

# IDAHO HABITAT NATURAL PRODUCTION MONITORING PART 1

ANNUAL REPORT  
1996

Prepared by:

J.A. Hall-Griswold,  
Fisheries Research Biologist

C.E. Petrosky  
Fisheries Staff Biologist  
Idaho Department of Fish and Game

Prepared for:

U.S. Department of Energy  
Bonneville Power Administration  
Division of Fish and Wildlife  
P.O. Box 3621  
Portland, Oregon 97283-3621

Project Number 91-73  
Contract Number DE-8179-91 BP21182

IDFG 98-25  
SEPTEMBER 1998

## TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT .....	1
INTRODUCTION .....	2
METHODS.....	2
Prioritization of Streams .....	3
1996 Sampling .....	3
Physical Habitat .....	4
Parr Density Monitoring .....	4
Parr Density Comparisons .....	6
Database Management .....	7
RESULTS AND DISCUSSION .....	7
Parr Density Monitoring .....	7
Steelhead Trout Parr .....	8
Densities.....	8
Percent Carrying Capacity .....	8
Chinook Salmon Parr .....	8
Densities.....	9
Percent Carrying Capacity .....	9
Future Direction and Recommendations .....	9
ACKNOWLEDGEMENTS.....	11
LITERATURE CITED .....	12
FIGURES.....	16
TABLES .....	24
APPENDICES.....	32

## LIST OF FIGURES

Figure 1. Idaho's present anadromous fish production waters showing major drainages of the Clearwater River, Salmon River, and Snake River subbasins .....	17
Figure 2. Present distribution of wild A-run and B-run steelhead trout production areas in Idaho .....	18
Figure 3. Present distribution of wild chinook salmon production areas in Idaho .....	19
Figure 4. Mean annual density (number of age-1+ steelhead trout/100m <sup>2</sup> in B channels) of four classes of steelhead trout parr in Idaho, 1985-96.....	20

## LIST OF FIGURES (Continued)

	<u>Page</u>
Figure 5. Mean annual percent of carrying capacity (PCC) of four classes of steelhead trout parr (age-1+ and 2+ in B and C channels) in Idaho, 1985-96 .....	20
Figure 6. Mean annual density (number/100m <sup>2</sup> in C channels) of two classes of chinook salmon parr (age-0 <sup>+</sup> ) in Idaho. 1985-96 .....	21
Figure 7. Mean annual percent of carrying capacity (PCC) of two classes of chinook salmon parr (age-0 <sup>+</sup> in B and C channels) in Idaho, 1985-96 .....	21

## LIST OF TABLES

Table 1. Number of sections where steelhead trout and chinook salmon parr were monitored in Idaho by BRA project 91-73, other research and management programs, as well as other agencies and tribes from 1984 through 1996 .....	23
Table 2. Average percent carrying capacity (PCC) for ages 1+ and 2+ steelhead trout in all monitoring sections (B and C channels) and densities (number/100m <sup>2</sup> ) of age-1+ steelhead trout parr in B channels, 1996 .....	24
Table 3. Average percent carrying capacity (PCC) for chinook parr in all monitoring sections (B and C channels) and densities (numbers/100m <sup>2</sup> of chinook salmon parr in C channels, 1996 .....	25
Table 4. Mean percent of rated carrying capacity (PCC) of age-1+ and 2+ steelhead trout parr in B and C channels, and density of age-1+ steelhead trout parr in B channels, by class and year, 1985-96 .....	26
Table 5. Mean percent of rated carrying capacity (PCC) of age-0+ chinook salmon parr in B and C channels, and density of age-0+ chinook salmon parr in C channels, by class and year, 1985-96 .....	27
Table 6. Summary of length at age information for steelhead trout by drainage .....	28
Table 7. Breakdown of 1996 GPM sampling by classes of anadromous fish and channel Type .....	29

## LIST OF APPENDICES

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural, A- or B-run), chinook salmon classification (wild or natural, spring or summer), densities and percent carrying capacities for all sites sampled in 1996 .....	33
---	----

## LIST OF APPENDICES (Continued)

	<u>Page</u>
Appendix A-2. Evaluation section names, channel types (B or C), steelhead trout classification (wild or natural, A or B-run), chinook salmon classification (wild or natural, spring or summer), densities and percent carrying capacities for all sites sampled in 1996 .....	41
Appendix A-3. List of stream monitoring sections not completed in 1996 due to prioritization or poor snorkeling conditions .....	47
Appendix B. Prioritization of monitoring streams .....	64
Appendix C-1. Biological data collection sheet for General Pam Monitoring .....	71
Appendix C-2. Biological data collection sheet (by habitat units) used by Idaho Supplementation Studies .....	73
Appendix C-3. Physical Habitat data collection sheet for General Parr Monitoring .....	75
Appendix D. General Parr Monitoring database (DBase III) structure (version 1.2) .....	77

## ABSTRACT

In 1996, a total of 238 stream sections were sampled in Idaho to monitor trends in steelhead trout *Oncorhynchus mykiss* and spring and summer chinook salmon *O. tshawytscha* parr populations. The following classes of fish were analyzed for percent carrying capacity and density estimates for 1985-1996: wild A-run steelhead trout parr, wild B-run steelhead trout parr, natural A-run steelhead trout parr, natural B-run steelhead trout parr, wild spring and summer chinook salmon parr, and natural spring and summer chinook salmon parr. The 1996 data were also summarized by subbasins as defined in the Idaho Department of Fish and Game's 1992-1996 Anadromous Fish Management Plan.

Snake River steelhead trout were listed in 1997 as "threatened" under the Endangered Species Act. Snake River chinook salmon have been listed as "threatened" since 1992. In 1996, parr density monitoring in Idaho indicated that steelhead trout and chinook salmon populations fell below 1995 estimates, making these the lowest density estimates on record. Estimates of densities parallel those of percent carrying capacity for all classes of steelhead trout and chinook salmon. Percent carrying capacity and densities of natural and wild spring and summer chinook salmon fell to new lows in 1996. Out of the last five years (the length of the chinook life cycle) only one year class showed even moderate strength (1993 brood year or 1994 parr). Densities and percent carrying capacity of all classes of steelhead trout in 1996 were below the 1985-1996 average. Density estimates were, however, at similar levels in 1996 compared to 1995.

### Authors:

J.A. Hall-Griswold  
Fisheries Research Biologist

C.E. Petrosky  
Fisheries Staff Biologist

## INTRODUCTION

The Idaho Department of Fish and Game (Department) has been monitoring trends in juvenile spring and summer chinook salmon *Oncorhynchus tshawytscha* and steelhead trout *O. mykiss* populations in the Salmon, Clearwater and lower Snake River drainages (Figure 1) for the past 13 years. The Department monitoring approach, developed in 1984-85 (Petrosky and Holubetz 1985, 1986), consists of three basic integrated levels: 1) parr density monitoring; 2) parr standing stock evaluations; and 3) estimation of survival rates between major freshwater life stages (egg, Parr, smolt) of chinook salmon and steelhead trout. The latter two are referred to as "intensive studies." Annual general monitoring of anadromous parr densities is being used to follow population trends and define seeding levels over a broad geographic area, but generally with a small number of sections per stream. Intensive studies (Kiefer and Lockhart 1994) estimate spawning escapements, standing stocks of parr, and outmigrant yields for a limited number of streams. These estimates are used to index survival rates from egg-to-parr and par-to-smolt.

Project 91-73, Idaho Natural Production Monitoring, consists of two subprojects, General Monitoring and Intensive Monitoring. This report updates and summarizes data through 1996 for the General Parr Monitoring (GPM) database to document status and trends of classes of wild and natural chinook salmon and steelhead trout populations (Objective 1, General Monitoring Subproject). Estimates of densities and percent carrying capacities were compared between wild and natural populations of both juvenile chinook salmon and juvenile steelhead trout. Streams were prioritized following a plan developed in 1994 which prioritizes sample streams in each management unit to ensure continued sampling of "core" streams.

Snake River steelhead trout were listed in 1997 as "threatened" under the Endangered Species Act (ESA). Snake River spring/summer chinook salmon have been listed as "threatened" since 1992, with a temporary emergency listing of "endangered" during 1994-1995. The ESA listing for spring/summer chinook pertains to native salmon populations in the Salmon River, Idaho, and Snake River tributaries in Oregon, Washington, and Idaho; the reintroduced populations in the Clearwater River, Idaho are not listed.

## METHODS

This project has been monitoring Parr densities of juvenile chinook salmon and steelhead trout as well as densities of resident species in stream sections within the Salmon, Clearwater, and lower Snake River drainages in Idaho since 1984. Only data from 1985 on are presented in this report because of the small number of stream sections sampled in 1984 (the initial year of the project). The Department fisheries research section and regional anadromous fisheries programs in Regions 2 and 7, and Subregion 3 were responsible for collecting the majority of the 1996 data. Other cooperating agencies involved in the collection of parr density data for this project are the Shoshone-Bannock Tribes (SBT), the Nez Perce Tribe (NPT), and the U.S. Fish and Wildlife Services' Fishery Resource Office (FRO) in Ahsahka, Idaho. The number of sections monitored annually since 1984 is shown in Table 1.

## **Prioritization of Streams**

To ensure the long-term integrity of monitoring trends in anadromous fish populations, a sampling scheme to prioritize streams for conducting snorkel surveys (Appendix B) was developed in 1994 (Leitzinger and Holubetz 1994). Priority one streams are top priority and must be surveyed every year. These represent the most important (core) streams that ensure all subbasins, as defined in the Department anadromous plan (Department 1992), will be sampled. Priority one streams do not require intensive sampling, but they do need to be stratified by channel type (B or C), and several representative sites (at least three) per strata need to be identified and sampled every year. These sites should include several habitat types per site, with fish numbers and surface areas recorded separately for each habitat type. For the purpose of this report, fish numbers for the total transect (i.e., all habitat units combined) are reported and analyzed.

Priority two streams are considered non-key streams, which are sampled intensively. Sampling of priority two streams should occur annually (or as long as the project continues). These streams represent streams currently being sampled intensively by various research and management projects. Once the project ends, the streams will be evaluated to determine if they should be categorized as priority one, three or four.

Priority three streams are non-key streams sampled with general parr monitoring sites only, and will be surveyed only as time allows (every other year or a minimum of every third year). These are important production streams but do not require annual sampling.

Nonessential streams are ranked a priority four. These are streams either not rated as chinook (and in some cases, steelhead) spawning and rearing streams or are not significant anadromous fish production streams. Priority four streams should be sampled as needed for regional or resident fish management or research programs.

A breakdown of key monitoring (or priority one) anadromous streams sampled annually by Department, cooperating agencies, and tribes are as follows:

Department	=	34
NPT	=	2
SBT	=	3
USFWS-FRO	=	<u>0</u>
Total Key Streams	=	39

## **1996 Sampling**

Data from individual sections monitored in 1996 are listed in Appendix A-1. Parr density evaluation sites, which were surveyed in 1996, are listed in Appendix A-2. The GPM sites not surveyed in 1996 are listed in Appendix A-3. A recent inventory of historical transects has allowed us to update the list of GPM transects monitored each year. The sites listed in Appendix A-3 are representative of transects snorkeled since 1992, but not surveyed in 1996. Several factors such as low flows, lack of personnel, and stream prioritization contributed to a higher number than usual of unsurveyed stream sections in 1996.

## **Physical Habitat**

General parr monitoring sections provide an annual index of anadromous fish abundance in various habitat types and drainages. Monitoring sections are approximately 100 m in length with boundaries occurring at defined breaks between habitat types. Sections generally include at least one pool-riffle sequence. Stream strata and sections were cross-referenced to the Environmental Protection Agency's (EPA) stream reach numbering system (Northwest Power Planning Council [NPPC] and Bonneville Power Administration [BPA] 1989).

Physical habitat variables were standardized and measured at least once since 1984 in each established density monitoring section. The physical habitat variables, other than width and length, were not measured every year in each section due to time constraints (parr densities in all anadromous streams in Idaho need to be sampled within a two-month period from late June to late August) and because the physical habitat was relatively stable from year to year. The same physical variables were measured in the Department supplementation and intensive smolt monitoring projects. The Department has encouraged other agencies and tribes to incorporate this standardized variable list into its monitoring programs.

The following physical habitat variables were measured in each monitoring section: habitat type (percent pool, riffle, run, pocketwater, and glide); substrate composition (percent surface sand, gravel, rubble, boulder, and bedrock); section length, average width, average depth, gradient, conductivity, and channel type (Rosgen 1985). The techniques to collect the physical habitat data are described in Petrosky and Holubetz (1988) and Scully et al. (1990). Data for physical habitat are recorded on the form shown in Appendix C-3.

Data collected during 1985-1996 were summarized by channel type. This variable simultaneously categorizes several morphological characteristics and was used as a primary classifier to investigate juvenile chinook salmon and steelhead trout rearing potential and for density trend comparisons. Scully and Petrosky (1991) demonstrated the effect of channel type on both steelhead trout and chinook salmon parr densities. In a comparison they made of parr densities in B and C channels, they found that chinook salmon densities were 3.5 times higher in C channels, while steelhead trout densities were two to three times higher in B channels. The B channels are confined in valleys or canyons and have high enough gradients that most of the fine sediment is flushed out. A significant part of the substrate may be comprised of boulders larger than 30 cm in diameter. The C channels, in contrast, meander through flat alluvial valleys and are characterized by deposition of fine materials and low water velocities. Substrate composition in C channels has a high percentage of small materials, sand, and gravel. In unstable, heavily managed watersheds, sand may be the predominant substrate type in C channels. In general, surveyed C channel sections had gradients less than 1.5%, while B channel sections had gradients greater than 1.5%.

## **Parr Density Monitoring**

General Parr monitoring and intensive monitoring subprojects sampled a total of 238 sections in 1996 to index the annual abundance of chinook salmon and steelhead trout parr (Table 1). Chinook salmon parr are defined here as age-0+, with lengths less than 10 cm (4 in). Steelhead trout parr are age-1+ and 2+, with respective lengths of 8-15 cm (3.0-5.9 in) and 15-23 cm (6.0-8.9 in). Steelhead trout length-at-age intervals are similar to those defined by Thurow

(1985; 1987). These data were used to index trends in annual abundance and estimate rearing potential in different habitats.

Most anadromous fish production streams in Idaho are clear and have low conductivity. Snorkel counts by trained observers are preferred for efficiency in these streams over estimates obtained from electrofishing. Snorkel counts potentially underestimate parr abundance, especially at lower temperatures in late summer and fall (Hillman et al 1992). Other comparisons of snorkeling and electrofishing methods did not indicate a negative bias (Petrosky and Holubetz 1987; Hankin and Reeves 1988). Density estimates in 1996 were obtained by snorkeling in all anadromous stream sections except those in the Lemhi River. The Lemhi River was electrofished due to its relative turbidity and high conductivity. This report summarizes 1996 parr density and PCC information. Data for years prior to 1996 were obtained from Rich et al. (1992 and 1993), Rich and Petrosky (1994), Leitzinger and Petrosky (1995), Hall-Griswold et al. (1995), and Hall-Griswold and Petrosky (1996). Snorkel methods for surveying fish are described in Petrosky and Holubetz (1986). Data sheets used for recording snorkel data appear in Appendices C-1 and C-2. The data collection sheets have been updated to include the collection of amphibian data.

All monitoring sections were snorkeled with a team of divers working upstream. Crew size ranged from one for small streams to five or more for larger streams. The combined programs monitored sections in 77 streams (39 of which were priority streams), representing a variety of stocks, production types (i.e., wild or natural), and habitats. We compared parr densities among all major anadromous fish drainages in Idaho during 1985-1996, and summarized chinook salmon and steelhead trout parr densities by year and production type. Due to the preference by steelhead trout for B channels and chinook salmon for C channels, parr density comparisons among drainages incorporated only the preferred channel type for each species. We summarized A-run and B-run steelhead trout separately because of large differences in Columbia River harvest rates and escapements between the two runs TAC 1997).

We also estimated parr density as a percent of carrying capacity (PCC) derived from standardized smolt capacity ratings developed for subbasin planning by the System Planning Group for the NPPC (1986). The parr density database was merged with the NPPC's species presence/absence database using the common variable EPA reach number. The NPPC file rates each reach as being poor, fair, good, or excellent habitat for rearing chinook salmon or steelhead trout smolts. Respective NPPC smolt densities in number/100m<sup>2</sup> are 10, 37, 64, and 90 for chinook salmon, and 3, 5, 7, and 10 for steelhead trout. The NPPC smolt density ratings provide a consistent, though subjective assessment of habitat quality and smolt carrying capacity within Idaho subbasins. Based on parr densities from this project and a planning value of 50% parr-to-smolt survival or less (Kiefer and Lockhart 1994), the NPPC smolt densities appear to be good approximations for steelhead trout, but over estimate carrying capacity for chinook salmon in Idaho streams. NPPC steelhead trout smolt capacity in excellent habitat (10/100m<sup>2</sup>) and 50% parr-to-smolt survival imply a parr density of 20/100m<sup>2</sup>, the same as defined by Petrosky and Holubetz (1988) based on empirical data. The NPPC chinook salmon smolt carrying capacity in excellent habitat (90/100m<sup>2</sup>) and 50% parr-to-smolt survival imply a parr density of 180/100m<sup>2</sup>, which is 67% higher than defined by Petrosky and Holubetz (1988) based on empirical data and fry stocking experiments.

We adjusted the NPPC smolt density ratings to parr carrying capacity assuming that excellent steelhead trout habitat would support 20 parr/100m<sup>2</sup> and excellent chinook salmon habitat would support 108 parr/100m<sup>2</sup> (Petrosky and Holubetz 1988). We also assumed the same relative

density proportions between the NPPC habitat classes of poor, fair, good and excellent. Thus, respective parr carrying capacity ratings for four habitat classes were 6, 10, 14, and 20/100m<sup>2</sup> for steelhead trout; 12, 44, 77, and 108/100m<sup>2</sup> for chinook salmon.

Excellent habitat for chinook salmon would be undisturbed C channel streams and good habitat would be undisturbed B channel streams with moderate gradients. High gradient undisturbed B channels would rate as fair or poor for chinook salmon (Petrosky and Holubetz 1988). For steelhead trout, excellent habitat would be in undisturbed B channels, and good habitat would be in undisturbed C channels. The C channels in productive spring-fed streams could also be classified as excellent steelhead trout rearing habitat. Degraded streams received ratings of good, fair, or poor for both species depending on the degree of disturbance and channel type. Because the different habitat types and quality ratings are considered in the carrying capacity rating system, PCC data from both B and C channel sections are analyzed for both species, unlike the analysis for the parr density statistic.

### **Parr Density Comparisons**

Steelhead trout and chinook salmon cells were defined to be consistent with stocks or subbasins identified in Department's anadromous fish management plan (Department 1992) and the subbasin plans (Department et al. 1990; Nez Perce Tribe and Department 1990; Washington Department of Fisheries et al. 1990). Densities and PCC for 1996 were summarized according to these cells.

We compared steelhead trout and chinook salmon part densities and PCC among classes and years for 1985-1996. Steelhead trout classes were wild A-run, wild B-run, natural A-run, and natural B-run. Chinook salmon classes were wild and natural. In order to increase sample size, spring and summer chinook were combined.

Wild (indigenous) steelhead trout populations in Idaho presently occur in the lower tributaries of the Clearwater (below the North Fork Clearwater River) and Selway rivers; in the majority of small Snake River tributaries; the entire Middle Fork and South Fork Salmon rivers; most small mainstream Salmon River tributaries downstream from the mouth of the Middle Fork Salmon; and in Rapid River, a tributary to the Little Salmon River (Figure 2). Areas not listed above were considered for this analysis to have natural (hatchery influenced) populations. The classification of wild and natural steelhead populations will be revised in the 1997 report based on state of Idaho (1997) comments on the proposed steelhead listing. Specifically, Lochsa River steelhead will be classified as wild in the future.

Wild spring chinook salmon in Idaho presently occur throughout the Middle Fork Salmon River drainage and several Salmon River tributaries below the Middle Fork Salmon River. Wild summer chinook salmon occur in the Secesh River and the Middle Fork Salmon River drainage (Figure 3). The upper mainstem Salmon River and tributaries including lower Valley Creek and the lower East Fork Salmon River also produce wild summer chinook salmon, however the juveniles observed during GPM surveys in these streams could be either wild summers or natural springs. These and the remainder of Idaho's chinook salmon waters were classified here as natural populations. Due to the small sample size of summer chinook, we combined spring and summer chinook salmon and compared only wild and natural classes.

For steelhead trout, the statistic PCC used the density of age-1+ and age-2+ steelhead trout parr relative to maximum density that could occur in that section. The PCC may be the most appropriate statistic for comparing the relative status of steelhead trout populations because it incorporates an estimate of the carrying capacity, and is insensitive to assumptions about length at age. The PCC statistic also accounts for, in part, differences in channel type, gradient, stream size, and sediment level. Because the PCC for steelhead trout includes both age-1+ and age-2+ parr, it may mask annual differences resulting from variations in adult escapement between two brood years.

The best index of steelhead trout escapement is probably the age-1+ parr density in B channels. In underseeded conditions, as occur in most of Idaho's anadromous fish waters, sufficient B channel habitat exists to support the age-1+ steelhead trout parr. Fewer fish are forced into the less preferred C channel habitat as a result. Also, unlike the age-2+ parr, none of the age-1+ cohort would have smolted. However, refinement of the GPM length-at-age classification appears to be necessary to better represent yearling abundance across the range of production streams (see Future Direction and Recommendations)

For chinook salmon, both parr density and PCC are for a single age class (age-0+) and brood year. Thus, the best overall index may be PCC rather than density in C channels because PCC has a larger sample size, incorporating both B and C channel sections. At extremely low escapements, relatively fewer chinook salmon parr and a smaller PCC would be expected in the less preferred B channel habitat.

### **Database Management**

All biological data from 1985 through 1996 have been entered into Dbase III (version 1.5) files for easy access and arrangement for various analyses. The 1986 through 1996 data have been verified for accuracy. The 1985 data are the last to be verified. Once verified, these files are available for use by project implementers, tribes, and natural resource agencies upon request. The GPM database is being integrated into the StreamNet database system (Anderson et al., 1996) in 1997. The StreamNet Distributed System is a PC-based database application containing fully referenced data and a user friendly interface to query, report, or export the data. The current GPM database structure (version 1.2) is listed in Appendix D.

## **RESULTS AND DISCUSSION**

### **Parr Density Monitoring**

Numbers of streams and sections sampled in 1996 within each class and cell, and average PCC and densities are summarized in Tables 2 and 3. All general parr monitoring stream sections surveyed in 1996 are listed in Appendix A-1 along with channel type, chinook salmon and steelhead trout class, chinook salmon and steelhead trout density, percent carrying capacity and priority classification. Note that future summaries will classify Lochsa River steelhead as wild production type.

## **Steelhead Trout Parr**

Steelhead trout populations have generally not met replacement since the mid-1980s, as evidenced by the aggregate declines in parr densities from the past 12 years (Table 4 and Figure 4). Yearling parr counted in 1996, were from the 1995 brood year, which were primarily progeny of brood years 1989-1991 (assuming predominate smolt ages of 2+ and 3+, and ocean ages of 1 and 2). Depending on run-type, population and geographic area, lags of four to six years may be most appropriate to determine whether replacement is being met from yearling parr density indices for specific drainages.

