

Cottonwood Creek Fall Chinook Salmon Carcass Survey

2011-2013 Summary Report

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TABLE OF CONTENTS

List of Figures	iii
List of Tables	iv
Abstract	1
Introduction	1
Methods	4
<i>Survey Area</i>	4
<i>Sampling Protocol</i>	5
<i>Redd Sampling</i>	6
<i>Data Analysis</i>	7
Results	7
<i>Carcass Recoveries</i>	7
<i>Coded-wire Tag Recoveries</i>	8
<i>Hatchery-origin Returns</i>	8
<i>Age Composition and Length-at-Age</i>	15
<i>Sex Ratio</i>	17
<i>Redds</i>	17
<i>Creek Conditions</i>	19
Discussion	20
Acknowledgements	23
Literature Cited	24
Appendix I	26

LIST OF FIGURES

Figure 1.	Map of the Cottonwood Creek watershed.	3
Figure 2.	Fall Chinook salmon carcass survey area on Cottonwood Creek during fall 2011-2013.	5
Figure 3.	Hatchery contributions to fall Chinook salmon carcass recoveries based on CWT expansions in Cottonwood Creek in (A) 2011, (B) 2012 and (C) 2013.	10
Figure 4.	Weekly numbers of male and female fresh fall Chinook salmon carcass recovered in Cottonwood Creek in (A) 2011, (B) 2012 and (C) 2013.	11
Figure 5.	Fall Chinook salmon carcass distribution by stream mile in recovered in Cottonwood Creek in (A) 2011, (B) 2012 and (C) 2013.	12
Figure 6.	Map of fall Chinook salmon carcass distribution on Cottonwood Creek during fall 2011-2013.	13
Figure 7.	Proportion of total carcass recoveries by sex for males and females in (A) 2011, (B) 2012 and (C) 2013 based on recovery location of fall Chinook salmon carcasses in Cottonwood Creek.	14
Figure 8.	Length frequency distributions of fall Chinook salmon carcasses recovered on Cottonwood Creek during (A) 2011 ($N = 398$), (B) 2012 ($N = 986$) and (C) 2013 ($N = 1148$).	16
Figure 9.	Age composition by sex of hatchery-origin fall Chinook salmon carcasses recovered in Cottonwood Creek during fall 2011- 2013 by year.	17
Figure 10.	Redd distribution by stream mile in Cottonwood Creek during fall 2011-2013 by year.	18
Figure 11.	Map of redd distribution and abundance in Cottonwood Creek during surveys in fall 2011- 2013.	18
Figure 12.	Flows in Cottonwood Creek during survey periods in 2011- 2013 at the Cottonwood Creek near Cottonwood, CA gage (USGS 11376000) located downstream of the I-5 bridge (SM 2).	19
Figure 13.	Average daily water temperature at the CDFW Cottonwood Creek video weir site during survey periods in 2011-2013.	20

LIST OF TABLES

Table 1.	Numbers of fall Chinook salmon observed during video monitoring in Cottonwood Creek from 2007 through 2013.....	4
Table 2.	Percent of hatchery-origin carcasses recovered in each survey reach for males and females for fall Chinook salmon in Cottonwood Creek during fall 2011-2013.	15
Table A.1.	Release information associated with coded wire tags recovered from Chinook salmon carcasses in Cottonwood Creek during fall 2011-2013..	26
Table A. 2.	Biological data from Chinook salmon carcasses with a coded wire tag in Cottonwood Creek during fall 2011 - 2013.....	29

Abstract

Central Valley fall Chinook salmon *Oncorhynchus tshawytscha* are an important species for commercial and recreational fishing and fulfill important ecological roles within the freshwater and marine ecosystems. To mitigate for water development projects and subsequent habitat loss, more than 32 million fall Chinook salmon are produced annually in California's Central Valley hatcheries. A large percentage of hatchery produced fall Chinook salmon juveniles are transported to San Pablo Bay for release, which increases their survival and availability for harvest. Transporting juvenile salmon, however, disrupts their natural outmigration process, which can lead to reduced imprinting on their natal water source. Adult salmon that stray into non-natal spawning areas can negatively impact wild populations. To evaluate straying of hatchery-origin fall Chinook salmon into Cottonwood Creek, a tributary of the upper Sacramento River, we performed annual carcass surveys of fall Chinook salmon in Cottonwood Creek from 2011-2013. Coded-wire tags, biological and genetic samples and associated information were collected from recovered carcasses to characterize and compare attributes of hatchery- and natural-origin salmon. We observed 435 carcasses (55% hatchery-origin) in 2011, 1,080 carcasses (28% hatchery-origin) in 2012 and 1,408 carcasses (33% hatchery-origin) in 2013. The percentage of carcasses observed on the survey, compared to the number estimated at the video weir, increased greatly from 20% in 2011 to 42% in 2012 and 51% in 2013, likely due to lower flows and beaver dams which hindered or completely blocked the upstream passage of salmon in 2012 and 2013. In each year the proportion of natural-origin salmon recovered increased positively with increasing distance from the confluence with the Sacramento River. In all three years, a majority of the recovered hatchery-origin carcasses were fall Chinook salmon from Coleman National Fish Hatchery, followed by fall Chinook salmon from Feather River Fish Hatchery. Information from this survey adds to monitoring efforts of salmonid populations across the Central Valley and helps to inform resource managers of the interactions of hatchery- and natural-origin salmon in natural spawning areas.

Introduction

Annually, more than 32 million fall Chinook salmon (FCS) are produced at five fish hatcheries in the Central Valley of California, including Coleman National Fish Hatchery (NFH), Feather River Fish Hatchery and the Feather River Hatchery Annex, Nimbus Fish Hatchery, Mokelumne River Fish Hatchery and Merced River Fish Hatchery (Kormos et al. 2012). Hatchery production of Central Valley FCS contributes substantially to recreational and commercial fisheries in ocean and inland areas. Releasing large numbers of hatchery propagated salmonids, however, can result in negative effects to naturally-produced salmonids. For example, artificial propagation can pose genetic risks to natural-origin salmonid populations which can affect locally adapted gene complexes and have deleterious effects on fitness or survivorship (Hard et al. 1992; Cuenco et al. 1993; Waples et al. 2007).

The potential for hatchery-origin salmon to negatively affect natural-origin salmonids is reduced when hatchery-origin salmon return, as adults, to their hatchery of origin, or "home" and is greater when hatchery-origin salmon spawn in non-natal streams, or "stray" (Quinn et al. 1991; Williamson and May 2005). Natural-origin salmon typically show a high level of fidelity to their

natal spawning areas which results from imprinting on environmental cues during juvenile rearing and emigration (Dittman and Quinn 1996).

Imprinting is disrupted and straying is increased for hatchery-origin salmon that are released at locations distant from the hatchery (Quinn 1993; Dittman and Quinn 1996). In recent years, many of the FCS produced at Central Valley hatcheries have been transported by truck to the downstream limit of the watersheds, where they are typically acclimated to estuarine water conditions for several hours in net pens and released into San Pablo Bay. This practice has been shown to increase survival of juveniles by bypassing mortality that would otherwise occur during emigration, resulting in an increased abundance of salmon available for harvest (Kormos et al. 2012). At the same time, the practice of transporting juvenile salmon has also raised concerns about negative effects to naturally spawning salmon populations that may result from straying of adult hatchery-origin FCS (Williamson and May 2005).

Assessments of straying of adult hatchery-origin FCS in the Central Valley have been limited by low and inconsistent rates of marking or tagging of hatchery-origin salmon. Inadequate marking and tagging programs result in the inability to distinguish hatchery- and natural-origin FCS when they return to hatcheries and in natural spawning areas. Beginning in 2007, however, a representative portion of all hatchery production of FCS in the Central Valley has been marked with an adipose fin-clip and a coded-wire tag (CWT) has been inserted in the nasal cartilage. This program, called the Constant Fractional Marking (CFM) Program, targets 25% of FCS production releases to be marked and tagged on an annual basis (Buttars 2012). The overall objectives of the CFM program are:

1. “To evaluate the contribution rates of hatchery fish to Central Valley Chinook salmon populations;
2. To evaluate the Central Valley propagation program’s genetic and ecological effects on natural Chinook salmon populations;
3. To estimate exploitation rates of hatchery and natural Central Valley Chinook salmon in ocean and inland fisheries;
4. To evaluate the success of restoration actions designed to increase natural production of Central Valley Chinook salmon;
5. To evaluate the relative impacts of water project operations on hatchery and naturally-produced Chinook salmon; and,
6. To evaluate the recovery of listed stocks of Chinook salmon” (Buttars 2012).

To meet the objectives of the CFM program, rigorous field sampling programs are necessary to survey natural spawning areas. In 2011, the California’s Central Valley Salmonid Escapement Project Work Team distributed a plan to provide a framework for long-term monitoring programs to estimate, in a statistically valid manner, the abundance and trends in escapement of adult Central Valley Chinook salmon at the watershed level (Bergman et al. 2012). The main objective of this Central Valley In-river Chinook Salmon Escapement Monitoring Plan is to improve estimates of the total number of Chinook salmon that “escape” fisheries and return to natural spawning areas (i.e., “escapement”) and estimate the percent of escapement that are of hatchery origin. Biological data (e.g., sex ratios, age and length distributions) and data collected during surveys of natural spawning areas are also used to enhance understanding of the life

history, status and health of each stock and to improve the management of the salmon stocks. This monitoring plan calls for systematic surveys of important spawning areas of the Central Valley to collect biological data and recover CWTs (Bergman et al. 2012).

Cottonwood Creek is a tributary on the west side of the upper Sacramento River (confluence river mile [RM] 273). The Cottonwood Creek watershed, with its headwaters originating in the North Coast Mountain Range and Klamath Mountains, encompasses 929 square miles and has three main tributaries: the South Fork, the North Fork and the Middle Fork (Figure 1). Cottonwood Creek has steep, narrow canyons starting from the headwaters and transitioning to wide, braided alluvial streams in the valley reach (CH2M Hill 2002). The watershed provides approximately 130 miles of potential spawning habitat for fall, late-fall and spring Chinook salmon and steelhead trout (CH2M Hill 2002). Surveys to estimate the abundance of salmon in Cottonwood Creek have been infrequent and have varied in location, method and methodology, producing sporadic and highly variable estimates of population size (CH2M Hill 2002, CalFish.org).

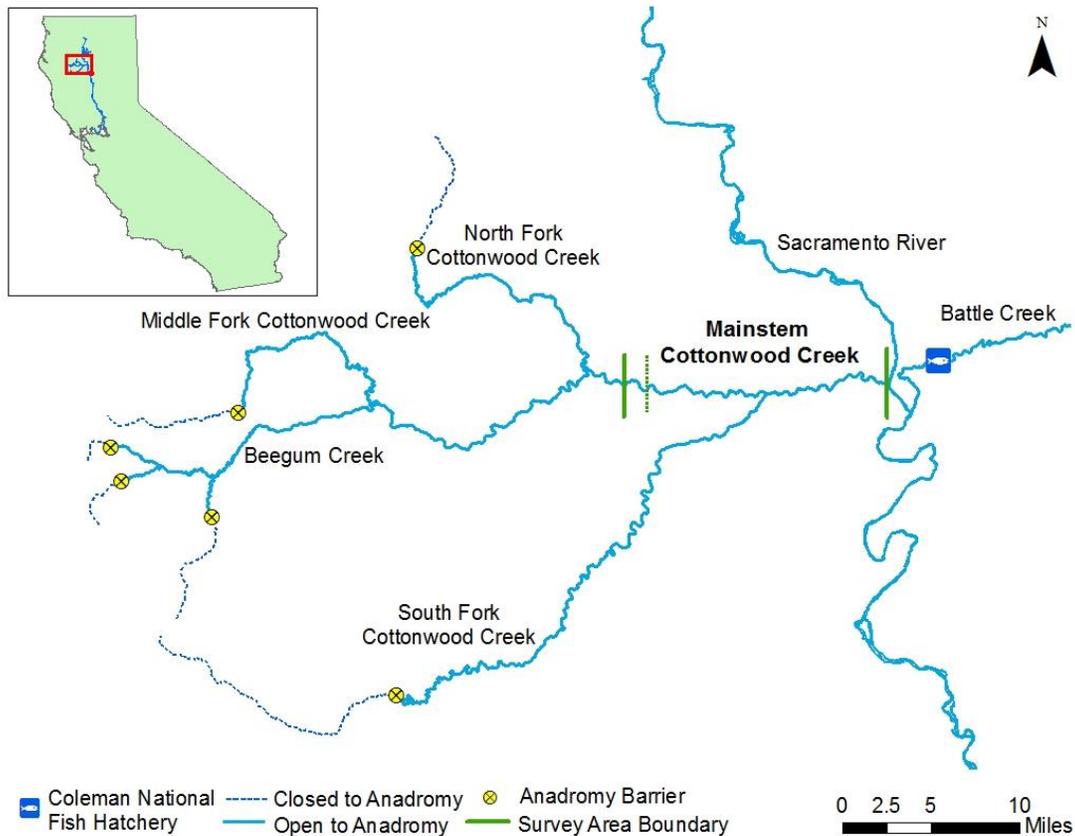


Figure 1. Map of the Cottonwood Creek watershed. The expanded area is indicated in red on the California state map. The upstream survey boundary was changed for the 2013 survey and is indicated by a dashed line on the map. (Adapted from CH2M Hill 2002).

Since 2007, California Department of Fish and Wildlife (CDFW) staff have seasonally installed a partial weir and video monitoring equipment near the mouth of Cottonwood Creek to monitor

salmon escapement into the creek (Grifantini et al. 2011, Killam and Merrick 2012). In 2010, an additional underwater camera was installed to determine if returning salmon had an adipose fin (Table 1). Full details of the design, function and results of FCS video monitoring in Cottonwood Creek can be found in Killam and Merrick (2012). Counts at the video weir are used to estimate total escapement of adult salmon in Cottonwood Creek, including spring Chinook salmon (SCS) and FCS, and the data referenced in this report are a subset of the salmon that have been identified as FCS. Spawning area carcass surveys provide additional data that complement monitoring at the video weir including spawning locations, sex composition, fork length and information resulting from CWT recoveries which provide hatchery of origin and age structure and afford the ability to expand CWT data to account for unmarked hatchery-origin salmon.

Table 1. Numbers of fall Chinook salmon observed during video monitoring in Cottonwood Creek from 2007 through 2013. Assessment of adipose fin-clip status of fall Chinook salmon began in 2010 and the percentage of adipose fin-clipped salmon within the estimated population is provided in parentheses for that year (Source: Killam and Merrick 2012, D. Killam, California Department of Fish and Wildlife, personal communication).

Year	# of fall Chinook observed
2007	1,250
2008	510
2009	1,065
2010	1,139 (8.1 %)
2011	2,144 (10.9 %)
2012	2,556 (5.6 %)
2013	2,774 (5.9 %)

The goal of this monitoring project is to collect CWTs, biological and genetic samples and associated information from FCS in Cottonwood Creek, as recommended in the Central Valley In-river Chinook Salmon Escapement Monitoring Plan (Bergman et al. 2012). This information will be used to estimate the proportion of hatchery- and natural-origin FCS within the survey area, determine the hatchery of origin for hatchery produced salmon straying into Cottonwood Creek, estimate the sex ratio of FCS within the survey area and determine the age class structure of hatchery-origin FCS. Additionally, the study was designed to provide information on the spatial distributions of salmon carcasses and redds.

Methods

Survey Area

We surveyed lower elevation areas of Cottonwood Creek, where FCS typically spawn, from the confluence with Sacramento River upstream, with the upstream boundary determined by landowner access permission. In 2011 and 2012, we surveyed 19.1 miles, split into 3 reaches ranging in length from 5.1 - 7.4 miles. During peak of carcasses recoveries, the section with the most carcasses (i.e. Reach 2) was split into sub-reaches. In 2013, the survey was 17.6 miles split into 3 reaches ranging in length from 3.4 - 7.5 miles (Figure 2).

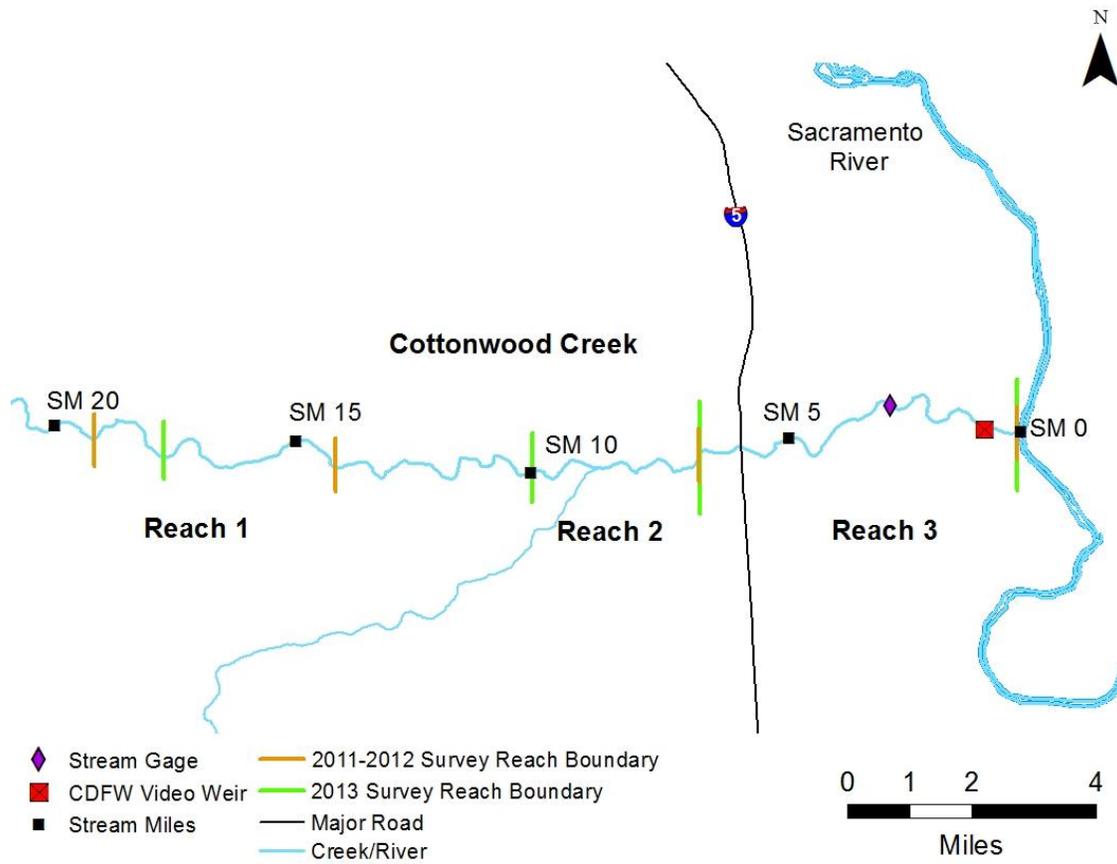


Figure 2. Fall Chinook salmon carcass survey area on Cottonwood Creek during fall 2011-2013.

Sampling Protocol

The survey periods varied each year, but were designed to begin prior to the onset of most FCS spawning in Cottonwood Creek and were terminated when FCS spawning activity was nearly complete. The completion of spawning was indicated when the number of carcasses recovered was near zero and most carcasses recovered were in an advanced state of decay. Each reach was surveyed once per week during the survey period. Survey dates in 2011 were October 13, 2011 through December 16, 2011. In 2012, surveys began October 9, but terminated earlier than anticipated on November 27, 2012, because high flows from a storm event prevented crews from safely surveying the creek. Additionally, multiple beaver dams on Reach 2 acted as intermittent barriers to FCS passage. No salmon were observed above these beaver dams on surveys conducted on October 10, 2012 and live salmon were observed congregating below the beaver dams. Therefore, Reach 1 was not surveyed during the weeks of October 14 and October 28, 2012. Additionally, Reach 1 was not surveyed on November 18 and November 25 because we were unable to access the creek through private property. The 2013 survey began later than in previous years because of the Federal government shutdown in October 2013. Surveys were conducted October 22- December 17, 2013. Although beaver dams also limited upstream migration in 2013, weekly surveys were conducted on all reaches during the survey period.

To survey a reach of the creek, two observers kayaked downstream, with each observer focusing attention from the center of the creek to opposite banks. Sampling gear included a data sheet, global positioning system (GPS) device, specimen vials, specimen knives, gaff hook and a machete. Sit-on-top kayaks were used with kayakers in an upright kneeling position to allow greater visibility of the creek while paddling. The depth of the creek was variable and at times it became so shallow that it was necessary to walk portions of the creek.

Carcasses were recovered using a 1.5 meter gaff hook as well as hand-picking from the shoreline or in shallow waters. The physical condition of each carcass was estimated as “fresh”, “non-fresh”, or “very non-fresh”. A carcass was considered “fresh” if it had at least one clear eye, relatively firm body texture, or pink gills; “non-fresh” if the eyes were cloudy, the gills were no longer pink or the body texture had softened slightly; and “very non-fresh” if it was in a decomposed state and the body was very soft and flaccid. Data collected from carcasses included: date, location (survey reach, GPS waypoint), sex, spawn status (spawned, un-spawned and unknown), fork length and adipose fin status (absent, present and unknown). Spawn status for females was defined as spawned (abdomen extremely flaccid and very few eggs remaining), un-spawned (abdomen firm and swollen or many eggs remaining), or unknown (indeterminable spawn status, usually due to predation on the carcass). The spawn status for males was always categorized as unknown. Adipose fin status was categorized as either “absent”, indicating the adipose fin was missing from the salmon due to removal prior to being released from a hatchery, “present”, indicating the adipose fin was intact on the carcass, or “unknown”, which typically resulted when a carcass was either very deteriorated or had been subject to predation. The head and a tissue sample were collected from salmon with an adipose fin status of absent or unknown. Collected heads were transported to the Red Bluff Fish and Wildlife Office (RBFWO) and subsequently processed for CWT recovery. Carcasses of unknown fin status were reclassified as “absent” if a CWT was recovered from the head or “present” if no CWT was recovered. From each fresh carcass we collected a small piece of fin tissue for genetic run determination and a patch of scales for determining age-class. Fin tissues were preserved in 100% ethanol and archived in the USFWS salmonid tissue archive at RBFWO for future studies. Scale patches were air dried prior to transferring to the CDFW Central Valley scale ageing project. After data were recorded and samples collected from individual salmon, the carcass was cut in half with a machete to prevent resampling and returned to the creek.

Stream discharges from the Cottonwood Creek stream gaging station near Cottonwood, CA (USGS 11376000) were obtained from the U.S. Geological Survey (USGS) Water Data for the Nation website (<http://nwis.waterdata.usgs.gov/nwis>). Data from the gage were used during the survey season to assist in assessing creek conditions and determine the ability of observers to safely conduct surveys.

Redd Sampling

Supplemental surveys were conducted to estimate the number and distribution of redds in Cottonwood Creek. Redd surveys were conducted November 30 - December 1, 2011, November 6 - 8, 2012 and November 14 - 15, 2013. These sampling dates were selected to maximize the number of redds encountered because they occurred after the peak of spawning, but prior to accretion of sediment and periphyton, which makes redd identification difficult. Locations of

individual redds were marked with a GPS waypoint. When several redds were located in close proximity, they were marked with a single GPS waypoint and the number of redds was noted.

Data Analysis

The process for removing and decoding CWTs is described in U.S. Fish and Wildlife Service (2005). Age, hatchery of origin, release group size and release location were determined by querying the tag codes in the Regional Mark Information System (RMIS; www.rmipc.org). The age of CWT salmon was determined by identifying brood year relative to return year. Spatial distribution and sex composition were compared between natural-origin and hatchery-origin carcasses.

An expansion factor was calculated for each CWT group, using the equation shown below. The expanded number (i.e., total number of salmon represented by that CWT code) was estimated by dividing the number of salmon recovered with that CWT code by the expansion factor.

$$\text{Expansion Factor} = \frac{\text{number of marked and tagged juvenile fish in a CWT group}}{\text{total marked and unmarked juvenile fish represented by the CWT group}}$$

For example, if a CWT is recovered from a group of salmon that had a 25% mark rate, then the expansion factor for this particular CWT would be 0.25 and the expanded number for each salmon recovered would be 4. In this case, each CWT recovery represents four hatchery-origin salmon, including one marked salmon and three unmarked salmon. Based on these expanded numbers, the proportion of hatchery-origin salmon in Cottonwood Creek was estimated for each year of the survey. We assumed that the biological characteristics (e.g. age, sex, hatchery of origin) and distribution (e.g., survey reach) of non-fin-clipped salmon (i.e., without a CWT) that were expanded for in these CWT expansion estimates were similar to those of salmon with CWTs that were observed on the surveys. These assumptions were not applied to recovery date, fork length, or distribution based on stream mile due to a small sample sizes for each of these metrics.

Results

Carcass Recoveries

In 2011, we observed 435 carcasses, representing 20% of the total FCS escapement estimated at the CDFW video weir ($N = 2,144$) in Cottonwood Creek. In 2012, we observed 1,080 carcasses, representing 42% of the total FCS escapement ($N = 2,556$). In 2013, we observed 1,408 carcasses, representing 51% of the total FCS escapement ($N = 2,774$). Biological data such as fork length, sex and spawn condition was recorded for 401 carcasses in 2011, 987 carcasses in 2012 and 1,148 carcasses in 2013. A sample of fin tissue was collected from 360 carcasses in 2011, 284 carcasses in 2012 and 342 carcasses in 2013. A scale patch was collected from 282 carcasses in 2011, 242 carcasses in 2012 and 294 carcasses in 2013. In 2011, 127 fresh and 274 non-fresh carcasses and 34 intact skeletons were recovered. In 2012, 225 fresh, 633 non-fresh and 128 very non-fresh carcasses and 93 intact skeletons were recovered; carcass condition was not recorded for one carcass. In 2013, 261 fresh, 845 non-fresh and 40 very non-fresh carcasses and 260 intact skeletons were recovered; carcass condition was not recorded for two carcasses.

Coded-wire Tag Recoveries

In 2011, the heads were collected from 61 salmon carcasses, including 53 from salmon with an absent adipose fin and 8 from salmon with an unknown adipose fin status. A CWT was recovered from 54 of the heads collected. One CWT from a carcass with an adipose fin status recorded as absent was lost prior to being read. A CWT was not detected in 6 heads (1 absent adipose fin and 5 unknown adipose fin status). Three of the 8 heads collected from carcasses with unknown adipose fin status contained a CWT. An additional fresh absent adipose fin fish was found without a head, most likely due to depredation (otters or scavengers) and was categorized as “No CWT”.

In 2012, the heads were collected from 81 salmon carcasses, including 68 from salmon with an absent adipose fin and 13 from salmon with an unknown adipose fin status. A CWT was recovered from 67 of the heads collected. Two CWTs from carcasses with an adipose fin status recorded as absent were lost prior to being read. A CWT was not detected in 12 heads (3 absent adipose fin and 9 unknown adipose fin status). Four of the 13 heads collected from carcasses with unknown adipose fin status contained a CWT.

In 2013, the heads were collected from 105 salmon carcasses, including 92 from salmon with an absent adipose fin and 13 from salmon with an unknown adipose fin status. A CWT was recovered from 88 of the heads collected. One CWT from a carcass with an adipose fin status recorded as absent was lost prior to being read. A CWT was not detected in 16 heads (6 absent adipose fin and 10 unknown adipose fin status). Three of the 13 heads collected from carcasses with unknown adipose fin status contained a CWT.

Some data were reclassified for subsequent analysis of hatchery-origin contributions to the FCS escapement in Cottonwood Creek. Carcasses with an “unknown” adipose fin status were reclassified as “present” if no CWT was recovered, or “absent” if a CWT was recovered. A classification of “No CWT” was given to carcasses with an “absent” adipose fin status that either had no tag detected or had a lost tag during processing. These salmon remained categorized as “absent” and were grouped with hatchery-origin salmon for subsequent analysis.

Hatchery-origin Returns

Expansion factors were applied to the hatchery-origin salmon for both CWT recoveries and “No CWT” designated carcasses to account for unmarked hatchery production. A weighted expansion factor was applied to hatchery-origin carcasses categorized as “No CWT” (0.250 in 2011, 0.263 in 2012 and 0.248 in 2013). Most FCS, and all recovered on this survey, were marked at Central Valley fish hatcheries at a 25% rate, but some experimental release groups of FCS were marked at a 100% rate. Application of these expansion factors yielded an estimate 220 hatchery-origin salmon (55% of sampled carcasses) in 2011, 274 hatchery-origin salmon (28% of sampled carcasses) in 2012 and 384 hatchery-origin salmon (33% of sampled carcasses) in 2013.

CWT recoveries in 2011 consisted of the following: Coleman NFH FCS on-site releases ($N = 38$ recovered, $N = 153$ expanded), Coleman NFH FCS off-site (San Pablo Bay) releases ($N = 6$

recovered, $N = 24$ expanded), Feather River Hatchery FCS off-site (San Pablo Bay and Santa Cruz) releases ($N = 8$ recovered, $N = 29$ expanded), Feather River hybrid (e.g., FCS x SCS) Chinook salmon off-site (San Pablo Bay and San Francisco Bay) releases, ($N = 2$ recovered, $N = 2$ expanded), or no CWT ($N = 3$ recovered, $N = 12$ expanded; Figure 3a). No late-fall Chinook salmon (LFCS) or SCS were recovered. Sixty-eight percent of recovered males were of hatchery-origin and 25 % of recovered females were of hatchery-origin.

CWT recoveries in 2012 consisted of the following: Coleman NFH FCS on-site releases ($N = 19$ recovered, $N = 76$ expanded), Coleman NFH FCS off-site (San Pablo Bay) releases ($N = 13$ recovered, $N = 52$ expanded), Feather River Fish Hatchery FCS off-site (San Pablo Bay, San Francisco Bay and Santa Cruz) releases ($N = 35$ recovered, $N = 127$ expanded), or no CWT ($N = 5$, $N = 19$ expanded; Figure 3b). No LFCS or SCS were recovered. Twenty-eight percent of recovered males were of hatchery-origin and 21% of recovered females were of hatchery-origin.

CWT recoveries in 2013 consisted of the followings: Coleman NFH FCS on-site releases ($N = 55$ recovered, $N = 220$ expanded), Coleman NFH FCS off-site (San Pablo Bay) releases ($N = 9$ recovered, $N = 36$ expanded), Feather River Fish Hatchery FCS off-site (San Pablo Bay, San Francisco Bay and Santa Cruz) releases ($N = 24$ recovered, $N = 96$ expanded), or no CWT ($N = 8$, $N = 32$ expanded; Figure 3c). No LFCS or SCS were recovered. Forty percent of recovered males were of hatchery-origin and 24 % of recovered females were of hatchery-origin.

