IDAHO
DEPARTMENT OF FISH AND GAME

FEDERAL AID IN FISH RESTORATION
1996 Job Performance Report
Program F-71-R-21

REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS
SOUTHWEST REGION (Subprojects I-D, II-D, III-D, IV-D)

PROJECT I.	SURVEYS AND INVENTORIES
Job a.	Southwest Region Mountain Lakes Investigations
Job b.	Southwest Region Lowland Lakes Investigations
Job c.	Southwest Region Rivers and Streams Investigations
Job d.	Southwest Region Salmon and Steelhead Investigations
PROJECT II.	TECHNICAL GUIDANCE
PROJECT III.	HABITAT MANAGEMENT
PROJECT IV.	POPULATION MANAGEMENT

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TECHNICAL GUIDANCE

HABITAT MANAGEMENT

POPULATION MANAGEMENT

1996 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-21

Project I: Surveys and Inventories Subproject I-D: Southwest Region

Job: a Title: Mountain Lakes Investigations

Contract Period: July 1, 1996 to June 30, 1997

ABSTRACT

Forty-eight mountain lakes or ponds were visited in 1996. Lakes visited were located in the Middle Fork Boise River, Queens River, North Fork Boise River, and South Fork Payette River. Gill nets were set overnight and angling occurred in six waters, overnight gill net sets without angling occurred in four waters, angling without gill net sets in two waters, and visual observation only occurred in 36 waters. Twelve waters contained fish populations.

Twenty-eight of 48 waters were surveyed for the presence of amphibians. Adult spotted frogs *Rana luteiventris* were found in three waters, juvenile spotted frogs were found in ten waters, and long toed salamanders *Ambystoma macrodactylum* were found in one water. No amphibians were found in waters containing fish.

Data on amount of human use and presence and condition of trails to lakes was collected and recorded.

All data collected was entered into an ACCESS database.

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OBJECTIVES

To survey all mountain lakes within the region and document the presence or absence of fish and amphibian populations, and the level of human use at mountain lakes and ponds. Information will be used to develop a management plan for high elevation waters within the region.

METHODS

Mountain lakes were surveyed by regional fisheries staff during two separate trips in 1996. Mountain lakes were visited to determine the distribution of fish and amphibians in high elevation waters within the region.

Waters were sampled to document the presence of fish and to identify fish species present using gill nets and angling. Angling was often used to sample fish in lakes. If 10 fish could be easily caught, gill nets were not used to sample fish. If the presence of fish in a lake was not obvious, or if fish were difficult to catch, one gill net was set overnight to document the presence of fish and identify species. Gill nets were 30.5 m long with 7.6 m panels of 19, 25, 32 and 38 mm square mesh monofilament. All fish captured in gill nets or by angling were measured for total length (nearest mm) and weight (nearest g).

Shallow waters where the bottom could easily be seen and no fish were observed were considered fishless and no further sampling was done. Several of the waters in this years survey were small "frog ponds." These waters were often viewed from ridge tops and judged to be too shallow to support fish. No further sampling was done in these waters.

On waters that were visited, the presence and identity of amphibians was determined by walking slowly around the edge of each lake and attempting to identify all amphibians. When possible amphibians were collected and observed to determine species.

Lakes were visually surveyed to document the presence and condition of campsites and campfire rings, and for other signs documenting the level of human use. The trail condition (if any) and difficulty of getting to each lake was observed and recorded.

Water chemistry was measured at lakes containing fish.

All data was entered into an ACCESS database.

RESULTS

Forty-eight mountain lakes and ponds were visited or observed from ridge tops in 1996. Of waters observed or visited, 16 were within the Johnson Creek drainage (tributary to North Fork Boise River), 17 were within the North Fork Boise River (not in Johnson Creek), 8 were within the Middle Fork Boise River, 4 were within the Queens River drainage, and 3 were within the Benedict Creek drainage (South Fork Payette River).

Trout populations were documented in Alidade, Azure, Cliff, Cow (Tyee), Glacier, Island, Johnson, Rock Island, Slide, Snowbank, The Hole and Warrior #2 lakes. All of these lakes contained only westslope cutthroat trout *Oncorhynchus clarki lewisi*. Azure lake contained golden trout *Oncorhynchus aguabonita*, and golden x westslope cutthroat hybrids in addition to westslope cutthroat. Slide lake contained only rainbow *Oncorhynchus mykiss*. Warrior #2 lake contained westslope cutthroat trout x rainbow trout hybrids, in addition to westslope cutthroat trout.

Amphibians were found in 11 of 28 waters surveyed. Adult spotted frogs *Rana luteiventris* were found in Johnson Creek Pond #4, Queens River Pond #1, and in Warrior #4. Juvenile spotted frogs were found in Upper Alidade, Johnson Creek Ponds #1, #2, #3, and #4, Queens River Pond #1, Taylor Creek Ponds #2, #3, and #5, and in Warrior #4. No waters contained both fish and amphibians. Long-toed salamanders *Ambystoma macrodactylum* were found in Johnson Creek Pond #5.

Fish and amphibian survey information, human use level, trail condition and water chemistry information for individual lakes is contained in Appendix A. Species abbreviations used in Appendix A are as follows: BKT brook trout *salvelinus fontinalis*; GND golden trout; HYB westslope x rainbow; RBT rainbow trout; and WCT westslope cutthroat trout.

APPENDICES

Mountain Lake General Information

Lake Name:	ALIDADE
Planting Number:	100312
County:	ELMORE
National Forest:	BOISE
Township:	7N
Range:	11E
Section:	10
Latitude:	
Longitude:	
Spawning Potential:	

Excellent. May not need to stock this lake. Check length frequency of fish. Good inlet with 200 m of gravel/sand spawn substrate.

Quadmap:	Nahneke Mtn
Outlet:	
Drainage:	nfbr
Tributary To:	Johnson Ck
Lake Type:	Slump
Elevation:	2420 m
Size:	2.59 ha
Maximum Depth:	m
Aspect:	N

Comments:

Fry were observed in the outlet. 6" ct were observed in a swam-pool 50m below the lake. No <6" ct were observed in the lake.

Chemical Report:

Date:	9/23/96
Alkalinity (mg/l CaCO3):	85
Hardness (mg/l CaCO3):	17
pH:	8.6
Conductivity (uS/cm):	2
Surface Temp(C):	10
Secchi (m):	0

Human Use Report:

Date:	9/23/96
Human Use:	
Campsite Condition:	Well Developed
Campsite Number:	2
Campfire Rings:	2
Trail Condition:	Fair
Trail Difficulty:	Moderate
Litter:	Rare

Angler Information:

Date:	9/23/96
Number of Anglers:	1
Hours Fished:	1
Total Caught	11
Catch per Hour:	11

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WSC	11	305	370
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date
WSC	Angling	9/23/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WSC	330	6	285	21	0.8

Amphibian Report:

Date:	9/23/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WSC					10	1

Mountain Lake General Information

Lake Name:	ALIDADE, UPPER	Quadmap:	Nahneke Mtn
Planting Number:	10U120	Outlet:	Unnamed
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2470 m
Section:	10	Size:	0.45 ha
Latitude:		Maximum Depth:	2 m
Longitude:		Aspect:	NW
Spawning Potential:		Comments:	
None.		No fish potential.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Angler Information:

Date:	9/23/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Human Use Report:

Date:	9/23/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	Poor
Trail Difficulty:	Difficult
Litter:	None

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/23/96
Spotted Frog Adults:	0
Spotted Frog Juv:	200
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	ARROWHEAD	Quadmap:	Mount Everly
Planting Number:	100316	Outlet:	
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	
Range:	11E	Elevation:	2674 m
Section:	1	Size:	ha
Latitude:	43 58.45	Maximum Depth:	m
Longitude:	115 5.41	Aspect:	
Spawning Potential:		Comments:	

Chemical Report:

Human Use Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	7/23/96
Number of Anglers:	2
Hours Fished:	1
Total Caught	10
Catch per Hour:	10

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WCT	10	100	405
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	AZURE	Quadmap:	Nahneke Mtn
Planting Number:	100313	Outlet:	
County:	ELMORE	Drainage:	nfbr
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2520 m
Section:	1	Size:	6.36 ha
Latitude:		Maximum Depth:	15 m
Longitude:		Aspect:	W

Spawning Potential:
Some. Length freq of gill net catch shows various size classes of fish. Limited spawning may be occurring.

Comments:
Some WSC looked to be hybridizing with GDN trout. Some GDN trout looked relatively pure.

Chemical Report:

Date:	9/27/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	0
pH:	
Conductivity (uS/cm):	1
Surface Temp(C):	9
Secchi (m):	0

Human Use Report:

Date:	9/27/96
Human Use:	
Campsite Condition:	Poorly Developed
Campsite Number:	2
Campfire Rings:	2
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	Rare

Angler Information:

Date:	9/27/96
Number of Anglers:	1
Hours Fished:	0.5
Total Caught	0
Catch per Hour:	0

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
	0	0	0
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date
GDN	Gill net	9/27/96
WSC	Gill net	9/27/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
GDN	221	12	105	17	0.9
WSC	320	36	250	89	0.8

Amphibian Report:

Date:	9/27/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
GDN		1	3			
WSC		1	1		1	3

Mountain Lake General Information

Lake Name:	AZURE, UPPER	Quadmap:	Mount Everly
Planting Number:	10U123	Outlet:	Unnamed
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	Johnson Ck
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2726 m
Section:	12	Size:	0.68 ha
Latitude:		Maximum Depth:	0 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	
None.		Marginal fish lake. Might be deep enough to support fish. Fish passage from Azure to Upper Azure would not occur. Fish could move from Upper Azure to Azure. Too small for fish.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	9/27/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	None

Angler Information:

Date: 9/27/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species

Captured

<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	BENEDICT	Quadmap:	Mount Everly
Planting Number:	090193	Outlet:	
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	SFPR
Township:	7N	Lake Type:	Moraine-meadow
Range:	12E	Elevation:	2604 m
Section:	9	Size:	6.81 ha
Latitude:	43 57.81 N	Maximum Depth:	6.1 m
Longitude:	115 01.03	Aspect:	S
Spawning Potential:		Comments:	Moderate to heavy human use, used by "Sawtooth Outfitters."

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	7/22/96
Number of Anglers:	1
Hours Fished:	0.5
Total Caught	0
Catch per Hour:	0

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
	0	0	0
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	BLUE JAY	Quadmap:	Swanholm Peak
Planting Number:	100308	Outlet:	Blue Jay Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Slump
Range:	10E	Elevation:	2340 m
Section:	31	Size:	0.45 ha
Latitude:		Maximum Depth:	2 m
Longitude:		Aspect:	SE
Spawning Potential:		Comments:	
None.		We viewed this small lake from across and above the drainage. It looked too small and shallow to provide any fish potential.	

Chemical Report:

Date:
Alkalinity (mg/l CaCO3):
Hardness (mg/l CaCO3):
pH:
Conductivity (uS/cm):
Surface Temp(C):
Secchi (m):

Human Use Report:

Date:
Human Use:
Campsite Condition:
Campsite Number:
Campfire Rings:
Trail Condition:
Trail Difficulty:
Litter:

Angler Information:

Date: 9/7/96

Number of Anglers:
Hours Fished:
Total Caught
Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species Geartype Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:
Spotted Frog Adults:
Spotted Frog Juv:
Tailed Frog Adults:
Tailed Frog Juv:
Tree Frog Adults:
Tree Frog Juv:
Salamanders:

Length Frequency

Species

Captured

<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	CLIFF	Quadmap:	Mount Everly
Planting Number:	100250	Outlet:	
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2592 m
Section:	13	Size:	0.45 ha
Latitude:		Maximum Depth:	5.5 m
Longitude:		Aspect:	E
Spawning Potential:		Comments:	

No inlet or outlet. No spawning potential.

Chemical Report:

Date:	9/24/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	0
pH:	
Conductivity (uS/cm):	0
Surface Temp(C):	10
Secchi (m):	0

Human Use Report:

Date:	9/24/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	None

Angler Information:

Date:	9/24/96
Number of Anglers:	1
Hours Fished:	0.5
Total Caught	0
Catch per Hour:	0

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
	0	0	0
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date
WSC	Angling	9/24/96
WSC	Gill net	9/24/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WSC	264	9	138	40	0.7
WSC	274	8	179	14	0.9

Amphibian Report:

Date:	9/24/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WSC			2	7		

Mountain Lake General Information

Lake Name:	COW LAKE	Quadmap:	Tyee Mtn
Planting Number:	100355	Outlet:	
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	8N	Lake Type:	Slump
Range:	10E	Elevation:	2396 m
Section:	20	Size:	2.59 ha
Latitude:	44 01.22	Maximum Depth:	7 m
Longitude:	115 15.03	Aspect:	N

Spawning Potential:
None. No inlet or outlet.

Comments:
Maximum depth was estimated. Lake is fairly shallow. Trout are in good condition, i.e., heavy for length.

Chemical Report:

Date:	9/3/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	17
pH:	7.4
Conductivity (uS/cm):	3
Surface Temp(C):	16
Secchi (m):	0

Human Use Report:

Date:	9/3/96
Human Use:	
Campsite Condition:	Well Developed
Campsite Number:	3
Campfire Rings:	3
Trail Condition:	Fair
Trail Difficulty:	Moderate
Litter:	Rare

Angler Information:

Date:	9/3/96
Number of Anglers:	2
Hours Fished:	1.5
Total Caught	
Catch per Hour:	

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WCT	3	270	405

Mean Length and Weight Report:

Species	Geartype	Date
WCT	Angling	9/3/96
WCT	Gill net	9/3/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WCT	332	39	0	0	0.0
WCT	287	21	289	65	1.1

Amphibian Report:

Date:	9/3/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WCT			2	2	3	1

Mountain Lake General Information

Lake Name:	CUB CK #1	Quadmap:	Swanholm Peak
Planting Number:	10U022	Outlet:	Cub Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	8N	Lake Type:	Bog
Range:	9E	Elevation:	2470 m
Section:	35	Size:	0.45 ha
Latitude:		Maximum Depth:	0.5 m
Longitude:		Aspect:	NW
Spawning Potential:		Comments:	
None.		We viewed these ponds from ridge top. They appeared to be more marshes than lakes. Open standing water could not be seen. They appear to have good potential for amphibians.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date: 9/5/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species

Captured

<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	CUB CK #2	Quadmap:	Swanholm Peak
Planting Number:	10U023	Outlet:	Cub Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	8N	Lake Type:	Bog
Range:	9E	Elevation:	2470 m
Section:	35	Size:	0.22 ha
Latitude:		Maximum Depth:	0.5 m
Longitude:		Aspect:	NW

Spawning Potential:
None.

Comments:
We viewed these ponds from ridge top. They appeared to be more marshes than lakes. Open standing water could not be seen. They appear to have good potential for amphibians.

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date: 9/5/96

Number of Anglers:
Hours Fished:
Total Caught
Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species
Captured

<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	CUB CK #3	Quadmap:	Swanholm Peak
Planting Number:	10U024	Outlet:	Cub Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	8N	Lake Type:	Bog
Range:	9E	Elevation:	2433 m
Section:	35	Size:	0.22 ha
Latitude:		Maximum Depth:	0.5 m
Longitude:		Aspect:	NW
Spawning Potential:		Comments:	
None.		We viewed these ponds from ridge top. They appeared to be more marshes than lakes. Open standing water could not be seen. They appear to have good potential for amphibians.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date: 9/5/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species

Captured

<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	CUB CK #4	Quadmap:	Swanholm Peak
Planting Number:	10U025	Outlet:	Cub Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Bog
Range:	9E	Elevation:	2503 m
Section:	2	Size:	0.45 ha
Latitude:		Maximum Depth:	0.5 m
Longitude:		Aspect:	NW
Spawning Potential:		Comments:	
None.		We viewed these ponds from ridge top. They appeared to be more marshes than lakes. Open standing water could not be seen. They appear to have good potential for amphibians.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	9/5/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species

Captured

<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	CUB CK, SF	Quadmap:	Swanholm Peak
Planting Number:	10U026	Outlet:	S.F. Cub Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Bog
Range:	9E	Elevation:	2482 m
Section:	2	Size:	0.45 ha
Latitude:		Maximum Depth:	1.5 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	
None.		We viewed this pond from the ridge top. It was deemed too small and shallow for fish.	

Chemical Report:

Date:
Alkalinity (mg/l CaCO3):
Hardness (mg/l CaCO3):
pH:
Conductivity (uS/cm):
Surface Temp(C):
Secchi (m):

Human Use Report:

Date:
Human Use:
Campsite Condition:
Campsite Number:
Campfire Rings:
Trail Condition:
Trail Difficulty:
Litter:

Angler Information:

Date: 9/5/96

Number of Anglers:
Hours Fished:
Total Caught
Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:
Spotted Frog Adults:
Spotted Frog Juv:
Tailed Frog Adults:
Tailed Frog Juv:
Tree Frog Adults:
Tree Frog Juv:
Salamanders:

Length Frequency

Species

Captured

<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	EVERLY	Quadmap:	Mount Everly
Planting Number:	090200	Outlet:	
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	SFPR
Township:	7N	Lake Type:	
Range:	12E	Elevation:	2631 m
Section:	8	Size:	ha
Latitude:		Maximum Depth:	m
Longitude:		Aspect:	
Spawning Potential:		Comments:	

Chemical Report:

Human Use Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	7/22/96
Number of Anglers:	2
Hours Fished:	1
Total Caught	5
Catch per Hour:	5

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WCT	5	280	330
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	GLACIER	Quadmap:	Nahneke Mtn
Planting Number:	100321	Outlet:	
County:	ELMORE	Drainage:	nfbr
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2621 m
Section:	13	Size:	3.90 ha
Latitude:		Maximum Depth:	17.5 m
Longitude:		Aspect:	N
Spawning Potential:		Comments:	

Limited or none. No inlet or outlet. Some shore spawning may occur.

Chemical Report:

Date:	9/24/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	0
pH:	
Conductivity (uS/cm):	0
Surface Temp(C):	10
Secchi (m):	0

Human Use Report:

Date:	9/24/96
Human Use:	
Campsite Condition:	Poorly Developed
Campsite Number:	1
Campfire Rings:	1
Trail Condition:	Poor
Trail Difficulty:	Moderate
Litter:	None

Angler Information:

Date:	9/24/96
Number of Anglers:	1
Hours Fished:	0.5
Total Caught	3
Catch per Hour:	6

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WSC	3	270	310
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date
WSC	Angling	9/24/96
WSC	Gill net	9/24/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WSC	290	12	205	19	0.8
WSC	288	21	231	54	0.9

Amphibian Report:

Date:	9/24/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WSC			2	4	2	1

Mountain Lake General Information

Lake Name:	GOAT MOUNTAIN #1	Quadmap:	Swanholm Peak
Planting Number:	100347	Outlet:	
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Slump
Range:	9E	Elevation:	2628 m
Section:	11	Size:	0.45 ha
Latitude:		Maximum Depth:	2 m
Longitude:		Aspect:	S
Spawning Potential:		Comments:	
None.		Lake was viewed from ridgetop. It appeared small, shallow with a mud bottom with little or no fish potential.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	9/5/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	None

Angler Information:

Date:	9/5/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Mean Length and Weight Report:

Species	Geartype	Date

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species						
Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	GOAT MOUNTAIN #2	Quadmap:	Swanholm Peak
Planting Number:	10U048	Outlet:	Taylor Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Slump
Range:	9E	Elevation:	2508 m
Section:	12	Size:	0.45 ha
Latitude:		Maximum Depth:	m
Longitude:		Aspect:	S
Spawning Potential:		Comments:	
None.		Lake was viewed from ridgetop. It appeared small with a mud bottom with little potential for fish.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	9/5/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Mean Length and Weight Report:

Species	Geartype	Date

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	INGEBORG	Quadmap:	Mount Everly
Planting Number:	100306	Outlet:	MFBR
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	MFBR
Township:	7N	Lake Type:	Moraine
Range:	12E	Elevation:	2711 m
Section:	15	Size:	12.7 ha
Latitude:	43 57.03 N	Maximum Depth:	11 m
Longitude:	115 02.51 W	Aspect:	SE
Spawning Potential:		Comments:	
Very limited			

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	7/22/96
Number of Anglers:	2
Hours Fished:	2
Total Caught	8
Catch per Hour:	4

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WCT	8	254	330
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	ISLAND	Quadmap:	Mount Everly
Planting Number:	10U069	Outlet:	Unnamed
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2689 m
Section:	13	Size:	0.90 ha
Latitude:		Maximum Depth:	4.5 m
Longitude:		Aspect:	SW
Spawning Potential:		Comments:	

Inlet and outlet both dry. Two size classes of fish in gill net probably hatchery trout.

Chemical Report:

Date:	9/26/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	0
pH:	
Conductivity (uS/cm):	0
Surface Temp(C):	9
Secchi (m):	0

Human Use Report:

Date:	9/26/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Moderate
Litter:	None

Angler Information:

Date:	9/26/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date
WSC	Gill net	9/26/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WSC	293	36	150	38	0.8

Amphibian Report:

Date:	9/26/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WSC			3	2		1

Mountain Lake General Information

Lake Name:	JOHNSON	Quadmap:	Nahneke Mtn
Planting Number:	100334	Outlet:	
County:	ELMORE	Drainage:	nfbr
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Bog
Range:	11E	Elevation:	2439 m
Section:	14	Size:	2.36 ha
Latitude:		Maximum Depth:	4.5 m
Longitude:		Aspect:	SW
Spawning Potential:		Comments:	
Limited. Four trout were seen in inlet above lake. Both inlet and outlet have mud bottoms. Some spawning likely occurs.		Fish passage likely occurs from The Hole and Glacier into Johnson lake.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	9/24/96
Human Use:	
Campsite Condition:	Well Developed
Campsite Number:	5
Campfire Rings:	5
Trail Condition:	Good
Trail Difficulty:	Easy
Litter:	Abundant

Angler Information:

Date:	9/24/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date
WSC	Gill net	9/24/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WSC	260	23	182	59	1.0

Amphibian Report:

Date:	9/24/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WSC			1	2		

Mountain Lake General Information

Lake Name:	JOHNSON CREEK POND 01	Quadmap:	Nahneke Mtn
Planting Number:	10U116	Outlet:	Unnamed
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	Johnson Ck
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2482 m
Section:	14	Size:	0.22 ha
Latitude:		Maximum Depth:	2 m
Longitude:		Aspect:	NE
Spawning Potential:		Comments:	
None.		No fish potential.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	9/23/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	Good
Trail Difficulty:	Difficult
Litter:	Rare

Angler Information:

Date:	9/23/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Mean Length and Weight Report:

Species	Geartype	Date

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/23/96
Spotted Frog Adults:	0
Spotted Frog Juv:	100
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	JOHNSON CREEK POND 02	Quadmap:	Nahneke Mtn
Planting Number:	10U124	Outlet:	None
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	Johnson Ck
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2665 m
Section:	13	Size:	0.22 ha
Latitude:		Maximum Depth:	1 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	
None.		No fish potential.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Angler Information:

Date: 9/26/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Human Use Report:

Date:	9/26/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	None

Mean Length and Weight Report:

Species Geartype Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/26/96
Spotted Frog Adults:	0
Spotted Frog Juv:	15
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	JOHNSON CREEK POND 03	Quadmap:	Nahneke Mtn
Planting Number:	10U119	Outlet:	Unnamed
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	Johnson Ck
Township:	7N	Lake Type:	Bog
Range:	11E	Elevation:	2451 m
Section:	14	Size:	0.45 ha
Latitude:		Maximum Depth:	2 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	
None.		Frog Pond. No fish potential. Too shallow.	