### **Densities**

The density of age-1+ steelhead trout parr in B channels is summarized by class and year (1985-1996) in Table 4 and Figure 4. Table 2 summarizes the densities of age-1+ steelhead trout parr in B channels by class and cell (or subbasin). The lowest mean densities for age-1+ steelhead trout parr in B channels in 1996 were for natural A-run steelhead in the headwaters of the Salmon River (cell 13) and for natural B-run steelhead in the East Fork Salmon River (above the weir)(cell 7) at 0.03/100m<sup>2</sup> and 0.06/100m<sup>2</sup>, respectively (Table 2). The highest mean densities were for natural A-run steelhead trout in the lower Salmon River (cell 9) at 7.43/100m<sup>2</sup>. The next to highest densities were also for natural A-run steelhead trout parr- in Snake River tributaries (cell 14) at 5.70/100m<sup>2</sup>. Overall, densities for the wild A-run and natural B-run classes of 1+ steelhead trout declined from 1995 levels. Natural A-run and wild B-run densities in 1996, however, averaged about the same as in 1995 (Table 4, Figure 4).

### **Percent Carrying Capacity**

In 1996, percent carrying capacity for age-1+ and 2+ natural A-run steelhead trout parr in B and C channels showed an increase over 1995 estimates. All other classes of steelhead trout parr declined in 1996 from 1995 estimates, continuing the overall trend in declining steelhead populations in Idaho (Table 4, Figure 5) since 1986. Average PCC for all classes of steelhead trout parr in 1996 fell below the twelve-year average (Table 4). Natural A-run steelhead populations averaged 13% of carrying capacity, which is higher than shown in 1995. All other classes - wild A-run, wild B-run and natural B-run steelhead populations declined from 1995 estimates, averaging 17%, 8%, and 14% respectively, of carrying capacity.

## **Chinook Salmon Parr**

In 1996, wild and natural spring and summer chinook parr densities were down from those of the parent generations four and five years previous. The 1991 and 1992 wild spring and summer chinook densities averaged 3.4/100m<sup>2</sup> and 6.6/100m<sup>2</sup>, respectively, compared to 0.01/100m<sup>2</sup> in 1996 (Table 5, Figure 6). The parent generation of 1996 natural spring and summer chinook parr (which averaged 0.4/100m<sup>2</sup>) had parr densities of 2.7/100m<sup>2</sup> in 1991 and 5.0/100m<sup>2</sup> in 1992. This lagged comparison indicates that, in aggregate, wild, and natural chinook populations did not meet replacement levels.

## **Densities**

In 1996, densities of wild and natural classes of spring and summer chinook were 5% and 33%, respectively, of those in 1995 (Table 5, Figure 6). Wild spring and summer chinook salmon parr densities averaged 0.01/100m<sup>2</sup>, the lowest on record. Natural spring and summer chinook salmon parr averaged 0.4/100m<sup>2</sup> in 1996, also the lowest on record.

Out of the last five years (the length of the chinook life cycle) only one year class of wild and natural spring and summer chinook showed even moderate strength (1993 brood year or 1994 parr). The parr density patterns generally mirror the spring and summer chinook salmon spawning escapements which are indexed by redd counts (Elms-Cockrum 1996).

Chinook salmon parr densities in C channels are summarized by cell and class in Table 3. In 1996, there were no age-0+ chinook salmon parr counted in C channels in the following cells and classes: wild spring chinook salmon in the Middle Fork Salmon River (excluding Bear Valley and Elk Creeks)(cell 1); wild summer chinook salmon in the Secesh River (cell 5); and natural spring chinook salmon in the mainstem Clearwater River and tributaries (Lolo Creek)(cell 15). The number of sections surveyed in the latter two were, however, small. Due to the lower number of sites sampled in 1996, a total of six cells were surveyed without C channels. The highest mean densities for age-0+ chinook salmon parr were for natural summer chinook salmon in the Pahsimeroi River (cell 18) at 2.17/100m<sup>2</sup>, and natural spring chinook salmon (cell 9) in the Lemhi River at 1.21/100m<sup>2</sup>.

## **Percent Carrying Capacity**

The PCC for both classes of chinook salmon parr in 1996 were the lowest on record (0.07% and 0.39% for wild and natural classes, respectively). PCC estimates paralleled density estimates for both classes of chinook salmon parr in 1996. The overall trend demonstrates declining stocks since 1985 (Table 5, Figure 7).

## **Future Direction and Recommendations**

The GPM database was initially developed based on project-specific data needs (i.e., evaluating habitat improvements), with overall monitoring being a secondary priority. Since these project-specific evaluations have been completed, for the most part, overall monitoring has become the top priority. An overall GPM sampling design was developed (Leitzinger and Holubetz 1994) for implementation in 1995 and future years (Appendix B). The plan was designed to provide coverage for stocks and geographic areas defined in the Department's Anadromous Fish Management Plan (Department 1992). The sampling scheme prioritizes GPM streams based on stock, geographic area, habitat type and channel type, so that all subbasins are adequately sampled.

The Department will revise the natural and wild classifications used in GPM, beginning with the 1997 annual report. This will ensure consistency of GPM database with State of Idaho (1997) comments on the proposed listing of Snake River steelhead. The primary change will be reclassifying Lochsa River steelhead as wild rather than natural.

Steelhead trout have a complex life cycle, which varies among geographic location, type and habitat (Scott and Crossman, 1973). Length-at-age is difficult to generalize over broad geographic areas, such as streams throughout Idaho, because of this variation. When the GPM project began in 1984, a length-at-age classification was developed which defined ranges for age 0+ steelhead at less than 74.0 mm, age-1+ from 74.0 to 151.9 mm, and age-2+ from 152.0 to 227.9 mm. This classification was based on steelhead length-at-age data from the Middle Fork and South Fork Salmon rivers (Petrosky and Holubetz, 1985). This length-at-age classification currently encompasses all classes of steelhead trout in the Snake, Salmon and Clearwater River drainages in the existing GPM database.

There has been concern among the GPM cooperators that the length-at-age breakdown for steelhead trout overestimates age-1+ parr density and underestimates age-2+ parr density. Therefore, length classes should be reviewed and revised as needed in the GPM database for different populations, geographic areas, and elevations, to account for different growth rate patterns. Age misclassification could bias age-1+ and age-2+ steelhead density estimates, analyses of brood year strength and life stage survival rate estimates. However, the steelhead trout PCC statistic would be relatively insensitive to age misclassification.

With 12 years of data from the GPM project, and other projects such as Idaho Supplementation Studies (ISS), Steelhead Supplementation Studies (SSS) and Intensive Smolt Monitoring (ISM), data have been collected, which may help refine the length at age of steelhead trout for specific populations and geographic areas (Table 6). The elevation and thermal regime of a stream reach, for instance, may largely control the growth rate, with lower elevation streams producing larger parr and younger aged smolts (Chuck Huntington, personal communication). Also, because parr may continue to grow an estimated nine mm per month (Everest 1969), the timing of a survey, combined with the existing classification, may bias estimates of the number of smolts (i.e., a steelhead trout parr observed in the upper Salmon River in July and falling in the age-1+ category may outmigrate that fall classified as age-2+; Russ Kiefer, personal communication). Historical parr density data were entered by three-inch increments into the GPM database, but archived field data sheets contain records by one-inch increments (Appendices C-1, C-2). The historical data could be re-entered into GPM database by one-inch increment to provide the flexibility needed to better represent steelhead trout age structure for specific drainages. This would be a time consuming task, but one which is being considered at this time.

The future plans for the Idaho Natural Production Monitoring Program are to incorporate into the GPM database the data from the intensive studies now being conducted, namely Idaho Supplementation Studies (ISS), Steelhead Supplementation Studies (SSS), and Wild Steelhead Studies (WSS). Additional data from the USFS or other entities may be included if appropriate. This will greatly increase our sample size in most stream classes and cells as well as our ability to more accurately assess population status of chinook salmon and steelhead trout parr in Idaho.

Table 7 summarizes the number of cells sampled in each anadromous fish class in Idaho, the number of streams sampled and the number of GPM sites by channel type sampled in 1996. It also lists the number of streams being sampled intensively and the number of those that do and do not already contain GPM sites.

By incorporating the intensive data from 1996 into the GPM database, we would add data from a total of 81 streams. There would be 5 new streams added that are not presently in the

database, and additional sites in 24 streams. The number of sites sampled in each of these intensive streams is not summarized at this point but it ranges from roughly 12 to 50 per stream.

Databases and programs to summarize the data are currently being developed for these intensive data independently from the existing GPM database. Work has begun to link the various databases so that the intensive data can be incorporated into the GPM data. In addition, these databases will be linked to StreamNet to facilitate information exchange. Data will start being entered in this new format in 1997.

The GPM data are also relevant to an identified need in Plan for Analyzing and Testing Hypotheses (PATH), Project 96-8, to compare densities of juvenile salmon, steelhead, and resident fish among streams from different land use classes to index population responses in good and poor habitat (Marmorek and Peters 1996). The PATH project was established under the NMFS 1995-1998 Biological Opinion on Federal Columbia River Power System Operations in 1995 to resolve controversy about competing hypotheses related to the relative effects of the "four H's" (hydropower, habitat, hatcheries, and harvest), and climate patterns to the decline of Snake River salmon, and to assist upcoming recovery decisions.

The GPM database, containing 12 years of chinook salmon, steelhead trout and resident salmonid densities, will be summarized and analyzed by classes of land use (e.g. road density and landscape characteristics). For the PATH analysis, the GPM database will be related to the spatial scales used in the Interior Columbia Basin Ecosystem Management Project, with densities analyzed within classes. Huntington (1995) previously used a similar approach to compare resident and anadromous fish densities in the Clearwater National Forest streams between managed and unmanaged land use classes. The PATH analysis may also incorporate specific habitat variables from GPM (eg., channel type, percent sand, gradient, stream size, etc.) and the Eastside Assessment (Overton et al. 1995).

The PATH project to date has relied extensively on historic spawner-recruit information in the spring/summer chinook analyses and hypothesis testing (Beamesderfer et al. 1997; Derso et al. 1996; Schaller et al. 1996). There is a paucity of this type of historic information for Snake River steelhead trout populations due to the species' complex life cycle, spawn timing and difficulty of monitoring redds, the logistics and cost of weir operations, and funding processes which have prioritized chinook salmon research. Therefore the GPM database, combined with more intensive studies, may be particularly important for future analysis of status and evaluation of recovery strategies for Snake River steelhead trout.

## **ACKNOWLEDGEMENTS**

We would like to express our thanks to Department regional managers and biologists in Lewiston, Salmon, and McCall, and Department research crews in Nampa who collected the majority of the data, and to Elaine Cavanaugh (Department Fisheries Bureau) for manuscript formatting. Additional thanks go to the ISS cooperators: the Shoshone-Bannock Tribes, the Nez Perce Tribe, and the U.S. Fish and Wildlife Service Fisheries Resource Office in Ahsahka, ID who worked closely with Department to standardize data collection and reporting.

The U.S. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife through Protect No. 91-73 provided funding; Contract No. DE-B179-91BP21182.

## LITERATURE CITED

- Anderson, D.A., G. Christofferson, R. Beamesderfer, B. Woodard, M. Rowe, J. Hansen. 1996. StreamNet -The Northwest aquatic resource information Network. Report on the status of Salmon and Steelhead in the Columbia River Basin - 1995. Project No. 88-108-04. Dept. Of Energy, Bonneville Power Administration, Division of Fish and Wildlife. 76 p.
- Beamesderfer, R.C.P., H.A. Schaller, M.P. Zimmerman, C.E. Petrosky, O.P. Langness and L. LaVoy, 1997. Spawner-recruit data for spring and summer chinook salmon populations in Idaho, Oregon, and Washington. July 1997 Review Draft for PATH - Plan for Analyzing and Testing Hypotheses, Retrospective Analysis.
- Deriso, R., D. Marmorek and I. Parnell. 1996. Retrospective analysis of passage mortality of spring chinook of the Columbia River. Chapter 5. in Marmorek, D.R. (ed.) and 21 co-authors. 1996. Plan for Analyzing and Testing Hypotheses (PATH). Final report on retrospective analysis for fiscal year 1996. Compiled and edited by ESSA Technologies Ltd., Vancouver, B.C.
- Elms-Cockrum, T.J. 1996. Idaho Department of Fish and Game Salmon Spawning Ground Surveys, 1995. Pacific Salmon Treaty Program. Award No. NA47FP0346. 69 p.
- Everest, F.H. 1969. Habitat selection and spatial interaction by juvenile chinook and steelhead trout in two Idaho streams. Ph.D. Thesis, University of Idaho, Moscow, Idaho.
- Hall-Griswold, J.A. and C.E. Petrosky. 1996. Idaho habitat/natural production monitoring, Part I, General Monitoring Subproject Annual Report 1995. Project 91-73. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife. 69 p.
- Hall-Griswold, J.A., E.J. Leitzinger, and C.E. Petrosky. 1995. Idaho habitat/natural production monitoring, Part I, General Monitoring Subproject Annual Report 1994. Project 91-73. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife. 61 p.
- Hankin, D.G. and G.H. Reeves. 1988. Estimating total fish abundance and total habitat area in small streams based on visual estimation methods. Canadian Journal of Fisheries and Aquatic Sciences. 45:834-844.
- Hillman, T.W., J.W. Mullen and J.S. Griffith. 1992. Accuracy of underwater counts of juvenile chinook salmon, coho salmon, and steelhead. North American Journal of Fisheries Management. 12:598-603.
- Huntington, C.W. 1995. Fish habitat and salmonid abundance within managed and unroaded landscapes on the Clearwater National Forest, Idaho. Eastside Ecosystem Management Project, USDA Forest Service. Project Order No. 43-OE00-4-9106. 63 p.
- Idaho Cooperative Fishery Research Unit. 1977. University of Idaho, Moscow, Idaho (unpublished manuscript).

- Department (Idaho Department of Fish and Game). 1992. Anadromous Fish Management Plan, 1992-1996. 217 p.
- Department et al. (Idaho Department of Fish and Game, Nez Perce Tribe of Idaho, and Shoshone Bannock Tribes of Fort Hall). 1990. Salmon River subbasin salmon and steelhead production plan. Prepared for: Northwest Power Planning Council, Portland, Oregon.
- Kiefer, R.B. and J.N. Lockhart. 1994. Intensive evaluation and monitoring of chinook salmon and steelhead trout production, Crooked River and Salmon River sites. Idaho Department of Fish and Game. Annual progress report, 1992. Project 91-73. Prepared for Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife.
- Leitzinger, E.J. and T.B. Holubetz. 1994. Prioritization of snorkel streams. Idaho Department of Fish and Game, Intradepartmental memo. November 28, 1994. 6 p.
- Leitzinger, E.J. and C.E. Petrosky. 1995. Idaho habitat/natural production monitoring, Part I, General Monitoring Subproject. Annual Report 1993. Project 91-73. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife.
- Marmorek, D. and C. Peters (editors) and 24 co-authors. 1996. Conclusions of FY96 retrospective analyses. PATH - Plan for Analyzing and Testing Hypotheses. Final Report on Retrospective Analysis for Fiscal Year 1996. December 10, 1996.
- NPT and Department (Nez Perce Tribe of Idaho and Idaho Department of Fish and Game). 1990. Clearwater River subbasin salmon and steelhead production plan. Prepared for: Northwest Power Planning Council, Portland, Oregon.
- NPPC (Northwest Power Planning Council). 1986. Columbia River basin fishery planning model - technical discussion paper.
- NPPC and BPA (Northwest Power Planning Council and Bonneville Power Administration). 1989. U.S. Environmental Protection Agency's river reach file. Hydrologic segment plots, Idaho. Northwest Rivers Information System.
- Overton, C.K., J.D. McIntyre, R. Armstrong, S.L. Whitwell, and K.A. Duncan. 1995. User's Guide to Fish Habitat: Descriptions that Represent Natural Conditions in the Salmon River Basin, Idaho. Gen. Tech. Rep. INT-GTR-322. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 142 p.
- Petrosky, C.E. and T.B. Holubetz. 1985. Idaho habitat evaluation for off-site mitigation record. Annual report, 1984. Project 83-7. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife.
- Petrosky, C.E. and T.B. Holubetz. 1986. Idaho habitat evaluation for off-site mitigation record. Annual report, 1985. Project 83-7. Department of Energy. Bonneville Power Administration, Division of Fish and Wildlife.

- Petrosky, C.E. and T.B. Holubetz 1987. Evaluation and Monitoring of Idaho Habitat enhancement and anadromous fish natural production. Annual report, fiscal year 1986. Project 83-7. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife.
- Petrosky, C.E. and T.B. Holubetz. 1988. Idaho habitat evaluation for off-site mitigation record. Annual report, 1987. Project 83-7. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife.
- Rich, B.A., and C.E. Petrosky. 1994. Idaho habitat/natural production monitoring, Part I, General Monitoring Subproject Annual Report 1992. Project 91-73. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife.
- Rich, B.A., W. Schrader, and C.E. Petrosky. 1993. Idaho habitat/natural production monitoring, Part I, General Monitoring Subproject Annual Report 1991. Project 91-73. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife.
- Rich, B.A., R.J. Scully, and C.E. Petrosky. 1992. Idaho habitat/natural production monitoring, Part I, General Monitoring Subproject Annual Report 1990. Project 83-7. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife.
- Rosgen, D.L. 1985. A stream classification system. North America Riparian Conference. Tucson, Arizona. April 16-18, 1985.
- Schaller, H.A., C.E. Petrosky and O.P. Langness. 1996. Contrasts in stock recruitment patterns of Snake and Columbia River spring and summer chinook populations. Chapter 3. In: Marmorek D.R. (Ed.) and 21 co-authors. 1996. Plan for Analyzing and Testing Hypotheses (PATH). Final report on retrospective analysis for fiscal year 1996. Compiled and edited by ESSA Technologies Ltd., Vancouver, B.C.
- Scott, W.B. and E.J. Crossman. 1973. Freshwater Fishes of Canada. Fisheries Research Board of Canada, Ottawa. Bulletin 184. 966 p.
- Scully, R.J., E.J. Leitzinger and C.E. Petrosky. 1990. Idaho habitat evaluation for off-site mitigation record. Part I in Idaho Department of Fish and Game. 1990. Idaho habitat evaluation for off-site mitigation record. Annual report 1988. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife. Project 83-7.
- Scully, R.J. and C.E. Petrosky. 1991. Idaho habitat/natural production monitoring. Idaho Department of Fish and Game. 1991. Idaho Department of Fish and Game. 1991. Idaho habitat evaluation for off-site mitigation record. Annual report, fiscal year 1989. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife. Project 83-7.
- State of Idaho. 1997. Proposed listing of Snake River steelhead for protection under the Federal Endangered Species Act. State of Idaho comments to the National Marine Fisheries Service. January 3, 1997.
- TAC (U.S. vs. Oregon Technical Advisory Committee). 1997. 1996 All Species Review. Columbia River Fisheries Management Plan.

- Thurrow, R.T. 1985. Middle Fork Salmon River Fisheries Investigations. River and Stream Investigations. Job Completion Report, Project F-73-R-6. Idaho Department of Fish and Game. 100p.
- Thurrow, R.T. 1987. Evaluation of the South Fork Salmon River steelhead trout fishery restoration program. Report to the U.S. Department of the Interior, Fish and Wildlife Service, Lower Snake River Fish and Wildlife Compensation Plan. Contract No. 14-16-0001-86505. Idaho Department of Fish and Game. Boise. 154 p.
- WDF et al. (Washington Department of Fisheries, Confederated Tribes of the Umatilla Indian Reservation, Idaho Department of Fish and Game, Nez Perce Tribe of Idaho, Oregon Department of Fish and Wildlife, Shoshone-Bannock Tribes of Fort Hall, and Washington Department of Wildlife). 1990. Snake River subbasin salmon and steelhead production plan. Prepared for: Northwest Power Planning Council, Portland, Oregon.

## FIGURES

Figure 1. Idaho's present anadromous fish production waters showing major drainages of the Clearwater River, Salmon River and Snake River subbasins.

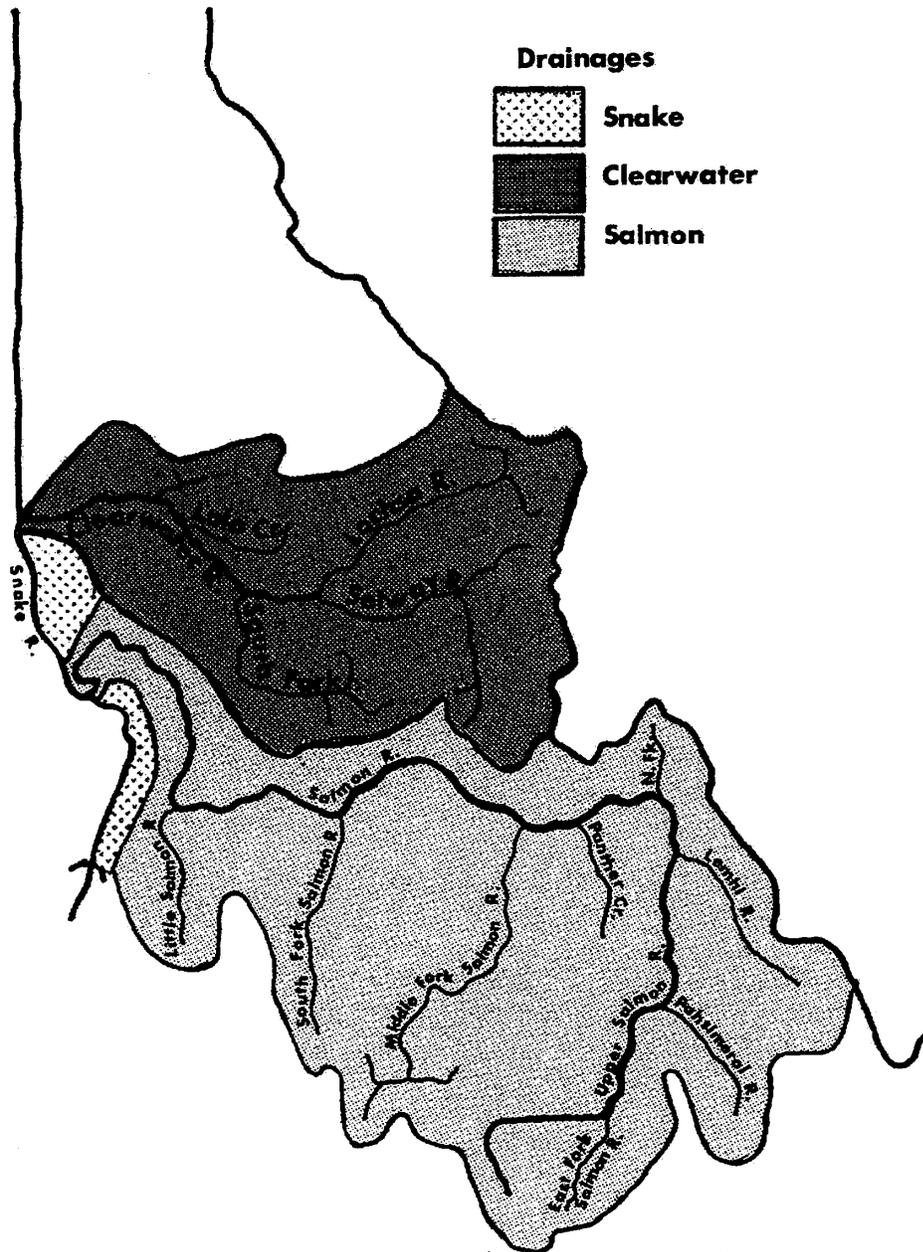


Figure 2. Present distribution of wild A-run and B-run steelhead trout production areas in Idaho.

