	27-Sep-09	19:00:00	9.6
28-May-09	14:00:00	9.9	8-Jul-09	08:00:00	13.6	18-Aug-09	02:00:00	18.3	27-Sep-09	20:00:00	9.5
28-May-09	15:00:00	10.6	8-Jul-09	09:00:00	13.8	18-Aug-09	03:00:00	18.0	27-Sep-09	21:00:00	9.2
28-May-09	16:00:00	11.2	8-Jul-09	10:00:00	13.9	18-Aug-09	04:00:00	17.7	27-Sep-09	22:00:00	9.0
28-May-09	17:00:00	11.8	8-Jul-09	11:00:00	14.3	18-Aug-09	05:00:00	17.4	27-Sep-09	23:00:00	8.9

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
28-May-09	18:00:00	12.1	8-Jul-09	12:00:00	14.9	18-Aug-09	06:00:00	17.2	28-Sep-09	00:00:00	8.7
28-May-09	19:00:00	12.1	8-Jul-09	13:00:00	15.7	18-Aug-09	07:00:00	16.9	28-Sep-09	01:00:00	8.6
28-May-09	20:00:00	12.1	8-Jul-09	14:00:00	16.2	18-Aug-09	08:00:00	16.8	28-Sep-09	02:00:00	8.4
28-May-09	21:00:00	11.8	8-Jul-09	15:00:00	16.8	18-Aug-09	09:00:00	16.8	28-Sep-09	03:00:00	8.1
28-May-09	22:00:00	11.5	8-Jul-09	16:00:00	17.4	18-Aug-09	10:00:00	16.9	28-Sep-09	04:00:00	8.1
28-May-09	23:00:00	11.4	8-Jul-09	17:00:00	17.5	18-Aug-09	11:00:00	17.4	28-Sep-09	05:00:00	8.0
29-May-09	00:00:00	10.9	8-Jul-09	18:00:00	17.8	18-Aug-09	12:00:00	17.8	28-Sep-09	06:00:00	8.0
29-May-09	01:00:00	10.6	8-Jul-09	19:00:00	17.8	18-Aug-09	13:00:00	18.3	28-Sep-09	07:00:00	7.8
29-May-09	02:00:00	10.3	8-Jul-09	20:00:00	17.7	18-Aug-09	14:00:00	19.2	28-Sep-09	08:00:00	7.8
29-May-09	03:00:00	10.1	8-Jul-09	21:00:00	17.4	18-Aug-09	15:00:00	19.9	28-Sep-09	09:00:00	7.8
29-May-09	04:00:00	9.8	8-Jul-09	22:00:00	17.1	18-Aug-09	16:00:00	20.5	28-Sep-09	10:00:00	7.8
29-May-09	05:00:00	9.5	8-Jul-09	23:00:00	16.6	18-Aug-09	17:00:00	20.8	28-Sep-09	11:00:00	8.0
29-May-09	06:00:00	9.3	9-Jul-09	00:00:00	16.3	18-Aug-09	18:00:00	20.6	28-Sep-09	12:00:00	8.0
29-May-09	07:00:00	9.2	9-Jul-09	01:00:00	15.9	18-Aug-09	19:00:00	20.5	28-Sep-09	13:00:00	8.3
29-May-09	08:00:00	9.0	9-Jul-09	02:00:00	15.5	18-Aug-09	20:00:00	20.3	28-Sep-09	14:00:00	8.7
29-May-09	09:00:00	9.0	9-Jul-09	03:00:00	15.1	18-Aug-09	21:00:00	20.0	28-Sep-09	15:00:00	9.2
29-May-09	10:00:00	9.2	9-Jul-09	04:00:00	14.8	18-Aug-09	22:00:00	19.5	28-Sep-09	16:00:00	9.3
29-May-09	11:00:00	9.6	9-Jul-09	05:00:00	14.5	18-Aug-09	23:00:00	19.4	28-Sep-09	17:00:00	9.5
29-May-09	12:00:00	10.1	9-Jul-09	06:00:00	14.3	19-Aug-09	00:00:00	19.1	28-Sep-09	18:00:00	9.6
29-May-09	13:00:00	10.5	9-Jul-09	07:00:00	14.0	19-Aug-09	01:00:00	18.8	28-Sep-09	19:00:00	9.8
29-May-09	14:00:00	10.8	9-Jul-09	08:00:00	13.9	19-Aug-09	02:00:00	18.4	28-Sep-09	20:00:00	9.6
29-May-09	15:00:00	11.4	9-Jul-09	09:00:00	13.9	19-Aug-09	03:00:00	18.1	28-Sep-09	21:00:00	9.5
29-May-09	16:00:00	12.0	9-Jul-09	10:00:00	13.9	19-Aug-09	04:00:00	17.7	28-Sep-09	22:00:00	9.2
29-May-09	17:00:00	12.1	9-Jul-09	11:00:00	13.9	19-Aug-09	05:00:00	17.4	28-Sep-09	23:00:00	9.2
29-May-09	18:00:00	12.1	9-Jul-09	12:00:00	13.9	19-Aug-09	06:00:00	16.9	29-Sep-09	00:00:00	9.0
29-May-09	19:00:00	12.3	9-Jul-09	13:00:00	14.0	19-Aug-09	07:00:00	16.5	29-Sep-09	01:00:00	8.9
29-May-09	20:00:00	12.3	9-Jul-09	14:00:00	14.0	19-Aug-09	08:00:00	16.2	29-Sep-09	02:00:00	8.7
29-May-09	21:00:00	12.3	9-Jul-09	15:00:00	14.5	19-Aug-09	09:00:00	16.0	29-Sep-09	03:00:00	8.4
29-May-09	22:00:00	12.1	9-Jul-09	16:00:00	14.6	19-Aug-09	10:00:00	16.0	29-Sep-09	04:00:00	8.3
29-May-09	23:00:00	12.0	9-Jul-09	17:00:00	14.9	19-Aug-09	11:00:00	16.3	29-Sep-09	05:00:00	8.0
30-May-09	00:00:00	11.7	9-Jul-09	18:00:00	15.2	19-Aug-09	12:00:00	16.8	29-Sep-09	06:00:00	7.8
30-May-09	01:00:00	11.4	9-Jul-09	19:00:00	15.5	19-Aug-09	13:00:00	17.5	29-Sep-09	07:00:00	7.7
30-May-09	02:00:00	10.9	9-Jul-09	20:00:00	15.5	19-Aug-09	14:00:00	18.3	29-Sep-09	08:00:00	7.7
30-May-09	03:00:00	10.6	9-Jul-09	21:00:00	15.7	19-Aug-09	15:00:00	19.2	29-Sep-09	09:00:00	7.5
30-May-09	04:00:00	10.2	9-Jul-09	22:00:00	15.5	19-Aug-09	16:00:00	20.0	29-Sep-09	10:00:00	7.5
30-May-09	05:00:00	9.9	9-Jul-09	23:00:00	15.7	19-Aug-09	17:00:00	20.3	29-Sep-09	11:00:00	7.5
30-May-09	06:00:00	9.6	10-Jul-09	00:00:00	15.5	19-Aug-09	18:00:00	20.6	29-Sep-09	12:00:00	7.5
30-May-09	07:00:00	9.5	10-Jul-09	01:00:00	15.4	19-Aug-09	19:00:00	20.6	29-Sep-09	13:00:00	7.5
30-May-09	08:00:00	9.2	10-Jul-09	02:00:00	15.2	19-Aug-09	20:00:00	20.5	29-Sep-09	14:00:00	7.5
30-May-09	09:00:00	9.2	10-Jul-09	03:00:00	15.1	19-Aug-09	21:00:00	20.2	29-Sep-09	15:00:00	7.7
30-May-09	10:00:00	9.3	10-Jul-09	04:00:00	14.9	19-Aug-09	22:00:00	19.9	29-Sep-09	16:00:00	7.7
30-May-09	11:00:00	9.6	10-Jul-09	05:00:00	14.9	19-Aug-09	23:00:00	19.5	29-Sep-09	17:00:00	7.7
30-May-09	12:00:00	10.1	10-Jul-09	06:00:00	14.8	20-Aug-09	00:00:00	19.2	29-Sep-09	18:00:00	7.5
30-May-09	13:00:00	10.5	10-Jul-09	07:00:00	14.6	20-Aug-09	01:00:00	18.9	29-Sep-09	19:00:00	7.5
30-May-09	14:00:00	11.1	10-Jul-09	08:00:00	14.5	20-Aug-09	02:00:00	18.8	29-Sep-09	20:00:00	7.4
30-May-09	15:00:00	11.5	10-Jul-09	09:00:00	14.3	20-Aug-09	03:00:00	18.4	29-Sep-09	21:00:00	7.3
30-May-09	16:00:00	11.8	10-Jul-09	10:00:00	14.3	20-Aug-09	04:00:00	18.0	29-Sep-09	22:00:00	7.3
30-May-09	17:00:00	12.1	10-Jul-09	11:00:00	14.5	20-Aug-09	05:00:00	17.5	29-Sep-09	23:00:00	7.1
30-May-09	18:00:00	12.4	10-Jul-09	12:00:00	14.8	20-Aug-09	06:00:00	17.2	30-Sep-09	00:00:00	7.0
30-May-09	19:00:00	12.6	10-Jul-09	13:00:00	15.1	20-Aug-09	07:00:00	16.9	30-Sep-09	01:00:00	6.8
30-May-09	20:00:00	12.4	10-Jul-09	14:00:00	15.4	20-Aug-09	08:00:00	16.6	30-Sep-09	02:00:00	6.8
30-May-09	21:00:00	12.1	10-Jul-09	15:00:00	15.5	20-Aug-09	09:00:00	16.5	30-Sep-09	03:00:00	6.7
30-May-09	22:00:00	12.0	10-Jul-09	16:00:00	16.0	20-Aug-09	10:00:00	16.5	30-Sep-09	04:00:00	6.7
30-May-09	23:00:00	11.5	10-Jul-09	17:00:00	16.5	20-Aug-09	11:00:00	16.8	30-Sep-09	05:00:00	6.5
31-May-09	00:00:00	11.4	10-Jul-09	18:00:00	16.2	20-Aug-09	12:00:00	17.1	30-Sep-09	06:00:00	6.5
31-May-09	01:00:00	10.9	10-Jul-09	19:00:00	16.2	20-Aug-09	13:00:00	17.5	30-Sep-09	07:00:00	6.4
31-May-09	02:00:00	10.6	10-Jul-09	20:00:00	16.3	20-Aug-09	14:00:00	18.1	30-Sep-09	08:00:00	6.4
31-May-09	03:00:00	10.3	10-Jul-09	21:00:00	16.3	20-Aug-09	15:00:00	18.8	30-Sep-09	09:00:00	6.2
31-May-09	04:00:00	10.1	10-Jul-09	22:00:00	16.2	20-Aug-09	16:00:00	19.4	30-Sep-09	10:00:00	6.1

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
31-May-09	05:00:00	9.8	10-Jul-09	23:00:00	16.0	20-Aug-09	17:00:00	19.9	30-Sep-09	11:00:00	6.2
31-May-09	06:00:00	9.6	11-Jul-09	00:00:00	15.7	20-Aug-09	18:00:00	20.2	30-Sep-09	12:00:00	6.5
31-May-09	07:00:00	9.3	11-Jul-09	01:00:00	15.5	20-Aug-09	19:00:00	20.0	30-Sep-09	13:00:00	7.1
31-May-09	08:00:00	9.2	11-Jul-09	02:00:00	15.2	20-Aug-09	20:00:00	19.9	30-Sep-09	14:00:00	7.7
31-May-09	09:00:00	9.2	11-Jul-09	03:00:00	15.1	20-Aug-09	21:00:00	19.7	30-Sep-09	15:00:00	8.4
31-May-09	10:00:00	9.0	11-Jul-09	04:00:00	14.8	20-Aug-09	22:00:00	19.5	30-Sep-09	16:00:00	8.4
31-May-09	11:00:00	9.3	11-Jul-09	05:00:00	14.5	20-Aug-09	23:00:00	19.2	30-Sep-09	17:00:00	8.6
31-May-09	12:00:00	9.6	11-Jul-09	06:00:00	14.5	21-Aug-09	00:00:00	19.1	30-Sep-09	18:00:00	8.6
31-May-09	13:00:00	10.2	11-Jul-09	07:00:00	14.3	21-Aug-09	01:00:00	18.9	30-Sep-09	19:00:00	8.6
31-May-09	14:00:00	10.3	11-Jul-09	08:00:00	14.3	21-Aug-09	02:00:00	18.8	30-Sep-09	20:00:00	8.4
31-May-09	15:00:00	11.1	11-Jul-09	09:00:00	14.5	21-Aug-09	03:00:00	18.6	30-Sep-09	21:00:00	8.1
31-May-09	16:00:00	11.4	11-Jul-09	10:00:00	14.6	21-Aug-09	04:00:00	18.3	30-Sep-09	22:00:00	7.8
31-May-09	17:00:00	11.5	11-Jul-09	11:00:00	14.9	21-Aug-09	05:00:00	18.1	30-Sep-09	23:00:00	7.5
31-May-09	18:00:00	11.7	11-Jul-09	12:00:00	15.2	21-Aug-09	06:00:00	17.8	1-Oct-09	00:00:00	7.3
31-May-09	19:00:00	11.7	11-Jul-09	13:00:00	15.9	21-Aug-09	07:00:00	17.7	1-Oct-09	01:00:00	6.8
31-May-09	20:00:00	11.8	11-Jul-09	14:00:00	16.3	21-Aug-09	08:00:00	17.5	1-Oct-09	02:00:00	6.7
31-May-09	21:00:00	11.8	11-Jul-09	15:00:00	16.8	21-Aug-09	09:00:00	17.4	1-Oct-09	03:00:00	6.4
31-May-09	22:00:00	11.7	11-Jul-09	16:00:00	17.2	21-Aug-09	10:00:00	17.5	1-Oct-09	04:00:00	6.1
31-May-09	23:00:00	11.2	11-Jul-09	17:00:00	17.7	21-Aug-09	11:00:00	17.8	1-Oct-09	05:00:00	5.9
1-Jun-09	00:00:00	10.9	11-Jul-09	18:00:00	18.1	21-Aug-09	12:00:00	18.3	1-Oct-09	06:00:00	5.6
1-Jun-09	01:00:00	10.5	11-Jul-09	19:00:00	18.4	21-Aug-09	13:00:00	19.1	1-Oct-09	07:00:00	5.5
1-Jun-09	02:00:00	10.2	11-Jul-09	20:00:00	18.4	21-Aug-09	14:00:00	19.5	1-Oct-09	08:00:00	5.2
1-Jun-09	03:00:00	9.9	11-Jul-09	21:00:00	18.3	21-Aug-09	15:00:00	19.7	1-Oct-09	09:00:00	5.0
1-Jun-09	04:00:00	9.8	11-Jul-09	22:00:00	18.3	21-Aug-09	16:00:00	20.3	1-Oct-09	10:00:00	5.0
1-Jun-09	05:00:00	9.6	11-Jul-09	23:00:00	18.1	21-Aug-09	17:00:00	20.8	1-Oct-09	11:00:00	5.0
1-Jun-09	06:00:00	9.5	12-Jul-09	00:00:00	17.8	21-Aug-09	18:00:00	21.0	1-Oct-09	12:00:00	5.3
1-Jun-09	07:00:00	9.3	12-Jul-09	01:00:00	17.5	21-Aug-09	19:00:00	20.6	1-Oct-09	13:00:00	5.8
1-Jun-09	08:00:00	9.3	12-Jul-09	02:00:00	17.1	21-Aug-09	20:00:00	20.5	1-Oct-09	14:00:00	6.5
1-Jun-09	09:00:00	9.2	12-Jul-09	03:00:00	16.8	21-Aug-09	21:00:00	20.2	1-Oct-09	15:00:00	7.3
1-Jun-09	10:00:00	9.3	12-Jul-09	04:00:00	16.5	21-Aug-09	22:00:00	19.9	1-Oct-09	16:00:00	7.7
1-Jun-09	11:00:00	9.6	12-Jul-09	05:00:00	16.2	21-Aug-09	23:00:00	19.7	1-Oct-09	17:00:00	8.1
1-Jun-09	12:00:00	10.1	12-Jul-09	06:00:00	15.9	22-Aug-09	00:00:00	19.4	1-Oct-09	18:00:00	8.4
1-Jun-09	13:00:00	10.3	12-Jul-09	07:00:00	15.7	22-Aug-09	01:00:00	18.9	1-Oct-09	19:00:00	8.3
1-Jun-09	14:00:00	10.8	12-Jul-09	08:00:00	15.5	22-Aug-09	02:00:00	18.8	1-Oct-09	20:00:00	7.8
1-Jun-09	15:00:00	10.9	12-Jul-09	09:00:00	15.4	22-Aug-09	03:00:00	18.3	1-Oct-09	21:00:00	7.5
1-Jun-09	16:00:00	11.4	12-Jul-09	10:00:00	15.5	22-Aug-09	04:00:00	18.0	1-Oct-09	22:00:00	7.3
1-Jun-09	17:00:00	11.5	12-Jul-09	11:00:00	15.9	22-Aug-09	05:00:00	17.5	1-Oct-09	23:00:00	7.0
1-Jun-09	18:00:00	12.0	12-Jul-09	12:00:00	16.3	22-Aug-09	06:00:00	16.9	2-Oct-09	00:00:00	6.7
1-Jun-09	19:00:00	12.3	12-Jul-09	13:00:00	16.8	22-Aug-09	07:00:00	16.6	2-Oct-09	01:00:00	6.4
1-Jun-09	20:00:00	12.4	12-Jul-09	14:00:00	17.4	22-Aug-09	08:00:00	16.2	2-Oct-09	02:00:00	6.2
1-Jun-09	21:00:00	12.1	12-Jul-09	15:00:00	18.0	22-Aug-09	09:00:00	16.0	2-Oct-09	03:00:00	5.9
1-Jun-09	22:00:00	11.8	12-Jul-09	16:00:00	18.6	22-Aug-09	10:00:00	15.9	2-Oct-09	04:00:00	5.6
1-Jun-09	23:00:00	11.7	12-Jul-09	17:00:00	18.8	22-Aug-09	11:00:00	16.0	2-Oct-09	05:00:00	5.5
2-Jun-09	00:00:00	11.5	12-Jul-09	18:00:00	18.1	22-Aug-09	12:00:00	16.3	2-Oct-09	06:00:00	5.3
2-Jun-09	01:00:00	10.9	12-Jul-09	19:00:00	17.7	22-Aug-09	13:00:00	16.9	2-Oct-09	07:00:00	5.2
2-Jun-09	02:00:00	10.5	12-Jul-09	20:00:00	17.7	22-Aug-09	14:00:00	17.4	2-Oct-09	08:00:00	5.0
2-Jun-09	03:00:00	10.2	12-Jul-09	21:00:00	17.8	22-Aug-09	15:00:00	17.4	2-Oct-09	09:00:00	5.0
2-Jun-09	04:00:00	9.8	12-Jul-09	22:00:00	17.8	22-Aug-09	16:00:00	17.8	2-Oct-09	10:00:00	4.9
2-Jun-09	05:00:00	9.5	12-Jul-09	23:00:00	17.5	22-Aug-09	17:00:00	18.4	2-Oct-09	11:00:00	5.2
2-Jun-09	06:00:00	9.2	13-Jul-09	00:00:00	17.4	22-Aug-09	18:00:00	18.8	2-Oct-09	12:00:00	5.2
2-Jun-09	07:00:00	8.9	13-Jul-09	01:00:00	16.9	22-Aug-09	19:00:00	18.9	2-Oct-09	13:00:00	5.8
2-Jun-09	08:00:00	8.7	13-Jul-09	02:00:00	16.5	22-Aug-09	20:00:00	18.3	2-Oct-09	14:00:00	6.4
2-Jun-09	09:00:00	8.7	13-Jul-09	03:00:00	16.3	22-Aug-09	21:00:00	17.5	2-Oct-09	15:00:00	7.1
2-Jun-09	10:00:00	8.9	13-Jul-09	04:00:00	16.2	22-Aug-09	22:00:00	17.1	2-Oct-09	16:00:00	7.5
2-Jun-09	11:00:00	9.3	13-Jul-09	05:00:00	16.2	22-Aug-09	23:00:00	16.8	2-Oct-09	17:00:00	7.5
2-Jun-09	12:00:00	9.9	13-Jul-09	06:00:00	16.0	23-Aug-09	00:00:00	16.5	2-Oct-09	18:00:00	7.5
2-Jun-09	13:00:00	10.6	13-Jul-09	07:00:00	15.9	23-Aug-09	01:00:00	16.3	2-Oct-09	19:00:00	7.5
2-Jun-09	14:00:00	11.2	13-Jul-09	08:00:00	15.9	23-Aug-09	02:00:00	16.2	2-Oct-09	20:00:00	7.4
2-Jun-09	15:00:00	12.0	13-Jul-09	09:00:00	15.7	23-Aug-09	03:00:00	15.9	2-Oct-09	21:00:00	7.4

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
2-Jun-09	16:00:00	12.4	13-Jul-09	10:00:00	15.7	23-Aug-09	04:00:00	15.5	2-Oct-09	22:00:00	7.3
2-Jun-09	17:00:00	12.9	13-Jul-09	11:00:00	15.7	23-Aug-09	05:00:00	15.2	2-Oct-09	23:00:00	7.1
2-Jun-09	18:00:00	13.3	13-Jul-09	12:00:00	15.7	23-Aug-09	06:00:00	14.9	3-Oct-09	00:00:00	7.1
2-Jun-09	19:00:00	13.5	13-Jul-09	13:00:00	15.7	23-Aug-09	07:00:00	14.6	3-Oct-09	01:00:00	7.0
2-Jun-09	20:00:00	13.5	13-Jul-09	14:00:00	15.7	23-Aug-09	08:00:00	14.5	3-Oct-09	02:00:00	7.0
2-Jun-09	21:00:00	13.3	13-Jul-09	15:00:00	15.9	23-Aug-09	09:00:00	14.2	3-Oct-09	03:00:00	6.7
2-Jun-09	22:00:00	13.2	13-Jul-09	16:00:00	15.9	23-Aug-09	10:00:00	14.3	3-Oct-09	04:00:00	6.7
2-Jun-09	23:00:00	12.9	13-Jul-09	17:00:00	16.0	23-Aug-09	11:00:00	14.6	3-Oct-09	05:00:00	6.5
3-Jun-09	00:00:00	12.6	13-Jul-09	18:00:00	16.0	23-Aug-09	12:00:00	15.1	3-Oct-09	06:00:00	6.4
3-Jun-09	01:00:00	12.1	13-Jul-09	19:00:00	16.0	23-Aug-09	13:00:00	15.7	3-Oct-09	07:00:00	6.4
3-Jun-09	02:00:00	11.8	13-Jul-09	20:00:00	16.0	23-Aug-09	14:00:00	16.3	3-Oct-09	08:00:00	6.2
3-Jun-09	03:00:00	11.4	13-Jul-09	21:00:00	15.9	23-Aug-09	15:00:00	16.9	3-Oct-09	09:00:00	6.2
3-Jun-09	04:00:00	10.9	13-Jul-09	22:00:00	15.9	23-Aug-09	16:00:00	17.4	3-Oct-09	10:00:00	6.2
3-Jun-09	05:00:00	10.6	13-Jul-09	23:00:00	15.7	23-Aug-09	17:00:00	17.8	3-Oct-09	11:00:00	6.4
3-Jun-09	06:00:00	10.2	14-Jul-09	00:00:00	15.5	23-Aug-09	18:00:00	18.0	3-Oct-09	12:00:00	6.4
3-Jun-09	07:00:00	9.9	14-Jul-09	01:00:00	15.4	23-Aug-09	19:00:00	17.7	3-Oct-09	13:00:00	6.7
3-Jun-09	08:00:00	9.8	14-Jul-09	02:00:00	15.1	23-Aug-09	20:00:00	17.4	3-Oct-09	14:00:00	6.8
3-Jun-09	09:00:00	9.6	14-Jul-09	03:00:00	14.9	23-Aug-09	21:00:00	16.9	3-Oct-09	15:00:00	7.1
3-Jun-09	10:00:00	9.8	14-Jul-09	04:00:00	14.8	23-Aug-09	22:00:00	16.5	3-Oct-09	16:00:00	7.4
3-Jun-09	11:00:00	10.2	14-Jul-09	05:00:00	14.5	23-Aug-09	23:00:00	16.2	3-Oct-09	17:00:00	7.5
3-Jun-09	12:00:00	10.8	14-Jul-09	06:00:00	14.3	24-Aug-09	00:00:00	15.9	3-Oct-09	18:00:00	7.4
3-Jun-09	13:00:00	11.4	14-Jul-09	07:00:00	14.2	24-Aug-09	01:00:00	15.5	3-Oct-09	19:00:00	7.4
3-Jun-09	14:00:00	12.1	14-Jul-09	08:00:00	14.0	24-Aug-09	02:00:00	15.2	3-Oct-09	20:00:00	7.3
3-Jun-09	15:00:00	12.9	14-Jul-09	09:00:00	14.0	24-Aug-09	03:00:00	14.8	3-Oct-09	21:00:00	7.3
3-Jun-09	16:00:00	13.6	14-Jul-09	10:00:00	14.2	24-Aug-09	04:00:00	14.5	3-Oct-09	22:00:00	7.1
3-Jun-09	17:00:00	14.2	14-Jul-09	11:00:00	14.5	24-Aug-09	05:00:00	14.2	3-Oct-09	23:00:00	7.1
3-Jun-09	18:00:00	14.8	14-Jul-09	12:00:00	14.8	24-Aug-09	06:00:00	13.8	4-Oct-09	00:00:00	7.0
3-Jun-09	19:00:00	15.1	14-Jul-09	13:00:00	15.2	24-Aug-09	07:00:00	13.5	4-Oct-09	01:00:00	6.8
3-Jun-09	20:00:00	15.1	14-Jul-09	14:00:00	15.5	24-Aug-09	08:00:00	13.2	4-Oct-09	02:00:00	6.8
3-Jun-09	21:00:00	15.1	14-Jul-09	15:00:00	16.0	24-Aug-09	09:00:00	13.0	4-Oct-09	03:00:00	6.7
3-Jun-09	22:00:00	15.1	14-Jul-09	16:00:00	16.3	24-Aug-09	10:00:00	13.0	4-Oct-09	04:00:00	6.7
3-Jun-09	23:00:00	14.8	14-Jul-09	17:00:00	16.9	24-Aug-09	11:00:00	13.3	4-Oct-09	05:00:00	6.4
4-Jun-09	00:00:00	14.6	14-Jul-09	18:00:00	17.2	24-Aug-09	12:00:00	13.9	4-Oct-09	06:00:00	6.1
4-Jun-09	01:00:00	14.2	14-Jul-09	19:00:00	17.4	24-Aug-09	13:00:00	14.5	4-Oct-09	07:00:00	5.9
4-Jun-09	02:00:00	13.9	14-Jul-09	20:00:00	17.2	24-Aug-09	14:00:00	15.4	4-Oct-09	08:00:00	5.6
4-Jun-09	03:00:00	13.6	14-Jul-09	21:00:00	16.9	24-Aug-09	15:00:00	16.3	4-Oct-09	09:00:00	5.5
4-Jun-09	04:00:00	13.3	14-Jul-09	22:00:00	16.6	24-Aug-09	16:00:00	16.9	4-Oct-09	10:00:00	5.5
4-Jun-09	05:00:00	13.0	14-Jul-09	23:00:00	16.3	24-Aug-09	17:00:00	17.2	4-Oct-09	11:00:00	5.6
4-Jun-09	06:00:00	12.7	15-Jul-09	00:00:00	15.9	24-Aug-09	18:00:00	17.4	4-Oct-09	12:00:00	5.9
4-Jun-09	07:00:00	12.3	15-Jul-09	01:00:00	15.4	24-Aug-09	19:00:00	17.4	4-Oct-09	13:00:00	6.2
4-Jun-09	08:00:00	12.1	15-Jul-09	02:00:00	14.9	24-Aug-09	20:00:00	17.1	4-Oct-09	14:00:00	6.8
4-Jun-09	09:00:00	11.8	15-Jul-09	03:00:00	14.6	24-Aug-09	21:00:00	16.9	4-Oct-09	15:00:00	7.3
4-Jun-09	10:00:00	11.8	15-Jul-09	04:00:00	14.5	24-Aug-09	22:00:00	16.6	4-Oct-09	16:00:00	7.5
4-Jun-09	11:00:00	11.8	15-Jul-09	05:00:00	14.2	24-Aug-09	23:00:00	16.5	4-Oct-09	17:00:00	7.8
4-Jun-09	12:00:00	11.8	15-Jul-09	06:00:00	13.9	25-Aug-09	00:00:00	16.3	4-Oct-09	18:00:00	8.0
4-Jun-09	13:00:00	12.0	15-Jul-09	07:00:00	13.8	25-Aug-09	01:00:00	16.2	4-Oct-09	19:00:00	7.8
4-Jun-09	14:00:00	12.1	15-Jul-09	08:00:00	13.6	25-Aug-09	02:00:00	16.2	4-Oct-09	20:00:00	7.4
4-Jun-09	15:00:00	12.4	15-Jul-09	09:00:00	13.6	25-Aug-09	03:00:00	16.0	4-Oct-09	21:00:00	7.1
4-Jun-09	16:00:00	12.9	15-Jul-09	10:00:00	13.9	25-Aug-09	04:00:00	15.9	4-Oct-09	22:00:00	6.7
4-Jun-09	17:00:00	13.2	15-Jul-09	11:00:00	14.3	25-Aug-09	05:00:00	15.7	4-Oct-09	23:00:00	6.4
4-Jun-09	18:00:00	13.5	15-Jul-09	12:00:00	14.9	25-Aug-09	06:00:00	15.5	5-Oct-09	00:00:00	5.9
4-Jun-09	19:00:00	13.5	15-Jul-09	13:00:00	15.5	25-Aug-09	07:00:00	15.2	5-Oct-09	01:00:00	5.6
4-Jun-09	20:00:00	13.5	15-Jul-09	14:00:00	16.3	25-Aug-09	08:00:00	15.1	5-Oct-09	02:00:00	5.5
4-Jun-09	21:00:00	13.5	15-Jul-09	15:00:00	17.1	25-Aug-09	09:00:00	14.9	5-Oct-09	03:00:00	5.2
4-Jun-09	22:00:00	13.3	15-Jul-09	16:00:00	17.7	25-Aug-09	10:00:00	14.9	5-Oct-09	04:00:00	5.0
4-Jun-09	23:00:00	13.3	15-Jul-09	17:00:00	18.3	25-Aug-09	11:00:00	14.9	5-Oct-09	05:00:00	4.9
5-Jun-09	00:00:00	13.2	15-Jul-09	18:00:00	18.6	25-Aug-09	12:00:00	15.1	5-Oct-09	06:00:00	4.9
5-Jun-09	01:00:00	13.0	15-Jul-09	19:00:00	18.8	25-Aug-09	13:00:00	15.2	5-Oct-09	07:00:00	4.7
5-Jun-09	02:00:00	12.7	15-Jul-09	20:00:00	18.8	25-Aug-09	14:00:00	15.4	5-Oct-09	08:00:00	4.7

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
5-Jun-09	03:00:00	12.6	15-Jul-09	21:00:00	18.6	25-Aug-09	15:00:00	15.7	5-Oct-09	09:00:00	4.7
5-Jun-09	04:00:00	12.4	15-Jul-09	22:00:00	18.6	25-Aug-09	16:00:00	16.3	5-Oct-09	10:00:00	4.7
5-Jun-09	05:00:00	12.3	15-Jul-09	23:00:00	18.3	25-Aug-09	17:00:00	16.9	5-Oct-09	11:00:00	4.7
5-Jun-09	06:00:00	12.0	16-Jul-09	00:00:00	18.1	25-Aug-09	18:00:00	17.2	5-Oct-09	12:00:00	4.9
5-Jun-09	07:00:00	11.7	16-Jul-09	01:00:00	17.8	25-Aug-09	19:00:00	17.2	5-Oct-09	13:00:00	5.2
5-Jun-09	08:00:00	11.5	16-Jul-09	02:00:00	17.5	25-Aug-09	20:00:00	16.9	5-Oct-09	14:00:00	5.6
5-Jun-09	09:00:00	11.2	16-Jul-09	03:00:00	17.4	25-Aug-09	21:00:00	16.5	5-Oct-09	15:00:00	6.2
5-Jun-09	10:00:00	11.1	16-Jul-09	04:00:00	17.1	25-Aug-09	22:00:00	16.2	5-Oct-09	16:00:00	6.8
5-Jun-09	11:00:00	11.1	16-Jul-09	05:00:00	16.9	25-Aug-09	23:00:00	15.7	5-Oct-09	17:00:00	7.1
5-Jun-09	12:00:00	11.4	16-Jul-09	06:00:00	16.6	26-Aug-09	00:00:00	15.5	5-Oct-09	18:00:00	7.3
5-Jun-09	13:00:00	11.7	16-Jul-09	07:00:00	16.3	26-Aug-09	01:00:00	15.1	5-Oct-09	19:00:00	7.1
5-Jun-09	14:00:00	12.3	16-Jul-09	08:00:00	16.2	26-Aug-09	02:00:00	14.9	5-Oct-09	20:00:00	7.1
5-Jun-09	15:00:00	12.6	16-Jul-09	09:00:00	16.0	26-Aug-09	03:00:00	14.6	5-Oct-09	21:00:00	7.1
5-Jun-09	16:00:00	13.0	16-Jul-09	10:00:00	16.2	26-Aug-09	04:00:00	14.3	5-Oct-09	22:00:00	7.1
5-Jun-09	17:00:00	13.6	16-Jul-09	11:00:00	16.5	26-Aug-09	05:00:00	13.9	5-Oct-09	23:00:00	7.1
5-Jun-09	18:00:00	13.6	16-Jul-09	12:00:00	16.9	26-Aug-09	06:00:00	13.5	6-Oct-09	00:00:00	7.1
5-Jun-09	19:00:00	13.8	16-Jul-09	13:00:00	17.5	26-Aug-09	07:00:00	13.2	6-Oct-09	01:00:00	7.1
5-Jun-09	20:00:00	13.9	16-Jul-09	14:00:00	18.1	26-Aug-09	08:00:00	12.9	6-Oct-09	02:00:00	7.1
5-Jun-09	21:00:00	13.9	16-Jul-09	15:00:00	18.8	26-Aug-09	09:00:00	12.7	6-Oct-09	03:00:00	7.1
5-Jun-09	22:00:00	13.6	16-Jul-09	16:00:00	19.1	26-Aug-09	10:00:00	12.9	6-Oct-09	04:00:00	7.1
5-Jun-09	23:00:00	13.5	16-Jul-09	17:00:00	19.4	26-Aug-09	11:00:00	13.2	6-Oct-09	05:00:00	7.3
6-Jun-09	00:00:00	13.0	16-Jul-09	18:00:00	19.7	26-Aug-09	12:00:00	13.8	6-Oct-09	06:00:00	7.3
6-Jun-09	01:00:00	12.6	16-Jul-09	19:00:00	20.0	26-Aug-09	13:00:00	14.5	6-Oct-09	07:00:00	7.3
6-Jun-09	02:00:00	12.1	16-Jul-09	20:00:00	19.9	26-Aug-09	14:00:00	15.1	6-Oct-09	08:00:00	7.1
6-Jun-09	03:00:00	11.5	16-Jul-09	21:00:00	19.7	26-Aug-09	15:00:00	15.5	6-Oct-09	09:00:00	7.0
6-Jun-09	04:00:00	11.1	16-Jul-09	22:00:00	19.5	26-Aug-09	16:00:00	15.9	6-Oct-09	10:00:00	7.0
6-Jun-09	05:00:00	10.8	16-Jul-09	23:00:00	19.2	26-Aug-09	17:00:00	16.2	6-Oct-09	11:00:00	7.0
6-Jun-09	06:00:00	10.3	17-Jul-09	00:00:00	18.9	26-Aug-09	18:00:00	16.3	6-Oct-09	12:00:00	7.0
6-Jun-09	07:00:00	9.9	17-Jul-09	01:00:00	18.6	26-Aug-09	19:00:00	16.6	6-Oct-09	13:00:00	7.1
6-Jun-09	08:00:00	9.6	17-Jul-09	02:00:00	18.1	26-Aug-09	20:00:00	16.5	6-Oct-09	14:00:00	7.3
6-Jun-09	09:00:00	9.6	17-Jul-09	03:00:00	17.7	26-Aug-09	21:00:00	16.0	6-Oct-09	15:00:00	7.3
6-Jun-09	10:00:00	9.6	17-Jul-09	04:00:00	17.2	26-Aug-09	22:00:00	15.7	6-Oct-09	16:00:00	7.4
6-Jun-09	11:00:00	9.8	17-Jul-09	05:00:00	16.9	26-Aug-09	23:00:00	15.4	6-Oct-09	17:00:00	7.4
6-Jun-09	12:00:00	10.2	17-Jul-09	06:00:00	16.6	27-Aug-09	00:00:00	14.9	6-Oct-09	18:00:00	7.3
6-Jun-09	13:00:00	10.5	17-Jul-09	07:00:00	16.3	27-Aug-09	01:00:00	14.6	6-Oct-09	19:00:00	7.3
6-Jun-09	14:00:00	11.1	17-Jul-09	08:00:00	16.2	27-Aug-09	02:00:00	14.3	6-Oct-09	20:00:00	7.1
6-Jun-09	15:00:00	11.7	17-Jul-09	09:00:00	16.2	27-Aug-09	03:00:00	14.0	6-Oct-09	21:00:00	6.8
6-Jun-09	16:00:00	12.1	17-Jul-09	10:00:00	16.3	27-Aug-09	04:00:00	13.6	6-Oct-09	22:00:00	6.4
6-Jun-09	17:00:00	12.7	17-Jul-09	11:00:00	16.5	27-Aug-09	05:00:00	13.3	6-Oct-09	23:00:00	6.2
6-Jun-09	18:00:00	13.2	17-Jul-09	12:00:00	17.1	27-Aug-09	06:00:00	12.9	7-Oct-09	00:00:00	5.9
6-Jun-09	19:00:00	13.2	17-Jul-09	13:00:00	17.7	27-Aug-09	07:00:00	12.6	7-Oct-09	01:00:00	5.8
6-Jun-09	20:00:00	13.0	17-Jul-09	14:00:00	18.1	27-Aug-09	08:00:00	12.3	7-Oct-09	02:00:00	5.5
6-Jun-09	21:00:00	12.9	17-Jul-09	15:00:00	18.6	27-Aug-09	09:00:00	12.1	7-Oct-09	03:00:00	5.3
6-Jun-09	22:00:00	12.6	17-Jul-09	16:00:00	19.1	27-Aug-09	10:00:00	12.1	7-Oct-09	04:00:00	5.2
6-Jun-09	23:00:00	12.3	17-Jul-09	17:00:00	19.4	27-Aug-09	11:00:00	12.4	7-Oct-09	05:00:00	5.0
7-Jun-09	00:00:00	11.8	17-Jul-09	18:00:00	19.5	27-Aug-09	12:00:00	13.0	7-Oct-09	06:00:00	4.9
7-Jun-09	01:00:00	11.4	17-Jul-09	19:00:00	19.5	27-Aug-09	13:00:00	13.6	7-Oct-09	07:00:00	4.9
7-Jun-09	02:00:00	10.9	17-Jul-09	20:00:00	19.5	27-Aug-09	14:00:00	14.5	7-Oct-09	08:00:00	4.7
7-Jun-09	03:00:00	10.5	17-Jul-09	21:00:00	19.4	27-Aug-09	15:00:00	15.1	7-Oct-09	09:00:00	4.7
7-Jun-09	04:00:00	10.2	17-Jul-09	22:00:00	19.2	27-Aug-09	16:00:00	15.9	7-Oct-09	10:00:00	4.7
7-Jun-09	05:00:00	9.8	17-Jul-09	23:00:00	18.9	27-Aug-09	17:00:00	16.3	7-Oct-09	11:00:00	4.7
7-Jun-09	06:00:00	9.5	18-Jul-09	00:00:00	18.6	27-Aug-09	18:00:00	16.8	7-Oct-09	12:00:00	4.9
7-Jun-09	07:00:00	9.2	18-Jul-09	01:00:00	18.3	27-Aug-09	19:00:00	16.8	7-Oct-09	13:00:00	5.5
7-Jun-09	08:00:00	8.9	18-Jul-09	02:00:00	18.0	27-Aug-09	20:00:00	16.6	7-Oct-09	14:00:00	5.9
7-Jun-09	09:00:00	8.9	18-Jul-09	03:00:00	17.7	27-Aug-09	21:00:00	16.3	7-Oct-09	15:00:00	6.1
7-Jun-09	10:00:00	9.0	18-Jul-09	04:00:00	17.5	27-Aug-09	22:00:00	16.0	7-Oct-09	16:00:00	6.4
7-Jun-09	11:00:00	9.3	18-Jul-09	05:00:00	17.2	27-Aug-09	23:00:00	15.7	7-Oct-09	17:00:00	6.4
7-Jun-09	12:00:00	9.9	18-Jul-09	06:00:00	16.9	28-Aug-09	00:00:00	15.4	7-Oct-09	18:00:00	6.4
7-Jun-09	13:00:00	10.3	18-Jul-09	07:00:00	16.8	28-Aug-09	01:00:00	15.1	7-Oct-09	19:00:00	6.4

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
7-Jun-09	14:00:00	11.1	18-Jul-09	08:00:00	16.5	28-Aug-09	02:00:00	14.9	7-Oct-09	20:00:00	6.1
7-Jun-09	15:00:00	11.7	18-Jul-09	09:00:00	16.3	28-Aug-09	03:00:00	14.6	7-Oct-09	21:00:00	5.8
7-Jun-09	16:00:00	12.3	18-Jul-09	10:00:00	16.5	28-Aug-09	04:00:00	14.3	7-Oct-09	22:00:00	5.6
7-Jun-09	17:00:00	12.7	18-Jul-09	11:00:00	16.6	28-Aug-09	05:00:00	14.0	7-Oct-09	23:00:00	5.5
7-Jun-09	18:00:00	13.2	18-Jul-09	12:00:00	17.1	28-Aug-09	06:00:00	13.8	8-Oct-09	00:00:00	5.2
7-Jun-09	19:00:00	13.3	18-Jul-09	13:00:00	17.5	28-Aug-09	07:00:00	13.5	8-Oct-09	01:00:00	5.0
7-Jun-09	20:00:00	13.5	18-Jul-09	14:00:00	18.1	28-Aug-09	08:00:00	13.2	8-Oct-09	02:00:00	5.0
7-Jun-09	21:00:00	13.3	18-Jul-09	15:00:00	18.4	28-Aug-09	09:00:00	13.0	8-Oct-09	03:00:00	4.9
7-Jun-09	22:00:00	13.0	18-Jul-09	16:00:00	18.8	28-Aug-09	10:00:00	12.9	8-Oct-09	04:00:00	4.7
7-Jun-09	23:00:00	12.9	18-Jul-09	17:00:00	19.2	28-Aug-09	11:00:00	13.3	8-Oct-09	05:00:00	4.4
8-Jun-09	00:00:00	12.4	18-Jul-09	18:00:00	19.5	28-Aug-09	12:00:00	13.8	8-Oct-09	06:00:00	4.3
8-Jun-09	01:00:00	12.1	18-Jul-09	19:00:00	19.5	28-Aug-09	13:00:00	14.3	8-Oct-09	07:00:00	4.1
8-Jun-09	02:00:00	11.7	18-Jul-09	20:00:00	19.5	28-Aug-09	14:00:00	15.1	8-Oct-09	08:00:00	3.8
8-Jun-09	03:00:00	11.2	18-Jul-09	21:00:00	19.4	28-Aug-09	15:00:00	16.0	8-Oct-09	09:00:00	3.7
8-Jun-09	04:00:00	10.8	18-Jul-09	22:00:00	19.2	28-Aug-09	16:00:00	16.6	8-Oct-09	10:00:00	3.7
8-Jun-09	05:00:00	10.3	18-Jul-09	23:00:00	18.9	28-Aug-09	17:00:00	17.2	8-Oct-09	11:00:00	3.5
8-Jun-09	06:00:00	9.9	19-Jul-09	00:00:00	18.4	28-Aug-09	18:00:00	17.5	8-Oct-09	12:00:00	3.7
8-Jun-09	07:00:00	9.6	19-Jul-09	01:00:00	18.1	28-Aug-09	19:00:00	17.7	8-Oct-09	13:00:00	3.8
8-Jun-09	08:00:00	9.5	19-Jul-09	02:00:00	17.8	28-Aug-09	20:00:00	17.5	8-Oct-09	14:00:00	3.8
8-Jun-09	09:00:00	9.5	19-Jul-09	03:00:00	17.5	28-Aug-09	21:00:00	17.2	8-Oct-09	15:00:00	4.0
8-Jun-09	10:00:00	9.6	19-Jul-09	04:00:00	17.1	28-Aug-09	22:00:00	17.1	8-Oct-09	16:00:00	4.1
8-Jun-09	11:00:00	10.1	19-Jul-09	05:00:00	16.9	28-Aug-09	23:00:00	16.8	8-Oct-09	17:00:00	4.0
8-Jun-09	12:00:00	10.6	19-Jul-09	06:00:00	16.8	29-Aug-09	00:00:00	16.6	8-Oct-09	18:00:00	3.8
8-Jun-09	13:00:00	11.1	19-Jul-09	07:00:00	16.6	29-Aug-09	01:00:00	16.3	8-Oct-09	19:00:00	3.7
8-Jun-09	14:00:00	11.8	19-Jul-09	08:00:00	16.5	29-Aug-09	02:00:00	16.2	8-Oct-09	20:00:00	3.5
8-Jun-09	15:00:00	12.6	19-Jul-09	09:00:00	16.3	29-Aug-09	03:00:00	15.9	8-Oct-09	21:00:00	3.4
8-Jun-09	16:00:00	13.2	19-Jul-09	10:00:00	16.5	29-Aug-09	04:00:00	15.7	8-Oct-09	22:00:00	3.2
8-Jun-09	17:00:00	13.6	19-Jul-09	11:00:00	16.6	29-Aug-09	05:00:00	15.5	8-Oct-09	23:00:00	3.1
8-Jun-09	18:00:00	13.9	19-Jul-09	12:00:00	16.9	29-Aug-09	06:00:00	15.2	9-Oct-09	00:00:00	2.9
8-Jun-09	19:00:00	13.9	19-Jul-09	13:00:00	17.4	29-Aug-09	07:00:00	15.1	9-Oct-09	01:00:00	2.8
8-Jun-09	20:00:00	14.0	19-Jul-09	14:00:00	17.8	29-Aug-09	08:00:00	14.9	9-Oct-09	02:00:00	2.6
8-Jun-09	21:00:00	13.9	19-Jul-09	15:00:00	18.0	29-Aug-09	09:00:00	14.8	9-Oct-09	03:00:00	2.6
8-Jun-09	22:00:00	13.8	19-Jul-09	16:00:00	18.0	29-Aug-09	10:00:00	14.8	9-Oct-09	04:00:00	2.5
8-Jun-09	23:00:00	13.5	19-Jul-09	17:00:00	18.3	29-Aug-09	11:00:00	14.8	9-Oct-09	05:00:00	2.3
9-Jun-09	00:00:00	13.0	19-Jul-09	18:00:00	18.8	29-Aug-09	12:00:00	14.9	9-Oct-09	06:00:00	2.3
9-Jun-09	01:00:00	12.6	19-Jul-09	19:00:00	19.2	29-Aug-09	13:00:00	15.2	9-Oct-09	07:00:00	2.2
9-Jun-09	02:00:00	12.1	19-Jul-09	20:00:00	19.4	29-Aug-09	14:00:00	15.9	9-Oct-09	08:00:00	2.2
9-Jun-09	03:00:00	11.5	19-Jul-09	21:00:00	19.4	29-Aug-09	15:00:00	16.6	9-Oct-09	09:00:00	2.0
9-Jun-09	04:00:00	11.1	19-Jul-09	22:00:00	19.2	29-Aug-09	16:00:00	17.4	9-Oct-09	10:00:00	2.0
9-Jun-09	05:00:00	10.6	19-Jul-09	23:00:00	19.1	29-Aug-09	17:00:00	17.8	9-Oct-09	11:00:00	2.2
9-Jun-09	06:00:00	10.1	20-Jul-09	00:00:00	18.8	29-Aug-09	18:00:00	18.3	9-Oct-09	12:00:00	2.2
9-Jun-09	07:00:00	9.8	20-Jul-09	01:00:00	18.6	29-Aug-09	19:00:00	18.4	9-Oct-09	13:00:00	2.2
9-Jun-09	08:00:00	9.6	20-Jul-09	02:00:00	18.4	29-Aug-09	20:00:00	18.3	9-Oct-09	14:00:00	2.3
9-Jun-09	09:00:00	9.6	20-Jul-09	03:00:00	18.1	29-Aug-09	21:00:00	17.8	9-Oct-09	15:00:00	2.5
9-Jun-09	10:00:00	9.8	20-Jul-09	04:00:00	18.0	29-Aug-09	22:00:00	17.5	9-Oct-09	16:00:00	2.6
9-Jun-09	11:00:00	10.2	20-Jul-09	05:00:00	17.7	29-Aug-09	23:00:00	17.4	9-Oct-09	17:00:00	2.6
9-Jun-09	12:00:00	10.6	20-Jul-09	06:00:00	17.4	30-Aug-09	00:00:00	16.9	9-Oct-09	18:00:00	2.6
9-Jun-09	13:00:00	11.4	20-Jul-09	07:00:00	17.1	30-Aug-09	01:00:00	16.8	9-Oct-09	19:00:00	2.6
9-Jun-09	14:00:00	12.1	20-Jul-09	08:00:00	16.9	30-Aug-09	02:00:00	16.5	9-Oct-09	20:00:00	2.5
9-Jun-09	15:00:00	12.7	20-Jul-09	09:00:00	16.8	30-Aug-09	03:00:00	16.2	9-Oct-09	21:00:00	2.5
9-Jun-09	16:00:00	13.3	20-Jul-09	10:00:00	16.8	30-Aug-09	04:00:00	15.9	9-Oct-09	22:00:00	2.3
9-Jun-09	17:00:00	13.9	20-Jul-09	11:00:00	17.1	30-Aug-09	05:00:00	15.5	9-Oct-09	23:00:00	2.2
9-Jun-09	18:00:00	14.5	20-Jul-09	12:00:00	17.5	30-Aug-09	06:00:00	15.2	10-Oct-09	00:00:00	2.2
9-Jun-09	19:00:00	14.5	20-Jul-09	13:00:00	18.1	30-Aug-09	07:00:00	14.9	10-Oct-09	01:00:00	2.0
9-Jun-09	20:00:00	14.6	20-Jul-09	14:00:00	18.8	30-Aug-09	08:00:00	14.6	10-Oct-09	02:00:00	1.9
9-Jun-09	21:00:00	14.5	20-Jul-09	15:00:00	19.4	30-Aug-09	09:00:00	14.3	10-Oct-09	03:00:00	1.9
9-Jun-09	22:00:00	14.2	20-Jul-09	16:00:00	19.9	30-Aug-09	10:00:00	14.3	10-Oct-09	04:00:00	1.7
9-Jun-09	23:00:00	13.9	20-Jul-09	17:00:00	20.2	30-Aug-09	11:00:00	14.6	10-Oct-09	05:00:00	1.7
10-Jun-09	00:00:00	13.5	20-Jul-09	18:00:00	20.5	30-Aug-09	12:00:00	15.2	10-Oct-09	06:00:00	1.6

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
10-Jun-09	01:00:00	13.0	20-Jul-09	19:00:00	20.6	30-Aug-09	13:00:00	16.0	10-Oct-09	07:00:00	1.6
10-Jun-09	02:00:00	12.6	20-Jul-09	20:00:00	20.6	30-Aug-09	14:00:00	16.9	10-Oct-09	08:00:00	1.6
10-Jun-09	03:00:00	12.1	20-Jul-09	21:00:00	20.6	30-Aug-09	15:00:00	18.0	10-Oct-09	09:00:00	1.4
10-Jun-09	04:00:00	11.7	20-Jul-09	22:00:00	20.3	30-Aug-09	16:00:00	18.8	10-Oct-09	10:00:00	1.4
10-Jun-09	05:00:00	11.2	20-Jul-09	23:00:00	20.0	30-Aug-09	17:00:00	19.4	10-Oct-09	11:00:00	1.4
10-Jun-09	06:00:00	10.8	21-Jul-09	00:00:00	19.7	30-Aug-09	18:00:00	19.7	10-Oct-09	12:00:00	1.6
10-Jun-09	07:00:00	10.5	21-Jul-09	01:00:00	19.2	30-Aug-09	19:00:00	19.7	10-Oct-09	13:00:00	1.6
10-Jun-09	08:00:00	10.3	21-Jul-09	02:00:00	18.9	30-Aug-09	20:00:00	19.4	10-Oct-09	14:00:00	1.7
10-Jun-09	09:00:00	10.2	21-Jul-09	03:00:00	18.6	30-Aug-09	21:00:00	18.9	10-Oct-09	15:00:00	1.7
10-Jun-09	10:00:00	10.3	21-Jul-09	04:00:00	18.1	30-Aug-09	22:00:00	18.4	10-Oct-09	16:00:00	1.9
10-Jun-09	11:00:00	10.8	21-Jul-09	05:00:00	17.8	30-Aug-09	23:00:00	18.1	10-Oct-09	17:00:00	1.9
10-Jun-09	12:00:00	11.4	21-Jul-09	06:00:00	17.5	31-Aug-09	00:00:00	17.8	10-Oct-09	18:00:00	1.9
10-Jun-09	13:00:00	12.0	21-Jul-09	07:00:00	17.4	31-Aug-09	01:00:00	17.4	10-Oct-09	19:00:00	1.7
10-Jun-09	14:00:00	12.6	21-Jul-09	08:00:00	17.1	31-Aug-09	02:00:00	17.2	10-Oct-09	20:00:00	1.4
10-Jun-09	15:00:00	13.3	21-Jul-09	09:00:00	17.1	31-Aug-09	03:00:00	16.9	10-Oct-09	21:00:00	1.1
10-Jun-09	16:00:00	13.9	21-Jul-09	10:00:00	17.4	31-Aug-09	04:00:00	16.6	10-Oct-09	22:00:00	1.0
10-Jun-09	17:00:00	14.5	21-Jul-09	11:00:00	17.7	31-Aug-09	05:00:00	16.3	10-Oct-09	23:00:00	0.7
10-Jun-09	18:00:00	15.1	21-Jul-09	12:00:00	18.3	31-Aug-09	06:00:00	16.0	11-Oct-09	00:00:00	0.4
10-Jun-09	19:00:00	15.2	21-Jul-09	13:00:00	18.8	31-Aug-09	07:00:00	15.7	11-Oct-09	01:00:00	0.0
10-Jun-09	20:00:00	15.4	21-Jul-09	14:00:00	19.2	31-Aug-09	08:00:00	15.5	11-Oct-09	02:00:00	0.0
10-Jun-09	21:00:00	15.4	21-Jul-09	15:00:00	19.5	31-Aug-09	09:00:00	15.4	11-Oct-09	03:00:00	0.0
10-Jun-09	22:00:00	15.4	21-Jul-09	16:00:00	19.9	31-Aug-09	10:00:00	15.2	11-Oct-09	04:00:00	0.0
10-Jun-09	23:00:00	15.1	21-Jul-09	17:00:00	20.2	31-Aug-09	11:00:00	15.4	11-Oct-09	05:00:00	0.0
11-Jun-09	00:00:00	14.9	21-Jul-09	18:00:00	20.3	31-Aug-09	12:00:00	15.7	11-Oct-09	06:00:00	0.0
11-Jun-09	01:00:00	14.5	21-Jul-09	19:00:00	20.3	31-Aug-09	13:00:00	16.5	11-Oct-09	07:00:00	0.0
11-Jun-09	02:00:00	14.2	21-Jul-09	20:00:00	20.2	31-Aug-09	14:00:00	17.2	11-Oct-09	08:00:00	0.0
11-Jun-09	03:00:00	13.8	21-Jul-09	21:00:00	20.2	31-Aug-09	15:00:00	18.0	11-Oct-09	09:00:00	0.0
11-Jun-09	04:00:00	13.5	21-Jul-09	22:00:00	20.0	31-Aug-09	16:00:00	18.8	11-Oct-09	10:00:00	0.0
11-Jun-09	05:00:00	13.0	21-Jul-09	23:00:00	19.9	31-Aug-09	17:00:00	19.4	11-Oct-09	11:00:00	0.0
11-Jun-09	06:00:00	12.7	22-Jul-09	00:00:00	19.7	31-Aug-09	18:00:00	19.7	11-Oct-09	12:00:00	0.0
11-Jun-09	07:00:00	12.4	22-Jul-09	01:00:00	19.5	31-Aug-09	19:00:00	19.7	11-Oct-09	13:00:00	0.0
11-Jun-09	08:00:00	12.1	22-Jul-09	02:00:00	19.4	31-Aug-09	20:00:00	19.4	11-Oct-09	14:00:00	0.0
11-Jun-09	09:00:00	12.1	22-Jul-09	03:00:00	19.2	31-Aug-09	21:00:00	18.8	11-Oct-09	15:00:00	0.0
11-Jun-09	10:00:00	12.1	22-Jul-09	04:00:00	18.9	31-Aug-09	22:00:00	18.3	11-Oct-09	16:00:00	0.2
11-Jun-09	11:00:00	12.3	22-Jul-09	05:00:00	18.8	31-Aug-09	23:00:00	18.0	11-Oct-09	17:00:00	0.2
11-Jun-09	12:00:00	12.7	22-Jul-09	06:00:00	18.6	1-Sep-09	00:00:00	17.7	11-Oct-09	18:00:00	0.4
11-Jun-09	13:00:00	13.3	22-Jul-09	07:00:00	18.4	1-Sep-09	01:00:00	17.4	11-Oct-09	19:00:00	0.2
11-Jun-09	14:00:00	13.9	22-Jul-09	08:00:00	18.3	1-Sep-09	02:00:00	17.1	11-Oct-09	20:00:00	0.0
11-Jun-09	15:00:00	14.5	22-Jul-09	09:00:00	18.3	1-Sep-09	03:00:00	16.8	11-Oct-09	21:00:00	0.0
11-Jun-09	16:00:00	14.9	22-Jul-09	10:00:00	18.4	1-Sep-09	04:00:00	16.6	11-Oct-09	22:00:00	0.0
11-Jun-09	17:00:00	15.7	22-Jul-09	11:00:00	18.8	1-Sep-09	05:00:00	16.3	11-Oct-09	23:00:00	0.0
11-Jun-09	18:00:00	15.7	22-Jul-09	12:00:00	19.2	1-Sep-09	06:00:00	16.0	12-Oct-09	00:00:00	0.0
11-Jun-09	19:00:00	15.5	22-Jul-09	13:00:00	19.5	1-Sep-09	07:00:00	15.7	12-Oct-09	01:00:00	0.0
11-Jun-09	20:00:00	15.7	22-Jul-09	14:00:00	20.0	1-Sep-09	08:00:00	15.4	12-Oct-09	02:00:00	0.0
11-Jun-09	21:00:00	15.4	22-Jul-09	15:00:00	20.6	1-Sep-09	09:00:00	15.2	12-Oct-09	03:00:00	0.0
11-Jun-09	22:00:00	15.2	22-Jul-09	16:00:00	21.1	1-Sep-09	10:00:00	15.2	12-Oct-09	04:00:00	0.0
11-Jun-09	23:00:00	15.1	22-Jul-09	17:00:00	21.4	1-Sep-09	11:00:00	15.5	12-Oct-09	05:00:00	0.0
12-Jun-09	00:00:00	14.9	22-Jul-09	18:00:00	21.4	1-Sep-09	12:00:00	16.0	12-Oct-09	06:00:00	0.0
12-Jun-09	01:00:00	14.8	22-Jul-09	19:00:00	21.4	1-Sep-09	13:00:00	16.8	12-Oct-09	07:00:00	0.0
12-Jun-09	02:00:00	14.6	22-Jul-09	20:00:00	21.4	1-Sep-09	14:00:00	17.5	12-Oct-09	08:00:00	0.0
12-Jun-09	03:00:00	14.3	22-Jul-09	21:00:00	21.1	1-Sep-09	15:00:00	18.4	12-Oct-09	09:00:00	0.0
12-Jun-09	04:00:00	14.2	22-Jul-09	22:00:00	21.0	1-Sep-09	16:00:00	19.2	12-Oct-09	10:00:00	0.0
12-Jun-09	05:00:00	13.9	22-Jul-09	23:00:00	20.6	1-Sep-09	17:00:00	19.9	12-Oct-09	11:00:00	0.0
12-Jun-09	06:00:00	13.5	23-Jul-09	00:00:00	20.3	1-Sep-09	18:00:00	20.2	12-Oct-09	12:00:00	0.0
12-Jun-09	07:00:00	13.3	23-Jul-09	01:00:00	19.9	1-Sep-09	19:00:00	20.0	12-Oct-09	13:00:00	0.2
12-Jun-09	08:00:00	13.2	23-Jul-09	02:00:00	19.5	1-Sep-09	20:00:00	19.7	12-Oct-09	14:00:00	0.4
12-Jun-09	09:00:00	13.2	23-Jul-09	03:00:00	19.2	1-Sep-09	21:00:00	19.2	12-Oct-09	15:00:00	0.5
12-Jun-09	10:00:00	13.3	23-Jul-09	04:00:00	18.9	1-Sep-09	22:00:00	18.9	12-Oct-09	16:00:00	0.7
12-Jun-09	11:00:00	13.8	23-Jul-09	05:00:00	18.6	1-Sep-09	23:00:00	18.4	12-Oct-09	17:00:00	0.7

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
12-Jun-09	12:00:00	14.3	23-Jul-09	06:00:00	18.4	2-Sep-09	00:00:00	18.3	12-Oct-09	18:00:00	0.5
12-Jun-09	13:00:00	14.9	23-Jul-09	07:00:00	18.1	2-Sep-09	01:00:00	18.0	12-Oct-09	19:00:00	0.4
12-Jun-09	14:00:00	15.5	23-Jul-09	08:00:00	18.0	2-Sep-09	02:00:00	18.0	12-Oct-09	20:00:00	0.0
12-Jun-09	15:00:00	16.0	23-Jul-09	09:00:00	18.0	2-Sep-09	03:00:00	17.8	12-Oct-09	21:00:00	0.0
12-Jun-09	16:00:00	16.9	23-Jul-09	10:00:00	18.0	2-Sep-09	04:00:00	17.7	12-Oct-09	22:00:00	0.0
12-Jun-09	17:00:00	17.4	23-Jul-09	11:00:00	18.3	2-Sep-09	05:00:00	17.5	12-Oct-09	23:00:00	0.0
12-Jun-09	18:00:00	18.0	23-Jul-09	12:00:00	18.8	2-Sep-09	06:00:00	17.4	13-Oct-09	00:00:00	0.0
12-Jun-09	19:00:00	18.1	23-Jul-09	13:00:00	19.2	2-Sep-09	07:00:00	17.1	13-Oct-09	01:00:00	0.0
12-Jun-09	20:00:00	18.1	23-Jul-09	14:00:00	19.9	2-Sep-09	08:00:00	16.9	13-Oct-09	02:00:00	0.0
12-Jun-09	21:00:00	18.0	23-Jul-09	15:00:00	20.5	2-Sep-09	09:00:00	16.8	13-Oct-09	03:00:00	0.0
12-Jun-09	22:00:00	17.8	23-Jul-09	16:00:00	21.0	2-Sep-09	10:00:00	16.8	13-Oct-09	04:00:00	0.0
12-Jun-09	23:00:00	17.7	23-Jul-09	17:00:00	21.3	2-Sep-09	11:00:00	16.8	13-Oct-09	05:00:00	0.0
13-Jun-09	00:00:00	17.4	23-Jul-09	18:00:00	21.8	2-Sep-09	12:00:00	16.8	13-Oct-09	06:00:00	0.0
13-Jun-09	01:00:00	17.1	23-Jul-09	19:00:00	21.9	2-Sep-09	13:00:00	16.8	13-Oct-09	07:00:00	0.0
13-Jun-09	02:00:00	16.8	23-Jul-09	20:00:00	21.9	2-Sep-09	14:00:00	16.9	13-Oct-09	08:00:00	0.0
13-Jun-09	03:00:00	16.3	23-Jul-09	21:00:00	21.8	2-Sep-09	15:00:00	16.9	13-Oct-09	09:00:00	0.0
13-Jun-09	04:00:00	15.9	23-Jul-09	22:00:00	21.4	2-Sep-09	16:00:00	17.1	13-Oct-09	10:00:00	0.0
13-Jun-09	05:00:00	15.4	23-Jul-09	23:00:00	21.3	2-Sep-09	17:00:00	17.1	13-Oct-09	11:00:00	0.0
13-Jun-09	06:00:00	14.9	24-Jul-09	00:00:00	21.0	2-Sep-09	18:00:00	17.7	13-Oct-09	12:00:00	0.0
13-Jun-09	07:00:00	14.6	24-Jul-09	01:00:00	20.6	2-Sep-09	19:00:00	18.0	13-Oct-09	13:00:00	0.0
13-Jun-09	08:00:00	14.5	24-Jul-09	02:00:00	20.3	2-Sep-09	20:00:00	17.8	13-Oct-09	14:00:00	0.0
13-Jun-09	09:00:00	14.3	24-Jul-09	03:00:00	20.0	2-Sep-09	21:00:00	17.5	13-Oct-09	15:00:00	0.0
13-Jun-09	10:00:00	14.6	24-Jul-09	04:00:00	19.7	2-Sep-09	22:00:00	17.4	13-Oct-09	16:00:00	0.0
13-Jun-09	11:00:00	15.1	24-Jul-09	05:00:00	19.4	2-Sep-09	23:00:00	17.1	13-Oct-09	17:00:00	0.2
13-Jun-09	12:00:00	15.5	24-Jul-09	06:00:00	19.1	3-Sep-09	00:00:00	16.9	13-Oct-09	18:00:00	0.0
13-Jun-09	13:00:00	16.2	24-Jul-09	07:00:00	18.9	3-Sep-09	01:00:00	16.6	13-Oct-09	19:00:00	0.0
13-Jun-09	14:00:00	16.9	24-Jul-09	08:00:00	18.6	3-Sep-09	02:00:00	16.5	13-Oct-09	20:00:00	0.0
13-Jun-09	15:00:00	17.5	24-Jul-09	09:00:00	18.6	3-Sep-09	03:00:00	16.3	13-Oct-09	21:00:00	0.0
13-Jun-09	16:00:00	18.1	24-Jul-09	10:00:00	18.8	3-Sep-09	04:00:00	16.2	13-Oct-09	22:00:00	0.0
13-Jun-09	17:00:00	18.6	24-Jul-09	11:00:00	19.2	3-Sep-09	05:00:00	16.2	13-Oct-09	23:00:00	0.0
13-Jun-09	18:00:00	18.9	24-Jul-09	12:00:00	19.7	3-Sep-09	06:00:00	16.2	14-Oct-09	00:00:00	0.0
13-Jun-09	19:00:00	19.1	24-Jul-09	13:00:00	20.5	3-Sep-09	07:00:00	16.0	14-Oct-09	01:00:00	0.0
13-Jun-09	20:00:00	18.9	24-Jul-09	14:00:00	21.0	3-Sep-09	08:00:00	15.9	14-Oct-09	02:00:00	0.0
13-Jun-09	21:00:00	18.9	24-Jul-09	15:00:00	21.6	3-Sep-09	09:00:00	16.0	14-Oct-09	03:00:00	0.0
13-Jun-09	22:00:00	18.8	24-Jul-09	16:00:00	21.8	3-Sep-09	10:00:00	16.0	14-Oct-09	04:00:00	0.0
13-Jun-09	23:00:00	18.6	24-Jul-09	17:00:00	22.4	3-Sep-09	11:00:00	16.2	14-Oct-09	05:00:00	0.0
14-Jun-09	00:00:00	18.1	24-Jul-09	18:00:00	22.6	3-Sep-09	12:00:00	16.3	14-Oct-09	06:00:00	0.0
14-Jun-09	01:00:00	17.8	24-Jul-09	19:00:00	22.7	3-Sep-09	13:00:00	16.6	14-Oct-09	07:00:00	0.0
14-Jun-09	02:00:00	17.5	24-Jul-09	20:00:00	22.9	3-Sep-09	14:00:00	17.1	14-Oct-09	08:00:00	0.0
14-Jun-09	03:00:00	17.1	24-Jul-09	21:00:00	22.6	3-Sep-09	15:00:00	18.0	14-Oct-09	09:00:00	0.0
14-Jun-09	04:00:00	16.8	24-Jul-09	22:00:00	22.4	3-Sep-09	16:00:00	18.6	14-Oct-09	10:00:00	0.0
14-Jun-09	05:00:00	16.3	24-Jul-09	23:00:00	22.1	3-Sep-09	17:00:00	18.9	14-Oct-09	11:00:00	0.0
14-Jun-09	06:00:00	16.0	25-Jul-09	00:00:00	21.8	3-Sep-09	18:00:00	19.2	14-Oct-09	12:00:00	0.2
14-Jun-09	07:00:00	15.7	25-Jul-09	01:00:00	21.3	3-Sep-09	19:00:00	19.2	14-Oct-09	13:00:00	0.0
14-Jun-09	08:00:00	15.5	25-Jul-09	02:00:00	21.1	3-Sep-09	20:00:00	19.1	14-Oct-09	14:00:00	0.2
14-Jun-09	09:00:00	15.5	25-Jul-09	03:00:00	20.6	3-Sep-09	21:00:00	18.9	14-Oct-09	15:00:00	0.2
14-Jun-09	10:00:00	15.9	25-Jul-09	04:00:00	20.3	3-Sep-09	22:00:00	18.8	14-Oct-09	16:00:00	0.2
14-Jun-09	11:00:00	16.2	25-Jul-09	05:00:00	20.2	3-Sep-09	23:00:00	18.6	14-Oct-09	17:00:00	0.2
14-Jun-09	12:00:00	16.6	25-Jul-09	06:00:00	19.7	4-Sep-09	00:00:00	18.3	14-Oct-09	18:00:00	0.2
14-Jun-09	13:00:00	17.2	25-Jul-09	07:00:00	19.5	4-Sep-09	01:00:00	18.1	14-Oct-09	19:00:00	0.2
14-Jun-09	14:00:00	17.7	25-Jul-09	08:00:00	19.4	4-Sep-09	02:00:00	17.8	14-Oct-09	20:00:00	0.2
14-Jun-09	15:00:00	18.3	25-Jul-09	09:00:00	19.2	4-Sep-09	03:00:00	17.7	14-Oct-09	21:00:00	0.2
14-Jun-09	16:00:00	18.8	25-Jul-09	10:00:00	19.4	4-Sep-09	04:00:00	17.4	14-Oct-09	22:00:00	0.2
14-Jun-09	17:00:00	19.1	25-Jul-09	11:00:00	19.7	4-Sep-09	05:00:00	17.4	14-Oct-09	23:00:00	0.2
14-Jun-09	18:00:00	19.4	25-Jul-09	12:00:00	20.3	4-Sep-09	06:00:00	17.2	15-Oct-09	00:00:00	0.2
14-Jun-09	19:00:00	19.5	25-Jul-09	13:00:00	21.0	4-Sep-09	07:00:00	17.1	15-Oct-09	01:00:00	0.2
14-Jun-09	20:00:00	19.5	25-Jul-09	14:00:00	21.6	4-Sep-09	08:00:00	16.8	15-Oct-09	02:00:00	0.2
14-Jun-09	21:00:00	19.4	25-Jul-09	15:00:00	22.2	4-Sep-09	09:00:00	16.6	15-Oct-09	03:00:00	0.2
14-Jun-09	22:00:00	19.1	25-Jul-09	16:00:00	22.7	4-Sep-09	10:00:00	16.6	15-Oct-09	04:00:00	0.2

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
14-Jun-09	23:00:00	18.8	25-Jul-09	17:00:00	23.2	4-Sep-09	11:00:00	16.6	15-Oct-09	05:00:00	0.2
15-Jun-09	00:00:00	18.4	25-Jul-09	18:00:00	23.6	4-Sep-09	12:00:00	16.6	15-Oct-09	06:00:00	0.2
15-Jun-09	01:00:00	18.0	25-Jul-09	19:00:00	23.7	4-Sep-09	13:00:00	16.8	15-Oct-09	07:00:00	0.2
15-Jun-09	02:00:00	17.5	25-Jul-09	20:00:00	23.6	4-Sep-09	14:00:00	17.1	15-Oct-09	08:00:00	0.2
15-Jun-09	03:00:00	17.1	25-Jul-09	21:00:00	23.2	4-Sep-09	15:00:00	17.7	15-Oct-09	09:00:00	0.2
15-Jun-09	04:00:00	16.6	25-Jul-09	22:00:00	23.1	4-Sep-09	16:00:00	18.4	15-Oct-09	10:00:00	0.2
15-Jun-09	05:00:00	16.3	25-Jul-09	23:00:00	22.7	4-Sep-09	17:00:00	18.9	15-Oct-09	11:00:00	0.2
15-Jun-09	06:00:00	15.9	26-Jul-09	00:00:00	22.4	4-Sep-09	18:00:00	18.9	15-Oct-09	12:00:00	0.4
15-Jun-09	07:00:00	15.5	26-Jul-09	01:00:00	21.9	4-Sep-09	19:00:00	18.9	15-Oct-09	13:00:00	0.7
15-Jun-09	08:00:00	15.4	26-Jul-09	02:00:00	21.4	4-Sep-09	20:00:00	18.6	15-Oct-09	14:00:00	1.0
15-Jun-09	09:00:00	15.2	26-Jul-09	03:00:00	21.1	4-Sep-09	21:00:00	18.1	15-Oct-09	15:00:00	1.4
15-Jun-09	10:00:00	15.4	26-Jul-09	04:00:00	20.8	4-Sep-09	22:00:00	17.7	15-Oct-09	16:00:00	1.9
15-Jun-09	11:00:00	15.9	26-Jul-09	05:00:00	20.5	4-Sep-09	23:00:00	17.2	15-Oct-09	17:00:00	2.0
15-Jun-09	12:00:00	16.3	26-Jul-09	06:00:00	20.2	5-Sep-09	00:00:00	16.9	15-Oct-09	18:00:00	2.0
15-Jun-09	13:00:00	16.9	26-Jul-09	07:00:00	19.9	5-Sep-09	01:00:00	16.5	15-Oct-09	19:00:00	1.7
15-Jun-09	14:00:00	17.7	26-Jul-09	08:00:00	19.5	5-Sep-09	02:00:00	16.2	15-Oct-09	20:00:00	1.3
15-Jun-09	15:00:00	18.1	26-Jul-09	09:00:00	19.5	5-Sep-09	03:00:00	15.9	15-Oct-09	21:00:00	1.0
15-Jun-09	16:00:00	18.6	26-Jul-09	10:00:00	19.5	5-Sep-09	04:00:00	15.7	15-Oct-09	22:00:00	0.8
15-Jun-09	17:00:00	18.9	26-Jul-09	11:00:00	19.9	5-Sep-09	05:00:00	15.4	15-Oct-09	23:00:00	0.5
15-Jun-09	18:00:00	19.2	26-Jul-09	12:00:00	20.5	5-Sep-09	06:00:00	14.9	16-Oct-09	00:00:00	0.5
15-Jun-09	19:00:00	19.2	26-Jul-09	13:00:00	21.0	5-Sep-09	07:00:00	14.6	16-Oct-09	01:00:00	0.4
15-Jun-09	20:00:00	19.2	26-Jul-09	14:00:00	21.8	5-Sep-09	08:00:00	14.3	16-Oct-09	02:00:00	0.4
15-Jun-09	21:00:00	19.2	26-Jul-09	15:00:00	22.4	5-Sep-09	09:00:00	14.2	16-Oct-09	03:00:00	0.4
15-Jun-09	22:00:00	19.2	26-Jul-09	16:00:00	22.9	5-Sep-09	10:00:00	14.3	16-Oct-09	04:00:00	0.4
15-Jun-09	23:00:00	19.1	26-Jul-09	17:00:00	23.4	5-Sep-09	11:00:00	14.5	16-Oct-09	05:00:00	0.4
16-Jun-09	00:00:00	18.8	26-Jul-09	18:00:00	23.7	5-Sep-09	12:00:00	14.9	16-Oct-09	06:00:00	0.4
16-Jun-09	01:00:00	18.4	26-Jul-09	19:00:00	23.9	5-Sep-09	13:00:00	15.5	16-Oct-09	07:00:00	0.4
16-Jun-09	02:00:00	18.1	26-Jul-09	20:00:00	23.9	5-Sep-09	14:00:00	16.2	16-Oct-09	08:00:00	0.5
16-Jun-09	03:00:00	17.8	26-Jul-09	21:00:00	23.7	5-Sep-09	15:00:00	16.6	16-Oct-09	09:00:00	0.5
16-Jun-09	04:00:00	17.5	26-Jul-09	22:00:00	23.4	5-Sep-09	16:00:00	16.9	16-Oct-09	10:00:00	0.5
16-Jun-09	05:00:00	17.2	26-Jul-09	23:00:00	23.1	5-Sep-09	17:00:00	16.9	16-Oct-09	11:00:00	0.7
16-Jun-09	06:00:00	16.9	27-Jul-09	00:00:00	22.7	5-Sep-09	18:00:00	16.9	16-Oct-09	12:00:00	1.0
16-Jun-09	07:00:00	16.8	27-Jul-09	01:00:00	22.4	5-Sep-09	19:00:00	16.8	16-Oct-09	13:00:00	1.3
16-Jun-09	08:00:00	16.6	27-Jul-09	02:00:00	21.9	5-Sep-09	20:00:00	16.6	16-Oct-09	14:00:00	1.4
16-Jun-09	09:00:00	16.5	27-Jul-09	03:00:00	21.6	5-Sep-09	21:00:00	16.5	16-Oct-09	15:00:00	1.7
16-Jun-09	10:00:00	16.6	27-Jul-09	04:00:00	21.3	5-Sep-09	22:00:00	16.3	16-Oct-09	16:00:00	2.0
16-Jun-09	11:00:00	16.8	27-Jul-09	05:00:00	21.0	5-Sep-09	23:00:00	16.2	16-Oct-09	17:00:00	2.3
16-Jun-09	12:00:00	17.1	27-Jul-09	06:00:00	20.6	6-Sep-09	00:00:00	16.0	16-Oct-09	18:00:00	2.5
16-Jun-09	13:00:00	17.2	27-Jul-09	07:00:00	20.3	6-Sep-09	01:00:00	15.9	16-Oct-09	19:00:00	2.5
16-Jun-09	14:00:00	17.5	27-Jul-09	08:00:00	20.0	6-Sep-09	02:00:00	15.7	16-Oct-09	20:00:00	2.3
16-Jun-09	15:00:00	17.8	27-Jul-09	09:00:00	20.0	6-Sep-09	03:00:00	15.7	16-Oct-09	21:00:00	2.2
16-Jun-09	16:00:00	18.3	27-Jul-09	10:00:00	20.0	6-Sep-09	04:00:00	15.5	16-Oct-09	22:00:00	2.2
16-Jun-09	17:00:00	18.6	27-Jul-09	11:00:00	20.3	6-Sep-09	05:00:00	15.4	16-Oct-09	23:00:00	2.2
16-Jun-09	18:00:00	19.1	27-Jul-09	12:00:00	21.0	6-Sep-09	06:00:00	15.4	17-Oct-09	00:00:00	2.2
16-Jun-09	19:00:00	19.2	27-Jul-09	13:00:00	21.6	6-Sep-09	07:00:00	15.2	17-Oct-09	01:00:00	2.0
16-Jun-09	20:00:00	19.2	27-Jul-09	14:00:00	22.4	6-Sep-09	08:00:00	15.1	17-Oct-09	02:00:00	1.9
16-Jun-09	21:00:00	19.2	27-Jul-09	15:00:00	23.1	6-Sep-09	09:00:00	15.1	17-Oct-09	03:00:00	1.9
16-Jun-09	22:00:00	18.9	27-Jul-09	16:00:00	23.7	6-Sep-09	10:00:00	14.9	17-Oct-09	04:00:00	1.9
16-Jun-09	23:00:00	18.8	27-Jul-09	17:00:00	23.7	6-Sep-09	11:00:00	14.9	17-Oct-09	05:00:00	1.7
17-Jun-09	00:00:00	18.3	27-Jul-09	18:00:00	24.0	6-Sep-09	12:00:00	14.8	17-Oct-09	06:00:00	1.7
17-Jun-09	01:00:00	18.0	27-Jul-09	19:00:00	24.0	6-Sep-09	13:00:00	14.6	17-Oct-09	07:00:00	1.6
17-Jun-09	02:00:00	17.7	27-Jul-09	20:00:00	24.2	6-Sep-09	14:00:00	14.6	17-Oct-09	08:00:00	1.4
17-Jun-09	03:00:00	17.4	27-Jul-09	21:00:00	24.0	6-Sep-09	15:00:00	14.5	17-Oct-09	09:00:00	1.3
17-Jun-09	04:00:00	17.1	27-Jul-09	22:00:00	23.7	6-Sep-09	16:00:00	14.5	17-Oct-09	10:00:00	1.3
17-Jun-09	05:00:00	16.8	27-Jul-09	23:00:00	23.6	6-Sep-09	17:00:00	14.5	17-Oct-09	11:00:00	1.3
17-Jun-09	06:00:00	16.6	28-Jul-09	00:00:00	23.2	6-Sep-09	18:00:00	14.6	17-Oct-09	12:00:00	1.4
17-Jun-09	07:00:00	16.5	28-Jul-09	01:00:00	22.9	6-Sep-09	19:00:00	14.6	17-Oct-09	13:00:00	1.9
17-Jun-09	08:00:00	16.3	28-Jul-09	02:00:00	22.6	6-Sep-09	20:00:00	14.5	17-Oct-09	14:00:00	2.3
17-Jun-09	09:00:00	16.3	28-Jul-09	03:00:00	22.2	6-Sep-09	21:00:00	14.2	17-Oct-09	15:00:00	3.1

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
17-Jun-09	10:00:00	16.5	28-Jul-09	04:00:00	21.9	6-Sep-09	22:00:00	14.0	17-Oct-09	16:00:00	3.5
17-Jun-09	11:00:00	16.8	28-Jul-09	05:00:00	21.8	6-Sep-09	23:00:00	13.9	17-Oct-09	17:00:00	3.8
17-Jun-09	12:00:00	17.2	28-Jul-09	06:00:00	21.4	7-Sep-09	00:00:00	13.8	17-Oct-09	18:00:00	3.8
17-Jun-09	13:00:00	17.5	28-Jul-09	07:00:00	21.3	7-Sep-09	01:00:00	13.6	17-Oct-09	19:00:00	3.5
17-Jun-09	14:00:00	17.8	28-Jul-09	08:00:00	21.0	7-Sep-09	02:00:00	13.5	17-Oct-09	20:00:00	3.2
17-Jun-09	15:00:00	18.8	28-Jul-09	09:00:00	21.0	7-Sep-09	03:00:00	13.3	17-Oct-09	21:00:00	2.8
17-Jun-09	16:00:00	18.9	28-Jul-09	10:00:00	21.0	7-Sep-09	04:00:00	13.2	17-Oct-09	22:00:00	2.6
17-Jun-09	17:00:00	19.2	28-Jul-09	11:00:00	21.3	7-Sep-09	05:00:00	13.0	17-Oct-09	23:00:00	2.3
17-Jun-09	18:00:00	19.7	28-Jul-09	12:00:00	21.8	7-Sep-09	06:00:00	12.9	18-Oct-09	00:00:00	2.2
17-Jun-09	19:00:00	19.9	28-Jul-09	13:00:00	22.6	7-Sep-09	07:00:00	12.7	18-Oct-09	01:00:00	2.0
17-Jun-09	20:00:00	19.5	28-Jul-09	14:00:00	23.2	7-Sep-09	08:00:00	12.6	18-Oct-09	02:00:00	1.9
17-Jun-09	21:00:00	19.2	28-Jul-09	15:00:00	23.7	7-Sep-09	09:00:00	12.6	18-Oct-09	03:00:00	1.7
17-Jun-09	22:00:00	19.1	28-Jul-09	16:00:00	24.4	7-Sep-09	10:00:00	12.7	18-Oct-09	04:00:00	1.6
17-Jun-09	23:00:00	18.9	28-Jul-09	17:00:00	24.7	7-Sep-09	11:00:00	13.0	18-Oct-09	05:00:00	1.6
18-Jun-09	00:00:00	18.4	28-Jul-09	18:00:00	25.1	7-Sep-09	12:00:00	13.3	18-Oct-09	06:00:00	1.6
18-Jun-09	01:00:00	18.1	28-Jul-09	19:00:00	25.1	7-Sep-09	13:00:00	13.8	18-Oct-09	07:00:00	1.6
18-Jun-09	02:00:00	17.7	28-Jul-09	20:00:00	24.7	7-Sep-09	14:00:00	13.9	18-Oct-09	08:00:00	1.4
18-Jun-09	03:00:00	17.4	28-Jul-09	21:00:00	24.4	7-Sep-09	15:00:00	14.0	18-Oct-09	09:00:00	1.4
18-Jun-09	04:00:00	17.1	28-Jul-09	22:00:00	24.0	7-Sep-09	16:00:00	14.2	18-Oct-09	10:00:00	1.3
18-Jun-09	05:00:00	16.6	28-Jul-09	23:00:00	23.7	7-Sep-09	17:00:00	14.2	18-Oct-09	11:00:00	1.3
18-Jun-09	06:00:00	16.3	29-Jul-09	00:00:00	23.2	7-Sep-09	18:00:00	14.2	18-Oct-09	12:00:00	1.4
18-Jun-09	07:00:00	16.0	29-Jul-09	01:00:00	22.6	7-Sep-09	19:00:00	14.0	18-Oct-09	13:00:00	1.6
18-Jun-09	08:00:00	15.7	29-Jul-09	02:00:00	22.1	7-Sep-09	20:00:00	13.9	18-Oct-09	14:00:00	2.2
18-Jun-09	09:00:00	15.7	29-Jul-09	03:00:00	21.8	7-Sep-09	21:00:00	13.8	18-Oct-09	15:00:00	2.6
18-Jun-09	10:00:00	15.9	29-Jul-09	04:00:00	21.3	7-Sep-09	22:00:00	13.8	18-Oct-09	16:00:00	3.1
18-Jun-09	11:00:00	16.2	29-Jul-09	05:00:00	21.0	7-Sep-09	23:00:00	13.6	18-Oct-09	17:00:00	3.4
18-Jun-09	12:00:00	16.6	29-Jul-09	06:00:00	20.6	8-Sep-09	00:00:00	13.5	18-Oct-09	18:00:00	3.4
18-Jun-09	13:00:00	17.2	29-Jul-09	07:00:00	20.3	8-Sep-09	01:00:00	13.3	18-Oct-09	19:00:00	3.2
18-Jun-09	14:00:00	17.8	29-Jul-09	08:00:00	20.2	8-Sep-09	02:00:00	13.3	18-Oct-09	20:00:00	3.1
18-Jun-09	15:00:00	18.4	29-Jul-09	09:00:00	20.0	8-Sep-09	03:00:00	13.2	18-Oct-09	21:00:00	2.9
18-Jun-09	16:00:00	18.9	29-Jul-09	10:00:00	20.2	8-Sep-09	04:00:00	13.0	18-Oct-09	22:00:00	2.6
18-Jun-09	17:00:00	19.2	29-Jul-09	11:00:00	20.5	8-Sep-09	05:00:00	13.0	18-Oct-09	23:00:00	2.5
18-Jun-09	18:00:00	19.2	29-Jul-09	12:00:00	21.0	8-Sep-09	06:00:00	13.0	19-Oct-09	00:00:00	2.3
18-Jun-09	19:00:00	18.9	29-Jul-09	13:00:00	21.6	8-Sep-09	07:00:00	12.9	19-Oct-09	01:00:00	2.2
18-Jun-09	20:00:00	18.9	29-Jul-09	14:00:00	22.4	8-Sep-09	08:00:00	12.7	19-Oct-09	02:00:00	2.0
18-Jun-09	21:00:00	18.8	29-Jul-09	15:00:00	23.1	8-Sep-09	09:00:00	12.7	19-Oct-09	03:00:00	1.9
18-Jun-09	22:00:00	18.4	29-Jul-09	16:00:00	23.7	8-Sep-09	10:00:00	12.9	19-Oct-09	04:00:00	1.7
18-Jun-09	23:00:00	18.3	29-Jul-09	17:00:00	24.2	8-Sep-09	11:00:00	13.0	19-Oct-09	05:00:00	1.6
19-Jun-09	00:00:00	18.0	29-Jul-09	18:00:00	24.5	8-Sep-09	12:00:00	13.3	19-Oct-09	06:00:00	1.4
19-Jun-09	01:00:00	17.5	29-Jul-09	19:00:00	24.5	8-Sep-09	13:00:00	13.8	19-Oct-09	07:00:00	1.3
19-Jun-09	02:00:00	17.2	29-Jul-09	20:00:00	24.5	8-Sep-09	14:00:00	14.3	19-Oct-09	08:00:00	1.3
19-Jun-09	03:00:00	16.8	29-Jul-09	21:00:00	24.2	8-Sep-09	15:00:00	14.8	19-Oct-09	09:00:00	1.3
19-Jun-09	04:00:00	16.5	29-Jul-09	22:00:00	24.0	8-Sep-09	16:00:00	14.6	19-Oct-09	10:00:00	1.3
19-Jun-09	05:00:00	16.0	29-Jul-09	23:00:00	23.7	8-Sep-09	17:00:00	14.8	19-Oct-09	11:00:00	1.4
19-Jun-09	06:00:00	15.7	30-Jul-09	00:00:00	23.2	8-Sep-09	18:00:00	15.1	19-Oct-09	12:00:00	1.7
19-Jun-09	07:00:00	15.4	30-Jul-09	01:00:00	22.7	8-Sep-09	19:00:00	15.1	19-Oct-09	13:00:00	2.0
19-Jun-09	08:00:00	15.1	30-Jul-09	02:00:00	22.4	8-Sep-09	20:00:00	15.1	19-Oct-09	14:00:00	2.5
19-Jun-09	09:00:00	15.1	30-Jul-09	03:00:00	21.9	8-Sep-09	21:00:00	14.8	19-Oct-09	15:00:00	2.9
19-Jun-09	10:00:00	15.4	30-Jul-09	04:00:00	21.6	8-Sep-09	22:00:00	14.5	19-Oct-09	16:00:00	3.4
19-Jun-09	11:00:00	15.7	30-Jul-09	05:00:00	21.3	8-Sep-09	23:00:00	14.2	19-Oct-09	17:00:00	3.7
19-Jun-09	12:00:00	16.5	30-Jul-09	06:00:00	21.0	9-Sep-09	00:00:00	13.9	19-Oct-09	18:00:00	3.7
19-Jun-09	13:00:00	17.1	30-Jul-09	07:00:00	20.6	9-Sep-09	01:00:00	13.6	19-Oct-09	19:00:00	3.4
19-Jun-09	14:00:00	17.5	30-Jul-09	08:00:00	20.5	9-Sep-09	02:00:00	13.3	19-Oct-09	20:00:00	3.1
19-Jun-09	15:00:00	18.1	30-Jul-09	09:00:00	20.3	9-Sep-09	03:00:00	13.2	19-Oct-09	21:00:00	2.9
19-Jun-09	16:00:00	18.9	30-Jul-09	10:00:00	20.3	9-Sep-09	04:00:00	12.9	19-Oct-09	22:00:00	2.8
19-Jun-09	17:00:00	19.2	30-Jul-09	11:00:00	20.3	9-Sep-09	05:00:00	12.6	19-Oct-09	23:00:00	2.6
19-Jun-09	18:00:00	19.2	30-Jul-09	12:00:00	20.5	9-Sep-09	06:00:00	12.3	20-Oct-09	00:00:00	2.3
19-Jun-09	19:00:00	19.4	30-Jul-09	13:00:00	21.3	9-Sep-09	07:00:00	12.0	20-Oct-09	01:00:00	2.2
19-Jun-09	20:00:00	19.5	30-Jul-09	14:00:00	22.1	9-Sep-09	08:00:00	11.8	20-Oct-09	02:00:00	2.0

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
19-Jun-09	21:00:00	19.2	30-Jul-09	15:00:00	22.7	9-Sep-09	09:00:00	11.7	20-Oct-09	03:00:00	1.9
19-Jun-09	22:00:00	19.1	30-Jul-09	16:00:00	23.4	9-Sep-09	10:00:00	11.7	20-Oct-09	04:00:00	1.9
19-Jun-09	23:00:00	18.8	30-Jul-09	17:00:00	24.0	9-Sep-09	11:00:00	11.7	20-Oct-09	05:00:00	1.7
20-Jun-09	00:00:00	18.3	30-Jul-09	18:00:00	24.5	9-Sep-09	12:00:00	11.8	20-Oct-09	06:00:00	1.7
20-Jun-09	01:00:00	18.0	30-Jul-09	19:00:00	24.5	9-Sep-09	13:00:00	12.1	20-Oct-09	07:00:00	1.6
20-Jun-09	02:00:00	17.7	30-Jul-09	20:00:00	24.5	9-Sep-09	14:00:00	12.3	20-Oct-09	08:00:00	1.6
20-Jun-09	03:00:00	17.2	30-Jul-09	21:00:00	24.4	9-Sep-09	15:00:00	12.6	20-Oct-09	09:00:00	1.6
20-Jun-09	04:00:00	16.9	30-Jul-09	22:00:00	24.0	9-Sep-09	16:00:00	12.9	20-Oct-09	10:00:00	1.6
20-Jun-09	05:00:00	16.8	30-Jul-09	23:00:00	23.9	9-Sep-09	17:00:00	13.0	20-Oct-09	11:00:00	1.6
20-Jun-09	06:00:00	16.5	31-Jul-09	00:00:00	23.4	9-Sep-09	18:00:00	12.9	20-Oct-09	12:00:00	1.7
20-Jun-09	07:00:00	16.2	31-Jul-09	01:00:00	23.1	9-Sep-09	19:00:00	12.9	20-Oct-09	13:00:00	1.9
20-Jun-09	08:00:00	16.0	31-Jul-09	02:00:00	22.6	9-Sep-09	20:00:00	12.9	20-Oct-09	14:00:00	2.0
20-Jun-09	09:00:00	15.9	31-Jul-09	03:00:00	22.2	9-Sep-09	21:00:00	12.9	20-Oct-09	15:00:00	2.3
20-Jun-09	10:00:00	15.7	31-Jul-09	04:00:00	21.8	9-Sep-09	22:00:00	12.7	20-Oct-09	16:00:00	2.5
20-Jun-09	11:00:00	15.9	31-Jul-09	05:00:00	21.4	9-Sep-09	23:00:00	12.7	20-Oct-09	17:00:00	2.6
20-Jun-09	12:00:00	16.3	31-Jul-09	06:00:00	21.1	10-Sep-09	00:00:00	12.6	20-Oct-09	18:00:00	2.6
20-Jun-09	13:00:00	16.8	31-Jul-09	07:00:00	20.8	10-Sep-09	01:00:00	12.6	20-Oct-09	19:00:00	2.6
20-Jun-09	14:00:00	16.9	31-Jul-09	08:00:00	20.6	10-Sep-09	02:00:00	12.6	20-Oct-09	20:00:00	2.6
20-Jun-09	15:00:00	17.4	31-Jul-09	09:00:00	20.6	10-Sep-09	03:00:00	12.6	20-Oct-09	21:00:00	2.6
20-Jun-09	16:00:00	17.8	31-Jul-09	10:00:00	20.8	10-Sep-09	04:00:00	12.3	20-Oct-09	22:00:00	2.6
20-Jun-09	17:00:00	18.1	31-Jul-09	11:00:00	21.1	10-Sep-09	05:00:00	12.3	20-Oct-09	23:00:00	2.6
20-Jun-09	18:00:00	18.4	31-Jul-09	12:00:00	21.6	10-Sep-09	06:00:00	12.3	21-Oct-09	00:00:00	2.6
20-Jun-09	19:00:00	18.4	31-Jul-09	13:00:00	22.2	10-Sep-09	07:00:00	12.1	21-Oct-09	01:00:00	2.5
20-Jun-09	20:00:00	18.3	31-Jul-09	14:00:00	23.1	10-Sep-09	08:00:00	12.1	21-Oct-09	02:00:00	2.5
20-Jun-09	21:00:00	18.1	31-Jul-09	15:00:00	23.7	10-Sep-09	09:00:00	12.1	21-Oct-09	03:00:00	2.5
20-Jun-09	22:00:00	17.5	31-Jul-09	16:00:00	24.4	10-Sep-09	10:00:00	12.1	21-Oct-09	04:00:00	2.5
20-Jun-09	23:00:00	17.2	31-Jul-09	17:00:00	25.1	10-Sep-09	11:00:00	12.4	21-Oct-09	05:00:00	2.5
21-Jun-09	00:00:00	16.9	31-Jul-09	18:00:00	25.4	10-Sep-09	12:00:00	12.9	21-Oct-09	06:00:00	2.3
21-Jun-09	01:00:00	16.6	31-Jul-09	19:00:00	25.6	10-Sep-09	13:00:00	13.6	21-Oct-09	07:00:00	2.5
21-Jun-09	02:00:00	16.2	31-Jul-09	20:00:00	25.6	10-Sep-09	14:00:00	14.3	21-Oct-09	08:00:00	2.5
21-Jun-09	03:00:00	15.7	31-Jul-09	21:00:00	25.6	10-Sep-09	15:00:00	14.8	21-Oct-09	09:00:00	2.5
21-Jun-09	04:00:00	15.4	31-Jul-09	22:00:00	25.2	10-Sep-09	16:00:00	15.2	21-Oct-09	10:00:00	2.3
21-Jun-09	05:00:00	14.9	31-Jul-09	23:00:00	25.1	10-Sep-09	17:00:00	15.5	21-Oct-09	11:00:00	2.5
21-Jun-09	06:00:00	14.5	1-Aug-09	00:00:00	24.7	10-Sep-09	18:00:00	15.5	21-Oct-09	12:00:00	2.5
21-Jun-09	07:00:00	14.2	1-Aug-09	01:00:00	24.2	10-Sep-09	19:00:00	15.4	21-Oct-09	13:00:00	2.6
21-Jun-09	08:00:00	14.0	1-Aug-09	02:00:00	23.9	10-Sep-09	20:00:00	15.1	21-Oct-09	14:00:00	2.6
21-Jun-09	09:00:00	14.0	1-Aug-09	03:00:00	23.4	10-Sep-09	21:00:00	14.8	21-Oct-09	15:00:00	2.8
21-Jun-09	10:00:00	14.2	1-Aug-09	04:00:00	23.1	10-Sep-09	22:00:00	14.5	21-Oct-09	16:00:00	2.8
21-Jun-09	11:00:00	14.6	1-Aug-09	05:00:00	22.6	10-Sep-09	23:00:00	14.2	21-Oct-09	17:00:00	2.9
21-Jun-09	12:00:00	15.2	1-Aug-09	06:00:00	22.2	11-Sep-09	00:00:00	13.8	21-Oct-09	18:00:00	2.9
21-Jun-09	13:00:00	15.9	1-Aug-09	07:00:00	21.9	11-Sep-09	01:00:00	13.5	21-Oct-09	19:00:00	2.9
21-Jun-09	14:00:00	16.5	1-Aug-09	08:00:00	21.8	11-Sep-09	02:00:00	13.3	21-Oct-09	20:00:00	2.9
21-Jun-09	15:00:00	17.1	1-Aug-09	09:00:00	21.6	11-Sep-09	03:00:00	13.0	21-Oct-09	21:00:00	2.9
21-Jun-09	16:00:00	17.5	1-Aug-09	10:00:00	21.8	11-Sep-09	04:00:00	12.9	21-Oct-09	22:00:00	2.9
21-Jun-09	17:00:00	18.0	1-Aug-09	11:00:00	22.1	11-Sep-09	05:00:00	12.6	21-Oct-09	23:00:00	2.8
21-Jun-09	18:00:00	18.1	1-Aug-09	12:00:00	22.4	11-Sep-09	06:00:00	12.4	22-Oct-09	00:00:00	2.8
21-Jun-09	19:00:00	18.1	1-Aug-09	13:00:00	23.1	11-Sep-09	07:00:00	12.3	22-Oct-09	01:00:00	2.8
21-Jun-09	20:00:00	18.4	1-Aug-09	14:00:00	23.6	11-Sep-09	08:00:00	12.1	22-Oct-09	02:00:00	2.6
21-Jun-09	21:00:00	18.1	1-Aug-09	15:00:00	24.0	11-Sep-09	09:00:00	12.1	22-Oct-09	03:00:00	2.5
21-Jun-09	22:00:00	17.8	1-Aug-09	16:00:00	24.5	11-Sep-09	10:00:00	12.1	22-Oct-09	04:00:00	2.5
21-Jun-09	23:00:00	17.4	1-Aug-09	17:00:00	24.9	11-Sep-09	11:00:00	12.4	22-Oct-09	05:00:00	2.3
22-Jun-09	00:00:00	16.9	1-Aug-09	18:00:00	25.2	11-Sep-09	12:00:00	12.7	22-Oct-09	06:00:00	2.3
22-Jun-09	01:00:00	16.5	1-Aug-09	19:00:00	25.2	11-Sep-09	13:00:00	13.5	22-Oct-09	07:00:00	2.3
22-Jun-09	02:00:00	16.2	1-Aug-09	20:00:00	25.2	11-Sep-09	14:00:00	14.2	22-Oct-09	08:00:00	2.2
22-Jun-09	03:00:00	15.7	1-Aug-09	21:00:00	25.1	11-Sep-09	15:00:00	15.1	22-Oct-09	09:00:00	2.0
22-Jun-09	04:00:00	15.2	1-Aug-09	22:00:00	24.7	11-Sep-09	16:00:00	15.4	22-Oct-09	10:00:00	1.9
22-Jun-09	05:00:00	14.8	1-Aug-09	23:00:00	24.5	11-Sep-09	17:00:00	15.9	22-Oct-09	11:00:00	1.9
22-Jun-09	06:00:00	14.5	2-Aug-09	00:00:00	24.2	11-Sep-09	18:00:00	16.3	22-Oct-09	12:00:00	1.9
22-Jun-09	07:00:00	14.0	2-Aug-09	01:00:00	23.9	11-Sep-09	19:00:00	16.3	22-Oct-09	13:00:00	2.0