Chemical Report:

Human Use Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Date:	9/24/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	Poor
Trail Difficulty:	Moderate
Litter:	None

Angler Information:

Date:	9/24/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Mean Length and Weight Report:

Species	Geartype	Date

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/24/96
Spotted Frog Adults:	0
Spotted Frog Juv:	30
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	JOHNSON CREEK POND 04	Quadmap:	Nahneke Mtn
Planting Number:	10U118	Outlet:	None
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	Johnson Ck
Township:	7N	Lake Type:	Bog
Range:	11E	Elevation:	2470 m
Section:	13	Size:	0.45 ha
Latitude:		Maximum Depth:	1 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	
None.		Frog Pond. No fish potential. Too shallow.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Angler Information:

Date: 9/24/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Human Use Report:

Date:	9/24/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	Poor
Trail Difficulty:	Moderate
Litter:	None

Mean Length and Weight Report:

Species Geartype Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/24/96
Spotted Frog Adults:	10
Spotted Frog Juv:	6
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	JOHNSON CREEK POND 05	Quadmap:	Nahneke Mtn
Planting Number:	10U121	Outlet:	Unnamed
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	Johnson Ck
Township:	7N	Lake Type:	Bog
Range:	11E	Elevation:	2439 m
Section:	14	Size:	0.22 ha
Latitude:		Maximum Depth:	1 m
Longitude:		Aspect:	N
Spawning Potential:		Comments:	
None.		No fish potential.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Angler Information:

Date: 9/26/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Human Use Report:

Date:	9/26/96
Human Use:	
Campsite Condition:	Well Developed
Campsite Number:	1
Campfire Rings:	1
Trail Condition:	Good
Trail Difficulty:	Moderate
Litter:	Rare

Mean Length and Weight Report:

Species Geartype Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/26/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	3

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	LITTLE SILVER POND	Quadmap:	Swanholm Peak
Planting Number:	10U126	Outlet:	Little Silver Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	8N	Lake Type:	Slump
Range:	10E	Elevation:	2414 m
Section:	30	Size:	0.90 ha
Latitude:		Maximum Depth:	1 m
Longitude:		Aspect:	N
Spawning Potential:		Comments:	
None.		Bog lake. No fish potential, too shallow.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Angler Information:

Date: 9/4/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Human Use Report:

Date:	9/4/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	None

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/4/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	LITTLE SILVER, LOWER	Quadmap:	Swanholm Peak
Planting Number:	100353	Outlet:	Little Silver Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	8N	Lake Type:	Slump
Range:	10E	Elevation:	2341 m
Section:	30	Size:	0.90 ha
Latitude:		Maximum Depth:	5 m
Longitude:		Aspect:	NNE
Spawning Potential:		Comments:	

Max depth was estimated. Lake appears capable of supporting fish. Recommend 1) grayling, 2) wsct.

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	9/4/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	None

Angler Information:

Date:	9/4/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Mean Length and Weight Report:

Species	Geartype	Date

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/4/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	LITTLE SILVER, UPPER	Quadmap:	Swanholm Peak
Planting Number:	10U125	Outlet:	Little Silver Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	8N	Lake Type:	Slump
Range:	10E	Elevation:	2409 m
Section:	30	Size:	0.90 ha
Latitude:		Maximum Depth:	5 m
Longitude:		Aspect:	NE
Spawning Potential:		Comments:	
None.		Max depth was estimated (guessed). Lake appears to be big enough and deep enough to support fish. Recommend 1) grayling, 2) wsct. Lake currently appears barren of fish.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	9/4/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	None

Angler Information:

Date: 9/4/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species Geartype Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/4/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	LODGEPOLE	Quadmap:	Swanholm Peak
Planting Number:	100310	Outlet:	Lodgepole Ck
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	6N	Lake Type:	Slump
Range:	10E	Elevation:	2409 m
Section:	5	Size:	2.27 ha
Latitude:		Maximum Depth:	8 m
Longitude:		Aspect:	S
Spawning Potential:		Comments:	

All species of fish were represented in the catch.
Spawning may be occurring in the inlet and outlet.

Good lake. Lots of fish, with all size classes represented.

Chemical Report:

Date:	9/7/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	17
pH:	7.6
Conductivity (uS/cm):	10
Surface Temp(C):	11
Secchi (m):	0

Human Use Report:

Date:	9/7/96
Human Use:	
Campsite Condition:	Well Developed
Campsite Number:	1
Campfire Rings:	1
Trail Condition:	Poor
Trail Difficulty:	Moderate
Litter:	Rare

Angler Information:

Date:	9/7/96
Number of Anglers:	2
Hours Fished:	2
Total Caught	
Catch per Hour:	

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WCT	18	160	310

Mean Length and Weight Report:

Species	Geartype	Date
WCT	Angling	9/7/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WCT	252	11	142	14	0.8

Amphibian Report:

Date:	9/7/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WCT		2	6	6	1	

Mountain Lake General Information

Lake Name:	PATS	Quadmap:	Mount Everly
Planting Number:	100315	Outlet:	
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	
Range:	11E	Elevation:	2546 m
Section:	1	Size:	ha
Latitude:		Maximum Depth:	m
Longitude:		Aspect:	
Spawning Potential:		Comments:	

Chemical Report:

Human Use Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	7/23/96
Number of Anglers:	2
Hours Fished:	1
Total Caught	10
Catch per Hour:	10

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WCT	10	254	450
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	QUEEN R POND 01	Quadmap:	Mount Everly
Planting Number:	10U122	Outlet:	Unnamed
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	Queens R
Township:	7N	Lake Type:	Bog
Range:	12E	Elevation:	2622 m
Section:	7	Size:	1.81 ha
Latitude:		Maximum Depth:	3 m
Longitude:		Aspect:	S
Spawning Potential:		Comments:	
None.		No fish potential. Too shallow. Several ponds at this location.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	9/26/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Very Difficult
Litter:	None

Angler Information:

Date:	9/26/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/26/96
Spotted Frog Adults:	3
Spotted Frog Juv:	30
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	QUEENS R #16	Quadmap:	Nahneke Mtn
Planting Number:	100246	Outlet:	Queens R
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	MFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2714 m
Section:	23	Size:	1.36 ha
Latitude:		Maximum Depth:	4 m
Longitude:		Aspect:	ENE
Spawning Potential:		Comments:	
None.		Marginal fish lake. Probably too shallow.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Angler Information:

Date: 9/27/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Human Use Report:

Date:	9/27/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	Poor
Trail Difficulty:	Moderate
Litter:	None

Mean Length and Weight Report:

Species Geartype Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/27/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	ROCK ISLAND	Quadmap:	Nahneke Mtn
Planting Number:	100318	Outlet:	
County:	ELMORE	Drainage:	nfbr
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2605 m
Section:	12	Size:	5.90 ha
Latitude:		Maximum Depth:	7 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	

None.

Chemical Report:

Date:	9/25/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	0
pH:	
Conductivity (uS/cm):	10
Surface Temp(C):	10.5
Secchi (m):	0

Human Use Report:

Date:	9/25/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Very Difficult
Litter:	None

Angler Information:

Date:	9/25/96
Number of Anglers:	1
Hours Fished:	1
Total Caught	13
Catch per Hour:	13

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WSC	13	290	340
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date
WSC	Angling	9/25/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WSC	320	5	255	31	0.8

Amphibian Report:

Date:	9/25/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WSC				1	9	

Mountain Lake General Information

Lake Name:	ROCK SLIDE/ROBERT	Quadmap:	Mount Everly
Planting Number:	090195	Outlet:	unnamed
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	Benedict Ck
Township:	7N	Lake Type:	Moraine
Range:	12E	Elevation:	2643 m
Section:	10	Size:	4.09 ha
Latitude:	43 57.20 N	Maximum Depth:	7.6 m
Longitude:	115 03.18 W	Aspect:	NW
Spawning Potential:		Comments:	
Poor.		Moderate human use, one RCT caught in the gill nets.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	7/22/96
Number of Anglers:	2
Hours Fished:	1
Total Caught	0
Catch per Hour:	0

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
	0	0	0
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
Captured						

Mountain Lake General Information

Lake Name:	SLIDE	Quadmap:	Nahneke Mtn
Planting Number:	100251	Outlet:	Queens R
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	MFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2592 m
Section:	13	Size:	0.45 ha
Latitude:		Maximum Depth:	4 m
Longitude:		Aspect:	NE
Spawning Potential:		Comments:	

None. Small glacial cirque w/mostly mud bottom.

Chemical Report:

Date:	9/24/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	0
pH:	
Conductivity (uS/cm):	0
Surface Temp(C):	8
Secchi (m):	0

Angler Information:

Date: 9/24/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Human Use Report:

Date:	9/24/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Moderate
Litter:	Rare

Mean Length and Weight Report:

Species	Geartype	Date
RBT	Gill net	9/24/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
RBT	280		280		1.3

Amphibian Report:

Date:	9/24/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
RBT				1		

Mountain Lake General Information

Lake Name:	SNOWBANK	Quadmap:	Mount Everly
Planting Number:	100252	Outlet:	Unnamed
County:	ELMORE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2701 m
Section:	13	Size:	1.27 ha
Latitude:		Maximum Depth:	12.5 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	

One small fish in sample may have been naturally produced. No inlet or outlet. Spawning potential is very limited or nonexistent.

Chemical Report:

Date:	9/26/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	0
pH:	
Conductivity (uS/cm):	0
Surface Temp(C):	9
Secchi (m):	0

Human Use Report:

Date:	9/26/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Moderate
Litter:	None

Angler Information:

Date:	9/26/96
Number of Anglers:	1
Hours Fished:	0.5
Total Caught	4
Catch per Hour:	8

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WSC	4	250	280
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date
WSC	Angling	9/26/96
WSC	Gill net	9/26/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WSC	268	6	143	11	0.7
WSC	232	12	103	11	0.8

Amphibian Report:

Date:	9/26/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WSC		1	5	4		

Mountain Lake General Information

Lake Name:	SPANGLE	Quadmap:	Mount Everly
Planting Number:	100302	Outlet:	Unnamed
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	MFBR
Township:	7N	Lake Type:	Moraine
Range:	12E	Elevation:	2618 m
Section:	14	Size:	25 ha
Latitude:	43 56.79 N	Maximum Depth:	21.3 m
Longitude:	115 02.10 W	Aspect:	SE
Spawning Potential:		Comments:	
Poor for WCT, good for BKT.		Moderate human use.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	7/21/96
Number of Anglers:	2
Hours Fished:	1
Total Caught	3
Catch per Hour:	3

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
BKT	3	280	305
	0	0	0
	0	0	0

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	SPANGLE, LITTLE	Quadmap:	Mount Everly
Planting Number:	100300	Outlet:	MFBR
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	MFBR
Township:	7N	Lake Type:	
Range:	12E	Elevation:	2616 m
Section:	14	Size:	ha
Latitude:		Maximum Depth:	m
Longitude:		Aspect:	
Spawning Potential:		Comments:	

Chemical Report:

Human Use Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	7/21/96
Number of Anglers:	2
Hours Fished:	1
Total Caught	4
Catch per Hour:	4

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
BKT	3	280	305
WCT	1	405	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	TAYLOR CK #1	Quadmap:	Swanholm Peak
Planting Number:	10U092	Outlet:	
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	8N	Lake Type:	Slump
Range:	9E	Elevation:	2515 m
Section:	36	Size:	0.68 ha
Latitude:		Maximum Depth:	3 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	
None.		Fairly shallow. No fish potential	

Chemical Report:

Date:	9/6/96
Alkalinity (mg/l CaCO3):	0
Hardness (mg/l CaCO3):	0
pH:	0
Conductivity (uS/cm):	0
Surface Temp(C):	10
Secchi (m):	0

Human Use Report:

Date:	9/6/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	Rare

Angler Information:

Date: 9/6/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species

Captured

<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	TAYLOR CK #2	Quadmap:	Swanholm Peak
Planting Number:	100348	Outlet:	
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	
Range:	9E	Elevation:	2494 m
Section:	1	Size:	ha
Latitude:		Maximum Depth:	m
Longitude:		Aspect:	
Spawning Potential:		Comments:	

Chemical Report:

Human Use Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Date:	9/6/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	Rare

Angler Information:

Date:	9/6/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Mean Length and Weight Report:

Species	Geartype	Date

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/6/96
Spotted Frog Adults:	0
Spotted Frog Juv:	5
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	TAYLOR CK #3	Quadmap:	Swanholm Peak
Planting Number:	10U093	Outlet:	
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Bog
Range:	9E	Elevation:	2317 m
Section:	1	Size:	0.11 ha
Latitude:		Maximum Depth:	1 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	
None.		No fish potential.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	9/6/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	None

Angler Information:

Date:	9/6/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Mean Length and Weight Report:

Species	Geartype	Date

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/6/96
Spotted Frog Adults:	0
Spotted Frog Juv:	200
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	TAYLOR CK #6	Quadmap:	Swanholm Peak
Planting Number:	10U096	Outlet:	
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Slump
Range:	9E	Elevation:	2506 m
Section:	1	Size:	0.22 ha
Latitude:		Maximum Depth:	0 m
Longitude:		Aspect:	NE
Spawning Potential:		Comments:	
None.		Lake was dry 9/96. No fish potential.	

Chemical Report:

Human Use Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Mean Length and Weight Report:

Date:	9/6/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Species	Geartype	Date

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	TAYLOR CK #7	Quadmap:	Swanholm Peak
Planting Number:	10U097	Outlet:	Unnamed
County:	BOISE	Drainage:	NFBR
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Slump
Range:	9E	Elevation:	2531 m
Section:	1	Size:	0.22 ha
Latitude:		Maximum Depth:	1 m
Longitude:		Aspect:	SW
Spawning Potential:		Comments:	
None.		Too small for fish. Lake was viewed from ridge top.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Human Use Report:

Date:	
Human Use:	
Campsite Condition:	
Campsite Number:	
Campfire Rings:	
Trail Condition:	
Trail Difficulty:	
Litter:	

Angler Information:

Date:	9/5/96
Number of Anglers:	
Hours Fished:	
Total Caught	
Catch per Hour:	

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	THE HOLE	Quadmap:	Nahneke Mtn
Planting Number:	100320	Outlet:	
County:	ELMORE	Drainage:	nfbr
National Forest:	BOISE	Tributary To:	NFBR
Township:	7N	Lake Type:	Cirque
Range:	11E	Elevation:	2560 m
Section:	13	Size:	1.36 ha
Latitude:		Maximum Depth:	5.5 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	
Good.		30m of stream available in outlet. 50 25-30mm fry observed in outlet. Larger fry (50-60mm) observed in lake. Some lake spawning may have occurred.	

Chemical Report:

Date:	9/24/96
Alkalinity (mg/l CaCO3):	0
Hardness (mg/l CaCO3):	0
pH:	8.5
Conductivity (uS/cm):	0
Surface Temp(C):	10
Secchi (m):	0

Human Use Report:

Date:	9/24/96
Human Use:	
Campsite Condition:	Well Developed
Campsite Number:	2
Campfire Rings:	2
Trail Condition:	Fair
Trail Difficulty:	Moderate
Litter:	Rare

Angler Information:

Date:	9/24/96
Number of Anglers:	1
Hours Fished:	0.5
Total Caught	4
Catch per Hour:	8

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WSC	4	270	330
	0	0	0
	0	0	0

Mean Length and Weight Report:

Species	Geartype	Date
WSC	Angling	9/24/96
WSC	Gill net	9/24/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
WSC	301	12	225	26	0.8
WSC	234	8	109	10	0.8

Amphibian Report:

Date:	9/24/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
WSC		1	5	3	2	

Mountain Lake General Information

Lake Name:	WARRIOR #2	Quadmap:	Swanholm Peak
Planting Number:	100311	Outlet:	W. Warrior Ck
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	MFBR
Township:	6N	Lake Type:	Slump
Range:	10E	Elevation:	2439 m
Section:	5	Size:	2.27 ha
Latitude:		Maximum Depth:	4.5 m
Longitude:		Aspect:	SE
Spawning Potential:		Comments:	
None.		Fairly shallow lake but fish were surviving. May winterkill in some years.	

Chemical Report:

Human Use Report:

Date:	9/8/96
Alkalinity (mg/l CaCO3):	17
Hardness (mg/l CaCO3):	17
pH:	0
Conductivity (uS/cm):	10
Surface Temp(C):	12
Secchi (m):	4.5

Date:	9/8/96
Human Use:	
Campsite Condition:	Well Developed
Campsite Number:	2
Campfire Rings:	2
Trail Condition:	
Trail Difficulty:	Easy
Litter:	Rare

Angler Information:

Date:	9/8/96
Number of Anglers:	1
Hours Fished:	1
Total Caught	
Catch per Hour:	

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Mean Length and Weight Report:

Species	Geartype	Date
HYB	Gill net	9/8/96
WCT	Gill net	9/8/96

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor
HYB	420		750		1.0
WCT	373	17	610	67	1.2

Amphibian Report:

Date:	9/8/96
Spotted Frog Adults:	0
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm
HYB						1
WCT					1	2

Mountain Lake General Information

Lake Name:	WARRIOR #3	Quadmap:	Swanholm Peak
Planting Number:	10U110	Outlet:	W. Warrior Ck
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	MFBR
Township:	6N	Lake Type:	Slump
Range:	10E	Elevation:	2365 m
Section:	4	Size:	0.90 ha
Latitude:		Maximum Depth:	m
Longitude:		Aspect:	N
Spawning Potential:		Comments:	
None.		Marginal for fish.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Angler Information:

Date: 9/8/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Human Use Report:

Date:	9/8/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	Good
Trail Difficulty:	Easy
Litter:	Rare

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	
Spotted Frog Adults:	
Spotted Frog Juv:	
Tailed Frog Adults:	
Tailed Frog Juv:	
Tree Frog Adults:	
Tree Frog Juv:	
Salamanders:	

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

Mountain Lake General Information

Lake Name:	WARRIOR #4	Quadmap:	Swanholm Peak
Planting Number:	10U111	Outlet:	W. Warrior Ck
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	MFBR
Township:	6N	Lake Type:	Bog
Range:	10E	Elevation:	2463 m
Section:	5	Size:	0.45 ha
Latitude:		Maximum Depth:	2 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	
None.		Too shallow for fish.	

Chemical Report:

Date:	
Alkalinity (mg/l CaCO3):	
Hardness (mg/l CaCO3):	
pH:	
Conductivity (uS/cm):	
Surface Temp(C):	
Secchi (m):	

Angler Information:

Date: 9/8/96

Number of Anglers:

Hours Fished:

Total Caught

Catch per Hour:

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)

Human Use Report:

Date:	9/8/96
Human Use:	
Campsite Condition:	None
Campsite Number:	0
Campfire Rings:	0
Trail Condition:	Good
Trail Difficulty:	Easy
Litter:	Rare

Mean Length and Weight Report:

Species	Geartype	Date

Species	Mean Length (mm)	S.E.	Mean Weight (g)	S.E.	C-Factor

Amphibian Report:

Date:	9/8/96
Spotted Frog Adults:	2
Spotted Frog Juv:	15
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0
Salamanders:	0

Length Frequency

Species Captured	<151mm	151-200mm	201-250mm	251-300mm	301-350mm	>350mm

1996 ANNUAL PERFORMANCE REPORT

State of: Idaho

Program: Fisheries Management F-71-R-21

Project I: Surveys and Inventories

Subproject I-D: Southwest Region

Job: b

Title: Lowland Lakes Investigations

Contract Period: July 1, 1996 to June 30, 1997

ABSTRACT

A lowland lake survey was done on Lake Lowell on May 20, 1996 with gill nets, trap nets, and electrofishing efforts, three additional nights of electrofishing were also conducted. Lake Lowell is responding to higher overwinter water levels as evidenced by the presence age-1+ and age-2+ largemouth bass *Micropterus salmoides* and smallmouth bass *Micropterus dolomieu*. The absence of panfishes; bluegill *Lepomis macrochirus*; white and black crappie *Pomoxis annularis* and *P. nigromaculatus*; and yellow perch *Perca flavescens, was* quite dramatic.

A lowland lake survey of C.J. Strike Reservoir was done on May 14, 1996. Catch-per-effort by species and by a combined unit of effort were calculated. Catch of white crappie was higher than previous years and for the second year in a row rainbow trout *Oncorhynchus mykiss* numbers were much reduced.

Electrofishing was done on May 28 and 29,1996 on lower Brownlee Reservoir. Catch-per-effort by species and by gear was calculated. The hourly electrofishing catch for 1996 was high for smallmouth bass at 774 per hour but the fish were smaller than in 1995. The percentage of bluegill sampled per unit effort increased to 36% from 4.7% in the 1995 samples. White crappie numbers and mean size continue to decrease.

A total of 1,560 reward tags were placed on catfish in Brownlee Reservoir and the border waters of the Snake River in 1996. The cooperative catfish study with Idaho Department of Fish and Game, Oregon Department of Fish and Wildlife, and Idaho Power Company entered its second year. Reported number of recaptures of tagged catfish was 117. The reward amount was increased on some tags to either $5.00, $10.00, or $20.00 in 1996. The $20.00 tags return at approximately twice the rate of the $5.00 tags. Catfish movements varied from 0 to over 120 river miles. Since 1995 five tagged catfish have been harvested below the Brownlee Dam in the Oxbow pool.

A lowland lake survey was done on Swan Falls Reservoir on June 6, 1996. Catch-per-effort by species and by a combined unit of effort were calculated. Age analysis was completed on 62 smallmouth bass scale samples.

A lowland lake survey was completed on Horseshoe Bend Mill Pond on June 26, 1996. Catch-per-effort by species and by a combined unit of effort were calculated. Biomass per unit of effort was 79.4 kg and 920 individual fish. A good population of largemouth bass was documented.

A lowland lake survey was done on September 4, 1996 on Black Canyon Reservoir. Catch-per-effort by species and by a combined unit of effort were calculated. A total of 878 fish weighing 135.9 kg were captured per standard unit of effort. Non-game species comprised 61% by number and 81.3% by weight of the standard unit of effort catch.