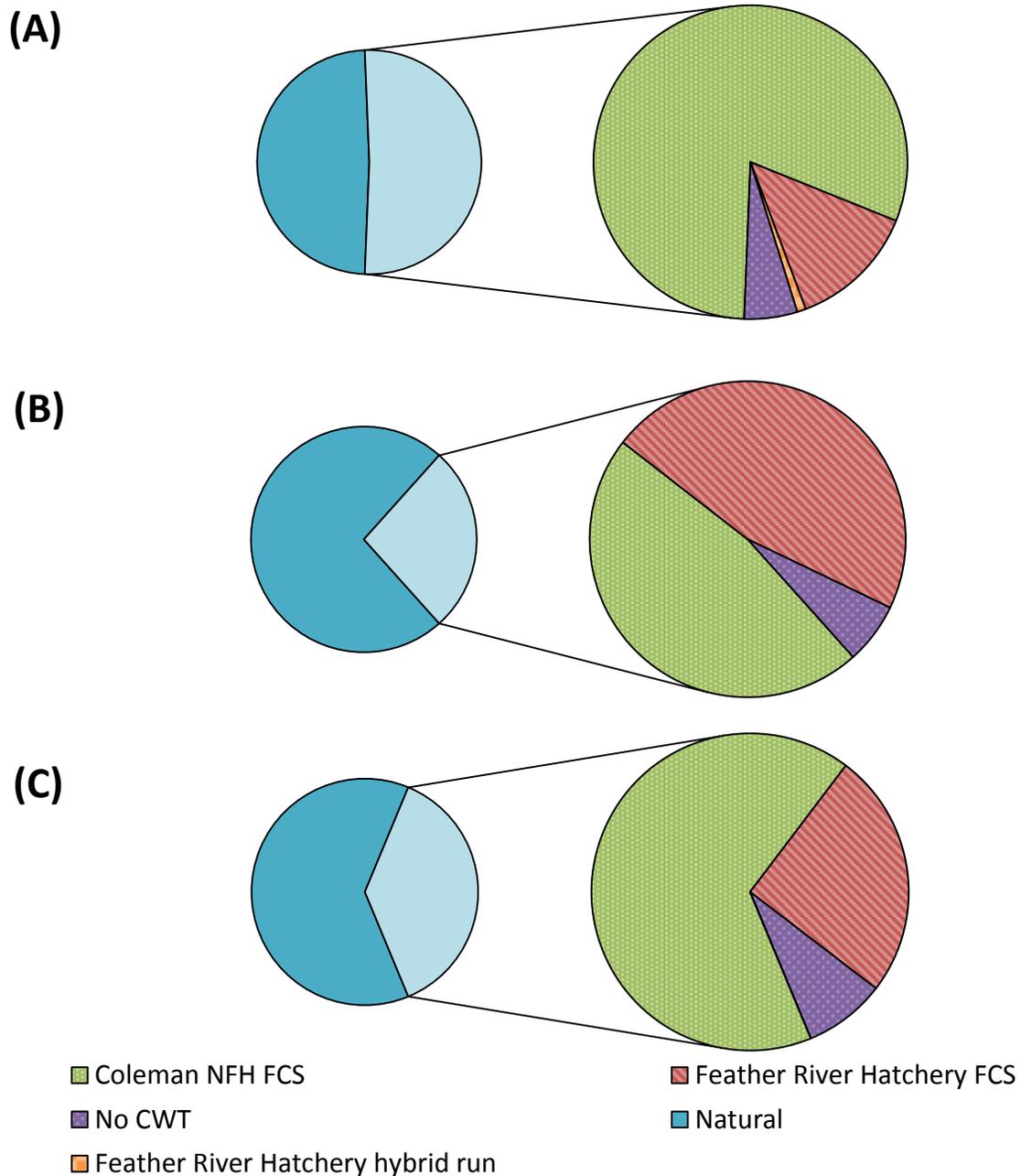


Figure 3. Hatchery contributions to fall Chinook salmon carcass recoveries based on CWT expansions in Cottonwood Creek in (A) 2011, (B) 2012 and (C) 2013.

Temporal and Spatial Distribution

Fresh carcasses recoveries totaled 127 in 2011, 225 in 2012 and 261 in 2013. The peak recovery of fresh carcasses was in Julian week 45 in 2011 (November 6-12, 2011) and in Julian week 44 in 2012 and 2013 (October 28- November 3, 2012 and October 27- November 2, 2013; Figure 4). The peak passages of FCS through the video station were during the weeks of October 2, 2011 ($N = 579$), October 28, 2012 ($N = 811$) and October 13, 2013 ($N = 722$) (Killam and

Merrick, 2012; D. Killam, personal communication). There was no noticeable difference in the timing of fresh carcasses recovered for hatchery- and natural-origin salmon.

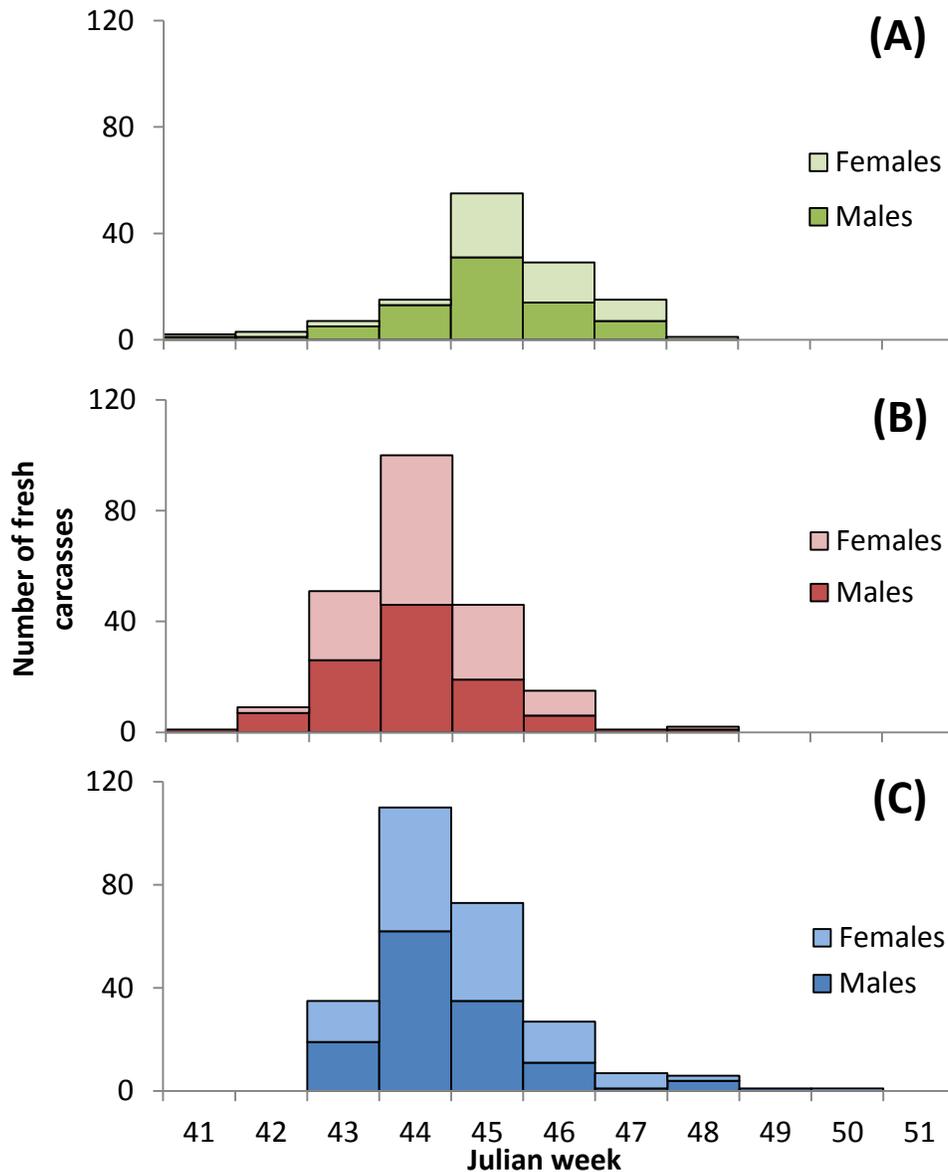


Figure 4. Weekly numbers of male and female fresh fall Chinook salmon carcass recovered in Cottonwood Creek in (A) 2011, (B) 2012 and (C) 2013. In 2013, surveys began later than anticipated (October 22, 2013) and therefore, were not performed in weeks 41 and 42.

Distribution of carcasses was similar across all three years of the survey, with a majority of the recovered carcasses were found between SM 6 and SM 12; 57 % ($N = 230$) in 2011, 66 % ($N = 654$) in 2012 and 74 % ($N = 848$) in 2013. Each year, the greatest number were found in SM 9 ($N = 52$ in 2011, $N = 165$ in 2012 and $N = 220$ in 2013; Figure 5).

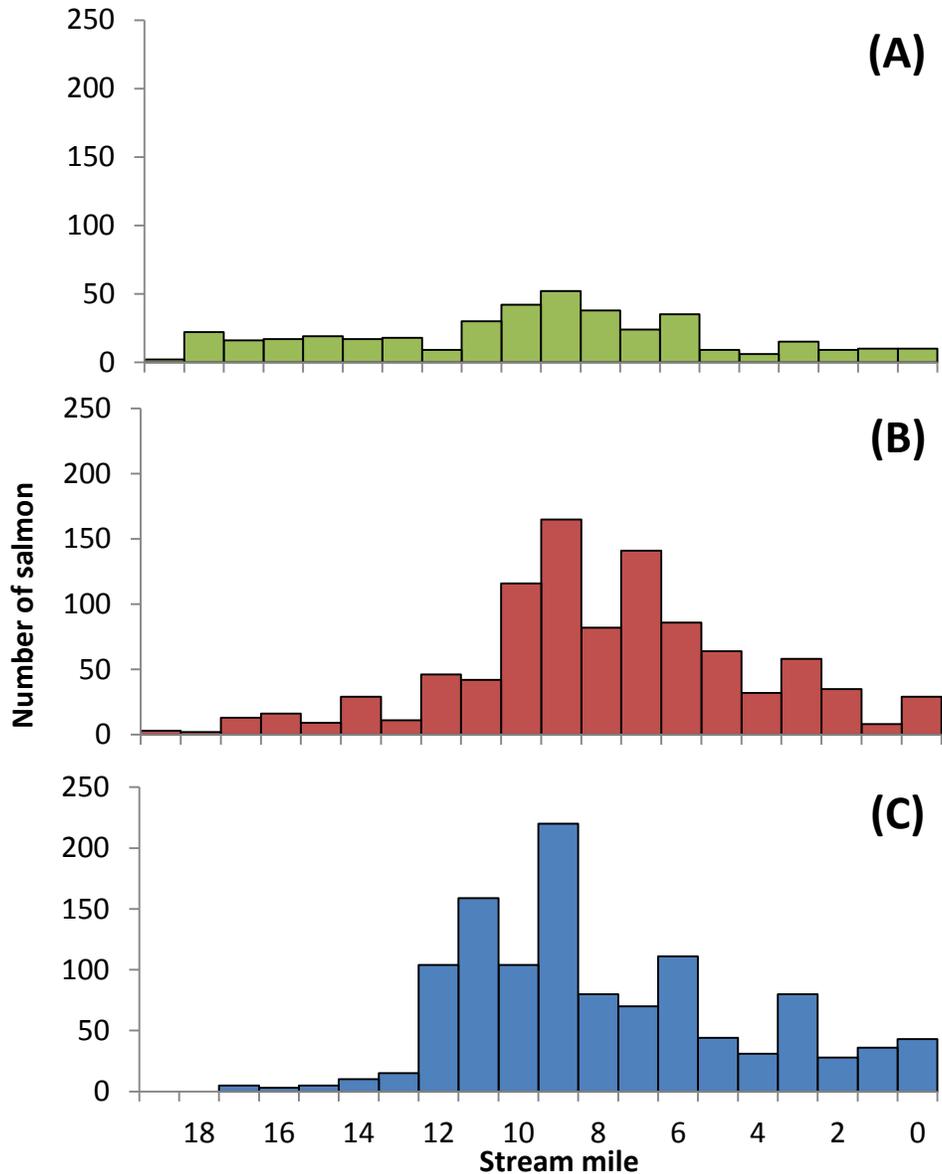


Figure 5. Fall Chinook salmon carcass distribution by stream mile recovered in Cottonwood Creek in (A) 2011, (B) 2012 and (C) 2013.

The peak recovery area of carcasses was generally between SM 6 and SM 12 for all three years of the survey (Figure 6). Distributions of male and female carcasses in the survey area were generally similar in 2012 and 2013 (Figure 7). In 2011, a higher proportion of males were distributed farther downstream in the system than females; only 3 % of females were recovered downstream of the peak recovery area (SM 6- SM 12), compared to 19 % of all males. In 2012, beaver dams were noted throughout the season at SM 7, SM 8, SM 11, SM 12 and SM 13 and were observed to intermittently hinder or block upstream passage. Low stream flows and some beaver dams in 2013 may have limited distribution.

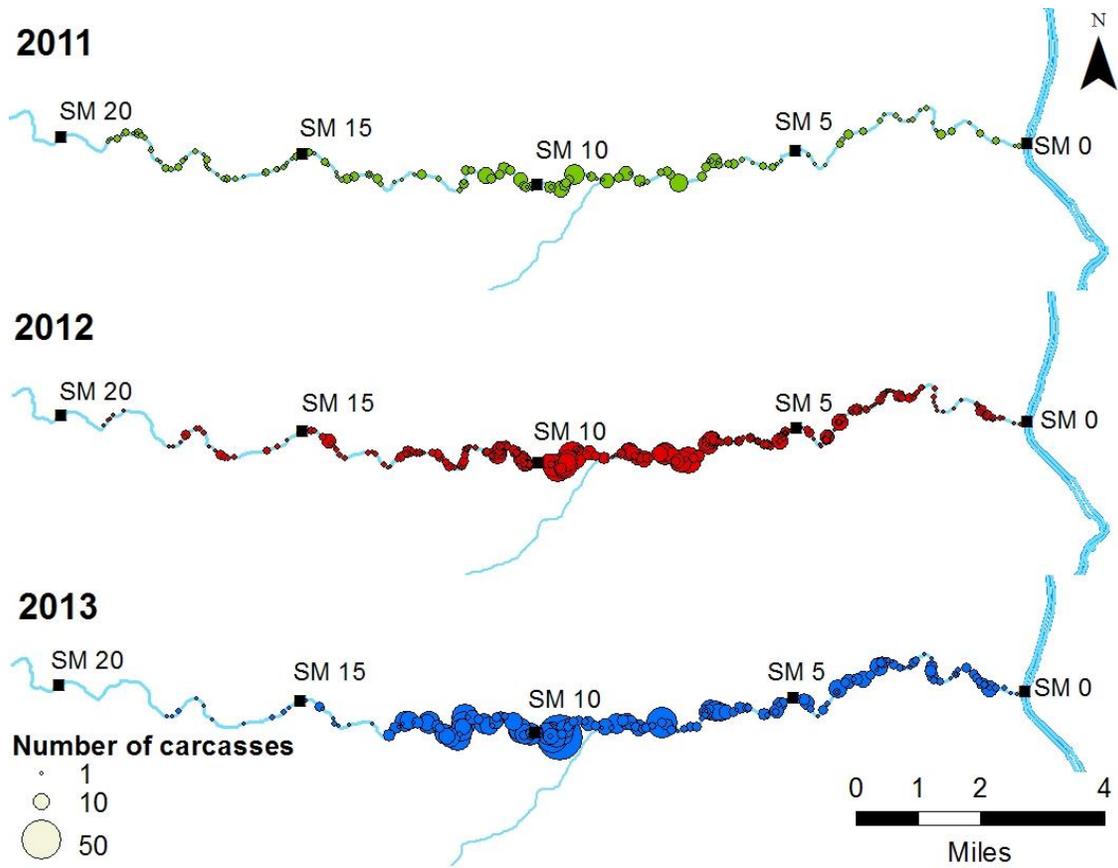


Figure 6. Map of fall Chinook salmon carcass distribution on Cottonwood Creek during fall 2011-2013.

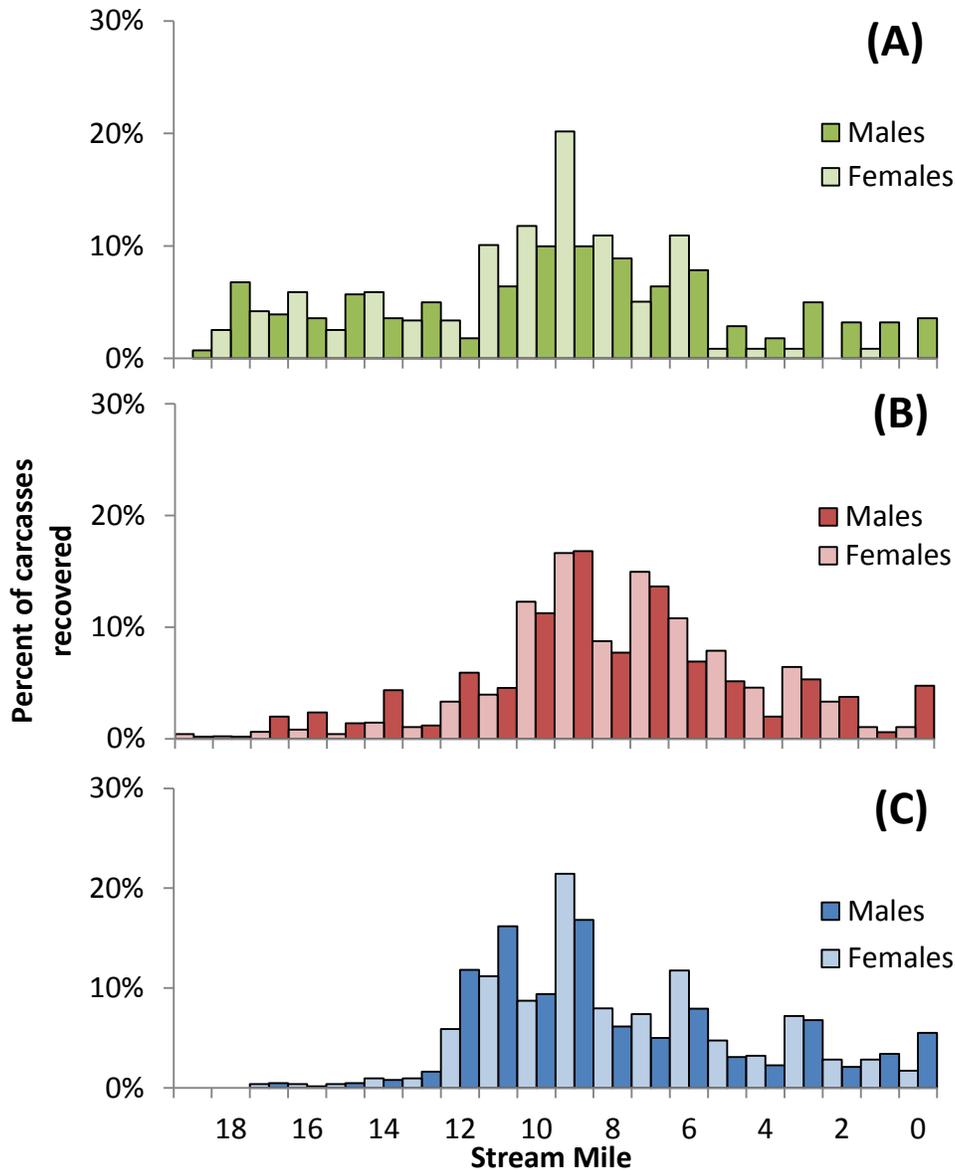


Figure 7. Proportion of total carcass recoveries by sex for males and females in (A) 2011, (B) 2012 and (C) 2013 based on recovery location of fall Chinook salmon carcasses in Cottonwood Creek.

The percentage of hatchery-origin salmon decreased for both males and females in survey areas farther upstream from the confluence with the Sacramento River. This was observed in all survey years for both sexes with the exception of females in 2013, which had an increase in percent hatchery-origin between the middle and upstream survey areas (Table 2).

Table 2. Percent of carcasses of hatchery-origin salmon recovered in each survey reach for males and females for fall Chinook salmon in Cottonwood Creek during fall 2011-2013. In 2013, stream miles 18-19 were not surveyed.

Stream Mile	Males			Females		
	2011	2012	2013	2011	2012	2013
0-5	87%	48%	66%	100%	45%	34%
6-11	67%	29%	37%	30%	14%	17%
12-19	53%	7%	14%	0%	6%	26%

Age Composition and Length-at-Age

Annually, lengths of salmon carcasses were bi-modally distributed, with modes at approximately 630 mm and 800 mm in 2011, 590 mm and 790 mm in 2012 and 600 mm and 800 mm in 2013. Length distribution of male carcasses showed a nadir separating the modes at approximately 750 mm in 2011 and 700 mm in 2012 and 2013 (Figure 8). These lengths were used to estimate proportions of grilse (age-2) and adult (age-3 and age-4) males, with salmon greater than or equal to the cutoff considered to be adults [2011: $N = 47$ (17%); 2012: $N = 345$ (68%); 2013: $N = 550$ (89%)] and salmon less than the cutoff considered to be grilse [2011: $N = 232$ (83 %); 2012: $N = 161$ (32%); 2013: $N = 71$ (11%)]. Female carcass lengths were approximately normally distributed, likely because few females return at age-2. This assumption was supported by the lack of grilse females amongst CWT recoveries in 2011 and 2012 and very few in 2013 (Figure 9). A grilse cutoff was therefore not determined for females due to the lack of a distinct bimodal distribution in the female size distribution.

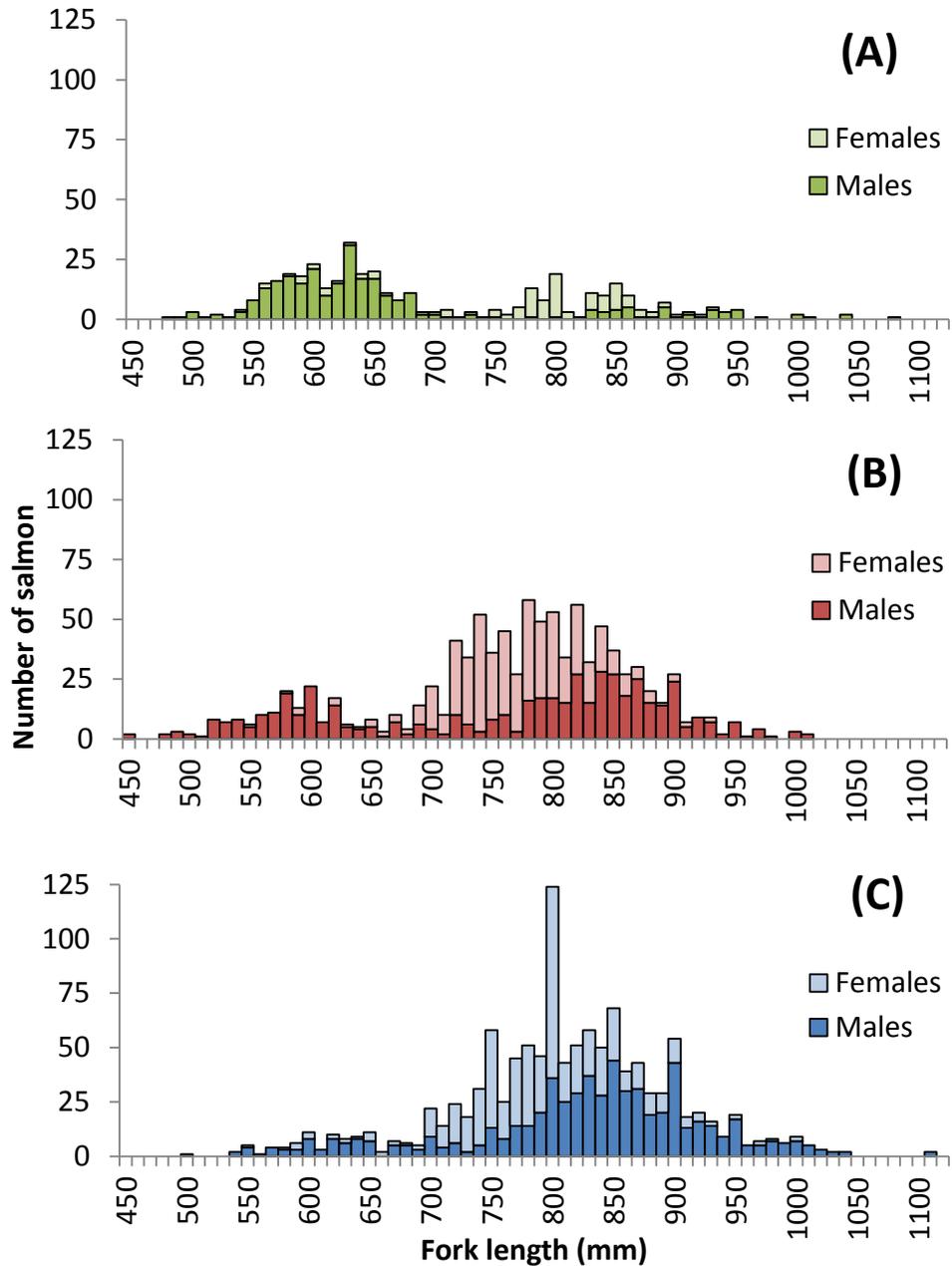


Figure 8. Length frequency distributions of fall Chinook salmon carcasses recovered on Cottonwood Creek during (A) 2011 ($N = 398$), (B) 2012 ($N = 986$) and (C) 2013 ($N = 1148$).

Based on expanded numbers from recovered CWTs in 2011, 80.8% of hatchery-origin carcasses were grilse ($N = 178$) and 19.2% were adults ($N = 42$ total; $N = 34$ age-3 and $N = 8$ age-4). One hundred percent of hatchery-origin females were adults ($N = 29$ total; $N = 25$ age-3 and $N = 4$ age-4), whereas 93.2% of hatchery-origin male carcasses were grilse ($N = 178$) and 6.8% were adults ($N = 13$ total; $N = 9$ age-3 and $N = 4$ age-4; Figure 9).

Based on expanded numbers from recovered CWTs in 2012, 15.7% of hatchery-origin carcasses were grilse ($N = 36$) and 84.3% were adult ($N = 194$). All adults recovered were age-3. One hundred percent of hatchery-origin females were adults ($N = 95$), whereas 26.7% of hatchery-origin male carcasses were grilse ($N = 36$) and 73.3% were adults ($N = 99$; Figure 9).

Based on expanded numbers from recovered CWTs in 2013, 12.5% of hatchery-origin carcasses were grilse ($N = 44$) and 87.5% were adult ($N = 309$ total, $N = 297$ age-3 and $N = 12$). Seven percent of hatchery-origin females were grilse ($N = 8$) and 93% were adults ($N = 113$ total, $N = 109$ age-3 and $N = 4$ age-4), whereas 16% of hatchery-origin males were grilse ($N = 36$) and 84% were adults ($N = 192$ total, $N = 184$ age-3 and $N = 8$ age-4). The sex was not recorded for one age-3 hatchery-origin adult (Figure 9).

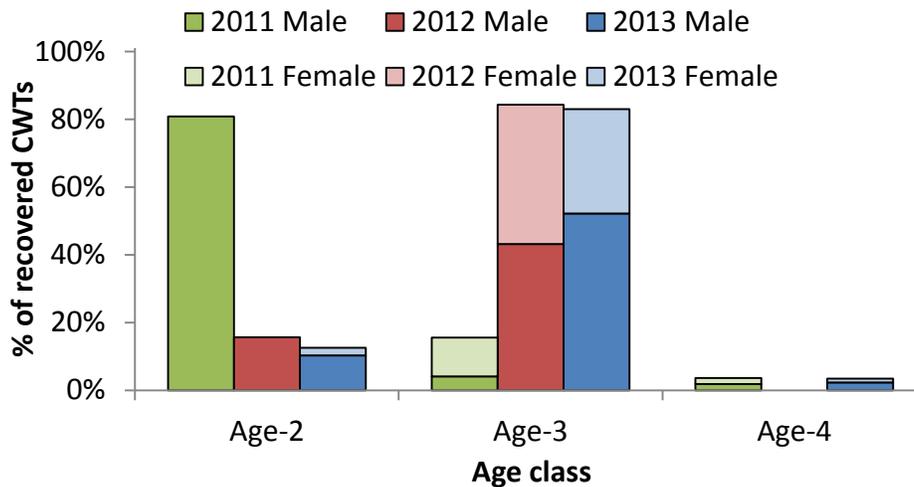


Figure 9. Age composition by sex of hatchery-origin fall Chinook salmon carcasses recovered in Cottonwood Creek during fall 2011- 2013 by year.

Sex Ratio

The sex ratio of males to females was 2.4: 1 in 2011, 1.1: 1 in 2012 and 1.3: 1 in 2013. In 2011, the sex ratio for hatchery-origin males to hatchery-origin females based on expanded CWT recoveries was 6.6: 1, but was lower in 2012 and 2013 at 1.1: 1 and 1.3: 1, respectively. The sex ratio was nearly equal in natural-origin salmon; 1: 1 in 2011 0.9: 1 in 2012 and 1.1: 1 in 2013.

Redds

There were 147 redds found during the week of November 27, 2011, 384 redds found during the week of November 4, 2012 and 542 redds found during the week of November 10, 2013 (Figure 10). The survey mile with the highest number of redds shifted upstream each year with the peak in SM 6 in 2011 ($N = 23$), SM 9 in 2012 ($N = 47$) and SM 11 in 2013 ($N = 84$). Redds were not observed in the first mile from the confluence with the Sacramento River during 2011 and 2012, but one was observed in 2013 (Figure 11). In 2013, SM 18 and SM 19 were not surveyed due to a change in creek access during this year.

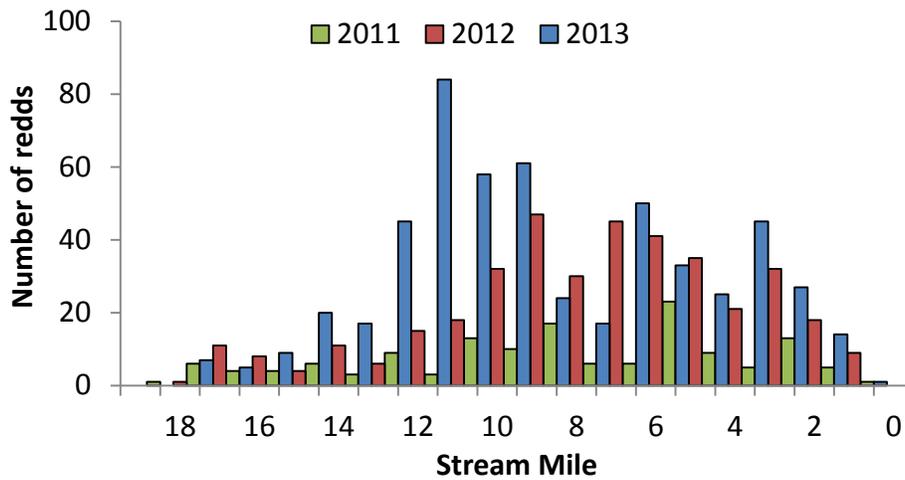


Figure 10. Redd distribution by stream mile in Cottonwood Creek during fall 2011- 2013 by year.