Appendix C Table C2B. Temperature data collected on the lower Moberly River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
22-Jun-09	08:00:00	13.9	2-Aug-09	02:00:00	23.6	11-Sep-09	20:00:00	15.9	22-Oct-09	14:00:00	2.3
22-Jun-09	09:00:00	13.8	2-Aug-09	03:00:00	23.1	11-Sep-09	21:00:00	15.7	22-Oct-09	15:00:00	2.8
22-Jun-09	10:00:00	13.9	2-Aug-09	04:00:00	22.7	11-Sep-09	22:00:00	15.5	22-Oct-09	16:00:00	3.4
22-Jun-09	11:00:00	14.3	2-Aug-09	05:00:00	22.4	11-Sep-09	23:00:00	15.2	22-Oct-09	17:00:00	3.7
22-Jun-09	12:00:00	14.8	2-Aug-09	06:00:00	22.1	12-Sep-09	00:00:00	15.1	22-Oct-09	18:00:00	3.7
22-Jun-09	13:00:00	15.4	2-Aug-09	07:00:00	21.8	12-Sep-09	01:00:00	14.8	22-Oct-09	19:00:00	3.4
22-Jun-09	14:00:00	16.0	2-Aug-09	08:00:00	21.6	12-Sep-09	02:00:00	14.5	22-Oct-09	20:00:00	3.1
22-Jun-09	15:00:00	16.8	2-Aug-09	09:00:00	21.6	12-Sep-09	03:00:00	14.3	22-Oct-09	21:00:00	2.9
22-Jun-09	16:00:00	17.4	2-Aug-09	10:00:00	21.6	12-Sep-09	04:00:00	14.0	22-Oct-09	22:00:00	2.8
22-Jun-09	17:00:00	17.7	2-Aug-09	11:00:00	21.8	12-Sep-09	05:00:00	13.8	22-Oct-09	23:00:00	2.6
22-Jun-09	18:00:00	18.1	2-Aug-09	12:00:00	21.9	12-Sep-09	06:00:00	13.6	23-Oct-09	00:00:00	2.5
22-Jun-09	19:00:00	18.3	2-Aug-09	13:00:00	22.4	12-Sep-09	07:00:00	13.3	23-Oct-09	01:00:00	2.5
22-Jun-09	20:00:00	18.3	2-Aug-09	14:00:00	22.7	12-Sep-09	08:00:00	13.0	23-Oct-09	02:00:00	2.3
22-Jun-09	21:00:00	18.3	2-Aug-09	15:00:00	22.7	12-Sep-09	09:00:00	13.0	23-Oct-09	03:00:00	2.2
22-Jun-09	22:00:00	18.1	2-Aug-09	16:00:00	22.9	12-Sep-09	10:00:00	13.0	23-Oct-09	04:00:00	2.2
22-Jun-09	23:00:00	18.0	2-Aug-09	17:00:00	22.7	12-Sep-09	11:00:00	13.2	23-Oct-09	05:00:00	2.0
23-Jun-09	00:00:00	17.5	2-Aug-09	18:00:00	22.6	12-Sep-09	12:00:00	13.5	23-Oct-09	06:00:00	2.0
23-Jun-09	01:00:00	17.2	2-Aug-09	19:00:00	22.6	12-Sep-09	13:00:00	14.0	23-Oct-09	07:00:00	2.2
23-Jun-09	02:00:00	16.8	2-Aug-09	20:00:00	22.4	12-Sep-09	14:00:00	14.9	23-Oct-09	08:00:00	2.2
23-Jun-09	03:00:00	16.5	2-Aug-09	21:00:00	22.1	12-Sep-09	15:00:00	15.7	23-Oct-09	09:00:00	2.2
23-Jun-09	04:00:00	16.2	2-Aug-09	22:00:00	21.9	12-Sep-09	16:00:00	16.5	23-Oct-09	10:00:00	2.2
23-Jun-09	05:00:00	15.7	2-Aug-09	23:00:00	21.6	12-Sep-09	17:00:00	16.9	23-Oct-09	11:00:00	2.3
23-Jun-09	06:00:00	15.2	3-Aug-09	00:00:00	21.3	12-Sep-09	18:00:00	17.2	23-Oct-09	12:00:00	2.5
23-Jun-09	07:00:00	14.9	3-Aug-09	01:00:00	21.0	12-Sep-09	19:00:00	17.2	23-Oct-09	13:00:00	2.8
23-Jun-09	08:00:00	14.8	3-Aug-09	02:00:00	20.6	12-Sep-09	20:00:00	16.9	23-Oct-09	14:00:00	3.2
23-Jun-09	09:00:00	14.8	3-Aug-09	03:00:00	20.5	12-Sep-09	21:00:00	16.5	23-Oct-09	15:00:00	4.0
23-Jun-09	10:00:00	14.9	3-Aug-09	04:00:00	20.2	12-Sep-09	22:00:00	16.2	23-Oct-09	16:00:00	4.3
23-Jun-09	11:00:00	15.4	3-Aug-09	05:00:00	19.9	12-Sep-09	23:00:00	15.7	23-Oct-09	17:00:00	4.6
23-Jun-09	12:00:00	16.0	3-Aug-09	06:00:00	19.7	13-Sep-09	00:00:00	15.5	23-Oct-09	18:00:00	4.6
23-Jun-09	13:00:00	16.6	3-Aug-09	07:00:00	19.4	13-Sep-09	01:00:00	15.2	23-Oct-09	19:00:00	4.6
23-Jun-09	14:00:00	17.2	3-Aug-09	08:00:00	19.2	13-Sep-09	02:00:00	14.9	23-Oct-09	20:00:00	4.3
23-Jun-09	15:00:00	17.8	3-Aug-09	09:00:00	19.1	13-Sep-09	03:00:00	14.6	23-Oct-09	21:00:00	4.0
23-Jun-09	16:00:00	18.3	3-Aug-09	10:00:00	18.9	13-Sep-09	04:00:00	14.5	23-Oct-09	22:00:00	3.8
23-Jun-09	17:00:00	18.9	3-Aug-09	11:00:00	18.9	13-Sep-09	05:00:00	14.2	23-Oct-09	23:00:00	3.8

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
25-May-09	00:00:00	8.4	27-Jun-09	18:00:00	10.2	9-Aug-09	12:00:00	21.9	12-Sep-09	06:00:00	11.5
25-May-09	01:00:00	8.3	27-Jun-09	19:00:00	10.5	9-Aug-09	13:00:00	24.0	12-Sep-09	07:00:00	11.2
25-May-09	02:00:00	8.1	27-Jun-09	20:00:00	10.9	9-Aug-09	14:00:00	23.6	12-Sep-09	08:00:00	11.1
25-May-09	03:00:00	8.0	27-Jun-09	21:00:00	11.1	9-Aug-09	15:00:00	22.2	12-Sep-09	09:00:00	10.9
25-May-09	04:00:00	7.8	27-Jun-09	22:00:00	11.2	9-Aug-09	16:00:00	21.1	12-Sep-09	10:00:00	10.9
25-May-09	05:00:00	7.5	27-Jun-09	23:00:00	11.1	9-Aug-09	17:00:00	18.8	12-Sep-09	11:00:00	11.2
25-May-09	06:00:00	7.4	28-Jun-09	00:00:00	11.1	9-Aug-09	18:00:00	18.9	12-Sep-09	12:00:00	11.7
25-May-09	07:00:00	7.1	28-Jun-09	01:00:00	11.1	9-Aug-09	19:00:00	17.4	12-Sep-09	13:00:00	12.1
25-May-09	08:00:00	7.0	28-Jun-09	02:00:00	10.9	9-Aug-09	20:00:00	16.5	12-Sep-09	14:00:00	12.9
25-May-09	09:00:00	7.0	28-Jun-09	03:00:00	10.8	9-Aug-09	21:00:00	15.7	12-Sep-09	15:00:00	13.5
25-May-09	10:00:00	7.3	28-Jun-09	04:00:00	10.5	9-Aug-09	22:00:00	14.9	12-Sep-09	16:00:00	14.0
25-May-09	11:00:00	7.7	28-Jun-09	05:00:00	10.2	9-Aug-09	23:00:00	14.3	12-Sep-09	17:00:00	14.5
25-May-09	12:00:00	8.3	28-Jun-09	06:00:00	10.1	10-Aug-09	00:00:00	13.6	12-Sep-09	18:00:00	14.6
25-May-09	13:00:00	8.9	28-Jun-09	07:00:00	9.8	10-Aug-09	01:00:00	12.6	12-Sep-09	19:00:00	14.8
25-May-09	14:00:00	9.5	28-Jun-09	08:00:00	9.6	10-Aug-09	02:00:00	12.6	12-Sep-09	20:00:00	14.6
25-May-09	15:00:00	9.6	28-Jun-09	09:00:00	9.6	10-Aug-09	03:00:00	12.7	12-Sep-09	21:00:00	14.5
25-May-09	16:00:00	10.1	28-Jun-09	10:00:00	9.8	10-Aug-09	04:00:00	12.4	12-Sep-09	22:00:00	14.2
25-May-09	17:00:00	10.6	28-Jun-09	11:00:00	9.9	10-Aug-09	05:00:00	12.3	12-Sep-09	23:00:00	13.9
25-May-09	18:00:00	11.1	28-Jun-09	12:00:00	10.3	10-Aug-09	06:00:00	12.4	13-Sep-09	00:00:00	13.6
25-May-09	19:00:00	11.2	28-Jun-09	13:00:00	10.8	10-Aug-09	07:00:00	12.3	13-Sep-09	01:00:00	13.3
25-May-09	20:00:00	10.9	28-Jun-09	14:00:00	11.2	10-Aug-09	08:00:00	12.1	13-Sep-09	02:00:00	13.0
25-May-09	21:00:00	10.6	28-Jun-09	15:00:00	11.8	10-Aug-09	09:00:00	13.3	13-Sep-09	03:00:00	12.9
25-May-09	22:00:00	10.5	28-Jun-09	16:00:00	12.3	10-Aug-09	10:00:00	15.1	13-Sep-09	04:00:00	12.6
25-May-09	23:00:00	10.3	28-Jun-09	17:00:00	12.4	10-Aug-09	11:00:00	16.0	13-Sep-09	05:00:00	12.3
26-May-09	00:00:00	10.1	28-Jun-09	18:00:00	12.6	10-Aug-09	12:00:00	16.8	13-Sep-09	06:00:00	12.1
26-May-09	01:00:00	9.8	28-Jun-09	19:00:00	12.7	10-Aug-09	13:00:00	19.2	13-Sep-09	07:00:00	11.8
26-May-09	02:00:00	9.6	28-Jun-09	20:00:00	12.7	10-Aug-09	14:00:00	14.2	13-Sep-09	08:00:00	11.7
26-May-09	03:00:00	9.3	28-Jun-09	21:00:00	12.6	10-Aug-09	15:00:00	14.6	13-Sep-09	09:00:00	11.4
26-May-09	04:00:00	9.2	28-Jun-09	22:00:00	12.3	10-Aug-09	16:00:00	14.9	13-Sep-09	10:00:00	11.4
26-May-09	05:00:00	9.0	28-Jun-09	23:00:00	12.3	10-Aug-09	17:00:00	15.1	13-Sep-09	11:00:00	11.5
26-May-09	06:00:00	8.7	29-Jun-09	00:00:00	12.3	10-Aug-09	18:00:00	15.1	13-Sep-09	12:00:00	11.8
26-May-09	07:00:00	8.6	29-Jun-09	01:00:00	12.0	10-Aug-09	19:00:00	15.4	13-Sep-09	13:00:00	12.4
26-May-09	08:00:00	8.4	29-Jun-09	02:00:00	11.7	10-Aug-09	20:00:00	15.1	13-Sep-09	14:00:00	13.0
26-May-09	09:00:00	8.3	29-Jun-09	03:00:00	11.2	10-Aug-09	21:00:00	14.9	13-Sep-09	15:00:00	13.6
26-May-09	10:00:00	8.1	29-Jun-09	04:00:00	10.8	10-Aug-09	22:00:00	14.6	13-Sep-09	16:00:00	14.2
26-May-09	11:00:00	8.1	29-Jun-09	05:00:00	10.3	10-Aug-09	23:00:00	14.5	13-Sep-09	17:00:00	14.5
26-May-09	12:00:00	7.8	29-Jun-09	06:00:00	10.1	11-Aug-09	00:00:00	14.3	13-Sep-09	18:00:00	14.8
26-May-09	13:00:00	7.8	29-Jun-09	07:00:00	9.8	11-Aug-09	01:00:00	14.0	13-Sep-09	19:00:00	14.8
26-May-09	14:00:00	7.8	29-Jun-09	08:00:00	9.6	11-Aug-09	02:00:00	13.8	13-Sep-09	20:00:00	14.8
26-May-09	15:00:00	8.0	29-Jun-09	09:00:00	9.6	11-Aug-09	03:00:00	13.5	13-Sep-09	21:00:00	14.5
26-May-09	16:00:00	8.0	29-Jun-09	10:00:00	9.8	11-Aug-09	04:00:00	13.2	13-Sep-09	22:00:00	14.3
26-May-09	17:00:00	8.1	29-Jun-09	11:00:00	10.1	11-Aug-09	05:00:00	12.9	13-Sep-09	23:00:00	14.0
26-May-09	18:00:00	8.0	29-Jun-09	12:00:00	10.5	11-Aug-09	06:00:00	12.4	14-Sep-09	00:00:00	13.8
26-May-09	19:00:00	7.8	29-Jun-09	13:00:00	10.9	11-Aug-09	07:00:00	12.1	14-Sep-09	01:00:00	13.5
26-May-09	20:00:00	7.8	29-Jun-09	14:00:00	11.5	11-Aug-09	08:00:00	12.0	14-Sep-09	02:00:00	13.2
26-May-09	21:00:00	7.7	29-Jun-09	15:00:00	12.1	11-Aug-09	09:00:00	12.0	14-Sep-09	03:00:00	13.0
26-May-09	22:00:00	7.5	29-Jun-09	16:00:00	12.7	11-Aug-09	10:00:00	12.1	14-Sep-09	04:00:00	12.7
26-May-09	23:00:00	7.5	29-Jun-09	17:00:00	12.9	11-Aug-09	11:00:00	12.1	14-Sep-09	05:00:00	12.6
27-May-09	00:00:00	7.4	29-Jun-09	18:00:00	13.2	11-Aug-09	12:00:00	12.1	14-Sep-09	06:00:00	12.4
27-May-09	01:00:00	7.3	29-Jun-09	19:00:00	13.2	11-Aug-09	13:00:00	12.4	14-Sep-09	07:00:00	12.3
27-May-09	02:00:00	7.1	29-Jun-09	20:00:00	12.7	11-Aug-09	14:00:00	13.0	14-Sep-09	08:00:00	12.1
27-May-09	03:00:00	7.0	29-Jun-09	21:00:00	12.9	11-Aug-09	15:00:00	13.5	14-Sep-09	09:00:00	12.0
27-May-09	04:00:00	6.8	29-Jun-09	22:00:00	12.9	11-Aug-09	16:00:00	13.8	14-Sep-09	10:00:00	12.1
27-May-09	05:00:00	6.7	29-Jun-09	23:00:00	12.6	11-Aug-09	17:00:00	13.8	14-Sep-09	11:00:00	12.3
27-May-09	06:00:00	6.5	30-Jun-09	00:00:00	12.4	11-Aug-09	18:00:00	14.2	14-Sep-09	12:00:00	12.6
27-May-09	07:00:00	6.4	30-Jun-09	01:00:00	12.4	11-Aug-09	19:00:00	14.3	14-Sep-09	13:00:00	13.2
27-May-09	08:00:00	6.4	30-Jun-09	02:00:00	12.1	11-Aug-09	20:00:00	14.2	14-Sep-09	14:00:00	13.6
27-May-09	09:00:00	6.2	30-Jun-09	03:00:00	11.8	11-Aug-09	21:00:00	13.9	14-Sep-09	15:00:00	14.2
27-May-09	10:00:00	6.1	30-Jun-09	04:00:00	11.5	11-Aug-09	22:00:00	13.3	14-Sep-09	16:00:00	14.5

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
27-May-09	11:00:00	6.1	30-Jun-09	05:00:00	11.4	11-Aug-09	23:00:00	13.0	14-Sep-09	17:00:00	14.8
27-May-09	12:00:00	6.1	30-Jun-09	06:00:00	11.1	12-Aug-09	00:00:00	12.9	14-Sep-09	18:00:00	14.8
27-May-09	13:00:00	5.9	30-Jun-09	07:00:00	10.8	12-Aug-09	01:00:00	12.6	14-Sep-09	19:00:00	14.6
27-May-09	14:00:00	5.9	30-Jun-09	08:00:00	10.8	12-Aug-09	02:00:00	12.4	14-Sep-09	20:00:00	14.6
27-May-09	15:00:00	6.1	30-Jun-09	09:00:00	10.5	12-Aug-09	03:00:00	12.3	14-Sep-09	21:00:00	14.5
27-May-09	16:00:00	6.2	30-Jun-09	10:00:00	10.5	12-Aug-09	04:00:00	12.1	14-Sep-09	22:00:00	14.2
27-May-09	17:00:00	6.2	30-Jun-09	11:00:00	10.3	12-Aug-09	05:00:00	12.0	14-Sep-09	23:00:00	14.0
27-May-09	18:00:00	6.4	30-Jun-09	12:00:00	10.3	12-Aug-09	06:00:00	11.8	15-Sep-09	00:00:00	13.9
27-May-09	19:00:00	6.5	30-Jun-09	13:00:00	10.3	12-Aug-09	07:00:00	11.7	15-Sep-09	01:00:00	13.6
27-May-09	20:00:00	6.7	30-Jun-09	14:00:00	10.5	12-Aug-09	08:00:00	11.5	15-Sep-09	02:00:00	13.3
27-May-09	21:00:00	6.8	30-Jun-09	15:00:00	10.8	12-Aug-09	09:00:00	11.4	15-Sep-09	03:00:00	13.2
27-May-09	22:00:00	6.8	30-Jun-09	16:00:00	11.1	12-Aug-09	10:00:00	11.5	15-Sep-09	04:00:00	12.9
27-May-09	23:00:00	6.7	30-Jun-09	17:00:00	11.5	12-Aug-09	11:00:00	11.4	15-Sep-09	05:00:00	12.6
28-May-09	00:00:00	6.7	30-Jun-09	18:00:00	12.1	12-Aug-09	12:00:00	11.4	15-Sep-09	06:00:00	12.3
28-May-09	01:00:00	6.4	30-Jun-09	19:00:00	12.1	12-Aug-09	13:00:00	11.5	15-Sep-09	07:00:00	12.0
28-May-09	02:00:00	6.2	30-Jun-09	20:00:00	11.8	12-Aug-09	14:00:00	11.5	15-Sep-09	08:00:00	11.7
28-May-09	03:00:00	6.1	30-Jun-09	21:00:00	11.8	12-Aug-09	15:00:00	11.8	15-Sep-09	09:00:00	11.5
28-May-09	04:00:00	5.8	30-Jun-09	22:00:00	11.7	12-Aug-09	16:00:00	12.0	15-Sep-09	10:00:00	11.4
28-May-09	05:00:00	5.6	30-Jun-09	23:00:00	11.5	12-Aug-09	17:00:00	12.1	15-Sep-09	11:00:00	11.5
28-May-09	06:00:00	5.3	1-Jul-09	00:00:00	11.2	12-Aug-09	18:00:00	12.3	15-Sep-09	12:00:00	11.8
28-May-09	07:00:00	5.0	1-Jul-09	01:00:00	11.1	12-Aug-09	19:00:00	12.3	15-Sep-09	13:00:00	12.1
28-May-09	08:00:00	4.9	1-Jul-09	02:00:00	10.8	12-Aug-09	20:00:00	12.3	15-Sep-09	14:00:00	12.6
28-May-09	09:00:00	4.9	1-Jul-09	03:00:00	10.6	12-Aug-09	21:00:00	12.1	15-Sep-09	15:00:00	13.2
28-May-09	10:00:00	5.0	1-Jul-09	04:00:00	10.5	12-Aug-09	22:00:00	12.1	15-Sep-09	16:00:00	13.5
28-May-09	11:00:00	5.3	1-Jul-09	05:00:00	10.2	12-Aug-09	23:00:00	11.8	15-Sep-09	17:00:00	13.8
28-May-09	12:00:00	5.8	1-Jul-09	06:00:00	9.9	13-Aug-09	00:00:00	11.5	15-Sep-09	18:00:00	13.8
28-May-09	13:00:00	6.4	1-Jul-09	07:00:00	9.8	13-Aug-09	01:00:00	11.4	15-Sep-09	19:00:00	13.5
28-May-09	14:00:00	6.8	1-Jul-09	08:00:00	9.6	13-Aug-09	02:00:00	11.1	15-Sep-09	20:00:00	13.3
28-May-09	15:00:00	7.5	1-Jul-09	09:00:00	9.5	13-Aug-09	03:00:00	10.9	15-Sep-09	21:00:00	13.2
28-May-09	16:00:00	8.1	1-Jul-09	10:00:00	9.5	13-Aug-09	04:00:00	10.6	15-Sep-09	22:00:00	13.0
28-May-09	17:00:00	8.4	1-Jul-09	11:00:00	9.6	13-Aug-09	05:00:00	10.3	15-Sep-09	23:00:00	12.7
28-May-09	18:00:00	8.9	1-Jul-09	12:00:00	9.6	13-Aug-09	06:00:00	10.1	16-Sep-09	00:00:00	12.6
28-May-09	19:00:00	9.2	1-Jul-09	13:00:00	10.1	13-Aug-09	07:00:00	9.8	16-Sep-09	01:00:00	12.4
28-May-09	20:00:00	9.3	1-Jul-09	14:00:00	10.5	13-Aug-09	08:00:00	9.6	16-Sep-09	02:00:00	12.4
28-May-09	21:00:00	9.2	1-Jul-09	15:00:00	11.1	13-Aug-09	09:00:00	9.5	16-Sep-09	03:00:00	12.3
28-May-09	22:00:00	9.0	1-Jul-09	16:00:00	11.5	13-Aug-09	10:00:00	9.5	16-Sep-09	04:00:00	12.1
28-May-09	23:00:00	8.9	1-Jul-09	17:00:00	12.3	13-Aug-09	11:00:00	9.8	16-Sep-09	05:00:00	12.1
29-May-09	00:00:00	8.7	1-Jul-09	18:00:00	12.4	13-Aug-09	12:00:00	10.2	16-Sep-09	06:00:00	12.0
29-May-09	01:00:00	8.4	1-Jul-09	19:00:00	12.7	13-Aug-09	13:00:00	10.9	16-Sep-09	07:00:00	11.8
29-May-09	02:00:00	8.3	1-Jul-09	20:00:00	12.6	13-Aug-09	14:00:00	11.5	16-Sep-09	08:00:00	11.8
29-May-09	03:00:00	8.0	1-Jul-09	21:00:00	12.6	13-Aug-09	15:00:00	12.3	16-Sep-09	09:00:00	11.7
29-May-09	04:00:00	7.8	1-Jul-09	22:00:00	12.4	13-Aug-09	16:00:00	13.0	16-Sep-09	10:00:00	11.7
29-May-09	05:00:00	7.5	1-Jul-09	23:00:00	12.3	13-Aug-09	17:00:00	13.5	16-Sep-09	11:00:00	11.7
29-May-09	06:00:00	7.4	2-Jul-09	00:00:00	12.3	13-Aug-09	18:00:00	13.9	16-Sep-09	12:00:00	11.7
29-May-09	07:00:00	7.1	2-Jul-09	01:00:00	12.1	13-Aug-09	19:00:00	14.0	16-Sep-09	13:00:00	11.8
29-May-09	08:00:00	7.0	2-Jul-09	02:00:00	12.1	13-Aug-09	20:00:00	13.9	16-Sep-09	14:00:00	11.8
29-May-09	09:00:00	6.8	2-Jul-09	03:00:00	12.0	13-Aug-09	21:00:00	13.8	16-Sep-09	15:00:00	12.0
29-May-09	10:00:00	7.0	2-Jul-09	04:00:00	11.7	13-Aug-09	22:00:00	13.5	16-Sep-09	16:00:00	12.0
29-May-09	11:00:00	7.3	2-Jul-09	05:00:00	11.4	13-Aug-09	23:00:00	13.2	16-Sep-09	17:00:00	12.0
29-May-09	12:00:00	7.5	2-Jul-09	06:00:00	10.9	14-Aug-09	00:00:00	13.0	16-Sep-09	18:00:00	11.8
29-May-09	13:00:00	7.8	2-Jul-09	07:00:00	10.6	14-Aug-09	01:00:00	12.7	16-Sep-09	19:00:00	11.8
29-May-09	14:00:00	8.4	2-Jul-09	08:00:00	10.5	14-Aug-09	02:00:00	12.4	16-Sep-09	20:00:00	11.8
29-May-09	15:00:00	8.9	2-Jul-09	09:00:00	10.3	14-Aug-09	03:00:00	12.1	16-Sep-09	21:00:00	11.7
29-May-09	16:00:00	9.3	2-Jul-09	10:00:00	10.2	14-Aug-09	04:00:00	12.0	16-Sep-09	22:00:00	11.5
29-May-09	17:00:00	9.3	2-Jul-09	11:00:00	10.6	14-Aug-09	05:00:00	11.7	16-Sep-09	23:00:00	11.5
29-May-09	18:00:00	9.8	2-Jul-09	12:00:00	11.1	14-Aug-09	06:00:00	11.2	17-Sep-09	00:00:00	11.5
29-May-09	19:00:00	9.9	2-Jul-09	13:00:00	11.8	14-Aug-09	07:00:00	10.9	17-Sep-09	01:00:00	11.4
29-May-09	20:00:00	10.1	2-Jul-09	14:00:00	12.3	14-Aug-09	08:00:00	10.6	17-Sep-09	02:00:00	11.2
29-May-09	21:00:00	10.1	2-Jul-09	15:00:00	12.1	14-Aug-09	09:00:00	10.5	17-Sep-09	03:00:00	11.1

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
29-May-09	22:00:00	9.9	2-Jul-09	16:00:00	12.4	14-Aug-09	10:00:00	10.6	17-Sep-09	04:00:00	10.9
29-May-09	23:00:00	9.6	2-Jul-09	17:00:00	12.6	14-Aug-09	11:00:00	10.9	17-Sep-09	05:00:00	10.8
30-May-09	00:00:00	9.2	2-Jul-09	18:00:00	12.6	14-Aug-09	12:00:00	11.4	17-Sep-09	06:00:00	10.6
30-May-09	01:00:00	9.0	2-Jul-09	19:00:00	12.6	14-Aug-09	13:00:00	12.0	17-Sep-09	07:00:00	10.3
30-May-09	02:00:00	8.9	2-Jul-09	20:00:00	12.6	14-Aug-09	14:00:00	12.7	17-Sep-09	08:00:00	10.2
30-May-09	03:00:00	8.7	2-Jul-09	21:00:00	12.6	14-Aug-09	15:00:00	12.9	17-Sep-09	09:00:00	9.9
30-May-09	04:00:00	8.3	2-Jul-09	22:00:00	12.4	14-Aug-09	16:00:00	13.2	17-Sep-09	10:00:00	9.9
30-May-09	05:00:00	8.0	2-Jul-09	23:00:00	12.3	14-Aug-09	17:00:00	13.3	17-Sep-09	11:00:00	10.1
30-May-09	06:00:00	7.5	3-Jul-09	00:00:00	12.0	14-Aug-09	18:00:00	13.6	17-Sep-09	12:00:00	10.5
30-May-09	07:00:00	7.3	3-Jul-09	01:00:00	11.8	14-Aug-09	19:00:00	13.8	17-Sep-09	13:00:00	11.1
30-May-09	08:00:00	7.0	3-Jul-09	02:00:00	11.7	14-Aug-09	20:00:00	13.9	17-Sep-09	14:00:00	11.5
30-May-09	09:00:00	7.0	3-Jul-09	03:00:00	11.5	14-Aug-09	21:00:00	13.9	17-Sep-09	15:00:00	12.1
30-May-09	10:00:00	7.1	3-Jul-09	04:00:00	11.4	14-Aug-09	22:00:00	13.8	17-Sep-09	16:00:00	12.6
30-May-09	11:00:00	7.3	3-Jul-09	05:00:00	11.2	14-Aug-09	23:00:00	13.6	17-Sep-09	17:00:00	12.9
30-May-09	12:00:00	7.7	3-Jul-09	06:00:00	11.1	15-Aug-09	00:00:00	13.5	17-Sep-09	18:00:00	12.9
30-May-09	13:00:00	8.0	3-Jul-09	07:00:00	10.8	15-Aug-09	01:00:00	13.2	17-Sep-09	19:00:00	12.7
30-May-09	14:00:00	8.1	3-Jul-09	08:00:00	10.6	15-Aug-09	02:00:00	13.2	17-Sep-09	20:00:00	12.6
30-May-09	15:00:00	8.4	3-Jul-09	09:00:00	10.6	15-Aug-09	03:00:00	13.0	17-Sep-09	21:00:00	12.3
30-May-09	16:00:00	9.0	3-Jul-09	10:00:00	10.6	15-Aug-09	04:00:00	12.9	17-Sep-09	22:00:00	12.1
30-May-09	17:00:00	9.2	3-Jul-09	11:00:00	10.8	15-Aug-09	05:00:00	12.7	17-Sep-09	23:00:00	11.8
30-May-09	18:00:00	9.0	3-Jul-09	12:00:00	10.9	15-Aug-09	06:00:00	12.6	18-Sep-09	00:00:00	11.5
30-May-09	19:00:00	9.0	3-Jul-09	13:00:00	11.4	15-Aug-09	07:00:00	12.4	18-Sep-09	01:00:00	11.4
30-May-09	20:00:00	9.0	3-Jul-09	14:00:00	11.5	15-Aug-09	08:00:00	12.3	18-Sep-09	02:00:00	11.2
30-May-09	21:00:00	9.0	3-Jul-09	15:00:00	12.1	15-Aug-09	09:00:00	12.1	18-Sep-09	03:00:00	10.9
30-May-09	22:00:00	8.9	3-Jul-09	16:00:00	12.6	15-Aug-09	10:00:00	12.1	18-Sep-09	04:00:00	10.8
30-May-09	23:00:00	8.6	3-Jul-09	17:00:00	12.7	15-Aug-09	11:00:00	12.1	18-Sep-09	05:00:00	10.6
31-May-09	00:00:00	8.3	3-Jul-09	18:00:00	13.2	15-Aug-09	12:00:00	12.4	18-Sep-09	06:00:00	10.5
31-May-09	01:00:00	8.0	3-Jul-09	19:00:00	13.2	15-Aug-09	13:00:00	12.9	18-Sep-09	07:00:00	10.2
31-May-09	02:00:00	7.7	3-Jul-09	20:00:00	13.3	15-Aug-09	14:00:00	13.5	18-Sep-09	08:00:00	10.2
31-May-09	03:00:00	7.3	3-Jul-09	21:00:00	13.3	15-Aug-09	15:00:00	13.9	18-Sep-09	09:00:00	10.1
31-May-09	04:00:00	7.0	3-Jul-09	22:00:00	13.0	15-Aug-09	16:00:00	14.5	18-Sep-09	10:00:00	10.2
31-May-09	05:00:00	6.7	3-Jul-09	23:00:00	12.9	15-Aug-09	17:00:00	14.5	18-Sep-09	11:00:00	10.3
31-May-09	06:00:00	6.4	4-Jul-09	00:00:00	12.9	15-Aug-09	18:00:00	14.6	18-Sep-09	12:00:00	10.5
31-May-09	07:00:00	6.2	4-Jul-09	01:00:00	12.7	15-Aug-09	19:00:00	15.1	18-Sep-09	13:00:00	10.8
31-May-09	08:00:00	6.1	4-Jul-09	02:00:00	12.6	15-Aug-09	20:00:00	15.1	18-Sep-09	14:00:00	11.1
31-May-09	09:00:00	6.1	4-Jul-09	03:00:00	12.3	15-Aug-09	21:00:00	14.9	18-Sep-09	15:00:00	11.8
31-May-09	10:00:00	6.1	4-Jul-09	04:00:00	12.1	15-Aug-09	22:00:00	14.5	18-Sep-09	16:00:00	12.1
31-May-09	11:00:00	6.1	4-Jul-09	05:00:00	11.8	15-Aug-09	23:00:00	14.2	18-Sep-09	17:00:00	12.4
31-May-09	12:00:00	6.2	4-Jul-09	06:00:00	11.5	16-Aug-09	00:00:00	13.9	18-Sep-09	18:00:00	12.4
31-May-09	13:00:00	6.7	4-Jul-09	07:00:00	11.4	16-Aug-09	01:00:00	13.8	18-Sep-09	19:00:00	12.1
31-May-09	14:00:00	7.3	4-Jul-09	08:00:00	11.2	16-Aug-09	02:00:00	13.5	18-Sep-09	20:00:00	12.1
31-May-09	15:00:00	7.5	4-Jul-09	09:00:00	11.1	16-Aug-09	03:00:00	13.2	18-Sep-09	21:00:00	12.0
31-May-09	16:00:00	8.0	4-Jul-09	10:00:00	11.1	16-Aug-09	04:00:00	13.0	18-Sep-09	22:00:00	11.8
31-May-09	17:00:00	8.6	4-Jul-09	11:00:00	11.1	16-Aug-09	05:00:00	12.7	18-Sep-09	23:00:00	11.5
31-May-09	18:00:00	8.6	4-Jul-09	12:00:00	11.4	16-Aug-09	06:00:00	12.3	19-Sep-09	00:00:00	11.5
31-May-09	19:00:00	8.9	4-Jul-09	13:00:00	11.8	16-Aug-09	07:00:00	12.1	19-Sep-09	01:00:00	11.5
31-May-09	20:00:00	8.7	4-Jul-09	14:00:00	12.1	16-Aug-09	08:00:00	11.8	19-Sep-09	02:00:00	11.4
31-May-09	21:00:00	8.9	4-Jul-09	15:00:00	12.6	16-Aug-09	09:00:00	11.7	19-Sep-09	03:00:00	11.2
31-May-09	22:00:00	8.9	4-Jul-09	16:00:00	13.2	16-Aug-09	10:00:00	11.8	19-Sep-09	04:00:00	11.1
31-May-09	23:00:00	8.9	4-Jul-09	17:00:00	13.8	16-Aug-09	11:00:00	12.1	19-Sep-09	05:00:00	10.9
1-Jun-09	00:00:00	8.9	4-Jul-09	18:00:00	14.2	16-Aug-09	12:00:00	12.7	19-Sep-09	06:00:00	10.8
1-Jun-09	01:00:00	8.7	4-Jul-09	19:00:00	14.5	16-Aug-09	13:00:00	13.5	19-Sep-09	07:00:00	10.5
1-Jun-09	02:00:00	8.6	4-Jul-09	20:00:00	14.3	16-Aug-09	14:00:00	14.2	19-Sep-09	08:00:00	10.2
1-Jun-09	03:00:00	8.3	4-Jul-09	21:00:00	14.3	16-Aug-09	15:00:00	14.8	19-Sep-09	09:00:00	10.1
1-Jun-09	04:00:00	8.0	4-Jul-09	22:00:00	14.3	16-Aug-09	16:00:00	15.4	19-Sep-09	10:00:00	9.9
1-Jun-09	05:00:00	7.7	4-Jul-09	23:00:00	13.9	16-Aug-09	17:00:00	15.9	19-Sep-09	11:00:00	10.1
1-Jun-09	06:00:00	7.5	5-Jul-09	00:00:00	13.5	16-Aug-09	18:00:00	16.0	19-Sep-09	12:00:00	10.3
1-Jun-09	07:00:00	7.3	5-Jul-09	01:00:00	13.3	16-Aug-09	19:00:00	16.3	19-Sep-09	13:00:00	10.6
1-Jun-09	08:00:00	7.1	5-Jul-09	02:00:00	13.0	16-Aug-09	20:00:00	16.3	19-Sep-09	14:00:00	11.1

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
1-Jun-09	09:00:00	7.3	5-Jul-09	03:00:00	12.7	16-Aug-09	21:00:00	16.2	19-Sep-09	15:00:00	11.5
1-Jun-09	10:00:00	7.4	5-Jul-09	04:00:00	12.4	16-Aug-09	22:00:00	15.9	19-Sep-09	16:00:00	12.0
1-Jun-09	11:00:00	7.4	5-Jul-09	05:00:00	12.1	16-Aug-09	23:00:00	15.7	19-Sep-09	17:00:00	12.3
1-Jun-09	12:00:00	7.4	5-Jul-09	06:00:00	11.7	17-Aug-09	00:00:00	15.5	19-Sep-09	18:00:00	12.4
1-Jun-09	13:00:00	7.4	5-Jul-09	07:00:00	11.4	17-Aug-09	01:00:00	15.2	19-Sep-09	19:00:00	12.3
1-Jun-09	14:00:00	7.8	5-Jul-09	08:00:00	11.1	17-Aug-09	02:00:00	15.1	19-Sep-09	20:00:00	12.1
1-Jun-09	15:00:00	8.4	5-Jul-09	09:00:00	10.9	17-Aug-09	03:00:00	14.9	19-Sep-09	21:00:00	11.8
1-Jun-09	16:00:00	9.0	5-Jul-09	10:00:00	11.2	17-Aug-09	04:00:00	14.8	19-Sep-09	22:00:00	11.5
1-Jun-09	17:00:00	9.6	5-Jul-09	11:00:00	11.5	17-Aug-09	05:00:00	14.6	19-Sep-09	23:00:00	11.2
1-Jun-09	18:00:00	10.6	5-Jul-09	12:00:00	12.1	17-Aug-09	06:00:00	14.5	20-Sep-09	00:00:00	10.9
1-Jun-09	19:00:00	10.8	5-Jul-09	13:00:00	12.6	17-Aug-09	07:00:00	14.2	20-Sep-09	01:00:00	10.8
1-Jun-09	20:00:00	10.9	5-Jul-09	14:00:00	13.2	17-Aug-09	08:00:00	13.9	20-Sep-09	02:00:00	10.5
1-Jun-09	21:00:00	10.9	5-Jul-09	15:00:00	13.9	17-Aug-09	09:00:00	13.9	20-Sep-09	03:00:00	10.2
1-Jun-09	22:00:00	10.8	5-Jul-09	16:00:00	14.5	17-Aug-09	10:00:00	13.9	20-Sep-09	04:00:00	10.1
1-Jun-09	23:00:00	10.6	5-Jul-09	17:00:00	14.9	17-Aug-09	11:00:00	14.2	20-Sep-09	05:00:00	9.9
2-Jun-09	00:00:00	10.3	5-Jul-09	18:00:00	15.2	17-Aug-09	12:00:00	14.6	20-Sep-09	06:00:00	9.6
2-Jun-09	01:00:00	10.2	5-Jul-09	19:00:00	15.4	17-Aug-09	13:00:00	15.1	20-Sep-09	07:00:00	9.5
2-Jun-09	02:00:00	9.9	5-Jul-09	20:00:00	15.4	17-Aug-09	14:00:00	15.5	20-Sep-09	08:00:00	9.2
2-Jun-09	03:00:00	9.6	5-Jul-09	21:00:00	15.2	17-Aug-09	15:00:00	15.9	20-Sep-09	09:00:00	8.9
2-Jun-09	04:00:00	9.2	5-Jul-09	22:00:00	15.1	17-Aug-09	16:00:00	15.9	20-Sep-09	10:00:00	8.9
2-Jun-09	05:00:00	8.9	5-Jul-09	23:00:00	14.9	17-Aug-09	17:00:00	16.2	20-Sep-09	11:00:00	9.0
2-Jun-09	06:00:00	8.4	6-Jul-09	00:00:00	14.6	17-Aug-09	18:00:00	16.3	20-Sep-09	12:00:00	9.3
2-Jun-09	07:00:00	8.1	6-Jul-09	01:00:00	14.5	17-Aug-09	19:00:00	16.5	20-Sep-09	13:00:00	9.8
2-Jun-09	08:00:00	7.8	6-Jul-09	02:00:00	14.2	17-Aug-09	20:00:00	16.3	20-Sep-09	14:00:00	10.2
2-Jun-09	09:00:00	7.8	6-Jul-09	03:00:00	13.9	17-Aug-09	21:00:00	16.2	20-Sep-09	15:00:00	10.8
2-Jun-09	10:00:00	8.0	6-Jul-09	04:00:00	13.8	17-Aug-09	22:00:00	15.7	20-Sep-09	16:00:00	11.2
2-Jun-09	11:00:00	8.4	6-Jul-09	05:00:00	13.5	17-Aug-09	23:00:00	15.4	20-Sep-09	17:00:00	11.4
2-Jun-09	12:00:00	8.9	6-Jul-09	06:00:00	13.2	18-Aug-09	00:00:00	14.9	20-Sep-09	18:00:00	11.4
2-Jun-09	13:00:00	9.5	6-Jul-09	07:00:00	12.9	18-Aug-09	01:00:00	14.8	20-Sep-09	19:00:00	11.2
2-Jun-09	14:00:00	10.1	6-Jul-09	08:00:00	12.6	18-Aug-09	02:00:00	14.6	20-Sep-09	20:00:00	11.1
2-Jun-09	15:00:00	10.8	6-Jul-09	09:00:00	12.3	18-Aug-09	03:00:00	14.5	20-Sep-09	21:00:00	10.8
2-Jun-09	16:00:00	11.4	6-Jul-09	10:00:00	12.1	18-Aug-09	04:00:00	14.3	20-Sep-09	22:00:00	10.6
2-Jun-09	17:00:00	12.0	6-Jul-09	11:00:00	11.8	18-Aug-09	05:00:00	14.0	20-Sep-09	23:00:00	10.3
2-Jun-09	18:00:00	12.1	6-Jul-09	12:00:00	11.7	18-Aug-09	06:00:00	13.9	21-Sep-09	00:00:00	10.1
2-Jun-09	19:00:00	12.6	6-Jul-09	13:00:00	11.7	18-Aug-09	07:00:00	13.6	21-Sep-09	01:00:00	9.9
2-Jun-09	20:00:00	12.6	6-Jul-09	14:00:00	11.7	18-Aug-09	08:00:00	13.5	21-Sep-09	02:00:00	9.8
2-Jun-09	21:00:00	12.6	6-Jul-09	15:00:00	11.5	18-Aug-09	09:00:00	13.5	21-Sep-09	03:00:00	9.6
2-Jun-09	22:00:00	12.4	6-Jul-09	16:00:00	11.4	18-Aug-09	10:00:00	13.6	21-Sep-09	04:00:00	9.6
2-Jun-09	23:00:00	12.3	6-Jul-09	17:00:00	11.4	18-Aug-09	11:00:00	13.8	21-Sep-09	05:00:00	9.5
3-Jun-09	00:00:00	12.0	6-Jul-09	18:00:00	11.2	18-Aug-09	12:00:00	14.3	21-Sep-09	06:00:00	9.3
3-Jun-09	01:00:00	11.8	6-Jul-09	19:00:00	11.1	18-Aug-09	13:00:00	14.6	21-Sep-09	07:00:00	9.3
3-Jun-09	02:00:00	11.5	6-Jul-09	20:00:00	11.1	18-Aug-09	14:00:00	15.1	21-Sep-09	08:00:00	9.2
3-Jun-09	03:00:00	11.1	6-Jul-09	21:00:00	10.9	18-Aug-09	15:00:00	15.5	21-Sep-09	09:00:00	9.0
3-Jun-09	04:00:00	10.8	6-Jul-09	22:00:00	10.8	18-Aug-09	16:00:00	16.2	21-Sep-09	10:00:00	9.2
3-Jun-09	05:00:00	10.3	6-Jul-09	23:00:00	10.6	18-Aug-09	17:00:00	16.6	21-Sep-09	11:00:00	9.3
3-Jun-09	06:00:00	10.1	7-Jul-09	00:00:00	10.5	18-Aug-09	18:00:00	16.9	21-Sep-09	12:00:00	9.6
3-Jun-09	07:00:00	9.8	7-Jul-09	01:00:00	10.3	18-Aug-09	19:00:00	17.1	21-Sep-09	13:00:00	10.1
3-Jun-09	08:00:00	9.5	7-Jul-09	02:00:00	10.2	18-Aug-09	20:00:00	16.9	21-Sep-09	14:00:00	10.1
3-Jun-09	09:00:00	9.3	7-Jul-09	03:00:00	10.1	18-Aug-09	21:00:00	16.6	21-Sep-09	15:00:00	10.1
3-Jun-09	10:00:00	9.5	7-Jul-09	04:00:00	9.9	18-Aug-09	22:00:00	16.3	21-Sep-09	16:00:00	10.2
3-Jun-09	11:00:00	9.8	7-Jul-09	05:00:00	9.8	18-Aug-09	23:00:00	16.0	21-Sep-09	17:00:00	10.9
3-Jun-09	12:00:00	10.2	7-Jul-09	06:00:00	9.6	19-Aug-09	00:00:00	15.7	21-Sep-09	18:00:00	11.5
3-Jun-09	13:00:00	10.6	7-Jul-09	07:00:00	9.6	19-Aug-09	01:00:00	15.4	21-Sep-09	19:00:00	11.8
3-Jun-09	14:00:00	11.4	7-Jul-09	08:00:00	9.5	19-Aug-09	02:00:00	14.9	21-Sep-09	20:00:00	11.8
3-Jun-09	15:00:00	12.0	7-Jul-09	09:00:00	9.3	19-Aug-09	03:00:00	14.6	21-Sep-09	21:00:00	11.5
3-Jun-09	16:00:00	12.6	7-Jul-09	10:00:00	9.3	19-Aug-09	04:00:00	14.3	21-Sep-09	22:00:00	11.4
3-Jun-09	17:00:00	13.0	7-Jul-09	11:00:00	9.2	19-Aug-09	05:00:00	14.0	21-Sep-09	23:00:00	11.2
3-Jun-09	18:00:00	13.2	7-Jul-09	12:00:00	9.2	19-Aug-09	06:00:00	13.6	22-Sep-09	00:00:00	11.1
3-Jun-09	19:00:00	13.2	7-Jul-09	13:00:00	9.3	19-Aug-09	07:00:00	13.3	22-Sep-09	01:00:00	10.9

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
3-Jun-09	20:00:00	13.5	7-Jul-09	14:00:00	9.2	19-Aug-09	08:00:00	13.0	22-Sep-09	02:00:00	10.9
3-Jun-09	21:00:00	13.5	7-Jul-09	15:00:00	9.2	19-Aug-09	09:00:00	12.9	22-Sep-09	03:00:00	10.8
3-Jun-09	22:00:00	13.3	7-Jul-09	16:00:00	9.5	19-Aug-09	10:00:00	12.9	22-Sep-09	04:00:00	10.6
3-Jun-09	23:00:00	13.2	7-Jul-09	17:00:00	9.8	19-Aug-09	11:00:00	13.2	22-Sep-09	05:00:00	10.3
4-Jun-09	00:00:00	12.9	7-Jul-09	18:00:00	10.2	19-Aug-09	12:00:00	13.6	22-Sep-09	06:00:00	10.1
4-Jun-09	01:00:00	12.7	7-Jul-09	19:00:00	10.3	19-Aug-09	13:00:00	14.2	22-Sep-09	07:00:00	9.9
4-Jun-09	02:00:00	12.4	7-Jul-09	20:00:00	10.3	19-Aug-09	14:00:00	14.8	22-Sep-09	08:00:00	9.6
4-Jun-09	03:00:00	12.1	7-Jul-09	21:00:00	10.3	19-Aug-09	15:00:00	15.4	22-Sep-09	09:00:00	9.5
4-Jun-09	04:00:00	11.8	7-Jul-09	22:00:00	10.2	19-Aug-09	16:00:00	15.9	22-Sep-09	10:00:00	9.5
4-Jun-09	05:00:00	11.5	7-Jul-09	23:00:00	10.2	19-Aug-09	17:00:00	16.3	22-Sep-09	11:00:00	9.6
4-Jun-09	06:00:00	11.1	8-Jul-09	00:00:00	10.1	19-Aug-09	18:00:00	16.8	22-Sep-09	12:00:00	9.9
4-Jun-09	07:00:00	10.8	8-Jul-09	01:00:00	9.9	19-Aug-09	19:00:00	16.8	22-Sep-09	13:00:00	10.5
4-Jun-09	08:00:00	10.3	8-Jul-09	02:00:00	9.8	19-Aug-09	20:00:00	16.8	22-Sep-09	14:00:00	11.1
4-Jun-09	09:00:00	10.2	8-Jul-09	03:00:00	9.5	19-Aug-09	21:00:00	16.6	22-Sep-09	15:00:00	11.8
4-Jun-09	10:00:00	10.2	8-Jul-09	04:00:00	9.2	19-Aug-09	22:00:00	16.5	22-Sep-09	16:00:00	12.3
4-Jun-09	11:00:00	10.2	8-Jul-09	05:00:00	8.9	19-Aug-09	23:00:00	16.2	22-Sep-09	17:00:00	12.7
4-Jun-09	12:00:00	10.3	8-Jul-09	06:00:00	8.6	20-Aug-09	00:00:00	15.9	22-Sep-09	18:00:00	12.9
4-Jun-09	13:00:00	10.3	8-Jul-09	07:00:00	8.4	20-Aug-09	01:00:00	15.5	22-Sep-09	19:00:00	13.0
4-Jun-09	14:00:00	10.5	8-Jul-09	08:00:00	8.1	20-Aug-09	02:00:00	15.4	22-Sep-09	20:00:00	12.7
4-Jun-09	15:00:00	10.8	8-Jul-09	09:00:00	8.1	20-Aug-09	03:00:00	14.9	22-Sep-09	21:00:00	12.6
4-Jun-09	16:00:00	11.2	8-Jul-09	10:00:00	8.3	20-Aug-09	04:00:00	14.6	22-Sep-09	22:00:00	12.3
4-Jun-09	17:00:00	11.5	8-Jul-09	11:00:00	8.6	20-Aug-09	05:00:00	14.5	22-Sep-09	23:00:00	12.0
4-Jun-09	18:00:00	11.8	8-Jul-09	12:00:00	9.0	20-Aug-09	06:00:00	14.2	23-Sep-09	00:00:00	11.8
4-Jun-09	19:00:00	11.8	8-Jul-09	13:00:00	9.5	20-Aug-09	07:00:00	13.9	23-Sep-09	01:00:00	11.5
4-Jun-09	20:00:00	11.7	8-Jul-09	14:00:00	10.1	20-Aug-09	08:00:00	13.6	23-Sep-09	02:00:00	11.2
4-Jun-09	21:00:00	11.7	8-Jul-09	15:00:00	10.6	20-Aug-09	09:00:00	13.5	23-Sep-09	03:00:00	11.1
4-Jun-09	22:00:00	11.5	8-Jul-09	16:00:00	11.1	20-Aug-09	10:00:00	13.5	23-Sep-09	04:00:00	10.8
4-Jun-09	23:00:00	11.4	8-Jul-09	17:00:00	11.5	20-Aug-09	11:00:00	13.6	23-Sep-09	05:00:00	10.5
5-Jun-09	00:00:00	11.1	8-Jul-09	18:00:00	11.7	20-Aug-09	12:00:00	13.6	23-Sep-09	06:00:00	10.3
5-Jun-09	01:00:00	10.8	8-Jul-09	19:00:00	11.8	20-Aug-09	13:00:00	13.9	23-Sep-09	07:00:00	10.1
5-Jun-09	02:00:00	10.5	8-Jul-09	20:00:00	12.0	20-Aug-09	14:00:00	14.5	23-Sep-09	08:00:00	9.9
5-Jun-09	03:00:00	10.3	8-Jul-09	21:00:00	11.8	20-Aug-09	15:00:00	14.9	23-Sep-09	09:00:00	9.6
5-Jun-09	04:00:00	9.9	8-Jul-09	22:00:00	11.7	20-Aug-09	16:00:00	15.4	23-Sep-09	10:00:00	9.6
5-Jun-09	05:00:00	9.8	8-Jul-09	23:00:00	11.5	20-Aug-09	17:00:00	15.9	23-Sep-09	11:00:00	9.8
5-Jun-09	06:00:00	9.6	9-Jul-09	00:00:00	11.4	20-Aug-09	18:00:00	16.2	23-Sep-09	12:00:00	10.1
5-Jun-09	07:00:00	9.3	9-Jul-09	01:00:00	11.1	20-Aug-09	19:00:00	16.3	23-Sep-09	13:00:00	10.5
5-Jun-09	08:00:00	9.2	9-Jul-09	02:00:00	10.8	20-Aug-09	20:00:00	16.2	23-Sep-09	14:00:00	11.1
5-Jun-09	09:00:00	9.0	9-Jul-09	03:00:00	10.6	20-Aug-09	21:00:00	16.0	23-Sep-09	15:00:00	11.8
5-Jun-09	10:00:00	8.9	9-Jul-09	04:00:00	10.3	20-Aug-09	22:00:00	15.7	23-Sep-09	16:00:00	12.3
5-Jun-09	11:00:00	8.7	9-Jul-09	05:00:00	10.1	20-Aug-09	23:00:00	15.5	23-Sep-09	17:00:00	12.6
5-Jun-09	12:00:00	8.7	9-Jul-09	06:00:00	9.8	21-Aug-09	00:00:00	15.2	23-Sep-09	18:00:00	12.7
5-Jun-09	13:00:00	9.0	9-Jul-09	07:00:00	9.5	21-Aug-09	01:00:00	14.9	23-Sep-09	19:00:00	12.7
5-Jun-09	14:00:00	9.2	9-Jul-09	08:00:00	9.3	21-Aug-09	02:00:00	14.8	23-Sep-09	20:00:00	12.6
5-Jun-09	15:00:00	9.6	9-Jul-09	09:00:00	9.2	21-Aug-09	03:00:00	14.5	23-Sep-09	21:00:00	12.4
5-Jun-09	16:00:00	9.6	9-Jul-09	10:00:00	9.2	21-Aug-09	04:00:00	14.5	23-Sep-09	22:00:00	12.1
5-Jun-09	17:00:00	9.8	9-Jul-09	11:00:00	9.2	21-Aug-09	05:00:00	14.2	23-Sep-09	23:00:00	12.0
5-Jun-09	18:00:00	10.1	9-Jul-09	12:00:00	9.3	21-Aug-09	06:00:00	14.0	24-Sep-09	00:00:00	11.8
5-Jun-09	19:00:00	10.2	9-Jul-09	13:00:00	9.3	21-Aug-09	07:00:00	13.9	24-Sep-09	01:00:00	11.7
5-Jun-09	20:00:00	10.1	9-Jul-09	14:00:00	9.5	21-Aug-09	08:00:00	13.8	24-Sep-09	02:00:00	11.4
5-Jun-09	21:00:00	9.9	9-Jul-09	15:00:00	9.8	21-Aug-09	09:00:00	13.8	24-Sep-09	03:00:00	11.1
5-Jun-09	22:00:00	9.8	9-Jul-09	16:00:00	10.2	21-Aug-09	10:00:00	13.8	24-Sep-09	04:00:00	10.9
5-Jun-09	23:00:00	9.5	9-Jul-09	17:00:00	10.9	21-Aug-09	11:00:00	13.8	24-Sep-09	05:00:00	10.6
6-Jun-09	00:00:00	9.2	9-Jul-09	18:00:00	11.4	21-Aug-09	12:00:00	14.2	24-Sep-09	06:00:00	10.3
6-Jun-09	01:00:00	8.9	9-Jul-09	19:00:00	11.5	21-Aug-09	13:00:00	14.8	24-Sep-09	07:00:00	10.1
6-Jun-09	02:00:00	8.6	9-Jul-09	20:00:00	11.7	21-Aug-09	14:00:00	15.2	24-Sep-09	08:00:00	9.9
6-Jun-09	03:00:00	8.1	9-Jul-09	21:00:00	11.5	21-Aug-09	15:00:00	15.9	24-Sep-09	09:00:00	9.6
6-Jun-09	04:00:00	7.8	9-Jul-09	22:00:00	11.5	21-Aug-09	16:00:00	16.2	24-Sep-09	10:00:00	9.8
6-Jun-09	05:00:00	7.5	9-Jul-09	23:00:00	11.5	21-Aug-09	17:00:00	16.3	24-Sep-09	11:00:00	9.9
6-Jun-09	06:00:00	7.4	10-Jul-09	00:00:00	11.4	21-Aug-09	18:00:00	16.3	24-Sep-09	12:00:00	10.2

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
6-Jun-09	07:00:00	7.1	10-Jul-09	01:00:00	11.2	21-Aug-09	19:00:00	16.3	24-Sep-09	13:00:00	10.6
6-Jun-09	08:00:00	6.8	10-Jul-09	02:00:00	11.1	21-Aug-09	20:00:00	16.5	24-Sep-09	14:00:00	11.1
6-Jun-09	09:00:00	6.8	10-Jul-09	03:00:00	10.9	21-Aug-09	21:00:00	16.3	24-Sep-09	15:00:00	11.5
6-Jun-09	10:00:00	7.0	10-Jul-09	04:00:00	10.6	21-Aug-09	22:00:00	15.7	24-Sep-09	16:00:00	11.8
6-Jun-09	11:00:00	7.1	10-Jul-09	05:00:00	10.5	21-Aug-09	23:00:00	15.2	24-Sep-09	17:00:00	12.1
6-Jun-09	12:00:00	7.5	10-Jul-09	06:00:00	10.2	22-Aug-09	00:00:00	14.8	24-Sep-09	18:00:00	12.1
6-Jun-09	13:00:00	8.0	10-Jul-09	07:00:00	10.1	22-Aug-09	01:00:00	14.5	24-Sep-09	19:00:00	12.0
6-Jun-09	14:00:00	8.6	10-Jul-09	08:00:00	9.9	22-Aug-09	02:00:00	14.2	24-Sep-09	20:00:00	11.7
6-Jun-09	15:00:00	9.0	10-Jul-09	09:00:00	9.9	22-Aug-09	03:00:00	13.8	24-Sep-09	21:00:00	11.4
6-Jun-09	16:00:00	9.2	10-Jul-09	10:00:00	9.8	22-Aug-09	04:00:00	13.5	24-Sep-09	22:00:00	11.1
6-Jun-09	17:00:00	9.5	10-Jul-09	11:00:00	9.9	22-Aug-09	05:00:00	13.2	24-Sep-09	23:00:00	10.8
6-Jun-09	18:00:00	9.8	10-Jul-09	12:00:00	10.2	22-Aug-09	06:00:00	13.0	25-Sep-09	00:00:00	10.5
6-Jun-09	19:00:00	9.9	10-Jul-09	13:00:00	10.6	22-Aug-09	07:00:00	12.6	25-Sep-09	01:00:00	10.2
6-Jun-09	20:00:00	9.9	10-Jul-09	14:00:00	10.9	22-Aug-09	08:00:00	12.3	25-Sep-09	02:00:00	9.9
6-Jun-09	21:00:00	9.9	10-Jul-09	15:00:00	11.4	22-Aug-09	09:00:00	12.1	25-Sep-09	03:00:00	9.8
6-Jun-09	22:00:00	9.8	10-Jul-09	16:00:00	11.8	22-Aug-09	10:00:00	12.1	25-Sep-09	04:00:00	9.6
6-Jun-09	23:00:00	9.6	10-Jul-09	17:00:00	11.8	22-Aug-09	11:00:00	12.3	25-Sep-09	05:00:00	9.5
7-Jun-09	00:00:00	9.3	10-Jul-09	18:00:00	11.8	22-Aug-09	12:00:00	12.7	25-Sep-09	06:00:00	9.3
7-Jun-09	01:00:00	9.0	10-Jul-09	19:00:00	12.1	22-Aug-09	13:00:00	13.3	25-Sep-09	07:00:00	9.2
7-Jun-09	02:00:00	8.7	10-Jul-09	20:00:00	12.3	22-Aug-09	14:00:00	13.8	25-Sep-09	08:00:00	8.9
7-Jun-09	03:00:00	8.3	10-Jul-09	21:00:00	12.3	22-Aug-09	15:00:00	14.2	25-Sep-09	09:00:00	8.6
7-Jun-09	04:00:00	8.0	10-Jul-09	22:00:00	12.4	22-Aug-09	16:00:00	14.8	25-Sep-09	10:00:00	8.4
7-Jun-09	05:00:00	7.7	10-Jul-09	23:00:00	12.3	22-Aug-09	17:00:00	14.8	25-Sep-09	11:00:00	8.6
7-Jun-09	06:00:00	7.4	11-Jul-09	00:00:00	12.1	22-Aug-09	18:00:00	14.9	25-Sep-09	12:00:00	8.7
7-Jun-09	07:00:00	7.1	11-Jul-09	01:00:00	12.0	22-Aug-09	19:00:00	15.1	25-Sep-09	13:00:00	9.0
7-Jun-09	08:00:00	6.8	11-Jul-09	02:00:00	12.0	22-Aug-09	20:00:00	14.8	25-Sep-09	14:00:00	9.2
7-Jun-09	09:00:00	6.8	11-Jul-09	03:00:00	11.8	22-Aug-09	21:00:00	14.5	25-Sep-09	15:00:00	9.5
7-Jun-09	10:00:00	7.0	11-Jul-09	04:00:00	11.7	22-Aug-09	22:00:00	14.0	25-Sep-09	16:00:00	9.5
7-Jun-09	11:00:00	7.3	11-Jul-09	05:00:00	11.4	22-Aug-09	23:00:00	13.8	25-Sep-09	17:00:00	9.6
7-Jun-09	12:00:00	7.7	11-Jul-09	06:00:00	11.1	23-Aug-09	00:00:00	13.5	25-Sep-09	18:00:00	9.8
7-Jun-09	13:00:00	8.3	11-Jul-09	07:00:00	10.9	23-Aug-09	01:00:00	13.2	25-Sep-09	19:00:00	9.8
7-Jun-09	14:00:00	8.7	11-Jul-09	08:00:00	10.8	23-Aug-09	02:00:00	12.9	25-Sep-09	20:00:00	9.5
7-Jun-09	15:00:00	9.3	11-Jul-09	09:00:00	10.8	23-Aug-09	03:00:00	12.6	25-Sep-09	21:00:00	9.2
7-Jun-09	16:00:00	9.9	11-Jul-09	10:00:00	11.1	23-Aug-09	04:00:00	12.3	25-Sep-09	22:00:00	9.0
7-Jun-09	17:00:00	10.3	11-Jul-09	11:00:00	11.4	23-Aug-09	05:00:00	12.1	25-Sep-09	23:00:00	8.7
7-Jun-09	18:00:00	10.8	11-Jul-09	12:00:00	11.8	23-Aug-09	06:00:00	11.8	26-Sep-09	00:00:00	8.6
7-Jun-09	19:00:00	10.9	11-Jul-09	13:00:00	12.3	23-Aug-09	07:00:00	11.5	26-Sep-09	01:00:00	8.3
7-Jun-09	20:00:00	11.1	11-Jul-09	14:00:00	12.9	23-Aug-09	08:00:00	11.2	26-Sep-09	02:00:00	8.1
7-Jun-09	21:00:00	11.1	11-Jul-09	15:00:00	13.5	23-Aug-09	09:00:00	11.1	26-Sep-09	03:00:00	8.0
7-Jun-09	22:00:00	10.9	11-Jul-09	16:00:00	13.9	23-Aug-09	10:00:00	11.1	26-Sep-09	04:00:00	7.8
7-Jun-09	23:00:00	10.8	11-Jul-09	17:00:00	13.8	23-Aug-09	11:00:00	11.4	26-Sep-09	05:00:00	7.8
8-Jun-09	00:00:00	10.5	11-Jul-09	18:00:00	14.0	23-Aug-09	12:00:00	12.0	26-Sep-09	06:00:00	7.7
8-Jun-09	01:00:00	10.2	11-Jul-09	19:00:00	14.2	23-Aug-09	13:00:00	12.6	26-Sep-09	07:00:00	7.5
8-Jun-09	02:00:00	9.9	11-Jul-09	20:00:00	14.5	23-Aug-09	14:00:00	13.0	26-Sep-09	08:00:00	7.5
8-Jun-09	03:00:00	9.6	11-Jul-09	21:00:00	14.5	23-Aug-09	15:00:00	13.0	26-Sep-09	09:00:00	7.4
8-Jun-09	04:00:00	9.3	11-Jul-09	22:00:00	13.9	23-Aug-09	16:00:00	13.3	26-Sep-09	10:00:00	7.4
8-Jun-09	05:00:00	9.0	11-Jul-09	23:00:00	13.8	23-Aug-09	17:00:00	13.6	26-Sep-09	11:00:00	7.3
8-Jun-09	06:00:00	8.7	12-Jul-09	00:00:00	13.5	23-Aug-09	18:00:00	13.6	26-Sep-09	12:00:00	7.4
8-Jun-09	07:00:00	8.4	12-Jul-09	01:00:00	13.3	23-Aug-09	19:00:00	13.6	26-Sep-09	13:00:00	7.7
8-Jun-09	08:00:00	8.3	12-Jul-09	02:00:00	13.2	23-Aug-09	20:00:00	13.5	26-Sep-09	14:00:00	8.0
8-Jun-09	09:00:00	8.1	12-Jul-09	03:00:00	12.9	23-Aug-09	21:00:00	13.2	26-Sep-09	15:00:00	8.4
8-Jun-09	10:00:00	8.4	12-Jul-09	04:00:00	12.7	23-Aug-09	22:00:00	12.7	26-Sep-09	16:00:00	8.9
8-Jun-09	11:00:00	8.6	12-Jul-09	05:00:00	12.6	23-Aug-09	23:00:00	12.4	26-Sep-09	17:00:00	9.2
8-Jun-09	12:00:00	9.2	12-Jul-09	06:00:00	12.4	24-Aug-09	00:00:00	12.1	26-Sep-09	18:00:00	9.2
8-Jun-09	13:00:00	9.6	12-Jul-09	07:00:00	12.3	24-Aug-09	01:00:00	12.0	26-Sep-09	19:00:00	9.0
8-Jun-09	14:00:00	9.9	12-Jul-09	08:00:00	12.1	24-Aug-09	02:00:00	11.7	26-Sep-09	20:00:00	8.7
8-Jun-09	15:00:00	10.2	12-Jul-09	09:00:00	12.0	24-Aug-09	03:00:00	11.4	26-Sep-09	21:00:00	8.4
8-Jun-09	16:00:00	10.8	12-Jul-09	10:00:00	12.1	24-Aug-09	04:00:00	11.1	26-Sep-09	22:00:00	8.1
8-Jun-09	17:00:00	11.1	12-Jul-09	11:00:00	12.3	24-Aug-09	05:00:00	10.9	26-Sep-09	23:00:00	7.8

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
8-Jun-09	18:00:00	11.4	12-Jul-09	12:00:00	12.6	24-Aug-09	06:00:00	10.6	27-Sep-09	00:00:00	7.5
8-Jun-09	19:00:00	11.5	12-Jul-09	13:00:00	13.0	24-Aug-09	07:00:00	10.3	27-Sep-09	01:00:00	7.3
8-Jun-09	20:00:00	11.5	12-Jul-09	14:00:00	13.6	24-Aug-09	08:00:00	10.2	27-Sep-09	02:00:00	7.1
8-Jun-09	21:00:00	11.4	12-Jul-09	15:00:00	13.8	24-Aug-09	09:00:00	9.9	27-Sep-09	03:00:00	6.8
8-Jun-09	22:00:00	11.1	12-Jul-09	16:00:00	14.2	24-Aug-09	10:00:00	10.1	27-Sep-09	04:00:00	6.5
8-Jun-09	23:00:00	10.9	12-Jul-09	17:00:00	14.6	24-Aug-09	11:00:00	10.3	27-Sep-09	05:00:00	6.4
9-Jun-09	00:00:00	10.8	12-Jul-09	18:00:00	14.3	24-Aug-09	12:00:00	10.9	27-Sep-09	06:00:00	6.1
9-Jun-09	01:00:00	10.6	12-Jul-09	19:00:00	14.0	24-Aug-09	13:00:00	11.4	27-Sep-09	07:00:00	5.9
9-Jun-09	02:00:00	10.3	12-Jul-09	20:00:00	14.2	24-Aug-09	14:00:00	12.1	27-Sep-09	08:00:00	5.6
9-Jun-09	03:00:00	10.1	12-Jul-09	21:00:00	14.0	24-Aug-09	15:00:00	12.7	27-Sep-09	09:00:00	5.5
9-Jun-09	04:00:00	9.8	12-Jul-09	22:00:00	13.9	24-Aug-09	16:00:00	13.2	27-Sep-09	10:00:00	5.5
9-Jun-09	05:00:00	9.5	12-Jul-09	23:00:00	13.6	24-Aug-09	17:00:00	13.5	27-Sep-09	11:00:00	5.6
9-Jun-09	06:00:00	9.2	13-Jul-09	00:00:00	13.5	24-Aug-09	18:00:00	13.6	27-Sep-09	12:00:00	5.9
9-Jun-09	07:00:00	8.9	13-Jul-09	01:00:00	13.3	24-Aug-09	19:00:00	13.8	27-Sep-09	13:00:00	6.5
9-Jun-09	08:00:00	8.7	13-Jul-09	02:00:00	13.2	24-Aug-09	20:00:00	13.6	27-Sep-09	14:00:00	7.0
9-Jun-09	09:00:00	8.7	13-Jul-09	03:00:00	12.7	24-Aug-09	21:00:00	13.5	27-Sep-09	15:00:00	7.4
9-Jun-09	10:00:00	8.9	13-Jul-09	04:00:00	12.6	24-Aug-09	22:00:00	13.3	27-Sep-09	16:00:00	7.8
9-Jun-09	11:00:00	9.2	13-Jul-09	05:00:00	12.3	24-Aug-09	23:00:00	13.2	27-Sep-09	17:00:00	8.1
9-Jun-09	12:00:00	9.6	13-Jul-09	06:00:00	12.1	25-Aug-09	00:00:00	13.0	27-Sep-09	18:00:00	8.0
9-Jun-09	13:00:00	10.1	13-Jul-09	07:00:00	11.8	25-Aug-09	01:00:00	12.9	27-Sep-09	19:00:00	8.0
9-Jun-09	14:00:00	10.6	13-Jul-09	08:00:00	11.5	25-Aug-09	02:00:00	12.6	27-Sep-09	20:00:00	7.7
9-Jun-09	15:00:00	10.9	13-Jul-09	09:00:00	11.4	25-Aug-09	03:00:00	12.6	27-Sep-09	21:00:00	7.7
9-Jun-09	16:00:00	11.1	13-Jul-09	10:00:00	11.2	25-Aug-09	04:00:00	12.4	27-Sep-09	22:00:00	7.7
9-Jun-09	17:00:00	11.2	13-Jul-09	11:00:00	11.1	25-Aug-09	05:00:00	12.3	27-Sep-09	23:00:00	7.5
9-Jun-09	18:00:00	11.4	13-Jul-09	12:00:00	10.9	25-Aug-09	06:00:00	12.3	28-Sep-09	00:00:00	7.4
9-Jun-09	19:00:00	11.4	13-Jul-09	13:00:00	10.9	25-Aug-09	07:00:00	12.1	28-Sep-09	01:00:00	7.3
9-Jun-09	20:00:00	11.5	13-Jul-09	14:00:00	10.9	25-Aug-09	08:00:00	12.0	28-Sep-09	02:00:00	7.3
9-Jun-09	21:00:00	11.4	13-Jul-09	15:00:00	11.1	25-Aug-09	09:00:00	12.0	28-Sep-09	03:00:00	7.0
9-Jun-09	22:00:00	11.2	13-Jul-09	16:00:00	11.1	25-Aug-09	10:00:00	11.8	28-Sep-09	04:00:00	7.0
9-Jun-09	23:00:00	11.1	13-Jul-09	17:00:00	11.1	25-Aug-09	11:00:00	11.8	28-Sep-09	05:00:00	6.8
10-Jun-09	00:00:00	10.8	13-Jul-09	18:00:00	11.4	25-Aug-09	12:00:00	12.0	28-Sep-09	06:00:00	6.7
10-Jun-09	01:00:00	10.5	13-Jul-09	19:00:00	11.5	25-Aug-09	13:00:00	12.1	28-Sep-09	07:00:00	6.7
10-Jun-09	02:00:00	10.1	13-Jul-09	20:00:00	11.5	25-Aug-09	14:00:00	12.6	28-Sep-09	08:00:00	6.7
10-Jun-09	03:00:00	9.9	13-Jul-09	21:00:00	11.5	25-Aug-09	15:00:00	13.0	28-Sep-09	09:00:00	6.5
10-Jun-09	04:00:00	9.6	13-Jul-09	22:00:00	11.4	25-Aug-09	16:00:00	13.2	28-Sep-09	10:00:00	6.5
10-Jun-09	05:00:00	9.3	13-Jul-09	23:00:00	11.2	25-Aug-09	17:00:00	13.6	28-Sep-09	11:00:00	6.7
10-Jun-09	06:00:00	9.0	14-Jul-09	00:00:00	11.2	25-Aug-09	18:00:00	14.0	28-Sep-09	12:00:00	6.7
10-Jun-09	07:00:00	8.7	14-Jul-09	01:00:00	11.1	25-Aug-09	19:00:00	14.2	28-Sep-09	13:00:00	6.8
10-Jun-09	08:00:00	8.6	14-Jul-09	02:00:00	10.8	25-Aug-09	20:00:00	14.2	28-Sep-09	14:00:00	7.0
10-Jun-09	09:00:00	8.6	14-Jul-09	03:00:00	10.6	25-Aug-09	21:00:00	13.9	28-Sep-09	15:00:00	7.3
10-Jun-09	10:00:00	8.7	14-Jul-09	04:00:00	10.5	25-Aug-09	22:00:00	13.8	28-Sep-09	16:00:00	7.3
10-Jun-09	11:00:00	9.2	14-Jul-09	05:00:00	10.2	25-Aug-09	23:00:00	13.5	28-Sep-09	17:00:00	7.3
10-Jun-09	12:00:00	9.6	14-Jul-09	06:00:00	10.1	26-Aug-09	00:00:00	13.0	28-Sep-09	18:00:00	7.3
10-Jun-09	13:00:00	10.1	14-Jul-09	07:00:00	9.9	26-Aug-09	01:00:00	12.7	28-Sep-09	19:00:00	7.1
10-Jun-09	14:00:00	10.3	14-Jul-09	08:00:00	9.8	26-Aug-09	02:00:00	12.3	28-Sep-09	20:00:00	7.1
10-Jun-09	15:00:00	10.6	14-Jul-09	09:00:00	9.8	26-Aug-09	03:00:00	12.0	28-Sep-09	21:00:00	7.0
10-Jun-09	16:00:00	10.8	14-Jul-09	10:00:00	9.8	26-Aug-09	04:00:00	11.5	28-Sep-09	22:00:00	7.0
10-Jun-09	17:00:00	10.9	14-Jul-09	11:00:00	10.1	26-Aug-09	05:00:00	11.2	28-Sep-09	23:00:00	6.8
10-Jun-09	18:00:00	11.1	14-Jul-09	12:00:00	10.6	26-Aug-09	06:00:00	10.9	29-Sep-09	00:00:00	6.8
10-Jun-09	19:00:00	11.1	14-Jul-09	13:00:00	11.2	26-Aug-09	07:00:00	10.8	29-Sep-09	01:00:00	6.7
10-Jun-09	20:00:00	11.4	14-Jul-09	14:00:00	11.7	26-Aug-09	08:00:00	10.5	29-Sep-09	02:00:00	6.7
10-Jun-09	21:00:00	11.5	14-Jul-09	15:00:00	12.3	26-Aug-09	09:00:00	10.3	29-Sep-09	03:00:00	6.5
10-Jun-09	22:00:00	11.4	14-Jul-09	16:00:00	12.7	26-Aug-09	10:00:00	10.5	29-Sep-09	04:00:00	6.5
10-Jun-09	23:00:00	11.1	14-Jul-09	17:00:00	13.2	26-Aug-09	11:00:00	10.8	29-Sep-09	05:00:00	6.4
11-Jun-09	00:00:00	10.9	14-Jul-09	18:00:00	13.5	26-Aug-09	12:00:00	11.4	29-Sep-09	06:00:00	6.4
11-Jun-09	01:00:00	10.8	14-Jul-09	19:00:00	13.6	26-Aug-09	13:00:00	12.1	29-Sep-09	07:00:00	6.2
11-Jun-09	02:00:00	10.6	14-Jul-09	20:00:00	13.6	26-Aug-09	14:00:00	12.7	29-Sep-09	08:00:00	6.2
11-Jun-09	03:00:00	10.5	14-Jul-09	21:00:00	13.5	26-Aug-09	15:00:00	13.3	29-Sep-09	09:00:00	6.1
11-Jun-09	04:00:00	10.3	14-Jul-09	22:00:00	13.6	26-Aug-09	16:00:00	13.8	29-Sep-09	10:00:00	6.1

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
11-Jun-09	05:00:00	10.1	14-Jul-09	23:00:00	13.5	26-Aug-09	17:00:00	13.9	29-Sep-09	11:00:00	5.9
11-Jun-09	06:00:00	9.9	15-Jul-09	00:00:00	13.2	26-Aug-09	18:00:00	14.0	29-Sep-09	12:00:00	6.1
11-Jun-09	07:00:00	9.8	15-Jul-09	01:00:00	12.9	26-Aug-09	19:00:00	14.0	29-Sep-09	13:00:00	6.1
11-Jun-09	08:00:00	9.6	15-Jul-09	02:00:00	12.6	26-Aug-09	20:00:00	14.0	29-Sep-09	14:00:00	6.2
11-Jun-09	09:00:00	9.8	15-Jul-09	03:00:00	12.4	26-Aug-09	21:00:00	13.9	29-Sep-09	15:00:00	6.4
11-Jun-09	10:00:00	9.8	15-Jul-09	04:00:00	12.0	26-Aug-09	22:00:00	13.5	29-Sep-09	16:00:00	6.2
11-Jun-09	11:00:00	10.1	15-Jul-09	05:00:00	11.5	26-Aug-09	23:00:00	13.2	29-Sep-09	17:00:00	6.1
11-Jun-09	12:00:00	10.5	15-Jul-09	06:00:00	11.1	27-Aug-09	00:00:00	12.9	29-Sep-09	18:00:00	6.1
11-Jun-09	13:00:00	10.9	15-Jul-09	07:00:00	10.8	27-Aug-09	01:00:00	12.4	29-Sep-09	19:00:00	5.9
11-Jun-09	14:00:00	11.5	15-Jul-09	08:00:00	10.6	27-Aug-09	02:00:00	12.1	29-Sep-09	20:00:00	5.8
11-Jun-09	15:00:00	11.8	15-Jul-09	09:00:00	10.5	27-Aug-09	03:00:00	11.7	29-Sep-09	21:00:00	5.8
11-Jun-09	16:00:00	11.8	15-Jul-09	10:00:00	10.6	27-Aug-09	04:00:00	11.4	29-Sep-09	22:00:00	5.6
11-Jun-09	17:00:00	12.0	15-Jul-09	11:00:00	10.8	27-Aug-09	05:00:00	10.9	29-Sep-09	23:00:00	5.5
11-Jun-09	18:00:00	12.1	15-Jul-09	12:00:00	11.2	27-Aug-09	06:00:00	10.8	30-Sep-09	00:00:00	5.5
11-Jun-09	19:00:00	12.1	15-Jul-09	13:00:00	11.8	27-Aug-09	07:00:00	10.5	30-Sep-09	01:00:00	5.3
11-Jun-09	20:00:00	12.3	15-Jul-09	14:00:00	12.4	27-Aug-09	08:00:00	10.2	30-Sep-09	02:00:00	5.3
11-Jun-09	21:00:00	12.4	15-Jul-09	15:00:00	13.0	27-Aug-09	09:00:00	10.1	30-Sep-09	03:00:00	5.2
11-Jun-09	22:00:00	12.3	15-Jul-09	16:00:00	13.6	27-Aug-09	10:00:00	10.1	30-Sep-09	04:00:00	5.0
11-Jun-09	23:00:00	12.0	15-Jul-09	17:00:00	13.8	27-Aug-09	11:00:00	10.3	30-Sep-09	05:00:00	5.0
12-Jun-09	00:00:00	11.7	15-Jul-09	18:00:00	13.8	27-Aug-09	12:00:00	10.8	30-Sep-09	06:00:00	4.9
12-Jun-09	01:00:00	11.4	15-Jul-09	19:00:00	13.8	27-Aug-09	13:00:00	11.2	30-Sep-09	07:00:00	4.9
12-Jun-09	02:00:00	10.9	15-Jul-09	20:00:00	13.8	27-Aug-09	14:00:00	11.7	30-Sep-09	08:00:00	4.7
12-Jun-09	03:00:00	10.6	15-Jul-09	21:00:00	13.8	27-Aug-09	15:00:00	12.1	30-Sep-09	09:00:00	4.4
12-Jun-09	04:00:00	10.5	15-Jul-09	22:00:00	13.8	27-Aug-09	16:00:00	12.6	30-Sep-09	10:00:00	4.4
12-Jun-09	05:00:00	10.3	15-Jul-09	23:00:00	13.8	27-Aug-09	17:00:00	13.0	30-Sep-09	11:00:00	4.6
12-Jun-09	06:00:00	10.1	16-Jul-09	00:00:00	13.5	27-Aug-09	18:00:00	13.2	30-Sep-09	12:00:00	4.6
12-Jun-09	07:00:00	9.9	16-Jul-09	01:00:00	13.2	27-Aug-09	19:00:00	13.2	30-Sep-09	13:00:00	4.9
12-Jun-09	08:00:00	9.6	16-Jul-09	02:00:00	12.7	27-Aug-09	20:00:00	13.2	30-Sep-09	14:00:00	5.6
12-Jun-09	09:00:00	9.6	16-Jul-09	03:00:00	12.6	27-Aug-09	21:00:00	13.2	30-Sep-09	15:00:00	6.2
12-Jun-09	10:00:00	9.8	16-Jul-09	04:00:00	12.1	27-Aug-09	22:00:00	12.9	30-Sep-09	16:00:00	6.2
12-Jun-09	11:00:00	10.1	16-Jul-09	05:00:00	11.8	27-Aug-09	23:00:00	12.6	30-Sep-09	17:00:00	6.2
12-Jun-09	12:00:00	10.5	16-Jul-09	06:00:00	11.5	28-Aug-09	00:00:00	12.3	30-Sep-09	18:00:00	6.1
12-Jun-09	13:00:00	11.1	16-Jul-09	07:00:00	11.2	28-Aug-09	01:00:00	12.0	30-Sep-09	19:00:00	6.5
12-Jun-09	14:00:00	11.7	16-Jul-09	08:00:00	11.1	28-Aug-09	02:00:00	11.7	30-Sep-09	20:00:00	6.7
12-Jun-09	15:00:00	12.1	16-Jul-09	09:00:00	10.9	28-Aug-09	03:00:00	11.4	30-Sep-09	21:00:00	6.5
12-Jun-09	16:00:00	12.7	16-Jul-09	10:00:00	10.9	28-Aug-09	04:00:00	11.1	30-Sep-09	22:00:00	6.2
12-Jun-09	17:00:00	13.0	16-Jul-09	11:00:00	11.1	28-Aug-09	05:00:00	10.9	30-Sep-09	23:00:00	5.9
12-Jun-09	18:00:00	13.3	16-Jul-09	12:00:00	11.5	28-Aug-09	06:00:00	10.8	1-Oct-09	00:00:00	5.8
12-Jun-09	19:00:00	13.6	16-Jul-09	13:00:00	12.1	28-Aug-09	07:00:00	10.6	1-Oct-09	01:00:00	5.5
12-Jun-09	20:00:00	13.8	16-Jul-09	14:00:00	12.9	28-Aug-09	08:00:00	10.5	1-Oct-09	02:00:00	5.2
12-Jun-09	21:00:00	13.5	16-Jul-09	15:00:00	13.5	28-Aug-09	09:00:00	10.3	1-Oct-09	03:00:00	4.9
12-Jun-09	22:00:00	13.3	16-Jul-09	16:00:00	13.9	28-Aug-09	10:00:00	10.5	1-Oct-09	04:00:00	4.9
12-Jun-09	23:00:00	13.2	16-Jul-09	17:00:00	14.5	28-Aug-09	11:00:00	10.8	1-Oct-09	05:00:00	4.7
13-Jun-09	00:00:00	12.9	16-Jul-09	18:00:00	14.6	28-Aug-09	12:00:00	11.4	1-Oct-09	06:00:00	4.6
13-Jun-09	01:00:00	12.7	16-Jul-09	19:00:00	14.8	28-Aug-09	13:00:00	12.1	1-Oct-09	07:00:00	4.4
13-Jun-09	02:00:00	12.3	16-Jul-09	20:00:00	14.9	28-Aug-09	14:00:00	12.9	1-Oct-09	08:00:00	4.3
13-Jun-09	03:00:00	12.1	16-Jul-09	21:00:00	14.9	28-Aug-09	15:00:00	13.8	1-Oct-09	09:00:00	4.1
13-Jun-09	04:00:00	11.8	16-Jul-09	22:00:00	14.8	28-Aug-09	16:00:00	14.5	1-Oct-09	10:00:00	4.1
13-Jun-09	05:00:00	11.4	16-Jul-09	23:00:00	14.6	28-Aug-09	17:00:00	15.1	1-Oct-09	11:00:00	4.3
13-Jun-09	06:00:00	11.1	17-Jul-09	00:00:00	14.3	28-Aug-09	18:00:00	15.4	1-Oct-09	12:00:00	4.4
13-Jun-09	07:00:00	10.8	17-Jul-09	01:00:00	14.0	28-Aug-09	19:00:00	15.5	1-Oct-09	13:00:00	4.9
13-Jun-09	08:00:00	10.6	17-Jul-09	02:00:00	13.9	28-Aug-09	20:00:00	15.5	1-Oct-09	14:00:00	5.5
13-Jun-09	09:00:00	10.6	17-Jul-09	03:00:00	13.5	28-Aug-09	21:00:00	15.4	1-Oct-09	15:00:00	5.6
13-Jun-09	10:00:00	10.8	17-Jul-09	04:00:00	13.2	28-Aug-09	22:00:00	15.1	1-Oct-09	16:00:00	5.8
13-Jun-09	11:00:00	11.1	17-Jul-09	05:00:00	12.7	28-Aug-09	23:00:00	14.9	1-Oct-09	17:00:00	6.2
13-Jun-09	12:00:00	11.4	17-Jul-09	06:00:00	12.3	29-Aug-09	00:00:00	14.6	1-Oct-09	18:00:00	6.5
13-Jun-09	13:00:00	11.7	17-Jul-09	07:00:00	12.0	29-Aug-09	01:00:00	14.3	1-Oct-09	19:00:00	6.5
13-Jun-09	14:00:00	12.1	17-Jul-09	08:00:00	11.8	29-Aug-09	02:00:00	14.0	1-Oct-09	20:00:00	6.4
13-Jun-09	15:00:00	12.4	17-Jul-09	09:00:00	11.7	29-Aug-09	03:00:00	13.9	1-Oct-09	21:00:00	6.2

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
13-Jun-09	16:00:00	13.0	17-Jul-09	10:00:00	11.8	29-Aug-09	04:00:00	13.6	1-Oct-09	22:00:00	5.9
13-Jun-09	17:00:00	13.5	17-Jul-09	11:00:00	12.0	29-Aug-09	05:00:00	13.3	1-Oct-09	23:00:00	5.8
13-Jun-09	18:00:00	13.8	17-Jul-09	12:00:00	12.4	29-Aug-09	06:00:00	13.2	2-Oct-09	00:00:00	5.5
13-Jun-09	19:00:00	13.8	17-Jul-09	13:00:00	12.9	29-Aug-09	07:00:00	13.0	2-Oct-09	01:00:00	5.3
13-Jun-09	20:00:00	13.6	17-Jul-09	14:00:00	13.2	29-Aug-09	08:00:00	12.7	2-Oct-09	02:00:00	5.0
13-Jun-09	21:00:00	13.6	17-Jul-09	15:00:00	13.2	29-Aug-09	09:00:00	12.6	2-Oct-09	03:00:00	4.9
13-Jun-09	22:00:00	13.5	17-Jul-09	16:00:00	13.6	29-Aug-09	10:00:00	12.4	2-Oct-09	04:00:00	4.7
13-Jun-09	23:00:00	13.2	17-Jul-09	17:00:00	13.8	29-Aug-09	11:00:00	12.4	2-Oct-09	05:00:00	4.6
14-Jun-09	00:00:00	12.9	17-Jul-09	18:00:00	13.8	29-Aug-09	12:00:00	12.9	2-Oct-09	06:00:00	4.4
14-Jun-09	01:00:00	12.6	17-Jul-09	19:00:00	13.8	29-Aug-09	13:00:00	13.3	2-Oct-09	07:00:00	4.3
14-Jun-09	02:00:00	12.3	17-Jul-09	20:00:00	13.8	29-Aug-09	14:00:00	14.0	2-Oct-09	08:00:00	4.1
14-Jun-09	03:00:00	12.0	17-Jul-09	21:00:00	13.5	29-Aug-09	15:00:00	14.8	2-Oct-09	09:00:00	4.0
14-Jun-09	04:00:00	11.7	17-Jul-09	22:00:00	13.5	29-Aug-09	16:00:00	15.5	2-Oct-09	10:00:00	4.0
14-Jun-09	05:00:00	11.4	17-Jul-09	23:00:00	13.3	29-Aug-09	17:00:00	16.2	2-Oct-09	11:00:00	4.0
14-Jun-09	06:00:00	11.1	18-Jul-09	00:00:00	13.2	29-Aug-09	18:00:00	16.6	2-Oct-09	12:00:00	4.3
14-Jun-09	07:00:00	10.9	18-Jul-09	01:00:00	12.9	29-Aug-09	19:00:00	16.6	2-Oct-09	13:00:00	4.7
14-Jun-09	08:00:00	10.8	18-Jul-09	02:00:00	12.6	29-Aug-09	20:00:00	16.5	2-Oct-09	14:00:00	5.2
14-Jun-09	09:00:00	10.6	18-Jul-09	03:00:00	12.1	29-Aug-09	21:00:00	16.3	2-Oct-09	15:00:00	5.5
14-Jun-09	10:00:00	10.8	18-Jul-09	04:00:00	12.0	29-Aug-09	22:00:00	15.9	2-Oct-09	16:00:00	5.8
14-Jun-09	11:00:00	10.9	18-Jul-09	05:00:00	11.5	29-Aug-09	23:00:00	15.4	2-Oct-09	17:00:00	6.4
14-Jun-09	12:00:00	11.4	18-Jul-09	06:00:00	11.4	30-Aug-09	00:00:00	15.1	2-Oct-09	18:00:00	6.4
14-Jun-09	13:00:00	11.5	18-Jul-09	07:00:00	11.1	30-Aug-09	01:00:00	14.6	2-Oct-09	19:00:00	6.2
14-Jun-09	14:00:00	12.0	18-Jul-09	08:00:00	10.9	30-Aug-09	02:00:00	14.3	2-Oct-09	20:00:00	6.1
14-Jun-09	15:00:00	12.0	18-Jul-09	09:00:00	10.8	30-Aug-09	03:00:00	14.0	2-Oct-09	21:00:00	5.8
14-Jun-09	16:00:00	12.3	18-Jul-09	10:00:00	10.9	30-Aug-09	04:00:00	13.8	2-Oct-09	22:00:00	5.6
14-Jun-09	17:00:00	12.9	18-Jul-09	11:00:00	11.4	30-Aug-09	05:00:00	13.3	2-Oct-09	23:00:00	5.5
14-Jun-09	18:00:00	13.3	18-Jul-09	12:00:00	11.8	30-Aug-09	06:00:00	13.0	3-Oct-09	00:00:00	5.3
14-Jun-09	19:00:00	13.3	18-Jul-09	13:00:00	12.4	30-Aug-09	07:00:00	12.7	3-Oct-09	01:00:00	5.3
14-Jun-09	20:00:00	13.0	18-Jul-09	14:00:00	13.0	30-Aug-09	08:00:00	12.4	3-Oct-09	02:00:00	5.3
14-Jun-09	21:00:00	12.9	18-Jul-09	15:00:00	13.6	30-Aug-09	09:00:00	12.3	3-Oct-09	03:00:00	5.3
14-Jun-09	22:00:00	13.0	18-Jul-09	16:00:00	13.9	30-Aug-09	10:00:00	12.4	3-Oct-09	04:00:00	5.3
14-Jun-09	23:00:00	12.9	18-Jul-09	17:00:00	14.0	30-Aug-09	11:00:00	12.7	3-Oct-09	05:00:00	5.3
15-Jun-09	00:00:00	12.3	18-Jul-09	18:00:00	14.3	30-Aug-09	12:00:00	13.3	3-Oct-09	06:00:00	5.2
15-Jun-09	01:00:00	11.8	18-Jul-09	19:00:00	14.3	30-Aug-09	13:00:00	14.0	3-Oct-09	07:00:00	5.2
15-Jun-09	02:00:00	11.5	18-Jul-09	20:00:00	14.3	30-Aug-09	14:00:00	14.8	3-Oct-09	08:00:00	5.0
15-Jun-09	03:00:00	11.4	18-Jul-09	21:00:00	14.3	30-Aug-09	15:00:00	15.5	3-Oct-09	09:00:00	4.9
15-Jun-09	04:00:00	11.1	18-Jul-09	22:00:00	14.3	30-Aug-09	16:00:00	16.2	3-Oct-09	10:00:00	5.0
15-Jun-09	05:00:00	10.9	18-Jul-09	23:00:00	14.3	30-Aug-09	17:00:00	16.6	3-Oct-09	11:00:00	5.0
15-Jun-09	06:00:00	10.6	19-Jul-09	00:00:00	14.2	30-Aug-09	18:00:00	16.8	3-Oct-09	12:00:00	5.0
15-Jun-09	07:00:00	10.3	19-Jul-09	01:00:00	14.0	30-Aug-09	19:00:00	16.8	3-Oct-09	13:00:00	5.2
15-Jun-09	08:00:00	10.1	19-Jul-09	02:00:00	13.9	30-Aug-09	20:00:00	16.8	3-Oct-09	14:00:00	5.3
15-Jun-09	09:00:00	10.1	19-Jul-09	03:00:00	13.8	30-Aug-09	21:00:00	16.6	3-Oct-09	15:00:00	5.5
15-Jun-09	10:00:00	10.1	19-Jul-09	04:00:00	13.5	30-Aug-09	22:00:00	16.3	3-Oct-09	16:00:00	5.6
15-Jun-09	11:00:00	10.3	19-Jul-09	05:00:00	13.2	30-Aug-09	23:00:00	15.9	3-Oct-09	17:00:00	5.9
15-Jun-09	12:00:00	10.8	19-Jul-09	06:00:00	12.9	31-Aug-09	00:00:00	15.5	3-Oct-09	18:00:00	6.1
15-Jun-09	13:00:00	11.4	19-Jul-09	07:00:00	12.6	31-Aug-09	01:00:00	15.2	3-Oct-09	19:00:00	6.1
15-Jun-09	14:00:00	11.5	19-Jul-09	08:00:00	12.4	31-Aug-09	02:00:00	14.8	3-Oct-09	20:00:00	5.9
15-Jun-09	15:00:00	11.8	19-Jul-09	09:00:00	12.3	31-Aug-09	03:00:00	14.3	3-Oct-09	21:00:00	5.6
15-Jun-09	16:00:00	12.1	19-Jul-09	10:00:00	12.3	31-Aug-09	04:00:00	14.0	3-Oct-09	22:00:00	5.5
15-Jun-09	17:00:00	12.1	19-Jul-09	11:00:00	12.3	31-Aug-09	05:00:00	13.8	3-Oct-09	23:00:00	5.3
15-Jun-09	18:00:00	12.1	19-Jul-09	12:00:00	12.6	31-Aug-09	06:00:00	13.5	4-Oct-09	00:00:00	5.0
15-Jun-09	19:00:00	12.7	19-Jul-09	13:00:00	13.3	31-Aug-09	07:00:00	13.3	4-Oct-09	01:00:00	4.9
15-Jun-09	20:00:00	13.0	19-Jul-09	14:00:00	13.6	31-Aug-09	08:00:00	13.0	4-Oct-09	02:00:00	4.6
15-Jun-09	21:00:00	13.0	19-Jul-09	15:00:00	14.0	31-Aug-09	09:00:00	12.9	4-Oct-09	03:00:00	4.3
15-Jun-09	22:00:00	12.9	19-Jul-09	16:00:00	14.2	31-Aug-09	10:00:00	13.0	4-Oct-09	04:00:00	4.1
15-Jun-09	23:00:00	12.6	19-Jul-09	17:00:00	14.5	31-Aug-09	11:00:00	13.3	4-Oct-09	05:00:00	4.0
16-Jun-09	00:00:00	12.3	19-Jul-09	18:00:00	14.5	31-Aug-09	12:00:00	13.8	4-Oct-09	06:00:00	3.7
16-Jun-09	01:00:00	12.0	19-Jul-09	19:00:00	15.2	31-Aug-09	13:00:00	14.3	4-Oct-09	07:00:00	3.5
16-Jun-09	02:00:00	11.7	19-Jul-09	20:00:00	15.2	31-Aug-09	14:00:00	14.9	4-Oct-09	08:00:00	3.4

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
16-Jun-09	03:00:00	11.5	19-Jul-09	21:00:00	14.9	31-Aug-09	15:00:00	15.5	4-Oct-09	09:00:00	3.1
16-Jun-09	04:00:00	11.4	19-Jul-09	22:00:00	14.9	31-Aug-09	16:00:00	16.2	4-Oct-09	10:00:00	2.9
16-Jun-09	05:00:00	11.4	19-Jul-09	23:00:00	14.8	31-Aug-09	17:00:00	16.6	4-Oct-09	11:00:00	3.1
16-Jun-09	06:00:00	11.1	20-Jul-09	00:00:00	14.5	31-Aug-09	18:00:00	16.8	4-Oct-09	12:00:00	3.4
16-Jun-09	07:00:00	10.9	20-Jul-09	01:00:00	14.2	31-Aug-09	19:00:00	16.9	4-Oct-09	13:00:00	3.8
16-Jun-09	08:00:00	10.8	20-Jul-09	02:00:00	13.9	31-Aug-09	20:00:00	16.8	4-Oct-09	14:00:00	4.4
16-Jun-09	09:00:00	10.8	20-Jul-09	03:00:00	13.6	31-Aug-09	21:00:00	16.6	4-Oct-09	15:00:00	4.9
16-Jun-09	10:00:00	11.1	20-Jul-09	04:00:00	13.3	31-Aug-09	22:00:00	16.3	4-Oct-09	16:00:00	5.3
16-Jun-09	11:00:00	11.4	20-Jul-09	05:00:00	12.9	31-Aug-09	23:00:00	15.9	4-Oct-09	17:00:00	5.6
16-Jun-09	12:00:00	11.5	20-Jul-09	06:00:00	12.6	1-Sep-09	00:00:00	15.5	4-Oct-09	18:00:00	5.6
16-Jun-09	13:00:00	11.8	20-Jul-09	07:00:00	12.3	1-Sep-09	01:00:00	15.1	4-Oct-09	19:00:00	5.6
16-Jun-09	14:00:00	12.3	20-Jul-09	08:00:00	12.0	1-Sep-09	02:00:00	14.8	4-Oct-09	20:00:00	5.5
16-Jun-09	15:00:00	12.7	20-Jul-09	09:00:00	11.8	1-Sep-09	03:00:00	14.5	4-Oct-09	21:00:00	5.2
16-Jun-09	16:00:00	13.2	20-Jul-09	10:00:00	12.0	1-Sep-09	04:00:00	14.0	4-Oct-09	22:00:00	5.0
16-Jun-09	17:00:00	13.6	20-Jul-09	11:00:00	12.3	1-Sep-09	05:00:00	13.8	4-Oct-09	23:00:00	4.9
16-Jun-09	18:00:00	13.8	20-Jul-09	12:00:00	12.7	1-Sep-09	06:00:00	13.5	5-Oct-09	00:00:00	4.6
16-Jun-09	19:00:00	13.9	20-Jul-09	13:00:00	13.2	1-Sep-09	07:00:00	13.2	5-Oct-09	01:00:00	4.4
16-Jun-09	20:00:00	13.8	20-Jul-09	14:00:00	13.8	1-Sep-09	08:00:00	12.9	5-Oct-09	02:00:00	4.1
16-Jun-09	21:00:00	13.8	20-Jul-09	15:00:00	14.3	1-Sep-09	09:00:00	12.7	5-Oct-09	03:00:00	4.0
16-Jun-09	22:00:00	13.6	20-Jul-09	16:00:00	14.9	1-Sep-09	10:00:00	12.9	5-Oct-09	04:00:00	3.7
16-Jun-09	23:00:00	13.3	20-Jul-09	17:00:00	15.4	1-Sep-09	11:00:00	13.0	5-Oct-09	05:00:00	3.5
17-Jun-09	00:00:00	13.0	20-Jul-09	18:00:00	15.5	1-Sep-09	12:00:00	13.5	5-Oct-09	06:00:00	3.4
17-Jun-09	01:00:00	12.9	20-Jul-09	19:00:00	15.4	1-Sep-09	13:00:00	14.0	5-Oct-09	07:00:00	3.4
17-Jun-09	02:00:00	12.6	20-Jul-09	20:00:00	15.9	1-Sep-09	14:00:00	14.9	5-Oct-09	08:00:00	3.2
17-Jun-09	03:00:00	12.3	20-Jul-09	21:00:00	16.2	1-Sep-09	15:00:00	15.5	5-Oct-09	09:00:00	3.1
17-Jun-09	04:00:00	12.1	20-Jul-09	22:00:00	15.9	1-Sep-09	16:00:00	16.2	5-Oct-09	10:00:00	3.1
17-Jun-09	05:00:00	11.8	20-Jul-09	23:00:00	15.4	1-Sep-09	17:00:00	16.6	5-Oct-09	11:00:00	3.1
17-Jun-09	06:00:00	11.5	21-Jul-09	00:00:00	15.2	1-Sep-09	18:00:00	16.8	5-Oct-09	12:00:00	3.4
17-Jun-09	07:00:00	11.4	21-Jul-09	01:00:00	15.1	1-Sep-09	19:00:00	16.9	5-Oct-09	13:00:00	3.5
17-Jun-09	08:00:00	11.2	21-Jul-09	02:00:00	14.9	1-Sep-09	20:00:00	16.8	5-Oct-09	14:00:00	3.8
17-Jun-09	09:00:00	11.2	21-Jul-09	03:00:00	14.6	1-Sep-09	21:00:00	16.6	5-Oct-09	15:00:00	4.3
17-Jun-09	10:00:00	11.4	21-Jul-09	04:00:00	14.3	1-Sep-09	22:00:00	16.3	5-Oct-09	16:00:00	4.4
17-Jun-09	11:00:00	11.7	21-Jul-09	05:00:00	13.9	1-Sep-09	23:00:00	16.0	5-Oct-09	17:00:00	4.6
17-Jun-09	12:00:00	12.0	21-Jul-09	06:00:00	13.5	2-Sep-09	00:00:00	15.5	5-Oct-09	18:00:00	4.6
17-Jun-09	13:00:00	12.3	21-Jul-09	07:00:00	13.2	2-Sep-09	01:00:00	15.2	5-Oct-09	19:00:00	4.6
17-Jun-09	14:00:00	13.0	21-Jul-09	08:00:00	12.9	2-Sep-09	02:00:00	14.9	5-Oct-09	20:00:00	4.7
17-Jun-09	15:00:00	13.5	21-Jul-09	09:00:00	12.9	2-Sep-09	03:00:00	14.8	5-Oct-09	21:00:00	4.9
17-Jun-09	16:00:00	13.8	21-Jul-09	10:00:00	13.0	2-Sep-09	04:00:00	14.5	5-Oct-09	22:00:00	4.9
17-Jun-09	17:00:00	14.2	21-Jul-09	11:00:00	13.3	2-Sep-09	05:00:00	14.3	5-Oct-09	23:00:00	4.9
17-Jun-09	18:00:00	14.3	21-Jul-09	12:00:00	13.3	2-Sep-09	06:00:00	14.0	6-Oct-09	00:00:00	4.9
17-Jun-09	19:00:00	14.2	21-Jul-09	13:00:00	13.5	2-Sep-09	07:00:00	13.9	6-Oct-09	01:00:00	4.9
17-Jun-09	20:00:00	14.2	21-Jul-09	14:00:00	13.6	2-Sep-09	08:00:00	13.8	6-Oct-09	02:00:00	4.9
17-Jun-09	21:00:00	14.0	21-Jul-09	15:00:00	13.8	2-Sep-09	09:00:00	13.6	6-Oct-09	03:00:00	4.9
17-Jun-09	22:00:00	13.6	21-Jul-09	16:00:00	14.0	2-Sep-09	10:00:00	13.6	6-Oct-09	04:00:00	4.9
17-Jun-09	23:00:00	13.5	21-Jul-09	17:00:00	14.2	2-Sep-09	11:00:00	13.9	6-Oct-09	05:00:00	4.7
18-Jun-09	00:00:00	13.2	21-Jul-09	18:00:00	14.3	2-Sep-09	12:00:00	14.5	6-Oct-09	06:00:00	4.7
18-Jun-09	01:00:00	12.7	21-Jul-09	19:00:00	14.3	2-Sep-09	13:00:00	14.9	6-Oct-09	07:00:00	4.7
18-Jun-09	02:00:00	12.4	21-Jul-09	20:00:00	14.5	2-Sep-09	14:00:00	14.9	6-Oct-09	08:00:00	4.9
18-Jun-09	03:00:00	12.0	21-Jul-09	21:00:00	14.5	2-Sep-09	15:00:00	14.9	6-Oct-09	09:00:00	5.0
18-Jun-09	04:00:00	11.7	21-Jul-09	22:00:00	14.5	2-Sep-09	16:00:00	15.4	6-Oct-09	10:00:00	5.0
18-Jun-09	05:00:00	11.2	21-Jul-09	23:00:00	14.5	2-Sep-09	17:00:00	16.0	6-Oct-09	11:00:00	5.0
18-Jun-09	06:00:00	10.9	22-Jul-09	00:00:00	14.3	2-Sep-09	18:00:00	16.2	6-Oct-09	12:00:00	5.2
18-Jun-09	07:00:00	10.6	22-Jul-09	01:00:00	14.2	2-Sep-09	19:00:00	16.2	6-Oct-09	13:00:00	5.2
18-Jun-09	08:00:00	10.5	22-Jul-09	02:00:00	14.0	2-Sep-09	20:00:00	16.0	6-Oct-09	14:00:00	5.3
18-Jun-09	09:00:00	10.3	22-Jul-09	03:00:00	13.9	2-Sep-09	21:00:00	15.7	6-Oct-09	15:00:00	5.3
18-Jun-09	10:00:00	10.6	22-Jul-09	04:00:00	13.8	2-Sep-09	22:00:00	15.5	6-Oct-09	16:00:00	5.6
18-Jun-09	11:00:00	10.9	22-Jul-09	05:00:00	13.6	2-Sep-09	23:00:00	15.1	6-Oct-09	17:00:00	5.8
18-Jun-09	12:00:00	11.5	22-Jul-09	06:00:00	13.3	3-Sep-09	00:00:00	14.9	6-Oct-09	18:00:00	5.8
18-Jun-09	13:00:00	11.5	22-Jul-09	07:00:00	13.2	3-Sep-09	01:00:00	14.6	6-Oct-09	19:00:00	5.8