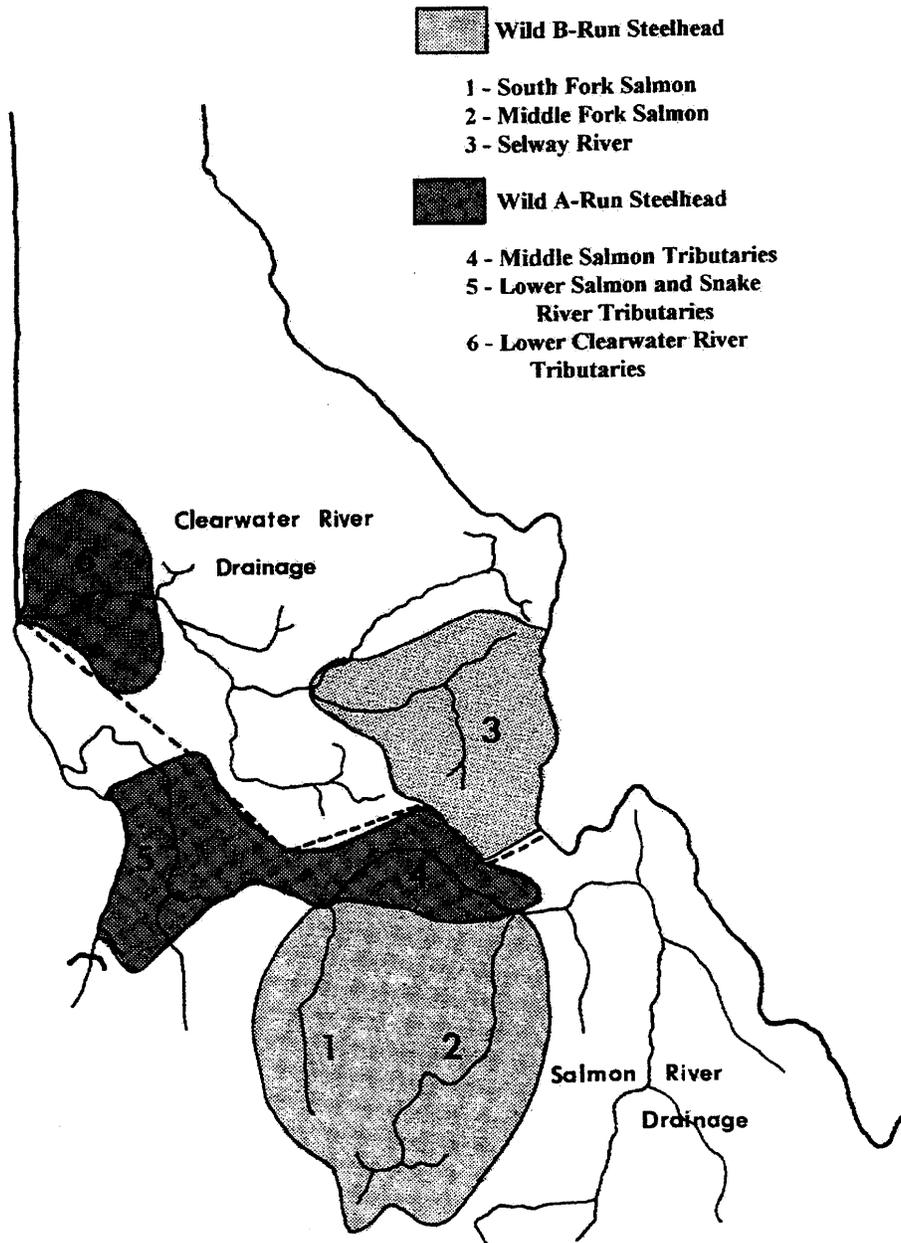


Figure 3. Present distribution of wild chinook salmon production areas of Idaho.

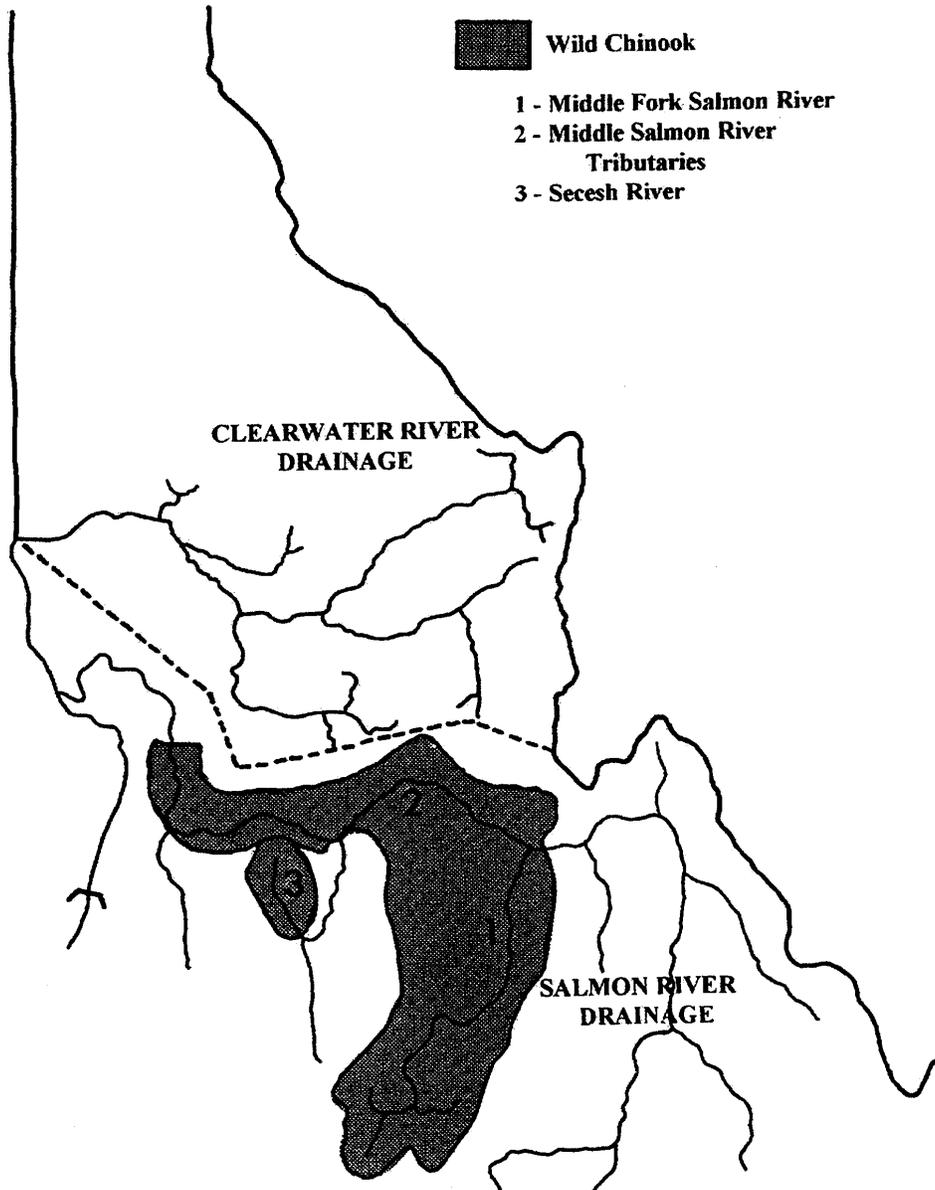


Figure 4. Mean Annual Density (Number of Age-1+ Steelhead Trout/100m<sup>2</sup> in B Channels) of Four Classes of Steelhead Trout Parr in Idaho.

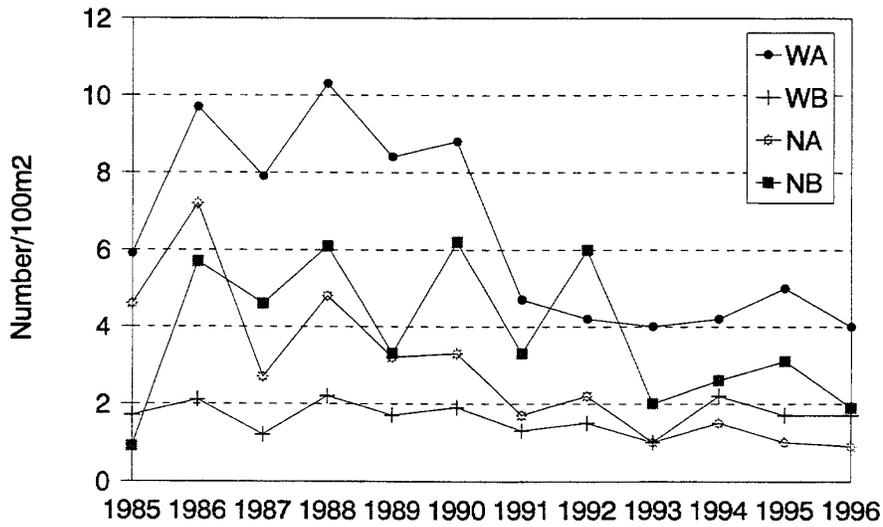


Figure 5. Mean Annual Percent of carrying capacity (PCC) of Four Classes of Steelhead Trout Parr (Age-1+ and 2+ in B and C Channels) in Idaho, 1985-96.

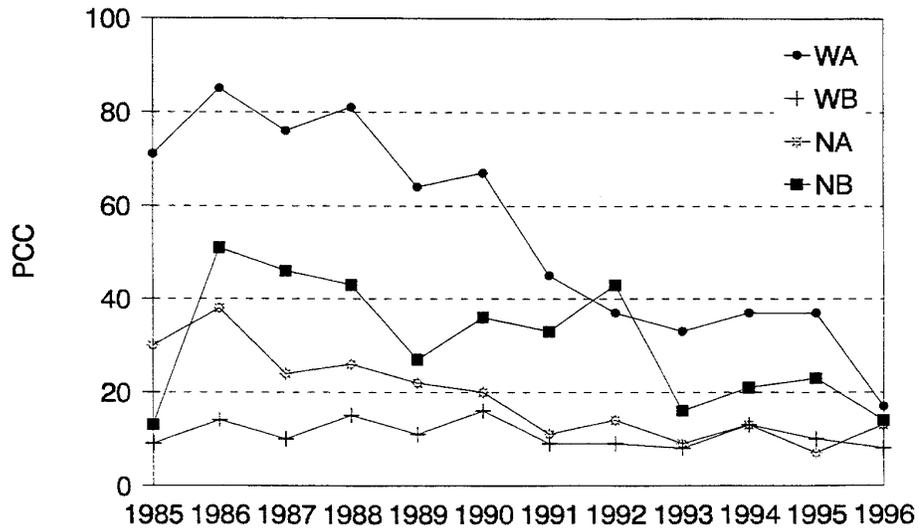


Figure 6. Mean Annual Density (Number/100m<sup>2</sup> in C Channels) of Two Classes of Chinook Salmon parr (Age-0+) in Idaho, 1985-96.

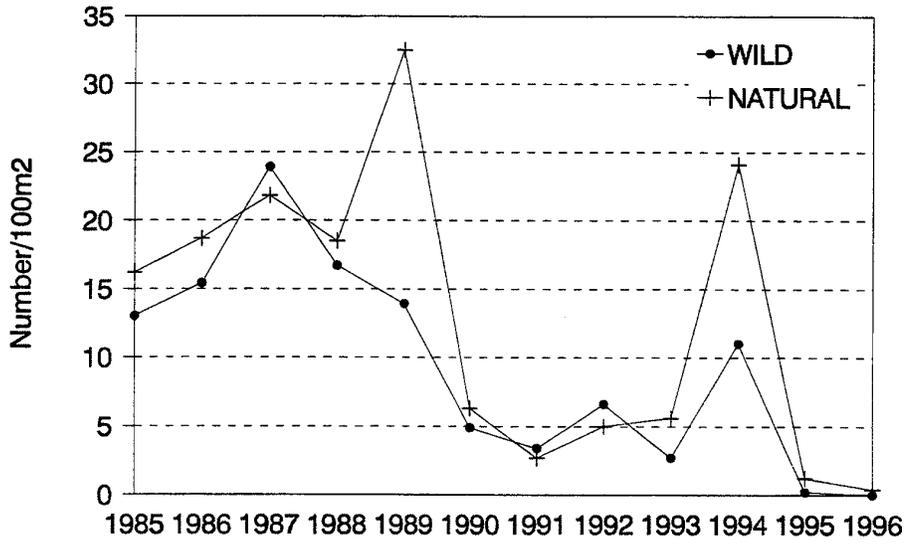
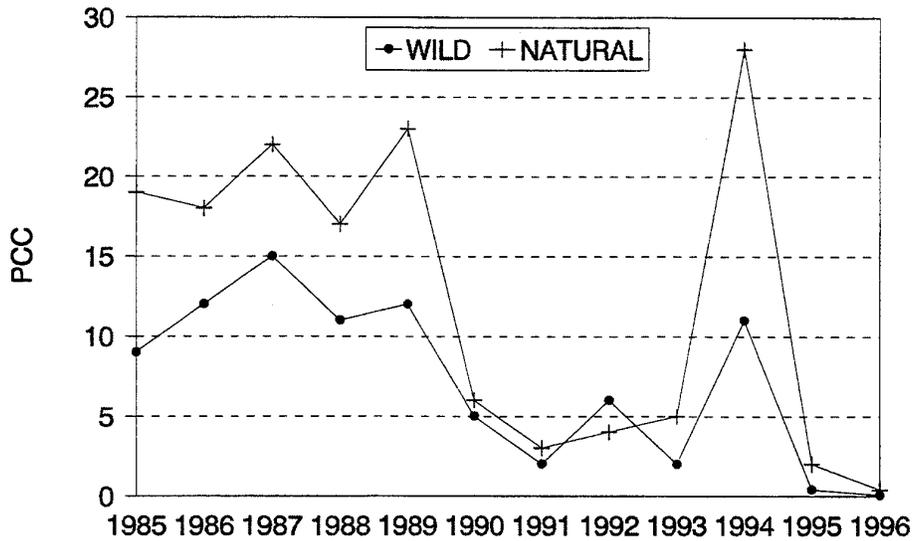


Figure 7. Breakdown of 1996 GPM Sampling by Classes of Anadromous Fish and Channel Type.



## TABLES

Table 1 Number of sections where steelhead trout and chinook salmon parr were monitored in Idaho by BPA project 91-73, other research and management programs, as well as other agencies and tribes from 1984 through 1996.

Year	Number Of Steelhead Trout Sections	Number Of Chinook Salmon Sections
1984	60	37
1985	184	139
1986	190	156
1987	225	178
1988	225	175
1989	268	216
1990	349	243
1991	315	241
1992	334	241
1993	401	377
1994	333	329
1995	281	272
1996	238	223

<sup>a</sup>Chinook salmon sections are a subset of the steelhead trout sections.

Table 2. Average percent carrying capacity (PCC) for ages 1+ and 2+ steelhead trout in all monitoring sections (B and C channels) and densities (number/100m<sup>2</sup>) of age-1+ steelhead trout parr in B channels, 1996.

Class Cell	Average PCC	No. Sites	No. Streams	Average age 1+ density in B channels	No. Sites	No. Streams
<u>Wild B-run</u>						
1. Selway R	11.54	24	13	1.09	23	13
2. Middle Fk Salmon R	2.11	27	8	0.27	14	7
3. South Fk Salmon R	10.18	30	8	1.05	18	5
<u>Natural B-run</u>						
4. Lochsa R	23.83	18	10	2.68	18	10
5. South Fk Clearwater R	11.81	50	8	1.43	23	5
6. Mainstem Clearwater & Tribs (Lolo Cr)	11.24	8	2	1.44	4	2
7. East Fork Salmon R (Above weir)	2.02	3	1	0.06	2	1
<u>Natural A-run</u>						
8. Little Salmon R	36.94	4	2	4.07	4	2
9. Lower Salmon R	58.40	3	1	7.43	3	1
10. Upper Salmon R	3.88	11	5	0.35	7	5
11. Pahsimeroi R	17.19	4	1	- No B Channel -	--	--
12. Lemhi R	23.39	7	4	0.66	3	2
13. Headwaters Salmon R	0.72	26	4	0.03	13	2
14. Snake R Tribs (Granite Cr)	58.67	2	1	5.70	2	1
<u>Wild A-run</u>						
15. Salmon Canyon Tribs	8.60	11	6	4.13	11	6
16. Snake R Tribs (Sheep Cr)	21.95	2	1	5.64	2	1
17. Mains Tribs	0.83	3	2	No Steelhead 1+	3	2
18. Lower Salmon R Tribs	41.29	5	3	5.32	5	3
19. Rapid R (above weir)	- No Sites Sampled -			-- No Sites Sampled	--	--

Table 3. Average percent carrying capacity (PCC) for chinook parr in all monitoring sections (B and C channels) and densities (number/100m<sup>2</sup>) of chinook salmon parr in C channels, 1996.

Class Cell	Average PCC	No. Sites	No. Streams	Average age 0+ density in C channels	No. Sites	No. Streams
<u>Wild Spring</u>						
1. Middle Fk Salmon R (w/o Bear Valley/Elk Cr)	0.09	21	8	0.00	7	4
2. Salmon R Canyon & Tribs (Chamberlain Cr)	0.08	11	6	No C-Channel	--	--
3. Bear Valley/Elk Cr	0.02	6	1	0.02	6	1
4. Snake R Tribs (Granite/Sheep Cr)	0.00	4	2	No C-Channel	--	--
19. Lower Salmon R	0.16	8	4	No C-Channel	--	--
<u>Wild Summer</u>						
5. Secesh R	0.00	4	2	0.00	2	1
6. Middle Fk Salmon R	- No Sites Sampled -	--	--	- No Sites Sampled -	--	--
7. Upper Salmon R (Middle Fk to Redfish Lk Cr and East Fk mouth to weir)	0.00	1	1	No C-Channel	--	--
<u>Natural Spring</u>						
8. Little Salmon R	0.94	4	2	No C-Channel	--	--
9. Lemhi R	0.84	7	4	1.21	4	2
10. Upper Salmon R	0.20	13	5	0.34	5	3
11. Headwaters Salmon R	0.49	26	4	0.40	13	4
12. South Fk Clearwa 0.05a		50	8	0.06	27	6
13. Lochsa R	0.00	18	10	No C-Channel	--	--
14. Selway R	0.37	24	13	0.70	1	1
15. Mains & Tribs (Lolo Cr)	0.54 11.00	4	0		4	2
<u>Natural Summer</u>						
16. Rapid R	- No Sites Sampled -	--	--	- No Sites Sampled -	--	--
17. South Fk Salmon R	0.67	26	6	0.23	10	4
18. Pahsimeroi R	2.81	4	1	2.17	4	1

<sup>a</sup>Includes the ponds on Crooked River

Table 4. Mean percent of rated carrying capacity (PCC) of age-1+ and age-2+ steelhead trout parr in B and C channels, and density of age-1+ steelhead trout parr in B channels, by class and year, 1985-1996.

Year	PCC (by Class <sup>a</sup> )				B channel density (by Class)			
	WA	WB	NA	NB	WA	WB	NA	NB
1985	71	9	30	13	5.9	1.7	4.6	0.9
1986	85	14	38	51	9.7	2.1	7.2	5.7
1987	76	10	24	46	7.9	1.2	2.7	4.6
1988	81	15	26	43	10.3	2.2	4.8	6.1
1989	64	11	22	27	8.4	1.7	3.2	3.3
1990	67	16	20	36	8.8	1.9	3.3	6.2
1991	45	9	11	33	4.7	1.3	1.7	3.3
1992	37	9	14	43	4.2	1.5	2.2	6.0
1993	33	8	9	16	4.0	1.0	1.0	2.0
1994	37	13	13	21	4.2	2.2	1.5	2.6
1995	37	10	7	23	5.0	1.7	1.0	3.1
1996	17	8	13	14	4.0	1.7	0.9	1.9
Mean	54.2	11.0	18.9	30.5	6.4	1.7	2.8	3.8
SD of Annual Means	22.3	2.8	9.4	13.3	2.4	0.4	1.9	1.9

<sup>a</sup>WA=wild A, WB=wild B, NA=natural A, NB=natural B

Table 5. Mean percent of rated carrying capacity (PCC) of age 0+ chinook salmon parr in B and C channels, and density of age 0+ chinook salmon parr in C channels, by class and year, 1985-1996.

Year	PCC (by Class <sup>a</sup> )		C Channel Density (by Class)	
	WSp/WSu	NSp/NSu	WSp/WSu	Nsp/NSu
1985	9.0	19.0	13.0	16.2
1986	12.0	18.0	15.4	18.7
1987	15.0	22.0	23.9	21.8
1988	11.0	17.0	16.7	18.5
1989	12.0	23.0	13.9	32.5
1990	5.0	6.0	4.9	6.3
1991	2.0	3.0	3.4	2.7
1992	6.0	4.0	6.6	5.0
1993	2.0	5.0	2.7	5.6
1994	11.0	28.0	11.0	24.1
1995	0.4	2.0	0.2	1.2
1996	0.07	0.39	0.01	0.4
Mean	7.1	12.3	9.3	12.8
SD of Annual Means	5.2	9.8	7.5	10.5

<sup>a</sup>WSp=wild spring, WSu=wild summer, NSp=natural spring, NSu=natural summer

Table 6. Summary of length at age information for steelhead trout by drainage.

Drainage	Length at Age (mm)				Source
	0+	1+	2+	3+	
<u>GENERAL PARR MONITORING GUIDELINES</u>					
All Drainages	<74	74-152	152-228	>228	Petrosky & Holubetz (1985) IDFG
<u>CLEARWATER RIVER DRAINAGE</u>					
Lower Lochsa River	<75	75-127	127-203	>203	Chuck Huntington (pers.com.) Clearwater Biostudies
Lower Lochsa River		135-140	160-170		Alan Byrne (pers.com.) IDFG
<u>SALMON RIVER DRAINAGE</u>					
Upper Salmon River		<90	90-200	>200	Russ Kiefer (pers.com.) IDFG
Middle Fork Salmon R.	<70	70-130	130-200	>200	Thurrow (1985) IDFG
Middle Fork Salmon R.	<70	70-130	130-200	>200	Everest (1969)
South Fork Salmon R.	<70	70-130	130-200	>200	Thurrow (1987) IDFG
<u>SNAKE RIVER DRAINAGE</u>					
Lower Granite Dam			120-250	>250	Unpublished, 1977 Idaho Coop. Fishery Unit

Table 7. Breakdown of 1996 GPM sampling by classes of anadromous fish and channel type.