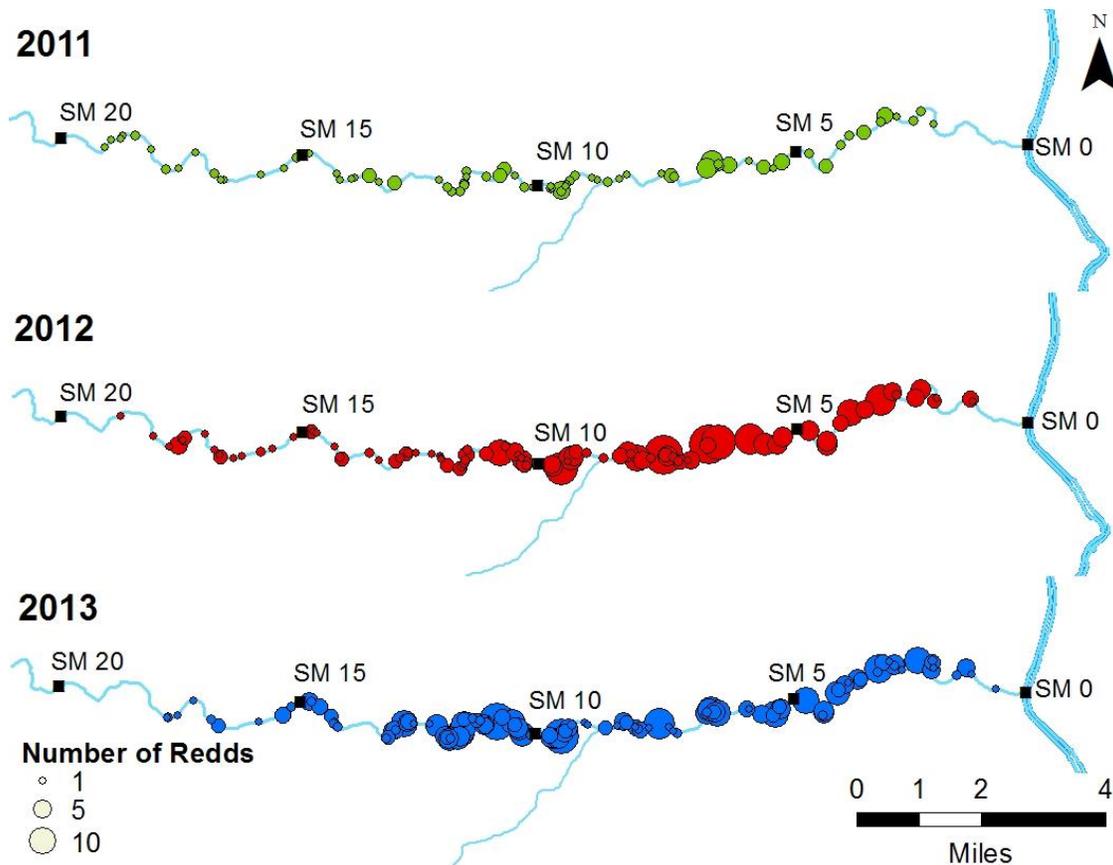


Figure 11. Map of redd distribution and abundance in Cottonwood Creek during surveys in fall 2011- 2013.

Creek Conditions

Average flow in Cottonwood Creek during the 2011 survey period was 118 cubic feet per second (CFS; min 92 CFS, max 278 CFS) and flows were within the range observed over the last 10 years. Average flow in the creek during the 2012 survey period was 94 CFS (min 54 CFS, max 456 CFS) and flows were within the range observed over the last 10 years until high flows late in the season (max 23,100 CFS on December 2, 2012) resulted in three surveys being cancelled due to safety concerns. Therefore, data for 2012 were not collected throughout the entire period when FCS were expected to be spawning in Cottonwood Creek. Average flow in the creek during the 2013 survey period was 44 CFS (min 29 CFS, max 76 CFS). The flows during FCS migration were well below the 10 year average and on many dates were record lows (Figure 12; <http://nwis.waterdata.usgs.gov/nwis>). Average water temperature during the survey period at the site of the video weir (SM 1) was 12.0° Celsius (C; min 6.0° C, max 20.5° C) in 2011, 15.3° C (min 10.9° C, max 19.8° C) in 2012 and 11.6° C (min 6.2° C, max 17.1° C) in 2013 (Figure 13; D. Killam, personal communication).

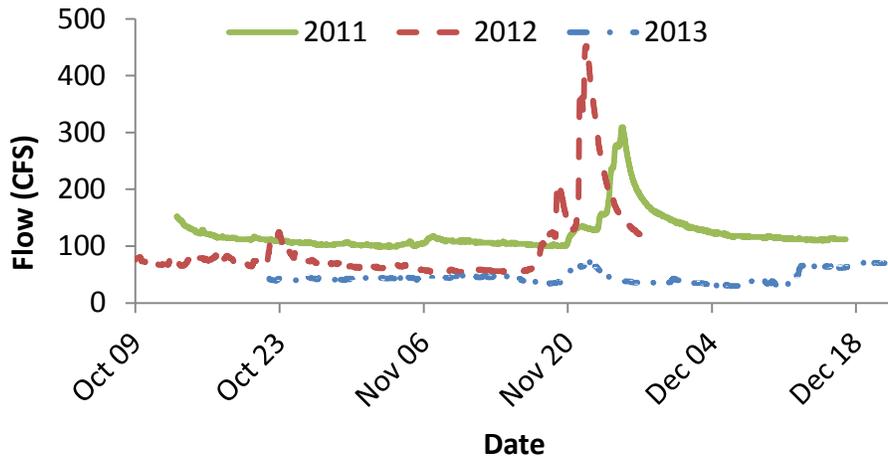


Figure 12. Flows in Cottonwood Creek during survey periods in 2011- 2013 at the Cottonwood Creek near Cottonwood, CA gage (USGS 11376000) located downstream of the I-5 bridge (SM 2).

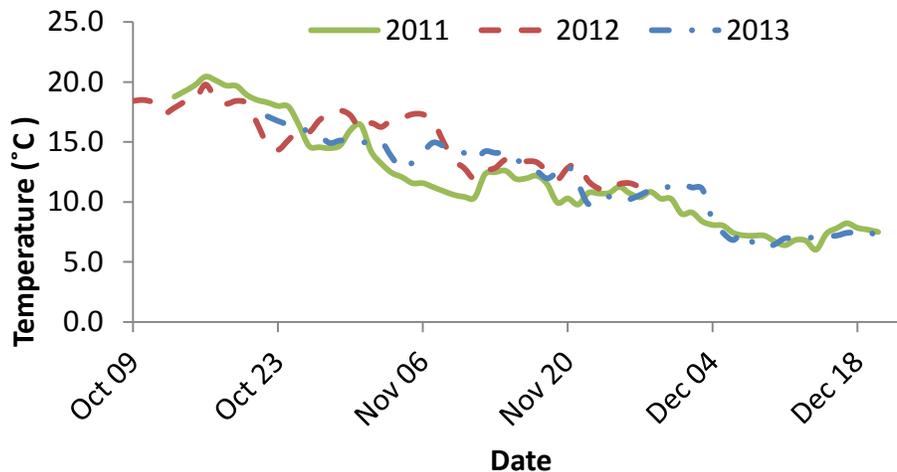


Figure 13. Average daily water temperature at the CDFW Cottonwood Creek video weir site during survey periods in 2011-2013 (SM 1; D. Killam, personal communication).

Discussion

Central Valley FCS comprise the most abundant salmon run in California and are important because of their economic, ecological and cultural values. Central Valley FCS are propagated at five state and federally operated hatcheries, producing a combined total of 32 million smolts annually. Most FCS returning to the Central Valley are of hatchery-origin and large numbers of these hatchery-origin FCS spawn in Central Valley rivers and streams instead of returning to their hatchery of origin each year. Numerous studies have shown that hatchery-origin salmon spawning in the wild have lower reproductive success than natural-origin fish (See review in Christie et al. 2014) and interbreeding in natural spawning areas may reduce the fitness of the natural-origin population. Understanding the distribution and characteristics of hatchery-origin salmon is critical for properly managing this important run of anadromous fish.

Cottonwood Creek was chosen for this study because it supports a relatively large abundance of FCS, including many hatchery-origin salmon observed at the CDFW video weir. Cottonwood Creek is the largest undammed tributary to the upper Sacramento River and has historically supported anadromous fish, including Central Valley FCS (CH2MHill 2002). Central Valley FCS spawn in lower elevations of the valley floor (Yoshiyama et al. 2001) and historical accounts indicate that a majority of FCS spawning within Cottonwood Creek occurred downstream of the confluence of the Middle and North Forks (SM 22; CH2MHill 2002). FCS have been observed spawning in the North Fork (CH2MHill 2002) and South Fork of Cottonwood Creek (Yoshiyama et al. 2001; CH2MHill 2002), but the spatial extent of current spawning is likely limited by instream flows and the availability of suitable habitats. For example, spawning of FCS in the South Fork of Cottonwood Creek was either nonexistent or very limited in 2011-2013 as that portion of the creek was dry for most of the survey season each year.

Several factors seemed to effect the distribution of FCS spawning within the survey area. There were beaver dams in 2012 and 2013 that hindered or completely blocked upstream passage for salmon for all or part of the survey period in those years. Average flow within the creek

decreased each year which may have also impacted spawning distribution and the ability of salmon to move upstream. These two factors likely led to a higher proportion of the run spawning within the survey area; the proportion of escapement recovered on the carcass survey increased from 20% in 2011, to 42% in 2012 and up to 51% in 2013. The number of redds observed also increased annually (147 in 2011, 384 in 2012 and 542 in 2013), even though the total estimated escapement did not increase significantly (2,144 in 2011, 2,556 in 2012 and 2,774 in 2013). Carcass recovery rates were likely affected by the length of the survey periods; surveys were terminated early in 2012 due to storm and high flow events and surveys started 2 weeks late in 2013 due to a Federal government shutdown.

Fall Chinook salmon from Coleman NFH were the most abundant hatchery-origin salmon in Cottonwood Creek each year, followed by FCS from Feather River Fish Hatchery. A small number of Feather River hybrid Chinook salmon were observed in 2011. We caution the reader against interpreting the origins of hatchery salmon observed as the sole basis for comparing relative rates of straying from each hatchery facility. For example, the relatively higher proportion of Coleman NFH FCS recovered in Cottonwood Creek should not be interpreted as indicating a relatively higher rate of straying by salmon originating at Coleman NFH as compared to other Central Valley hatcheries. The proximal location of Cottonwood Creek to Coleman NFH likely contributes to the higher percentage of FCS originating from the Coleman NFH relative to other Central Valley hatcheries. Coleman NFH is located on Battle Creek, which flows into the Sacramento River only 2 miles downstream of the mouth of Cottonwood Creek. To compare the relative rates of straying between Central Valley hatchery facilities, it is important to consider the geographic scope of inference and we recommend that straying for hatchery facilities be evaluated on the scale of the Central Valley Basin as described in Kormos et al. (2012).

Additionally, the greater number of Coleman NFH FCS on-site releases than off-site releases recovered in Cottonwood Creek should not be interpreted as indicating a relatively higher rate of straying by Coleman NFH salmon released on-site compared to salmon released off-site. These findings are supported by previous assessments of Coleman NFH off-site releases, which showed that juvenile salmon transported and released at distant locations were more likely to stray at geographically distant locations, whereas juvenile salmon released off-site but closer to the hatchery strayed at an intermediate level and were recovered in closer proximity to the hatchery (Niemela 1996). When comparing the numbers of salmon recovered from Coleman NFH on-site and off-site releases relative to the total numbers released for each group, a higher proportion of off-site releases were recovered in Cottonwood Creek than on-site releases, for all years of the study.

Resource managers should consider information generated from this study when defining fishery management goals for Cottonwood Creek and identifying the management strategies necessary to achieve those goals. For example, we observed that on-site releases from the Coleman NFH comprised the majority of hatchery-origin FCS in Cottonwood Creek during each year of monitoring. Under normal circumstances, the entire production of 12 million fall Chinook smolts from the Coleman NFH is released on-site into Battle Creek. This practice of releasing FCS at the hatchery is intended to promote a high level of site fidelity to Battle Creek and minimize straying into other natural spawning areas. This objective and strategy are in

accordance with guidelines of the California Hatchery Scientific Review Group (HSRG; CA HSRG 2012) and are a requirement of the Biological Opinion of the Coleman NFH Complex (National Marine Fisheries Service 2014). The observation that on-site releases from the Coleman NFH consistently comprised the majority of hatchery-origin strays in Cottonwood Creek suggest that it is unlikely that hatchery practices could be modified to further reduce the number of Coleman NFH-origin FCS that stray into this tributary. To the contrary, this level of straying into proximally located natural spawning areas may be an inevitable consequence of operating a large hatchery program. If this level of interbreeding between hatchery- and natural-origin salmon is determined to be undesirable in Cottonwood Creek, then site-specific management strategies, such as a sorting weir, may be necessary to control straying of Coleman NFH-origin FCS into the creek.

Results of the FCS carcass survey in Cottonwood Creek were complemented by information from the video station operated by CDFW to estimate the abundance of FCS in the creek. A benefit of using two complementary monitoring projects is that it enables comparisons between the two methods, providing the ability to assess the advantages and disadvantages of each. For example, comparisons of the proportion of hatchery-origin salmon in Cottonwood Creek annually yielded slightly different results using the two methods. The carcass survey estimated hatchery-origin percentages at 55 %, 28 % and 33 % in 2011, 2012 and 2013, respectively. Conversely, the percentages of hatchery origin salmon in Cottonwood Creek estimated at the video weir were 44 %, 19 % and 34 % in 2011, 2012 and 2013, respectively. Over three years of study, annual estimates of the percentage of hatchery-origin FCS differed by a maximum of 11% between the video weir and the carcass survey and did not show a consistent bias for estimating this metric.

Each method of estimating the proportion of hatchery-origin FCS in Cottonwood Creek has limitations, which could result in biases. A principle limitation of the carcass survey was our inability to obtain landowner permission to access some portions of the creek, which restricted the survey area to approximately 20 miles of Cottonwood Creek immediately upstream from the confluence with the Sacramento River. Some of the salmon that were counted at the video weir would likely have been able to move upstream of the carcass survey area, decreasing the chance that they would be recovered on the carcass survey. This effect likely had the greatest impact when base flows were higher, such as 2011 when only 20% of the run was recovered on the carcass survey. Some salmon also likely migrated upstream of the area surveyed in 2012 (42 % recovered) and 2013 (51 % recovered). Low water levels and beaver dams, however, hindered or completely blocked upstream migration, thereby likely reducing the proportion of the population accessing areas upstream of the survey area and contributing to a substantially higher rate of carcass recovery. Additionally, the survey in 2013 was started later than desirable due to the government shutdown, which limited our ability to recover fresh carcasses from the earliest portion of the run.

A principle limitation of video counting weirs is associated with poor video quality, which may limit the ability to distinguish adipose fin-clips with equal efficiency across entire escapement periods. In 2011-2013, however, water clarity was consistently good through much of the FCS run in Cottonwood Creek. Complications of observing adipose fin-clip status due to water clarity were very limited in those years and substantial problems were not experienced with

video quality (D. Killam, personal communication). In considering the potential biases of each method, we believe the video weir likely provided the better estimate of hatchery-origin fall FCS escapement into Cottonwood Creek due to the consistency of video clarity and ability to observe all salmon that escaped into Cottonwood Creek.

Information resulting from this study supports monitoring recommendations by the Central Valley In-river Chinook Salmon Escapement Monitoring Plan and the California HSRG and supplements monitoring at the Cottonwood Creek video weir. Considered together, the results of these two monitoring projects yield a more comprehensive assessment of FCS escapement into Cottonwood Creek than either project would have alone. This study adds to existing monitoring efforts across the Sacramento River system to form a more detailed picture of hatchery- and natural-origin salmon interactions in natural spawning areas. This information can also be used by resource managers to guide the management of hatchery- and natural-origin stocks.

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Appendix I

Table A.1. Release information associated with coded wire tags recovered from Chinook salmon carcasses in Cottonwood Creek during fall 2011-2013. Numbers of juvenile salmon released are categorized based on juvenile CWT retention data as follows: Clip/Tag = adipose fin-clipped with CWT; No Clip/Tag = no adipose fin-clip with CWT; Clip/ No Tag = adipose fin-clipped without CWT; No Clip/ No Tag = no adipose fin-clip without CWT.

CWT Code	Hatchery of Origin	Run	Release Location	Brood Year	Clip/ Tag	No Clip/ Tag	Clip/ No Tag	Expansion Factor	Number Recovered	Expanded Number
054471	Coleman NFH	Fall	Coleman NFH	2007	338,491	0	438	0.250	1	4.006
054871	Coleman NFH	Fall	Mare Island Net Pens	2008	137,800	353	353	0.249	1	4.022
054873	Coleman NFH	Fall	Coleman NFH	2008	129,807	0	0	0.250	1	4.002
054886	Coleman NFH	Fall	Coleman NFH	2008	109,292	0	271	0.249	1	4.012
054890	Coleman NFH	Fall	Coleman NFH	2008	109,171	0	0	0.250	1	4.002
054891	Coleman NFH	Fall	Coleman NFH	2008	117,384	0	0	0.250	1	4.002
054896	Coleman NFH	Fall	Coleman NFH	2008	112,556	0	0	0.249	1	4.012
055183	Coleman NFH	Fall	Coleman NFH	2009	116,291	282	0	0.249	3	12.034
055184	Coleman NFH	Fall	Mare Island Net Pens	2009	114,091	0	0	0.247	5	20.208
055185	Coleman NFH	Fall	Coleman NFH	2009	108,389	0	0	0.250	2	8.002
055186	Coleman NFH	Fall	Coleman NFH	2009	105,794	0	0	0.250	2	8.003
055187	Coleman NFH	Fall	Mare Island Net Pens	2009	118,588	309	0	0.249	5	20.058
055188	Coleman NFH	Fall	Coleman NFH	2009	117,670	0	311	0.249	1	4.023
055189	Coleman NFH	Fall	Coleman NFH	2009	112,440	0	0	0.250	2	8.004
055190	Coleman NFH	Fall	Coleman NFH	2009	99,672	0	0	0.247	5	20.273
055191	Coleman NFH	Fall	Coleman NFH	2009	104,281	0	0	0.250	4	16.008
055192	Coleman NFH	Fall	Coleman NFH	2009	116,800	0	0	0.250	2	8.003
055193	Coleman NFH	Fall	Coleman NFH	2009	117,720	0	0	0.250	3	12.005
055194	Coleman NFH	Fall	Coleman NFH	2009	111,590	0	0	0.249	2	8.024
055196	Coleman NFH	Fall	Mare Island Net Pens	2009	105,240	0	0	0.249	6	24.070
055197	Coleman NFH	Fall	Coleman NFH	2009	107,617	0	0	0.250	3	12.008
055198	Coleman NFH	Fall	Coleman NFH	2009	103,920	0	0	0.250	3	12.005
055199	Coleman NFH	Fall	Coleman NFH	2009	99,659	0	0	0.249	3	12.033
055221	Coleman NFH	Fall	Coleman NFH	2009	109,482	0	550	0.249	4	16.086
055222	Coleman NFH	Fall	Coleman NFH	2009	110,067	0	788	0.248	2	8.061
055223	Coleman NFH	Fall	Coleman NFH	2009	101,711	0	0	0.250	2	8.005
055224	Coleman NFH	Fall	Coleman NFH	2009	94,403	0	243	0.249	1	4.022
055225	Coleman NFH	Fall	Coleman NFH	2009	90,698	0	0	0.250	2	8.002
055226	Coleman NFH	Fall	Coleman NFH	2009	89,598	0	224	0.249	1	4.012
055369	Coleman NFH	Fall	Coleman NFH	2010	107,520	0	284	0.249	4	16.052
055370	Coleman NFH	Fall	Coleman NFH	2010	114,941	0	0	0.250	3	12.012
055371	Coleman NFH	Fall	Mare Island Net Pens	2010	102,080	0	0	0.250	2	8.005
055372	Coleman NFH	Fall	Coleman NFH	2010	107,843	0	0	0.250	3	12.008

CWT Code	Hatchery of Origin	Run	Release Location	Brood Year	Clip/ Tag	No Clip/ Tag	Clip/ No Tag	Expansion Factor	Number Recovered	Expanded Number
055373	Coleman NFH	Fall	Coleman NFH	2010	116,619	0	0	0.250	3	12.005
055374	Coleman NFH	Fall	Coleman NFH	2010	113,603	0	633	0.248	2	8.048
055375	Coleman NFH	Fall	Coleman NFH	2010	116,346	0	0	0.250	2	8.003
055376	Coleman NFH	Fall	Coleman NFH	2010	112,097	0	0	0.250	2	8.005
055377	Coleman NFH	Fall	Coleman NFH	2010	114,891	236	59	0.249	3	12.058
055378	Coleman NFH	Fall	Mare Island Net Pens	2010	113,686	0	0	0.250	8	32.011
055379	Coleman NFH	Fall	Coleman NFH	2010	106,750	0	0	0.250	2	8.002
055380	Coleman NFH	Fall	Coleman NFH	2010	109,892	0	0	0.250	1	4.003
055381	Coleman NFH	Fall	Coleman NFH	2010	113,938	578	289	0.247	2	8.106
055382	Coleman NFH	Fall	Coleman NFH	2010	102,858	481	0	0.248	5	20.163
055383	Coleman NFH	Fall	Coleman NFH	2010	101,916	0	0	0.250	1	4.001
055384	Coleman NFH	Fall	Coleman NFH	2010	119,435	0	0	0.250	3	12.007
055385	Coleman NFH	Fall	Coleman NFH	2010	116,099	0	0	0.250	2	8.003
055386	Coleman NFH	Fall	Coleman NFH	2010	116,363	0	0	0.250	3	12.011
055387	Coleman NFH	Fall	Coleman NFH	2010	109,050	0	0	0.250	2	8.006
055388	Coleman NFH	Fall	Coleman NFH	2010	111,886	0	0	0.250	2	8.005
055389	Coleman NFH	Fall	Coleman NFH	2010	120,305	0	299	0.249	3	12.041
055390	Coleman NFH	Fall	Coleman NFH	2010	118,874	0	603	0.249	1	4.022
055391	Coleman NFH	Fall	Mare Island Net Pens	2010	118,990	0	0	0.250	1	4.002
055392	Coleman NFH	Fall	Coleman NFH	2010	114,286	0	0	0.250	1	4.003
055393	Coleman NFH	Fall	Coleman NFH	2010	119,307	834	0	0.248	1	4.030
055394	Coleman NFH	Fall	Coleman NFH	2010	110,103	0	0	0.250	3	12.008
055396	Coleman NFH	Fall	Coleman NFH	2010	117,642	0	0	0.250	3	12.004
055504	Coleman NFH	Fall	Coleman NFH	2011	109,094	0	0	0.250	2	8.005
060388	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2011	457,906	1,713	0	0.241	1	4.144
060392	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2011	389,500	0	392	0.249	1	4.015
060393	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2011	391,022	0	0	0.249	2	8.026
060394	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2011	394,966	0	436	0.249	3	12.034
060395	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2011	276,116	0	0	0.250	2	8.016
062589	Feather River Hatchery	Hybrid	Tiburon Net Pens	2008	13,010	0	334	0.951	1	1.051
068604	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2007	399,244	0	0	0.250	1	4.002
068624	Feather River Hatchery	Fall	Tiburon Net Pens	2009	41,238	212	211	0.985	4	4.062
068649	Feather River Hatchery	Hybrid	Mare Island Net Pens	2008	167,530	172	3,011	0.981	1	1.019
068650	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2008	144,831	0	1,496	0.247	2	8.092
068654	Feather River Hatchery	Fall	Wickland Oil Net Pens	2009	108,744	3,809	254	0.240	8	33.366

CWT Code	Hatchery of Origin	Run	Release Location	Brood Year	Clip/ Tag	No Clip/ Tag	Clip/ No Tag	Expansion Factor	Number Recovered	Expanded Number
068668	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2009	258,683	654	991	0.248	1	4.033
068670	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2009	398,016	494	494	0.249	2	8.045
068671	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2009	392,330	0	987	0.249	6	24.081
068672	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2009	400,675	0	981	0.249	15	60.200
068674	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2010	143,768	0	683	0.248	1	4.037
068675	Feather River Hatchery	Fall	Santa Cruz Harbor Net Pens	2009	118,879	2,468	987	0.972	2	2.058
068695	Feather River Hatchery	Fall	Wickland Oil Net Pens	2009	89,066	505	216	0.247	2	8.084
068709	Feather River Hatchery	Fall	Wickland Oil Net Pens	2010	166,322	201	770	0.248	1	4.028
068746	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2010	534,012	1,136	2,328	0.247	1	4.041
068751	Feather River Hatchery	Fall	Wickland Oil Net Pens	2010	397,697	0	2,497	0.247	4	16.179
068752	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2010	403,277	0	1,666	0.249	6	24.138
068754	Feather River Hatchery	Fall	San Pablo Bay Net Pens	2010	109,221	0	894	0.247	2	8.081
No CWT									19	61.000
Total									228	877

Table A. 2. Biological data from Chinook salmon carcasses with a coded wire tag in Cottonwood Creek during fall 2011 - 2013. “NTD” indicates there was no coded wire tag detected in the head. Five coded wire tags were lost prior to decoding. A blank sample number indicates a tissue was not collected for the carcass, due to deteriorated physical condition.