A lowland lake survey was done on Indian Creek Reservoir on June 14, 1996. Catch-per-effort by species and by a combined unit of effort were calculated. A total of 322 fish were captured. Largemouth bass comprised 91.6% of the standard unit catch and the majority of the largemouth bass were age-1+ and age-2+ fish. Bluegill numbers were low at 25 fish per unit of effort.

Boat electrofishing was conducted on Paddock Reservoir during daylight hours on May 23, 1996. An estimated 277 largemouth bass per hour were captured. Mean length of largemouth bass was 264 mm and mean weight was 299 g.

Two trap nets and two pair of gill nets were fished overnight in Succor Creek Reservoir on June 14, 1996. Catch-per-effort by species and gear were calculated. Redband trout *O. mykiss gairdneri*, bridgelip sucker *Catostomus columbianus*, and redside shiner *Richardsonius balteatus* were captured. This was the first time this irrigation reservoir had been sampled. The redband trout scale samples were aged.

Four sinking experimental gill nets and five vertical gill nets were fished overnight on July 15, 1996 in Lucky Peak Reservoir. Catch-per-effort by species and by gear unit of effort were calculated. The vertical gill nets captured only four chiselmouth *Acrocheilus alutaceus.*

Mountain Home Reservoir was boat electrofished on May 22, July 30 and September 24, 1996. Catch-per-effort by species and by gear unit of effort were calculated. Average length for captured hatchery rainbow trout was 254, 316, and 310 mm, respectively, for the three samplings.

Two pair of gill nets were set overnight in Deadwood Reservoir on September 26, 1996. Catch-per-effort by species and by gear unit of effort were calculated. The standard unit catch per pair of gill nets was lower in 1996 than the previous year. Kokanee salmon *Oncorhynchus nerka kennerlyi* numbers increased over 1995 numbers. Average size of kokanee spawners was higher at 332 mm for females and 344 mm for males. The 1996 kokanee spawning run was very low, 70,000 eggs were taken at the Deadwood River weir.

Arrowrock Reservoir was gill netted extensively for bull trout *Salvelinus confluentus* in the spring of 1996. The U.S. Bureau of Reclamation contracted with the Southwest Region Idaho Department of Fish and Game to study bull trout in the reservoir. Twelve radio tags were surgically implanted in larger bull trout. Staff and volunteers radio tracked the bull trout by vehicle and airplane during 1996. Further gillnetting was done in the late fall and winter of 1996 and 1997 to capture and mark bull trout to estimate population numbers.

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METHODS

General Fish Sampling

Electrofishing was conducted from a boom-mounted electrofishing boat. Netting of immobilized fish was conducted with one or two netters. Electrofishing was conducted along shoreline. Attempts were made to collect all fish immobilized. One unit of electrofishing effort was defined as one hour of activated electrode time. Unless noted below, electrofishing occurred during darkness. Electrofishing catch-per-unit of effort was calculated as catch, by both number and weight, per hour of activated electrode time.

Gillnetting was done using floating and sinking experimental gill nets. Experimental gill nets were 45.7 m long x 1.8 m deep, and were composed of 6-7.6 m panels of 1.9, 2.5, 3.2, 3.8, 5.2, and 6.4 cm bar mesh. Nets were set in late afternoon and pulled the following morning. Nets were set by tying or anchoring one end of the net near or on shore in water less than 0.5 m deep and extending the net toward the center of the water, perpendicular to shore. When more than one floating or one sinking net was used per water, nets were set such that both large and small mesh ends of the nets were set next to shore. One unit of gill net effort was defined as one floating and one sinking experimental gill net fished overnight. Gill net catch-per-unit of effort was calculated as combined catch of one floating and one sinking experimental net, by both number and weight, per night. (Hereafter, 'gill net' catch refers to combined catch from one floating and one sinking experimental gill net).

Trapnetting was conducted using standard trap nets composed of two light steel frames measuring 1.8 m x 0.9 m, covered with 19 mm square black mesh, and with 5-76 cm steel round hoops with crow foot throats on the first and third hoops, and with 23 m long lead lines 0.9 to 1.3 m in height. Trap nets were set on shallow sloping areas with the top of the steel frame within 0.3 m of the water surface. The lead line was tied to shore. Trap nets were set late in the afternoon and pulled the following morning. One unit of trap net effort was defined as one trap net fished overnight. Trap net catch-per-unit of effort was calculated as catch of one trap net, by both number and weight, per night.

Attempts were made to measure a sample of each size group of each species collected to the nearest mm and to weigh a sample of each size group collected to the nearest g. In some cases, scale samples were collected to estimate age and growth. Scales from trout were collected from above the lateral line posterior to an imaginary line between the posterior end of the dorsal fin and the anterior end of the anal fin. Scales from bass were collected at the end of the pectoral fin as it laid against the body of the fish from above the lateral line. Entire pectoral fin spines were removed from catfish to estimate age and growth. Fins and scales were placed in coin envelopes and processed later in the lab.

LAKE LOWELL

Methods

Sampling was conducted with four pairs of standard gill nets and four trap nets set overnight and one hour of electrofishing energized time from May 20-23, 1996. One hour of electrofishing was done on the nights of July 10, August 8 and September 18,1996. Table 1 provides the amount of effort of each event.

Results

Largemouth Bass

Age-1+ largemouth bass *Micropterus salmoides* were captured in the May 20, 1996 sample, documenting overwinter survival. Several older year classes were also captured (Appendices A & B). Later electrofishing samples collected more older bass and also documented a good 1996 year-class of largemouth bass (Appendix B). Largemouth adults were difficult to sample because they tended to be in the flooded brush beyond the effective reach of the electrofishing boat. Age analysis was done on a small group of largemouth bass collected on May 20,1996 (Table 2).

Smallmouth Bass

Overwinter survival of age-1+ smallmouth bass *Micropterus dolomieu* was documented. Length frequency of this species was similar to largemouth in all samples (Appendix B). Smallmouth bass percentage of total fish numbers may be increasing. Age analysis was done on a group of smallmouth bass collected on May 20,1996 (Table 2).

Panfish

The numbers of panfish, bluegill *Lepomis macrochirus*, white crappie *Pomoxis annularis* and black crappie *P. nigromaculatus*, and yellow perch *Perca flavescens*, remain low. Their combined percent by number generally was under 15% of the catch (Appendix A).

Non-game Species

Numbers and biomass of nongame species were high. Biomass of non-game species was greatest in the catch in spring and fall, over 90% (Appendix A). The percentage of non-game species biomass dropped in the sample during the summer months to approximately 48 to 67% of the catch.

Recommendations

1. Electrofish in late July to best sample the bass population in Lake Lowell.

2. Reconsider the no harvest on bass in the up coming regulation cycle.

C.J. STRIKE RESERVOIR

Introduction

C.J. Strike Reservoir is a 3,036 ha impoundment on the Snake River in Elmore and Owyhee Counties in southwest Idaho. The reservoir is managed for a multi species warm/cool water fisheries. Hatchery fingerling rainbow trout are stocked in the spring of each year and return to the anglers that fall and the next two years. The reservoir is popular with anglers from the Treasure and Magic Valleys.

Methods

The reservoir was sampled on May 15, 1996 with 3 trap nets, 3 pair of floating and sinking gill nets, and 1.3 hours of energized electrofishing effort (Table 1). Sampling was confined to the main pool and the Bruneau River arm.

Results

Weather again affected sampling, with high winds, rain squalls, and falling temperatures while electrofishing the reservoir. The rapidly changing weather likely reduced the catch of all gears. Water temperature at sampling was 17 C.

Smallmouth bass

Sample catch of smallmouth bass per hour and by standard unit of effort was higher in 1996 than 1995 (Appendices A and C) (Allen et al. 1998). The percentage by number of total standard unit catch rose to 18.5%. Smallmouth bass Proportional Stock Density (PSD) was 20, which is low.

Yellow perch

Yellow perch were not captured effectively in 1996. The numbers of yellow perch were small in the 1996 sample (Appendix A) compared to the approximately 54.0 % of all fish captured

in April 1995. The 1995 sample was taken when the yellow perch were spawning, perch actually spawned on the trap nets that year.

Rainbow trout

The number of rainbow trout *Oncorhynchus mykiss* sampled declined from samples taken in 1993 and 1995 (Appendix A) (Allen et al. 1996 and Allen et al. 1998). The standard unit catch by number was 2.5% in 1996 versus 11.6% in the 1995 sample. This was mainly due to the drop in electrofishing catch in 1996. The gill net catches from 1995 and 1996 were approximately the same. The angling catch for rainbow trout from the reservoir has declined during the last two seasons. High water flows in the Snake River in the past two springs (1995 and 1996) were likely to blame for the drop in trout angling success.

White Crappie

The sample catch of white crappie has increased dramatically. White crappie comprised 19.9% of the sample by number up from 0.2% by number in 1995 (Appendix A) (Allen et al. 1998). Average length of white crappie was 199 mm and 155 g. Several year classes of crappie were present at sampling.

Recommendations

1. Sample fishery in May of each year and provide the angling public information on the fishery.

2. Conduct creel checks monthly to better follow the fishery and provide information for 1-800 -ASK FISH information line.

BROWNLEE RESERVOIR

Methods

Boat electrofishing was conducted with a three person crew on the nights of May 28 and 29, 1996 on Brownlee Reservoir. A total of 3,621 seconds of energized electroshocking was done on four sites in the lower reservoir. The sites that were sampled included: The Island, Robinette Creek, Brownlee Creek, and the first Idaho cove across from Powder River arm.

Results

Sampling conditions were good. Reservoir pool level was approximately 7 m below full pool. Night-time water temperature was 14° C.

A total of 541 bluegill and 270 black crappie of various sizes were transported to Paddock Reservoir. Fifty-seven large adult white crappie were also transported and stocked in rearing ponds at C.J. Strike Reservoir.

The electrofishing catch per hour was 1842 total fish with a biomass of 190.09 kg (Appendix A). This was considerably higher than the electrofishing catch of 372 fish and 83.8 kg per hour from sampling in 1995 at the same sites (Allen et al. 1998).

Smallmouth Bass

The hourly electrofishing catch was 774 smallmouth bass. Smallmouth PSD was 9, considerably different than a PSD of 63 calculated for the 1995 sample. Much higher numbers of age-3+ and age-4+ bass were captured in 1995 than this year.

Bluegill

Thirty-six percent of the 1996 unit effort catch was comprised of bluegills versus only 4.7% of the catch being bluegills in 1995. The PSD was 14 in 1996 and 39 in 1995. The mean length was 128 mm (s.e. 1.4) and mean weight was 69 g (s.e. 2.5) (Appendix A).

Black Crappie

Black crappie catch per unit effort was higher in 1996 versus 1995 but average size was smaller, 163 mm in 1996 versus 177 mm in 1995 (Appendix A) (Allen et al. 1998). The 1996 PSD was 2 versus PSD of 65 in 1995.

White Crappie

The 1996 sample percentage by number decreased from 14% in the 1995 sample to 3.5% in 1996. Average length was reduced in 1996, at 212 mm (s.e. 13.3) versus 262 (s.e. 7.3) for 1995. This shift mirrors the angling catch reduction of the larger white crappie observed during the last several years.

Recommendations

1. Conduct a lowland reservoir survey on Brownlee Reservoir during 1997, duplicating the 1993 survey.

2. Conduct monthly boat creel checks to follow the fishery in 1997.

BROWNLEE RESERVOIR CATFISH STUDY

Introduction

A cooperative study on the channel catfish *Ictalurus punctatus* and flathead catfish *Pylodictis olivaris* population in Brownlee Reservoir began in 1995 with Idaho Department of Fish and Game (IDFG), Oregon Department of Fish and Wildlife (ODFW), and Idaho Power Company (IPC) participating. The goal of the study was to define the fisherman exploitation of the catfish population. Biologists will tag fish in Brownlee Reservoir and the Snake River along the Idaho and Oregon border for three years.

Methods

Catfish were captured primarily by monofilament experimental type gill nets. Only one 300 mm and larger catfish were targeted for tagging. The 300 mm size was considered to be the smallest size harvested by fishermen. Gill nets were modified to fish with monofilament panels of one inch bar mesh and larger. This reduced a considerable amount of non-target by catch. Using a larger mesh also reduced catch of smaller catfish.

Catfish were also captured by hook-and-line and by longlines set by ODFW in the free flowing section of the Snake River. Angler-caught catfish were measured, weighed, tagged and released at the Memorial Day Catfish Tournament near Huntington, Oregon by ODFW personnel. The majority of tags in Brownlee Reservoir were placed by IDFG personnel utilizing gill nets.

The tags were a Carlin Dangler type produced by Floy Tag Manufacturing Company with the word "Reward" on one side and the address which to return tags on the back. The tag reward amount was changed to include $5.00, $10.00, and $20.00 tags. The tags were oval in shape approximately 0.5 cm by 2 cm long, and yellow in color. The tags were attached to the catfish just ventral of the posterior of the dorsal fin, ventral of the skeletal plate of the dorsal spine. The actual attachment was accomplished by inserting two hypodermic needles, which were held in pliers, through the muscle tissue; inserting the two ends of stainless steel wire of the tag from the opposite side; removing the needles; thus pulling the ends of wire through the musculature of the fish. The wire was pulled tight and twisted against itself and the excess clipped off and the fish released. The tagged fish were not held for observation after tagging.

The ODFW staff developed posters and handouts about the tagging and return reward program and distributed materials to license vendors in both state line areas. Press releases were also produced for the local media by both IDFG and ODFW.

Tag reward payment and record keeping were administered by ODFW. A database tracked the capture length, weight, tag number, release site by river mile, recapture date, and location. For incomplete tag return information, ODFW staff attempted to contact the individuals that sent in tags to gather missing information.

Results

A total of 1,560 reward tags were attached to channel catfish and flathead catfish in Brownlee Reservoir and the Snake River in 1996. Table 3 presents the relative location of the tagged fish, number of tagged fish in the strata, and a description of the strata boundaries. More fish were tagged in the Snake River (489) than in any strata of the reservoir.

Reported recaptures numbered 117 in 1996. Thirty-five of these recaptures were from fish tagged in 1995, the rest were from 1996. Overall return percentage of tags released in 1996 was 5.3%. Exploitation rates will be calculated after three years of tag returns. Rewards were paid to all anglers who returned tags.

Movements of returned tagged fish for 1995 and 1996 are tabulated in Tables 4 and 5. Two catfish tagged in 1996 were recaptured by anglers below Brownlee Dam in Oxbow Reservoir. So far five tags have been recaptured from the Oxbow pool. The furthest movement of tagged catfish was 120 miles; the fish moved from below the Powder River Oregon to above Marsing, Idaho.

The return rates of higher reward tags was significantly greater for the $20.00 versus the $5.00 tags, at twice the return rate (Table 6). Numbers of returns were relatively low and another return year will be needed before a final estimate can be made.

Average length of 1,551 channel catfish tagged was 457.1 mm with an average weight of 909.7 g, and an average relative weight of 89. Only nine flathead catfish were tagged in 1996. Average length of flatheads was 606.1 mm and 4,483.1 g with a relative weight of 136.

SWAN FALLS RESERVOIR

Methods

Swan Falls Reservoir was sampled on June 9 and 10, 1996. Two pair of floating and sinking gill nets and two trap nets were set overnight and 0.9 hour of electrofishing was conducted. River flows were fairly high at 18,000 cfs during the sample time.

Results

A total of 278 fish per standard unit of effort were captured with a total biomass of 125.3 kg (Appendices A, B, and C). Eleven species of fish were captured. Smallmouth bass were most numerous in the catch, followed by largescale suckers *Catostomus macrocheilus*. Smallmouth bass PSD was 29, some larger bass were captured.

Sixty-two smallmouth bass scales were used to estimate the average back-calculated length at annuli (Table 7).

Gillnetting was not effective at the 18,000 cfs river flow experienced, most nets were forced parallel to shore by the flow. Trap nets also did not sample well. The fish sample was comprised almost entirely of the electrofishing catch. Future sampling needs to be conducted during low flows in the late summer.

HORSESHOE BEND MILL POND

Introduction

Horseshoe Bend mill pond lies on the south shore of the Payette River on the north edge of the town of Horseshoe Bend. The pond was an old sawmill log containment pond of approximately I.7 ha, and the pond and lands were purchased by IDFG in the 1970s. A rock diversion in the Payette River supplies water to keep the pond full. The pond is generally shallow and becomes approximately half covered with vegetation by late summer. Management direction is for a multi-species warmwater fishery with hatchery catchable trout stocked in the spring and fall while the waters remain cool.

Methods

A lowland lake survey was conducted on the pond on June 26, 1996. Sampling gear used consisted of one pair of 45.7m floating and sinking gill nets, one trap net, and 1.001 hour of energized electrofishing time (Table 1).

Results

Sampling efforts captured 920 fish weighing 79.4 kg per standard unit of catch (Appendix C). Nine species of fish were captured (Appendix B). The most numerous species captured was pumpkinseed sunfish *Lepomis gibbosus* at 67.0% by number followed by largemouth bass at 12.0%. The highest biomass by standard unit of catch was largemouth bass at 32.0%, followed by pumpkinseed sunfish at 28.4%. Average length and weight of largemouth bass was 218 mm and 228 g, respectively. The average length and weight of pumpkinseed sunfish was 114 mm and 39 g, respectively. The Proportional Stock Density (PSD) of largemouth bass was 44.4 and the PSD of pumpkinseed sunfish was 1.2. Hatchery trout catch was low at 33 trout and only 3.4% of the total number.

Recommendations

1. Hold a public meeting in Horseshoe Bend to gather input from local fishermen to see if they want any regulation changes.

2. Conduct a tagging study on hatchery catchable trout returns in the spring of 1997.

BLACK CANYON RESERVOIR

Methods

A lowland lake fishery survey was done on September 4 and completed on September 19, 1996. Two pairs of gill nets and one trap net were set overnight and one hour of night-time electrofishing was completed.

Results

A total of 878 fish were captured per standard unit of effort and weighed 135.9 kg (Appendix C). Thirteen different species were captured among all sampling gears. Non-game species comprised 61% of the catch by number and 81.3% by weight. Gamefish populations were heavily comprised of small pumpkinseed sunfish and small smallmouth bass. Good numbers of brown bullheads were present.

Generally the reservoir does not provide a good species specific fishery. Stocking of rainbow trout was discontinued because of high flow through and outward movement of trout. Warmwater species are present but do not have good population structure largely due to cooler waters and poor growth. The reservoir has uniform habitat types in that it is shallow and sandy with little diversity.

INDIAN CREEK RESERVOIR

Introduction

Indian Creek Reservoir is approximately 20 km east of Boise, Idaho just south of Interstate 84. The watershed lies to the north and is rather low in elevation. In some years very little runoff reaches the reservoir. The 79 ha reservoir is very shallow and water seeps or leaks fairly rapidly from the reservoir; in many years the reservoir is quite low by fall. A rotenone treatment was done in the fall of 1992 to remove a stunted crappie population. The treatment was considered

successful in that no crappie have been found. The reservoir was restocked with largemouth bass, bluegill, bullhead, and cultured channel catfish.

Methods

Two trap nets and two pair of standard experimental gill nets were fished overnight and 0.75 hour of boat electrofishing was conducted on June 14, 1996.

Results

A total of 322 fish per standard unit of effort were captured (Appendix C). Three species of fish were captured; bluegill, largemouth bass, and channel catfish. Largemouth bass comprised 91.6% of the catch. The majority of largemouth were age-1+ and age-2+ fish, only one adult largemouth was captured (Appendix B). The number of bluegills were low at 25, per standard unit of effort.

PADDOCK VALLEY RESERVOIR

Methods

Boat electrofishing was conducted on Paddock Reservoir on May 23, 1996 during daylight. A total of 0.35 hrs of energized time was used. Captured largemouth bass were transported to Lake Lowell and the rearing ponds at C. J. Strike Reservoir.

Results

An estimated 277 fish per hour were captured. Largemouth bass comprised 99% of the numbers (Appendix A). Mean length was 264 mm and mean weight was 299 g. Relative weights were very good (Appendix A). The largemouth bass population has been dominated by two year-classes since the reservoir was restocked in 1993. Few young bass are now surviving predation from the 1993 and 1994 year classes.

Recommendations

1. Develop several alternatives for bass regulation changes.
2. Survey reservoir for forage fish availability in May 1997.

SUCCOR CREEK RESERVOIR

Introduction

Succor Creek Reservoir is an approximately 360 ha irrigation reservoir located in western Owyhee County, Idaho. The reservoir lies on Succor Creek which drains into Oregon and eventually into Owyhee Reservoir. No record of any formal sampling by IDFG was found in the files, hence the sampling in 1996.

Methods

Two trap nets and two pair of standard experimental gill nets were fished overnight on June 14,1996. No electrofishing was conducted because of poor access to the reservoir and no boat ramp.

Results

A total of 85 fish were captured for each pair of gill nets and one trap net set (Appendices A and B). Three native fish species were captured; redband trout *O. mykiss gairdneri*, bridgelip sucker *Catostomus columbianus*, and redside shiner *Richardsonius balteatus*.

Redband trout

Only 8.8% by number of the combined catch-per-unit-effort and 40.3% of weight was redband trout. The trout were larger than most stream-dwelling redbands in Owyhee County with a mean length of 377 mm and mean weight of 665 g. The reservoir was drained in 1991 and it was assumed all trout were destroyed at that time. The drainage above the reservoir was checked in 1996 and redbands were only found in Cottonwood Creek, a tributary to Succor Creek.

Average age at annuli for the captured redband trout is reported in Table 8. Growth was much higher than stream redband trout.

Recommendations

1. Investigate ownership and landowner concerns about promoting a fishery in Succor Creek, Reservoir.

2. Attempt to establish a redband trout reservoir fishery by transplanting stream redband trout from local drainages.

LUCKY PEAK RESERVOIR

Methods

Four sinking experimental gill nets were set overnight in Lucky Peak Reservoir on July 15, 1996. Two 25 mm bar mesh vertical gill nets and three 19 mm bar mesh vertical gill nets were also set. The vertical gill nets were 1.8 m in width and were fished from surface to bottom, thus overall length varied.

Results

The five vertical gill nets captured only four chiselmouth with a mean length of 250 mm and an average weight of 187 g. The target species, kokanee salmon *Oncorhyncus nerka kennerlyi* was not captured.

The standard unit catch per sinking gill net was 90.3 fish with a biomass of 26.7 kg (Appendices A and B). Nongame species were 92% of the fish by number and 93.2% by biomass. Fall chinook salmon *O. tshawytscha* were captured at 281 mm mean length.

Two of the sinking gill nets were set in deep water (> 25 m) and collapsed. The gill nets collapse was likely due to water pressure against the foam floatation used on the float line. One of the deep nets did not capture any fish and the other deep sinking net captured a few fish.

MOUNTAIN HOME RESERVOIR

Methods

Three electrofishing surveys of Mountain Home Reservoir were conducted on May 22, July 30, and September 24, 1996. Data was gathered for a research project and provided to Southwest Region fisheries management personnel.