Class	Steelhead					Chinook				
	WA	WB	NA	NB	Total	WSp	WSu	NSp	NSu	Total
Number cells	4	3	7	4	18	5	2	8	2	17
Number streams	12	30	18	21	81	21	3	50	7	81
Number Sites										
B-Channel	21	55	34	45	155	37	3	99	16	155
C-Channel	0	26	26	31	83	13	2	54	14	83
Total <sup>a</sup>	21	81	60	76	238	50	5	153	30	238
Number of streams currently being sampled intensively										
w/GPM sites	2	17	5	0	24	8	1	10	5	24
w/o GPM sites	10	13	13	21	57	13	2	40	2	57
Total <sup>b</sup>	12	30	18	21	81	21	3	50	7	81

<sup>a</sup> There were 8 streams with 11 sites sampled that were not rated as steelhead spawning and rearing streams.

<sup>b</sup> There were 11 streams with 15 sites sampled that were not rated as chinook salmon spawning and rearing streams.

Appendix A-1.

General Parr Monitoring Snorkel Survey Sections-1996  
for project 91-73

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural), A or B run chinook salmon classification (Wild or natural). spring or summer), densities and percent carrying for all sites sampled in 1996.

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class	
					Class W vs N A vs B	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Age 0+ Density No/100msq		Percent Carrying Capacity
<b><u>Snake River, above mouth Salmon River</u></b>												
GRANITE CR		1	101	B	NA	5.27	3.51	43.90	WSPR	0.00	0.00	3
GRANITE CR		3	101	B	NA	6.12	8.57	73.45	WSPR	0.00	0.00	3
SHEEP CR		1	101	B	WA	4.84	6.58	0.00	WSPR	0.00	0.00	1
SHEEP CR		2	101	B	WA	6.44	2.34	43.90	WSPR	0.00	0.00	1
<b><u>Lower Salmon River</u></b>												
JOHN DAY CR		1	209	B	WA	2.88	3.60	46.29	WSPR	0.00	0.00	3
JOHN DAY CR		2	209	B	WA	2.74	0.00	19.57	WSPR	0.00	0.00	3
SKOOKUMCHUCK CR		1	209	B	WA	0.57	1.14	12.21	WSPR	0.00	0.00	3
SKOOKUMCHUCK CR		2	209	B	WA	0.63	2.52	22.50	WSPR	0.00	0.00	3
SLATE CR		2	209	B	NAB	7.70	3.11	54.05	WSPR	0.12	0.27	2
SLATE CR		4	209	B	NAB	12.58	7.81	101.95	WSPR	0.43	0.98	2
SLATE CR		6	209	B	NAB	2.00	1.84	19.20	WSPR	0.00	0.00	2
WHITEBIRD CR		1	209	B	WA	19.77	1.41	105.90	WSPR	0.00	0.00	1
<b><u>Little Salmon River</u></b>												
BOULDER CR	BELOW	5	210	B	NA	7.74	4.72	62.30	NSPR	1.44	3.27	3
LITTLE SALMON R		1	210	B	NAB	4.39	2.90	36.45	NSPR	0.09	0.20	3
LITTLE SALMON R		1.5	210	B	NAB	2.01	2.85	24.30	NSPR	0.00	0.00	3
LITTLE SALMON R		2	210	B	NAB	2.16	2.78	24.70	NSPR	0.12	0.27	3
<b><u>Salmon River Canyon</u></b>												
BARGAMIN CR		1	207	B	WA	2.69	0.82	17.55	WSPR	0.00	0.00	3
BARGAMIN CR		2	207	B	WA	3.46	1.42	24.40	WSPR	0.00	0.00	3
BARGAMIN CR		3	207	B	WA	3.39	2.34	0.00	WSPR	0.00	0.00	3
BARGAMIN CR		4	207	B	WA	4.36	1.23	0.00	WSPR	0.00	0.00	3
BIG MALLARD CR		1	207	B	WA	3.47	2.31	0.00	WSPR	0.00	0.00	1
CROOKED CR		1	207	B	WA	1.94	0.32	0.00	WSPR	0.00	0.00	1

31

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural), A or B run chinook salmon classification (Wild or natural). spring or summer), densities and percent carrying for all sites sampled in 1996 (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Density No/100msq	Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Density No/100msq	Percent Carrying Capacity	
CROOKED CR		2	207	B	WA	2.40	0.51	0.00	WSPR	0.00	0.00	1
HORSE CR		L1	207	B	WA	1.05	0.35	7.00	WSPR	0.00	0.00	3
HORSE CR		L2	207	B	WA	4.40	1.68	30.40	WSPR	0.00	0.00	3
JERSEY CR		1	207	B	WA	15.84	3.39	0.00	WSPR	0.00	0.00	1
SHEEP CR		L1	207	B	WA	2.42	0.64	15.30	WSPR	0.38	0.86	1
<b><u>Lemhi River</u></b>												
BEAR VALLEY CR	HC1	B	204	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	3
BEAR VALLEY CR	HC1	CAMP	204	B	NA	0.00	0.25	1.25	NSPR	0.00	0.00	3
BIG SPRINGS CR	LEM1	A	204	C	NA	22.08	2.49	122.85	NSPR	0.00	0.00	1
HAYDEN CR	HC2	B	204	B	NA	0.18	0.12	1.50	NSPR	0.00	0.00	1
HAYDEN CR	HC3	B	204	B	NA	1.80	0.12	9.60	NSPR	1.08	1.40	1
LEMHI R	1	2B	204	C	NA	1.59	1.71	16.50	NSPR	4.76	4.41	1
LEMHI R	1	LEM3A	204	C	NA	1.35	1.06	12.05	NSPR	0.10	0.09	1
<b><u>Pahsimeroi River</u></b>												
PAHSIMEROI R	1	PONDS	202	C	NA	0.42	1.12	7.70	NSUM	0.98	1.27	1
PAHSIMEROI R	LOWER	DWTNLANE	202	C	NA	2.44	3.97	32.05	NSUM	4.73	6.14	1
PAHSIMEROI R	UPPER	DWTNLANE	202	C	NA	0.83	3.69	22.60	NSUM	1.43	1.86	1
PAHSIMEROI R	WEIR	WEIR	202	C	NA	0.51	0.77	6.40	NSUM	1.53	1.99	1
<b><u>Headwaters Salmon River</u></b>												
ALTURAS LK CR	1	1B	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
ALTURAS LK CR	2	2B	201	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
ALTURAS LK CR	4	4A	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
ALTURAS LK CR	5	5A	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
PETTIT LK CR	1	1A	201	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	3
PETTIT LK CR	1	1B	201	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	3
POLE CR	1	1A	201	C	NA	0.16	0.16	3.20	NSPR	0.00	0.00	3
POLE CR	1	1B	201	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	3
REDFISH LK CR		LOWER	201	B	NA	0.40	0.28	4.86	NSPR	0.00	0.00	3
REDFISH LK CR		WEIR DS	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	3

32

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural), A or B run chinook salmon classification (Wild or natural). spring or summer), densities and percent carrying for all sites sampled in 1996 (Continued).

33

SALMON RIVER DRAINAGE													
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class	
					Class W vs N A vs B	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Age 0+ Density No/100msq	Percent Carrying Capacity		
SALMON R	10	10A	201	B	NA	0.24	0.00	1.71	NSPR	0.00	0.00	1	
SALMON R	10	10AB	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
SALMON R	3	3B	201	B	NA	0.03	0.03	0.43	NSPR	0.00	0.00	1	
SALMON R	3	3BRA	201	C	NA	0.06	0.19	1.79	NSPR	4.81	10.93	1	
SALMON R	3	3BRB	201	C	NA	0.02	0.02	0.29	NSPR	0.00	0.00	1	
SALMON R	3	3SA	201	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
SALMON R	4	4B	201	C	NA	0.00	0.05	0.36	NSPR	0.40	0.52	1	
SALMON R	4	4BRB	201	B	NA	0.00	0.05	0.36	NSPR	0.00	0.00	1	
SALMON R	4	4SB	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
SALMON R	5	5B	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
SALMON R	6	6A	201	C	NA	0.04	0.04	0.57	WSPR	0.00	0.00	1	
SALMON R	6	6B	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
SALMON R	6	6SA	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
SALMON R	7	7A	201	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
SALMON R	7	7SA	201	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
SALMON R	9	9A	201	C	NA	0.72	0.36	7.71	NSPR	0.00	0.00	1	
SALMON R	9	9B	201	B	NA	0.00	0.15	1.07	NSPR	0.00	0.00	1	
SALMON R, E FK	ABOVE-WEIR	2	201	C	NAB	0.00	0.00	0.00	NSPR	0.00	0.00	1	
SALMON R, E FK	ABOVE-WEIR	3	201	B	NAB	0.11	0.00	0.55	NSPR	0.00	0.00	1	
SALMON R, E FK	BLW WEIR	ZIEGLER HL	201	B	NAB	0.00	0.77	5.50	NSPR	0.29	0.38	1	
THOMPSON CR	ABOVE	TWO-POLE	201	B	NA	0.00	0.51	3.64	NSPR	0.00	0.00	3	
THOMPSON CR	BELOW	1	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	3	
<b>South Fork Salmon River</b>													
BUCKHORN CR	LOWER	NR MOUTH	208	B	WB	0.00	0.00	0.00	NSUM	0.00	0.00	3	
JOHNSON CR	LOWER IV	L2	208	B	WB	1.64	0.74	23.80	NSUM	0.00	0.00	1	
JOHNSON CR	LOWER IV	L3	208	B	WB	1.42	1.02	24.40	NSUM	0.00	0.00	1	
JOHNSON CR	MID LOWIII	PW3B	208	B	WB	0.41	0.47	8.80	NSUM	0.00	0.00	1	
JOHNSON CR	MID UPR II	PW3A	208	B	WB	4.04	2.47	65.10	NSUM	0.00	0.00	1	
JOHNSON CR	UPPER I	M1	208	C	WB	0.00	0.00	0.00	NSUM	0.00	0.00	1	
JOHNSON CR	UPPER I	M2	208	C	WB	0.24	0.00	2.40	NSUM	0.00	0.00	1	
JOHNSON CR	UPPER I	M2 SIDE	208	C	WB	0.00	0.00	0.00	NSUM	0.00	0.00	1	

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural), A or B run chinook salmon classification (Wild or natural). spring or summer), densities and percent carrying for all sites sampled in 1996 (Continued).

Stream Name	Strata	Section	Drainage	Channel Type	SALMON RIVER DRAINAGE							
					Steelhead Class	Steelhead Age 1+	Steelhead Age 2+	Steelhead Percent Carrying	Chinook Class	Chinook Age 0+	Chinook Percent Carrying	Priority Class
					W vs N A vs B	Density No/100msq	Density No/100msq	Capacity	W vs N Spr vs Sum	Density No/100msq	Capacity	
JOHNSON CR	UPPER I	M3	208	C	WB	0.10	0.00	1.00	NSUM	0.00	0.00	1
JOHNSON CR	UPPER I	M3 SIDE	208	C	WB	0.00	0.00	0.00	NSUM	0.00	0.00	1
JOHNSON CR	UPPER I	PW1A	208	B	WB	0.00	0.17	1.70	NSUM	0.00	0.00	1
LAKE CR		BURGDORF	208	C	WB	0.00	0.00	0.00	WSUM	0.00	0.00	1
LAKE CR		WILLOW CR	208	C	WB	0.46	0.93	9.93	WSUM	0.00	0.00	1
LICK CR		L1	208	B	WB	0.62	0.41	7.36	WSUM	0.00	0.00	2
LICK CR		L3	208	B	WB	2.40	1.08	24.86	WSUM	0.00	0.00	2
ROCK CR	UPPER I	M1	208	C	WB	0.00	0.00	0.00	NSUM	0.00	0.00	1
SALMON R, S FK		11	208	B	WB	0.83	0.14	6.93	NSUM	2.25	5.11	1
SALMON R, S FK		14	208	B	WB	0.19	0.06	1.79	NSUM	0.58	1.32	1
SALMON R, S FK		16	208	B	WB	0.29	0.13	3.00	NSUM	0.06	0.14	1
SALMON R, S FK		5	208	B	WB	0.15	0.00	1.50	NSUM	2.28	5.18	1
SALMON R, S FK		7	208	B	WB	1.68	1.26	21.00	NSUM	0.00	0.00	1
SALMON R, S FK		POVERTY	208	C	WB	0.03	0.00	0.21	NSUM	1.09	2.48	1
SALMON R, S FK		STOLLE1	208	C	WB	0.18	0.00	1.80	NSUM	0.47	1.07	1
SALMON R, S FK		STOLLE2	208	C	WB	0.00	0.00	0.00	NSUM	0.74	1.68	1
SALMON R, S FK, E FK	ABV JHNSN	SUGAR CR	208	B	WB	0.64	0.43	10.70	NSUM	0.00	0.00	1
SALMON R, S FK, E FK	BLW JHNSN	MP 35.8	208	B	WB	0.14	0.55	6.90	NSUM	0.00	0.00	1
SALMON R, S FK, E FK		3	208	B	WB	2.97	1.33	43.00	NSUM	0.00	0.00	1
SALMON R, S FK, E FK		6	208	B	WB	0.39	1.16	11.07	NSUM	0.16	0.36	1
SALMON R, S FK, E FK		7	208	B	WB	1.14	2.78	28.00	NSUM	0.00	0.00	1
SAND CR	UPPER I	M2	208	C	WB	0.00	0.00	0.00	NSUM	0.00	0.00	1
<b>Middle Fork Salmon River</b>												
BEAR VALLEY CR	2	A	205	C	WB	0.20	0.00	2.00	WSPR	0.10	0.13	2
BEAR VALLEY CR	2	B	205	C	WB	0.00	0.00	0.00	WSPR	0.00	0.00	2
BEAR VALLEY CR	3	A	205	C	WB	0.00	0.00	0.00	WSPR	0.00	0.00	2
BEAR VALLEY CR	5	A	205	C	WB	0.00	0.00	0.00	WSPR	0.00	0.00	2
BEAR VALLEY CR	7	BIG-MDW-L	205	C	WB	0.00	0.00	0.00	WSPR	0.00	0.00	2
BEAR VALLEY CR	9	B	205	C	WB	0.00	0.00	0.00	WSPR	0.00	0.00	2
BEAVER CR	1	A	205	B	WB	0.00	0.10	0.71	WSPR	0.00	0.00	1
BEAVER CR	3	B	205	C	WB	0.00	0.07	0.50	WSPR	0.00	0.00	1
BIG CR	UPPER	ABV HOGBK	206	B	WB	0.15	0.58	3.65	WSPR	0.00	0.00	1
BIG CR	UPPER	ABV JACOBS	206	C	WB	0.21	0.00	1.05	WSPR	0.00	0.00	1

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural), A or B run chinook salmon classification (Wild or natural). spring or summer), densities and percent carrying for all sites sampled in 1996 (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Age 0+ Density No/100msq	Percent Carrying Capacity	
BIG CR	UPPER	LOGAN CR	206	B	WB	0.14	0.41	2.75	WSPR	0.82	1.86	1
BIG CR	UPPER	NEAR FORD	206	C	WB	1.03	0.00	5.15	WSPR	0.00	0.00	1
CAMAS CR		1	206	C	WB	0.00	0.63	3.15	WSPR	0.00	0.00	3
CAMAS CR		2	206	B	WB	0.00	0.00	0.00	WSPR	0.00	0.00	3
CAMAS CR		CAM1	206	C	WB	0.71	0.71	7.10	WSPR	0.00	0.00	3
CAPE HORN CR	1	A	205	C	WB	0.00	0.00	0.00	WSPR	0.00	0.00	1
CAPE HORN CR	2	B	205	C	WB	0.00	0.00	0.00	WSPR	0.00	0.00	1
MARBLE CR	UPPER	MAR1	205	B	WB	0.00	0.00	0.00	WSPR	0.00	0.00	3
MARBLE CR	UPPER	MAR1B	205	B	WB	0.00	0.00	0.00	WSPR	0.00	0.00	3
MARBLE CR	UPPER	MAR2	205	B	WB	0.00	0.00	0.00	WSPR	0.00	0.00	3
MARBLE CR	UPPER	SUNNYSIDE	205	B	WB	0.00	0.00	0.00	WSPR	0.00	0.00	3
MARSH CR	1	A	205	B	WB	0.54	0.33	4.35	WSPR	0.00	0.00	1
MARSH CR	1	B	205	B	WB	1.47	1.63	15.50	WSPR	0.00	0.00	1
MONUMENTAL CR		MON2	206	B	WB	1.29	0.43	8.60	WSPR	0.00	0.00	2
MONUMENTAL CR		MON3	206	B	WB	0.00	0.00	0.00	WSPR	0.00	0.00	2
MONUMENTAL CR		MON5	206	B	WB	0.14	0.21	1.75	WSPR	0.00	0.00	2
MONUMENTAL CR, W FK		MON4	206	B	WB	0.00	0.13	0.65	WSPR	0.00	0.00	2
<u>Upper Salmon River</u>												
SALMON R, N FK	2	DAHLONEGA	203	B	NA	1.98	0.62	13.00	NSPR	0.00	0.00	1
SALMON R, N FK	2	HUGHES	203	C	NA	1.66	1.16	20.14	NSPR	1.33	1.73	1
SALMON R	2	2B	201	B	NA	0.09	0.09	1.29	WSUM	0.54	1.23	1
SALMON R	1	RBNSN-BAR	201	B	NA	0.07	0.00	0.50	WSUM	0.00	0.00	1
VALLEY CR	1	B	201	C	NA	0.05	0.00	0.50	NSPR	0.36	0.47	1
VALLEY CR	3	A	201	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
VALLEY CR	3	B	201	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
VALLEY CR	6	B	201	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1

35

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural), A or B run chinook salmon classification (Wild or natural), spring or summer), densities and percent carrying for all sites sampled in 1996 (Continued).

CLEARWATER RIVER DRAINAGE													
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook		
					Class W vs N	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N	Age 0+ Density No/100msq	Percent Carrying Capacity	Priority Class	
<b>Mainstem Clearwater River (includes Middle Fork Clearwater River)</b>													
BIG CANYON CR		1	306	B	WA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
ELDORADO CR	ABOVE	1HG	306	C	NB	1.58	0.40	19.80	NSPR	0.00	0.00	2	
ELDORADO CR	ABOVE	2LG	306	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	2	
ELDORADO CR	ABOVE	2M	306	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	2	
ELDORADO CR	BELOW	1B	306	B	NB	1.48	0.49	19.70	NSPR	0.00	0.00	2	
LOLO CR	UPSTREAM	8303	306	C	NB	0.60	0.00	4.29	NSPR	0.00	0.00	1	
LOLO CR	UPSTREAM	8360	306	B	NB	1.66	1.25	20.79	NSPR	0.62	0.81	1	
LOLO CR	UPSTREAM	RUN1	306	B	NB	2.12	0.60	19.43	NSPR	3.93	5.10	1	
LOLO CR	UPSTREAM	RUN7	306	B	NB	0.50	0.33	5.93	NSPR	0.00	0.00	1	
MISSION CR		1	306	B	WA	0.00	0.50	2.50	NSPR	0.00	0.00	1	
MISSION CR		2	306	B	WA	0.00	0.00	0.00	NSPR	0.00	0.00	1	
<b>South Fork Clearwater River</b>													
AMERICAN R	2	1	305	C	NB	0.28	0.00	2.00	NSPR	0.00	0.00	2	
AMERICAN R	3	2	305	C	NB	1.88	0.29	15.50	NSPR	0.00	0.00	2	
CROOKED R	1	BOULDER-A	305	B	NB	1.06	0.47	10.93	NSPR	0.00	0.00	1	
CROOKED R	1	BOULDER-B	305	B	NB	1.10	0.00	7.86	NSPR	0.00	0.00	1	
CROOKED R	1	CONTROLA	305	B	NB	0.44	0.00	3.14	NSPR	0.00	0.00	1	
CROOKED R	1	CONTROLB	305	B	NB	0.45	0.00	3.21	NSPR	0.00	0.00	1	
CROOKED R	1	SILL-LOG-A	305	B	NB	0.39	0.20	4.21	NSPR	0.00	0.00	1	
CROOKED R	1	SILL-LOG-B	305	B	NB	1.54	0.00	11.00	NSPR	0.00	0.00	1	
CROOKED R	2	CONTROL1	305	B	NB	1.36	0.37	12.36	NSPR	0.00	0.00	1	
CROOKED R	2	CONTROL2	305	B	NB	1.21	0.00	8.64	NSPR	0.00	0.00	1	
CROOKED R	2	TREAT1	305	B	NB	1.85	0.74	18.50	NSPR	0.00	0.00	1	
CROOKED R	2	TREAT2	305	B	NB	2.68	0.22	20.71	NSPR	0.00	0.00	1	
CROOKED R	3	NATURAL1	305	C	NB	0.51	0.00	2.55	NSPR	0.00	0.00	1	
CROOKED R	3	NATURAL2	305	C	NB	0.51	0.00	3.64	NSPR	0.00	0.00	1	
CROOKED R	3	NATURAL3	305	C	NB	0.57	0.28	6.07	NSPR	0.00	0.00	1	
CROOKED R	4	MEANDER1	305	C	NB	0.10	0.00	0.50	NSPR	0.00	0.00	1	
CROOKED R	4	MEANDER2	305	C	NB	0.25	0.00	1.79	NSPR	0.00	0.00	1	
CROOKED R	4	MEANDER3	305	C	NB	0.58	0.07	4.64	NSPR	0.00	0.00	1	