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/13/2011	1501	Female	700	Absent	Spawned	Fresh	3	6	062589
10/13/2011	1502	Male	560	Present	Unknown	Fresh	3	1	
10/19/2011	1503	Female	708	Present	Spawned	Non-Fresh	3	4	
10/19/2011	1504	Male	630	Absent	Unknown	Fresh	3	2	055183
10/19/2011	1505	Male	640	Absent	Unknown	Non-Fresh	3	0	055186
10/20/2011	1506	Female	820	Present	Spawned	Fresh	2	12	
10/20/2011	1581	Male	850	Present	Unknown	Non-Fresh	1	16	
10/20/2011	1582	Female	800	Present	Unknown	Fresh	1	13	
10/26/2011	1507	Male	570	Present	Unknown	Non-Fresh	3	6	
10/26/2011	1508	Male	600	Present	Unknown	Non-Fresh	3	3	
10/27/2011		Male	950	Present	Unknown	Non-Fresh	1	18	
10/27/2011	1509	Female	925	Present	Spawned	Fresh	2	11	
10/27/2011	1510	Male	630	Present	Unknown	Fresh	2	10	
10/27/2011	1511	Male	720	Present	Unknown	Fresh	2	8	
10/27/2011	1512	Male	620	Absent	Unknown	Fresh	2	8	055196
10/27/2011	1513	Male	600	Present	Unknown	Fresh	2	8	
10/27/2011	1583	Male	950	Present	Unknown	Non-Fresh	1	18	
10/27/2011	1584	Male	610	Unknown	Unknown	Non-Fresh	1	18	NTD
10/27/2011	1585	Male	640	Present	Unknown	Unknown	1	18	
10/27/2011	1586	Male	570	Present	Unknown	Fresh	1	17	
10/27/2011	1587	Female	590	Present	Spawned	Fresh	1	16	
10/27/2011	1588	Male	910	Present	Unknown	Non-Fresh	1	14	
11/2/2011	1514	Male	560	Present	Unknown	Non-Fresh	3	5	
11/2/2011	1515	Male	610	Present	Unknown	Non-Fresh	3	5	
11/2/2011	1516	Male	680	Absent	Unknown	Non-Fresh	3	4	055194
11/2/2011	1517	Male	610	Present	Unknown	Non-Fresh	3	2	
11/2/2011	1589	Male	930	Present	Unknown	Fresh	2	14	
11/2/2011	1590	Male	560	Absent	Unknown	Non-Fresh	2	13	055186
11/2/2011	1591	Male	930	Present	Unknown	Non-Fresh	2	11	
11/2/2011	1592	Male	630	Present	Unknown	Non-Fresh	2	10	
11/2/2011	1593	Male	560	Absent	Unknown	Non-Fresh	2	10	NTD
11/2/2011	1594	Male	970	Present	Unknown	Non-Fresh	2	10	
11/2/2011	1595	Male	650	Present	Unknown	Fresh	2	10	
11/2/2011	1596	Female	780	Present	Spawned	Non-Fresh	2	9	
11/2/2011	1597	Female	770	Present	Spawned	Non-Fresh	2	9	
11/2/2011	1598	Male	620	Present	Unknown	Non-Fresh	2	9	
11/2/2011	1599	Female	850	Absent	Spawned	Non-Fresh	2	9	068604
11/2/2011	1600	Male	730	Present	Unknown	Fresh	2	9	
11/2/2011	1601	Male	630	Present	Unknown	Non-Fresh	2	9	
11/2/2011	1602	Male	560	Present	Unknown	Non-Fresh	2	9	
11/2/2011	1603	Male	950	Present	Unknown	Fresh	2	9	
11/2/2011	1604	Male	1080	Present	Unknown	Fresh	2	9	
11/2/2011	1605	Male	580	Absent	Unknown	Non-Fresh	2	9	055190
11/2/2011	1606	Female	750	Present	Spawned	Non-Fresh	2	8	
11/2/2011	1607	Female	780	Absent	Spawned	Non-Fresh	2	8	054891
11/2/2011	1608	Male	680	Present	Unknown	Fresh	2	8	
11/2/2011	1609	Male	660	Present	Unknown	Fresh	2	8	
11/2/2011	1610	Male	500	Present	Unknown	Non-Fresh	2	8	
11/2/2011	1611	Male	670	Absent	Unknown	Fresh	2	7	055190
11/2/2011	1612	Female	760	Present	Spawned	Non-Fresh	2	7	
11/2/2011	1613	Male	570	Present	Unknown	Fresh	2	8	
11/3/2011	1614	Male	590	Present	Unknown	Non-Fresh	1	19	
11/3/2011	1615	Male	550	Present	Unknown	Non-Fresh	1	18	
11/3/2011	1616	Male	600	Present	Unknown	Non-Fresh	1	18	
11/3/2011	1617	Female	805	Present	Spawned	Non-Fresh	1	18	
11/3/2011	1618	Male	570	Present	Unknown	Non-Fresh	1	18	
11/3/2011	1619	Male	670	Present	Unknown	Fresh	1	18	
11/3/2011	1620	Male	590	Present	Unknown	Non-Fresh	1	18	
11/3/2011	1621	Male	620	Present	Unknown	Non-Fresh	1	18	
11/3/2011	1622	Male	630	Present	Unknown	Fresh	1	18	
11/3/2011	1623	Male	640	Present	Unknown	Non-Fresh	1	18	
11/3/2011	1624	Male	630	Present	Unknown	Non-Fresh	1	18	
11/3/2011	1625	Male	830	Absent	Unknown	Non-Fresh	1	17	054471
11/3/2011	1626	Female	750	Present	Spawned	Fresh	1	17	
11/3/2011	1627	Male	880	Present	Unknown	Non-Fresh	1	17	
11/3/2011	1628	Female	870	Present	Spawned	Fresh	1	17	
11/3/2011	1629	Male	520	Present	Unknown	Non-Fresh	1	17	
11/3/2011	1630	Female	560	Present	Spawned	Non-Fresh	1	17	
11/3/2011	1631	Male	530	Absent	Unknown	Fresh	1	17	068675
11/3/2011	1632	Male	590	Present	Unknown	Non-Fresh	1	17	
11/3/2011	1633	Male	550	Absent	Unknown	Fresh	1	16	055184
11/3/2011	1634	Male	630	Present	Unknown	Non-Fresh	1	16	
11/3/2011	1635	Female	600	Present	Spawned	Non-Fresh	1	16	
11/3/2011	1636	Male	630	Present	Unknown	Non-Fresh	1	16	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/3/2011	1637	Male	670	Present	Unknown	Non-Fresh	1	15	
11/3/2011	1638	Female	850	Present	Spawned	Non-Fresh	1	15	
11/3/2011	1639	Male	590	Present	Unknown	Non-Fresh	1	15	
11/3/2011	1640	Male	570	Present	Unknown	Non-Fresh	1	15	
11/3/2011	1641	Male	850	Present	Unknown	Non-Fresh	1	15	
11/3/2011	1642	Male	550	Absent	Unknown	Non-Fresh	1	14	055185
11/3/2011	1643	Male	590	Present	Unknown	Non-Fresh	1	14	
11/8/2011	1644	Female	840	Present	Spawned	Non-Fresh	3	6	
11/8/2011	1645	Female	830	Present	Spawned	Non-Fresh	3	6	
11/8/2011	1646	Male	630	Present	Unknown	Non-Fresh	3	6	
11/8/2011	1647	Male	570	Present	Unknown	Fresh	3	6	
11/8/2011	1648	Male	630	Present	Unknown	Non-Fresh	3	6	
11/8/2011	1649	Male	630	Present	Unknown	Non-Fresh	3	6	
11/8/2011	1650	Male	570	Present	Unknown	Non-Fresh	3	6	
11/8/2011	1651	Male	630	Present	Unknown	Fresh	3	6	
11/8/2011	1652	Male	910	Present	Unknown	Fresh	3	6	
11/8/2011	1653	Female	610	Present	Spawned	Fresh	3	6	
11/8/2011	1654	Male	890	Present	Unknown	Non-Fresh	3	6	
11/8/2011	1655	Male	630	Present	Unknown	Non-Fresh	3	5	
11/8/2011	1656	Male	830	Present	Unknown	Fresh	3	5	
11/8/2011	1657	Female	800	Present	Spawned	Non-Fresh	3	5	
11/8/2011	1658	Male	650	Absent	Unknown	Non-Fresh	3	5	055192
11/8/2011	1659	Male	630	Present	Unknown	Non-Fresh	3	5	
11/8/2011	1660	Male	700	Absent	Unknown	Fresh	3	4	055190
11/8/2011	1661	Male	1010	Present	Unknown	Non-Fresh	3	4	
11/8/2011	1662	Male	580	Present	Unknown	Fresh	3	3	
11/8/2011	1663	Male	630	Present	Unknown	Non-Fresh	3	3	
11/8/2011	1664	Male	620	Present	Unknown	Non-Fresh	3	3	
11/8/2011	1665	Male	630	Present	Unknown	Non-Fresh	3	3	
11/8/2011	1666	Male	560	Present	Unknown	Fresh	3	3	
11/8/2011	1667	Male	590	Present	Unknown	Fresh	3	3	
11/8/2011	1668	Male	650	Present	Unknown	Fresh	3	3	
11/8/2011	1669	Male	890	Present	Unknown	Fresh	3	3	
11/8/2011	1670	Male	840	Absent	Unknown	Fresh	3	2	054896
11/8/2011	1671	Male	860	Absent	Unknown	Non-Fresh	3	2	055197
11/8/2011	1672	Male	860	Unknown	Unknown	Non-Fresh	3	2	NTD
11/8/2011	1673	Male	930	Present	Unknown	Non-Fresh	3	2	
11/8/2011	1674	Male	570	Absent	Unknown	Non-Fresh	3	1	055188
11/8/2011	1675	Male	660	Present	Unknown	Non-Fresh	3	0	
11/8/2011	1676	Male	620	Present	Unknown	Non-Fresh	3	0	
11/8/2011	1677	Male	1000	Present	Unknown	Fresh	3	0	
11/8/2011	1678	Male	570	Present	Unknown	Fresh	3	0	
11/8/2011	1679	Male	580	Present	Unknown	Fresh	3	0	
11/9/2011		Male	580	Present	Unknown	Non-Fresh	2	8	
11/9/2011		Male	660	Present	Unknown	Non-Fresh	2	8	
11/9/2011		Female	790	Present	Spawned	Fresh	2	8	
11/9/2011		Female	840	Present	Spawned	Fresh	2	9	
11/9/2011		Female	850	Present	Spawned	Non-Fresh	2	9	
11/9/2011		Female	830	Present	Spawned	Fresh	2	8	
11/9/2011		Male	640	Present	Unknown	Fresh	2	8	
11/9/2011		Male	630	Present	Unknown	Non-Fresh	2	9	
11/9/2011	1518	Male	590	Present	Unknown	Non-Fresh	1	18	
11/9/2011	1519	Female	850	Present	Spawned	Fresh	1	18	
11/9/2011	1520	Male	650	Absent	Unknown	Fresh	1	18	055184
11/9/2011	1521	Male	580	Present	Unknown	Non-Fresh	1	18	
11/9/2011	1522	Male	900	Present	Unknown	Fresh	1	17	
11/9/2011	1523	Male	580	Present	Unknown	Non-Fresh	1	17	
11/9/2011	1524	Male	630	Present	Unknown	Non-Fresh	1	17	
11/9/2011	1525	Male	600	Present	Unknown	Non-Fresh	1	16	
11/9/2011	1526	Male	630	Present	Unknown	Non-Fresh	1	16	
11/9/2011	1527	Male	640	Present	Unknown	Non-Fresh	1	15	
11/9/2011	1528	Male	940	Present	Unknown	Fresh	1	15	
11/9/2011	1529	Male	630	Present	Unknown	Non-Fresh	1	15	
11/9/2011	1530	Male	600	Present	Unknown	Fresh	1	15	
11/9/2011	1531	Male	640	Present	Unknown	Non-Fresh	1	15	
11/9/2011	1532	Male	620	Present	Unknown	Non-Fresh	1	15	
11/9/2011	1533	Female	890	Present	Spawned	Non-Fresh	1	15	
11/9/2011	1534	Female	800	Present	Spawned	Non-Fresh	1	14	
11/9/2011	1680	Female	780	Present	Spawned	Fresh	2	14	
11/9/2011	1681	Male	560	Present	Unknown	Non-Fresh	2	14	
11/9/2011	1682	Male	940	Present	Unknown	Fresh	2	13	
11/9/2011	1683	Male	0	Unknown	Unknown	Non-Fresh	2	13	068649
11/9/2011	1684	Male	630	Present	Unknown	Fresh	2	13	
11/9/2011	1685	Female	610	Present	Spawned	Fresh	2	13	
11/9/2011	1686	Male	650	Absent	Unknown	Non-Fresh	2	13	068670
11/9/2011	1687	Male	560	Present	Unknown	Non-Fresh	2	13	
11/9/2011	1688	Female	800	Present	Spawned	Fresh	2	12	
11/9/2011	1689	Male	560	Present	Unknown	Non-Fresh	2	12	
11/9/2011	1690	Male	630	Present	Unknown	Fresh	2	12	
11/9/2011	1691	Female	560	Present	Spawned	Fresh	2	12	
11/9/2011	1692	Male	680	Present	Unknown	Non-Fresh	2	12	
11/9/2011	1693	Female	640	Present	Spawned	Non-Fresh	2	12	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/9/2011	1694	Male	570	Present	Unknown	Fresh	2	11	
11/9/2011	1695	Male	560	Present	Unknown	Non-Fresh	2	11	
11/9/2011	1696	Male	690	Present	Unknown	Non-Fresh	2	11	
11/9/2011	1697	Female	830	Absent	Spawned	Fresh	2	11	054886
11/9/2011	1698	Male	600	Present	Unknown	Non-Fresh	2	11	
11/9/2011	1699	Female	800	Present	Spawned	Fresh	2	11	
11/9/2011	1700	Male	550	Absent	Unknown	Non-Fresh	2	11	055184
11/9/2011	1701	Male	650	Present	Unknown	Fresh	2	11	
11/9/2011	1702	Male	610	Present	Unknown	Fresh	2	10	
11/9/2011	1703	Male	890	Present	Unknown	Fresh	2	10	
11/9/2011	1704	Male	580	Absent	Unknown	Non-Fresh	2	10	055191
11/9/2011	1705	Male	870	Present	Unknown	Non-Fresh	2	10	
11/9/2011	1706	Male	550	Unknown	Unknown	Non-Fresh	2	10	NTD
11/9/2011	1707	Female	870	Present	Spawned	Fresh	2	10	
11/9/2011	1708	Female	770	Present	Spawned	Fresh	2	10	
11/9/2011	1709	Male	750	Present	Unknown	Non-Fresh	2	10	
11/9/2011	1710	Male	580	Absent	Unknown	Non-Fresh	2	10	068672
11/9/2011	1711	Female	770	Present	Spawned	Fresh	2	10	
11/9/2011	1712	Female	830	Present	Spawned	Fresh	2	10	
11/9/2011	1713	Female	770	Present	Spawned	Fresh	2	10	
11/9/2011	1714	Male	680	Present	Unknown	Non-Fresh	2	10	
11/9/2011	1715	Male	670	Present	Unknown	Fresh	2	10	
11/9/2011	1716	Female	800	Present	Spawned	Non-Fresh	2	9	
11/9/2011	1717	Female	780	Present	Spawned	Non-Fresh	2	9	
11/9/2011	1718	Female	850	Present	Spawned	Fresh	2	9	
11/9/2011	1719	Female	800	Present	Spawned	Fresh	2	9	
11/9/2011	1720	Female	580	Present	Spawned	Non-Fresh	2	9	
11/9/2011	1721	Male	860	Present	Unknown	Fresh	2	9	
11/9/2011	1722	Male	830	Present	Unknown	Fresh	2	9	
11/9/2011	1723	Female	840	Present	Spawned	Fresh	2	9	
11/9/2011	1724	Female	710	Present	Spawned	Fresh	2	9	
11/9/2011	1725	Female	780	Absent	Spawned	Fresh	2	9	068650
11/9/2011	1726	Female	900	Absent	Spawned	Fresh	2	9	054871
11/9/2011	1727	Male	670	Absent	Unknown	Fresh	2	9	068672
11/9/2011	1728	Female	810	Present	Spawned	Fresh	2	9	
11/9/2011	1729	Male	600	Absent	Unknown	Fresh	2	9	055185
11/9/2011	1730	Female	800	Present	Spawned	Fresh	2	8	
11/9/2011	1731	Male	580	Absent	Unknown	Non-Fresh	2	7	055187
11/9/2011	1732	Male	860	Absent	Unknown	Non-Fresh	2	7	054873
11/9/2011	1733	Male	610	Absent	Unknown	Non-Fresh	2	6	055198
11/16/2011	1734	Male	630	Present	Unknown	Non-Fresh	3	6	
11/16/2011	1735	Male	640	Present	Unknown	Non-Fresh	3	6	
11/16/2011	1736	Male	670	Absent	Unknown	Non-Fresh	3	6	055193
11/16/2011	1737	Female	840	Absent	Spawned	Non-Fresh	3	6	068650
11/16/2011	1738	Female	780	Present	Spawned	Non-Fresh	3	6	
11/16/2011	1739	Female	620	Present	Spawned	Non-Fresh	3	6	
11/16/2011	1740	Male	580	Present	Unknown	Non-Fresh	3	6	
11/16/2011	1741	Female	780	Present	Spawned	Non-Fresh	3	6	
11/16/2011	1742	Male	520	Absent	Unknown	Non-Fresh	3	6	055226
11/16/2011	1743	Male	620	Present	Unknown	Non-Fresh	3	6	
11/16/2011	1744	Male	680	Present	Unknown	Non-Fresh	3	4	
11/16/2011	1745	Male	680	Present	Unknown	Non-Fresh	3	4	
11/16/2011	1746	Female	800	Present	Unspawned	Fresh	3	3	
11/16/2011	1747	Male	670	Present	Unknown	Non-Fresh	3	3	
11/16/2011	1748	Male	650	Absent	Unknown	Fresh	3	3	No head
11/16/2011	1749	Male	630	Absent	Unknown	Non-Fresh	3	3	055197
11/16/2011	1750	Male	640	Present	Unknown	Non-Fresh	3	2	
11/16/2011	1851	Male	570	Absent	Unknown	Non-Fresh	3	2	055222
11/16/2011	1852	Male	500	Present	Unknown	Non-Fresh	3	2	
11/16/2011	1853	Male	620	Present	Unknown	Non-Fresh	3	1	
11/16/2011	1854	Male	600	Absent	Unknown	Non-Fresh	3	1	Lost
11/16/2011	1855	Male	640	Present	Unknown	Non-Fresh	3	1	
11/16/2011	1856	Female	800	Absent	Spawned	Non-Fresh	3	1	054890
11/16/2011	1857	Male	650	Present	Unknown	Non-Fresh	3	1	
11/16/2011	1858	Male	570	Present	Unknown	Non-Fresh	3	0	
11/16/2011	1859	Male	590	Present	Unknown	Non-Fresh	3	0	
11/17/2011		Male	600	Present	Unknown	Non-Fresh	2	6	
11/17/2011		Male	580	Present	Unknown	Fresh	2	6	
11/17/2011		Male	630	Present	Unknown	Non-Fresh	2	7	
11/17/2011		Male	580	Present	Unknown	Non-Fresh	2	7	
11/17/2011		Female	750	Present	Spawned	Non-Fresh	2	8	
11/17/2011		Male	560	Present	Unknown	Non-Fresh	2	7	
11/17/2011		Male	490	Present	Unknown	Non-Fresh	2	8	
11/17/2011		Female	810	Present	Spawned	Non-Fresh	2	9	
11/17/2011		Female	870	Present	Spawned	Non-Fresh	2	8	
11/17/2011		Male	950	Present	Unknown	Fresh	2	8	
11/17/2011		Female	800	Present	Spawned	Non-Fresh	2	8	
11/17/2011		Male	640	Present	Unknown	Non-Fresh	2	8	
11/17/2011		Male	500	Present	Unknown	Non-Fresh	2	8	
11/17/2011		Male	570	Present	Unknown	Non-Fresh	2	9	
11/17/2011		Male	640	Present	Unknown	Non-Fresh	2	8	
11/17/2011		Male	640	Present	Unknown	Non-Fresh	2	9	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/17/2011		Male	590	Present	Unknown	Non-Fresh	2	7	
11/17/2011		Female	830	Present	Spawned	Fresh	2	9	
11/17/2011		Male	620	Present	Unknown	Non-Fresh	2	9	
11/17/2011		Male	600	Present	Unknown	Fresh	2	9	
11/17/2011		Female	830	Present	Spawned	Non-Fresh	2	9	
11/17/2011		Male	620	Present	Unknown	Fresh	2	9	
11/17/2011		Unknown	880	Present	Unknown	Non-Fresh	2	9	
11/17/2011		Male	680	Present	Unknown	Non-Fresh	2	7	
11/17/2011		Female	660	Present	Spawned	Fresh	2	7	
11/17/2011		Male	660	Present	Unknown	Non-Fresh	2	7	
11/17/2011		Female	850	Present	Spawned	Fresh	2	7	
11/17/2011		Female	730	Present	Spawned	Non-Fresh	2	7	
11/17/2011		Male	580	Present	Unknown	Non-Fresh	2	7	
11/17/2011		Male	480	Present	Unknown	Non-Fresh	2	7	
11/17/2011	1535	Male	825	Present	Unknown	Non-Fresh	1	19	
11/17/2011	1536	Male	600	Present	Unknown	Non-Fresh	1	18	
11/17/2011	1537	Female	775	Present	Spawned	Non-Fresh	1	18	
11/17/2011	1538	Male	610	Present	Unknown	Non-Fresh	1	18	
11/17/2011	1539	Male	1035	Present	Unknown	Non-Fresh	1	18	
11/17/2011	1540	Female	650	Present	Spawned	Non-Fresh	1	17	
11/17/2011	1541	Female	650	Present	Spawned	Non-Fresh	1	17	
11/17/2011	1542	Male	650	Absent	Unknown	Non-Fresh	1	16	055221
11/17/2011	1543	Female	800	Present	Spawned	Fresh	1	16	
11/17/2011	1544	Male	590	Present	Unknown	Non-Fresh	1	16	
11/17/2011	1545	Female	630	Present	Spawned	Fresh	1	16	
11/17/2011	1546	Female	540	Present	Spawned	Non-Fresh	1	16	
11/17/2011	1547	Female	840	Present	Spawned	Non-Fresh	1	16	
11/17/2011	1548	Male	930	Present	Unknown	Non-Fresh	1	16	
11/17/2011	1549	Male	610	Unknown	Unknown	Non-Fresh	1	15	NTD
11/17/2011	1550	Male	600	Present	Unknown	Fresh	1	15	
11/17/2011	1551	Male	885	Present	Unknown	Non-Fresh	1	15	
11/17/2011	1552	Male	650	Present	Unknown	Non-Fresh	1	15	
11/17/2011	1553	Male	650	Present	Unknown	Non-Fresh	1	15	
11/17/2011	1554	Female	910	Present	Spawned	Non-Fresh	1	14	
11/17/2011	1555	Male	640	Present	Unknown	Non-Fresh	1	14	
11/17/2011	1556	Female	780	Present	Spawned	Non-Fresh	1	14	
11/17/2011	1557	Male	678	Absent	Unknown	Non-Fresh	1	14	055197
11/17/2011	1558	Male	835	Present	Unknown	Non-Fresh	1	14	
11/17/2011	1559	Male	650	Present	Unknown	Non-Fresh	1	14	
11/17/2011	1560	Female	640	Present	Spawned	Fresh	1	14	
11/17/2011	1561	Female	850	Present	Spawned	Fresh	1	14	
11/17/2011	1860	Male	740	Present	Unknown	Non-Fresh	2	14	
11/17/2011	1861	Male	580	Present	Unknown	Non-Fresh	2	13	
11/17/2011	1862	Male	620	Present	Unknown	Fresh	2	13	
11/17/2011	1863	Male	600	Present	Unknown	Non-Fresh	2	13	
11/17/2011	1864	Male	630	Present	Unknown	Fresh	2	13	
11/17/2011	1865	Male	800	Present	Unknown	Non-Fresh	2	13	
11/17/2011	1866	Female	800	Present	Spawned	Non-Fresh	2	11	
11/17/2011	1867	Female	860	Present	Spawned	Non-Fresh	2	11	
11/17/2011	1868	Female	790	Present	Spawned	Non-Fresh	2	11	
11/17/2011	1869	Female	850	Present	Spawned	Fresh	2	11	
11/17/2011	1870	Female	850	Present	Spawned	Non-Fresh	2	11	
11/17/2011	1871	Male	640	Present	Unknown	Non-Fresh	2	11	
11/17/2011	1872	Male	610	Absent	Unknown	Non-Fresh	2	11	055199
11/17/2011	1873	Male	730	Present	Unknown	Non-Fresh	2	11	
11/17/2011	1874	Male	610	Present	Unknown	Non-Fresh	2	11	
11/17/2011	1875	Female	710	Present	Spawned	Non-Fresh	2	11	
11/17/2011	1876	Male	680	Present	Unknown	Non-Fresh	2	11	
11/17/2011	1877	Male	550	Present	Unknown	Non-Fresh	2	11	
11/17/2011	1878	Male	660	Present	Unknown	Non-Fresh	2	11	
11/17/2011	1879	Male	620	Present	Unknown	Non-Fresh	2	11	
11/17/2011	1880	Female	590	Present	Spawned	Non-Fresh	2	11	
11/17/2011	1881	Male	780	Present	Unknown	Non-Fresh	2	11	
11/17/2011	1882	Male	580	Present	Unknown	Non-Fresh	2	10	
11/17/2011	1883	Male	580	Present	Unknown	Non-Fresh	2	10	
11/17/2011	1884	Male	940	Present	Unknown	Fresh	2	10	
11/17/2011	1885	Female	770	Present	Spawned	Fresh	2	10	
11/17/2011	1886	Male	570	Present	Unknown	Non-Fresh	2	10	
11/17/2011	1887	Female	850	Present	Spawned	Fresh	2	10	
11/17/2011	1888	Female	610	Present	Spawned	Non-Fresh	2	10	
11/17/2011	1889	Female	600	Present	Spawned	Fresh	2	10	
11/17/2011	1890	Male	850	Present	Unknown	Non-Fresh	2	10	
11/17/2011	1891	Male	670	Present	Unknown	Fresh	2	10	
11/17/2011	1892	Male	630	Absent	Unknown	Fresh	2	10	055190
11/17/2011	1893	Male	650	Present	Unknown	Fresh	2	10	
11/17/2011	1894	Female	800	Present	Spawned	Fresh	2	10	
11/17/2011	1895	Male	560	Present	Unknown	Non-Fresh	2	10	
11/17/2011	1896	Female	790	Present	Spawned	Non-Fresh	2	10	
11/17/2011	1897	Male	920	Present	Unknown	Non-Fresh	2	10	
11/17/2011	1898	Male	660	Present	Unknown	Non-Fresh	2	10	
11/17/2011	1899	Male	600	Present	Unknown	Non-Fresh	2	9	
11/17/2011	1900	Female	780	Present	Spawned	Non-Fresh	2	9	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/17/2011	1901	Female	790	Present	Spawnd	Fresh	2	9	
11/17/2011	1902	Female	860	Present	Spawnd	Non-Fresh	2	9	
11/17/2011	1903	Male	630	Present	Unknown	Non-Fresh	2	9	
11/17/2011	1904	Male	600	Present	Unknown	Fresh	2	9	
11/17/2011	1905	Male	600	Present	Unknown	Non-Fresh	2	9	
11/17/2011	1906	Male	850	Present	Unknown	Non-Fresh	2	8	
11/17/2011	1907	Male	610	Absent	Unknown	Non-Fresh	2	8	055191
11/17/2011	1908	Male	560	Absent	Unknown	Non-Fresh	2	8	055225
11/17/2011	1909	Female	860	Present	Spawnd	Fresh	2	8	
11/17/2011	1910	Male	600	Absent	Unknown	Non-Fresh	2	8	055191
11/17/2011	1911	Female	790	Present	Spawnd	Non-Fresh	2	7	
11/17/2011	1912	Male	640	Present	Unknown	Non-Fresh	2	7	
11/17/2011	1913	Male	860	Present	Unknown	Non-Fresh	2	7	
11/17/2011	1914	Male	570	Absent	Unknown	Fresh	2	6	055190
11/22/2011	1562	Male	710	Present	Unknown	Non-Fresh	3	6	
11/22/2011	1563	Female	890	Unknown	Spawnd	Non-Fresh	3	6	NTD
11/22/2011	1564	Female	790	Present	Spawnd	Non-Fresh	3	6	
11/22/2011	1565	Male	660	Present	Unknown	Non-Fresh	3	6	
11/22/2011	1566	Female	800	Present	Spawnd	Non-Fresh	3	6	
11/22/2011	1567	Female	650	Present	Spawnd	Fresh	3	6	
11/22/2011	1568	Male	650	Unknown	Unknown	Non-Fresh	3	6	055192
11/22/2011	1569	Male	640	Present	Unknown	Non-Fresh	3	5	
11/22/2011	1570	Male	660	Present	Unknown	Non-Fresh	3	5	
11/22/2011	1571	Male	540	Present	Unknown	Non-Fresh	3	3	
11/22/2011	1572	Male	600	Present	Unknown	Non-Fresh	3	3	
11/22/2011	1573	Male	590	Present	Unknown	Non-Fresh	3	1	
11/22/2011	1574	Male	620	Present	Unknown	Fresh	3	1	
11/22/2011	1575	Male	620	Present	Unknown	Non-Fresh	3	16	
11/22/2011	1576	Male	690	Present	Unknown	Fresh	3	0	
11/22/2011	2094	Female	800	Present	Spawnd	Fresh	2	14	
11/22/2011	2095	Male	840	Present	Unknown	Non-Fresh	2	13	
11/22/2011	2096	Female	840	Present	Spawnd	Non-Fresh	2	13	
11/22/2011	2097	Male	700	Present	Unknown	Fresh	2	13	
11/22/2011	2098	Male	585	Absent	Unknown	Fresh	2	12	055199
11/22/2011	2099	Male	620	Present	Unknown	Non-Fresh	2	12	
11/22/2011	2100	Male	510	Present	Unknown	Non-Fresh	2	11	
11/22/2011	2101	Female	880	Present	Spawnd	Non-Fresh	2	11	
11/22/2011	2102	Male	590	Present	Unknown	Non-Fresh	2	11	
11/22/2011	2103	Male	630	Present	Unknown	Non-Fresh	2	10	
11/22/2011	2104	Female	690	Present	Spawnd	Non-Fresh	2	10	
11/22/2011	2105	Female	840	Present	Spawnd	Fresh	2	10	
11/22/2011	2106	Male	660	Present	Unknown	Non-Fresh	2	10	
11/22/2011	2107	Male	590	Present	Unknown	Non-Fresh	2	9	
11/22/2011	2108	Male	570	Present	Unknown	Non-Fresh	2	9	
11/22/2011	2109	Female	830	Present	Spawnd	Fresh	2	9	
11/22/2011	2110	Male	580	Absent	Unknown	Fresh	2	9	055183
11/22/2011	2111	Male	1000	Present	Unknown	Non-Fresh	2	9	
11/22/2011	2112	Female	860	Present	Spawnd	Fresh	2	9	
11/22/2011	2113	Female	850	Present	Spawnd	Fresh	2	9	
11/22/2011	2114	Male	550	Present	Unknown	Fresh	2	9	
11/22/2011	2115	Female	920	Present	Spawnd	Non-Fresh	2	8	
11/22/2011	2116	Male	540	Present	Unknown	Non-Fresh	2	8	
11/22/2011	2117	Female	790	Present	Spawnd	Non-Fresh	2	8	
11/22/2011	2118	Male	890	Present	Unknown	Non-Fresh	2	8	
11/22/2011	2119	Male	590	Present	Unknown	Non-Fresh	2	8	
11/22/2011	2120	Female	590	Present	Spawnd	Fresh	2	8	
11/22/2011	2121	Male	630	Present	Unknown	Non-Fresh	2	8	
11/22/2011	2122	Male	660	Present	Unknown	Non-Fresh	2	7	
11/22/2011	2123	Male	650	Present	Unknown	Non-Fresh	2	7	
11/22/2011	2124	Female	860	Present	Spawnd	Non-Fresh	2	7	
11/22/2011	2125	Male	600	Present	Unknown	Non-Fresh	2	7	
11/22/2011	2126	Male	630	Present	Unknown	Fresh	2	7	
11/22/2011	2127	Male	600	Absent	Unknown	Non-Fresh	2	7	055223
11/23/2011	2128	Male	600	Absent	Unknown	Non-Fresh	1	17	055198
11/23/2011	2129	Female	780	Present	Spawnd	Fresh	1	16	
11/30/2011	1577	Female	800	Present	Spawnd	Fresh	3	6	
12/1/2011	1578	Male	1040	Present	Unknown	Non-Fresh	2	13	
12/1/2011	1579	Female	880	Present	Spawnd	Non-Fresh	2	13	
12/1/2011	1580	Female	780	Present	Spawnd	Non-Fresh	2	11	
12/1/2011	2015	Male	640	Present	Unknown	Non-Fresh	2	9	
12/1/2011	2016	Female	800	Present	Spawnd	Non-Fresh	2	8	
12/1/2011	2130	Male	650	Present	Unknown	Non-Fresh	1	16	
12/1/2011	2131	Male	650	Present	Unknown	Non-Fresh	1	15	
12/1/2011	2132	Female	760	Present	Spawnd	Non-Fresh	1	15	
12/8/2011	2017	Female	790	Present	Spawnd	Non-Fresh	2	10	
12/8/2011	2018	Male	580	Present	Unknown	Non-Fresh	2	8	
12/8/2011	2020	Male	0	Unknown	Unknown	Non-Fresh	2	8	055221
12/9/2011	2021	Male	550	Absent	Unknown	Non-Fresh	1	17	068672
12/15/2011	2023	Male	680	Present	Unknown	Non-Fresh	2	10	
10/9/2012	1591	Male	830	Present	Unknown	Fresh	1	3	
10/16/2012	1701	Male	890	Present	Unknown	Fresh	2	11	
10/16/2012	1702	Male	740	Unknown	Unknown	Very Non-Fresh	2	10	NTD