Results

Catch rate for hatchery rainbow trout was relatively high at 59, 57, and 37 trout per hour (Appendix A). Average length for captured hatchery rainbow trout was 254, 316, and 310 mm respectively, for each event. Largemouth bass was the other most numerous fish species captured.

DEADWOOD RESERVOIR

Methods

Two pair of standard experimental gill nets were fished overnight on September 26, 1996 in Deadwood Reservoir. The gill nets were set on the west side of the reservoir at historical sampling sites.

Results

The standard unit catch per pair of gill nets was 89.5 fish with a biomass of 24.4 kg which was lower than the catch data in 1995 (Appendix A) (Allen et al. 1998). Mountain whitefish percent by number and percent by biomass decreased in the catch in 1996 from 1995. No Atlantic salmon *Salmo salar* were captured. One bull trout *Salvelinus confluentus* and one fall chinook were captured. One marked Gerrard rainbow trout was captured at 570 mm and 2300 g. Westslope cutthroat trout *O. clarki lewisi* numbers seem to be dropping in the catch, and younger fish were absent from the catch.

Kokanee salmon increased in percent number to 31.3% and 12.0% biomass in 1996 compared to 5.3% and 3.2% by percent number and biomass, respectively (Appendix A) (Allen et al. 1998). Average size of spawners was higher at 332 mm for females and 344 mm for males. The spawning run was very low, 70,000 eggs were taken. High reservoir levels also hindered spawn take operations.

Recommendations

1. Consider stocking westslope cutthroat trout fingerlings.
2. Advertise the good kokanee fishery to anglers.

ARROWROCK RESERVOIR

Introduction

Arrowrock Reservoir is a 3100 acre impoundment of the Boise River near Boise, Idaho that has a full pool volume of 286,000 acre-feet. The dam which created Arrowrock Reservoir was completed by the U.S. Bureau of Reclamation in 1915. The reservoir provides storage for flood control, irrigation, recreation and is frequently drawn down in the spring and summer months.

Routine sampling of Arrowrock Reservoir in the spring of 1995 documented bull trout as large as 465 mm. Relative to other reservoirs in Idaho, an abundant population of bull trout is believed to inhabit Arrowrock Reservoir, but little information detailing movements from Arrowrock Reservoir to the Middle Fork of the Boise River (MFBR) exists. In April of 1996, Arrowrock Reservoir was sampled in an attempt to catch mature bull trout and fit them with radio tags. These fish were to be studied to document the timing and magnitude of spawning migrations, and to identify spawning areas in the MFBR and associated tributaries.

Methods

Standard experimental gill nets were fished for one hour sets, both sinking and floating nets were used. Trap nets were fished overnight. Captured bull trout were fitted with implanted radio tags with trailing antennae. Radios were matched with fish so that their dry weight did not exceed 2% of the weight of the fish (Table 9).

Volunteers utilized telemetry tracking equipment to monitor implanted radios in the roaded areas and IDFG employees conducted all tracking which required aircraft in roadless areas. Radio telemetry surveys were conducted bi-weekly from mid-April through September.

Results

The most productive areas for catching bull trout in April were found to be gradual sloping beaches. Forty hours of sampling produced twenty-two total bull trout twelve of which were fitted with radios, four bull trout were killed, and six were measured and released. Of the radio implanted fish, five were tracked to the MFBR and/or associated tributaries, four were tracked to the North Fork Boise River (NFBR) and/or associated tributaries, two fish died or shed their radio's in the MFBR, and one fish was never located after release (Table 10). The majority of the tagged fish left Arrowrock in early May, and by July had reached areas with suitable habitat for spawning.

Recommendations

1. Continue life-history studies on bull trout in the Boise basin in cooperation with the Bureau of Reclamation.

2. Quantify possible losses of bull trout due to entrainment in Arrowrock Dam.

LITERATURE CITED

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TABLES

Table 1. Units of sampling effort by geartype[1] and body of water, 1996.

Water Name	Date	EF	GN	HSGN	SGN	TN
Arrowrock Reservoir	10/18/96			18		4
Arrowrock Reservoir	10/23/96			16		
Arrowrock Reservoir	10/25/96			12		4
Arrowrock Reservoir	10/26/96			4		5
Arrowrock Reservoir	10/30/96			28		
Arrowrock Reservoir	11/01/96			20		
Arrowrock Reservoir	11/02/96			22		
Arrowrock Reservoir	11/06/96			20		
Arrowrock Reservoir	11/08/96			14		
Arrowrock Reservoir	11/22/96			20		
Arrowrock Reservoir	11/24/96			18		
Arrowrock Reservoir	11/27/96			20		
Arrowrock Reservoir	11/30/96			20		
Arrowrock Reservoir	12/06/96			9.5		
Arrowrock Reservoir	12/17/96			15		
Arrowrock Reservoir	12/19/96			17		
Black Canyon Reservoir	09/04/96	1	2			1
Brownlee Reservoir	05/28/96	1.0058				
C.J. Strike Reservoir	05/14/96	1.3167	3			3
Deadwood Reservoir	09/26/96		2			
Horseshoe Bend Mill Pond	6/26/96	1.0011	1			1
Indian Creek Res	4/29/96	0.7547	2			2
Lake Lowell	5/20/96	1	4			4
Lake Lowell	7/10/96	1.0044				
Lake Lowell	8/8/96	1				
Lake Lowell	9/18/96	1.25				
Lucky Peak Reservoir	7/15/96				4	
Mountain Home Reservoir	5/22/96	1.05				
Mountain Home Reservoir	7/30/96	0.97				
Mountain Home Reservoir	9/24/96	1.2				
Paddock Reservoir	5/23/96	0.35				
Succor Creek Reservoir	6/14/96		2			2
Swan Falls Reservoir	6/9/96	0.88	2			2

[1] Units of effort: EF=h of activated electrode time while electrofishing;
GN=one sinking and one floating gill net set overnight; HSGN=h of sinking gill net sampling;
SGN=overnight set of one sinking gill net; TN=Total number of trap nets set overnight.

Table 2. Average back-calculated length for each age class of largemouth bass and smallmouth bass collected on May 20, 1996 on Lake Lowell.

Largemouth Bass

Age	1+	2+
Average length (mm)	96.0	132.3
Number = 13	13	4

Smallmouth Bass

Age	1+	2+	3+	4+	5+
Average length (mm)	81.2	110.4	143.2	178.5	190.9
Number = 22	22	13	9	6	1

Table 3. Location and number of tagged catfish in Brownlee Reservoir and the Snake River in 1996.

Strata	River Miles	Number of Channel Catfish Tagged	Number of Flathead Catfish Tagged	Description of Strata
1	284.6 to 298.6	210	1	Dam to 2 miles upstream Powder River.
2	298.6 to 312.2	229	0	Up to Dennett Creek
3	312.2 to 325.8	363	7	Up to 1 mile below Spring ramp
4	325.8 to 339.4	260	1	Up to bend above Farewell Bend
5	339.4 to 365.5	489	0	To confluence of Payette River

Table 4. Summary of recaptured tagged catfish, location of tagging and location of recapture for catfish tagged in 1995 in Brownlee Reservoir and the Snake River.

TAGNUM	TAGMIL	DATTAG	RECAPMIL	DATRECAP	DISTANCE	RECAPLOC
645	335	05/28/95	338.7	06/19/95	3.7	Just below rapids,1/2 mile below Oasis
661	335	05/28/95	314.5	06/07/95	-20.5	Conner Ck
690	335	05/28/95	334	07/04/95	-1.0	Farewell Bend
731	331.5	05/27/95	384	05/11/96	52.5	Two miles US Nyssa
758	331.5	05/27/95	335	05/29/95	3.5	Off Highway 84, Weiser turnoff
767	335	05/28/95	322.5	08/08/95	-12.5	RM 322.5
821	328.5	05/29/95	326	07/13/96	-2.5	2 miles down from Steck, Idaho side
826	328.5	05/29/95	317	06/03/96	-11.5	Mouth of Hibbard Creek
864	328.5	05/29/95	320	06/09/96	-8.5	Mouth of Rock Creek
874	328.5	05/29/95	314	07/16/95	-14.5	RM 3 mile south of Mountain Man Idaho
920	328.5	05/29/95	334.1	06/21/96	5.6	Old Highway near FB State Park
Y004	328	04/24/95	295.8	07/22/96	-32.2	Powder River Arm Mud Flats
Y018	328	04/24/95	340	06/15/95	12.0	Near the Oasis
Y040	328	04/25/95	326	09/11/95	-2.0	2 miles down from Steck Park
Y045	318.5	04/25/95	323	07/02/95	4.5	Cabin Idaho side
Y048	318.5	04/25/95	287	09/02/95	-31.5	RM 287 westside across from Woodhead
Y049	318.5	04/25/95	425	07/27/95	106.5	Snake River - near Marsing
Y053	318.5	04/25/95	335	07/12/95	16.5	Weiser Exit 356
Y070	318.5	04/25/95	316.5	05/15/95	-2.0	@ Small Cemetery
Y091	323	04/25/95	328	08/08/96	5.0	RR bridge near Huntington
Y111	323.1	04/26/95	328.5	08/11/95	5.4	Idaho side
Y118	323.1	04/26/95	340	04/25/95	16.9	RM 340.0 2 mile above I-84 toward Weiser
Y125	326.3	04/25/95	425	09/08/95	98.7	Near Marsing Bridge-guess RM 425
Y135	326.3	04/25/95	317	05/16/95	-9.3	RM 317 mouth of Hibbard Creek
Y138	323.1	04/25/95	425	09/10/95	101.9	Near Marsing Bridge-guess RM 425
Y150	323.1	04/25/95	339.6	07/04/96	16.5	Camp area DS Oasis
Y183	323.1	04/25/95	328.3	07/25/96	5.2	1/4 mile above River Bridge
Y191	329.6	04/25/95	325.8	07/01/96	-3.8	2 miles down from Springs
Y196	329.6	04/25/95	327.8	07/30/96	-1.8	300 yards up Burnt River
Y220	323.1	04/26/95	384	06/20/96	60.9	One mile north Adrian Bridge
Y229	323.1	04/26/95	324.8	07/12/96	1.7	About 3 miles down from Spring Rec Site
Y237	323.1	04/26/95	317.5	06/03/95	-5.6	RM 317.5
Y259	327	04/27/95	330.5	09/02/95	3.5	Big rock N of Bend S of Steck Park
Y263	326.1	04/27/95	344	07/04/96	17.9	Between rec site and Oasis
Y264	326.1	04/27/95	331	06/30/95	4.9	3 mile up from Huntington
Y274	326.1	04/27/95	327	07/20/95	0.9	Spring recreation site
Y277	326.1	04/27/95	329.5	04/29/95	3.4	1 or 2 mile above Steck Park
Y283	326.1	04/27/95	296.8	12/08/95	-29.3	Mouth of Powder River
Y298	326	04/27/95	310.5	06/20/95	-15.5	Dennett Creek mouth
Y303	323	04/25/95	323	09/15/95	0.0	5 miles down from Steck Park, Idaho side
Y319	321.5	04/25/95	325	09/25/95	3.5	2 miles below Spring Recreation Site
Y320	321.5	04/25/95	327	08/21/95	5.5	1 mile down from Steck Park

Table 4 (continued)

TAGNUM	TAGMIL	DATTAG	RECAPMIL	DATRECAP	DISTANCE	RECAPLOC
Y335	321.5	04/26/95	364	09/17/95	42.5	2 miles N of Payette, Davis Rd OR
Y338	318.5	04/26/95	284	06/20/95	-34.5	Spillway in Oxbow Reservoir
Y345	318.5	04/26/95	325.5	07/02/95	7.0	RM 325.5
Y365	318.5	04/26/95	328.5	09/10/95	10.0	RM 328.5 Steck Park
Y372	318.5	04/26/95	308.5	08/26/96	-10.0	10 miles down river from Morgan Creek
Y381	318.5	04/26/95	317	06/29/95	-1.5	Just below Jack Gordon
Y388	318.5	04/26/95	309	05/26/96	-9.5	Between Big Deacon and Raft Creek
Y411	323	04/26/95	327.5	10/05/95	4.5	Between Spring Camp groun & RR trestle
Y416	323	04/26/95	304	05/30/96	-19.0	Between FB State Pk and Richland
Y451	326	04/26/95	425	07/09/95	99.0	Near Marsing Bridge-guess RM 425
Y478	326	04/27/95	339	07/25/95	13.0	Idaho side,1 mi past pavement to Steck Pk
Y484	326	04/27/95	318.5	06/15/95	-7.5	Left side of Jack Gordon
Y521	326	04/27/95	329.5	06/20/96	3.5	1.5 miles south of Steck Park
Y523	326	04/27/95	327.5	07/30/96	1.5	0.5 miles north of Steck Park
Y546	326	04/27/95	327.7	07/07/95	1.7	Burnt River Falls (just below bridge)
Y557	326	04/27/95	327.5	07/11/95	1.5	RM Huntington-Steck Park
Y600	311.5	04/28/95	312	07/18/96	0.5	Black Canyon Creek
Y616	311.5	04/28/95	333.7	07/09/96	22.2	FB State Park
Y636	311.5	04/28/95	304	05/27/95	-7.5	Hunts cabin about 1mile from Swedes
Y684	311	04/28/95	295.5	05/09/95	-15.5	Mouth of Powder River
Y685	311	04/28/95	327.9	06/06/96	16.9	DS Steck Park
Y704	288.4	05/03/95	337	05/02/96	48.6	Between Weiser and Huntington
Y708	288.4	05/03/95	325	07/13/96	36.6	3 miles down from Steck, Covewear Ferry
Y720	294.6	05/03/95	294.5	07/02/95	-0.1	1 mile below river
Y740	295.8	05/03/95	284.5	07/15/96	-11.3	Oxbow Reservoir, Brownlee Spillway
Y742	300	05/03/95	327.5	05/23/95	27.5	1/4 mi below Steck Park
Y778	300	05/03/95	335	07/04/95	35.0	RM 335 off Highway 84, Weiser turnoff
Y787	327.8	05/11/95	333.7	08/17/96	5.9	Farewell Bend State Park
Y802	337.8	07/07/95	328	05/11/96	-9.8	Steck Park boat ramp
Y833	337.8	07/21/95	336	06/18/96	-1.8	Upstream 2 mile from FB State Park
Y853	347	07/23/95	347	08/08/95	0.0	Near Weiser, slide area
Y854	347	07/23/95	339.2	06/25/96	-7.8	Cobb Rapids
Y855	347	07/23/95	346.5	07/12/96	-0.5	DS Recreational site
Y859	362.6	07/24/95	331	01/15/96	-31.6	3 miles above Steck Park
Y860	362.6	07/24/95	328	09/04/95	-34.6	RM 328 Steck Park
Y862	362.6	07/24/95	301	06/24/96	-61.6	Hatcomb Memorial Park, Richland, OR
Y879	339	08/03/95	340.2	06/20/96	1.2	Oasis
Y916	350.4	08/06/95	326	09/23/95	-24.4	RM 326
Y921	365.8	08/07/95	324.8	10/28/95	-41.0	3 miles north of Burnt River
Y924	365.8	08/07/95	325.3	03/24/96	-40.5	2.5 miles north of Huntington
Y927	363.9	08/17/95	362	07/02/96	-1.9	10 miles north of Ontario

Table 5. Summary of 1996 tagged catfish recaptured in 1996 in Brownlee Reservoir and the Snake River.

TAGNUM	TAGMIL	DATTAG	RECAPMIL	DATRECAP	DISTANCE	RECAPLOC
942	319.00	04/19/96	287.00	07/06/96	-32.0	Woodhead Park off Old Dock
958	318.00	04/24/96	323.00	05/28/96	5.0	Cemetery
981	314.00	04/24/96	327.80	06/18/96	13.8	Burnt River mouth
985	314.00	04/24/96	316.60	06/23/96	2.6	By cemetery
993	314.00	04/24/96	326.00	06/12/96	12.0	North of Steck Recreational Area
1113	319.00	04/18/96	319.00	05/27/96	0.0	North Rock Creek
1119	320.00	04/18/96	340.00	06/18/96	20.0	"East" of Oasis-- .2/.5 mile north
1125	320.00	04/18/96	320.00	04/18/96	0.0	Idaho side M Creek Ramp
1129	320.00	04/18/96	320.00	06/23/96	0.0	6 to 8 miles north of Burnt River
1152	321.00	04/17/96	333.70	08/21/96	12.7	Farewell Bend State Park (bank)
1198	321.00	04/17/96	340.20	06/15/96	19.2	Oasis
1208	296.00	05/08/96	295.70	08/10/96	-0.3	Powder River,1 mile from mouth
1214	296.00	05/07/96	295.80	09/02/96	-0.2	Hewitt Park
1223	296.00	05/07/96	296.00	06/20/96	0.0	Powder River arm
1229	296.00	05/07/96	321.00	06/23/96	25.0	Near Rock Creek
1259	296.00	05/08/96	295.70	07/29/96	-0.3	Mud Flats Powder River
1262	301.00	05/08/96	295.80	07/15/96	-5.2	Richland, Powder River arm
1274	301.00	05/08/96	304.00	06/10/96	3.0	Swede's Landing
1318	301.00	05/09/96	284.30	07/27/96	-16.7	Oxbow Reservoir, between dam & bridge
1352	301.00	05/09/96	333.00	07/01/96	32.0	1 mile below Farewell Bend
1629	320.00	04/18/96	327.80	05/26/96	7.8	Huntington, OR
1658	319.00	04/18/96	352.00	05/27/96	33.0	Trailer Park South of Weiser
1664	319.00	04/19/96	334.00	06/01/96	15.0	Downstream .5 mile FB State Park
1694	314.00	04/24/96	331.20	11/24/96	17.2	2.5 mile north of Farewell Bend
1726	296.00	05/08/96	296.00	06/15/96	0.0	Powder River,1/4 mile Below Sage Road
1731	296.00	05/08/96	296.00	06/11/96	0.0	Upper Powder River arm
1753	301.00	05/08/96	421.00	07/28/96	120.0	2 miles North of Marsing
1931	301.00	05/09/96	346.50	06/28/96	45.5	5 miles west of Weiser
2002	321.00	04/17/96	295.80	08/23/96	-25.2	Upper end of Powder River arm
2008	321.00	04/17/96	334.50	08/15/96	13.5	Bank across from Farewell Bend Truck
2011	321.00	04/17/96	333.70	06/18/96	12.7	Farewell Bend State Park
2024	321.00	04/17/96	284.00	06/21/96	-37.0	Oxbow Res 100 yds Below Brownlee Dam
2029	320.00	04/18/96	320.00	06/08/96	0.0	Mouth Rock Creek
2053	320.00	04/18/96	291.00	07/01/96	-29.0	Near Halfway OR
2055	320.00	04/18/96	295.80	06/12/96	-24.2	Hewitt Park, Upper Powder River arm
2057	319.00	04/18/96	316.00	06/26/96	-3.0	North 12 miles of Huntington
2059	319.00	04/18/96	319.00	04/24/96	0.0	Morgan Creek
2076	315.00	04/24/96	326.00	06/03/96	11.0	North of Spring Creek
2084	314.00	04/24/96	361.50	08/16/96	47.5	5 miles North of Payette
2086	314.00	04/24/96	324.00	06/19/96	10.0	Four miles DS Burnt River
2096	314.00	04/24/96	296.00	06/16/96	-18.0	West end flats Powder River arm

Table 5 (continued)

TAGNUM	TAGMIL	DATTAG	RECAPMIL	DATRECAP	DISTANCE	RECAPLOC
2100	291.00	05/08/96	304.00	06/16/96	13.0	Swedes Landing
2108	296.00	05/08/96	296.00	07/07/96	0.0	Powder River arm, Richland, OR
2113	296.00	05/07/96	324.80	07/06/96	28.8	3 miles DS river bridge
2119	296.00	05/07/96	295.80	08/15/96	-0.2	Directly in front of Hewitt Park
2126	296.00	05/07/96	295.80	07/15/96	-0.2	Richland, Powder River arm
2127	296.00	05/07/96	295.80	05/31/96	-0.2	Upper end of Powder River arm
2142	296.00	05/08/96	296.00	06/26/96	0.0	Around 1st bend from Hewitt boat dock
2148	296.00	05/08/96	295.80	06/02/96	-0.2	North Powder River @ Richland
2176	300.00	05/08/96	329.00	06/05/96	29.0	Snake 1 mile from Burnt River
2186	300.00	05/08/96	311.00	06/02/96	11.0	Mountain Man Lodge
2196	297.00	05/09/96	328.00	06/06/96	31.0	Steck Park
2304	301.00	05/09/96	304.00	10/11/96	3.0	Swede's Landing
2307	301.00	05/09/96	283.50	07/02/96	-17.5	Below Brownlee Dam
1405	370.00	06/04/96	368.00	06/18/96	-2.0	North of Fruitland Bridge 5 miles
1518	343.00	05/08/96	342.00	06/04/96	-1.0	2 Miles up stream from Oasis
1555	343.00	05/28/96	328.00	06/13/96	-15.0	Burnt River
1808	364.00	05/02/96	366.50	07/20/96	2.5	Mouth of Payette
1816	370.00	05/07/96	370.50	06/21/96	0.5	Ontario State Park
1897	368.00	06/04/96	326.50	06/22/96	-41.5	DS Spring Creek
2202	366.00	05/02/96	327.80	06/01/96	-38.2	Snake River near Huntington
2204	366.00	05/02/96	363.00	05/27/96	-3.0	Half mile DS Car Body Hole
2253	343.00	05/28/96	327.00	07/03/96	-16.0	Spring Recreational Area
2261	344.00	05/30/96	334.00	07/27/96	-10.0	Farewell Bend
2280	364.00	06/03/96	366.50	07/03/96	2.5	5-6 miles up the Payette
2408	335.00	07/02/96	330.70	07/18/96	-4.3	3 miles west of Farewell Bend State Park
2603	339.00	07/03/96	335.70	09/08/96	-3.3	2 miles above Farewell Bend
2706	335.00	07/02/96	341.50	09/19/96	6.5	10 miles west of Weiser
1380	328.00	05/25/96	290.80	09/30/96	-37.2	5 miles downstream from Powder River
1397	328.00	05/26/96	328.00	06/25/96	0.0	US Steck Park
1840	328.00	05/27/96	326.00	06/03/96	-2.0	One mile N Spring Recreational site
1943	328.00	05/25/96	295.80	08/08/96	-32.2	Hewitt Park
1970	328.00	05/26/96	328.00	08/06/96	0.0	Near Steck Park
1997	328.00	05/27/96	420.00	08/03/96	92.0	½ between Marsing & Homedale
2347	328.00	05/25/96	327.70	07/28/96	-0.3	DS Steck Park
2359	328.00	05/26/96	325.00	05/30/96	-3.0	Huntington
2361	328.00	05/26/96	318.00	09/24/96	-10.0	9 miles below Spring Recreational site
1443	358.00	06/12/96	353.50	09/15/96	-4.5	2 mile S of Roberts Access, Weiser
1492	358.00	06/14/96	366.50	07/27/96	8.5	10 miles up Payette River
1493	358.00	06/14/96	366.50	06/25/96	8.5	Payette River, 220 S. 6th St.
2260	343.00	05/30/96	334.00	06/25/96	-9.0	FB State Park
2266	343.00	06/01/96	341.20	07/01/96	-1.8	1 mile up from Oasis

Table 6. Comparison of returns for three values of reward tags placed on catfish in Brownlee Reservoir and the Snake River during 1996.