36

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural), A or B run chinook salmon classification (Wild or natural). spring or summer), densities and percent carrying for all sites sampled in 1996 (Continued).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Age 0+ Density No/100msq	Percent Carrying Capacity	
CROOKED R	C	CAN1	305	B	NB	4.04	1.35	38.50	NSPR	0.00	0.00	1
CROOKED R	C	CAN2	305	B	NB	3.64	1.74	38.43	NSPR	0.00	0.00	1
CROOKED R	C	CAN3	305	B	NB	1.42	0.09	10.79	NSPR	0.00	0.00	1
CROOKED R	H	OROGRANDE1	305	B	NB	0.00	0.46	3.29	NSPR	0.00	0.00	1
CROOKED R	PONDS A	POND N93	305	C	NB	1.17	0.00	8.36	NSPR	0.00	0.00	1
CROOKED R	PONDS A	POND U	305	C	NB	4.40	1.32	40.86	NSPR	0.00	0.00	1
CROOKED R	PONDS A	POND11	305	C	NB	0.54	0.11	4.64	NSPR	0.00	0.00	1
CROOKED R	PONDS B	POND S1	305	C	NB	0.73	0.00	5.21	NSPR	0.00	0.00	1
CROOKED R	PONDS B	POND S2	305	C	NB	0.25	0.25	3.57	NSPR	0.00	0.00	1
CROOKED R	PONDS B	POND S3	305	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	1
JOHNS CR	1	1	305	B	NB	2.80	1.87	23.35	NSPR	0.00	0.00	3
JOHNS CR	1	2	305	B	NB	3.23	1.17	22.00	NSPR	0.00	0.00	3
JOHNS CR	2	3	305	B	NB	1.59	1.59	15.90	NSPR	0.00	0.00	3
JOHNS CR	2	4	305	B	NB	1.25	1.57	14.10	NSPR	0.00	0.00	3
MEADOW CR		MEADOW	305	C	NB	0.87	1.45	16.57	NSPR	0.00	0.00	2
MEADOW CR		MP2	305	B	NB	0.75	0.00	5.36	NSPR	0.00	0.00	2
MOOSE BUTTE CR		MOUTH	305	C	NB	0.42	0.00	4.20	NSPR	0.42	0.55	3
NEWSOME CR		1	305	C	NB	1.10	0.49	11.36	NSPR	0.00	0.00	2
NEWSOME CR		4MI	305	C	NB	2.00	2.89	34.93	NSPR	0.00	0.00	2
NEWSOME CR		NEW SIDE	305	C	NB	4.22	0.60	34.43	NSPR	0.00	0.00	2
NEWSOME CR		OLD SIDE	305	C	NB	4.39	0.94	38.07	NSPR	0.00	0.00	2
NEWSOME CR		TRANSECT11	305	C	NB	1.91	3.27	37.00	NSPR	0.00	0.00	2
RED R	1	CNTL 1	305	C	NB	0.00	0.00	0.00	NSPR	0.37	0.84	1
RED R	1	CNTL 2	305	C	NB	1.78	0.36	15.29	NSPR	0.00	0.00	1
RED R	2	CNTL 2	305	B	NB	0.00	0.00	0.00	NSPR	0.00	0.00	1
RED R	2	TREAT 2	305	B	NB	0.21	0.42	4.50	NSPR	0.00	0.00	1
RED R	4	CNTL 2	305	C	NB	0.19	0.00	1.90	NSPR	0.19	0.25	1
RED R	4	TREAT 2	305	C	NB	0.20	0.00	2.00	NSPR	0.59	0.77	1
RED R	5	CNTL 2	305	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	1
RED R	5	TREAT 2	305	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	1
TENMILE CR		1	305	B	NB	1.14	0.97	10.55	NSPR	0.00	0.00	1
TENMILE CR		2	305	B	NB	0.71	0.89	8.00	NSPR	0.00	0.00	1

37

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural), A or B run chinook salmon classification (Wild or natural). spring or summer), densities and percent carrying for all sites sampled in 1996 (Continued).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Age 0+ Density No/100msq	Percent Carrying Capacity	
<b>Selway River</b>												
BEAR CR		1	301	B	WB	0.55	0.07	3.10	NSPR	0.00	0.00	3
DEEP CR		CACTUS	301	B	WB	0.48	0.95	7.15	NSPR	0.00	0.00	3
DEEP CR		SCIMITAR	301	B	WB	0.19	0.19	1.90	NSPR	0.00	0.00	3
GEDNEY CR		1	302	B	WB	0.78	0.86	8.20	NSPR	0.00	0.00	1
GEDNEY CR		2	302	B	WB	6.33	3.45	48.90	NSPR	0.00	0.00	1
LITTLE CLEARWATER R		2	301	B	WB	1.61	1.02	0.00	NSPR	0.00	0.00	2
MEADOW CR		1	302	B	WB	1.76	1.21	49.50	NSPR	0.19	0.43	1
MEADOW CR		2	302	B	WB	0.00	0.08	1.33	NSPR	0.00	0.00	1
MOOSE CR		1	302	B	WB	2.83	1.21	20.20	NSPR	0.00	0.00	3
MOOSE CR		2	302	B	WB	0.05	0.00	0.25	NSPR	0.05	0.11	3
MOOSE CR, E FK		3	302	B	WB	0.00	0.19	0.95	NSPR	0.00	0.00	3
MOOSE CR, N FK		4	302	B	WB	1.09	0.91	10.00	NSPR	0.00	0.00	3
OTTER CR		1	302	B	WB	0.50	2.02	12.60	NSPR	0.00	0.00	4
RUNNING CR		1	301	B	WB	0.58	0.23	4.05	NSPR	0.00	0.00	1
RUNNING CR		2	301	B	WB	1.46	0.00	7.30	NSPR	0.00	0.00	1
SELWAY R		BEAVER PT	301	C	WB	1.72	1.13	14.25	NSPR	0.70	0.65	3
SELWAY R		HELLSHALF	301	B	WB	1.39	0.99	11.90	NSPR	0.00	0.00	3
SELWAY R		LITTLE-CW	301	B	WB	1.48	0.84	11.60	NSPR	0.21	0.19	3
SELWAY R		MAG-XING	301	B	WB	0.48	1.00	7.40	NSPR	0.00	0.00	3
SELWAY R		RUNNING CR	301	B	WB	0.00	0.02	0.00	NSPR	0.00	0.00	3
THREE LINKS CR		1	302	B	WB	1.00	6.01	35.05	NSPR	2.34	5.32	4
WHITE CAP CR	3	1	301	B	WB	0.98	0.66	8.20	NSPR	0.25	0.57	1
WHITE CAP CR	3	2	301	B	WB	0.52	0.46	4.90	NSPR	0.06	0.14	1
WHITE CAP CR	3	3	301	B	WB	1.00	0.67	8.35	NSPR	0.67	1.52	1
<b>Lochsa River</b>												
BRUSHY FK CR	3	1	303	B	NB	4.81	1.52	31.65	NSPR	0.00	0.00	1
BRUSHY FK CR	3	2	303	B	NB	3.18	0.35	17.65	NSPR	0.00	0.00	1
COLT CR		BRIDGE	303	B	NB	2.07	0.00	10.35	NSPR	0.00	0.00	3
CROOKED FK CR	2	3A	303	B	NB	0.43	0.00	2.15	NSPR	0.00	0.00	1
CROOKED FK CR	2	4A	303	B	NB	1.16	0.00	5.80	NSPR	0.00	0.00	1
CROOKED FK CR	3	1	303	B	NB	0.29	0.15	0.00	NSPR	0.00	0.00	1
CROOKED FK CR	3	2B	303	B	NB	1.56	1.12	13.40	NSPR	0.00	0.00	1

38

Appendix A-1. Monitoring section names, channel types (B or C), steelhead trout classification (wild or natural), A or B run chinook salmon classification (Wild or natural). spring or summer), densities and percent carrying for all sites sampled in 1996 (Continued).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Age 0+ Density No/100msq	Percent Carrying Capacity	
CROOKED FK CR		4A MP11	303	B	NB	0.00	0.00	0.00	NSPR	0.00	0.00	1
FISH CR		1	303	B	NB	1.61	3.11	47.20	NSPR	0.00	0.00	2
FISH CR		2	303	B	NB	3.36	5.91	92.70	NSPR	0.00	0.00	2
HOPEFUL CR	1	1-BOOGIEDN	303	B	NB	0.00	0.00	0.00	NSPR	0.00	0.00	3
OLD MAN CR		1	303	B	NB	15.38	4.99	101.85	NSPR	0.00	0.00	4
POST OFFICE CR		1	303	B	NB	1.66	0.55	11.05	NSPR	0.00	0.00	3
POST OFFICE CR		2	303	B	NB	6.55	0.00	32.75	NSPR	0.00	0.00	3
SPLIT CR		1	303	B	NB	2.32	2.06	21.90	NSPR	0.00	0.00	1
SPLIT CR		2	303	B	NB	1.63	2.79	22.10	NSPR	0.00	0.00	1
WARM SPRINGS CR		1	303	B	NB	2.08	1.28	16.80	NSPR	0.00	0.00	3
WHITE SAND CR	LOWER	WS1	303	B	NB	0.20	0.11	1.55	NSPR	0.00	0.00	1

Appendix A-2

Evaluation Snorkel Sections - 1996

Appendix A-2 Evaluation section names, channel types (B or C), steelhead trout classification (wild or natural, A or B run), chinook salmon classification (wild or natural, spring or summer), densities and percent carrying capacities for all sites sampled in 1996.

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class Spr vs Sum	Age 0+ Density No/100msq	Percent Carryng Capacity	
<b>Lower Salmon River</b>												
LITTLE SLATE CR		TRANSECT7	209	B	NA	2.92	1.62	22.70	WSPR	0.65	1.48	1
SLATE CR		1	209	C	NAB	8.29	3.39	58.40	WSPR	0.19	0.43	1
SLATE CR		5	209	B	NAB	5.42	1.31	33.65	WSPR	1.12	2.55	1
<b>Salmon River Canyon</b>												
SHEEP CR	.5KBELOW6	5	207	B	WA	0.00	1.62	0.00	WSPR	0.00	0.00	1
SHEEP CR	7KMUPTRAIL	7	207	B	WA	1.02	1.53	0.00	WSPR	0.00	0.00	1
SHEEP CR	ABFLATCAMP	6 SCHANNEL	207	B	WA	0.00	0.40	0.00	WSPR	0.00	0.00	1
SHEEP CR	ABVPLUMRCR	9	207	B	WA	1.89	2.70	0.00	WSPR	0.00	0.00	1
SHEEP CR	BELPLUMRCR	8	207	B	WA	0.74	1.48	0.00	WSPR	0.00	0.00	1
SHEEP CR	FLTBLPORKY	4	207	B	WA	0.00	1.18	0.00	WSPR	0.00	0.00	1
SHEEP CR	FLTBLROCKB	2	207	B	WA	0.20	0.00	0.00	WSPR	0.00	0.00	1
SHEEP CR	FLTBLTRIB	3	207	B	WA	0.00	0.35	0.00	WSPR	0.00	0.00	1
WIND R		.2KABV1CR	207	B	WA	1.75	3.79	0.00	WSPR	0.00	0.00	1
WIND R		1ST BRIDGE	207	B	WA	4.04	4.20	0.00	WSPR	0.00	0.00	1
WIND R		BELFA113PL	207	B	WA	4.08	14.29	0.00	WSPR	0.00	0.00	1
WIND R		PLABVFALLS	207	B	WA	7.94	6.35	0.00	WSPR	0.00	0.00	1
<b>Lemhi River</b>												
BIG SPRINGS CR	1	3 UPPER	204	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
BIG SPRINGS CR	1	4A UPPER	204	C	NA	3.62	0.80	22.10	NSPR	0.00	0.00	1
BIG SPRINGS CR	1	BSC 6 UP	204		NA	1.70	3.68	26.90	NSPR	0.28	0.26	1
BIG SPRINGS CR	1	BSC BRIDGE	204	B	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
LEMHI R	1	L-59	204	C	NA	1.37	0.32	8.45	NSPR	0.11	0.10	1
LEMHI R	1	LEADORE	204	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
LEMHI R	1	PWRHS L58A	204	C	NA	2.78	2.30	25.40	NSPR	0.00	0.00	1

41

Appendix A-2 Evaluation section names, channel types (B or C), steelhead trout classification (wild or natural, A or B run), chinook salmon classification (wild or natural, spring or summer), densities and percent carrying capacities for all sites sampled in 1996 (Cont.).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Density No/100msq	Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Density No/100msq	Percent Carryng Capacity	
LEMHI R	2	#2 "MERC"	204	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
LEMHI R	2	#4 MCKIN A	204	C	NA	0.00	0.00	0.00	NSPR	0.00	0.00	1
LEMHI R	2	#6	204	C	NA	0.00	0.21	1.05	NSPR	0.00	0.00	1
LEMHI R	2	#7	204	C	NA	0.00	0.27	1.35	NSPR	0.00	0.00	1
LEMHI R	2	#8 L-50	204	C	NA	2.05	1.14	15.95	NSPR	0.23	0.21	1

Little Salmon River

RAPID R	ABV W FK	4	210	B	WA	0.90	0.75	8.25	NSUM	0.00	0.00	1
RAPID R	ABV W FK	CASTLE CR	210	B	WA	1.41	0.71	10.60	NSUM	0.00	0.00	1
RAPID R	ABV W FK	COPPER CR	210	B	WA	0.80	1.20	10.00	NSUM	0.00	0.00	1
RAPID R	ABV W FK	CORA CLIFF	210	B	WA	1.44	1.85	16.45	NSUM	0.00	0.00	1
RAPID R	ABV W FK	PARADISE	210	B	WA	2.10	0.81	14.55	NSUM	0.00	0.00	1
RAPID R	ABV W FK	WYANT	210	B	WA	0.76	0.54	6.50	NSUM	0.00	0.00	2
RAPID R	BLW W FK	6	210	B	WA	0.71	1.66	11.85	NSUM	0.00	0.00	2
RAPID R	BLW W FK	7	210	B	WA	5.47	7.52	64.95	NSUM	0.00	0.00	2
RAPID R	BLW W FK	CLIFF HANG	210	B	WA	0.79	1.19	9.90	NSUM	0.00	0.00	2
RAPID R	BLW W FK	RAP2	210	B	WA	1.05	2.86	19.55	NSUM	0.00	0.00	2
RAPID R, W FK	BLW FALLS	RAP1	210	B	WA	2.25	1.98	21.15	NSUM	0.00	0.00	2

CLEARWATER RIVER DRAINAGE

Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Density No/100msq	Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Density No/100msq	Percent Carryng Capacity	

Mainstem Clearwater River

ELDORADO CR		SIX BIT	306	C	NB	0.34	0.00	3.40	NSPR	0.00	0.00	1
ELDORADO CR		TRANSECT10	306	C	NB	2.31	0.58	28.90	NSPR	0.00	0.00	1
ELDORADO CR		TRANSECT12	306	B	NB	1.22	1.62	28.40	NSPR	0.00	0.00	1
ELDORADO CR		TRANSECT13	306	C	NB	0.00	0.18	1.80	NSPR	0.00	0.00	1
ELDORADO CR		TRANSECT2	306	B	NB	4.52	1.81	63.30	NSPR	0.00	0.00	1

Appendix A-2 Evaluation section names, channel types (B or C), steelhead trout classification (wild or natural, A or B run), chinook salmon classification (wild or natural, spring or summer), densities and percent carrying capacities for all sites sampled in 1996 (Cont.).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Age 0+ Density No/100msq	Percent Carryng Capacity	
ELDORADO CR		TRANSECT3	306	B	NB	0.37	1.29	16.60	NSPR	0.00	0.00	1
ELDORADO CR		TRANSECT4	306	B	NB	1.53	0.92	24.50	NSPR	0.00	0.00	1
ELDORADO CR		TRANSECT5	306	C	NB	1.06	0.00	10.60	NSPR	0.00	0.00	1
ELDORADO CR		TRANSECT7	306	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	1
ELDORADO CR		TRANSECT8	306	C	NB	0.65	0.00	6.50	NSPR	0.00	0.00	1
ELDORADO CR		TRANSECT9	306	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	3
LOLO CR		DS WEIR	306	C	NB	3.59	0.59	29.86	NSPR	0.00	0.00	1
LOLO CR		TRANSECT4	306	B	NB	0.80	0.00	5.71	NSPR	0.00	0.00	1
LOLO CR		TRANSECT6	306	C	NB	3.41	0.60	28.64	NSPR	0.70	0.00	1
LOLO CR		TRANSECT8	306	C	NB	0.24	0.00	1.71	NSPR	0.00	0.00	1
LOLO CR		TRANSECT9	306	C	NB	1.03	0.00	7.36	NSPR	0.00	0.00	1
POTLATCH R		1	306	B	WA	0.55	0.77	22.00	NSPR	0.00	0.00	1
POTLATCH R, E FK		1	306	B	WA	0.88	0.44	13.20	NSPR	0.00	0.00	1
POTLATCH R, E FK		2	306	C	WA	0.52	0.39	9.10	NSPR	0.00	0.00	1
POTLATCH R, E FK		3	306	C	WA	10.15	1.79	119.40	NSPR	0.00	0.00	2
<b>South Fork Clearwater River</b>												
CROOKED R, E FK	H	EF1	305	B	NB	0.00	0.00	0.00	NSPR	0.00	0.00	2
CROOKED R, E FK	H	EF2	305	B	NB	0.00	0.00	0.00	NSPR	0.00	0.00	2
CROOKED R, W FK	H	WF1	305	B	NB	0.29	0.00	1.45	NSPR	0.00	0.00	2
CROOKED R, W FK	H	WF2	305	B	NB	0.76	0.00	3.80	NSPR	0.00	0.00	2
MOORES CR		1	305	B	NB	0.00	0.00	0.00	NSPR	0.00	0.00	2
MOORES CR		2	305	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	2
NEWSOME CR	1	BEAR CR	305	C	NB	10.37	0.00	74.07	NSPR	0.00	0.00	2
NEWSOME CR	1	BEAVER CR	305	C	NB	5.40	0.36	41.14	NSPR	0.00	0.00	1
NEWSOME CR	1	SNGLSCMPG	305	C	NB	0.94	0.63	11.21	NSPR	0.00	0.00	1
NEWSOME CR	1UPPER	SETL POND	305	C	NB	1.28	0.96	16.00	NSPR	0.00	0.00	1
NEWSOME CR	NEW	TRANSECT0	305	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	1
NEWSOME CR	NEW USFWS	TRANS 2.5	305	C	NB	0.75	0.88	11.64	NSPR	0.00	0.00	1

43

Appendix A-2 Evaluation section names, channel types (B or C), steelhead trout classification (wild or natural, A or B run), chinook salmon classification (wild or natural, spring or summer), densities and percent carrying capacities for all sites sampled in 1996 (Cont.).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Age 0+ Density No/100msq	Percent Carrying Capacity	
<b>Selway River</b>												
SELWAY R		BADLUCK CR	301	B	WB	0.00	0.06	0.00	NSPR	0.00	0.00	2
MARTEN CR		1	302	B	WB	4.63	3.09	38.60	NSPR	0.00	0.00	2
<b>Lochsa River</b>												
LOCHSA R		L1	303	B	NB	0.07	0.01	0.57	NSPR	0.03	0.07	2
LOCHSA R		L2	303	B	NB	0.00	0.00	0.00	NSPR	0.00	0.00	2
LOCHSA R		L3	303	B	NB	0.03	0.07	0.71	NSPR	0.00	0.00	2
LOCHSA R		L4	303	B	NB	0.16	0.06	1.57	NSPR	0.00	0.00	1
PETE KING CR	NEW	SLIDE	303	B	NB	7.33	1.22	85.50	NSPR	0.00	0.00	1
PETE KING CR		.5MIUMOUTH	303	B	NB	2.47	0.00	24.70	NSPR	0.49	1.11	1
PETE KING CR		ABOVEZHOLE	303	B	NB	2.51	0.00	25.10	NSPR	0.00	0.00	1
PETE KING CR		BIGBOULDER	303	B	NB	15.23	1.79	170.20	NSPR	0.00	0.00	2
PETE KING CR		CULVERT	303	B	NB	1.94	0.00	19.40	NSPR	0.00	0.00	1
PETE KING CR		FALL	303	B	NB	8.46	2.54	110.00	NSPR	0.00	0.00	1
PETE KING CR		JUNGLE	303	B	NB	5.25	0.00	52.50	NSPR	0.00	0.00	1
PETE KING CR		LAST SLIDE	303	B	NB	4.58	0.00	45.80	NSPR	0.76	1.73	1
PETE KING CR		NUT CREEK	303		NB	3.71	1.06	47.70	NSPR	0.53	1.20	2
PETE KING CR		ROAD END	303		NB	7.60	0.42	80.20	NSPR	0.00	0.00	2
<b>Clear Creek</b>												
CLEAR CR	MAINSTEM	1	304	B	NB	7.06	1.28	0.00	NSPR	0.00	0.00	3
CLEAR CR	MAINSTEM	2	304	B	NB	7.96	1.10	0.00	NSPR	0.00	0.00	3
CLEAR CR	UPPER	RING RANCH	304	C	NB	4.94	0.41	0.00	NSPR	0.00	0.00	3
CLEAR CR		.5WAGONWHE	304	B	NB	1.30	0.52	0.00	NSPR	0.00	0.00	3
CLEAR CR		1MILEABOVE	304		NB	2.83	0.71	0.00	NSPR	0.00	0.00	1
CLEAR CR		44C	304		NB	3.12	0.89	0.00	NSPR	0.00	0.00	1
CLEAR CR		BARNES	304	C	NB	2.07	1.48	0.00	NSPR	0.00	0.00	1
CLEAR CR		DELIVERANC	304	B	NB	3.82	1.04	0.00	NSPR	0.00	0.00	1
CLEAR CR		END OF RD	304		NB	5.04	0.00	0.00	NSPR	0.00	0.00	1

44

Appendix A-2 Evaluation section names, channel types (B or C), steelhead trout classification (wild or natural, A or B run), chinook salmon classification (wild or natural, spring or summer), densities and percent carrying capacities for all sites sampled in 1996 (Cont.).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Drainage	Channel Type	Steelhead	Steelhead	Steelhead	Steelhead	Chinook	Chinook	Chinook	Priority Class
					Class W vs N A vs B	Age 1+ Density No/100msq	Age 2+ Density No/100msq	Percent Carrying Capacity	Class W vs N Spr vs Sum	Age 0+ Density No/100msq	Percent Carrying Capacity	
CLEAR CR		F.LOUGHHRAN	304	C	NB	0.00	0.00	0.00	NSPR	0.00	0.00	4
CLEAR CR		HAZELGREY	304	B	NB	5.39	0.34	0.00	NSPR	0.00	0.00	4
CLEAR CR		INTAKE	304	C	NB	1.31	2.18	0.00	NSPR	0.44	0.00	4
CLEAR CR		MCCLEAN	304		NB	0.75	0.00	0.00	NSPR	0.00	0.00	2
CLEAR CR		OLINCOULEY	304		NB	0.40	0.40	0.00	NSPR	0.00	0.00	2
CLEAR CR		POWERLINE	304	C	NB	8.18	1.53	0.00	NSPR	0.00	0.00	2
CLEAR CR		THOMASRNCH	304	C	NB	5.99	0.92	0.00	NSPR	0.00	0.00	2
CLEAR CR		USBRIDGE#1	304		NB	6.51	0.38	0.00	NSPR	0.00	0.00	2
CLEAR CR		WAGONWHEEL	304	B	NB	3.73	4.85	0.00	NSPR	0.00	0.00	2
CLEAR CR		WEIR	304		NB	0.17	0.33	0.00	NSPR	0.00	0.00	2
CLEAR CR		Y-IN ROAD	304	C	NB	4.34	1.74	0.00	NSPR	0.00	0.00	2
CLEAR CR, S FK	LOWER	ABVMOUTH	304	B	NB	14.55	1.53	0.00	NSPR	0.00	0.00	2

Appendix A-3.

General Parr Monitoring Sections Unsurveyed in 1996

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued.