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/16/2012	1703	Male	820	Present	Unknown	Fresh	2	8	
10/16/2012	1704	Female	620	Present	Spawnd	Fresh	2	7	
10/17/2012	1705	Female	690	Present	Spawnd	Fresh	3	5	
10/17/2012	1706	Male	820	Present	Unknown	Fresh	3	4	
10/17/2012	1707	Male	900	Present	Unknown	Fresh	3	3	
10/17/2012	1708	Male	930	Present	Unknown	Fresh	3	3	
10/17/2012	1709	Male	680	Present	Unknown	Fresh	3	3	
10/17/2012	1710	Male	640	Present	Unknown	Fresh	3	0	
10/23/2012		Male	930	Present	Unknown	Non-Fresh	3	6	
10/23/2012	1592	Female	810	Present	Spawnd	fresh	3	5	
10/23/2012	1593	Male	860	Absent	Unknown	Non-Fresh	3	5	055187
10/23/2012	1594	Male	540	Absent	Unknown	fresh	3	5	055382
10/23/2012		Male	830	Present	Unknown	Non-Fresh	3	5	
10/23/2012	1595	Female	800	Present	Spawnd	fresh	3	4	
10/23/2012	1596	Female	730	Absent	Spawnd	fresh	3	4	068624
10/23/2012	1597	Male	560	Present	Unknown	fresh	3	4	
10/23/2012	1598	Female	820	Absent	Spawnd	fresh	3	3	068671
10/23/2012	1599	Male	930	Present	Unknown	fresh	3	3	
10/23/2012	1600	Female	690	Absent	Spawnd	fresh	3	3	055191
10/23/2012	1601	Male	890	Present	Unknown	fresh	3	3	
10/23/2012	1602	Female	830	Present	Spawnd	fresh	3	3	
10/23/2012	1603	Female	800	Present	Spawnd	Non-Fresh	3	3	
10/23/2012	1604	Female	740	Present	Spawnd	fresh	3	3	
10/23/2012	1605	Female	740	Present	Spawnd	fresh	3	3	
10/23/2012		Male	920	Present	Unknown	Non-Fresh	3	3	
10/23/2012		Male	640	Present	Unknown	Non-Fresh	3	3	
10/23/2012		Male	950	Present	Unknown	Non-Fresh	3	3	
10/23/2012		Female	800	Present	Spawnd	Non-Fresh	3	3	
10/23/2012		Male	850	Present	Unknown	Non-Fresh	3	3	
10/23/2012		Male	750	Present	Unknown	Non-Fresh	3	3	
10/23/2012		Female	820	Present	Spawnd	Non-Fresh	3	3	
10/23/2012	1606	Female	720	Unknown	Unspawnd	Non-Fresh	3	2	NTD
10/23/2012	1607	Male	930	Present	Unknown	fresh	3	2	
10/23/2012	1608	Female	710	Present	Unspawnd	fresh	3	2	
10/23/2012	1609	Female	730	Present	Spawnd	fresh	3	2	
10/23/2012	1610	Female	840	Present	Spawnd	fresh	3	2	
10/23/2012		Male	850	Present	Unknown	Non-Fresh	3	2	
10/23/2012		Female	780	Present	Spawnd	Non-Fresh	3	2	
10/23/2012	1611	Female	840	Present	Spawnd	fresh	3	1	
10/23/2012	1612	Male	950	Present	Unknown	fresh	3	0	
10/23/2012	1613	Male	570	Absent	Unknown	fresh	3	0	055392
10/23/2012	1614	Female	780	Absent	Spawnd	fresh	3	0	055189
10/23/2012	1615	Male	580	Present	Unknown	fresh	3	0	
10/23/2012	1616	Male	850	Present	Unknown	fresh	3	0	
10/23/2012		Male	650	Present	Unknown	Non-Fresh	3	0	
10/24/2012	1617	Female	590	Present	Spawnd	Fresh	2	11	
10/24/2012	1618	Male	820	Present	Unknown	Fresh	2	11	
10/24/2012	1619	Female	730	Present	Spawnd	Fresh	2	11	
10/24/2012	1620	Male	570	Absent	Unknown	Fresh	2	10	068751
10/24/2012	1621	Male	800	Present	Unknown	Fresh	2	10	
10/24/2012	1622	Female	750	Present	Spawnd	Fresh	2	10	
10/24/2012	1623	Male	760	Present	Unknown	Fresh	2	10	
10/24/2012	1624	Male	880	Present	Unknown	Fresh	2	10	
10/24/2012		Male	870	Present	Unknown	Very Non-Fresh	2	10	
10/24/2012		Female	780	Present	Spawnd	Non-Fresh	2	10	
10/24/2012		Male	870	Present	Unknown	Non-Fresh	2	10	
10/24/2012		Male	900	Present	Unknown	Non-Fresh	1	10	
10/24/2012	1625	Male	860	Present	Unknown	Fresh	2	9	
10/24/2012	1626	Female	760	Present	Spawnd	Fresh	2	9	
10/24/2012	1627	Male	860	Absent	Unknown	Fresh	2	9	068672
10/24/2012	1628	Female	840	Present	Spawnd	Fresh	2	9	
10/24/2012	1629	Male	920	Present	Unknown	Fresh	2	9	
10/24/2012	1630	Male	900	Present	Unknown	Fresh	2	9	
10/24/2012	1631	Male	900	Present	Unknown	Fresh	2	9	
10/24/2012	1632	Male	810	Present	Unknown	Fresh	2	9	
10/24/2012	1633	Female	860	Present	Spawnd	fresh	2	9	
10/24/2012	1634	Female	780	Present	Spawnd	Fresh	2	9	
10/24/2012	1635	Male	620	Present	Unknown	Fresh	2	9	
10/24/2012	1636	Female	670	Present	Spawnd	Fresh	2	9	
10/24/2012		Male	790	Present	Unknown	Non-Fresh	2	9	
10/24/2012		Female	840	Present	Spawnd	Non-Fresh	2	9	
10/24/2012		Female	800	Present	Spawnd	Non-Fresh	2	9	
10/24/2012		Female	790	Present	Spawnd	Very Non-Fresh	2	9	
10/24/2012		Female	740	Present	Spawnd	Very Non-Fresh	2	9	
10/24/2012		Male	850	Present	Unknown	Non-Fresh	2	9	
10/24/2012		Female	720	Present	Spawnd	Non-Fresh	2	9	
10/24/2012	1637	Male	820	Present	Unknown	Fresh	2	8	
10/24/2012	1638	Male	980	Present	Unknown	Fresh	2	8	
10/24/2012	1639	Male	860	Present	Unknown	fresh	2	8	
10/24/2012		Male	1000	Present	Unknown	Non-Fresh	2	8	
10/24/2012		Male	800	Present	Unknown	Non-Fresh	2	8	
10/24/2012		Female	790	Present	Spawnd	Very Non-Fresh	2	8	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/24/2012		Male	870	Present	Unknown	Non-Fresh	2	8	
10/24/2012		Female	790	Present	Spawned	Non-Fresh	2	8	
10/24/2012	1640	Female	850	Present	Unspawned	fresh	2	7	
10/24/2012	1641	Female	820	Present	Spawned	fresh	2	7	
10/24/2012	1642	Male	900	Present	Unknown	fresh	2	7	
10/24/2012	1643	Female	750	Present	Spawned	fresh	2	7	
10/24/2012	1644	Male	780	Absent	Unknown	Very Non-Fresh	2	7	055183
10/24/2012	1645	Female	800	Present	Spawned	fresh	2	7	
10/24/2012		Female	770	Present	Spawned	Non-Fresh	2	7	
10/24/2012		Female	720	Present	Spawned	Non-Fresh	2	7	
10/24/2012		Male	900	Present	Unknown	Non-Fresh	2	7	
10/24/2012		Female	790	Present	Spawned	Non-Fresh	2	7	
10/24/2012		Female	820	Present	Spawned	Non-Fresh	2	7	
10/24/2012		Male	560	Present	Unknown	Non-Fresh	2	7	
10/24/2012		Male	880	Present	Unknown	Very Non-Fresh	2	7	
10/24/2012		Male	800	Present	Unknown	Non-Fresh	2	7	
10/24/2012		Male	850	Present	Unknown	Non-Fresh	2	7	
10/24/2012		Male	780	Present	Unknown	Non-Fresh	2	7	
10/24/2012		Male	880	Present	Unknown	Non-Fresh	2	7	
10/24/2012		Male	950	Present	Unknown	Very Non-Fresh	2	7	
10/24/2012	1646	Male	610	Present	Unknown	fresh	2	6	
10/24/2012		Female	700	Present	Spawned	Non-Fresh	2	6	
10/24/2012		Female	800	Present	Spawned	Non-Fresh	2	6	
10/24/2012		Male	870	Present	Unknown	Non-Fresh	2	6	
10/24/2012		Female	800	Present	Spawned	Non-Fresh	2	6	
10/30/2012	1647	Female	700	Present	Spawned	Fresh	3	6	
10/30/2012	1648	Female	820	Present	Spawned	Fresh	3	6	
10/30/2012	1649	Female	730	Absent	Spawned	Very Non-Fresh	3	6	068624
10/30/2012	1650	Male	810	Absent	Unknown	Fresh	3	6	068672
10/30/2012	1651	Female	700	Present	Spawned	Fresh	3	6	
10/30/2012	1652	Female	740	Present	Spawned	Fresh	3	6	
10/30/2012	1653	Male	1010	Present	Unknown	Fresh	3	6	
10/30/2012	1654	Female	760	Present	Spawned	Fresh	3	6	
10/30/2012	1655	Female	730	Present	Spawned	Fresh	3	6	
10/30/2012		Male	810	Present	Unknown	Very Non-Fresh	3	6	
10/30/2012		Female	750	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Male	570	Present	Unknown	Non-Fresh	3	6	
10/30/2012		Male	890	Present	Unknown	Non-Fresh	3	6	
10/30/2012		Female	780	Present	Spawned	Very Non-Fresh	3	6	
10/30/2012		Female	720	Present	Spawned	Very Non-Fresh	3	6	
10/30/2012		Male	670	Present	Unknown	Non-Fresh	3	6	
10/30/2012		Female	800	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Female	850	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Female	730	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Female	690	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Female	860	Present	Spawned	Very Non-Fresh	3	6	
10/30/2012		Male	700	Present	Unknown	Non-Fresh	3	6	
10/30/2012		Male	540	Present	Unknown	Non-Fresh	3	6	
10/30/2012		Male	790	Present	Unknown	Non-Fresh	3	6	
10/30/2012		Female	670	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Female	780	Present	Unspawned	Non-Fresh	3	6	
10/30/2012		Male	810	Present	Unknown	Very Non-Fresh	3	6	
10/30/2012		Female	780	Present	Spawned	Very Non-Fresh	3	6	
10/30/2012		Male	660	Present	Unknown	Non-Fresh	3	6	
10/30/2012		Male	600	Present	Unknown	Very Non-Fresh	3	6	
10/30/2012		Male	700	Present	Unknown	Very Non-Fresh	3	6	
10/30/2012		Female	870	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Male	700	Present	Unknown	Very Non-Fresh	3	6	
10/30/2012		Male	870	Present	Unknown	Non-Fresh	3	6	
10/30/2012		Female	830	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Female	900	Present	Unspawned	Non-Fresh	3	6	
10/30/2012		Female	730	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Male	920	Present	Unknown	Non-Fresh	3	6	
10/30/2012		Female	790	Present	Spawned	Non-Fresh	3	6	
10/30/2012		Male	520	Present	Unknown	Non-Fresh	3	6	
10/30/2012	1656	Female	660	Present	Spawned	Fresh	3	5	
10/30/2012	1657	Male	820	Present	Unknown	Fresh	3	5	
10/30/2012	1658	Female	780	Absent	Spawned	Non-Fresh	3	5	055225
10/30/2012	1659	Male	560	Present	Unknown	Fresh	3	5	
10/30/2012	1660	Female	700	Absent	Spawned	Very Non-Fresh	3	5	068654
10/30/2012	1661	Female	800	Absent	Spawned	Non-Fresh	3	5	068672
10/30/2012	1662	Female	730	Absent	Spawned	Very Non-Fresh	3	5	068654
10/30/2012	1663	Male	540	Absent	Unknown	Non-Fresh	3	5	055378
10/30/2012	1664	Male	910	Present	Unknown	Fresh	3	5	
10/30/2012	1665	Female	660	Present	Spawned	Fresh	3	5	
10/30/2012	1666	Female	720	Present	Spawned	Fresh	3	5	
10/30/2012	1667	Female	740	Absent	Spawned	Non-Fresh	3	5	068671
10/30/2012	1668	Male	580	Present	Unknown	Fresh	3	5	
10/30/2012	1669	Female	750	Absent	Spawned	Fresh	3	5	055196
10/30/2012	1670	Female	770	Present	Spawned	Fresh	3	5	
10/30/2012	1671	Female	700	Absent	Spawned	Fresh	3	5	055184
10/30/2012	1672	Male	900	Present	Unknown	Fresh	3	5	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/30/2012		Male	850	Present	Unknown	Very Non-Fresh	3	5	
10/30/2012		Male	910	Present	Unknown	Very Non-Fresh	3	5	
10/30/2012		Female	740	Present	Spawned	Non-Fresh	3	5	
10/30/2012		Female	800	Present	Spawned	Non-Fresh	3	5	
10/30/2012		Male	860	Present	Unknown	Non-Fresh	3	5	
10/30/2012		Female	680	Present	Spawned	Non-Fresh	3	5	
10/30/2012		Male	780	Present	Unknown	Non-Fresh	3	5	
10/30/2012		Female	690	Present	Spawned	Non-Fresh	3	5	
10/30/2012		Female	750	Present	Spawned	Very Non-Fresh	3	5	
10/30/2012		Female	700	Present	Spawned	Very Non-Fresh	3	5	
10/30/2012		Female	790	Present	Spawned	Very Non-Fresh	3	5	
10/30/2012		Female	820	Present	Spawned	Very Non-Fresh	3	5	
10/30/2012		Male	970	Present	Unknown	Very Non-Fresh	3	5	
10/30/2012		Male	760	Present	Unknown	Non-Fresh	3	5	
10/30/2012		Male	780	Present	Unknown	Non-Fresh	3	5	
10/30/2012		Female	800	Present	Spawned	Non-Fresh	3	5	
10/30/2012		Female	650	Present	Spawned	Very Non-Fresh	3	5	
10/30/2012	1673	Female	810	Present	Spawned	Fresh	3	4	
10/30/2012	1674	Female	830	Present	Unspawned	Fresh	3	4	
10/30/2012		Female	910	Present	Spawned	Non-Fresh	3	4	
10/30/2012		Male	880	Present	Unknown	Very Non-Fresh	3	4	
10/30/2012		Female	870	Present	Spawned	Non-Fresh	3	4	
10/30/2012		Female	710	Present	Spawned	Non-Fresh	3	4	
10/30/2012		Female	810	Present	Spawned	Very Non-Fresh	3	4	
10/30/2012		Male	850	Present	Unknown	Very Non-Fresh	3	4	
10/30/2012		Male	870	Present	Unknown	Non-Fresh	3	4	
10/30/2012		Female	770	Present	Spawned	Non-Fresh	3	4	
10/30/2012		Female	780	Present	Spawned	Non-Fresh	3	4	
10/30/2012		Female	760	Present	Spawned	Non-Fresh	3	4	
10/30/2012		Female	730	Present	Spawned	Non-Fresh	3	4	
10/30/2012		Female	830	Present	Spawned	Non-Fresh	3	4	
10/30/2012	1675	Male	760	Present	Unknown	Fresh	3	3	
10/30/2012	1676	Male	900	Present	Unknown	Fresh	3	3	
10/30/2012	1677	Female	750	Present	Spawned	Fresh	3	3	
10/30/2012	1678	Female	780	Present	Spawned	Fresh	3	3	
10/30/2012		Female	770	Present	Spawned	Non-Fresh	3	3	
10/30/2012		Female	880	Present	Spawned	Very Non-Fresh	3	3	
10/30/2012		Female	740	Present	Spawned	Non-Fresh	3	3	
10/30/2012		Male	590	Present	Unknown	Non-Fresh	3	3	
10/30/2012		Female	760	Present	Spawned	Non-Fresh	3	3	
10/30/2012		Male	720	Present	Unknown	Very Non-Fresh	3	3	
10/30/2012		Male	800	Present	Unknown	Non-Fresh	3	3	
10/30/2012		Female	730	Present	Spawned	Very Non-Fresh	3	3	
10/30/2012		Male	760	Present	Unknown	Non-Fresh	3	3	
10/30/2012		Female	830	Present	Spawned	Non-Fresh	3	3	
10/30/2012		Male	870	Present	Unknown	Very Non-Fresh	3	3	
10/30/2012		Female	810	Present	Spawned	Very Non-Fresh	3	3	
10/30/2012		Female	740	Present	Spawned	Very Non-Fresh	3	3	
10/30/2012		Female	810	Present	Spawned	Non-Fresh	3	3	
10/30/2012	1679	Male	820	Absent	Unknown	Very Non-Fresh	3	2	055222
10/30/2012	1680	Female	740	Unknown	Spawned	Non-Fresh	3	2	068671
10/30/2012	1771	Female	840	Present	Spawned	Fresh	3	2	
10/30/2012	1772	Male	840	Absent	Unknown	Very Non-Fresh	3	2	055187
10/30/2012	1773	Male	850	Absent	Unknown	Non-Fresh	3	2	068624
10/30/2012		Female	740	Present	Spawned	Very Non-Fresh	3	2	
10/30/2012		Female	820	Present	Spawned	Non-Fresh	3	2	
10/30/2012		Female	770	Present	Spawned	Non-Fresh	3	2	
10/30/2012		Male	750	Present	Unknown	Very Non-Fresh	3	2	
10/30/2012		Male	850	Present	Unknown	Non-Fresh	3	2	
10/30/2012		Male	790	Present	Unknown	Non-Fresh	3	2	
10/30/2012		Male	750	Present	Unknown	Very Non-Fresh	3	2	
10/30/2012		Female	820	Present	Spawned	Very Non-Fresh	3	2	
10/30/2012	1774	Male	730	Absent	Unknown	Very Non-Fresh	3	1	Lost
10/30/2012	1775	Male	570	Present	Unknown	Fresh	3	1	
10/30/2012		Female	720	Present	Unspawned	Non-Fresh	3	1	
10/30/2012		Female	720	Present	Spawned	Non-Fresh	3	1	
10/30/2012		Male	870	Present	Unknown	Non-Fresh	3	1	
10/30/2012	1776	Male	830	Present	Unknown	Fresh	3	0	
10/30/2012	1777	Male	720	Absent	Unknown	Very Non-Fresh	3	0	055223
10/30/2012		Female	650	Present	Spawned	Non-Fresh	3	0	
10/30/2012		Male	690	Present	Unknown	Non-Fresh	3	0	
10/30/2012		Male	860	Present	Unknown	Non-Fresh	3	0	
10/30/2012		Female	650	Present	Spawned	Non-Fresh	3	0	
10/30/2012		Male	850	Present	Unknown	Very Non-Fresh	3	0	
10/30/2012		Male	820	Present	Unknown	Very Non-Fresh	3	0	
10/30/2012		Male	690	Present	Unknown	Very Non-Fresh	3	0	
10/30/2012		Male	900	Present	Unknown	Non-Fresh	3	0	
10/31/2012	1778	Female	840	Present	Spawned	Fresh	2.1	14	
10/31/2012	1779	Male	550	Present	Unknown	Fresh	2.1	13	
10/31/2012	1780	Male	830	Present	Unknown	Fresh	2.1	13	
10/31/2012		Male	630	Present	Unknown	Non-Fresh	2.1	13	
10/31/2012	1781	Male	800	Present	Unknown	Fresh	2.1	12	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/31/2012	1782	Male	510	Unknown	Unknown	Fresh	2.1	12	NTD
10/31/2012	1783	Female	750	Present	Spawned	Fresh	2.1	12	
10/31/2012	1784	Male	800	Present	Unknown	Fresh	2.1	12	
10/31/2012	1785	Male	520	Present	Unknown	Fresh	2.1	12	
10/31/2012	1786	Male	490	Absent	Unknown	Non-Fresh	2.1	12	068624
10/31/2012	1787	Male	800	Unknown	Unknown	Fresh	2.1	12	NTD
10/31/2012		Female	750	Present	Unspawned	Very Non-Fresh	2.1	12	
10/31/2012		Male	820	Present	Unknown	Non-Fresh	2.1	12	
10/31/2012		Male	790	Present	Unknown	Non-Fresh	2.1	12	
10/31/2012		Male	810	Present	Unknown	Very Non-Fresh	2.1	12	
10/31/2012		Male	840	Present	Unknown	Very Non-Fresh	2.1	12	
10/31/2012		Female	770	Present	Spawned	Non-Fresh	2.1	12	
10/31/2012		Male	610	Present	Unknown	Non-Fresh	2.1	12	
10/31/2012		Male	650	Present	Unknown	Non-Fresh	2.1	12	
10/31/2012		Male	820	Present	Unknown	Non-Fresh	2.1	12	
10/31/2012	1788	Male	850	Present	Unknown	Fresh	2.1	11	
10/31/2012	1789	Male	600	Present	Unknown	Fresh	2.1	11	
10/31/2012	1790	Male	900	Absent	Unknown	Non-Fresh	2.1	11	055189
10/31/2012	1791	Male	490	Present	Unknown	Fresh	2.1	11	
10/31/2012	1792	Female	730	Present	Spawned	Fresh	2.1	11	
10/31/2012		Male	730	Present	Unknown	Very Non-Fresh	2.1	11	
10/31/2012		Male	530	Present	Unknown	Non-Fresh	2.1	11	
10/31/2012		Male	800	Present	Unknown	Non-Fresh	2.1	11	
10/31/2012		Male	900	Present	Unknown	Non-Fresh	2.1	11	
10/31/2012		Male	450	Present	Unknown	Non-Fresh	2.1	11	
10/31/2012		Male	870	Present	Unknown	Non-Fresh	2.1	11	
10/31/2012		Male	720	Present	Unknown	Very Non-Fresh	2.1	11	
10/31/2012		Male	870	Present	Unknown	Very Non-Fresh	2.1	11	
10/31/2012		Female	820	Present	Spawned	Non-Fresh	2.1	11	
10/31/2012	1793	Female	720	Present	Spawned	Fresh	2.1	10	
10/31/2012	1794	Male	600	Present	Unknown	Fresh	2.1	10	
10/31/2012	1795	Female	760	Present	Spawned	Fresh	2.1	10	
10/31/2012	1796	Female	790	Present	Spawned	Fresh	2.1	10	
10/31/2012	1797	Female	720	Present	Spawned	Fresh	2.1	10	
10/31/2012	1798	Male	840	Present	Unknown	Fresh	2.1	10	
10/31/2012	1799	Female	720	Present	Spawned	Fresh	2.1	10	
10/31/2012	1800	Male	810	Present	Unknown	Fresh	2.1	10	
10/31/2012	1801	Male	830	Absent	Unknown	Fresh	2.1	10	055184
10/31/2012	1802	Male	790	Present	Unknown	Fresh	2.1	10	
10/31/2012	1803	Male	780	Absent	Unknown	Fresh	2.1	10	055221
10/31/2012	1804	Female	740	Present	Spawned	Fresh	2.1	10	
10/31/2012	1805	Female	780	Absent	Spawned	Very Non-Fresh	2.1	10	NTD
10/31/2012	1806	Female	850	Present	Spawned	Fresh	2.1	10	
10/31/2012		Male	870	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	600	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Female	830	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Male	520	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	880	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	870	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	840	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	820	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	800	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	840	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Female	800	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	700	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	630	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	840	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	620	Present	Spawned	Very Non-Fresh	2.1	10	
10/31/2012		Male	790	Present	Unknown	Very Non-Fresh	2.1	10	
10/31/2012		Male	810	Present	Unknown	Very Non-Fresh	2.1	10	
10/31/2012		Female	740	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	770	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	770	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Male	870	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Female	780	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Male	600	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	820	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	830	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	740	Present	Spawned	Very Non-Fresh	2.1	10	
10/31/2012		Female	710	Present	Spawned	Very Non-Fresh	2.1	10	
10/31/2012		Male	620	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Female	720	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Male	890	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Female	790	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Male	730	Present	Unknown	Very Non-Fresh	2.1	10	
10/31/2012		Male	940	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	840	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	790	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Male	630	Present	Unknown	Non-Fresh	2.1	10	
10/31/2012		Female	930	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	700	Present	Spawned	Non-Fresh	2.1	10	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/31/2012		Female	700	Present	Spawned	Very Non-Fresh	2.1	10	
10/31/2012		Male	500	Present	Unknown	Very Non-Fresh	2.1	10	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012		Female	770	Present	Spawned	Non-Fresh	2.1	10	
10/31/2012	1861	Male	610	Present	Unknown	Fresh	2.2	9	
10/31/2012	1862	Female	850	Absent	Spawned	Fresh	2.2	9	068670
10/31/2012	1863	Female	750	Present	Spawned	Fresh	2.2	9	
10/31/2012	1864	Male	690	Present	Unknown	Fresh	2.2	9	
10/31/2012	1865	Female	880	Present	Spawned	Fresh	2.2	9	
10/31/2012	1866	Male	760	Present	Unknown	Fresh	2.2	9	
10/31/2012	1867	Male	590	Present	Unknown	Fresh	2.2	9	
10/31/2012	1868	Female	840	Present	Spawned	Fresh	2.2	9	
10/31/2012	1869	Female	720	Present	Spawned	Fresh	2.2	9	
10/31/2012	1870	Male	910	Present	Unknown	Fresh	2.2	9	
10/31/2012	1871	Male	730	Present	Unknown	Fresh	2.2	9	
10/31/2012	1872	Female	750	Present	Spawned	Fresh	2.2	9	
10/31/2012	1873	Female	830	Present	Spawned	Fresh	2.2	9	
10/31/2012	1874	Female	740	Present	Spawned	Fresh	2.2	9	
10/31/2012	1875	Female	750	Present	Spawned	Fresh	2.2	9	
10/31/2012	1876	Male	840	Present	Unknown	Fresh	2.2	9	
10/31/2012	1877	Female	790	Present	Spawned	Fresh	2.2	9	
10/31/2012	1878	Female	830	Present	Spawned	Fresh	2.2	9	
10/31/2012	1879	Male	920	Present	Unknown	Fresh	2.2	9	
10/31/2012	1880	Male	610	Unknown	Unknown	Non-Fresh	2.2	9	NTD
10/31/2012	1881	Female	800	Unknown	Spawned	Non-Fresh	2.2	9	NTD
10/31/2012	1882	Female	760	Present	Spawned	Fresh	2.2	9	
10/31/2012	1883	Female	750	Present	Spawned	Fresh	2.2	9	
10/31/2012	1884	Male	670	Present	Unknown	Fresh	2.2	9	
10/31/2012	1885	Female	870	Present	Spawned	Fresh	2.2	9	
10/31/2012	1886	Female	770	Absent	Spawned	Non-Fresh	2.2	9	055187
10/31/2012	1887	Male	900	Present	Unknown	Fresh	2.2	9	
10/31/2012	1888	Female	740	Present	Spawned	Fresh	2.2	9	
10/31/2012	1889	Female	740	Present	Spawned	Fresh	2.2	9	
10/31/2012	1890	Female	820	Absent	Spawned	Non-Fresh	2.2	9	055187
10/31/2012		Female	780	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	800	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	620	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	790	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	840	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	790	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	800	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	780	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	840	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	870	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	780	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	520	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	840	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	750	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	840	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	820	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	600	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	840	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	760	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	820	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	640	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	750	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	850	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	880	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	860	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	730	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	850	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	730	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	780	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	840	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	720	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Female	790	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	820	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	770	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	860	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	810	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	720	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	850	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	780	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	620	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	9	
10/31/2012		Male	740	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	620	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	610	Present	Unknown	Non-Fresh	2.2	9	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/31/2012		Male	950	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	880	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	600	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	710	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	870	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	790	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Male	580	Present	Unknown	Non-Fresh	2.2	9	
10/31/2012		Female	860	Present	Unspawned	Non-Fresh	2.2	9	
10/31/2012	1891	Female	800	Present	Spawned	Fresh	2.2	8	
10/31/2012	1892	Male	840	Absent	Unknown	Non-Fresh	2.2	8	055224
10/31/2012	1893	Female	780	Absent	Spawned	Non-Fresh	2.2	8	068695
10/31/2012	1894	Female	860	Present	Spawned	Fresh	2.2	8	
10/31/2012	1895	Female	790	Present	Spawned	Fresh	2.2	8	
10/31/2012	1896	Female	760	Present	Spawned	Fresh	2.2	8	
10/31/2012	1897	Male	850	Absent	Unknown	Non-Fresh	2.2	8	055196
10/31/2012	1898	Female	720	Present	Spawned	Fresh	2.2	8	
10/31/2012	1899	Female	750	Present	Spawned	Fresh	2.2	8	
10/31/2012	1900	Male	850	Present	Unknown	Fresh	2.2	8	
10/31/2012	1901	Female	810	Absent	Spawned	Non-Fresh	2.2	8	068672
10/31/2012		Male	880	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Female	780	Present	Spawned	Non-Fresh	2.2	8	
10/31/2012		Male	880	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Female	810	Present	Spawned	Non-Fresh	2.2	8	
10/31/2012		Male	750	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Female	800	Present	Spawned	Non-Fresh	2.2	8	
10/31/2012		Male	580	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	580	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	900	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	720	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Female	800	Present	Spawned	Non-Fresh	2.2	8	
10/31/2012		Male	900	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	870	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	860	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	570	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Female	740	Present	Spawned	Non-Fresh	2.2	8	
10/31/2012		Male	960	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	820	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	590	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	860	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	890	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	600	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	870	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012		Male	950	Present	Unknown	Non-Fresh	2.2	8	
10/31/2012	1902	Female	790	Present	Spawned	Fresh	2.2	7	
10/31/2012	1903	Male	560	Present	Unknown	Fresh	2.2	7	
10/31/2012	1904	Female	790	Present	Spawned	Fresh	2.2	7	
10/31/2012	1905	Male	770	Absent	Unknown	Fresh	2.2	7	055193
10/31/2012	1906	Male	810	Present	Unknown	Fresh	2.2	7	
10/31/2012	1907	Male	800	Unknown	Unknown	Non-Fresh	2.2	7	068672
10/31/2012	1908	Male	860	Present	Unknown	Fresh	2.2	7	
10/31/2012	1909	Male	620	Present	Unknown	Fresh	2.2	7	
10/31/2012	1910	Female	800	Present	Spawned	Fresh	2.2	7	
10/31/2012	1911	Male	850	Present	Unknown	Fresh	2.2	7	
10/31/2012	1912	Female	760	Present	Spawned	Fresh	2.2	7	
10/31/2012	1913	Female	780	Present	Spawned	Fresh	2.2	7	
10/31/2012	1914	Male	560	Present	Unknown	Fresh	2.2	7	
10/31/2012	1915	Male	550	Present	Unknown	Fresh	2.2	7	
10/31/2012		Female	740	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	830	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	740	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	850	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	830	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	720	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	720	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	740	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	580	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	560	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	740	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	870	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	880	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	900	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	760	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	550	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	890	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	880	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	750	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	790	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	790	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	790	Present	Unknown	Non-Fresh	2.2	7	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/31/2012		Male	820	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	780	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	820	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	780	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	590	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	570	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	570	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	630	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	780	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	840	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	850	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	760	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	850	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	730	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	790	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	690	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	820	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	850	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	720	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	870	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	900	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	800	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Female	890	Present	Spawned	Non-Fresh	2.2	7	
10/31/2012		Male	890	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Male	650	Present	Unknown	Non-Fresh	2.2	7	
10/31/2012		Female	820	Present	Spawned	Non-Fresh	2.2	7	
11/5/2012	1916	Male	790	Present	Unknown	Fresh	3	6	
11/5/2012	1917	Male	840	Present	Unknown	Fresh	3	6	
11/5/2012	1918	Female	900	Absent	Spawned	Non-Fresh	3	6	068672
11/5/2012		Female	800	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Female	810	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Male	880	Present	Unknown	Non-Fresh	3	6	
11/5/2012		Female	780	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Female	750	Present	Spawned	Very Non-Fresh	3	6	
11/5/2012		Female	770	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Female	930	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Female	770	Present	Spawned	Very Non-Fresh	3	6	
11/5/2012		Male	590	Present	Unknown	Non-Fresh	3	6	
11/5/2012		Male	670	Present	Unknown	Non-Fresh	3	6	
11/5/2012		Male	530	Present	Unknown	Very Non-Fresh	3	6	
11/5/2012		Female	750	Present	Spawned	Very Non-Fresh	3	6	
11/5/2012		Female	750	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Male	820	Present	Unknown	Very Non-Fresh	3	6	
11/5/2012		Female	800	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Female	720	Present	Spawned	Very Non-Fresh	3	6	
11/5/2012		Male	1000	Present	Unknown	Non-Fresh	3	6	
11/5/2012		Female	720	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Female	750	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Male	840	Present	Unknown	Non-Fresh	3	6	
11/5/2012		Female	760	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Female	900	Present	Spawned	Non-Fresh	3	6	
11/5/2012		Male	700	Present	Unknown	Non-Fresh	3	6	
11/5/2012	1919	Female	710	Present	Spawned	Fresh	3	5	
11/5/2012	1920	Female	710	Present	Spawned	Fresh	3	5	
11/5/2012	1921	Female	750	Present	Spawned	Fresh	3	5	
11/5/2012		Female	820	Present	Spawned	Non-Fresh	3	5	
11/5/2012		Female	730	Present	Spawned	Non-Fresh	3	5	
11/5/2012		Male	910	Present	Unknown	Non-Fresh	3	5	
11/5/2012		Male	1010	Present	Unknown	Non-Fresh	3	5	
11/5/2012		Male	940	Present	Unknown	Non-Fresh	3	5	
11/5/2012		Female	750	Present	Spawned	Very Non-Fresh	3	5	
11/5/2012		Female	810	Present	Spawned	Very Non-Fresh	3	5	
11/5/2012		Female	840	Present	Spawned	Non-Fresh	3	5	
11/5/2012		Female	730	Present	Spawned	Very Non-Fresh	3	5	
11/5/2012		Male	950	Present	Unknown	Very Non-Fresh	3	5	
11/5/2012		Male	950	Present	Unknown	Non-Fresh	3	5	
11/5/2012		Female	800	Present	Spawned	Non-Fresh	3	5	
11/5/2012		Male	790	Present	Unknown	Very Non-Fresh	3	5	
11/5/2012		Male	560	Present	Unknown	Non-Fresh	3	4	
11/5/2012		Female	730	Present	Spawned	Non-Fresh	3	4	
11/5/2012		Male	640	Present	Unknown	Non-Fresh	3	4	
11/5/2012		Female	780	Present	Spawned	Non-Fresh	3	4	
11/5/2012		Female	720	Present	Spawned	Non-Fresh	3	4	
11/5/2012		Female	790	Present	Spawned	Very Non-Fresh	3	4	
11/5/2012		Female	670	Present	Spawned	Non-Fresh	3	4	
11/5/2012		Female	740	Present	Spawned	Very Non-Fresh	3	4	
11/5/2012	1922	Male	920	Absent	Unknown	Non-Fresh	3	3	068672
11/5/2012	1923	Male	710	Absent	Unknown	Non-Fresh	3	3	068671
11/5/2012	1924	Female	770	Absent	Spawned	Non-Fresh	3	3	055199
11/5/2012		Male	750	Present	Unknown	Very Non-Fresh	3	3	
11/5/2012		Female	830	Present	Spawned	Non-Fresh	3	3	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/5/2012		Female	760	Present	Spawnd	Non-Fresh	3	3	
11/5/2012		Male	720	Present	Unknown	Non-Fresh	3	3	
11/5/2012	1925	Female	780	Present	Spawnd	Fresh	3	2	
11/5/2012	1926	Male	600	Absent	Unknown	Non-Fresh	3	2	055384
11/5/2012	1927	Male	480	Present	Unknown	Fresh	3	2	
11/5/2012		Female	780	Present	Spawnd	Non-Fresh	3	2	
11/5/2012		Male	570	Present	Unknown	Very Non-Fresh	3	2	
11/5/2012		Male	780	Present	Unknown	Very Non-Fresh	3	2	
11/5/2012		Male	720	Present	Unknown	Non-Fresh	3	2	
11/5/2012		Male	870	Present	Unknown	Non-Fresh	3	2	
11/5/2012		Female	700	Present	Spawnd	Non-Fresh	3	2	
11/5/2012	1928	Male	630	Absent	Unknown	Very Non-Fresh	3	0	Lost
11/5/2012	1929	Male	830	Absent	Unknown	Very Non-Fresh	3	0	055194
11/5/2012		Male	600	Present	Unknown	Non-Fresh	3	0	
11/5/2012		Male	600	Present	Unknown	Non-Fresh	3	0	
11/5/2012		Male	780	Present	Unknown	Very Non-Fresh	3	0	
11/5/2012		Male	560	Present	Unknown	Very Non-Fresh	3	0	
11/5/2012		Male	520	Present	Unknown	Very Non-Fresh	3	0	
11/6/2012	1930	Female	740	Unknown	Spawnd	Non-Fresh	2.2	9	NTD
11/6/2012	1931	Female	820	Present	Spawnd	Fresh	2.2	9	
11/6/2012	1932	Male	920	Absent	Unknown	Non-Fresh	2.2	9	068672
11/6/2012	1933	Female	800	Present	Spawnd	Fresh	2.2	9	
11/6/2012	1934	Female	740	Present	Spawnd	Fresh	2.2	9	
11/6/2012	1935	Female	830	Present	Spawnd	Fresh	2.2	9	
11/6/2012	1936	Male	790	Absent	Unknown	Fresh	2.2	9	068672
11/6/2012	1937	Female	730	Absent	Spawnd	Non-Fresh	2.2	9	068654
11/6/2012	1938	Female	860	Present	Spawnd	Fresh	2.2	9	
11/6/2012	1939	Female	820	Present	Spawnd	Fresh	2.2	9	
11/6/2012		Female	780	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	580	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	540	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	810	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	750	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	690	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	920	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	820	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Female	840	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	520	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	810	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	620	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	810	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Female	720	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	780	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	530	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	840	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	580	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	820	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	910	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	840	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	590	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	900	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	580	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Female	850	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	720	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	720	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Female	790	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Female	820	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Female	550	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	580	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	860	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	830	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	730	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	810	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	670	Present	Unknown	Very Non-Fresh	2.2	9	
11/6/2012		Male	790	Present	Unknown	Very Non-Fresh	2.2	9	
11/6/2012		Male	860	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	560	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Male	850	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012		Female	860	Present	Spawnd	Non-Fresh	2.2	9	
11/6/2012		Male	860	Present	Unknown	Non-Fresh	2.2	9	
11/6/2012	1940	Male	780	Unknown	Unknown	Non-Fresh	2.2	8	068668
11/6/2012	1941	Female	870	Present	Spawnd	Fresh	2.2	8	
11/6/2012	1942	Female	730	Present	Spawnd	Fresh	2.2	8	
11/6/2012	1943	Female	730	Absent	Spawnd	Non-Fresh	2.2	8	068672
11/6/2012		Female	740	Present	Spawnd	Non-Fresh	2.2	8	
11/6/2012		Female	820	Present	Spawnd	Non-Fresh	2.2	8	
11/6/2012		Male	670	Present	Unknown	Non-Fresh	2.2	8	
11/6/2012		Female	730	Present	Spawnd	Non-Fresh	2.2	8	
11/6/2012		Male	850	Present	Unknown	Non-Fresh	2.2	8	
11/6/2012		Male	860	Present	Unknown	Non-Fresh	2.2	8	
11/6/2012		Female	820	Present	Spawnd	Non-Fresh	2.2	8	
11/6/2012		Female	740	Present	Spawnd	Non-Fresh	2.2	8	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/6/2012		Female	730	Present	Spawned	Non-Fresh	2.2	8	
11/6/2012		Female	740	Present	Spawned	Non-Fresh	2.2	8	
11/6/2012		Male	790	Present	Unknown	Non-Fresh	2.2	8	
11/6/2012		Female	760	Present	Spawned	Non-Fresh	2.2	8	
11/6/2012		Male	650	Present	Unknown	Non-Fresh	2.2	8	
11/6/2012		Female	780	Present	Spawned	Non-Fresh	2.2	8	
11/6/2012		Female	790	Present	Spawned	Non-Fresh	2.2	8	
11/6/2012		Female	740	Present	Spawned	Non-Fresh	2.2	8	
11/6/2012		Male	480	Present	Unknown	Non-Fresh	2.2	8	
11/6/2012		Male	760	Present	Unknown	Non-Fresh	2.2	8	
11/6/2012		Male	520	Present	Unknown	Non-Fresh	2.2	8	
11/6/2012		Female	830	Present	Spawned	Non-Fresh	2.2	8	
11/6/2012		Female	840	Present	Spawned	Non-Fresh	2.2	8	
11/6/2012		Female	730	Present	Spawned	Very Non-Fresh	2.2	8	
11/6/2012		Female	800	Present	Spawned	Non-Fresh	2.2	8	
11/6/2012	1944	Male	800	Absent	Unknown	Non-Fresh	2.2	7	055196
11/6/2012	1945	Male	580	Absent	Unknown	Non-Fresh	2.2	7	055386
11/6/2012	1946	Female	860	Present	Spawned	Fresh	2.2	7	
11/6/2012	1947	Male	890	Absent	Unknown	Fresh	2.2	7	055198
11/6/2012	1948	Female	690	Present	Spawned	Fresh	2.2	7	
11/6/2012	1949	Male	820	Absent	Unknown	Fresh	2.2	7	055196
11/6/2012		Female	750	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	740	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	740	Present	Spawned	Very Non-Fresh	2.2	7	
11/6/2012		Female	820	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Male	620	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Male	600	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Female	720	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Male	790	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Female	720	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Male	600	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Female	790	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Male	840	Present	Unknown	Very Non-Fresh	2.2	7	
11/6/2012		Male	620	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Female	720	Present	Spawned	Very Non-Fresh	2.2	7	
11/6/2012		Female	720	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	740	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Male	900	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Female	720	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	750	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Male	840	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Male	790	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Male	580	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Female	770	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	850	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Male	880	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Female	770	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	760	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	700	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Male	830	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Male	1000	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012		Female	710	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	690	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	740	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	850	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	800	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	740	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	790	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	720	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	820	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Female	780	Present	Spawned	Non-Fresh	2.2	7	
11/6/2012		Male	820	Present	Unknown	Non-Fresh	2.2	7	
11/6/2012	1807	Male	530	Absent	Unknown	Non-Fresh	2.2	6	055385
11/6/2012	1950	Female	750	Absent	Spawned	Non-Fresh	2.2	6	068654
11/6/2012		Male	900	Present	Unknown	Non-Fresh	2.2	6	
11/6/2012		Female	780	Present	Spawned	Non-Fresh	2.2	6	
11/6/2012		Female	780	Present	Spawned	Non-Fresh	2.2	6	
11/7/2012	2041	Female	780	Present	Spawned	Fresh	1	19	
11/7/2012		Male	590	Present	Unknown	Non-Fresh	1	19	
11/7/2012		Female	800	Present	Spawned	Non-Fresh	1	18	
11/7/2012		Male	490	Present	Unknown	Non-Fresh	1	18	
11/7/2012	2042	Male	860	Present	Unknown	Fresh	1	17	
11/7/2012	2043	Female	800	Present	Spawned	Fresh	1	17	
11/7/2012		Female	740	Present	Spawned	Non-Fresh	1	17	
11/7/2012		Male	900	Present	Unknown	Non-Fresh	1	17	
11/7/2012		Male	770	Present	Unknown	Non-Fresh	1	17	
11/7/2012		Male	920	Present	Unknown	Non-Fresh	1	17	
11/7/2012		Male	530	Present	Unknown	Non-Fresh	1	17	
11/7/2012		Male	520	Present	Unknown	Non-Fresh	1	17	
11/7/2012		Female	880	Present	Spawned	Non-Fresh	1	17	
11/7/2012		Male	810	Present	Unknown	Non-Fresh	1	17	
11/7/2012		Male	840	Present	Unknown	Non-Fresh	1	17	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/7/2012		Male	690	Present	Unknown	Non-Fresh	1	17	
11/7/2012		Male	500	Present	Unknown	Non-Fresh	1	17	
11/7/2012	2044	Male	930	Present	Unknown	Fresh	1	16	
11/7/2012	2045	Male	570	Present	Unknown	Fresh	1	16	
11/7/2012	2046	Female	740	Present	Spawned	Fresh	1	16	
11/7/2012	2047	Female	780	Present	Spawned	Fresh	1	16	
11/7/2012	2048	Male	870	Present	Unknown	Fresh	1	16	
11/7/2012	2049	Male	870	Present	Unknown	Fresh	1	16	
11/7/2012		Male	860	Present	Unknown	Non-Fresh	1	16	
11/7/2012		Female	810	Present	Spawned	Non-Fresh	1	16	
11/7/2012		Male	540	Present	Unknown	Non-Fresh	1	16	
11/7/2012		Male	580	Present	Unknown	Non-Fresh	1	16	
11/7/2012		Male	580	Present	Unknown	Non-Fresh	1	16	
11/7/2012		Male	570	Present	Unknown	Non-Fresh	1	16	
11/7/2012		Male	590	Present	Unknown	Non-Fresh	1	16	
11/7/2012		Female	840	Present	Spawned	Non-Fresh	1	16	
11/7/2012		Male	800	Present	Unknown	Non-Fresh	1	16	
11/7/2012		Male	840	Present	Unknown	Non-Fresh	1	16	
11/7/2012	2050	Male	810	Absent	Unknown	Non-Fresh	1	15	068671
11/7/2012	2051	Male	820	Present	Unknown	Fresh	1	15	
11/7/2012	2052	Female	590	Present	Spawned	Fresh	1	15	
11/7/2012		Male	550	Present	Unknown	Non-Fresh	1	15	
11/7/2012		Male	580	Present	Unknown	Non-Fresh	1	15	
11/7/2012		Male	540	Present	Unknown	Very Non-Fresh	1	15	
11/7/2012		Female	770	Present	Spawned	Non-Fresh	1	15	
11/7/2012	2053	Male	720	Present	Unknown	Fresh	1	14	
11/7/2012	2054	Male	580	Unknown	Unknown	Very Non-Fresh	1	14	NTD
11/7/2012	2055	Male	820	Present	Unknown	Non-Fresh	1	14	
11/7/2012	2056	Male	820	Present	Unknown	Fresh	1	14	
11/7/2012		Female	810	Present	Spawned	Non-Fresh	1	14	
11/7/2012		Male	850	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Male	560	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Female	830	Present	Spawned	Non-Fresh	1	14	
11/7/2012		Male	890	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Female	860	Present	Spawned	Very Non-Fresh	1	14	
11/7/2012		Male	870	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Male	550	Present	Unknown	Very Non-Fresh	1	14	
11/7/2012		Male	750	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Male	570	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Male	880	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Male	930	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Male	800	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Male	840	Present	Unknown	Very Non-Fresh	1	14	
11/7/2012		Male	630	Present	Unknown	Very Non-Fresh	1	14	
11/7/2012		Male	620	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Male	820	Present	Unknown	Very Non-Fresh	1	14	
11/7/2012		Male	600	Present	Unknown	Non-Fresh	1	14	
11/7/2012		Female	790	Present	Spawned	Non-Fresh	1	14	
11/7/2012		Male	590	Present	Unknown	Very Non-Fresh	1	14	
11/7/2012		Female	780	Present	Spawned	Non-Fresh	1	14	
11/7/2012		Female	740	Present	Spawned	Non-Fresh	1	14	
11/7/2012		Male	600	Present	Unknown	Non-Fresh	2.1	13	
11/7/2012		Female	800	Present	Spawned	Non-Fresh	2.1	13	
11/7/2012		Female	790	Present	Spawned	Non-Fresh	2.1	13	
11/7/2012	1808	Female	790	Present	Spawned	Fresh	2.1	12	
11/7/2012	1809	Female	770	Absent	Spawned	Non-Fresh	2.1	12	NTD
11/7/2012	1810	Female	700	Present	Spawned	Fresh	2.1	12	
11/7/2012		Male	750	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Male	970	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Male	870	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Female	810	Present	Spawned	Non-Fresh	2.1	12	
11/7/2012		Female	780	Present	Spawned	Non-Fresh	2.1	12	
11/7/2012		Female	910	Present	Spawned	Non-Fresh	2.1	12	
11/7/2012		Male	830	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Male	810	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Female	820	Present	Spawned	Non-Fresh	2.1	12	
11/7/2012		Female	780	Present	Spawned	Non-Fresh	2.1	12	
11/7/2012		Male	900	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Female	780	Present	Spawned	Non-Fresh	2.1	12	
11/7/2012		Male	590	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Male	890	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Male	580	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Male	580	Present	Unknown	Very Non-Fresh	2.1	12	
11/7/2012		Female	700	Present	Spawned	Non-Fresh	2.1	12	
11/7/2012		Female	0	Present	Spawned	Non-Fresh	2.1	12	
11/7/2012		Male	840	Present	Unknown	Non-Fresh	2.1	12	
11/7/2012		Female	790	Present	Spawned	Non-Fresh	2.1	12	
11/7/2012	1811	Female	700	Absent	Spawned	Non-Fresh	2.1	11	068654
11/7/2012	1812	Male	840	Present	Unknown	Fresh	2.1	11	
11/7/2012	1813	Female	690	Present	Spawned	Fresh	2.1	11	
11/7/2012		Male	720	Present	Unknown	Non-Fresh	2.1	11	
11/7/2012		Female	720	Present	Unspawned	Non-Fresh	2.1	11	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/7/2012		Male	820	Present	Unknown	Non-Fresh	2.1	11	
11/7/2012		Female	850	Present	Spawned	Non-Fresh	2.1	11	
11/7/2012		Female	750	Present	Spawned	Non-Fresh	2.1	11	
11/7/2012		Female	800	Present	Spawned	Fresh	2.1	11	
11/7/2012		Male	840	Present	Unknown	Non-Fresh	2.1	11	
11/7/2012		Female	730	Present	Spawned	Non-Fresh	2.1	11	
11/7/2012		Female	760	Present	Spawned	Non-Fresh	2.1	11	
11/7/2012		Female	770	Present	Spawned	Non-Fresh	2.1	11	
11/7/2012		Female	740	Present	Spawned	Non-Fresh	2.1	11	
11/7/2012		Female	730	Present	Spawned	Non-Fresh	2.1	11	
11/7/2012	1814	Female	760	Absent	Spawned	Non-Fresh	2.1	10	068695
11/7/2012	1815	Male	920	Present	Unknown	Fresh	2.1	10	
11/7/2012	1816	Female	820	Present	Unspawned	Fresh	2.1	10	
11/7/2012	1817	Male	880	Present	Unknown	Fresh	2.1	10	
11/7/2012	1818	Female	800	Present	Spawned	Fresh	2.1	10	
11/7/2012	1819	Female	760	Present	Spawned	Fresh	2.1	10	
11/7/2012	1820	Male	810	Present	Unknown	Fresh	2.1	10	
11/7/2012	1821	Female	810	Absent	Spawned	Very Non-Fresh	2.1	10	068675
11/7/2012	1822	Female	800	Present	Spawned	Fresh	2.1	10	
11/7/2012	1823	Male	620	Absent	Unknown	Fresh	2.1	10	055378
11/7/2012		Male	580	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Male	830	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Female	590	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Female	840	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Male	790	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Male	670	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Male	760	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Male	540	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Female	640	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Male	680	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Female	740	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Male	900	Present	Unknown	Very Non-Fresh	2.1	10	
11/7/2012		Female	830	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Male	970	Present	Unknown	Very Non-Fresh	2.1	10	
11/7/2012		Male	830	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Female	740	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Female	780	Present	Spawned	Very Non-Fresh	2.1	10	
11/7/2012		Male	820	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Female	780	Present	Spawned	Very Non-Fresh	2.1	10	
11/7/2012		Female	740	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Female	700	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Male	900	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Male	870	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Female	840	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Female	780	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Female	830	Present	Spawned	Very Non-Fresh	2.1	10	
11/7/2012		Female	800	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Female	760	Present	Spawned	Very Non-Fresh	2.1	10	
11/7/2012		Female	810	Present	Spawned	Very Non-Fresh	2.1	10	
11/7/2012		Female	780	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Female	790	Present	Spawned	Non-Fresh	2.1	10	
11/7/2012		Male	840	Present	Unknown	Non-Fresh	2.1	10	
11/7/2012		Male	860	Present	Unknown	Very Non-Fresh	2.1	10	
11/13/2012		Female	840	Present	Spawned	Non-Fresh	3	6	
11/13/2012		Female	820	Present	Spawned	Non-Fresh	3	6	
11/13/2012		Female	770	Present	Spawned	Very Non-Fresh	3	6	
11/13/2012		Female	760	Present	Spawned	Non-Fresh	3	6	
11/13/2012		Female	810	Present	Spawned	Non-Fresh	3	6	
11/13/2012		Male	770	Present	Unknown	Non-Fresh	3	6	
11/13/2012		Female	830	Present	Spawned	Non-Fresh	3	6	
11/13/2012		Male	620	Present	Unknown	Non-Fresh	3	6	
11/13/2012	2057	Male	830	Present	Unknown	Fresh	3	5	
11/13/2012		Female	800	Present	Spawned	Non-Fresh	3	5	
11/13/2012		Female	740	Present	Spawned	Non-Fresh	3	5	
11/13/2012		Male	890	Present	Unknown	Non-Fresh	3	5	
11/13/2012		Female	710	Present	Spawned	Non-Fresh	3	5	
11/13/2012		Female	740	Present	Spawned	Non-Fresh	3	5	
11/13/2012		Female	800	Present	Spawned	Non-Fresh	3	5	
11/13/2012		Male	620	Present	Unknown	Non-Fresh	3	5	
11/13/2012		Male	600	Present	Unknown	Non-Fresh	3	5	
11/13/2012	2058	Female	750	Absent	Spawned	Fresh	3	4	068672
11/13/2012		Female	740	Present	Spawned	Non-Fresh	3	4	
11/13/2012		Male	840	Present	Unknown	Non-Fresh	3	4	
11/13/2012		Male	620	Present	Unknown	Non-Fresh	3	4	
11/13/2012		Male	850	Present	Unknown	Very Non-Fresh	3	4	
11/13/2012	2059	Male	850	Present	Unknown	Fresh	3	3	
11/13/2012	2060	Male	670	Present	Unknown	Fresh	3	3	
11/13/2012	2061	Female	760	Absent	Spawned	Non-Fresh	3	3	068654
11/13/2012	2062	Female	790	Present	Spawned	Fresh	3	3	
11/13/2012	2063	Female	810	Present	Spawned	Fresh	3	3	
11/13/2012		Female	760	Present	Spawned	Non-Fresh	3	3	
11/13/2012		Male	850	Present	Unknown	Very Non-Fresh	3	3	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/13/2012		Female	730	Present	Spawnd	Non-Fresh	3	3	
11/13/2012		Female	820	Present	Spawnd	Non-Fresh	3	3	
11/13/2012		Female	850	Present	Spawnd	Very Non-Fresh	3	3	
11/13/2012		Female	700	Present	Spawnd	Very Non-Fresh	3	3	
11/13/2012		Female	760	Present	Spawnd	Non-Fresh	3	3	
11/13/2012		Male	830	Present	Unknown	Very Non-Fresh	3	3	
11/13/2012		Male	820	Present	Unknown	Non-Fresh	3	3	
11/13/2012		Female	800	Present	Spawnd	Non-Fresh	3	2	
11/13/2012		Male	780	Present	Unknown	Very Non-Fresh	3	2	
11/13/2012		Male	600	Present	Unknown	Non-Fresh	3	2	
11/13/2012		Male	540	Present	Unknown	Non-Fresh	3	2	
11/13/2012		Female	760	Present	Spawnd	Very Non-Fresh	3	2	
11/13/2012		Male	970	Present	Unknown	Very Non-Fresh	3	2	
11/13/2012	2064	Female	820	Present	Spawnd	Fresh	3	1	
11/13/2012		Male	720	Present	Unknown	Non-Fresh	3	0	
11/13/2012		Male	580	Present	Unknown	Non-Fresh	3	0	
11/13/2012		Female	770	Present	Spawnd	Non-Fresh	3	0	
11/14/2012		Female	740	Present	Spawnd	Non-Fresh	1	19	
11/14/2012	2065	Male	890	Present	Unknown	Fresh	1	15	
11/14/2012		Male	450	Present	Unknown	Non-Fresh	1	15	
11/14/2012		Male	830	Present	Unknown	Fresh	1	14	
11/14/2012		Male	600	Present	Unknown	Non-Fresh	1	14	
11/14/2012	1824	Female	820	Present	Spawnd	Fresh	2.1	13	
11/14/2012	1825	Female	770	Present	Spawnd	Fresh	2.1	13	