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
18-Jun-09	14:00:00	12.3	22-Jul-09	08:00:00	13.0	3-Sep-09	02:00:00	14.3	6-Oct-09	20:00:00	5.6
18-Jun-09	15:00:00	12.7	22-Jul-09	09:00:00	12.9	3-Sep-09	03:00:00	14.0	6-Oct-09	21:00:00	5.3
18-Jun-09	16:00:00	13.2	22-Jul-09	10:00:00	12.9	3-Sep-09	04:00:00	13.9	6-Oct-09	22:00:00	5.2
18-Jun-09	17:00:00	13.5	22-Jul-09	11:00:00	12.9	3-Sep-09	05:00:00	13.6	6-Oct-09	23:00:00	5.0
18-Jun-09	18:00:00	13.6	22-Jul-09	12:00:00	13.0	3-Sep-09	06:00:00	13.5	7-Oct-09	00:00:00	4.9
18-Jun-09	19:00:00	13.8	22-Jul-09	13:00:00	13.5	3-Sep-09	07:00:00	13.2	7-Oct-09	01:00:00	4.6
18-Jun-09	20:00:00	13.8	22-Jul-09	14:00:00	13.9	3-Sep-09	08:00:00	13.0	7-Oct-09	02:00:00	4.4
18-Jun-09	21:00:00	13.8	22-Jul-09	15:00:00	14.5	3-Sep-09	09:00:00	13.0	7-Oct-09	03:00:00	4.4
18-Jun-09	22:00:00	13.6	22-Jul-09	16:00:00	15.1	3-Sep-09	10:00:00	12.9	7-Oct-09	04:00:00	4.3
18-Jun-09	23:00:00	13.3	22-Jul-09	17:00:00	15.1	3-Sep-09	11:00:00	13.0	7-Oct-09	05:00:00	4.1
19-Jun-09	00:00:00	13.2	22-Jul-09	18:00:00	15.7	3-Sep-09	12:00:00	13.3	7-Oct-09	06:00:00	4.0
19-Jun-09	01:00:00	13.0	22-Jul-09	19:00:00	16.3	3-Sep-09	13:00:00	13.5	7-Oct-09	07:00:00	4.0
19-Jun-09	02:00:00	12.6	22-Jul-09	20:00:00	16.2	3-Sep-09	14:00:00	14.0	7-Oct-09	08:00:00	4.0
19-Jun-09	03:00:00	12.0	22-Jul-09	21:00:00	15.9	3-Sep-09	15:00:00	14.3	7-Oct-09	09:00:00	3.8
19-Jun-09	04:00:00	11.5	22-Jul-09	22:00:00	15.4	3-Sep-09	16:00:00	14.6	7-Oct-09	10:00:00	3.8
19-Jun-09	05:00:00	11.1	22-Jul-09	23:00:00	15.1	3-Sep-09	17:00:00	14.9	7-Oct-09	11:00:00	4.0
19-Jun-09	06:00:00	10.8	23-Jul-09	00:00:00	14.9	3-Sep-09	18:00:00	15.1	7-Oct-09	12:00:00	4.1
19-Jun-09	07:00:00	10.5	23-Jul-09	01:00:00	14.8	3-Sep-09	19:00:00	14.9	7-Oct-09	13:00:00	4.3
19-Jun-09	08:00:00	10.2	23-Jul-09	02:00:00	14.6	3-Sep-09	20:00:00	14.9	7-Oct-09	14:00:00	4.9
19-Jun-09	09:00:00	9.9	23-Jul-09	03:00:00	14.5	3-Sep-09	21:00:00	14.9	7-Oct-09	15:00:00	5.2
19-Jun-09	10:00:00	10.2	23-Jul-09	04:00:00	14.2	3-Sep-09	22:00:00	14.8	7-Oct-09	16:00:00	5.5
19-Jun-09	11:00:00	10.6	23-Jul-09	05:00:00	13.8	3-Sep-09	23:00:00	14.5	7-Oct-09	17:00:00	5.6
19-Jun-09	12:00:00	11.1	23-Jul-09	06:00:00	13.5	4-Sep-09	00:00:00	14.3	7-Oct-09	18:00:00	5.8
19-Jun-09	13:00:00	11.5	23-Jul-09	07:00:00	13.0	4-Sep-09	01:00:00	14.2	7-Oct-09	19:00:00	5.6
19-Jun-09	14:00:00	11.7	23-Jul-09	08:00:00	12.9	4-Sep-09	02:00:00	14.0	7-Oct-09	20:00:00	5.3
19-Jun-09	15:00:00	12.6	23-Jul-09	09:00:00	12.7	4-Sep-09	03:00:00	13.9	7-Oct-09	21:00:00	5.0
19-Jun-09	16:00:00	13.3	23-Jul-09	10:00:00	13.0	4-Sep-09	04:00:00	13.9	7-Oct-09	22:00:00	4.9
19-Jun-09	17:00:00	13.5	23-Jul-09	11:00:00	13.3	4-Sep-09	05:00:00	13.8	7-Oct-09	23:00:00	4.7
19-Jun-09	18:00:00	13.2	23-Jul-09	12:00:00	13.8	4-Sep-09	06:00:00	13.8	8-Oct-09	00:00:00	4.6
19-Jun-09	19:00:00	13.5	23-Jul-09	13:00:00	14.3	4-Sep-09	07:00:00	13.6	8-Oct-09	01:00:00	4.6
19-Jun-09	20:00:00	13.3	23-Jul-09	14:00:00	15.1	4-Sep-09	08:00:00	13.5	8-Oct-09	02:00:00	4.4
19-Jun-09	21:00:00	13.3	23-Jul-09	15:00:00	15.5	4-Sep-09	09:00:00	13.5	8-Oct-09	03:00:00	4.3
19-Jun-09	22:00:00	13.3	23-Jul-09	16:00:00	16.2	4-Sep-09	10:00:00	13.5	8-Oct-09	04:00:00	4.1
19-Jun-09	23:00:00	13.0	23-Jul-09	17:00:00	16.9	4-Sep-09	11:00:00	13.5	8-Oct-09	05:00:00	4.0
20-Jun-09	00:00:00	12.6	23-Jul-09	18:00:00	17.1	4-Sep-09	12:00:00	13.5	8-Oct-09	06:00:00	3.7
20-Jun-09	01:00:00	12.4	23-Jul-09	19:00:00	17.1	4-Sep-09	13:00:00	13.8	8-Oct-09	07:00:00	3.5
20-Jun-09	02:00:00	12.1	23-Jul-09	20:00:00	17.2	4-Sep-09	14:00:00	14.2	8-Oct-09	08:00:00	3.5
20-Jun-09	03:00:00	11.8	23-Jul-09	21:00:00	17.1	4-Sep-09	15:00:00	14.8	8-Oct-09	09:00:00	3.4
20-Jun-09	04:00:00	11.5	23-Jul-09	22:00:00	16.9	4-Sep-09	16:00:00	15.2	8-Oct-09	10:00:00	3.2
20-Jun-09	05:00:00	11.4	23-Jul-09	23:00:00	16.5	4-Sep-09	17:00:00	15.7	8-Oct-09	11:00:00	3.1
20-Jun-09	06:00:00	11.1	24-Jul-09	00:00:00	16.3	4-Sep-09	18:00:00	16.2	8-Oct-09	12:00:00	3.2
20-Jun-09	07:00:00	10.8	24-Jul-09	01:00:00	16.2	4-Sep-09	19:00:00	16.3	8-Oct-09	13:00:00	3.2
20-Jun-09	08:00:00	10.6	24-Jul-09	02:00:00	16.0	4-Sep-09	20:00:00	16.0	8-Oct-09	14:00:00	3.4
20-Jun-09	09:00:00	10.5	24-Jul-09	03:00:00	15.9	4-Sep-09	21:00:00	15.7	8-Oct-09	15:00:00	3.4
20-Jun-09	10:00:00	10.5	24-Jul-09	04:00:00	15.5	4-Sep-09	22:00:00	15.1	8-Oct-09	16:00:00	3.5
20-Jun-09	11:00:00	10.5	24-Jul-09	05:00:00	15.2	4-Sep-09	23:00:00	14.5	8-Oct-09	17:00:00	3.5
20-Jun-09	12:00:00	10.6	24-Jul-09	06:00:00	14.9	5-Sep-09	00:00:00	14.2	8-Oct-09	18:00:00	3.4
20-Jun-09	13:00:00	10.9	24-Jul-09	07:00:00	14.5	5-Sep-09	01:00:00	13.9	8-Oct-09	19:00:00	3.2
20-Jun-09	14:00:00	11.4	24-Jul-09	08:00:00	14.3	5-Sep-09	02:00:00	13.6	8-Oct-09	20:00:00	2.9
20-Jun-09	15:00:00	11.5	24-Jul-09	09:00:00	14.3	5-Sep-09	03:00:00	13.2	8-Oct-09	21:00:00	2.8
20-Jun-09	16:00:00	11.7	24-Jul-09	10:00:00	14.5	5-Sep-09	04:00:00	12.9	8-Oct-09	22:00:00	2.5
20-Jun-09	17:00:00	12.0	24-Jul-09	11:00:00	14.6	5-Sep-09	05:00:00	12.7	8-Oct-09	23:00:00	2.3
20-Jun-09	18:00:00	12.3	24-Jul-09	12:00:00	14.9	5-Sep-09	06:00:00	12.4	9-Oct-09	00:00:00	2.2
20-Jun-09	19:00:00	12.4	24-Jul-09	13:00:00	15.7	5-Sep-09	07:00:00	12.1	9-Oct-09	01:00:00	2.2
20-Jun-09	20:00:00	12.1	24-Jul-09	14:00:00	16.3	5-Sep-09	08:00:00	12.0	9-Oct-09	02:00:00	2.0
20-Jun-09	21:00:00	11.8	24-Jul-09	15:00:00	16.8	5-Sep-09	09:00:00	11.8	9-Oct-09	03:00:00	1.9
20-Jun-09	22:00:00	11.4	24-Jul-09	16:00:00	17.4	5-Sep-09	10:00:00	11.8	9-Oct-09	04:00:00	1.7
20-Jun-09	23:00:00	11.2	24-Jul-09	17:00:00	17.5	5-Sep-09	11:00:00	12.0	9-Oct-09	05:00:00	1.6
21-Jun-09	00:00:00	11.2	24-Jul-09	18:00:00	18.0	5-Sep-09	12:00:00	12.3	9-Oct-09	06:00:00	1.6

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
21-Jun-09	01:00:00	11.1	24-Jul-09	19:00:00	18.0	5-Sep-09	13:00:00	12.7	9-Oct-09	07:00:00	1.4
21-Jun-09	02:00:00	10.9	24-Jul-09	20:00:00	18.1	5-Sep-09	14:00:00	13.0	9-Oct-09	08:00:00	1.3
21-Jun-09	03:00:00	10.6	24-Jul-09	21:00:00	17.8	5-Sep-09	15:00:00	13.2	9-Oct-09	09:00:00	1.3
21-Jun-09	04:00:00	10.2	24-Jul-09	22:00:00	17.7	5-Sep-09	16:00:00	13.3	9-Oct-09	10:00:00	1.3
21-Jun-09	05:00:00	9.9	24-Jul-09	23:00:00	17.5	5-Sep-09	17:00:00	13.5	9-Oct-09	11:00:00	1.3
21-Jun-09	06:00:00	9.8	25-Jul-09	00:00:00	17.2	5-Sep-09	18:00:00	13.5	9-Oct-09	12:00:00	1.4
21-Jun-09	07:00:00	9.5	25-Jul-09	01:00:00	17.1	5-Sep-09	19:00:00	13.5	9-Oct-09	13:00:00	1.7
21-Jun-09	08:00:00	9.2	25-Jul-09	02:00:00	16.8	5-Sep-09	20:00:00	13.3	9-Oct-09	14:00:00	2.0
21-Jun-09	09:00:00	9.2	25-Jul-09	03:00:00	16.3	5-Sep-09	21:00:00	13.2	9-Oct-09	15:00:00	2.3
21-Jun-09	10:00:00	9.2	25-Jul-09	04:00:00	16.0	5-Sep-09	22:00:00	13.0	9-Oct-09	16:00:00	2.6
21-Jun-09	11:00:00	9.5	25-Jul-09	05:00:00	15.5	5-Sep-09	23:00:00	12.9	9-Oct-09	17:00:00	3.1
21-Jun-09	12:00:00	9.8	25-Jul-09	06:00:00	15.2	6-Sep-09	00:00:00	12.7	9-Oct-09	18:00:00	3.1
21-Jun-09	13:00:00	10.2	25-Jul-09	07:00:00	14.5	6-Sep-09	01:00:00	12.6	9-Oct-09	19:00:00	3.1
21-Jun-09	14:00:00	10.8	25-Jul-09	08:00:00	14.5	6-Sep-09	02:00:00	12.4	9-Oct-09	20:00:00	2.6
21-Jun-09	15:00:00	10.9	25-Jul-09	09:00:00	14.5	6-Sep-09	03:00:00	12.3	9-Oct-09	21:00:00	2.5
21-Jun-09	16:00:00	11.4	25-Jul-09	10:00:00	15.7	6-Sep-09	04:00:00	12.0	9-Oct-09	22:00:00	2.3
21-Jun-09	17:00:00	11.7	25-Jul-09	11:00:00	16.5	6-Sep-09	05:00:00	11.7	9-Oct-09	23:00:00	2.2
21-Jun-09	18:00:00	12.0	25-Jul-09	12:00:00	17.1	6-Sep-09	06:00:00	11.4	10-Oct-09	00:00:00	2.0
21-Jun-09	19:00:00	11.8	25-Jul-09	13:00:00	18.8	6-Sep-09	07:00:00	11.2	10-Oct-09	01:00:00	1.9
21-Jun-09	20:00:00	12.0	25-Jul-09	14:00:00	19.1	6-Sep-09	08:00:00	10.9	10-Oct-09	02:00:00	1.9
21-Jun-09	21:00:00	12.1	25-Jul-09	15:00:00	20.3	6-Sep-09	09:00:00	10.8	10-Oct-09	03:00:00	1.7
21-Jun-09	22:00:00	12.0	25-Jul-09	16:00:00	20.6	6-Sep-09	10:00:00	10.6	10-Oct-09	04:00:00	1.6
21-Jun-09	23:00:00	11.7	25-Jul-09	17:00:00	21.8	6-Sep-09	11:00:00	10.6	10-Oct-09	05:00:00	1.6
22-Jun-09	00:00:00	11.7	25-Jul-09	18:00:00	21.8	6-Sep-09	12:00:00	10.5	10-Oct-09	06:00:00	1.4
22-Jun-09	01:00:00	11.4	25-Jul-09	19:00:00	19.1	6-Sep-09	13:00:00	10.5	10-Oct-09	07:00:00	1.3
22-Jun-09	02:00:00	11.1	25-Jul-09	20:00:00	19.1	6-Sep-09	14:00:00	10.6	10-Oct-09	08:00:00	1.1
22-Jun-09	03:00:00	10.9	25-Jul-09	21:00:00	18.6	6-Sep-09	15:00:00	10.8	10-Oct-09	09:00:00	1.0
22-Jun-09	04:00:00	10.6	25-Jul-09	22:00:00	17.5	6-Sep-09	16:00:00	10.9	10-Oct-09	10:00:00	1.0
22-Jun-09	05:00:00	10.2	25-Jul-09	23:00:00	16.8	6-Sep-09	17:00:00	11.1	10-Oct-09	11:00:00	1.0
22-Jun-09	06:00:00	9.8	4-Aug-09	00:00:00	13.2	6-Sep-09	18:00:00	11.1	10-Oct-09	12:00:00	1.1
22-Jun-09	07:00:00	9.3	4-Aug-09	01:00:00	12.9	6-Sep-09	19:00:00	11.2	10-Oct-09	13:00:00	1.3
22-Jun-09	08:00:00	9.2	4-Aug-09	02:00:00	12.6	6-Sep-09	20:00:00	11.2	10-Oct-09	14:00:00	1.6
22-Jun-09	09:00:00	9.0	4-Aug-09	03:00:00	12.3	6-Sep-09	21:00:00	11.1	10-Oct-09	15:00:00	2.0
22-Jun-09	10:00:00	9.3	4-Aug-09	04:00:00	12.1	6-Sep-09	22:00:00	10.9	10-Oct-09	16:00:00	2.5
22-Jun-09	11:00:00	9.6	4-Aug-09	05:00:00	11.8	6-Sep-09	23:00:00	10.8	10-Oct-09	17:00:00	2.6
22-Jun-09	12:00:00	10.1	4-Aug-09	06:00:00	11.5	7-Sep-09	00:00:00	10.8	10-Oct-09	18:00:00	2.5
22-Jun-09	13:00:00	10.3	4-Aug-09	07:00:00	11.2	7-Sep-09	01:00:00	10.6	10-Oct-09	19:00:00	2.3
22-Jun-09	14:00:00	10.8	4-Aug-09	08:00:00	11.1	7-Sep-09	02:00:00	10.6	10-Oct-09	20:00:00	2.0
22-Jun-09	15:00:00	11.1	4-Aug-09	09:00:00	10.9	7-Sep-09	03:00:00	10.3	10-Oct-09	21:00:00	1.7
22-Jun-09	16:00:00	11.1	4-Aug-09	10:00:00	10.9	7-Sep-09	04:00:00	10.3	10-Oct-09	22:00:00	1.4
22-Jun-09	17:00:00	11.5	4-Aug-09	11:00:00	10.9	7-Sep-09	05:00:00	10.2	10-Oct-09	23:00:00	1.3
22-Jun-09	18:00:00	11.5	4-Aug-09	12:00:00	11.1	7-Sep-09	06:00:00	10.2	11-Oct-09	00:00:00	1.0
22-Jun-09	19:00:00	11.5	4-Aug-09	13:00:00	11.5	7-Sep-09	07:00:00	10.1	11-Oct-09	01:00:00	0.7
22-Jun-09	20:00:00	11.5	4-Aug-09	14:00:00	11.8	7-Sep-09	08:00:00	10.1	11-Oct-09	02:00:00	0.5
22-Jun-09	21:00:00	12.1	4-Aug-09	15:00:00	12.4	7-Sep-09	09:00:00	9.9	11-Oct-09	03:00:00	0.2
22-Jun-09	22:00:00	12.3	4-Aug-09	16:00:00	12.7	7-Sep-09	10:00:00	9.9	11-Oct-09	04:00:00	0.0
22-Jun-09	23:00:00	12.1	4-Aug-09	17:00:00	13.2	7-Sep-09	11:00:00	9.9	11-Oct-09	05:00:00	-0.1
23-Jun-09	00:00:00	11.8	4-Aug-09	18:00:00	13.6	7-Sep-09	12:00:00	10.2	11-Oct-09	06:00:00	-0.1
23-Jun-09	01:00:00	11.7	4-Aug-09	19:00:00	13.5	7-Sep-09	13:00:00	10.2	11-Oct-09	07:00:00	-0.1
23-Jun-09	02:00:00	11.4	4-Aug-09	20:00:00	13.2	7-Sep-09	14:00:00	10.3	11-Oct-09	08:00:00	-0.1
23-Jun-09	03:00:00	11.1	4-Aug-09	21:00:00	13.3	7-Sep-09	15:00:00	10.3	11-Oct-09	09:00:00	-0.1
23-Jun-09	04:00:00	10.6	4-Aug-09	22:00:00	13.0	7-Sep-09	16:00:00	10.5	11-Oct-09	10:00:00	-0.1
23-Jun-09	05:00:00	10.2	4-Aug-09	23:00:00	13.0	7-Sep-09	17:00:00	10.5	11-Oct-09	11:00:00	-0.1
23-Jun-09	06:00:00	9.9	5-Aug-09	00:00:00	12.7	7-Sep-09	18:00:00	10.6	11-Oct-09	12:00:00	-0.1
23-Jun-09	07:00:00	9.5	5-Aug-09	01:00:00	12.6	7-Sep-09	19:00:00	10.5	11-Oct-09	13:00:00	-0.1
23-Jun-09	08:00:00	9.2	5-Aug-09	02:00:00	12.3	7-Sep-09	20:00:00	10.5	11-Oct-09	14:00:00	0.0
23-Jun-09	09:00:00	9.2	5-Aug-09	03:00:00	12.1	7-Sep-09	21:00:00	10.3	11-Oct-09	15:00:00	0.2
23-Jun-09	10:00:00	9.5	5-Aug-09	04:00:00	11.8	7-Sep-09	22:00:00	10.2	11-Oct-09	16:00:00	0.5
23-Jun-09	11:00:00	9.8	5-Aug-09	05:00:00	11.5	7-Sep-09	23:00:00	10.1	11-Oct-09	17:00:00	0.8

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
23-Jun-09	12:00:00	10.3	5-Aug-09	06:00:00	11.2	8-Sep-09	00:00:00	9.9	11-Oct-09	18:00:00	0.8
23-Jun-09	13:00:00	10.9	5-Aug-09	07:00:00	10.9	8-Sep-09	01:00:00	9.9	11-Oct-09	19:00:00	0.7
23-Jun-09	14:00:00	11.5	5-Aug-09	08:00:00	10.6	8-Sep-09	02:00:00	9.8	11-Oct-09	20:00:00	0.5
23-Jun-09	15:00:00	12.0	5-Aug-09	09:00:00	10.5	8-Sep-09	03:00:00	9.8	11-Oct-09	21:00:00	0.5
23-Jun-09	16:00:00	11.8	5-Aug-09	10:00:00	10.6	8-Sep-09	04:00:00	9.5	11-Oct-09	22:00:00	0.4
23-Jun-09	17:00:00	12.1	5-Aug-09	11:00:00	10.9	8-Sep-09	05:00:00	9.5	11-Oct-09	23:00:00	0.4
23-Jun-09	18:00:00	12.3	5-Aug-09	12:00:00	11.4	8-Sep-09	06:00:00	9.3	12-Oct-09	00:00:00	0.4
23-Jun-09	19:00:00	13.0	5-Aug-09	13:00:00	12.0	8-Sep-09	07:00:00	9.2	12-Oct-09	01:00:00	0.4
23-Jun-09	20:00:00	13.5	5-Aug-09	14:00:00	12.4	8-Sep-09	08:00:00	9.0	12-Oct-09	02:00:00	0.2
23-Jun-09	21:00:00	13.3	5-Aug-09	15:00:00	13.0	8-Sep-09	09:00:00	9.0	12-Oct-09	03:00:00	0.0
23-Jun-09	22:00:00	13.2	5-Aug-09	16:00:00	13.6	8-Sep-09	10:00:00	9.0	12-Oct-09	04:00:00	0.0
23-Jun-09	23:00:00	13.2	5-Aug-09	17:00:00	14.0	8-Sep-09	11:00:00	9.0	12-Oct-09	05:00:00	0.0
24-Jun-09	00:00:00	12.9	5-Aug-09	18:00:00	14.3	8-Sep-09	12:00:00	9.3	12-Oct-09	06:00:00	-0.1
24-Jun-09	01:00:00	12.7	5-Aug-09	19:00:00	14.5	8-Sep-09	13:00:00	9.8	12-Oct-09	07:00:00	-0.1
24-Jun-09	02:00:00	12.6	5-Aug-09	20:00:00	14.5	8-Sep-09	14:00:00	10.1	12-Oct-09	08:00:00	-0.1
24-Jun-09	03:00:00	12.4	5-Aug-09	21:00:00	14.5	8-Sep-09	15:00:00	10.5	12-Oct-09	09:00:00	-0.1
24-Jun-09	04:00:00	12.0	5-Aug-09	22:00:00	14.2	8-Sep-09	16:00:00	11.1	12-Oct-09	10:00:00	-0.1
24-Jun-09	05:00:00	11.7	5-Aug-09	23:00:00	13.9	8-Sep-09	17:00:00	11.1	12-Oct-09	11:00:00	-0.1
24-Jun-09	06:00:00	11.2	6-Aug-09	00:00:00	13.9	8-Sep-09	18:00:00	11.7	12-Oct-09	12:00:00	-0.1
24-Jun-09	07:00:00	10.8	6-Aug-09	01:00:00	13.6	8-Sep-09	19:00:00	11.7	12-Oct-09	13:00:00	-0.1
24-Jun-09	08:00:00	10.6	6-Aug-09	02:00:00	13.3	8-Sep-09	20:00:00	11.5	12-Oct-09	14:00:00	-0.1
24-Jun-09	09:00:00	10.6	6-Aug-09	03:00:00	13.2	8-Sep-09	21:00:00	11.4	12-Oct-09	15:00:00	-0.1
24-Jun-09	10:00:00	10.8	6-Aug-09	04:00:00	12.7	8-Sep-09	22:00:00	11.2	12-Oct-09	16:00:00	0.0
24-Jun-09	11:00:00	11.2	6-Aug-09	05:00:00	12.6	8-Sep-09	23:00:00	11.1	12-Oct-09	17:00:00	0.0
24-Jun-09	12:00:00	11.5	6-Aug-09	06:00:00	12.1	9-Sep-09	00:00:00	10.8	12-Oct-09	18:00:00	0.0
24-Jun-09	13:00:00	12.1	6-Aug-09	07:00:00	11.8	9-Sep-09	01:00:00	10.5	12-Oct-09	19:00:00	0.0
24-Jun-09	14:00:00	12.7	6-Aug-09	08:00:00	11.5	9-Sep-09	02:00:00	10.3	12-Oct-09	20:00:00	-0.1
24-Jun-09	15:00:00	13.3	6-Aug-09	09:00:00	11.4	9-Sep-09	03:00:00	10.2	12-Oct-09	21:00:00	-0.1
24-Jun-09	16:00:00	13.8	6-Aug-09	10:00:00	11.4	9-Sep-09	04:00:00	10.1	12-Oct-09	22:00:00	-0.1
24-Jun-09	17:00:00	14.0	6-Aug-09	11:00:00	11.7	9-Sep-09	05:00:00	9.8	12-Oct-09	23:00:00	-0.1
24-Jun-09	18:00:00	14.0	6-Aug-09	12:00:00	12.1	9-Sep-09	06:00:00	9.6	13-Oct-09	00:00:00	-0.1
24-Jun-09	19:00:00	14.2	6-Aug-09	13:00:00	12.7	9-Sep-09	07:00:00	9.3	13-Oct-09	01:00:00	-0.1
24-Jun-09	20:00:00	14.0	6-Aug-09	14:00:00	13.3	9-Sep-09	08:00:00	9.2	13-Oct-09	02:00:00	-0.1
24-Jun-09	21:00:00	13.9	6-Aug-09	15:00:00	14.0	9-Sep-09	09:00:00	9.2	13-Oct-09	03:00:00	-0.1
24-Jun-09	22:00:00	13.8	6-Aug-09	16:00:00	14.6	9-Sep-09	10:00:00	9.0	13-Oct-09	04:00:00	-0.1
24-Jun-09	23:00:00	13.8	6-Aug-09	17:00:00	15.1	9-Sep-09	11:00:00	9.0	13-Oct-09	05:00:00	-0.1
25-Jun-09	00:00:00	13.6	6-Aug-09	18:00:00	15.5	9-Sep-09	12:00:00	9.2	13-Oct-09	06:00:00	-0.1
25-Jun-09	01:00:00	13.3	6-Aug-09	19:00:00	15.7	9-Sep-09	13:00:00	9.3	13-Oct-09	07:00:00	-0.1
25-Jun-09	02:00:00	13.0	6-Aug-09	20:00:00	15.7	9-Sep-09	14:00:00	9.5	13-Oct-09	08:00:00	-0.1
25-Jun-09	03:00:00	12.9	6-Aug-09	21:00:00	15.7	9-Sep-09	15:00:00	9.6	13-Oct-09	09:00:00	-0.1
25-Jun-09	04:00:00	12.7	6-Aug-09	22:00:00	15.5	9-Sep-09	16:00:00	9.8	13-Oct-09	10:00:00	-0.1
25-Jun-09	05:00:00	12.4	6-Aug-09	23:00:00	15.4	9-Sep-09	17:00:00	9.8	13-Oct-09	11:00:00	-0.1
25-Jun-09	06:00:00	12.1	7-Aug-09	00:00:00	15.1	9-Sep-09	18:00:00	9.9	13-Oct-09	12:00:00	-0.1
25-Jun-09	07:00:00	12.0	7-Aug-09	01:00:00	14.9	9-Sep-09	19:00:00	10.1	13-Oct-09	13:00:00	-0.1
25-Jun-09	08:00:00	11.8	7-Aug-09	02:00:00	14.8	9-Sep-09	20:00:00	10.1	13-Oct-09	14:00:00	-0.1
25-Jun-09	09:00:00	11.7	7-Aug-09	03:00:00	14.5	9-Sep-09	21:00:00	10.1	13-Oct-09	15:00:00	-0.1
25-Jun-09	10:00:00	11.8	7-Aug-09	04:00:00	14.2	9-Sep-09	22:00:00	10.1	13-Oct-09	16:00:00	-0.1
25-Jun-09	11:00:00	11.8	7-Aug-09	05:00:00	13.9	9-Sep-09	23:00:00	10.1	13-Oct-09	17:00:00	-0.1
25-Jun-09	12:00:00	12.1	7-Aug-09	06:00:00	13.6	10-Sep-09	00:00:00	10.1	13-Oct-09	18:00:00	-0.1
25-Jun-09	13:00:00	12.6	7-Aug-09	07:00:00	13.3	10-Sep-09	01:00:00	10.1	13-Oct-09	19:00:00	-0.1
25-Jun-09	14:00:00	12.9	7-Aug-09	08:00:00	13.0	10-Sep-09	02:00:00	10.1	13-Oct-09	20:00:00	-0.1
25-Jun-09	15:00:00	12.7	7-Aug-09	09:00:00	12.9	10-Sep-09	03:00:00	10.1	13-Oct-09	21:00:00	-0.1
25-Jun-09	16:00:00	13.2	7-Aug-09	10:00:00	12.9	10-Sep-09	04:00:00	10.1	13-Oct-09	22:00:00	-0.1
25-Jun-09	17:00:00	13.2	7-Aug-09	11:00:00	13.2	10-Sep-09	05:00:00	10.1	13-Oct-09	23:00:00	-0.1
25-Jun-09	18:00:00	13.2	7-Aug-09	12:00:00	13.5	10-Sep-09	06:00:00	10.1	14-Oct-09	00:00:00	-0.1
25-Jun-09	19:00:00	12.7	7-Aug-09	13:00:00	13.9	10-Sep-09	07:00:00	9.9	14-Oct-09	01:00:00	-0.1
25-Jun-09	20:00:00	12.7	7-Aug-09	14:00:00	14.6	10-Sep-09	08:00:00	9.9	14-Oct-09	02:00:00	-0.1
25-Jun-09	21:00:00	12.6	7-Aug-09	15:00:00	15.2	10-Sep-09	09:00:00	9.8	14-Oct-09	03:00:00	-0.1
25-Jun-09	22:00:00	12.4	7-Aug-09	16:00:00	15.9	10-Sep-09	10:00:00	9.9	14-Oct-09	04:00:00	-0.1

Appendix C Table C2C. Temperature data collected on the upper Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
25-Jun-09	23:00:00	12.6	7-Aug-09	17:00:00	16.3	10-Sep-09	11:00:00	10.1	14-Oct-09	05:00:00	-0.1
26-Jun-09	00:00:00	12.4	7-Aug-09	18:00:00	16.5	10-Sep-09	12:00:00	10.6	14-Oct-09	06:00:00	-0.1
26-Jun-09	01:00:00	12.3	7-Aug-09	19:00:00	16.6	10-Sep-09	13:00:00	10.9	14-Oct-09	07:00:00	-0.1
26-Jun-09	02:00:00	12.0	7-Aug-09	20:00:00	16.6	10-Sep-09	14:00:00	11.4	14-Oct-09	08:00:00	-0.1
26-Jun-09	03:00:00	11.7	7-Aug-09	21:00:00	16.3	10-Sep-09	15:00:00	12.0	14-Oct-09	09:00:00	-0.1
26-Jun-09	04:00:00	11.4	7-Aug-09	22:00:00	16.0	10-Sep-09	16:00:00	12.0	14-Oct-09	10:00:00	-0.1
26-Jun-09	05:00:00	11.2	7-Aug-09	23:00:00	15.7	10-Sep-09	17:00:00	12.1	14-Oct-09	11:00:00	-0.1
26-Jun-09	06:00:00	10.9	8-Aug-09	00:00:00	15.5	10-Sep-09	18:00:00	12.1	14-Oct-09	12:00:00	-0.1
26-Jun-09	07:00:00	10.8	8-Aug-09	01:00:00	15.4	10-Sep-09	19:00:00	12.1	14-Oct-09	13:00:00	-0.1
26-Jun-09	08:00:00	10.6	8-Aug-09	02:00:00	15.1	10-Sep-09	20:00:00	12.0	14-Oct-09	14:00:00	-0.1
26-Jun-09	09:00:00	10.5	8-Aug-09	03:00:00	14.8	10-Sep-09	21:00:00	11.8	14-Oct-09	15:00:00	-0.1
26-Jun-09	10:00:00	10.6	8-Aug-09	04:00:00	14.5	10-Sep-09	22:00:00	11.5	14-Oct-09	16:00:00	-0.1
26-Jun-09	11:00:00	10.6	8-Aug-09	05:00:00	14.0	10-Sep-09	23:00:00	11.4	14-Oct-09	17:00:00	-0.1
26-Jun-09	12:00:00	10.8	8-Aug-09	06:00:00	13.6	11-Sep-09	00:00:00	11.1	14-Oct-09	18:00:00	-0.1
26-Jun-09	13:00:00	10.8	8-Aug-09	07:00:00	13.3	11-Sep-09	01:00:00	10.8	14-Oct-09	19:00:00	-0.1
26-Jun-09	14:00:00	10.9	8-Aug-09	08:00:00	12.9	11-Sep-09	02:00:00	10.6	14-Oct-09	20:00:00	-0.1
26-Jun-09	15:00:00	11.1	8-Aug-09	09:00:00	12.9	11-Sep-09	03:00:00	10.5	14-Oct-09	21:00:00	-0.1
26-Jun-09	16:00:00	11.4	8-Aug-09	10:00:00	13.6	11-Sep-09	04:00:00	10.3	14-Oct-09	22:00:00	-0.1
26-Jun-09	17:00:00	11.5	8-Aug-09	11:00:00	15.4	11-Sep-09	05:00:00	10.3	14-Oct-09	23:00:00	-0.1
26-Jun-09	18:00:00	11.7	8-Aug-09	12:00:00	16.3	11-Sep-09	06:00:00	10.2	15-Oct-09	00:00:00	-0.1
26-Jun-09	19:00:00	11.7	8-Aug-09	13:00:00	17.2	11-Sep-09	07:00:00	10.1	15-Oct-09	01:00:00	-0.1
26-Jun-09	20:00:00	11.7	8-Aug-09	14:00:00	16.5	11-Sep-09	08:00:00	10.1	15-Oct-09	02:00:00	-0.1
26-Jun-09	21:00:00	11.7	8-Aug-09	15:00:00	16.5	11-Sep-09	09:00:00	9.9	15-Oct-09	03:00:00	-0.1
26-Jun-09	22:00:00	11.5	8-Aug-09	16:00:00	18.9	11-Sep-09	10:00:00	10.1	15-Oct-09	04:00:00	-0.1
26-Jun-09	23:00:00	11.2	8-Aug-09	17:00:00	19.1	11-Sep-09	11:00:00	10.3	15-Oct-09	05:00:00	-0.1
27-Jun-09	00:00:00	10.9	8-Aug-09	18:00:00	19.4	11-Sep-09	12:00:00	10.6	15-Oct-09	06:00:00	-0.1
27-Jun-09	01:00:00	10.6	8-Aug-09	19:00:00	16.8	11-Sep-09	13:00:00	11.1	15-Oct-09	07:00:00	-0.1
27-Jun-09	02:00:00	10.3	8-Aug-09	20:00:00	17.1	11-Sep-09	14:00:00	11.5	15-Oct-09	08:00:00	-0.1
27-Jun-09	03:00:00	10.1	8-Aug-09	21:00:00	16.6	11-Sep-09	15:00:00	12.1	15-Oct-09	09:00:00	-0.1
27-Jun-09	04:00:00	9.8	8-Aug-09	22:00:00	16.3	11-Sep-09	16:00:00	12.3	15-Oct-09	10:00:00	-0.1
27-Jun-09	05:00:00	9.5	8-Aug-09	23:00:00	15.9	11-Sep-09	17:00:00	12.4	15-Oct-09	11:00:00	-0.1
27-Jun-09	06:00:00	9.2	9-Aug-09	00:00:00	15.7	11-Sep-09	18:00:00	12.6	15-Oct-09	12:00:00	0.0
27-Jun-09	07:00:00	8.9	9-Aug-09	01:00:00	15.5	11-Sep-09	19:00:00	12.9	15-Oct-09	13:00:00	0.2
27-Jun-09	08:00:00	8.7	9-Aug-09	02:00:00	15.2	11-Sep-09	20:00:00	13.0	15-Oct-09	14:00:00	0.7
27-Jun-09	09:00:00	8.7	9-Aug-09	03:00:00	14.6	11-Sep-09	21:00:00	13.2	15-Oct-09	15:00:00	1.1
27-Jun-09	10:00:00	8.6	9-Aug-09	04:00:00	14.3	11-Sep-09	22:00:00	12.9	15-Oct-09	16:00:00	1.4
27-Jun-09	11:00:00	8.6	9-Aug-09	05:00:00	14.2	11-Sep-09	23:00:00	12.7	15-Oct-09	17:00:00	1.7
27-Jun-09	12:00:00	8.6	9-Aug-09	06:00:00	13.3	12-Sep-09	00:00:00	12.7	15-Oct-09	18:00:00	1.9
27-Jun-09	13:00:00	8.7	9-Aug-09	07:00:00	13.0	12-Sep-09	01:00:00	12.7	15-Oct-09	19:00:00	1.9
27-Jun-09	14:00:00	9.0	9-Aug-09	08:00:00	12.9	12-Sep-09	02:00:00	12.6	15-Oct-09	20:00:00	1.7
27-Jun-09	15:00:00	9.5	9-Aug-09	09:00:00	13.3	12-Sep-09	03:00:00	12.3	15-Oct-09	21:00:00	1.6
27-Jun-09	16:00:00	9.9	9-Aug-09	10:00:00	14.9	12-Sep-09	04:00:00	12.1	15-Oct-09	22:00:00	1.6
27-Jun-09	17:00:00	10.1	9-Aug-09	11:00:00	18.6	12-Sep-09	05:00:00	11.7	15-Oct-09	23:00:00	1.4

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
13-May-09	0:00:00	6.1	20-Jun-09	18:00:00	14.5	29-Jul-09	12:00:00	19.9	6-Sep-09	6:00:00	14.9
13-May-09	1:00:00	6.1	20-Jun-09	19:00:00	14.6	29-Jul-09	13:00:00	20.3	6-Sep-09	7:00:00	14.6
13-May-09	2:00:00	6.1	20-Jun-09	20:00:00	14.5	29-Jul-09	14:00:00	20.6	6-Sep-09	8:00:00	14.6
13-May-09	3:00:00	5.9	20-Jun-09	21:00:00	14.5	29-Jul-09	15:00:00	21.3	6-Sep-09	9:00:00	14.5
13-May-09	4:00:00	5.8	20-Jun-09	22:00:00	14.2	29-Jul-09	16:00:00	21.8	6-Sep-09	10:00:00	14.2
13-May-09	5:00:00	5.6	20-Jun-09	23:00:00	13.9	29-Jul-09	17:00:00	21.9	6-Sep-09	11:00:00	13.9
13-May-09	6:00:00	5.6	21-Jun-09	0:00:00	13.8	29-Jul-09	18:00:00	22.1	6-Sep-09	12:00:00	13.9
13-May-09	7:00:00	5.5	21-Jun-09	1:00:00	13.3	29-Jul-09	19:00:00	22.1	6-Sep-09	13:00:00	13.8
13-May-09	8:00:00	5.3	21-Jun-09	2:00:00	13.2	29-Jul-09	20:00:00	22.1	6-Sep-09	14:00:00	13.8
13-May-09	9:00:00	5.3	21-Jun-09	3:00:00	13.0	29-Jul-09	21:00:00	21.9	6-Sep-09	15:00:00	13.8
13-May-09	10:00:00	5.3	21-Jun-09	4:00:00	12.6	29-Jul-09	22:00:00	21.9	6-Sep-09	16:00:00	13.9
13-May-09	11:00:00	5.3	21-Jun-09	5:00:00	12.6	29-Jul-09	23:00:00	21.6	6-Sep-09	17:00:00	14.0
13-May-09	12:00:00	5.5	21-Jun-09	6:00:00	12.3	30-Jul-09	0:00:00	21.3	6-Sep-09	18:00:00	13.9
13-May-09	13:00:00	5.6	21-Jun-09	7:00:00	12.1	30-Jul-09	1:00:00	21.1	6-Sep-09	19:00:00	13.9
13-May-09	14:00:00	5.8	21-Jun-09	8:00:00	12.0	30-Jul-09	2:00:00	20.8	6-Sep-09	20:00:00	13.9
13-May-09	15:00:00	5.9	21-Jun-09	9:00:00	11.8	30-Jul-09	3:00:00	20.5	6-Sep-09	21:00:00	13.8
13-May-09	16:00:00	6.1	21-Jun-09	10:00:00	12.0	30-Jul-09	4:00:00	20.3	6-Sep-09	22:00:00	13.5
13-May-09	17:00:00	6.4	21-Jun-09	11:00:00	12.0	30-Jul-09	5:00:00	19.9	6-Sep-09	23:00:00	13.3
13-May-09	18:00:00	6.2	21-Jun-09	12:00:00	12.1	30-Jul-09	6:00:00	19.9	7-Sep-09	0:00:00	13.2
13-May-09	19:00:00	6.2	21-Jun-09	13:00:00	12.3	30-Jul-09	7:00:00	19.5	7-Sep-09	1:00:00	13.0
13-May-09	20:00:00	6.4	21-Jun-09	14:00:00	12.6	30-Jul-09	8:00:00	19.4	7-Sep-09	2:00:00	12.9
13-May-09	21:00:00	6.4	21-Jun-09	15:00:00	13.0	30-Jul-09	9:00:00	19.2	7-Sep-09	3:00:00	12.7
13-May-09	22:00:00	6.4	21-Jun-09	16:00:00	13.2	30-Jul-09	10:00:00	19.1	7-Sep-09	4:00:00	12.6
13-May-09	23:00:00	6.2	21-Jun-09	17:00:00	13.5	30-Jul-09	11:00:00	19.1	7-Sep-09	5:00:00	12.4
14-May-09	0:00:00	6.1	21-Jun-09	18:00:00	13.8	30-Jul-09	12:00:00	19.2	7-Sep-09	6:00:00	12.3
14-May-09	1:00:00	5.8	21-Jun-09	19:00:00	13.9	30-Jul-09	13:00:00	19.5	7-Sep-09	7:00:00	12.1
14-May-09	2:00:00	5.8	21-Jun-09	20:00:00	13.9	30-Jul-09	14:00:00	20.2	7-Sep-09	8:00:00	12.1
14-May-09	3:00:00	5.6	21-Jun-09	21:00:00	13.9	30-Jul-09	15:00:00	20.6	7-Sep-09	9:00:00	12.1
14-May-09	4:00:00	5.5	21-Jun-09	22:00:00	13.9	30-Jul-09	16:00:00	21.1	7-Sep-09	10:00:00	12.1
14-May-09	5:00:00	5.3	21-Jun-09	23:00:00	13.8	30-Jul-09	17:00:00	21.4	7-Sep-09	11:00:00	12.1
14-May-09	6:00:00	5.0	22-Jun-09	0:00:00	13.5	30-Jul-09	18:00:00	21.6	7-Sep-09	12:00:00	12.1
14-May-09	7:00:00	5.0	22-Jun-09	1:00:00	13.3	30-Jul-09	19:00:00	21.9	7-Sep-09	13:00:00	12.3
14-May-09	8:00:00	5.0	22-Jun-09	2:00:00	13.0	30-Jul-09	20:00:00	21.9	7-Sep-09	14:00:00	12.4
14-May-09	9:00:00	5.0	22-Jun-09	3:00:00	12.7	30-Jul-09	21:00:00	21.8	7-Sep-09	15:00:00	12.6
14-May-09	10:00:00	4.9	22-Jun-09	4:00:00	12.3	30-Jul-09	22:00:00	21.8	7-Sep-09	16:00:00	12.6
14-May-09	11:00:00	5.0	22-Jun-09	5:00:00	12.0	30-Jul-09	23:00:00	21.4	7-Sep-09	17:00:00	12.6
14-May-09	12:00:00	5.5	22-Jun-09	6:00:00	11.8	31-Jul-09	0:00:00	21.3	7-Sep-09	18:00:00	12.6
14-May-09	13:00:00	5.8	22-Jun-09	7:00:00	11.5	31-Jul-09	1:00:00	21.1	7-Sep-09	19:00:00	12.6
14-May-09	14:00:00	6.2	22-Jun-09	8:00:00	11.5	31-Jul-09	2:00:00	20.8	7-Sep-09	20:00:00	12.6
14-May-09	15:00:00	6.4	22-Jun-09	9:00:00	11.4	31-Jul-09	3:00:00	20.6	7-Sep-09	21:00:00	12.6
14-May-09	16:00:00	7.0	22-Jun-09	10:00:00	11.5	31-Jul-09	4:00:00	20.5	7-Sep-09	22:00:00	12.4
14-May-09	17:00:00	7.3	22-Jun-09	11:00:00	11.7	31-Jul-09	5:00:00	20.0	7-Sep-09	23:00:00	12.3
14-May-09	18:00:00	7.3	22-Jun-09	12:00:00	12.0	31-Jul-09	6:00:00	19.9	8-Sep-09	0:00:00	12.3
14-May-09	19:00:00	7.5	22-Jun-09	13:00:00	12.3	31-Jul-09	7:00:00	19.5	8-Sep-09	1:00:00	12.1
14-May-09	20:00:00	7.7	22-Jun-09	14:00:00	12.6	31-Jul-09	8:00:00	19.4	8-Sep-09	2:00:00	12.1
14-May-09	21:00:00	7.5	22-Jun-09	15:00:00	13.0	31-Jul-09	9:00:00	19.2	8-Sep-09	3:00:00	12.0
14-May-09	22:00:00	7.4	22-Jun-09	16:00:00	13.5	31-Jul-09	10:00:00	19.2	8-Sep-09	4:00:00	11.8
14-May-09	23:00:00	7.3	22-Jun-09	17:00:00	13.8	31-Jul-09	11:00:00	19.4	8-Sep-09	5:00:00	11.7
15-May-09	0:00:00	7.1	22-Jun-09	18:00:00	13.9	31-Jul-09	12:00:00	19.5	8-Sep-09	6:00:00	11.5
15-May-09	1:00:00	7.0	22-Jun-09	19:00:00	14.2	31-Jul-09	13:00:00	20.2	8-Sep-09	7:00:00	11.5
15-May-09	2:00:00	6.8	22-Jun-09	20:00:00	13.9	31-Jul-09	14:00:00	20.6	8-Sep-09	8:00:00	11.4
15-May-09	3:00:00	6.5	22-Jun-09	21:00:00	14.0	31-Jul-09	15:00:00	21.1	8-Sep-09	9:00:00	11.4
15-May-09	4:00:00	6.4	22-Jun-09	22:00:00	13.8	31-Jul-09	16:00:00	21.6	8-Sep-09	10:00:00	11.4
15-May-09	5:00:00	6.1	22-Jun-09	23:00:00	13.5	31-Jul-09	17:00:00	21.9	8-Sep-09	11:00:00	11.4
15-May-09	6:00:00	5.9	23-Jun-09	0:00:00	13.3	31-Jul-09	18:00:00	22.4	8-Sep-09	12:00:00	11.5
15-May-09	7:00:00	5.8	23-Jun-09	1:00:00	13.3	31-Jul-09	19:00:00	22.6	8-Sep-09	13:00:00	12.0
15-May-09	8:00:00	5.6	23-Jun-09	2:00:00	13.2	31-Jul-09	20:00:00	22.6	8-Sep-09	14:00:00	12.1
15-May-09	9:00:00	5.5	23-Jun-09	3:00:00	13.0	31-Jul-09	21:00:00	22.6	8-Sep-09	15:00:00	12.1
15-May-09	10:00:00	5.6	23-Jun-09	4:00:00	12.6	31-Jul-09	22:00:00	22.4	8-Sep-09	16:00:00	12.6

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
15-May-09	11:00:00	5.9	23-Jun-09	5:00:00	12.3	31-Jul-09	23:00:00	22.4	8-Sep-09	17:00:00	12.6
15-May-09	12:00:00	6.4	23-Jun-09	6:00:00	12.0	1-Aug-09	0:00:00	21.9	8-Sep-09	18:00:00	13.0
15-May-09	13:00:00	6.8	23-Jun-09	7:00:00	11.5	1-Aug-09	1:00:00	21.9	8-Sep-09	19:00:00	13.0
15-May-09	14:00:00	7.1	23-Jun-09	8:00:00	11.5	1-Aug-09	2:00:00	21.8	8-Sep-09	20:00:00	12.9
15-May-09	15:00:00	7.5	23-Jun-09	9:00:00	11.5	1-Aug-09	3:00:00	21.3	8-Sep-09	21:00:00	12.9
15-May-09	16:00:00	8.0	23-Jun-09	10:00:00	11.5	1-Aug-09	4:00:00	21.1	8-Sep-09	22:00:00	12.6
15-May-09	17:00:00	8.4	23-Jun-09	11:00:00	11.8	1-Aug-09	5:00:00	20.8	8-Sep-09	23:00:00	12.6
15-May-09	18:00:00	9.0	23-Jun-09	12:00:00	12.1	1-Aug-09	6:00:00	20.6	9-Sep-09	0:00:00	12.3
15-May-09	19:00:00	9.0	23-Jun-09	13:00:00	12.6	1-Aug-09	7:00:00	20.5	9-Sep-09	1:00:00	12.1
15-May-09	20:00:00	8.9	23-Jun-09	14:00:00	13.0	1-Aug-09	8:00:00	20.3	9-Sep-09	2:00:00	12.1
15-May-09	21:00:00	9.0	23-Jun-09	15:00:00	13.5	1-Aug-09	9:00:00	20.0	9-Sep-09	3:00:00	12.1
15-May-09	22:00:00	8.9	23-Jun-09	16:00:00	13.9	1-Aug-09	10:00:00	20.2	9-Sep-09	4:00:00	12.0
15-May-09	23:00:00	8.9	23-Jun-09	17:00:00	14.5	1-Aug-09	11:00:00	20.3	9-Sep-09	5:00:00	11.7
16-May-09	0:00:00	8.7	23-Jun-09	18:00:00	14.6	1-Aug-09	12:00:00	20.6	9-Sep-09	6:00:00	11.5
16-May-09	1:00:00	8.4	23-Jun-09	19:00:00	15.1	1-Aug-09	13:00:00	20.8	9-Sep-09	7:00:00	11.4
16-May-09	2:00:00	8.1	23-Jun-09	20:00:00	15.5	1-Aug-09	14:00:00	21.3	9-Sep-09	8:00:00	11.4
16-May-09	3:00:00	8.0	23-Jun-09	21:00:00	15.4	1-Aug-09	15:00:00	21.8	9-Sep-09	9:00:00	11.2
16-May-09	4:00:00	8.0	23-Jun-09	22:00:00	15.1	1-Aug-09	16:00:00	22.1	9-Sep-09	10:00:00	11.1
16-May-09	5:00:00	8.0	23-Jun-09	23:00:00	14.9	1-Aug-09	17:00:00	22.4	9-Sep-09	11:00:00	11.1
16-May-09	6:00:00	8.0	24-Jun-09	0:00:00	14.5	1-Aug-09	18:00:00	22.6	9-Sep-09	12:00:00	11.2
16-May-09	7:00:00	7.8	24-Jun-09	1:00:00	14.2	1-Aug-09	19:00:00	22.6	9-Sep-09	13:00:00	11.5
16-May-09	8:00:00	7.7	24-Jun-09	2:00:00	13.8	1-Aug-09	20:00:00	22.9	9-Sep-09	14:00:00	11.5
16-May-09	9:00:00	7.7	24-Jun-09	3:00:00	13.2	1-Aug-09	21:00:00	22.7	9-Sep-09	15:00:00	11.5
16-May-09	10:00:00	7.8	24-Jun-09	4:00:00	13.0	1-Aug-09	22:00:00	22.7	9-Sep-09	16:00:00	11.8
16-May-09	11:00:00	8.0	24-Jun-09	5:00:00	12.6	1-Aug-09	23:00:00	22.4	9-Sep-09	17:00:00	11.8
16-May-09	12:00:00	8.4	24-Jun-09	6:00:00	12.6	2-Aug-09	0:00:00	22.4	9-Sep-09	18:00:00	11.8
16-May-09	13:00:00	8.4	24-Jun-09	7:00:00	12.3	2-Aug-09	1:00:00	21.9	9-Sep-09	19:00:00	11.8
16-May-09	14:00:00	8.4	24-Jun-09	8:00:00	12.1	2-Aug-09	2:00:00	21.9	9-Sep-09	20:00:00	11.8
16-May-09	15:00:00	8.7	24-Jun-09	9:00:00	12.1	2-Aug-09	3:00:00	21.8	9-Sep-09	21:00:00	11.7
16-May-09	16:00:00	8.7	24-Jun-09	10:00:00	12.4	2-Aug-09	4:00:00	21.3	9-Sep-09	22:00:00	11.7
16-May-09	17:00:00	8.7	24-Jun-09	11:00:00	12.6	2-Aug-09	5:00:00	21.1	9-Sep-09	23:00:00	11.5
16-May-09	18:00:00	8.7	24-Jun-09	12:00:00	13.0	2-Aug-09	6:00:00	20.8	10-Sep-09	0:00:00	11.5
16-May-09	19:00:00	8.9	24-Jun-09	13:00:00	13.5	2-Aug-09	7:00:00	20.6	10-Sep-09	1:00:00	11.5
16-May-09	20:00:00	8.7	24-Jun-09	14:00:00	14.0	2-Aug-09	8:00:00	20.5	10-Sep-09	2:00:00	11.5
16-May-09	21:00:00	8.7	24-Jun-09	15:00:00	14.6	2-Aug-09	9:00:00	20.5	10-Sep-09	3:00:00	11.4
16-May-09	22:00:00	8.6	24-Jun-09	16:00:00	14.9	2-Aug-09	10:00:00	20.3	10-Sep-09	4:00:00	11.1
16-May-09	23:00:00	8.4	24-Jun-09	17:00:00	15.4	2-Aug-09	11:00:00	20.3	10-Sep-09	5:00:00	11.1
17-May-09	0:00:00	8.4	24-Jun-09	18:00:00	15.7	2-Aug-09	12:00:00	20.5	10-Sep-09	6:00:00	11.1
17-May-09	1:00:00	8.3	24-Jun-09	19:00:00	15.7	2-Aug-09	13:00:00	20.5	10-Sep-09	7:00:00	10.9
17-May-09	2:00:00	8.1	24-Jun-09	20:00:00	15.5	2-Aug-09	14:00:00	20.6	10-Sep-09	8:00:00	10.9
17-May-09	3:00:00	8.0	24-Jun-09	21:00:00	15.5	2-Aug-09	15:00:00	20.8	10-Sep-09	9:00:00	10.8
17-May-09	4:00:00	7.8	24-Jun-09	22:00:00	15.5	2-Aug-09	16:00:00	20.6	10-Sep-09	10:00:00	10.9
17-May-09	5:00:00	7.7	24-Jun-09	23:00:00	15.5	2-Aug-09	17:00:00	20.5	10-Sep-09	11:00:00	10.9
17-May-09	6:00:00	7.4	25-Jun-09	0:00:00	15.2	2-Aug-09	18:00:00	20.5	10-Sep-09	12:00:00	11.4
17-May-09	7:00:00	7.3	25-Jun-09	1:00:00	15.1	2-Aug-09	19:00:00	20.3	10-Sep-09	13:00:00	11.8
17-May-09	8:00:00	7.1	25-Jun-09	2:00:00	14.9	2-Aug-09	20:00:00	20.3	10-Sep-09	14:00:00	12.1
17-May-09	9:00:00	6.7	25-Jun-09	3:00:00	14.6	2-Aug-09	21:00:00	20.2	10-Sep-09	15:00:00	12.6
17-May-09	10:00:00	6.5	25-Jun-09	4:00:00	14.5	2-Aug-09	22:00:00	19.9	10-Sep-09	16:00:00	13.0
17-May-09	11:00:00	6.2	25-Jun-09	5:00:00	14.5	2-Aug-09	23:00:00	19.9	10-Sep-09	17:00:00	13.2
17-May-09	12:00:00	6.2	25-Jun-09	6:00:00	14.5	3-Aug-09	0:00:00	19.4	10-Sep-09	18:00:00	13.3
17-May-09	13:00:00	6.2	25-Jun-09	7:00:00	14.2	3-Aug-09	1:00:00	19.2	10-Sep-09	19:00:00	13.3
17-May-09	14:00:00	6.1	25-Jun-09	8:00:00	14.0	3-Aug-09	2:00:00	18.9	10-Sep-09	20:00:00	13.2
17-May-09	15:00:00	6.2	25-Jun-09	9:00:00	13.9	3-Aug-09	3:00:00	18.8	10-Sep-09	21:00:00	13.2
17-May-09	16:00:00	6.4	25-Jun-09	10:00:00	14.2	3-Aug-09	4:00:00	18.6	10-Sep-09	22:00:00	13.0
17-May-09	17:00:00	6.4	25-Jun-09	11:00:00	14.5	3-Aug-09	5:00:00	18.3	10-Sep-09	23:00:00	13.0
17-May-09	18:00:00	6.4	25-Jun-09	12:00:00	14.6	3-Aug-09	6:00:00	18.1	11-Sep-09	0:00:00	12.7
17-May-09	19:00:00	6.4	25-Jun-09	13:00:00	14.6	3-Aug-09	7:00:00	18.0	11-Sep-09	1:00:00	12.6
17-May-09	20:00:00	6.2	25-Jun-09	14:00:00	14.6	3-Aug-09	8:00:00	17.8	11-Sep-09	2:00:00	12.6
17-May-09	21:00:00	6.2	25-Jun-09	15:00:00	15.1	3-Aug-09	9:00:00	17.5	11-Sep-09	3:00:00	12.3

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
17-May-09	22:00:00	6.1	25-Jun-09	16:00:00	15.4	3-Aug-09	10:00:00	17.4	11-Sep-09	4:00:00	12.1
17-May-09	23:00:00	5.8	25-Jun-09	17:00:00	15.7	3-Aug-09	11:00:00	17.1	11-Sep-09	5:00:00	12.1
18-May-09	0:00:00	5.8	25-Jun-09	18:00:00	15.5	3-Aug-09	12:00:00	17.1	11-Sep-09	6:00:00	12.1
18-May-09	1:00:00	5.5	25-Jun-09	19:00:00	15.5	3-Aug-09	13:00:00	16.8	11-Sep-09	7:00:00	12.0
18-May-09	2:00:00	5.3	25-Jun-09	20:00:00	15.4	3-Aug-09	14:00:00	16.8	11-Sep-09	8:00:00	11.8
18-May-09	3:00:00	5.2	25-Jun-09	21:00:00	14.9	3-Aug-09	15:00:00	16.8	11-Sep-09	9:00:00	11.8
18-May-09	4:00:00	5.2	25-Jun-09	22:00:00	14.6	3-Aug-09	16:00:00	16.8	11-Sep-09	10:00:00	11.7
18-May-09	5:00:00	5.0	25-Jun-09	23:00:00	14.3	3-Aug-09	17:00:00	16.8	11-Sep-09	11:00:00	12.0
18-May-09	6:00:00	4.9	26-Jun-09	0:00:00	13.9	3-Aug-09	18:00:00	16.8	11-Sep-09	12:00:00	12.3
18-May-09	7:00:00	4.7	26-Jun-09	1:00:00	13.8	3-Aug-09	19:00:00	16.8	11-Sep-09	13:00:00	12.7
18-May-09	8:00:00	4.6	26-Jun-09	2:00:00	13.9	3-Aug-09	20:00:00	16.6	11-Sep-09	14:00:00	13.2
18-May-09	9:00:00	4.6	26-Jun-09	3:00:00	13.9	3-Aug-09	21:00:00	16.3	11-Sep-09	15:00:00	13.8
18-May-09	10:00:00	4.7	26-Jun-09	4:00:00	13.8	3-Aug-09	22:00:00	16.3	11-Sep-09	16:00:00	14.2
18-May-09	11:00:00	4.9	26-Jun-09	5:00:00	13.5	3-Aug-09	23:00:00	15.9	11-Sep-09	17:00:00	14.2
18-May-09	12:00:00	4.9	26-Jun-09	6:00:00	13.3	4-Aug-09	0:00:00	15.7	11-Sep-09	18:00:00	14.5
18-May-09	13:00:00	5.0	26-Jun-09	7:00:00	13.2	4-Aug-09	1:00:00	15.5	11-Sep-09	19:00:00	14.5
18-May-09	14:00:00	5.2	26-Jun-09	8:00:00	13.2	4-Aug-09	2:00:00	15.2	11-Sep-09	20:00:00	14.2
18-May-09	15:00:00	5.5	26-Jun-09	9:00:00	13.0	4-Aug-09	3:00:00	14.9	11-Sep-09	21:00:00	14.2
18-May-09	16:00:00	5.6	26-Jun-09	10:00:00	13.0	4-Aug-09	4:00:00	14.9	11-Sep-09	22:00:00	14.2
18-May-09	17:00:00	5.8	26-Jun-09	11:00:00	13.2	4-Aug-09	5:00:00	14.6	11-Sep-09	23:00:00	14.0
18-May-09	18:00:00	5.6	26-Jun-09	12:00:00	13.2	4-Aug-09	6:00:00	14.5	12-Sep-09	0:00:00	14.0
18-May-09	19:00:00	5.8	26-Jun-09	13:00:00	13.2	4-Aug-09	7:00:00	14.5	12-Sep-09	1:00:00	13.9
18-May-09	20:00:00	5.8	26-Jun-09	14:00:00	13.2	4-Aug-09	8:00:00	14.2	12-Sep-09	2:00:00	13.6
18-May-09	21:00:00	5.8	26-Jun-09	15:00:00	13.2	4-Aug-09	9:00:00	14.0	12-Sep-09	3:00:00	13.5
18-May-09	22:00:00	5.6	26-Jun-09	16:00:00	13.2	4-Aug-09	10:00:00	14.0	12-Sep-09	4:00:00	13.2
18-May-09	23:00:00	5.5	26-Jun-09	17:00:00	13.3	4-Aug-09	11:00:00	14.2	12-Sep-09	5:00:00	13.0
19-May-09	0:00:00	5.2	26-Jun-09	18:00:00	13.3	4-Aug-09	12:00:00	14.2	12-Sep-09	6:00:00	13.0
19-May-09	1:00:00	5.0	26-Jun-09	19:00:00	13.3	4-Aug-09	13:00:00	14.5	12-Sep-09	7:00:00	12.7
19-May-09	2:00:00	4.9	26-Jun-09	20:00:00	13.3	4-Aug-09	14:00:00	14.9	12-Sep-09	8:00:00	12.6
19-May-09	3:00:00	4.9	26-Jun-09	21:00:00	13.2	4-Aug-09	15:00:00	14.9	12-Sep-09	9:00:00	12.6
19-May-09	4:00:00	4.7	26-Jun-09	22:00:00	13.2	4-Aug-09	16:00:00	15.4	12-Sep-09	10:00:00	12.6
19-May-09	5:00:00	4.6	26-Jun-09	23:00:00	13.2	4-Aug-09	17:00:00	15.5	12-Sep-09	11:00:00	12.6
19-May-09	6:00:00	4.4	27-Jun-09	0:00:00	12.9	4-Aug-09	18:00:00	15.5	12-Sep-09	12:00:00	12.7
19-May-09	7:00:00	4.4	27-Jun-09	1:00:00	12.6	4-Aug-09	19:00:00	15.5	12-Sep-09	13:00:00	13.2
19-May-09	8:00:00	4.3	27-Jun-09	2:00:00	12.3	4-Aug-09	20:00:00	15.7	12-Sep-09	14:00:00	13.8
19-May-09	9:00:00	4.1	27-Jun-09	3:00:00	12.1	4-Aug-09	21:00:00	15.5	12-Sep-09	15:00:00	14.2
19-May-09	10:00:00	4.1	27-Jun-09	4:00:00	12.0	4-Aug-09	22:00:00	15.2	12-Sep-09	16:00:00	14.5
19-May-09	11:00:00	4.1	27-Jun-09	5:00:00	11.5	4-Aug-09	23:00:00	14.9	12-Sep-09	17:00:00	14.9
19-May-09	12:00:00	4.1	27-Jun-09	6:00:00	11.5	5-Aug-09	0:00:00	14.9	12-Sep-09	18:00:00	15.4
19-May-09	13:00:00	4.1	27-Jun-09	7:00:00	11.1	5-Aug-09	1:00:00	14.6	12-Sep-09	19:00:00	15.4
19-May-09	14:00:00	4.0	27-Jun-09	8:00:00	11.1	5-Aug-09	2:00:00	14.5	12-Sep-09	20:00:00	15.4
19-May-09	15:00:00	4.0	27-Jun-09	9:00:00	11.1	5-Aug-09	3:00:00	14.3	12-Sep-09	21:00:00	15.2
19-May-09	16:00:00	4.1	27-Jun-09	10:00:00	10.9	5-Aug-09	4:00:00	13.9	12-Sep-09	22:00:00	15.1
19-May-09	17:00:00	4.4	27-Jun-09	11:00:00	10.9	5-Aug-09	5:00:00	13.9	12-Sep-09	23:00:00	14.9
19-May-09	18:00:00	4.7	27-Jun-09	12:00:00	10.9	5-Aug-09	6:00:00	13.8	13-Sep-09	0:00:00	14.9
19-May-09	19:00:00	4.9	27-Jun-09	13:00:00	11.1	5-Aug-09	7:00:00	13.5	13-Sep-09	1:00:00	14.6
19-May-09	20:00:00	4.9	27-Jun-09	14:00:00	11.2	5-Aug-09	8:00:00	13.3	13-Sep-09	2:00:00	14.5
19-May-09	21:00:00	4.9	27-Jun-09	15:00:00	11.5	5-Aug-09	9:00:00	13.3	13-Sep-09	3:00:00	14.5
19-May-09	22:00:00	4.7	27-Jun-09	16:00:00	11.8	5-Aug-09	10:00:00	13.2	13-Sep-09	4:00:00	14.5
19-May-09	23:00:00	4.6	27-Jun-09	17:00:00	12.1	5-Aug-09	11:00:00	13.3	13-Sep-09	5:00:00	14.3
20-May-09	0:00:00	4.6	27-Jun-09	18:00:00	12.4	5-Aug-09	12:00:00	13.8	13-Sep-09	6:00:00	14.2
20-May-09	1:00:00	4.4	27-Jun-09	19:00:00	12.6	5-Aug-09	13:00:00	13.9	13-Sep-09	7:00:00	14.0
20-May-09	2:00:00	4.4	27-Jun-09	20:00:00	12.6	5-Aug-09	14:00:00	14.5	13-Sep-09	8:00:00	13.9
20-May-09	3:00:00	4.3	27-Jun-09	21:00:00	12.7	5-Aug-09	15:00:00	14.6	13-Sep-09	9:00:00	13.9
20-May-09	4:00:00	4.1	27-Jun-09	22:00:00	12.7	5-Aug-09	16:00:00	14.9	13-Sep-09	10:00:00	13.8
20-May-09	5:00:00	4.1	27-Jun-09	23:00:00	12.6	5-Aug-09	17:00:00	15.2	13-Sep-09	11:00:00	13.8
20-May-09	6:00:00	4.0	28-Jun-09	0:00:00	12.4	5-Aug-09	18:00:00	15.5	13-Sep-09	12:00:00	13.9
20-May-09	7:00:00	4.0	28-Jun-09	1:00:00	12.1	5-Aug-09	19:00:00	15.9	13-Sep-09	13:00:00	14.3
20-May-09	8:00:00	4.0	28-Jun-09	2:00:00	12.1	5-Aug-09	20:00:00	15.9	13-Sep-09	14:00:00	14.6

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
20-May-09	9:00:00	4.1	28-Jun-09	3:00:00	12.1	5-Aug-09	21:00:00	15.7	13-Sep-09	15:00:00	15.1
20-May-09	10:00:00	4.3	28-Jun-09	4:00:00	11.8	5-Aug-09	22:00:00	15.7	13-Sep-09	16:00:00	15.5
20-May-09	11:00:00	4.7	28-Jun-09	5:00:00	11.8	5-Aug-09	23:00:00	15.5	13-Sep-09	17:00:00	15.9
20-May-09	12:00:00	5.2	28-Jun-09	6:00:00	11.5	6-Aug-09	0:00:00	15.4	13-Sep-09	18:00:00	16.2
20-May-09	13:00:00	5.6	28-Jun-09	7:00:00	11.5	6-Aug-09	1:00:00	15.1	13-Sep-09	19:00:00	16.2
20-May-09	14:00:00	6.2	28-Jun-09	8:00:00	11.4	6-Aug-09	2:00:00	14.9	13-Sep-09	20:00:00	16.2
20-May-09	15:00:00	6.8	28-Jun-09	9:00:00	11.4	6-Aug-09	3:00:00	14.6	13-Sep-09	21:00:00	15.9
20-May-09	16:00:00	7.4	28-Jun-09	10:00:00	11.4	6-Aug-09	4:00:00	14.5	13-Sep-09	22:00:00	15.9
20-May-09	17:00:00	8.0	28-Jun-09	11:00:00	11.5	6-Aug-09	5:00:00	14.5	13-Sep-09	23:00:00	15.5
20-May-09	18:00:00	8.0	28-Jun-09	12:00:00	11.5	6-Aug-09	6:00:00	14.2	14-Sep-09	0:00:00	15.5
20-May-09	19:00:00	8.1	28-Jun-09	13:00:00	11.8	6-Aug-09	7:00:00	13.8	14-Sep-09	1:00:00	15.5
20-May-09	20:00:00	8.1	28-Jun-09	14:00:00	12.0	6-Aug-09	8:00:00	13.8	14-Sep-09	2:00:00	15.4
20-May-09	21:00:00	8.1	28-Jun-09	15:00:00	12.6	6-Aug-09	9:00:00	13.8	14-Sep-09	3:00:00	14.9
20-May-09	22:00:00	8.3	28-Jun-09	16:00:00	13.2	6-Aug-09	10:00:00	13.6	14-Sep-09	4:00:00	14.9
20-May-09	23:00:00	8.3	28-Jun-09	17:00:00	13.5	6-Aug-09	11:00:00	13.9	14-Sep-09	5:00:00	14.5
21-May-09	0:00:00	8.3	28-Jun-09	18:00:00	13.9	6-Aug-09	12:00:00	14.2	14-Sep-09	6:00:00	14.5
21-May-09	1:00:00	8.1	28-Jun-09	19:00:00	14.2	6-Aug-09	13:00:00	14.5	14-Sep-09	7:00:00	14.3
21-May-09	2:00:00	8.1	28-Jun-09	20:00:00	14.5	6-Aug-09	14:00:00	14.9	14-Sep-09	8:00:00	14.2
21-May-09	3:00:00	8.0	28-Jun-09	21:00:00	14.2	6-Aug-09	15:00:00	15.4	14-Sep-09	9:00:00	13.9
21-May-09	4:00:00	7.8	28-Jun-09	22:00:00	14.0	6-Aug-09	16:00:00	15.9	14-Sep-09	10:00:00	13.9
21-May-09	5:00:00	7.8	28-Jun-09	23:00:00	13.9	6-Aug-09	17:00:00	16.3	14-Sep-09	11:00:00	13.9
21-May-09	6:00:00	7.7	29-Jun-09	0:00:00	13.3	6-Aug-09	18:00:00	16.3	14-Sep-09	12:00:00	14.5
21-May-09	7:00:00	7.7	29-Jun-09	1:00:00	12.9	6-Aug-09	19:00:00	16.6	14-Sep-09	13:00:00	14.6
21-May-09	8:00:00	7.7	29-Jun-09	2:00:00	12.7	6-Aug-09	20:00:00	16.6	14-Sep-09	14:00:00	14.9
21-May-09	9:00:00	7.5	29-Jun-09	3:00:00	12.6	6-Aug-09	21:00:00	16.6	14-Sep-09	15:00:00	15.5
21-May-09	10:00:00	7.5	29-Jun-09	4:00:00	12.6	6-Aug-09	22:00:00	16.5	14-Sep-09	16:00:00	15.9
21-May-09	11:00:00	7.8	29-Jun-09	5:00:00	12.1	6-Aug-09	23:00:00	16.3	14-Sep-09	17:00:00	16.2
21-May-09	12:00:00	8.3	29-Jun-09	6:00:00	12.0	7-Aug-09	0:00:00	16.3	14-Sep-09	18:00:00	16.3
21-May-09	13:00:00	8.6	29-Jun-09	7:00:00	11.8	7-Aug-09	1:00:00	16.2	14-Sep-09	19:00:00	16.3
21-May-09	14:00:00	9.2	29-Jun-09	8:00:00	11.7	7-Aug-09	2:00:00	16.2	14-Sep-09	20:00:00	16.2
21-May-09	15:00:00	9.6	29-Jun-09	9:00:00	11.8	7-Aug-09	3:00:00	15.9	14-Sep-09	21:00:00	16.2
21-May-09	16:00:00	10.1	29-Jun-09	10:00:00	12.0	7-Aug-09	4:00:00	15.7	14-Sep-09	22:00:00	16.2
21-May-09	17:00:00	10.6	29-Jun-09	11:00:00	12.1	7-Aug-09	5:00:00	15.5	14-Sep-09	23:00:00	15.9
21-May-09	18:00:00	10.9	29-Jun-09	12:00:00	12.6	7-Aug-09	6:00:00	15.2	15-Sep-09	0:00:00	15.9
21-May-09	19:00:00	11.1	29-Jun-09	13:00:00	12.7	7-Aug-09	7:00:00	15.1	15-Sep-09	1:00:00	15.9
21-May-09	20:00:00	11.1	29-Jun-09	14:00:00	13.2	7-Aug-09	8:00:00	14.9	15-Sep-09	2:00:00	15.7
21-May-09	21:00:00	11.1	29-Jun-09	15:00:00	13.8	7-Aug-09	9:00:00	14.9	15-Sep-09	3:00:00	15.5
21-May-09	22:00:00	11.1	29-Jun-09	16:00:00	14.0	7-Aug-09	10:00:00	14.9	15-Sep-09	4:00:00	15.4
21-May-09	23:00:00	10.9	29-Jun-09	17:00:00	14.5	7-Aug-09	11:00:00	14.9	15-Sep-09	5:00:00	14.9
22-May-09	0:00:00	10.8	29-Jun-09	18:00:00	14.6	7-Aug-09	12:00:00	15.4	15-Sep-09	6:00:00	14.9
22-May-09	1:00:00	10.6	29-Jun-09	19:00:00	14.9	7-Aug-09	13:00:00	15.7	15-Sep-09	7:00:00	14.5
22-May-09	2:00:00	10.5	29-Jun-09	20:00:00	14.9	7-Aug-09	14:00:00	16.2	15-Sep-09	8:00:00	14.5
22-May-09	3:00:00	10.2	29-Jun-09	21:00:00	14.5	7-Aug-09	15:00:00	16.8	15-Sep-09	9:00:00	14.2
22-May-09	4:00:00	10.2	29-Jun-09	22:00:00	14.5	7-Aug-09	16:00:00	17.1	15-Sep-09	10:00:00	14.0
22-May-09	5:00:00	9.9	29-Jun-09	23:00:00	13.9	7-Aug-09	17:00:00	17.5	15-Sep-09	11:00:00	14.3
22-May-09	6:00:00	9.8	30-Jun-09	0:00:00	13.8	7-Aug-09	18:00:00	17.7	15-Sep-09	12:00:00	14.5
22-May-09	7:00:00	9.3	30-Jun-09	1:00:00	13.5	7-Aug-09	19:00:00	18.0	15-Sep-09	13:00:00	14.6
22-May-09	8:00:00	9.2	30-Jun-09	2:00:00	13.2	7-Aug-09	20:00:00	18.1	15-Sep-09	14:00:00	14.9
22-May-09	9:00:00	9.0	30-Jun-09	3:00:00	13.2	7-Aug-09	21:00:00	18.0	15-Sep-09	15:00:00	15.2
22-May-09	10:00:00	9.0	30-Jun-09	4:00:00	13.0	7-Aug-09	22:00:00	18.0	15-Sep-09	16:00:00	15.5
22-May-09	11:00:00	9.5	30-Jun-09	5:00:00	13.0	7-Aug-09	23:00:00	17.7	15-Sep-09	17:00:00	15.7
22-May-09	12:00:00	9.8	30-Jun-09	6:00:00	13.0	8-Aug-09	0:00:00	17.5	15-Sep-09	18:00:00	15.7
22-May-09	13:00:00	10.2	30-Jun-09	7:00:00	12.9	8-Aug-09	1:00:00	17.4	15-Sep-09	19:00:00	15.7
22-May-09	14:00:00	10.8	30-Jun-09	8:00:00	12.6	8-Aug-09	2:00:00	17.4	15-Sep-09	20:00:00	15.7
22-May-09	15:00:00	11.1	30-Jun-09	9:00:00	12.6	8-Aug-09	3:00:00	17.1	15-Sep-09	21:00:00	15.5
22-May-09	16:00:00	11.7	30-Jun-09	10:00:00	12.6	8-Aug-09	4:00:00	16.9	15-Sep-09	22:00:00	15.4
22-May-09	17:00:00	11.8	30-Jun-09	11:00:00	12.6	8-Aug-09	5:00:00	16.8	15-Sep-09	23:00:00	15.2
22-May-09	18:00:00	12.1	30-Jun-09	12:00:00	12.6	8-Aug-09	6:00:00	16.5	16-Sep-09	0:00:00	15.1
22-May-09	19:00:00	12.6	30-Jun-09	13:00:00	12.6	8-Aug-09	7:00:00	16.3	16-Sep-09	1:00:00	14.9

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
22-May-09	20:00:00	12.4	30-Jun-09	14:00:00	12.7	8-Aug-09	8:00:00	16.2	16-Sep-09	2:00:00	14.9
22-May-09	21:00:00	12.6	30-Jun-09	15:00:00	12.6	8-Aug-09	9:00:00	15.9	16-Sep-09	3:00:00	14.9
22-May-09	22:00:00	12.1	30-Jun-09	16:00:00	13.0	8-Aug-09	10:00:00	15.9	16-Sep-09	4:00:00	14.6
22-May-09	23:00:00	12.1	30-Jun-09	17:00:00	13.2	8-Aug-09	11:00:00	16.2	16-Sep-09	5:00:00	14.5
23-May-09	0:00:00	12.0	30-Jun-09	18:00:00	13.2	8-Aug-09	12:00:00	16.5	16-Sep-09	6:00:00	14.5
23-May-09	1:00:00	11.5	30-Jun-09	19:00:00	13.3	8-Aug-09	13:00:00	16.8	16-Sep-09	7:00:00	14.5
23-May-09	2:00:00	11.4	30-Jun-09	20:00:00	13.5	8-Aug-09	14:00:00	17.1	16-Sep-09	8:00:00	14.3
23-May-09	3:00:00	11.5	30-Jun-09	21:00:00	13.5	8-Aug-09	15:00:00	17.5	16-Sep-09	9:00:00	14.0
23-May-09	4:00:00	11.1	30-Jun-09	22:00:00	13.2	8-Aug-09	16:00:00	18.1	16-Sep-09	10:00:00	13.9
23-May-09	5:00:00	10.8	30-Jun-09	23:00:00	13.0	8-Aug-09	17:00:00	18.3	16-Sep-09	11:00:00	13.9
23-May-09	6:00:00	10.6	1-Jul-09	0:00:00	12.7	8-Aug-09	18:00:00	18.6	16-Sep-09	12:00:00	13.9
23-May-09	7:00:00	10.2	1-Jul-09	1:00:00	12.6	8-Aug-09	19:00:00	18.6	16-Sep-09	13:00:00	13.9
23-May-09	8:00:00	10.2	1-Jul-09	2:00:00	12.6	8-Aug-09	20:00:00	18.6	16-Sep-09	14:00:00	13.9
23-May-09	9:00:00	9.9	1-Jul-09	3:00:00	12.6	8-Aug-09	21:00:00	18.4	16-Sep-09	15:00:00	13.9
23-May-09	10:00:00	10.2	1-Jul-09	4:00:00	12.3	8-Aug-09	22:00:00	18.3	16-Sep-09	16:00:00	13.9
23-May-09	11:00:00	10.2	1-Jul-09	5:00:00	12.1	8-Aug-09	23:00:00	18.1	16-Sep-09	17:00:00	13.9
23-May-09	12:00:00	10.3	1-Jul-09	6:00:00	12.0	9-Aug-09	0:00:00	17.8	16-Sep-09	18:00:00	13.9
23-May-09	13:00:00	10.8	1-Jul-09	7:00:00	11.8	9-Aug-09	1:00:00	17.5	16-Sep-09	19:00:00	13.9
23-May-09	14:00:00	11.4	1-Jul-09	8:00:00	11.8	9-Aug-09	2:00:00	17.4	16-Sep-09	20:00:00	13.9
23-May-09	15:00:00	11.5	1-Jul-09	9:00:00	11.7	9-Aug-09	3:00:00	17.1	16-Sep-09	21:00:00	13.8
23-May-09	16:00:00	11.8	1-Jul-09	10:00:00	11.7	9-Aug-09	4:00:00	16.9	16-Sep-09	22:00:00	13.8
23-May-09	17:00:00	12.0	1-Jul-09	11:00:00	11.7	9-Aug-09	5:00:00	16.8	16-Sep-09	23:00:00	13.8
23-May-09	18:00:00	12.0	1-Jul-09	12:00:00	12.0	9-Aug-09	6:00:00	16.6	17-Sep-09	0:00:00	13.6
23-May-09	19:00:00	12.3	1-Jul-09	13:00:00	12.0	9-Aug-09	7:00:00	16.3	17-Sep-09	1:00:00	13.5
23-May-09	20:00:00	12.6	1-Jul-09	14:00:00	12.1	9-Aug-09	8:00:00	16.3	17-Sep-09	2:00:00	13.5
23-May-09	21:00:00	12.3	1-Jul-09	15:00:00	12.7	9-Aug-09	9:00:00	16.2	17-Sep-09	3:00:00	13.3
23-May-09	22:00:00	12.3	1-Jul-09	16:00:00	13.0	9-Aug-09	10:00:00	16.2	17-Sep-09	4:00:00	13.2
23-May-09	23:00:00	12.1	1-Jul-09	17:00:00	13.6	9-Aug-09	11:00:00	16.3	17-Sep-09	5:00:00	13.0
24-May-09	0:00:00	11.8	1-Jul-09	18:00:00	13.8	9-Aug-09	12:00:00	16.5	17-Sep-09	6:00:00	12.7
24-May-09	1:00:00	11.7	1-Jul-09	19:00:00	13.9	9-Aug-09	13:00:00	16.9	17-Sep-09	7:00:00	12.6
24-May-09	2:00:00	11.5	1-Jul-09	20:00:00	14.2	9-Aug-09	14:00:00	17.4	17-Sep-09	8:00:00	12.3
24-May-09	3:00:00	11.4	1-Jul-09	21:00:00	14.2	9-Aug-09	15:00:00	17.8	17-Sep-09	9:00:00	12.3
24-May-09	4:00:00	10.8	1-Jul-09	22:00:00	14.0	9-Aug-09	16:00:00	18.1	17-Sep-09	10:00:00	12.1
24-May-09	5:00:00	10.8	1-Jul-09	23:00:00	13.8	9-Aug-09	17:00:00	18.8	17-Sep-09	11:00:00	12.1
24-May-09	6:00:00	10.3	2-Jul-09	0:00:00	13.5	9-Aug-09	18:00:00	18.8	17-Sep-09	12:00:00	12.4
24-May-09	7:00:00	10.2	2-Jul-09	1:00:00	13.3	9-Aug-09	19:00:00	18.8	17-Sep-09	13:00:00	12.9
24-May-09	8:00:00	9.8	2-Jul-09	2:00:00	13.2	9-Aug-09	20:00:00	18.6	17-Sep-09	14:00:00	13.3
24-May-09	9:00:00	9.8	2-Jul-09	3:00:00	13.0	9-Aug-09	21:00:00	18.6	17-Sep-09	15:00:00	13.8
24-May-09	10:00:00	9.8	2-Jul-09	4:00:00	12.7	9-Aug-09	22:00:00	18.1	17-Sep-09	16:00:00	13.9
24-May-09	11:00:00	10.2	2-Jul-09	5:00:00	12.6	9-Aug-09	23:00:00	18.1	17-Sep-09	17:00:00	14.2
24-May-09	12:00:00	10.3	2-Jul-09	6:00:00	12.4	10-Aug-09	0:00:00	17.8	17-Sep-09	18:00:00	14.2
24-May-09	13:00:00	10.9	2-Jul-09	7:00:00	12.1	10-Aug-09	1:00:00	17.5	17-Sep-09	19:00:00	14.0
24-May-09	14:00:00	10.8	2-Jul-09	8:00:00	12.1	10-Aug-09	2:00:00	17.4	17-Sep-09	20:00:00	13.9
24-May-09	15:00:00	10.8	2-Jul-09	9:00:00	12.1	10-Aug-09	3:00:00	17.1	17-Sep-09	21:00:00	13.8
24-May-09	16:00:00	10.9	2-Jul-09	10:00:00	12.1	10-Aug-09	4:00:00	16.8	17-Sep-09	22:00:00	13.5
24-May-09	17:00:00	11.4	2-Jul-09	11:00:00	12.6	10-Aug-09	5:00:00	16.8	17-Sep-09	23:00:00	13.3
24-May-09	18:00:00	11.5	2-Jul-09	12:00:00	13.2	10-Aug-09	6:00:00	16.5	18-Sep-09	0:00:00	13.2
24-May-09	19:00:00	12.0	2-Jul-09	13:00:00	13.8	10-Aug-09	7:00:00	16.2	18-Sep-09	1:00:00	13.0
24-May-09	20:00:00	12.0	2-Jul-09	14:00:00	14.2	10-Aug-09	8:00:00	16.2	18-Sep-09	2:00:00	13.0
24-May-09	21:00:00	11.7	2-Jul-09	15:00:00	14.5	10-Aug-09	9:00:00	15.9	18-Sep-09	3:00:00	12.9
24-May-09	22:00:00	11.7	2-Jul-09	16:00:00	14.9	10-Aug-09	10:00:00	15.9	18-Sep-09	4:00:00	12.7
24-May-09	23:00:00	11.5	2-Jul-09	17:00:00	14.6	10-Aug-09	11:00:00	16.2	18-Sep-09	5:00:00	12.6
25-May-09	0:00:00	11.1	2-Jul-09	18:00:00	14.6	10-Aug-09	12:00:00	16.2	18-Sep-09	6:00:00	12.6
25-May-09	1:00:00	10.8	2-Jul-09	19:00:00	14.6	10-Aug-09	13:00:00	16.5	18-Sep-09	7:00:00	12.3
25-May-09	2:00:00	10.3	2-Jul-09	20:00:00	14.6	10-Aug-09	14:00:00	16.8	18-Sep-09	8:00:00	12.1
25-May-09	3:00:00	9.9	2-Jul-09	21:00:00	14.9	10-Aug-09	15:00:00	16.9	18-Sep-09	9:00:00	12.1
25-May-09	4:00:00	9.8	2-Jul-09	22:00:00	14.9	10-Aug-09	16:00:00	17.4	18-Sep-09	10:00:00	12.1
25-May-09	5:00:00	9.5	2-Jul-09	23:00:00	14.9	10-Aug-09	17:00:00	17.5	18-Sep-09	11:00:00	12.1
25-May-09	6:00:00	9.2	3-Jul-09	0:00:00	14.6	10-Aug-09	18:00:00	17.5	18-Sep-09	12:00:00	12.3

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
25-May-09	7:00:00	8.9	3-Jul-09	1:00:00	14.5	10-Aug-09	19:00:00	17.4	18-Sep-09	13:00:00	12.6
25-May-09	8:00:00	8.7	3-Jul-09	2:00:00	14.5	10-Aug-09	20:00:00	17.4	18-Sep-09	14:00:00	13.0
25-May-09	9:00:00	8.7	3-Jul-09	3:00:00	14.2	10-Aug-09	21:00:00	17.1	18-Sep-09	15:00:00	13.3
25-May-09	10:00:00	8.9	3-Jul-09	4:00:00	13.9	10-Aug-09	22:00:00	16.9	18-Sep-09	16:00:00	13.8
25-May-09	11:00:00	9.3	3-Jul-09	5:00:00	13.8	10-Aug-09	23:00:00	16.8	18-Sep-09	17:00:00	13.6
25-May-09	12:00:00	9.8	3-Jul-09	6:00:00	13.5	11-Aug-09	0:00:00	16.5	18-Sep-09	18:00:00	13.8
25-May-09	13:00:00	10.2	3-Jul-09	7:00:00	13.3	11-Aug-09	1:00:00	16.3	18-Sep-09	19:00:00	13.8
25-May-09	14:00:00	10.8	3-Jul-09	8:00:00	13.2	11-Aug-09	2:00:00	16.2	18-Sep-09	20:00:00	13.9
25-May-09	15:00:00	11.4	3-Jul-09	9:00:00	13.2	11-Aug-09	3:00:00	15.9	18-Sep-09	21:00:00	13.8
25-May-09	16:00:00	11.8	3-Jul-09	10:00:00	13.0	11-Aug-09	4:00:00	15.5	18-Sep-09	22:00:00	13.8
25-May-09	17:00:00	11.8	3-Jul-09	11:00:00	13.2	11-Aug-09	5:00:00	15.4	18-Sep-09	23:00:00	13.8
25-May-09	18:00:00	12.1	3-Jul-09	12:00:00	13.5	11-Aug-09	6:00:00	15.1	19-Sep-09	0:00:00	13.5
25-May-09	19:00:00	12.1	3-Jul-09	13:00:00	13.8	11-Aug-09	7:00:00	14.9	19-Sep-09	1:00:00	13.5
25-May-09	20:00:00	12.1	3-Jul-09	14:00:00	13.9	11-Aug-09	8:00:00	14.6	19-Sep-09	2:00:00	13.5
25-May-09	21:00:00	12.0	3-Jul-09	15:00:00	14.2	11-Aug-09	9:00:00	14.6	19-Sep-09	3:00:00	13.5
25-May-09	22:00:00	12.0	3-Jul-09	16:00:00	14.5	11-Aug-09	10:00:00	14.5	19-Sep-09	4:00:00	13.3
25-May-09	23:00:00	12.0	3-Jul-09	17:00:00	14.6	11-Aug-09	11:00:00	14.6	19-Sep-09	5:00:00	13.2
26-May-09	0:00:00	12.0	3-Jul-09	18:00:00	15.4	11-Aug-09	12:00:00	14.9	19-Sep-09	6:00:00	13.0
26-May-09	1:00:00	12.0	3-Jul-09	19:00:00	15.5	11-Aug-09	13:00:00	14.9	19-Sep-09	7:00:00	12.7
26-May-09	2:00:00	11.8	3-Jul-09	20:00:00	15.5	11-Aug-09	14:00:00	14.9	19-Sep-09	8:00:00	12.6
26-May-09	3:00:00	11.5	3-Jul-09	21:00:00	15.2	11-Aug-09	15:00:00	15.5	19-Sep-09	9:00:00	12.4
26-May-09	4:00:00	11.4	3-Jul-09	22:00:00	15.1	11-Aug-09	16:00:00	15.7	19-Sep-09	10:00:00	12.3
26-May-09	5:00:00	11.2	3-Jul-09	23:00:00	14.9	11-Aug-09	17:00:00	16.2	19-Sep-09	11:00:00	12.3
26-May-09	6:00:00	10.9	4-Jul-09	0:00:00	14.6	11-Aug-09	18:00:00	16.3	19-Sep-09	12:00:00	12.6
26-May-09	7:00:00	10.8	4-Jul-09	1:00:00	14.6	11-Aug-09	19:00:00	16.3	19-Sep-09	13:00:00	13.0
26-May-09	8:00:00	10.8	4-Jul-09	2:00:00	14.5	11-Aug-09	20:00:00	16.3	19-Sep-09	14:00:00	13.3
26-May-09	9:00:00	10.8	4-Jul-09	3:00:00	14.5	11-Aug-09	21:00:00	16.2	19-Sep-09	15:00:00	13.5
26-May-09	10:00:00	10.8	4-Jul-09	4:00:00	14.0	11-Aug-09	22:00:00	15.9	19-Sep-09	16:00:00	13.6
26-May-09	11:00:00	10.8	4-Jul-09	5:00:00	13.8	11-Aug-09	23:00:00	15.7	19-Sep-09	17:00:00	13.9
26-May-09	12:00:00	10.6	4-Jul-09	6:00:00	13.5	12-Aug-09	0:00:00	15.5	19-Sep-09	18:00:00	13.8
26-May-09	13:00:00	10.6	4-Jul-09	7:00:00	13.5	12-Aug-09	1:00:00	15.1	19-Sep-09	19:00:00	13.3
26-May-09	14:00:00	10.8	4-Jul-09	8:00:00	13.3	12-Aug-09	2:00:00	14.8	19-Sep-09	20:00:00	13.3
26-May-09	15:00:00	10.8	4-Jul-09	9:00:00	13.3	12-Aug-09	3:00:00	14.5	19-Sep-09	21:00:00	13.2
26-May-09	16:00:00	10.8	4-Jul-09	10:00:00	13.3	12-Aug-09	4:00:00	14.5	19-Sep-09	22:00:00	13.0
26-May-09	17:00:00	10.9	4-Jul-09	11:00:00	13.5	12-Aug-09	5:00:00	14.0	19-Sep-09	23:00:00	12.7
26-May-09	18:00:00	10.9	4-Jul-09	12:00:00	13.8	12-Aug-09	6:00:00	13.9	20-Sep-09	0:00:00	12.6
26-May-09	19:00:00	10.8	4-Jul-09	13:00:00	13.9	12-Aug-09	7:00:00	13.8	20-Sep-09	1:00:00	12.3
26-May-09	20:00:00	10.8	4-Jul-09	14:00:00	14.0	12-Aug-09	8:00:00	13.8	20-Sep-09	2:00:00	12.1
26-May-09	21:00:00	10.8	4-Jul-09	15:00:00	14.5	12-Aug-09	9:00:00	13.6	20-Sep-09	3:00:00	12.1
26-May-09	22:00:00	10.8	4-Jul-09	16:00:00	14.9	12-Aug-09	10:00:00	13.5	20-Sep-09	4:00:00	12.0
26-May-09	23:00:00	10.6	4-Jul-09	17:00:00	15.4	12-Aug-09	11:00:00	13.5	20-Sep-09	5:00:00	11.8
27-May-09	0:00:00	10.3	4-Jul-09	18:00:00	15.5	12-Aug-09	12:00:00	13.5	20-Sep-09	6:00:00	11.5
27-May-09	1:00:00	10.2	4-Jul-09	19:00:00	15.7	12-Aug-09	13:00:00	13.6	20-Sep-09	7:00:00	11.2
27-May-09	2:00:00	10.2	4-Jul-09	20:00:00	15.5	12-Aug-09	14:00:00	13.8	20-Sep-09	8:00:00	11.1
27-May-09	3:00:00	10.1	4-Jul-09	21:00:00	15.5	12-Aug-09	15:00:00	13.8	20-Sep-09	9:00:00	10.9
27-May-09	4:00:00	9.9	4-Jul-09	22:00:00	15.4	12-Aug-09	16:00:00	13.8	20-Sep-09	10:00:00	10.8
27-May-09	5:00:00	9.8	4-Jul-09	23:00:00	15.2	12-Aug-09	17:00:00	13.9	20-Sep-09	11:00:00	10.9
27-May-09	6:00:00	9.6	5-Jul-09	0:00:00	14.9	12-Aug-09	18:00:00	13.9	20-Sep-09	12:00:00	11.2
27-May-09	7:00:00	9.5	5-Jul-09	1:00:00	14.9	12-Aug-09	19:00:00	13.9	20-Sep-09	13:00:00	11.7
27-May-09	8:00:00	9.2	5-Jul-09	2:00:00	14.6	12-Aug-09	20:00:00	13.9	20-Sep-09	14:00:00	12.1
27-May-09	9:00:00	9.2	5-Jul-09	3:00:00	14.5	12-Aug-09	21:00:00	13.9	20-Sep-09	15:00:00	12.4
27-May-09	10:00:00	9.2	5-Jul-09	4:00:00	14.3	12-Aug-09	22:00:00	13.9	20-Sep-09	16:00:00	12.6
27-May-09	11:00:00	9.2	5-Jul-09	5:00:00	14.0	12-Aug-09	23:00:00	13.6	20-Sep-09	17:00:00	12.7
27-May-09	12:00:00	9.0	5-Jul-09	6:00:00	13.8	13-Aug-09	0:00:00	13.5	20-Sep-09	18:00:00	12.7
27-May-09	13:00:00	9.0	5-Jul-09	7:00:00	13.5	13-Aug-09	1:00:00	13.2	20-Sep-09	19:00:00	12.6
27-May-09	14:00:00	9.0	5-Jul-09	8:00:00	13.5	13-Aug-09	2:00:00	13.2	20-Sep-09	20:00:00	12.3
27-May-09	15:00:00	8.9	5-Jul-09	9:00:00	13.3	13-Aug-09	3:00:00	13.0	20-Sep-09	21:00:00	12.3
27-May-09	16:00:00	8.9	5-Jul-09	10:00:00	13.6	13-Aug-09	4:00:00	12.7	20-Sep-09	22:00:00	12.1
27-May-09	17:00:00	8.7	5-Jul-09	11:00:00	13.9	13-Aug-09	5:00:00	12.6	20-Sep-09	23:00:00	12.0

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
27-May-09	18:00:00	8.7	5-Jul-09	12:00:00	14.5	13-Aug-09	6:00:00	12.3	21-Sep-09	0:00:00	11.7
27-May-09	19:00:00	8.9	5-Jul-09	13:00:00	14.6	13-Aug-09	7:00:00	12.3	21-Sep-09	1:00:00	11.5
27-May-09	20:00:00	8.7	5-Jul-09	14:00:00	15.1	13-Aug-09	8:00:00	12.3	21-Sep-09	2:00:00	11.5
27-May-09	21:00:00	8.7	5-Jul-09	15:00:00	15.7	13-Aug-09	9:00:00	12.1	21-Sep-09	3:00:00	11.4
27-May-09	22:00:00	8.7	5-Jul-09	16:00:00	16.3	13-Aug-09	10:00:00	12.1	21-Sep-09	4:00:00	11.2
27-May-09	23:00:00	8.6	5-Jul-09	17:00:00	16.8	13-Aug-09	11:00:00	12.1	21-Sep-09	5:00:00	11.1
28-May-09	0:00:00	8.6	5-Jul-09	18:00:00	16.8	13-Aug-09	12:00:00	12.1	21-Sep-09	6:00:00	10.9
28-May-09	1:00:00	8.6	5-Jul-09	19:00:00	17.1	13-Aug-09	13:00:00	12.3	21-Sep-09	7:00:00	10.9
28-May-09	2:00:00	8.4	5-Jul-09	20:00:00	17.1	13-Aug-09	14:00:00	12.7	21-Sep-09	8:00:00	10.9
28-May-09	3:00:00	8.4	5-Jul-09	21:00:00	17.1	13-Aug-09	15:00:00	13.2	21-Sep-09	9:00:00	10.8
28-May-09	4:00:00	8.4	5-Jul-09	22:00:00	16.8	13-Aug-09	16:00:00	13.8	21-Sep-09	10:00:00	10.8
28-May-09	5:00:00	8.4	5-Jul-09	23:00:00	16.8	13-Aug-09	17:00:00	14.0	21-Sep-09	11:00:00	10.8
28-May-09	6:00:00	8.4	6-Jul-09	0:00:00	16.6	13-Aug-09	18:00:00	14.5	21-Sep-09	12:00:00	11.1
28-May-09	7:00:00	8.4	6-Jul-09	1:00:00	16.3	13-Aug-09	19:00:00	14.5	21-Sep-09	13:00:00	11.5
28-May-09	8:00:00	8.3	6-Jul-09	2:00:00	16.3	13-Aug-09	20:00:00	14.5	21-Sep-09	14:00:00	12.0
28-May-09	9:00:00	8.1	6-Jul-09	3:00:00	16.2	13-Aug-09	21:00:00	14.5	21-Sep-09	15:00:00	12.3
28-May-09	10:00:00	8.1	6-Jul-09	4:00:00	15.7	13-Aug-09	22:00:00	14.5	21-Sep-09	16:00:00	12.6
28-May-09	11:00:00	8.1	6-Jul-09	5:00:00	15.5	13-Aug-09	23:00:00	14.2	21-Sep-09	17:00:00	12.7
28-May-09	12:00:00	8.1	6-Jul-09	6:00:00	15.4	14-Aug-09	0:00:00	13.9	21-Sep-09	18:00:00	12.6
28-May-09	13:00:00	8.0	6-Jul-09	7:00:00	15.1	14-Aug-09	1:00:00	13.9	21-Sep-09	19:00:00	12.3
28-May-09	14:00:00	8.0	6-Jul-09	8:00:00	14.9	14-Aug-09	2:00:00	13.5	21-Sep-09	20:00:00	12.1
28-May-09	15:00:00	8.0	6-Jul-09	9:00:00	14.8	14-Aug-09	3:00:00	13.3	21-Sep-09	21:00:00	12.1
28-May-09	16:00:00	8.0	6-Jul-09	10:00:00	14.5	14-Aug-09	4:00:00	13.2	21-Sep-09	22:00:00	12.1
28-May-09	17:00:00	8.0	6-Jul-09	11:00:00	14.5	14-Aug-09	5:00:00	12.9	21-Sep-09	23:00:00	12.1
28-May-09	18:00:00	8.0	6-Jul-09	12:00:00	14.3	14-Aug-09	6:00:00	12.7	22-Sep-09	0:00:00	12.1
28-May-09	19:00:00	8.0	6-Jul-09	13:00:00	14.2	14-Aug-09	7:00:00	12.6	22-Sep-09	1:00:00	12.1
28-May-09	20:00:00	8.0	6-Jul-09	14:00:00	14.2	14-Aug-09	8:00:00	12.3	22-Sep-09	2:00:00	12.1
28-May-09	21:00:00	8.0	6-Jul-09	15:00:00	13.9	14-Aug-09	9:00:00	12.3	22-Sep-09	3:00:00	12.1
28-May-09	22:00:00	8.0	6-Jul-09	16:00:00	13.9	14-Aug-09	10:00:00	12.3	22-Sep-09	4:00:00	12.1
28-May-09	23:00:00	8.0	6-Jul-09	17:00:00	13.9	14-Aug-09	11:00:00	12.6	22-Sep-09	5:00:00	12.0
29-May-09	0:00:00	8.0	6-Jul-09	18:00:00	13.8	14-Aug-09	12:00:00	12.9	22-Sep-09	6:00:00	11.8
29-May-09	1:00:00	8.1	6-Jul-09	19:00:00	13.8	14-Aug-09	13:00:00	13.3	22-Sep-09	7:00:00	11.5
29-May-09	2:00:00	8.0	6-Jul-09	20:00:00	13.6	14-Aug-09	14:00:00	13.9	22-Sep-09	8:00:00	11.5
29-May-09	3:00:00	8.1	6-Jul-09	21:00:00	13.5	14-Aug-09	15:00:00	14.5	22-Sep-09	9:00:00	11.4
29-May-09	4:00:00	8.1	6-Jul-09	22:00:00	13.5	14-Aug-09	16:00:00	14.9	22-Sep-09	10:00:00	11.4
29-May-09	5:00:00	8.1	6-Jul-09	23:00:00	13.3	14-Aug-09	17:00:00	15.2	22-Sep-09	11:00:00	11.5
29-May-09	6:00:00	8.1	7-Jul-09	0:00:00	13.2	14-Aug-09	18:00:00	15.5	22-Sep-09	12:00:00	11.5
29-May-09	7:00:00	8.1	7-Jul-09	1:00:00	13.2	14-Aug-09	19:00:00	15.7	22-Sep-09	13:00:00	12.0
29-May-09	8:00:00	8.1	7-Jul-09	2:00:00	12.9	14-Aug-09	20:00:00	15.7	22-Sep-09	14:00:00	12.6
29-May-09	9:00:00	8.3	7-Jul-09	3:00:00	12.7	14-Aug-09	21:00:00	15.9	22-Sep-09	15:00:00	13.0
29-May-09	10:00:00	8.1	7-Jul-09	4:00:00	12.6	14-Aug-09	22:00:00	15.7	22-Sep-09	16:00:00	13.3
29-May-09	11:00:00	8.3	7-Jul-09	5:00:00	12.6	14-Aug-09	23:00:00	15.5	22-Sep-09	17:00:00	13.6
29-May-09	12:00:00	8.3	7-Jul-09	6:00:00	12.3	15-Aug-09	0:00:00	15.5	22-Sep-09	18:00:00	13.8
29-May-09	13:00:00	8.3	7-Jul-09	7:00:00	12.3	15-Aug-09	1:00:00	15.1	22-Sep-09	19:00:00	13.8
29-May-09	14:00:00	8.3	7-Jul-09	8:00:00	12.1	15-Aug-09	2:00:00	14.9	22-Sep-09	20:00:00	13.5
29-May-09	15:00:00	8.3	7-Jul-09	9:00:00	12.1	15-Aug-09	3:00:00	14.9	22-Sep-09	21:00:00	13.3
29-May-09	16:00:00	8.3	7-Jul-09	10:00:00	12.1	15-Aug-09	4:00:00	14.6	22-Sep-09	22:00:00	13.3
29-May-09	17:00:00	8.3	7-Jul-09	11:00:00	12.1	15-Aug-09	5:00:00	14.5	22-Sep-09	23:00:00	13.2
29-May-09	18:00:00	8.3	7-Jul-09	12:00:00	12.0	15-Aug-09	6:00:00	14.5	23-Sep-09	0:00:00	13.2
29-May-09	19:00:00	8.3	7-Jul-09	13:00:00	12.0	15-Aug-09	7:00:00	14.5	23-Sep-09	1:00:00	13.0
29-May-09	20:00:00	8.3	7-Jul-09	14:00:00	12.1	15-Aug-09	8:00:00	14.3	23-Sep-09	2:00:00	13.0
29-May-09	21:00:00	8.3	7-Jul-09	15:00:00	12.3	15-Aug-09	9:00:00	14.2	23-Sep-09	3:00:00	13.0
29-May-09	22:00:00	8.3	7-Jul-09	16:00:00	12.1	15-Aug-09	10:00:00	14.5	23-Sep-09	4:00:00	12.7
29-May-09	23:00:00	8.4	7-Jul-09	17:00:00	12.6	15-Aug-09	11:00:00	14.5	23-Sep-09	5:00:00	12.6
30-May-09	0:00:00	8.3	7-Jul-09	18:00:00	12.6	15-Aug-09	12:00:00	14.5	23-Sep-09	6:00:00	12.3
30-May-09	1:00:00	8.4	7-Jul-09	19:00:00	12.3	15-Aug-09	13:00:00	14.6	23-Sep-09	7:00:00	12.1
30-May-09	2:00:00	8.4	7-Jul-09	20:00:00	12.3	15-Aug-09	14:00:00	14.9	23-Sep-09	8:00:00	12.1
30-May-09	3:00:00	8.6	7-Jul-09	21:00:00	12.3	15-Aug-09	15:00:00	15.5	23-Sep-09	9:00:00	12.0
30-May-09	4:00:00	8.6	7-Jul-09	22:00:00	12.1	15-Aug-09	16:00:00	15.7	23-Sep-09	10:00:00	11.8