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
<b><u>Snake River, above mouth Salmon River</u></b>												
GRANITE CR		2	GPM	101	MARGIN BEST	B	MON	NA	WSPR	12	20	1
<b><u>Lower Salmon River</u></b>												
RACE CR		1	R2	209		B	MON	WA	WSPR	-99	-9	1
SLATE CR		3	GPM	209		B	MON	NAB	WSPR	44	20	1
WHITEBIRD CR, S FK		SF-#2	GPM	209		B	MON	WA	WSPR	44	20	2
WHITEBIRD CR, S FK		SF-#3	GPM	209		B	MON	WA	WSPR	44	20	2
<b><u>Little Salmon River</u></b>												
BOULDER CR	ABOVE	1	GPM	210	4.9MI USBARRIER	B	MON	NA	NSPR	44	20	2
BOULDER CR	ABOVE	2	GPM	210		B	MON	NA	NSPR	44	20	3
BOULDER CR	BELOW	3	GPM	210		B	MON	NA	NSPR	44	20	2
HAZARD CR		HAZ1	GPM	210		B	MON	NAB	NSPR	44	20	2
HAZARD CR		HAZ2	GPM	210		B	MON	NAB	NSPR	44	20	2
RAPID R	BLW W FK	5	GPM	210		B	EVAL	WA	NSUM	44	20	1
RAPID R, W FK	US FALLS	2	PEL	210		B	EVAL	WA	NSUM	44	20	3
<b><u>Salmon River Canyon</u></b>												
CHAMBERLAIN CR	LOWER	HOTZEL	PEL	207	BELOW FENCELINE	B	OTHR	WA	WSPR	77	14	2
CHAMBERLAIN CR	LOWER	RED TOP	PEL	207		C	EVAL	WA	WSPR	77	14	2
CHAMBERLAIN CR	MOUTH	NO NAME	PEL	207		B	EVAL	WA	WSPR	77	14	3
CHAMBERLAIN CR	UPPER	HOTZEL	PEL	207		C	OTHR	WA	WSPR	77	14	3
CHAMBERLAIN CR	UPPER	RED TOP	PEL	207		C	EVAL	WA	WSPR	77	14	3
CHAMBERLAIN CR		ASPENGROVE	PEL	207		B	OTHR	WA	WSPR	77	14	2
CHAMBERLAIN CR		CHA1	GPM	207		B	MON	WA	WSPR	44	20	2
CHAMBERLAIN CR		CHA4	GPM	207		C	MON	WA	WSPR	77	14	1
CHAMBERLAIN CR		DRY MOUTH	PEL	207		B	EVAL	WA	WSPR	77	14	1
CHAMBERLAIN CR		FISH MOUTH	PEL	207		C	EVAL	WA	WSPR	77	14	1
CHAMBERLAIN CR		FORKS	PEL	207		B	EVAL	WA	WSPR	77	14	1

47

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
CHAMBERLAIN CR		HOTZEL	PEL	207		C	EVAL	WA	WSPR	77	14	1
CHAMBERLAIN CR		MOUTH(L1)	R7	207		B	MON	WA	WSPR	77	14	1
CHAMBERLAIN CR		RUN(L2)	R7	207	500YDS US MOUTH	B	MON	WA	WSPR	77	14	1
CHAMBERLAIN CR		SMOKEHOUSE	PEL	207		B	EVAL	WA	WSPR	77	14	1
CHAMBERLAIN CR		WFK MOUTH	PEL	207		C	EVAL	WA	WSPR	77	14	1
CHAMBERLAIN CR, S FK		MOUTH	PEL	207		B	EVAL	WA	WSPR	-99	-9	1
CHAMBERLAIN CR,W FK	STONEBRAK	AIRSTRIP	GPM	207		C	MON	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		1 <sup>ST</sup> XING	PEL	207		B	EVAL	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		BEALMEADOW	PEL	207		C	EVAL	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		BEAVERSTMP	PEL	207		C	OTHR	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		CHA2	GPM	207		C	MON	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		CHA3	GPM	207		B	MON	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		MOUTH	PEL	207		B	EVAL	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		OLD PK BR	PEL	207		B	OTHR	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		SAGE FENCE	PEL	207		C	EVAL	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		SPRING	PEL	207		B	EVAL	WA	WSPR	108	14	1
CHAMBERLAIN CR, W FK		TUMBLE DWN	PEL	207		B	EVAL	WA	WSPR	108	14	1
FISH CR	1	TRAIL XING	PEL	207		B	EVAL	WA	WSPR	108	10	1
FLOSSIE CR		TRAIL XING	PEL	207		C	EVAL	WA	WSPR	-99	-9	1
GAME CR	1	TRAIL XING	PEL	207		B	EVAL	WA	WSPR	108	20	1
INDIAN CR		100M<MOUTH	R2ISS	207	NEW IN 1995 TO	B	MON	WA	WSPR	-99	-9	1
MOOSE CR	LOWER	MOOSE JAW	PEL	207		C	EVAL	WA	WSPR	44	20	1
MOOSE CR		MOUTH	PEL	207		B	EVAL	WA	WSPR	44	20	1
MOOSE CR		UPPER	PEL	207		B	EVAL	WA	WSPR	44	20	1
RIM CR		MOUTH	PEL	207		B	EVAL	WA	WSPR	77	14	1
SHEEP CR		L2	R7	207		B	MON	WA	WSPR	44	20	1

48

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
<b>Lemhi River</b>												
BEAR VALLEY CR	HC1	B-LOWER	GPM	204		B	OTHR	NA	NSPR	77	20	3
BIG SPRINGS CR	1	3-BSC	R7ISS	204		B	OTHR	NA	NSPR	108	20	3
BIG SPRINGS CR	1	BSC 5	R7ISS	204		B	OTHR	NA	NSPR	108	20	3
BIG SPRINGS CR	1	BSC-1	R7ISS	204		B	OTHR	NA	NSPR	108	20	1
BIG SPRINGS CR	1	BSC-1 UP	R7ISS	204		B	OTHR	NA	NSPR	108	20	1
BIG SPRINGS CR	1	BSC5 UPTL	R7ISS	204		B	OTHR	NA	NSPR	108	20	1
BIG SPRINGS CR	1	COW SIGN	R7ISS	204		B	OTHR	NA	NSPR	108	20	1
BIG SPRINGS CR	1	MI MRK 93	R7ISS	204	SCULPIN, DACE	B	OTHR	NA	NSPR	108	20	1
BIG SPRINGS CR	1	TW TELBS 5	R7ISS	204		B	OTHR	NA	NSPR	108	20	1
LEMHI R	1	13 BEYELER	R7ISS	204		B	OTHR	NA	NSPR	108	20	1
LEMHI R	1	BIG SPR CR	R7ISS	204			OTHR	NA	NSPR	108	20	1
LEMHI R	1	BS-6	R7ISS	204			OTHR	NA	NSPR	108	20	1
LEMHI R	1	DARWIN	R7ISS	204			OTHR	NA	NSPR	108	20	1
LEMHI R	1	POWER LANE	R7ISS	204			OTHR	NA	NSPR	108	20	1
LEMHI R	2	#1 WEIR	R7ISS	204	DACE	B	OTHR	NA	NSPR	108	20	1
LEMHI R	2	#10 J L54	R7ISS	204		C	OTHR	NA	NSPR	108	20	1
LEMHI R	2	#5 MCKIN B	R7ISS	204			OTHR	NA	NSPR	108	20	1
LEMHI R	2	#9	R7ISS	204			OTHR	NA	NSPR	108	20	1
LEMHI R	2	3 SHINER	R7ISS	204			OTHR	NA	NSPR	108	20	1
<b>Pahsimeroi River</b>												
PAHSIMEROI R	1	US-P9 DIV	ISS	202		C	MON	NA	NSUM	77	20	4
<b>Headwaters Salmon River</b>												
ALTURAS LK CR	1	1A	ISM	201		B	EVAL	NA	NSPR	108	14	
ALTURAS LK CR	1	1C	ISM	201		C	EVAL	NA	NSPR	108	14	
ALTURAS LK CR	2	2A	ISM	201		B	MON	NA	NSPR	108	14	
ALTURAS LK CR	2	2C	ISM	201	EAST & WEST SC	C	EVAL	NA	NSPR	108	14	
ALTURAS LK CR	3	3A	ISM	201		C	EVAL	NA	NSPR	108	14	
ALTURAS LK CR	3	3B	ISM	201		C	EVAL	NA	NSPR	108	14	
ALTURAS LK CR	3	3C	ISM	201		C	EVAL	NA	NSPR	108	14	
ALTURAS LK CR	4	4B	ISM	201		B	EVAL	NA	NSPR	108	14	1

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Capacity Rating	Capacity Rating	Steelhead Carrying Priority Class
ALTURAS LK CR	5	5B	ISM	201		C	EVAL	NA	NSPR	108	14	1
BEAVER CR	1	1A	ISM	201		C	EVAL	NA	NSPR	77	10	1
BEAVER CR	1	1B	ISM	201		C	EVAL	NA	NSPR	77	10	1
BEAVER CR	1	1C	ISM	201	NEW IN 94	B	EVAL	NA	NSPR	77	10	1
BEAVER CR	2	2A	ISM	201		C	EVAL	NA	NSPR	77	10	1
BEAVER CR	2	2B	ISM	201		C	EVAL	NA	NSPR	77	10	1
BEAVER CR	2	2S1	ISM	201		B	OTHR	NA	NSPR	77	10	1
BEAVER CR	2	2S2	ISM	201		C	OTHR	NA	NSPR	77	10	1
BEAVER CR	2	2S4	ISM	201		C	OTHR	NA	NSPR	77	10	2
BEAVER CR	2	2S5	ISM	201		C	OTHR	NA	NSPR	77	10	2
CHAMPION CR	1	1A	ISM	201	NEW IN 93	C	EVAL	NA	NSPR	44	10	2
CHAMPION CR	1	1B	ISM	201	NEW IN 93	C	EVAL	NA	NSPR	44	10	2
CHAMPION CR	1	1C	ISM	201	NEW IN 93	B	EVAL	NA	NSPR	44	10	2
CHAMPION CR	1	1D	ISM	201	NEW IN 93	B	EVAL	NA	NSPR	44	10	2
CHAMPION CR	2	2A	ISM	201		B	EVAL	NA	NSPR	44	10	2
CHAMPION CR	2	2B	ISM	201		B	EVAL	NA	NSPR	44	10	3
FOURTH OF JULY CR	1	A	GPM	201		B	MON	NA	NSPR	77	14	2
FOURTH OF JULY CR	1	B	ISM	201		B	MON	NA	NSPR	77	14	3
FRENCHMAN CR	1	1A	ISM	201		B	EVAL	NA	NSPR	77	14	3
FRENCHMAN CR	1	1B	ISM	201		B	EVAL	NA	NSPR	77	14	3
FRENCHMAN CR	2	2A	ISM	201		B	EVAL	NA	NSPR	77	14	3
FRENCHMAN CR	2	2B	ISM	201		B	EVAL	NA	NSPR	77	14	3
FRENCHMAN CR	2	S2	ISM	201		B	OTHR	NA	NSPR	77	14	3
FRENCHMAN CR	2	S3	ISM	201		B	OTHR	NA	NSPR	77	14	3
FRENCHMAN CR	2	S5	ISM	201		B	OTHR	NA	NSPR	77	14	3
GOLD CR	1	1A	ISM	201		B	MON	NA	NSPR	77	14	2
GOLD CR	1	1B	ISM	201		B	MON	NA	NSPR	77	14	2
HUCKLEBERRY CR	1	1A	ISM	201		B	MON	NA	NSPR	77	14	2
HUCKLEBERRY CR	1	1B	ISM	201		B	MON	NA	NSPR	77	14	2
HUCKLEBERRY CR	2	2A	ISM	201		C	MON	NA	NSPR	77	6	2
HUCKLEBERRY CR	2	2B	ISM	201		C	MON	NA	NSPR	77	6	2
MORGAN CR	LOWER	FENCE	GPM	201	SUNNY	B	MON	NA	NSPR	12	14	1
MORGAN CR	UPPER	BLM CAMP	GPM	201		C	MON	NA	NSPR	12	14	4
POLE CR	1	1AB	ISM	201	NEW IN 93	C	EVAL	NA	NSPR	77	10	1
POLE CR	2	2A	ISM	201		C	EVAL	NA	NSPR	77	10	1
POLE CR	2	2AB	ISM	201	NEW IN 93	B	EVAL	NA	NSPR	77	10	1
POLE CR	2	2B	ISM	201		B	EVAL	NA	NSPR	77	10	1

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
POLE CR	3	3A	ISM	201		B	EVAL	NA	NSPR	77	10	1
POLE CR	3	3B	ISM	201		B	EVAL	NA	NSPR	77	10	1
POLE CR	4	4A	ISM	201		C	EVAL	NA	NSPR	77	10	1
POLE CR	4	4B	ISM	201		B	EVAL	NA	NSPR	77	10	1
POLE CR	5	5A	ISM	201		C	EVAL	NA	NSPR	77	10	1
POLE CR	5	5B	ISM	201		C	EVAL	NA	NSPR	77	10	1
SALMON R	10	10B	ISM	201		C	MON	NA	NSPR	77	14	1
SALMON R	3	3A	GPM	201		B	MON	NA	NSPR	44	14	1
SALMON R	3	3SB	ISM	201		C	MON	NA	NSPR	44	14	1
SALMON R	3	ACCESS	GPM	201		C	EVAL	NA	NSPR	44	14	1
SALMON R	3	HANSON	GPM	201		C	EVAL	NA	NSPR	44	14	1
SALMON R	4	4A	ISM	201		C	MON	NA	NSPR	77	14	1
SALMON R	4	4BRA	ISM	201		C	MON	NA	NSPR	77	14	1
SALMON R	4	4SA	ISM	201		C	MON	NA	NSPR	77	14	1
SALMON R	4	ANDY2	GPM	201		B	EVAL	NA	NSPR	44	14	1
SALMON R	5	5A	ISM	201		B	MON	NA	NSPR	77	14	1
SALMON R	6	6SB	ISM	201		B	MON	NA	NSPR	77	14	1
SALMON R	7	7B	ISM	201	DEWATERED 1985	C	MON	NA	NSPR	77	10	1
SALMON R	7	7SB	GPM	201		C	MON	NA	NSPR	77	10	1
SALMON R	7	ANDY1	GPM	201	DS BBACK @PIPE	C	EVAL	NA	NSPR	44	14	1
SALMON R	8	8A	ISM	201		C	MON	NA	NSPR	77	10	1
SALMON R	8	8B	ISM	201		C	MON	NA	NSPR	77	10	1
SALMON R	8	8SA	ISM	201		C	MON	NA	NSPR	77	10	1
SALMON R	8	8SB	ISM	201		C	MON	NA	NSPR	77	10	3
SALMON R, E FK	BLW WEIR	FOX CR	GPM	201		C	MON	NAB	NSPR	108	20	3
SMILEY CR	1A	1A	ISM	201		B	MON	NA	NSPR	77	10	3
SMILEY CR	1A	1AA	ISM	201		B	MON	NA	NSPR	77	10	3
SMILEY CR	1B	1B	ISM	201		B	MON	NA	NSPR	77	10	3
SMILEY CR	1B	1BB	ISM	201		B	MON	NA	NSPR	77	10	3
SMILEY CR	1B	2A	SSS	201		B	EVAL	NA	NSPR	77	10	3
SMILEY CR	1B	S5	SSS	201		B	EVAL	NA	NSPR	77	10	3
SMILEY CR	2	2A	ISM	201		B	MON	NA	NSPR	77	10	3
SMILEY CR	2	2B	ISM	201		B	MON	NA	NSPR	77	10	3
SMILEY CR	2	2S3	SSS	201		B	EVAL	NA	NSPR	77	10	3
SMILEY CR	2	2S5	ISM	201		B	EVAL	NA	NSPR	77	10	3

51

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
SMILEY CR	2	2S6	ISM	201		B	EVAL	NA	NSPR	77	10	3
VALLEY CR	VC6	BY-PASS CH	GPM	201		C	EVAL	NA	NSPR	77	10	3
WARM SPRINGS CR		ABVCAB	GPM	201	NEW TRANSECT	B	MON	NA	NSPR	12	14	3
WARM SPRINGS CR		CABINS	GPM	201		B	MON	NA	NSPR	12	14	3
WILLIAMS CR	1	1A	ISM	201		B	MON	NA	NSPR	77	14	3
WILLIAMS CR	2	2A	ISM	201		B	MON	NA	NSPR	77	14	1
WILLIAMS CR	2	2B	ISM	201		B	MON	NA	NSPR	77	14	4
YELLOWBELLY CR	1	1A	ISM	201		B	MON	NA	NSPR	77	14	4
<b>South Fork Salmon River</b>												
DOLLAR CR		1	MCCALLISS	208		B	MON	WB	NSUM	44	14	1
DOLLAR CR		MOUTH	MCCALLISS	208		B	MON	WB	NSUM	44	14	1
LAKE CR		1	CSUP	208		C	EVAL	WB	WSUM	108	14	1
LAKE CR		3	CSUP	208		C	EVAL	WB	WSUM	108	14	1
LAKE CR		4	CSUP	208		C	EVAL	WB	WSUM	108	14	1
LAKE CR		5	CSUP	208		C	EVAL	WB	WSUM	108	14	1
LAKE CR		6	CSUP	208		C	EVAL	WB	WSUM	108	14	1
LICK CR		LPOOL	GPM	208		B	MON	WB	WSUM	77	14	1
SALMON R, S FK		18	R3	208	US SHEEPCR;WF	B	MON	WB	NSUM	-99	-9	1
SALMON R, S FK		19	R3	208	RESERVOIR;WF	B	MON	WB	NSUM	-99	-9	1
SALMON R, S FK		20	R3	208	BEAR CR;WF	B	MON	WB	NSUM	-99	-9	1
SALMON R, S FK		22	R3	208	SFSR GDSTA;WF	B	MON	WB	NSUM	-99	-9	1
SECESH R		1	CSUP	208		C	EVAL	WB	WSUM	77	14	1
SECESH R		2	CSUP	208		C	EVAL	WB	WSUM	77	14	1
SECESH R		3	CSUP	208		C	EVAL	WB	WSUM	77	14	1
SECESH R		4	CSUP	208		C	EVAL	WB	WSUM	77	14	1
SECESH R		5	CSUP	208		C	EVAL	WB	WSUM	77	14	1
SECESH R		6	CSUP	208		B	EVAL	WB	WSUM	77	14	1
SECESH R		7	CSUP	208		B	EVAL	WB	WSUM	77	14	1
SECESH R		8	CSUP	208		B	EVAL	WB	WSUM	77	14	1
SECESH R		GROUSE	R3	208		B	MON	WB	WSUM	77	14	1
SECESH R		LONG-GULCH	R3	208		C	MON	WB	WSUM	77	14	1
SECESH R		U-SCSH-MDW	R3	208		C	MON	WB	WSUM	77	14	1

52

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Capacity Rating	Steelhead Carrying Priority Class
<b>Middle Fork Salmon River</b>												
BEAR VALLEY CR	1	A	GPM	205		B	MON	WB	WSPR	77	20	1
BEARSKIN CR	1	A	GPM	205	NO FISH	C	MON	WB	WSPR	44	6	1
BEARSKIN CR	2	A	GPM	205		C	MON	WB	WSPR	44	6	1
BEARSKIN CR	3	A	GPM	205		C	MON	WB	WSPR	44	6	1
BEARSKIN CR	3	B	GPM	205	HOT	C	MON	WB	WSPR	44	6	1
BEARSKIN CR		OXBOW	GPM	205		C	MON	WB	WSPR	44	6	1
BEAVER CR	1	B	R7ISS	205	NO HAB. BREAKDN	B	MON	WB	WSPR	77	14	1
BIG CR	LOWER	L1	R7	206		B	MON	WB	WSPR	44	20	3
BIG CR	MIDDLE	ABV BEAVER	MCCALL	206	ESTABLISHED '94	B	MON	WB	WSPR	44	20	3
BIG CR	MIDDLE	CARPENTER	MCCALLISS	206		B	MON	WB	WSPR	44	20	3
BIG CR	MIDDLE	DOE CR	MCCALLISS	206		B	MON	WB	WSPR	44	20	3
BIG CR	MIDDLE	HARD BOIL	MCCALLISS	206		B	MON	WB	WSPR	44	20	3
BIG CR	MIDDLE	MTH BEAVER	MCCALL	206	ESTABLISHED '94	B	MON	WB	WSPR	44	20	3
BIG CR	MIDDLE	TAYLOR 1	GPM	206		C	MON	WB	WSPR	44	20	3
BIG CR	MOUTH	CABIN CR	R7	206	WF NOT ENTERED	B	CORR	WB	WSPR	44	20	3
CAMAS CR		L1-MOUTH	R7	206		B	MON	WB	WSPR	77	20	1
CAMAS CR		UPPER	R7	206	1CT>12,16ADLTWF	B	MON	WB	WSPR	77	20	1
KNAPP CR	1	BEAVERDAM	GPM	205	NEW SECTION	C	MON	WB	WSPR	108	14	1
KNAPP CR	1	CAMPSITE	GPM	205		C	MON	WB	WSPR	108	14	1
KNAPP CR	1	DS DIV	GPM	205		C	MON	WB	WSPR	108	14	1
KNAPP CR	1	LCKD FENCE	GPM	205		C	MON	WB	WSPR	108	14	1
LOON CR	LNM1	3	GPM	205		B	MON	WB	WSPR	44	20	1
LOON CR	PACK BR	1	GPM	205		C	MON	WB	WSPR	44	20	1
LOON CR		L1-BRIDGE	R7	205	DS PACK BRIDGE	B	MON	WB	WSPR	44	20	1
LOON CR		L2-RUN	GPM	205	400YD US PKBRID	B	MON	WB	WSPR	44	20	1
MARBLE CR	LOWER	L1	R7	205		B	MON	WB	WSPR	44	14	1
MARBLE CR	UPPER	PACKBRIDGE	R7	205		B	MON	WB	WSPR	77	20	1

53

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
MARSH CR	1		ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	1	1	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	1	11	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	1	19	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	1	2	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	1	3	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	1	4	ISS	205		B	OTHR	WB	WSPR	44	20	1
MARSH CR	1	5	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	1	6	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	1	8	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	1	9	CSUP	205	Beaverdm @willow NEW IN '94	C	OTHR	WB	WSPR	44	20	1
MARSH CR	2	14	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	2	15	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	2	4	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	2	5	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR	3	A	GPM	205		C	MON	WB	WSPR	77	6	1
MARSH CR	4	B	ISS	205		C	MON	WB	WSPR	77	10	1
MARSH CR	5	A	ISS	205		C	MON	WB	WSPR	77	10	1
MARSH CR		10	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		11	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		12	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		13	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		16	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		17	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		18	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		20	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		3	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		6	ISS	205		C	OTHR	WB	WSPR	44	20	1
MARSH CR		7	ISS	205		C	OTHR	WB	WSPR	44	20	4
MARSH CR		8	ISS	205		C	OTHR	WB	WSPR	44	20	4
MARSH CR		9	ISS	205		C	OTHR	WB	WSPR	44	20	4
MARSH CR		ABVMON1	ISS	205		C	OTHR	WB	WSPR	44	20	4