Reservoir tagged catfish, below river mile 340

Tag Value	Number Tagged	Number Returned
$5.00	269	16
$10.00	247	8
$20.00	250	28

Snake River tagged catfish

Tag Value	Number Tagged	Number Returned
$5.00	192	5
$10.00	89	5
$20.00	92	8

Catfish tagged at Huntington Memorial Day Tournament

Tag Value	Number Tagged	Number Returned
$5.00	57	2
$10.00	81	4
$20.00	78	4

Table 7. Average back-calculated length for each age class of smallmouth bass collected on June 9, 1996 on Swan Falls Reservoir.

Smallmouth Bass

Age	1+	2+	3+	4+	5+	6+
Average length (mm)	90.0	152.4	208.0	251.5	294.2	315.4
Number = 62	62	56	42	30	18	3

Table 8. Average back-calculated length for each age class for redband trout captured on June 14,1996 in Succor Creek Reservoir.

Redband Trout

Age	1+	2+	3+	4+	5+
Average length (mm)	134.1	228.0	312.2	373.3	388.8
Number = 15	15	15	14	14	6

Table 9. Radio tag frequency, length, weight, and tag weight of radio tags surgically implanted in bull trout in Arrowrock Reservoir in 1996.

Tag Number (MHZ)	Fish Length (mm)	Fish Weight (g)	Tag Weight (g)	Tag as % of body weight
150.113	397	515	10	1.9
150.240	575	2150	10	0.5
150.261	534	1375	10	0.7
150.281	547	1850	10	0.5
150.593	526	1850	20	1.1
150.644	470	630	10	1.6
150.663	582	2350	10	0.4
150.700	400	490	4	0.8
150.733	497	1200	10	1.0
150.133	595	2480	10	0.4
151.692	583	2350	12	0.5
150.142	573	2500	10	0.4

Additional bull trout measured and released but not tagged:

Length	Weight
320	255
260	145
322	250
314	220
326	155
300	no weight

Mortalities*:

Length	Weight
595	3150
409	585
364	400
510	1420

*Nets should be checked every 0.5 hour in future sampling to minimize mortalities

Table 10. Tag frequency and dates and locations of individual bull trout located in the Boise River system above Arrowrock Reservoir by radio tracking in 1996.

Bull Trout Radio Tracking

Tag Freq.	Date Located	Location	River Mile
150.113			
	4/19/96	Arrowrock Reservoir	approx. 84
	5/8/96	MFBR at Cherry Gulch	85.7
	5/16/96	MFBR near Badger Ck.	89.7
	5/24/96	MFBR near Badger Ck.	89.7
	6/13/96	MFBR near Badger Ck.	89.7
	6/20/96	MFBR near Badger Ck.	89.7
	6/22/96	MFBR near Badger Ck.	89.7
	7/2/96	MFBR near Badger Ck.	89.7
	7/20/96	MFBR near Badger Ck.	89.7
	7/31/96	MFBR near Badger Ck.	89.7
	9/11/96	MFBR near Badger Ck.	89.7
150.133			
	4/27/96	Arrowrock Reservoir	approx. 84
	5/8/96	MFBR near Willow Ck.	85.2
	5/16/96	MFBR near Willow Ck.	86.6
	6/2/96	MFBR	94.3
	6/13/96	MFBR near Haga Ck.	96.3
	6/20/96	MFBR near Loftus Ck.	99.8
	6/22/96	MFBR near Loftus Ck.	100.3
	7/2/96	MFBR near Roaring Riv.	113.4
	7/20/96	MFBR near Black Warrior Ck.	123.2
	7/31/96	MFBR near Black Warrior Ck.	123.2
	9/11/96	MFBR near Queens River	127
150.142			
	4/27/96	Arrowrock Reservoir	approx. 84
	5/8/96	MFBR near Slide Gulch	88
	5/16/96	MFBR near Badger Ck.	88.6
	5/24/96	MFBR near Badger Ck.	87.8
	6/2/96	MFBR at Badger Ck. Camp	90.6
	6/8/96	MFBR at Badger Ck. Camp	90.8
	6/13/96	MFBR at Badger Ck. Camp	90.6
	6/20/96	MFBR at Badger Ck. Camp	90.6
	6/22/96	MFBR	92.9
	7/31/96	NFBR above Ballentyne Ck.	36.9
	9/11/96	NFBR near Mcleod Ck.	38.7
150.240			
	4/19/96	Arrowrock Reservoir	approx. 84
	4/27/96	MFBR near Willow Ck. Campground.	87.2

Table 10 (continued)

Tag Freq.	Date Located	Location	River Mile
	5/8/96	MFBR near Willow Ck.	87.4
	5/16/96	MFBR	91.1
	6/2/96	MFBR	95.4
	9/11/96	Near mouth of E. Fk. Sheep Ck.	7.2
150.261			
	4/19/96	Arrowrock Reservoir	approx. 84
	4/27/96	MFBR at Willow Ck. Campground.	87.2
	5/8/96	MFBR near Twin Springs	92.4
	5/16/96	MFBR near Sheep Ck.	95.6
	5/24/96	MFBR near Sheep Ck.	94.6
	7/31/96	East Fk. Sheep Ck., Near mouth	approx. 7.2
	9/11/96	Sheep Ck.	approx. 7.2
150.281			
	4/19/96	Arrowrock Reservoir	approx. 84
	4/27/96	Arrowrock Reservoir	approx. 84
	5/8/96	MFBR near Troutdale Campground.	98.7
	5/16/96	MFBR near Alexander Flats	107
	5/24/96	MFBR at Mink Ck.	110
	6/2/96	MFBR near Hot Ck.	119
	6/8/96	MFBR near Hot Ck.	121.2
	6/13/96	MFBR near Hot Ck.	121.3
	6/20/96	MFBR near Queens Riv. mouth	128.5
	6/22/96	Queens River	1
	9/11/96	Queens River near King Ck.	5.4
150.593			
	4/19/96	Arrowrock Reservoir	approx. 84
	5/24/96	MFBR at Pool Ck.	104.4
	7/31/96	NFBR near Johnson Ck. mouth	28.7
	9/11/96	NFBR near Arrastra Ck. mouth	39.9
150.644			
	4/19/96	Arrowrock Reservoir	approx. 84
	4/27/96	Arrowrock Reservoir	approx. 84
	5/8/96	MFBR near Twin Springs	93.2
	5/16/96	MFBR near Troutdale Campground.	98.5
	5/24/96	MFBR near Loftus Ck.	100.1
	6/2/96	MFBR at Hot Spring Bridge	95.4
	7/31/96	NFBR near Blue Jay Ck. mouth	25.1
150.663			

	4/19/96	Arrowrock Reservoir	approx. 84

Table 10 (continued)

Table 10 (continued)

Tag Freq.	Date Located	Location	River Mile
	5/8/96	MFBR near Slide Gulch	88
	5/16/96	MFBR at Badger Ck. Campground.	90.6
	6/8/96	FBR at Loftus Ck.	99.6
	6/13/96	MFBR at Pete Ck.	100.9
	6/20/96	MFBR near Alexander Flat	107
	7/2/96	MFBR near Black Warrior Ck.	121.8
	7/20/96	MFBR below Bald Mountain Ck.	124.2
	7/31/96	MFBR above Bald Mountain Ck.	125.2
150.700.			
	4/19/96	Arrowrock Reservoir	approx. 84
	9/11/96	NFBR above Black Rock Camp	.9
150.733			
	4/19/96	Arrowrock Reservoir	approx. 84
151.692			
	4/27/96	Arrowrock Reservoir	approx. 84
	5/16/96	MFBR at Slide Gulch bridge	87.5
	6/20/96	MFBR	93.7
	6/22/96	MFBR above Willow Ck.	89.4

APPENDICES

Appendix A. Number of fish collected, minimum length, maximum length, mean length, weight, condition factor, standard errors, catch-per-unit-effort (CPUE) and percent of total by number and weight for fish collected during sampling in 1996.

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
ARROWROCK RES													
10/18/96													
Sinking Gill Net													
Bridgelip sucker	12	250	395	340	11	433	40	1.07	0.03	1.44	0.62	14.46	13.84
Bull trout	2	365	400	383	18	445	55	0.79	0.01	0.11	0.05	2.41	1.10
Largescale sucker	56	250	475	372	7	540	28	1.01	0.01	6.28	3.39	67.47	75.10
Mountain whitefish	5	235	340	272	18	188	40	0.89	0.08	0.56	0.10	6.02	2.31
Northern pikeminnow	2	310	500	405	95	705	415	0.93	0.04	0.22	0.16	2.41	3.47
Wild rainbow/redband	1	320	320	320		340		1.04		0.11	0.04	1.20	0.84
Yellow perch	5	240	350	272	20	272	58	1.30	0.04	0.56	0.15	6.02	3.35
Total	83									9.28	4.52		
10/23/96													
Sinking Gill Net													
Bridgelip sucker	1	320	320	320		310		0.95		0.13	0.04	2.63	2.10
Bull trout	6	275	427	387	23	461	63	0.75	0.02	0.38	0.17	15.79	9.37
Hatchery rainbow	4	285	370	330	19	333	47	0.91	0.03	0.50	0.17	10.53	9.02
Largescale sucker	14	250	480	399	18	623	66	0.92	0.02	1.75	1.09	36.84	59.07
Mountain whitefish	9	210	350	288	18	221	42	0.83	0.04	1.13	0.25	23.68	13.46
Northern pikeminnow	2	180	300	240	60	140	100	0.79	0.10	0.25	0.04	5.26	1.90
Westslope cutthroat	1	410	410	410		620		0.90		0.13	0.08	2.63	4.20
Wild rainbow/redband	1	240	240	240		130		0.94		0.13	0.02	2.63	0.88
Total	38									4.38	1.84		
10/25/96													
Sinking Gill Net													
Bridgelip sucker	5	345	395	370	10	489	26	0.97	0.05	0.83	0.41	7.14	5.41
Bull trout	6	290	480	359	31	405	116	0.77	0.02	0.50	0.20	8.57	2.69
Hatchery rainbow	3	315	345	335	10	377	48	0.99	0.07	0.50	0.19	4.29	2.50
Largescale sucker	37	330	560	441	9	889	59	0.99	0.02	6.17	5.48	52.86	72.74
Mountain whitefish	12	240	400	307	14	311	47	1.04	0.02	1.92	0.62	17.14	8.20
Northern pikeminnow	6	345	520	401	25	656	142	0.96	0.03	0.92	0.60	8.57	7.98
Wild rainbow/redband	1	295	295	295		220		0.86		0.17	0.04	1.43	0.49
Total	70									11.00	7.54		
10/26/96													
Sinking Gill Net													
Bull trout	3	334	350	342	5	331	24	0.82	0.04	0.75	0.25	100.00	100.00
Total	3									0.75	0.25		

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
10/30/96													
Sinking Gill Net													
Bull trout	8	395	562	441	19	686	105	0.77	0.01	0.29	0.20	80.00	38.69
Hatchery rainbow	1	670	670	670		3725		1.24		0.07	0.27	10.00	52.56
Wild rainbow/redband	1	406	406	406		620		0.93		0.07	0.04	10.00	8.75
Total	10									0.43	0.51		
11/1/96													
Sinking Gill Net													
Bull trout	11	270	599	438	34	867	200	0.83	0.03	0.55	0.48	100.00	100.00
Total	11									0.55	0.48		
11/2/96													
Sinking Gill Net													
Bull trout	16	335	645	482	25	1140	191	0.87	0.03	0.73	0.83	100.00	100.00
Total	16									0.73	0.83		
11/6/96													
Sinking Gill Net													
Bull trout	2	425	462	444	19	735	10	0.85	0.12	0.10	0.07	100.00	100.00
Total	2									0.10	0.07		
11/8/96													
Sinking Gill Net													
Bull trout	2	456	619	538	82	1608	842	0.92	0.11	0.14	0.23	100.00	100.00
Total	2									0.14	0.23		
11/22/96													
Sinking Gill Net													
Bull trout	16	326	642	443	21	890	184	0.86	0.03	0.80	0.71	80.00	93.22
Hatchery rainbow	4	292	370	329	17	345	35	1.09	0.04	0.20	0.05	20.00	6.78
Total	20									1.00	0.76		
11/24/96													
Sinking Gill Net													
Bull trout	10	320	606	439	26	809	180	0.84	0.04	0.56	0.45	76.92	100.00
Hatchery rainbow	3	326	350	334	8					0.17		23.08	
Total	13									0.72	0.45		
11/27/96													
Sinking Gill Net													
Bull trout	8	350	480	407	16	546	83	0.77	0.02	0.40	0.22	100.00	100.00
Total	8									0.40	0.22		

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
11/30/96													
Sinking Gill Net													
Bull trout	13	325	590	410	20	666	145	0.84	0.03	0.65	0.43	81.25	100.00
Hatchery rainbow	3	160	380	282	65					0.15		18.75	
Total	16									0.80	0.43		
12/6/96													
Sinking Gill Net													
Bull trout	4	338	435	382	25	444	93	0.76	0.01	0.42	0.19	80.00	75.37
Wild rainbow/redband	1	395	395	395		580		0.94		0.11	0.06	20.00	24.63
Total	5									0.53	0.25		
12/17/96													
Sinking Gill Net													
Bull trout	2	420	595	508	88	1575	875	1.05	0.11	0.13	0.21	100.00	100.00
Total	2									0.13	0.21		
12/19/96													
Sinking Gill Net													
Bull trout	6	321	531	389	31	590	213	0.84	0.06	0.35	0.21	100.00	100.00
Total	6									0.35	0.21		
BLACK CANYON RES													
9/4/96													
Electrofishing													
Black crappie	22	40	180	112	9	47	11	1.48	0.19	22.00	0.68	6.55	1.12
Bluegill	3	30	130	70	31	20		0.91		3.00	0.02	0.89	0.03
Bridgelip sucker	38	35	275	104	6	33	13	1.54	0.16	61.00	1.29	11.31	2.12
Brown bullhead	5	175	275	237	18	200	42	1.39	0.04	5.00	1.06	1.49	1.74
Chiselmouth	4	50	235	119	41	140		1.08		13.00	0.39	1.19	0.64
Common carp	7	80	400	192	45	325	170	2.47	0.45	7.00	2.27	2.08	3.74
Hatchery rainbow	1	160	160	160		30		0.73		1.00	0.03	0.30	0.05
Largemouth bass	69	45	280	96	4	36	12	2.08	0.14	69.00	1.77	20.54	2.91
Largescale sucker	43	75	410	214	11	154	25	1.10	0.02	285.00	39.38	12.80	64.83
Northern pikeminnow	21	70	350	169	23	115	34	1.24	0.12	35.00	3.79	6.25	6.24
Pumpkinseed	56	25	135	69	2	17	2	3.84	0.26	86.00	1.15	16.67	1.89
Smallmouth bass	50	55	450	191	12	186	40	1.33	0.05	51.00	8.29	14.88	13.64
Yellow perch	17	20	200	114	15	76	15	1.51	0.19	17.00	0.63	5.06	1.04
Total	336									655.00	60.74		

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
Gill Net													
Black crappie	8	95	285	147	25	103	53	1.98	0.07	4.00	0.39	2.40	0.53
Bridgelip sucker	1	270	270	270		250		1.27		1.50	0.36	0.30	0.49
Brown bullhead	79	125	330	209	4	162	11	1.64	0.04	40.50	6.52	23.72	8.78
Chiselmouth	24	190	290	219	5	101	8	0.92	0.02	12.00	1.22	7.21	1.64
Common carp	17	315	590	460	17	1424	145	1.42	0.05	8.50	12.10	5.11	16.30
Largemouth bass	2	150	240	195	45	145	85	1.72	0.06	1.00	0.14	0.60	0.19
Largescale sucker	66	165	565	386	9	621	37	0.98	0.01	53.50	33.23	19.82	44.76
Northern pikeminnow	107	100	540	260	7	222	28	1.02	0.07	80.50	17.74	32.13	23.90
Pumpkinseed	3	80	120	95	13	28	13	2.38	0.06	1.50	0.04	0.90	0.05
Smallmouth bass	8	270	330	304	7	447	34	1.57	0.04	4.00	1.73	2.40	2.32
Yellow perch	18	130	220	179	5	87	6	1.45	0.03	9.00	0.77	5.41	1.04
Total	333									216.00	74.23		
Trap Net													
Black crappie	3	105	205	140	33	65	43	1.78	0.05	3.00	0.19	42.86	20.76
Largescale sucker	1	405	405	405		620		0.93		1.00	0.60	14.29	66.57
Pumpkinseed	3	80	140	100	20	37	22	2.92	0.00	3.00	0.11	42.86	12.67
Total	7									7.00	0.90		
BROWNLEE RES													
5/28/96													
Electrofishing													
Black crappie	62	78	202	163	4	96	5	2.10	0.03	251.54	24.28	8.62	12.77
Bluegill	238	68	210	128	1	69	2	3.02	0.04	664.15	45.84	33.10	24.11
Bridgelip sucker	33	139	530	255	14	255	50	1.21	0.03	32.81	8.37	4.59	4.40
Channel catfish	1	505	505	505		1380		1.07		0.99	1.37	0.14	0.72
Chiselmouth	1	129	129	129		15		0.70		0.99	0.01	0.14	0.01
Common carp	8	183	800	377	67	1790	1103	1.88	0.05	7.95	14.24	1.11	7.49
Largemouth bass	2	284	291	288	3	385	10	1.62	0.02	1.99	0.77	0.28	0.40
Largescale sucker	14	95	536	295	40	559	165	1.47	0.26	13.92	7.23	1.95	3.80
Northern pikeminnow	1	152	152	152		40		1.14		0.99	0.04	0.14	0.02
Pumpkinseed	2	104	120	112	8	36	6	2.55	0.12	1.99	0.07	0.28	0.04
Smallmouth bass	315	70	380	181	2	102	6	1.37	0.01	773.51	73.32	43.81	38.57
White crappie	15	120	310	212	13	182	32	1.58	0.08	64.63	11.74	2.09	6.18
Yellow perch	27	76	250	186	7	105	10	1.45	0.06	26.84	2.82	3.76	1.49
Total	719									1842.31	190.09		

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
C J STRIKE RES													
5/14/96													
Electrofishing													
Black crappie	20	154	200	177	2	109	8	1.92	0.08	15.19	1.61	3.91	1.40
Bluegill	66	85	225	146	5	110	10	3.05	0.09	50.13	5.49	12.92	4.78
Bridgelip sucker	16	205	280	240	5	172	11	1.22	0.02	12.15	2.05	3.13	1.78
Channel catfish	1	700	700	700		4600		1.34		0.76	3.49	0.20	3.04
Chiselmouth	3	120	360	242	69	293	174	2.70	1.55	2.28	0.69	0.59	0.60
Common carp	6	430	690	623	41	3770	608	1.47	0.07	4.56	17.16	1.17	14.94
Hatchery rainbow	2	210	330	270	60	280	160	1.26	0.04	1.52	0.41	0.39	0.36
Largemouth bass	19	196	555	390	23	1304	233	1.75	0.05	14.43	18.82	3.72	16.38
Largescale sucker	154	70	555	280	7	336	27	1.26	0.03	116.96	39.54	30.14	34.41
Smallmouth bass	143	65	495	205	5	153	13	1.60	0.13	108.60	16.46	27.98	14.33
Warmouth sunfish	1	164	164	164		120		2.72		0.76	0.09	0.20	0.08
White crappie	73	140	272	205	3	164	6	1.86	0.02	55.44	8.85	14.29	7.70
Yellow perch	7	122	175	147	7	41	6	1.29	0.08	5.32	0.23	1.37	0.20
Total	511									388.09	114.90		
Gill Net													
Black crappie	4	178	193	184	3	113	6	1.82	0.02	1.33	0.16	0.60	0.18
Bridgelip sucker	31	190	365	273	7	229	22	1.06	0.04	10.33	2.13	4.67	2.52
Brown bullhead	2	200	297	249	49	290	150	1.71	0.04	0.67	0.19	0.30	0.23
Channel catfish	16	346	658	546	21	2013	236	1.14	0.03	5.33	10.73	2.41	12.68
Chiselmouth	121	144	375	245	4	194	10	1.16	0.01	40.33	7.58	18.22	8.96
Common carp	10	290	655	540	40	2720	451	1.56	0.07	3.33	9.07	1.51	10.72
Hatchery rainbow	42	236	426	319	7	389	23	1.16	0.02	14.00	5.45	6.33	6.44
Largemouth bass	2	175	340	258	83	362	298	1.44	0.24	0.67	0.24	0.30	0.29
Largescale sucker	145	218	620	360	8	643	47	1.12	0.03	48.33	29.22	21.84	34.52
Northern pikeminnow	52	120	586	310	16	574	112	1.17	0.04	17.33	8.08	7.83	9.55
Peamouth	6	251	362	294	21	247	34	0.98	0.08	2.00	0.49	0.90	0.58
Smallmouth bass	19	206	318	261	8	228	21	1.24	0.03	6.33	1.48	2.86	1.75
Warmouth sunfish	1	173	173	173		85		1.64		0.33	0.03	0.15	0.03
White crappie	178	109	285	197	1	152	4	1.91	0.09	59.33	8.25	26.81	9.75
Yellow perch	35	143	304	210	7	131	13	1.30	0.03	11.67	1.52	5.27	1.80
Total	664									221.33	84.63		