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
30-May-09	5:00:00	8.6	7-Jul-09	23:00:00	12.0	15-Aug-09	17:00:00	15.9	23-Sep-09	11:00:00	11.8
30-May-09	6:00:00	8.6	8-Jul-09	0:00:00	11.8	15-Aug-09	18:00:00	16.2	23-Sep-09	12:00:00	12.1
30-May-09	7:00:00	8.6	8-Jul-09	1:00:00	11.7	15-Aug-09	19:00:00	16.3	23-Sep-09	13:00:00	12.3
30-May-09	8:00:00	8.6	8-Jul-09	2:00:00	11.5	15-Aug-09	20:00:00	16.3	23-Sep-09	14:00:00	12.7
30-May-09	9:00:00	8.7	8-Jul-09	3:00:00	11.4	15-Aug-09	21:00:00	16.2	23-Sep-09	15:00:00	13.3
30-May-09	10:00:00	8.9	8-Jul-09	4:00:00	11.4	15-Aug-09	22:00:00	15.9	23-Sep-09	16:00:00	13.8
30-May-09	11:00:00	9.2	8-Jul-09	5:00:00	11.2	15-Aug-09	23:00:00	15.9	23-Sep-09	17:00:00	13.9
30-May-09	12:00:00	9.0	8-Jul-09	6:00:00	11.1	16-Aug-09	0:00:00	15.5	23-Sep-09	18:00:00	13.9
30-May-09	13:00:00	8.9	8-Jul-09	7:00:00	10.9	16-Aug-09	1:00:00	15.2	23-Sep-09	19:00:00	13.9
30-May-09	14:00:00	8.9	8-Jul-09	8:00:00	10.8	16-Aug-09	2:00:00	15.1	23-Sep-09	20:00:00	13.9
30-May-09	15:00:00	9.8	8-Jul-09	9:00:00	10.8	16-Aug-09	3:00:00	14.9	23-Sep-09	21:00:00	13.6
30-May-09	16:00:00	9.5	8-Jul-09	10:00:00	10.8	16-Aug-09	4:00:00	14.6	23-Sep-09	22:00:00	13.5
30-May-09	17:00:00	9.5	8-Jul-09	11:00:00	10.8	16-Aug-09	5:00:00	14.5	23-Sep-09	23:00:00	13.3
30-May-09	18:00:00	9.6	8-Jul-09	12:00:00	10.9	16-Aug-09	6:00:00	14.5	24-Sep-09	0:00:00	13.2
30-May-09	19:00:00	9.6	8-Jul-09	13:00:00	11.1	16-Aug-09	7:00:00	14.2	24-Sep-09	1:00:00	13.2
30-May-09	20:00:00	9.8	8-Jul-09	14:00:00	11.2	16-Aug-09	8:00:00	13.9	24-Sep-09	2:00:00	13.2
30-May-09	21:00:00	9.8	8-Jul-09	15:00:00	11.4	16-Aug-09	9:00:00	13.9	24-Sep-09	3:00:00	13.0
30-May-09	22:00:00	9.8	8-Jul-09	16:00:00	11.5	16-Aug-09	10:00:00	13.9	24-Sep-09	4:00:00	12.9
30-May-09	23:00:00	9.8	8-Jul-09	17:00:00	11.8	16-Aug-09	11:00:00	14.0	24-Sep-09	5:00:00	12.6
31-May-09	0:00:00	9.8	8-Jul-09	18:00:00	12.1	16-Aug-09	12:00:00	14.5	24-Sep-09	6:00:00	12.3
31-May-09	1:00:00	9.8	8-Jul-09	19:00:00	12.3	16-Aug-09	13:00:00	14.9	24-Sep-09	7:00:00	12.1
31-May-09	2:00:00	9.8	8-Jul-09	20:00:00	12.3	16-Aug-09	14:00:00	15.5	24-Sep-09	8:00:00	11.8
31-May-09	3:00:00	9.8	8-Jul-09	21:00:00	12.3	16-Aug-09	15:00:00	16.2	24-Sep-09	9:00:00	11.8
31-May-09	4:00:00	9.8	8-Jul-09	22:00:00	12.3	16-Aug-09	16:00:00	16.6	24-Sep-09	10:00:00	11.5
31-May-09	5:00:00	9.8	8-Jul-09	23:00:00	12.3	16-Aug-09	17:00:00	16.9	24-Sep-09	11:00:00	11.5
31-May-09	6:00:00	9.5	9-Jul-09	0:00:00	12.1	16-Aug-09	18:00:00	17.4	24-Sep-09	12:00:00	11.8
31-May-09	7:00:00	9.5	9-Jul-09	1:00:00	12.1	16-Aug-09	19:00:00	17.4	24-Sep-09	13:00:00	12.1
31-May-09	8:00:00	9.3	9-Jul-09	2:00:00	12.1	16-Aug-09	20:00:00	17.4	24-Sep-09	14:00:00	12.4
31-May-09	9:00:00	9.3	9-Jul-09	3:00:00	12.1	16-Aug-09	21:00:00	17.4	24-Sep-09	15:00:00	12.7
31-May-09	10:00:00	9.2	9-Jul-09	4:00:00	12.1	16-Aug-09	22:00:00	17.1	24-Sep-09	16:00:00	12.9
31-May-09	11:00:00	9.0	9-Jul-09	5:00:00	12.0	16-Aug-09	23:00:00	16.9	24-Sep-09	17:00:00	13.2
31-May-09	12:00:00	9.2	9-Jul-09	6:00:00	12.0	17-Aug-09	0:00:00	16.8	24-Sep-09	18:00:00	13.2
31-May-09	13:00:00	9.0	9-Jul-09	7:00:00	12.0	17-Aug-09	1:00:00	16.6	24-Sep-09	19:00:00	13.0
31-May-09	14:00:00	9.2	9-Jul-09	8:00:00	12.0	17-Aug-09	2:00:00	16.5	24-Sep-09	20:00:00	12.7
31-May-09	15:00:00	9.2	9-Jul-09	9:00:00	12.0	17-Aug-09	3:00:00	16.3	24-Sep-09	21:00:00	12.6
31-May-09	16:00:00	9.3	9-Jul-09	10:00:00	11.8	17-Aug-09	4:00:00	16.2	24-Sep-09	22:00:00	12.4
31-May-09	17:00:00	9.6	9-Jul-09	11:00:00	11.8	17-Aug-09	5:00:00	16.0	24-Sep-09	23:00:00	12.3
31-May-09	18:00:00	9.8	9-Jul-09	12:00:00	11.8	17-Aug-09	6:00:00	15.7	25-Sep-09	0:00:00	12.1
31-May-09	19:00:00	9.9	9-Jul-09	13:00:00	11.8	17-Aug-09	7:00:00	15.5	25-Sep-09	1:00:00	12.0
31-May-09	20:00:00	9.9	9-Jul-09	14:00:00	11.8	17-Aug-09	8:00:00	15.5	25-Sep-09	2:00:00	12.0
31-May-09	21:00:00	10.2	9-Jul-09	15:00:00	11.8	17-Aug-09	9:00:00	15.5	25-Sep-09	3:00:00	11.7
31-May-09	22:00:00	10.1	9-Jul-09	16:00:00	11.8	17-Aug-09	10:00:00	15.5	25-Sep-09	4:00:00	11.5
31-May-09	23:00:00	9.9	9-Jul-09	17:00:00	11.7	17-Aug-09	11:00:00	15.7	25-Sep-09	5:00:00	11.5
1-Jun-09	0:00:00	9.8	9-Jul-09	18:00:00	11.7	17-Aug-09	12:00:00	16.3	25-Sep-09	6:00:00	11.2
1-Jun-09	1:00:00	9.8	9-Jul-09	19:00:00	11.7	17-Aug-09	13:00:00	16.8	25-Sep-09	7:00:00	11.1
1-Jun-09	2:00:00	9.8	9-Jul-09	20:00:00	11.8	17-Aug-09	14:00:00	16.9	25-Sep-09	8:00:00	10.9
1-Jun-09	3:00:00	9.8	9-Jul-09	21:00:00	11.8	17-Aug-09	15:00:00	17.4	25-Sep-09	9:00:00	10.8
1-Jun-09	4:00:00	9.5	9-Jul-09	22:00:00	11.8	17-Aug-09	16:00:00	17.7	25-Sep-09	10:00:00	10.8
1-Jun-09	5:00:00	9.5	9-Jul-09	23:00:00	11.8	17-Aug-09	17:00:00	18.0	25-Sep-09	11:00:00	10.8
1-Jun-09	6:00:00	9.5	10-Jul-09	0:00:00	11.8	17-Aug-09	18:00:00	18.1	25-Sep-09	12:00:00	10.8
1-Jun-09	7:00:00	9.5	10-Jul-09	1:00:00	11.8	17-Aug-09	19:00:00	18.1	25-Sep-09	13:00:00	11.1
1-Jun-09	8:00:00	9.3	10-Jul-09	2:00:00	11.8	17-Aug-09	20:00:00	18.0	25-Sep-09	14:00:00	11.1
1-Jun-09	9:00:00	9.3	10-Jul-09	3:00:00	11.8	17-Aug-09	21:00:00	17.8	25-Sep-09	15:00:00	11.4
1-Jun-09	10:00:00	9.3	10-Jul-09	4:00:00	11.8	17-Aug-09	22:00:00	17.5	25-Sep-09	16:00:00	11.4
1-Jun-09	11:00:00	9.3	10-Jul-09	5:00:00	11.8	17-Aug-09	23:00:00	17.4	25-Sep-09	17:00:00	11.2
1-Jun-09	12:00:00	9.3	10-Jul-09	6:00:00	11.7	18-Aug-09	0:00:00	17.2	25-Sep-09	18:00:00	11.2
1-Jun-09	13:00:00	9.5	10-Jul-09	7:00:00	11.5	18-Aug-09	1:00:00	16.9	25-Sep-09	19:00:00	11.4
1-Jun-09	14:00:00	9.8	10-Jul-09	8:00:00	11.5	18-Aug-09	2:00:00	16.8	25-Sep-09	20:00:00	11.2
1-Jun-09	15:00:00	9.9	10-Jul-09	9:00:00	11.4	18-Aug-09	3:00:00	16.6	25-Sep-09	21:00:00	10.9

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
1-Jun-09	16:00:00	10.2	10-Jul-09	10:00:00	11.4	18-Aug-09	4:00:00	16.5	25-Sep-09	22:00:00	10.8
1-Jun-09	17:00:00	10.2	10-Jul-09	11:00:00	11.4	18-Aug-09	5:00:00	16.3	25-Sep-09	23:00:00	10.8
1-Jun-09	18:00:00	10.2	10-Jul-09	12:00:00	11.5	18-Aug-09	6:00:00	16.2	26-Sep-09	0:00:00	10.5
1-Jun-09	19:00:00	10.2	10-Jul-09	13:00:00	11.4	18-Aug-09	7:00:00	15.9	26-Sep-09	1:00:00	10.2
1-Jun-09	20:00:00	10.5	10-Jul-09	14:00:00	11.4	18-Aug-09	8:00:00	15.7	26-Sep-09	2:00:00	10.1
1-Jun-09	21:00:00	10.6	10-Jul-09	15:00:00	11.5	18-Aug-09	9:00:00	15.7	26-Sep-09	3:00:00	9.9
1-Jun-09	22:00:00	10.8	10-Jul-09	16:00:00	11.5	18-Aug-09	10:00:00	15.9	26-Sep-09	4:00:00	9.8
1-Jun-09	23:00:00	10.8	10-Jul-09	17:00:00	11.5	18-Aug-09	11:00:00	16.2	26-Sep-09	5:00:00	9.8
2-Jun-09	0:00:00	10.8	10-Jul-09	18:00:00	11.8	18-Aug-09	12:00:00	16.3	26-Sep-09	6:00:00	9.6
2-Jun-09	1:00:00	10.8	10-Jul-09	19:00:00	12.0	18-Aug-09	13:00:00	16.8	26-Sep-09	7:00:00	9.6
2-Jun-09	2:00:00	10.6	10-Jul-09	20:00:00	12.1	18-Aug-09	14:00:00	16.9	26-Sep-09	8:00:00	9.5
2-Jun-09	3:00:00	10.3	10-Jul-09	21:00:00	12.1	18-Aug-09	15:00:00	17.4	26-Sep-09	9:00:00	9.5
2-Jun-09	4:00:00	10.2	10-Jul-09	22:00:00	12.1	18-Aug-09	16:00:00	17.8	26-Sep-09	10:00:00	9.5
2-Jun-09	5:00:00	10.2	10-Jul-09	23:00:00	12.3	18-Aug-09	17:00:00	18.1	26-Sep-09	11:00:00	9.5
2-Jun-09	6:00:00	9.8	11-Jul-09	0:00:00	12.3	18-Aug-09	18:00:00	18.4	26-Sep-09	12:00:00	9.5
2-Jun-09	7:00:00	9.8	11-Jul-09	1:00:00	12.4	18-Aug-09	19:00:00	18.4	26-Sep-09	13:00:00	9.5
2-Jun-09	8:00:00	9.6	11-Jul-09	2:00:00	12.6	18-Aug-09	20:00:00	18.3	26-Sep-09	14:00:00	9.6
2-Jun-09	9:00:00	9.5	11-Jul-09	3:00:00	12.4	18-Aug-09	21:00:00	18.1	26-Sep-09	15:00:00	9.8
2-Jun-09	10:00:00	9.5	11-Jul-09	4:00:00	12.4	18-Aug-09	22:00:00	18.0	26-Sep-09	16:00:00	9.8
2-Jun-09	11:00:00	9.6	11-Jul-09	5:00:00	12.6	18-Aug-09	23:00:00	17.8	26-Sep-09	17:00:00	9.9
2-Jun-09	12:00:00	9.8	11-Jul-09	6:00:00	12.4	19-Aug-09	0:00:00	17.5	26-Sep-09	18:00:00	9.9
2-Jun-09	13:00:00	10.1	11-Jul-09	7:00:00	12.3	19-Aug-09	1:00:00	17.4	26-Sep-09	19:00:00	9.8
2-Jun-09	14:00:00	10.3	11-Jul-09	8:00:00	12.4	19-Aug-09	2:00:00	17.1	26-Sep-09	20:00:00	9.8
2-Jun-09	15:00:00	10.8	11-Jul-09	9:00:00	12.3	19-Aug-09	3:00:00	16.9	26-Sep-09	21:00:00	9.8
2-Jun-09	16:00:00	11.1	11-Jul-09	10:00:00	12.3	19-Aug-09	4:00:00	16.8	26-Sep-09	22:00:00	9.6
2-Jun-09	17:00:00	12.0	11-Jul-09	11:00:00	12.3	19-Aug-09	5:00:00	16.5	26-Sep-09	23:00:00	9.5
2-Jun-09	18:00:00	12.1	11-Jul-09	12:00:00	12.3	19-Aug-09	6:00:00	16.2	27-Sep-09	0:00:00	9.2
2-Jun-09	19:00:00	12.6	11-Jul-09	13:00:00	12.4	19-Aug-09	7:00:00	15.7	27-Sep-09	1:00:00	8.9
2-Jun-09	20:00:00	12.6	11-Jul-09	14:00:00	12.7	19-Aug-09	8:00:00	15.5	27-Sep-09	2:00:00	8.7
2-Jun-09	21:00:00	12.6	11-Jul-09	15:00:00	13.0	19-Aug-09	9:00:00	15.5	27-Sep-09	3:00:00	8.6
2-Jun-09	22:00:00	12.7	11-Jul-09	16:00:00	13.3	19-Aug-09	10:00:00	15.4	27-Sep-09	4:00:00	8.4
2-Jun-09	23:00:00	12.6	11-Jul-09	17:00:00	13.6	19-Aug-09	11:00:00	15.5	27-Sep-09	5:00:00	8.1
3-Jun-09	0:00:00	12.6	11-Jul-09	18:00:00	13.9	19-Aug-09	12:00:00	15.9	27-Sep-09	6:00:00	7.8
3-Jun-09	1:00:00	12.4	11-Jul-09	19:00:00	14.2	19-Aug-09	13:00:00	16.5	27-Sep-09	7:00:00	7.5
3-Jun-09	2:00:00	12.3	11-Jul-09	20:00:00	14.5	19-Aug-09	14:00:00	16.9	27-Sep-09	8:00:00	7.5
3-Jun-09	3:00:00	12.1	11-Jul-09	21:00:00	14.5	19-Aug-09	15:00:00	17.4	27-Sep-09	9:00:00	7.3
3-Jun-09	4:00:00	12.1	11-Jul-09	22:00:00	14.6	19-Aug-09	16:00:00	18.0	27-Sep-09	10:00:00	7.1
3-Jun-09	5:00:00	12.0	11-Jul-09	23:00:00	14.6	19-Aug-09	17:00:00	18.3	27-Sep-09	11:00:00	7.3
3-Jun-09	6:00:00	11.8	12-Jul-09	0:00:00	14.6	19-Aug-09	18:00:00	18.6	27-Sep-09	12:00:00	7.5
3-Jun-09	7:00:00	11.5	12-Jul-09	1:00:00	14.5	19-Aug-09	19:00:00	18.6	27-Sep-09	13:00:00	7.8
3-Jun-09	8:00:00	11.5	12-Jul-09	2:00:00	14.5	19-Aug-09	20:00:00	18.6	27-Sep-09	14:00:00	8.3
3-Jun-09	9:00:00	11.4	12-Jul-09	3:00:00	14.5	19-Aug-09	21:00:00	18.8	27-Sep-09	15:00:00	8.6
3-Jun-09	10:00:00	11.5	12-Jul-09	4:00:00	14.5	19-Aug-09	22:00:00	18.6	27-Sep-09	16:00:00	8.7
3-Jun-09	11:00:00	11.5	12-Jul-09	5:00:00	14.2	19-Aug-09	23:00:00	18.3	27-Sep-09	17:00:00	9.0
3-Jun-09	12:00:00	12.0	12-Jul-09	6:00:00	14.2	20-Aug-09	0:00:00	18.1	27-Sep-09	18:00:00	9.2
3-Jun-09	13:00:00	12.3	12-Jul-09	7:00:00	14.0	20-Aug-09	1:00:00	17.8	27-Sep-09	19:00:00	9.0
3-Jun-09	14:00:00	12.6	12-Jul-09	8:00:00	13.9	20-Aug-09	2:00:00	17.5	27-Sep-09	20:00:00	8.7
3-Jun-09	15:00:00	13.2	12-Jul-09	9:00:00	13.9	20-Aug-09	3:00:00	17.4	27-Sep-09	21:00:00	8.7
3-Jun-09	16:00:00	13.5	12-Jul-09	10:00:00	13.9	20-Aug-09	4:00:00	17.1	27-Sep-09	22:00:00	8.6
3-Jun-09	17:00:00	13.9	12-Jul-09	11:00:00	13.9	20-Aug-09	5:00:00	16.8	27-Sep-09	23:00:00	8.6
3-Jun-09	18:00:00	13.9	12-Jul-09	12:00:00	13.9	20-Aug-09	6:00:00	16.8	28-Sep-09	0:00:00	8.4
3-Jun-09	19:00:00	14.5	12-Jul-09	13:00:00	14.0	20-Aug-09	7:00:00	16.3	28-Sep-09	1:00:00	8.4
3-Jun-09	20:00:00	14.5	12-Jul-09	14:00:00	14.5	20-Aug-09	8:00:00	16.3	28-Sep-09	2:00:00	8.4
3-Jun-09	21:00:00	14.5	12-Jul-09	15:00:00	14.5	20-Aug-09	9:00:00	16.2	28-Sep-09	3:00:00	8.3
3-Jun-09	22:00:00	14.5	12-Jul-09	16:00:00	14.6	20-Aug-09	10:00:00	16.0	28-Sep-09	4:00:00	8.3
3-Jun-09	23:00:00	14.5	12-Jul-09	17:00:00	14.6	20-Aug-09	11:00:00	16.2	28-Sep-09	5:00:00	8.1
4-Jun-09	0:00:00	14.5	12-Jul-09	18:00:00	14.9	20-Aug-09	12:00:00	16.2	28-Sep-09	6:00:00	8.0
4-Jun-09	1:00:00	14.2	12-Jul-09	19:00:00	14.9	20-Aug-09	13:00:00	16.3	28-Sep-09	7:00:00	8.0
4-Jun-09	2:00:00	14.0	12-Jul-09	20:00:00	14.9	20-Aug-09	14:00:00	16.8	28-Sep-09	8:00:00	7.8

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
4-Jun-09	3:00:00	13.9	12-Jul-09	21:00:00	14.9	20-Aug-09	15:00:00	16.9	28-Sep-09	9:00:00	7.8
4-Jun-09	4:00:00	13.8	12-Jul-09	22:00:00	14.9	20-Aug-09	16:00:00	17.4	28-Sep-09	10:00:00	7.8
4-Jun-09	5:00:00	13.5	12-Jul-09	23:00:00	14.9	20-Aug-09	17:00:00	18.0	28-Sep-09	11:00:00	7.8
4-Jun-09	6:00:00	13.2	13-Jul-09	0:00:00	14.9	20-Aug-09	18:00:00	18.1	28-Sep-09	12:00:00	7.8
4-Jun-09	7:00:00	13.0	13-Jul-09	1:00:00	14.9	20-Aug-09	19:00:00	18.1	28-Sep-09	13:00:00	8.0
4-Jun-09	8:00:00	12.9	13-Jul-09	2:00:00	14.9	20-Aug-09	20:00:00	18.1	28-Sep-09	14:00:00	8.1
4-Jun-09	9:00:00	12.7	13-Jul-09	3:00:00	14.6	20-Aug-09	21:00:00	18.1	28-Sep-09	15:00:00	8.1
4-Jun-09	10:00:00	12.6	13-Jul-09	4:00:00	14.6	20-Aug-09	22:00:00	18.1	28-Sep-09	16:00:00	8.4
4-Jun-09	11:00:00	12.6	13-Jul-09	5:00:00	14.5	20-Aug-09	23:00:00	18.0	28-Sep-09	17:00:00	8.4
4-Jun-09	12:00:00	12.7	13-Jul-09	6:00:00	14.5	21-Aug-09	0:00:00	17.8	28-Sep-09	18:00:00	8.4
4-Jun-09	13:00:00	12.9	13-Jul-09	7:00:00	14.5	21-Aug-09	1:00:00	17.5	28-Sep-09	19:00:00	8.4
4-Jun-09	14:00:00	13.0	13-Jul-09	8:00:00	14.5	21-Aug-09	2:00:00	17.4	28-Sep-09	20:00:00	8.3
4-Jun-09	15:00:00	13.0	13-Jul-09	9:00:00	14.3	21-Aug-09	3:00:00	17.4	28-Sep-09	21:00:00	8.3
4-Jun-09	16:00:00	13.2	13-Jul-09	10:00:00	14.2	21-Aug-09	4:00:00	17.1	28-Sep-09	22:00:00	8.3
4-Jun-09	17:00:00	13.5	13-Jul-09	11:00:00	14.0	21-Aug-09	5:00:00	16.9	28-Sep-09	23:00:00	8.1
4-Jun-09	18:00:00	13.5	13-Jul-09	12:00:00	14.0	21-Aug-09	6:00:00	16.8	29-Sep-09	0:00:00	8.1
4-Jun-09	19:00:00	13.3	13-Jul-09	13:00:00	13.9	21-Aug-09	7:00:00	16.8	29-Sep-09	1:00:00	8.0
4-Jun-09	20:00:00	13.3	13-Jul-09	14:00:00	13.9	21-Aug-09	8:00:00	16.6	29-Sep-09	2:00:00	8.0
4-Jun-09	21:00:00	13.2	13-Jul-09	15:00:00	13.8	21-Aug-09	9:00:00	16.3	29-Sep-09	3:00:00	7.8
4-Jun-09	22:00:00	13.0	13-Jul-09	16:00:00	13.8	21-Aug-09	10:00:00	16.3	29-Sep-09	4:00:00	7.5
4-Jun-09	23:00:00	12.9	13-Jul-09	17:00:00	13.8	21-Aug-09	11:00:00	16.3	29-Sep-09	5:00:00	7.5
5-Jun-09	0:00:00	12.6	13-Jul-09	18:00:00	13.8	21-Aug-09	12:00:00	16.8	29-Sep-09	6:00:00	7.4
5-Jun-09	1:00:00	12.4	13-Jul-09	19:00:00	13.6	21-Aug-09	13:00:00	17.4	29-Sep-09	7:00:00	7.4
5-Jun-09	2:00:00	12.3	13-Jul-09	20:00:00	13.5	21-Aug-09	14:00:00	17.8	29-Sep-09	8:00:00	7.3
5-Jun-09	3:00:00	12.1	13-Jul-09	21:00:00	13.5	21-Aug-09	15:00:00	18.1	29-Sep-09	9:00:00	7.3
5-Jun-09	4:00:00	12.1	13-Jul-09	22:00:00	13.5	21-Aug-09	16:00:00	18.6	29-Sep-09	10:00:00	7.1
5-Jun-09	5:00:00	12.0	13-Jul-09	23:00:00	13.3	21-Aug-09	17:00:00	18.8	29-Sep-09	11:00:00	7.3
5-Jun-09	6:00:00	12.0	14-Jul-09	0:00:00	13.2	21-Aug-09	18:00:00	19.1	29-Sep-09	12:00:00	7.3
5-Jun-09	7:00:00	11.7	14-Jul-09	1:00:00	13.2	21-Aug-09	19:00:00	19.1	29-Sep-09	13:00:00	7.3
5-Jun-09	8:00:00	11.5	14-Jul-09	2:00:00	13.0	21-Aug-09	20:00:00	18.9	29-Sep-09	14:00:00	7.3
5-Jun-09	9:00:00	11.5	14-Jul-09	3:00:00	12.9	21-Aug-09	21:00:00	18.8	29-Sep-09	15:00:00	7.3
5-Jun-09	10:00:00	11.5	14-Jul-09	4:00:00	12.7	21-Aug-09	22:00:00	18.6	29-Sep-09	16:00:00	7.3
5-Jun-09	11:00:00	11.5	14-Jul-09	5:00:00	12.6	21-Aug-09	23:00:00	18.1	29-Sep-09	17:00:00	7.3
5-Jun-09	12:00:00	11.5	14-Jul-09	6:00:00	12.3	22-Aug-09	0:00:00	17.8	29-Sep-09	18:00:00	7.3
5-Jun-09	13:00:00	11.5	14-Jul-09	7:00:00	12.3	22-Aug-09	1:00:00	17.5	29-Sep-09	19:00:00	7.3
5-Jun-09	14:00:00	11.4	14-Jul-09	8:00:00	12.1	22-Aug-09	2:00:00	17.4	29-Sep-09	20:00:00	7.3
5-Jun-09	15:00:00	11.5	14-Jul-09	9:00:00	11.8	22-Aug-09	3:00:00	17.1	29-Sep-09	21:00:00	7.1
5-Jun-09	16:00:00	11.5	14-Jul-09	10:00:00	12.0	22-Aug-09	4:00:00	16.8	29-Sep-09	22:00:00	7.1
5-Jun-09	17:00:00	11.5	14-Jul-09	11:00:00	12.0	22-Aug-09	5:00:00	16.6	29-Sep-09	23:00:00	7.0
5-Jun-09	18:00:00	11.5	14-Jul-09	12:00:00	12.1	22-Aug-09	6:00:00	16.3	30-Sep-09	0:00:00	7.0
5-Jun-09	19:00:00	11.7	14-Jul-09	13:00:00	12.3	22-Aug-09	7:00:00	15.9	30-Sep-09	1:00:00	7.0
5-Jun-09	20:00:00	11.8	14-Jul-09	14:00:00	12.4	22-Aug-09	8:00:00	15.5	30-Sep-09	2:00:00	6.8
5-Jun-09	21:00:00	11.8	14-Jul-09	15:00:00	12.6	22-Aug-09	9:00:00	15.4	30-Sep-09	3:00:00	6.8
5-Jun-09	22:00:00	11.8	14-Jul-09	16:00:00	12.7	22-Aug-09	10:00:00	15.4	30-Sep-09	4:00:00	6.7
5-Jun-09	23:00:00	11.8	14-Jul-09	17:00:00	13.0	22-Aug-09	11:00:00	15.5	30-Sep-09	5:00:00	6.7
6-Jun-09	0:00:00	11.8	14-Jul-09	18:00:00	13.2	22-Aug-09	12:00:00	15.5	30-Sep-09	6:00:00	6.5
6-Jun-09	1:00:00	11.8	14-Jul-09	19:00:00	13.3	22-Aug-09	13:00:00	15.9	30-Sep-09	7:00:00	6.4
6-Jun-09	2:00:00	11.8	14-Jul-09	20:00:00	13.5	22-Aug-09	14:00:00	16.3	30-Sep-09	8:00:00	6.4
6-Jun-09	3:00:00	11.8	14-Jul-09	21:00:00	13.5	22-Aug-09	15:00:00	16.6	30-Sep-09	9:00:00	6.4
6-Jun-09	4:00:00	11.8	14-Jul-09	22:00:00	13.8	22-Aug-09	16:00:00	16.6	30-Sep-09	10:00:00	6.2
6-Jun-09	5:00:00	11.7	14-Jul-09	23:00:00	13.8	22-Aug-09	17:00:00	16.8	30-Sep-09	11:00:00	6.2
6-Jun-09	6:00:00	11.7	15-Jul-09	0:00:00	13.8	22-Aug-09	18:00:00	16.9	30-Sep-09	12:00:00	6.2
6-Jun-09	7:00:00	11.7	15-Jul-09	1:00:00	13.8	22-Aug-09	19:00:00	17.1	30-Sep-09	13:00:00	6.4
6-Jun-09	8:00:00	11.5	15-Jul-09	2:00:00	13.8	22-Aug-09	20:00:00	16.9	30-Sep-09	14:00:00	6.7
6-Jun-09	9:00:00	11.4	15-Jul-09	3:00:00	13.5	22-Aug-09	21:00:00	16.5	30-Sep-09	15:00:00	7.0
6-Jun-09	10:00:00	11.4	15-Jul-09	4:00:00	13.5	22-Aug-09	22:00:00	16.3	30-Sep-09	16:00:00	7.3
6-Jun-09	11:00:00	11.2	15-Jul-09	5:00:00	13.5	22-Aug-09	23:00:00	16.2	30-Sep-09	17:00:00	7.3
6-Jun-09	12:00:00	11.1	15-Jul-09	6:00:00	13.3	23-Aug-09	0:00:00	15.9	30-Sep-09	18:00:00	7.4
6-Jun-09	13:00:00	11.1	15-Jul-09	7:00:00	13.3	23-Aug-09	1:00:00	15.5	30-Sep-09	19:00:00	7.4

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
6-Jun-09	14:00:00	10.9	15-Jul-09	8:00:00	13.2	23-Aug-09	2:00:00	15.2	30-Sep-09	20:00:00	7.3
6-Jun-09	15:00:00	10.9	15-Jul-09	9:00:00	13.2	23-Aug-09	3:00:00	14.9	30-Sep-09	21:00:00	7.3
6-Jun-09	16:00:00	10.8	15-Jul-09	10:00:00	13.2	23-Aug-09	4:00:00	14.6	30-Sep-09	22:00:00	7.0
6-Jun-09	17:00:00	10.8	15-Jul-09	11:00:00	13.2	23-Aug-09	5:00:00	14.6	30-Sep-09	23:00:00	7.0
6-Jun-09	18:00:00	10.8	15-Jul-09	12:00:00	13.2	23-Aug-09	6:00:00	14.5	1-Oct-09	0:00:00	6.7
6-Jun-09	19:00:00	10.8	15-Jul-09	13:00:00	13.5	23-Aug-09	7:00:00	14.2	1-Oct-09	1:00:00	6.5
6-Jun-09	20:00:00	10.8	15-Jul-09	14:00:00	13.9	23-Aug-09	8:00:00	13.9	1-Oct-09	2:00:00	6.5
6-Jun-09	21:00:00	10.8	15-Jul-09	15:00:00	14.2	23-Aug-09	9:00:00	13.9	1-Oct-09	3:00:00	6.4
6-Jun-09	22:00:00	10.8	15-Jul-09	16:00:00	14.6	23-Aug-09	10:00:00	13.9	1-Oct-09	4:00:00	6.2
6-Jun-09	23:00:00	10.9	15-Jul-09	17:00:00	14.9	23-Aug-09	11:00:00	14.0	1-Oct-09	5:00:00	6.1
7-Jun-09	0:00:00	10.9	15-Jul-09	18:00:00	15.4	23-Aug-09	12:00:00	14.5	1-Oct-09	6:00:00	5.9
7-Jun-09	1:00:00	10.8	15-Jul-09	19:00:00	15.5	23-Aug-09	13:00:00	14.6	1-Oct-09	7:00:00	5.8
7-Jun-09	2:00:00	10.8	15-Jul-09	20:00:00	15.7	23-Aug-09	14:00:00	15.1	1-Oct-09	8:00:00	5.6
7-Jun-09	3:00:00	10.8	15-Jul-09	21:00:00	15.7	23-Aug-09	15:00:00	15.7	1-Oct-09	9:00:00	5.5
7-Jun-09	4:00:00	10.8	15-Jul-09	22:00:00	15.7	23-Aug-09	16:00:00	15.7	1-Oct-09	10:00:00	5.5
7-Jun-09	5:00:00	10.8	15-Jul-09	23:00:00	15.5	23-Aug-09	17:00:00	15.7	1-Oct-09	11:00:00	5.5
7-Jun-09	6:00:00	10.6	16-Jul-09	0:00:00	15.5	23-Aug-09	18:00:00	15.9	1-Oct-09	12:00:00	5.8
7-Jun-09	7:00:00	10.5	16-Jul-09	1:00:00	15.1	23-Aug-09	19:00:00	15.9	1-Oct-09	13:00:00	5.9
7-Jun-09	8:00:00	10.2	16-Jul-09	2:00:00	14.9	23-Aug-09	20:00:00	15.7	1-Oct-09	14:00:00	6.4
7-Jun-09	9:00:00	10.2	16-Jul-09	3:00:00	14.9	23-Aug-09	21:00:00	15.5	1-Oct-09	15:00:00	6.7
7-Jun-09	10:00:00	9.9	16-Jul-09	4:00:00	14.6	23-Aug-09	22:00:00	15.4	1-Oct-09	16:00:00	7.0
7-Jun-09	11:00:00	9.8	16-Jul-09	5:00:00	14.5	23-Aug-09	23:00:00	15.1	1-Oct-09	17:00:00	7.3
7-Jun-09	12:00:00	9.8	16-Jul-09	6:00:00	14.5	24-Aug-09	0:00:00	14.9	1-Oct-09	18:00:00	7.3
7-Jun-09	13:00:00	9.9	16-Jul-09	7:00:00	14.5	24-Aug-09	1:00:00	14.6	1-Oct-09	19:00:00	7.3
7-Jun-09	14:00:00	9.9	16-Jul-09	8:00:00	14.2	24-Aug-09	2:00:00	14.5	1-Oct-09	20:00:00	7.1
7-Jun-09	15:00:00	9.9	16-Jul-09	9:00:00	14.0	24-Aug-09	3:00:00	13.9	1-Oct-09	21:00:00	7.0
7-Jun-09	16:00:00	10.2	16-Jul-09	10:00:00	14.0	24-Aug-09	4:00:00	13.9	1-Oct-09	22:00:00	6.8
7-Jun-09	17:00:00	10.3	16-Jul-09	11:00:00	14.0	24-Aug-09	5:00:00	13.5	1-Oct-09	23:00:00	6.8
7-Jun-09	18:00:00	10.6	16-Jul-09	12:00:00	14.2	24-Aug-09	6:00:00	13.2	2-Oct-09	0:00:00	6.5
7-Jun-09	19:00:00	10.8	16-Jul-09	13:00:00	14.2	24-Aug-09	7:00:00	13.0	2-Oct-09	1:00:00	6.4
7-Jun-09	20:00:00	11.1	16-Jul-09	14:00:00	14.5	24-Aug-09	8:00:00	12.7	2-Oct-09	2:00:00	6.4
7-Jun-09	21:00:00	11.4	16-Jul-09	15:00:00	14.6	24-Aug-09	9:00:00	12.6	2-Oct-09	3:00:00	6.2
7-Jun-09	22:00:00	11.4	16-Jul-09	16:00:00	14.9	24-Aug-09	10:00:00	12.6	2-Oct-09	4:00:00	6.1
7-Jun-09	23:00:00	11.2	16-Jul-09	17:00:00	15.2	24-Aug-09	11:00:00	12.7	2-Oct-09	5:00:00	5.9
8-Jun-09	0:00:00	11.1	16-Jul-09	18:00:00	15.5	24-Aug-09	12:00:00	13.2	2-Oct-09	6:00:00	5.8
8-Jun-09	1:00:00	11.1	16-Jul-09	19:00:00	15.5	24-Aug-09	13:00:00	13.5	2-Oct-09	7:00:00	5.8
8-Jun-09	2:00:00	10.9	16-Jul-09	20:00:00	15.5	24-Aug-09	14:00:00	14.0	2-Oct-09	8:00:00	5.6
8-Jun-09	3:00:00	10.8	16-Jul-09	21:00:00	15.7	24-Aug-09	15:00:00	14.5	2-Oct-09	9:00:00	5.6
8-Jun-09	4:00:00	10.6	16-Jul-09	22:00:00	15.7	24-Aug-09	16:00:00	14.8	2-Oct-09	10:00:00	5.5
8-Jun-09	5:00:00	10.3	16-Jul-09	23:00:00	15.7	24-Aug-09	17:00:00	14.9	2-Oct-09	11:00:00	5.6
8-Jun-09	6:00:00	10.1	17-Jul-09	0:00:00	15.5	24-Aug-09	18:00:00	15.1	2-Oct-09	12:00:00	5.8
8-Jun-09	7:00:00	9.9	17-Jul-09	1:00:00	15.5	24-Aug-09	19:00:00	15.4	2-Oct-09	13:00:00	6.1
8-Jun-09	8:00:00	9.8	17-Jul-09	2:00:00	15.5	24-Aug-09	20:00:00	15.1	2-Oct-09	14:00:00	6.2
8-Jun-09	9:00:00	9.8	17-Jul-09	3:00:00	15.4	24-Aug-09	21:00:00	14.9	2-Oct-09	15:00:00	6.5
8-Jun-09	10:00:00	9.9	17-Jul-09	4:00:00	15.1	24-Aug-09	22:00:00	14.9	2-Oct-09	16:00:00	6.7
8-Jun-09	11:00:00	10.2	17-Jul-09	5:00:00	14.9	24-Aug-09	23:00:00	14.9	2-Oct-09	17:00:00	6.8
8-Jun-09	12:00:00	10.5	17-Jul-09	6:00:00	14.6	25-Aug-09	0:00:00	14.8	2-Oct-09	18:00:00	6.8
8-Jun-09	13:00:00	10.8	17-Jul-09	7:00:00	14.5	25-Aug-09	1:00:00	14.6	2-Oct-09	19:00:00	6.8
8-Jun-09	14:00:00	11.4	17-Jul-09	8:00:00	14.5	25-Aug-09	2:00:00	14.5	2-Oct-09	20:00:00	6.7
8-Jun-09	15:00:00	11.8	17-Jul-09	9:00:00	14.5	25-Aug-09	3:00:00	14.5	2-Oct-09	21:00:00	6.7
8-Jun-09	16:00:00	12.1	17-Jul-09	10:00:00	14.5	25-Aug-09	4:00:00	14.5	2-Oct-09	22:00:00	6.4
8-Jun-09	17:00:00	12.6	17-Jul-09	11:00:00	14.5	25-Aug-09	5:00:00	14.3	2-Oct-09	23:00:00	6.4
8-Jun-09	18:00:00	12.7	17-Jul-09	12:00:00	14.5	25-Aug-09	6:00:00	13.9	3-Oct-09	0:00:00	6.4
8-Jun-09	19:00:00	12.7	17-Jul-09	13:00:00	14.9	25-Aug-09	7:00:00	13.9	3-Oct-09	1:00:00	6.2
8-Jun-09	20:00:00	12.9	17-Jul-09	14:00:00	14.9	25-Aug-09	8:00:00	13.9	3-Oct-09	2:00:00	6.4
8-Jun-09	21:00:00	12.7	17-Jul-09	15:00:00	15.2	25-Aug-09	9:00:00	13.8	3-Oct-09	3:00:00	6.4
8-Jun-09	22:00:00	12.7	17-Jul-09	16:00:00	15.5	25-Aug-09	10:00:00	13.8	3-Oct-09	4:00:00	6.2
8-Jun-09	23:00:00	12.6	17-Jul-09	17:00:00	15.5	25-Aug-09	11:00:00	13.8	3-Oct-09	5:00:00	6.2
9-Jun-09	0:00:00	12.3	17-Jul-09	18:00:00	15.7	25-Aug-09	12:00:00	13.8	3-Oct-09	6:00:00	6.2

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
9-Jun-09	1:00:00	12.3	17-Jul-09	19:00:00	15.9	25-Aug-09	13:00:00	13.9	3-Oct-09	7:00:00	6.1
9-Jun-09	2:00:00	12.1	17-Jul-09	20:00:00	15.9	25-Aug-09	14:00:00	13.9	3-Oct-09	8:00:00	6.1
9-Jun-09	3:00:00	12.0	17-Jul-09	21:00:00	15.9	25-Aug-09	15:00:00	14.2	3-Oct-09	9:00:00	6.1
9-Jun-09	4:00:00	11.5	17-Jul-09	22:00:00	15.9	25-Aug-09	16:00:00	14.6	3-Oct-09	10:00:00	6.1
9-Jun-09	5:00:00	11.4	17-Jul-09	23:00:00	15.9	25-Aug-09	17:00:00	14.9	3-Oct-09	11:00:00	5.9
9-Jun-09	6:00:00	11.1	18-Jul-09	0:00:00	15.7	25-Aug-09	18:00:00	15.1	3-Oct-09	12:00:00	6.1
9-Jun-09	7:00:00	10.8	18-Jul-09	1:00:00	15.5	25-Aug-09	19:00:00	15.4	3-Oct-09	13:00:00	6.2
9-Jun-09	8:00:00	10.6	18-Jul-09	2:00:00	15.5	25-Aug-09	20:00:00	15.5	3-Oct-09	14:00:00	6.4
9-Jun-09	9:00:00	10.5	18-Jul-09	3:00:00	15.4	25-Aug-09	21:00:00	15.2	3-Oct-09	15:00:00	6.4
9-Jun-09	10:00:00	10.6	18-Jul-09	4:00:00	15.1	25-Aug-09	22:00:00	15.1	3-Oct-09	16:00:00	6.5
9-Jun-09	11:00:00	10.8	18-Jul-09	5:00:00	14.9	25-Aug-09	23:00:00	14.9	3-Oct-09	17:00:00	6.7
9-Jun-09	12:00:00	11.1	18-Jul-09	6:00:00	14.8	26-Aug-09	0:00:00	14.6	3-Oct-09	18:00:00	6.7
9-Jun-09	13:00:00	11.4	18-Jul-09	7:00:00	14.5	26-Aug-09	1:00:00	14.5	3-Oct-09	19:00:00	6.7
9-Jun-09	14:00:00	11.8	18-Jul-09	8:00:00	14.5	26-Aug-09	2:00:00	14.2	3-Oct-09	20:00:00	6.5
9-Jun-09	15:00:00	12.1	18-Jul-09	9:00:00	14.3	26-Aug-09	3:00:00	13.9	3-Oct-09	21:00:00	6.5
9-Jun-09	16:00:00	12.6	18-Jul-09	10:00:00	14.2	26-Aug-09	4:00:00	13.8	3-Oct-09	22:00:00	6.4
9-Jun-09	17:00:00	13.0	18-Jul-09	11:00:00	14.2	26-Aug-09	5:00:00	13.5	3-Oct-09	23:00:00	6.5
9-Jun-09	18:00:00	13.2	18-Jul-09	12:00:00	14.2	26-Aug-09	6:00:00	13.2	4-Oct-09	0:00:00	6.4
9-Jun-09	19:00:00	13.2	18-Jul-09	13:00:00	14.5	26-Aug-09	7:00:00	13.0	4-Oct-09	1:00:00	6.4
9-Jun-09	20:00:00	13.2	18-Jul-09	14:00:00	14.9	26-Aug-09	8:00:00	12.7	4-Oct-09	2:00:00	6.4
9-Jun-09	21:00:00	13.2	18-Jul-09	15:00:00	15.1	26-Aug-09	9:00:00	12.6	4-Oct-09	3:00:00	6.4
9-Jun-09	22:00:00	13.2	18-Jul-09	16:00:00	15.5	26-Aug-09	10:00:00	12.6	4-Oct-09	4:00:00	6.4
9-Jun-09	23:00:00	13.0	18-Jul-09	17:00:00	15.7	26-Aug-09	11:00:00	12.9	4-Oct-09	5:00:00	6.2
10-Jun-09	0:00:00	12.7	18-Jul-09	18:00:00	15.7	26-Aug-09	12:00:00	13.3	4-Oct-09	6:00:00	6.2
10-Jun-09	1:00:00	12.6	18-Jul-09	19:00:00	15.7	26-Aug-09	13:00:00	13.8	4-Oct-09	7:00:00	6.1
10-Jun-09	2:00:00	12.3	18-Jul-09	20:00:00	15.7	26-Aug-09	14:00:00	14.3	4-Oct-09	8:00:00	5.9
10-Jun-09	3:00:00	12.1	18-Jul-09	21:00:00	15.7	26-Aug-09	15:00:00	14.5	4-Oct-09	9:00:00	5.8
10-Jun-09	4:00:00	11.8	18-Jul-09	22:00:00	15.7	26-Aug-09	16:00:00	14.6	4-Oct-09	10:00:00	5.8
10-Jun-09	5:00:00	11.4	18-Jul-09	23:00:00	15.7	26-Aug-09	17:00:00	14.6	4-Oct-09	11:00:00	5.6
10-Jun-09	6:00:00	11.1	19-Jul-09	0:00:00	15.7	26-Aug-09	18:00:00	14.6	4-Oct-09	12:00:00	5.8
10-Jun-09	7:00:00	10.9	19-Jul-09	1:00:00	15.5	26-Aug-09	19:00:00	14.9	4-Oct-09	13:00:00	5.9
10-Jun-09	8:00:00	10.8	19-Jul-09	2:00:00	15.5	26-Aug-09	20:00:00	14.6	4-Oct-09	14:00:00	6.2
10-Jun-09	9:00:00	10.8	19-Jul-09	3:00:00	15.1	26-Aug-09	21:00:00	14.6	4-Oct-09	15:00:00	6.5
10-Jun-09	10:00:00	10.8	19-Jul-09	4:00:00	15.1	26-Aug-09	22:00:00	14.5	4-Oct-09	16:00:00	6.8
10-Jun-09	11:00:00	11.1	19-Jul-09	5:00:00	14.9	26-Aug-09	23:00:00	14.5	4-Oct-09	17:00:00	7.0
10-Jun-09	12:00:00	11.4	19-Jul-09	6:00:00	14.9	27-Aug-09	0:00:00	14.2	4-Oct-09	18:00:00	7.0
10-Jun-09	13:00:00	11.8	19-Jul-09	7:00:00	14.6	27-Aug-09	1:00:00	13.9	4-Oct-09	19:00:00	7.0
10-Jun-09	14:00:00	12.1	19-Jul-09	8:00:00	14.6	27-Aug-09	2:00:00	13.5	4-Oct-09	20:00:00	6.7
10-Jun-09	15:00:00	12.6	19-Jul-09	9:00:00	14.5	27-Aug-09	3:00:00	13.3	4-Oct-09	21:00:00	6.5
10-Jun-09	16:00:00	13.0	19-Jul-09	10:00:00	14.5	27-Aug-09	4:00:00	13.2	4-Oct-09	22:00:00	6.4
10-Jun-09	17:00:00	13.3	19-Jul-09	11:00:00	14.6	27-Aug-09	5:00:00	12.9	4-Oct-09	23:00:00	6.1
10-Jun-09	18:00:00	13.5	19-Jul-09	12:00:00	14.6	27-Aug-09	6:00:00	12.6	5-Oct-09	0:00:00	5.9
10-Jun-09	19:00:00	13.8	19-Jul-09	13:00:00	15.2	27-Aug-09	7:00:00	12.3	5-Oct-09	1:00:00	5.8
10-Jun-09	20:00:00	13.9	19-Jul-09	14:00:00	15.9	27-Aug-09	8:00:00	12.1	5-Oct-09	2:00:00	5.6
10-Jun-09	21:00:00	13.9	19-Jul-09	15:00:00	15.5	27-Aug-09	9:00:00	12.0	5-Oct-09	3:00:00	5.6
10-Jun-09	22:00:00	13.8	19-Jul-09	16:00:00	15.5	27-Aug-09	10:00:00	12.0	5-Oct-09	4:00:00	5.5
10-Jun-09	23:00:00	13.5	19-Jul-09	17:00:00	16.2	27-Aug-09	11:00:00	12.1	5-Oct-09	5:00:00	5.3
11-Jun-09	0:00:00	13.5	19-Jul-09	18:00:00	16.5	27-Aug-09	12:00:00	12.6	5-Oct-09	6:00:00	5.2
11-Jun-09	1:00:00	13.2	19-Jul-09	19:00:00	16.6	27-Aug-09	13:00:00	13.0	5-Oct-09	7:00:00	5.0
11-Jun-09	2:00:00	13.0	19-Jul-09	20:00:00	16.3	27-Aug-09	14:00:00	13.5	5-Oct-09	8:00:00	5.0
11-Jun-09	3:00:00	12.6	19-Jul-09	21:00:00	16.6	27-Aug-09	15:00:00	13.8	5-Oct-09	9:00:00	5.0
11-Jun-09	4:00:00	12.1	19-Jul-09	22:00:00	16.6	27-Aug-09	16:00:00	14.0	5-Oct-09	10:00:00	4.9
11-Jun-09	5:00:00	12.0	19-Jul-09	23:00:00	16.3	27-Aug-09	17:00:00	14.2	5-Oct-09	11:00:00	4.9
11-Jun-09	6:00:00	11.5	20-Jul-09	0:00:00	16.2	27-Aug-09	18:00:00	14.5	5-Oct-09	12:00:00	4.9
11-Jun-09	7:00:00	11.4	20-Jul-09	1:00:00	15.9	27-Aug-09	19:00:00	14.6	5-Oct-09	13:00:00	5.0
11-Jun-09	8:00:00	11.1	20-Jul-09	2:00:00	15.7	27-Aug-09	20:00:00	14.6	5-Oct-09	14:00:00	5.5
11-Jun-09	9:00:00	11.1	20-Jul-09	3:00:00	15.5	27-Aug-09	21:00:00	14.5	5-Oct-09	15:00:00	5.8
11-Jun-09	10:00:00	11.1	20-Jul-09	4:00:00	15.4	27-Aug-09	22:00:00	14.5	5-Oct-09	16:00:00	5.9
11-Jun-09	11:00:00	11.4	20-Jul-09	5:00:00	15.1	27-Aug-09	23:00:00	14.5	5-Oct-09	17:00:00	6.1

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
11-Jun-09	12:00:00	11.8	20-Jul-09	6:00:00	14.9	28-Aug-09	0:00:00	14.5	5-Oct-09	18:00:00	6.1
11-Jun-09	13:00:00	12.1	20-Jul-09	7:00:00	14.9	28-Aug-09	1:00:00	14.2	5-Oct-09	19:00:00	6.1
11-Jun-09	14:00:00	12.6	20-Jul-09	8:00:00	14.8	28-Aug-09	2:00:00	13.9	5-Oct-09	20:00:00	6.1
11-Jun-09	15:00:00	13.2	20-Jul-09	9:00:00	14.6	28-Aug-09	3:00:00	13.9	5-Oct-09	21:00:00	5.9
11-Jun-09	16:00:00	13.3	20-Jul-09	10:00:00	14.6	28-Aug-09	4:00:00	13.8	5-Oct-09	22:00:00	5.8
11-Jun-09	17:00:00	13.3	20-Jul-09	11:00:00	14.9	28-Aug-09	5:00:00	13.5	5-Oct-09	23:00:00	5.9
11-Jun-09	18:00:00	13.3	20-Jul-09	12:00:00	15.1	28-Aug-09	6:00:00	13.2	6-Oct-09	0:00:00	5.8
11-Jun-09	19:00:00	13.5	20-Jul-09	13:00:00	15.4	28-Aug-09	7:00:00	13.2	6-Oct-09	1:00:00	5.8
11-Jun-09	20:00:00	13.5	20-Jul-09	14:00:00	16.2	28-Aug-09	8:00:00	13.0	6-Oct-09	2:00:00	5.8
11-Jun-09	21:00:00	13.8	20-Jul-09	15:00:00	16.2	28-Aug-09	9:00:00	12.7	6-Oct-09	3:00:00	5.8
11-Jun-09	22:00:00	13.6	20-Jul-09	16:00:00	16.5	28-Aug-09	10:00:00	12.6	6-Oct-09	4:00:00	5.9
11-Jun-09	23:00:00	13.3	20-Jul-09	17:00:00	17.1	28-Aug-09	11:00:00	12.7	6-Oct-09	5:00:00	5.9
12-Jun-09	0:00:00	13.2	20-Jul-09	18:00:00	17.2	28-Aug-09	12:00:00	13.0	6-Oct-09	6:00:00	5.9
12-Jun-09	1:00:00	13.0	20-Jul-09	19:00:00	17.4	28-Aug-09	13:00:00	13.3	6-Oct-09	7:00:00	5.9
12-Jun-09	2:00:00	12.6	20-Jul-09	20:00:00	17.4	28-Aug-09	14:00:00	13.9	6-Oct-09	8:00:00	5.8
12-Jun-09	3:00:00	12.6	20-Jul-09	21:00:00	17.8	28-Aug-09	15:00:00	14.2	6-Oct-09	9:00:00	5.8
12-Jun-09	4:00:00	12.3	20-Jul-09	22:00:00	17.5	28-Aug-09	16:00:00	14.5	6-Oct-09	10:00:00	5.8
12-Jun-09	5:00:00	12.1	20-Jul-09	23:00:00	17.2	28-Aug-09	17:00:00	14.9	6-Oct-09	11:00:00	5.8
12-Jun-09	6:00:00	12.1	21-Jul-09	0:00:00	16.9	28-Aug-09	18:00:00	15.2	6-Oct-09	12:00:00	5.6
12-Jun-09	7:00:00	11.8	21-Jul-09	1:00:00	16.8	28-Aug-09	19:00:00	15.5	6-Oct-09	13:00:00	5.5
12-Jun-09	8:00:00	11.7	21-Jul-09	2:00:00	16.8	28-Aug-09	20:00:00	15.7	6-Oct-09	14:00:00	5.5
12-Jun-09	9:00:00	11.7	21-Jul-09	3:00:00	16.6	28-Aug-09	21:00:00	15.7	6-Oct-09	15:00:00	5.5
12-Jun-09	10:00:00	11.8	21-Jul-09	4:00:00	16.3	28-Aug-09	22:00:00	15.7	6-Oct-09	16:00:00	5.5
12-Jun-09	11:00:00	12.1	21-Jul-09	5:00:00	16.2	28-Aug-09	23:00:00	15.7	6-Oct-09	17:00:00	5.5
12-Jun-09	12:00:00	12.1	21-Jul-09	6:00:00	15.9	29-Aug-09	0:00:00	15.5	6-Oct-09	18:00:00	5.5
12-Jun-09	13:00:00	12.6	21-Jul-09	7:00:00	15.7	29-Aug-09	1:00:00	15.4	6-Oct-09	19:00:00	5.3
12-Jun-09	14:00:00	13.2	21-Jul-09	8:00:00	15.5	29-Aug-09	2:00:00	15.2	6-Oct-09	20:00:00	5.2
12-Jun-09	15:00:00	13.6	21-Jul-09	9:00:00	15.5	29-Aug-09	3:00:00	14.9	6-Oct-09	21:00:00	5.2
12-Jun-09	16:00:00	13.9	21-Jul-09	10:00:00	15.5	29-Aug-09	4:00:00	14.9	6-Oct-09	22:00:00	5.0
12-Jun-09	17:00:00	14.3	21-Jul-09	11:00:00	15.5	29-Aug-09	5:00:00	14.9	6-Oct-09	23:00:00	4.9
12-Jun-09	18:00:00	14.5	21-Jul-09	12:00:00	15.9	29-Aug-09	6:00:00	14.6	7-Oct-09	0:00:00	4.9
12-Jun-09	19:00:00	14.6	21-Jul-09	13:00:00	16.5	29-Aug-09	7:00:00	14.5	7-Oct-09	1:00:00	4.7
12-Jun-09	20:00:00	14.6	21-Jul-09	14:00:00	16.5	29-Aug-09	8:00:00	14.5	7-Oct-09	2:00:00	4.7
12-Jun-09	21:00:00	14.5	21-Jul-09	15:00:00	16.6	29-Aug-09	9:00:00	14.2	7-Oct-09	3:00:00	4.6
12-Jun-09	22:00:00	14.5	21-Jul-09	16:00:00	16.8	29-Aug-09	10:00:00	14.2	7-Oct-09	4:00:00	4.6
12-Jun-09	23:00:00	14.5	21-Jul-09	17:00:00	16.9	29-Aug-09	11:00:00	14.2	7-Oct-09	5:00:00	4.6
13-Jun-09	0:00:00	14.2	21-Jul-09	18:00:00	16.9	29-Aug-09	12:00:00	14.5	7-Oct-09	6:00:00	4.6
13-Jun-09	1:00:00	13.9	21-Jul-09	19:00:00	17.1	29-Aug-09	13:00:00	14.5	7-Oct-09	7:00:00	4.4
13-Jun-09	2:00:00	13.9	21-Jul-09	20:00:00	17.1	29-Aug-09	14:00:00	14.9	7-Oct-09	8:00:00	4.4
13-Jun-09	3:00:00	13.5	21-Jul-09	21:00:00	17.1	29-Aug-09	15:00:00	15.5	7-Oct-09	9:00:00	4.4
13-Jun-09	4:00:00	13.3	21-Jul-09	22:00:00	16.8	29-Aug-09	16:00:00	15.7	7-Oct-09	10:00:00	4.4
13-Jun-09	5:00:00	13.2	21-Jul-09	23:00:00	16.8	29-Aug-09	17:00:00	15.9	7-Oct-09	11:00:00	4.4
13-Jun-09	6:00:00	13.0	22-Jul-09	0:00:00	16.8	29-Aug-09	18:00:00	16.3	7-Oct-09	12:00:00	4.6
13-Jun-09	7:00:00	12.9	22-Jul-09	1:00:00	16.8	29-Aug-09	19:00:00	16.8	7-Oct-09	13:00:00	4.7
13-Jun-09	8:00:00	12.7	22-Jul-09	2:00:00	16.6	29-Aug-09	20:00:00	16.8	7-Oct-09	14:00:00	7.7
13-Jun-09	9:00:00	12.6	22-Jul-09	3:00:00	16.3	29-Aug-09	21:00:00	16.8	7-Oct-09	15:00:00	6.8
13-Jun-09	10:00:00	12.9	22-Jul-09	4:00:00	16.2	29-Aug-09	22:00:00	16.8	7-Oct-09	16:00:00	7.1
13-Jun-09	11:00:00	13.0	22-Jul-09	5:00:00	16.0	29-Aug-09	23:00:00	16.6	7-Oct-09	17:00:00	10.2
13-Jun-09	12:00:00	13.3	22-Jul-09	6:00:00	15.7	30-Aug-09	0:00:00	16.5	7-Oct-09	18:00:00	5.8
13-Jun-09	13:00:00	13.6	22-Jul-09	7:00:00	15.5	30-Aug-09	1:00:00	16.3	7-Oct-09	19:00:00	4.3
13-Jun-09	14:00:00	13.9	22-Jul-09	8:00:00	15.4	30-Aug-09	2:00:00	16.2	7-Oct-09	20:00:00	2.6
13-Jun-09	15:00:00	14.5	22-Jul-09	9:00:00	15.4	30-Aug-09	3:00:00	15.9	7-Oct-09	21:00:00	2.0
13-Jun-09	16:00:00	14.6	22-Jul-09	10:00:00	15.4	30-Aug-09	4:00:00	15.5	7-Oct-09	22:00:00	1.0
13-Jun-09	17:00:00	14.9	22-Jul-09	11:00:00	15.4	30-Aug-09	5:00:00	15.5	7-Oct-09	23:00:00	0.8
13-Jun-09	18:00:00	15.4	22-Jul-09	12:00:00	15.7	30-Aug-09	6:00:00	14.9	8-Oct-09	0:00:00	1.9
13-Jun-09	19:00:00	15.4	22-Jul-09	13:00:00	15.9	30-Aug-09	7:00:00	14.9	8-Oct-09	1:00:00	2.2
13-Jun-09	20:00:00	15.1	22-Jul-09	14:00:00	16.3	30-Aug-09	8:00:00	14.6	8-Oct-09	2:00:00	4.0
13-Jun-09	21:00:00	14.9	22-Jul-09	15:00:00	16.6	30-Aug-09	9:00:00	14.5	8-Oct-09	3:00:00	4.3
13-Jun-09	22:00:00	14.6	22-Jul-09	16:00:00	16.8	30-Aug-09	10:00:00	14.5	8-Oct-09	4:00:00	4.4

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
13-Jun-09	23:00:00	14.5	22-Jul-09	17:00:00	17.1	30-Aug-09	11:00:00	14.8	8-Oct-09	5:00:00	4.3
14-Jun-09	0:00:00	14.2	22-Jul-09	18:00:00	17.4	30-Aug-09	12:00:00	15.4	8-Oct-09	6:00:00	4.1
14-Jun-09	1:00:00	14.2	22-Jul-09	19:00:00	17.4	30-Aug-09	13:00:00	15.7	8-Oct-09	7:00:00	4.0
14-Jun-09	2:00:00	13.9	22-Jul-09	20:00:00	17.5	30-Aug-09	14:00:00	16.3	8-Oct-09	8:00:00	3.8
14-Jun-09	3:00:00	13.8	22-Jul-09	21:00:00	17.4	30-Aug-09	15:00:00	16.8	8-Oct-09	9:00:00	3.4
14-Jun-09	4:00:00	13.3	22-Jul-09	22:00:00	17.4	30-Aug-09	16:00:00	17.4	8-Oct-09	10:00:00	3.4
14-Jun-09	5:00:00	13.2	22-Jul-09	23:00:00	17.4	30-Aug-09	17:00:00	17.7	8-Oct-09	11:00:00	3.5
14-Jun-09	6:00:00	13.0	23-Jul-09	0:00:00	17.4	30-Aug-09	18:00:00	18.0	8-Oct-09	12:00:00	4.3
14-Jun-09	7:00:00	12.9	23-Jul-09	1:00:00	17.1	30-Aug-09	19:00:00	18.0	8-Oct-09	13:00:00	4.1
14-Jun-09	8:00:00	12.6	23-Jul-09	2:00:00	16.9	30-Aug-09	20:00:00	17.8	8-Oct-09	14:00:00	3.8
14-Jun-09	9:00:00	12.7	23-Jul-09	3:00:00	16.8	30-Aug-09	21:00:00	17.7	8-Oct-09	15:00:00	4.1
14-Jun-09	10:00:00	12.7	23-Jul-09	4:00:00	16.6	30-Aug-09	22:00:00	17.5	8-Oct-09	16:00:00	4.1
14-Jun-09	11:00:00	13.0	23-Jul-09	5:00:00	16.3	30-Aug-09	23:00:00	17.4	8-Oct-09	17:00:00	4.3
14-Jun-09	12:00:00	13.2	23-Jul-09	6:00:00	16.2	31-Aug-09	0:00:00	17.2	8-Oct-09	18:00:00	4.0
14-Jun-09	13:00:00	13.5	23-Jul-09	7:00:00	15.9	31-Aug-09	1:00:00	16.9	8-Oct-09	19:00:00	3.8
14-Jun-09	14:00:00	13.8	23-Jul-09	8:00:00	15.9	31-Aug-09	2:00:00	16.8	8-Oct-09	20:00:00	3.8
14-Jun-09	15:00:00	14.0	23-Jul-09	9:00:00	15.7	31-Aug-09	3:00:00	16.8	8-Oct-09	21:00:00	3.1
14-Jun-09	16:00:00	14.3	23-Jul-09	10:00:00	15.7	31-Aug-09	4:00:00	16.5	8-Oct-09	22:00:00	3.1
14-Jun-09	17:00:00	14.5	23-Jul-09	11:00:00	15.9	31-Aug-09	5:00:00	16.3	8-Oct-09	23:00:00	3.4
14-Jun-09	18:00:00	14.6	23-Jul-09	12:00:00	16.2	31-Aug-09	6:00:00	15.9	9-Oct-09	0:00:00	3.2
14-Jun-09	19:00:00	14.5	23-Jul-09	13:00:00	16.6	31-Aug-09	7:00:00	15.7	9-Oct-09	1:00:00	3.1
14-Jun-09	20:00:00	14.6	23-Jul-09	14:00:00	17.1	31-Aug-09	8:00:00	15.5	9-Oct-09	2:00:00	3.1
14-Jun-09	21:00:00	14.6	23-Jul-09	15:00:00	17.4	31-Aug-09	9:00:00	15.2	9-Oct-09	3:00:00	2.5
14-Jun-09	22:00:00	14.5	23-Jul-09	16:00:00	17.5	31-Aug-09	10:00:00	15.4	9-Oct-09	4:00:00	2.6
14-Jun-09	23:00:00	14.5	23-Jul-09	17:00:00	18.3	31-Aug-09	11:00:00	15.5	9-Oct-09	5:00:00	2.8
15-Jun-09	0:00:00	14.2	23-Jul-09	18:00:00	18.6	31-Aug-09	12:00:00	16.0	9-Oct-09	6:00:00	2.6
15-Jun-09	1:00:00	13.9	23-Jul-09	19:00:00	18.6	31-Aug-09	13:00:00	16.3	9-Oct-09	7:00:00	2.5
15-Jun-09	2:00:00	13.8	23-Jul-09	20:00:00	18.8	31-Aug-09	14:00:00	16.8	9-Oct-09	8:00:00	2.5
15-Jun-09	3:00:00	13.3	23-Jul-09	21:00:00	18.8	31-Aug-09	15:00:00	17.2	9-Oct-09	9:00:00	2.5
15-Jun-09	4:00:00	13.2	23-Jul-09	22:00:00	18.6	31-Aug-09	16:00:00	17.5	9-Oct-09	10:00:00	2.5
15-Jun-09	5:00:00	12.9	23-Jul-09	23:00:00	18.3	31-Aug-09	17:00:00	18.0	9-Oct-09	11:00:00	2.3
15-Jun-09	6:00:00	12.6	24-Jul-09	0:00:00	18.3	31-Aug-09	18:00:00	18.1	9-Oct-09	12:00:00	2.6
15-Jun-09	7:00:00	12.6	24-Jul-09	1:00:00	18.1	31-Aug-09	19:00:00	18.1	9-Oct-09	13:00:00	2.8
15-Jun-09	8:00:00	12.3	24-Jul-09	2:00:00	18.0	31-Aug-09	20:00:00	18.1	9-Oct-09	14:00:00	3.2
15-Jun-09	9:00:00	12.4	24-Jul-09	3:00:00	17.8	31-Aug-09	21:00:00	18.1	9-Oct-09	15:00:00	3.1
15-Jun-09	10:00:00	12.6	24-Jul-09	4:00:00	17.5	31-Aug-09	22:00:00	18.0	9-Oct-09	16:00:00	2.9
15-Jun-09	11:00:00	12.6	24-Jul-09	5:00:00	17.4	31-Aug-09	23:00:00	17.8	9-Oct-09	17:00:00	2.9
15-Jun-09	12:00:00	13.0	24-Jul-09	6:00:00	17.4	1-Sep-09	0:00:00	17.7	9-Oct-09	18:00:00	3.1
15-Jun-09	13:00:00	13.3	24-Jul-09	7:00:00	17.1	1-Sep-09	1:00:00	17.4	9-Oct-09	19:00:00	2.9
15-Jun-09	14:00:00	13.6	24-Jul-09	8:00:00	16.9	1-Sep-09	2:00:00	17.1	9-Oct-09	20:00:00	3.1
15-Jun-09	15:00:00	14.2	24-Jul-09	9:00:00	16.8	1-Sep-09	3:00:00	16.8	9-Oct-09	21:00:00	2.9
15-Jun-09	16:00:00	14.5	24-Jul-09	10:00:00	16.9	1-Sep-09	4:00:00	16.8	9-Oct-09	22:00:00	3.1
15-Jun-09	17:00:00	14.5	24-Jul-09	11:00:00	17.1	1-Sep-09	5:00:00	16.6	9-Oct-09	23:00:00	3.1
15-Jun-09	18:00:00	14.5	24-Jul-09	12:00:00	17.8	1-Sep-09	6:00:00	16.3	10-Oct-09	0:00:00	2.8
15-Jun-09	19:00:00	14.5	24-Jul-09	13:00:00	18.1	1-Sep-09	7:00:00	16.2	10-Oct-09	1:00:00	2.6
15-Jun-09	20:00:00	14.5	24-Jul-09	14:00:00	18.4	1-Sep-09	8:00:00	15.7	10-Oct-09	2:00:00	2.3
15-Jun-09	21:00:00	14.3	24-Jul-09	15:00:00	18.9	1-Sep-09	9:00:00	15.7	10-Oct-09	3:00:00	2.5
15-Jun-09	22:00:00	14.2	24-Jul-09	16:00:00	19.2	1-Sep-09	10:00:00	15.7	10-Oct-09	4:00:00	2.2
15-Jun-09	23:00:00	13.9	24-Jul-09	17:00:00	19.4	1-Sep-09	11:00:00	15.9	10-Oct-09	5:00:00	2.0
16-Jun-09	0:00:00	13.8	24-Jul-09	18:00:00	19.9	1-Sep-09	12:00:00	16.2	10-Oct-09	6:00:00	1.9
16-Jun-09	1:00:00	13.5	24-Jul-09	19:00:00	20.0	1-Sep-09	13:00:00	16.6	10-Oct-09	7:00:00	1.6
16-Jun-09	2:00:00	13.3	24-Jul-09	20:00:00	20.2	1-Sep-09	14:00:00	16.8	10-Oct-09	8:00:00	1.4
16-Jun-09	3:00:00	13.2	24-Jul-09	21:00:00	19.9	1-Sep-09	15:00:00	17.4	10-Oct-09	9:00:00	1.9
16-Jun-09	4:00:00	13.0	24-Jul-09	22:00:00	19.9	1-Sep-09	16:00:00	18.0	10-Oct-09	10:00:00	1.9
16-Jun-09	5:00:00	13.0	24-Jul-09	23:00:00	19.7	1-Sep-09	17:00:00	18.3	10-Oct-09	11:00:00	2.5
16-Jun-09	6:00:00	12.7	25-Jul-09	0:00:00	19.4	1-Sep-09	18:00:00	18.6	10-Oct-09	12:00:00	2.5
16-Jun-09	7:00:00	12.6	25-Jul-09	1:00:00	19.4	1-Sep-09	19:00:00	18.8	10-Oct-09	13:00:00	1.9
16-Jun-09	8:00:00	12.6	25-Jul-09	2:00:00	19.2	1-Sep-09	20:00:00	18.3	10-Oct-09	14:00:00	2.0
16-Jun-09	9:00:00	12.4	25-Jul-09	3:00:00	19.2	1-Sep-09	21:00:00	18.1	10-Oct-09	15:00:00	2.9

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
16-Jun-09	10:00:00	12.6	25-Jul-09	4:00:00	18.8	1-Sep-09	22:00:00	18.1	10-Oct-09	16:00:00	3.4
16-Jun-09	11:00:00	12.9	25-Jul-09	5:00:00	18.6	1-Sep-09	23:00:00	18.0	10-Oct-09	17:00:00	3.2
16-Jun-09	12:00:00	13.2	25-Jul-09	6:00:00	18.3	2-Sep-09	0:00:00	17.8	10-Oct-09	18:00:00	2.3
16-Jun-09	13:00:00	13.5	25-Jul-09	7:00:00	18.1	2-Sep-09	1:00:00	17.7	10-Oct-09	19:00:00	1.7
16-Jun-09	14:00:00	13.9	25-Jul-09	8:00:00	18.0	2-Sep-09	2:00:00	17.4	10-Oct-09	20:00:00	0.8
16-Jun-09	15:00:00	14.5	25-Jul-09	9:00:00	17.8	2-Sep-09	3:00:00	17.4	10-Oct-09	21:00:00	0.7
16-Jun-09	16:00:00	14.6	25-Jul-09	10:00:00	18.0	2-Sep-09	4:00:00	17.4	10-Oct-09	22:00:00	0.7
16-Jun-09	17:00:00	14.6	25-Jul-09	11:00:00	18.1	2-Sep-09	5:00:00	17.1	10-Oct-09	23:00:00	1.1
16-Jun-09	18:00:00	14.9	25-Jul-09	12:00:00	18.3	2-Sep-09	6:00:00	16.9	11-Oct-09	0:00:00	1.0
16-Jun-09	19:00:00	14.6	25-Jul-09	13:00:00	18.8	2-Sep-09	7:00:00	16.8	11-Oct-09	1:00:00	1.0
16-Jun-09	20:00:00	14.9	25-Jul-09	14:00:00	19.2	2-Sep-09	8:00:00	16.8	11-Oct-09	2:00:00	1.3
16-Jun-09	21:00:00	14.6	25-Jul-09	15:00:00	19.5	2-Sep-09	9:00:00	16.5	11-Oct-09	3:00:00	1.3
16-Jun-09	22:00:00	14.6	25-Jul-09	16:00:00	20.0	2-Sep-09	10:00:00	16.5	11-Oct-09	4:00:00	0.7
16-Jun-09	23:00:00	14.5	25-Jul-09	17:00:00	20.5	2-Sep-09	11:00:00	16.5	11-Oct-09	5:00:00	0.7
17-Jun-09	0:00:00	14.5	25-Jul-09	18:00:00	20.6	2-Sep-09	12:00:00	16.6	11-Oct-09	6:00:00	0.5
17-Jun-09	1:00:00	14.5	25-Jul-09	19:00:00	20.8	2-Sep-09	13:00:00	16.6	11-Oct-09	7:00:00	0.5
17-Jun-09	2:00:00	14.2	25-Jul-09	20:00:00	20.8	2-Sep-09	14:00:00	16.6	11-Oct-09	8:00:00	0.4
17-Jun-09	3:00:00	13.9	25-Jul-09	21:00:00	20.6	2-Sep-09	15:00:00	16.6	11-Oct-09	9:00:00	0.4
17-Jun-09	4:00:00	13.9	25-Jul-09	22:00:00	20.6	2-Sep-09	16:00:00	16.6	11-Oct-09	10:00:00	0.8
17-Jun-09	5:00:00	13.8	25-Jul-09	23:00:00	20.3	2-Sep-09	17:00:00	16.8	11-Oct-09	11:00:00	0.8
17-Jun-09	6:00:00	13.5	26-Jul-09	0:00:00	20.0	2-Sep-09	18:00:00	16.9	11-Oct-09	12:00:00	1.4
17-Jun-09	7:00:00	13.3	26-Jul-09	1:00:00	19.9	2-Sep-09	19:00:00	17.1	11-Oct-09	13:00:00	1.4
17-Jun-09	8:00:00	13.2	26-Jul-09	2:00:00	19.5	2-Sep-09	20:00:00	17.1	11-Oct-09	14:00:00	1.3
17-Jun-09	9:00:00	13.2	26-Jul-09	3:00:00	19.2	2-Sep-09	21:00:00	17.1	11-Oct-09	15:00:00	1.1
17-Jun-09	10:00:00	13.2	26-Jul-09	4:00:00	19.2	2-Sep-09	22:00:00	17.1	11-Oct-09	16:00:00	1.6
17-Jun-09	11:00:00	13.3	26-Jul-09	5:00:00	18.8	2-Sep-09	23:00:00	16.9	11-Oct-09	17:00:00	1.3
17-Jun-09	12:00:00	13.8	26-Jul-09	6:00:00	18.6	3-Sep-09	0:00:00	16.8	11-Oct-09	18:00:00	0.8
17-Jun-09	13:00:00	14.2	26-Jul-09	7:00:00	18.3	3-Sep-09	1:00:00	16.8	11-Oct-09	19:00:00	0.5
17-Jun-09	14:00:00	14.5	26-Jul-09	8:00:00	18.1	3-Sep-09	2:00:00	16.6	11-Oct-09	20:00:00	0.4
17-Jun-09	15:00:00	14.9	26-Jul-09	9:00:00	18.1	3-Sep-09	3:00:00	16.3	11-Oct-09	21:00:00	0.5
17-Jun-09	16:00:00	15.4	26-Jul-09	10:00:00	18.1	3-Sep-09	4:00:00	16.2	11-Oct-09	22:00:00	0.2
17-Jun-09	17:00:00	15.5	26-Jul-09	11:00:00	18.3	3-Sep-09	5:00:00	16.2	11-Oct-09	23:00:00	-0.1
17-Jun-09	18:00:00	15.7	26-Jul-09	12:00:00	18.8	3-Sep-09	6:00:00	16.2	12-Oct-09	0:00:00	0.0
17-Jun-09	19:00:00	15.7	26-Jul-09	13:00:00	19.2	3-Sep-09	7:00:00	15.9	12-Oct-09	1:00:00	0.0
17-Jun-09	20:00:00	15.5	26-Jul-09	14:00:00	19.5	3-Sep-09	8:00:00	15.9	12-Oct-09	2:00:00	-0.1
17-Jun-09	21:00:00	15.5	26-Jul-09	15:00:00	20.0	3-Sep-09	9:00:00	15.7	12-Oct-09	3:00:00	-0.1
17-Jun-09	22:00:00	15.4	26-Jul-09	16:00:00	20.5	3-Sep-09	10:00:00	15.9	12-Oct-09	4:00:00	0.0
17-Jun-09	23:00:00	15.1	26-Jul-09	17:00:00	20.6	3-Sep-09	11:00:00	15.9	12-Oct-09	5:00:00	0.0
18-Jun-09	0:00:00	14.9	26-Jul-09	18:00:00	21.1	3-Sep-09	12:00:00	16.2	12-Oct-09	6:00:00	0.0
18-Jun-09	1:00:00	14.6	26-Jul-09	19:00:00	21.3	3-Sep-09	13:00:00	16.3	12-Oct-09	7:00:00	0.2
18-Jun-09	2:00:00	14.5	26-Jul-09	20:00:00	21.3	3-Sep-09	14:00:00	16.8	12-Oct-09	8:00:00	0.0
18-Jun-09	3:00:00	14.5	26-Jul-09	21:00:00	21.1	3-Sep-09	15:00:00	17.1	12-Oct-09	9:00:00	0.2
18-Jun-09	4:00:00	14.2	26-Jul-09	22:00:00	21.0	3-Sep-09	16:00:00	17.5	12-Oct-09	10:00:00	0.2
18-Jun-09	5:00:00	13.9	26-Jul-09	23:00:00	20.6	3-Sep-09	17:00:00	17.8	12-Oct-09	11:00:00	0.4
18-Jun-09	6:00:00	13.8	27-Jul-09	0:00:00	20.6	3-Sep-09	18:00:00	17.8	12-Oct-09	12:00:00	0.4
18-Jun-09	7:00:00	13.5	27-Jul-09	1:00:00	20.3	3-Sep-09	19:00:00	17.7	12-Oct-09	13:00:00	0.8
18-Jun-09	8:00:00	13.2	27-Jul-09	2:00:00	19.9	3-Sep-09	20:00:00	17.7	12-Oct-09	14:00:00	0.7
18-Jun-09	9:00:00	13.2	27-Jul-09	3:00:00	19.9	3-Sep-09	21:00:00	17.5	12-Oct-09	15:00:00	0.7
18-Jun-09	10:00:00	13.3	27-Jul-09	4:00:00	19.4	3-Sep-09	22:00:00	17.5	12-Oct-09	16:00:00	0.2
18-Jun-09	11:00:00	13.5	27-Jul-09	5:00:00	19.2	3-Sep-09	23:00:00	17.4	12-Oct-09	17:00:00	0.4
18-Jun-09	12:00:00	13.8	27-Jul-09	6:00:00	19.1	4-Sep-09	0:00:00	17.4	12-Oct-09	18:00:00	0.4
18-Jun-09	13:00:00	13.9	27-Jul-09	7:00:00	18.8	4-Sep-09	1:00:00	17.1	12-Oct-09	19:00:00	0.5
18-Jun-09	14:00:00	14.2	27-Jul-09	8:00:00	18.4	4-Sep-09	2:00:00	17.1	12-Oct-09	20:00:00	0.2
18-Jun-09	15:00:00	14.5	27-Jul-09	9:00:00	18.3	4-Sep-09	3:00:00	17.1	12-Oct-09	21:00:00	0.4
18-Jun-09	16:00:00	14.9	27-Jul-09	10:00:00	18.4	4-Sep-09	4:00:00	16.9	12-Oct-09	22:00:00	0.5
18-Jun-09	17:00:00	15.1	27-Jul-09	11:00:00	18.8	4-Sep-09	5:00:00	16.8	12-Oct-09	23:00:00	0.7
18-Jun-09	18:00:00	15.2	27-Jul-09	12:00:00	18.9	4-Sep-09	6:00:00	16.8	13-Oct-09	0:00:00	0.4
18-Jun-09	19:00:00	15.1	27-Jul-09	13:00:00	19.4	4-Sep-09	7:00:00	16.6	13-Oct-09	1:00:00	0.4
18-Jun-09	20:00:00	14.9	27-Jul-09	14:00:00	19.9	4-Sep-09	8:00:00	16.3	13-Oct-09	2:00:00	0.0

Appendix C Table C2D. Temperature data collected on the lower Halfway River, Site C large tributaries summer fish survey 2009.

Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)	Date	Time	Temp. (°C)
18-Jun-09	21:00:00	14.9	27-Jul-09	15:00:00	20.3	4-Sep-09	9:00:00	16.3	13-Oct-09	3:00:00	0.5
18-Jun-09	22:00:00	14.8	27-Jul-09	16:00:00	20.8	4-Sep-09	10:00:00	16.3	13-Oct-09	4:00:00	0.4
18-Jun-09	23:00:00	14.5	27-Jul-09	17:00:00	21.3	4-Sep-09	11:00:00	16.2	13-Oct-09	5:00:00	0.5
19-Jun-09	0:00:00	14.2	27-Jul-09	18:00:00	21.6	4-Sep-09	12:00:00	16.0	13-Oct-09	6:00:00	0.4
19-Jun-09	1:00:00	13.9	27-Jul-09	19:00:00	21.8	4-Sep-09	13:00:00	16.0	13-Oct-09	7:00:00	0.4
19-Jun-09	2:00:00	13.9	27-Jul-09	20:00:00	21.8	4-Sep-09	14:00:00	16.3	13-Oct-09	8:00:00	0.0
19-Jun-09	3:00:00	13.8	27-Jul-09	21:00:00	21.8	4-Sep-09	15:00:00	16.6	13-Oct-09	9:00:00	0.0
19-Jun-09	4:00:00	13.5	27-Jul-09	22:00:00	21.4	4-Sep-09	16:00:00	16.9	13-Oct-09	10:00:00	0.0
19-Jun-09	5:00:00	13.2	27-Jul-09	23:00:00	21.3	4-Sep-09	17:00:00	17.4	13-Oct-09	11:00:00	0.0
19-Jun-09	6:00:00	13.0	28-Jul-09	0:00:00	21.1	4-Sep-09	18:00:00	17.4	13-Oct-09	12:00:00	0.2
19-Jun-09	7:00:00	12.7	28-Jul-09	1:00:00	21.1	4-Sep-09	19:00:00	17.5	13-Oct-09	13:00:00	0.5
19-Jun-09	8:00:00	12.6	28-Jul-09	2:00:00	20.8	4-Sep-09	20:00:00	17.4	13-Oct-09	14:00:00	1.6
19-Jun-09	9:00:00	12.4	28-Jul-09	3:00:00	20.6	4-Sep-09	21:00:00	17.1	13-Oct-09	15:00:00	1.7
19-Jun-09	10:00:00	12.6	28-Jul-09	4:00:00	20.6	4-Sep-09	22:00:00	16.9	13-Oct-09	16:00:00	0.5
19-Jun-09	11:00:00	12.7	28-Jul-09	5:00:00	20.5	4-Sep-09	23:00:00	16.8	13-Oct-09	17:00:00	0.5
19-Jun-09	12:00:00	13.2	28-Jul-09	6:00:00	20.0	5-Sep-09	0:00:00	16.5	13-Oct-09	18:00:00	0.0
19-Jun-09	13:00:00	13.5	28-Jul-09	7:00:00	19.9	5-Sep-09	1:00:00	16.2	13-Oct-09	19:00:00	0.0
19-Jun-09	14:00:00	13.9	28-Jul-09	8:00:00	19.9	5-Sep-09	2:00:00	15.9	13-Oct-09	20:00:00	-0.1
19-Jun-09	15:00:00	14.5	28-Jul-09	9:00:00	19.9	5-Sep-09	3:00:00	15.5	13-Oct-09	21:00:00	-0.1
19-Jun-09	16:00:00	14.8	28-Jul-09	10:00:00	19.9	5-Sep-09	4:00:00	15.5	13-Oct-09	22:00:00	-0.4
19-Jun-09	17:00:00	14.9	28-Jul-09	11:00:00	19.9	5-Sep-09	5:00:00	15.1	13-Oct-09	23:00:00	-0.6
19-Jun-09	18:00:00	15.4	28-Jul-09	12:00:00	20.5	5-Sep-09	6:00:00	14.9	14-Oct-09	0:00:00	0.0
19-Jun-09	19:00:00	15.5	28-Jul-09	13:00:00	20.8	5-Sep-09	7:00:00	14.5	14-Oct-09	1:00:00	0.0
19-Jun-09	20:00:00	15.5	28-Jul-09	14:00:00	21.3	5-Sep-09	8:00:00	14.5	14-Oct-09	2:00:00	0.0
19-Jun-09	21:00:00	15.5	28-Jul-09	15:00:00	21.8	5-Sep-09	9:00:00	14.2	14-Oct-09	3:00:00	0.0
19-Jun-09	22:00:00	15.1	28-Jul-09	16:00:00	21.9	5-Sep-09	10:00:00	14.5	14-Oct-09	4:00:00	0.0
19-Jun-09	23:00:00	14.9	28-Jul-09	17:00:00	22.4	5-Sep-09	11:00:00	14.5	14-Oct-09	5:00:00	0.2
20-Jun-09	0:00:00	14.6	28-Jul-09	18:00:00	22.4	5-Sep-09	12:00:00	14.5	14-Oct-09	6:00:00	0.2
20-Jun-09	1:00:00	14.5	28-Jul-09	19:00:00	22.7	5-Sep-09	13:00:00	14.9	14-Oct-09	7:00:00	0.2
20-Jun-09	2:00:00	14.2	28-Jul-09	20:00:00	22.7	5-Sep-09	14:00:00	15.4	14-Oct-09	8:00:00	0.2
20-Jun-09	3:00:00	13.9	28-Jul-09	21:00:00	22.7	5-Sep-09	15:00:00	15.5	14-Oct-09	9:00:00	0.2
20-Jun-09	4:00:00	13.8	28-Jul-09	22:00:00	22.6	5-Sep-09	16:00:00	15.7	14-Oct-09	10:00:00	0.2
20-Jun-09	5:00:00	13.3	28-Jul-09	23:00:00	22.1	5-Sep-09	17:00:00	15.7	14-Oct-09	11:00:00	0.4
20-Jun-09	6:00:00	13.2	29-Jul-09	0:00:00	21.9	5-Sep-09	18:00:00	15.7	14-Oct-09	12:00:00	0.5
20-Jun-09	7:00:00	13.2	29-Jul-09	1:00:00	21.8	5-Sep-09	19:00:00	15.5	14-Oct-09	13:00:00	0.4
20-Jun-09	8:00:00	13.0	29-Jul-09	2:00:00	21.3	5-Sep-09	20:00:00	15.5	14-Oct-09	14:00:00	0.5
20-Jun-09	9:00:00	12.9	29-Jul-09	3:00:00	21.1	5-Sep-09	21:00:00	15.4	14-Oct-09	15:00:00	0.5
20-Jun-09	10:00:00	12.7	29-Jul-09	4:00:00	20.8	5-Sep-09	22:00:00	15.2	14-Oct-09	16:00:00	0.5
20-Jun-09	11:00:00	12.9	29-Jul-09	5:00:00	20.5	5-Sep-09	23:00:00	15.1	14-Oct-09	17:00:00	0.4
20-Jun-09	12:00:00	13.0	29-Jul-09	6:00:00	20.3	6-Sep-09	0:00:00	15.1	14-Oct-09	18:00:00	0.4
20-Jun-09	13:00:00	13.2	29-Jul-09	7:00:00	19.9	6-Sep-09	1:00:00	14.9	14-Oct-09	19:00:00	0.5
20-Jun-09	14:00:00	13.6	29-Jul-09	8:00:00	19.9	6-Sep-09	2:00:00	14.9	14-Oct-09	20:00:00	0.7
20-Jun-09	15:00:00	13.8	29-Jul-09	9:00:00	19.5	6-Sep-09	3:00:00	14.9	14-Oct-09	21:00:00	0.5
20-Jun-09	16:00:00	14.0	29-Jul-09	10:00:00	19.5	6-Sep-09	4:00:00	14.9	14-Oct-09	22:00:00	0.2
20-Jun-09	17:00:00	14.5	29-Jul-09	11:00:00	19.9	6-Sep-09	5:00:00	14.9	14-Oct-09	23:00:00	0.2

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APPENDIX D
Habitat Data

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Appendix D Table D1. Habitat characteristics information, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Habitat	Substrate (%) OM	Si	Sa	Gr	Co	Bo	Be	D90 (cm)	Embeddedness	Compaction	Cover (%) Ovh.	Rock	LOD	Subm.	Emer.	Algae	Depth (m) Near	Mid	Far	Velocity (m/s) Near	Mid	Far
HALFWAY RIVER																								
01																								
	HBS0101	RUN		20		80				9	M	M	0	0	10	0	0	0	0.22	0.35	0.44	0.40	0.40	0.50
	HBS0102	BACK CHANNEL		100						0	0	0	0	0	0	0	10	0	0.26	0.40	0.46	0.00	0.00	0.00
	HBS0103	BACK CHANNEL		100						0			0	0	0	0	0	30	0.15	0.38	0.41	0.00	0.00	0.00
	HEF0101	RUN				30	70			16	M	M	0	50	5	0	0	5	0.20	0.20	0.32	0.26	0.57	0.17
	HEF0102	BACK CHANNEL	50				50			23	M	M	0	0	0	0	5	90	0.11	0.19	0.21	0.00	0.00	0.00
	HEF0103	RIFFLE/RAPID				5	90	5		18	M	H	0	80	0	0	0	5	0.09	0.10	0.09	0.13	0.14	0.10
	HEF0104	POOL		40		60				7	H	M	0	0	5	0	0	50	0.32	0.11	0.70	0.00	0.00	0.00
	HEF0105	RUN				40	60			13	M	M	0	40	0	0	0	0	0.27	0.22	0.18	0.32	0.47	0.68
02																								
	HBS0201	BACK CHANNEL		40		30	30			12	H	M	0	0	0	0	0	30	0.15	0.26	0.54	0.00	0.00	0.00
	HEF0201	POOL		70		25	5			0	H	L	0	0	5	0	0	30	0.26	0.08	0.12	0.00	0.00	0.00
	HEF0202	RIFFLE/RAPID		10			80	10		31	L	H	0	40	5	0	0	5	0.14	0.17	0.14	0.14	0.39	0.08
	HEF0203	RIFFLE/RAPID		20		40	40			18	M	H	0	30	0	0	0	20	0.12	0.23	0.16	0.22	0.27	0.60
	HEF0204	RIFFLE/RAPID		20		60	20			18	L	M	0	40	0	0	0	10	0.10	0.13	0.09	0.48	0.46	0.46
	HEF0205	RIFFLE/RAPID				20	50	30		36	L	M	0	30	0	0	0	0	0.11	0.25	0.28	0.55	0.48	0.26
03																								
	HEF0301	RIFFLE/RAPID				50	50			27	L	H	0	20	0	0	0	5	0.12	0.16	0.14	0.20	0.27	0.15
	HEF0302	TRIBUTARY		50		20		30		36	M	H	0	10	10	0	0	0	0.13	0.14	0.08	0.23	0.18	0.20
	HEF0303	RIFFLE/RAPID				20	80			20	M	M	0	10	0	0	0	5	0.08	0.15	0.13	0.35	0.32	0.32
	HEF0304	TRIBUTARY				40	20	40		34	M	M	10	30	5	0	0	5	0.07	0.07	0.09	0.11	0.12	0.12
	HEF0305	BACK CHANNEL				40	60			18	L	H	0	10	0	0	0	20	0.13	0.15	0.14	0.00	0.00	0.00
	HEF0306	BACK CHANNEL		90			5	5		15	0	0	0	5	0	0	0	0	0.30	0.41	0.47	0.00	0.00	0.00

Appendix D Table D1. Habitat characteristics information, Halfway River and Moberly River summer fish survey 2009.

Waterbody			Substrate (%)							D90			Cover (%)							Depth (m)			Velocity (m/s)		
Section	Site	Habitat	OM	Si	Sa	Gr	Co	Bo	Be	(cm)	Emb.	Comp.	Ovh.	Rock	LOD	Subm.	Emer.	Algae	Near	Mid	Far	Near	Mid	Far
04																								
	HBS0401	BACKWATER		60			40			24	H	M	0	5	0	0	0	0	0.20	0.35	0.60	0.00	0.00	0.00
	HBS0402	BACK CHANNEL		100						0			0	0	0	5	0	0	0.21	0.30	0.32			
	HEF0401	TRIBUTARY				10	20	70		47	L	H	0	30	0	0	0	0	0.34	0.37	0.37	0.49	0.40	0.56
	HEF0402	RIFFLE/RAPID				60	40			18	L	M	0	30	0	0	0	5	0.16	0.13	0.16	0.52	0.47	0.32
	HEF0403	RIFFLE/RAPID				60	30	10		29	H	M	0	30	0	0	0	5	0.11	0.14	0.14	0.18	0.24	0.32
	HEF0404	POOL				10	80	10		18	L	M	0	30	0	0	0	5	0.30	0.24	0.22	0.00	0.00	0.00
05																								
	HEF0501	BACK CHANNEL		100						0	0	0	0	0	0	30	30	20	0.32	0.45	0.36	0.00	0.00	0.00
	HEF0502	BACK CHANNEL		80		10	10			15			0	10	30	0	0	5	0.20	0.17	0.19	0.52	0.35	0.42
	HEF0503	BACK CHANNEL		40		40	20			18	M	M	0	30	0	0	0	5	0.48	0.36	0.18	0.00	0.00	0.00
	HEF0504	BACKWATER		60			40			16	H	L	0	0	0	0	0	20	0.18	0.24	0.15	0.00	0.00	0.00
	HEF0505	RIFFLE/RAPID				50	50			14	M	M	0	20	5	0	0	5	0.14	0.08	0.07	0.26	0.31	0.48
	HEF0506	BACKWATER		60			20	20		30	H	L	0	0	0	0	0	5	0.34	0.25	0.40	0.00	0.00	0.00
06																								
	HBS0601	BACK CHANNEL		100						0	0	0	0	0	0	0	0	0	0.50	0.60	1.00	0.00	0.00	0.00
	HEF0601	RIFFLE/RAPID				30	70			30	L	M	0	20	0	0	0	5	0.09	0.13	0.15	0.38	0.33	0.19
	HEF0602	RIFFLE/RAPID				50	50			14	L	M	0	10	5	0	0	0	0.44	0.33		0.43	0.72	
	HEF0603	RUN		10		50	40			18	L	H	0	20	0	0	0	0	0.07	0.12	0.20	0.42	0.05	0.04
	HEF0604	TRIBUTARY		5		10	60	25		26	M	H	0	10	5	0	0	5	0.24	0.25	0.14	0.47	0.13	0.29
	HEF0605	RIFFLE/RAPID				10	90			16	L	M	0	10	0	0	0	0	0.10	0.14	0.11	0.21	0.28	0.48
07																								
	HBS0701	BACK CHANNEL		90		5	5			9	0	0	0	0	0	0	0	5	0.20	0.35	0.60	0.00	0.00	0.00
	HEF0701	RIFFLE/RAPID		10		60	30			24	L	H	0	10	0	0	0	5	0.19	0.13	0.16	0.51	0.41	0.35

See Appendix B1 for definitions

Appendix D Table D1. Habitat characteristics information, Halfway River and Moberly River summer fish survey 2009.

Waterbody			Substrate (%)							D90			Cover (%)							Depth (m)			Velocity (m/s)		
Section	Site	Habitat	OM	Si	Sa	Gr	Co	Bo	Be	(cm)	Emb.	Comp.	Ovh.	Rock	LOD	Subm.	Emer.	Algae	Near	Mid	Far	Near	Mid	Far
	HEF0702	RUN		20		70	10			9	M	M	0	0	30	0	0	0	0.24	0.17	0.17	0.24	0.09	0.31
	HEF0703	FLAT		20		30	50			24	M	H	0	0	5	0	0	0	0.26	0.28	0.66	0.29	0.42	0.04
08																								
	HBS0702	TRIBUTARY		100						0	0	0	0	0	0	0	0	0	0.22	0.30	0.41	0.00	0.00	0.00
	HEF0704	BACK CHANNEL		5		15	80			21	M	M	0	20	0	0	0	0	0.11	0.14	0.17	0.00	0.00	0.00
	HEF0801	BACK CHANNEL				30	70			17	M	M	0	10	0	0	0	0	0.49	0.32	0.18	0.00	0.00	0.00
	HEF0802	RIFFLE/RAPID				10	90			16	L	H	0	20	5	0	0	0	0.33	0.25	0.26	0.33	0.80	0.15
	HEF0803	RIFFLE/RAPID		20		10	60	10		16	M	M	0	0	20	0	0	0	0.37	0.54	0.55	0.96	0.91	0.68
	HEF0804	RIFFLE/RAPID		10		30	60			14	M	M	0	10	5	0	0	0	0.15	0.16	0.17	0.56	0.30	0.64
	HEF0805	RIFFLE/RAPID					80	20		20	M	H	0	0	5	0	0	0	0.35	0.28	0.25	1.07	0.73	0.68
	HEF0806	RIFFLE/RAPID		5		30	65			26	M	M	0	10	0	0	0	5	0.31	0.31	0.58	0.44	0.76	0.50
09																								
	HBS0901	BACK CHANNEL		40		20	40			10	H	M	0	5	0	0	0	0	0.20	0.30	0.35	0.00	0.00	0.00
	HEF0901	RUN		40		50	10			15	M	M	0	0	5	0	0	0	0.25	0.20	0.26	0.06	0.52	0.44
	HEF0902	RIFFLE/RAPID		10		30	60			16	M	M	0	0	5	0	0	0	0.25	0.23	0.60	0.13	0.33	0.32
	HEF0903	RIFFLE/RAPID		30		35	35			12	L	M	0	0	5	0	0	0	0.34	0.22	0.16	0.44	0.68	0.12
	HEF0904	RUN		30		30	40			12	M	M	0	0	0	0	0	0	0.46	0.44	0.29	0.35	0.23	0.66
	HEF0905	BACK CHANNEL		20		20	60			12	L	M	0	0	0	0	0	0	0.77	0.66	0.38	0.00	0.00	0.00
10																								
	HEF1001	RUN		80			20			16	H	H	0	0	10	0	0	0	0.20	0.40	0.26	0.44	0.18	0.19
	HEF1002	RIFFLE/RAPID				60	40			10	M	M	0	0	0	0	0	0	0.07	0.05	0.14	0.09	0.09	0.34
	HEF1003	FLAT		80			20			10	H	L	0	0	0	0	0	0	0.09	0.16	0.20	0.00	0.12	0.15
	HEF1004	FLAT		70			10	20		0	H	H	0	5	0	0	0	0	0.24	0.25	0.16	0.22	0.00	0.00

See Appendix B1 for definitions

Appendix D Table D1. Habitat characteristics information, Halfway River and Moberly River summer fish survey 2009.