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
MONUMENTAL CR		MON1	R3	206		B	MON	WB	WSPR	44	14	1
PISTOL CR		L1	R7	205		B	MON	WB	WSPR	44	20	4
PISTOL CR		L2	R7	205		B	MON	WB	WSPR	44	20	4
RUSH CR	LOWER	ABOVE XING	PEL	206	NEW IN '92	B	EVAL	WB	WSPR	44	20	1
RUSH CR	LOWER	ISLAND	PEL	206	NEW IN '92	B	EVAL	WB	WSPR	44	20	1
RUSH CR	MIDDLE	CLIFF HANG	PEL	206	CLOSE TO SEC.5	B	EVAL	WB	WSPR	44	20	1
RUSH CR	MIDDLE	LOGJAMBAR	PEL	206		B	EVAL	WB	WSPR	44	20	1
RUSH CR	UPPER	RANGE CR MO	PEL	206	NEW IN '92	B	EVAL	WB	WSPR	44	20	1
RUSH CR		11	PEL	206		B	EVAL	WB	WSPR	44	20	1
RUSH CR		12	PEL	206		B	EVAL	WB	WSPR	44	20	1
RUSH CR		2	PEL	206		B	EVAL	WB	WSPR	44	20	1
RUSH CR		3	PEL	206	SFK MOUTH	B	EVAL	WB	WSPR	44	20	1
RUSH CR		4	PEL	206	WFK MOUTH	B	EVAL	WB	WSPR	44	20	1
RUSH CR, S FK		1	PEL	206	MOUTH	B	EVAL	WB	WSPR	44	20	1
RUSH CR, S FK		UPPER	PEL	206	NEW IN '92	B	EVAL	WB	WSPR	44	20	1
SALMON R, M FK	1	BOUNDARY	R7	205	STHD TRANSECT	B	CORR	WB	WSPR	77	20	4
SALMON R, M FK	1	GRDLHOLE	R7	205	CT/CK TRANSECT	B	CORR	WB	WSPR	108	14	4
SALMON R, M FK	1	INDIAN	R7	205	STHD TRANSECT	B	CORR	WB	WSPR	44	20	2
SALMON R, M FK	1	RAPID-R	R7	205	STHD TRANSECT	B	CORR	WB	WSPR	108	14	2
SALMON R, M FK	1	SHEEPEATER	R7	205	STHD TRANSECT	B	CORR	WB	WSPR	108	14	2
SALMON R, M FK	2	COUGAR	R7	205	STHD TRANSECT	B	CORR	WB	WSPR	44	14	2
SALMON R, M FK	2	LJACKASS	R7	205	CT/CK TRANSECT	B	CORR	WB	WSPR	44	14	2
SALMON R, M FK	2	MARBLPL	R7	205	CT/CK TRANSECT	B	CORR	WB	WSPR	44	20	2
SALMON R, M FK	2	PUNGO	R7	205	CT/CK TRANSECT	B	CORR	WB	WSPR	44	20	2
SALMON R, M FK	2	SKIJUMP	R7	205	STHD TRANSECT	B	CORR	WB	WSPR	44	14	2
SALMON R, M FK	2	WHITEYCX	R7	205	CT/CK TRANSECT	B	CORR	WB	WSPR	44	14	2
SALMON R, M FK	2	ROCK IS	R7	205	STHD TRANSECT	B	CORR	WB	WSPR	44	20	2
SALMON R, M FK	2	HOSPPL	R7	206	CT/CK TRANSECT	B	CORR	WB	WSPR	77	20	1
SALMON R, M FK	2	HOSPRUN	R7	206	STHD TRANSECT	B	CORR	WB	WSPR	77	20	1
SALMON R, M FK	2	TAPPANPOOL	R7	206	CT/CK TRANSECT	B	CORR	WB	WSPR	77	20	1
SALMON R, M FK	2	TAPPANRUN	R7	206	STHD TRANSECT	B	CORR	WB	WSPR	77	20	1
SALMON R, M FK	3	AIRSTRIP	R7	206	STHD TRANSECT	B	CORR	WB	WSPR	77	20	1
SALMON R, M FK	3	FLYING-B	R7	206	CT/CK TRANSECT	B	CORR	WB	WSPR	77	20	1
SALMON R, M FK	3	SURVEY	R7	206	STHD TRANSECT	B	CORR	WB	WSPR	77	20	1
SALMON R, M FK	4	BIG-CR-BR	R7	206	CT/CK TRANSECT	B	CORR	WB	WSPR	44	20	1
SALMON R, M FK	4	GOATPOOL	R7	206	CT/CK TRANSECT	B	CORR	WB	WSPR	44	20	1

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
SALMON R, M FK	4	GOATRUN	R7	206	STHD TRANSECT	B	CORR	WB	WSPR	44	20	1
SALMON R, M FK	4	LOVEBAR	R7	206	STHD TRANSECT	B	CORR	WB	WSPR	44	20	1
SALMON R, M FK	4	OTTERBAR	R7	206	CT/CK TRANSECT	B	CORR	WB	WSPR	44	20	1
SALMON R, M FK	4	SHIPISLAND	R7	206	CT/CK TRANSECT	B	CORR	WB	WSPR	44	20	1
SULPHUR CR	1	MEADOWS	ISS	205		B	OTHR	WB	WSPR	108	14	2
SULPHUR CR	1	NFKMOUTH	ISS	205		B	OTHR	WB	WSPR	108	14	2
SULPHUR CR	1	ROCKYKNOLL	ISS	205		B	OTHR	WB	WSPR	108	14	2
SULPHUR CR	2	3A	R3	205		B	MON	WB	WSPR	108	14	2
SULPHUR CR	2	4A	R3	205		C	MON	WB	WSPR	108	14	2
SULPHUR CR	2	4B	R3	205	NEW 4B CHAN SFT	B	MON	WB	WSPR	108	14	2
SULPHUR CR	2	BLWBRAIDED	ISS	205		B	OTHR	WB	WSPR	108	14	2
SULPHUR CR	2	BRAIDEDCHN	ISS	205			OTHR	WB	WSPR	108	14	2
SULPHUR CR	2	BRIDGESITE	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR	2	DSHALFMOON	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR	2	FOOTBRIDGE	ISS	205			OTHR	WB	WSPR	108	14	3
SULPHUR CR	2	FULLMOON	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR	2	HALFMOON	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR	2	LOBLUEMOON	ISS	205		B	OTHR	WB	WSPR	108	14	4
SULPHUR CR	2	LONGRUN	ISS	205			OTHR	WB	WSPR	108	14	1
SULPHUR CR	2	LOWISLAND	ISS	205		B	OTHR	WB	WSPR	108	14	1
SULPHUR CR	2	MOONSHINE	ISS	205		B	OTHR	WB	WSPR	108	14	2
SULPHUR CR	2	MOREHEADCR	ISS	205		B	OTHR	WB	WSPR	108	14	4
SULPHUR CR	?	MORGANDIV	ISS	205			OTHR	WB	WSPR	108	14	4
SULPHUR CR	2	R3	ISS	205		B	OTHR	WB	WSPR	108	14	4
SULPHUR CR	2	ROCKCLIFF	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR	2	ROCKSLIDE	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR	2	SILVERMOON	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR	2	TRAILX	ISS	205			OTHR	WB	WSPR	108	14	3
SULPHUR CR	2	UPBLUEMOON	ISS	205		B	OTHR	WB	WSPR	108	14	2
SULPHUR CR	2	USDIVERSN	ISS	205			OTHR	WB	WSPR	108	14	2
SULPHUR CR	2	USFULLMOON	ISS	205		B	OTHR	WB	WSPR	108	14	2
SULPHUR CR	3	3A	GPM	205		B	MON	WB	WSPR	108	14	2
SULPHUR CR	4	4A	GPM	205		C	MON	WB	WSPR	108	14	2
SULPHUR CR	4	4B	GPM	205	FENCELINE SBARN	B	MON	WB	WSPR	108	14	2
SULPHUR CR		BIGLOG	ISS	205		B	OTHR	WB	WSPR	108	14	4

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
SULPHUR CR		BIGLOGJAM	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR		CAWPTEUDER	ISS	205		B	OTHR	WB	WSPR	108	14	4
SULPHUR CR		UPPER1	ISS	205		B	OTHR	WB	WSPR	108	14	4
SULPHUR CR		UPPER2	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR		UPPERSPLIT	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR, N FK		LOWERB1	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR, N FK		LOWERB2	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR, N FK		LOWERC1	ISS	205		B	OTHR	WB	WSPR	108	14	3
SULPHUR CR, N FK		LOWERC2	ISS	205		B	OTHR	WB	WSPR	108	14	3
<b>Upper Salmon River</b>												
MOYER CR	ABOVE	MO1	GPM	203		C	MON	NA	NSPR	77	20	3
MOYER CR	ABOVE	NEW SEC	GPM	203		B	MON	NA	NSPR	77	20	3
PANTHER CR	ABOVE	PC10	GPM	203		C	MON	NA	NSPR	44	20	3
PANTHER CR	ABOVE	PC9	GPM	203		C	MON	NA	NSPR	44	20	3
PANTHER CR	DS-BIGD	PC4	GPM	203		B	MON	NA	NSPR	77	20	3
PANTHER CR	DS-BLACKB	PC6	R7ISS	203		C	MON	NA	NSPR	12	10	3
PANTHER CR	DS-CLEAR	PC1	GPM	203		B	MON	NA	NSPR	12	6	3
PINE CR		BRIDGE	GPM	203		B	MON	NA	NSPR	-99	20	1
PINE CR		SAWMILL CR	GPM	203		B	MON	NA	NSPR	-99	20	1
SALMON R, N FK	1	CRONE GLCH	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	DEEP CR	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	DEEPCRLWR	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	DEEPCRPLNG	R7ISS	203	SCUL, 5" CUTTBOW	B	OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	HAIRPIN	R7ISS	203		B	OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	MI PST 340	R7ISS	203		B	OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	MI PST 342	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	MI PST 343	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	MI PST 345	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	MI PST 346	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	RYLELK RCH	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	SIGN 93	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	TWIN CR CG	R7ISS	203		B	OTHR	NA	NSPR	77	20	1
SALMON R, N FK	1	UPR L & C	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	2	BOYNES NF6	R7ISS	203	SCULPIN		OTHR	NA	NSPR	77	20	1
SALMON R, N FK	2	LUMBER CO.	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	2	LW LMBR CO	R7ISS	203		C	OTHR	NA	NSPR	77	20	1

57

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

SALMON RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
SALMON R, N FK	2	MERAL WARD	R7ISS	203		C	OTHR	NA	NSPR	77	20	1
SALMON R, N FK	2	MI PST 335	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	2	MI PST 339	R7ISS	203			OTHR	NA	NSPR	77	20	1
SALMON R, N FK	2	NF 9-10	R7ISS	203	SCULPIN		OTHR	NA	NSPR	77	20	1
SALMON R, N FK	2	NF-11	R7ISS	203			OTHR	NA	NSPR	77	20	3
SALMON R, N FK	2	NF-7	R7ISS	203			OTHR	NA	NSPR	77	20	3
SALMON R, N FK	2	PINE MEDWS	R7ISS	203	SCULPIN	B	OTHR	NA	NSPR	77	20	3
SALMON R, N FK	2	POND	R7ISS	203			OTHR	NA	NSPR	77	20	3
SALMON R, N FK	2	UP GBBONS	R7ISS	203	SCULPIN		OTHR	NA	NSPR	77	20	3
SALMON R, N FK	2	WOLFRAM	R7ISS	203			OTHR	NA	NSPR	77	20	3
SALMON R, N FK	3	ABNDND TLR	R7ISS	203			OTHR	NA	NSPR	77	20	4
SALMON R, N FK	3	BELW HGHEs	R7ISS	203		C	OTHR	NA	NSPR	77	20	4
SALMON R, N FK	3	CUMMINGS	R7ISS	203	SCULPIN		OTHR	NA	NSPR	77	20	4
SALMON R, N FK	3	FLTBED BRG	R7ISS	203			OTHR	NA	NSPR	77	20	3
SALMON R, N FK	3	HULL CR RD	R7ISS	203		B	OTHR	NA	NSPR	77	20	3
SALMON R, N FK	3	LATHAM HSE	R7ISS	203		B	OTHR	NA	NSPR	77	20	3
SALMON R, N FK	3	MI PST 328	R7ISS	203		B	OTHR	NA	NSPR	77	20	3
SALMON R, N FK	3	NF BRG LWR	R7ISS	203			OTHR	NA	NSPR	77	20	3
SALMON R, N FK	3	NF BRG UPR	R7ISS	203			OTHR	NA	NSPR	77	20	3
CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
<b>Mainstem Clearwater River (Includes Middle Fork Clearwater River)</b>												
BEDROCK CR		1	R2ISS	306	PART DEWATERED	B	OTHR	WA	NSPR	-99	-9	1
BIG CANYON CR		2	GPM	306		B	MON	WA	NSPR	-99	6	1
LOLO CR	DOWNSTREAM	DS6	GPM	306		B	MON	NB	NSPR	44	14	1
LOLO CR	DOWNSTREAM	RUN6	GPM	306		B	MON	NB	NSPR	44	14	1
POTLATCH R		KENDRICK	R2ISS	306	1 SMB NEW 1994	B	OTHR	WA	NSPR	-99	6	1
<b>South Fork Clearwater River</b>												
AMERICAN R	1	0.25U	ISS	305		C	EVAL	NB	NSPR	77	14	1
AMERICAN R	1	0.5U	ISS	305		C	EVAL	NB	NSPR	77	14	1
AMERICAN R	1	0.75U	ISS	305		C	EVAL	NB	NSPR	77	14	1

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
AMERICAN R	1	1.0U	ISS	305		C	EVAL	NB	NSPR	77	14	1
AMERICAN R	1	1.25U	ISS	305		C	EVAL	NB	NSPR	77	14	1
AMERICAN R	1	1.75U	ISS	305		C	EVAL	NB	NSPR	77	14	1
AMERICAN R	1	2.0U	ISS	305		C	EVAL	NB	NSPR	77	14	1
CLEARWATER R, S FK	MEADOW CR	MP 17	R2ISS	305	NEW 1994 POOL	B	OTHR	NB	NSPR	-99	-9	1
CLEARWATER R, S FK		JOHNS CR	R2ISS	305	NEW 1994 POOL	B	OTHR	NB	NSPR	-99	-9	1
CLEARWATER R, S FK		MP 13	RSISS	305	NEW 1994 POOL	B	OTHR	NB	NSPR	-99	-9	1
CLEARWATER R, S FK		MP 14, UP	R2ISS	305	NEW 1994 POOL	B	OTHR	NB	NSPR	-99	-9	1
CLEARWATER R, S FK		MP 18	R2ISS	305	NEW 1994 POOL	B	OTHR	NB	NSPR	-99	-9	1
CLEARWATER R, S FK		NEWSOME	R2ISS	305		C	MON	NB	NSPR	44	20	1
CLEARWATER R, S FK		TENMILE CR	R2ISS	305	NEW 1994 RUN	B	OTHR	NB	NSPR	-99	-9	1
CLEARWATER R, S FK		WING CR	GPM	305	PARTLY RAINY	B	MON	NB	NSPR	44	20	1
CROOKED R	1	CONTROL1	GPM	305		B	MON	NB	NSPR	44	14	1
CROOKED R	1	CONTROL2	GPM	305		B	MON	NB	NSPR	44	14	1
CROOKED R	1	CONTROLX	ISM	305	STAC "HATCHERY"	B	OTHR	NB	NSPR	44	14	1
CROOKED R	1	POND-A	GPM	305	CONNECTED	C	MON	NB	NSPR	44	14	2
CROOKED R	2	POND U	GPM	305	ABOVE RELIEF CR	C	MON	NB	NSPR	77	14	4
CROOKED R	2	POND11	GPM	305		C	MON	NB	NSPR	77	14	1
CROOKED R	4	POND S1	ISM	305		C	MON	NB	NSPR	77	14	1
CROOKED R	4	POND S2	ISM	305		C	MON	NB	NSPR	77	14	1
CROOKED R	4	POND S3	ISM	305		C	MON	NB	NSPR	44	20	1
FIVE MILE CR	1	1A	ISM	305		B	EVAL	NB	NSPR	-99	14	1
FIVE MILE CR	1	1B	ISM	305		B	EVAL	NB	NSPR	-99	14	1
GOSPEL CR		MOUTH	CSUP	305		B	EVAL	NB	NSPR	-99	-9	1
JOHNS CR	MOUTH	FRANKBROWN	CSUP	305		B	EVAL	NB	NSPR	44	20	1
JOHNS CR	MOUTH	GOSPEL	CSUP	305		B	EVAL	NB	NSPR	44	20	1
JOHNS CR	MOUTH	TWIN LAKES	CSUP	305		B	EVAL	NB	NSPR	44	20	1
NEWSOME CR	1	BEAR CR RD	CSUP	305	TRANSECT3	C	OTHR	NB	NSPR	44	14	1
NEWSOME CR	1	CATTLE GRD	CSUP	305	TRANSECT4	B	EVAL	NB	NSPR	44	14	4
RED R	2	CNTL 1	GPM	305		C	EVAL	NB	NSPR	44	14	4
RED R	2	CNTL 10	GPM	305		C	EVAL	NB	NSPR	44	14	4
RED R	2	CNTL 11	GPM	305		C	EVAL	NB	NSPR	44	14	4
RED R	2	CNTL 12	GPM	305		C	EVAL	NB	NSPR	44	14	4
RED R	2	CNTL 14	GPM	305		C	EVAL	NB	NSPR	44	14	4
RED R	2	CNTL 15	GPM	305		C	EVAL	NB	NSPR	44	14	4
RED R	2	CNTL 17	GPM	305		C	EVAL	NB	NSPR	44	14	4
RED R	2	CNTL 18	GPM	305		C	EVAL	NB	NSPR	44	14	1

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
RED R	2	CNTL 19	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 20	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 21	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 22	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 23	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 24	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 26	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 3	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 4	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 5	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 6	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 7	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 8	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 8	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL 9	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	CNTL A	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 1	GPM	305	ABOVE DITCH CR	C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 10	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 11	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 12	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 13	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 14	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 15	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 16	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 17	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 18	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 19	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 20	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 21	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 22	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 23	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 24	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 3	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 4	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 5	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 6	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 7	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT 8	GPM	305		C	EVAL	NB	NSPR	44	14	1

60

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
RED R	2	TREAT 9	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT A	GPM	305		C	EVAL	NB	NSPR	44	14	1
RED R	2	TREAT A1	GPM	305	DS V DAM	B	EVAL	NB	NSPR	44	14	1
RELIEF CR	1	1A	GPM	305		C	EVAL	NB	NSPR	77	20	1
RELIEF CR	1	1AB	ISM	305	NEW SITE IN 93	B	EVAL	NB	NSPR	77	20	1
RELIEF CR	1	1B	GPM	305		B	EVAL	NB	NSPR	77	20	1
RELIEF CR	2	1A	ISM	305		B	EVAL	NB	NSPR	77	20	1
RELIEF CR	2	1B	ISM	305		B	EVAL	NB	NSPR	77	20	1
RELIEF CR	2	2A	ISM	305		C	EVAL	NB	NSPR	77	20	1
RELIEF CR	2	2B	ISM	305		C	EVAL	NB	NSPR	77	20	1
TWIN LAKES CR		CAMPSITE	GPM	305		C	EVAL	NB	NSPR	-99	-9	1
TWIN LAKES CR		LOWER MDW	GPM	305		C	EVAL	NB	NSPR	-99	-9	1
<b>Selway River</b>												
BEAR CR		2	R2	301		B	MON	WB	NSPR	77	20	3
EAGLE CR		2 <sup>ND</sup> XING	GPM	301	2 <sup>ND</sup> TRAIL CROSS	B	EVAL	WB	NSPR	77	20	3
EAGLE CR		DIVERSION	GPM	301	OLD IRR. DIVER.	B	EVAL	WB	NSPR	77	20	3
GROUSE CR		DS FALLS	GPM	301	US LOG BARRIER	B	EVAL	WB	NSPR	77	20	3
GROUSE CR		MOUTH	GPM	301		B	EVAL	WB	NSPR	77	20	3
LITTLE CLEARWATER R		1	R2ISS	301	NEW 1994	B	OTHR	WB	NSPR	-99	-9	3
LYNX CR		CULVERT	GPM	301	OFF RD 357	B	EVAL	WB	NSPR	-99	-9	3
LYNX CR		MOUTH	PEL	301		B	EVAL	WB	NSPR	-99	-9	4
OHARA CR		CANYON	R2ISS	302	NEW 1993	B	MON	WB	NSPR	44	20	1
OHARA CR		MEADOW	R2ISS	302	NEW 1993	C	MON	WB	NSPR	44	20	1
OTTER CR	#2 NEW	MOUTH	CSUP	302	DROPPED IN '93	B	EVAL	WB	NSPR	77	20	1
RUNNING CR	BOUNDRY	WILDERNESS	PEL	301		B	EVAL	WB	NSPR	77	20	4
RUNNING CR	MOUTH	GROUSE CR	PEL	301		B	EVAL	WB	NSPR	77	20	4
RUNNING CR		CABIN	PEL	301		B	EVAL	WB	NSPR	77	20	2
RUNNING CR		DRY WASH	GPM	301	ABOVE DRY WASH	B	EVAL	WB	NSPR	77	20	4
RUNNING CR		LOWERMOUTH	R2	301		B	MON	WB	NSPR	77	20	3
RUNNING CR		MOUTH S FK	GPM	301		B	EVAL	WB	NSPR	77	20	3
RUNNING CR		RD BRIDGE	GPM	301	DS FROM BRIDGE	B	EVAL	WB	NSPR	77	20	3
RUNNING CR		TRAIL CULV	PEL	301		B	EVAL	WB	NSPR	77	20	3
RUNNING CR		UPPEREAGLE	R2	301	DROP IN '96	B	MON	WB	NSPR	77	20	3
RUNNING CR		YORKS CAMP	PEL	301		B	EVAL	WB	NSPR	77	20	3
RUNNING CR, S FK		MOUTH	GPM	301		B	EVAL	WB	NSPR	77	20	3

61

Appendix A-3 List of stream monitoring sections (including historical) not completed in 1996 due to prioritization, poor snorkeling conditions or sites that have been discontinued (Continued).