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
Trap Net													
Black crappie	9	160	197	177	4	100	11	1.76	0.08	3.00	0.31	19.57	11.75
Chiselmouth	3	170	300	253	42	183	73	1.00	0.14	1.00	0.21	6.52	7.96
Hatchery rainbow	1	422	422	422		600		0.80		0.33	0.20	2.17	7.42
Northern pikeminnow	1	456	456	456		1000		1.05		0.33	0.33	2.17	12.50
Smallmouth bass	1	310	310	310		320		1.07		0.33	0.13	2.17	4.96
White crappie	28	170	225	201	3	143	7	1.72	0.05	9.33	1.42	60.87	53.33
Yellow perch	3	155	173	165	5	50	0	1.15	0.19	1.00	0.06	6.52	2.09
Total	46									15.33	2.67		
DEADWOOD RES													
9/26/96													
Gill Net													
Bull trout	1	305	305	305		270		0.95		0.50	0.14	0.73	0.55
Fall chinook salmon	1	220	220	220		115		1.08		0.50	0.06	0.73	0.24
Gerrard rainbow	1	570	570	570		2300		1.24		0.50	1.15	0.73	4.71
Kokanee salmon	56	85	380	212	6	105	8	1.18	0.17	28.00	2.94	40.88	12.05
Mountain whitefish	56	170	410	313	8	356	23	1.04	0.01	49.00	17.45	40.88	71.52
Rainbow X cutthroat	1	320	320	320		320		0.98		0.50	0.16	0.73	0.66
Westslope cutthroat	3	225	365	277	44	220	91	0.96	0.08	1.50	0.33	2.19	1.35
Wild rainbow/redband	18	160	340	272	16	242	34	1.04	0.04	9.00	2.17	13.14	8.92
Total	137									89.50	24.39		
HORSESHOE BEND MILL POND													
6/26/96													
Electrofishing													
Bluegill	73	38	155	119	3	41	3	2.69	0.45	72.92	3.00	29.32	4.57
Brown bullhead	19	268	380	316	5	486	16	1.60	0.03	18.98	8.74	7.63	13.33
Common carp	1	705	705	705		6000		1.71		1.00	5.99	0.40	9.14
Hatchery rainbow	4	221	272	251	11	160	20	0.99	0.07	4.00	0.68	1.61	1.03
Largemouth bass	77	78	484	218	10	234	38	1.48	0.03	107.88	25.01	30.92	38.17
Largescale sucker	2	400	486	443	43	915	285	1.01	0.03	2.00	1.83	0.80	2.79
Pumpkinseed	73	83	160	110	2	31	2	2.24	0.04	574.37	20.29	29.32	30.96
Total	249									781.14	65.54		

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
Gill Net													
Bluegill	2	115	125	120	5	58	8	3.42	0.86	2.00	0.08	2.44	0.73
Hatchery rainbow	29	193	291	247	4	167	9	1.07	0.02	29.00	4.79	35.37	42.80
Largemouth bass	7	214	260	234	7	189	17	1.47	0.04	7.00	1.33	8.54	11.86
Largescale sucker	2	495	510	503	8	1530	90	1.21	0.13	2.00	3.06	2.44	27.33
Northern pikeminnow	1	258	258	258		166		0.97		1.00	0.17	1.22	1.48
Pumpkinseed	37	87	136	112	2	40	2	2.78	0.08	37.00	1.34	45.12	11.96
Yellow perch	4	194	205	197	3	107	10	1.39	0.09	4.00	0.43	4.88	3.83
Total	82									82.00	11.20		
Trap Net													
Bluegill	18	90	150	126	3	47	3	2.31	0.06	18.00	0.84	31.58	31.73
Largemouth bass	1	114	114	114		20		1.35		1.00	0.02	1.75	0.74
Pumpkinseed	38	89	145	125	2	51	2	2.60	0.06	38.00	1.78	66.67	67.53
Total	57									57.00	2.64		
INDIAN CREEK RES													
4/29/96													
Electrofishing													
Bluegill	17	84	160	116	5	37	6	2.08	0.08	22.53	0.79	28.81	4.38
Channel catfish	2	380	480	430	50	978	347	1.17	0.02	2.65	2.59	3.39	14.36
Largemouth bass	40	84	380	124	7	50	27	1.36	0.04	294.16	14.66	67.80	81.26
Total	59									319.33	18.04		
Trap Net													
Bluegill	4	130	263	185	28	204	127	2.11	0.41	2.00	0.43	80.00	97.39
Largemouth bass	1	125	125	125		8		0.41		0.50	0.01	20.00	2.61
Total	5									2.50	0.44		
LAKE LOWELL													
5/20/96													
Electrofishing													
Bluegill	2	125	140	133	8	55	15	2.30	0.25	2.00	0.11	1.77	0.32
Brown bullhead	2	140	285	213	73	178	142	1.35	0.04	2.00	0.36	1.77	1.05
Chiselmouth	1	185	185	185		54		0.85		1.00	0.05	0.88	0.16
Common carp	13	120	590	377	50	1026	231	1.32	0.07	13.00	13.12	11.50	38.29
Largemouth bass	17	70	205	118	8	27	6	1.35	0.08	17.00	0.46	15.04	1.33
Largescale sucker	23	110	520	412	26	800	79	0.96	0.03	23.00	18.14	20.35	52.95
Smallmouth bass	33	70	230	135	8	38	7	1.10	0.04	33.00	1.30	29.20	3.81

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
White crappie	2	115	294	205	90	195	185	1.08	0.42	2.00	0.39	1.77	1.14
Yellow perch	20	95	127	112	2	16	1	1.14	0.06	20.00	0.33	17.70	0.95
Total	113									113.00	34.26		
Gill Net													
Black crappie	2	100	130	115	15	35		1.59		0.50	0.01	2.11	0.01
Channel catfish	28	175	650	438	26	1047	165	0.88	0.03	8.00	8.38	29.47	14.08
Common carp	25	160	535	388	29	928	126	1.17	0.06	18.50	17.31	26.32	29.08
Hatchery rainbow	1	270	270	270		200		1.02		0.25	0.05	1.05	0.08
Kokanee salmon	1	325	325	325		425		1.24		0.25	0.11	1.05	0.18
Largemouth bass	2	285	285	285	0	313	13	1.35	0.05	0.50	0.16	2.11	0.26
Largescale sucker	22	350	520	466	10	905	46	0.88	0.02	35.00	32.73	23.16	55.01
Northern pikeminnow	11	185	355	257	15	163	41	0.76	0.07	4.00	0.62	11.58	1.04
Smallmouth bass	1	235	235	235		220		1.70		0.50	0.09	1.05	0.16
Yellow perch	2	215	220	218	3	110	0	1.07	0.04	0.50	0.06	2.11	0.09
Total	95									68.00	59.50		
Trap Net													
Bluegill	1	150	150	150		100		2.96		0.25	0.03	0.97	0.09
Brown bullhead	12	125	360	287	22	359	53	1.28	0.06	3.00	1.08	11.65	3.86
Common carp	36	420	675	502	9	1598	113	1.21	0.02	9.00	14.39	34.95	51.59
Largescale sucker	51	425	580	478	4	977	22	0.90	0.02	12.75	12.35	49.51	44.28
Northern pikeminnow	3	172	190	182	5	70	15	1.21	0.38	0.75	0.05	2.91	0.18
Total	103									25.75	27.90		
7/10/96													
Electrofishing													
Bluegill	9	65	145	90	10	70	10	2.61	0.64	8.96	0.14	3.70	0.48
Channel catfish	5	150	660	525	95	1798	527	0.97	0.08	4.98	8.95	2.06	30.80
Common carp	6	180	495	319	58	570	221	1.40	0.14	5.97	3.41	2.47	11.72
Largemouth bass	23	35	280	120	12	62	20	1.38	0.04	22.90	0.98	9.47	3.37
Largescale sucker	47	135	525	238	18	279	57	1.10	0.04	46.79	10.75	19.34	36.99
Smallmouth bass	135	75	350	121	4	79	15	1.43	0.04	134.41	4.40	55.56	15.15
White crappie	1	125	125	125						1.00		0.41	
Yellow perch	17	45	145	118	7	29	2	1.38	0.11	16.93	0.43	7.00	1.48
Total	243									241.94	29.06		

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
8/8/96													
Electrofishing													
Black crappie	1	166	166	166		60		1.31		1.00	0.06	0.13	0.10
Bluegill	75	63	161	93	2	26	3	1.97	0.11	75.00	1.20	9.75	1.93
Brown bullhead	5	120	286	212	30	156	54	1.38	0.09	5.00	0.78	0.65	1.25
Channel catfish	1	119	119	119		12		0.71		1.00	0.01	0.13	0.02
Chiselmouth	1	190	190	190		58		0.85		1.00	0.06	0.13	0.09
Common carp	19	195	580	388	29	884	152	1.26	0.05	19.00	16.70	2.47	26.76
Largemouth bass	264	40	326	121	3	69	9	1.31	0.03	264.00	9.83	34.33	15.76
Largescale sucker	122	60	530	233	10	441	69	1.02	0.02	122.00	24.27	15.86	38.89
Pumpkinseed	4	85	96	91	2	25		3.21		4.00	0.07	0.52	0.12
Smallmouth bass	257	40	446	118	3	110	34	1.34	0.03	257.00	9.18	33.42	14.71
White crappie	3	50	80	68	9					3.00		0.39	
Yellow perch	17	62	170	106	11	40	0	1.12	0.09	17.00	0.24	2.21	0.38
Total	769									769.00	62.40		
9/18/96													
Electrofishing													
Bluegill	22	65	120	99	4	50	0	2.89	0.00	17.60	0.16	4.48	0.10
Channel catfish	2	575	575	575	0	1750	0	0.92	0.00	1.60	2.80	0.41	1.78
Common carp	58	240	535	411	13	1024	71	1.30	0.02	46.40	47.54	11.81	30.28
Fall chinook salmon	1	375	375	375		600		1.14		0.80	0.48	0.20	0.31
Largemouth bass	96	60	215	116	5	83	6	1.46	0.09	76.80	1.89	19.55	1.20
Largescale sucker	192	75	535	364	11	862	33	0.96	0.01	153.60	101.07	39.10	64.39
Northern pikeminnow	8	205	260	223	9	105	2	1.00	0.08	6.40	0.67	1.63	0.43
Smallmouth bass	102	60	180	122	3	46	3	1.73	0.10	81.60	2.36	20.77	1.50
Yellow perch	10	70	85	78	2					8.00		2.04	
Total	491									392.80	156.97		
LUCKY PEAK RES													
7/15/96													
Set Sinking Gill Net													
Bridgelip sucker	2	350	350	350	0	495	0	1.15	0.00	1.00	0.50	0.84	1.85
Chiselmouth	17	192	306	250	10	187	19	1.15	0.04	11.00	2.06	7.11	7.71
Fall chinook salmon	2	281	281	281	0	238	0	1.07	0.00	0.50	0.12	0.84	0.45
Largescale sucker	78	170	460	322	8	394	25	1.05	0.01	29.75	11.72	32.64	43.88
Mountain whitefish	9	303	348	324	5	334	15	0.99	0.04	3.25	1.08	3.77	4.06
Northern pikeminnow	116	173	400	284	6	260	12	1.05	0.03	40.50	10.51	48.54	39.36

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
Redside shiner	1	140	140	140		102		3.72		0.75	0.08	0.42	0.29
Smallmouth bass	6	233	264	244	6	217	17	1.48	0.02	1.50	0.33	2.51	1.22
Yellow perch	8	198	236	214	6	159	15	1.61	0.04	2.00	0.32	3.35	1.19
Total	239									90.25	26.71		
MOUNTAIN HOME RES													
5/22/96													
Electrofishing													
Bluegill	2	45	71	58	13					1.90		1.44	
Hatchery rainbow	62	99	418	254	13	341	31	1.17	0.02	59.05	15.80	44.60	99.70
Largemouth bass	70	77	160	115	2	50		1.22		66.67	0.05	50.36	0.30
Redside shiner	2	85	90	88	3					1.90		1.44	
Speckled dace	1	48	48	48						0.95		0.72	
Sucker spp.	2	223	225	224	1					1.90		1.44	
Total	139									132.38	15.84		
7/30/96													
Electrofishing													
Bluegill	1	120	120	120		40		2.31		1.03	0.04	1.49	0.18
Hatchery rainbow	55	198	436	316	10	388	34	1.09	0.02	56.70	22.02	82.09	96.74
Largemouth bass	11	71	220	157	13	76	12	1.36	0.03	11.34	0.70	16.42	3.08
Total	67									69.07	22.76		
9/24/96													
Electrofishing													
Bluegill	11	85	140	115	6					9.17		7.80	
Hatchery rainbow	44	220	450	310	10	363	38	1.07	0.03	36.67	13.29	31.21	90.27
Largemouth bass	71	70	345	122	6	180	64	1.13	0.07	59.17	1.43	50.35	9.73
Redside shiner	13	70	110	90	3					10.83		9.22	
Sucker spp.	2	145	175	160	15					1.67		1.42	
Total	141									117.50	14.73		
PADDOCK RES													
5/23/96													
Electrofishing													
Black crappie	1	256	256	256		344		2.05		2.86	0.98	1.03	1.18
Largemouth bass	96	205	317	264	2	299	6	1.62	0.03	274.29	82.13	98.97	98.82
Total	97									277.14	83.11		

Appendix A. (continued)

Water / Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
SUCCOR CREEK RES													
6/14/96													
Gill Net													
Bridgelip sucker	66	154	305	232	4	154	11	1.14	0.02	34.00	4.93	62.86	51.90
Redside shiner	27	122	162	139	2	40	1	1.47	0.03	14.00	0.58	25.71	6.13
Wild rainbow/redband	12	160	425	376	20	662	68	1.14	0.03	6.00	3.99	11.43	41.96
Total	105									54.00	9.51		
Trap Net													
Bridgelip sucker	32	135	241	188	5	92	11	1.22	0.05	16.00	1.31	50.79	45.76
Redside shiner	28	115	155	135	2	42	2	1.74	0.06	14.00	0.55	44.44	19.38
Wild rainbow/redband	3	325	425	380	29	676	183	1.15	0.10	1.50	1.00	4.76	34.86
Total	63									31.50	2.86		
SWAN FALLS RESERVOIR													
6/9/96													
Electrofishing													
Brown bullhead	3	125	245	203	39	180	81	1.55	0.27	3.40	0.61	1.31	0.57
Common carp	7	555	670	606	16	3150	321	1.40	0.06	7.92	24.62	3.06	22.99
Hatchery rainbow	3	150	330	215	58	143	88	1.26	0.27	3.40	0.49	1.31	0.45
Largescale sucker	56	165	575	402	13	831	66	1.13	0.02	63.40	51.58	24.45	48.15
Northern pikeminnow	4	215	511	365	75	670	313	1.04	0.06	4.53	3.03	1.75	2.83
Peamouth	2	240	290	265	25	205	45	1.09	0.07	2.26	0.46	0.87	0.43
Smallmouth bass	154	64	372	196	6	170	11	1.55	0.03	174.35	26.33	67.25	24.58
Total	229									259.26	107.12		
Gill Net													
Brown bullhead	1	253	253	253		330		2.04		0.50	0.17	5.00	1.63
Channel catfish	2	548	575	562	14	1975	225	1.11	0.05	1.00	1.98	10.00	19.49
Common carp	3	570	617	591	14	2633	285	1.27	0.06	1.50	4.10	15.00	40.46
Largescale sucker	5	481	575	507	18	1335	199	1.00	0.07	2.50	3.09	25.00	30.49
Northern pikeminnow	6	190	350	259	24	179	46	0.93	0.03	3.00	0.54	30.00	5.30
Peamouth	2	279	325	302	23	210	70	0.73	0.09	1.00	0.21	10.00	2.07
Smallmouth bass	1	196	196	196		100		1.33		0.50	0.06	5.00	0.55
Total	20									10.00	10.13		
Trap Net													
Black crappie	4	168	202	181	7	100	12	1.71	0.27	2.00	0.20	22.22	2.50
Bridgelip sucker	1	360	360	360		430		0.92		0.50	0.22	5.56	2.69

Appendix A. (continued)

Water	Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
	Largescale sucker	10	488	650	540	17	1308	156	0.81	0.04	5.00	7.27	55.56	90.96
	Smallmouth bass	2	200	309	255	54	100		1.25		1.00	0.24	11.11	2.98
	White crappie	1	215	215	215		140		1.41		0.50	0.07	5.56	0.88
	Total	18									9.00	8.00		

Appendix B. Length frequency for all species captured in 1996, all gear types combined.

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
ARROWROCK RES											
	10/18/96										
		Bridgelip sucker									
			25	0	0	0	0	1	0	1	
			31	0	0	0	0	3	0	3	
			33	0	0	0	0	1	0	1	
			34	0	0	0	0	2	0	2	
			36	0	0	0	0	2	0	2	
			37	0	0	0	0	1	0	1	
			38	0	0	0	0	1	0	1	
			39	0	0	0	0	1	0	1	
		Bull trout									
			36	0	0	0	0	1	0	1	
			40	0	0	0	0	1	0	1	
		Largescale sucker									
			25	0	0	0	0	1	0	1	
			26	0	0	0	0	1	0	1	
			28	0	0	0	0	2	0	2	
			29	0	0	0	0	2	0	2	
			31	0	0	0	0	2	0	2	
			33	0	0	0	0	2	0	2	
			34	0	0	0	0	2	0	2	
			35	0	0	0	0	5	0	5	
			36	0	0	0	0	7	0	7	
			37	0	0	0	0	9	0	9	
			38	0	0	0	0	7	0	7	
			39	0	0	0	0	2	0	2	
			40	0	0	0	0	2	0	2	
			41	0	0	0	0	3	0	3	
			42	0	0	0	0	2	0	2	
			43	0	0	0	0	1	0	1	
			44	0	0	0	0	3	0	3	
			46	0	0	0	0	1	0	1	
			47	0	0	0	0	2	0	2	
		Mountain whitefish									
			23	0	0	0	0	1	0	1	77.17
			25	0	0	0	0	1	0	1	76.74
			26	0	0	0	0	1	0	1	90.84
			27	0	0	0	0	1	0	1	119.71
			34	0	0	0	0	1	0	1	77.95
		Northern pikeminnow									
			31	0	0	0	0	1	0	1	
			50	0	0	0	0	1	0	1	
		Wild rainbow/redband									
			32	0	0	0	0	1	0	1	92.16
		Yellow perch									
			24	0	0	0	0	1	0	1	94.77
			25	0	0	0	0	2	0	2	86.78
			26	0	0	0	0	1	0	1	94.16
			35	0	0	0	0	1	0	1	73.73
	10/23/96										