11/14/2012		Female	770	Present	Spawnd	Non-Fresh	2.1	13	
11/14/2012		Male	780	Present	Unknown	Very Non-Fresh	2.1	13	
11/14/2012	1826	Male	780	Absent	Unknown	Non-Fresh	2.1	12	068654
11/14/2012		Male	930	Present	Unknown	Very Non-Fresh	2.1	12	
11/14/2012		Female	710	Present	Spawnd	Non-Fresh	2.1	12	
11/14/2012		Male	820	Present	Unknown	Non-Fresh	2.1	12	
11/14/2012		Male	840	Present	Unknown	Very Non-Fresh	2.1	12	
11/14/2012		Male	610	Present	Unknown	Very Non-Fresh	2.1	12	
11/14/2012	1827	Male	580	Absent	Unknown	Very Non-Fresh	2.1	11	055396
11/14/2012		Female	850	Present	Spawnd	Non-Fresh	2.1	11	
11/14/2012		Female	760	Present	Spawnd	Non-Fresh	2.1	11	
11/14/2012		Female	730	Present	Spawnd	Very Non-Fresh	2.1	11	
11/14/2012		Male	900	Present	Unknown	Non-Fresh	2.1	11	
11/14/2012	1828	Male	530	Absent	Unknown	Very Non-Fresh	2.1	10	NTD
11/14/2012		Female	780	Present	Spawnd	Very Non-Fresh	2.1	10	
11/14/2012		Male	650	Present	Unknown	Non-Fresh	2.1	10	
11/14/2012		Male	600	Present	Unknown	Non-Fresh	2.1	10	
11/14/2012		Female	790	Present	Spawnd	Non-Fresh	2.1	10	
11/15/2012	2067	Male	800	Present	Unknown	Fresh	2.2	9	
11/15/2012		Female	680	Present	Spawnd	Non-Fresh	2.2	9	
11/15/2012		Female	880	Present	Spawnd	Non-Fresh	2.2	9	
11/15/2012		Male	600	Present	Unknown	Non-Fresh	2.2	9	
11/15/2012		Female	750	Present	Spawnd	Non-Fresh	2.2	9	
11/15/2012		Male	600	Present	Unknown	Non-Fresh	2.2	9	
11/15/2012	2068	Female	700	Unknown	Spawnd	Non-Fresh	2.2	8	068672
11/15/2012	2069	Female	760	Present	Spawnd	Fresh	2.2	8	
11/15/2012	2070	Female	780	Absent	Spawnd	Non-Fresh	2.2	8	068654
11/15/2012	2071	Female	770	Present	Spawnd	Fresh	2.2	8	
11/15/2012		Female	740	Present	Spawnd	Non-Fresh	2.2	8	
11/15/2012		Female	740	Present	Spawnd	Non-Fresh	2.2	8	
11/15/2012		Female	620	Present	Spawnd	Non-Fresh	2.2	8	
11/15/2012		Female	740	Present	Spawnd	Non-Fresh	2.2	8	
11/15/2012		Female	730	Present	Spawnd	Non-Fresh	2.2	8	
11/15/2012	2072	Female	800	Unknown	Spawnd	Fresh	2.2	7	NTD
11/15/2012		Female	730	Present	Spawnd	Non-Fresh	2.2	7	
11/15/2012		Male	780	Present	Unknown	Non-Fresh	2.2	7	
11/15/2012		Male	890	Present	Unknown	Non-Fresh	2.2	7	
11/15/2012		Female	740	Present	Spawnd	Very Non-Fresh	2.2	7	
11/15/2012		Male	530	Present	Unknown	Non-Fresh	2.2	7	
11/15/2012		Female	780	Present	Spawnd	Non-Fresh	2.2	7	
11/19/2012		Male	870	Present	Unknown	Non-Fresh	2	13	
11/19/2012	1829	Male	760	Present	Unknown	Very Non-Fresh	2	12	
11/19/2012		Male	810	Present	Unknown	Fresh	2	11	
11/19/2012		Female	790	Present	Spawnd	Very Non-Fresh	2	10	
11/19/2012		Male	840	Present	Unknown	Non-Fresh	2	9	
11/19/2012		Male	860	Present	Unknown	Non-Fresh	2	8	
11/19/2012		Male	890	Present	Unknown	Non-Fresh	2	8	
11/19/2012		Male	840	Present	Unknown	Non-Fresh	2	7	
11/19/2012		Male	610	Present	Unknown	Non-Fresh	3	6	
11/19/2012		Female	740	Present	Spawnd	Non-Fresh	3	4	
11/19/2012		Female	740	Present	Spawnd	Non-Fresh	3	1	
11/19/2012	2073	Female	700	Absent	Spawnd	Non-Fresh	3	0	055196
11/19/2012		Male	800	Present	Unknown	Non-Fresh	3	0	
11/27/2012	2074	Female	790	Present	Spawnd	Fresh	2	11	
11/27/2012		Male	600	Present	Unknown	Non-Fresh	2	11	
11/27/2012		Male	800	Present	Unknown	Non-Fresh	2	11	
11/27/2012	2075	Male	880	Present	Unknown	Fresh	2	9	
11/27/2012		Female	690	Present	Spawnd	Non-Fresh	2	7	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/22/2013	1502	Female	900	Present	Spawned	Fresh	3	0	
10/22/2013	1504	Male	940	Present	Unknown	Fresh	3	0	
10/22/2013	1505	Female	780	Absent	Spawned	Fresh	3	0	055382
10/22/2013	1509	Male	850	Present	Unknown	Fresh	3	0	
10/22/2013	1511	Male	860	Present	Unknown	Fresh	3	0	
10/22/2013	1512	Male	760	Present	Unknown	Fresh	3	0	
10/22/2013	1513	Female	740	Unknown	Unspawned	Fresh	3	0	NTD
10/22/2013	1515	Male	870	Absent	Unknown	Fresh	3	0	055381
10/22/2013	1516	Male	870	Absent	Unknown	Non-Fresh	3	0	055382
10/22/2013		Female	710	Present	Spawned	Non-Fresh	3	0	
10/22/2013		Female	730	Present	Spawned	Non-Fresh	3	0	
10/22/2013		Female	740	Present	Spawned	Non-Fresh	3	0	
10/22/2013		Male	800	Present	Unknown	Non-Fresh	3	0	
10/22/2013		Male	820	Present	Unknown	Non-Fresh	3	0	
10/22/2013		Male	830	Present	Unknown	Non-Fresh	3	0	
10/22/2013		Female	860	Present	Spawned	Non-Fresh	3	0	
10/22/2013		Male	870	Present	Unknown	Non-Fresh	3	0	
10/22/2013		Male	900	Present	Unknown	Non-Fresh	3	0	
10/22/2013		Male	980	Present	Unknown	Non-Fresh	3	0	
10/22/2013		Male	1030	Present	Unknown	Non-Fresh	3	0	
10/22/2013	1514	Male	690	Present	Unknown	Fresh	3	1	
10/22/2013		Male	820	Present	Unknown	Non-Fresh	3	1	
10/22/2013		Female	800	Present	Spawned	Non-Fresh	3	2	
10/22/2013		Male	810	Present	Unknown	Non-Fresh	3	2	
10/22/2013	1508	Male	850	Present	Unknown	Fresh	3	3	
10/22/2013	1510	Female	840	Present	Spawned	Fresh	3	3	
10/22/2013		Female	710	Present	Spawned	Non-Fresh	3	3	
10/22/2013		Male	780	Present	Unknown	Non-Fresh	3	3	
10/22/2013		Male	860	Present	Unknown	Non-Fresh	3	3	
10/22/2013		Male	870	Present	Unknown	Non-Fresh	3	3	
10/22/2013	1506	Female	750	Present	Spawned	Fresh	3	4	
10/22/2013	1507	Female	950	Present	Spawned	Fresh	3	4	
10/22/2013		Female	810	Present	Spawned	Non-Fresh	3	5	
10/22/2013	1501	Male	990	Present	Unknown	Fresh	3	6	
10/22/2013	1503	Female	780	Present	Spawned	Fresh	3	6	
10/22/2013		Male	600	Present	Unknown	Non-Fresh	3	6	
10/22/2013		Male	820	Present	Unknown	Non-Fresh	3	6	
10/22/2013		Male	870	Present	Unknown	Non-Fresh	3	6	
10/22/2013		Male	920	Present	Unknown	Non-Fresh	3	6	
10/23/2013		Female	900	Present	Spawned	Non-Fresh	2	6	
10/23/2013	1537	Female	750	Absent	Spawned	Non-Fresh	2	7	068746
10/23/2013	1538	Female	800	Absent	Spawned	Non-Fresh	2	7	055381
10/23/2013	1539	Female	800	Present	Spawned	Fresh	2	7	
10/23/2013	1540	Female	850	Present	Spawned	Fresh	2	7	
10/23/2013	1541	Male	900	Present	Unknown	Fresh	2	7	
10/23/2013	1542	Male	750	Present	Unknown	Fresh	2	7	
10/23/2013		Male	680	Present	Unknown	Non-Fresh	2	7	
10/23/2013		Female	800	Present	Spawned	Non-Fresh	2	7	
10/23/2013		Female	810	Present	Spawned	Non-Fresh	2	7	
10/23/2013		Male	980	Present	Unknown	Non-Fresh	2	7	
10/23/2013	1529	Male	990	Present	Unknown	Fresh	2	8	
10/23/2013	1530	Male	860	Absent	Unknown	Non-Fresh	2	8	055379
10/23/2013	1531	Female	850	Present	Spawned	Fresh	2	8	
10/23/2013	1532	Female	780	Present	Spawned	Fresh	2	8	
10/23/2013	1533	Female	810	Present	Spawned	Fresh	2	8	
10/23/2013	1534	Male	1030	Present	Unknown	Fresh	2	8	
10/23/2013	1535	Male	830	Present	Unknown	Fresh	2	8	
10/23/2013	1536	Male	640	Absent	Unknown	Very Non-Fresh	2	8	060388
10/23/2013		Female	710	Present	Spawned	Non-Fresh	2	8	
10/23/2013		Male	740	Present	Unknown	Non-Fresh	2	8	
10/23/2013		Female	780	Present	Spawned	Non-Fresh	2	8	
10/23/2013		Female	780	Present	Spawned	Non-Fresh	2	8	
10/23/2013		Male	850	Present	Unknown	Non-Fresh	2	8	
10/23/2013		Female	850	Present	Spawned	Non-Fresh	2	8	
10/23/2013		Male	970	Present	Unknown	Non-Fresh	2	8	
10/23/2013		Female	970	Present	Spawned	Non-Fresh	2	8	
10/23/2013	1517	Male	820	Absent	Unknown	Non-Fresh	2	9	055376
10/23/2013	1518	Female	770	Present	Spawned	Fresh	2	9	
10/23/2013	1519	Male	830	Present	Unknown	Fresh	2	9	
10/23/2013	1520	Male	880	Present	Unknown	Fresh	2	9	
10/23/2013	1521	Male	890	Present	Unknown	Fresh	2	9	
10/23/2013	1522	Male	750	Present	Unknown	Fresh	2	9	
10/23/2013	1523	Female	980	Present	Spawned	Fresh	2	9	
10/23/2013	1524	Female	870	Present	Spawned	Fresh	2	9	
10/23/2013	1525	Female	760	Unknown	Spawned	Non-Fresh	2	9	NTD
10/23/2013	1526	Male	590	Absent	Unknown	Fresh	2	9	060392
10/23/2013	1527	Female	800	Absent	Spawned	Fresh	2	9	055374
10/23/2013	1528	Male	890	Absent	Unknown	Fresh	2	9	055193
10/23/2013		Male	640	Present	Unknown	Non-Fresh	2	9	
10/23/2013		Female	700	Present	Spawned	Non-Fresh	2	9	
10/23/2013		Male	750	Present	Unknown	Non-Fresh	2	9	
10/23/2013		Female	760	Present	Spawned	Non-Fresh	2	9	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/23/2013		Female	760	Present	Spawnd	Non-Fresh	2	9	
10/23/2013		Female	770	Present	Spawnd	Non-Fresh	2	9	
10/23/2013		Female	780	Present	Spawnd	Non-Fresh	2	9	
10/23/2013		Female	790	Present	Spawnd	Non-Fresh	2	9	
10/23/2013		Female	800	Present	Spawnd	Non-Fresh	2	9	
10/23/2013		Female	800	Present	Spawnd	Non-Fresh	2	9	
10/23/2013		Male	810	Present	Unknown	Non-Fresh	2	9	
10/23/2013		Female	860	Present	Spawnd	Non-Fresh	2	9	
10/23/2013		Male	860	Present	Unknown	Non-Fresh	2	9	
10/23/2013		Male	870	Present	Unknown	Non-Fresh	2	9	
10/23/2013		Female	870	Present	Spawnd	Non-Fresh	2	9	
10/23/2013		Male	900	Present	Unknown	Non-Fresh	2	9	
10/23/2013		Male	940	Present	Unknown	Very Non-Fresh	2	9	
10/23/2013		Male	980	Present	Unknown	Non-Fresh	2	9	
10/23/2013		Male	1010	Present	Unknown	Non-Fresh	2	9	
10/23/2013		Male	1010	Present	Unknown	Non-Fresh	2	9	
10/29/2013	1580	Male	790	Present	Unknown	Fresh	3	0	
10/29/2013	1581	Male	900	Absent	Unknown	Non-Fresh	3	0	055375
10/29/2013	1582	Male	780	Present	Unknown	Fresh	3	0	
10/29/2013	1583	Male	850	Absent	Unknown	Non-Fresh	3	0	055370
10/29/2013		Male	620	Present	Unknown	Non-Fresh	3	0	
10/29/2013		Female	760	Present	Spawnd	Non-Fresh	3	0	
10/29/2013		Female	800	Present	Spawnd	Very Non-Fresh	3	0	
10/29/2013		Male	800	Present	Unknown	Non-Fresh	3	0	
10/29/2013		Male	840	Present	Unknown	Non-Fresh	3	0	
10/29/2013		Male	850	Present	Unknown	Non-Fresh	3	0	
10/29/2013		Female	870	Present	Spawnd	Non-Fresh	3	0	
10/29/2013		Male	880	Present	Unknown	Non-Fresh	3	0	
10/29/2013		Male	900	Present	Unknown	Unknown	3	0	
10/29/2013		Male	900	Present	Unknown	Non-Fresh	3	0	
10/29/2013		Female	910	Present	Spawnd	Non-Fresh	3	0	
10/29/2013		Male	990	Present	Unknown	Non-Fresh	3	0	
10/29/2013		Female	1000	Present	Unknown	Non-Fresh	3	0	
10/29/2013	1576	Female	900	Present	Spawnd	Fresh	3	1	
10/29/2013	1577	Female	780	Present	Spawnd	Fresh	3	1	
10/29/2013	1578	Male	830	Absent	Unknown	Non-Fresh	3	1	055373
10/29/2013	1579	Male	850	Absent	Unknown	Non-Fresh	3	1	055373
10/29/2013		Female	780	Present	Spawnd	Non-Fresh	3	1	
10/29/2013		Female	800	Present	Spawnd	Non-Fresh	3	1	
10/29/2013		Female	820	Present	Spawnd	Non-Fresh	3	1	
10/29/2013		Male	890	Present	Unknown	Very Non-Fresh	3	1	
10/29/2013		Male	950	Present	Unknown	Non-Fresh	3	1	
10/29/2013		Male	970	Present	Unknown	Non-Fresh	3	1	
10/29/2013	1572	Female	810	Absent	Spawnd	Non-Fresh	3	2	068751
10/29/2013	1573	Female	800	Present	Spawnd	Fresh	3	2	
10/29/2013	1574	Male	930	Absent	Unknown	Non-Fresh	3	2	055394
10/29/2013	1575	Female	850	Absent	Spawnd	Fresh	3	2	068752
10/29/2013		Female	800	Present	Spawnd	Non-Fresh	3	2	
10/29/2013		Female	800	Present	Spawnd	Non-Fresh	3	2	
10/29/2013		Male	810	Present	Unknown	Non-Fresh	3	2	
10/29/2013		Female	820	Present	Spawnd	Very Non-Fresh	3	2	
10/29/2013		Male	850	Present	Unknown	Very Non-Fresh	3	2	
10/29/2013		Male	870	Present	Unknown	Non-Fresh	3	2	
10/29/2013		Female	890	Present	Spawnd	Non-Fresh	3	2	
10/29/2013		Male	910	Present	Unknown	Non-Fresh	3	2	
10/29/2013		Male	950	Present	Unknown	Non-Fresh	3	2	
10/29/2013	1561	Male	900	Present	Unknown	Fresh	3	3	
10/29/2013	1562	Female	740	Absent	Spawnd	Fresh	3	3	055396
10/29/2013	1563	Male	940	Absent	Unknown	Non-Fresh	3	3	055373
10/29/2013	1564	Male	870	Absent	Unknown	Non-Fresh	3	3	068752
10/29/2013	1565	Female	950	Present	Spawnd	Fresh	3	3	
10/29/2013	1566	Female	850	Present	Spawnd	Fresh	3	3	
10/29/2013	1567	Female	800	Present	Spawnd	Fresh	3	3	
10/29/2013	1568	Female	750	Present	Spawnd	Fresh	3	3	
10/29/2013	1569	Female	780	Present	Spawnd	Fresh	3	3	
10/29/2013	1570	Female	910	Present	Spawnd	Fresh	3	3	
10/29/2013	1571	Male	620	Unknown	Unknown	Very Non-Fresh	3	3	NTD
10/29/2013		Male	630	Present	Unknown	Non-Fresh	3	3	
10/29/2013		Female	700	Present	Spawnd	Non-Fresh	3	3	
10/29/2013		Female	740	Present	Spawnd	Non-Fresh	3	3	
10/29/2013		Female	770	Present	Spawnd	Non-Fresh	3	3	
10/29/2013		Male	790	Present	Unknown	Non-Fresh	3	3	
10/29/2013		Female	790	Present	Spawnd	Non-Fresh	3	3	
10/29/2013		Male	800	Present	Unknown	Non-Fresh	3	3	
10/29/2013		Female	800	Present	Spawnd	Non-Fresh	3	3	
10/29/2013		Male	800	Present	Unknown	Non-Fresh	3	3	
10/29/2013		Female	850	Present	Spawnd	Non-Fresh	3	3	
10/29/2013		Male	870	Present	Unknown	Non-Fresh	3	3	
10/29/2013		Female	880	Present	Spawnd	Non-Fresh	3	3	
10/29/2013		Female	880	Present	Spawnd	Non-Fresh	3	3	
10/29/2013		Female	900	Present	Spawnd	Non-Fresh	3	3	
10/29/2013		Female	930	Present	Spawnd	Non-Fresh	3	3	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/29/2013		Male	950	Present	Unknown	Non-Fresh	3	3	
10/29/2013		Male	950	Present	Unknown	Non-Fresh	3	3	
10/29/2013		Male	950	Present	Unknown	Non-Fresh	3	3	
10/29/2013	1559	Male	980	Present	Unknown	Fresh	3	4	
10/29/2013	1560	Male	990	Present	Unknown	Fresh	3	4	
10/29/2013		Female	720	Present	Spawned	Non-Fresh	3	4	
10/29/2013		Female	770	Present	Spawned	Non-Fresh	3	4	
10/29/2013		Female	800	Present	Spawned	Non-Fresh	3	4	
10/29/2013		Female	840	Present	Unspawned	Non-Fresh	3	4	
10/29/2013		Male	860	Present	Unknown	Non-Fresh	3	4	
10/29/2013	1553	Female	810	Present	Spawned	Fresh	3	5	
10/29/2013	1554	Female	800	Absent	Spawned	Non-Fresh	3	5	055370
10/29/2013	1555	Female	840	Present	Spawned	Fresh	3	5	
10/29/2013	1556	Female	760	Present	Spawned	Fresh	3	5	
10/29/2013	1557	Female	780	Present	Spawned	Fresh	3	5	
10/29/2013	1558	Male	900	Present	Unknown	Fresh	3	5	
10/29/2013		Male	700	Present	Unknown	Non-Fresh	3	5	
10/29/2013		Male	700	Present	Unknown	Non-Fresh	3	5	
10/29/2013		Female	700	Present	Spawned	Non-Fresh	3	5	
10/29/2013		Male	740	Present	Unknown	Non-Fresh	3	5	
10/29/2013		Female	770	Present	Spawned	Non-Fresh	3	5	
10/29/2013		Female	810	Present	Spawned	Non-Fresh	3	5	
10/29/2013		Male	820	Present	Unknown	Non-Fresh	3	5	
10/29/2013		Female	840	Present	Spawned	Non-Fresh	3	5	
10/29/2013		Male	870	Present	Unknown	Non-Fresh	3	5	
10/29/2013		Male	1000	Present	Unknown	Non-Fresh	3	5	
10/29/2013	1543	Female	830	Present	Spawned	Fresh	3	6	
10/29/2013	1544	Female	710	Absent	Spawned	Non-Fresh	3	6	055388
10/29/2013	1545	Female	1000	Present	Spawned	Fresh	3	6	
10/29/2013	1546	Female	770	Present	Spawned	Fresh	3	6	
10/29/2013	1547	Female	810	Present	Spawned	Fresh	3	6	
10/29/2013	1548	Male	920	Present	Unknown	Fresh	3	6	
10/29/2013	1549	Male	770	Absent	Unknown	Non-Fresh	3	6	055379
10/29/2013	1550	Female	800	Absent	Spawned	Very Non-Fresh	3	6	055369
10/29/2013	1551	Male	790	Absent	Unknown	Non-Fresh	3	6	055369
10/29/2013	1552	Male	840	Absent	Unknown	Non-Fresh	3	6	055375
10/29/2013		Male	600	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Female	750	Present	Spawned	Non-Fresh	3	6	
10/29/2013		Male	750	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Male	790	Present	Unknown	Very Non-Fresh	3	6	
10/29/2013		Female	790	Present	Spawned	Non-Fresh	3	6	
10/29/2013		Female	790	Present	Spawned	Non-Fresh	3	6	
10/29/2013		Female	800	Present	Spawned	Very Non-Fresh	3	6	
10/29/2013		Female	810	Present	Spawned	Non-Fresh	3	6	
10/29/2013		Female	830	Present	Spawned	Non-Fresh	3	6	
10/29/2013		Male	840	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Male	850	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Male	850	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Female	850	Present	Spawned	Non-Fresh	3	6	
10/29/2013		Female	850	Present	Spawned	Non-Fresh	3	6	
10/29/2013		Male	870	Present	Unknown	Very Non-Fresh	3	6	
10/29/2013		Male	890	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Male	900	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Male	900	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Male	920	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Male	930	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Male	990	Present	Unknown	Non-Fresh	3	6	
10/29/2013		Female	800	Absent	Spawned	Non-Fresh	3	6	Lost
10/30/2013	2021	Male	700	Absent	Unknown	Non-Fresh	2	6	055369
10/30/2013	2009	Male	580	Present	Unknown	Fresh	2	7	
10/30/2013	2010	Male	900	Present	Unknown	Fresh	2	7	
10/30/2013	2011	Male	890	Present	Unknown	Fresh	2	7	
10/30/2013	2012	Male	700	Present	Unknown	Fresh	2	7	
10/30/2013	2013	Female	800	Present	Spawned	Fresh	2	7	
10/30/2013	2014	Female	840	Present	Spawned	Fresh	2	7	
10/30/2013	2015	Male	700	Present	Unknown	Fresh	2	7	
10/30/2013	2016	Female	920	Present	Spawned	Fresh	2	7	
10/30/2013	2017	Male	850	Present	Unknown	Fresh	2	7	
10/30/2013	2018	Male	820	Present	Unknown	Fresh	2	7	
10/30/2013	2019	Female	620	Present	Spawned	Fresh	2	7	
10/30/2013	2020	Male	800	Absent	Unknown	Non-Fresh	2	7	055393
10/30/2013		Female	590	Present	Spawned	Non-Fresh	2	7	
10/30/2013		Male	670	Present	Unknown	Non-Fresh	2	7	
10/30/2013		Female	740	Present	Spawned	Non-Fresh	2	7	
10/30/2013		Female	780	Present	Spawned	Non-Fresh	2	7	
10/30/2013		Female	790	Present	Spawned	Non-Fresh	2	7	
10/30/2013		Female	790	Present	Spawned	Non-Fresh	2	7	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	7	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	7	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	7	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	7	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	7	
10/30/2013		Male	820	Present	Unknown	Non-Fresh	2	7	
10/30/2013		Male	830	Present	Unknown	Non-Fresh	2	7	
10/30/2013		Male	890	Present	Unknown	Non-Fresh	2	7	
10/30/2013		Male	900	Present	Unknown	Non-Fresh	2	7	
10/30/2013		Male	970	Present	Unknown	Non-Fresh	2	7	
10/30/2013		Male	1000	Present	Unknown	Non-Fresh	2	7	
10/30/2013	2003	Male	860	Present	Unknown	Fresh	2	8	
10/30/2013	2004	Male	900	Present	Unknown	Fresh	2	8	
10/30/2013	2005	Female	850	Present	Spawned	Fresh	2	8	
10/30/2013	2006	Female	750	Present	Spawned	Fresh	2	8	
10/30/2013	2007	Female	800	Present	Spawned	Fresh	2	8	
10/30/2013	2008	Female	970	Present	Spawned	Fresh	2	8	
10/30/2013		Female	760	Present	Spawned	Non-Fresh	2	8	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	8	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	8	
10/30/2013		Female	810	Present	Spawned	Non-Fresh	2	8	
10/30/2013		Male	830	Present	Unknown	Non-Fresh	2	8	
10/30/2013		Male	870	Present	Unknown	Non-Fresh	2	8	
10/30/2013		Female	870	Present	Spawned	Non-Fresh	2	8	
10/30/2013		Male	900	Present	Unknown	Non-Fresh	2	8	
10/30/2013		Male	900	Present	Unknown	Non-Fresh	2	8	
10/30/2013		Female	910	Present	Spawned	Non-Fresh	2	8	
10/30/2013	1584	Female	870	Present	Spawned	Fresh	2	9	
10/30/2013	1585	Female	790	Present	Spawned	Fresh	2	9	
10/30/2013	1586	Male	830	Present	Unknown	Fresh	2	9	
10/30/2013	1587	Male	860	Present	Unknown	Fresh	2	9	
10/30/2013	1588	Female	820	Present	Spawned	Fresh	2	9	
10/30/2013	1589	Male	900	Present	Unknown	Fresh	2	9	
10/30/2013	1590	Male	900	Absent	Unknown	Very Non-Fresh	2	9	NTD
10/30/2013	1591	Female	900	Present	Spawned	Fresh	2	9	
10/30/2013	1592	Male	840	Present	Unknown	Fresh	2	9	
10/30/2013	1593	Female	750	Present	Spawned	Fresh	2	9	
10/30/2013	1594	Male	800	Present	Unknown	Fresh	2	9	
10/30/2013	1595	Female	750	Present	Spawned	Fresh	2	9	
10/30/2013	1596	Male	920	Present	Unknown	Fresh	2	9	
10/30/2013	1597	Female	850	Present	Spawned	Fresh	2	9	
10/30/2013	1598	Female	730	Absent	Spawned	Fresh	2	9	055370
10/30/2013	1599	Female	800	Unknown	Spawned	Non-Fresh	2	9	NTD
10/30/2013	1600	Male	880	Absent	Unknown	Non-Fresh	2	9	055378
10/30/2013	2001	Male	930	Present	Unknown	Fresh	2	9	
10/30/2013	2002	Male	900	Absent	Unknown	Non-Fresh	2	9	055386
10/30/2013		Unknown	810	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	540	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	550	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	550	Present	Unknown	Very Non-Fresh	2	9	
10/30/2013		Male	600	Present	Unknown	Very Non-Fresh	2	9	
10/30/2013		Male	650	Present	Unknown	Very Non-Fresh	2	9	
10/30/2013		Female	650	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	720	Present	Spawned	Very Non-Fresh	2	9	
10/30/2013		Female	730	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	740	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	750	Present	Spawned	Very Non-Fresh	2	9	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	780	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	780	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	790	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Male	790	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Male	800	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Male	800	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Unknown	820	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	820	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Female	820	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	820	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	820	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Male	820	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	830	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	840	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Female	840	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	840	Present	Spawned	Non-Fresh	2	9	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/30/2013		Female	840	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	850	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Male	850	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	850	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Female	850	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Male	850	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Female	860	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	860	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Female	870	Present	Spawned	Non-Fresh	2	9	
10/30/2013		Male	880	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	900	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	900	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	910	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	920	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	920	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	930	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	1000	Present	Unknown	Non-Fresh	2	9	
10/30/2013		Male	1000	Present	Unknown	Non-Fresh	2	9	
10/30/2013	1620	Male	850	Present	Unknown	Fresh	1	11	
10/30/2013	1621	Male	890	Present	Unknown	Fresh	1	11	
10/30/2013	1622	Male	960	Present	Unknown	Fresh	1	11	
10/30/2013	1623	Male	820	Absent	Unknown	Non-Fresh	1	11	055382
10/30/2013	1624	Female	840	Absent	Spawned	Non-Fresh	1	11	068671
10/30/2013	1625	Female	780	Present	Spawned	Fresh	1	11	
10/30/2013	1626	Female	720	Absent	Spawned	Very Non-Fresh	1	11	055377
10/30/2013	1627	Male	950	Present	Unknown	Fresh	1	11	
10/30/2013	1628	Male	790	Present	Unknown	Fresh	1	11	
10/30/2013	1629	Male	770	Present	Unknown	Fresh	1	11	
10/30/2013	1630	Male	830	Present	Unknown	Fresh	1	11	
10/30/2013	1631	Male	850	Present	Unknown	Fresh	1	11	
10/30/2013	1632	Male	830	Absent	Unknown	Non-Fresh	1	11	055378
10/30/2013	1633	Male	910	Absent	Unknown	Non-Fresh	1	11	055378
10/30/2013	1634	Male	880	Present	Unknown	Fresh	1	11	
10/30/2013	1635	Male	920	Present	Unknown	Fresh	1	11	
10/30/2013	1636	Male	740	Present	Unknown	Fresh	1	11	
10/30/2013	1637	Female	800	Present	Spawned	Fresh	1	11	
10/30/2013	1638	Male	870	Present	Unknown	Fresh	1	11	
10/30/2013	1639	Male	880	Absent	Unknown	Very Non-Fresh	1	11	Lost
10/30/2013	1640	Male	850	Present	Unknown	Fresh	1	11	
10/30/2013	1641	Male	860	Present	Unknown	Fresh	1	11	
10/30/2013	1642	Female	790	Present	Spawned	Fresh	1	11	
10/30/2013	1643	Male	840	Present	Unknown	Fresh	1	11	
10/30/2013	1644	Male	810	Present	Unknown	Fresh	1	11	
10/30/2013	1645	Male	820	Absent	Unknown	Non-Fresh	1	11	055394
10/30/2013	1646	Male	860	Present	Unknown	Fresh	1	11	
10/30/2013	1647	Male	950	Present	Unknown	Fresh	1	11	
10/30/2013	1648	Male	860	Present	Unknown	Fresh	1	11	
10/30/2013		Male	580	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Male	630	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Female	650	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	700	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Male	700	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Male	700	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Male	700	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Female	710	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	740	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Male	750	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Male	750	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	750	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	760	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	760	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Male	760	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Female	770	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	770	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	780	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	780	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	780	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Male	790	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Male	790	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Female	790	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Male	790	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Male	800	Present	Unknown	Non-Fresh	1	11	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	1	11	
10/30/2013		Female	800	Present	Spawned	Non-Fresh	1	11	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
10/30/2013		Female	800	Present	Spawnd	Non-Fresh	1	12	
10/30/2013		Male	800	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	800	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Female	800	Present	Spawnd	Non-Fresh	1	12	
10/30/2013		Female	800	Present	Spawnd	Non-Fresh	1	12	
10/30/2013		Female	800	Present	Spawnd	Non-Fresh	1	12	
10/30/2013		Male	810	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	810	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	810	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	820	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	830	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	830	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	830	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Female	840	Present	Spawnd	Non-Fresh	1	12	
10/30/2013		Male	840	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	840	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	840	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	840	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	850	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	850	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	850	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	860	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	870	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Female	870	Present	Spawnd	Non-Fresh	1	12	
10/30/2013		Male	870	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	870	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	870	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	870	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	880	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	890	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Female	890	Present	Spawnd	Non-Fresh	1	12	
10/30/2013		Male	900	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	900	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	910	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	930	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	930	Present	Unknown	Non-Fresh	1	12	
10/30/2013		Male	950	Present	Unknown	Non-Fresh	1	12	
10/30/2013	1602	Male	970	Present	Unknown	Fresh	1	13	
10/30/2013	1603	Male	790	Present	Unknown	Fresh	1	13	
10/30/2013	1604	Male	810	Present	Unknown	Fresh	1	13	
10/30/2013		Male	770	Present	Unknown	Non-Fresh	1	13	
10/30/2013	1601	Male	950	Present	Unknown	Fresh	1	14	
10/31/2013		Female	720	Present	Spawnd	Non-Fresh	1	9	
10/31/2013		Female	780	Present	Spawnd	Non-Fresh	1	9	
10/31/2013		Male	800	Present	Unknown	Non-Fresh	1	9	
10/31/2013		Female	810	Present	Spawnd	Non-Fresh	1	9	
10/31/2013	1649	Female	920	Present	Spawnd	Fresh	1	10	
10/31/2013	1650	Female	840	Present	Spawnd	Fresh	1	10	
10/31/2013	1651	Male	750	Present	Unknown	Fresh	1	10	
10/31/2013	1652	Male	770	Present	Unknown	Fresh	1	10	
10/31/2013	1653	Male	550	Present	Unknown	Fresh	1	10	
10/31/2013	1654	Female	870	Present	Spawnd	Fresh	1	10	
10/31/2013	1655	Female	880	Present	Spawnd	Fresh	1	10	
10/31/2013	1656	Female	840	Present	Spawnd	Fresh	1	10	
10/31/2013	1657	Female	780	Absent	Spawnd	Fresh	1	10	055387
10/31/2013	1658	Male	860	Absent	Unknown	Unknown	1	10	055372
10/31/2013	1659	Female	800	Present	Spawnd	Fresh	1	10	
10/31/2013	1660	Male	790	Present	Unknown	Fresh	1	10	
10/31/2013	1661	Male	800	Present	Unknown	Fresh	1	10	
10/31/2013	1662	Male	830	Present	Unknown	Fresh	1	10	
10/31/2013	1663	Male	610	Absent	Unknown	Non-Fresh	1	10	060394
10/31/2013	1664	Male	810	Present	Unknown	Fresh	1	10	
10/31/2013	1665	Male	950	Present	Unknown	Fresh	1	10	
10/31/2013		Male	680	Present	Unknown	Non-Fresh	1	10	
10/31/2013		Female	690	Present	Spawnd	Non-Fresh	1	10	
10/31/2013		Female	780	Present	Spawnd	Non-Fresh	1	10	
10/31/2013		Female	780	Present	Spawnd	Non-Fresh	1	10	
10/31/2013		Male	810	Present	Unknown	Non-Fresh	1	10	
10/31/2013		Male	850	Present	Unknown	Non-Fresh	1	10	
10/31/2013		Female	850	Present	Spawnd	Non-Fresh	1	10	
10/31/2013		Female	900	Present	Unspawnd	Non-Fresh	1	10	
10/31/2013		Male	910	Present	Unknown	Non-Fresh	1	10	
10/31/2013		Male	1010	Present	Unknown	Non-Fresh	1	10	
10/31/2013		Male	1010	Present	Unknown	Non-Fresh	1	10	
10/31/2013		Male	1020	Present	Unknown	Non-Fresh	1	10	
11/5/2013	1690	Male	930	Absent	Unknown	Non-Fresh	3	0	055372
11/5/2013	1691	Male	880	Absent	Unknown	Fresh	3	0	055389
11/5/2013	1692	Male	820	Absent	Unknown	Non-Fresh	3	0	055387
11/5/2013		Male	680	Present	Unknown	Non-Fresh	3	0	
11/5/2013		Male	720	Present	Unknown	Non-Fresh	3	0	
11/5/2013		Male	800	Present	Unknown	Non-Fresh	3	0	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/5/2013		Male	800	Present	Unknown	Non-Fresh	3	0	
11/5/2013		Male	810	Present	Unknown	Non-Fresh	3	0	
11/5/2013		Female	820	Present	Spawned	Non-Fresh	3	0	
11/5/2013		Male	850	Present	Unknown	Non-Fresh	3	0	
11/5/2013		Male	850	Present	Unknown	Non-Fresh	3	0	
11/5/2013		Male	870	Present	Unknown	Non-Fresh	3	0	
11/5/2013		Male	890	Present	Unknown	Non-Fresh	3	0	
11/5/2013	1687	Male	830	Absent	Unknown	Non-Fresh	3	1	068752
11/5/2013	1688	Male	620	Absent	Unknown	Non-Fresh	3	1	060395
11/5/2013	1689	Male	830	Present	Unknown	Fresh	3	1	
11/5/2013		Female	670	Present	Spawned	Non-Fresh	3	1	
11/5/2013		Female	770	Present	Unknown	Non-Fresh	3	1	
11/5/2013		Male	800	Present	Unknown	Non-Fresh	3	1	
11/5/2013		Male	820	Present	Unknown	Non-Fresh	3	1	
11/5/2013		Male	850	Present	Unknown	Non-Fresh	3	1	
11/5/2013		Male	900	Present	Unknown	Non-Fresh	3	1	
11/5/2013		Male	950	Present	Unknown	Non-Fresh	3	1	
11/5/2013	1685	Male	610	Unknown	Unknown	Very Non-Fresh	3	2	055504
11/5/2013	1686	Male	830	Absent	Unknown	Non-Fresh	3	2	055371
11/5/2013		Male	620	Present	Unknown	Non-Fresh	3	2	
11/5/2013		Female	720	Present	Spawned	Non-Fresh	3	2	
11/5/2013		Female	830	Present	Spawned	Non-Fresh	3	2	
11/5/2013	1682	Female	750	Present	Spawned	Fresh	3	3	
11/5/2013	1683	Male	760	Present	Unknown	Fresh	3	3	
11/5/2013	1684	Female	780	Present	Spawned	Fresh	3	3	
11/5/2013		Female	750	Present	Spawned	Non-Fresh	3	3	
11/5/2013		Male	760	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Male	760	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Male	770	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Male	800	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Female	800	Present	Spawned	Non-Fresh	3	3	
11/5/2013		Female	820	Present	Spawned	Non-Fresh	3	3	
11/5/2013		Male	830	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Male	830	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Female	830	Present	Spawned	Non-Fresh	3	3	
11/5/2013		Female	840	Present	Spawned	Non-Fresh	3	3	
11/5/2013		Male	850	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Male	850	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Male	870	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Female	890	Present	Spawned	Non-Fresh	3	3	
11/5/2013		Male	900	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Male	930	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Male	960	Present	Unknown	Non-Fresh	3	3	
11/5/2013		Male	1110	Present	Unknown	Non-Fresh	3	3	
11/5/2013	1680	Male	940	Present	Unknown	Fresh	3	4	
11/5/2013	1681	Female	550	Present	Spawned	Fresh	3	4	
11/5/2013		Male	570	Present	Unknown	Non-Fresh	3	4	
11/5/2013		Male	640	Present	Unknown	Non-Fresh	3	4	
11/5/2013		Female	760	Present	Spawned	Non-Fresh	3	4	
11/5/2013		Male	800	Present	Unknown	Non-Fresh	3	4	
11/5/2013		Female	850	Present	Spawned	Non-Fresh	3	4	
11/5/2013		Male	860	Present	Unknown	Non-Fresh	3	4	
11/5/2013		Male	880	Present	Unknown	Non-Fresh	3	4	
11/5/2013		Male	910	Present	Unknown	Non-Fresh	3	4	
11/5/2013	1676	Male	980	Present	Unknown	Fresh	3	5	
11/5/2013	1677	Female	830	Absent	Spawned	Non-Fresh	3	5	NTD
11/5/2013	1678	Female	800	Present	Spawned	Fresh	3	5	
11/5/2013	1679	Female	800	Absent	Spawned	Fresh	3	5	055383
11/5/2013		Female	710	Present	Spawned	Non-Fresh	3	5	
11/5/2013		Female	740	Present	Spawned	Non-Fresh	3	5	
11/5/2013		Male	780	Present	Unknown	Non-Fresh	3	5	
11/5/2013		Female	800	Present	Spawned	Non-Fresh	3	5	
11/5/2013		Male	800	Present	Unknown	Non-Fresh	3	5	
11/5/2013		Female	800	Present	Spawned	Non-Fresh	3	5	
11/5/2013		Male	810	Present	Unknown	Non-Fresh	3	5	
11/5/2013		Male	820	Present	Unknown	Non-Fresh	3	5	
11/5/2013		Male	830	Present	Unknown	Non-Fresh	3	5	
11/5/2013		Female	830	Present	Spawned	Non-Fresh	3	5	
11/5/2013		Male	870	Present	Unknown	Non-Fresh	3	5	
11/5/2013	1666	Female	890	Present	Spawned	Fresh	3	6	
11/5/2013	1667	Female	750	Absent	Spawned	Very Non-Fresh	3	6	055374
11/5/2013	1668	Female	870	Present	Spawned	Fresh	3	6	
11/5/2013	1669	Female	700	Unknown	Unknown	Very Non-Fresh	3	6	NTD
11/5/2013	1670	Female	730	Present	Spawned	Fresh	3	6	
11/5/2013	1671	Female	660	Present	Spawned	Fresh	3	6	
11/5/2013	1672	Female	750	Present	Spawned	Fresh	3	6	
11/5/2013	1673	Male	810	Present	Unknown	Fresh	3	6	
11/5/2013	1674	Male	820	Present	Unknown	Fresh	3	6	
11/5/2013	1675	Male	650	Present	Unknown	Fresh	3	6	
11/5/2013		Female	580	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	700	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	720	Present	Spawned	Non-Fresh	3	6	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/5/2013		Female	720	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	730	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	730	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	750	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	770	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	770	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	790	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	800	Present	Unknown	Non-Fresh	3	6	
11/5/2013		Female	800	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Male	810	Present	Unknown	Non-Fresh	3	6	
11/5/2013		Female	820	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	830	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Female	830	Present	Unspawned	Non-Fresh	3	6	
11/5/2013		Female	830	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Male	830	Present	Unknown	Non-Fresh	3	6	
11/5/2013		Male	840	Present	Unknown	Non-Fresh	3	6	
11/5/2013		Female	850	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Male	850	Present	Unknown	Non-Fresh	3	6	
11/5/2013		Female	850	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Male	850	Present	Unknown	Non-Fresh	3	6	
11/5/2013		Female	860	Present	Spawned	Non-Fresh	3	6	
11/5/2013		Male	870	Present	Unknown	Non-Fresh	3	6	
11/5/2013		Male	890	Present	Unknown	Non-Fresh	3	6	
11/5/2013		Male	900	Present	Unknown	Non-Fresh	3	6	
11/5/2013		Male	930	Present	Unknown	Non-Fresh	3	6	
11/6/2013	1833	Male	560	Present	Unknown	Fresh	2	6	
11/6/2013		Male	840	Present	Unknown	Non-Fresh	2	6	
11/6/2013		Male	890	Present	Unknown	Non-Fresh	2	6	
11/6/2013		Male	930	Present	Unknown	Non-Fresh	2	6	
11/6/2013	1827	Male	860	Present	Unknown	Fresh	2	7	
11/6/2013	1828	Female	790	Present	Spawned	Fresh	2	7	
11/6/2013	1829	Female	770	Unknown	Spawned	Non-Fresh	2	7	NTD
11/6/2013	1830	Female	620	Present	Spawned	Fresh	2	7	
11/6/2013	1831	Female	720	Absent	Spawned	Non-Fresh	2	7	068752
11/6/2013	1832	Female	700	Present	Spawned	Fresh	2	7	
11/6/2013		Male	650	Present	Unknown	Non-Fresh	2	7	
11/6/2013		Male	690	Present	Unknown	Non-Fresh	2	7	
11/6/2013		Female	720	Present	Spawned	Non-Fresh	2	7	
11/6/2013		Male	730	Present	Unknown	Non-Fresh	2	7	
11/6/2013		Female	750	Present	Spawned	Non-Fresh	2	7	
11/6/2013		Male	750	Present	Unknown	Non-Fresh	2	7	
11/6/2013		Female	770	Present	Spawned	Non-Fresh	2	7	
11/6/2013		Female	800	Present	Spawned	Non-Fresh	2	7	
11/6/2013		Female	800	Present	Unknown	Non-Fresh	2	7	
11/6/2013		Male	830	Present	Unknown	Non-Fresh	2	7	
11/6/2013		Female	860	Present	Spawned	Non-Fresh	2	7	
11/6/2013		Male	1020	Present	Unknown	Non-Fresh	2	7	
11/6/2013	1821	Male	900	Present	Unknown	Fresh	2	8	
11/6/2013	1822	Male	850	Present	Unknown	Fresh	2	8	
11/6/2013	1823	Female	860	Present	Spawned	Fresh	2	8	
11/6/2013	1824	Male	800	Present	Unknown	Fresh	2	8	
11/6/2013	1825	Female	800	Present	Spawned	Fresh	2	8	
11/6/2013	1826	Male	540	Present	Unknown	Fresh	2	8	
11/6/2013		Male	600	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Male	650	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Female	650	Present	Unspawned	Non-Fresh	2	8	
11/6/2013		Female	740	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Female	740	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Female	750	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Female	750	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Male	770	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Male	770	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Female	790	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Female	800	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Male	810	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Female	820	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Female	830	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Female	830	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Female	850	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Male	860	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Male	870	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Female	870	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Male	870	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Female	880	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Female	900	Present	Spawned	Non-Fresh	2	8	
11/6/2013		Male	930	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Male	930	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Male	940	Present	Unknown	Non-Fresh	2	8	
11/6/2013		Male	950	Present	Unknown	Non-Fresh	2	8	
11/6/2013	1693	Male	620	Present	Unknown	Fresh	2	9	
11/6/2013	1694	Male	650	Present	Unknown	Fresh	2	9	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/6/2013	1695	Unknown	890	Present	Unknown	Fresh	2	9	
11/6/2013	1696	Male	880	Present	Unknown	Fresh	2	9	
11/6/2013	1697	Female	800	Present	Spawned	Fresh	2	9	
11/6/2013	1698	Female	800	Present	Spawned	Fresh	2	9	
11/6/2013	1699	Male	880	Present	Unknown	Fresh	2	9	
11/6/2013	1700	Female	800	Present	Spawned	Fresh	2	9	
11/6/2013	1801	Female	660	Absent	Spawned	Fresh	2	9	068751
11/6/2013	1802	Male	800	Present	Unknown	Fresh	2	9	
11/6/2013	1803	Female	750	Present	Spawned	Fresh	2	9	
11/6/2013	1804	Female	790	Present	Spawned	Fresh	2	9	
11/6/2013	1805	Female	760	Present	Spawned	Fresh	2	9	
11/6/2013	1806	Male	900	Present	Unknown	Fresh	2	9	
11/6/2013	1807	Female	740	Absent	Spawned	Fresh	2	9	055377
11/6/2013	1808	Female	790	Present	Spawned	Fresh	2	9	
11/6/2013	1809	Male	880	Present	Unknown	Fresh	2	9	
11/6/2013	1810	Female	750	Present	Unknown	Fresh	2	9	
11/6/2013	1811	Male	590	Unknown	Unknown	Non-Fresh	2	9	NTD
11/6/2013	1812	Female	820	Absent	Spawned	Non-Fresh	2	9	055385
11/6/2013	1813	Male	820	Absent	Unknown	Non-Fresh	2	9	055377
11/6/2013	1814	Female	800	Present	Spawned	Fresh	2	9	
11/6/2013	1815	Male	860	Absent	Unknown	Fresh	2	9	055390
11/6/2013	1816	Male	880	Absent	Unknown	Non-Fresh	2	9	NTD
11/6/2013	1817	Male	1040	Present	Unknown	Fresh	2	9	
11/6/2013	1818	Female	740	Present	Spawned	Fresh	2	9	
11/6/2013	1819	Male	900	Unknown	Unknown	Non-Fresh	2	9	NTD
11/6/2013	1820	Male	940	Present	Unknown	Fresh	2	9	
11/6/2013	1901	Male	850	Present	Unknown	Fresh	1	9	
11/6/2013		Male	670	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	670	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Female	700	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Female	700	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Female	720	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Male	720	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	740	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Female	740	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Female	740	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Male	750	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Female	760	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Female	760	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Female	770	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Female	770	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Female	780	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Male	790	Present	Unknown	Very Non-Fresh	2	9	
11/6/2013		Male	790	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Female	800	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Female	800	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Male	800	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	830	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Female	830	Present	Unspawned	Non-Fresh	2	9	
11/6/2013		Male	840	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Female	840	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Male	860	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	870	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	870	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	870	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Female	890	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Male	890	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	890	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Female	900	Present	Spawned	Non-Fresh	2	9	
11/6/2013		Male	900	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	900	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	910	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Male	920	Present	Unknown	Non-Fresh	2	9	
11/6/2013		Female	930	Present	Spawned	Non-Fresh	2	9	
11/6/2013	1915	Female	740	Present	Spawned	Fresh	1	10	
11/6/2013	1916	Female	800	Present	Spawned	Fresh	1	10	
11/6/2013	1917	Male	640	Absent	Unknown	Non-Fresh	1	10	055504
11/6/2013	1918	Male	910	Present	Unknown	Fresh	1	10	
11/6/2013	1919	Male	950	Present	Unknown	Fresh	1	10	
11/6/2013	1920	Male	800	Present	Unknown	Fresh	1	10	
11/6/2013	1921	Male	960	Present	Unknown	Fresh	1	10	
11/6/2013	1922	Female	800	Present	Spawned	Fresh	1	10	
11/6/2013	1923	Female	780	Present	Spawned	Fresh	1	10	
11/6/2013	1924	Male	620	Present	Unknown	Fresh	1	10	
11/6/2013	1925	Male	950	Present	Unknown	Fresh	1	10	
11/6/2013		Female	840	Present	Spawned	Non-Fresh	2	10	
11/6/2013		Female	700	Present	Spawned	Non-Fresh	1	10	
11/6/2013		Female	730	Present	Spawned	Non-Fresh	1	10	
11/6/2013		Female	730	Present	Spawned	Non-Fresh	1	10	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/6/2013		Female	740	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Male	760	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Female	770	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Female	770	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Female	800	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Male	820	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Male	820	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Male	840	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Female	850	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Female	850	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Male	850	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Female	860	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Male	860	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Female	880	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Female	880	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Female	880	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Female	880	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Female	880	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Male	890	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Male	900	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Male	920	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Female	920	Present	Spawnd	Non-Fresh	1	10	
11/6/2013		Male	930	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Male	950	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Male	1000	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Male	1000	Present	Unknown	Non-Fresh	1	10	
11/6/2013		Male	1020	Present	Unknown	Non-Fresh	1	10	
11/6/2013	1908	Female	780	Absent	Spawnd	Non-Fresh	1	11	055382
11/6/2013	1909	Male	830	Absent	Unknown	Non-Fresh	1	11	055389
11/6/2013	1910	Female	900	Present	Spawnd	Fresh	1	11	
11/6/2013	1911	Male	1010	Present	Unknown	Fresh	1	11	
11/6/2013	1912	Female	920	Present	Spawnd	Fresh	1	11	
11/6/2013	1913	Female	790	Present	Spawnd	Fresh	1	11	
11/6/2013	1914	Male	910	Absent	Unknown	Non-Fresh	1	11	055369
11/6/2013		Female	700	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	710	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	710	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Female	750	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	750	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	750	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	750	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Male	780	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	780	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	780	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	780	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	780	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	800	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	800	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	800	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	820	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	830	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	830	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Male	840	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	850	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	850	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	870	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	880	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Male	890	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Male	890	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Female	890	Present	Spawnd	Non-Fresh	1	11	
11/6/2013		Male	900	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Male	910	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Male	940	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Male	940	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Male	960	Present	Unknown	Non-Fresh	1	11	
11/6/2013		Male	980	Present	Unknown	Non-Fresh	1	11	
11/6/2013	1906	Male	700	Present	Unknown	Fresh	1	12	
11/6/2013	1907	Female	910	Absent	Spawnd	Fresh	1	12	055384
11/6/2013		Male	580	Present	Unknown	Non-Fresh	1	12	
11/6/2013		Male	620	Present	Unknown	Non-Fresh	1	12	
11/6/2013		Female	640	Present	Spawnd	Non-Fresh	1	12	
11/6/2013		Female	750	Present	Spawnd	Non-Fresh	1	12	
11/6/2013		Female	770	Present	Unspawnd	Non-Fresh	1	12	
11/6/2013		Female	770	Present	Spawnd	Non-Fresh	1	12	
11/6/2013		Male	780	Present	Unknown	Non-Fresh	1	12	
11/6/2013		Male	780	Present	Unknown	Non-Fresh	1	12	
11/6/2013		Male	800	Present	Unknown	Non-Fresh	1	12	
11/6/2013		Female	800	Present	Spawnd	Non-Fresh	1	12	
11/6/2013		Female	800	Present	Spawnd	Non-Fresh	1	12	
11/6/2013		Female	820	Present	Spawnd	Non-Fresh	1	12	
11/6/2013		Male	830	Present	Unknown	Non-Fresh	1	12	
11/6/2013		Male	840	Present	Unknown	Non-Fresh	1	12	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/6/2013		Male	840	Present	Unknown	Non-Fresh	1	12	
11/6/2013		Male	870	Present	Unknown	Non-Fresh	1	12	
11/6/2013		Male	870	Present	Unknown	Non-Fresh	1	12	
11/6/2013		Male	900	Present	Unknown	Non-Fresh	1	12	
11/6/2013	1904	Male	830	Present	Unknown	Fresh	1	13	
11/6/2013	1905	Female	850	Present	Spawned	Fresh	1	13	
11/6/2013		Female	740	Present	Spawned	Non-Fresh	1	13	
11/6/2013		Female	750	Present	Spawned	Non-Fresh	1	13	
11/6/2013		Male	780	Present	Unknown	Non-Fresh	1	13	
11/6/2013		Male	790	Present	Unknown	Non-Fresh	1	13	
11/6/2013		Male	810	Present	Unknown	Non-Fresh	1	13	
11/6/2013		Male	920	Present	Unknown	Non-Fresh	1	13	
11/6/2013		Female	780	Present	Spawned	Non-Fresh	1	14	
11/6/2013		Male	840	Present	Unknown	Non-Fresh	1	14	
11/6/2013	1902	Female	840	Present	Spawned	Fresh	1	15	
11/6/2013	1903	Male	830	Present	Unknown	Fresh	1	15	
11/12/2013	2115	Unknown	720	Unknown	Unknown	Very Non-Fresh	3	0	055378
11/12/2013		Male	680	Present	Unknown	Non-Fresh	3	0	
11/12/2013		Male	830	Present	Unknown	Non-Fresh	3	0	
11/12/2013		Male	880	Present	Unknown	Non-Fresh	3	0	
11/12/2013	2113	Female	760	Absent	Spawned	Very Non-Fresh	3	1	055378
11/12/2013	2114	Female	730	Absent	Spawned	Non-Fresh	3	1	068751
11/12/2013		Female	750	Present	Spawned	Non-Fresh	3	1	
11/12/2013		Male	770	Present	Unknown	Non-Fresh	3	1	
11/12/2013		Female	770	Present	Spawned	Non-Fresh	3	1	
11/12/2013		Male	790	Present	Unknown	Non-Fresh	3	1	
11/12/2013		Male	790	Present	Unknown	Non-Fresh	3	1	
11/12/2013		Male	800	Present	Unknown	Non-Fresh	3	1	
11/12/2013		Female	860	Present	Spawned	Non-Fresh	3	1	
11/12/2013		Female	900	Present	Spawned	Non-Fresh	3	1	
11/12/2013	2111	Male	840	Present	Unknown	Fresh	3	2	
11/12/2013	2112	Female	770	Present	Unspawned	Fresh	3	2	
11/12/2013		Female	750	Present	Spawned	Non-Fresh	3	2	
11/12/2013		Female	770	Present	Spawned	Non-Fresh	3	2	
11/12/2013		Male	870	Present	Unknown	Non-Fresh	3	2	
11/12/2013	2107	Female	760	Present	Spawned	Fresh	3	3	
11/12/2013	2108	Male	800	Absent	Unknown	Very Non-Fresh	3	3	055371
11/12/2013	2109	Male	1110	Absent	Unknown	Very Non-Fresh	3	3	055221
11/12/2013	2110	Female	770	Present	Spawned	Fresh	3	3	
11/12/2013		Female	720	Present	Spawned	Non-Fresh	3	3	
11/12/2013		Female	730	Present	Spawned	Non-Fresh	3	3	
11/12/2013		Male	770	Present	Unknown	Non-Fresh	3	3	
11/12/2013		Female	790	Present	Spawned	Non-Fresh	3	3	
11/12/2013		Female	800	Present	Spawned	Non-Fresh	3	3	
11/12/2013		Female	800	Present	Spawned	Non-Fresh	3	3	
11/12/2013		Male	800	Present	Unknown	Very Non-Fresh	3	3	
11/12/2013		Female	820	Present	Spawned	Non-Fresh	3	3	
11/12/2013		Female	830	Present	Spawned	Non-Fresh	3	3	
11/12/2013		Female	840	Present	Spawned	Non-Fresh	3	3	
11/12/2013		Female	850	Present	Spawned	Non-Fresh	3	3	
11/12/2013		Male	850	Present	Unknown	Non-Fresh	3	3	
11/12/2013		Male	850	Present	Unknown	Non-Fresh	3	3	
11/12/2013		Male	880	Present	Unknown	Very Non-Fresh	3	3	
11/12/2013		Male	980	Present	Unknown	Non-Fresh	3	3	
11/12/2013	2106	Male	840	Absent	Unknown	Non-Fresh	3	4	NTD
11/12/2013		Female	740	Present	Spawned	Non-Fresh	3	4	
11/12/2013		Female	790	Present	Spawned	Non-Fresh	3	4	
11/12/2013		Female	820	Present	Spawned	Non-Fresh	3	4	
11/12/2013		Male	840	Present	Unknown	Non-Fresh	3	4	
11/12/2013		Female	890	Present	Spawned	Non-Fresh	3	4	
11/12/2013	2103	Female	760	Present	Spawned	Fresh	3	5	
11/12/2013	2104	Male	850	Absent	Unknown	Fresh	3	5	055378
11/12/2013	2105	Female	810	Present	Spawned	Fresh	3	5	
11/12/2013		Female	740	Present	Spawned	Non-Fresh	3	5	
11/12/2013	2101	Male	790	Absent	Unknown	Non-Fresh	3	6	055396
11/12/2013	2102	Female	820	Present	Spawned	Fresh	3	6	
11/12/2013		Female	630	Present	Spawned	Very Non-Fresh	3	6	
11/12/2013		Female	630	Present	Spawned	Non-Fresh	3	6	
11/12/2013		Female	730	Present	Spawned	Very Non-Fresh	3	6	
11/12/2013		Female	740	Present	Spawned	Non-Fresh	3	6	
11/12/2013		Female	800	Present	Spawned	Very Non-Fresh	3	6	
11/12/2013		Female	800	Present	Spawned	Non-Fresh	3	6	
11/12/2013		Female	830	Present	Spawned	Non-Fresh	3	6	
11/12/2013		Female	830	Present	Spawned	Non-Fresh	3	6	
11/13/2013	2207	Male	720	Present	Unknown	Fresh	2	6	
11/13/2013	2208	Male	630	Absent	Unknown	Non-Fresh	2	6	060394
11/13/2013		Female	670	Present	Spawned	Non-Fresh	2	7	
11/13/2013		Female	720	Present	Spawned	Non-Fresh	2	7	
11/13/2013		Female	730	Present	Spawned	Non-Fresh	2	7	
11/13/2013		Female	740	Present	Spawned	Non-Fresh	2	7	
11/13/2013		Female	800	Present	Spawned	Non-Fresh	2	7	
11/13/2013	2206	Male	910	Absent	Unknown	Non-Fresh	2	8	055391