CLEARWATER RIVER DRAINAGE												
Stream Name	Strata	Section	Program	Drainage	Comments	Channel Type	Monitoring or Corridor	Steelhead Class W vs N A vs B	Chinook Class W vs N Spr vs Sum	Chinook Carrying Capacity Rating	Steelhead Carrying Capacity Rating	Priority Class
RUNNING CR, S FK		UPPER	PEL	301		B	EVAL	NB	NSPR	77	20	3
THREE LINKS CR		2	GPM	302		B	EVAL	WB	NSPR	44	20	1
<b>Lochsa River</b>												
BRUSHY FK CR	MOUTH	BRUSHYFKCR	ISS	303	END OF ROAD	B	MON	NB	NSPR	77	20	1
CROOKED FK CR	1	2A	GPM	303		B	MON	NB	NSPR	-99	-9	1
CROOKED FK CR	1	3	CSUP	303		C	MON	NB	NSPR	77	20	1
CROOKED FK CR	3	2	ISS	303		C	MON	NB	NSPR	77	20	1
CROOKED FK CR	4	1B	ISS	303		B	MON	NB	NSPR	77	20	1
FIRE CR		1	GPM	303		B	MON	NB	NSPR	-99	20	1
FIRE CR		2	GPM	303		B	MON	NB	NSPR	-99	20	1
PAPOOSE CR		1	CSUP	303	TRANSECT1	B	EVAL	NB	NSPR	44	10	1
PAPOOSE CR		2	CSUP	303		B	EVAL	NB	NSPR	44	10	1
PAPOOSE CR		4	CSUP	303		C	EVAL	NB	NSPR	44	10	1
PAPOOSE CR		5	CSUP	303		C	EVAL	NB	NSPR	44	10	1
PAPOOSE CR		6	CSUP	303		B	EVAL	NB	NSPR	44	10	1
PAPOOSE CR		7	CSUP	303		C	EVAL	NB	NSPR	44	10	1
PAPOOSE CR		8	CSUP	303		B	EVAL	NB	NSPR	44	10	1
PETE KING CR		BIGBOULDER	ISM	303		B	OTHR	NB	NSPR	44	10	1
SQUAW CR		1	CSUP	303		B	EVAL	NB	NSPR	44	14	1
SQUAW CR		10	CSUP	303		B	EVAL	NB	NSPR	44	14	1
SQUAW CR		11	CSUP	303		B	EVAL	NB	NSPR	44	14	1
SQUAW CR		2	CSUP	303		B	EVAL	NB	NSPR	44	14	1
SQUAW CR		3	CSUP	303		B	EVAL	NB	NSPR	44	14	1
SQUAW CR		4	CSUP	303		C	EVAL	NB	NSPR	44	14	1
SQUAW CR		5	CSUP	303		C	EVAL	NB	NSPR	44	14	1
SQUAW CR		6	CSUP	303		B	EVAL	NB	NSPR	44	14	1
SQUAW CR		7	CSUP	303		B	EVAL	NB	NSPR	44	14	1
SQUAW CR		8	CSUP	303		B	EVAL	NB	NSPR	44	14	1
SQUAW CR		9	CSUP	303		B	EVAL	NB	NSPR	44	14	1

29

Appendix B.

Prioritization of Snorkel Streams

Appendix B. Prioritization of General Parr Monitoring snorkel streams, 1996.

<b>SNAKE RIVER AND TRIBUTARIES</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Sheep Cr	101	Y	Y	NPT/R2	R2	1
Capt. John Cr	101	N	Y	R2	--	1
Granite Cr	101	N	Y	R2	--	3

<b>LOWER CLEARWATER</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Lolo Cr	306	Y	Y	NPT	R2	1
Lapwai Cr or	306	N	Y	NPT	R2	1
Big Canyon Cr	306	N	Y	R2	--	1
Potlatch R,&Efk	306	N	Y	R2	--	1/2
Mission Cr	306	N	Y	R2	--	1
Eldorado Cr	306	Y	Y	NPT	--	2
Bedrock Cr	306		Y	R2	RES	4

<b>SOUTH FORK CLEARWATER</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Red R, and S.F. Red R	305	Y	Y	R2	--	1
Crooked R,& EFk & Wfk	305	Y	Y	RES	--	1
Tenmile Cr	305	Y	Y	RES	--	3
American R	305	Y	Y	R2	--	1
Newsome Cr	305	Y	Y	R2	--	2
Meadow Cr	305	Y	Y	NPT	R2	2
Mill Cr	305	Y	Y	NPT	R2	2/3
S.F. Clearwater	305	Y	Y	NPT	--	2
Johns Cr	305	N	Y	R2	--	3
Moores Cr	305	N	Y	R2	--	4
Gospel Cr	305	N	Y	R2	--	4
Twin Lakes Cr	305	None	None	R2	--	4
Moose Butte Cr	305		Y	R2	--	3
Relief Cr	305		Y	RES	--	2
Five Mile Cr	305		Y	RES	--	4

Appendix B. Prioritization of General Parr Monitoring snorkel streams, 1996 (Continued).

<b>MIDDLE FORK CLEARWATER</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Clear Cr & Sfk Clear Cr	304	Y	Y	FRO	R2	1
<b>LOCHSA</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Crooked Fk Cr & Brushy Fk Cr	303	Y	Y	RES	--	1
White Sand Cr & Big Flat Cr	303	Y	Y	RES	--	1
Fish Cr	303	N	Y	RES	--	1
Fire Cr	303	N	Y	R2	--	1
Split Cr	303	N	Y	R2	--	1
Pete King Cr	303	Y	Y	FRO	--	2
Squaw Cr	303	Y	Y	NPT	--	2
Papoose Cr	303	Y	Y	NPT	--	2
Post Office Cr	303	Y	Y	R2	--	3
Warm Springs Cr	303	Y	Y	R2	--	3
Mainstem	303	Y	Y	R2	--	3
Old Man Cr	303	N	Y	R2	--	4
Colt Cr	303		Y	R2	--	3
Hopeful Cr	303		Y	R2	--	3
<b>SELWAY</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
White Cap Cr	301	Y	Y	R2	--	1
Running Cr	301	Y	Y	RES	--	1
Meadow Cr	302	Y	Y	NPT	R2	1
Gedney Cr	302	N	Y	RES	--	1
Bear Cr	301	Y	Y	R2	--	3
Deep Cr	301	Y	Y	R2	--	3
Moose Cr & Efk & NFk	302	Y	Y	R2	--	3
O'Hare Cr	302	Y	Y	R2	--	3
Mainstem	301	Y	Y	R2	--	3
Otter Cr	302	Y	Y	R2	--	4
Three Links Cr	302	Y	Y	R2	--	4
Marten Cr	302	Y	Y	R2	--	4
L.Clearwater R.	301	Y	Y	R2	--	2

Appendix B. Prioritization of General Parr Monitoring snorkel streams, 1996 (Continued).

<b>LOWER SALMON (mouth to French Cr)</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Whitebird Cr & SFk	209	Y	Y	R2	--	1
Slate Cr & Little Slate	209	Y	Y	NPT	--	2
John Day Cr	209	Y	Y	R2	--	3
Skookumchuck Cr	209	Y	Y	R2	--	3
Race Cr	209	Y	Y	R2	--	3

<b>LITTLE SALMON</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Rapid R & Wfk	210	Y	Y	R3	--	1
Boulder Cr	210	Y	Y	R3	--	3
Mainstem	210	Y	Y	R3	--	3
Hazard Cr	210	Y	Y	R3	--	3

<b>SALMON RIVER CANYON (French Cr - Middle Fk)</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Chamberlain Cr & Wfk & SFk	207	Y	Y	RES	--	1
Bargamin Cr	207	Y	Y	R3	R2	3
Horse Cr	207	Y	Y	R7	--	3
Sheep Cr	207	Y	Y	R3	R2	1
Rim Cr	207	NONE	NONE	?	--	4
Crooked Cr	207	Y	Y	R2	--	1
Jersey Cr	207	Y	Y	R2	--	1
Fish Cr	207				RES	--
Flossie Cr	207				R7	--
Indian Cr	207				R7	--
Game Cr	207					
Moose Cr	207					

Appendix B. Prioritization of General Parr Monitoring snorkel streams, 1996 (Continued).

SOUTH FORK SALMON						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Johnson Cr	208	Y	Y	R3	--	1
Secesh R	208	Y	Y	NPT	R3	1
EFSF Salmon	208	Y	Y	R3	--	1
Mainstem	208	Y	?	R3	--	1
Mainstem upper	208	Y	Y	SBT	R3	2
Lick Cr	208	Y	Y	?	R3	2
Buckhorn Cr	208	Y	Y	R3	--	3
Lake Cr	208	Y	Y	R3	NPT	1
Rock Cr	208	Y	Y	R3	RES	1
Sand Cr	208	Y	Y	R3	--	1
Dollar Cr	208	Y	Y	R3	--	4

MIDDLE FORK SALMON						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Marsh Cr*	205	Y	Y	RES	--	1
Sulphur Cr	205	Y	Y	RES	R3	1
Big Cr	206	Y	Y	R3	--	1
Bear Valley Cr	205	Y	Y	SBT	RES	2
Monumental Cr & Wfk	206	Y	Y	?	R3?	2
Camas Cr	206	Y	Y	R7	--	3
Elk Cr	205	Y	Y	RES?	R3?	3
Indian Cr	205	Y	Y	R7	--	3
Loon Cr	205	Y	Y	R7	--	3
Marble Cr	205	Y	Y	R7/R3	--	3
Pistol Cr	205	Y	Y	R7	--	3
Mainstem	205	Y	Y	R7	--	3
Bearskin Cr	205			R3	--	

(\*includes snorkel transects on Beaver, Capehorn and Knapp Creeks)

LEMHI						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Mainstem above	204	Y	Y	?	--	1
Hayden Cr	204	Y	Y	R7	--	1/3?
Bear Valley Cr	204	Y	Y	R7	--	3
Big Springs Cr	204	Y	Y	R7	--	1

Appendix B. Prioritization of General Parr Monitoring snorkel streams, 1996 (Continued).

<b>PAHSIMEROI</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Mainstem	202	Y	Y	RES	--	1
<b>UPPER SALMON (Middle Fork - Sawtooth Weir)</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
North Fk	203	Y	Y	R7	--	1
Valley Cr	201	Y	Y	SBT	R7	1
Yankee Fk,W Fk	201	Y	Y	SBT	R7	2
Basin Cr	201	N	Y	RES	--	2
Morgan Cr	201	Y	Y	R7	--	3
Moyer Cr	203	Y	Y	R7	--	3
Panther Cr	203	Y	Y	R7	--	3
Mainstem	201	Y	Y	R7	--	3
Thompson Cr	201	Y	Y	R7	--	3
Warm Springs Cr	201	Y	Y	R7	--	3
Redfish Lk Cr	201	Y	Y	R7	--	3
Pine Cr	203	N	Y	R7?	--	4
<b>EAST FORK SALMON</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Herd Cr	201	Y	Y	SBT	R7	1
Mainstem	201	Y	Y	SBT	R7	1
Germania Cr	201	N	Y	RES	--	2
West Pass Cr	201	N	Y	RES	--	2
<b>HEADWATERS SALMON (above Sawtooth Weir)</b>						
Stream	Drain	(Y/N) Chinook	(Y/N) Steelhead	Agency 1	Agency 2	Priority (1-4)
Alturas Lk Cr	201	Y	Y	R7	--	1
Mainstem	201	Y	Y	RES	--	1
Beaver Cr	201	Y	Y	RES	--	2
Frenchman Cr	201	Y	Y	RES	--	2
Champion Cr	201	Y	Y	RES	--	3
Fourth of July	201	Y	Y	RES	--	3
Gold Cr	201	Y	Y	RES	--	3
Huckleberry Cr	201	Y	Y	RES	--	3
Pettit Lk Cr	201	Y	Y	RES	--	3
Pole Cr	201	Y	Y	RES	--	3
Smiley Cr	201	Y	Y	RES	--	3
Williams Cr	201	Y	Y	RES	--	3
Yellowbelly Cr	201	Y	Y	RES	--	3

Appendix B. Prioritization of General Parr Monitoring snorkel streams, 1996 (Continued).

---

Abbreviations:

---

- R2 - IDFG Region 2 (Lewiston, ID)
  - R3 - IDFG Region 3 (McCall, ID)
  - R7 - IDFG Region 7 (Salmon, ID)
  - RES - IDFG Fisheries Research (Nampa, ID)
  - FRO - USFWS Fishery Resource Office (Ahsahka, ID)
  - NPT - Nez Perce Tribe (Ahsahka, ID)
  - SBT - Shoshone-Bannock Tribes (Fort Hall, ID)
-

Appendix C-1

Biological Data Collection Sheet for  
General Parr Monitoring - 1996

Appendix C-1 Biological Data Collection Sheet for General Parr Monitoring – 1996.

**Idaho Department of Fish and Game  
SNORKEL DATA SHEET**

STREAM: \_\_\_\_\_ DATE: \_\_\_/\_\_\_/\_\_\_ LEADER/RECORDER: \_\_\_\_\_

AGENCY: (circle one) NPT SBT IFG FRO ICU

PROGRAM: (circle one) R2 R3 R7 PEL ISM CSUP SSUP

STRATA: \_\_\_\_\_ SECTION: \_\_\_\_\_

CHANNEL TYPE: B C OTHER: \_\_\_\_\_ SECTION TYPE: MONR CSUP SSUP EVAL

QYAD MAP: \_\_\_\_\_ TRANSECT LENGTH (m): \_\_\_\_\_

UTM X/Y: \_\_\_\_\_ TRANSECT WIDTH (m): \_\_\_\_\_

EPA REACH: #1706 MEAN WIDTH: \_\_\_\_\_ SEC AREA: \_\_\_\_\_

H2O TEMP: \_\_\_\_\_ TIME: \_\_\_\_\_ VISIBILITY: \_\_\_\_\_

**GPS COORDINATES:** \_\_\_\_\_

**AMPHIBIANS OBSERVED:** Yes \_\_\_ No \_\_\_ **NUMBER AMPHIBIANS OBSERVED:** \_\_\_\_\_

**AMPHIBIAN SPECIES I.D.** \_\_\_\_\_

**DESCRIPTION OF AMPHIBIANS:** \_\_\_\_\_

**METHODS:** ( ) Snorkel (circle corridor or entire stream width)

( ) Electro fish

( ) Other

**HABITAT TYPE:** (circle one) Pool Riffle Run Pocket Water

Length Class (in)	RAINBOW-STEEHEAD				RESIDENT SPECIES			
	Total	Wild & Natural	Adipose Clipped	Hatchery Catchable	Cutthroat	Brook	Bull	Whitefish
<2								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
>12 Specific Length	Adults:							
Age 0 Chinook								
Age 1 Chinnok	Reds:							

Appendix C-2

Biological Data Collection Sheet by Habitat  
Unit used by Intensive Smolt Sampling (ISS) Programs

Appendix C-2 Biological Data Collection Sheet by Habitat Unit used by Intensive Smolt .

Idaho Department of Fish and Game  
ISS - SNORKEL COUNT DATA

Stream: \_\_\_\_\_ Date: \_\_\_\_\_ Recorder/Crew: \_\_\_\_\_  
 Strata: \_\_\_\_\_ Time: \_\_\_\_\_ Agency: NPT SBT IFG ICU  
 Section: \_\_\_\_\_ H2O Temp: \_\_\_\_\_ Program: R2 R3 R7 PEL ISM CSUP SSUP  
 Conductivity: \_\_\_\_\_  
 Section Type: MONR CSUP SSUP EVAL Visibility: \_\_\_\_\_ Channel Type: B C Other: \_\_\_\_\_  
 Methods: ( ) Snorkel ( ) Electrofish ( ) Other  
 EPA REACH # 1760 \_\_\_\_\_ GPS Coordinates: \_\_\_\_\_

AMPHIBIAN DATA: No. Observed: \_\_\_\_\_ Species I D: \_\_\_\_\_ Description: \_\_\_\_\_

Unit# _____		Habit Type: (circle one)		Pool	Riffle	Run	Pocket	Glide
Transect Length (m) _____		Widths: _____		Ave. Width _____	Sec. Area (100m2)		_____	
LENGTH	STHD	RESIDENT	LENGTH	STHD	RESIDENT			
<2			8					
2			9					
3			10					
4			11					
5			12					
6			>12					
7			SPECIFY					
CHINOOK 0			CHINOOK 1					

Unit# _____		Habit Type: (circle one)		Pool	Riffle	Run	Pocket	Glide
Transect Length (m) _____		Widths: _____		Ave. Width _____	Sec. Area (100m2)		_____	
LENGTH	STHD	RESIDENT	LENGTH	STHD	RESIDENT			
<2			8					
2			9					
3			10					
4			11					
5			12					
6			>12					
7			SPECIFY					
CHINOOK 0			CHINOOK 1					

Unit# _____		Habit Type: (circle one)		Pool	Riffle	Run	Pocket	Glide
Transect Length (m) _____		Widths: _____		Ave. Width _____	Sec. Area (100m2)		_____	
LENGTH	STHD	RESIDENT	LENGTH	STHD	RESIDENT			
<2			8					
2			9					
3			10					
4			11					
5			12					
6			>12					
7			SPECIFY					
CHINOOK 0			CHINOOK 1					

Chinook age 0=z; yearlings=y; Fry=F; Steelhead=S; Adipose clipped=AD; Hatchery Catchables=H; Cutthroat=CT; Bull Trout=DV; Whitefish=WF; Age 0 WFF; Squawfish=SQ

Appendix C-3

Physical Habitat Data Collection Sheet for  
General Parr Monitoring

Appendix C-3 Physical Habitat Data Collection Sheet for General Parr Monitoring.

IDAHO DEPARTMENT OF FISH AND GAME

STREAM: \_\_\_\_\_ DATE: \_\_\_\_\_ COLLECTORS: \_\_\_\_\_

EPA REACH: \_\_\_\_\_ LENGTH: \_\_\_\_\_ COMMENTS: \_\_\_\_\_

STRATA: \_\_\_\_\_ VERTICAL DROP: \_\_\_\_\_

SECTION: \_\_\_\_\_ GRADIENT %: \_\_\_\_\_

CHANNEL TYPES: B- confined, flushing  
C-meandered, depositional

HABITAT TYPE: (Circle One) pool riffle run pocket water

75

Transect Length From Bottom	Width	Location on transect (1 to r)	Depth	Substrate Class by Area				
				Sand	Gravel	Rubble	Boulder	Bedrock
		1/4						
		1/2						
		3/4						
		1/4						
		1/2						
		3/4						
		1/4						
		1/2						
		3/4						
		1/4						
		1/2						
		3/4						

Appendix D.  
General Parr Monitoring Database Structure  
(version 1.2)

Appendix D General Parr Monitoring Database Structure (version 1.2).

Field	Field Name	Type	Width	Dec
1	STREAM	Character	20	
2	STRATA	Character	10	
3	SECTION	Character	10	
4	OTHRSTRATA	Character	10	
5	OTHRSECT	Character	10	
6	PRIORITY	Numeric	1	
7	HABITAT	Character	2	
8	TOTALTRAN	Logical	1	
9	DATE	Character	8	
10	YR	Character	2	
11	COLLECTOR	Character	12	
12	AGENCY	Character	7	
13	PROGRAM	Character	10	
14	CDT	Numeric	3	
15	WEATHER	Character	10	
16	DRAIN	Character	3	
17	EPA_REACH	Character	16	
18	IDAEPA	Character	10	
19	GPSZONE	Numeric	2	
20	GPSEAST	Numeric	6	
21	GPSNORTH	Numeric	7	
22	COMMENTS	Character	15	
23	TEMP	Numeric	4	1
24	TIME	Numeric	4	
25	LNTH	Numeric	6	2
26	MNWDTH	Numeric	6	2
27	SEC_AREA	Numeric	8	2
28	VIS	Numeric	5	2
29	MTHD	Character	4	
30	CHTYP	Character	1	
31	MON	Character	4	
32	WNAB	Character	3	
33	CHCLS	Character	4	
34	STCELL	Numeric	2	
35	NEWSTCELL	Numeric	2	
36	CHCELL	Numeric	2	
37	NEWCHCELL	Numeric	2	
38	CHIN0D	Numeric	6	2
39	CHIN1D	Numeric	6	2
40	STHD0D	Numeric	5	2
41	STHD1D	Numeric	5	2
42	STGD2D	Numeric	5	2
43	STHD12D	Numeric	5	2
44	CHCC	Numeric	3	

Appendix D General Parr Monitoring Database Structure (version 1.2).

Field	Field Name	Type	Width	Dec
45	CHPERCC	Numeric	6	2
46	STCC	Numeric	2	
47	STPERCC	Numeric	6	2
48	STHD02	Numeric	4	
49	STHD35	Numeric	4	
50	STHD68	Numeric	4	
51	STHD911	Numeric	4	
52	STHD1214	Numeric	4	
53	STHD1517	Numeric	4	
54	STHD18PL	Numeric	4	
55	STAC02	Numeric	4	
56	STAC35	Numeric	4	
57	STAC68	Numeric	4	
58	STAC911	Numeric	4	
59	STAC1214	Numeric	4	
60	STAC1517	Numeric	4	
61	STAC18PL	Numeric	4	
62	RBT02	Numeric	4	
63	RBT35	Numeric	4	
64	RBT68	Numeric	4	
65	RBT911	Numeric	4	
66	RBT1214	Numeric	4	
67	RBT1517	Numeric	4	
68	RBT18PL	Numeric	4	
69	CUTT02	Numeric	4	
70	CUTT35	Numeric	4	
71	CUTT68	Numeric	4	
72	CUTT911	Numeric	4	
73	CUTT1214	Numeric	4	
74	CUTT1517	Numeric	4	
75	CUTT18PL	Numeric	4	
76	BRKT02	Numeric	4	
77	BRKT35	Numeric	4	
78	BRKT68	Numeric	4	
79	BRKT911	Numeric	4	
80	BRKT1214	Numeric	4	
81	BRKT1517	Numeric	4	
82	BRKT18PL	Numeric	4	
83	BULT02	Numeric	4	
84	BULT35	Numeric	4	
85	BULT68	Numeric	4	
86	BULT911	Numeric	4	
87	BULT1214	Numeric	4	
88	BULT1517	Numeric	4	

Appendix D General Parr Monitoring Database Structure (version 1.2).

Field	Field Name	Type	Width	Dec
89	BULT18PL	Numeric	4	
90	WHF02	Numeric	4	
91	WHF35	Numeric	4	
92	WHF68	Numeric	4	
93	WHF911	Numeric	4	
94	WHF1214	Numeric	4	
95	WHF1517	Numeric	4	
96	WHF18PL	Numeric	4	
97	CHIN0	Numeric	4	
98	CHIN1	Numeric	4	
99	COHO0	Numeric	4	
100	COHO1	Numeric	4	
101	SPCHPERUSE	Numeric	4	2
102	SUCHPERUSE	Numeric	4	2
103	STHDPERUSE	Numeric	4	2
104	SPCHNHA	Numeric	1	
105	SUCHNHA	Numeric	1	
106	STHDHA	Numeric	1	
107	SPCHUSETYP	Numeric	1	
108	SUCHUSETYP	Numeric	1	
109	STHDUSETYP	Numeric	1	
110	HERPPRES	Logical	1	
111	HERPSPECIE	Character	10	
112	SECONDHERP	Character	10	
113	HERPDESCRI	Character	20	
<b>Total</b>			<b>553</b>	

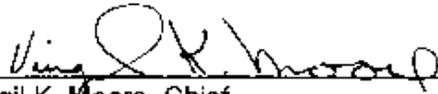
**Submitted by:**

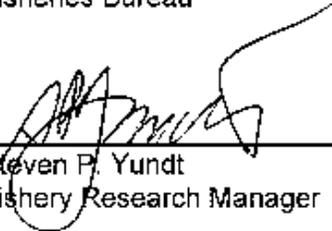
J.A. Hall-Griswold,  
Fisheries Research Biologist

C.E. Petrosky  
Fisheries Staff Biologist

**Approved by:**

IDAHO DEPARTMENT OF FISH AND GAME

  
\_\_\_\_\_  
Virgil K. Moore, Chief  
Fisheries Bureau

  
\_\_\_\_\_  
Steven P. Yundt  
Fishery Research Manager