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
		Bridgelip sucker									
			32	0	0	0	0	1	0	1	
		Bull trout									
			27	0	0	0	0	1	0	1	
			39	0	0	0	0	1	0	1	
			40	0	0	0	0	2	0	2	
			41	0	0	0	0	1	0	1	
			42	0	0	0	0	1	0	1	
		Hatchery rainbow									
			28	0	0	0	0	1	0	1	85.37
			31	0	0	0	0	1	0	1	82.53
			35	0	0	0	0	1	0	1	84.19
			37	0	0	0	0	1	0	1	70.88
		Largescale sucker									
			25	0	0	0	0	1	0	1	
			27	0	0	0	0	1	0	1	
			38	0	0	0	0	2	0	2	
			39	0	0	0	0	1	0	1	
			40	0	0	0	0	1	0	1	
			41	0	0	0	0	2	0	2	
			42	0	0	0	0	1	0	1	
			44	0	0	0	0	2	0	2	
			45	0	0	0	0	2	0	2	
			48	0	0	0	0	1	0	1	
		Mountain whitefish									
			21	0	0	0	0	1	0	1	81.43
			22	0	0	0	0	1	0	1	88.06
			23	0	0	0	0	1	0	1	78.26
			27	0	0	0	0	1	0	1	76.61
			29	0	0	0	0	1	0	1	77.43
			33	0	0	0	0	1	0	1	99.10
			34	0	0	0	0	2	0	2	77.32
			35	0	0	0	0	1	0	1	89.80
		Northern pikeminnow									
			18	0	0	0	0	1	0	1	
			30	0	0	0	0	1	0	1	
		Westslope cutthroat									
			41	0	0	0	0	1	0	1	
		Wild rainbow/redband									
			24	0	0	0	0	1	0	1	85.91
	10/25/96										
		Bridgelip sucker									
			34	0	0	0	0	1	0	1	
			35	0	0	0	0	1	0	1	
			37	0	0	0	0	1	0	1	
			39	0	0	0	0	2	0	2	
		Bull trout									
			29	0	0	0	0	1	0	1	
			30	0	0	0	0	1	0	1	
			31	0	0	0	0	1	0	1	
			34	0	0	0	0	1	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			42	0	0	0	0	1	0	1	
			48	0	0	0	0	1	0	1	
		Hatchery rainbow									
			31	0	0	0	0	1	0	1	85.38
			34	0	0	0	0	2	0	2	89.10
		Largescale sucker									
			33	0	0	0	0	1	0	1	
			36	0	0	0	0	2	0	2	
			37	0	0	0	0	1	0	1	
			38	0	0	0	0	2	0	2	
			39	0	0	0	0	3	0	3	
			40	0	0	0	0	3	0	3	
			41	0	0	0	0	2	0	2	
			42	0	0	0	0	2	0	2	
			43	0	0	0	0	1	0	1	
			44	0	0	0	0	4	0	4	
			45	0	0	0	0	1	0	1	
			46	0	0	0	0	2	0	2	
			47	0	0	0	0	2	0	2	
			48	0	0	0	0	3	0	3	
			49	0	0	0	0	3	0	3	
			50	0	0	0	0	1	0	1	
			51	0	0	0	0	1	0	1	
			52	0	0	0	0	1	0	1	
			54	0	0	0	0	1	0	1	
			56	0	0	0	0	1	0	1	
		Mountain whitefish									
			24	0	0	0	0	2	0	2	108.59
			26	0	0	0	0	2	0	2	105.03
			29	0	0	0	0	1	0	1	101.88
			31	0	0	0	0	1	0	1	96.52
			33	0	0	0	0	3	0	3	97.87
			34	0	0	0	0	2	0	2	113.15
			40	0	0	0	0	1	0	1	101.32
		Northern pikeminnow									
			34	0	0	0	0	1	0	1	
			37	0	0	0	0	2	0	2	
			39	0	0	0	0	1	0	1	
			40	0	0	0	0	1	0	1	
			52	0	0	0	0	1	0	1	
		Wild rainbow/redband									
			29	0	0	0	0	1	0	1	76.72
	10/26/96										
		Bull trout									
			33	0	0	0	0	1	0	1	
			34	0	0	0	0	1	0	1	
			35	0	0	0	0	1	0	1	
	10/30/96										
		Bull trout									
			39	0	0	0	0	1	0	1	
			40	0	0	0	0	1	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			41	0	0	0	0	1	0	1	
			42	0	0	0	0	2	0	2	
			44	0	0	0	0	1	0	1	
			47	0	0	0	0	1	0	1	
			56	0	0	0	0	1	0	1	
		Hatchery rainbow									
			67	0	0	0	0	1	0	1	102.32
		Wild rainbow/redband									
			40	0	0	0	0	1	0	1	80.39
	11/1/96										
		Bull trout									
			27	0	0	0	0	1	0	1	
			30	0	0	0	0	1	0	1	
			37	0	0	0	0	1	0	1	
			38	0	0	0	0	2	0	2	
			42	0	0	0	0	1	0	1	
			45	0	0	0	0	1	0	1	
			47	0	0	0	0	1	0	1	
			58	0	0	0	0	2	0	2	
			59	0	0	0	0	1	0	1	
	11/2/96										
		Bull trout									
			33	0	0	0	0	1	0	1	
			35	0	0	0	0	1	0	1	
			38	0	0	0	0	1	0	1	
			39	0	0	0	0	1	0	1	
			40	0	0	0	0	2	0	2	
			43	0	0	0	0	1	0	1	
			44	0	0	0	0	1	0	1	
			51	0	0	0	0	1	0	1	
			52	0	0	0	0	1	0	1	
			55	0	0	0	0	2	0	2	
			56	0	0	0	0	1	0	1	
			57	0	0	0	0	1	0	1	
			63	0	0	0	0	1	0	1	
			64	0	0	0	0	1	0	1	
	11/6/96										
		Bull trout									
			42	0	0	0	0	1	0	1	
			46	0	0	0	0	1	0	1	
	11/8/96										
		Bull trout									
			45	0	0	0	0	1	0	1	
			61	0	0	0	0	1	0	1	
	11/22/96										
		Bull trout									
			32	0	0	0	0	1	0	1	
			35	0	0	0	0	1	0	1	
			37	0	0	0	0	1	0	1	
			39	0	0	0	0	2	0	2	
			40	0	0	0	0	2	0	2	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			42	0	0	0	0	3	0	3	
			45	0	0	0	0	1	0	1	
			46	0	0	0	0	1	0	1	
			48	0	0	0	0	1	0	1	
			56	0	0	0	0	1	0	1	
			57	0	0	0	0	1	0	1	
			64	0	0	0	0	1	0	1	
		Hatchery rainbow									
			29	0	0	0	0	1	0	1	100.79
			31	0	0	0	0	1	0	1	101.03
			34	0	0	0	0	1	0	1	89.85
			37	0	0	0	0	1	0	1	
	11/24/96										
		Bull trout									
			32	0	0	0	0	1	0	1	
			38	0	0	0	0	2	0	2	
			42	0	0	0	0	3	0	3	
			44	0	0	0	0	2	0	2	
			53	0	0	0	0	1	0	1	
			60	0	0	0	0	1	0	1	
		Hatchery rainbow									
			32	0	0	0	0	2	0	2	
			35	0	0	0	0	1	0	1	
	11/27/96										
		Bull trout									
			35	0	0	0	0	2	0	2	
			37	0	0	0	0	1	0	1	
			39	0	0	0	0	1	0	1	
			41	0	0	0	0	1	0	1	
			42	0	0	0	0	1	0	1	
			45	0	0	0	0	1	0	1	
			48	0	0	0	0	1	0	1	
	11/30/96										
		Bull trout									
			32	0	0	0	0	1	0	1	
			33	0	0	0	0	1	0	1	
			36	0	0	0	0	3	0	3	
			37	0	0	0	0	1	0	1	
			40	0	0	0	0	1	0	1	
			41	0	0	0	0	2	0	2	
			45	0	0	0	0	1	0	1	
			46	0	0	0	0	1	0	1	
			48	0	0	0	0	1	0	1	
			59	0	0	0	0	1	0	1	
		Hatchery rainbow									
			16	0	0	0	0	1	0	1	
			30	0	0	0	0	1	0	1	
			38	0	0	0	0	1	0	1	
	12/6/96										
		Bull trout									
			33	0	0	0	0	1	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			34	0	0	0	0	1	0	1	
			41	0	0	0	0	1	0	1	
			43	0	0	0	0	1	0	1	
		Wild rainbow/redband									
			39	0	0	0	0	1	0	1	81.88
	12/17/96										
		Bull trout									
			42	0	0	0	0	1	0	1	
			59	0	0	0	0	1	0	1	
	12/19/96										
		Bull trout									
			32	0	0	0	0	1	0	1	
			33	0	0	0	0	1	0	1	
			36	0	0	0	0	1	0	1	
			38	0	0	0	0	1	0	1	
			40	0	0	0	0	1	0	1	
			53	0	0	0	0	1	0	1	
BLACK CANYON RES											
	9/4/96										
		Black crappie									
			4	0	3	0	0	0	0	3	
			8	0	1	0	0	0	0	1	233.46
			9	0	3	1	0	0	0	4	201.16
			10	0	4	4	0	0	1	9	148.95
			11	0	5	0	0	0	1	6	117.03
			12	0	1	0	0	0	0	1	161.14
			16	0	1	0	0	0	0	1	71.41
			17	0	1	0	0	0	0	1	129.24
			18	0	3	1	0	0	0	4	105.26
			20	0	0	0	0	0	1	1	115.15
			21	0	0	1	0	0	0	1	104.74
			28	0	0	1	0	0	0	1	113.48
		Bluegill									
			3	0	1	0	0	0	0	1	
			5	0	1	0	0	0	0	1	
			13	0	1	0	0	0	0	1	46.26
		Bridgelip sucker									
			3	0	1	0	0	0	0	1	
			5	0	4	0	0	0	0	4	
			6	0	2	0	0	0	0	2	
			7	0	3	0	0	0	0	3	
			8	0	1	0	0	0	0	1	
			9	0	2	0	0	0	0	2	
			10	0	4	0	0	0	0	4	
			11	0	10	0	0	0	0	10	
			12	0	6	0	0	0	0	6	
			13	0	3	0	0	0	0	3	
			15	0	1	0	0	0	0	1	
			27	0	1	1	0	0	0	2	
		Brown bullhead									
			12	0	0	1	0	0	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			13	0	0	1	0	0	0	1	
			15	0	0	2	0	0	0	2	
			16	0	0	3	0	0	0	3	
			17	0	1	7	0	0	0	8	
			18	0	0	6	0	0	0	6	
			19	0	0	13	0	0	0	13	
			20	0	0	9	0	0	0	9	
			21	0	0	10	0	0	0	10	
			22	0	1	12	0	0	0	13	
			23	0	0	1	0	0	0	1	
			24	0	1	2	0	0	0	3	
			25	0	0	2	0	0	0	2	
			26	0	0	2	0	0	0	2	
			27	0	2	1	0	0	0	3	
			28	0	0	1	0	0	0	1	
			29	0	0	4	0	0	0	4	
			31	0	0	1	0	0	0	1	
			33	0	0	1	0	0	0	1	
		Chiselmouth									
			5	0	1	0	0	0	0	1	
			7	0	1	0	0	0	0	1	
			12	0	1	0	0	0	0	1	
			19	0	0	5	0	0	0	5	
			20	0	0	4	0	0	0	4	
			21	0	0	3	0	0	0	3	
			22	0	0	5	0	0	0	5	
			23	0	1	3	0	0	0	4	
			24	0	0	1	0	0	0	1	
			25	0	0	1	0	0	0	1	
			26	0	0	1	0	0	0	1	
			29	0	0	1	0	0	0	1	
		Common carp									
			8	0	1	0	0	0	0	1	
			9	0	1	0	0	0	0	1	
			10	0	1	0	0	0	0	1	
			18	0	1	0	0	0	0	1	
			20	0	1	0	0	0	0	1	
			29	0	1	0	0	0	0	1	
			31	0	0	1	0	0	0	1	
			33	0	0	1	0	0	0	1	
			40	0	1	0	0	0	0	1	
			42	0	0	1	0	0	0	1	
			44	0	0	4	0	0	0	4	
			45	0	0	1	0	0	0	1	
			46	0	0	4	0	0	0	4	
			48	0	0	1	0	0	0	1	
			52	0	0	1	0	0	0	1	
			54	0	0	1	0	0	0	1	
			56	0	0	1	0	0	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			59	0	0	1	0	0	0	1	
		Hatchery rainbow									
			16	0	1	0	0	0	0	1	69.62
		Largemouth bass									
			4	0	1	0	0	0	0	1	
			5	0	2	0	0	0	0	2	522.98
			6	0	4	0	0	0	0	4	440.25
			7	0	7	0	0	0	0	7	129.63
			8	0	13	0	0	0	0	13	207.57
			9	0	20	0	0	0	0	20	152.06
			10	0	12	0	0	0	0	12	163.01
			11	0	6	0	0	0	0	6	178.16
			14	0	1	0	0	0	0	1	108.15
			15	0	1	1	0	0	0	2	130.21
			24	0	0	1	0	0	0	1	121.58
			27	0	1	0	0	0	0	1	123.43
			28	0	1	0	0	0	0	1	116.38
		Largescale sucker									
			7	0	1	0	0	0	0	1	
			10	0	1	0	0	0	0	1	
			12	0	2	0	0	0	0	2	
			15	0	1	0	0	0	0	1	
			16	0	1	1	0	0	0	2	
			17	0	3	3	0	0	0	6	
			18	0	6	0	0	0	0	6	
			19	0	4	0	0	0	0	4	
			20	0	3	0	0	0	0	3	
			21	0	8	0	0	0	0	8	
			22	0	4	0	0	0	0	4	
			23	0	1	0	0	0	0	1	
			24	0	1	0	0	0	0	1	
			27	0	1	0	0	0	0	1	
			28	0	0	2	0	0	0	2	
			29	0	1	1	0	0	0	2	
			32	0	1	1	0	0	0	2	
			33	0	0	1	0	0	0	1	
			34	0	0	1	0	0	0	1	
			35	0	0	4	0	0	0	4	
			37	0	2	5	0	0	0	7	
			38	0	0	5	0	0	0	5	
			39	0	1	10	0	0	0	11	
			40	0	0	6	0	0	1	7	
			41	0	1	7	0	0	0	8	
			42	0	0	3	0	0	0	3	
			43	0	0	4	0	0	0	4	
			44	0	0	5	0	0	0	5	
			45	0	0	2	0	0	0	2	
			46	0	0	3	0	0	0	3	
			47	0	0	1	0	0	0	1	
			56	0	0	1	0	0	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
		Northern pikeminnow									
			7	0	1	0	0	0	0	1	
			8	0	2	0	0	0	0	2	
			9	0	2	0	0	0	0	2	
			10	0	4	1	0	0	0	5	
			11	0	2	0	0	0	0	2	
			12	0	2	1	0	0	0	3	
			14	0	2	0	0	0	0	2	
			16	0	0	5	0	0	0	5	
			17	0	0	6	0	0	0	6	
			18	0	0	8	0	0	0	8	
			19	0	0	3	0	0	0	3	
			20	0	0	3	0	0	0	3	
			21	0	0	3	0	0	0	3	
			22	0	0	4	0	0	0	4	
			23	0	0	4	0	0	0	4	
			24	0	0	2	0	0	0	2	
			25	0	0	6	0	0	0	6	
			26	0	0	11	0	0	0	11	
			27	0	0	15	0	0	0	15	
			28	0	0	8	0	0	0	8	
			29	0	0	7	0	0	0	7	
			30	0	1	3	0	0	0	4	
			31	0	1	5	0	0	0	6	
			32	0	1	3	0	0	0	4	
			33	0	1	0	0	0	0	1	
			34	0	1	2	0	0	0	3	
			35	0	1	1	0	0	0	2	
			45	0	0	2	0	0	0	2	
			46	0	0	1	0	0	0	1	
			51	0	0	1	0	0	0	1	
			54	0	0	2	0	0	0	2	
		Pumpkinseed									
			2	0	1	0	0	0	0	1	
			4	0	3	0	0	0	0	3	
			5	0	9	0	0	0	0	9	
			6	0	16	0	0	0	0	16	
			7	0	15	0	0	0	0	15	
			8	0	6	2	0	0	2	10	
			9	0	3	0	0	0	0	3	
			10	0	1	0	0	0	0	1	
			11	0	1	0	0	0	0	1	
			12	0	0	1	0	0	0	1	
			13	0	1	0	0	0	0	1	
			14	0	0	0	0	0	1	1	
		Smallmouth bass									
			5	0	1	0	0	0	0	1	
			9	0	1	0	0	0	0	1	
			10	0	2	0	0	0	0	2	70.74
			11	0	4	0	0	0	0	4	131.10

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			12	0	5	0	0	0	0	5	126.16
			13	0	3	0	0	0	0	3	107.16
			14	0	6	0	0	0	0	6	106.82
			15	0	2	0	0	0	0	2	54.07
			16	0	1	0	0	0	0	1	88.91
			17	0	4	0	0	0	0	4	75.72
			18	0	1	0	0	0	0	1	49.57
			19	0	1	0	0	0	0	1	38.82
			20	0	2	0	0	0	0	2	108.35
			22	0	2	0	0	0	0	2	81.48
			23	0	1	0	0	0	0	1	93.77
			24	0	1	0	0	0	0	1	82.33
			25	0	1	0	0	0	0	1	99.93
			26	0	4	0	0	0	0	4	106.50
			27	0	1	1	0	0	0	2	102.34
			28	0	1	0	0	0	0	1	94.36
			29	0	0	2	0	0	0	2	104.11
			30	0	1	2	0	0	0	3	105.40
			32	0	1	2	0	0	0	3	111.83
			33	0	1	1	0	0	0	2	106.98
			37	0	1	0	0	0	0	1	104.22
			40	0	1	0	0	0	0	1	97.26
			45	0	1	0	0	0	0	1	94.26
		Yellow perch									
			2	0	1	0	0	0	0	1	
			5	0	1	0	0	0	0	1	
			6	0	5	0	0	0	0	5	
			7	0	2	0	0	0	0	2	240.20
			11	0	1	0	0	0	0	1	
			13	0	0	1	0	0	0	1	90.34
			14	0	1	0	0	0	0	1	101.59
			16	0	0	2	0	0	0	2	120.12
			17	0	1	4	0	0	0	5	110.15
			18	0	1	5	0	0	0	6	104.66
			19	0	3	4	0	0	0	7	100.63
			20	0	1	1	0	0	0	2	105.61
			22	0	0	1	0	0	0	1	95.80
BROWNLEE RES											
	5/28/96										
		Black crappie									
			7	0	1	0	0	0	0	1	194.51
			8	0	1	0	0	0	0	1	250.22
			10	0	3	0	0	0	0	3	156.62
			11	0	1	0	0	0	0	1	236.74
			12	0	2	0	0	0	0	2	172.89
			13	0	2	0	0	0	0	2	147.48
			14	0	3	0	0	0	0	3	153.96
			15	0	9	0	0	0	0	9	158.61
			16	0	12	0	0	0	0	12	152.53
			17	0	8	0	0	0	0	8	147.46

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			18	0	12	0	0	0	0	12	139.22
			19	0	7	0	0	0	0	7	135.73
			20	0	1	0	0	0	0	1	125.01
		Bluegill									
			6	0	1	0	0	0	0	1	396.67
			7	0	4	0	0	0	0	4	162.64
			8	0	5	0	0	0	0	5	171.83
			9	0	6	0	0	0	0	6	150.38
			10	0	15	0	0	0	0	15	173.81
			11	0	33	0	0	0	0	33	154.19
			12	0	66	0	0	0	0	66	157.73
			13	0	49	0	0	0	0	49	154.23
			14	0	26	0	0	0	0	26	152.08
			15	0	16	0	0	0	0	16	142.88
			16	0	5	0	0	0	0	5	129.79
			17	0	6	0	0	0	0	6	139.56
			18	0	2	0	0	0	0	2	141.51
			19	0	2	0	0	0	0	2	126.17
			20	0	1	0	0	0	0	1	124.17
			21	0	1	0	0	0	0	1	131.09
		Bridgelip sucker									
			13	0	1	0	0	0	0	1	
			15	0	1	0	0	0	0	1	
			17	0	1	0	0	0	0	1	
			18	0	2	0	0	0	0	2	
			19	0	3	0	0	0	0	3	
			20	0	2	0	0	0	0	2	
			21	0	2	0	0	0	0	2	
			22	0	4	0	0	0	0	4	
			23	0	1	0	0	0	0	1	
			24	0	3	0	0	0	0	3	
			25	0	1	0	0	0	0	1	
			26	0	1	0	0	0	0	1	
			27	0	2	0	0	0	0	2	
			29	0	1	0	0	0	0	1	
			30	0	1	0	0	0	0	1	
			33	0	2	0	0	0	0	2	
			34	0	1	0	0	0	0	1	
			36	0	1	0	0	0	0	1	
			39	0	2	0	0	0	0	2	
			53	0	1	0	0	0	0	1	
		Channel catfish									
			50	0	1	0	0	0	0	1	105.22
		Chiselmouth									
			12	0	1	0	0	0	0	1	
		Common carp									
			18	0	1	0	0	0	0	1	
			20	0	1	0	0	0	0	1	
			33	0	1	0	0	0	0	1	
			34	0	1	0	0	0	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			36	0	1	0	0	0	0	1	
			37	0	1	0	0	0	0	1	
			41	0	1	0	0	0	0	1	
			80	0	1	0	0	0	0	1	
		Largemouth bass									
			28	0	1	0	0	0	0	1	115.86
			29	0	1	0	0	0	0	1	112.92
		Largescale sucker									
			9	0	1	0	0	0	0	1	
			10	0	1	0	0	0	0	1	
			13	0	1	0	0	0	0	1	
			19	0	1	0	0	0	0	1	
			20	0	1	0	0	0	0	1	
			23	0	1	0	0	0	0	1	
			27	0	1	0	0	0	0	1	
			28	0	1	0	0	0	0	1	
			32	0	1	0	0	0	0	1	
			36	0	2	0	0	0	0	2	
			51	0	2	0	0	0	0	2	
			53	0	1	0	0	0	0	1	
		Northern pikeminnow									
			15	0	1	0	0	0	0	1	
		Pumpkinseed									
			10	0	1	0	0	0	0	1	
			12	0	1	0	0	0	0	1	
		Smallmouth bass									
			7	0	1	0	0	0	0	1	221.93
			9	0	2	0	0	0	0	2	100.53
			10	0	1	0	0	0	0	1	
			12	0	8	0	0	0	0	8	105.73
			13	0	13	0	0	0	0	13	110.29
			14	0	21	0	0	0	0	21	104.06
			15	0	41	0	0	0	0	41	104.26
			16	0	54	0	0	0	0	54	101.47
			17	0	39	0	0	0	0	39	99.72
			18	0	37	0	0	0	0	37	95.62
			19	0	28	0	0	0	0	28	94.25
			20	0	16	0	0	0	0	16	92.43
			21	0	13	0	0	0	0	13	92.66
			22	0	12	0	0	0	0	12	85.66
			23	0	4	0	0	0	0	4	98.59
			24	0	3	0	0	0	0	3	94.36
			25	0	5	0	0	0	0	5	91.08
			26	0	2	0	0	0	0	2	91.47
			27	0	3	0	0	0	0	3	98.75
			28	0	1	0	0	0	0	1	90.35
			29	0	1	0	0	0	0	1	92.37
			30	0	3	0	0	0	0	3	109.67
			31	0	1	0	0	0	0	1	91.93
			32	0	1	0	0	0	0	1	96.16

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			33	0	1	0	0	0	0	1	99.20
			34	0	2	0	0	0	0	2	105.28
			35	0	1	0	0	0	0	1	80.75
			38	0	1	0	0	0	0	1	107.44
		White crappie									
			12	0	1	0	0	0	0	1	51.78
			15	0	1	0	0	0	0	1	106.00
			16	0	1	0	0	0	0	1	140.50
			18	0	2	0	0	0	0	2	124.16
			19	0	1	0	0	0	0	1	132.06
			20	0	2	0	0	0	0	2	131.37
			21	0	2	0	0	0	0	2	136.01
			23	0	1	0	0	0	0	1	119.18
			26	0	1	0	0	0	0	1	113.72
			27	0	1	0	0	0	0	1	107.66
			28	0	1	0	0	0	0	1	109.22
			31	0	1	0	0	0	0	1	100.82
		Yellow perch									
			7	0	1	0	0	0	0	1	102.32
			12	0	1	0	0	0	0	1	90.24
			13	0	1	0	0	0	0	1	72.28
			14	0	1	0	0	0	0	1	99.36
			15	0	1	0	0	0	0	1	84.86
			17	0	1	0	0	0	0	1	110.68
			18	0	5	0	0	0	0	5	102.58
			19	0	4	0	0	0	0	4	106.84
			20	0	6	0	0	0	0	6	124.23
			21	0	4	0	0	0	0	4	108.28
			22	0	1	0	0	0	0	1	92.49
			25	0	1	0	0	0	0	1	91.81
C J STRIKE RES											
	5/14/96										
		Black crappie									
			15	0	2	0	0	0	0	2	107.82
			16	0	1	0	0	0	3	4	124.36
			17	0	8	1	0	0	2	11	135.30
			18	0	7	2	0	0	2	11	126.26
			19	0	1	1	0	0	2	4	130.33
			20	0	1	0	0	0	0	1	158.42
		Bluegill									
			8	0	3	0	0	0	0	3	224.82
			9	0	2	0	0	0	0	2	117.44
			10	0	3	0	0	0	0	3	209.84
			11	0	7	0	0	0	0	7	170.76
			12	0	12	0	0	0	0	12	157.71
			13	0	5	0	0	0	0	5	164.16
			14	0	7	0	0	0	0	7	155.87
			15	0	6	0	0	0	0	6	129.96
			16	0	4	0	0	0	0	4	138.66
			17	0	2	0	0	0	0	2	134.32