Waterbody			Substrate (%)							D90			Cover (%)							Depth (m)			Velocity (m/s)		
Section	Site	Habitat	OM	Si	Sa	Gr	Co	Bo	Be	(cm)	Emb.	Comp.	Ovh.	Rock	LOD	Subm.	Emer.	Algae	Near	Mid	Far	Near	Mid	Far
	HEF1005	RIFFLE/RAPID				20	30	50		15	M	M	0	0	0	0	0	0	0.28	0.27	0.38	0.25	0.65	0.63
	HEF1006	RUN		20		30	50			11	M	M	0	5	0	0	0	0	0.21	0.21	0.26	0.15	0.19	0.20
MOBERLY RIVER																								
01																								
	MBS010	FLAT		10	15	75				3	H	M	0	0	0	0	0	0	0.17	0.28	0.37	0.00	0.00	0.18
	MEF010	FLAT			70	30				2	H	L	0	0	10	0	0	0	0.15	0.23	0.31	0.22	0.26	0.28
	MEF010	RUN			100					0			0	0	15	0	0	0	0.31	0.44	0.24	0.39	0.15	0.06
02																								
	MBS020	FLAT			100					0			0	0	0	0	0	0	0.26	0.42	0.45	0.19	0.25	0.32
	MBS020	FLAT			100					0			0	0	0	0	5	0	0.30	0.65	0.35	0.00	0.12	0.20
	MEF020	FLAT		100						0			0	0	10	0	0	0	0.26	0.37	0.41	0.20	0.23	0.18
	MEF020	FLAT		10	90					0			0	0	10	10	0	0	0.34	0.46	0.52	0.18	0.21	0.21
	MEF020	RIFFLE/RAPID			5	30	50	15		35	M	M	0	40	10	0	0	0	0.42	0.35	0.41	0.69	0.64	0.57
	MEF020	RIFFLE/BOULDER GARDEN		30	30	30	10			30	M	L	0	35	0	0	0	0	0.31	0.35	0.35	0.21	0.51	0.25
	MEF020	RUN			10	70	10	10		45	M	L	0	5	5	0	0	0	0.33	0.25	0.26	0.35	0.77	0.89
03																								
	MBS030	BACKWATER			50		50			7	H	H	0	0	0	0	0	0	0.26	0.41	0.40	0.06	0.00	0.00
	MBS030	FLAT				10	80	10		15	L	M	0	0	0	0	0	0	0.40	0.45	0.45	0.00	0.05	0.18
	MBS030	FLAT			100					0			0	0	5	0	0	0	0.44	0.71	0.51	0.18	0.19	0.12
	MEF030	RUN/FLAT/RIFFLE/RAPID			10	90				8	M	L	0	0	30	0	0	0	0.09	0.09	0.07	0.01	0.00	0.19
	MEF030	RUN		20	75	5				11	M	M	0	0	30	0	0	0	0.20	0.26	0.35	0.01	0.07	0.22
	MEF030	RIFFLE/RUN/FLAT				20	80			8	M	M	0	35	0	0	0	0	0.18	0.23	0.13	0.19	0.08	0.15
	MEF030	RIFFLE/RAPID				10	70	20		40	L	L	0	50	0	0	0	0	0.12	0.22	0.41	0.32	0.18	0.28

Appendix D Table D1. Habitat characteristics information, Halfway River and Moberly River summer fish survey 2009.

Waterbody			Substrate (%)							D90			Cover (%)						Depth (m)			Velocity (m/s)		
Section	Site	Habitat	OM	Si	Sa	Gr	Co	Bo	Be	(cm)	Emb.	Comp.	Ovh.	Rock	LOD	Subm.	Emer.	Algae	Near	Mid	Far	Near	Mid	Far
04																								
	MBS040	FLAT		40	40	20				3	H	L	0	5	20	0	0	0	0.57	0.64	0.73	0.06	0.22	0.37
	MBS040	RUN	5	30	15	20	30			3	H	L	5	20	5	5	0	0	0.50	0.60	0.70	0.18	0.22	0.31
	MBS040	FLAT	20	80						0	H	L	0	0	0	10	10	50	0.57	0.82	0.66	0.07	0.27	0.12
	MEF040	BACKCHANNEL	10	90							H	L	0	0	10	30	40	10	0.20	0.25	0.30	0.00	0.00	0.00
	MEF040	RUN		10	10		70	10		41	L	M	20	30	10	0	0	0	0.23	0.43	0.49	0.39	0.48	0.50
	MEF040	RUN/RIFFLE				5	90	5		23	M	M	0	5	0	10	0	15	0.22	0.36	0.23	0.23	0.44	0.51
	MEF040	BACKCHANNEL	10	90						0	H	L	0	0	50	10	5	0	0.33	0.52	0.54	0.15	0.15	0.20
05																								
	MBS050	BACKWATER		60	30		5	5		13	H	L	0	5	10	0	0	0	0.32	0.29	0.38	0.13	0.01	0.16
	MBS050	BACKWATER		100						0	H	L	0	0	0	10	20	0	0.23	0.39	0.65	0.00	0.00	0.00
	MEF050	RIFFLE/BOULDER GARDEN		20			40	40		40	L	M	0	30	30	0	0	0	0.15	0.32	0.60	0.16	0.54	0.41
	MEF050	RUN				90	10			8	M	M	0	10	0	0	0	0	0.04	0.10	0.17	0.02	0.26	0.63
	MEF050	BACKCHANNEL		100						0	H	L	5	0	30	0	20	0	0.10	0.30	0.15	0.00	0.00	0.00
	MEF050	RUN		10		55	30	5		22	L	M	30	10	20	0	0	0	0.23	0.35	0.27	0.43	0.58	0.68
06																								
	MBS060	RUN			30	70				6	H	M	0	5	0	0	0	0	0.14	0.27	0.40	0.09	0.23	0.26
	MBS060	RUN		30		30	30	10		18	M	M	0	5	0	0	0	0	0.21	0.32	0.40	0.13	0.35	0.39
	MBS060	RUN		10		30	60			15	M	M	0	10	0	0	0	0	0.24	0.48	0.53	0.01	0.11	0.41
	MEF060	RUN		20		60	15	5		23	M	M	20	5	30	5	5	0	0.20	0.31	0.11	0.29	0.17	0.17
	MEF060	RUN/BOULDER GARDEN			20	10	30	40		17	L	H	5	20	10	0	0	0	0.22	0.31	0.33	0.24	0.43	0.42
	MEF060	RUN			5	10	75	10		20	L	M	0	20	15	0	0	0	0.42	0.37	0.34	0.42	0.40	0.35
07																								
	MEF070	RUN		40	40	5	10	5		0	M	M	20	5	5	0	0	0						

See Appendix B1 for definitions

Appendix D Table D1. Habitat characteristics information, Halfway River and Moberly River summer fish survey 2009.

Waterbody			Substrate (%)							D90			Cover (%)						Depth (m)			Velocity (m/s)		
Section	Site	Habitat	OM	Si	Sa	Gr	Co	Bo	Be	(cm)	Emb.	Comp.	Ovh.	Rock	LOD	Subm.	Emer.	Algae	Near	Mid	Far	Near	Mid	Far
	MEF070	RUN		20		25	50	5		13	H	M	30	15	10	0	10	0						
	MEF070	RUN		20	5	50	20	5		14	M	H	20	10	10	0	0	0						
	MEF070	RIFFLE/RAPID	30	10		50	10			12	M	L	5	5	20	60	10	40						
	MEF070	RUN		60		20	20			15	H	L	5	5	10	0	0	0						
	MEF070	RUN/BOULDERGARDEN		5		15	65	10	5	22	M	M	0	20	40	0	0	0						
	MEF070	RUN	10	15		15	55			13	H	L	20	5	10	10	5	0						
08																								
	MEF080	RIFFLE/RAPID		5		5	85	5		15	L	M	5	10	5	0	0	0						
	MEF080	RUN	20	30			45	5		13	M	L	20	10	10	40	10	0						
	MEF080	RUN		30		10	50	10		22	H	M	5	5	15	0	0	0						
	MEF080	RUN	5	40		10	45			17	M	M	30	10	20	5	5	0						
	MEF080	RIFFLE/RAPID		5		10	80	5		12	L	M	20	10	10	0	0	0						
	MEF080	RUN		20		20	60			13	M	L	10	5	30	0	0	0						
09																								
	MEF090	RUN	10	20		30	40			15	M	M	5	5	10	5	20	0						
	MEF090	RUN	5	30		35	30			10	M	L	30	0	20	0	10	0						
	MEF090	RUN		40		50	10			10	M	L	10	0	40	0	0	0						
	MEF090	RUN	5	40		20	30	5		13	H	L	20	5	10	20	10	20						
	MEF090	RUN		5		10	75	10		20	L	M	5	10	5	0	0	0						
10																								
	MEF100	RIFFLE/RAPID	5	65		20	10			10	M	L	80	0	20	0	10	0						
	MEF100	RUN	5	45		40	10			10	M	L	20	0	5	5	5	0						
	MEF100	RUN	5	30		20	40	5		13	M	M	20	10	15	10	5	0						

See Appendix B1 for definitions

Appendix D Table D1. Habitat characteristics information, Halfway River and Moberly River summer fish survey 2009.

Waterbody			Substrate (%)							D90			Cover (%)						Depth (m)			Velocity (m/s)		
Section	Site	Habitat	OM	Si	Sa	Gr	Co	Bo	Be	(cm)	Emb.	Comp.	Ovh.	Rock	LOD	Subm.	Emer.	Algae	Near	Mid	Far	Near	Mid	Far
	MEF100	RUN		50		50				2	H	L	80	0	20	0	0	0						
	MEF100	RUN	5	40		40	10			12	H	L	10	0	10	20	5	0						

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APPENDIX E
Catch Data

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Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
HALFWAY RIVER											
01	HSF0101	8/13/2009	530	60	1010	529					
							BT	1	1	1.98	1.98
							CCG	1	1	0.99	0.99
							GR	5	5	4.95	4.95
							LNC	1	1	0.99	0.99
							LSU	6	6	6.93	6.93
							MW	40	40	39.60	39.60
							RB	3	3	2.97	2.97
01	HSF0102	8/13/2009	530	60	1070	676					
							CCG	5	5	4.67	4.67
							GR	8	8	7.48	7.48
							LNC	2	2	1.87	1.87
							LSU	5	5	5.61	5.61
							MW	71	71	68.22	68.22
01	HSF0103	8/13/2009	530	60	952	521					
							BT	0	1	1.05	2.10
							CCG	4	4	4.20	4.20
							GR	4	4	4.20	4.20
							LSU	3	3	3.15	3.15
							MW	46	46	48.32	48.32
							RB	1	1	1.05	1.05
01	HSF0104	8/13/2009	530	60	891	648					
							BT	0	1	0.00	1.12
							CCG	14	14	15.71	15.71
							GR	7	8	7.86	8.98
							LSU	3	3	3.37	3.37
							MW	48	48	53.87	53.87
							RB	1	1	1.12	1.12
01	HSF0105	8/13/2009	530	60	1010	452					
							BT	1	3	5.94	7.92
							CCG	4	4	3.96	3.96
							GR	7	7	6.93	6.93
							LSU	3	3	2.97	2.97
							MW	14	16	13.86	15.84
							RB	1	1	3.96	3.96
							RSC	1	1	0.99	0.99
01	HSF0106	8/13/2009	530	60	580	142					
							GR	2	2	3.45	3.45
							LSU	1	1	1.72	1.72
							MW	14	14	24.14	24.14
01	HSF0107	8/14/2009	530	60	491	322					
							BT	0	1	0.00	2.04
							CCG	1	1	2.04	2.04
							LSU	2	2	4.07	4.07
							MW	27	27	54.99	54.99
02	HSF0201	8/14/2009	530	60	962	477					
							CCG	1	1	1.04	1.04
							GR	1	1	1.04	1.04
							LNC	1	1	1.04	1.04

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							LSU	3	3	3.12	3.12
							MW	20	20	22.87	22.87
							RB	2	2	5.20	5.20
02	HSF0202	8/14/2009	530	60	995	542					
							BT	0	1	0.00	1.01
							CCG	4	4	4.02	4.02
							GR	4	4	4.02	4.02
							LSU	1	1	1.01	1.01
							MW	34	34	36.18	36.18
							RB	2	2	7.04	7.04
02	HSF0203	8/14/2009	530	60	1090	466					
							CCG	4	4	3.67	3.67
							GR	3	3	2.75	2.75
							LNC	2	2	1.83	1.83
							LSU	6	6	5.50	5.50
							MW	44	44	41.28	41.28
							RB	2	2	4.59	4.59
02	HSF0204	8/14/2009	530	60	1050	424					
							BT	1	1	0.95	0.95
							CCG	2	2	1.90	1.90
							GR	1	1	0.95	0.95
							LSU	5	8	4.76	7.62
							MW	50	50	47.62	47.62
							RB	2	2	4.76	4.76
02	HSF0205	8/14/2009	530	60	1010	327					
							BT	0	1	1.98	2.97
							GR	2	3	2.97	3.96
							LSU	6	6	5.94	5.94
							MW	24	24	23.76	23.76
							RB	2	2	1.98	1.98
03	HSF0206	8/14/2009	530	60	1010	620					
							BT	1	2	0.99	1.98
							CCG	3	3	2.97	2.97
							GR	4	4	3.96	3.96
							LSU	9	9	10.89	10.89
							MW	31	32	30.69	31.68
							RB	0	1	0.00	0.99
							RSC	3	3	2.97	2.97
03	HSF0301	8/14/2009	530	60	1020	533					
							BT	4	5	5.88	6.86
							CCG	6	6	5.88	5.88
							GR	4	4	4.90	4.90
							LNC	2	2	1.96	1.96
							LSU	1	1	1.96	1.96
							MW	53	54	160.78	161.76
							RB	4	4	3.92	3.92
03	HSF0302	8/15/2009	530	60	1040	672					
							BT	2	3	3.85	5.77
							GR	7	7	6.73	6.73
							LSU	1	1	0.96	0.96

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							MW	57	60	54.81	57.69
							RB	3	4	2.88	3.85
03	HSF0303	8/15/2009	530	60	1010	537					
							BT	1	2	2.97	3.96
							CCG	3	3	2.97	2.97
							GR	2	4	1.98	3.96
							LSU	7	7	7.92	7.92
							MW	36	38	38.61	40.59
							RB	0	1	0.00	0.99
03	HSF0304	8/15/2009	530	60	1060	658					
							BT	0	2	0.94	2.83
							CCG	7	7	6.60	6.60
							GR	3	6	2.83	5.66
							LSU	1	1	0.94	0.94
							MW	33	34	31.13	32.08
							RB	2	2	1.89	1.89
03	HSF0305	8/15/2009	530	60	1040	609					
							BT	0	2	0.96	2.88
							CCG	1	1	0.96	0.96
							GR	2	2	1.92	1.92
							LSU	1	2	0.96	1.92
							MW	36	36	34.62	34.62
							RB	2	3	2.88	3.85
03	HSF0306	8/15/2009	530	60	967	494					
							BT	0	1	2.07	3.10
							CCG	3	3	3.10	3.10
							GR	3	3	3.10	3.10
							LNC	1	1	1.03	1.03
							LSU	3	3	3.10	3.10
							MW	19	21	19.65	21.72
							RB	4	5	11.38	12.41
04	HSF0401	8/15/2009	530	60	960	482					
							BT	1	2	1.04	2.08
							CCG	1	1	1.04	1.04
							GR	5	5	5.21	5.21
							LSU	9	10	10.42	11.46
							MW	21	21	22.92	22.92
							RB	1	1	1.04	1.04
04	HSF0402	8/15/2009	530	60	1030	623					
							BT	0	2	0.97	2.91
							CCG	1	1	0.97	0.97
							GR	2	2	1.94	1.94
							LKC	2	2	1.94	1.94
							LSU	3	3	2.91	2.91
							MW	11	11	11.65	11.65
							RB	3	3	2.91	2.91
							RSC	4	4	3.88	3.88
04	HSF0403	8/15/2009	530	60	964	522					
							BT	0	1	1.04	2.07
							CCG	3	3	3.11	3.11

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							CSU	1	1	1.04	1.04
							LNC	3	3	3.11	3.11
							LSU	12	13	13.49	14.52
							MW	30	31	31.12	32.16
							RB	1	1	1.04	1.04
							RSC	1	1	1.04	1.04
04	HSF0404	8/16/2009	530	60	998	697					
							BT	0	2	2.00	4.01
							CCG	3	3	3.01	3.01
							LSU	10	10	11.02	11.02
							MW	23	23	23.05	23.05
							RB	7	7	7.01	7.01
04	HSF0405	8/16/2009	530	60	1060	650					
							BB	0	1	0.94	1.89
							BT	0	2	2.83	4.72
							CCG	5	5	4.72	4.72
							GR	3	4	3.77	4.72
							LSU	8	9	9.43	10.38
							MW	26	26	24.53	24.53
							RB	4	4	6.60	6.60
04	HSF0406	8/16/2009	530	60	1010	678					
							CCG	3	3	2.97	2.97
							GR	3	3	2.97	2.97
							LSU	6	6	7.92	7.92
							MW	45	48	44.55	47.52
							RB	2	2	4.95	4.95
							RSC	2	2	1.98	1.98
05	HSF0501	8/16/2009	530	60	1070	569					
							BT	0	1	1.87	2.80
							CCG	2	2	1.87	1.87
							GR	4	4	3.74	3.74
							LNC	2	2	1.87	1.87
							LSU	9	9	8.41	8.41
							MW	36	36	33.64	33.64
							RB	1	2	2.80	3.74
05	HSF0502	8/16/2009	530	60	1030	706					
							BT	0	1	1.94	2.91
							CCG	3	3	2.91	2.91
							LNC	2	2	1.94	1.94
							LSU	7	7	6.80	6.80
							MW	29	29	28.16	28.16
							RB	3	3	5.83	5.83
05	HSF0503	8/16/2009	530	60	1020	494					
							BT	1	2	2.94	3.92
							CCG	2	2	1.96	1.96
							CSU	1	2	0.98	1.96
							GR	1	1	0.98	0.98
							LNC	2	2	1.96	1.96
							LSU	7	7	6.86	6.86
							MW	22	22	21.57	21.57

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							RB	4	4	5.88	5.88
05	HSF0504	8/16/2009	530	60	958	552					
							BT	0	1	0.00	1.04
							CCG	1	1	1.04	1.04
							GR	1	1	1.04	1.04
							LNC	2	2	3.13	3.13
							LSU	8	8	9.39	9.39
							MW	19	19	19.83	19.83
05	HSF0505	8/16/2009	530	60	631	189					
							BT	0	1	0.00	1.58
							CCG	2	2	3.17	3.17
							GR	1	1	3.17	3.17
							LSU	7	7	11.09	11.09
							MW	12	12	20.60	20.60
							RB	3	3	4.75	4.75
05	HSF0506	8/16/2009	530	60	511	283					
							BT	1	1	1.96	1.96
							CCG	1	1	1.96	1.96
							LSU	1	1	1.96	1.96
							MW	14	14	31.31	31.31
05	HSF0507	8/16/2009	530	60	988	708					
							BT	0	1	0.00	1.01
							CCG	1	1	1.01	1.01
							GR	2	2	2.02	2.02
							LNC	4	4	4.05	4.05
							LSU	11	11	11.13	11.13
							MW	31	31	31.38	31.38
							RB	2	3	8.10	9.11
06	HSF0601	8/17/2009	530	60	1010	630					
							BT	0	2	0.99	2.97
							CCG	3	3	2.97	2.97
							GR	1	1	0.99	0.99
							LNC	1	1	0.99	0.99
							LSU	2	2	1.98	1.98
							MW	50	51	49.50	50.50
							RB	2	2	4.95	4.95
06	HSF0602	8/17/2009	530	60	1020	640					
							CCG	3	3	2.94	2.94
							LNC	2	2	1.96	1.96
							LSU	2	2	1.96	1.96
							MW	29	30	28.43	29.41
							RB	2	3	2.94	3.92
06	HSF0603	8/17/2009	530	60	1020	633					
							CCG	5	5	4.90	4.90
							CSU	1	1	0.98	0.98
							LNC	8	8	7.84	7.84
							LSU	21	21	20.59	20.59
							MW	37	37	36.27	36.27
							RB	3	3	4.90	4.90
							RSC	6	6	5.88	5.88

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
06	HSF0604	8/17/2009	530	60	1000	551					
							CCG	5	5	5.00	5.00
							GR	1	1	1.00	1.00
							LNC	1	1	1.00	1.00
							LSU	12	12	12.00	12.00
							MW	12	12	12.00	12.00
							RB	3	3	3.00	3.00
							RSC	5	5	5.00	5.00
06	HSF0605	8/17/2009	530	60	1020	369					
							BT	2	3	1.96	2.94
							CCG	2	2	1.96	1.96
							CSU	1	1	0.98	0.98
							LNC	1	1	0.98	0.98
							LSU	8	9	7.84	8.82
							MW	11	12	10.78	11.76
							RSC	12	12	11.76	11.76
							WSC	1	1	0.98	0.98
06	HSF0606	8/17/2009	530	60	1040	598					
							BT	0	1	0.96	1.92
							CSU	1	1	0.96	0.96
							GR	1	1	0.96	0.96
							LKC	2	2	1.92	1.92
							LNC	2	2	1.92	1.92
							LSU	30	30	93.27	93.27
							MW	11	12	10.58	11.54
							RSC	25	25	24.04	24.04
07	HSF0701	8/17/2009	530	60	978	434					
							BT	0	1	0.00	1.02
							CSU	4	5	4.09	5.11
							GR	1	1	1.02	1.02
							LSU	16	17	16.36	17.38
							MW	5	6	5.11	6.13
							RSC	8	8	8.18	8.18
07	HSF0702	8/17/2009	530	60	1030	567					
							BT	0	2	0.00	1.94
							CCG	2	2	1.94	1.94
							CSU	1	1	0.97	0.97
							LKC	1	1	0.97	0.97
							LNC	1	1	0.97	0.97
							LSU	22	22	26.21	26.21
							MW	2	2	1.94	1.94
							NSC	0	2	0.00	1.94
							RB	4	4	5.83	5.83
							RSC	23	23	22.33	22.33
07	HSF0703	8/17/2009	530	60	898	517					
							BT	1	1	1.11	1.11
							CCG	3	3	3.34	3.34
							CSU	11	11	16.70	16.70
							LNC	1	1	1.11	1.11
							LSU	26	26	33.41	33.41

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							MW	11	11	12.25	12.25
							NSC	0	1	1.11	2.23
							RSC	33	33	36.75	36.75
07	HSF0704	8/18/2009	530	60	1060	496					
							CSU	2	2	1.89	1.89
							LSU	13	13	12.26	12.26
							MW	25	25	23.58	23.58
							NSC	2	2	1.89	1.89
							RSC	2	2	1.89	1.89
07	HSF0705	8/18/2009	530	60	1050	584					
							CCG	1	1	0.95	0.95
							LSU	10	10	10.48	10.48
							MW	31	31	30.48	30.48
							NSC	1	1	0.95	0.95
							RSC	10	10	9.52	9.52
08	HSF0706	8/18/2009	530	60	910	453					
							BT	0	2	1.10	3.30
							CSU	1	1	1.10	1.10
							GR	1	1	1.10	1.10
							LSU	4	4	6.59	6.59
							MW	22	22	25.27	25.27
							NSC	1	1	1.10	1.10
							RSC	1	1	1.10	1.10
08	HSF0707	8/18/2009	530	60	867	615					
							CSU	1	1	1.15	1.15
							GR	1	1	1.15	1.15
							LSU	8	8	10.38	10.38
							MW	24	24	31.14	31.14
							NSC	1	1	1.15	1.15
							RSC	14	14	16.15	16.15
08	HSF0801	8/18/2009	530	60	1010	570					
							BT	1	3	1.98	3.96
							LKC	1	1	0.99	0.99
							LNC	1	1	0.99	0.99
							LSU	7	7	6.93	6.93
							MW	5	5	4.95	4.95
							RSC	18	18	17.82	17.82
08	HSF0802	8/18/2009	530	60	1000	507					
							BT	0	2	2.00	4.00
							CSU	3	3	3.00	3.00
							LNC	1	1	1.00	1.00
							LSU	21	21	22.00	22.00
							MW	16	17	16.00	17.00
							NSC	1	1	1.00	1.00
							RSC	21	21	21.00	21.00
08	HSF0803	8/18/2009	530	60	1000	582					
							BT	0	2	2.00	4.00
							CSU	5	5	6.00	6.00
							GR	1	1	1.00	1.00
							LSU	14	14	17.00	17.00

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							MW	5	5	7.00	7.00
							NSC	3	3	3.00	3.00
							RSC	30	30	30.00	30.00
08	HSF0804	8/18/2009	530	60	961	606					
							CCG	1	1	1.04	1.04
							CSU	12	12	13.53	13.53
							GR	1	1	1.04	1.04
							LKC	1	1	1.04	1.04
							LNC	1	1	1.04	1.04
							LSU	13	13	13.53	13.53
							MW	7	7	9.37	9.37
							NSC	2	2	2.08	2.08
							RSC	27	27	28.10	28.10
08	HSF0805	8/17/2009	530	60	996	621					
							CCG	1	1	1.00	1.00
							CSU	11	11	12.05	12.05
							LNC	1	1	1.00	1.00
							LSU	15	15	16.06	16.06
							MW	15	15	16.06	16.06
							NSC	3	3	3.01	3.01
							RSC	55	55	55.22	55.22
08	HSF0806	8/17/2009	530	60	1000	641					
							CSU	6	6	10.00	10.00
							LNC	1	1	1.00	1.00
							LSU	4	4	5.00	5.00
							MW	9	9	9.00	9.00
							NSC	5	5	5.00	5.00
							RSC	36	36	36.00	36.00
09	HSF0901	8/19/2009	530	60	904	519					
							BT	0	1	0.00	1.11
							CSU	5	5	5.53	5.53
							LSU	2	2	5.53	5.53
							MW	15	15	16.59	16.59
							NSC	3	3	3.32	3.32
							RSC	8	8	8.85	8.85
09	HSF0902	8/19/2009	530	60	1020	708					
							CCG	1	1	0.98	0.98
							CSU	11	11	11.76	11.76
							FHC	2	2	1.96	1.96
							LKC	2	2	1.96	1.96
							LNC	1	1	0.98	0.98
							LSU	9	9	11.76	11.76
							MW	11	11	11.76	11.76
							NSC	8	8	7.84	7.84
							RSC	42	42	41.18	41.18
09	HSF0903	8/19/2009	530	60	1020	520					
							CCG	5	5	4.90	4.90
							CSU	12	12	11.76	11.76
							LNC	1	1	0.98	0.98
							LSU	12	12	11.76	11.76

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							MW	15	15	14.71	14.71
							NSC	5	5	4.90	4.90
							RSC	31	31	30.39	30.39
09	HSF0904	8/19/2009	530	60	1010	750					
							BT	0	1	1.98	2.97
							CSU	12	12	11.88	11.88
							LKC	1	1	0.99	0.99
							LNC	2	2	1.98	1.98
							LSU	8	8	9.90	9.90
							MW	10	10	9.90	9.90
							NSC	6	6	7.92	7.92
							RSC	29	29	28.71	28.71
09	HSF0905	8/19/2009	530	60	1050	577					
							CSU	8	8	7.62	7.62
							LKC	1	1	0.95	0.95
							LNC	1	1	0.95	0.95
							LSU	2	2	1.90	1.90
							MW	8	8	7.62	7.62
							NSC	2	2	2.86	2.86
							RB	1	1	0.95	0.95
							RSC	30	30	28.57	28.57
09	HSF0906	8/19/2009	530	60	1030	826					
							CCG	1	1	0.97	0.97
							CSU	4	5	3.88	4.85
							FHC	2	2	1.94	1.94
							LKC	2	2	1.94	1.94
							LNC	3	3	2.91	2.91
							LSU	6	7	5.83	6.80
							MW	6	6	5.83	5.83
							NSC	5	5	4.85	4.85
							RSC	62	62	60.19	60.19
10	HSF1001	8/20/2009	530	60	1240	620					
							CSU	9	9	7.26	7.26
							LSU	4	4	3.23	3.23
							MW	5	5	4.03	4.03
							NSC	0	1	0.00	0.81
							RSC	3	3	2.42	2.42
10	HSF1002	8/20/2009	530	60	1070	728					
							CSU	24	24	23.36	23.36
							LKC	1	1	0.93	0.93
							LSU	6	6	6.54	6.54
							MW	5	5	4.67	4.67
							NSC	1	1	0.93	0.93
							RB	2	2	3.74	3.74
							RSC	3	3	2.80	2.80
							WSC	1	1	0.93	0.93
10	HSF1003	8/20/2009	530	60	892	701					
							CAS	1	1	1.12	1.12
							CCG	1	1	1.12	1.12
							CSU	19	19	28.03	28.03

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							LSU	3	3	5.61	5.61
							MW	1	1	1.12	1.12
							NSC	2	2	5.61	5.61
							RSC	13	13	14.57	14.57
10	HSF1004	8/20/2009	530	60	1020	702					
							CSU	14	14	16.67	16.67
							LSU	12	12	11.76	11.76
							MW	12	13	11.76	12.75
							NSC	2	2	1.96	1.96
							RB	1	1	0.98	0.98
							RSC	29	29	28.43	28.43
10	HSF1005	8/20/2009	530	60	1050	704					
							CSU	5	5	5.71	5.71
							LKC	1	1	0.95	0.95
							LSU	8	8	7.62	7.62
							MW	5	5	4.76	4.76
							RB	1	1	0.95	0.95
							RSC	3	3	2.86	2.86
							WSC	1	1	0.95	0.95
10	HSF1006	8/19/2009	530	60	1000	626					
							BB	0	1	0.00	1.00
							CCG	1	1	1.00	1.00
							CSU	15	15	15.00	15.00
							LNC	3	3	3.00	3.00
							LSU	14	15	16.00	17.00
							MW	5	5	5.00	5.00
							NSC	3	3	4.00	4.00
							RSC	12	12	12.00	12.00
MOBERLY RIVER											
01	MSF0101	8/6/2009	354	60	500	790					
							CAS	1	1	2.00	2.00
							CCG	2	2	4.00	4.00
							GR	1	1	2.00	4.00
							LNC	1	1	2.00	2.00
							MW	9	14	18.00	28.00
							NP	3	3	6.00	6.00
							RSC	1	1	2.00	2.00
							TP	2	2	4.00	4.00
01	MSF0102	8/6/2009	354	60	500	525					
							CCG	1	1	2.00	2.00
							LNC	3	3	6.00	6.00
							MW	7	9	14.00	18.00
							TP	1	1	2.00	2.00
01	MSF0103	8/6/2009	354	60	1000	976					
							CCG	2	2	2.00	2.00
							GR	0	1	0.00	2.00
							MW	10	11	10.00	11.00
							RSC	2	2	2.00	2.00
							WSC	0	1	0.00	1.00

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
01	MSF0104	8/6/2009	354	60	500	519					
							BB	1	3	2.00	6.00
							CCG	2	2	4.00	4.00
							GR	0	2	0.00	4.00
							LNC	3	3	6.00	6.00
							MW	3	6	6.00	12.00
							NP	1	1	2.00	2.00
							RSC	5	5	10.00	10.00
							TP	1	1	2.00	2.00
							WSC	2	3	4.00	6.00
01	MSF0105	8/6/2009	354	60	500	517					
							BB	1	2	4.00	6.00
							CCG	2	2	4.00	4.00
							MW	2	2	4.00	4.00
							RSC	7	7	14.00	14.00
							TP	3	3	6.00	6.00
							YSU	1	1	2.00	2.00
01	MSF0106	8/6/2009	354	60	500	470					
							LNC	1	1	2.00	2.00
							RSC	1	1	2.00	2.00
							TP	1	1	2.00	2.00
							WSC	1	1	2.00	2.00
02	MSF0201	8/7/2009	354	60	1000	1204					
							CCG	1	1	1.00	1.00
							LNC	1	1	1.00	1.00
							LSU	0	1	0.00	1.00
							MW	1	4	1.00	4.00
							NP	2	3	2.00	4.00
							RSC	3	3	3.00	3.00
							WSC	1	3	1.00	3.00
02	MSF0202	8/7/2009	354	60	985	1093					
							MW	3	4	3.05	4.06
							NP	3	3	3.05	4.06
							WSC	1	3	1.02	3.05
02	MSF0203	8/7/2009	354	60	1000	1244					
							MW	1	1	1.00	1.00
							NP	1	1	1.00	1.00
							RSC	2	2	2.00	2.00
							TP	4	4	4.00	4.00
							WSC	1	2	1.00	2.00
02	MSF0204	8/7/2009	354	60	1000	1242					
							BB	1	1	1.00	1.00
							CAS	1	1	1.00	1.00
							CCG	1	1	1.00	1.00
							LW	0	1	0.00	1.00
							MW	1	3	1.00	3.00
							NP	0	2	0.00	3.00
							RSC	9	9	9.00	9.00
							WSC	1	1	1.00	1.00

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
02	MSF0205	8/7/2009	354	60	1000	1098					
							BB	1	1	1.00	1.00
							LSU	2	2	2.00	2.00
							MW	0	2	0.00	2.00
							RSC	14	14	14.00	14.00
							WSC	2	2	2.00	2.00
02	MSF0206	8/7/2009	354	60	500	486					
							BB	1	1	2.00	2.00
							CCG	1	1	2.00	2.00
							LNC	2	2	4.00	4.00
							LSU	1	1	2.00	2.00
							MW	3	9	6.00	18.00
							RSC	2	2	4.00	4.00
							WSC	0	1	0.00	2.00
02	MSF0207	8/7/2009	354	60	1000	988					
							BB	2	3	2.00	3.00
							CAS	1	1	1.00	1.00
							LNC	5	5	5.00	5.00
							LSU	1	1	1.00	1.00
							MW	25	34	25.00	34.00
							RSC	7	7	7.00	7.00
							WSC	2	2	2.00	2.00
02	MSF0208	8/7/2009	354	60	1000	1009					
							BB	2	2	2.00	2.00
							CAS	1	1	1.00	1.00
							GR	3	3	3.00	5.00
							LNC	1	1	1.00	1.00
							LSU	3	3	3.00	3.00
							MW	13	21	22.00	30.00
							NP	3	3	3.00	3.00
							RSC	8	8	8.00	8.00
							TP	3	3	3.00	3.00
02	MSF0209	8/7/2009	354	60	1000	827					
							BB	5	5	5.00	5.00
							CCG	4	4	4.00	4.00
							GR	0	1	0.00	1.00
							LNC	4	4	4.00	4.00
							LSU	2	2	2.00	2.00
							MW	11	18	11.00	32.00
							NP	0	1	0.00	1.00
							RSC	3	3	3.00	3.00
							WSC	1	1	1.00	1.00
03	MSF0301	8/8/2009	354	60	1000	951					
							BB	1	1	1.00	1.00
							CCG	3	3	3.00	3.00
							GR	5	5	5.00	5.00
							LNC	4	4	4.00	4.00
							LSU	1	1	1.00	1.00
							MW	15	22	15.00	22.00
							NP	1	1	1.00	1.00

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							RSC	5	5	5.00	5.00
							TP	1	1	1.00	1.00
							WSC	4	4	4.00	4.00
03	MSF0302	8/8/2009	354	60	1000	984					
							BB	1	1	1.00	1.00
							CCG	5	5	5.00	5.00
							GR	1	1	1.00	1.00
							LNC	3	3	3.00	3.00
							LSU	2	2	2.00	2.00
							MW	10	17	10.00	17.00
							RSC	4	4	4.00	4.00
							WSC	5	5	5.00	5.00
03	MSF0303	8/8/2009	354	60	1000	991					
							BB	3	3	3.00	3.00
							CAS	1	1	1.00	1.00
							CCG	2	2	2.00	2.00
							GR	2	2	2.00	2.00
							LSU	3	5	3.00	5.00
							MW	7	9	7.00	9.00
							NP	3	3	3.00	3.00
							RSC	9	9	9.00	9.00
							TP	1	1	1.00	1.00
							WSC	5	6	5.00	6.00
03	MSF0304	8/8/2009	354	60	1000	1062					
							BB	1	1	3.00	3.00
							CCG	7	7	7.00	7.00
							LNC	1	1	1.00	1.00
							LSU	8	8	8.00	8.00
							MW	10	12	10.00	12.00
							NP	2	2	2.00	2.00
							RSC	10	10	10.00	10.00
							TP	2	2	2.00	2.00
							WSC	4	4	4.00	4.00
03	MSF0305	8/8/2009	354	60	1000	987					
							CCG	1	1	1.00	1.00
							LNC	1	1	1.00	1.00
							LSU	2	2	2.00	2.00
							MW	8	18	8.00	18.00
							NP	0	1	0.00	1.00
							RSC	5	5	6.00	6.00
							TP	6	6	6.00	6.00
							WSC	2	2	2.00	2.00
03	MSF0306	8/8/2009	354	60	1000	1060					
							BB	4	4	5.00	5.00
							CCG	1	1	1.00	1.00
							LNC	1	1	1.00	1.00
							LSU	1	2	1.00	2.00
							MW	12	15	12.00	15.00
							NP	4	4	4.00	4.00
							RSC	7	7	7.00	7.00

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							TP	2	2	2.00	2.00
							WSC	1	1	1.00	1.00
03	MSF0307	8/8/2009	354	60	1000	1022					
							BB	1	1	3.00	3.00
							GR	2	2	2.00	2.00
							LNC	2	2	2.00	2.00
							LSU	2	2	2.00	2.00
							MW	7	7	7.00	7.00
							NP	2	2	3.00	3.00
							RSC	10	10	26.00	26.00
							TP	1	1	1.00	1.00
							WSC	9	9	9.00	9.00
03	MSF0308	8/8/2009	354	60	1000	878					
							CCG	2	2	2.00	2.00
							GR	1	1	1.00	1.00
							LKC	1	1	1.00	1.00
							LNC	1	1	1.00	1.00
							LSU	9	10	9.00	10.00
							MW	16	22	16.00	22.00
							NP	1	1	3.00	3.00
							RSC	7	7	7.00	7.00
							TP	2	2	2.00	2.00
							WSC	1	1	1.00	1.00
04	MSF0401	8/9/2009	354	60	1000	903					
							BB	9	10	13.00	14.00
							CCG	11	11	11.00	11.00
							GR	2	2	2.00	2.00
							LNC	9	9	9.00	9.00
							LSU	5	5	5.00	5.00
							MW	10	15	10.00	15.00
							NP	1	2	2.00	3.00
							RSC	9	9	9.00	9.00
							WSC	2	3	2.00	3.00
04	MSF0402	8/9/2009	354	60	950	804					
							BB	2	2	6.32	6.32
							CCG	11	11	11.58	11.58
							GR	1	1	1.05	1.05
							LNC	11	11	11.58	11.58
							LSU	6	6	6.32	6.32
							MW	6	19	6.32	20.00
							RSC	10	10	10.53	10.53
							TP	1	1	1.05	1.05
							WSC	2	3	2.11	3.16
04	MSF0403	8/9/2009	354	60	1000	825					
							BB	1	1	1.00	1.00
							CCG	2	2	2.00	2.00
							GR	0	1	0.00	1.00
							LNC	2	2	2.00	2.00
							LSU	6	7	6.00	7.00
							MW	13	27	13.00	27.00

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							NP	1	1	1.00	1.00
							RSC	11	11	11.00	11.00
							TP	2	2	2.00	2.00
04	MSF0404	8/9/2009	354	60	1000	976					
							CCG	3	3	3.00	3.00
							GR	1	1	1.00	1.00
							LKC	1	1	1.00	1.00
							LNC	5	5	5.00	5.00
							LSU	3	3	3.00	3.00
							MW	10	16	10.00	16.00
							NP	1	1	1.00	1.00
							RSC	11	11	11.00	11.00
							WSC	2	2	2.00	2.00
04	MSF0405	8/9/2009	354	60	1100	1071					
							CCG	2	2	1.82	1.82
							LNC	5	5	4.55	4.55
							LSU	3	3	2.73	2.73
							MW	2	18	1.82	16.36
							RSC	8	8	7.27	7.27
							WSC	0	1	0.00	0.91
04	MSF0406	8/9/2009	354	60	1070	817					
							BB	1	2	1.87	2.80
							LNC	2	2	1.87	1.87
							MW	10	22	9.35	20.56
							RSC	5	5	4.67	4.67
05	MSF0501	8/10/2009	530	60	1000	762					
							BB	1	1	1.00	1.00
							CCG	6	6	6.00	6.00
							GR	3	3	3.00	3.00
							LNC	10	10	13.00	13.00
							LSU	26	27	26.00	27.00
							MW	20	29	20.00	29.00
							RSC	3	3	3.00	3.00
							TP	1	1	1.00	1.00
05	MSF0502	8/10/2009	530	60	950	696					
							BB	2	2	2.11	2.11
							CCG	1	1	1.05	1.05
							GR	0	1	1.05	2.11
							LKC	1	1	1.05	1.05
							LNC	6	6	6.32	6.32
							LSU	10	13	10.53	13.68
							MW	18	27	18.95	28.42
							RSC	9	9	9.47	9.47
05	MSF0503	8/10/2009	530	60	1000	786					
							BB	1	1	2.00	2.00
							CCG	6	6	6.00	6.00
							GR	1	1	1.00	1.00
							LKC	3	3	3.00	3.00
							LNC	10	10	10.00	10.00
							LSU	5	7	5.00	7.00

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							MW	17	26	17.00	26.00
							RSC	7	7	21.00	21.00
05	MSF0504	8/10/2009	530	60	950	766					
							BB	2	2	5.26	5.26
							CCG	16	16	16.84	16.84
							GR	4	5	4.21	5.26
							LNC	3	3	9.47	9.47
							LSU	13	14	13.68	14.74
							MW	16	27	16.84	28.42
							NP	0	2	0.00	2.11
							RSC	1	1	13.68	13.68
							TP	1	1	1.05	1.05
							WSC	1	1	1.05	1.05
05	MSF0505	8/10/2009	530	60	950	737					
							BB	3	3	9.47	9.47
							CCG	9	9	9.47	9.47
							GR	0	1	0.00	1.05
							LKC	1	1	1.05	1.05
							LNC	2	2	7.37	7.37
							LSU	14	17	14.74	17.89
							MW	24	32	25.26	33.68
							NP	1	1	1.05	1.05
							RSC	9	9	10.53	10.53
							TP	1	1	1.05	1.05
05	MSF0506	8/10/2009	530	60	850	665					
							BB	3	3	12.94	14.12
							CCG	4	4	4.71	4.71
							GR	2	2	2.35	2.35
							LNC	1	1	8.24	8.24
							LSU	8	9	9.41	10.59
							MW	17	30	20.00	35.29
							RSC	8	8	10.59	10.59
							WSC	2	2	2.35	2.35
05	MSF0507	8/10/2009	530	60	1000	773					
							BB	1	1	3.00	3.00
							CCG	10	10	10.00	10.00
							LNC	7	7	7.00	7.00
							LSU	2	2	2.00	2.00
							MW	10	14	10.00	14.00
							NP	0	1	0.00	1.00
							NSC	1	1	1.00	1.00
							RSC	7	7	10.00	10.00
							TP	1	1	1.00	1.00
							WSC	2	3	2.00	3.00
06	MSF0601	8/11/2009	530	60	950	789					
							CCG	4	4	4.21	4.21
							GR	2	2	2.11	2.11
							LNC	14	14	14.74	14.74
							LSU	4	4	4.21	4.21
							MW	8	10	8.42	10.53

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							RSC	5	5	5.26	5.26
							TP	5	5	5.26	5.26
06	MSF0602	8/11/2009	530	60	1000	875					
							BB	1	1	2.00	2.00
							CCG	4	4	4.00	4.00
							CSU	1	1	1.00	1.00
							LKC	1	1	1.00	1.00
							LNC	3	3	3.00	3.00
							LSU	4	4	4.00	4.00
							MW	11	12	11.00	12.00
							NP	3	3	3.00	3.00
							RSC	7	7	12.00	12.00
							TP	5	5	5.00	5.00
06	MSF0603	8/11/2009	530	60	1000	740					
							BB	1	1	1.00	2.00
							CCG	8	8	8.00	8.00
							GR	6	7	7.00	9.00
							LNC	9	9	9.00	9.00
							LSU	4	4	4.00	4.00
							MW	17	26	17.00	26.00
							RSC	8	8	18.00	18.00
							TP	1	1	1.00	1.00
06	MSF0604	8/11/2009	530	60	1000	690					
							BB	1	1	2.00	2.00
							CCG	2	2	2.00	2.00
							GR	5	5	6.00	6.00
							LNC	8	8	8.00	8.00
							LSU	4	4	4.00	4.00
							MW	15	27	15.00	27.00
							NSC	0	1	0.00	1.00
							RSC	9	9	13.00	13.00
06	MSF0605	8/11/2009	530	60	900	562					
							CCG	4	4	4.44	4.44
							GR	1	1	1.11	1.11
							LKC	3	3	3.33	3.33
							LNC	12	12	13.33	13.33
							LSU	8	10	8.89	11.11
							MW	14	31	15.56	34.44
							WSC	1	1	1.11	1.11
06	MSF0606	8/11/2009	530	60	1000	617					
							BB	1	1	2.00	2.00
							CCG	2	2	2.00	2.00
							GR	5	5	5.00	5.00
							LNC	12	12	12.00	12.00
							LSU	14	16	14.00	16.00
							MW	22	35	22.00	35.00
							NP	2	2	2.00	2.00
							NSC	1	3	1.00	3.00
							RSC	1	1	1.00	1.00
							WSC	1	1	1.00	1.00

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
07	MSF0701	8/12/2009	530	60	950	521					
							CCG	1	1	1.05	1.05
							GR	5	6	5.26	6.32
							LSU	6	7	6.32	7.37
							MW	17	25	17.89	26.32
							NSC	0	1	0.00	1.05
							RSC	4	4	4.21	4.21
07	MSF0702	8/12/2009	530	60	850	672					
							BB	1	1	1.18	1.18
							CCG	1	1	1.18	1.18
							CSU	0	1	0.00	1.18
							GR	4	5	5.88	7.06
							LKC	1	1	1.18	1.18
							LNC	2	2	2.35	2.35
							LSU	11	12	12.94	14.12
							MW	12	22	14.12	25.88
							NSC	0	1	0.00	1.18
							RSC	6	6	7.06	7.06
07	MSF0703	8/12/2009	530	60	1000	936					
							BB	1	1	1.00	1.00
							CSU	2	3	2.00	3.00
							GR	3	7	6.00	10.00
							LKC	2	2	2.00	2.00
							LSU	30	31	30.00	31.00
							MW	24	33	24.00	33.00
							NP	0	2	0.00	2.00
							NSC	0	2	0.00	2.00
							RSC	2	2	2.00	2.00
07	MSF0704	8/12/2009	530	60	750	355					
							CSU	2	2	2.67	2.67
							GR	1	1	1.33	1.33
							LNC	5	5	6.67	6.67
							LSU	16	20	21.33	26.67
							MW	26	33	34.67	44.00
							RSC	4	4	5.33	5.33
07	MSF0705	8/12/2009	530	60	950	471					
							GR	1	1	1.05	1.05
							LSU	20	24	21.05	25.26
							MW	30	36	31.58	37.89
07	MSF0706	8/12/2009	530	60	900	489					
							CCG	1	1	1.11	1.11
							GR	1	1	1.11	1.11
							LKC	1	1	1.11	1.11
							LNC	6	6	6.67	6.67
							LSU	18	25	20.00	27.78
							MW	20	28	22.22	31.11
							NP	0	1	0.00	1.11
							NSC	0	1	0.00	1.11
							RSC	9	9	10.00	10.00
							WSC	0	1	0.00	1.11

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
07	MSF0707	8/12/2009	530	60	1000	537					
							CSU	0	1	0.00	1.00
							GR	0	1	0.00	1.00
							LNC	1	1	1.00	1.00
							LSU	16	16	16.00	16.00
							MW	11	20	11.00	20.00
							NSC	0	1	0.00	1.00
							RSC	1	1	1.00	1.00
08	MSF0801	8/13/2009	530	60	1000	543					
							GR	1	1	1.00	1.00
							LKC	2	2	2.00	2.00
							LNC	2	2	2.00	2.00
							LSU	19	21	19.00	21.00
							MW	30	34	30.00	34.00
							RSC	3	3	3.00	3.00
08	MSF0802	8/13/2009	530	60	1000	491					
							GR	3	4	3.00	4.00
							LKC	1	1	1.00	1.00
							LNC	2	2	2.00	2.00
							LSU	14	16	14.00	16.00
							MW	14	15	14.00	15.00
							RSC	9	9	9.00	9.00
08	MSF0803	8/13/2009	530	60	800	330					
							CSU	2	2	2.50	2.50
							GR	1	1	1.25	2.50
							LNC	2	2	2.50	2.50
							LSU	5	7	6.25	8.75
							MW	13	16	16.25	20.00
							RSC	2	2	2.50	2.50
08	MSF0804	8/13/2009	530	60	500	249					
							GR	1	1	4.00	4.00
							LKC	1	1	2.00	2.00
							LNC	2	2	4.00	4.00
							LSU	7	8	14.00	16.00
							MW	14	15	28.00	30.00
							RSC	2	2	4.00	4.00
08	MSF0805	8/13/2009	530	60	825	347					
							CSU	0	1	0.00	1.21
							GR	2	2	2.42	3.64
							LNC	7	7	8.48	8.48
							LSU	19	21	23.03	25.45
							MW	15	17	18.18	20.61
							NSC	0	3	0.00	3.64
08	MSF0806	8/13/2009	530	60	850	385					
							CSU	1	1	1.18	1.18
							GR	2	2	2.35	2.35
							LKC	3	3	3.53	3.53
							LNC	2	2	2.35	2.35
							LSU	6	9	7.06	10.59
							MW	9	11	10.59	12.94

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							NSC	1	1	1.18	1.18
							RSC	10	10	11.76	11.76
09	MSF0901	8/14/2009	530	60	650	398					
							CSU	0	2	0.00	3.08
							GR	3	3	6.15	6.15
							LNC	1	1	1.54	1.54
							LSU	13	13	20.00	20.00
							MW	9	12	13.85	18.46
							NSC	0	2	0.00	3.08
							RSC	1	1	1.54	1.54
09	MSF0902	8/14/2009	530	60	950	546					
							CSU	2	2	2.11	2.11
							LNC	3	3	3.16	3.16
							LSU	6	6	6.32	6.32
							MW	12	17	12.63	17.89
							NP	0	1	0.00	1.05
09	MSF0903	8/14/2009	530	60	900	473					
							CCG	1	1	1.11	1.11
							LNC	2	2	2.22	2.22
							LSU	6	8	6.67	8.89
							MW	10	11	11.11	12.22
							NSC	0	1	0.00	1.11
							RSC	2	2	2.22	2.22
09	MSF0904	8/14/2009	530	60	950	494					
							BB	1	1	1.05	1.05
							CSU	1	4	1.05	4.21
							LKC	2	2	2.11	2.11
							LNC	6	6	6.32	6.32
							LSU	5	12	5.26	12.63
							MW	12	17	12.63	17.89
							NSC	0	2	0.00	2.11
							RSC	1	1	1.05	1.05
09	MSF0905	8/14/2009	530	60	925	456					
							BB	0	1	1.08	2.16
							CSU	2	2	2.16	2.16
							LKC	1	1	1.08	1.08
							LNC	3	3	3.24	3.24
							LSU	13	20	14.05	21.62
							MW	8	10	8.65	10.81
							RSC	4	4	4.32	4.32
10	MSF1001	8/15/2009	530	60	650	283					
							BB	0	1	0.00	1.54
							LSU	2	2	3.08	3.08
							MW	3	5	4.62	7.69
							NSC	1	2	1.54	3.08
							RSC	2	2	3.08	3.08
10	MSF1002	8/15/2009	530	60	700	334					
							CSU	1	3	1.43	4.29
							LNC	2	2	2.86	2.86
							LSU	2	2	2.86	2.86

Appendix E Table E1. Boat electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Total Catch	Small fish CPUE (Fish/km)	All Fish CPUE (Fish/km)
							MW	4	4	5.71	5.71
							NSC	1	2	1.43	2.86
							RSC	1	1	1.43	1.43
10	MSF1003	8/15/2009	530	60	850	374					
							CSU	3	4	3.53	4.71
							LNC	1	1	1.18	1.18
							LSU	1	4	1.18	4.71
							MW	8	8	9.41	9.41
							NSC	2	2	2.35	2.35
							RSC	2	2	2.35	2.35
10	MSF1004	8/14/2009	530	60	900	396					
							CCG	1	1	1.11	1.11
							CSU	3	6	3.33	6.67
							LNC	5	5	5.56	5.56
							LSU	7	8	7.78	8.89
							MW	10	11	11.11	12.22
							NSC	1	1	1.11	1.11
							RSC	1	1	2.22	2.22
10	MSF1005	8/14/2009	530	60	500	274					
							CSU	1	1	2.00	2.00
							GR	1	1	2.00	2.00
							LNC	3	3	6.00	6.00
							LSU	8	9	16.00	18.00
							MW	1	1	2.00	2.00
							NSC	0	1	0.00	2.00
							RSC	8	8	16.00	16.00
10	MSF1006	8/14/2009	530	60	750	356					
							CSU	2	3	2.67	4.00
							LNC	1	1	1.33	1.33
							LSU	15	16	20.00	21.33
							MW	4	4	5.33	5.33
							NSC	1	1	1.33	1.33
							RSC	2	2	2.67	2.67
10	MSF1007	8/14/2009	530	60	950	454					
							BT	0	1	0.00	1.05
							CSU	0	2	0.00	2.11
							LKC	5	5	5.26	5.26
							LNC	1	1	1.05	1.05
							LSU	10	11	10.53	11.58
							MW	8	8	8.42	8.42
							NSC	3	3	3.16	3.16
							RSC	10	10	21.05	21.05

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
HALFWAY RIVER									
01	HEF0101	8/13/2009	300	60	200	542			
							CCG	10	7.00
							LKC	4	2.00
							LNC	4	2.00
							LSU	10	6.00
							MW	8	4.00
01	HEF0102	8/13/2009	300	60	50	144			
							CCG	2	4.00
							LKC	1	2.00
							LNC	1	2.00
							LSU	1	2.00
							MW	10	22.00
01	HEF0103	8/13/2009	300	60	120	236			
							CCG	1	0.83
							GR	2	1.67
							LSU	11	10.83
							MW	3	2.50
01	HEF0104	8/13/2009	300	60	100	319			
							CCG	4	4.00
							LNC	1	1.00
							LSU	10	32.00
01	HEF0105	8/13/2009	300	60	100	258			
							CCG	3	3.00
							LKC	3	3.00
							LNC	2	2.00
							LSU	2	2.00
							MW	4	4.00
							RSC	4	4.00
02	HEF0201	8/14/2009	275	60	200	345			
							CCG	10	5.50
							GR	1	0.50
							LSU	10	5.00
02	HEF0202	8/14/2009	275	60	100	376			
							BT	1	1.00
							CCG	5	5.00
							GR	1	1.00
							LNC	3	3.00
							LSU	2	2.00
							MW	9	9.00
							RB	1	1.00
02	HEF0203	8/14/2009	275	60	100	261			
							CCG	4	4.00
							GR	3	3.00
							LKC	1	1.00
							LSU	10	10.00
							MW	10	18.00
							RSC	1	1.00
02	HEF0204	8/14/2009	275	60	110	324			
							CCG	3	2.73
							LKC	4	3.64

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
							LNC	3	2.73
							LSU	11	10.00
							MW	10	19.09
							RSC	1	0.91
02	HEF0205	8/14/2009	260	60	100	344			
							BT	1	1.00
							CCG	2	2.00
							LNC	3	3.00
							LSU	5	5.00
							MW	2	2.00
							RB	1	1.00
03	HEF0301	8/14/2009	260	60	100	348			
							CCG	12	12.00
							LKC	1	1.00
							LNC	4	4.00
							LSU	9	9.00
03	HEF0302	8/15/2009	250	60	118	240			
							GR	1	0.85
							LKC	11	12.71
							LNC	4	3.39
							LSU	10	11.86
							MW	5	4.24
							RSC	3	2.54
03	HEF0303	8/15/2009	300	60	100	261			
							CCG	10	16.00
							LNC	2	2.00
							LSU	1	1.00
							MW	4	4.00
03	HEF0304	8/15/2009	275	60	100	274			
							CCG	2	2.00
							GR	11	11.00
03	HEF0305	8/15/2009	275	60	100	256			
							CCG	1	1.00
							LKC	7	7.00
							LNC	8	8.00
							LSU	6	6.00
03	HEF0306	8/15/2009	250	60	100	202			
							LNC	1	1.00
							LSU	8	8.00
04	HEF0401	8/15/2009	250	60	125	365			
							CCG	1	0.80
							CSU	1	0.80
							LKC	1	0.80
							LNC	2	1.60
							LSU	2	1.60
							RSC	10	8.00
04	HEF0402	8/15/2009	250	60	100	345			
							CCG	4	4.00
							LNC	9	9.00
							LSU	3	3.00
							MW	4	4.00

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
04	HEF0403	8/16/2009	250	60	100	262			
							CCG	2	2.00
							CSU	1	1.00
							LKC	2	2.00
							LNC	9	9.00
							LSU	3	3.00
							MW	4	4.00
04	HEF0404	8/16/2009	300	60	100	291			
							CCG	5	5.00
							LKC	5	5.00
							LNC	3	3.00
							LSU	6	6.00
							MW	3	3.00
							RB	1	1.00
							RSC	4	4.00
05	HEF0501	8/16/2009	300	60	100	210			
							LKC	4	4.00
							LSU	12	19.00
05	HEF0502	8/15/2009	300	60	100	257			
							BT	1	1.00
							CCG	2	2.00
							LKC	1	1.00
							LNC	1	1.00
							LSU	5	5.00
							MW	3	3.00
05	HEF0503	8/16/2009	300	60	100	280			
							CCG	5	5.00
							CSU	1	1.00
							LNC	3	3.00
							LSU	10	14.00
							MW	4	4.00
							RSC	1	1.00
05	HEF0504	8/16/2009	325	60	100	125			
							LNC	1	1.00
							LSU	10	30.00
05	HEF0505	8/16/2009	325	60	100	264			
							CCG	2	2.00
							LKC	7	7.00
							LNC	1	1.00
							LSU	10	14.00
							MW	8	8.00
							RSC	3	3.00
05	HEF0506	8/16/2009	300	60	100	265			
							CCG	1	1.00
							LKC	1	1.00
							LSU	6	6.00
							RSC	2	2.00
06	HEF0601	8/17/2009	250	60	100	281			
							CCG	1	1.00
							LNC	7	7.00
							LSU	2	2.00

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
							MW	5	5.00
06	HEF0602	8/17/2009	250	60	100	254			
							CCG	1	1.00
							LNC	2	2.00
							LSU	3	3.00
							MW	1	1.00
							RSC	2	2.00
06	HEF0603	8/17/2009	250	60	100	199			
							CCG	2	2.00
							GR	1	1.00
							LSU	2	2.00
							MW	10	15.00
06	HEF0604	8/17/2009	250	60	100	248			
							CCG	3	3.00
							LKC	3	3.00
							LNC	4	4.00
							LSU	4	4.00
							RSC	8	8.00
06	HEF0605	8/17/2009	250	60	100	321			
							CCG	3	3.00
							CSU	1	1.00
							LKC	4	4.00
							LNC	3	3.00
							LSU	10	15.00
							MW	11	11.00
07	HEF0701	8/17/2009	250	60	100	303			
							CCG	5	5.00
							LKC	3	3.00
							LNC	4	4.00
							LSU	7	7.00
							MW	1	1.00
07	HEF0702	8/17/2009	250	60	100	210			
							CCG	3	3.00
							CSU	10	10.00
							LKC	12	12.00
							LNC	1	1.00
							LSU	8	8.00
							MW	1	1.00
							RSC	10	10.00
07	HEF0703	8/18/2009	250	60	100	338			
							BT	0	0.00
							CCG	1	1.00
							LKC	1	1.00
							LNC	4	4.00
08	HEF0704	8/18/2009	250	60	125	522			
							LKC	11	14.40
							LNC	4	3.20
							LSU	8	6.40
							NSC	1	0.80
08	HEF0801	8/18/2009	250	60	100	241			
							LKC	1	1.00

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
							LNC	4	4.00
							LSU	9	9.00
							MW	1	1.00
							RSC	2	2.00
08	HEF0802	8/18/2009	250	60	100	393			
							BT	0	0.00
							CSU	1	1.00
							MW	1	1.00
							RSC	9	9.00
08	HEF0803	8/18/2009	250	60	100	377			
							BT	0	0.00
							LNC	4	4.00
							LSU	2	2.00
							MW	1	1.00
							RSC	3	3.00
08	HEF0804	8/18/2009	350	60	100	375			
							CCG	1	1.00
							LKC	2	2.00
							LNC	2	2.00
							MW	2	2.00
							RSC	4	4.00
08	HEF0805	8/18/2009	250	60	100	278			
							CCG	1	1.00
							LNC	3	3.00
							LSU	2	2.00
08	HEF0806	8/18/2009	250	60	150	210			
							CCG	2	1.33
							CSU	1	0.67
							WSC	1	0.67
09	HEF0901	8/19/2009	250	60	100	282			
							CCG	2	2.00
							CSU	3	3.00
							LKC	2	2.00
							LNC	5	5.00
							LSU	1	1.00
							MW	2	2.00
							NSC	1	1.00
							RSC	4	4.00
							WSC	1	1.00
09	HEF0902	8/19/2009	250	60	100	287			
							CSU	1	1.00
							GR	1	1.00
							LKC	1	1.00
							LNC	5	5.00
							MW	1	1.00
							RSC	1	1.00
09	HEF0903	8/19/2009	250	60	150	365			
							GR	1	0.67
							LKC	2	1.33
							LNC	3	2.00
							MW	2	1.33

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody	Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
								NSC	1	0.67
								RSC	1	0.67
	09	HEF0904	8/19/2009	250	60	100	284			
								CSU	2	2.00
								LNC	1	1.00
								LSU	1	1.00
								NSC	3	3.00
								RSC	8	8.00
	09	HEF0905	8/19/2009	250	60	100	270			
								CCG	2	2.00
								CSU	8	8.00
								LKC	2	2.00
								LNC	3	3.00
								MW	1	1.00
								NSC	1	1.00
								RSC	7	7.00
	10	HEF1001	8/19/2009	250	60	100	432			
								LNC	2	2.00
								NSC	1	1.00
	10	HEF1002	8/20/2009	250	60	100	420			
								CSU	2	2.00
								LKC	1	1.00
								LNC	4	4.00
								LSU	4	4.00
								MW	3	3.00
	10	HEF1003	8/20/2009	250	60	60	165			
								CSU	1	1.67
	10	HEF1004	8/20/2009	250	60	100	411			
								CSU	2	2.00
								LKC	1	1.00
								LSU	2	2.00
								MW	1	1.00
								NSC	1	1.00
	10	HEF1005	8/20/2009	275	60	100	336			
								LKC	1	1.00
								LNC	5	5.00
								RSC	5	5.00
	10	HEF1006	8/20/2009	275	60	100	209			
								LKC	5	5.00
								MW	1	1.00
								RSC	3	3.00
MOBERLY RIVER										
	01	MEF0101	8/6/2009	400	60	105	246			
								BB	1	0.95
								LNC	1	0.95
	01	MEF0102	8/6/2009	400	60	75	240			
								LNC	1	1.33
								TP	1	1.33
	02	MEF0202	8/7/2009	400	60	65	188			
								BB	1	1.54
								CCG	1	1.54

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
02	MEF0203	8/7/2009	400	60	90	290			
							CCG	4	4.44
							LNC	5	5.56
02	MEF0204	8/7/2009	400	60	170	247			
							BB	2	1.18
							CCG	3	3.53
							LNC	4	2.35
02	MEF0205	8/7/2009	400	60	130	325			
							BB	1	0.77
03	MEF0301	8/8/2009	400	60	75	170			
							CCG	1	1.33
							GR	1	4.00
03	MEF0302	8/8/2009	400	60	105	286			
							CCG	2	1.90
							NP	2	2.86
03	MEF0303	8/8/2009			65	212			
							CCG	5	7.69
							LNC	2	3.08
03	MEF0304	8/8/2009	400	60	157	450			
							BB	9	5.73
							CCG	12	16.56
							LNC	7	4.46
							RSC	1	0.64
04	MEF0402	8/9/2009	400	60	100	260			
							BB	1	2.00
							CCG	4	4.00
							LNC	4	4.00
							RSC	1	1.00
							YSU	1	1.00
04	MEF0403	8/9/2009	400	60	115	276			
							BB	1	0.87
							LNC	1	0.87
							TP	1	0.87
04	MEF0404	8/9/2009	400	60	95	190			
							BB	2	2.11
							CCG	1	1.05
							YSU	1	1.05
05	MEF0501	8/10/2009	400	60	100	298			
							BB	2	2.00
							CCG	5	5.00
							LKC	2	2.00
							LNC	2	2.00
							NP	1	1.00
							RSC	1	1.00
05	MEF0502	8/10/2009	400	80	100	240			
							BB	1	1.00
							CCG	2	2.00
							LNC	2	2.00
							YSU	1	1.00
05	MEF0503	8/10/2009	400	60	100	332			
							CCG	1	1.00

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
							NP	1	1.00
							YSU	1	1.00
05	MEF0504	8/10/2009	400	80	100	277			
							BB	2	2.00
							LNC	6	6.00
							RSC	1	1.00
							YSU	4	4.00
06	MEF0601	8/11/2009	400	80	150	375			
							BB	1	1.33
							CCG	4	2.67
							LNC	1	1.33
							YSU	3	2.00
06	MEF0602	8/11/2009	400	60	100	283			
							BB	1	1.00
							CCG	3	3.00
							LNC	4	4.00
							NP	1	1.00
							RSC	1	1.00
06	MEF0603	8/11/2009	400	60	100	242			
							CCG	1	1.00
							LKC	1	1.00
							LNC	10	10.00
							RSC	1	1.00
07	MEF0701	8/12/2009	400	80	125	202			
							BB	1	0.80
							CCG	2	1.60
							LSU	1	0.80
07	MEF0702	8/12/2009	400	80	100	213			
							CCG	1	1.00
							LSU	1	1.00
							NP	1	2.00
07	MEF0703	8/12/2009	400	80	75	173			
							BB	2	2.67
							LSU	1	2.67
							NP	1	1.33
07	MEF0704	8/12/2009	400	80	100	158			
							NP	2	2.00
07	MEF0705	8/12/2009	400	80	80	232			
							BB	2	2.50
							LKC	1	1.25
							NP	1	1.25
07	MEF0706	8/12/2009	400	80	100	448			
							BB	5	6.00
							CCG	1	2.00
							GR	1	1.00
							LSU	1	5.00
							NP	1	1.00
							RSC	1	1.00
							TP	1	1.00
07	MEF0707	8/12/2009	400	80	100	328			
							BB	2	2.00

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
							CCG	4	7.00
							LKC	1	6.00
							LSU	1	4.00
08	MEF0801	8/13/2009	400	80	100	260			
							LSU	1	1.00
08	MEF0802	8/13/2009	400	80	100	244			
							BB	1	1.00
							CCG	3	3.00
							LNC	1	9.00
							LSU	1	1.00
							RSC	1	2.00
08	MEF0803	8/13/2009	400	80	110	255			
							BB	3	2.73
							CSU	1	0.91
							LSU	1	0.91
08	MEF0804	8/13/2009	400	80	100	299			
							CCG	1	5.00
							LKC	1	13.00
							LNC	2	21.00
							LSU	2	2.00
							RSC	1	4.00
08	MEF0805	8/13/2009	400	80	100	209			
							CCG	1	2.00
							LKC	1	2.00
							LSU	3	3.00
08	MEF0806	8/13/2009	400	80	125	273			
							BB	3	2.40
							LNC	1	11.20
							LSU	2	2.40
							RSC	1	3.20
09	MEF0901	8/14/2009	400	80	100	259			
							BB	1	1.00
							LKC	2	4.00
							LNC	1	12.00
							LSU	1	12.00
							MW	1	1.00
							NP	2	2.00
09	MEF0902	8/14/2009	400	80	100	222			
							GR	1	1.00
							LKC	1	2.00
							LSU	1	3.00
09	MEF0903	8/14/2009	400	80	100	174			
							LSU	1	2.00
09	MEF0904	8/14/2009	400	80	125	316			
							CCG	1	1.60
							CSU	1	0.80
							GR	1	0.80
							LSU	2	3.20
							RSC	1	1.60
09	MEF0905	8/14/2009	400	80	75	143			
							LSU	1	2.67

Appendix E Table E2. Backpack electrofisher effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Voltage	Freq. (Hz)	Effort (m)	Effort (s)	Species	Small Fish Catch	Small Fish CPUE (Fish/100m)
10	MEF1001	8/15/2009	400	80	75	182			
							CCG	1	2.67
							CSU	1	1.33
							LKC	1	5.33
							LSU	1	4.00
							NSC	1	1.33
							RSC	1	8.00
							YSU	1	1.33
10	MEF1002	8/15/2009	400	80	100	198			
							BB	1	1.00
							CCG	1	1.00
							CSU	4	4.00
							NSC	3	3.00
							RSC	1	4.00
							YSU	1	1.00
10	MEF1003	8/14/2009	400	80	75	176			
							CCG	1	2.67
							CSU	1	1.33
							GR	1	1.33
							LSU	1	1.33
10	MEF1005	8/14/2009	400	80	125	293			
							BB	3	2.40
							CSU	1	0.80
							GR	6	4.80
							MW	5	4.00

Appendix E Table E3. Beach seine effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Haul Dist. (m) 1	2	3	Effort $(m)^2$	Species	Small Fish Catch	Small Fish CPUE (Fish/100 $m)^2$
HALFWAY RIVER									
01	HBS0101	8/13/2009	25	25	25	315			
							MW	4	1.27
01	HBS0102	8/13/2009	25	25	25	315			
							CCG	2	0.63
							LNC	1	0.32
							LSU	6	1.90
01	HBS0103	8/14/2009	25	25	25	315			
							CCG	4	1.27
							LSU	10	186.35
							MW	10	3.17
02	HBS0201	8/14/2009	25	25	25	315			
							LNC	2	0.63
							LSU	12	3.81
							MW	1	0.32
04	HBS0401	8/16/2009	25	25	25	315			
							CCG	1	0.32
							LNC	1	0.32
							LSU	10	4.44
							MW	2	0.63
							RSC	6	1.90
04	HBS0402	8/15/2009	25	25	25	315			
							CCG	2	0.63
							CSU	1	0.32
							LKC	10	6.98
							LNC	1	0.32
							LSU	10	117.46
							RSC	3	0.95
06	HBS0601	8/17/2009	25	25	25	315			
							CSU	2	0.63
							LKC	1	0.32
							LSU	3	0.95
							RSC	10	28.57
07	HBS0701	8/17/2009	25	25	25	315			
							LSU	9	2.86
							RSC	5	1.59
08	HBS0702	8/18/2009	25	25	25	315			
							CSU	11	7.62
							LKC	5	1.59
							LSU	5	1.59
							NSC	9	2.86
							RSC	12	10.48
							TP	5	1.59
09	HBS0901	8/19/2009	25	25	25	315			
							CSU	3	0.95
MOBERLY RIVER									
01	MBS0101	8/6/2009	10	25	25	252			
							CCG	2	0.79
							LNC	9	3.57

See Appendix B1 for definitions

Appendix E Table E3. Beach seine effort, small fish catch (≤ 200 mm length), total catch, and catch-per-unit-effort, Halfway River and Moberly River summer fish survey 2009.

Waterbody Section	Site	Date	Haul Dist. (m) 1	2	3	Effort $(m)^2$	Species	Small Fish Catch	Small Fish CPUE (Fish/100 $m)^2$
							LSU	8	3.17
							TP	3	1.19
							YSU	7	2.78
02	MBS0202	8/7/2009	25	35		252			
							LNC	1	0.40
							NP	1	0.40
03	MBS0301	8/8/2009	25			105			
							RSC	13	35.24
							TP	1	0.95
03	MBS0302	8/8/2009	41	40		340.2			
							CCG	2	0.59
							LSU	1	0.29
							RSC	14	6.76
							YSU	1	0.29
03	MBS0303	8/8/2009	47			197.4			
							NP	1	0.51
							RSC	4	2.03
							TP	3	1.52
04	MBS0401	8/9/2009	25	25	25	315			
							RSC	10	57.78
							YSU	11	23.49
04	MBS0402	8/9/2009	25	25	25	315			
							LNC	1	0.32
							RSC	5	1.59
04	MBS0403	8/9/2009	25	25	25	315			
							RSC	5	1.59
							YSU	1	0.32
05	MBS0501	8/10/2009	25	25	25	315			
							LKC	1	0.32
							LNC	10	8.89
							RSC	10	4.13
							TP	5	1.59
							YSU	10	54.92
05	MBS0502	8/10/2009	25	25	25	315			
							LNC	1	0.32
							RSC	10	15.87
							TP	1	0.32
							YSU	10	4.76
06	MBS0601	8/11/2009	25	25	25	315			
							LNC	1	0.32
							RSC	4	1.27
							YSU	3	0.95
06	MBS0602	8/11/2009	25	25	25	315			
							RSC	1	0.32
06	MBS0603	8/11/2009	25	25	25	315			
							LNC	7	2.22
							LSU	1	0.32
							TP	1	0.32
							YSU	8	2.54

See Appendix B1 for definitions

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

Waterbody	Section	Method	Site	Species	Observed			RND		
					YOY	Juv	Adult	YOY	Juv	Adult
HALFWAY RIVER										
	01									
		BACKPACK ELECTROFISH								
			HEF0101	CCG	0	0	0	0	0	0
			HEF0101	LSU	0	0	0	0	2	0
			HEF0102	MW	0	0	0	1	0	0
			HEF0103	LSU	0	0	0	2	0	0
			HEF0104	LSU	0	0	0	22	0	0
		BEACH SEINE								
			HBS0103	LSU	0	0	0	577	0	0
		BOAT ELECTROFISH								
			HSF0101	BT	0	1	0	0	0	0
			HSF0101	LSU	0	0	0	0	1	0
			HSF0102	LSU	0	0	0	0	1	0
			HSF0102	MW	0	0	0	0	2	0
			HSF0103	BT	0	1	0	0	0	0
			HSF0105	BT	0	5	0	0	0	0
			HSF0105	RB	0	3	0	0	0	0
	02									
		BACKPACK ELECTROFISH								
			HEF0201	CCG	0	0	0	0	0	0
			HEF0203	MW	0	0	0	8	0	0
			HEF0204	MW	0	0	0	11	0	0
		BOAT ELECTROFISH								
			HSF0201	BT	0	1	0	0	0	0
			HSF0201	MW	0	0	0	0	2	0
			HSF0201	RB	0	3	0	0	0	0
			HSF0202	MW	0	0	0	0	2	0
			HSF0202	RB	0	5	0	0	0	0
			HSF0203	BT	0	1	0	0	0	0
			HSF0203	MW	0	0	0	0	1	0
			HSF0203	RB	0	3	0	0	0	0
			HSF0204	RB	0	3	0	0	0	0
			HSF0205	BT	0	1	0	0	1	0
			HSF0205	GR	0	0	0	0	1	0
	03									
		BACKPACK ELECTROFISH								
			HEF0302	LKC	0	0	0	0	0	0
			HEF0302	LSU	0	0	0	4	0	0
			HEF0303	CCG	0	0	0	0	0	0
		BOAT ELECTROFISH								
			HSF0206	LSU	0	0	0	0	2	0

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

Waterbody	Section	Method	Site	Species	Observed			RND		
					YOY	Juv	Adult	YOY	Juv	Adult
			HSF0301	BT	0	2	0	0	0	0
			HSF0301	GR	0	1	0	0	0	0
			HSF0301	LSU	0	0	0	0	1	0
			HSF0301	MW	0	0	0	0	111	0
			HSF0302	BT	0	2	1	0	0	0
			HSF0303	BT	0	2	0	0	0	0
			HSF0303	LSU	0	0	0	0	1	0
			HSF0303	MW	0	0	0	0	3	0
			HSF0304	BT	0	1	0	0	0	0
			HSF0305	BT	0	1	0	0	0	0
			HSF0305	RB	0	1	0	0	0	0
			HSF0306	BT	0	2	0	0	0	0
			HSF0306	RB	0	7	0	0	0	0
	04									
		BACKPACK ELECTROFISH								
			HEF0404	GR	1	0	0	0	0	0
		BEACH SEINE								
			HBS0401	LSU	0	0	0	4	0	0
			HBS0402	LKC	0	0	0	0	0	0
			HBS0402	LSU	0	0	0	360	0	0
		BOAT ELECTROFISH								
			HSF0401	LSU	0	0	0	0	1	0
			HSF0401	MW	0	0	0	0	1	0
			HSF0402	BT	0	1	0	0	0	0
			HSF0402	MW	0	0	0	0	1	0
			HSF0403	BT	0	1	0	0	0	0
			HSF0403	GR	0	1	0	0	0	0
			HSF0403	LSU	0	0	0	0	1	0
			HSF0404	BT	0	2	0	0	0	0
			HSF0404	LSU	0	0	0	0	1	0
			HSF0405	BB	0	1	0	0	0	0
			HSF0405	BT	0	3	0	0	0	0
			HSF0405	CSU	0	0	0	0	1	0
			HSF0405	GR	0	1	0	0	0	0
			HSF0405	LSU	0	0	0	0	2	0
			HSF0405	RB	0	3	0	0	0	0
			HSF0406	BT	0	4	0	0	0	0
			HSF0406	LSU	0	0	0	0	2	0
			HSF0406	RB	0	3	0	0	0	0
	05									
		BACKPACK ELECTROFISH								
			HEF0501	LSU	0	0	0	7	0	0

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

Waterbody	Section	Method	Site	Species	Observed			RND		
					YOY	Juv	Adult	YOY	Juv	Adult
			HEF0503	LSU	0	0	0	4	0	0
			HEF0504	LSU	0	0	0	20	0	0
			HEF0505	LSU	0	0	0	4	0	0
		BOAT ELECTROFISH								
			HSF0501	BT	0	2	0	0	0	0
			HSF0501	RB	0	2	0	0	0	0
			HSF0502	BT	0	2	0	0	0	0
			HSF0502	RB	0	3	0	0	0	0
			HSF0503	BT	0	2	0	0	0	0
			HSF0503	RB	0	2	0	0	0	0
			HSF0504	LNC	0	0	0	0	0	0
			HSF0504	LSU	0	0	0	0	1	0
			HSF0505	GR	0	1	0	0	0	0
			HSF0505	MW	0	0	0	0	1	0
			HSF0506	MW	0	0	0	0	2	0
			HSF0507	RB	0	6	0	0	0	0
	06									
		BACKPACK ELECTROFISH								
			HEF0603	MW	0	0	0	5	0	0
			HEF0605	LSU	0	0	0	0	5	0
		BEACH SEINE								
			HBS0601	RSC	0	0	0	0	0	0
		BOAT ELECTROFISH								
			HSF0601	BB	0	1	0	0	0	0
			HSF0601	BT	0	1	0	0	0	0
			HSF0601	RB	0	3	0	0	0	0
			HSF0602	BB	0	1	0	0	0	0
			HSF0602	GR	0	1	0	0	0	0
			HSF0602	RB	0	1	0	0	0	0
			HSF0603	BT	0	1	0	0	0	0
			HSF0603	RB	0	2	0	0	0	0
			HSF0604	BT	0	2	0	0	0	0
			HSF0605	GR	0	2	0	0	0	0
			HSF0605	RB	0	1	0	0	0	0
			HSF0606	BT	0	1	0	0	0	0
			HSF0606	LSU	0	0	0	0	67	0
	07									
		BOAT ELECTROFISH								
			HSF0701	RB	0	3	0	0	0	0
			HSF0702	LSU	0	0	0	0	5	0
			HSF0702	RB	0	2	0	0	0	0
			HSF0703	CSU	0	0	0	0	4	0

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

					Observed			RND		
Waterbody	Section	Method	Site	Species	YOY	Juv	Adult	YOY	Juv	Adult
			HSF0703	LSU	0	0	0	0	4	0
			HSF0703	NSC	0	0	0	0	0	0
			HSF0704	RB	0	1	0	0	0	0
			HSF0705	BT	0	1	0	0	0	0
			HSF0705	LSU	0	0	0	0	1	0
			HSF0705	MW	0	0	0	0	1	0
	08									
		BACKPACK ELECTROFISH								
			HEF0704	LKC	0	0	0	0	0	0
		BEACH SEINE								
			HBS0702	CSU	0	0	0	0	13	0
			HBS0702	RSC	0	0	0	0	0	0
		BOAT ELECTROFISH								
			HSF0706	BT	0	1	0	0	0	0
			HSF0706	LSU	0	0	0	0	2	0
			HSF0706	MW	0	0	0	0	1	0
			HSF0707	BT	0	1	0	0	0	0
			HSF0707	LSU	0	0	0	0	1	0
			HSF0707	MW	0	0	0	0	3	0
			HSF0801	BT	0	1	0	0	0	0
			HSF0801	CSU	0	0	0	0	1	0
			HSF0802	BT	0	2	0	0	0	0
			HSF0802	LSU	0	0	0	0	1	0
			HSF0803	BT	0	2	0	0	0	0
			HSF0803	CSU	0	0	0	0	1	0
			HSF0803	LSU	0	0	0	0	3	0
			HSF0803	MW	0	0	0	0	2	0
			HSF0804	BT	0	1	0	0	0	0
			HSF0804	CSU	0	0	0	0	1	0
			HSF0804	MW	0	0	0	0	2	0
			HSF0805	CSU	0	0	0	0	1	0
			HSF0805	LSU	0	0	0	0	1	0
			HSF0805	MW	0	0	0	0	1	0
			HSF0806	BT	0	1	0	0	0	0
			HSF0806	CSU	0	0	0	0	4	0
			HSF0806	LSU	0	0	0	0	1	0
	09									
		BOAT ELECTROFISH								
			HSF0901	LSU	0	0	0	0	3	0
			HSF0902	BT	0	1	0	0	0	0
			HSF0902	CSU	0	0	0	0	1	0
			HSF0902	LSU	0	0	0	0	3	0

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

Waterbody	Section	Method	Site	Species	Observed			RND		
					YOY	Juv	Adult	YOY	Juv	Adult
			HSF0902	MW	0	0	0	0	1	0
			HSF0902	RB	0	0	0	0	1	0
			HSF0902	WSC	0	0	0	0	1	0
			HSF0904	BT	0	2	0	0	0	0
			HSF0904	LSU	0	0	0	0	2	0
			HSF0904	NSC	0	0	0	0	0	0
			HSF0905	NSC	0	0	0	0	0	0
			HSF0906	BT	0	1	0	0	0	0
	10									
		BACKPACK ELECTROFISH								
			HEF1003	BB	0	0	1	0	0	0
		BOAT ELECTROFISH								
			HSF1002	BT	0	1	0	0	0	0
			HSF1002	CSU	0	0	0	0	1	0
			HSF1002	LSU	0	0	0	0	1	0
			HSF1002	RB	0	2	0	0	0	0
			HSF1003	CSU	0	0	0	0	6	0
			HSF1003	LSU	0	0	0	0	2	0
			HSF1003	NSC	0	0	0	0	0	0
			HSF1004	CSU	0	0	0	0	3	0
			HSF1005	BB	0	1	0	0	0	0
			HSF1005	CSU	0	0	0	0	1	0
			HSF1006	LSU	0	0	0	0	2	0
			HSF1006	NSC	0	0	0	0	0	0
MOBERLY RIVER										
	01									
		BACKPACK ELECTROFISH								
			MEF0101	NP	0	1	0	0	0	0
		BOAT ELECTROFISH								
			MSF0101	GR	0	0	1	0	0	0
			MSF0102	BB	0	1	0	0	0	0
			MSF0103	BB	0	1	0	0	0	0
			MSF0103	GR	0	0	1	0	0	0
			MSF0105	BB	0	1	0	0	0	0
	02									
		BACKPACK ELECTROFISH								
			MEF0204	CCG	0	0	0	0	0	0
			MEF0205	LNC	0	0	0	0	0	0
			MEF0205	NP	0	0	0	0	1	0
		BEACH SEINE								
			MBS0202	YSU	0	0	0	1	0	0
		BOAT ELECTROFISH								

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

Waterbody	Section	Method	Site	Species	Observed			RND		
					YOY	Juv	Adult	YOY	Juv	Adult
			MSF0201	NP	0	0	1	0	0	0
			MSF0202	NP	0	0	1	0	0	0
			MSF0204	NP	0	0	1	0	0	0
			MSF0208	GR	0	0	2	0	0	0
			MSF0208	MW	0	0	0	0	9	0
			MSF0209	MW	0	0	0	0	0	14
	03									
		BACKPACK ELECTROFISH								
			MEF0301	GR	2	0	1	0	0	0
			MEF0302	NP	1	0	0	0	0	0
			MEF0304	CCG	0	0	0	0	0	0
		BEACH SEINE								
			MBS0301	RSC	0	0	0	0	0	0
			MBS0302	RSC	0	0	0	0	0	0
		BOAT ELECTROFISH								
			MSF0304	BB	0	2	0	0	0	0
			MSF0305	RSC	0	0	0	0	0	0
			MSF0306	BB	0	1	0	0	0	0
			MSF0307	BB	0	2	0	0	0	0
			MSF0307	NP	0	1	0	0	0	0
			MSF0307	RSC	0	0	0	0	0	0
			MSF0308	NP	0	2	0	0	0	0
	04									
		BACKPACK ELECTROFISH								
			MEF0401	NP	0	1	0	0	0	0
			MEF0402	BB	0	0	0	0	1	0
		BEACH SEINE								
			MBS0401	RSC	0	0	0	0	0	0
			MBS0401	YSU	0	0	0	63	0	0
		BOAT ELECTROFISH								
			MSF0401	BB	0	4	0	0	0	0
			MSF0401	NP	1	0	0	0	0	0
			MSF0402	BB	0	4	0	0	0	0
			MSF0404	BB	0	1	0	0	0	0
			MSF0405	BB	0	0	1	0	0	0
			MSF0405	NP	0	1	0	0	0	0
			MSF0406	BB	0	1	0	0	0	0
			MSF0406	NP	0	1	0	0	0	0
	05									
		BEACH SEINE								
			MBS0501	LNC	0	0	0	0	0	0
			MBS0501	RSC	0	0	0	0	0	0

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

Waterbody	Section	Method	Site	Species	Observed			RND		
					YOY	Juv	Adult	YOY	Juv	Adult
			MBS0501	YSU	0	0	0	163	0	0
			MBS0502	RSC	0	0	0	0	0	0
			MBS0502	YSU	0	0	0	5	0	0
		BOAT ELECTROFISH								
			MSF0501	LNC	0	0	0	0	0	0
			MSF0502	GR	0	1	0	0	0	0
			MSF0503	BB	0	1	0	0	0	0
			MSF0503	RSC	0	0	0	0	0	0
			MSF0504	BB	0	3	0	0	0	0
			MSF0504	LNC	0	0	0	0	0	0
			MSF0504	RSC	0	0	0	0	0	0
			MSF0505	BB	0	6	0	0	0	0
			MSF0505	LNC	0	0	0	0	0	0
			MSF0505	RSC	0	0	0	0	0	0
			MSF0506	BB	6	2	1	0	0	0
			MSF0506	LNC	0	0	0	0	0	0
			MSF0506	RSC	0	0	0	0	0	0
			MSF0507	BB	0	2	0	0	0	0
			MSF0507	RSC	0	0	0	0	0	0
	06									
		BACKPACK ELECTROFISH								
			MEF0601	BB	0	1	0	0	0	0
			MEF0601	LNC	0	0	0	0	0	0
			MEF0601	NP	0	1	0	0	0	0
		BOAT ELECTROFISH								
			MSF0601	BB	0	1	0	0	0	0
			MSF0602	BB	0	1	0	0	0	0
			MSF0602	RSC	0	0	0	0	0	0
			MSF0603	BB	0	0	1	0	0	0
			MSF0603	GR	0	1	1	0	0	0
			MSF0603	RSC	0	0	0	0	0	0
			MSF0604	BB	0	1	0	0	0	0
			MSF0604	GR	0	1	0	0	0	0
			MSF0604	RSC	0	0	0	0	0	0
			MSF0605	BB	0	2	0	0	0	0
			MSF0606	BB	0	1	0	0	0	0
	07									
		BACKPACK ELECTROFISH								
			MEF0701	LNC	0	0	0	0	0	0
			MEF0701	YSU	0	0	0	1	0	0
			MEF0702	BB	0	0	0	0	1	0
			MEF0702	LNC	0	0	0	0	0	0

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

					Observed			RND		
Waterbody	Section	Method	Site	Species	YOY	Juv	Adult	YOY	Juv	Adult
			MEF0702	NP	0	1	0	0	0	0
			MEF0702	YSU	0	0	0	2	0	0
			MEF0703	CCG	0	0	0	0	0	0
			MEF0703	LKC	0	0	0	0	0	0
			MEF0703	LNC	0	0	0	0	0	0
			MEF0703	LSU	0	0	0	0	1	0
			MEF0703	YSU	0	0	0	2	0	0
			MEF0704	CCG	0	0	0	0	0	0
			MEF0704	LNC	0	0	0	0	0	0
			MEF0704	YSU	0	0	0	1	0	0
			MEF0705	CCG	0	0	0	0	0	0
			MEF0705	LNC	0	0	0	0	0	0
			MEF0705	YSU	0	0	0	10	0	0
			MEF0706	BB	0	0	0	0	1	0
			MEF0706	CCG	0	0	0	0	0	0
			MEF0706	LKC	0	0	0	0	0	0
			MEF0706	LNC	0	0	0	0	0	0
			MEF0706	LSU	0	0	0	0	4	0
			MEF0707	CCG	0	0	0	0	0	0
			MEF0707	LKC	0	0	0	0	0	0
			MEF0707	LNC	0	0	0	0	0	0
			MEF0707	LSU	0	0	0	0	3	0
		BOAT ELECTROFISH								
			MSF0702	GR	0	1	0	0	0	0
			MSF0703	GR	0	3	0	0	0	0
			MSF0706	BB	0	1	0	0	0	0
	08									
		BACKPACK ELECTROFISH								
			MEF0801	LNC	0	0	0	0	0	0
			MEF0801	TP	0	0	0	0	0	0
			MEF0801	YSU	0	0	0	11	0	0
			MEF0802	LKC	0	0	0	0	0	0
			MEF0802	LNC	0	0	0	0	0	0
			MEF0802	RSC	0	0	0	0	0	0
			MEF0802	YSU	0	0	0	1	0	0
			MEF0803	LKC	0	0	0	0	0	0
			MEF0803	LNC	0	0	0	0	0	0
			MEF0803	RSC	0	0	0	0	0	0
			MEF0803	YSU	0	0	0	13	0	0
			MEF0804	CCG	0	0	0	0	0	0
			MEF0804	LKC	0	0	0	0	0	0
			MEF0804	LNC	0	0	0	0	0	0

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

Waterbody	Section	Method	Site	Species	Observed			RND		
					YOY	Juv	Adult	YOY	Juv	Adult
			MEF0804	RSC	0	0	0	0	0	0
			MEF0805	BB	1	0	0	0	0	0
			MEF0805	CCG	0	0	0	0	0	0
			MEF0805	LKC	0	0	0	0	0	0
			MEF0805	LNC	0	0	0	0	0	0
			MEF0805	YSU	0	0	0	12	0	0
			MEF0806	GR	0	0	0	1	0	0
			MEF0806	LKC	0	0	0	0	0	0
			MEF0806	LNC	0	0	0	0	0	0
			MEF0806	LSU	0	0	0	0	1	0
			MEF0806	RSC	0	0	0	0	0	0
			MEF0806	YSU	0	0	0	23	0	0
		BOAT ELECTROFISH								
			MSF0801	BB	0	1	0	0	0	0
			MSF0803	GR	0	0	1	0	0	0
			MSF0804	GR	0	1	0	0	0	0
			MSF0805	GR	0	0	1	0	0	0
	09									
		BACKPACK ELECTROFISH								
			MEF0901	LKC	0	0	0	0	0	0
			MEF0901	LNC	0	0	0	0	0	0
			MEF0901	LSU	0	0	0	0	11	0
			MEF0901	YSU	0	0	0	1	0	0
			MEF0902	LKC	0	0	0	0	0	0
			MEF0902	LNC	0	0	0	0	0	0
			MEF0902	LSU	0	0	0	0	2	0
			MEF0902	RSC	0	0	0	0	0	0
			MEF0902	YSU	0	0	0	2	0	0
			MEF0903	LKC	0	0	0	0	0	0
			MEF0903	LNC	0	0	0	0	0	0
			MEF0903	LSU	0	0	0	0	1	0
			MEF0904	CCG	0	0	0	0	0	0
			MEF0904	LKC	0	0	0	0	0	0
			MEF0904	LNC	0	0	0	0	0	0
			MEF0904	LSU	0	0	0	0	2	0
			MEF0904	RSC	0	0	0	0	0	0
			MEF0904	YSU	0	0	0	37	0	0
			MEF0905	LKC	0	0	0	0	0	0
			MEF0905	LNC	0	0	0	0	0	0
			MEF0905	LSU	0	0	0	0	1	0
			MEF0905	RSC	0	0	0	0	0	0
		BOAT ELECTROFISH								

Appendix E Table E4. Numbers of fish observed and/or captured but released with no data that were used as part of the catch rate calculations, Halfway and Moberly rivers summer fish survey 2009.