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/13/2013		Male	640	Present	Unknown	Non-Fresh	2	8	
11/13/2013		Female	720	Present	Spawnd	Non-Fresh	2	8	
11/13/2013		Female	720	Present	Spawnd	Non-Fresh	2	8	
11/13/2013		Female	730	Present	Spawnd	Non-Fresh	2	8	
11/13/2013		Female	790	Present	Spawnd	Non-Fresh	2	8	
11/13/2013		Female	810	Present	Spawnd	Non-Fresh	2	8	
11/13/2013		Female	820	Present	Spawnd	Non-Fresh	2	8	
11/13/2013		Female	830	Present	Spawnd	Non-Fresh	2	8	
11/13/2013		Male	860	Present	Unknown	Non-Fresh	2	8	
11/13/2013		Male	920	Present	Unknown	Non-Fresh	2	8	
11/13/2013		Male	990	Present	Unknown	Non-Fresh	2	8	
11/13/2013		Male	1040	Present	Unknown	Non-Fresh	2	8	
11/13/2013	2202	Female	910	Present	Spawnd	Fresh	2	9	
11/13/2013	2203	Male	950	Absent	Unknown	Non-Fresh	2	9	055384
11/13/2013	2204	Female	790	Present	Spawnd	Fresh	2	9	
11/13/2013	2205	Female	590	Present	Spawnd	Fresh	2	9	
11/13/2013		Male	570	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Male	620	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Male	770	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Female	780	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Female	780	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Female	790	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Female	800	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Female	800	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Female	810	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Male	810	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Male	820	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Male	820	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Female	830	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Female	830	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Male	830	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Female	840	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Female	840	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Female	840	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Female	840	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Male	840	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Female	850	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Male	870	Present	Unknown	Non-Fresh	2	9	
11/13/2013		Female	890	Present	Spawnd	Non-Fresh	2	9	
11/13/2013		Male	910	Present	Unknown	Non-Fresh	2	9	
11/13/2013	2128	Male	880	Absent	Unknown	Non-Fresh	1	10	055389
11/13/2013	2129	Male	590	Unknown	Unknown	Fresh	1	10	NTD
11/13/2013	2130	Female	740	Present	Spawnd	Fresh	1	10	
11/13/2013	2131	Female	790	Present	Spawnd	Fresh	1	10	
11/13/2013	2132	Male	800	Absent	Unknown	Non-Fresh	1	10	068752
11/13/2013	2201	Male	960	Present	Unknown	Fresh	2	10	
11/13/2013		Male	500	Present	Unknown	Very Non-Fresh	1	10	
11/13/2013		Male	600	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Male	630	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Male	670	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Male	670	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Male	720	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Female	720	Present	Spawnd	Non-Fresh	1	10	
11/13/2013		Female	720	Present	Spawnd	Non-Fresh	1	10	
11/13/2013		Female	730	Present	Spawnd	Non-Fresh	1	10	
11/13/2013		Female	740	Present	Spawnd	Non-Fresh	1	10	
11/13/2013		Male	750	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Female	770	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Female	770	Present	Spawnd	Non-Fresh	1	10	
11/13/2013		Male	780	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Female	790	Present	Spawnd	Non-Fresh	1	10	
11/13/2013		Male	800	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Male	880	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Male	900	Present	Unknown	Non-Fresh	1	10	
11/13/2013		Male	920	Present	Unknown	Non-Fresh	1	10	
11/13/2013	2126	Female	710	Present	Spawnd	Fresh	1	11	
11/13/2013	2127	Male	880	Present	Unknown	Fresh	1	11	
11/13/2013		Female	720	Present	Spawnd	Non-Fresh	1	11	
11/13/2013		Female	740	Present	Spawnd	Non-Fresh	1	11	
11/13/2013		Female	760	Present	Spawnd	Non-Fresh	1	11	
11/13/2013		Female	780	Present	Spawnd	Non-Fresh	1	11	
11/13/2013		Male	860	Present	Unknown	Non-Fresh	1	11	
11/13/2013		Female	880	Present	Spawnd	Non-Fresh	1	11	
11/13/2013	2124	Male	650	Present	Unknown	Fresh	1	12	
11/13/2013	2125	Male	680	Absent	Unknown	Non-Fresh	1	12	068754
11/13/2013		Male	800	Present	Unknown	Non-Fresh	1	12	
11/13/2013		Male	810	Present	Unknown	Non-Fresh	1	12	
11/13/2013		Male	860	Present	Unknown	Non-Fresh	1	12	
11/13/2013		Female	770	Present	Spawnd	Non-Fresh	1	13	
11/13/2013		Female	800	Present	Spawnd	Non-Fresh	1	13	