					Observed			RND		
Waterbody	Section	Method	Site	Species	YOY	Juv	Adult	YOY	Juv	Adult
			MSF0901	GR	0	1	0	0	0	0
			MSF0905	BB	0	1	0	0	0	0
	10									
		BACKPACK ELECTROFISH								
			MEF1001	CCG	0	0	0	0	0	0
			MEF1001	LKC	0	0	0	0	0	0
			MEF1001	LNC	0	0	0	0	0	0
			MEF1001	LSU	0	0	0	0	2	0
			MEF1001	RSC	0	0	0	0	0	0
			MEF1002	LKC	0	0	0	0	0	0
			MEF1002	LNC	0	0	0	0	0	0
			MEF1002	RSC	0	0	0	0	0	0
			MEF1003	BB	0	1	0	0	0	0
			MEF1003	CCG	0	0	0	0	0	0
			MEF1003	LKC	0	0	0	0	0	0
			MEF1003	LNC	0	0	0	0	0	0
			MEF1004	LKC	0	0	0	0	0	0
			MEF1004	LNC	0	0	0	0	0	0
			MEF1004	RSC	0	0	0	0	0	0
			MEF1005	LKC	0	0	0	0	0	0
			MEF1005	LNC	0	0	0	0	0	0
			MEF1005	LSU	0	0	0	0	14	0
			MEF1005	RSC	0	0	0	0	0	0
			MEF1005	YSU	0	0	0	109	0	0
		BOAT ELECTROFISH								
			MSF1002	BB	0	1	0	0	0	0
			MSF1004	RSC	0	0	0	0	0	0
			MSF1007	RSC	0	0	0	0	0	0

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APPENDIX F
Biological Information