Date	Sample	Sex	Fork length	Adipose Fin Status	Spawn Condition	Carcass Condition	Reach	Stream Mile	CWT Code
11/13/2013		Male	840	Present	Unknown	Non-Fresh	1	13	
11/13/2013	2120	Male	710	Present	Unknown	Fresh	1	14	
11/13/2013	2121	Female	590	Present	Spawned	Fresh	1	14	
11/13/2013	2122	Female	800	Absent	Spawned	Fresh	1	14	055394
11/13/2013	2123	Male	820	Present	Unknown	Fresh	1	14	
11/13/2013		Female	750	Present	Spawned	Non-Fresh	1	14	
11/13/2013		Male	790	Present	Unknown	Non-Fresh	1	14	
11/13/2013		Female	810	Present	Spawned	Non-Fresh	1	14	
11/13/2013	2119	Male	640	Present	Unknown	Fresh	1	15	
11/13/2013		Female	820	Present	Spawned	Non-Fresh	1	15	
11/13/2013		Male	870	Present	Unknown	Non-Fresh	1	15	
11/13/2013	2118	Male	640	Present	Unknown	Fresh	1	16	
11/13/2013	2116	Female	870	Present	Spawned	Fresh	1	17	
11/13/2013	2117	Female	800	Present	Spawned	Fresh	1	17	
11/13/2013		Male	770	Present	Unknown	Non-Fresh	1	17	
11/19/2013	2138	Female	730	Present	Spawned	Fresh	3	0	
11/19/2013		Male	860	Present	Unknown	Non-Fresh	3	0	
11/19/2013	2136	Female	700	Absent	Spawned	Fresh	3	1	068709
11/19/2013		Female	840	Present	Spawned	Non-Fresh	3	1	
11/19/2013		Male	910	Present	Unknown	Non-Fresh	3	1	
11/19/2013	2135	Female	600	Present	Spawned	Fresh	3	4	
11/19/2013		Female	690	Present	Spawned	Non-Fresh	3	4	
11/19/2013		Female	800	Present	Spawned	Non-Fresh	3	4	
11/19/2013		Female	800	Present	Spawned	Non-Fresh	3	4	
11/19/2013		Male	890	Present	Unknown	Non-Fresh	3	4	
11/19/2013		Male	900	Present	Unknown	Non-Fresh	3	4	
11/19/2013		Male	630	Present	Unknown	Non-Fresh	3	5	
11/19/2013		Female	770	Present	Spawned	Non-Fresh	3	5	
11/19/2013		Female	800	Present	Spawned	Non-Fresh	3	5	
11/19/2013		Male	840	Present	Unknown	Non-Fresh	3	5	
11/19/2013		Male	920	Present	Unknown	Non-Fresh	3	5	
11/19/2013	2133	Female	600	Absent	Spawned	Non-Fresh	3	6	060394
11/19/2013	2134	Male	850	Absent	Unknown	Very Non-Fresh	3	6	055372
11/19/2013		Female	770	Present	Spawned	Non-Fresh	3	6	
11/19/2013		Female	830	Present	Spawned	Non-Fresh	3	6	
11/19/2013		Male	840	Present	Unknown	Non-Fresh	3	6	
11/19/2013		Male	860	Present	Unknown	Non-Fresh	3	6	
11/19/2013	2137	Female	750	Absent	Spawned	Fresh	3	10	068674
11/20/2013	2141	Male	640	Absent	Unknown	Non-Fresh	2	7	068752
11/20/2013	2142	Male	600	Absent	Unknown	Non-Fresh	2	7	060393
11/20/2013		Female	600	Present	Spawned	Non-Fresh	2	7	
11/20/2013		Male	650	Present	Unknown	Non-Fresh	2	7	
11/20/2013		Female	780	Present	Spawned	Non-Fresh	2	7	
11/20/2013		Male	810	Present	Unknown	Non-Fresh	2	7	
11/20/2013		Male	930	Present	Unknown	Non-Fresh	2	7	
11/20/2013		Male	550	Present	Unknown	Very Non-Fresh	2	8	
11/20/2013		Male	750	Present	Unknown	Non-Fresh	2	8	
11/20/2013	2139	Male	570	Unknown	Unknown	Very Non-Fresh	2	9	060395
11/20/2013	2140	Female	780	Present	Spawned	Fresh	2	9	
11/20/2013		Male	790	Present	Unknown	Non-Fresh	2	9	
11/20/2013		Female	820	Present	Spawned	Non-Fresh	2	9	
11/20/2013		Female	900	Present	Spawned	Non-Fresh	2	9	
11/20/2013		Male	940	Present	Unknown	Non-Fresh	2	9	
11/20/2013	2210	Male	720	Absent	Unknown	Non-Fresh	1	10	055388
11/20/2013	2211	Male	630	Present	Unknown	Fresh	1	10	
11/20/2013	2212	Female	750	Present	Spawned	Fresh	1	10	
11/20/2013		Male	820	Present	Unknown	Very Non-Fresh	1	10	
11/20/2013		Female	770	Present	Spawned	Very Non-Fresh	1	11	
11/20/2013		Female	710	Present	Spawned	Non-Fresh	1	12	
11/20/2013		Male	820	Present	Unknown	Very Non-Fresh	1	12	
11/20/2013		Male	830	Present	Unknown	Non-Fresh	1	12	
11/20/2013		Female	850	Present	Spawned	Non-Fresh	1	12	
11/20/2013	2209	Female	800	Present	Spawned	Fresh	1	16	
11/20/2013		Male	570	Present	Unknown	Non-Fresh	1	17	
11/25/2013	2213	Female	650	Absent	Spawned	Non-Fresh	3	0	060393
11/25/2013	2216	Female	750	Present	Spawned	Fresh	3	0	
11/25/2013		Female	730	Present	Spawned	Non-Fresh	3	2	
11/25/2013	2214	Female	680	Present	Spawned	Fresh	3	5	
11/25/2013	2215	Male	840	Absent	Unknown	Very Non-Fresh	3	5	055386
11/25/2013		Female	750	Present	Spawned	Non-Fresh	2	8	
11/25/2013	2143	Male	830	Present	Unknown	Fresh	2	9	
11/26/2013		Female	740	Present	Spawned	Non-Fresh	1	10	
11/26/2013		Female	780	Present	Spawned	Non-Fresh	1	10	
11/26/2013	2147	Male	740	Present	Unknown	Fresh	1	11	
11/26/2013	2146	Male	770	Present	Unknown	Fresh	1	12	
11/26/2013		Male	730	Present	Unknown	Non-Fresh	1	12	
11/26/2013	2145	Female	820	Absent	Spawned	Non-Fresh	1	16	NTD
11/26/2013	2144	Male	830	Present	Unknown	Fresh	1	17	
12/3/2013	2148	Male	770	Present	Unknown	Fresh	3	1	
12/3/2013		Female	700	Present	Spawned	Non-Fresh	3	6	
12/10/2013	2217	Female	800	Absent	Spawned	Fresh	3	0	068754
12/10/2013		Male	780	Present	Unknown	Non-Fresh	3	10	