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
01											
	HBS0101	3265	MW	47							0
	HBS0101	3266	MW	47							0
	HBS0101	3267	MW	45							0
	HBS0101	3268	MW	36							0
	HBS0102	3269	LSU	26							0
	HBS0102	3270	LSU	28							0
	HBS0102	3271	LSU	26							0
	HBS0102	3272	LSU	21							0
	HBS0102	3273	LSU	23							0
	HBS0102	3274	LSU	22							0
	HBS0102	3275	LNC	25							0
	HBS0102	3276	CCG	21							0
	HBS0102	3277	CCG	22							0
	HBS0103	3278	LSU	27							0
	HBS0103	3279	LSU	23							0
	HBS0103	3280	LSU	26							0
	HBS0103	3281	LSU	19							0
	HBS0103	3282	LSU	22							0
	HBS0103	3283	LSU	21							0
	HBS0103	3284	LSU	26							0
	HBS0103	3285	LSU	26							0
	HBS0103	3286	LSU	25							0
	HBS0103	3287	LSU	29							0
	HBS0103	3288	MW	60							0
	HBS0103	3289	MW	35							0
	HBS0103	3290	MW	51							0
	HBS0103	3291	MW	61							0
	HBS0103	3292	MW	56							0
	HBS0103	3293	MW	52							0
	HBS0103	3294	MW	57							0
	HBS0103	3295	MW	44							0
	HBS0103	3296	MW	46							0
	HBS0103	3297	MW	39							0
	HBS0103	3298	CCG	23							0
	HBS0103	3299	CCG	21							0
	HBS0103	3300	CCG	23							0
	HBS0103	3301	CCG	21							0
	HEF0101	3423	LSU	80							0
	HEF0101	3424	LSU	98							0
	HEF0101	3425	LKC	75							0
	HEF0101	3426	LNC	41							0
	HEF0101	3427	MW	47			SCALES				0
	HEF0101	3428	MW	66			SCALES				0
	HEF0101	3429	LSU	31							0
	HEF0101	3430	LSU	99							0
	HEF0101	3431	LKC	72							0
	HEF0101	3432	MW	61			SCALES				0
	HEF0101	3433	MW	65			SCALES	0			0
	HEF0101	3434	MW	52			SCALES	0			0
	HEF0101	3435	CCG	82							0
	HEF0101	3436	LSU	106							0
	HEF0101	3437	MW	41							0
	HEF0101	3438	LKC	76							0
	HEF0101	3439	LSU	106							0
	HEF0101	3440	LSU	112							0
	HEF0101	3441	CCG	67							0
	HEF0101	3442	LSU	29							0
	HEF0101	3443	LSU	150							0
	HEF0101	3444	CCG	91							0
	HEF0101	3445	LSU	72							0
	HEF0101	3446	CCG	80							0
	HEF0101	3447	CCG	63							0
	HEF0101	3448	MW	67							0
	HEF0101	3449	LNC	48							0
	HEF0101	3450	LNC	67							0
	HEF0101	3451	MW	64							0
	HEF0101	3452	CCG	93							0
	HEF0101	3453	CCG	65							0
	HEF0101	3454	CCG	54							0
	HEF0101	3455	LNC	42							0
	HEF0101	3456	CCG	60							0
	HEF0101	3457	CCG	96							0
	HEF0101	3458	LKC	56							0
	HEF0102	3459	MW	44							0
	HEF0102	3460	MW	62							0
	HEF0102	3461	MW	58							0
	HEF0102	3462	MW	52							0
	HEF0102	3463	MW	50							0
	HEF0102	3464	MW	52							0
	HEF0102	3465	MW	65							0
	HEF0102	3466	MW	62							0
	HEF0102	3467	MW	57							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0102	3468	MW	54							0
	HEF0102	3469	LKC	57							0
	HEF0102	3470	LSU	81							0
	HEF0102	3471	LNC	43							0
	HEF0102	3472	CCG	27							0
	HEF0102	3473	CCG	17							0
	HEF0103	3474	MW	46							0
	HEF0103	3475	MW	44							0
	HEF0103	3476	MW	40							0
	HEF0103	3477	LSU	22							0
	HEF0103	3478	GR	61			SCALES	0			0
	HEF0103	3479	GR	48			SCALES				0
	HEF0103	3480	LSU	22							0
	HEF0103	3481	LSU	23							0
	HEF0103	3482	LSU	22							0
	HEF0103	3483	LSU	24							0
	HEF0103	3484	LSU	21							0
	HEF0103	3485	LSU	42							0
	HEF0103	3486	LSU	29							0
	HEF0103	3487	LSU	32							0
	HEF0103	3488	LSU	20							0
	HEF0103	3489	LSU	29							0
	HEF0103	3490	CCG	26							0
	HEF0104	3491	CCG	71							0
	HEF0104	3492	LSU	117							0
	HEF0104	3493	LSU	31							0
	HEF0104	3494	LSU	22							0
	HEF0104	3495	LSU	24							0
	HEF0104	3496	LSU	22							0
	HEF0104	3497	LSU	43							0
	HEF0104	3498	LSU	26							0
	HEF0104	3499	LSU	29							0
	HEF0104	3500	LSU	27							0
	HEF0104	3501	LSU	28							0
	HEF0104	3502	CCG	86							0
	HEF0104	3503	LNC	27							0
	HEF0104	3504	CCG	69							0
	HEF0104	3505	CCG	18							0
	HEF0105	3506	RSC	71							0
	HEF0105	3507	LSU	57							0
	HEF0105	3508	MW	63							0
	HEF0105	3509	RSC	73							0
	HEF0105	3510	LSU	100							0
	HEF0105	3511	RSC	79							0
	HEF0105	3512	LKC	70							0
	HEF0105	3513	LKC	79							0
	HEF0105	3514	LKC	75							0
	HEF0105	3515	CCG	72							0
	HEF0105	3516	RSC	82							0
	HEF0105	3517	MW	61							0
	HEF0105	3518	MW	63							0
	HEF0105	3519	MW	66							0
	HEF0105	3520	LNC	38							0
	HEF0105	3521	CCG	20							0
	HEF0105	3522	LNC	49							0
	HEF0105	3523	CCG	82							0
	HSF0101	3808	GR	186			SCALES				0
	HSF0101	3809	GR	133			SCALES	1			0
	HSF0101	3810	GR	106			SCALES				0
	HSF0101	3811	LSU	166							0
	HSF0101	3812	LSU	165							0
	HSF0101	3813	LSU	144							0
	HSF0101	3814	GR	127			SCALES				0
	HSF0101	3815	RB	165			SCALES				0
	HSF0101	3816	RB	178			SCALES				0
	HSF0101	3817	LSU	196							0
	HSF0101	3818	RB	179			SCALES	2			0
	HSF0101	3819	MW	195			SCALES				0
	HSF0101	3820	MW	123			SCALES				0
	HSF0101	3821	GR	129			SCALES				0
	HSF0101	3822	MW	130			SCALES				0
	HSF0101	3823	MW	115			SCALES				0
	HSF0101	3824	MW	125			SCALES				0
	HSF0101	3825	BT	200			SCALES				0
	HSF0101	3826	MW	41							0
	HSF0101	3827	MW	105							0
	HSF0101	3828	MW	59							0
	HSF0101	4364	MW	123							0
	HSF0101	4365	MW	99							0
	HSF0101	4366	MW	61							0
	HSF0101	4367	MW	60							0
	HSF0101	4368	MW	110							0
	HSF0101	4369	MW	113							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0101	4370	MW	115							0
	HSF0101	4371	MW	55							0
	HSF0101	4372	MW	60							0
	HSF0101	4373	MW	49							0
	HSF0101	4374	MW	54							0
	HSF0101	4375	MW	59							0
	HSF0101	4376	LNC	40							0
	HSF0101	4377	MW	51							0
	HSF0101	4378	MW	109							0
	HSF0101	4379	MW	60							0
	HSF0101	4380	MW	63							0
	HSF0101	4381	MW	44							0
	HSF0101	4382	MW	65							0
	HSF0101	4383	MW	50							0
	HSF0101	4384	MW	44							0
	HSF0101	4385	MW	64							0
	HSF0101	4386	MW	55							0
	HSF0101	4387	MW	64							0
	HSF0101	4388	MW	57							0
	HSF0101	4389	MW	47							0
	HSF0101	4390	MW	175							0
	HSF0101	4391	MW	123							0
	HSF0101	4392	MW	44							0
	HSF0101	4393	MW	126							0
	HSF0101	4394	MW	109							0
	HSF0101	4395	MW	62							0
	HSF0101	4396	LSU	115							0
	HSF0101	4397	MW	45							0
	HSF0101	4398	CCG	71							0
	HSF0101	7564	LSU	161							0
	HSF0102	4399	MW	124							0
	HSF0102	4400	MW	122							0
	HSF0102	4401	MW	132							0
	HSF0102	4402	MW	105							0
	HSF0102	4403	MW	111							0
	HSF0102	4404	MW	104							0
	HSF0102	4405	MW	114							0
	HSF0102	4406	MW	62							0
	HSF0102	4407	MW	62							0
	HSF0102	4408	MW	114							0
	HSF0102	4409	MW	107							0
	HSF0102	4410	MW	154							0
	HSF0102	4411	MW	110							0
	HSF0102	4412	MW	105							0
	HSF0102	4413	MW	119							0
	HSF0102	4414	MW	53							0
	HSF0102	4415	MW	113							0
	HSF0102	4416	MW	124							0
	HSF0102	4417	MW	118							0
	HSF0102	4418	MW	113							0
	HSF0102	4419	MW	123							0
	HSF0102	4420	MW	115							0
	HSF0102	4421	MW	60							0
	HSF0102	4422	LSU	163							0
	HSF0102	4423	MW	161							0
	HSF0102	4424	MW	168							0
	HSF0102	4425	MW	113							0
	HSF0102	4426	MW	172							0
	HSF0102	4427	MW	125							0
	HSF0102	4428	MW	120							0
	HSF0102	4429	MW	135							0
	HSF0102	4430	MW	115							0
	HSF0102	4431	MW	110							0
	HSF0102	4432	MW	111							0
	HSF0102	4433	MW	120							0
	HSF0102	4434	MW	119							0
	HSF0102	4435	MW	60							0
	HSF0102	4436	MW	61							0
	HSF0102	4437	MW	120							0
	HSF0102	4438	GR	135							0
	HSF0102	4439	GR	129							0
	HSF0102	4440	MW	115							0
	HSF0102	4441	MW	108							0
	HSF0102	4442	MW	122							0
	HSF0102	4443	MW	118							0
	HSF0102	4444	MW	125							0
	HSF0102	4445	MW	113							0
	HSF0102	4446	MW	114							0
	HSF0102	4447	GR	70							0
	HSF0102	4448	MW	114							0
	HSF0102	4449	MW	61							0
	HSF0102	4450	MW	45							0
	HSF0102	4451	MW	49							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0102	4452	LSU	185							0
	HSF0102	4453	GR	131							0
	HSF0102	4454	MW	109							0
	HSF0102	4455	MW	113							0
	HSF0102	4456	MW	119							0
	HSF0102	4457	MW	103							0
	HSF0102	4458	MW	59							0
	HSF0102	4459	MW	65							0
	HSF0102	4460	MW	109							0
	HSF0102	4461	CCG	90							0
	HSF0102	4462	MW	64							0
	HSF0102	4463	MW	65							0
	HSF0102	4464	CCG	81							0
	HSF0102	4465	LNC	79							0
	HSF0102	4466	CCG	58							0
	HSF0102	4467	GR	112							0
	HSF0102	4468	MW	115							0
	HSF0102	4469	MW	105							0
	HSF0102	4470	MW	109							0
	HSF0102	4471	LSU	104							0
	HSF0102	4472	MW	110							0
	HSF0102	4473	MW	115							0
	HSF0102	4474	GR	125							0
	HSF0102	4475	LSU	129							0
	HSF0102	4476	GR	180							0
	HSF0102	4477	GR	196							0
	HSF0102	4478	MW	113							0
	HSF0102	4479	MW	120							0
	HSF0102	4480	MW	117							0
	HSF0102	4481	MW	131							0
	HSF0102	4482	MW	110							0
	HSF0102	4483	LSU	105							0
	HSF0102	4484	MW	99							0
	HSF0102	4485	LNC	64							0
	HSF0102	4486	MW	105							0
	HSF0102	4487	CCG	71							0
	HSF0102	4488	CCG	70							0
	HSF0102	4489	MW	63							0
	HSF0103	4490	BT	229			SCALES				0
	HSF0103	4491	MW	124							0
	HSF0103	4492	MW	105							0
	HSF0103	4493	MW	109							0
	HSF0103	4494	MW	120							0
	HSF0103	4495	MW	117							0
	HSF0103	4496	MW	121							0
	HSF0103	4497	MW	103							0
	HSF0103	4498	MW	127							0
	HSF0103	4499	MW	116							0
	HSF0103	4500	MW	66							0
	HSF0103	4501	MW	56							0
	HSF0103	4502	MW	61							0
	HSF0103	4503	MW	51							0
	HSF0103	4504	LSU	181							0
	HSF0103	4505	MW	154							0
	HSF0103	4506	MW	110							0
	HSF0103	4507	GR	138							0
	HSF0103	4508	MW	126							0
	HSF0103	4509	MW	102							0
	HSF0103	4510	MW	110							0
	HSF0103	4511	MW	114							0
	HSF0103	4512	MW	103							0
	HSF0103	4513	MW	108							0
	HSF0103	4514	MW	114							0
	HSF0103	4515	GR	112							0
	HSF0103	4516	MW	110							0
	HSF0103	4517	MW	65							0
	HSF0103	4518	MW	70							0
	HSF0103	4519	MW	63							0
	HSF0103	4520	LSU	143							0
	HSF0103	4521	MW	188							0
	HSF0103	4522	GR	131							0
	HSF0103	4523	MW	112							0
	HSF0103	4524	MW	109							0
	HSF0103	4525	MW	54							0
	HSF0103	4526	GR	139							0
	HSF0103	4527	MW	109							0
	HSF0103	4528	MW	108							0
	HSF0103	4529	MW	109							0
	HSF0103	4530	MW	113							0
	HSF0103	4531	MW	108							0
	HSF0103	4532	MW	121							0
	HSF0103	4533	MW	49							0
	HSF0103	4534	MW	61							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0103	4535	MW	123							0
	HSF0103	4536	MW	120							0
	HSF0103	4537	MW	116							0
	HSF0103	4538	MW	107							0
	HSF0103	4539	RB	135							0
	HSF0103	4540	MW	124							0
	HSF0103	4541	MW	49							0
	HSF0103	4542	CCG	74							0
	HSF0103	4543	CCG	66							0
	HSF0103	4544	LSU	124							0
	HSF0103	4545	MW	65							0
	HSF0103	4546	CCG	86							0
	HSF0103	4547	MW	64							0
	HSF0103	4548	CCG	63							0
	HSF0104	4549	BT	257			SCALES				0
	HSF0104	4550	GR	203							0
	HSF0104	4551	GR	137							0
	HSF0104	4552	GR	112							0
	HSF0104	4553	MW	66							1
	HSF0104	4554	MW	117							0
	HSF0104	4555	MW	64							0
	HSF0104	4556	MW	56							0
	HSF0104	4557	MW	45							0
	HSF0104	4558	MW	114							0
	HSF0104	4559	MW	120							0
	HSF0104	4560	MW	54							0
	HSF0104	4561	MW	63							0
	HSF0104	4562	MW	110							0
	HSF0104	4563	MW	65							0
	HSF0104	4564	MW	118							0
	HSF0104	4565	LSU	116							0
	HSF0104	4566	MW	52							0
	HSF0104	4567	MW	132							0
	HSF0104	4568	CCG	63							0
	HSF0104	4569	MW	54							0
	HSF0104	4570	MW	118							0
	HSF0104	4571	MW	46							0
	HSF0104	4572	MW	59							0
	HSF0104	4573	MW	114							0
	HSF0104	4574	MW	58							0
	HSF0104	4575	MW	54							0
	HSF0104	4576	MW	65							0
	HSF0104	4577	MW	53							0
	HSF0104	4578	MW	50							0
	HSF0104	4579	MW	47							0
	HSF0104	4580	GR	57							0
	HSF0104	4581	LSU	162							0
	HSF0104	4582	MW	77							0
	HSF0104	4583	MW	45							0
	HSF0104	4584	MW	107							0
	HSF0104	4585	GR	126							0
	HSF0104	4586	CCG	58							0
	HSF0104	4587	MW	68							0
	HSF0104	4588	GR	136							0
	HSF0104	4589	LSU	154							0
	HSF0104	4590	MW	123							0
	HSF0104	4591	CCG	67							0
	HSF0104	4592	GR	134							0
	HSF0104	4593	CCG	65							0
	HSF0104	4594	RB	164			SCALES	1			0
	HSF0104	4595	MW	108							0
	HSF0104	4596	CCG	82							0
	HSF0104	4597	MW	63							0
	HSF0104	4598	MW	116							0
	HSF0104	4599	CCG	53							0
	HSF0104	4600	MW	121							0
	HSF0104	4601	MW	62							0
	HSF0104	4602	MW	55							0
	HSF0104	4603	CCG	77							0
	HSF0104	4604	MW	66							0
	HSF0104	4605	MW	52							0
	HSF0104	4606	GR	113							0
	HSF0104	4607	MW	63							0
	HSF0104	4608	MW	57							0
	HSF0104	4609	CCG	73							0
	HSF0104	4610	CCG	70							0
	HSF0104	4611	CCG	70							0
	HSF0104	4612	CCG	65							0
	HSF0104	4613	CCG	66							0
	HSF0104	4614	CCG	61							0
	HSF0104	4615	CCG	73							0
	HSF0104	4616	MW	51							0
	HSF0104	4617	MW	58							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0104	4618	MW	64							0
	HSF0104	4619	MW	60							0
	HSF0104	4620	MW	50							0
	HSF0104	4621	MW	52							0
	HSF0104	4622	MW	60							0
	HSF0104	4623	MW	62							0
	HSF0105	4624	BT	182			SCALES				0
	HSF0105	4625	BT	232			SCALES	2			0
	HSF0105	4626	BT	233			SCALES	2			0
	HSF0105	4627	GR	192							0
	HSF0105	4628	MW	167							0
	HSF0105	4629	MW	233							0
	HSF0105	4630	MW	157							0
	HSF0105	4631	MW	234							0
	HSF0105	4632	GR	122							0
	HSF0105	4633	MW	112							0
	HSF0105	4634	GR	132							0
	HSF0105	4635	GR	140							0
	HSF0105	4636	GR	150							0
	HSF0105	4637	MW	134							0
	HSF0105	4638	GR	123							0
	HSF0105	4639	MW	110							0
	HSF0105	4640	CCG	74							0
	HSF0105	4641	MW	160							0
	HSF0105	4642	LSU	112							0
	HSF0105	4643	LSU	128							0
	HSF0105	4644	MW	104							0
	HSF0105	4645	CCG	58							0
	HSF0105	4646	MW	116							0
	HSF0105	4647	MW	158							0
	HSF0105	4648	CCG	77							0
	HSF0105	4649	GR	111							0
	HSF0105	4650	MW	106							0
	HSF0105	4651	LSU	115							0
	HSF0105	4652	MW	118							0
	HSF0105	4653	RB	157							0
	HSF0105	4654	MW	113							0
	HSF0105	4655	MW	108							0
	HSF0105	4656	CCG	64							0
	HSF0105	4657	MW	63							0
	HSF0105	4658	RSC	72							0
	HSF0106	4659	MW	115							0
	HSF0106	4660	MW	113							0
	HSF0106	4661	GR	121							0
	HSF0106	4662	MW	57							0
	HSF0106	4663	MW	68							0
	HSF0106	4664	LSU	126							0
	HSF0106	4665	MW	114							0
	HSF0106	4666	MW	100							0
	HSF0106	4667	MW	116							0
	HSF0106	4668	MW	111							0
	HSF0106	4669	MW	113							0
	HSF0106	4670	MW	110							0
	HSF0106	4671	MW	64							0
	HSF0106	4672	MW	71							0
	HSF0106	4673	MW	113							0
	HSF0106	4674	MW	169							0
	HSF0106	4675	GR	117							0
	HSF0107	4676	MW	65							0
	HSF0107	4677	MW	62							0
	HSF0107	4678	MW	153							0
	HSF0107	4679	MW	126							0
	HSF0107	4680	MW	123							0
	HSF0107	4681	MW	113							0
	HSF0107	4682	MW	51							0
	HSF0107	4683	MW	115							0
	HSF0107	4684	MW	60							0
	HSF0107	4685	MW	55							0
	HSF0107	4686	MW	108							0
	HSF0107	4687	MW	162							0
	HSF0107	4688	MW	103							0
	HSF0107	4689	MW	66							0
	HSF0107	4690	MW	102							0
	HSF0107	4691	MW	50							0
	HSF0107	4692	CCG	62							0
	HSF0107	4693	LSU	92							0
	HSF0107	4694	MW	63							0
	HSF0107	4695	LSU	87							0
	HSF0107	4696	MW	70							0
	HSF0107	4697	MW	117							0
	HSF0107	4698	MW	128							0
	HSF0107	4699	MW	115							0
	HSF0107	4700	MW	118							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0107	4701	MW	59							0
	HSF0107	4702	MW	63							0
	HSF0107	4703	MW	58							0
	HSF0107	4704	MW	112							0
	HSF0107	4705	MW	115							0
	HSF0107	7624	BT	780							0
	MBS0101	3061	TP	50							0
	MBS0101	3062	TP	54							0
	MBS0101	3063	LSU	69							0
	MBS0101	3064	LNC	21							0
	MBS0101	3065	LSU	82							0
	MBS0101	3066	TP	52							0
	MBS0101	3067	LNC	22							0
	MBS0101	3068	LSU	31							0
	MBS0101	3069	CCG	23							0
	MBS0101	3070	LNC	27							0
	MBS0101	3071	LSU	35							0
	MBS0101	3072	LNC	22							0
	MBS0101	3073	LSU	31							0
	MBS0101	3074	LSU	34							0
	MBS0101	3075	YSU	22							0
	MBS0101	3076	YSU	30							0
	MBS0101	3077	LSU	33							0
	MBS0101	3078	LNC	21							0
	MBS0101	3079	LNC	22							0
	MBS0101	3080	YSU	20							0
	MBS0101	3081	YSU	22							0
	MBS0101	3082	YSU	19							0
	MBS0101	3083	LSU	24							0
	MBS0101	3084	LNC	17							0
	MBS0101	3085	YSU	23							0
	MBS0101	3086	LNC	22							0
	MBS0101	3087	CCG	29							0
	MBS0101	3088	LNC	28							0
	MBS0101	3089	YSU	21							0
	MEF0101	2784	BB	142							0
	MEF0101	2785	LNC	20							0
	MEF0102	2786	TP	52							0
	MEF0102	2787	LNC	20							0
	MSF0101	1	MW	263							0
	MSF0101	2	MW	262							0
	MSF0101	3	MW	239							0
	MSF0101	4	MW	215							0
	MSF0101	5	MW	201							0
	MSF0101	6	MW	198							0
	MSF0101	7	MW	169							0
	MSF0101	8	MW	121			SCALES	1			0
	MSF0101	9	MW	120			SCALES	1			0
	MSF0101	10	RSC	110							0
	MSF0101	11	GR	163			SCALES				0
	MSF0101	12	MW	176							0
	MSF0101	13	MW	120							0
	MSF0101	14	MW	105			SCALES				0
	MSF0101	15	NP	162			SCALES	1			0
	MSF0101	16	NP	122			SCALES				0
	MSF0101	17	NP	136			SCALES				0
	MSF0101	18	MW	127							0
	MSF0101	19	MW	151							0
	MSF0101	20	TP	49							0
	MSF0101	21	CCG	73							0
	MSF0101	22	CAS	77							0
	MSF0101	23	LNC	79							0
	MSF0101	24	CCG	59							0
	MSF0101	25	TP	60							0
	MSF0102	26	MW	171							0
	MSF0102	27	MW	224							0
	MSF0102	28	MW	209							0
	MSF0102	29	MW	154							0
	MSF0102	30	MW	176							0
	MSF0102	31	LNC	85							0
	MSF0102	32	MW	66			SCALES	0			0
	MSF0102	33	MW	61			SCALES	0			0
	MSF0102	34	TP	69							0
	MSF0102	35	MW	66							0
	MSF0102	36	LNC	71							0
	MSF0102	37	LNC	52							0
	MSF0102	38	CCG	73							0
	MSF0102	39	MW	63							0
	MSF0103	40	GR	220			SCALES	2			0
	MSF0103	41	MW	166							0
	MSF0103	42	MW	172							0
	MSF0103	43	MW	171							0
	MSF0103	44	MW	64							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0103	45	MW	166							0
	MSF0103	46	RSC	64							0
	MSF0103	47	MW	130							0
	MSF0103	48	RSC	96							0
	MSF0103	49	MW	132							0
	MSF0103	50	WSC	324							0
	MSF0103	51	MW	164							0
	MSF0103	52	MW	60							0
	MSF0103	53	CCG	74							0
	MSF0103	54	CCG	63							0
	MSF0103	55	MW	167							0
	MSF0103	56	MW	218							0
	MSF0104	57	GR	221			SCALES	2			0
	MSF0104	58	GR	323			SCALES	5			0
	MSF0104	59	WSC	324							0
	MSF0104	60	BB	238							0
	MSF0104	61	MW	274							0
	MSF0104	62	BB	203							0
	MSF0104	63	BB	169							0
	MSF0104	64	MW	215							0
	MSF0104	65	MW	207							0
	MSF0104	66	WSC	178							0
	MSF0104	67	WSC	131							0
	MSF0104	68	MW	164							0
	MSF0104	69	MW	167							0
	MSF0104	70	NP	129							0
	MSF0104	71	TP	61							0
	MSF0104	72	LNC	75							0
	MSF0104	73	LNC	77							0
	MSF0104	74	RSC	95							0
	MSF0104	75	RSC	97							0
	MSF0104	76	RSC	94							0
	MSF0104	77	LNC	78							0
	MSF0104	78	MW	68							0
	MSF0104	79	RSC	100							0
	MSF0104	80	CCG	53							0
	MSF0104	81	RSC	74							0
	MSF0104	82	CCG	57							0
	MSF0105	83	MW	169							0
	MSF0105	84	BB	204							0
	MSF0105	85	RSC	90							1
	MSF0105	86	TP	74							0
	MSF0105	87	BB	131							0
	MSF0105	88	CCG	83							0
	MSF0105	89	CCG	85							0
	MSF0105	90	RSC	93							0
	MSF0105	91	TP	62							0
	MSF0105	92	RSC	50							1
	MSF0105	93	RSC	89							0
	MSF0105	94	RSC	92							0
	MSF0105	95	TP	60							0
	MSF0105	96	MW	54							0
	MSF0105	97	RSC	45							0
	MSF0105	98	RSC	51							0
	MSF0105	99	YSU	20							0
	MSF0106	104	WSC	180							0
	MSF0106	105	TP	67							0
	MSF0106	106	LNC	42							0
	MSF0106	107	RSC	54							0
02											
	HBS0201	3250	MW	31							0
	HBS0201	3251	LSU	21							0
	HBS0201	3252	LSU	15							0
	HBS0201	3253	LSU	23							0
	HBS0201	3254	LNC	24							0
	HBS0201	3255	LSU	23							0
	HBS0201	3256	LSU	22							0
	HBS0201	3257	LSU	21							0
	HBS0201	3258	LSU	25							0
	HBS0201	3259	LSU	14							0
	HBS0201	3260	LSU	23							0
	HBS0201	3261	LSU	23							0
	HBS0201	3262	LSU	24							0
	HBS0201	3263	LSU	23							0
	HBS0201	3264	LNC	18							0
	HEF0201	3402	GR	46							0
	HEF0201	3403	LSU	115							0
	HEF0201	3404	CCG	95							0
	HEF0201	3405	CCG	84							0
	HEF0201	3406	CCG	90							0
	HEF0201	3407	CCG	77							0
	HEF0201	3408	CCG	80							0
	HEF0201	3409	CCG	67							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0201	3410	CCG	66							0
	HEF0201	3411	CCG	72							0
	HEF0201	3412	CCG	19							0
	HEF0201	3413	CCG	18							0
	HEF0201	3414	LSU	29							0
	HEF0201	3415	LSU	24							0
	HEF0201	3416	LSU	21							0
	HEF0201	3417	LSU	19							0
	HEF0201	3418	LSU	32							0
	HEF0201	3419	LSU	28							0
	HEF0201	3420	LSU	20							0
	HEF0201	3421	LSU	26							0
	HEF0201	3422	LSU	15							0
	HEF0202	3524	BT	191			SCALES	1			0
	HEF0202	3525	BT	223			SCALES				0
	HEF0202	3526	RB	127							0
	HEF0202	3527	LSU	119							0
	HEF0202	3528	CCG	72							0
	HEF0202	3529	MW	57							0
	HEF0202	3530	MW	69							0
	HEF0202	3531	MW	60							0
	HEF0202	3532	MW	65							0
	HEF0202	3533	MW	36							0
	HEF0202	3534	LSU	72							0
	HEF0202	3535	MW	59							0
	HEF0202	3536	LNC	61							0
	HEF0202	3537	LNC	62							0
	HEF0202	3538	MW	61							0
	HEF0202	3539	CCG	75							0
	HEF0202	3540	CCG	51							0
	HEF0202	3541	CCG	75							0
	HEF0202	3542	MW	54							0
	HEF0202	3543	MW	68							0
	HEF0202	3544	LNC	79							0
	HEF0202	3545	CCG	22							0
	HEF0202	3546	GR	60							0
	HEF0203	3547	MW	72							0
	HEF0203	3548	LSU	143							0
	HEF0203	3549	LSU	111							0
	HEF0203	3550	LSU	68							0
	HEF0203	3551	LSU	70							0
	HEF0203	3552	LSU	109							0
	HEF0203	3553	LSU	109							0
	HEF0203	3554	LSU	105							0
	HEF0203	3555	LSU	66							0
	HEF0203	3556	LSU	110							0
	HEF0203	3557	LSU	81							0
	HEF0203	3558	MW	54							0
	HEF0203	3559	MW	45							0
	HEF0203	3560	MW	62							0
	HEF0203	3561	MW	53							0
	HEF0203	3562	MW	53							0
	HEF0203	3563	MW	50							0
	HEF0203	3564	MW	65							0
	HEF0203	3565	MW	58							0
	HEF0203	3566	MW	52							0
	HEF0203	3567	LKC	56							0
	HEF0203	3568	RSC	81							0
	HEF0203	3569	CCG	61							0
	HEF0203	3570	CCG	68							0
	HEF0203	3571	GR	61							0
	HEF0203	3572	CCG	71							0
	HEF0203	3573	GR	49							0
	HEF0203	3574	CCG	71							0
	HEF0203	3575	GR	39							0
	HEF0204	3576	LKC	78							0
	HEF0204	3577	RSC	79							0
	HEF0204	3578	MW	68							0
	HEF0204	3579	MW	68							0
	HEF0204	3580	MW	54							0
	HEF0204	3581	MW	55							0
	HEF0204	3582	MW	52							0
	HEF0204	3583	MW	56							0
	HEF0204	3584	MW	57							0
	HEF0204	3585	MW	53							0
	HEF0204	3586	MW	56							0
	HEF0204	3587	MW	65							0
	HEF0204	3588	LKC	69							0
	HEF0204	3589	CCG	89							0
	HEF0204	3590	LSU	62							0
	HEF0204	3591	LSU	88							0
	HEF0204	3592	LSU	85							0
	HEF0204	3593	LSU	57							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0204	3594	LSU	65							0
	HEF0204	3595	LSU	82							0
	HEF0204	3596	LSU	66							0
	HEF0204	3597	LSU	86							0
	HEF0204	3598	LSU	89							0
	HEF0204	3599	LSU	69							0
	HEF0204	3600	LKC	78							0
	HEF0204	3601	LNC	67							0
	HEF0204	3602	LKC	66							0
	HEF0204	3603	LNC	62							0
	HEF0204	3604	LSU	76							0
	HEF0204	3605	LNC	44							0
	HEF0204	3606	CCG	31							0
	HEF0204	3607	CCG	53							0
	HEF0205	3608	RB	190							0
	HEF0205	3609	BT	182							0
	HEF0205	3610	LSU	138							0
	HEF0205	3611	LSU	193							0
	HEF0205	3612	LSU	160							0
	HEF0205	3613	LSU	148							0
	HEF0205	3614	LSU	126							0
	HEF0205	3615	LNC	67							0
	HEF0205	3616	LNC	88							0
	HEF0205	3617	MW	70							0
	HEF0205	3618	LNC	86							0
	HEF0205	3619	CCG	78							0
	HEF0205	3620	CCG	69							0
	HEF0205	3621	MW	49							0
	HSF0201	4706	MW	128			SCALES	1			0
	HSF0201	4707	MW	157							0
	HSF0201	4708	MW	172			SCALES				0
	HSF0201	4709	MW	105			SCALES	1			0
	HSF0201	4710	MW	60			SCALES				0
	HSF0201	4711	MW	69			SCALES				0
	HSF0201	4712	GR	138			SCALES				0
	HSF0201	4713	LSU	85							0
	HSF0201	4714	RB	125			SCALES	1			0
	HSF0201	4715	RB	146			SCALES				0
	HSF0201	4716	MW	128							0
	HSF0201	4717	MW	138							0
	HSF0201	4718	MW	122							0
	HSF0201	4719	MW	71							0
	HSF0201	4720	MW	68							0
	HSF0201	4721	LSU	106							0
	HSF0201	4722	LSU	93							0
	HSF0201	4723	MW	111							0
	HSF0201	4724	MW	117							0
	HSF0201	4725	MW	121							0
	HSF0201	4726	MW	113							0
	HSF0201	4727	MW	115							0
	HSF0201	4728	MW	120							0
	HSF0201	4729	MW	71							0
	HSF0201	4730	MW	133							0
	HSF0201	4731	LNC	72							0
	HSF0201	4732	CCG	68							0
	HSF0201	4733	MW	144							0
	HSF0202	4734	BT	222			SCALES	2			0
	HSF0202	4735	RB	170			SCALES				0
	HSF0202	4736	GR	137			SCALES				0
	HSF0202	4737	RB	157			SCALES				0
	HSF0202	4738	GR	142			SCALES				0
	HSF0202	4739	GR	141			SCALES	1			0
	HSF0202	4740	MW	126							0
	HSF0202	4741	MW	135							0
	HSF0202	4742	MW	127							0
	HSF0202	4743	GR	141			SCALES	1			0
	HSF0202	4744	LSU	145							0
	HSF0202	4745	MW	70							0
	HSF0202	4746	MW	77							0
	HSF0202	4747	MW	196							0
	HSF0202	4748	MW	182							0
	HSF0202	4749	MW	118							0
	HSF0202	4750	MW	113							0
	HSF0202	4751	MW	47							0
	HSF0202	4752	MW	140							0
	HSF0202	4753	MW	103							0
	HSF0202	4754	MW	46							0
	HSF0202	4755	MW	116							0
	HSF0202	4756	MW	118							0
	HSF0202	4757	MW	130							0
	HSF0202	4758	MW	101							0
	HSF0202	4759	MW	56							0
	HSF0202	4760	MW	122							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0202	4761	MW	55							0
	HSF0202	4762	CCG	56							0
	HSF0202	4763	MW	104							0
	HSF0202	4764	CCG	88							0
	HSF0202	4765	MW	128							0
	HSF0202	4766	MW	113							0
	HSF0202	4767	MW	122							0
	HSF0202	4768	MW	57							0
	HSF0202	4769	MW	116							0
	HSF0202	4770	MW	70							0
	HSF0202	4771	MW	50							0
	HSF0202	4772	CCG	24							0
	HSF0202	4773	MW	116							0
	HSF0202	4774	MW	66							0
	HSF0202	4775	MW	127							0
	HSF0202	4776	MW	123							0
	HSF0202	4777	MW	122							0
	HSF0202	4778	MW	50							0
	HSF0202	4779	CCG	67							0
	HSF0203	4780	LSU	177							0
	HSF0203	4781	MW	91							0
	HSF0203	4782	RB	147			SCALES				0
	HSF0203	4783	MW	200							0
	HSF0203	4784	MW	67							0
	HSF0203	4785	MW	112							0
	HSF0203	4786	MW	118							0
	HSF0203	4787	GR	124							0
	HSF0203	4788	MW	65							0
	HSF0203	4789	RB	155							0
	HSF0203	4790	MW	100							0
	HSF0203	4791	LSU	151							0
	HSF0203	4792	MW	117							0
	HSF0203	4793	MW	125							0
	HSF0203	4794	MW	124							0
	HSF0203	4795	LSU	102							0
	HSF0203	4796	GR	134							0
	HSF0203	4797	GR	145							0
	HSF0203	4798	MW	72							0
	HSF0203	4799	MW	117							0
	HSF0203	4800	MW	114							0
	HSF0203	4801	LSU	128							0
	HSF0203	4802	MW	90							0
	HSF0203	4803	MW	54							0
	HSF0203	4804	MW	45							0
	HSF0203	4805	MW	113							0
	HSF0203	4806	MW	108							0
	HSF0203	4807	MW	121							0
	HSF0203	4808	MW	123							0
	HSF0203	4809	MW	74							0
	HSF0203	4810	MW	62							0
	HSF0203	4811	MW	115							0
	HSF0203	4812	MW	54							0
	HSF0203	4813	MW	65							0
	HSF0203	4814	MW	71							0
	HSF0203	4815	MW	120							0
	HSF0203	4816	MW	90							0
	HSF0203	4817	MW	71							0
	HSF0203	4818	MW	118							0
	HSF0203	4819	LSU	117							0
	HSF0203	4820	MW	73							0
	HSF0203	4821	MW	62							0
	HSF0203	4822	LSU	62							0
	HSF0203	4823	MW	47							0
	HSF0203	4824	MW	119							0
	HSF0203	4825	MW	68							0
	HSF0203	4826	MW	54							0
	HSF0203	4827	MW	68							0
	HSF0203	4828	MW	62							0
	HSF0203	4829	MW	112							0
	HSF0203	4830	LNC	82							0
	HSF0203	4831	MW	69							0
	HSF0203	4832	MW	66							0
	HSF0203	4833	MW	67							0
	HSF0203	4834	LNC	61							0
	HSF0203	4835	MW	62							0
	HSF0203	4836	MW	64							0
	HSF0203	4837	CCG	73							0
	HSF0203	4838	CCG	84							0
	HSF0203	4839	CCG	49							0
	HSF0203	4840	CCG	52							0
	HSF0204	4841	LSU	205							0
	HSF0204	4842	LSU	210							0
	HSF0204	4843	LSU	201							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0204	4844	LSU	183							0
	HSF0204	4845	LSU	154							0
	HSF0204	4846	LSU	172							0
	HSF0204	4847	LSU	168							0
	HSF0204	4848	LSU	165							0
	HSF0204	4849	MW	65							0
	HSF0204	4850	MW	67							0
	HSF0204	4851	MW	124							0
	HSF0204	4852	GR	135							0
	HSF0204	4853	MW	115							0
	HSF0204	4854	MW	183							0
	HSF0204	4855	MW	197							0
	HSF0204	4856	MW	117							0
	HSF0204	4857	MW	118							0
	HSF0204	4858	MW	109							0
	HSF0204	4859	MW	110							0
	HSF0204	4860	MW	110							0
	HSF0204	4861	MW	64							0
	HSF0204	4862	MW	130							0
	HSF0204	4863	MW	169							0
	HSF0204	4864	MW	69							0
	HSF0204	4865	MW	111							0
	HSF0204	4866	MW	66							0
	HSF0204	4867	MW	113							0
	HSF0204	4868	MW	122							0
	HSF0204	4869	MW	66							0
	HSF0204	4870	MW	56							0
	HSF0204	4871	MW	65							0
	HSF0204	4872	MW	124							0
	HSF0204	4873	MW	130							0
	HSF0204	4874	MW	119							0
	HSF0204	4875	MW	114							0
	HSF0204	4876	MW	125							0
	HSF0204	4877	MW	116							0
	HSF0204	4878	RB	153							0
	HSF0204	4879	MW	119							0
	HSF0204	4880	MW	68							0
	HSF0204	4881	MW	109							0
	HSF0204	4882	MW	121							0
	HSF0204	4883	MW	120							0
	HSF0204	4884	MW	114							0
	HSF0204	4885	MW	139							0
	HSF0204	4886	MW	51							0
	HSF0204	4887	MW	67							0
	HSF0204	4888	RB	152							0
	HSF0204	4889	MW	133							0
	HSF0204	4890	MW	117							0
	HSF0204	4891	MW	114							0
	HSF0204	4892	MW	66							0
	HSF0204	4893	MW	117							0
	HSF0204	4894	MW	128							0
	HSF0204	4895	MW	109							0
	HSF0204	4896	MW	65							0
	HSF0204	4897	MW	62							0
	HSF0204	4898	MW	133							0
	HSF0204	4899	MW	125							0
	HSF0204	4900	MW	56							0
	HSF0204	4901	MW	65							0
	HSF0204	4902	CCG	65							0
	HSF0204	4903	CCG	71							0
	HSF0204	4904	BT	198							0
	HSF0205	4905	LSU	147							0
	HSF0205	4906	MW	134							0
	HSF0205	4907	MW	128							0
	HSF0205	4908	MW	124							0
	HSF0205	4909	MW	119							0
	HSF0205	4910	MW	119							0
	HSF0205	4911	MW	133							0
	HSF0205	4912	MW	65							0
	HSF0205	4913	MW	122							0
	HSF0205	4914	MW	110							0
	HSF0205	4915	MW	105							0
	HSF0205	4916	LSU	146							0
	HSF0205	4917	MW	65							0
	HSF0205	4918	MW	65							0
	HSF0205	4919	MW	71							0
	HSF0205	4920	MW	63							0
	HSF0205	4921	MW	65							0
	HSF0205	4922	RB	155							0
	HSF0205	4923	RB	158							0
	HSF0205	4924	MW	129							0
	HSF0205	4925	MW	115							0
	HSF0205	4926	GR	67			SCALES				0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0205	4927	MW	55							0
	HSF0205	4928	MW	70							0
	HSF0205	4929	MW	58							0
	HSF0205	4930	MW	72							0
	HSF0205	4931	MW	55							0
	HSF0205	4932	LSU	105							0
	HSF0205	4933	LSU	138							0
	HSF0205	4934	LSU	122							0
	HSF0205	4935	GR	142							0
	HSF0205	4936	MW	42							0
	HSF0205	4937	LSU	84							0
	HSF0205	7565	MW	55							0
	HSF0205	7625	BT	488							0
	HSF0205	7626	GR	224							0
	MBS0202	3090	NP	107							0
	MBS0202	3091	LNC	14							0
	MEF0202	2788	CCG	73							0
	MEF0202	2789	BB	103							0
	MEF0203	2790	CCG	73							0
	MEF0203	2791	CCG	73							0
	MEF0203	2792	CCG	71							0
	MEF0203	2793	CCG	65							0
	MEF0203	2794	LNC	67							0
	MEF0203	2795	LNC	84							0
	MEF0203	2796	LNC	46							0
	MEF0203	2797	LNC	63							0
	MEF0203	2798	LNC	42							0
	MEF0204	2799	CCG	73							0
	MEF0204	2800	BB	128							0
	MEF0204	2801	LNC	58							0
	MEF0204	2802	CCG	65							0
	MEF0204	2803	LNC	60							0
	MEF0204	2804	LNC	50							0
	MEF0204	2805	CCG	53							0
	MEF0204	2806	LNC	68							0
	MEF0204	2807	BB	57							0
	MEF0205	2808	BB	56							0
	MSF0201	100	NP	574			SCALES	5			0
	MSF0201	101	MW	306			SCALES	7			0
	MSF0201	102	MW	293							0
	MSF0201	103	WSC	313			SCALES				0
	MSF0201	108	WSC	331							0
	MSF0201	109	MW	182			SCALES				0
	MSF0201	110	LSU	204			SCALES				0
	MSF0201	111	MW	228							0
	MSF0201	112	WSC	166			SCALES				0
	MSF0201	113	CCG	89							0
	MSF0201	114	LNC	67							0
	MSF0201	115	NP	97			SCALES	0			0
	MSF0201	116	RSC	74							0
	MSF0201	117	RSC	84							0
	MSF0201	118	NP	116			SCALES	0			0
	MSF0201	119	RSC	96							0
	MSF0202	120	MW	273							0
	MSF0202	121	MW	198							0
	MSF0202	122	WSC	210			SCALES				0
	MSF0202	123	MW	178							0
	MSF0202	124	WSC	206							0
	MSF0202	125	MW	195							0
	MSF0202	126	NP	123			SCALES	0			0
	MSF0202	127	NP	100							0
	MSF0202	128	NP	105							0
	MSF0202	129	WSC	32							0
	MSF0203	130	WSC	239							0
	MSF0203	131	MW	167							0
	MSF0203	132	WSC	175							0
	MSF0203	133	RSC	101							0
	MSF0203	134	TP	64							0
	MSF0203	135	TP	60							0
	MSF0203	136	TP	49							0
	MSF0203	137	NP	109							0
	MSF0203	138	RSC	104							0
	MSF0203	139	TP	52							0
	MSF0204	140	LW	330			SCALES				0
	MSF0204	141	MW	308							0
	MSF0204	142	NP	784			SCALES	8			0
	MSF0204	143	NP	543							0
	MSF0204	144	MW	250			SCALES	4			0
	MSF0204	145	MW	137			SCALES				0
	MSF0204	146	RSC	105							0
	MSF0204	147	RSC	103							0
	MSF0204	148	RSC	88							0
	MSF0204	149	RSC	98							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0204	150	RSC	70							0
	MSF0204	151	RSC	73							0
	MSF0204	152	RSC	58							0
	MSF0204	153	RSC	99							0
	MSF0204	154	RSC	57							0
	MSF0204	155	BB	113							0
	MSF0204	156	CCG	74							0
	MSF0204	157	WSC	109			SCALES				0
	MSF0204	158	CAS	69							0
	MSF0205	159	MW	303							0
	MSF0205	160	MW	278							0
	MSF0205	161	LSU	196							0
	MSF0205	162	RSC	95							0
	MSF0205	163	RSC	94							0
	MSF0205	164	RSC	91							0
	MSF0205	165	WSC	192							0
	MSF0205	166	RSC	76							0
	MSF0205	167	RSC	93							0
	MSF0205	168	RSC	90							0
	MSF0205	169	RSC	105							0
	MSF0205	170	RSC	98							0
	MSF0205	171	RSC	96							0
	MSF0205	172	RSC	95							0
	MSF0205	173	RSC	100							0
	MSF0205	174	RSC	92							0
	MSF0205	175	RSC	85							0
	MSF0205	176	LSU	185			SCALES				0
	MSF0205	177	RSC	92							0
	MSF0205	178	WSC	155			SCALES				0
	MSF0205	179	BB	181							0
	MSF0206	180	MW	312							0
	MSF0206	181	MW	242							0
	MSF0206	182	MW	245							0
	MSF0206	183	MW	240							0
	MSF0206	184	MW	265							0
	MSF0206	185	MW	216							0
	MSF0206	186	WSC	242							0
	MSF0206	187	MW	168							0
	MSF0206	188	MW	138							0
	MSF0206	189	MW	161							0
	MSF0206	190	LSU	163							0
	MSF0206	191	RSC	98							0
	MSF0206	192	RSC	90							0
	MSF0206	193	BB	143							0
	MSF0206	194	LNC	106							0
	MSF0206	195	LNC	73							0
	MSF0206	196	CCG	77							0
	MSF0207	197	MW	271							0
	MSF0207	198	MW	208							0
	MSF0207	199	MW	234							0
	MSF0207	200	MW	269							0
	MSF0207	201	MW	215							0
	MSF0207	202	MW	270							0
	MSF0207	203	MW	198							0
	MSF0207	204	MW	166							0
	MSF0207	205	MW	212							0
	MSF0207	206	BB	205							1
	MSF0207	207	MW	215							0
	MSF0207	208	MW	172							0
	MSF0207	209	MW	198							0
	MSF0207	210	MW	169							0
	MSF0207	211	MW	223							0
	MSF0207	212	MW	166							0
	MSF0207	213	MW	71			SCALES	0			0
	MSF0207	214	MW	134							0
	MSF0207	215	MW	199							0
	MSF0207	216	LSU	195			SCALES				0
	MSF0207	217	RSC	42							0
	MSF0207	218	MW	169							0
	MSF0207	219	MW	121							0
	MSF0207	220	LNC	80							0
	MSF0207	221	RSC	94							0
	MSF0207	222	LNC	73							0
	MSF0207	223	MW	152							0
	MSF0207	224	WSC	139			SCALES				0
	MSF0207	225	MW	127							0
	MSF0207	226	MW	120							0
	MSF0207	227	MW	127							0
	MSF0207	228	LNC	76							0
	MSF0207	229	MW	169							0
	MSF0207	230	MW	130							0
	MSF0207	231	MW	168							0
	MSF0207	232	MW	119							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0207	233	RSC	71							0
	MSF0207	234	MW	130							0
	MSF0207	235	MW	127							0
	MSF0207	236	MW	133							0
	MSF0207	237	RSC	106		9					0
	MSF0207	238	MW	124							0
	MSF0207	239	RSC	106							0
	MSF0207	240	MW	116							0
	MSF0207	241	MW	110							0
	MSF0207	242	BB	165							0
	MSF0207	243	CAS	82							0
	MSF0207	244	BB	144							0
	MSF0207	245	RSC	98							0
	MSF0207	246	WSC	110							0
	MSF0207	247	RSC	97							0
	MSF0207	248	LNC	73							0
	MSF0207	249	LNC	91							0
	MSF0208	250	MW	293							0
	MSF0208	251	MW	277							0
	MSF0208	252	MW	260							0
	MSF0208	253	MW	239							0
	MSF0208	254	MW	211							0
	MSF0208	255	MW	215							0
	MSF0208	256	MW	202							0
	MSF0208	257	LSU	164			SCALES				0
	MSF0208	258	MW	220							0
	MSF0208	259	GR	154			SCALES				0
	MSF0208	260	GR	141			SCALES				0
	MSF0208	261	NP	113			SCALES	0			0
	MSF0208	262	RSC	76							1
	MSF0208	263	MW	168							0
	MSF0208	264	MW	163							0
	MSF0208	265	MW	162							0
	MSF0208	266	GR	151			SCALES				0
	MSF0208	267	MW	116							0
	MSF0208	268	MW	164							0
	MSF0208	269	MW	160							0
	MSF0208	270	TP	68							0
	MSF0208	271	RSC	105							0
	MSF0208	272	MW	154							0
	MSF0208	273	MW	158							0
	MSF0208	274	MW	127							0
	MSF0208	275	MW	128							0
	MSF0208	276	MW	119							0
	MSF0208	277	MW	139							0
	MSF0208	278	MW	69							0
	MSF0208	279	NP	109							0
	MSF0208	280	RSC	67							0
	MSF0208	281	LSU	154							0
	MSF0208	282	NP	114							0
	MSF0208	283	RSC	113		9					0
	MSF0208	284	RSC	85							0
	MSF0208	285	RSC	84							0
	MSF0208	286	RSC	101		9					0
	MSF0208	287	BB	116							0
	MSF0208	288	TP	76							0
	MSF0208	289	RSC	81							0
	MSF0208	290	TP	65							0
	MSF0208	291	LSU	65							0
	MSF0208	292	BB	159							0
	MSF0208	293	CAS	73							0
	MSF0208	294	LNC	76							0
	MSF0209	295	MW	261							0
	MSF0209	296	MW	203							0
	MSF0209	297	MW	257							0
	MSF0209	298	GR	254			SCALES	3			0
	MSF0209	299	NP	288							0
	MSF0209	300	MW	125							0
	MSF0209	301	LSU	85			SCALES				0
	MSF0209	302	MW	240							0
	MSF0209	303	MW	121							0
	MSF0209	304	MW	130							0
	MSF0209	305	MW	135							0
	MSF0209	306	MW	70							0
	MSF0209	307	MW	129							0
	MSF0209	308	RSC	97							0
	MSF0209	309	MW	160							0
	MSF0209	310	CCG	67							0
	MSF0209	311	MW	219							0
	MSF0209	312	MW	205							0
	MSF0209	313	MW	178							0
	MSF0209	314	MW	193							0
	MSF0209	315	MW	187							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0209	316	MW	165							0
	MSF0209	317	CCG	77							0
	MSF0209	318	MW	218							0
	MSF0209	319	RSC	101							0
	MSF0209	320	RSC	103							0
	MSF0209	321	LSU	133							0
	MSF0209	322	WSC	119							0
	MSF0209	323	LNC	114							0
	MSF0209	324	LNC	72							0
	MSF0209	325	LNC	105							0
	MSF0209	326	CCG	68							0
	MSF0209	327	CCG	62							0
	MSF0209	328	LNC	71							0
	MSF0209	329	BB	174							0
	MSF0209	330	BB	148							0
	MSF0209	331	BB	158							0
	MSF0209	332	BB	155							0
	MSF0209	333	BB	116							0
03											
	HEF0301	3622	CCG	94							0
	HEF0301	3623	CCG	65							0
	HEF0301	3624	CCG	65							0
	HEF0301	3625	CCG	55							0
	HEF0301	3626	LSU	90							0
	HEF0301	3627	LNC	64							0
	HEF0301	3628	LSU	63							0
	HEF0301	3629	LKC	86							0
	HEF0301	3630	CCG	75							0
	HEF0301	3631	LSU	111							0
	HEF0301	3632	CCG	60							0
	HEF0301	3633	LSU	118							0
	HEF0301	3634	CCG	62							0
	HEF0301	3635	LSU	58							0
	HEF0301	3636	LSU	106							0
	HEF0301	3637	CCG	65							0
	HEF0301	3638	LNC	70							0
	HEF0301	3639	LNC	63							0
	HEF0301	3640	LSU	86							0
	HEF0301	3641	LNC	29							0
	HEF0301	3642	CCG	67							0
	HEF0301	3643	CCG	48							0
	HEF0301	3644	LSU	76							0
	HEF0301	3645	CCG	23							0
	HEF0301	3646	CCG	31							0
	HEF0301	3647	LSU	31							0
	HEF0302	3648	LSU	189							0
	HEF0302	3649	LSU	135							0
	HEF0302	3650	LSU	139							0
	HEF0302	3651	LSU	61							0
	HEF0302	3652	LSU	71							0
	HEF0302	3653	LSU	139							0
	HEF0302	3654	LSU	102							0
	HEF0302	3655	LSU	86							0
	HEF0302	3656	LSU	102							0
	HEF0302	3657	LSU	71							0
	HEF0302	3658	LKC	90							0
	HEF0302	3659	LKC	85							0
	HEF0302	3660	LKC	92							0
	HEF0302	3661	MW	58							0
	HEF0302	3662	LKC	84							0
	HEF0302	3663	LNC	79							0
	HEF0302	3664	LKC	69							0
	HEF0302	3665	LKC	101							0
	HEF0302	3666	MW	71							0
	HEF0302	3667	LKC	80							0
	HEF0302	3668	LKC	101							0
	HEF0302	3669	LKC	86							0
	HEF0302	3670	LKC	77							0
	HEF0302	3671	LKC	86							0
	HEF0302	3672	RSC	69							0
	HEF0302	3673	RSC	70							0
	HEF0302	3674	GR	70							0
	HEF0302	3675	LNC	69							0
	HEF0302	3676	MW	71							0
	HEF0302	3677	MW	52							0
	HEF0302	3678	MW	52							0
	HEF0302	3679	LNC	63							0
	HEF0302	3680	RSC	91							0
	HEF0302	3681	LNC	49							0
	HEF0303	3682	CCG	76							0
	HEF0303	3683	CCG	68							0
	HEF0303	3684	CCG	76							0
	HEF0303	3685	CCG	67							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0303	3686	CCG	56							0
	HEF0303	3687	CCG	78							0
	HEF0303	3688	CCG	59							0
	HEF0303	3689	CCG	74							0
	HEF0303	3690	CCG	70							0
	HEF0303	3691	CCG	54							0
	HEF0303	3692	LNC	62							0
	HEF0303	3693	LSU	72							0
	HEF0303	3694	LNC	61							0
	HEF0303	3695	MW	62							0
	HEF0303	3696	MW	59							0
	HEF0303	3697	MW	69							0
	HEF0303	3698	MW	53							0
	HEF0304	3699	CCG	80							0
	HEF0304	3700	GR	39							0
	HEF0304	3701	GR	54							0
	HEF0304	3702	GR	52							0
	HEF0304	3703	GR	46							0
	HEF0304	3704	GR	69							0
	HEF0304	3705	GR	59							0
	HEF0304	3706	GR	57							0
	HEF0304	3707	GR	54							0
	HEF0304	3708	GR	56							0
	HEF0304	3709	GR	49							0
	HEF0304	3710	GR	47							0
	HEF0304	3711	CCG	23							0
	HEF0305	3712	LSU	27							0
	HEF0305	3713	LKC	73							0
	HEF0305	3714	LKC	72							0
	HEF0305	3715	LKC	80							0
	HEF0305	3716	LKC	67							0
	HEF0305	3717	LKC	69							0
	HEF0305	3718	LKC	66							0
	HEF0305	3719	LKC	71							0
	HEF0305	3720	LNC	63							0
	HEF0305	3721	LNC	59							0
	HEF0305	3722	LNC	55							0
	HEF0305	3723	LSU	32							0
	HEF0305	3724	CCG	75							0
	HEF0305	3725	LNC	56							0
	HEF0305	3726	LSU	24							0
	HEF0305	3727	LNC	43							0
	HEF0305	3728	LNC	25							0
	HEF0305	3729	LSU	74							0
	HEF0305	3730	LNC	53							0
	HEF0305	3731	LNC	44							0
	HEF0305	3732	LSU	25							0
	HEF0305	3733	LSU	33							0
	HEF0306	3734	LSU	21							0
	HEF0306	3735	LSU	81							0
	HEF0306	3736	LSU	19							0
	HEF0306	3737	LSU	26							0
	HEF0306	3738	LSU	20							0
	HEF0306	3739	LSU	44							0
	HEF0306	3740	LSU	45							0
	HEF0306	3741	LNC	22							0
	HEF0306	3742	LSU	28							0
	HSF0206	4938	LSU	191							0
	HSF0206	4939	LSU	166							0
	HSF0206	4940	BT	170							0
	HSF0206	4941	MW	139							0
	HSF0206	4942	MW	113							0
	HSF0206	4943	GR	130							0
	HSF0206	4944	MW	132							0
	HSF0206	4945	MW	170							0
	HSF0206	4946	MW	111							0
	HSF0206	4947	MW	66							0
	HSF0206	4948	MW	170							0
	HSF0206	4949	GR	137							0
	HSF0206	4950	LSU	123							0
	HSF0206	4951	MW	131							0
	HSF0206	4952	MW	112							0
	HSF0206	4953	LSU	157							0
	HSF0206	4954	MW	122							0
	HSF0206	4955	MW	130							0
	HSF0206	4956	MW	133							0
	HSF0206	4957	MW	70							0
	HSF0206	4958	MW	129							0
	HSF0206	4959	MW	118							0
	HSF0206	4960	MW	123							0
	HSF0206	4961	GR	158							0
	HSF0206	4962	MW	75							0
	HSF0206	4963	MW	163							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0206	4964	MW	105							0
	HSF0206	4965	GR	117							0
	HSF0206	4966	MW	124							0
	HSF0206	4967	MW	67							0
	HSF0206	4968	MW	119							0
	HSF0206	4969	MW	115							0
	HSF0206	4970	MW	71							0
	HSF0206	4971	MW	110							0
	HSF0206	4972	RSC	75							0
	HSF0206	4973	RSC	82							0
	HSF0206	4974	RSC	78							0
	HSF0206	4975	MW	64							0
	HSF0206	4976	MW	130							0
	HSF0206	4977	MW	119							0
	HSF0206	4978	CCG	62							0
	HSF0206	4979	MW	53							0
	HSF0206	4980	LSU	103							0
	HSF0206	4981	MW	50							0
	HSF0206	4982	LSU	180							0
	HSF0206	4983	LSU	116							0
	HSF0206	4984	MW	44							0
	HSF0206	4985	LSU	83							0
	HSF0206	4986	CCG	76							0
	HSF0206	4987	LSU	100							0
	HSF0206	4988	CCG	62							0
	HSF0206	7627	BT	455							0
	HSF0206	7628	RB	241							0
	HSF0206	7629	MW	241							0
	HSF0301	4989	BT	195			SCALES				0
	HSF0301	4990	BT	185			SCALES				0
	HSF0301	4991	BT	175			SCALES				0
	HSF0301	4992	BT	193			SCALES				0
	HSF0301	4993	BT	201			SCALES				0
	HSF0301	4994	GR	118			SCALES	1			0
	HSF0301	4995	GR	144			SCALES				0
	HSF0301	4996	GR	146			SCALES				0
	HSF0301	4997	GR	133			SCALES				0
	HSF0301	4998	RB	141			SCALES				0
	HSF0301	4999	RB	173			SCALES				0
	HSF0301	5000	RB	131			SCALES				0
	HSF0301	5001	RB	143			SCALES	1			0
	HSF0301	5002	MW	63			SCALES				0
	HSF0301	5003	MW	68			SCALES				0
	HSF0301	5004	MW	59			SCALES	0			0
	HSF0301	5005	MW	69			SCALES	0			0
	HSF0301	5006	MW	75			SCALES				0
	HSF0301	5007	MW	118							0
	HSF0301	5008	MW	124							0
	HSF0301	5009	MW	125							0
	HSF0301	5010	MW	114							0
	HSF0301	5011	MW	205							0
	HSF0301	5012	MW	64							0
	HSF0301	5013	MW	120							0
	HSF0301	5014	MW	115							0
	HSF0301	5015	MW	126							0
	HSF0301	5016	MW	130							0
	HSF0301	5017	MW	134							0
	HSF0301	5018	MW	123							0
	HSF0301	5019	MW	61							0
	HSF0301	5020	MW	114							0
	HSF0301	5021	MW	111							0
	HSF0301	5022	MW	144							0
	HSF0301	5023	MW	114							0
	HSF0301	5024	MW	123							0
	HSF0301	5025	MW	122							0
	HSF0301	5026	MW	128							0
	HSF0301	5027	MW	63							0
	HSF0301	5028	MW	66							0
	HSF0301	5029	MW	69							0
	HSF0301	5030	MW	64							0
	HSF0301	5031	MW	122							0
	HSF0301	5032	MW	120							0
	HSF0301	5033	MW	124							0
	HSF0301	5034	MW	133							0
	HSF0301	5035	MW	120							0
	HSF0301	5036	MW	66							0
	HSF0301	5037	MW	54							0
	HSF0301	5038	MW	60							0
	HSF0301	5039	MW	121							0
	HSF0301	5040	MW	57							0
	HSF0301	5041	MW	49							0
	HSF0301	5042	MW	113							0
	HSF0301	5043	MW	56							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0301	5044	MW	194							0
	HSF0301	5045	MW	122							0
	HSF0301	5046	MW	130							0
	HSF0301	5047	MW	124							0
	HSF0301	5048	MW	119							0
	HSF0301	5049	MW	123							0
	HSF0301	5050	MW	57							0
	HSF0301	5051	MW	69							0
	HSF0301	5052	MW	70							0
	HSF0301	5053	MW	65							0
	HSF0301	5054	MW	75							0
	HSF0301	5055	MW	69							0
	HSF0301	5056	CCG	64							0
	HSF0301	5057	CCG	61							0
	HSF0301	5058	CCG	85							0
	HSF0301	5059	CCG	74							0
	HSF0301	5060	CCG	70							0
	HSF0301	5061	CCG	77							0
	HSF0301	5062	LNC	108							0
	HSF0301	5063	LSU	177							0
	HSF0301	5064	LNC	94							0
	HSF0302	5065	GR	137			SCALES				0
	HSF0302	5066	RB	127			SCALES	1			0
	HSF0302	5067	MW	111							0
	HSF0302	5068	MW	51							0
	HSF0302	5069	MW	56							0
	HSF0302	5070	MW	114							0
	HSF0302	5071	MW	115							0
	HSF0302	5072	MW	120							0
	HSF0302	5073	MW	125							0
	HSF0302	5074	MW	117							0
	HSF0302	5075	MW	124							0
	HSF0302	5076	MW	120							0
	HSF0302	5077	BT	185							0
	HSF0302	5078	MW	113							0
	HSF0302	5079	MW	127							0
	HSF0302	5080	MW	123							0
	HSF0302	5081	MW	114							0
	HSF0302	5082	MW	128							0
	HSF0302	5083	MW	113							0
	HSF0302	5084	MW	126							0
	HSF0302	5085	MW	57							0
	HSF0302	5086	GR	173							0
	HSF0302	5087	MW	124							0
	HSF0302	5088	MW	115							0
	HSF0302	5089	MW	112							0
	HSF0302	5090	RB	232							0
	HSF0302	5091	RB	146							0
	HSF0302	5092	MW	124							0
	HSF0302	5093	MW	189							0
	HSF0302	5094	GR	173							0
	HSF0302	5095	MW	115							0
	HSF0302	5096	MW	110							0
	HSF0302	5097	MW	136							0
	HSF0302	5098	MW	123							0
	HSF0302	5099	MW	65							0
	HSF0302	5100	GR	129							0
	HSF0302	5101	GR	155							0
	HSF0302	5102	GR	153							0
	HSF0302	5103	RB	126							0
	HSF0302	5104	MW	171							0
	HSF0302	5105	MW	112							0
	HSF0302	5106	MW	122							0
	HSF0302	5107	MW	124							0
	HSF0302	5108	MW	115							0
	HSF0302	5109	MW	64							0
	HSF0302	5110	MW	75							0
	HSF0302	5111	MW	126							0
	HSF0302	5112	MW	61							0
	HSF0302	5113	MW	59							0
	HSF0302	5114	MW	61							0
	HSF0302	5115	MW	49							0
	HSF0302	5116	MW	124							0
	HSF0302	5117	MW	113							0
	HSF0302	5118	MW	126							0
	HSF0302	5119	MW	117							0
	HSF0302	5120	MW	123							0
	HSF0302	5121	MW	60							0
	HSF0302	5122	MW	122							0
	HSF0302	5123	LSU	97							0
	HSF0302	5124	MW	122							0
	HSF0302	5125	MW	119							0
	HSF0302	5126	MW	123							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0302	5127	MW	118							0
	HSF0302	5128	MW	120							0
	HSF0302	5129	BT	200							0
	HSF0302	5130	MW	131							0
	HSF0302	5131	MW	125							0
	HSF0302	5132	MW	54							0
	HSF0302	5133	MW	65							0
	HSF0302	5134	GR	73							0
	HSF0302	7566	MW	120							0
	HSF0302	7630	MW	321							0
	HSF0302	7631	BT	405							0
	HSF0302	7632	MW	352							0
	HSF0302	7633	MW	231							0
	HSF0303	5135	GR	203							0
	HSF0303	5136	MW	198							0
	HSF0303	5137	LSU	191							0
	HSF0303	5138	LSU	161							0
	HSF0303	5139	LSU	136							0
	HSF0303	5140	LSU	188							0
	HSF0303	5141	LSU	174							0
	HSF0303	5142	LSU	180							0
	HSF0303	5143	GR	161							0
	HSF0303	5144	GR	135							0
	HSF0303	5145	MW	133							0
	HSF0303	5146	MW	130							0
	HSF0303	5147	MW	110							0
	HSF0303	5148	MW	114							0
	HSF0303	5149	MW	64							0
	HSF0303	5150	MW	115							0
	HSF0303	5151	MW	71							0
	HSF0303	5152	MW	123							0
	HSF0303	5153	MW	60							0
	HSF0303	5154	MW	122							0
	HSF0303	5155	MW	66							0
	HSF0303	5156	MW	113							0
	HSF0303	5157	MW	120							0
	HSF0303	5158	MW	120							0
	HSF0303	5159	MW	60							0
	HSF0303	5160	MW	59							0
	HSF0303	5161	MW	54							0
	HSF0303	5162	MW	120							0
	HSF0303	5163	MW	71							0
	HSF0303	5164	MW	71							0
	HSF0303	5165	MW	133							0
	HSF0303	5166	MW	54							0
	HSF0303	5167	MW	116							0
	HSF0303	5168	MW	59							0
	HSF0303	5169	MW	70							0
	HSF0303	5170	MW	104							0
	HSF0303	5171	MW	66							0
	HSF0303	5172	MW	130							0
	HSF0303	5173	MW	116							0
	HSF0303	5174	MW	61							0
	HSF0303	5175	MW	74							0
	HSF0303	5176	MW	65							0
	HSF0303	5177	MW	65							0
	HSF0303	5178	MW	69							0
	HSF0303	5179	LSU	132							0
	HSF0303	5180	CCG	78							0
	HSF0303	5181	CCG	83							0
	HSF0303	5182	CCG	28							0
	HSF0303	5183	MW	57							0
	HSF0303	5184	BT	161							0
	HSF0303	7634	RB	271							0
	HSF0303	7635	GR	230							0
	HSF0303	7636	BT	238							0
	HSF0303	7637	MW	215							0
	HSF0303	7638	MW	221							0
	HSF0304	5185	GR	225							0
	HSF0304	5186	BT	208							0
	HSF0304	5187	GR	221							0
	HSF0304	5188	GR	231							0
	HSF0304	5189	MW	124							0
	HSF0304	5190	MW	192							0
	HSF0304	5191	MW	130							0
	HSF0304	5192	MW	117							0
	HSF0304	5193	MW	181							0
	HSF0304	5194	GR	143							0
	HSF0304	5195	MW	130							0
	HSF0304	5196	MW	137							0
	HSF0304	5197	MW	119							0
	HSF0304	5198	MW	116							0
	HSF0304	5199	MW	119							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0304	5200	MW	137							0
	HSF0304	5201	MW	113							0
	HSF0304	5202	RB	110							0
	HSF0304	5203	MW	145							0
	HSF0304	5204	MW	124							0
	HSF0304	5205	MW	57							0
	HSF0304	5206	LSU	103							0
	HSF0304	5207	MW	131							0
	HSF0304	5208	MW	51							0
	HSF0304	5209	MW	60							0
	HSF0304	5210	MW	115							0
	HSF0304	5211	MW	118							0
	HSF0304	5212	MW	113							0
	HSF0304	5213	MW	126							0
	HSF0304	5214	MW	117							0
	HSF0304	5215	MW	124							0
	HSF0304	5216	MW	123							0
	HSF0304	5217	MW	130							0
	HSF0304	5218	MW	70							0
	HSF0304	5219	MW	58							0
	HSF0304	5220	MW	70							0
	HSF0304	5221	GR	62			SCALES	0			0
	HSF0304	5222	GR	146							0
	HSF0304	5223	MW	48							0
	HSF0304	5224	MW	56							0
	HSF0304	5225	RB	157							0
	HSF0304	5226	MW	56							0
	HSF0304	5227	CCG	69							0
	HSF0304	5228	CCG	80							0
	HSF0304	5229	CCG	49							0
	HSF0304	5230	CCG	59							0
	HSF0304	5231	CCG	63							0
	HSF0304	5232	CCG	69							0
	HSF0304	5233	CCG	71							0
	HSF0304	7567	MW	129							0
	HSF0304	7639	BT	251							0
	HSF0304	7640	MW	278							0
	HSF0305	5234	MW	197							0
	HSF0305	5235	BT	214							0
	HSF0305	5236	RB	156							0
	HSF0305	5237	RB	171							0
	HSF0305	5238	MW	111							0
	HSF0305	5239	MW	125							0
	HSF0305	5240	MW	120							0
	HSF0305	5241	MW	129							0
	HSF0305	5242	MW	56							0
	HSF0305	5243	MW	126							0
	HSF0305	5244	MW	125							0
	HSF0305	5245	MW	124							0
	HSF0305	5246	MW	103							0
	HSF0305	5247	MW	118							0
	HSF0305	5248	MW	68							0
	HSF0305	5249	MW	51							0
	HSF0305	5250	MW	69							0
	HSF0305	5251	MW	171							0
	HSF0305	5252	MW	126							0
	HSF0305	5253	MW	128							0
	HSF0305	5254	MW	125							0
	HSF0305	5255	MW	120							0
	HSF0305	5256	MW	126							0
	HSF0305	5257	MW	136							0
	HSF0305	5258	MW	120							0
	HSF0305	5259	MW	115							0
	HSF0305	5260	MW	68							0
	HSF0305	5261	GR	146							0
	HSF0305	5262	MW	106							0
	HSF0305	5263	MW	118							0
	HSF0305	5264	MW	66							0
	HSF0305	5265	LSU	204							0
	HSF0305	5266	MW	159							0
	HSF0305	5267	MW	124							0
	HSF0305	5268	MW	134							0
	HSF0305	5269	MW	138							0
	HSF0305	5270	MW	117							0
	HSF0305	5271	MW	118							0
	HSF0305	5272	MW	60							0
	HSF0305	5273	CCG	60							0
	HSF0305	5274	GR	154							0
	HSF0305	5275	MW	129							0
	HSF0305	5276	MW	124							0
	HSF0305	5277	RB	206							0
	HSF0305	5278	LSU	120							0
	HSF0305	7641	BT	237							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0306	5279	BT	237							0
	HSF0306	5280	MW	241							0
	HSF0306	5281	MW	135							0
	HSF0306	5282	GR	193							0
	HSF0306	5283	GR	140							0
	HSF0306	5284	MW	209							0
	HSF0306	5285	MW	175							0
	HSF0306	5286	MW	58							0
	HSF0306	5287	MW	120							0
	HSF0306	5288	RB	151							0
	HSF0306	5289	MW	126							0
	HSF0306	5290	MW	123							0
	HSF0306	5291	MW	132							0
	HSF0306	5292	MW	129							0
	HSF0306	5293	LSU	125							0
	HSF0306	5294	LNC	53							0
	HSF0306	5295	LSU	97							0
	HSF0306	5296	LSU	114							0
	HSF0306	5297	MW	122							0
	HSF0306	5298	MW	127							0
	HSF0306	5299	MW	58							0
	HSF0306	5300	MW	58							0
	HSF0306	5301	MW	111							0
	HSF0306	5302	MW	67							0
	HSF0306	5303	MW	118							0
	HSF0306	5304	MW	60							0
	HSF0306	5305	GR	152							0
	HSF0306	5306	RB	134							0
	HSF0306	5307	MW	105							0
	HSF0306	5308	RB	222							0
	HSF0306	5309	MW	110							0
	HSF0306	5310	RB	115							0
	HSF0306	5311	MW	70							0
	HSF0306	5312	RB	138							0
	HSF0306	5313	CCG	66							0
	HSF0306	5314	CCG	72							0
	HSF0306	5315	CCG	52							0
	MBS0301	3092	TP	29							0
	MBS0301	3093	RSC	18							0
	MBS0301	3094	RSC	19							0
	MBS0301	3095	RSC	43							0
	MBS0301	3096	RSC	42							0
	MBS0301	3097	RSC	38							0
	MBS0301	3098	RSC	42							0
	MBS0301	3099	RSC	43							0
	MBS0301	3100	RSC	39							0
	MBS0301	3101	RSC	50							0
	MBS0301	3102	RSC	45							0
	MBS0301	3103	RSC	47							0
	MBS0301	3104	RSC	51							0
	MBS0301	3105	RSC	18							0
	MBS0302	3106	RSC	18							0
	MBS0302	3107	RSC	19							0
	MBS0302	3108	RSC	19							0
	MBS0302	3109	YSU	30							0
	MBS0302	3110	RSC	17							0
	MBS0302	3111	RSC	19							0
	MBS0302	3112	RSC	18							0
	MBS0302	3113	RSC	18							0
	MBS0302	3114	RSC	19							0
	MBS0302	3115	RSC	20							0
	MBS0302	3116	RSC	20							0
	MBS0302	3117	RSC	19							0
	MBS0302	3118	RSC	39							0
	MBS0302	3119	CCG	22							0
	MBS0302	3120	RSC	21							0
	MBS0302	3121	RSC	19							0
	MBS0302	3122	LSU	27							0
	MBS0302	3123	CCG	20							0
	MBS0303	3124	NP	103							0
	MBS0303	3125	RSC	40							0
	MBS0303	3126	TP	41							0
	MBS0303	3127	RSC	66							0
	MBS0303	3128	RSC	43							0
	MBS0303	3129	TP	44							0
	MBS0303	3130	RSC	46							0
	MBS0303	3131	TP	40							0
	MEF0301	2809	GR	66							0
	MEF0301	2810	CCG	14							0
	MEF0302	2811	NP	143							0
	MEF0302	2812	NP	143							0
	MEF0302	2813	CCG	67							0
	MEF0302	2814	CCG	53							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MEF0303	2815	CCG	25							0
	MEF0303	2816	CCG	80							0
	MEF0303	2817	CCG	80							0
	MEF0303	2818	CCG	75							0
	MEF0303	2819	LNC	62							0
	MEF0303	2820	CCG	75							0
	MEF0303	2821	LNC	76							0
	MEF0304	2822	BB	135							0
	MEF0304	2823	BB	46							0
	MEF0304	2824	LNC	46							0
	MEF0304	2825	CCG	56							0
	MEF0304	2826	CCG	72							0
	MEF0304	2827	CCG	73							0
	MEF0304	2828	CCG	72							0
	MEF0304	2829	CCG	62							0
	MEF0304	2830	BB	188							0
	MEF0304	2831	LNC	69							0
	MEF0304	2832	BB	144							0
	MEF0304	2833	LNC	89							0
	MEF0304	2834	CCG	57							0
	MEF0304	2835	CCG	66							0
	MEF0304	2836	CCG	58							0
	MEF0304	2837	CCG	68							0
	MEF0304	2838	CCG	62							0
	MEF0304	2839	CCG	66							0
	MEF0304	2840	CCG	68							0
	MEF0304	2841	LNC	43							0
	MEF0304	2842	RSC	49							0
	MEF0304	2843	BB	57							0
	MEF0304	2844	BB	136							0
	MEF0304	2845	BB	144							0
	MEF0304	2846	BB	57							0
	MEF0304	2847	LNC	19							0
	MEF0304	2848	LNC	45							0
	MEF0304	2849	LNC	78							0
	MEF0304	2850	BB	126							0
	MSF0301	334	MW	308			SCALES	7			0
	MSF0301	335	GR	162			SCALES				0
	MSF0301	336	GR	155			SCALES	1			0
	MSF0301	337	GR	151			SCALES				0
	MSF0301	338	MW	248							0
	MSF0301	339	MW	204			SCALES	5			0
	MSF0301	340	GR	159							0
	MSF0301	341	MW	213							0
	MSF0301	342	WSC	188			SCALES				0
	MSF0301	343	NP	124			SCALES	0			0
	MSF0301	344	MW	150			SCALES				0
	MSF0301	345	MW	164							0
	MSF0301	346	MW	71			SCALES	0			0
	MSF0301	347	MW	168							0
	MSF0301	348	MW	122			SCALES				0
	MSF0301	349	MW	178							0
	MSF0301	350	GR	64			SCALES	0			0
	MSF0301	351	MW	160							0
	MSF0301	352	MW	165							0
	MSF0301	353	MW	153							0
	MSF0301	354	WSC	163			SCALES				0
	MSF0301	355	MW	120							0
	MSF0301	356	LSU	125			SCALES				0
	MSF0301	357	MW	119							0
	MSF0301	358	LNC	70							0
	MSF0301	359	LNC	82							0
	MSF0301	360	RSC	51							0
	MSF0301	361	RSC	46							0
	MSF0301	362	RSC	47							0
	MSF0301	363	RSC	50							0
	MSF0301	364	LNC	72							0
	MSF0301	365	MW	252							0
	MSF0301	366	MW	229							0
	MSF0301	367	MW	219							0
	MSF0301	368	WSC	168							0
	MSF0301	369	MW	172							0
	MSF0301	370	WSC	146							0
	MSF0301	371	CCG	77							0
	MSF0301	372	MW	134							0
	MSF0301	373	MW	125							0
	MSF0301	374	TP	67							0
	MSF0301	375	RSC	74							0
	MSF0301	376	LNC	78							0
	MSF0301	377	MW	73							0
	MSF0301	378	CCG	53							0
	MSF0301	379	CCG	59							0
	MSF0301	380	BB	150							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0302	381	MW	288							0
	MSF0302	382	MW	284							0
	MSF0302	383	MW	252							0
	MSF0302	384	MW	200							0
	MSF0302	385	MW	252							0
	MSF0302	386	MW	210							0
	MSF0302	387	LSU	183			SCALES				0
	MSF0302	388	WSC	198			SCALES				0
	MSF0302	389	LSU	155			SCALES				0
	MSF0302	390	MW	215							0
	MSF0302	391	MW	158							0
	MSF0302	392	WSC	196							0
	MSF0302	393	MW	225							0
	MSF0302	394	MW	158							0
	MSF0302	395	WSC	172							0
	MSF0302	396	MW	154							0
	MSF0302	397	MW	136							0
	MSF0302	398	MW	195							0
	MSF0302	399	MW	122							0
	MSF0302	400	RSC	47							0
	MSF0302	401	LNC	76							0
	MSF0302	402	LNC	64							0
	MSF0302	403	GR	164			SCALES	1			0
	MSF0302	404	MW	159							0
	MSF0302	405	WSC	170							0
	MSF0302	406	RSC	97							0
	MSF0302	407	MW	163							0
	MSF0302	408	WSC	107							0
	MSF0302	409	CCG	69							0
	MSF0302	410	MW	68							0
	MSF0302	411	RSC	48							0
	MSF0302	412	RSC	46							0
	MSF0302	413	CCG	74							0
	MSF0302	414	CCG	74							0
	MSF0302	415	CCG	62							0
	MSF0302	416	CCG	61							0
	MSF0302	417	LNC	61							0
	MSF0302	418	BB	165							0
	MSF0303	419	MW	290							0
	MSF0303	420	LSU	217			SCALES				0
	MSF0303	421	MW	208							0
	MSF0303	422	WSC	250			SCALES				0
	MSF0303	423	GR	151							0
	MSF0303	424	LSU	212							0
	MSF0303	425	WSC	174							0
	MSF0303	426	LSU	186			SCALES				0
	MSF0303	427	MW	195							0
	MSF0303	428	MW	147							0
	MSF0303	429	WSC	199			SCALES				0
	MSF0303	430	NP	111			SCALES				0
	MSF0303	431	GR	154							0
	MSF0303	432	LSU	177			SCALES				0
	MSF0303	433	NP	130			SCALES				0
	MSF0303	434	NP	136			SCALES	0			0
	MSF0303	435	WSC	181			SCALES				0
	MSF0303	436	WSC	146							0
	MSF0303	437	RSC	87							0
	MSF0303	438	MW	113							0
	MSF0303	439	MW	168							0
	MSF0303	440	TP	61							0
	MSF0303	441	MW	68							0
	MSF0303	442	RSC	51							0
	MSF0303	443	MW	131							0
	MSF0303	444	RSC	96							0
	MSF0303	445	RSC	75							0
	MSF0303	446	BB	113							0
	MSF0303	447	MW	125							0
	MSF0303	448	BB	180							0
	MSF0303	449	RSC	89							0
	MSF0303	450	WSC	165							0
	MSF0303	451	LSU	143							0
	MSF0303	452	RSC	93							0
	MSF0303	453	CCG	76							0
	MSF0303	454	CCG	67							0
	MSF0303	455	RSC	98							0
	MSF0303	456	RSC	75							0
	MSF0303	457	BB	141							0
	MSF0303	458	RSC	94							0
	MSF0303	459	CAS	67							0
	MSF0304	460	NP	139			SCALES	0			0
	MSF0304	461	MW	278							0
	MSF0304	462	WSC	170							0
	MSF0304	463	MW	178							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0304	464	MW	189							0
	MSF0304	465	MW	212							0
	MSF0304	466	MW	157							0
	MSF0304	467	MW	158							0
	MSF0304	468	LSU	151							0
	MSF0304	469	MW	157							0
	MSF0304	470	MW	165							0
	MSF0304	471	LSU	174							0
	MSF0304	472	LSU	156							0
	MSF0304	473	MW	161							0
	MSF0304	474	WSC	138							0
	MSF0304	475	MW	117							0
	MSF0304	476	LSU	153							0
	MSF0304	477	RSC	88							0
	MSF0304	478	CCG	69							0
	MSF0304	479	RSC	75							0
	MSF0304	480	TP	52							0
	MSF0304	481	CCG	48							0
	MSF0304	482	CCG	82							0
	MSF0304	483	RSC	118							0
	MSF0304	484	WSC	119							0
	MSF0304	485	WSC	116							0
	MSF0304	486	LSU	168							0
	MSF0304	487	MW	116							0
	MSF0304	488	LSU	123							0
	MSF0304	489	RSC	96							0
	MSF0304	490	NP	128							0
	MSF0304	491	RSC	66							0
	MSF0304	492	RSC	67							0
	MSF0304	493	RSC	109							0
	MSF0304	494	LSU	103							0
	MSF0304	495	RSC	69							0
	MSF0304	496	RSC	58							0
	MSF0304	497	CCG	79							0
	MSF0304	498	MW	121							0
	MSF0304	499	CCG	76							0
	MSF0304	500	LSU	147							0
	MSF0304	501	RSC	91							0
	MSF0304	502	TP	51							0
	MSF0304	503	LNC	55							0
	MSF0304	504	CCG	55							0
	MSF0304	505	CCG	68							0
	MSF0304	506	BB	129							0
	MSF0305	507	MW	251							0
	MSF0305	508	MW	304							0
	MSF0305	509	MW	240							0
	MSF0305	510	MW	259							0
	MSF0305	511	MW	261							0
	MSF0305	512	MW	308							0
	MSF0305	513	WSC	180							0
	MSF0305	514	MW	213							0
	MSF0305	515	MW	189							0
	MSF0305	516	MW	290							0
	MSF0305	517	MW	216							0
	MSF0305	518	WSC	171							0
	MSF0305	519	MW	245							0
	MSF0305	520	NP	230			SCALES	2			0
	MSF0305	521	MW	120							0
	MSF0305	522	MW	164							0
	MSF0305	523	RSC	76							0
	MSF0305	524	MW	171							0
	MSF0305	525	MW	125							0
	MSF0305	526	MW	123							0
	MSF0305	527	MW	59							0
	MSF0305	528	TP	83		18					0
	MSF0305	529	LSU	161							0
	MSF0305	530	RSC	64							0
	MSF0305	531	LSU	162							0
	MSF0305	532	CCG	77							0
	MSF0305	533	TP	62							0
	MSF0305	534	TP	71							0
	MSF0305	535	LNC	84							0
	MSF0305	536	MW	62							0
	MSF0305	537	RSC	98							0
	MSF0305	538	TP	63							0
	MSF0305	539	RSC	92							0
	MSF0305	540	RSC	75							0
	MSF0305	541	TP	70							0
	MSF0305	542	TP	57							0
	MSF0306	543	MW	273							0
	MSF0306	544	LSU	241							0
	MSF0306	545	MW	194							0
	MSF0306	546	MW	173							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0306	547	RSC	98							0
	MSF0306	548	MW	134							0
	MSF0306	549	RSC	93							0
	MSF0306	550	MW	61							0
	MSF0306	551	MW	64							0
	MSF0306	552	RSC	90							0
	MSF0306	553	MW	57							0
	MSF0306	554	MW	114							0
	MSF0306	555	WSC	135							0
	MSF0306	556	NP	129							0
	MSF0306	557	BB	165							0
	MSF0306	558	TP	47							0
	MSF0306	559	BB	167							0
	MSF0306	560	MW	124							0
	MSF0306	561	TP	79							0
	MSF0306	562	MW	165							0
	MSF0306	563	MW	178							0
	MSF0306	564	MW	120							0
	MSF0306	565	LSU	167							0
	MSF0306	566	NP	112							0
	MSF0306	567	NP	111							0
	MSF0306	568	NP	114							0
	MSF0306	569	BB	173							0
	MSF0306	570	MW	210							0
	MSF0306	571	MW	230							0
	MSF0306	572	RSC	97							0
	MSF0306	573	CCG	63							0
	MSF0306	574	MW	117							0
	MSF0306	575	RSC	86							0
	MSF0306	576	LNC	38							0
	MSF0306	577	BB	137							0
	MSF0306	578	RSC	78							0
	MSF0306	579	RSC	110							0
	MSF0307	580	WSC	174							0
	MSF0307	581	WSC	189							0
	MSF0307	582	WSC	160							0
	MSF0307	583	NP	172							0
	MSF0307	584	WSC	174							0
	MSF0307	585	GR	148							0
	MSF0307	586	MW	163							0
	MSF0307	587	NP	154							0
	MSF0307	588	WSC	150							0
	MSF0307	589	WSC	168							0
	MSF0307	590	MW	116							0
	MSF0307	591	MW	162							0
	MSF0307	592	RSC	92							0
	MSF0307	593	TP	87							0
	MSF0307	594	GR	63							0
	MSF0307	595	RSC	93							0
	MSF0307	596	RSC	94							0
	MSF0307	597	RSC	92							0
	MSF0307	598	RSC	93							0
	MSF0307	599	RSC	93							0
	MSF0307	600	RSC	78							0
	MSF0307	601	RSC	71							0
	MSF0307	602	RSC	57							0
	MSF0307	603	RSC	66							0
	MSF0307	604	LSU	156							0
	MSF0307	605	LSU	159							0
	MSF0307	606	MW	181							0
	MSF0307	607	MW	147							0
	MSF0307	608	WSC	168							0
	MSF0307	609	MW	68							0
	MSF0307	610	MW	71							0
	MSF0307	611	WSC	98							0
	MSF0307	612	WSC	100							0
	MSF0307	613	LNC	63							0
	MSF0307	614	BB	104							0
	MSF0307	615	LNC	62							0
	MSF0308	616	MW	265							0
	MSF0308	617	MW	242							0
	MSF0308	618	MW	206							0
	MSF0308	619	MW	197							0
	MSF0308	620	MW	246							0
	MSF0308	621	MW	208							0
	MSF0308	622	MW	254							0
	MSF0308	623	WSC	185							0
	MSF0308	624	MW	188							0
	MSF0308	625	MW	198							0
	MSF0308	626	MW	170							0
	MSF0308	627	MW	183							0
	MSF0308	628	LSU	191							0
	MSF0308	629	LSU	202							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0308	630	LSU	190							0
	MSF0308	631	MW	193							0
	MSF0308	632	MW	197							0
	MSF0308	633	MW	146							0
	MSF0308	634	GR	142							0
	MSF0308	635	MW	155							0
	MSF0308	636	LSU	140							0
	MSF0308	637	LSU	154							0
	MSF0308	638	LSU	144							0
	MSF0308	639	LSU	141							0
	MSF0308	640	LSU	148							0
	MSF0308	641	NP	103							0
	MSF0308	642	LSU	153							0
	MSF0308	643	MW	130							0
	MSF0308	644	MW	121							0
	MSF0308	645	MW	68							0
	MSF0308	646	TP	79							0
	MSF0308	647	RSC	93							0
	MSF0308	648	RSC	86							0
	MSF0308	649	RSC	95							0
	MSF0308	650	RSC	112							0
	MSF0308	651	RSC	95							0
	MSF0308	652	RSC	78							0
	MSF0308	653	LSU	159							0
	MSF0308	654	MW	61							0
	MSF0308	655	MW	132							0
	MSF0308	656	RSC	89							0
	MSF0308	657	MW	66							0
	MSF0308	658	LNC	61							0
	MSF0308	659	MW	114							0
	MSF0308	660	LKC	90							0
	MSF0308	661	CCG	66							0
	MSF0308	662	CCG	83							0
	MSF0308	663	TP	36							0
04											
	HBS0401	3302	RSC	72							0
	HBS0401	3303	LSU	35							0
	HBS0401	3304	LSU	82							0
	HBS0401	3305	RSC	51							0
	HBS0401	3306	RSC	49							0
	HBS0401	3307	RSC	48							0
	HBS0401	3308	MW	58							0
	HBS0401	3309	RSC	47							0
	HBS0401	3310	LSU	34							0
	HBS0401	3311	LSU	23							0
	HBS0401	3312	LSU	59							0
	HBS0401	3313	RSC	47							0
	HBS0401	3314	LSU	22							0
	HBS0401	3315	LSU	32							0
	HBS0401	3316	LSU	22							0
	HBS0401	3317	LNC	23							0
	HBS0401	3318	MW	50							0
	HBS0401	3319	LSU	27							0
	HBS0401	3320	LSU	28							0
	HBS0401	3321	CCG	26							0
	HBS0402	3781	LSU	32							0
	HBS0402	3782	LSU	34							0
	HBS0402	3783	LSU	22							0
	HBS0402	3784	LSU	21							0
	HBS0402	3785	LSU	19							0
	HBS0402	3786	LSU	23							0
	HBS0402	3787	LSU	22							0
	HBS0402	3788	LSU	32							0
	HBS0402	3789	LSU	28							0
	HBS0402	3790	LSU	23							0
	HBS0402	3791	CSU	67							0
	HBS0402	3792	LKC	78							0
	HBS0402	3793	LKC	53							0
	HBS0402	3794	LKC	61							0
	HBS0402	3795	LKC	58							0
	HBS0402	3796	RSC	48							0
	HBS0402	3797	RSC	60							0
	HBS0402	3798	RSC	52							0
	HBS0402	3799	LKC	29							0
	HBS0402	3800	LKC	30							0
	HBS0402	3801	LKC	55							0
	HBS0402	3802	LKC	39							0
	HBS0402	3803	LKC	39							0
	HBS0402	3804	LNC	26							0
	HBS0402	3805	LKC	34							0
	HBS0402	3806	CCG	32							0
	HBS0402	3807	CCG	24							0
	HEF0401	3743	LSU	208							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0401	3744	LSU	195							0
	HEF0401	3745	LSU	155							0
	HEF0401	3746	RSC	78							0
	HEF0401	3747	RSC	105							0
	HEF0401	3748	RSC	98							0
	HEF0401	3749	RSC	82							0
	HEF0401	3750	CCG	69							0
	HEF0401	3751	RSC	77							0
	HEF0401	3752	RSC	69							0
	HEF0401	3753	RSC	71							0
	HEF0401	3754	RSC	73							0
	HEF0401	3755	RSC	76							0
	HEF0401	3756	RSC	72							0
	HEF0401	3757	LKC	84							0
	HEF0401	3758	LNC	54							0
	HEF0401	3759	LNC	53							0
	HEF0401	3760	CSU	126							0
	HEF0402	3761	LNC	84							0
	HEF0402	3762	LSU	86							0
	HEF0402	3763	CCG	76							0
	HEF0402	3764	MW	59							0
	HEF0402	3765	LNC	67							0
	HEF0402	3766	CCG	67							0
	HEF0402	3767	CCG	24							0
	HEF0402	3768	CCG	76							0
	HEF0402	3769	MW	73							0
	HEF0402	3770	MW	72							0
	HEF0402	3771	MW	75							0
	HEF0402	3772	LNC	64							0
	HEF0402	3773	LNC	52							0
	HEF0402	3774	LNC	65							0
	HEF0402	3775	LNC	44							0
	HEF0402	3776	LSU	77							0
	HEF0402	3777	LNC	81							0
	HEF0402	3778	LNC	62							0
	HEF0402	3779	LNC	41							0
	HEF0402	3780	LSU	26							0
	HEF0403	3829	MW	57							0
	HEF0403	3830	MW	65							0
	HEF0403	3831	MW	56							0
	HEF0403	3832	MW	50							0
	HEF0403	3833	LNC	63							0
	HEF0403	3834	LSU	116							0
	HEF0403	3835	CCG	78							0
	HEF0403	3836	CCG	77							0
	HEF0403	3837	LNC	55							0
	HEF0403	3838	CSU	77							0
	HEF0403	3839	LKC	59							0
	HEF0403	3840	LNC	61							0
	HEF0403	3841	LNC	60							0
	HEF0403	3842	LSU	79							0
	HEF0403	3843	LNC	60							0
	HEF0403	3844	LNC	76							0
	HEF0403	3845	LKC	72							0
	HEF0403	3846	LSU	80							0
	HEF0403	3847	LNC	64							0
	HEF0403	3848	LNC	60							0
	HEF0403	3849	LNC	75							0
	HEF0404	3850	LSU	23							0
	HEF0404	3851	LSU	31							0
	HEF0404	3852	MW	50							0
	HEF0404	3853	LKC	60							0
	HEF0404	3854	LKC	54							0
	HEF0404	3855	LKC	73							0
	HEF0404	3856	LKC	72							0
	HEF0404	3857	RB	159							0
	HEF0404	3858	RSC	69							0
	HEF0404	3859	MW	58							0
	HEF0404	3860	MW	45							0
	HEF0404	3861	LSU	80							0
	HEF0404	3862	RSC	74							0
	HEF0404	3863	RSC	61							0
	HEF0404	3864	LSU	91							0
	HEF0404	3865	LKC	54							0
	HEF0404	3866	LNC	61							0
	HEF0404	3867	LSU	25							0
	HEF0404	3868	LSU	56							0
	HEF0404	3869	RSC	50							0
	HEF0404	3870	CCG	74							0
	HEF0404	3871	LNC	44							0
	HEF0404	3872	LNC	43							0
	HEF0404	3873	CCG	64							0
	HEF0404	3874	CCG	71							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0404	3875	CCG	92							0
	HEF0404	3876	CCG	64							0
	HSF0401	5557	BT	227							0
	HSF0401	5558	LSU	190							0
	HSF0401	5559	LSU	230							0
	HSF0401	5560	MW	170			SCALES				0
	HSF0401	5561	MW	122			SCALES				0
	HSF0401	5562	MW	68			SCALES				0
	HSF0401	5563	MW	61			SCALES				0
	HSF0401	5564	MW	123			SCALES				0
	HSF0401	5565	GR	136			SCALES				0
	HSF0401	5566	GR	129			SCALES				0
	HSF0401	5567	GR	137			SCALES				0
	HSF0401	5568	GR	148			SCALES				0
	HSF0401	5569	GR	141			SCALES				0
	HSF0401	5570	RB	178			SCALES	1			0
	HSF0401	5571	BT	145			SCALES	1			0
	HSF0401	5572	LSU	187							0
	HSF0401	5573	MW	120							0
	HSF0401	5574	MW	108							0
	HSF0401	5575	MW	126							0
	HSF0401	5576	MW	123							0
	HSF0401	5577	MW	127							0
	HSF0401	5578	MW	117							0
	HSF0401	5579	MW	129							0
	HSF0401	5580	MW	129							0
	HSF0401	5581	MW	54							0
	HSF0401	5582	LSU	137							0
	HSF0401	5583	MW	130							0
	HSF0401	5584	MW	117							0
	HSF0401	5585	MW	123							0
	HSF0401	5586	MW	122							0
	HSF0401	5587	CCG	67							0
	HSF0401	5588	MW	124							0
	HSF0401	5589	LSU	116							0
	HSF0401	5590	LSU	103							0
	HSF0401	5591	MW	119							0
	HSF0401	5592	LSU	161							0
	HSF0401	5593	MW	126							0
	HSF0401	5594	LSU	111							0
	HSF0401	5595	LSU	113							0
	HSF0401	5596	LSU	100							0
	HSF0402	5316	BT	212							0
	HSF0402	5317	BT	211							0
	HSF0402	5318	RB	161			SCALES	1			0
	HSF0402	5319	RB	154			SCALES				0
	HSF0402	5320	RB	170			SCALES				0
	HSF0402	5321	LSU	154							0
	HSF0402	5322	MW	85							0
	HSF0402	5323	MW	132							0
	HSF0402	5324	MW	162							0
	HSF0402	5325	MW	125							0
	HSF0402	5326	LKC	83							0
	HSF0402	5327	GR	138							0
	HSF0402	5328	MW	122							0
	HSF0402	5329	RSC	83							0
	HSF0402	5330	RSC	83							0
	HSF0402	5331	MW	71							0
	HSF0402	5332	GR	140							0
	HSF0402	5333	MW	113							0
	HSF0402	5334	MW	121							0
	HSF0402	5335	MW	59							0
	HSF0402	5336	RSC	83							0
	HSF0402	5337	LSU	90							0
	HSF0402	5338	MW	119							0
	HSF0402	5339	MW	125							0
	HSF0402	5340	RSC	75							0
	HSF0402	5341	LKC	72							0
	HSF0402	5342	CCG	72							0
	HSF0402	5343	LSU	116							0
	HSF0403	5344	MW	252							0
	HSF0403	5345	BT	226							0
	HSF0403	5346	LSU	187							0
	HSF0403	5347	CSU	178							0
	HSF0403	5348	LSU	170							0
	HSF0403	5349	MW	190							0
	HSF0403	5350	MW	200							0
	HSF0403	5351	MW	180							0
	HSF0403	5352	LSU	162							0
	HSF0403	5353	LSU	162							0
	HSF0403	5354	LSU	150							0
	HSF0403	5355	LSU	233							0
	HSF0403	5356	LSU	132							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0403	5357	MW	142							0
	HSF0403	5358	LSU	130							0
	HSF0403	5359	LSU	125							0
	HSF0403	5360	LNC	64							0
	HSF0403	5361	MW	70							0
	HSF0403	5362	MW	111							0
	HSF0403	5363	MW	113							0
	HSF0403	5364	MW	123							0
	HSF0403	5365	MW	114							0
	HSF0403	5366	MW	72							0
	HSF0403	5367	MW	75							0
	HSF0403	5368	MW	113							0
	HSF0403	5369	MW	125							0
	HSF0403	5370	MW	70							0
	HSF0403	5371	MW	73							0
	HSF0403	5372	MW	72							0
	HSF0403	5373	MW	62							0
	HSF0403	5374	LSU	140							0
	HSF0403	5375	LSU	14							0
	HSF0403	5376	MW	72							0
	HSF0403	5377	MW	70							0
	HSF0403	5378	MW	135							0
	HSF0403	5379	MW	118							0
	HSF0403	5380	MW	65							0
	HSF0403	5381	RB	144			SCALES	1			0
	HSF0403	5382	MW	60							0
	HSF0403	5383	MW	65							0
	HSF0403	5384	MW	71							0
	HSF0403	5385	MW	64							0
	HSF0403	5386	MW	60							0
	HSF0403	5387	RSC	72							0
	HSF0403	5388	CCG	80							0
	HSF0403	5389	MW	122							0
	HSF0403	5390	MW	52							0
	HSF0403	5391	LSU	10							0
	HSF0403	5392	MW	54							0
	HSF0403	5393	LNC	48							0
	HSF0403	5394	LNC	56							0
	HSF0403	5395	CCG	66							0
	HSF0403	5396	CCG	72							0
	HSF0403	5397	LSU	126							0
	HSF0404	5398	BT	215			SCALES				0
	HSF0404	5399	BT	213			SCALES				0
	HSF0404	5400	MW	171							0
	HSF0404	5401	MW	175							0
	HSF0404	5402	MW	126							0
	HSF0404	5403	LSU	170							0
	HSF0404	5404	LSU	181							0
	HSF0404	5405	LSU	123							0
	HSF0404	5406	LSU	145							0
	HSF0404	5407	MW	105							0
	HSF0404	5408	LSU	132							0
	HSF0404	5409	MW	144							0
	HSF0404	5410	RB	144							0
	HSF0404	5411	LSU	160							0
	HSF0404	5412	MW	110							0
	HSF0404	5413	MW	122							0
	HSF0404	5414	LSU	155							0
	HSF0404	5415	RB	147							0
	HSF0404	5416	MW	120							0
	HSF0404	5417	MW	131							0
	HSF0404	5418	RB	158							0
	HSF0404	5419	MW	117							0
	HSF0404	5420	MW	52							0
	HSF0404	5421	MW	60							0
	HSF0404	5422	RB	162							0
	HSF0404	5423	RB	161							0
	HSF0404	5424	MW	72							0
	HSF0404	5425	MW	77							0
	HSF0404	5426	CCG	75							0
	HSF0404	5427	RB	147							0
	HSF0404	5428	MW	51							0
	HSF0404	5429	MW	120							0
	HSF0404	5430	MW	108							0
	HSF0404	5431	MW	72							0
	HSF0404	5432	LSU	121							0
	HSF0404	5433	MW	119							0
	HSF0404	5434	MW	124							0
	HSF0404	5435	MW	59							0
	HSF0404	5436	LSU	121							0
	HSF0404	5437	RB	128							0
	HSF0404	5438	MW	120							0
	HSF0404	5439	LSU	118							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0404	5440	MW	73							0
	HSF0404	5441	CCG	71							0
	HSF0404	5442	CCG	73							0
	HSF0405	5443	BT	250							0
	HSF0405	5444	BT	222							0
	HSF0405	5445	MW	112							0
	HSF0405	5446	GR	145							0
	HSF0405	5447	GR	150							0
	HSF0405	5448	RB	153							0
	HSF0405	5449	MW	172							0
	HSF0405	5450	LSU	155							0
	HSF0405	5451	MW	122							0
	HSF0405	5452	MW	113							0
	HSF0405	5453	MW	113							0
	HSF0405	5454	MW	124							0
	HSF0405	5455	MW	68							0
	HSF0405	5456	MW	120							0
	HSF0405	5457	RB	158							0
	HSF0405	5458	MW	120							0
	HSF0405	5459	MW	119							0
	HSF0405	5460	RB	150							0
	HSF0405	5461	MW	128							0
	HSF0405	5462	GR	137							0
	HSF0405	5463	LSU	98							0
	HSF0405	5464	MW	106							0
	HSF0405	5465	LSU	130							0
	HSF0405	5466	LSU	111							0
	HSF0405	5467	MW	66							0
	HSF0405	5468	MW	69							0
	HSF0405	5469	RB	175							0
	HSF0405	5470	MW	118							0
	HSF0405	5471	MW	139							0
	HSF0405	5472	MW	124							0
	HSF0405	5473	MW	124							0
	HSF0405	5474	MW	122							0
	HSF0405	5475	MW	80							0
	HSF0405	5476	MW	73							0
	HSF0405	5477	LSU	136							0
	HSF0405	5478	MW	72							0
	HSF0405	5479	LSU	106							0
	HSF0405	5480	CCG	66							0
	HSF0405	5481	MW	135							0
	HSF0405	5482	MW	61							0
	HSF0405	5483	MW	127							0
	HSF0405	5484	LSU	89							0
	HSF0405	5485	CCG	79							0
	HSF0405	5486	LSU	204							0
	HSF0405	5487	MW	123							0
	HSF0405	5488	LSU	110							0
	HSF0405	5489	CCG	66							0
	HSF0405	5490	CCG	61							0
	HSF0405	5491	CCG	69							0
	HSF0405	5492	GR	230							0
	HSF0405	7642	BB	493							0
	HSF0406	5493	MW	242							0
	HSF0406	5494	MW	242							0
	HSF0406	5495	LSU	149							0
	HSF0406	5496	MW	118							0
	HSF0406	5497	MW	139							0
	HSF0406	5498	MW	213							0
	HSF0406	5499	MW	190							0
	HSF0406	5500	MW	105							0
	HSF0406	5501	MW	120							0
	HSF0406	5502	MW	179							0
	HSF0406	5503	GR	158							0
	HSF0406	5504	GR	144							0
	HSF0406	5505	MW	172							0
	HSF0406	5506	MW	127							0
	HSF0406	5507	MW	121							0
	HSF0406	5508	MW	175							0
	HSF0406	5509	MW	122							0
	HSF0406	5510	MW	129							0
	HSF0406	5511	RB	165							0
	HSF0406	5512	MW	135							0
	HSF0406	5513	MW	118							0
	HSF0406	5514	RB	160							0
	HSF0406	5515	MW	129							0
	HSF0406	5516	MW	176							0
	HSF0406	5517	MW	119							0
	HSF0406	5518	MW	126							0
	HSF0406	5519	MW	110							0
	HSF0406	5520	MW	131							0
	HSF0406	5521	MW	133							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0406	5522	MW	133							0
	HSF0406	5523	MW	124							0
	HSF0406	5524	MW	128							0
	HSF0406	5525	MW	114							0
	HSF0406	5526	MW	126							0
	HSF0406	5527	MW	120							0
	HSF0406	5528	MW	128							0
	HSF0406	5529	MW	175							0
	HSF0406	5530	MW	125							0
	HSF0406	5531	MW	118							0
	HSF0406	5532	MW	130							0
	HSF0406	5533	MW	124							0
	HSF0406	5534	MW	110							0
	HSF0406	5535	LSU	138							0
	HSF0406	5536	LSU	119							0
	HSF0406	5537	MW	129							0
	HSF0406	5538	MW	124							0
	HSF0406	5539	MW	129							0
	HSF0406	5540	RSC	81							0
	HSF0406	5541	MW	62							0
	HSF0406	5542	MW	115							0
	HSF0406	5543	MW	60							0
	HSF0406	5544	RSC	64							0
	HSF0406	5545	GR	154							0
	HSF0406	5546	MW	125							0
	HSF0406	5547	LSU	154							0
	HSF0406	5548	MW	124							0
	HSF0406	5549	MW	70							0
	HSF0406	5550	LSU	105							0
	HSF0406	5551	MW	79							0
	HSF0406	5552	LSU	88							0
	HSF0406	5553	MW	118							0
	HSF0406	5554	CCG	63							0
	HSF0406	5555	CCG	69							0
	HSF0406	5556	CCG	66							0
	MBS0401	3132	RSC	43							0
	MBS0401	3133	RSC	33							0
	MBS0401	3134	RSC	45							0
	MBS0401	3135	RSC	42							0
	MBS0401	3136	RSC	39							0
	MBS0401	3137	RSC	39							0
	MBS0401	3138	RSC	52							0
	MBS0401	3139	RSC	37							0
	MBS0401	3140	RSC	40							0
	MBS0401	3141	RSC	34							0
	MBS0401	3142	YSU	26							0
	MBS0401	3143	YSU	30							0
	MBS0401	3144	YSU	32							0
	MBS0401	3145	YSU	24							0
	MBS0401	3146	YSU	25							0
	MBS0401	3147	YSU	25							0
	MBS0401	3148	YSU	28							0
	MBS0401	3149	YSU	24							0
	MBS0401	3150	YSU	24							0
	MBS0401	3151	YSU	25							0
	MBS0401	3152	YSU	22							0
	MBS0402	3153	RSC	63							0
	MBS0402	3154	RSC	49							0
	MBS0402	3155	RSC	61							0
	MBS0402	3156	RSC	70							0
	MBS0402	3157	RSC	74							0
	MBS0402	3158	LNC	22							0
	MBS0403	3159	RSC	65							0
	MBS0403	3160	RSC	48							0
	MBS0403	3161	RSC	66							0
	MBS0403	3162	RSC	67							0
	MBS0403	3163	YSU	23							0
	MBS0403	3164	RSC	52							0
	MEF0402	2851	RSC	96							0
	MEF0402	2852	LNC	116							0
	MEF0402	2853	CCG	54							0
	MEF0402	2854	CCG	73							0
	MEF0402	2855	CCG	72							0
	MEF0402	2856	BB	157							0
	MEF0402	2857	LNC	106							0
	MEF0402	2858	CCG	63							0
	MEF0402	2859	LNC	56							0
	MEF0402	2860	LNC	53							0
	MEF0402	2861	YSU	21							0
	MEF0403	2862	LNC	78							0
	MEF0403	2863	TP	75							0
	MEF0403	2864	BB	129							0
	MEF0404	2865	BB	59							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MEF0404	2866	YSU	25							0
	MEF0404	2867	CCG	54							0
	MEF0404	2868	BB	146							0
	MSF0401	664	NP	475							0
	MSF0401	665	MW	310			SCALES				0
	MSF0401	666	MW	305			SCALES				0
	MSF0401	667	WSC	245							0
	MSF0401	668	MW	123							0
	MSF0401	669	MW	123							0
	MSF0401	670	MW	234							0
	MSF0401	671	RSC	43							0
	MSF0401	672	MW	224							0
	MSF0401	673	GR	172			SCALE	1			0
	MSF0401	674	MW	165							0
	MSF0401	675	MW	165							0
	MSF0401	676	RSC	92							0
	MSF0401	677	GR	147							0
	MSF0401	678	MW	179							0
	MSF0401	679	LSU	189							0
	MSF0401	680	MW	127							0
	MSF0401	681	MW	132							0
	MSF0401	682	MW	276							0
	MSF0401	683	RSC	92							0
	MSF0401	684	WSC	198							0
	MSF0401	685	NP	150							0
	MSF0401	686	BB	260							0
	MSF0401	687	MW	133							0
	MSF0401	688	WSC	182							0
	MSF0401	689	MW	155							0
	MSF0401	690	MW	127							0
	MSF0401	691	LNC	127							0
	MSF0401	692	LNC	150							0
	MSF0401	693	LNC	103							0
	MSF0401	694	LSU	162							0
	MSF0401	695	BB	153							0
	MSF0401	696	BB	128							0
	MSF0401	697	BB	131							0
	MSF0401	698	BB	168							0
	MSF0401	699	CCG	73							0
	MSF0401	700	BB	167							0
	MSF0401	701	LSU	112							0
	MSF0401	702	LSU	98							0
	MSF0401	703	LSU	77							0
	MSF0401	704	CCG	51							0
	MSF0401	705	CCG	60							0
	MSF0401	706	BB	158							0
	MSF0401	707	RSC	105							0
	MSF0401	708	RSC	96							0
	MSF0401	709	RSC	97							0
	MSF0401	710	RSC	95							0
	MSF0401	711	RSC	88							0
	MSF0401	712	RSC	89							0
	MSF0401	713	LNC	70							0
	MSF0401	714	BB	150							0
	MSF0401	715	LNC	62							0
	MSF0401	716	LNC	65							0
	MSF0401	717	CCG	68							0
	MSF0401	718	CCG	48							0
	MSF0401	719	CCG	69							0
	MSF0401	720	CCG	66							0
	MSF0401	721	LNC	80							0
	MSF0401	722	LNC	69							0
	MSF0401	723	CCG	67							0
	MSF0401	724	BB	162							0
	MSF0401	725	CCG	67							0
	MSF0401	726	LNC	53							0
	MSF0401	727	CCG	70							0
	MSF0401	728	CCG	66							0
	MSF0401	729	BB	145							0
	MSF0402	730	WSC	421							0
	MSF0402	731	MW	208							0
	MSF0402	732	MW	251							0
	MSF0402	733	MW	263							0
	MSF0402	734	MW	164							0
	MSF0402	735	CCG	62							0
	MSF0402	736	RSC	47							1
	MSF0402	737	BB	193							0
	MSF0402	738	MW	123							0
	MSF0402	739	MW	262							0
	MSF0402	740	MW	183							0
	MSF0402	741	CCG	76							0
	MSF0402	742	CCG	73							0
	MSF0402	743	MW	283							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0402	744	WSC	184							0
	MSF0402	745	MW	220							0
	MSF0402	746	MW	163							0
	MSF0402	747	MW	249							0
	MSF0402	748	MW	221							0
	MSF0402	749	MW	222							0
	MSF0402	750	MW	214							0
	MSF0402	751	WSC	185							0
	MSF0402	752	LSU	169							0
	MSF0402	753	GR	137							0
	MSF0402	754	RSC	68							0
	MSF0402	755	RSC	74							0
	MSF0402	756	MW	121							0
	MSF0402	757	MW	207							0
	MSF0402	758	RSC	97							0
	MSF0402	759	MW	66							0
	MSF0402	760	TP	24							0
	MSF0402	761	RSC	98							0
	MSF0402	762	LNC	69							0
	MSF0402	763	LSU	79							0
	MSF0402	764	RSC	92							0
	MSF0402	765	MW	207							0
	MSF0402	766	LSU	165							0
	MSF0402	767	LSU	143							0
	MSF0402	768	LSU	161							0
	MSF0402	769	RSC	103							0
	MSF0402	770	RSC	106							0
	MSF0402	771	MW	219							0
	MSF0402	772	LSU	142							0
	MSF0402	773	RSC	71							0
	MSF0402	774	LNC	79							0
	MSF0402	775	LNC	62							0
	MSF0402	776	CCG	62							0
	MSF0402	777	RSC	86							0
	MSF0402	778	LNC	68							0
	MSF0402	779	LNC	66							0
	MSF0402	780	CCG	65							0
	MSF0402	781	BB	158							0
	MSF0402	782	CCG	57							0
	MSF0402	783	CCG	68							0
	MSF0402	784	CCG	63							0
	MSF0402	785	LNC	94							0
	MSF0402	786	LNC	83							0
	MSF0402	787	LNC	79							0
	MSF0402	788	LNC	72							0
	MSF0402	789	LNC	51							0
	MSF0402	790	CCG	49							0
	MSF0402	791	CCG	47							0
	MSF0402	792	LNC	62							0
	MSF0402	793	CCG	67							0
	MSF0403	794	MW	314							0
	MSF0403	795	MW	263							0
	MSF0403	796	MW	288							0
	MSF0403	797	MW	229							0
	MSF0403	798	MW	236							0
	MSF0403	799	MW	245							0
	MSF0403	800	MW	293							0
	MSF0403	801	MW	244							0
	MSF0403	802	MW	197							0
	MSF0403	803	MW	243							0
	MSF0403	804	MW	179							0
	MSF0403	805	MW	151							0
	MSF0403	806	MW	117							0
	MSF0403	807	NP	129							0
	MSF0403	808	MW	293							0
	MSF0403	809	MW	261							0
	MSF0403	810	MW	271							0
	MSF0403	811	MW	112							0
	MSF0403	812	MW	237							0
	MSF0403	813	MW	229							0
	MSF0403	814	MW	122							0
	MSF0403	815	MW	115							0
	MSF0403	816	GR	217							0
	MSF0403	817	LSU	189							0
	MSF0403	818	LSU	163							0
	MSF0403	819	LSU	208							0
	MSF0403	820	MW	181							0
	MSF0403	821	LSU	156							0
	MSF0403	822	MW	152							0
	MSF0403	823	LSU	192							0
	MSF0403	824	LSU	159							0
	MSF0403	825	MW	162							0
	MSF0403	826	MW	110							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0403	827	RSC	92							0
	MSF0403	828	RSC	95							0
	MSF0403	829	RSC	38							0
	MSF0403	830	RSC	69							0
	MSF0403	831	RSC	74							0
	MSF0403	832	RSC	62							0
	MSF0403	833	CCG	78							0
	MSF0403	834	RSC	89							0
	MSF0403	835	RSC	43							0
	MSF0403	836	MW	125							0
	MSF0403	837	RSC	95							0
	MSF0403	838	TP	75							0
	MSF0403	839	RSC	76							0
	MSF0403	840	LSU	147							0
	MSF0403	841	RSC	75							0
	MSF0403	842	TP	82							0
	MSF0403	843	CCG	79							0
	MSF0403	844	LNC	80							0
	MSF0403	845	BB	190							0
	MSF0403	846	LNC	88							0
	MSF0403	847	MW	124							0
	MSF0404	848	MW	290							0
	MSF0404	849	MW	263							0
	MSF0404	850	MW	273							0
	MSF0404	851	MW	217							0
	MSF0404	852	WSC	162							0
	MSF0404	853	MW	169							0
	MSF0404	854	MW	123							0
	MSF0404	855	LSU	109							0
	MSF0404	856	MW	167							0
	MSF0404	857	MW	280							0
	MSF0404	858	MW	183							0
	MSF0404	859	MW	208							0
	MSF0404	860	LNC	108							0
	MSF0404	861	MW	170							0
	MSF0404	862	RSC	43							0
	MSF0404	863	MW	130							0
	MSF0404	864	LSU	188							0
	MSF0404	865	MW	157							0
	MSF0404	866	MW	118							0
	MSF0404	867	LKC	102							0
	MSF0404	868	RSC	69							0
	MSF0404	869	RSC	90							0
	MSF0404	870	LNC	62							0
	MSF0404	871	WSC	170							0
	MSF0404	872	RSC	97							0
	MSF0404	873	RSC	92							0
	MSF0404	874	RSC	96							0
	MSF0404	875	RSC	52							0
	MSF0404	876	RSC	80							0
	MSF0404	877	RSC	94							0
	MSF0404	878	RSC	92							0
	MSF0404	879	RSC	70							0
	MSF0404	880	MW	65							0
	MSF0404	881	GR	158			SCALES	1			0
	MSF0404	882	LSU	91							0
	MSF0404	883	LNC	66							0
	MSF0404	884	NP	123							0
	MSF0404	885	LNC	78							0
	MSF0404	886	CCG	60							0
	MSF0404	887	CCG	58							0
	MSF0404	888	LNC	92							0
	MSF0404	889	MW	118			SCALES	1			0
	MSF0404	890	CCG	65							0
	MSF0405	891	MW	286							0
	MSF0405	892	MW	256							0
	MSF0405	893	MW	277							0
	MSF0405	894	MW	246							0
	MSF0405	895	MW	249							0
	MSF0405	896	MW	246							0
	MSF0405	897	MW	269							0
	MSF0405	898	MW	262							0
	MSF0405	899	MW	299							0
	MSF0405	900	MW	217							0
	MSF0405	901	MW	278							0
	MSF0405	902	MW	151							0
	MSF0405	903	MW	209							0
	MSF0405	904	MW	204							0
	MSF0405	905	MW	237							0
	MSF0405	906	MW	231							0
	MSF0405	907	MW	252							0
	MSF0405	908	LNC	98							0
	MSF0405	909	WSC	359							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0405	910	MW	117							0
	MSF0405	911	RSC	92							0
	MSF0405	912	RSC	66							0
	MSF0405	913	RSC	44							0
	MSF0405	914	RSC	64							0
	MSF0405	915	LNC	66							0
	MSF0405	916	RSC	71							0
	MSF0405	917	LSU	114							0
	MSF0405	918	LSU	113							0
	MSF0405	919	LSU	154							0
	MSF0405	920	RSC	69							0
	MSF0405	921	RSC	42							0
	MSF0405	922	LNC	65							0
	MSF0405	923	LNC	70							0
	MSF0405	924	CCG	67							0
	MSF0405	925	RSC	44							0
	MSF0405	926	CCG	46							0
	MSF0405	927	LNC	78							0
	MSF0406	928	MW	254							0
	MSF0406	929	MW	257							0
	MSF0406	930	MW	110							0
	MSF0406	931	MW	233							0
	MSF0406	932	MW	188							0
	MSF0406	933	MW	211							0
	MSF0406	934	MW	131							0
	MSF0406	935	MW	134							0
	MSF0406	936	MW	219							0
	MSF0406	937	MW	226							0
	MSF0406	938	MW	153							0
	MSF0406	939	MW	189							0
	MSF0406	940	MW	226							0
	MSF0406	941	MW	200							0
	MSF0406	942	MW	112							0
	MSF0406	943	MW	243							0
	MSF0406	944	MW	262							0
	MSF0406	945	MW	243							0
	MSF0406	946	MW	295							0
	MSF0406	947	MW	203							0
	MSF0406	948	MW	113							0
	MSF0406	949	MW	124							0
	MSF0406	950	RSC	93							0
	MSF0406	951	BB	110							0
	MSF0406	952	RSC	51							0
	MSF0406	953	RSC	74							0
	MSF0406	954	RSC	65							0
	MSF0406	955	RSC	88							0
	MSF0406	956	LNC	83							0
	MSF0406	957	LNC	66							0
	MSF0406	958	BB	322							0
05											
	HEF0501	3877	LKC	40							0
	HEF0501	3878	LSU	120							0
	HEF0501	3879	LSU	100							0
	HEF0501	3880	LKC	41							0
	HEF0501	3881	LSU	122							0
	HEF0501	3882	LKC	82							0
	HEF0501	3883	LSU	110							0
	HEF0501	3884	LSU	77							0
	HEF0501	3885	LKC	35							0
	HEF0501	3886	LSU	23							0
	HEF0501	3887	LSU	26							0
	HEF0501	3888	LSU	44							0
	HEF0501	3889	LSU	23							0
	HEF0501	3890	LSU	18							0
	HEF0501	3891	LSU	27							0
	HEF0501	3892	LSU	19							0
	HEF0502	3893	BT	176							0
	HEF0502	3894	LSU	115							0
	HEF0502	3895	CCG	72							0
	HEF0502	3896	LSU	88							0
	HEF0502	3897	CCG	78							0
	HEF0502	3898	LSU	111							0
	HEF0502	3899	LSU	107							0
	HEF0502	3900	MW	56							0
	HEF0502	3901	LSU	90							0
	HEF0502	3902	LKC	45							0
	HEF0502	3903	MW	45							0
	HEF0502	3904	MW	51							0
	HEF0502	3905	LNC	59							0
	HEF0503	3906	CSU	95							0
	HEF0503	3907	CCG	79							0
	HEF0503	3908	MW	58							0
	HEF0503	3909	MW	48							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0503	3910	LSU	47							0
	HEF0503	3911	LSU	30							0
	HEF0503	3912	LSU	86							0
	HEF0503	3913	LSU	29							0
	HEF0503	3914	RSC	61							0
	HEF0503	3915	CCG	79							0
	HEF0503	3916	CCG	60							0
	HEF0503	3917	LSU	60							0
	HEF0503	3918	CCG	65							0
	HEF0503	3919	MW	53							0
	HEF0503	3920	MW	45							0
	HEF0503	3921	LNC	47							0
	HEF0503	3922	LSU	21							0
	HEF0503	3923	LSU	24							0
	HEF0503	3924	LSU	26							0
	HEF0503	3925	LSU	36							0
	HEF0503	3926	LSU	25							0
	HEF0503	3927	LNC	44							0
	HEF0503	3928	CCG	79							0
	HEF0503	3929	LNC	46							0
	HEF0504	3930	LSU	31							0
	HEF0504	3931	LSU	29							0
	HEF0504	3932	LSU	34							0
	HEF0504	3933	LSU	28							0
	HEF0504	3934	LSU	32							0
	HEF0504	3935	LSU	22							0
	HEF0504	3936	LSU	29							0
	HEF0504	3937	LSU	26							0
	HEF0504	3938	LSU	61							0
	HEF0504	3939	LSU	30							0
	HEF0504	3940	LNC	36							0
	HEF0505	3941	LSU	97							0
	HEF0505	3942	MW	57							0
	HEF0505	3943	RSC	77							0
	HEF0505	3944	LNC	41							0
	HEF0505	3945	LSU	111							0
	HEF0505	3946	MW	54							0
	HEF0505	3947	MW	48							0
	HEF0505	3948	MW	59							0
	HEF0505	3949	MW	49							0
	HEF0505	3950	MW	50							0
	HEF0505	3951	MW	60							0
	HEF0505	3952	MW	51							0
	HEF0505	3953	LSU	32							0
	HEF0505	3954	LSU	78							0
	HEF0505	3955	LKC	54							0
	HEF0505	3956	LKC	71							0
	HEF0505	3957	CCG	36							0
	HEF0505	3958	LSU	33							0
	HEF0505	3959	LSU	121							0
	HEF0505	3960	RSC	69							0
	HEF0505	3961	LSU	59							0
	HEF0505	3962	LSU	56							0
	HEF0505	3963	LKC	62							0
	HEF0505	3964	LSU	62							0
	HEF0505	3965	LSU	110							0
	HEF0505	3966	LKC	50							0
	HEF0505	3967	LKC	61							0
	HEF0505	3968	LKC	49							0
	HEF0505	3969	CCG	30							0
	HEF0505	3970	RSC	75							0
	HEF0505	3971	LKC	50							0
	HEF0506	3972	LSU	222							0
	HEF0506	3973	LSU	189							0
	HEF0506	3974	LSU	201							0
	HEF0506	3975	LSU	152							0
	HEF0506	3976	LSU	130							0
	HEF0506	3977	LSU	128							0
	HEF0506	3978	LSU	69							0
	HEF0506	3979	LSU	25							0
	HEF0506	3980	RSC	83							0
	HEF0506	3981	CCG	66							0
	HEF0506	3982	LKC	39							0
	HEF0506	3983	RSC	34							0
	HSF0501	5597	MW	71			SCALES	0			0
	HSF0501	5598	MW	69			SCALES				0
	HSF0501	5599	MW	70			SCALES	0			0
	HSF0501	5600	MW	74			SCALES				0
	HSF0501	5601	MW	109			SCALES	1			0
	HSF0501	5602	GR	125			SCALES	1			0
	HSF0501	5603	GR	172			SCALES				0
	HSF0501	5604	GR	151			SCALES				0
	HSF0501	5605	RB	150			SCALES	1			0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0501	5606	MW	133							0
	HSF0501	5607	MW	196							0
	HSF0501	5608	MW	120							0
	HSF0501	5609	GR	190							0
	HSF0501	5610	MW	134							0
	HSF0501	5611	MW	125							0
	HSF0501	5612	MW	125							0
	HSF0501	5613	MW	134							0
	HSF0501	5614	MW	114							0
	HSF0501	5615	LSU	124							0
	HSF0501	5616	LSU	113							0
	HSF0501	5617	MW	115							0
	HSF0501	5618	MW	121							0
	HSF0501	5619	LSU	104							0
	HSF0501	5620	MW	182							0
	HSF0501	5621	MW	126							0
	HSF0501	5622	MW	115							0
	HSF0501	5623	MW	119							0
	HSF0501	5624	MW	124							0
	HSF0501	5625	MW	118							0
	HSF0501	5626	MW	118							0
	HSF0501	5627	MW	129							0
	HSF0501	5628	MW	118							0
	HSF0501	5629	LSU	138							0
	HSF0501	5630	MW	130							0
	HSF0501	5631	MW	131							0
	HSF0501	5632	MW	75							0
	HSF0501	5633	MW	56							0
	HSF0501	5634	MW	122							0
	HSF0501	5635	LSU	125							0
	HSF0501	5636	MW	60							0
	HSF0501	5637	MW	75							0
	HSF0501	5638	MW	65							0
	HSF0501	5639	MW	124							0
	HSF0501	5640	MW	114							0
	HSF0501	5641	MW	123							0
	HSF0501	5642	MW	51							0
	HSF0501	5643	LSU	125							0
	HSF0501	5644	LSU	106							0
	HSF0501	5645	LSU	91							0
	HSF0501	5646	LNC	55							0
	HSF0501	5647	LNC	65							0
	HSF0501	5648	LSU	111							0
	HSF0501	5649	CCG	68							0
	HSF0501	5650	CCG	78							0
	HSF0501	7643	RB	234							0
	HSF0501	7644	BT	252							0
	HSF0502	5651	MW	115							0
	HSF0502	5652	MW	130							0
	HSF0502	5653	MW	127							0
	HSF0502	5654	MW	105							0
	HSF0502	5655	MW	122							0
	HSF0502	5656	RB	155			SCALES				0
	HSF0502	5657	LSU	142							0
	HSF0502	5658	MW	120							0
	HSF0502	5659	MW	122							0
	HSF0502	5660	MW	113							0
	HSF0502	5661	MW	58							0
	HSF0502	5662	MW	51							0
	HSF0502	5663	MW	72							0
	HSF0502	5664	MW	113							0
	HSF0502	5665	MW	59							0
	HSF0502	5666	MW	115							0
	HSF0502	5667	RB	151			SCALES	1			0
	HSF0502	5668	MW	56							0
	HSF0502	5669	MW	129							0
	HSF0502	5670	LSU	156							0
	HSF0502	5671	LSU	174							0
	HSF0502	5672	MW	55							0
	HSF0502	5673	RB	145			SCALES				0
	HSF0502	5674	MW	124							0
	HSF0502	5675	MW	66							0
	HSF0502	5676	MW	175							0
	HSF0502	5677	MW	179							0
	HSF0502	5678	MW	131							0
	HSF0502	5679	LSU	145							0
	HSF0502	5680	MW	124							0
	HSF0502	5681	MW	126							0
	HSF0502	5682	MW	124							0
	HSF0502	5683	MW	131							0
	HSF0502	5684	LNC	60							0
	HSF0502	5685	MW	55							1
	HSF0502	5686	LSU	115							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0502	5687	MW	56							0
	HSF0502	5688	LNC	85							0
	HSF0502	5689	LSU	135							0
	HSF0502	5690	MW	119							0
	HSF0502	5691	CCG	78							0
	HSF0502	5692	CCG	71							0
	HSF0502	5693	LSU	95							0
	HSF0502	5694	CCG	89							0
	HSF0502	7645	BT	264							0
	HSF0503	5695	CSU	210							0
	HSF0503	5696	GR	136			SCALES				0
	HSF0503	5697	LSU	156							0
	HSF0503	5698	MW	124							0
	HSF0503	5699	MW	121							0
	HSF0503	5700	MW	121							0
	HSF0503	5701	LSU	191							0
	HSF0503	5702	MW	125							0
	HSF0503	5703	MW	121							0
	HSF0503	5704	MW	124							0
	HSF0503	5705	BT	149			SCALES	1			0
	HSF0503	5706	RB	149							0
	HSF0503	5707	RB	154							0
	HSF0503	5708	MW	123							0
	HSF0503	5709	MW	126							0
	HSF0503	5710	MW	133							0
	HSF0503	5711	MW	127							0
	HSF0503	5712	MW	126							0
	HSF0503	5713	MW	123							0
	HSF0503	5714	MW	124							0
	HSF0503	5715	LSU	113							0
	HSF0503	5716	MW	64							0
	HSF0503	5717	RB	196							0
	HSF0503	5718	LSU	166							0
	HSF0503	5719	MW	69							0
	HSF0503	5720	MW	117							0
	HSF0503	5721	RB	160							0
	HSF0503	5722	LSU	100							0
	HSF0503	5723	MW	72							0
	HSF0503	5724	MW	75							0
	HSF0503	5725	MW	66							0
	HSF0503	5726	MW	64							0
	HSF0503	5727	CSU	76							0
	HSF0503	5728	MW	114							0
	HSF0503	5729	MW	51							0
	HSF0503	5730	LSU	110							0
	HSF0503	5731	CCG	58							0
	HSF0503	5732	LSU	145							0
	HSF0503	5733	LNC	71							0
	HSF0503	5734	LNC	54							0
	HSF0503	5735	CCG	60							0
	HSF0503	7646	BT	482							0
	HSF0504	5736	BT	230			SCALES				0
	HSF0504	5737	MW	181							0
	HSF0504	5738	LSU	158							0
	HSF0504	5739	LSU	136							0
	HSF0504	5740	MW	122							0
	HSF0504	5741	MW	176							0
	HSF0504	5742	MW	138							0
	HSF0504	5743	MW	118							0
	HSF0504	5744	MW	165							0
	HSF0504	5745	MW	133							0
	HSF0504	5746	MW	76							0
	HSF0504	5747	MW	117							0
	HSF0504	5748	MW	125							0
	HSF0504	5749	MW	125							0
	HSF0504	5750	MW	121							0
	HSF0504	5751	MW	129							0
	HSF0504	5752	LSU	111							0
	HSF0504	5753	LSU	84							0
	HSF0504	5754	MW	128							0
	HSF0504	5755	GR	140							0
	HSF0504	5756	MW	66							0
	HSF0504	5757	MW	128							0
	HSF0504	5758	MW	126							0
	HSF0504	5759	MW	125							0
	HSF0504	5760	MW	200							0
	HSF0504	5761	LSU	119							0
	HSF0504	5762	LSU	113							0
	HSF0504	5763	LSU	135							0
	HSF0504	5764	LNC	90							0
	HSF0504	5765	LNC	59							0
	HSF0504	5766	CCG	73							0
	HSF0504	5767	LSU	125							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0505	5768	BT	318							0
	HSF0505	5769	GR	71			SCALES	0			0
	HSF0505	5770	RB	158							0
	HSF0505	5771	RB	143							0
	HSF0505	5772	RB	146							0
	HSF0505	5773	MW	105							0
	HSF0505	5774	MW	124							0
	HSF0505	5775	MW	67							0
	HSF0505	5776	MW	69							0
	HSF0505	5777	MW	73							0
	HSF0505	5778	LSU	125							0
	HSF0505	5779	MW	106							0
	HSF0505	5780	LSU	139							0
	HSF0505	5781	LSU	115							0
	HSF0505	5782	LSU	110							0
	HSF0505	5783	LSU	118							0
	HSF0505	5784	MW	76							0
	HSF0505	5785	LSU	135							0
	HSF0505	5786	MW	66							0
	HSF0505	5787	MW	120							0
	HSF0505	5788	MW	63							0
	HSF0505	5789	LSU	122							0
	HSF0505	5790	CCG	67							0
	HSF0505	5791	MW	73							0
	HSF0505	5792	MW	71							0
	HSF0505	5793	CCG	70							0
	HSF0506	5794	BT	195			SCALES	1			0
	HSF0506	5795	MW	176							0
	HSF0506	5796	MW	187							0
	HSF0506	5797	MW	128							1
	HSF0506	5798	MW	110							1
	HSF0506	5799	MW	135							0
	HSF0506	5800	MW	125							0
	HSF0506	5801	MW	123							0
	HSF0506	5802	MW	71							0
	HSF0506	5803	MW	63							0
	HSF0506	5804	MW	66							0
	HSF0506	5805	MW	70							0
	HSF0506	5806	LSU	137							0
	HSF0506	5807	MW	111							0
	HSF0506	5808	MW	132							0
	HSF0506	5809	MW	68							0
	HSF0506	5810	CCG	68							0
	HSF0507	5811	RB	273							0
	HSF0507	5812	BT	235							0
	HSF0507	5813	GR	179							0
	HSF0507	5814	MW	197							0
	HSF0507	5815	MW	132							0
	HSF0507	5816	LSU	116							0
	HSF0507	5817	RB	182							0
	HSF0507	5818	MW	109							0
	HSF0507	5819	MW	129							0
	HSF0507	5820	MW	187							0
	HSF0507	5821	RB	136							0
	HSF0507	5822	MW	132							0
	HSF0507	5823	MW	113							0
	HSF0507	5824	MW	127							0
	HSF0507	5825	LSU	130							0
	HSF0507	5826	GR	135							0
	HSF0507	5827	MW	121							0
	HSF0507	5828	MW	118							0
	HSF0507	5829	LSU	120							0
	HSF0507	5830	MW	123							0
	HSF0507	5831	LSU	104							0
	HSF0507	5832	LSU	97							0
	HSF0507	5833	MW	108							0
	HSF0507	5834	MW	70							0
	HSF0507	5835	MW	128							0
	HSF0507	5836	MW	113							0
	HSF0507	5837	MW	113							0
	HSF0507	5838	LSU	134							0
	HSF0507	5839	MW	126							0
	HSF0507	5840	MW	127							0
	HSF0507	5841	MW	130							0
	HSF0507	5842	MW	118							0
	HSF0507	5843	MW	126							0
	HSF0507	5844	MW	122							0
	HSF0507	5845	MW	74							0
	HSF0507	5846	MW	117							0
	HSF0507	5847	MW	73							0
	HSF0507	5848	LNC	60							0
	HSF0507	5849	MW	63							0
	HSF0507	5850	LNC	62							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0507	5851	MW	122							0
	HSF0507	5852	MW	61							0
	HSF0507	5853	LNC	60							0
	HSF0507	5854	MW	80							0
	HSF0507	5855	LSU	115							0
	HSF0507	5856	MW	115							0
	HSF0507	5857	LSU	115							0
	HSF0507	5858	LSU	95							0
	HSF0507	5859	LSU	111							0
	HSF0507	5860	LNC	44							0
	HSF0507	5861	MW	72							0
	HSF0507	5862	LSU	106							0
	HSF0507	5863	CCG	73							0
	MBS0501	3165	YSU	25							0
	MBS0501	3166	YSU	23							0
	MBS0501	3167	YSU	28							0
	MBS0501	3168	YSU	23							0
	MBS0501	3169	YSU	26							0
	MBS0501	3170	YSU	25							0
	MBS0501	3171	YSU	22							0
	MBS0501	3172	YSU	23							0
	MBS0501	3173	YSU	22							0
	MBS0501	3174	YSU	32							0
	MBS0501	3175	TP	27							0
	MBS0501	3176	RSC	43							0
	MBS0501	3177	RSC	39							0
	MBS0501	3178	RSC	20							0
	MBS0501	3179	RSC	40							0
	MBS0501	3180	LNC	24							0
	MBS0501	3181	LNC	22							0
	MBS0501	3182	LNC	22							0
	MBS0501	3183	RSC	19							0
	MBS0501	3184	TP	22							0
	MBS0501	3185	LNC	21							0
	MBS0501	3186	LNC	30							0
	MBS0501	3187	RSC	19							0
	MBS0501	3188	LNC	17							0
	MBS0501	3189	LNC	22							0
	MBS0501	3190	RSC	35							0
	MBS0501	3191	TP	22							0
	MBS0501	3192	RSC	19							0
	MBS0501	3193	LNC	17							0
	MBS0501	3194	TP	17							0
	MBS0501	3195	TP	23							0
	MBS0501	3196	LNC	20							0
	MBS0501	3197	LNC	19							0
	MBS0501	3198	RSC	43							0
	MBS0501	3199	RSC	20							0
	MBS0501	3200	LKC	45							0
	MBS0502	3201	RSC	19							0
	MBS0502	3202	RSC	38							0
	MBS0502	3203	YSU	25							0
	MBS0502	3204	RSC	18							0
	MBS0502	3205	YSU	22							0
	MBS0502	3206	RSC	22							0
	MBS0502	3207	RSC	20							0
	MBS0502	3208	RSC	18							0
	MBS0502	3209	RSC	36							0
	MBS0502	3210	RSC	47							0
	MBS0502	3211	YSU	22							0
	MBS0502	3212	RSC	38							0
	MBS0502	3213	RSC	21							0
	MBS0502	3214	YSU	23							0
	MBS0502	3215	YSU	22							0
	MBS0502	3216	YSU	21							0
	MBS0502	3217	YSU	22							0
	MBS0502	3218	YSU	19							0
	MBS0502	3219	YSU	24							0
	MBS0502	3220	YSU	18							0
	MBS0502	3221	TP	18							0
	MBS0502	3222	LNC	17							0
	MEF0501	2869	LKC	108							0
	MEF0501	2870	NP	114							0
	MEF0501	2871	LKC	118							0
	MEF0501	2872	BB	205							0
	MEF0501	2873	CCG	75							0
	MEF0501	2874	RSC	65							0
	MEF0501	2875	CCG	67							0
	MEF0501	2876	BB	128							0
	MEF0501	2877	BB	160							0
	MEF0501	2878	LNC	52							0
	MEF0501	2879	LNC	40							0
	MEF0501	2880	CCG	50							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MEF0501	2881	CCG	57							0
	MEF0501	2882	CCG	26							0
	MEF0502	2883	LNC	59							0
	MEF0502	2884	BB	167							0
	MEF0502	2885	CCG	41							0
	MEF0502	2886	CCG	44							0
	MEF0502	2887	LNC	42							0
	MEF0502	2888	YSU	25							0
	MEF0503	2889	NP	115							0
	MEF0503	2890	CCG	82							0
	MEF0503	2891	YSU	21							0
	MEF0504	2892	BB	151							0
	MEF0504	2893	YSU	24							0
	MEF0504	2894	LNC	37							0
	MEF0504	2895	LNC	53							0
	MEF0504	2896	YSU	27							0
	MEF0504	2897	YSU	23							0
	MEF0504	2898	BB	52							0
	MEF0504	2899	LNC	25							0
	MEF0504	2900	YSU	28							0
	MEF0504	2901	RSC	20							0
	MEF0504	2902	LNC	67							0
	MEF0504	2903	LNC	62							0
	MEF0504	2904	LNC	36							0
	MSF0501	959	MW	227							0
	MSF0501	960	MW	287							0
	MSF0501	961	MW	242							0
	MSF0501	962	MW	266							0
	MSF0501	963	MW	223							0
	MSF0501	964	MW	213							0
	MSF0501	965	MW	233							0
	MSF0501	966	LSU	193							0
	MSF0501	967	MW	250							0
	MSF0501	968	MW	233							0
	MSF0501	969	MW	170							0
	MSF0501	970	LSU	201							0
	MSF0501	971	LSU	159							0
	MSF0501	972	LSU	171							0
	MSF0501	973	MW	159							0
	MSF0501	974	LSU	191							0
	MSF0501	975	LSU	167							0
	MSF0501	976	LSU	148							0
	MSF0501	977	LSU	158							0
	MSF0501	978	LSU	111							0
	MSF0501	979	LSU	150							0
	MSF0501	980	MW	160							0
	MSF0501	981	LSU	134							0
	MSF0501	982	LSU	163							0
	MSF0501	983	LSU	194							0
	MSF0501	984	GR	145			SCALES				0
	MSF0501	985	LSU	138							0
	MSF0501	986	BB	176							0
	MSF0501	987	LSU	152							0
	MSF0501	988	LSU	118							0
	MSF0501	989	LSU	137							0
	MSF0501	990	LSU	123							0
	MSF0501	991	LSU	139							0
	MSF0501	992	LSU	143							0
	MSF0501	993	RSC	72							0
	MSF0501	994	CCG	62							0
	MSF0501	995	MW	68							0
	MSF0501	996	GR	146			SCALES	1			0
	MSF0501	997	GR	140			SCALES				0
	MSF0501	998	MW	116							0
	MSF0501	999	LNC	58							0
	MSF0501	1000	MW	64							0
	MSF0501	1001	MW	122							0
	MSF0501	1002	CCG	77							0
	MSF0501	1003	MW	157							0
	MSF0501	1004	MW	113							0
	MSF0501	1005	MW	112							0
	MSF0501	1006	LNC	120							0
	MSF0501	1007	LNC	117							0
	MSF0501	1008	LNC	81							0
	MSF0501	1009	LNC	67							0
	MSF0501	1010	MW	125							0
	MSF0501	1011	MW	112							0
	MSF0501	1012	TP	72							0
	MSF0501	1013	MW	115							0
	MSF0501	1014	MW	65							0
	MSF0501	1015	MW	117							0
	MSF0501	1016	MW	63							0
	MSF0501	1017	LSU	130							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0501	1018	LSU	140							0
	MSF0501	1019	LNC	60							0
	MSF0501	1020	LNC	75							0
	MSF0501	1021	MW	67							0
	MSF0501	1022	LNC	53							0
	MSF0501	1023	RSC	93							0
	MSF0501	1024	MW	61							0
	MSF0501	1025	LSU	109							0
	MSF0501	1026	CCG	68							0
	MSF0501	1027	LNC	94							0
	MSF0501	1028	RSC	74							0
	MSF0501	1029	LSU	67							0
	MSF0501	1030	CCG	68							0
	MSF0501	1031	CCG	62							0
	MSF0501	1032	MW	118							0
	MSF0501	1033	MW	64							0
	MSF0501	1034	LNC	58							0
	MSF0501	1035	LSU	155							0
	MSF0501	1036	LSU	84							0
	MSF0501	1037	LSU	57							0
	MSF0501	1038	CCG	54							0
	MSF0502	1039	GR	255			SCALES	3			0
	MSF0502	1040	MW	225			SCALES				0
	MSF0502	1041	MW	302			SCALES				0
	MSF0502	1042	MW	122			SCALES				0
	MSF0502	1043	MW	113			SCALES	1			0
	MSF0502	1044	MW	190			SCALES	3			0
	MSF0502	1045	MW	124			SCALES				0
	MSF0502	1046	MW	203			SCALES				0
	MSF0502	1047	MW	128			SCALES	1			0
	MSF0502	1048	MW	218			SCALES	4			0
	MSF0502	1049	MW	260			SCALES	5			0
	MSF0502	1050	MW	219			SCALES	3			0
	MSF0502	1051	MW	112			SCALES				0
	MSF0502	1052	MW	283			SCALES	6			0
	MSF0502	1053	MW	122			SCALES				0
	MSF0502	1054	MW	183			SCALES				0
	MSF0502	1055	MW	274			SCALES	5			0
	MSF0502	1056	MW	235			SCALES	6			0
	MSF0502	1057	MW	123							0
	MSF0502	1058	LSU	126							0
	MSF0502	1059	LSU	194							0
	MSF0502	1060	LSU	298							0
	MSF0502	1061	LSU	163							0
	MSF0502	1062	LSU	260							0
	MSF0502	1063	BB	159							0
	MSF0502	1064	MW	120							0
	MSF0502	1065	MW	69							0
	MSF0502	1066	MW	73							0
	MSF0502	1067	LSU	131							0
	MSF0502	1068	LSU	203							0
	MSF0502	1069	MW	134							0
	MSF0502	1070	LSU	150							0
	MSF0502	1071	MW	68							0
	MSF0502	1072	LSU	177							0
	MSF0502	1073	LSU	146							0
	MSF0502	1074	LSU	123							0
	MSF0502	1075	BB	165							0
	MSF0502	1076	LSU	176							0
	MSF0502	1077	RSC	45							0
	MSF0502	1078	MW	122							0
	MSF0502	1079	MW	72							0
	MSF0502	1080	LSU	152							0
	MSF0502	1081	MW	118							0
	MSF0502	1082	RSC	88							0
	MSF0502	1083	RSC	103							0
	MSF0502	1084	RSC	50							0
	MSF0502	1085	LNC	42							0
	MSF0502	1086	RSC	80							0
	MSF0502	1087	RSC	86							0
	MSF0502	1088	RSC	68							0
	MSF0502	1089	LNC	74							0
	MSF0502	1090	MW	63							0
	MSF0502	1091	LNC	116							0
	MSF0502	1092	RSC	91							0
	MSF0502	1093	RSC	88							0
	MSF0502	1094	LNC	56							0
	MSF0502	1095	LKC	88							0
	MSF0502	1096	CCG	62							0
	MSF0502	1097	LNC	66							0
	MSF0502	1098	LNC	77							0
	MSF0503	1099	MW	247			SCALES	6			0
	MSF0503	1100	MW	244			SCALES				0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0503	1101	MW	247			SCALES	4			0
	MSF0503	1102	MW	222			SCALES				0
	MSF0503	1103	MW	228			SCALES	4			0
	MSF0503	1104	MW	210			SCALES				0
	MSF0503	1105	MW	244			SCALES				0
	MSF0503	1106	MW	205			SCALES	4			0
	MSF0503	1107	MW	233			SCALES	3			0
	MSF0503	1108	LSU	206							0
	MSF0503	1109	MW	193							0
	MSF0503	1110	MW	157							0
	MSF0503	1111	MW	165							0
	MSF0503	1112	MW	128							0
	MSF0503	1113	LSU	138							0
	MSF0503	1114	LNC	95							0
	MSF0503	1115	LSU	145							0
	MSF0503	1116	MW	198							0
	MSF0503	1117	GR	149			SCALES	1			0
	MSF0503	1118	MW	161							0
	MSF0503	1119	LSU	148							0
	MSF0503	1120	LNC	76							0
	MSF0503	1121	RSC	102							0
	MSF0503	1122	MW	121							0
	MSF0503	1123	MW	160							0
	MSF0503	1124	MW	176							0
	MSF0503	1125	LSU	202							0
	MSF0503	1126	MW	133							0
	MSF0503	1127	MW	128							0
	MSF0503	1128	MW	139							0
	MSF0503	1129	LSU	152							0
	MSF0503	1130	LKC	102							0
	MSF0503	1131	LKC	106							0
	MSF0503	1132	MW	106							0
	MSF0503	1133	MW	116							0
	MSF0503	1134	RSC	70							0
	MSF0503	1135	RSC	87							0
	MSF0503	1136	RSC	68							0
	MSF0503	1137	RSC	95							0
	MSF0503	1138	MW	123							0
	MSF0503	1139	RSC	79							0
	MSF0503	1140	LKC	106							0
	MSF0503	1141	RSC	99							0
	MSF0503	1142	LNC	50							0
	MSF0503	1143	MW	122							0
	MSF0503	1144	MW	62							0
	MSF0503	1145	LNC	64							0
	MSF0503	1146	CCG	80							0
	MSF0503	1147	LNC	56							0
	MSF0503	1148	LSU	74							0
	MSF0503	1149	LNC	60							0
	MSF0503	1150	LNC	62							0
	MSF0503	1151	CCG	78							0
	MSF0503	1152	LNC	66							0
	MSF0503	1153	LNC	57							0
	MSF0503	1154	CCG	58							0
	MSF0503	1155	CCG	64							0
	MSF0503	1156	LNC	54							0
	MSF0503	1157	CCG	62							0
	MSF0503	1158	BB	150							0
	MSF0503	1159	CCG	69							0
	MSF0504	1160	NP	472							0
	MSF0504	1161	NP	308							0
	MSF0504	1162	GR	204			SCALES	2			0
	MSF0504	1163	LSU	213							0
	MSF0504	1164	MW	216			SCALES				0
	MSF0504	1165	GR	150			SCALES				0
	MSF0504	1166	MW	227			SCALES	4			0
	MSF0504	1167	MW	289			SCALES				0
	MSF0504	1168	MW	252							0
	MSF0504	1169	MW	233							0
	MSF0504	1170	MW	232			SCALES				0
	MSF0504	1171	MW	59							0
	MSF0504	1172	GR	147							0
	MSF0504	1173	GR	138			SCALES	1			0
	MSF0504	1174	LSU	160							0
	MSF0504	1175	MW	233							0
	MSF0504	1176	MW	229							0
	MSF0504	1177	MW	230							0
	MSF0504	1178	LNC	50							0
	MSF0504	1179	MW	190			SCALES	3			0
	MSF0504	1180	MW	223							0
	MSF0504	1181	MW	214							0
	MSF0504	1182	MW	199			SCALES	4			0
	MSF0504	1183	MW	150							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0504	1184	WSC	154							0
	MSF0504	1185	BB	164							0
	MSF0504	1186	MW	130							0
	MSF0504	1187	GR	135			SCALES				0
	MSF0504	1188	MW	162							0
	MSF0504	1189	MW	117							0
	MSF0504	1190	MW	164			SCALES				0
	MSF0504	1191	MW	122							0
	MSF0504	1192	MW	122							0
	MSF0504	1193	LSU	161							0
	MSF0504	1194	MW	157							0
	MSF0504	1195	LSU	140							0
	MSF0504	1196	LNC	58							0
	MSF0504	1197	MW	123							0
	MSF0504	1198	LSU	167							0
	MSF0504	1199	MW	190							0
	MSF0504	1200	MW	130							0
	MSF0504	1201	LSU	188							0
	MSF0504	1202	LSU	145							0
	MSF0504	1203	LSU	154							0
	MSF0504	1204	CCG	75							0
	MSF0504	1205	CCG	59							0
	MSF0504	1206	LSU	158							0
	MSF0504	1207	LSU	152							0
	MSF0504	1208	LSU	147							0
	MSF0504	1209	LSU	136							0
	MSF0504	1210	LNC	110							0
	MSF0504	1211	LSU	111							0
	MSF0504	1212	RSC	50							0
	MSF0504	1213	BB	140							0
	MSF0504	1214	TP	78							0
	MSF0504	1215	LSU	135							0
	MSF0504	1216	CCG	70							0
	MSF0504	1217	CCG	47							0
	MSF0504	1218	CCG	48							0
	MSF0504	1219	MW	65							0
	MSF0504	1220	MW	60							0
	MSF0504	1221	CCG	66							0
	MSF0504	1222	CCG	63							0
	MSF0504	1223	CCG	60							0
	MSF0504	1224	CCG	64							0
	MSF0504	1225	CCG	62							0
	MSF0504	1226	CCG	50							0
	MSF0504	1227	CCG	46							0
	MSF0504	1228	CCG	60							0
	MSF0504	1229	CCG	44							0
	MSF0504	1230	CCG	47							0
	MSF0504	1231	CCG	50							0
	MSF0505	1232	MW	312			SCALES	8			0
	MSF0505	1233	MW	263							0
	MSF0505	1234	GR	218			SCALES	2			0
	MSF0505	1235	BB	160							0
	MSF0505	1236	LSU	324							0
	MSF0505	1237	MW	202							0
	MSF0505	1238	MW	175							0
	MSF0505	1239	LSU	138							0
	MSF0505	1240	MW	196							0
	MSF0505	1241	MW	204							0
	MSF0505	1242	MW	243							0
	MSF0505	1243	MW	213							0
	MSF0505	1244	MW	160							0
	MSF0505	1245	LSU	250							0
	MSF0505	1246	LSU	230							0
	MSF0505	1247	MW	120							0
	MSF0505	1248	LSU	139							0
	MSF0505	1249	RSC	68							0
	MSF0505	1250	MW	212							0
	MSF0505	1251	MW	192							0
	MSF0505	1252	LSU	163							0
	MSF0505	1253	LSU	140							0
	MSF0505	1254	MW	234							0
	MSF0505	1255	MW	190							0
	MSF0505	1256	MW	124							0
	MSF0505	1257	LSU	170							0
	MSF0505	1258	LSU	102							0
	MSF0505	1259	RSC	61							0
	MSF0505	1260	MW	177							0
	MSF0505	1261	MW	132							0
	MSF0505	1262	MW	141							0
	MSF0505	1263	LSU	143							0
	MSF0505	1264	LNC	84							0
	MSF0505	1265	LSU	177							0
	MSF0505	1266	LSU	174							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0505	1267	MW	125							0
	MSF0505	1268	MW	116							0
	MSF0505	1269	NP	171							0
	MSF0505	1270	MW	123							0
	MSF0505	1271	MW	126							0
	MSF0505	1272	LSU	193							0
	MSF0505	1273	MW	123							0
	MSF0505	1274	LKC	113							0
	MSF0505	1275	MW	121							0
	MSF0505	1276	MW	117							0
	MSF0505	1277	RSC	100							0
	MSF0505	1278	RSC	122							0
	MSF0505	1279	RSC	62							0
	MSF0505	1280	MW	121							0
	MSF0505	1281	MW	71							0
	MSF0505	1282	MW	119							0
	MSF0505	1283	BB	153							0
	MSF0505	1284	MW	117							0
	MSF0505	1285	TP	83							0
	MSF0505	1286	CCG	55							0
	MSF0505	1287	LSU	115							0
	MSF0505	1288	LSU	139							0
	MSF0505	1289	RSC	68							0
	MSF0505	1290	CCG	62							0
	MSF0505	1291	RSC	59							0
	MSF0505	1292	MW	122							0
	MSF0505	1293	MW	117							0
	MSF0505	1294	CCG	59							0
	MSF0505	1295	MW	66							0
	MSF0505	1296	CCG	59							0
	MSF0505	1297	LSU	151							0
	MSF0505	1298	LSU	107							0
	MSF0505	1299	LNC	56							0
	MSF0505	1300	CCG	67							0
	MSF0505	1301	RSC	95							0
	MSF0505	1302	RSC	68							0
	MSF0505	1303	BB	134							0
	MSF0505	1304	CCG	60							0
	MSF0505	1305	CCG	56							0
	MSF0505	1306	CCG	57							0
	MSF0505	1307	CCG	60							0
	MSF0506	1308	GR	152			SCALES				0
	MSF0506	1309	MW	237							0
	MSF0506	1310	MW	249							0
	MSF0506	1311	MW	275							0
	MSF0506	1312	MW	279							0
	MSF0506	1313	MW	213							0
	MSF0506	1314	MW	260							0
	MSF0506	1315	MW	218							0
	MSF0506	1316	MW	227							0
	MSF0506	1317	MW	222							0
	MSF0506	1318	MW	274							0
	MSF0506	1319	WSC	194							0
	MSF0506	1320	LSU	121							0
	MSF0506	1321	MW	247							0
	MSF0506	1322	MW	282			SCALES				0
	MSF0506	1323	MW	170							0
	MSF0506	1324	MW	156							0
	MSF0506	1325	MW	65							0
	MSF0506	1326	LSU	203							0
	MSF0506	1327	MW	250							0
	MSF0506	1328	LSU	144							0
	MSF0506	1329	RSC	75							0
	MSF0506	1330	GR	139			SCALES	1			0
	MSF0506	1331	MW	153							0
	MSF0506	1332	MW	158							0
	MSF0506	1333	MW	69							0
	MSF0506	1334	LSU	144							0
	MSF0506	1335	CCG	65							0
	MSF0506	1336	BB	172							0
	MSF0506	1337	RSC	75							0
	MSF0506	1338	RSC	75							0
	MSF0506	1339	RSC	70							0
	MSF0506	1340	LNC	54							0
	MSF0506	1341	MW	159							0
	MSF0506	1342	BB	142							0
	MSF0506	1343	MW	122							0
	MSF0506	1344	LSU	142							0
	MSF0506	1345	WSC	155							0
	MSF0506	1346	MW	123							0
	MSF0506	1347	MW	150							0
	MSF0506	1348	MW	120							0
	MSF0506	1349	MW	135							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0506	1350	LSU	127							0
	MSF0506	1351	RSC	60							0
	MSF0506	1352	LSU	144							0
	MSF0506	1353	MW	62							0
	MSF0506	1354	MW	65							0
	MSF0506	1355	MW	62							0
	MSF0506	1356	RSC	55							0
	MSF0506	1357	RSC	60							0
	MSF0506	1358	MW	65							0
	MSF0506	1359	RSC	65							0
	MSF0506	1360	LSU	83							0
	MSF0506	1361	BB	103							0
	MSF0506	1362	MW	123							0
	MSF0506	1363	CCG	55							0
	MSF0506	1364	CCG	58							0
	MSF0506	1365	CCG	57							0
	MSF0506	1366	LSU	82							0
	MSF0507	1367	NP	605							0
	MSF0507	1368	WSC	371							0
	MSF0507	1369	MW	219							0
	MSF0507	1370	WSC	182							0
	MSF0507	1371	MW	248							0
	MSF0507	1372	MW	222							0
	MSF0507	1373	LSU	118							0
	MSF0507	1374	MW	226							0
	MSF0507	1375	MW	154							0
	MSF0507	1376	LNC	66							0
	MSF0507	1377	MW	168							0
	MSF0507	1378	LSU	126							0
	MSF0507	1379	WSC	116							0
	MSF0507	1380	MW	130							0
	MSF0507	1381	MW	110							0
	MSF0507	1382	MW	124							0
	MSF0507	1383	MW	120							0
	MSF0507	1384	RSC	51							0
	MSF0507	1385	RSC	70							0
	MSF0507	1386	RSC	52							0
	MSF0507	1387	MW	68							0
	MSF0507	1388	RSC	102							0
	MSF0507	1389	RSC	92							0
	MSF0507	1390	LNC	53							0
	MSF0507	1391	MW	61							0
	MSF0507	1392	RSC	70							0
	MSF0507	1393	RSC	50							0
	MSF0507	1394	CCG	60							0
	MSF0507	1395	CCG	60							0
	MSF0507	1396	CCG	57							0
	MSF0507	1397	CCG	56							0
	MSF0507	1398	MW	122							0
	MSF0507	1399	CCG	55							0
	MSF0507	1400	LNC	60							0
	MSF0507	1401	CCG	48							0
	MSF0507	1402	BB	160							0
	MSF0507	1403	MW	57							0
	MSF0507	1404	LNC	68							0
	MSF0507	1405	CCG	81							0
	MSF0507	1406	TP	62							0
	MSF0507	1407	CCG	62							0
	MSF0507	1408	LNC	70							0
	MSF0507	1409	CCG	66							0
	MSF0507	1410	LNC	64							0
	MSF0507	1411	LNC	93							0
	MSF0507	1412	CCG	63							0
	MSF0507	1413	NSC	77							0
06											
	HBS0601	3322	RSC	68							0
	HBS0601	3323	RSC	64							0
	HBS0601	3324	RSC	66							0
	HBS0601	3325	RSC	67							0
	HBS0601	3326	RSC	74							0
	HBS0601	3327	RSC	59							0
	HBS0601	3328	RSC	71							0
	HBS0601	3329	RSC	64							0
	HBS0601	3330	RSC	72							0
	HBS0601	3331	RSC	50							0
	HBS0601	3332	LSU	25							0
	HBS0601	3333	CSU	132							0
	HBS0601	3334	LKC	68							0
	HBS0601	3335	CSU	75							0
	HBS0601	3336	LSU	31							0
	HBS0601	3337	LSU	23							0
	HEF0601	3984	LSU	103							0
	HEF0601	3985	MW	69							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0601	3986	LNC	78							0
	HEF0601	3987	CCG	74							0
	HEF0601	3988	LSU	101							0
	HEF0601	3989	LNC	60							0
	HEF0601	3990	LNC	66							0
	HEF0601	3991	LNC	55							0
	HEF0601	3992	LNC	58							0
	HEF0601	3993	LNC	65							0
	HEF0601	3994	MW	72							0
	HEF0601	3995	LNC	56							0
	HEF0601	3996	MW	53							0
	HEF0601	3997	MW	64							0
	HEF0601	3998	MW	62							0
	HEF0602	3999	LSU	107							0
	HEF0602	4000	LSU	110							0
	HEF0602	4001	LSU	114							0
	HEF0602	4002	RSC	75							0
	HEF0602	4003	RSC	65							0
	HEF0602	4004	LNC	60							0
	HEF0602	4005	LNC	56							0
	HEF0602	4006	CCG	64							0
	HEF0602	4007	MW	52							0
	HEF0603	4008	LSU	95							0
	HEF0603	4009	LSU	70							0
	HEF0603	4010	CCG	66							0
	HEF0603	4011	MW	55							0
	HEF0603	4012	MW	53							0
	HEF0603	4013	MW	51							0
	HEF0603	4014	MW	57							0
	HEF0603	4015	MW	51							0
	HEF0603	4016	MW	62							0
	HEF0603	4017	MW	68							0
	HEF0603	4018	MW	57							0
	HEF0603	4019	MW	68							0
	HEF0603	4020	MW	62							0
	HEF0603	4021	GR	64			SCALES	0			0
	HEF0603	4022	CCG	32							0
	HEF0604	4023	LSU	245							0
	HEF0604	4024	LSU	249							0
	HEF0604	4025	LSU	176							0
	HEF0604	4026	LSU	128							0
	HEF0604	4027	RSC	82							0
	HEF0604	4028	LKC	86							0
	HEF0604	4029	LSU	118							0
	HEF0604	4030	RSC	89							0
	HEF0604	4031	RSC	88							0
	HEF0604	4032	RSC	86							0
	HEF0604	4033	LKC	50							0
	HEF0604	4034	CCG	29							0
	HEF0604	4035	LSU	71							0
	HEF0604	4036	LNC	65							0
	HEF0604	4037	RSC	70							0
	HEF0604	4038	LNC	69							0
	HEF0604	4039	LNC	65							0
	HEF0604	4040	CCG	58							0
	HEF0604	4041	LNC	60							0
	HEF0604	4042	RSC	91							0
	HEF0604	4043	RSC	82							0
	HEF0604	4044	RSC	72							0
	HEF0604	4045	CCG	60							0
	HEF0604	4046	LKC	66							0
	HEF0605	4047	LSU	93							0
	HEF0605	4048	LSU	88							0
	HEF0605	4049	MW	40							0
	HEF0605	4050	MW	69							0
	HEF0605	4051	MW	49							0
	HEF0605	4052	LSU	90							0
	HEF0605	4053	LKC	56							0
	HEF0605	4054	LSU	80							0
	HEF0605	4055	LSU	78							0
	HEF0605	4056	LKC	65							0
	HEF0605	4057	LKC	70							0
	HEF0605	4058	MW	60							0
	HEF0605	4059	LSU	56							0
	HEF0605	4060	LSU	87							0
	HEF0605	4061	LSU	100							0
	HEF0605	4062	LSU	94							0
	HEF0605	4063	LSU	91							0
	HEF0605	4064	MW	63							0
	HEF0605	4065	MW	67							0
	HEF0605	4066	MW	65							0
	HEF0605	4067	MW	65							0
	HEF0605	4068	CCG	74							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0605	4069	MW	61							0
	HEF0605	4070	CCG	60							0
	HEF0605	4071	MW	48							0
	HEF0605	4072	MW	65							0
	HEF0605	4073	CSU	92							0
	HEF0605	4074	LNC	58							0
	HEF0605	4075	CCG	54							0
	HEF0605	4076	LNC	64							0
	HEF0605	4077	LKC	61							0
	HEF0605	4078	LNC	50							0
	HSF0601	5864	MW	104			SCALES				0
	HSF0601	5865	MW	120			SCALES				0
	HSF0601	5866	MW	65			SCALES				0
	HSF0601	5867	MW	135			SCALES	1			0
	HSF0601	5868	MW	120			SCALES				0
	HSF0601	5869	GR	131			SCALES	1			0
	HSF0601	5870	RB	151			SCALES				0
	HSF0601	5871	MW	203							0
	HSF0601	5872	MW	119							0
	HSF0601	5873	MW	122							0
	HSF0601	5874	MW	129							0
	HSF0601	5875	MW	139							0
	HSF0601	5876	MW	124							0
	HSF0601	5877	MW	119							0
	HSF0601	5878	MW	105							0
	HSF0601	5879	MW	134							0
	HSF0601	5880	LNC	55							0
	HSF0601	5881	MW	110							0
	HSF0601	5882	MW	75							0
	HSF0601	5883	MW	66							0
	HSF0601	5884	MW	49							0
	HSF0601	5885	MW	68							0
	HSF0601	5886	MW	65							0
	HSF0601	5887	MW	65							0
	HSF0601	5888	MW	60							0
	HSF0601	5889	MW	126							0
	HSF0601	5890	MW	120							0
	HSF0601	5891	MW	55							0
	HSF0601	5892	MW	129							0
	HSF0601	5893	MW	124							0
	HSF0601	5894	MW	118							0
	HSF0601	5895	MW	123							0
	HSF0601	5896	MW	119							0
	HSF0601	5897	MW	119							0
	HSF0601	5898	MW	115							0
	HSF0601	5899	MW	65							0
	HSF0601	5900	MW	59							0
	HSF0601	5901	MW	66							0
	HSF0601	5902	MW	69							0
	HSF0601	5903	MW	125							0
	HSF0601	5904	MW	118							0
	HSF0601	5905	MW	113							0
	HSF0601	5906	MW	125							0
	HSF0601	5907	MW	122							0
	HSF0601	5908	MW	125							0
	HSF0601	5909	MW	58							0
	HSF0601	5910	MW	70							0
	HSF0601	5911	MW	119							0
	HSF0601	5912	MW	130							0
	HSF0601	5913	MW	60							0
	HSF0601	5914	MW	200							0
	HSF0601	5915	MW	61							0
	HSF0601	5916	MW	65							0
	HSF0601	5917	MW	72							0
	HSF0601	5918	CCG	62							0
	HSF0601	5919	RB	144			SCALES				0
	HSF0601	5920	BT	216			SCALES				0
	HSF0601	5921	LSU	84							0
	HSF0601	5922	CCG	75							0
	HSF0601	5923	CCG	67							0
	HSF0601	5924	LSU	95							0
	HSF0601	5925	BT	358			SCALES				0
	HSF0602	5926	RB	238			SCALES				0
	HSF0602	5927	MW	204							0
	HSF0602	5928	MW	175							0
	HSF0602	5929	MW	169							0
	HSF0602	5930	RB	153			SCALES				0
	HSF0602	5931	MW	117							0
	HSF0602	5932	MW	133							0
	HSF0602	5933	MW	115							0
	HSF0602	5934	MW	122							0
	HSF0602	5935	MW	151							0
	HSF0602	5936	MW	125							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0602	5937	MW	125							0
	HSF0602	5938	MW	68							0
	HSF0602	5939	MW	127							0
	HSF0602	5940	MW	75							0
	HSF0602	5941	MW	58							0
	HSF0602	5942	MW	81							0
	HSF0602	5943	MW	70							0
	HSF0602	5944	MW	70							0
	HSF0602	5945	MW	74							0
	HSF0602	5946	MW	66							0
	HSF0602	5947	MW	73							0
	HSF0602	5948	MW	58							0
	HSF0602	5949	MW	62							0
	HSF0602	5950	LNC	68							0
	HSF0602	5951	MW	125							0
	HSF0602	5952	LSU	114							0
	HSF0602	5953	MW	118							0
	HSF0602	5954	MW	124							0
	HSF0602	5955	RB	130			SCALES				0
	HSF0602	5956	MW	124							0
	HSF0602	5957	LSU	117							0
	HSF0602	5958	MW	121							0
	HSF0602	5959	CCG	71							0
	HSF0602	5960	CCG	70							0
	HSF0602	5961	CCG	74							0
	HSF0602	5962	MW	70							0
	HSF0602	5963	MW	58							0
	HSF0602	5964	MW	61							0
	HSF0602	5965	LNC	64							0
	HSF0603	5966	RB	137			SCALES	1			0
	HSF0603	5967	MW	109							0
	HSF0603	5968	MW	126							0
	HSF0603	5969	MW	123							0
	HSF0603	5970	MW	69							0
	HSF0603	5971	RSC	80							0
	HSF0603	5972	MW	64							0
	HSF0603	5973	LSU	97							0
	HSF0603	5974	MW	57							0
	HSF0603	5975	RSC	71							0
	HSF0603	5976	MW	78							0
	HSF0603	5977	MW	64							0
	HSF0603	5978	MW	75							0
	HSF0603	5979	MW	60							0
	HSF0603	5980	MW	63							0
	HSF0603	5981	LSU	99							0
	HSF0603	5982	MW	75							0
	HSF0603	5983	RSC	99							0
	HSF0603	5984	MW	68							0
	HSF0603	5985	MW	74							0
	HSF0603	5986	MW	69							0
	HSF0603	5987	MW	70							0
	HSF0603	5988	MW	69							0
	HSF0603	5989	MW	74							0
	HSF0603	5990	MW	63							0
	HSF0603	5991	CSU	168							0
	HSF0603	5992	MW	118							0
	HSF0603	5993	LSU	118							0
	HSF0603	5994	MW	110							0
	HSF0603	5995	RSC	74							0
	HSF0603	5996	RSC	79							0
	HSF0603	5997	LSU	80							0
	HSF0603	5998	MW	63							1
	HSF0603	5999	MW	72							0
	HSF0603	6000	MW	51							0
	HSF0603	6001	MW	54							0
	HSF0603	6002	RB	160							0
	HSF0603	6003	MW	122							0
	HSF0603	6004	MW	123							0
	HSF0603	6005	RB	147							0
	HSF0603	6006	RSC	81							1
	HSF0603	6007	MW	123							0
	HSF0603	6008	LSU	100							0
	HSF0603	6009	LSU	84							0
	HSF0603	6010	MW	115							0
	HSF0603	6011	MW	60							0
	HSF0603	6012	CCG	75							0
	HSF0603	6013	LSU	115							0
	HSF0603	6014	LSU	89							0
	HSF0603	6015	MW	70							0
	HSF0603	6016	LSU	131							0
	HSF0603	6017	MW	116							0
	HSF0603	6018	LSU	104							0
	HSF0603	6019	LSU	94							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0603	6020	LSU	119							0
	HSF0603	6021	MW	70							0
	HSF0603	6022	LSU	75							0
	HSF0603	6023	LSU	109							0
	HSF0603	6024	LSU	95							0
	HSF0603	6025	CCG	69							0
	HSF0603	6026	MW	65							0
	HSF0603	6027	LSU	108							0
	HSF0603	6028	MW	68							0
	HSF0603	6029	CCG	64							0
	HSF0603	6030	LSU	83							0
	HSF0603	6031	LSU	110							0
	HSF0603	6032	LSU	109							0
	HSF0603	6033	LSU	104							0
	HSF0603	6034	LSU	83							0
	HSF0603	6035	MW	64							0
	HSF0603	6036	LNC	55							0
	HSF0603	6037	LNC	60							0
	HSF0603	6038	LNC	56							0
	HSF0603	6039	LNC	60							0
	HSF0603	6040	LNC	53							0
	HSF0603	6041	MW	55							0
	HSF0603	6042	LNC	65							0
	HSF0603	6043	LNC	49							0
	HSF0603	6044	CCG	60							0
	HSF0603	6045	CCG	57							0
	HSF0603	6046	LNC	56							0
	HSF0604	6047	GR	122							0
	HSF0604	6048	LSU	185							0
	HSF0604	6049	LSU	200							0
	HSF0604	6050	RB	145							0
	HSF0604	6051	LSU	199							0
	HSF0604	6052	RB	169							0
	HSF0604	6053	LSU	115							0
	HSF0604	6054	LSU	115							0
	HSF0604	6055	MW	122							0
	HSF0604	6056	MW	120							0
	HSF0604	6057	LSU	92							0
	HSF0604	6058	LNC	64							0
	HSF0604	6059	MW	55							0
	HSF0604	6060	MW	60							0
	HSF0604	6061	RSC	83							0
	HSF0604	6062	LSU	100							0
	HSF0604	6063	RSC	76							0
	HSF0604	6064	MW	56							0
	HSF0604	6065	MW	71							0
	HSF0604	6066	RSC	77							0
	HSF0604	6067	CCG	71							0
	HSF0604	6068	MW	65							0
	HSF0604	6069	MW	65							0
	HSF0604	6070	CCG	73							0
	HSF0604	6071	LSU	179							0
	HSF0604	6072	LSU	134							0
	HSF0604	6073	LSU	104							0
	HSF0604	6074	LSU	121							0
	HSF0604	6075	LSU	99							0
	HSF0604	6076	RB	121							0
	HSF0604	6077	RSC	70							0
	HSF0604	6078	RSC	88							0
	HSF0604	6079	MW	56							0
	HSF0604	6080	MW	54							0
	HSF0604	6081	MW	64							0
	HSF0604	6082	MW	68							0
	HSF0604	6083	CCG	75							0
	HSF0604	6084	CCG	57							0
	HSF0604	6085	CCG	63							0
	HSF0605	6086	BT	141			SCALES	1			0
	HSF0605	6087	BT	225			SCALES	2			0
	HSF0605	6088	BT	199			SCALES				0
	HSF0605	6089	LSU	187							0
	HSF0605	6090	LSU	207							0
	HSF0605	6091	LSU	170							0
	HSF0605	6092	LSU	124							0
	HSF0605	6093	WSC	155							0
	HSF0605	6094	LSU	137							0
	HSF0605	6095	LSU	129							0
	HSF0605	6096	LSU	155							0
	HSF0605	6097	LSU	138							0
	HSF0605	6098	CSU	90							0
	HSF0605	6099	LSU	91							0
	HSF0605	6100	RSC	90							0
	HSF0605	6101	RSC	77							0
	HSF0605	6102	RSC	84							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0605	6103	RSC	96							0
	HSF0605	6104	RSC	85							0
	HSF0605	6105	RSC	79							0
	HSF0605	6106	RSC	75							0
	HSF0605	6107	RSC	71							0
	HSF0605	6108	RSC	82							0
	HSF0605	6109	RSC	56							0
	HSF0605	6110	RSC	74							0
	HSF0605	6111	MW	103							0
	HSF0605	6112	MW	125							0
	HSF0605	6113	MW	115							0
	HSF0605	6114	MW	114							0
	HSF0605	6115	MW	124							0
	HSF0605	6116	MW	76							0
	HSF0605	6117	MW	64							0
	HSF0605	6118	MW	63							0
	HSF0605	6119	MW	54							0
	HSF0605	6120	MW	72							0
	HSF0605	6121	MW	63							0
	HSF0605	6122	CCG	59							0
	HSF0605	6123	LNC	61							0
	HSF0605	6124	CCG	65							0
	HSF0605	6125	RSC	63							0
	HSF0605	7647	MW	361							0
	HSF0606	6126	LSU	134							0
	HSF0606	6127	MW	129							0
	HSF0606	6128	LSU	145							0
	HSF0606	6129	RSC	66							0
	HSF0606	6130	LSU	119							0
	HSF0606	6131	LSU	130							0
	HSF0606	6132	LSU	109							0
	HSF0606	6133	LSU	106							0
	HSF0606	6134	RSC	75							0
	HSF0606	6135	MW	74							0
	HSF0606	6136	LSU	96							0
	HSF0606	6137	RSC	60							0
	HSF0606	6138	RSC	73							0
	HSF0606	6139	LSU	113							0
	HSF0606	6140	MW	71							0
	HSF0606	6141	RSC	69							0
	HSF0606	6142	LKC	65							0
	HSF0606	6143	RSC	78							0
	HSF0606	6144	MW	61							0
	HSF0606	6145	RSC	78							0
	HSF0606	6146	MW	69							0
	HSF0606	6147	RSC	70							0
	HSF0606	6148	RSC	68							0
	HSF0606	6149	LKC	60							0
	HSF0606	6150	BT	229							0
	HSF0606	6151	MW	199							0
	HSF0606	6152	MW	123							0
	HSF0606	6153	GR	111							0
	HSF0606	6154	MW	125							0
	HSF0606	6155	LSU	136							0
	HSF0606	6156	LSU	100							0
	HSF0606	6157	LSU	116							0
	HSF0606	6158	RSC	73							0
	HSF0606	6159	RSC	73							0
	HSF0606	6160	RSC	86							0
	HSF0606	6161	LSU	100							0
	HSF0606	6162	MW	113							0
	HSF0606	6163	LSU	105							0
	HSF0606	6164	RSC	82							0
	HSF0606	6165	LSU	94							0
	HSF0606	6166	RSC	70							0
	HSF0606	6167	LSU	111							0
	HSF0606	6168	CSU	100							0
	HSF0606	6169	LSU	84							0
	HSF0606	6170	RSC	71							0
	HSF0606	6171	LSU	108							0
	HSF0606	6172	MW	66							0
	HSF0606	6173	RSC	61							0
	HSF0606	6174	RSC	68							0
	HSF0606	6175	RSC	59							0
	HSF0606	6176	RSC	61							0
	HSF0606	6177	LSU	111							0
	HSF0606	6178	MW	123							0
	HSF0606	6179	LSU	126							0
	HSF0606	6180	LSU	108							0
	HSF0606	6181	LSU	109							0
	HSF0606	6182	RSC	59							0
	HSF0606	6183	RSC	83							0
	HSF0606	6184	LSU	99							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0606	6185	LSU	111							0
	HSF0606	6186	LSU	104							0
	HSF0606	6187	LSU	135							0
	HSF0606	6188	RSC	86							0
	HSF0606	6189	LSU	110							0
	HSF0606	6190	LSU	107							0
	HSF0606	6191	LSU	97							0
	HSF0606	6192	LSU	100							0
	HSF0606	6193	RSC	75							0
	HSF0606	6194	RSC	69							0
	HSF0606	6195	LNC	59							0
	HSF0606	6196	LSU	110							0
	HSF0606	6197	RSC	96							0
	HSF0606	6198	LNC	64							0
	HSF0606	7648	MW	281							0
	MBS0601	3223	LNC	17							0
	MBS0601	3224	RSC	39							0
	MBS0601	3225	YSU	28							0
	MBS0601	3226	YSU	25							0
	MBS0601	3227	YSU	26							0
	MBS0601	3228	RSC	42							0
	MBS0601	3229	RSC	44							0
	MBS0601	3230	RSC	45							0
	MBS0602	3231	RSC	41							0
	MBS0603	3232	YSU	26							0
	MBS0603	3233	LNC	18							0
	MBS0603	3234	LNC	21							0
	MBS0603	3235	TP	24							0
	MBS0603	3236	YSU	25							0
	MBS0603	3237	LNC	20							0
	MBS0603	3238	YSU	25							0
	MBS0603	3239	YSU	23							0
	MBS0603	3240	LNC	20							0
	MBS0603	3241	YSU	17							0
	MBS0603	3242	LNC	20							0
	MBS0603	3243	YSU	23							0
	MBS0603	3244	LSU	69							0
	MBS0603	3245	YSU	20							0
	MBS0603	3246	YSU	30							0
	MBS0603	3247	LNC	21							0
	MBS0603	3248	LNC	20							0
	MEF0601	2905	BB	167							0
	MEF0601	2906	YSU	26							0
	MEF0601	2907	LNC	23							0
	MEF0601	2908	YSU	24							0
	MEF0601	2909	CCG	64							0
	MEF0601	2910	CCG	67							0
	MEF0601	2911	CCG	28							0
	MEF0601	2912	CCG	59							0
	MEF0601	2913	YSU	24							0
	MEF0602	2914	BB	178							0
	MEF0602	2915	LNC	56							0
	MEF0602	2916	RSC	45							0
	MEF0602	2917	CCG	63							0
	MEF0602	2918	CCG	67							0
	MEF0602	2919	NP	138							0
	MEF0602	2920	LNC	22							0
	MEF0602	2921	LNC	45							0
	MEF0602	2922	LNC	54							0
	MEF0602	2923	CCG	49							0
	MEF0603	2924	LNC	67							0
	MEF0603	2925	LKC	57							0
	MEF0603	2926	LNC	42							0
	MEF0603	2927	CCG	70							0
	MEF0603	2928	LNC	55							0
	MEF0603	2929	LNC	61							0
	MEF0603	2930	LNC	55							0
	MEF0603	2931	RSC	42							0
	MEF0603	2932	LNC	56							0
	MEF0603	2933	LNC	52							0
	MEF0603	2934	LNC	45							0
	MEF0603	2935	LNC	40							0
	MEF0603	2936	LNC	57							0
	MSF0601	1414	LNC	56							0
	MSF0601	1415	LNC	58							0
	MSF0601	1416	LNC	56							0
	MSF0601	1417	MW	220							0
	MSF0601	1418	GR	150							0
	MSF0601	1419	MW	247							0
	MSF0601	1420	MW	193							0
	MSF0601	1421	LNC	107							0
	MSF0601	1422	TP	77							0
	MSF0601	1423	TP	51							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0601	1424	LNC	62							0
	MSF0601	1425	LSU	113							0
	MSF0601	1426	GR	60			SCALES	0			0
	MSF0601	1427	LSU	116							0
	MSF0601	1428	RSC	50							0
	MSF0601	1429	MW	118							0
	MSF0601	1430	MW	122							0
	MSF0601	1431	RSC	41							0
	MSF0601	1432	LNC	74							0
	MSF0601	1433	LSU	111							0
	MSF0601	1434	MW	112							0
	MSF0601	1435	RSC	72							0
	MSF0601	1436	LSU	52							0
	MSF0601	1437	MW	68							0
	MSF0601	1438	RSC	48							0
	MSF0601	1439	LNC	86							0
	MSF0601	1440	MW	114							0
	MSF0601	1441	CCG	72							0
	MSF0601	1442	MW	67							0
	MSF0601	1443	RSC	47							0
	MSF0601	1444	LNC	60							0
	MSF0601	1445	CCG	68							0
	MSF0601	1446	TP	80							0
	MSF0601	1447	CCG	50							0
	MSF0601	1448	MW	69							0
	MSF0601	1449	TP	71							0
	MSF0601	1450	TP	60							0
	MSF0601	1451	LNC	55							0
	MSF0601	1452	LNC	56							0
	MSF0601	1453	LNC	66							0
	MSF0601	1454	LNC	40							0
	MSF0601	1455	CCG	80							0
	MSF0601	1456	LNC	75							0
	MSF0601	1457	LNC	40							0
	MSF0602	1458	MW	203							0
	MSF0602	1459	NP	158							0
	MSF0602	1460	NP	157							0
	MSF0602	1461	MW	173							0
	MSF0602	1462	NP	127							0
	MSF0602	1463	LSU	150							0
	MSF0602	1464	MW	167							0
	MSF0602	1465	LSU	130							0
	MSF0602	1466	LSU	141							0
	MSF0602	1467	CSU	180							0
	MSF0602	1468	TP	57							0
	MSF0602	1469	MW	155							0
	MSF0602	1470	TP	82							0
	MSF0602	1471	BB	155							0
	MSF0602	1472	RSC	73							0
	MSF0602	1473	MW	68							0
	MSF0602	1474	RSC	82							0
	MSF0602	1475	LKC	102							0
	MSF0602	1476	MW	131							0
	MSF0602	1477	MW	122							0
	MSF0602	1478	RSC	97							0
	MSF0602	1479	MW	67							0
	MSF0602	1480	MW	55							0
	MSF0602	1481	RSC	62							0
	MSF0602	1482	RSC	68							0
	MSF0602	1483	RSC	92							0
	MSF0602	1484	RSC	68							0
	MSF0602	1485	LNC	40							0
	MSF0602	1486	MW	66							0
	MSF0602	1487	MW	65							0
	MSF0602	1488	MW	63							0
	MSF0602	1489	CCG	61							0
	MSF0602	1490	TP	57							0
	MSF0602	1491	LNC	55							0
	MSF0602	1492	LNC	57							0
	MSF0602	1493	LSU	83							0
	MSF0602	1494	CCG	60							0
	MSF0602	1495	TP	63							0
	MSF0602	1496	TP	66							0
	MSF0602	1497	CCG	51							0
	MSF0602	1498	CCG	67							0
	MSF0603	1499	MW	249							0
	MSF0603	1500	MW	281							0
	MSF0603	1501	GR	251			SCALES				0
	MSF0603	1502	MW	231							0
	MSF0603	1503	MW	271							0
	MSF0603	1504	GR	131			SCALES				0
	MSF0603	1505	CCG	57							0
	MSF0603	1506	RSC	50							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0603	1507	RSC	94							0
	MSF0603	1508	RSC	63							0
	MSF0603	1509	MW	214							0
	MSF0603	1510	MW	59							0
	MSF0603	1511	GR	142							0
	MSF0603	1512	MW	225							0
	MSF0603	1513	MW	191							0
	MSF0603	1514	LSU	140							0
	MSF0603	1515	MW	257							0
	MSF0603	1516	MW	230							0
	MSF0603	1517	MW	212							0
	MSF0603	1518	GR	148							0
	MSF0603	1519	MW	153							0
	MSF0603	1520	MW	116							0
	MSF0603	1521	MW	197							0
	MSF0603	1522	GR	150							0
	MSF0603	1523	GR	147							0
	MSF0603	1524	MW	117							0
	MSF0603	1525	MW	126							0
	MSF0603	1526	MW	177							0
	MSF0603	1527	GR	139							0
	MSF0603	1528	RSC	90							0
	MSF0603	1529	RSC	96							0
	MSF0603	1530	RSC	100							0
	MSF0603	1531	LSU	111							0
	MSF0603	1532	BB	143							0
	MSF0603	1533	MW	119							0
	MSF0603	1534	RSC	89							0
	MSF0603	1535	RSC	40							0
	MSF0603	1536	MW	65							0
	MSF0603	1537	MW	63							0
	MSF0603	1538	MW	65							0
	MSF0603	1539	MW	62							0
	MSF0603	1540	CCG	52							0
	MSF0603	1541	LNC	63							0
	MSF0603	1542	LNC	54							0
	MSF0603	1543	LNC	58							0
	MSF0603	1544	CCG	60							0
	MSF0603	1545	MW	62							0
	MSF0603	1546	MW	119							0
	MSF0603	1547	TP	72							0
	MSF0603	1548	CCG	57							0
	MSF0603	1549	LNC	55							0
	MSF0603	1550	CCG	70							0
	MSF0603	1551	CCG	62							0
	MSF0603	1552	MW	134							0
	MSF0603	1553	LNC	56							0
	MSF0603	1554	MW	65							0
	MSF0603	1555	LSU	82							0
	MSF0603	1556	LSU	87							0
	MSF0603	1557	LNC	58							0
	MSF0603	1558	LNC	56							0
	MSF0603	1559	LNC	60							0
	MSF0603	1560	LNC	56							0
	MSF0603	1561	CCG	57							0
	MSF0603	1562	CCG	59							0
	MSF0604	1563	NSC	428							0
	MSF0604	1564	MW	278							0
	MSF0604	1565	MW	277							0
	MSF0604	1566	MW	196							0
	MSF0604	1567	MW	286							0
	MSF0604	1568	MW	235							0
	MSF0604	1569	MW	209							0
	MSF0604	1570	MW	216							0
	MSF0604	1571	MW	233							0
	MSF0604	1572	LSU	136							0
	MSF0604	1573	MW	182							0
	MSF0604	1574	MW	190							0
	MSF0604	1575	MW	246							0
	MSF0604	1576	MW	277							0
	MSF0604	1577	LNC	54							0
	MSF0604	1578	MW	210							0
	MSF0604	1579	MW	244							0
	MSF0604	1580	MW	250							0
	MSF0604	1581	GR	162							0
	MSF0604	1582	GR	149							0
	MSF0604	1583	MW	160							0
	MSF0604	1584	MW	129							0
	MSF0604	1585	LSU	173							0
	MSF0604	1586	GR	154							0
	MSF0604	1587	MW	126							0
	MSF0604	1588	CCG	79							0
	MSF0604	1589	BB	185							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0604	1590	MW	132							0
	MSF0604	1591	MW	134							0
	MSF0604	1592	MW	164							0
	MSF0604	1593	MW	122							0
	MSF0604	1594	MW	123							0
	MSF0604	1595	MW	122							0
	MSF0604	1596	MW	118							0
	MSF0604	1597	LSU	124							0
	MSF0604	1598	GR	143							0
	MSF0604	1599	LSU	117							0
	MSF0604	1600	MW	118							0
	MSF0604	1601	MW	158							0
	MSF0604	1602	LNC	64							0
	MSF0604	1603	GR	140							0
	MSF0604	1604	RSC	59							0
	MSF0604	1605	RSC	89							0
	MSF0604	1606	RSC	91							0
	MSF0604	1607	RSC	44							0
	MSF0604	1608	RSC	92							0
	MSF0604	1609	RSC	42							0
	MSF0604	1610	RSC	90							0
	MSF0604	1611	LNC	80							0
	MSF0604	1612	RSC	96							0
	MSF0604	1613	RSC	45							0
	MSF0604	1614	LNC	92							0
	MSF0604	1615	LNC	110							0
	MSF0604	1616	CCG	60							0
	MSF0604	1617	LNC	50							0
	MSF0604	1618	LNC	72							0
	MSF0604	1619	LNC	87							0
	MSF0605	1620	MW	330			SCALES	9			0
	MSF0605	1621	GR	150							0
	MSF0605	1622	MW	269							0
	MSF0605	1623	MW	223							0
	MSF0605	1624	MW	270							0
	MSF0605	1625	MW	235							0
	MSF0605	1626	MW	241							0
	MSF0605	1627	MW	221							0
	MSF0605	1628	MW	260							0
	MSF0605	1629	MW	283							0
	MSF0605	1630	MW	230							0
	MSF0605	1631	MW	257							0
	MSF0605	1632	MW	133							0
	MSF0605	1633	MW	213							0
	MSF0605	1634	WSC	149							0
	MSF0605	1635	MW	195							0
	MSF0605	1636	MW	239							0
	MSF0605	1637	MW	240							0
	MSF0605	1638	MW	131							0
	MSF0605	1639	LSU	215							0
	MSF0605	1640	MW	222							0
	MSF0605	1641	MW	198							0
	MSF0605	1642	MW	231							0
	MSF0605	1643	LSU	141							0
	MSF0605	1644	MW	223							0
	MSF0605	1645	MW	178							0
	MSF0605	1646	LSU	157							0
	MSF0605	1647	MW	182							0
	MSF0605	1648	MW	67							0
	MSF0605	1649	LSU	124							0
	MSF0605	1650	MW	117							0
	MSF0605	1651	MW	115							0
	MSF0605	1652	MW	135							0
	MSF0605	1653	LSU	124							0
	MSF0605	1654	MW	135							0
	MSF0605	1655	MW	109							0
	MSF0605	1656	LSU	206							0
	MSF0605	1657	LSU	126							0
	MSF0605	1658	LNC	54							0
	MSF0605	1659	MW	69							0
	MSF0605	1660	MW	68							0
	MSF0605	1661	CCG	69							0
	MSF0605	1662	LSU	143							0
	MSF0605	1663	LSU	100							0
	MSF0605	1664	LSU	123							0
	MSF0605	1665	LNC	80							0
	MSF0605	1666	LNC	52							0
	MSF0605	1667	LKC	80							0
	MSF0605	1668	CCG	68							0
	MSF0605	1669	LNC	65							0
	MSF0605	1670	CCG	58							0
	MSF0605	1671	LNC	54							0
	MSF0605	1672	LNC	50							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0605	1673	LKC	92							0
	MSF0605	1674	LNC	56							0
	MSF0605	1675	LKC	92							0
	MSF0605	1676	CCG	60							0
	MSF0605	1677	LNC	88							0
	MSF0605	1678	LNC	54							0
	MSF0605	1679	LNC	50							0
	MSF0605	1680	LNC	48							0
	MSF0605	1681	LNC	50							0
	MSF0606	1682	MW	383			SCALES	11			0
	MSF0606	1683	NSC	372							0
	MSF0606	1684	NSC	372							0
	MSF0606	1685	LSU	330							0
	MSF0606	1686	LSU	235							0
	MSF0606	1687	MW	241							0
	MSF0606	1688	MW	298			SCALES	5			0
	MSF0606	1689	MW	213							0
	MSF0606	1690	MW	228							0
	MSF0606	1691	MW	227							0
	MSF0606	1692	MW	256							0
	MSF0606	1693	MW	253							0
	MSF0606	1694	MW	122							0
	MSF0606	1695	MW	215							0
	MSF0606	1696	GR	143							0
	MSF0606	1697	MW	250							0
	MSF0606	1698	LSU	193							0
	MSF0606	1699	MW	207							0
	MSF0606	1700	MW	172							0
	MSF0606	1701	MW	136							0
	MSF0606	1702	LSU	182							0
	MSF0606	1703	MW	197							0
	MSF0606	1704	LSU	139							0
	MSF0606	1705	GR	157							0
	MSF0606	1706	GR	158							0
	MSF0606	1707	MW	186							0
	MSF0606	1708	MW	115							0
	MSF0606	1709	MW	189							0
	MSF0606	1710	MW	122							0
	MSF0606	1711	MW	126							0
	MSF0606	1712	MW	126							0
	MSF0606	1713	NP	153							0
	MSF0606	1714	MW	188							0
	MSF0606	1715	MW	114							0
	MSF0606	1716	LSU	134							0
	MSF0606	1717	LNC	50							0
	MSF0606	1718	MW	117							0
	MSF0606	1719	MW	125							0
	MSF0606	1720	GR	167			SCALES	1			0
	MSF0606	1721	LNC	98							0
	MSF0606	1722	LSU	198							0
	MSF0606	1723	MW	128							0
	MSF0606	1724	MW	220							0
	MSF0606	1725	MW	127							0
	MSF0606	1726	MW	222							0
	MSF0606	1727	MW	137							0
	MSF0606	1728	MW	163							0
	MSF0606	1729	LSU	151							0
	MSF0606	1730	MW	118							0
	MSF0606	1731	MW	183							0
	MSF0606	1732	LSU	157							0
	MSF0606	1733	GR	148							0
	MSF0606	1734	MW	163							0
	MSF0606	1735	NP	133							0
	MSF0606	1736	LNC	56							0
	MSF0606	1737	LSU	152							0
	MSF0606	1738	LSU	143							0
	MSF0606	1739	LSU	129							0
	MSF0606	1740	LSU	112							0
	MSF0606	1741	LNC	105							0
	MSF0606	1742	LSU	140							0
	MSF0606	1743	LNC	68							0
	MSF0606	1744	LSU	125							0
	MSF0606	1745	WSC	122							0
	MSF0606	1746	MW	63							0
	MSF0606	1747	RSC	72							0
	MSF0606	1748	NSC	94							0
	MSF0606	1749	BB	97							0
	MSF0606	1750	LSU	122							0
	MSF0606	1751	CCG	68							0
	MSF0606	1752	CCG	65							0
	MSF0606	1753	LNC	53							0
	MSF0606	1754	LNC	58							0
	MSF0606	1755	LNC	54							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0606	1756	LNC	58							0
	MSF0606	1757	LNC	57							0
	MSF0606	1758	LNC	54							0
	MSF0606	1759	LNC	71							0
07											
	HBS0701	3338	RSC	68							0
	HBS0701	3339	LSU	28							0
	HBS0701	3340	RSC	70							0
	HBS0701	3341	RSC	71							0
	HBS0701	3342	RSC	69							0
	HBS0701	3343	RSC	60							0
	HBS0701	3344	LSU	52							0
	HBS0701	3345	LSU	23							0
	HBS0701	3346	LSU	31							0
	HBS0701	3347	LSU	26							0
	HBS0701	3348	LSU	25							0
	HBS0701	3349	LSU	30							0
	HBS0701	3350	LSU	29							0
	HBS0701	3351	LSU	23							0
	HEF0701	4079	CCG	78							0
	HEF0701	4080	CCG	72							0
	HEF0701	4081	CCG	66							0
	HEF0701	4082	CCG	55							0
	HEF0701	4083	CCG	72							0
	HEF0701	4084	LSU	104							0
	HEF0701	4085	LSU	86							0
	HEF0701	4086	LSU	93							0
	HEF0701	4087	LSU	79							0
	HEF0701	4088	LSU	80							0
	HEF0701	4089	LSU	92							0
	HEF0701	4090	MW	59							0
	HEF0701	4091	LNC	60							0
	HEF0701	4092	LSU	82							0
	HEF0701	4093	LKC	54							0
	HEF0701	4094	LKC	82							0
	HEF0701	4095	LKC	75							0
	HEF0701	4096	LNC	55							0
	HEF0701	4097	LNC	32							0
	HEF0701	4098	LNC	56							0
	HEF0702	4099	CSU	82							0
	HEF0702	4100	RSC	74							0
	HEF0702	4101	RSC	67							0
	HEF0702	4102	CSU	105							0
	HEF0702	4103	RSC	83							0
	HEF0702	4104	CSU	100							0
	HEF0702	4105	RSC	62							0
	HEF0702	4106	RSC	66							0
	HEF0702	4107	LSU	97							0
	HEF0702	4108	LKC	71							0
	HEF0702	4109	RSC	65							0
	HEF0702	4110	LSU	52							0
	HEF0702	4111	RSC	81							0
	HEF0702	4112	RSC	83							0
	HEF0702	4113	RSC	82							0
	HEF0702	4114	LKC	89							0
	HEF0702	4115	LKC	81							0
	HEF0702	4116	CSU	83							0
	HEF0702	4117	LNC	96							0
	HEF0702	4118	CCG	74							0
	HEF0702	4119	CCG	60							0
	HEF0702	4120	RSC	90							0
	HEF0702	4121	LSU	76							0
	HEF0702	4122	LSU	95							0
	HEF0702	4123	LSU	100							0
	HEF0702	4124	LSU	94							0
	HEF0702	4125	CCG	77							0
	HEF0702	4126	LSU	87							0
	HEF0702	4127	CSU	101							0
	HEF0702	4128	CSU	87							0
	HEF0702	4129	CSU	85							0
	HEF0702	4130	LSU	80							0
	HEF0702	4131	LKC	78							0
	HEF0702	4132	LKC	85							0
	HEF0702	4133	LKC	67							0
	HEF0702	4134	CSU	99							0
	HEF0702	4135	LKC	70							0
	HEF0702	4136	LKC	75							0
	HEF0702	4137	CSU	81							0
	HEF0702	4138	CSU	84							0
	HEF0702	4139	LKC	79							0
	HEF0702	4140	LKC	70							0
	HEF0702	4141	LKC	63							0
	HEF0702	4142	MW	49							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0702	4143	LKC	71							0
	HEF0703	4144	BT	242			SCALES				0
	HEF0703	4145	LNC	87							0
	HEF0703	4146	LNC	53							0
	HEF0703	4147	LNC	78							0
	HEF0703	4148	CCG	65							0
	HEF0703	4149	LKC	67							0
	HEF0703	4150	LNC	48							0
	HSF0701	6199	BT	585							2
	HSF0701	6200	CSU	355							0
	HSF0701	6201	MW	292							0
	HSF0701	6202	LSU	256							0
	HSF0701	6203	GR	127			SCALES				0
	HSF0701	6204	LSU	185							0
	HSF0701	6205	MW	117			SCALES				0
	HSF0701	6206	MW	110			SCALES				0
	HSF0701	6207	MW	70			SCALES				0
	HSF0701	6208	MW	65			SCALES	0			0
	HSF0701	6209	LSU	121							0
	HSF0701	6210	LSU	98							0
	HSF0701	6211	MW	100			SCALES				0
	HSF0701	6212	LSU	116							0
	HSF0701	6213	LSU	146							0
	HSF0701	6214	LSU	105							0
	HSF0701	6215	LSU	150							0
	HSF0701	6216	CSU	90							0
	HSF0701	6217	LSU	106							0
	HSF0701	6218	LSU	119							0
	HSF0701	6219	CSU	103							0
	HSF0701	6220	LSU	87							0
	HSF0701	6221	RSC	85							0
	HSF0701	6222	CSU	93							0
	HSF0701	6223	LSU	126							0
	HSF0701	6224	LSU	92							0
	HSF0701	6225	LSU	100							0
	HSF0701	6226	LSU	90							0
	HSF0701	6227	LSU	118							0
	HSF0701	6228	CSU	87							0
	HSF0701	6229	RSC	78							0
	HSF0701	6230	LSU	102							0
	HSF0701	6231	RSC	73							0
	HSF0701	6232	RSC	70							0
	HSF0701	6233	RSC	83							0
	HSF0701	6234	RSC	60							0
	HSF0701	6235	RSC	77							0
	HSF0701	6236	RSC	93							0
	HSF0702	6237	NSC	305							0
	HSF0702	6238	NSC	312							0
	HSF0702	6239	BT	263			SCALES				0
	HSF0702	6240	BT	231			SCALES	2			0
	HSF0702	6241	RB	146			SCALES				0
	HSF0702	6242	RB	114			SCALES				0
	HSF0702	6243	RB	184			SCALES				0
	HSF0702	6244	RB	138			SCALES				0
	HSF0702	6245	MW	117							0
	HSF0702	6246	LSU	198							0
	HSF0702	6247	LSU	197							0
	HSF0702	6248	CSU	190							0
	HSF0702	6249	MW	161							0
	HSF0702	6250	RSC	90							0
	HSF0702	6251	LSU	183							0
	HSF0702	6252	LSU	109							0
	HSF0702	6253	LSU	111							0
	HSF0702	6254	RSC	88							0
	HSF0702	6255	RSC	85							0
	HSF0702	6256	RSC	70							0
	HSF0702	6257	RSC	87							0
	HSF0702	6258	RSC	83							0
	HSF0702	6259	RSC	115							0
	HSF0702	6260	LSU	136							0
	HSF0702	6261	LSU	111							0
	HSF0702	6262	LSU	102							0
	HSF0702	6263	LSU	133							0
	HSF0702	6264	LSU	131							0
	HSF0702	6265	RSC	80							0
	HSF0702	6266	LSU	92							0
	HSF0702	6267	RSC	75							0
	HSF0702	6268	RSC	78							0
	HSF0702	6269	RSC	77							0
	HSF0702	6270	RSC	86							0
	HSF0702	6271	RSC	81							0
	HSF0702	6272	RSC	77							0
	HSF0702	6273	LKC	86							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0702	6274	LSU	104							0
	HSF0702	6275	LSU	142							0
	HSF0702	6276	LSU	125							0
	HSF0702	6277	RSC	103							0
	HSF0702	6278	LSU	129							0
	HSF0702	6279	LSU	111							0
	HSF0702	6280	RSC	81							0
	HSF0702	6281	RSC	82							0
	HSF0702	6282	RSC	68							0
	HSF0702	6283	RSC	85							0
	HSF0702	6284	LSU	108							0
	HSF0702	6285	LSU	153							0
	HSF0702	6286	LSU	105							0
	HSF0702	6287	CCG	77							0
	HSF0702	6288	CCG	82							0
	HSF0702	6289	RSC	70							0
	HSF0702	6290	LSU	113							0
	HSF0702	6291	LSU	153							0
	HSF0702	6292	LSU	115							0
	HSF0702	6293	LNC	65							0
	HSF0702	6294	RSC	96							0
	HSF0702	6295	RSC	96							0
	HSF0702	6296	RSC	74							0
	HSF0703	6297	NSC	395							0
	HSF0703	6298	CSU	180							0
	HSF0703	6299	LSU	174							0
	HSF0703	6300	CSU	173							0
	HSF0703	6301	CSU	170							0
	HSF0703	6302	LSU	155							0
	HSF0703	6303	LSU	125							0
	HSF0703	6304	LSU	122							0
	HSF0703	6305	LSU	111							0
	HSF0703	6306	RSC	120							0
	HSF0703	6307	BT	138			SCALES	1			0
	HSF0703	6308	RSC	85							0
	HSF0703	6309	LSU	110							0
	HSF0703	6310	RSC	92							0
	HSF0703	6311	RSC	72							0
	HSF0703	6312	RSC	80							0
	HSF0703	6313	LSU	86							0
	HSF0703	6314	LSU	72							0
	HSF0703	6315	LSU	85							0
	HSF0703	6316	CSU	170							0
	HSF0703	6317	RSC	72							0
	HSF0703	6318	RSC	91							0
	HSF0703	6319	LSU	168							0
	HSF0703	6320	RSC	90							0
	HSF0703	6321	LSU	65							0
	HSF0703	6322	RSC	105							0
	HSF0703	6323	MW	74							0
	HSF0703	6324	MW	72							0
	HSF0703	6325	MW	70							0
	HSF0703	6326	RSC	98							0
	HSF0703	6327	LSU	88							0
	HSF0703	6328	MW	73							0
	HSF0703	6329	RSC	78							0
	HSF0703	6330	RSC	85							0
	HSF0703	6331	RSC	105							0
	HSF0703	6332	CSU	133							0
	HSF0703	6333	RSC	93							0
	HSF0703	6334	LSU	95							0
	HSF0703	6335	LSU	120							0
	HSF0703	6336	RSC	75							0
	HSF0703	6337	RSC	92							0
	HSF0703	6338	RSC	92							0
	HSF0703	6339	RSC	83							0
	HSF0703	6340	RSC	95							0
	HSF0703	6341	LSU	100							0
	HSF0703	6342	RSC	73							0
	HSF0703	6343	RSC	70							0
	HSF0703	6344	RSC	80							0
	HSF0703	6345	RSC	67							0
	HSF0703	6346	MW	119							0
	HSF0703	6347	LSU	136							0
	HSF0703	6348	MW	104							0
	HSF0703	6349	RSC	80							0
	HSF0703	6350	RSC	68							0
	HSF0703	6351	LSU	151							0
	HSF0703	6352	CSU	86							0
	HSF0703	6353	CSU	146							0
	HSF0703	6354	MW	67							0
	HSF0703	6355	MW	72							0
	HSF0703	6356	RSC	83							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0703	6357	MW	52							0
	HSF0703	6358	CCG	71							0
	HSF0703	6359	RSC	91							0
	HSF0703	6360	MW	61							0
	HSF0703	6361	CSU	146							0
	HSF0703	6362	RSC	84							0
	HSF0703	6363	LSU	96							0
	HSF0703	6364	LSU	138							0
	HSF0703	6365	LSU	105							0
	HSF0703	6366	LSU	105							0
	HSF0703	6367	LSU	86							0
	HSF0703	6368	CSU	96							0
	HSF0703	6369	CSU	113							0
	HSF0703	6370	LSU	103							0
	HSF0703	6371	LSU	105							0
	HSF0703	6372	CSU	92							0
	HSF0703	6373	RSC	75							0
	HSF0703	6374	LSU	100							0
	HSF0703	6375	RSC	80							0
	HSF0703	6376	RSC	81							0
	HSF0703	6377	LSU	89							0
	HSF0703	6378	RSC	85							0
	HSF0703	6379	CCG	73							0
	HSF0703	6380	MW	72							0
	HSF0703	6381	RSC	83							0
	HSF0703	6382	CCG	70							0
	HSF0703	6383	LNC	56							0
	HSF0704	6384	MW	154							0
	HSF0704	6385	LSU	164							0
	HSF0704	6386	LSU	168							0
	HSF0704	6387	CSU	124							0
	HSF0704	6388	LSU	180							0
	HSF0704	6389	LSU	124							0
	HSF0704	6390	LSU	114							0
	HSF0704	6391	MW	131							0
	HSF0704	6392	LSU	99							0
	HSF0704	6393	LSU	111							0
	HSF0704	6394	MW	120							0
	HSF0704	6395	MW	60							0
	HSF0704	6396	MW	115							0
	HSF0704	6397	MW	118							0
	HSF0704	6398	MW	105							0
	HSF0704	6399	MW	71							0
	HSF0704	6400	MW	75							0
	HSF0704	6401	MW	104							0
	HSF0704	6402	MW	64							0
	HSF0704	6403	MW	59							0
	HSF0704	6404	MW	64							0
	HSF0704	6405	MW	70							0
	HSF0704	6406	MW	49							0
	HSF0704	6407	MW	61							0
	HSF0704	6408	MW	49							0
	HSF0704	6409	MW	70							0
	HSF0704	6410	MW	119							0
	HSF0704	6411	LSU	100							0
	HSF0704	6412	NSC	114							0
	HSF0704	6413	LSU	155							0
	HSF0704	6414	LSU	118							0
	HSF0704	6415	MW	116							0
	HSF0704	6416	LSU	114							0
	HSF0704	6417	LSU	94							0
	HSF0704	6418	NSC	118							0
	HSF0704	6419	LSU	118							0
	HSF0704	6420	RSC	90							0
	HSF0704	6421	MW	74							0
	HSF0704	6422	MW	65							0
	HSF0704	6423	MW	61							0
	HSF0704	6424	MW	58							0
	HSF0704	6425	CSU	105							0
	HSF0704	6426	RSC	85							0
	HSF0704	6427	MW	60							0
	HSF0705	6428	MW	135							0
	HSF0705	6429	MW	110							0
	HSF0705	6430	MW	114							0
	HSF0705	6431	RSC	94							0
	HSF0705	6432	NSC	120							0
	HSF0705	6433	MW	68							0
	HSF0705	6434	MW	113							0
	HSF0705	6435	MW	119							0
	HSF0705	6436	MW	80							0
	HSF0705	6437	MW	59							0
	HSF0705	6438	MW	110							0
	HSF0705	6439	LSU	125							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0705	6440	MW	103							0
	HSF0705	6441	MW	115							0
	HSF0705	6442	MW	122							0
	HSF0705	6443	MW	128							0
	HSF0705	6444	MW	145							0
	HSF0705	6445	MW	105							0
	HSF0705	6446	MW	113							0
	HSF0705	6447	MW	70							0
	HSF0705	6448	MW	125							0
	HSF0705	6449	MW	144							0
	HSF0705	6450	MW	124							0
	HSF0705	6451	MW	64							0
	HSF0705	6452	MW	69							0
	HSF0705	6453	MW	123							0
	HSF0705	6454	MW	105							0
	HSF0705	6455	MW	64							0
	HSF0705	6456	MW	65							0
	HSF0705	6457	MW	71							0
	HSF0705	6458	MW	114							0
	HSF0705	6459	MW	58							0
	HSF0705	6460	LSU	95							0
	HSF0705	6461	LSU	195							0
	HSF0705	6462	LSU	162							0
	HSF0705	6463	LSU	153							0
	HSF0705	6464	LSU	120							0
	HSF0705	6465	LSU	97							0
	HSF0705	6466	LSU	122							0
	HSF0705	6467	RSC	91							0
	HSF0705	6468	RSC	73							0
	HSF0705	6469	RSC	89							0
	HSF0705	6470	LSU	98							0
	HSF0705	6471	CCG	80							0
	HSF0705	6472	LSU	102							0
	HSF0705	6473	RSC	75							0
	HSF0705	6474	RSC	70							0
	HSF0705	6475	RSC	77							0
	HSF0705	6476	MW	63							0
	HSF0705	6477	RSC	93							0
	HSF0705	6478	RSC	85							0
	HSF0705	6479	RSC	80							0
	HSF0705	6480	MW	113							0
	MEF0701	2937	BB	126							0
	MEF0701	2938	LSU	82							0
	MEF0701	2939	CCG	62							0
	MEF0701	2940	CCG	75							0
	MEF0702	2941	LSU	191							0
	MEF0702	2942	NP	172							0
	MEF0702	2943	CCG	68							0
	MEF0703	2944	LSU	133							0
	MEF0703	2945	NP	128							0
	MEF0703	2946	BB	164							0
	MEF0703	2947	BB	133							0
	MEF0704	2948	NP	140							0
	MEF0704	2949	NP	124							0
	MEF0705	2950	NP	135							0
	MEF0705	2951	BB	58							0
	MEF0705	2952	BB	58							0
	MEF0705	2953	LKC	27							0
	MEF0706	2954	NP	157							0
	MEF0706	2955	BB	145							0
	MEF0706	2956	BB	200							0
	MEF0706	2957	LSU	73							0
	MEF0706	2958	TP	57							0
	MEF0706	2959	CCG	60							0
	MEF0706	2960	GR	59							0
	MEF0706	2961	RSC	68							0
	MEF0706	2962	BB	52							0
	MEF0706	2963	BB	117							0
	MEF0706	2964	BB	126							0
	MEF0707	2965	LKC	85							0
	MEF0707	2966	CCG	68							0
	MEF0707	2967	CCG	27							0
	MEF0707	2968	BB	54							0
	MEF0707	2969	LSU	65							0
	MEF0707	2970	BB	46							0
	MEF0707	2971	CCG	26							0
	MEF0707	2972	CCG	24							0
	MSF0701	1760	MW	237							0
	MSF0701	1761	NSC	337							0
	MSF0701	1762	MW	203							0
	MSF0701	1763	MW	264							0
	MSF0701	1764	GR	303			SCALES	5			0
	MSF0701	1765	MW	256							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0701	1766	MW	242							0
	MSF0701	1767	MW	242							0
	MSF0701	1768	MW	198							0
	MSF0701	1769	MW	228							0
	MSF0701	1770	MW	250							0
	MSF0701	1771	MW	161							0
	MSF0701	1772	LSU	204							0
	MSF0701	1773	MW	190							0
	MSF0701	1774	MW	180							0
	MSF0701	1775	MW	192							0
	MSF0701	1776	LSU	177							0
	MSF0701	1777	GR	136							0
	MSF0701	1778	LSU	157							0
	MSF0701	1779	MW	200							0
	MSF0701	1780	GR	135							0
	MSF0701	1781	GR	151							0
	MSF0701	1782	MW	126							0
	MSF0701	1783	GR	146							0
	MSF0701	1784	MW	126							0
	MSF0701	1785	GR	144							0
	MSF0701	1786	LSU	131							0
	MSF0701	1787	MW	118							0
	MSF0701	1788	MW	132							0
	MSF0701	1789	RSC	80							0
	MSF0701	1790	RSC	66							0
	MSF0701	1791	RSC	46							0
	MSF0701	1792	CCG	62							0
	MSF0701	1793	LSU	114							0
	MSF0701	1794	LSU	111							0
	MSF0701	1795	MW	122							0
	MSF0701	1796	MW	120							0
	MSF0701	1797	MW	116							0
	MSF0701	1798	MW	109							0
	MSF0701	1799	MW	110							0
	MSF0701	1800	RSC	72							0
	MSF0701	1801	MW	120							0
	MSF0701	1802	MW	121							0
	MSF0701	3249	LSU	113							0
	MSF0702	1803	MW	221							0
	MSF0702	1804	NSC	402							0
	MSF0702	1805	MW	271							0
	MSF0702	1806	MW	284							0
	MSF0702	1807	MW	221							0
	MSF0702	1808	GR	217			SCALES	3			0
	MSF0702	1809	MW	227							0
	MSF0702	1810	BB	125							0
	MSF0702	1811	LSU	177							0
	MSF0702	1812	CSU	204							0
	MSF0702	1813	MW	252							0
	MSF0702	1814	MW	213							0
	MSF0702	1815	GR	145							0
	MSF0702	1816	GR	136							0
	MSF0702	1817	GR	154							0
	MSF0702	1818	GR	142							0
	MSF0702	1819	LSU	126							0
	MSF0702	1820	MW	214							0
	MSF0702	1821	MW	212							0
	MSF0702	1822	MW	72							0
	MSF0702	1823	LNC	97							0
	MSF0702	1824	RSC	113							0
	MSF0702	1825	MW	152							0
	MSF0702	1826	LSU	224							0
	MSF0702	1827	LSU	131							0
	MSF0702	1828	LSU	142							0
	MSF0702	1829	MW	156							0
	MSF0702	1830	MW	124							0
	MSF0702	1831	MW	121							0
	MSF0702	1832	LKC	98							0
	MSF0702	1833	MW	129							0
	MSF0702	1834	MW	118							0
	MSF0702	1835	MW	131							0
	MSF0702	1836	LSU	137							0
	MSF0702	1837	LSU	132							0
	MSF0702	1838	LSU	116							0
	MSF0702	1839	RSC	106							0
	MSF0702	1840	MW	187							0
	MSF0702	1841	RSC	94							0
	MSF0702	1842	RSC	96							0
	MSF0702	1843	MW	126							0
	MSF0702	1844	MW	127							0
	MSF0702	1845	LSU	118							0
	MSF0702	1846	LSU	99							0
	MSF0702	1847	RSC	91							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0702	1848	MW	268							0
	MSF0702	1849	LSU	118							0
	MSF0702	1850	LSU	157							0
	MSF0702	1851	RSC	91							0
	MSF0702	1852	LNC	68							0
	MSF0702	1853	MW	86							0
	MSF0702	1854	CCG	57							0
	MSF0703	1855	GR	354			SCALES	7			0
	MSF0703	1856	GR	303			SCALES	5			0
	MSF0703	1857	GR	317			SCALES	5			0
	MSF0703	1858	GR	251			SCALES				0
	MSF0703	1859	NP	355							0
	MSF0703	1860	NP	216							0
	MSF0703	1861	NSC	313							0
	MSF0703	1862	NSC	380							0
	MSF0703	1863	MW	256							0
	MSF0703	1864	MW	258							0
	MSF0703	1865	LSU	235							0
	MSF0703	1866	MW	230							0
	MSF0703	1867	MW	258							0
	MSF0703	1868	MW	211							0
	MSF0703	1869	MW	240							0
	MSF0703	1870	MW	213							0
	MSF0703	1871	MW	216							0
	MSF0703	1872	MW	180							0
	MSF0703	1873	MW	169							0
	MSF0703	1874	MW	216							0
	MSF0703	1875	LSU	147							0
	MSF0703	1876	LSU	185							0
	MSF0703	1877	MW	189							0
	MSF0703	1878	GR	147							0
	MSF0703	1879	GR	141							0
	MSF0703	1880	LSU	173							0
	MSF0703	1881	LSU	148							0
	MSF0703	1882	LSU	178							0
	MSF0703	1883	MW	181							0
	MSF0703	1884	LSU	175							0
	MSF0703	1885	LSU	193							0
	MSF0703	1886	LSU	197							0
	MSF0703	1887	GR	142							0
	MSF0703	1888	LSU	146							0
	MSF0703	1889	LSU	160							0
	MSF0703	1890	BB	199							0
	MSF0703	1891	LSU	165							0
	MSF0703	1892	MW	113							0
	MSF0703	1893	LSU	157							0
	MSF0703	1894	CSU	200							0
	MSF0703	1895	CSU	201							0
	MSF0703	1896	MW	179							0
	MSF0703	1897	LSU	144							0
	MSF0703	1898	MW	160							0
	MSF0703	1899	LSU	141							0
	MSF0703	1900	MW	114							0
	MSF0703	1901	MW	106							0
	MSF0703	1902	MW	121							0
	MSF0703	1903	MW	110							0
	MSF0703	1904	MW	106							0
	MSF0703	1905	MW	113							0
	MSF0703	1906	LSU	127							0
	MSF0703	1907	RSC	74							0
	MSF0703	1908	CSU	166							0
	MSF0703	1909	LSU	145							0
	MSF0703	1910	LSU	140							0
	MSF0703	1911	MW	59							0
	MSF0703	1912	MW	115							0
	MSF0703	1913	LKC	102							0
	MSF0703	1914	MW	128							0
	MSF0703	1915	MW	106							0
	MSF0703	1916	LSU	124							0
	MSF0703	1917	LSU	153							0
	MSF0703	1918	MW	134							0
	MSF0703	1919	LSU	145							0
	MSF0703	1920	LSU	136							0
	MSF0703	1921	LSU	137							0
	MSF0703	1922	LSU	110							0
	MSF0703	1923	MW	120							0
	MSF0703	1924	LSU	131							0
	MSF0703	1925	LSU	139							0
	MSF0703	1926	MW	126							0
	MSF0703	1927	LKC	92							0
	MSF0703	1928	LSU	116							0
	MSF0703	1929	RSC	46							0
	MSF0703	1930	MW	112							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0703	1931	MW	124							0
	MSF0703	1932	LSU	113							0
	MSF0703	1933	MW	127							0
	MSF0703	1934	LSU	116							0
	MSF0703	1935	MW	138							0
	MSF0703	1936	LSU	133							0
	MSF0703	1937	LSU	112							0
	MSF0704	1938	MW	238							0
	MSF0704	1939	MW	231							0
	MSF0704	1940	MW	271							0
	MSF0704	1941	LSU	211							0
	MSF0704	1942	MW	230							0
	MSF0704	1943	MW	204							0
	MSF0704	1944	MW	268							0
	MSF0704	1945	LSU	192							0
	MSF0704	1946	MW	175							0
	MSF0704	1947	LSU	202							0
	MSF0704	1948	LSU	211							0
	MSF0704	1949	LSU	205							0
	MSF0704	1950	MW	159							0
	MSF0704	1951	LSU	148							0
	MSF0704	1952	MW	167							0
	MSF0704	1953	MW	168							0
	MSF0704	1954	LSU	130							0
	MSF0704	1955	MW	184							0
	MSF0704	1956	LSU	156							0
	MSF0704	1957	LSU	199							0
	MSF0704	1958	MW	208							0
	MSF0704	1959	LSU	197							0
	MSF0704	1960	MW	115							0
	MSF0704	1961	LSU	198							0
	MSF0704	1962	GR	150							0
	MSF0704	1963	MW	121							0
	MSF0704	1964	MW	133							0
	MSF0704	1965	MW	124							0
	MSF0704	1966	RSC	114							0
	MSF0704	1967	LSU	153							0
	MSF0704	1968	LSU	126							0
	MSF0704	1969	MW	125							0
	MSF0704	1970	LSU	114							0
	MSF0704	1971	MW	124							0
	MSF0704	1972	MW	135							0
	MSF0704	1973	MW	135							0
	MSF0704	1974	MW	120							0
	MSF0704	1975	RSC	121							0
	MSF0704	1976	MW	117							0
	MSF0704	1977	RSC	76							0
	MSF0704	1978	LNC	48							0
	MSF0704	1979	MW	140							0
	MSF0704	1980	CSU	143							0
	MSF0704	1981	MW	128							0
	MSF0704	1982	MW	117							0
	MSF0704	1983	MW	117							0
	MSF0704	1984	MW	110							0
	MSF0704	1985	RSC	90							0
	MSF0704	1986	LSU	108							0
	MSF0704	1987	LNC	53							0
	MSF0704	1988	LSU	170							0
	MSF0704	1989	CSU	138							0
	MSF0704	1990	MW	136							0
	MSF0704	1991	LSU	118							0
	MSF0704	1992	MW	124							0
	MSF0704	1993	MW	121							0
	MSF0704	1994	MW	120							0
	MSF0704	1995	MW	125							0
	MSF0704	1996	MW	136							0
	MSF0704	1997	LSU	140							0
	MSF0704	1998	LSU	137							0
	MSF0704	1999	LSU	132							0
	MSF0704	2000	LNC	62							0
	MSF0704	2001	LNC	51							0
	MSF0704	2002	LNC	55							0
	MSF0705	2003	MW	266							0
	MSF0705	2004	MW	228							0
	MSF0705	2005	LSU	219							0
	MSF0705	2006	LSU	185							0
	MSF0705	2007	LSU	224							0
	MSF0705	2008	MW	202							0
	MSF0705	2009	LSU	223							0
	MSF0705	2010	MW	126							1
	MSF0705	2011	MW	127							0
	MSF0705	2012	MW	129							0
	MSF0705	2013	MW	124							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0705	2014	MW	69							0
	MSF0705	2015	MW	67							1
	MSF0705	2016	MW	252							0
	MSF0705	2017	MW	130							0
	MSF0705	2018	MW	172							0
	MSF0705	2019	MW	263							0
	MSF0705	2020	LSU	304							0
	MSF0705	2021	LSU	167							0
	MSF0705	2022	LSU	186							0
	MSF0705	2023	LSU	141							0
	MSF0705	2024	LSU	143							0
	MSF0705	2025	MW	132							0
	MSF0705	2026	MW	167							0
	MSF0705	2027	MW	136							0
	MSF0705	2028	GR	169							0
	MSF0705	2029	MW	137							0
	MSF0705	2030	LSU	137							0
	MSF0705	2031	MW	136							0
	MSF0705	2032	MW	138							0
	MSF0705	2033	MW	132							0
	MSF0705	2034	MW	114							0
	MSF0705	2035	MW	132							0
	MSF0705	2036	MW	127							0
	MSF0705	2037	MW	131							0
	MSF0705	2038	MW	129							0
	MSF0705	2039	MW	136							0
	MSF0705	2040	MW	121							0
	MSF0705	2041	LSU	104							0
	MSF0705	2042	MW	70							0
	MSF0705	2043	MW	67							0
	MSF0705	2044	MW	186							0
	MSF0705	2045	MW	183							0
	MSF0705	2046	LSU	149							0
	MSF0705	2047	MW	124							0
	MSF0705	2048	MW	117							0
	MSF0705	2049	LSU	106							0
	MSF0705	2050	MW	167							0
	MSF0705	2051	LSU	147							0
	MSF0705	2052	LSU	132							0
	MSF0705	2053	LSU	114							0
	MSF0705	2054	LSU	157							0
	MSF0705	2055	LSU	168							0
	MSF0705	2056	LSU	147							0
	MSF0705	2057	MW	201							0
	MSF0705	2058	LSU	107							0
	MSF0705	2059	LSU	156							0
	MSF0705	2060	LSU	122							0
	MSF0705	2061	MW	123							0
	MSF0705	2062	LSU	137							0
	MSF0705	2063	LSU	139							0
	MSF0706	2064	MW	249							0
	MSF0706	2065	NSC	395							0
	MSF0706	2066	NP	359							0
	MSF0706	2067	LSU	248							0
	MSF0706	2068	LSU	280							0
	MSF0706	2069	MW	233							0
	MSF0706	2070	MW	235							0
	MSF0706	2071	LSU	231							0
	MSF0706	2072	MW	241							0
	MSF0706	2073	MW	252							0
	MSF0706	2074	LSU	280							0
	MSF0706	2075	LSU	221							0
	MSF0706	2076	LSU	163							0
	MSF0706	2077	LSU	184							0
	MSF0706	2078	MW	241							0
	MSF0706	2079	MW	208							0
	MSF0706	2080	GR	143							0
	MSF0706	2081	MW	206							0
	MSF0706	2082	WSC	206							0
	MSF0706	2083	LSU	230							0
	MSF0706	2084	MW	184							0
	MSF0706	2085	MW	153							0
	MSF0706	2086	MW	166							0
	MSF0706	2087	MW	168							0
	MSF0706	2088	LSU	178							0
	MSF0706	2089	LSU	209							0
	MSF0706	2090	MW	122							0
	MSF0706	2091	MW	170							0
	MSF0706	2092	LSU	154							0
	MSF0706	2093	MW	175							0
	MSF0706	2094	MW	167							0
	MSF0706	2095	LSU	156							0
	MSF0706	2096	LSU	150							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0706	2097	MW	131							0
	MSF0706	2098	MW	122							0
	MSF0706	2099	MW	126							0
	MSF0706	2100	MW	130							0
	MSF0706	2101	RSC	91							0
	MSF0706	2102	MW	120							0
	MSF0706	2103	RSC	64							0
	MSF0706	2104	LSU	122							0
	MSF0706	2105	LSU	140							0
	MSF0706	2106	LSU	127							0
	MSF0706	2107	LKC	91							0
	MSF0706	2108	RSC	94							0
	MSF0706	2109	LSU	106							0
	MSF0706	2110	RSC	76							0
	MSF0706	2111	LNC	82							0
	MSF0706	2112	LSU	100							0
	MSF0706	2113	MW	124							0
	MSF0706	2114	MW	116							0
	MSF0706	2115	MW	119							0
	MSF0706	2116	RSC	91							0
	MSF0706	2117	LSU	168							0
	MSF0706	2118	LSU	132							0
	MSF0706	2119	RSC	96							0
	MSF0706	2120	MW	126							0
	MSF0706	2121	RSC	98							0
	MSF0706	2122	RSC	68							0
	MSF0706	2123	MW	169							0
	MSF0706	2124	MW	116							0
	MSF0706	2125	MW	131							0
	MSF0706	2126	LNC	75							0
	MSF0706	2127	LSU	137							0
	MSF0706	2128	LSU	139							0
	MSF0706	2129	LSU	89							0
	MSF0706	2130	RSC	68							0
	MSF0706	2131	LNC	80							0
	MSF0706	2132	CCG	70							0
	MSF0706	2133	LSU	141							0
	MSF0706	2134	LSU	126							0
	MSF0706	2135	LNC	73							0
	MSF0706	2136	LNC	88							0
	MSF0706	2137	LNC	57							0
	MSF0707	2138	MW	222							0
	MSF0707	2139	MW	269							0
	MSF0707	2140	MW	324							0
	MSF0707	2141	MW	124							0
	MSF0707	2142	GR	218							0
	MSF0707	2143	MW	251							0
	MSF0707	2144	MW	237							0
	MSF0707	2145	LSU	182							0
	MSF0707	2146	MW	138							0
	MSF0707	2147	MW	241							0
	MSF0707	2148	MW	284							0
	MSF0707	2149	NSC	273							0
	MSF0707	2150	MW	130							0
	MSF0707	2151	MW	117							0
	MSF0707	2152	LSU	165							0
	MSF0707	2153	LSU	195							0
	MSF0707	2154	LSU	107							0
	MSF0707	2155	RSC	89							0
	MSF0707	2156	MW	123							0
	MSF0707	2157	MW	106							0
	MSF0707	2158	MW	126							0
	MSF0707	2159	MW	134							0
	MSF0707	2160	MW	122							0
	MSF0707	2161	LSU	124							0
	MSF0707	2162	LSU	113							0
	MSF0707	2163	LSU	114							0
	MSF0707	2164	LSU	132							0
	MSF0707	2165	MW	117							0
	MSF0707	2166	MW	249							0
	MSF0707	2167	MW	211							0
	MSF0707	2168	LSU	108							0
	MSF0707	2169	LSU	122							0
	MSF0707	2170	CSU	206							0
	MSF0707	2171	LSU	154							0
	MSF0707	2172	LSU	112							0
	MSF0707	2173	LSU	99							0
	MSF0707	2174	MW	126							0
	MSF0707	2175	LSU	131							0
	MSF0707	2176	LSU	113							0
	MSF0707	2177	LSU	109							0
	MSF0707	2178	LNC	68							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
08											
	HBS0702	3352	CSU	35							0
	HBS0702	3353	CSU	35							0
	HBS0702	3354	CSU	32							0
	HBS0702	3355	RSC	55							0
	HBS0702	3356	CSU	65							0
	HBS0702	3357	CSU	58							0
	HBS0702	3358	LKC	53							0
	HBS0702	3359	RSC	55							0
	HBS0702	3360	RSC	82							0
	HBS0702	3361	RSC	25							0
	HBS0702	3362	LKC	55							0
	HBS0702	3363	CSU	31							0
	HBS0702	3364	CSU	32							0
	HBS0702	3365	RSC	50							0
	HBS0702	3366	CSU	58							0
	HBS0702	3367	LKC	55							0
	HBS0702	3368	RSC	85							0
	HBS0702	3369	RSC	70							0
	HBS0702	3370	RSC	65							0
	HBS0702	3371	CSU	25							0
	HBS0702	3372	RSC	45							0
	HBS0702	3373	CSU	62							0
	HBS0702	3374	CSU	55							0
	HBS0702	3375	RSC	60							0
	HBS0702	3376	TP	35							0
	HBS0702	3377	NSC	62							0
	HBS0702	3378	NSC	32							0
	HBS0702	3379	RSC	53							0
	HBS0702	3380	TP	31							0
	HBS0702	3381	RSC	22							0
	HBS0702	3382	TP	20							0
	HBS0702	3383	NSC	32							0
	HBS0702	3384	NSC	25							0
	HBS0702	3385	NSC	52							0
	HBS0702	3386	NSC	55							0
	HBS0702	3387	LKC	62							0
	HBS0702	3388	TP	32							0
	HBS0702	3389	LKC	62							0
	HBS0702	3390	TP	42							0
	HBS0702	3391	LSU	35							0
	HBS0702	3392	LSU	32							0
	HBS0702	3393	NSC	24							0
	HBS0702	3394	NSC	36							0
	HBS0702	3395	LSU	28							0
	HBS0702	3396	LSU	25							0
	HBS0702	3397	LSU	35							0
	HBS0702	3398	NSC	31							0
	HEF0704	4151	LSU	80							0
	HEF0704	4152	LSU	75							0
	HEF0704	4153	LSU	65							0
	HEF0704	4154	LSU	67							0
	HEF0704	4155	LKC	67							0
	HEF0704	4156	LKC	75							0
	HEF0704	4157	LKC	68							0
	HEF0704	4158	LSU	65							0
	HEF0704	4159	LKC	75							0
	HEF0704	4160	LKC	65							0
	HEF0704	4161	LKC	62							0
	HEF0704	4162	LKC	75							0
	HEF0704	4163	LKC	68							0
	HEF0704	4164	LKC	55							0
	HEF0704	4165	LKC	65							0
	HEF0704	4166	LSU	65							0
	HEF0704	4167	NSC	80							0
	HEF0704	4168	LSU	65							0
	HEF0704	4169	LNC	32							0
	HEF0704	4170	LSU	58							0
	HEF0704	4171	LKC	45							0
	HEF0704	4172	LNC	28							0
	HEF0704	4173	LNC	32							0
	HEF0704	4174	LNC	42							0
	HEF0801	4175	RSC	52							0
	HEF0801	4176	MW	57							0
	HEF0801	4177	RSC	39							0
	HEF0801	4178	LNC	35							0
	HEF0801	4179	LNC	42							0
	HEF0801	4180	LSU	28							0
	HEF0801	4181	LSU	42							0
	HEF0801	4182	LKC	58							0
	HEF0801	4183	LSU	36							0
	HEF0801	4184	LSU	26							0
	HEF0801	4185	LSU	40							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0801	4186	LSU	36							0
	HEF0801	4187	LNC	25							0
	HEF0801	4188	LSU	30							0
	HEF0801	4189	LSU	35							0
	HEF0801	4190	LSU	27							0
	HEF0801	4191	LNC	26							0
	HEF0802	4192	BT	260							0
	HEF0802	4193	BT	242			SCALES				0
	HEF0802	4194	RSC	73							0
	HEF0802	4195	MW	48							0
	HEF0802	4196	CSU	91							0
	HEF0802	4197	RSC	63							0
	HEF0802	4198	RSC	67							0
	HEF0802	4199	RSC	83							0
	HEF0802	4200	RSC	82							0
	HEF0802	4201	RSC	85							0
	HEF0802	4202	RSC	50							0
	HEF0802	4203	RSC	65							0
	HEF0802	4204	RSC	56							0
	HEF0803	4205	BT	238			SCALES				0
	HEF0803	4206	LSU	265							0
	HEF0803	4207	LSU	121							0
	HEF0803	4208	LSU	105							0
	HEF0803	4209	RSC	95							0
	HEF0803	4210	RSC	77							0
	HEF0803	4211	MW	70							0
	HEF0803	4212	LNC	99							0
	HEF0803	4213	RSC	65							0
	HEF0803	4214	LNC	45							0
	HEF0803	4215	LNC	43							0
	HEF0803	4216	LNC	55							0
	HEF0804	4217	RSC	94							0
	HEF0804	4218	RSC	95							0
	HEF0804	4219	RSC	75							0
	HEF0804	4220	LKC	71							0
	HEF0804	4221	RSC	75							0
	HEF0804	4222	CCG	81							0
	HEF0804	4223	MW	65							0
	HEF0804	4224	MW	65							0
	HEF0804	4225	LNC	54							0
	HEF0804	4226	LKC	39							0
	HEF0804	4227	LNC	49							0
	HEF0805	4228	LSU	221							0
	HEF0805	4229	LSU	145							0
	HEF0805	4230	LSU	141							0
	HEF0805	4231	CCG	76							0
	HEF0805	4232	LNC	52							0
	HEF0805	4233	LNC	55							0
	HEF0805	4234	LNC	56							0
	HEF0806	4235	CCG	79							0
	HEF0806	4236	CCG	65							0
	HEF0806	4237	WSC	85							0
	HEF0806	4238	CSU	68							0
	HSF0706	6481	GR	118			SCALES				0
	HSF0706	6482	BT	204			SCALES				0
	HSF0706	6483	BT	244			SCALES				0
	HSF0706	6484	MW	128							0
	HSF0706	6485	MW	119							0
	HSF0706	6486	MW	124							0
	HSF0706	6487	MW	125							0
	HSF0706	6488	MW	173							0
	HSF0706	6489	MW	116							0
	HSF0706	6490	MW	139							0
	HSF0706	6491	MW	115							0
	HSF0706	6492	MW	114							0
	HSF0706	6493	MW	129							0
	HSF0706	6494	MW	105							0
	HSF0706	6495	MW	115							0
	HSF0706	6496	MW	76							0
	HSF0706	6497	MW	60							0
	HSF0706	6498	LSU	92							0
	HSF0706	6499	RSC	95							0
	HSF0706	6500	MW	66							0
	HSF0706	6501	MW	71							0
	HSF0706	6502	LSU	144							0
	HSF0706	6503	CSU	177							0
	HSF0706	6504	NSC	133							0
	HSF0706	6505	LSU	133							0
	HSF0706	6506	LSU	97							0
	HSF0706	6507	MW	115							0
	HSF0706	6508	MW	115							0
	HSF0706	6509	MW	109							0
	HSF0706	6510	MW	111							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0706	6511	MW	124							0
	HSF0706	6512	MW	66							0
	HSF0707	6513	GR	62			SCALES	0			0
	HSF0707	6514	MW	155							0
	HSF0707	6515	MW	113							0
	HSF0707	6516	MW	199							0
	HSF0707	6517	LSU	150							0
	HSF0707	6518	LSU	144							0
	HSF0707	6519	RSC	71							0
	HSF0707	6520	MW	114							0
	HSF0707	6521	MW	126							0
	HSF0707	6522	RSC	90							0
	HSF0707	6523	LSU	154							0
	HSF0707	6524	MW	126							0
	HSF0707	6525	MW	51							0
	HSF0707	6526	MW	139							0
	HSF0707	6527	LSU	166							0
	HSF0707	6528	MW	110							0
	HSF0707	6529	MW	119							0
	HSF0707	6530	MW	120							0
	HSF0707	6531	LSU	168							0
	HSF0707	6532	NSC	119							0
	HSF0707	6533	MW	115							0
	HSF0707	6534	MW	78							0
	HSF0707	6535	RSC	80							0
	HSF0707	6536	MW	65							0
	HSF0707	6537	RSC	91							0
	HSF0707	6538	RSC	78							0
	HSF0707	6539	MW	68							0
	HSF0707	6540	MW	95							0
	HSF0707	6541	RSC	89							0
	HSF0707	6542	RSC	83							0
	HSF0707	6543	RSC	69							0
	HSF0707	6544	RSC	85							0
	HSF0707	6545	RSC	80							0
	HSF0707	6546	MW	56							0
	HSF0707	6547	MW	56							0
	HSF0707	6548	MW	51							0
	HSF0707	6549	MW	66							0
	HSF0707	6550	CSU	97							0
	HSF0707	6551	RSC	75							0
	HSF0707	6552	LSU	85							0
	HSF0707	6553	LSU	91							0
	HSF0707	6554	MW	78							0
	HSF0707	6555	MW	63							0
	HSF0707	6556	RSC	70							0
	HSF0707	6557	MW	71							0
	HSF0707	6558	MW	60							0
	HSF0707	6559	RSC	79							0
	HSF0707	6560	RSC	75							0
	HSF0707	6561	LSU	157							0
	HSF0801	6562	BT	263			SCALES				0
	HSF0801	6563	BT	231			SCALES				0
	HSF0801	6564	BT	193			SCALES	2			0
	HSF0801	6565	MW	66			SCALES				0
	HSF0801	6566	MW	123			SCALES				0
	HSF0801	6567	MW	113			SCALES				0
	HSF0801	6568	MW	128			SCALES				0
	HSF0801	6569	MW	65			SCALES				0
	HSF0801	6570	LSU	126							0
	HSF0801	6571	LSU	154							0
	HSF0801	6572	LSU	101							0
	HSF0801	6573	RSC	82							0
	HSF0801	6574	RSC	80							0
	HSF0801	6575	RSC	73							0
	HSF0801	6576	RSC	83							0
	HSF0801	6577	RSC	102							0
	HSF0801	6578	RSC	90							0
	HSF0801	6579	RSC	80							0
	HSF0801	6580	RSC	90							0
	HSF0801	6581	LKC	71							0
	HSF0801	6582	RSC	89							0
	HSF0801	6583	RSC	93							0
	HSF0801	6584	RSC	74							0
	HSF0801	6585	RSC	81							0
	HSF0801	6586	RSC	68							0
	HSF0801	6587	RSC	85							0
	HSF0801	6588	RSC	73							0
	HSF0801	6589	RSC	75							0
	HSF0801	6590	RSC	83							0
	HSF0801	6591	RSC	85							0
	HSF0801	6592	LSU	111							0
	HSF0801	6593	LSU	96							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0801	6594	LSU	89							0
	HSF0801	6595	LSU	105							0
	HSF0801	6596	LNC	49							0
	HSF0802	6597	BT	333			SCALES				0
	HSF0802	6598	BT	292			SCALES				0
	HSF0802	6599	LSU	193							0
	HSF0802	6600	MW	141							0
	HSF0802	6601	LSU	120							0
	HSF0802	6602	LSU	109							0
	HSF0802	6603	LSU	142							0
	HSF0802	6604	LSU	181							0
	HSF0802	6605	LSU	98							0
	HSF0802	6606	LSU	133							0
	HSF0802	6607	LSU	130							0
	HSF0802	6608	RSC	93							0
	HSF0802	6609	LSU	140							0
	HSF0802	6610	LSU	114							0
	HSF0802	6611	CSU	90							0
	HSF0802	6612	MW	114							0
	HSF0802	6613	RSC	95							0
	HSF0802	6614	LSU	104							0
	HSF0802	6615	MW	66							0
	HSF0802	6616	CSU	94							0
	HSF0802	6617	LSU	97							0
	HSF0802	6618	LSU	100							0
	HSF0802	6619	RSC	83							0
	HSF0802	6620	RSC	87							0
	HSF0802	6621	RSC	80							0
	HSF0802	6622	RSC	79							0
	HSF0802	6623	LSU	93							0
	HSF0802	6624	LSU	92							0
	HSF0802	6625	RSC	79							0
	HSF0802	6626	RSC	73							0
	HSF0802	6627	RSC	88							0
	HSF0802	6628	LSU	108							0
	HSF0802	6629	RSC	83							0
	HSF0802	6630	RSC	85							0
	HSF0802	6631	RSC	89							0
	HSF0802	6632	MW	77							0
	HSF0802	6633	MW	61							0
	HSF0802	6634	MW	59							0
	HSF0802	6635	MW	63							0
	HSF0802	6636	MW	60							0
	HSF0802	6637	RSC	71							0
	HSF0802	6638	MW	54							0
	HSF0802	6639	MW	54							0
	HSF0802	6640	MW	65							0
	HSF0802	6641	RSC	69							0
	HSF0802	6642	MW	188							0
	HSF0802	6643	MW	203							0
	HSF0802	6644	LSU	126							0
	HSF0802	6645	NSC	145							0
	HSF0802	6646	MW	73							0
	HSF0802	6647	MW	56							0
	HSF0802	6648	MW	123							0
	HSF0802	6649	LSU	114							0
	HSF0802	6650	RSC	99							0
	HSF0802	6651	RSC	96							0
	HSF0802	6652	CSU	80							0
	HSF0802	6653	MW	110							0
	HSF0802	6654	RSC	83							0
	HSF0802	6655	LSU	94							0
	HSF0802	6656	RSC	75							0
	HSF0802	6657	LSU	95							0
	HSF0802	6658	LSU	90							0
	HSF0802	6659	RSC	75							0
	HSF0802	6660	RSC	81							0
	HSF0802	6661	RSC	76							0
	HSF0802	6662	LNC	55							0
	HSF0803	6663	BT	252							0
	HSF0803	6664	NSC	196							0
	HSF0803	6665	LSU	152							0
	HSF0803	6666	GR	123			SCALES	1			0
	HSF0803	6667	RSC	115							0
	HSF0803	6668	LSU	141							0
	HSF0803	6669	MW	66							1
	HSF0803	6670	LSU	103							0
	HSF0803	6671	RSC	88							0
	HSF0803	6672	RSC	62							0
	HSF0803	6673	RSC	83							0
	HSF0803	6674	CSU	178							0
	HSF0803	6675	RSC	108							0
	HSF0803	6676	CSU	132							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0803	6677	LSU	140							0
	HSF0803	6678	LSU	138							0
	HSF0803	6679	RSC	76							0
	HSF0803	6680	RSC	66							0
	HSF0803	6681	RSC	79							0
	HSF0803	6682	RSC	83							0
	HSF0803	6683	RSC	71							0
	HSF0803	6684	LSU	117							0
	HSF0803	6685	LSU	100							0
	HSF0803	6686	RSC	73							0
	HSF0803	6687	RSC	86							0
	HSF0803	6688	RSC	100							0
	HSF0803	6689	RSC	80							0
	HSF0803	6690	RSC	91							0
	HSF0803	6691	RSC	71							0
	HSF0803	6692	RSC	85							0
	HSF0803	6693	LSU	110							0
	HSF0803	6694	LSU	92							0
	HSF0803	6695	LSU	84							0
	HSF0803	6696	CSU	185							0
	HSF0803	6697	CSU	193							0
	HSF0803	6698	CSU	154							0
	HSF0803	6699	MW	62							0
	HSF0803	6700	MW	65							0
	HSF0803	6701	NSC	136							0
	HSF0803	6702	RSC	92							0
	HSF0803	6703	LSU	93							0
	HSF0803	6704	RSC	115							0
	HSF0803	6705	RSC	91							0
	HSF0803	6706	RSC	105							0
	HSF0803	6707	LSU	95							0
	HSF0803	6708	RSC	81							0
	HSF0803	6709	RSC	80							0
	HSF0803	6710	RSC	75							0
	HSF0803	6711	RSC	76							0
	HSF0803	6712	RSC	73							0
	HSF0803	6713	RSC	82							0
	HSF0803	6714	RSC	70							0
	HSF0803	6715	MW	118							0
	HSF0803	6716	RSC	97							0
	HSF0803	6717	LSU	92							0
	HSF0803	6718	LSU	129							0
	HSF0803	6719	NSC	119							0
	HSF0803	6720	RSC	86							0
	HSF0803	6721	MW	54							0
	HSF0803	7649	BT	452							0
	HSF0804	6722	GR	117			SCALES	1			0
	HSF0804	6723	LSU	148							0
	HSF0804	6724	LSU	159							0
	HSF0804	6725	LSU	125							0
	HSF0804	6726	LSU	106							0
	HSF0804	6727	LSU	103							0
	HSF0804	6728	CSU	110							0
	HSF0804	6729	CSU	86							0
	HSF0804	6730	MW	126							1
	HSF0804	6731	MW	121							0
	HSF0804	6732	MW	69							0
	HSF0804	6733	RSC	115							0
	HSF0804	6734	RSC	102							0
	HSF0804	6735	RSC	88							0
	HSF0804	6736	RSC	80							0
	HSF0804	6737	RSC	79							0
	HSF0804	6738	RSC	68							0
	HSF0804	6739	RSC	81							0
	HSF0804	6740	RSC	80							0
	HSF0804	6741	RSC	88							0
	HSF0804	6742	LKC	94							0
	HSF0804	6743	MW	62							0
	HSF0804	6744	RSC	83							0
	HSF0804	6745	RSC	61							0
	HSF0804	6746	LSU	137							0
	HSF0804	6747	CSU	168							0
	HSF0804	6748	CSU	110							0
	HSF0804	6749	LSU	156							0
	HSF0804	6750	LSU	136							0
	HSF0804	6751	LSU	136							0
	HSF0804	6752	CSU	97							0
	HSF0804	6753	MW	127							0
	HSF0804	6754	MW	113							0
	HSF0804	6755	NSC	97							0
	HSF0804	6756	RSC	75							0
	HSF0804	6757	RSC	73							0
	HSF0804	6758	RSC	89							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0804	6759	RSC	86							0
	HSF0804	6760	CSU	92							0
	HSF0804	6761	LSU	186							0
	HSF0804	6762	LSU	170							0
	HSF0804	6763	CSU	175							0
	HSF0804	6764	CSU	120							0
	HSF0804	6765	LSU	89							0
	HSF0804	6766	RSC	96							0
	HSF0804	6767	LSU	92							0
	HSF0804	6768	RSC	88							0
	HSF0804	6769	RSC	80							0
	HSF0804	6770	MW	116							0
	HSF0804	6771	LNC	62							0
	HSF0804	6772	RSC	73							0
	HSF0804	6773	RSC	75							0
	HSF0804	6774	RSC	80							0
	HSF0804	6775	RSC	86							0
	HSF0804	6776	NSC	92							0
	HSF0804	6777	CSU	151							0
	HSF0804	6778	CSU	116							0
	HSF0804	6779	CSU	103							0
	HSF0804	6780	RSC	68							0
	HSF0804	6781	CSU	88							0
	HSF0804	6782	RSC	90							0
	HSF0804	6783	RSC	87							0
	HSF0804	6784	RSC	71							0
	HSF0804	6785	RSC	78							0
	HSF0804	6786	CCG	87							0
	HSF0805	6787	MW	126							0
	HSF0805	6788	MW	72							1
	HSF0805	6789	MW	52							0
	HSF0805	6790	MW	117							0
	HSF0805	6791	RSC	81							0
	HSF0805	6792	RSC	72							0
	HSF0805	6793	RSC	86							0
	HSF0805	6794	MW	64							0
	HSF0805	6795	RSC	78							0
	HSF0805	6796	RSC	78							0
	HSF0805	6797	RSC	100							0
	HSF0805	6798	RSC	75							0
	HSF0805	6799	RSC	80							0
	HSF0805	6800	RSC	78							0
	HSF0805	6801	MW	64							0
	HSF0805	6802	RSC	79							0
	HSF0805	6803	RSC	83							0
	HSF0805	6804	RSC	87							0
	HSF0805	6805	RSC	91							0
	HSF0805	6806	RSC	82							0
	HSF0805	6807	RSC	71							0
	HSF0805	6808	RSC	91							0
	HSF0805	6809	RSC	78							0
	HSF0805	6810	LSU	126							0
	HSF0805	6811	LSU	109							0
	HSF0805	6812	MW	124							0
	HSF0805	6813	NSC	158							0
	HSF0805	6814	LSU	136							0
	HSF0805	6815	LSU	115							0
	HSF0805	6816	LSU	113							0
	HSF0805	6817	MW	133							0
	HSF0805	6818	CSU	92							0
	HSF0805	6819	RSC	87							0
	HSF0805	6820	RSC	102							0
	HSF0805	6821	RSC	83							0
	HSF0805	6822	LSU	108							0
	HSF0805	6823	CSU	116							0
	HSF0805	6824	CSU	113							0
	HSF0805	6825	RSC	67							0
	HSF0805	6826	CSU	95							0
	HSF0805	6827	CSU	98							0
	HSF0805	6828	LSU	116							0
	HSF0805	6829	CSU	87							0
	HSF0805	6830	RSC	85							0
	HSF0805	6831	RSC	89							0
	HSF0805	6832	RSC	82							0
	HSF0805	6833	RSC	73							0
	HSF0805	6834	RSC	83							0
	HSF0805	6835	RSC	79							0
	HSF0805	6836	CSU	90							0
	HSF0805	6837	MW	61							0
	HSF0805	6838	CSU	106							0
	HSF0805	6839	NSC	96							0
	HSF0805	6840	RSC	72							0
	HSF0805	6841	LSU	97							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0805	6842	NSC	131							0
	HSF0805	6843	LSU	116							0
	HSF0805	6844	LSU	106							0
	HSF0805	6845	RSC	97							0
	HSF0805	6846	RSC	100							0
	HSF0805	6847	RSC	98							0
	HSF0805	6848	LSU	89							0
	HSF0805	6849	RSC	89							0
	HSF0805	6850	RSC	95							0
	HSF0805	6851	CSU	82							0
	HSF0805	6852	RSC	80							0
	HSF0805	6853	RSC	82							0
	HSF0805	6854	RSC	69							0
	HSF0805	6855	MW	73							0
	HSF0805	6856	RSC	69							0
	HSF0805	6857	RSC	82							0
	HSF0805	6858	RSC	100							0
	HSF0805	6859	CSU	65							0
	HSF0805	6860	RSC	82							0
	HSF0805	6861	RSC	76							0
	HSF0805	6862	RSC	82							0
	HSF0805	6863	RSC	92							0
	HSF0805	6864	RSC	91							0
	HSF0805	6865	RSC	60							0
	HSF0805	6866	RSC	76							0
	HSF0805	6867	CCG	76							0
	HSF0805	6868	RSC	73							0
	HSF0805	6869	RSC	80							0
	HSF0805	6870	RSC	60							0
	HSF0805	6871	LNC	58							0
	HSF0805	6872	MW	127							0
	HSF0805	6873	LSU	134							0
	HSF0805	6874	LSU	113							0
	HSF0805	6875	CSU	111							0
	HSF0805	6876	MW	63							0
	HSF0805	6877	MW	65							0
	HSF0805	6878	MW	68							0
	HSF0805	6879	MW	67							0
	HSF0805	6880	RSC	85							0
	HSF0805	6881	RSC	74							0
	HSF0805	6882	RSC	93							0
	HSF0805	6883	RSC	80							0
	HSF0805	6884	RSC	93							0
	HSF0805	6885	RSC	72							0
	HSF0805	6886	LSU	93							0
	HSF0805	6887	LSU	99							0
	HSF0806	6888	LSU	161							0
	HSF0806	6889	CSU	143							0
	HSF0806	6890	LSU	123							0
	HSF0806	6891	LSU	108							0
	HSF0806	6892	MW	121							0
	HSF0806	6893	MW	114							0
	HSF0806	6894	CSU	83							0
	HSF0806	6895	MW	117							0
	HSF0806	6896	NSC	101							0
	HSF0806	6897	NSC	98							0
	HSF0806	6898	RSC	91							0
	HSF0806	6899	RSC	73							0
	HSF0806	6900	RSC	72							0
	HSF0806	6901	RSC	82							0
	HSF0806	6902	RSC	90							0
	HSF0806	6903	RSC	86							0
	HSF0806	6904	RSC	78							0
	HSF0806	6905	RSC	107							0
	HSF0806	6906	RSC	80							0
	HSF0806	6907	RSC	90							0
	HSF0806	6908	RSC	80							0
	HSF0806	6909	RSC	84							0
	HSF0806	6910	RSC	74							0
	HSF0806	6911	RSC	73							0
	HSF0806	6912	RSC	84							0
	HSF0806	6913	RSC	89							0
	HSF0806	6914	RSC	76							0
	HSF0806	6915	CSU	85							0
	HSF0806	6916	RSC	65							0
	HSF0806	6917	RSC	73							0
	HSF0806	6918	RSC	88							0
	HSF0806	6919	RSC	68							0
	HSF0806	6920	RSC	68							0
	HSF0806	6921	RSC	74							0
	HSF0806	6922	RSC	70							0
	HSF0806	6923	RSC	75							0
	HSF0806	6924	RSC	71							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0806	6925	LSU	159							0
	HSF0806	6926	CSU	147							0
	HSF0806	6927	MW	122							0
	HSF0806	6928	CSU	126							0
	HSF0806	6929	CSU	88							0
	HSF0806	6930	MW	103							0
	HSF0806	6931	MW	58							0
	HSF0806	6932	MW	64							0
	HSF0806	6933	MW	61							0
	HSF0806	6934	RSC	64							0
	HSF0806	6935	RSC	73							0
	HSF0806	6936	RSC	92							0
	HSF0806	6937	RSC	77							0
	HSF0806	6938	RSC	79							0
	HSF0806	6939	RSC	79							0
	HSF0806	6940	RSC	71							0
	HSF0806	6941	LNC	57							0
	HSF0806	6942	NSC	116							0
	HSF0806	6943	NSC	90							0
	HSF0806	6944	NSC	99							0
	HSF0806	6945	MW	62							0
	HSF0806	6946	RSC	83							0
	HSF0806	6947	RSC	84							0
	HSF0806	6948	RSC	68							0
	MEF0801	2973	LSU	63							0
	MEF0802	2974	BB	168							0
	MEF0802	2975	RSC	94							0
	MEF0802	2976	CCG	70							0
	MEF0802	2977	LSU	45							0
	MEF0802	2978	CCG	28							0
	MEF0802	2979	LNC	85							0
	MEF0802	2980	CCG	24							0
	MEF0803	2981	BB	200							0
	MEF0803	2982	CSU	153							0
	MEF0803	2983	LSU	63							0
	MEF0803	2984	BB	164							0
	MEF0803	2985	BB	148							0
	MEF0804	2986	CCG	75							0
	MEF0804	2987	LSU	67							0
	MEF0804	2988	LNC	77							0
	MEF0804	2989	LKC	93							0
	MEF0804	2990	LNC	105							0
	MEF0804	2991	RSC	88							0
	MEF0804	2992	LSU	77							0
	MEF0805	2993	LSU	91							0
	MEF0805	2994	LSU	26							0
	MEF0805	2995	CCG	69							0
	MEF0805	2996	LKC	74							0
	MEF0805	2997	LSU	56							0
	MEF0806	2998	BB	180							0
	MEF0806	2999	BB	188							0
	MEF0806	3000	LSU	67							0
	MEF0806	3001	RSC	53							0
	MEF0806	3002	LNC	61							0
	MEF0806	3003	BB	48							0
	MEF0806	3004	LSU	44							0
	MSF0801	2179	MW	299							0
	MSF0801	2180	MW	281							0
	MSF0801	2181	MW	231							0
	MSF0801	2182	LSU	222							0
	MSF0801	2183	LSU	260							0
	MSF0801	2184	LSU	169							0
	MSF0801	2185	MW	181							0
	MSF0801	2186	MW	185							0
	MSF0801	2187	LSU	194							0
	MSF0801	2188	MW	212							0
	MSF0801	2189	MW	200							0
	MSF0801	2190	LSU	156							0
	MSF0801	2191	MW	197							0
	MSF0801	2192	LSU	186							0
	MSF0801	2193	LSU	142							0
	MSF0801	2194	MW	176							0
	MSF0801	2195	MW	124							0
	MSF0801	2196	MW	173							0
	MSF0801	2197	MW	199							0
	MSF0801	2198	GR	137							0
	MSF0801	2199	LSU	152							0
	MSF0801	2200	MW	131							0
	MSF0801	2201	MW	163							0
	MSF0801	2202	LSU	155							0
	MSF0801	2203	MW	173							0
	MSF0801	2204	MW	156							0
	MSF0801	2205	LSU	141							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0801	2206	LSU	160							0
	MSF0801	2207	MW	138							0
	MSF0801	2208	MW	117							0
	MSF0801	2209	MW	125							0
	MSF0801	2210	MW	117							0
	MSF0801	2211	MW	131							0
	MSF0801	2212	MW	121							0
	MSF0801	2213	MW	70							0
	MSF0801	2214	LSU	110							0
	MSF0801	2215	RSC	99							0
	MSF0801	2216	LSU	114							0
	MSF0801	2217	LSU	116							0
	MSF0801	2218	MW	61							0
	MSF0801	2219	MW	120							0
	MSF0801	2220	MW	115							0
	MSF0801	2221	MW	124							0
	MSF0801	2222	MW	117							0
	MSF0801	2223	LSU	115							0
	MSF0801	2224	LSU	92							0
	MSF0801	2225	MW	62							0
	MSF0801	2226	MW	57							0
	MSF0801	2227	MW	128							0
	MSF0801	2228	MW	117							0
	MSF0801	2229	MW	125							0
	MSF0801	2230	MW	66							0
	MSF0801	2231	LNC	76							0
	MSF0801	2232	LSU	107							0
	MSF0801	2233	LSU	104							0
	MSF0801	2234	LSU	119							0
	MSF0801	2235	LNC	64							0
	MSF0801	2236	LKC	100							0
	MSF0801	2237	RSC	91							0
	MSF0801	2238	RSC	109							0
	MSF0801	2239	LSU	117							0
	MSF0801	2240	LSU	114							0
	MSF0801	2241	LKC	91							0
	MSF0802	2242	GR	213			SCALES				0
	MSF0802	2243	MW	218							0
	MSF0802	2244	GR	138							0
	MSF0802	2245	LSU	231							0
	MSF0802	2246	LSU	167							0
	MSF0802	2247	LSU	191							0
	MSF0802	2248	MW	129							0
	MSF0802	2249	LSU	118							0
	MSF0802	2250	MW	126							0
	MSF0802	2251	MW	182							0
	MSF0802	2252	MW	111							0
	MSF0802	2253	LSU	108							0
	MSF0802	2254	MW	127							0
	MSF0802	2255	LSU	126							0
	MSF0802	2256	LSU	159							0
	MSF0802	2257	LSU	174							0
	MSF0802	2258	LSU	198							0
	MSF0802	2259	MW	171							0
	MSF0802	2260	MW	117							0
	MSF0802	2261	MW	112							0
	MSF0802	2262	MW	112							0
	MSF0802	2263	LSU	127							0
	MSF0802	2264	LSU	129							0
	MSF0802	2265	LSU	112							0
	MSF0802	2266	RSC	68							0
	MSF0802	2267	RSC	92							0
	MSF0802	2268	RSC	86							0
	MSF0802	2269	LNC	38							0
	MSF0802	2270	RSC	94							0
	MSF0802	2271	MW	113							0
	MSF0802	2272	LSU	96							0
	MSF0802	2273	LSU	230							0
	MSF0802	2274	GR	159							0
	MSF0802	2275	MW	126							0
	MSF0802	2276	RSC	82							0
	MSF0802	2277	LSU	104							0
	MSF0802	2278	MW	159							0
	MSF0802	2279	MW	141							0
	MSF0802	2280	LKC	96							0
	MSF0802	2281	LSU	93							0
	MSF0802	2282	GR	142							0
	MSF0802	2283	RSC	72							0
	MSF0802	2284	RSC	96							0
	MSF0802	2285	MW	157							0
	MSF0802	2286	RSC	88							0
	MSF0802	2287	RSC	88							0
	MSF0802	2288	LNC	46							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0803	2289	MW	310			SCALES	5			0
	MSF0803	2290	MW	281			SCALES	5			0
	MSF0803	2291	MW	230							0
	MSF0803	2292	LSU	220							0
	MSF0803	2293	LSU	132							0
	MSF0803	2294	LSU	201							0
	MSF0803	2295	LSU	175							0
	MSF0803	2296	MW	198							0
	MSF0803	2297	LSU	151							0
	MSF0803	2298	GR	140							0
	MSF0803	2299	CSU	168							0
	MSF0803	2300	LSU	138							0
	MSF0803	2301	MW	161							0
	MSF0803	2302	MW	147							0
	MSF0803	2303	MW	128							0
	MSF0803	2304	MW	129							0
	MSF0803	2305	MW	111							0
	MSF0803	2306	MW	116							0
	MSF0803	2307	MW	122							0
	MSF0803	2308	CSU	126							0
	MSF0803	2309	MW	121							0
	MSF0803	2310	MW	122							0
	MSF0803	2311	MW	113							0
	MSF0803	2312	LSU	116							0
	MSF0803	2313	RSC	70							0
	MSF0803	2314	MW	132							0
	MSF0803	2315	MW	124							0
	MSF0803	2316	RSC	58							0
	MSF0803	2317	LNC	66							0
	MSF0803	2318	LNC	56							0
	MSF0804	2319	RSC	71							0
	MSF0804	2320	MW	223							0
	MSF0804	2321	LSU	164							0
	MSF0804	2322	MW	117							0
	MSF0804	2323	MW	129							0
	MSF0804	2324	MW	126							0
	MSF0804	2325	GR	143							0
	MSF0804	2326	MW	124							0
	MSF0804	2327	MW	123							0
	MSF0804	2328	MW	127							0
	MSF0804	2329	MW	116							0
	MSF0804	2330	MW	136							0
	MSF0804	2331	MW	132							0
	MSF0804	2332	LSU	202							0
	MSF0804	2333	LSU	127							0
	MSF0804	2334	LSU	118							0
	MSF0804	2335	MW	117							0
	MSF0804	2336	LKC	88							0
	MSF0804	2337	MW	119							0
	MSF0804	2338	RSC	82							0
	MSF0804	2339	MW	167							0
	MSF0804	2340	MW	123							0
	MSF0804	2341	MW	166							0
	MSF0804	2342	LNC	56							0
	MSF0804	2343	LSU	170							0
	MSF0804	2344	LSU	113							0
	MSF0804	2345	LSU	98							0
	MSF0804	2346	LSU	67							0
	MSF0804	2347	LNC	54							0
	MSF0805	2348	CSU	399							0
	MSF0805	2349	NSC	334							0
	MSF0805	2350	NSC	350							0
	MSF0805	2351	MW	245							0
	MSF0805	2352	NSC	279							0
	MSF0805	2353	LSU	233							0
	MSF0805	2354	MW	125							1
	MSF0805	2355	MW	148							1
	MSF0805	2356	MW	208							0
	MSF0805	2357	LSU	195							0
	MSF0805	2358	LSU	203							0
	MSF0805	2359	LSU	200							0
	MSF0805	2360	MW	180							1
	MSF0805	2361	MW	166							0
	MSF0805	2362	GR	139							0
	MSF0805	2363	GR	132							0
	MSF0805	2364	LSU	147							0
	MSF0805	2365	MW	163							0
	MSF0805	2366	MW	131							0
	MSF0805	2367	MW	189							0
	MSF0805	2368	LSU	143							0
	MSF0805	2369	LSU	127							0
	MSF0805	2370	LSU	127							0
	MSF0805	2371	LSU	137							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0805	2372	MW	107							0
	MSF0805	2373	MW	130							0
	MSF0805	2374	MW	111							0
	MSF0805	2375	MW	136							0
	MSF0805	2376	LSU	128							0
	MSF0805	2377	MW	76							0
	MSF0805	2378	LSU	131							0
	MSF0805	2379	MW	129							0
	MSF0805	2380	LSU	110							0
	MSF0805	2381	LSU	119							0
	MSF0805	2382	LSU	121							0
	MSF0805	2383	LSU	106							0
	MSF0805	2384	LSU	81							0
	MSF0805	2385	LSU	113							0
	MSF0805	2386	LNC	59							0
	MSF0805	2387	LSU	114							0
	MSF0805	2388	MW	122							0
	MSF0805	2389	MW	120							0
	MSF0805	2390	LSU	139							0
	MSF0805	2391	LSU	112							0
	MSF0805	2392	LNC	61							0
	MSF0805	2393	LNC	66							0
	MSF0805	2394	LNC	56							0
	MSF0805	2395	LSU	93							0
	MSF0805	2396	LNC	60							0
	MSF0805	2397	LNC	66							0
	MSF0805	2398	LNC	61							0
	MSF0806	2399	MW	238							0
	MSF0806	2400	GR	158							0
	MSF0806	2401	LSU	212							0
	MSF0806	2402	LSU	210							0
	MSF0806	2403	LSU	147							0
	MSF0806	2404	LSU	126							0
	MSF0806	2405	MW	124							0
	MSF0806	2406	MW	156							0
	MSF0806	2407	MW	123							0
	MSF0806	2408	MW	122							0
	MSF0806	2409	LNC	63							0
	MSF0806	2410	MW	76							0
	MSF0806	2411	MW	62							0
	MSF0806	2412	RSC	88							0
	MSF0806	2413	RSC	91							0
	MSF0806	2414	RSC	52							0
	MSF0806	2415	RSC	89							0
	MSF0806	2416	LKC	91							0
	MSF0806	2417	RSC	64							0
	MSF0806	2418	RSC	41							0
	MSF0806	2419	LKC	87							0
	MSF0806	2420	NSC	172							0
	MSF0806	2421	GR	132							0
	MSF0806	2422	LSU	164							0
	MSF0806	2423	LSU	212							0
	MSF0806	2424	MW	226							0
	MSF0806	2425	LSU	147							0
	MSF0806	2426	MW	107							0
	MSF0806	2427	MW	71							0
	MSF0806	2428	LSU	111							0
	MSF0806	2429	RSC	86							0
	MSF0806	2430	MW	116							0
	MSF0806	2431	RSC	91							0
	MSF0806	2432	RSC	86							0
	MSF0806	2433	CSU	188							0
	MSF0806	2434	LSU	124							0
	MSF0806	2435	LKC	77							0
	MSF0806	2436	LNC	57							0
	MSF0806	2437	RSC	43							0
09											
	HBS0901	3399	CSU	32							0
	HBS0901	3400	CSU	33							0
	HBS0901	3401	CSU	29							0
	HEF0901	4239	LSU	32							0
	HEF0901	4240	WSC	107							0
	HEF0901	4241	CCG	71							0
	HEF0901	4242	CCG	75							0
	HEF0901	4243	RSC	87							0
	HEF0901	4244	LNC	92							0
	HEF0901	4245	LKC	65							0
	HEF0901	4246	LNC	55							0
	HEF0901	4247	NSC	74							0
	HEF0901	4248	RSC	82							0
	HEF0901	4249	MW	65							0
	HEF0901	4250	LKC	70							0
	HEF0901	4251	CSU	87							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HEF0901	4252	CSU	78							0
	HEF0901	4253	CSU	57							0
	HEF0901	4254	LNC	58							0
	HEF0901	4255	MW	50							0
	HEF0901	4256	LNC	60							0
	HEF0901	4257	LNC	42							0
	HEF0901	4258	RSC	25							0
	HEF0901	4259	RSC	21							0
	HEF0902	4260	LNC	55							0
	HEF0902	4261	RSC	75							0
	HEF0902	4262	CSU	71							0
	HEF0902	4263	LNC	55							0
	HEF0902	4264	LNC	45							0
	HEF0902	4265	MW	56							0
	HEF0902	4266	GR	61			SCALES	0			0
	HEF0902	4267	LKC	32							0
	HEF0902	4268	LNC	27							0
	HEF0902	4269	LNC	32							0
	HEF0903	4270	GR	135			SCALES				0
	HEF0903	4271	MW	52							0
	HEF0903	4272	NSC	187							0
	HEF0903	4273	MW	64							0
	HEF0903	4274	LKC	74							0
	HEF0903	4275	RSC	65							0
	HEF0903	4276	LKC	88							0
	HEF0903	4277	LNC	58							0
	HEF0903	4278	LNC	62							0
	HEF0903	4279	LNC	40							0
	HEF0904	4280	NSC	141							0
	HEF0904	4281	NSC	170							0
	HEF0904	4282	NSC	104							0
	HEF0904	4283	LSU	120							0
	HEF0904	4284	CSU	119							0
	HEF0904	4285	RSC	75							0
	HEF0904	4286	RSC	69							0
	HEF0904	4287	RSC	86							0
	HEF0904	4288	RSC	90							0
	HEF0904	4289	RSC	71							0
	HEF0904	4290	RSC	72							0
	HEF0904	4291	RSC	61							0
	HEF0904	4292	LNC	74							0
	HEF0904	4293	CSU	29							0
	HEF0904	4294	RSC	41							0
	HEF0905	4295	LKC	75							0
	HEF0905	4296	NSC	73							0
	HEF0905	4297	CCG	76							0
	HEF0905	4298	MW	58							0
	HEF0905	4299	LKC	65							0
	HEF0905	4300	LNC	56							0
	HEF0905	4301	LNC	63							0
	HEF0905	4302	LNC	59							0
	HEF0905	4303	CSU	26							0
	HEF0905	4304	CSU	26							0
	HEF0905	4305	CSU	33							0
	HEF0905	4306	CCG	32							0
	HEF0905	4307	CSU	31							0
	HEF0905	4308	CSU	29							0
	HEF0905	4309	CSU	26							0
	HEF0905	4310	RSC	22							0
	HEF0905	4311	RSC	21							0
	HEF0905	4312	RSC	25							0
	HEF0905	4313	RSC	22							0
	HEF0905	4314	RSC	26							0
	HEF0905	4315	CSU	35							0
	HEF0905	4316	CSU	31							0
	HEF0905	4317	RSC	31							0
	HEF0905	4318	RSC	22							0
	HSF0901	6949	MW	126			SCALES				0
	HSF0901	6950	MW	190			SCALES				0
	HSF0901	6951	MW	115			SCALES				0
	HSF0901	6952	MW	65			SCALES	0			0
	HSF0901	6953	MW	111			SCALES				0
	HSF0901	6954	BT	264			SCALES				0
	HSF0901	6955	CSU	170							0
	HSF0901	6956	MW	134							0
	HSF0901	6957	LSU	200							0
	HSF0901	6958	MW	154							0
	HSF0901	6959	NSC	133							0
	HSF0901	6960	LSU	118							0
	HSF0901	6961	MW	113							0
	HSF0901	6962	MW	66							1
	HSF0901	6963	NSC	132							0
	HSF0901	6964	MW	123							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0901	6965	MW	122							0
	HSF0901	6966	RSC	79							0
	HSF0901	6967	CSU	104							0
	HSF0901	6968	MW	114							0
	HSF0901	6969	RSC	83							0
	HSF0901	6970	RSC	84							0
	HSF0901	6971	RSC	92							0
	HSF0901	6972	RSC	60							0
	HSF0901	6973	NSC	90							0
	HSF0901	6974	RSC	80							0
	HSF0901	6975	MW	64							0
	HSF0901	6976	CSU	94							0
	HSF0901	6977	CSU	92							0
	HSF0901	6978	RSC	75							0
	HSF0901	6979	CSU	94							0
	HSF0901	6980	RSC	74							0
	HSF0901	6981	MW	65							0
	HSF0901	6982	MW	59							0
	HSF0902	6983	CSU	178							0
	HSF0902	6984	CSU	143							0
	HSF0902	6985	CSU	137							0
	HSF0902	6986	LSU	115							0
	HSF0902	6987	MW	60							0
	HSF0902	6988	MW	50							0
	HSF0902	6989	MW	122							0
	HSF0902	6990	NSC	113							0
	HSF0902	6991	RSC	100							0
	HSF0902	6992	MW	114							0
	HSF0902	6993	MW	119							0
	HSF0902	6994	LKC	108							0
	HSF0902	6995	RSC	90							0
	HSF0902	6996	RSC	85							0
	HSF0902	6997	RSC	100							0
	HSF0902	6998	RSC	79							0
	HSF0902	6999	MW	74							0
	HSF0902	7000	LSU	105							0
	HSF0902	7001	RSC	75							0
	HSF0902	7002	RSC	99							0
	HSF0902	7003	RSC	95							0
	HSF0902	7004	RSC	88							0
	HSF0902	7005	RSC	85							0
	HSF0902	7006	RSC	94							0
	HSF0902	7007	RSC	79							0
	HSF0902	7008	RSC	69							0
	HSF0902	7009	RSC	86							0
	HSF0902	7010	LSU	104							0
	HSF0902	7011	RSC	84							0
	HSF0902	7012	LKC	75							0
	HSF0902	7013	RSC	91							0
	HSF0902	7014	RSC	78							0
	HSF0902	7015	RSC	108							0
	HSF0902	7016	MW	69							0
	HSF0902	7017	CSU	88							0
	HSF0902	7018	RSC	73							0
	HSF0902	7019	RSC	41							0
	HSF0902	7020	NSC	86							0
	HSF0902	7021	NSC	80							0
	HSF0902	7022	RSC	71							0
	HSF0902	7023	MW	59							0
	HSF0902	7024	RSC	60							0
	HSF0902	7025	RSC	71							0
	HSF0902	7026	RSC	83							0
	HSF0902	7027	RSC	79							0
	HSF0902	7028	NSC	84							0
	HSF0902	7029	RSC	91							0
	HSF0902	7030	LNC	59							0
	HSF0902	7031	CSU	166							0
	HSF0902	7032	LSU	184							0
	HSF0902	7033	MW	169							0
	HSF0902	7034	LSU	194							0
	HSF0902	7035	CSU	134							0
	HSF0902	7036	LSU	128							0
	HSF0902	7037	LSU	116							0
	HSF0902	7038	FHC	118							0
	HSF0902	7039	RSC	120							0
	HSF0902	7040	CSU	114							0
	HSF0902	7041	LSU	103							0
	HSF0902	7042	RSC	69							0
	HSF0902	7043	MW	125							0
	HSF0902	7044	CSU	104							0
	HSF0902	7045	RSC	83							0
	HSF0902	7046	RSC	83							0
	HSF0902	7047	RSC	91							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0902	7048	RSC	86							0
	HSF0902	7049	LSU	86							0
	HSF0902	7050	CSU	104							0
	HSF0902	7051	CSU	95							0
	HSF0902	7052	RSC	90							0
	HSF0902	7053	RSC	71							0
	HSF0902	7054	RSC	80							0
	HSF0902	7055	RSC	97							0
	HSF0902	7056	RSC	81							0
	HSF0902	7057	CSU	100							0
	HSF0902	7058	RSC	84							0
	HSF0902	7059	CCG	73							0
	HSF0902	7060	RSC	91							0
	HSF0902	7061	RSC	86							0
	HSF0902	7062	RSC	84							0
	HSF0902	7063	FHC	88							0
	HSF0902	7064	MW	64							0
	HSF0902	7065	NSC	86							0
	HSF0902	7066	RSC	85							0
	HSF0902	7067	NSC	83							0
	HSF0902	7068	NSC	95							0
	HSF0902	7069	NSC	82							0
	HSF0903	7070	LSU	141							0
	HSF0903	7071	MW	154							0
	HSF0903	7072	RSC	110							0
	HSF0903	7073	RSC	81							0
	HSF0903	7074	MW	124							0
	HSF0903	7075	MW	120							0
	HSF0903	7076	MW	125							0
	HSF0903	7077	MW	131							0
	HSF0903	7078	MW	133							0
	HSF0903	7079	RSC	88							0
	HSF0903	7080	LSU	138							0
	HSF0903	7081	LSU	110							0
	HSF0903	7082	MW	84							0
	HSF0903	7083	MW	132							0
	HSF0903	7084	CSU	160							0
	HSF0903	7085	RSC	80							0
	HSF0903	7086	RSC	109							0
	HSF0903	7087	RSC	73							0
	HSF0903	7088	RSC	109							0
	HSF0903	7089	RSC	80							0
	HSF0903	7090	RSC	63							0
	HSF0903	7091	MW	114							0
	HSF0903	7092	RSC	84							0
	HSF0903	7093	MW	120							0
	HSF0903	7094	RSC	89							0
	HSF0903	7095	LSU	134							0
	HSF0903	7096	MW	115							0
	HSF0903	7097	CSU	122							0
	HSF0903	7098	CSU	114							0
	HSF0903	7099	CSU	115							0
	HSF0903	7100	RSC	89							0
	HSF0903	7101	CSU	112							0
	HSF0903	7102	RSC	86							0
	HSF0903	7103	NSC	139							0
	HSF0903	7104	RSC	88							0
	HSF0903	7105	RSC	90							0
	HSF0903	7106	LSU	122							0
	HSF0903	7107	RSC	75							0
	HSF0903	7108	RSC	76							0
	HSF0903	7109	CSU	92							0
	HSF0903	7110	MW	70							0
	HSF0903	7111	MW	75							0
	HSF0903	7112	CSU	108							0
	HSF0903	7113	RSC	82							0
	HSF0903	7114	LSU	122							0
	HSF0903	7115	LSU	115							0
	HSF0903	7116	NSC	95							0
	HSF0903	7117	LNC	56							0
	HSF0903	7118	RSC	82							0
	HSF0903	7119	CSU	115							0
	HSF0903	7120	LSU	114							0
	HSF0903	7121	NSC	96							0
	HSF0903	7122	RSC	74							0
	HSF0903	7123	MW	73							0
	HSF0903	7124	LSU	115							0
	HSF0903	7125	CSU	96							0
	HSF0903	7126	RSC	83							0
	HSF0903	7127	RSC	118							0
	HSF0903	7128	NSC	101							0
	HSF0903	7129	CSU	110							0
	HSF0903	7130	RSC	88							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0903	7131	LSU	95							0
	HSF0903	7132	CSU	86							0
	HSF0903	7133	LSU	104							0
	HSF0903	7134	RSC	80							0
	HSF0903	7135	LSU	115							0
	HSF0903	7136	RSC	79							0
	HSF0903	7137	RSC	86							0
	HSF0903	7138	CCG	74							0
	HSF0903	7139	CCG	73							0
	HSF0903	7140	CCG	71							0
	HSF0903	7141	CCG	81							0
	HSF0903	7142	CCG	82							0
	HSF0903	7143	NSC	93							0
	HSF0903	7144	RSC	100							0
	HSF0903	7145	RSC	86							0
	HSF0903	7146	RSC	70							0
	HSF0903	7147	MW	65							0
	HSF0903	7148	RSC	70							0
	HSF0903	7149	RSC	72							0
	HSF0903	7150	CSU	93							0
	HSF0904	7151	BT	258							0
	HSF0904	7152	MW	163							0
	HSF0904	7153	MW	154							0
	HSF0904	7154	MW	64							0
	HSF0904	7155	MW	70							0
	HSF0904	7156	MW	72							0
	HSF0904	7157	MW	76							0
	HSF0904	7158	MW	161							0
	HSF0904	7159	MW	68							0
	HSF0904	7160	MW	71							0
	HSF0904	7161	MW	125							0
	HSF0904	7162	RSC	88							0
	HSF0904	7163	RSC	90							0
	HSF0904	7164	RSC	91							0
	HSF0904	7165	RSC	86							0
	HSF0904	7166	NSC	108							0
	HSF0904	7167	RSC	94							0
	HSF0904	7168	RSC	89							0
	HSF0904	7169	RSC	86							0
	HSF0904	7170	RSC	104							0
	HSF0904	7171	RSC	74							0
	HSF0904	7172	RSC	80							0
	HSF0904	7173	RSC	91							0
	HSF0904	7174	RSC	76							0
	HSF0904	7175	RSC	56							0
	HSF0904	7176	LSU	194							0
	HSF0904	7177	LSU	180							0
	HSF0904	7178	CSU	145							0
	HSF0904	7179	RSC	84							0
	HSF0904	7180	CSU	104							0
	HSF0904	7181	RSC	86							0
	HSF0904	7182	RSC	90							0
	HSF0904	7183	LSU	120							0
	HSF0904	7184	CSU	94							0
	HSF0904	7185	RSC	84							0
	HSF0904	7186	RSC	85							0
	HSF0904	7187	LSU	100							0
	HSF0904	7188	CSU	104							0
	HSF0904	7189	CSU	99							0
	HSF0904	7190	RSC	83							0
	HSF0904	7191	LSU	114							0
	HSF0904	7192	RSC	110							0
	HSF0904	7193	CSU	127							0
	HSF0904	7194	LSU	124							0
	HSF0904	7195	LSU	131							0
	HSF0904	7196	LSU	113							0
	HSF0904	7197	RSC	81							0
	HSF0904	7198	NSC	110							0
	HSF0904	7199	RSC	78							0
	HSF0904	7200	CSU	100							0
	HSF0904	7201	RSC	89							0
	HSF0904	7202	CSU	89							0
	HSF0904	7203	CSU	97							0
	HSF0904	7204	CSU	104							0
	HSF0904	7205	LKC	85							0
	HSF0904	7206	RSC	118							0
	HSF0904	7207	NSC	98							0
	HSF0904	7208	RSC	70							0
	HSF0904	7209	NSC	99							0
	HSF0904	7210	NSC	109							0
	HSF0904	7211	RSC	88							0
	HSF0904	7212	NSC	99							0
	HSF0904	7213	CSU	98							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0904	7214	RSC	84							0
	HSF0904	7215	RSC	80							0
	HSF0904	7216	RSC	71							0
	HSF0904	7217	CSU	93							0
	HSF0904	7218	LNC	64							0
	HSF0904	7219	LNC	49							0
	HSF0905	7220	RB	146							0
	HSF0905	7221	CSU	179							0
	HSF0905	7222	MW	165							0
	HSF0905	7223	CSU	150							0
	HSF0905	7224	MW	138							0
	HSF0905	7225	MW	125							0
	HSF0905	7226	MW	151							0
	HSF0905	7227	RSC	80							0
	HSF0905	7228	RSC	79							0
	HSF0905	7229	RSC	84							0
	HSF0905	7230	RSC	85							0
	HSF0905	7231	RSC	84							0
	HSF0905	7232	RSC	91							0
	HSF0905	7233	RSC	85							0
	HSF0905	7234	RSC	81							0
	HSF0905	7235	RSC	85							0
	HSF0905	7236	RSC	76							0
	HSF0905	7237	MW	132							0
	HSF0905	7238	MW	115							0
	HSF0905	7239	RSC	88							0
	HSF0905	7240	RSC	84							0
	HSF0905	7241	RSC	84							0
	HSF0905	7242	RSC	94							0
	HSF0905	7243	CSU	99							0
	HSF0905	7244	RSC	87							0
	HSF0905	7245	NSC	154							0
	HSF0905	7246	RSC	90							0
	HSF0905	7247	RSC	95							0
	HSF0905	7248	CSU	124							0
	HSF0905	7249	LKC	105							0
	HSF0905	7250	RSC	94							0
	HSF0905	7251	RSC	86							0
	HSF0905	7252	RSC	82							0
	HSF0905	7253	RSC	91							0
	HSF0905	7254	RSC	82							0
	HSF0905	7255	RSC	93							0
	HSF0905	7256	CSU	152							0
	HSF0905	7257	MW	115							0
	HSF0905	7258	RSC	86							0
	HSF0905	7259	CSU	164							0
	HSF0905	7260	LSU	165							0
	HSF0905	7261	LSU	161							0
	HSF0905	7262	RSC	91							0
	HSF0905	7263	CSU	100							0
	HSF0905	7264	RSC	86							0
	HSF0905	7265	RSC	72							0
	HSF0905	7266	RSC	83							0
	HSF0905	7267	RSC	92							0
	HSF0905	7268	CSU	96							0
	HSF0905	7269	LNC	54							0
	HSF0905	7270	NSC	94							0
	HSF0905	7271	MW	47							0
	HSF0905	7568	RSC	89							0
	HSF0906	7272	CSU	207							0
	HSF0906	7273	LSU	203							0
	HSF0906	7274	NSC	179							0
	HSF0906	7275	NSC	154							0
	HSF0906	7276	LSU	145							0
	HSF0906	7277	LSU	144							0
	HSF0906	7278	RSC	95							0
	HSF0906	7279	NSC	108							0
	HSF0906	7280	LSU	135							0
	HSF0906	7281	RSC	93							0
	HSF0906	7282	FHC	124							0
	HSF0906	7283	RSC	93							0
	HSF0906	7284	RSC	85							0
	HSF0906	7285	RSC	90							0
	HSF0906	7286	RSC	102							0
	HSF0906	7287	RSC	81							0
	HSF0906	7288	RSC	88							0
	HSF0906	7289	RSC	93							0
	HSF0906	7290	RSC	71							0
	HSF0906	7291	RSC	80							0
	HSF0906	7292	RSC	91							0
	HSF0906	7293	RSC	91							0
	HSF0906	7294	RSC	73							0
	HSF0906	7295	RSC	74							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF0906	7296	RSC	80							0
	HSF0906	7297	RSC	91							0
	HSF0906	7298	RSC	77							0
	HSF0906	7299	RSC	83							0
	HSF0906	7300	RSC	83							0
	HSF0906	7301	RSC	79							0
	HSF0906	7302	LKC	71							0
	HSF0906	7303	RSC	86							0
	HSF0906	7304	CSU	119							0
	HSF0906	7305	RSC	81							0
	HSF0906	7306	RSC	85							0
	HSF0906	7307	RSC	74							0
	HSF0906	7308	RSC	86							0
	HSF0906	7309	RSC	94							0
	HSF0906	7310	MW	80							0
	HSF0906	7311	FHC	122							0
	HSF0906	7312	RSC	80							0
	HSF0906	7313	RSC	89							0
	HSF0906	7314	MW	77							0
	HSF0906	7315	MW	68							0
	HSF0906	7316	MW	56							0
	HSF0906	7317	MW	64							0
	HSF0906	7318	RSC	81							0
	HSF0906	7319	RSC	92							0
	HSF0906	7320	RSC	81							0
	HSF0906	7321	NSC	95							0
	HSF0906	7322	RSC	81							0
	HSF0906	7323	RSC	88							0
	HSF0906	7324	RSC	89							0
	HSF0906	7325	RSC	81							0
	HSF0906	7326	NSC	86							0
	HSF0906	7327	LSU	94							0
	HSF0906	7328	RSC	85							0
	HSF0906	7329	MW	59							0
	HSF0906	7330	LSU	100							0
	HSF0906	7331	LSU	109							0
	HSF0906	7332	RSC	69							0
	HSF0906	7333	RSC	81							0
	HSF0906	7334	RSC	94							0
	HSF0906	7335	RSC	73							0
	HSF0906	7336	RSC	79							0
	HSF0906	7337	RSC	86							0
	HSF0906	7338	RSC	99							0
	HSF0906	7339	RSC	79							0
	HSF0906	7340	RSC	81							0
	HSF0906	7341	RSC	79							0
	HSF0906	7342	RSC	79							0
	HSF0906	7343	RSC	84							0
	HSF0906	7344	RSC	86							0
	HSF0906	7345	RSC	62							0
	HSF0906	7346	RSC	97							0
	HSF0906	7347	LKC	73							0
	HSF0906	7348	RSC	79							0
	HSF0906	7349	RSC	88							0
	HSF0906	7350	RSC	79							0
	HSF0906	7351	RSC	73							0
	HSF0906	7352	RSC	93							0
	HSF0906	7353	CSU	117							0
	HSF0906	7354	RSC	84							0
	HSF0906	7355	LNC	59							0
	HSF0906	7356	RSC	86							0
	HSF0906	7357	RSC	73							0
	HSF0906	7358	RSC	82							0
	HSF0906	7359	RSC	84							0
	HSF0906	7360	CSU	102							0
	HSF0906	7361	LNC	50							0
	HSF0906	7362	LNC	60							0
	HSF0906	7363	CSU	85							0
	HSF0906	7364	CCG	28							0
	MEF0901	3005	NP	192							0
	MEF0901	3006	NP	169							0
	MEF0901	3007	MW	60							0
	MEF0901	3008	LSU	56							0
	MEF0901	3009	LKC	70							0
	MEF0901	3010	LNC	60							0
	MEF0901	3011	LKC	21							0
	MEF0901	3012	BB	47							0
	MEF0902	3013	GR	55							0
	MEF0902	3014	LSU	53							0
	MEF0902	3015	LKC	30							0
	MEF0903	3016	LSU	40							0
	MEF0904	3017	CSU	140							0
	MEF0904	3018	GR	57							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MEF0904	3019	RSC	84							0
	MEF0904	3020	LSU	56							0
	MEF0904	3021	CCG	30							0
	MEF0904	3022	LSU	83							0
	MEF0905	3023	LSU	125							0
	MSF0901	2438	NSC	403							0
	MSF0901	2439	CSU	365							0
	MSF0901	2440	NSC	410							0
	MSF0901	2441	CSU	480							0
	MSF0901	2442	MW	234							0
	MSF0901	2443	MW	258							0
	MSF0901	2444	MW	244							0
	MSF0901	2445	MW	183							0
	MSF0901	2446	LSU	179							0
	MSF0901	2447	LSU	180							0
	MSF0901	2448	LSU	143							0
	MSF0901	2449	LSU	164							0
	MSF0901	2450	LSU	158							0
	MSF0901	2451	LSU	141							0
	MSF0901	2452	LSU	107							0
	MSF0901	2453	MW	114							0
	MSF0901	2454	MW	110							0
	MSF0901	2455	LSU	105							0
	MSF0901	2456	MW	118							0
	MSF0901	2457	MW	111							0
	MSF0901	2458	MW	66							0
	MSF0901	2459	MW	127							0
	MSF0901	2460	LSU	131							0
	MSF0901	2461	LSU	101							0
	MSF0901	2462	RSC	119							0
	MSF0901	2463	GR	61							0
	MSF0901	2464	GR	63							0
	MSF0901	2465	MW	67							0
	MSF0901	2466	MW	61							0
	MSF0901	2467	GR	65							0
	MSF0901	2468	LNC	47							0
	MSF0901	2469	LSU	93							0
	MSF0901	2470	LSU	95							0
	MSF0901	2471	LSU	111							0
	MSF0902	2472	NP	452							0
	MSF0902	2473	MW	252							0
	MSF0902	2474	MW	280							0
	MSF0902	2475	CSU	178							0
	MSF0902	2476	LSU	197							0
	MSF0902	2477	MW	126							0
	MSF0902	2478	LSU	133							0
	MSF0902	2479	MW	214							0
	MSF0902	2480	MW	255							0
	MSF0902	2481	MW	158							0
	MSF0902	2482	MW	123							0
	MSF0902	2483	MW	169							0
	MSF0902	2484	MW	117							0
	MSF0902	2485	MW	124							0
	MSF0902	2486	MW	122							0
	MSF0902	2487	LSU	97							0
	MSF0902	2488	MW	64							0
	MSF0902	2489	MW	70							0
	MSF0902	2490	MW	65							0
	MSF0902	2491	MW	112							0
	MSF0902	2492	LSU	195							0
	MSF0902	2493	CSU	183							0
	MSF0902	2494	LSU	185							0
	MSF0902	2495	LSU	175							0
	MSF0902	2496	MW	205							0
	MSF0902	2497	MW	129							1
	MSF0902	2498	LNC	66							0
	MSF0902	2499	LNC	56							0
	MSF0902	2500	LNC	68							0
	MSF0903	2501	NSC	462							0
	MSF0903	2502	LSU	262							0
	MSF0903	2503	LSU	241							0
	MSF0903	2504	MW	230							0
	MSF0903	2505	MW	131							0
	MSF0903	2506	MW	120							0
	MSF0903	2507	LSU	182							0
	MSF0903	2508	LSU	143							0
	MSF0903	2509	LSU	150							0
	MSF0903	2510	MW	175							0
	MSF0903	2511	MW	129							0
	MSF0903	2512	LSU	146							0
	MSF0903	2513	RSC	92							0
	MSF0903	2514	LSU	129							0
	MSF0903	2515	MW	78							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0903	2516	MW	65							0
	MSF0903	2517	RSC	66							0
	MSF0903	2518	MW	66							0
	MSF0903	2519	MW	62							0
	MSF0903	2520	LNC	66							0
	MSF0903	2521	MW	133							0
	MSF0903	2522	LSU	120							0
	MSF0903	2523	MW	131							0
	MSF0903	2524	LNC	56							0
	MSF0903	2525	CCG	80							0
	MSF0904	2526	NSC	438							0
	MSF0904	2527	CSU	364							0
	MSF0904	2528	CSU	344							0
	MSF0904	2529	CSU	362							0
	MSF0904	2530	MW	283							0
	MSF0904	2531	NSC	327							0
	MSF0904	2532	MW	182							0
	MSF0904	2533	LSU	211							0
	MSF0904	2534	MW	112							0
	MSF0904	2535	LSU	208							0
	MSF0904	2536	LSU	194							0
	MSF0904	2537	MW	117							0
	MSF0904	2538	MW	167							0
	MSF0904	2539	LSU	292							0
	MSF0904	2540	MW	227							0
	MSF0904	2541	LSU	194							0
	MSF0904	2542	LSU	216							0
	MSF0904	2543	MW	280							0
	MSF0904	2544	CSU	161							0
	MSF0904	2545	LSU	127							0
	MSF0904	2546	LNC	79							0
	MSF0904	2547	LNC	58							0
	MSF0904	2548	LNC	43							0
	MSF0904	2549	LSU	231							0
	MSF0904	2550	LSU	237							0
	MSF0904	2551	MW	212							0
	MSF0904	2552	MW	116							0
	MSF0904	2553	MW	151							0
	MSF0904	2554	LSU	144							0
	MSF0904	2555	BB	181							0
	MSF0904	2556	LSU	231							0
	MSF0904	2557	MW	257							0
	MSF0904	2558	MW	58							0
	MSF0904	2559	MW	71							0
	MSF0904	2560	RSC	67							0
	MSF0904	2561	LSU	127							0
	MSF0904	2562	LKC	98							0
	MSF0904	2563	MW	62							0
	MSF0904	2564	LNC	66							0
	MSF0904	2565	MW	127							0
	MSF0904	2566	LKC	101							0
	MSF0904	2567	MW	117							0
	MSF0904	2568	MW	64							0
	MSF0904	2569	LNC	53							0
	MSF0904	2570	LNC	48							0
	MSF0905	2571	MW	271							0
	MSF0905	2572	LSU	233							0
	MSF0905	2573	LSU	220							0
	MSF0905	2574	LSU	216							0
	MSF0905	2575	LSU	227							0
	MSF0905	2576	BB	208							0
	MSF0905	2577	LSU	206							0
	MSF0905	2578	LSU	202							0
	MSF0905	2579	LSU	194							0
	MSF0905	2580	MW	206							0
	MSF0905	2581	MW	179							0
	MSF0905	2582	MW	175							0
	MSF0905	2583	LSU	204							0
	MSF0905	2584	LSU	162							0
	MSF0905	2585	CSU	168							0
	MSF0905	2586	LSU	148							0
	MSF0905	2587	LSU	162							0
	MSF0905	2588	CSU	167							0
	MSF0905	2589	MW	151							0
	MSF0905	2590	MW	146							0
	MSF0905	2591	LSU	149							0
	MSF0905	2592	RSC	96							0
	MSF0905	2593	MW	126							0
	MSF0905	2594	LSU	116							0
	MSF0905	2595	MW	123							0
	MSF0905	2596	LSU	97							0
	MSF0905	2597	LSU	129							0
	MSF0905	2598	MW	106							0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF0905	2599	LSU	97							0
	MSF0905	2600	RSC	93							0
	MSF0905	2601	RSC	85							0
	MSF0905	2602	RSC	83							0
	MSF0905	2603	LKC	81							0
	MSF0905	2604	LSU	110							0
	MSF0905	2605	LSU	78							0
	MSF0905	2606	MW	101							0
	MSF0905	2607	LNC	47							0
	MSF0905	2608	LSU	121							0
	MSF0905	2609	LSU	116							0
	MSF0905	2610	LNC	52							0
	MSF0905	2611	LNC	36							0
10											
	HEF1001	4319	NSC	101							0
	HEF1001	4320	LNC	69							0
	HEF1001	4321	LNC	57							0
	HEF1002	4322	LKC	65							0
	HEF1002	4323	MW	67							0
	HEF1002	4324	MW	43							0
	HEF1002	4325	LSU	35							0
	HEF1002	4326	LSU	41							0
	HEF1002	4327	LSU	48							0
	HEF1002	4328	LNC	50							0
	HEF1002	4329	CSU	28							0
	HEF1002	4330	CSU	26							0
	HEF1002	4331	LSU	34							0
	HEF1002	4332	LNC	49							0
	HEF1002	4333	LNC	57							0
	HEF1002	4334	LNC	58							0
	HEF1002	4335	MW	43							0
	HEF1003	4336	CSU	34							0
	HEF1004	4337	LKC	67							0
	HEF1004	4338	LSU	38							0
	HEF1004	4339	LSU	43							0
	HEF1004	4340	NSC	73							0
	HEF1004	4341	CSU	28							0
	HEF1004	4342	CSU	32							0
	HEF1004	4343	MW	53							0
	HEF1005	4344	RSC	123							0
	HEF1005	4345	RSC	127							0
	HEF1005	4346	LKC	96							0
	HEF1005	4347	RSC	83							0
	HEF1005	4348	RSC	75							0
	HEF1005	4349	RSC	60							0
	HEF1005	4350	LNC	56							0
	HEF1005	4351	LNC	56							0
	HEF1005	4352	LNC	53							0
	HEF1005	4353	LNC	60							0
	HEF1005	4354	LNC	58							0
	HEF1006	4355	LKC	94							0
	HEF1006	4356	RSC	92							0
	HEF1006	4357	RSC	75							0
	HEF1006	4358	MW	72							0
	HEF1006	4359	LKC	93							0
	HEF1006	4360	LKC	87							0
	HEF1006	4361	LKC	84							0
	HEF1006	4362	RSC	91							0
	HEF1006	4363	LKC	93							0
	HSF1001	7365	MW	168							0
	HSF1001	7366	MW	119			SCALES	1			0
	HSF1001	7367	MW	120			SCALES				0
	HSF1001	7368	MW	127			SCALES				0
	HSF1001	7369	MW	72			SCALES				0
	HSF1001	7370	LSU	179							0
	HSF1001	7371	CSU	130							0
	HSF1001	7372	LSU	120							0
	HSF1001	7373	CSU	126							0
	HSF1001	7374	CSU	114							0
	HSF1001	7375	CSU	117							0
	HSF1001	7376	LSU	115							0
	HSF1001	7377	CSU	128							0
	HSF1001	7378	CSU	112							0
	HSF1001	7379	LSU	104							0
	HSF1001	7380	CSU	130							0
	HSF1001	7381	RSC	92							0
	HSF1001	7382	CSU	97							0
	HSF1001	7383	RSC	104							0
	HSF1001	7384	CSU	101							0
	HSF1001	7385	RSC	82							0
	HSF1001	7650	NSC	276							0
	HSF1002	7386	MW	119			SCALES	1			0
	HSF1002	7387	RB	135			SCALES	1			0

See Appendix B for definitions

Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF1002	7388	LSU	135							0
	HSF1002	7389	CSU	126							0
	HSF1002	7390	CSU	168							0
	HSF1002	7391	LSU	200							0
	HSF1002	7392	LSU	161							0
	HSF1002	7393	LSU	153							0
	HSF1002	7394	CSU	104							0
	HSF1002	7395	LSU	115							0
	HSF1002	7396	CSU	116							0
	HSF1002	7397	CSU	134							0
	HSF1002	7398	MW	141							0
	HSF1002	7399	CSU	68							0
	HSF1002	7400	CSU	70							0
	HSF1002	7401	LSU	103							0
	HSF1002	7402	RSC	123							0
	HSF1002	7403	CSU	94							0
	HSF1002	7404	RSC	89							0
	HSF1002	7405	CSU	110							0
	HSF1002	7406	CSU	85							0
	HSF1002	7407	CSU	89							0
	HSF1002	7408	CSU	101							0
	HSF1002	7409	NSC	112							0
	HSF1002	7410	CSU	126							0
	HSF1002	7411	MW	74							0
	HSF1002	7412	CSU	110							0
	HSF1002	7413	CSU	96							0
	HSF1002	7414	CSU	92							0
	HSF1002	7415	CSU	101							0
	HSF1002	7416	WSC	103							0
	HSF1002	7417	CSU	103							0
	HSF1002	7418	CSU	115							0
	HSF1002	7419	CSU	85							0
	HSF1002	7420	CSU	103							0
	HSF1002	7421	CSU	104							0
	HSF1002	7422	MW	56							0
	HSF1002	7423	RSC	73							0
	HSF1002	7424	CSU	90							0
	HSF1002	7425	MW	72							0
	HSF1002	7426	CSU	104							0
	HSF1002	7427	LKC	101							0
	HSF1002	7428	RB	101			SCALES				0
	HSF1003	7429	CSU	172							0
	HSF1003	7430	LSU	161							0
	HSF1003	7431	NSC	90							0
	HSF1003	7432	CSU	131							0
	HSF1003	7433	CSU	116							0
	HSF1003	7434	MW	145							0
	HSF1003	7435	LSU	181							0
	HSF1003	7436	CSU	118							0
	HSF1003	7437	RSC	95							0
	HSF1003	7438	RSC	130							0
	HSF1003	7439	NSC	126							0
	HSF1003	7440	LSU	138							0
	HSF1003	7441	CSU	108							0
	HSF1003	7442	CSU	103							0
	HSF1003	7443	CSU	151							0
	HSF1003	7444	CSU	118							0
	HSF1003	7445	RSC	84							0
	HSF1003	7446	CSU	126							0
	HSF1003	7447	RSC	85							0
	HSF1003	7448	CSU	80							0
	HSF1003	7449	CSU	80							0
	HSF1003	7450	RSC	65							0
	HSF1003	7451	CSU	114							0
	HSF1003	7452	CSU	124							0
	HSF1003	7453	CSU	105							0
	HSF1003	7454	CAS	84							0
	HSF1003	7455	CSU	100							0
	HSF1003	7456	RSC	84							0
	HSF1003	7457	RSC	94							0
	HSF1003	7458	CSU	128							0
	HSF1003	7459	RSC	93							0
	HSF1003	7460	RSC	60							0
	HSF1003	7461	CSU	99							0
	HSF1003	7462	CSU	95							0
	HSF1003	7463	RSC	84							0
	HSF1003	7464	RSC	81							0
	HSF1003	7465	CSU	96							0
	HSF1003	7466	RSC	75							0
	HSF1003	7467	RSC	78							0
	HSF1003	7468	CCG	64							0
	HSF1004	7493	RB	136							0
	HSF1004	7494	LSU	186							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF1004	7495	MW	210							0
	HSF1004	7496	LSU	161							0
	HSF1004	7497	MW	197							0
	HSF1004	7498	LSU	172							0
	HSF1004	7499	LSU	143							0
	HSF1004	7500	LSU	145							0
	HSF1004	7501	CSU	165							0
	HSF1004	7502	NSC	151							0
	HSF1004	7503	LSU	153							0
	HSF1004	7504	LSU	108							0
	HSF1004	7505	MW	76							0
	HSF1004	7506	RSC	88							0
	HSF1004	7507	MW	71							0
	HSF1004	7508	LSU	124							0
	HSF1004	7509	RSC	76							0
	HSF1004	7510	RSC	74							0
	HSF1004	7511	RSC	85							0
	HSF1004	7512	RSC	91							0
	HSF1004	7513	RSC	120							0
	HSF1004	7514	MW	132							0
	HSF1004	7515	RSC	84							0
	HSF1004	7516	LSU	104							0
	HSF1004	7517	MW	68							0
	HSF1004	7518	RSC	90							0
	HSF1004	7519	CSU	111							0
	HSF1004	7520	RSC	81							0
	HSF1004	7521	RSC	99							0
	HSF1004	7522	RSC	85							0
	HSF1004	7523	LSU	114							0
	HSF1004	7524	NSC	100							0
	HSF1004	7525	CSU	100							0
	HSF1004	7526	RSC	91							0
	HSF1004	7527	MW	71							0
	HSF1004	7528	RSC	92							0
	HSF1004	7529	RSC	71							0
	HSF1004	7530	CSU	90							0
	HSF1004	7531	CSU	104							0
	HSF1004	7532	CSU	92							0
	HSF1004	7533	RSC	83							0
	HSF1004	7534	RSC	86							0
	HSF1004	7535	RSC	81							0
	HSF1004	7536	CSU	80							0
	HSF1004	7537	RSC	69							0
	HSF1004	7538	MW	58							1
	HSF1004	7539	RSC	82							0
	HSF1004	7540	RSC	119							0
	HSF1004	7541	RSC	118							0
	HSF1004	7542	LSU	144							0
	HSF1004	7543	LSU	165							0
	HSF1004	7544	MW	139							0
	HSF1004	7545	RSC	97							0
	HSF1004	7546	CSU	103							0
	HSF1004	7547	MW	68							0
	HSF1004	7548	RSC	89							0
	HSF1004	7549	CSU	86							0
	HSF1004	7550	CSU	84							0
	HSF1004	7551	RSC	119							0
	HSF1004	7552	CSU	125							0
	HSF1004	7553	RSC	85							0
	HSF1004	7554	CSU	114							0
	HSF1004	7555	MW	124							0
	HSF1004	7556	CSU	92							0
	HSF1004	7557	MW	70							0
	HSF1004	7558	RSC	81							0
	HSF1004	7559	MW	72							0
	HSF1004	7560	RSC	76							0
	HSF1004	7561	CSU	76							0
	HSF1004	7562	RSC	79							0
	HSF1004	7563	RSC	86							0
	HSF1005	7469	RB	110							0
	HSF1005	7470	CSU	168							0
	HSF1005	7471	MW	168							0
	HSF1005	7472	CSU	146							0
	HSF1005	7473	MW	145							0
	HSF1005	7474	LSU	192							0
	HSF1005	7475	LSU	186							0
	HSF1005	7476	MW	144							0
	HSF1005	7477	MW	134							0
	HSF1005	7478	CSU	160							0
	HSF1005	7479	LSU	114							0
	HSF1005	7480	LSU	159							0
	HSF1005	7481	LSU	153							0
	HSF1005	7482	LSU	114							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	HSF1005	7483	RSC	96							0
	HSF1005	7484	LSU	124							0
	HSF1005	7485	CSU	146							0
	HSF1005	7486	LSU	110							0
	HSF1005	7487	MW	69							0
	HSF1005	7488	RSC	74							0
	HSF1005	7489	WSC	86							0
	HSF1005	7490	CSU	85							0
	HSF1005	7491	LKC	74							0
	HSF1005	7492	RSC	91							0
	HSF1006	7569	BB	497							0
	HSF1006	7570	CCG	125							0
	HSF1006	7571	MW	127			SCALES	1			0
	HSF1006	7572	LSU	203							0
	HSF1006	7573	MW	139			SCALES	1			0
	HSF1006	7574	MW	168			SCALES				0
	HSF1006	7575	MW	116			SCALES				0
	HSF1006	7576	LSU	178							0
	HSF1006	7577	LSU	151							0
	HSF1006	7578	LSU	142							0
	HSF1006	7579	LSU	152							0
	HSF1006	7580	LSU	147							0
	HSF1006	7581	CSU	123							0
	HSF1006	7582	LSU	120							0
	HSF1006	7583	CSU	93							0
	HSF1006	7584	LSU	108							0
	HSF1006	7585	LNC	80							0
	HSF1006	7586	CSU	83							0
	HSF1006	7587	CSU	96							0
	HSF1006	7588	RSC	80							0
	HSF1006	7589	RSC	102							0
	HSF1006	7590	RSC	81							0
	HSF1006	7591	RSC	83							0
	HSF1006	7592	CSU	87							0
	HSF1006	7593	RSC	78							0
	HSF1006	7594	RSC	74							0
	HSF1006	7595	MW	67			SCALES				0
	HSF1006	7596	NSC	172							0
	HSF1006	7597	LSU	159							0
	HSF1006	7598	LSU	131							0
	HSF1006	7599	LSU	132							0
	HSF1006	7600	NSC	104							0
	HSF1006	7601	CSU	111							0
	HSF1006	7602	LSU	133							0
	HSF1006	7603	CSU	98							0
	HSF1006	7604	LSU	108							0
	HSF1006	7605	CSU	98							0
	HSF1006	7606	LSU	111							0
	HSF1006	7607	CSU	90							0
	HSF1006	7608	CSU	92							0
	HSF1006	7609	CSU	98							0
	HSF1006	7610	CSU	101							0
	HSF1006	7611	RSC	72							0
	HSF1006	7612	RSC	89							0
	HSF1006	7613	RSC	94							0
	HSF1006	7614	RSC	85							0
	HSF1006	7615	RSC	93							0
	HSF1006	7616	RSC	82							0
	HSF1006	7617	CSU	95							0
	HSF1006	7618	LSU	117							0
	HSF1006	7619	CSU	132							0
	HSF1006	7620	CSU	107							0
	HSF1006	7621	NSC	106							0
	HSF1006	7622	LNC	64							0
	HSF1006	7623	LNC	57							0
	MEF1001	3043	CSU	141							0
	MEF1001	3044	LSU	144							0
	MEF1001	3045	LKC	127							0
	MEF1001	3046	NSC	103							0
	MEF1001	3047	RSC	82							0
	MEF1001	3048	CCG	29							0
	MEF1001	3049	YSU	30							0
	MEF1002	3050	CSU	145							0
	MEF1002	3051	CSU	182							0
	MEF1002	3052	CSU	163							0
	MEF1002	3053	NSC	142							0
	MEF1002	3054	RSC	107							0
	MEF1002	3055	NSC	52							0
	MEF1002	3056	CSU	110							0
	MEF1002	3057	NSC	47							0
	MEF1002	3058	YSU	33							0
	MEF1002	3059	CCG	27							0
	MEF1002	3060	BB	68							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MEF1003	3024	CSU	158							0
	MEF1003	3025	LSU	118							0
	MEF1003	3026	CCG	73							0
	MEF1003	3027	GR	63							0
	MEF1005	3028	CSU	100							0
	MEF1005	3029	GR	56							0
	MEF1005	3030	GR	52							0
	MEF1005	3031	MW	50							0
	MEF1005	3032	BB	70							0
	MEF1005	3033	MW	51							0
	MEF1005	3034	GR	51							0
	MEF1005	3035	GR	62							0
	MEF1005	3036	GR	58							0
	MEF1005	3037	MW	53							0
	MEF1005	3038	GR	53							0
	MEF1005	3039	MW	54							0
	MEF1005	3040	MW	65							0
	MEF1005	3041	BB	55							0
	MEF1005	3042	BB	57							0
	MSF1001	2737	NSC	371							0
	MSF1001	2738	MW	274							0
	MSF1001	2739	LSU	172							0
	MSF1001	2740	LSU	196							0
	MSF1001	2741	MW	250							0
	MSF1001	2742	MW	179							0
	MSF1001	2743	BB	201							0
	MSF1001	2744	MW	124							0
	MSF1001	2745	MW	119							0
	MSF1001	2746	NSC	142							0
	MSF1001	2747	RSC	85							0
	MSF1001	2748	RSC	111							0
	MSF1002	2749	NSC	142							0
	MSF1002	2750	LSU	161							0
	MSF1002	2751	CSU	323							0
	MSF1002	2752	NSC	249							0
	MSF1002	2753	CSU	167							0
	MSF1002	2754	CSU	228							0
	MSF1002	2755	RSC	76							0
	MSF1002	2756	MW	123							0
	MSF1002	2757	LNC	54							0
	MSF1002	2758	MW	66							0
	MSF1002	2759	MW	119							0
	MSF1002	2760	LSU	147							0
	MSF1002	2761	MW	158							0
	MSF1002	2762	LNC	64							0
	MSF1003	2763	LSU	295							0
	MSF1003	2764	CSU	209							0
	MSF1003	2765	LSU	239							0
	MSF1003	2766	LSU	296							0
	MSF1003	2767	NSC	194							0
	MSF1003	2768	MW	181							0
	MSF1003	2769	CSU	133							0
	MSF1003	2770	CSU	113							0
	MSF1003	2771	CSU	130							0
	MSF1003	2772	MW	126							0
	MSF1003	2773	MW	135							0
	MSF1003	2774	MW	107							0
	MSF1003	2775	RSC	80							0
	MSF1003	2776	RSC	95							0
	MSF1003	2777	MW	59							0
	MSF1003	2778	MW	56							0
	MSF1003	2779	MW	117							0
	MSF1003	2780	LSU	132							0
	MSF1003	2781	MW	121							0
	MSF1003	2782	NSC	111							0
	MSF1003	2783	LNC	54							0
	MSF1004	2612	LSU	249							0
	MSF1004	2613	CSU	338							0
	MSF1004	2614	CSU	338							0
	MSF1004	2615	CSU	314							0
	MSF1004	2616	MW	165							0
	MSF1004	2617	MW	118							0
	MSF1004	2618	MW	137							0
	MSF1004	2619	MW	160							0
	MSF1004	2620	MW	123							0
	MSF1004	2621	RSC	93							0
	MSF1004	2622	MW	108							0
	MSF1004	2623	LSU	123							0
	MSF1004	2624	CSU	148							0
	MSF1004	2625	CSU	138							0
	MSF1004	2626	LSU	89							0
	MSF1004	2627	LSU	179							0
	MSF1004	2628	MW	127							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF1004	2629	CSU	148							0
	MSF1004	2630	NSC	108							0
	MSF1004	2631	LNC	47							0
	MSF1004	2632	LSU	141							0
	MSF1004	2633	LSU	167							0
	MSF1004	2634	MW	114							0
	MSF1004	2635	MW	118							0
	MSF1004	2636	MW	202							0
	MSF1004	2637	CCG	62							0
	MSF1004	2638	LSU	128							0
	MSF1004	2639	LSU	87							0
	MSF1004	2640	MW	127							0
	MSF1004	2641	LNC	51							0
	MSF1004	2642	LNC	54							0
	MSF1004	2643	LNC	53							0
	MSF1004	2644	LNC	49							0
	MSF1005	2645	NSC	481							0
	MSF1005	2646	LSU	196							0
	MSF1005	2647	GR	145							0
	MSF1005	2648	LSU	235							0
	MSF1005	2649	LSU	182							0
	MSF1005	2650	RSC	90							0
	MSF1005	2651	LSU	128							0
	MSF1005	2652	LSU	108							0
	MSF1005	2653	RSC	87							0
	MSF1005	2654	RSC	83							0
	MSF1005	2655	RSC	74							0
	MSF1005	2656	LSU	90							0
	MSF1005	2657	LNC	64							0
	MSF1005	2658	CSU	147							0
	MSF1005	2659	LSU	130							0
	MSF1005	2660	LSU	106							0
	MSF1005	2661	LSU	121							0
	MSF1005	2662	RSC	96							0
	MSF1005	2663	MW	119							0
	MSF1005	2664	RSC	94							0
	MSF1005	2665	RSC	71							0
	MSF1005	2666	LNC	56							0
	MSF1005	2667	RSC	109							0
	MSF1005	2668	LNC	54							0
	MSF1006	2669	CSU	289							0
	MSF1006	2670	LSU	157							0
	MSF1006	2671	LSU	150							0
	MSF1006	2672	LSU	195							0
	MSF1006	2673	CSU	137							0
	MSF1006	2674	LSU	113							0
	MSF1006	2675	MW	77							0
	MSF1006	2676	LSU	184							0
	MSF1006	2677	LSU	198							0
	MSF1006	2678	LSU	249							0
	MSF1006	2679	NSC	154							0
	MSF1006	2680	LSU	197							0
	MSF1006	2681	LSU	152							0
	MSF1006	2682	MW	191							0
	MSF1006	2683	LSU	153							0
	MSF1006	2684	LSU	168							0
	MSF1006	2685	LSU	164							0
	MSF1006	2686	RSC	79							0
	MSF1006	2687	MW	171							0
	MSF1006	2688	CSU	148							0
	MSF1006	2689	RSC	90							0
	MSF1006	2690	MW	113							0
	MSF1006	2691	LSU	92							0
	MSF1006	2692	LSU	137							0
	MSF1006	2693	LSU	128							0
	MSF1006	2694	LSU	118							0
	MSF1006	2695	LNC	53							0
	MSF1007	2696	CSU	369							0
	MSF1007	2697	CSU	345							0
	MSF1007	2698	BT	373							0
	MSF1007	2699	LSU	220							0
	MSF1007	2700	LSU	166							0
	MSF1007	2701	LSU	148							0
	MSF1007	2702	NSC	190							0
	MSF1007	2703	MW	113							0
	MSF1007	2704	LSU	118							0
	MSF1007	2705	MW	121							0
	MSF1007	2706	MW	96							0
	MSF1007	2707	MW	119							0
	MSF1007	2708	RSC	76							0
	MSF1007	2709	MW	110							0
	MSF1007	2710	RSC	71							0
	MSF1007	2711	LKC	88							0

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Appendix F Table F1. Biological characteristics data for sampled fish, Halfway River and Moberly River summer fish survey 2009.

Section	Site	FishID	Species	Fork Len (mm)	Wt. (g)	Sexual Mat.	Age Struct.	Age	Tag Type	Tag No.	Capt. Code
	MSF1007	2712	MW	57							0
	MSF1007	2713	RSC	86							0
	MSF1007	2714	RSC	84							0
	MSF1007	2715	RSC	56							0
	MSF1007	2716	RSC	83							0
	MSF1007	2717	RSC	84							0
	MSF1007	2718	LKC	91							0
	MSF1007	2719	RSC	65							0
	MSF1007	2720	LSU	114							0
	MSF1007	2721	LSU	120							0
	MSF1007	2722	MW	104							0
	MSF1007	2723	RSC	96							0
	MSF1007	2724	LKC	100							0
	MSF1007	2725	RSC	85							0
	MSF1007	2726	LKC	83							0
	MSF1007	2727	LSU	150							0
	MSF1007	2728	NSC	101							0
	MSF1007	2729	MW	56							0
	MSF1007	2730	LSU	121							0
	MSF1007	2731	NSC	196							0
	MSF1007	2732	LSU	134							0
	MSF1007	2733	LSU	127							0
	MSF1007	2734	LKC	90							0
	MSF1007	2735	LSU	112							0
	MSF1007	2736	LNC	61							0