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			18	0	3	0	0	0	0	3	146.58
			19	0	2	0	0	0	0	2	139.52
			20	0	6	0	0	0	0	6	119.59
			21	0	2	0	0	0	0	2	92.62
			22	0	2	0	0	0	0	2	136.84
		Bridgelip sucker									
			19	0	0	2	0	0	0	2	
			20	0	1	1	0	0	0	2	
			22	0	4	0	0	0	0	4	
			23	0	2	2	0	0	0	4	
			24	0	4	2	0	0	0	6	
			25	0	3	3	0	0	0	6	
			26	0	0	6	0	0	0	6	
			27	0	1	1	0	0	0	2	
			28	0	1	3	0	0	0	4	
			29	0	0	5	0	0	0	5	
			30	0	0	1	0	0	0	1	
			31	0	0	1	0	0	0	1	
			32	0	0	1	0	0	0	1	
			33	0	0	1	0	0	0	1	
			35	0	0	1	0	0	0	1	
			36	0	0	1	0	0	0	1	
		Brown bullhead									
			20	0	0	1	0	0	0	1	
			29	0	0	1	0	0	0	1	
		Channel catfish									
			34	0	0	1	0	0	0	1	111.75
			47	0	0	3	0	0	0	3	107.13
			50	0	0	1	0	0	0	1	99.12
			52	0	0	1	0	0	0	1	121.35
			53	0	0	2	0	0	0	2	104.30
			54	0	0	1	0	0	0	1	105.53
			57	0	0	1	0	0	0	1	115.11
			59	0	0	1	0	0	0	1	112.31
			61	0	0	1	0	0	0	1	113.49
			62	0	0	1	0	0	0	1	101.21
			63	0	0	1	0	0	0	1	143.28
			65	0	0	2	0	0	0	2	102.51
			70	0	1	0	0	0	0	1	121.65
		Chiselmouth									
			12	0	1	0	0	0	0	1	
			14	0	0	2	0	0	0	2	
			15	0	0	1	0	0	0	1	
			16	0	0	5	0	0	0	5	
			17	0	0	4	0	0	1	5	
			18	0	0	6	0	0	0	6	
			19	0	0	5	0	0	0	5	
			20	0	0	5	0	0	0	5	
			21	0	0	7	0	0	0	7	
			22	0	0	12	0	0	0	12	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			23	0	0	4	0	0	0	4	
			24	0	1	12	0	0	0	13	
			25	0	0	9	0	0	0	9	
			26	0	0	6	0	0	0	6	
			27	0	0	11	0	0	0	11	
			28	0	0	14	0	0	0	14	
			29	0	0	5	0	0	1	6	
			30	0	0	5	0	0	1	6	
			31	0	0	1	0	0	0	1	
			32	0	0	1	0	0	0	1	
			33	0	0	3	0	0	0	3	
			35	0	0	2	0	0	0	2	
			36	0	1	0	0	0	0	1	
			37	0	0	1	0	0	0	1	
		Common carp									
			29	0	0	1	0	0	0	1	
			36	0	0	1	0	0	0	1	
			43	0	1	0	0	0	0	1	
			50	0	0	1	0	0	0	1	
			51	0	0	1	0	0	0	1	
			57	0	0	1	0	0	0	1	
			60	0	1	1	0	0	0	2	
			61	0	0	1	0	0	0	1	
			64	0	0	2	0	0	0	2	
			65	0	0	1	0	0	0	1	
			67	0	2	0	0	0	0	2	
			68	0	1	0	0	0	0	1	
			69	0	1	0	0	0	0	1	
		Hatchery rainbow									
			21	0	1	0	0	0	0	1	119.93
			23	0	0	2	0	0	0	2	103.08
			24	0	0	1	0	0	0	1	103.05
			26	0	0	1	0	0	0	1	123.49
			27	0	0	1	0	0	0	1	105.53
			28	0	0	3	0	0	0	3	115.78
			29	0	0	2	0	0	0	2	109.76
			30	0	0	7	0	0	0	7	102.51
			31	0	0	7	0	0	0	7	101.62
			32	0	0	4	0	0	0	4	105.30
			33	0	1	7	0	0	0	8	102.17
			36	0	0	1	0	0	0	1	101.96
			37	0	0	2	0	0	0	2	103.01
			39	0	0	1	0	0	0	1	110.11
			40	0	0	1	0	0	0	1	99.83
			42	0	0	2	0	0	1	3	67.80
		Largemouth bass									
			17	0	0	1	0	0	0	1	92.66
			19	0	1	0	0	0	0	1	121.03
			23	0	1	0	0	0	0	1	121.09
			29	0	2	0	0	0	0	2	104.55

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			32	0	2	0	0	0	0	2	115.59
			33	0	1	0	0	0	0	1	98.51
			34	0	0	1	0	0	0	1	114.85
			36	0	1	0	0	0	0	1	113.79
			39	0	2	0	0	0	0	2	117.04
			40	0	1	0	0	0	0	1	109.55
			42	0	1	0	0	0	0	1	128.09
			44	0	3	0	0	0	0	3	119.77
			50	0	1	0	0	0	0	1	107.69
			51	0	1	0	0	0	0	1	131.73
			54	0	1	0	0	0	0	1	130.50
			55	0	1	0	0	0	0	1	124.66
		Largescale sucker									
			7	0	1	0	0	0	0	1	
			8	0	1	0	0	0	0	1	
			9	0	1	0	0	0	0	1	
			10	0	1	0	0	0	0	1	
			11	0	1	0	0	0	0	1	
			12	0	1	0	0	0	0	1	
			14	0	1	0	0	0	0	1	
			15	0	1	0	0	0	0	1	
			17	0	1	0	0	0	0	1	
			18	0	1	0	0	0	0	1	
			19	0	4	0	0	0	0	4	
			20	0	9	0	0	0	0	9	
			21	0	4	1	0	0	0	5	
			22	0	10	2	0	0	0	12	
			23	0	15	2	0	0	0	17	
			24	0	19	8	0	0	0	27	
			25	0	8	8	0	0	0	16	
			26	0	10	5	0	0	0	15	
			27	0	3	3	0	0	0	6	
			28	0	3	8	0	0	0	11	
			29	0	6	6	0	0	0	12	
			30	0	5	7	0	0	0	12	
			31	0	6	5	0	0	0	11	
			32	0	7	3	0	0	0	10	
			33	0	8	9	0	0	0	17	
			34	0	3	13	0	0	0	16	
			35	0	3	11	0	0	0	14	
			36	0	0	10	0	0	0	10	
			37	0	0	4	0	0	0	4	
			38	0	2	2	0	0	0	4	
			40	0	2	2	0	0	0	4	
			41	0	2	1	0	0	0	3	
			42	0	1	1	0	0	0	2	
			43	0	4	0	0	0	0	4	
			44	0	0	1	0	0	0	1	
			45	0	1	2	0	0	0	3	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			46	0	1	1	0	0	0	2	
			47	0	0	4	0	0	0	4	
			48	0	0	1	0	0	0	1	
			49	0	1	5	0	0	0	6	
			50	0	1	2	0	0	0	3	
			51	0	2	3	0	0	0	5	
			52	0	2	2	0	0	0	4	
			53	0	1	5	0	0	0	6	
			54	0	0	1	0	0	0	1	
			55	0	1	2	0	0	0	3	
			56	0	0	2	0	0	0	2	
			57	0	0	1	0	0	0	1	
			59	0	0	1	0	0	0	1	
			62	0	0	1	0	0	0	1	
		Northern pikeminnow									
			12	0	0	1	0	0	0	1	
			16	0	0	2	0	0	0	2	
			17	0	0	3	0	0	0	3	
			19	0	0	2	0	0	0	2	
			20	0	0	1	0	0	0	1	
			22	0	0	3	0	0	0	3	
			23	0	0	3	0	0	0	3	
			24	0	0	2	0	0	0	2	
			25	0	0	7	0	0	0	7	
			26	0	0	3	0	0	0	3	
			27	0	0	2	0	0	0	2	
			28	0	0	1	0	0	0	1	
			30	0	0	1	0	0	0	1	
			31	0	0	1	0	0	0	1	
			32	0	0	1	0	0	0	1	
			34	0	0	2	0	0	0	2	
			35	0	0	1	0	0	0	1	
			36	0	0	1	0	0	0	1	
			38	0	0	3	0	0	0	3	
			40	0	0	2	0	0	0	2	
			41	0	0	1	0	0	0	1	
			42	0	0	1	0	0	0	1	
			44	0	0	1	0	0	0	1	
			45	0	0	0	0	0	1	1	
			48	0	0	1	0	0	0	1	
			51	0	0	1	0	0	0	1	
			52	0	0	1	0	0	0	1	
			53	0	0	2	0	0	0	2	
			56	0	0	1	0	0	0	1	
			58	0	0	1	0	0	0	1	
		Peamouth									
			25	0	0	3	0	0	0	3	
			28	0	0	1	0	0	0	1	
			35	0	0	1	0	0	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			36	0	0	1	0	0	0	1	
		Smallmouth bass									
			6	0	2	0	0	0	0	2	797.04
			8	0	1	0	0	0	0	1	110.31
			10	0	1	0	0	0	0	1	136.40
			11	0	1	0	0	0	0	1	111.58
			12	0	4	0	0	0	0	4	126.84
			13	0	5	0	0	0	0	5	111.35
			14	0	6	0	0	0	0	6	169.52
			15	0	18	0	0	0	0	18	111.45
			16	0	7	0	0	0	0	7	107.27
			17	0	6	0	0	0	0	6	106.80
			18	0	8	0	0	0	0	8	107.87
			19	0	10	0	0	0	0	10	105.35
			20	0	8	1	0	0	0	9	102.77
			21	0	12	2	0	0	0	14	103.85
			22	0	12	1	0	0	0	13	92.80
			23	0	9	1	0	0	0	10	93.63
			24	0	5	1	0	0	0	6	96.05
			25	0	4	2	0	0	0	6	94.94
			26	0	2	5	0	0	0	7	84.06
			27	0	4	2	0	0	0	6	92.37
			28	0	4	0	0	0	0	4	96.33
			29	0	3	1	0	0	0	4	86.92
			30	0	5	1	0	0	0	6	89.88
			31	0	3	2	0	0	1	6	91.51
			33	0	1	0	0	0	0	1	106.98
			34	0	1	0	0	0	0	1	106.53
			49	0	1	0	0	0	0	1	84.54
		Warmouth sunfish									
			16	0	1	0	0	0	0	1	
			17	0	0	1	0	0	0	1	
		White crappie									
			10	0	0	1	0	0	0	1	214.00
			11	0	0	1	0	0	0	1	830.35
			14	0	2	1	0	0	0	3	139.20
			15	0	3	2	0	0	0	5	144.57
			16	0	2	1	0	0	0	3	162.93
			17	0	4	17	0	0	2	23	138.86
			18	0	2	34	0	0	4	40	140.08
			19	0	3	37	0	0	3	43	139.38
			20	0	18	44	0	0	9	71	139.10
			21	0	23	31	0	0	8	62	134.19
			22	0	13	6	0	0	2	21	129.75
			23	0	2	0	0	0	0	2	118.51
			24	0	0	1	0	0	0	1	
			27	0	1	1	0	0	0	2	115.21
			28	0	0	1	0	0	0	1	
		Yellow perch									
			12	0	1	0	0	0	0	1	133.10

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			13	0	2	0	0	0	0	2	95.97
			14	0	1	2	0	0	0	3	108.98
			15	0	1	2	0	0	1	4	90.69
			16	0	0	3	0	0	1	4	104.59
			17	0	2	3	0	0	1	6	93.22
			18	0	0	3	0	0	0	3	94.28
			19	0	0	3	0	0	0	3	91.75
			20	0	0	3	0	0	0	3	95.87
			21	0	0	2	0	0	0	2	109.47
			23	0	0	2	0	0	0	2	84.70
			24	0	0	4	0	0	0	4	88.74
			25	0	0	3	0	0	0	3	83.19
			26	0	0	1	0	0	0	1	88.59
			27	0	0	3	0	0	0	3	77.65
			30	0	0	1	0	0	0	1	74.38
DEADWOOD RES											
	9/26/96										
		Bull trout									
			30	0	0	1	0	0	0	1	
		Fall chinook salmon									
			22	0	0	1	0	0	0	1	
		Gerrard rainbow									
			57	0	0	1	0	0	0	1	
		Kokanee salmon									
			8	0	0	1	0	0	0	1	
			17	0	0	2	0	0	0	2	
			18	0	0	7	0	0	0	7	
			19	0	0	10	0	0	0	10	
			20	0	0	14	0	0	0	14	
			21	0	0	3	0	0	0	3	
			22	0	0	9	0	0	0	9	
			23	0	0	4	0	0	0	4	
			24	0	0	1	0	0	0	1	
			27	0	0	1	0	0	0	1	
			31	0	0	1	0	0	0	1	
			32	0	0	2	0	0	0	2	
			38	0	0	1	0	0	0	1	
		Mountain whitefish									
			17	0	0	1	0	0	0	1	103.12
			19	0	0	1	0	0	0	1	88.28
			21	0	0	3	0	0	0	3	94.10
			24	0	0	1	0	0	0	1	87.04
			25	0	0	3	0	0	0	3	98.36
			26	0	0	3	0	0	0	3	103.72
			27	0	0	5	0	0	0	5	103.51
			28	0	0	2	0	0	0	2	90.45
			29	0	0	1	0	0	0	1	91.69
			30	0	0	2	0	0	0	2	112.06
			31	0	0	3	0	0	0	3	101.46
			32	0	0	6	0	0	0	6	107.04

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			33	0	0	5	0	0	0	5	110.12
			34	0	0	4	0	0	0	4	115.70
			35	0	0	3	0	0	0	3	105.82
			36	0	0	1	0	0	0	1	109.46
			37	0	0	3	0	0	0	3	106.13
			38	0	0	5	0	0	0	5	104.04
			39	0	0	1	0	0	0	1	101.28
			40	0	0	2	0	0	0	2	97.86
			41	0	0	1	0	0	0	1	88.30
		Rainbow X cutthroat hybrid									
			32	0	0	1	0	0	0	1	
		Westslope cutthroat									
			22	0	0	1	0	0	0	1	
			24	0	0	1	0	0	0	1	
			36	0	0	1	0	0	0	1	
		Wild rainbow/redband									
			16	0	0	2	0	0	0	2	98.63
			17	0	0	1	0	0	0	1	86.55
			18	0	0	1	0	0	0	1	112.79
			22	0	0	1	0	0	0	1	95.18
			24	0	0	1	0	0	0	1	86.79
			26	0	0	1	0	0	0	1	90.25
			29	0	0	1	0	0	0	1	99.28
			30	0	0	3	0	0	0	3	84.41
			31	0	0	1	0	0	0	1	97.20
			32	0	0	1	0	0	0	1	138.23
			33	0	0	2	0	0	0	2	88.70
			34	0	0	3	0	0	0	3	84.99
HORSESHOE BEND MILL											
	6/26/96										
		Bluegill									
			3	0	1	0	0	0	0	1	2458.73
			5	0	1	0	0	0	0	1	188.79
			8	0	4	0	0	0	0	4	166.02
			9	0	8	0	0	0	1	9	174.26
			10	0	12	0	0	0	0	12	103.70
			11	0	3	1	0	0	2	6	133.72
			12	0	14	1	0	0	7	22	118.28
			13	0	16	0	0	0	6	22	105.65
			14	0	8	0	0	0	1	9	106.00
			15	0	6	0	0	0	1	7	106.37
		Brown bullhead									
			26	0	1	0	0	0	0	1	
			28	0	1	0	0	0	0	1	
			30	0	4	0	0	0	0	4	
			31	0	4	0	0	0	0	4	
			32	0	6	0	0	0	0	6	
			33	0	1	0	0	0	0	1	
			34	0	1	0	0	0	0	1	
			38	0	1	0	0	0	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
		Common carp									
			70	0	1	0	0	0	0	1	
		Hatchery rainbow									
			19	0	0	1	0	0	0	1	105.15
			21	0	0	2	0	0	0	2	97.72
			22	0	1	1	0	0	0	2	89.48
			23	0	0	6	0	0	0	6	94.45
			24	0	1	5	0	0	0	6	98.43
			25	0	0	7	0	0	0	7	100.27
			26	0	1	3	0	0	0	4	92.99
			27	0	1	2	0	0	0	3	97.20
			28	0	0	1	0	0	0	1	98.38
			29	0	0	1	0	0	0	1	100.41
		Largemouth bass									
			7	0	1	0	0	0	0	1	152.51
			10	0	1	0	0	0	0	1	173.86
			11	0	3	0	0	0	1	4	111.56
			12	0	3	0	0	0	0	3	132.30
			13	0	4	0	0	0	0	4	139.17
			14	0	11	0	0	0	0	11	110.70
			15	0	1	0	0	0	0	1	116.34
			16	0	5	0	0	0	0	5	107.68
			17	0	4	0	0	0	0	4	112.80
			18	0	3	0	0	0	0	3	147.22
			19	0	5	0	0	0	0	5	108.33
			20	0	2	0	0	0	0	2	104.88
			21	0	4	1	0	0	0	5	112.71
			22	0	1	3	0	0	0	4	110.45
			23	0	4	1	0	0	0	5	103.07
			24	0	1	0	0	0	0	1	108.89
			25	0	1	1	0	0	0	2	98.02
			26	0	0	1	0	0	0	1	110.56
			27	0	2	0	0	0	0	2	114.30
			28	0	3	0	0	0	0	3	105.01
			29	0	2	0	0	0	0	2	100.04
			30	0	1	0	0	0	0	1	105.55
			31	0	2	0	0	0	0	2	92.88
			32	0	3	0	0	0	0	3	104.63
			33	0	2	0	0	0	0	2	105.57
			34	0	2	0	0	0	0	2	98.00
			35	0	3	0	0	0	0	3	98.51
			41	0	1	0	0	0	0	1	30.61
			45	0	1	0	0	0	0	1	107.79
			48	0	1	0	0	0	0	1	110.56
		Largescale sucker									
			40	0	1	0	0	0	0	1	
			48	0	1	0	0	0	0	1	
			49	0	0	1	0	0	0	1	
			51	0	0	1	0	0	0	1	
		Northern pikeminnow									

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			25	0	0	1	0	0	0	1	
		Pumpkinseed									
			8	0	3	2	0	0	1	6	
			9	0	13	8	0	0	0	21	
			10	0	16	1	0	0	1	18	
			11	0	21	12	0	0	8	41	
			12	0	9	10	0	0	14	33	
			13	0	8	4	0	0	10	22	
			14	0	2	0	0	0	4	6	
			16	0	1	0	0	0	0	1	
		Yellow perch									
			19	0	0	3	0	0	0	3	97.99
			20	0	0	1	0	0	0	1	107.06
INDIAN CREEK RES											
	4/29/96										
		Bluegill									
			8	0	1	0	0	0	0	1	98.42
			9	0	2	0	0	0	0	2	117.44
			10	0	2	0	0	0	0	2	112.02
			11	0	6	0	0	0	0	6	96.82
			12	0	2	0	0	0	0	2	114.17
			13	0	2	0	0	0	1	3	106.80
			15	0	1	0	0	0	0	1	115.13
			16	0	1	0	0	0	1	2	100.62
			18	0	0	0	0	0	1	1	106.13
			26	0	0	0	0	0	1	1	129.67
		Channel catfish									
			38	0	1	0	0	0	0	1	120.81
			48	0	1	0	0	0	0	1	119.11
		Largemouth bass									
			8	0	3	0	0	0	0	3	113.34
			9	0	2	0	0	0	0	2	112.69
			10	0	6	0	0	0	0	6	117.91
			11	0	7	0	0	0	0	7	112.48
			12	0	9	0	0	0	1	10	107.35
			13	0	7	0	0	0	0	7	116.16
			14	0	2	0	0	0	0	2	98.60
			15	0	3	0	0	0	0	3	100.56
			38	0	1	0	0	0	0	1	134.24
LAKE LOWELL											
	5/20/96										
		Black crappie									
			10	0	0	1	0	0	0	1	
			13	0	0	1	0	0	0	1	123.29
		Bluegill									
			12	0	1	0	0	0	0	1	105.37
			14	0	1	0	0	0	0	1	126.63
			15	0	0	0	0	0	1	1	143.91
		Brown bullhead									
			12	0	0	0	0	0	1	1	
			14	0	1	0	0	0	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			16	0	0	0	0	0	1	1	
			26	0	0	0	0	0	1	1	
			28	0	1	0	0	0	1	2	
			29	0	0	0	0	0	3	3	
			34	0	0	0	0	0	3	3	
			35	0	0	0	0	0	1	1	
			36	0	0	0	0	0	1	1	
		Channel catfish									
			17	0	0	1	0	0	0	1	82.97
			18	0	0	1	0	0	0	1	89.08
			19	0	0	2	0	0	0	2	82.20
			31	0	0	1	0	0	0	1	96.90
			32	0	0	1	0	0	0	1	83.70
			33	0	0	1	0	0	0	1	101.01
			35	0	0	2	0	0	0	2	80.32
			36	0	0	1	0	0	0	1	62.84
			46	0	0	3	0	0	0	3	82.38
			47	0	0	1	0	0	0	1	84.22
			48	0	0	2	0	0	0	2	79.33
			49	0	0	1	0	0	0	1	89.49
			50	0	0	1	0	0	0	1	94.50
			51	0	0	1	0	0	0	1	96.00
			52	0	0	3	0	0	0	3	98.53
			55	0	0	2	0	0	0	2	100.45
			58	0	0	1	0	0	0	1	113.59
			61	0	0	1	0	0	0	1	103.62
			63	0	0	1	0	0	0	1	95.22
			65	0	0	1	0	0	0	1	109.30
		Chiselmouth									
			18	0	1	0	0	0	0	1	
		Common carp									
			12	0	3	0	0	0	0	3	
			13	0	1	0	0	0	0	1	
			16	0	0	4	0	0	0	4	
			17	0	0	1	0	0	0	1	
			18	0	0	1	0	0	0	1	
			22	0	0	1	0	0	0	1	
			23	0	0	1	0	0	0	1	
			42	0	0	0	0	0	1	1	
			43	0	0	1	0	0	0	1	
			44	0	2	0	0	0	3	5	
			45	0	0	2	0	0	2	4	
			46	0	3	0	0	0	6	9	
			47	0	0	4	0	0	3	7	
			48	0	0	3	0	0	4	7	
			49	0	1	1	0	0	1	3	
			50	0	0	1	0	0	3	4	
			51	0	0	4	0	0	2	6	
			52	0	1	0	0	0	0	1	
			53	0	1	1	0	0	3	5	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			54	0	0	0	0	0	1	1	
			56	0	0	0	0	0	2	2	
			57	0	0	0	0	0	1	1	
			58	0	0	0	0	0	1	1	
			59	0	1	0	0	0	0	1	
			60	0	0	0	0	0	2	2	
			67	0	0	0	0	0	1	1	
		Hatchery rainbow									
			27	0	0	1	0	0	0	1	91.76
		Kokanee salmon									
			32	0	0	1	0	0	0	1	
		Largemouth bass									
			7	0	2	0	0	0	0	2	140.27
			9	0	3	0	0	0	0	3	111.59
			10	0	2	0	0	0	0	2	118.18
			11	0	3	0	0	0	0	3	85.53
			12	0	3	0	0	0	0	3	136.68
			13	0	1	0	0	0	0	1	126.45
			15	0	1	0	0	0	0	1	106.61
			16	0	1	0	0	0	0	1	97.82
			20	0	1	0	0	0	0	1	90.89
			28	0	0	2	0	0	0	2	95.48
		Largescale sucker									
			11	0	2	0	0	0	0	2	
			15	0	1	0	0	0	0	1	
			27	0	1	0	0	0	0	1	
			35	0	0	1	0	0	0	1	
			37	0	0	1	0	0	0	1	
			40	0	1	0	0	0	0	1	
			42	0	2	1	0	0	1	4	
			43	0	2	1	0	0	1	4	
			44	0	2	3	0	0	4	9	
			45	0	1	1	0	0	9	11	
			46	0	3	1	0	0	8	12	
			47	0	1	0	0	0	7	8	
			48	0	2	3	0	0	3	8	
			49	0	1	6	0	0	5	12	
			50	0	1	1	0	0	5	7	
			51	0	1	2	0	0	4	7	
			52	0	2	1	0	0	0	3	
			53	0	0	0	0	0	1	1	
			54	0	0	0	0	0	2	2	
			58	0	0	0	0	0	1	1	
		Northern pikeminnow									
			17	0	0	0	0	0	1	1	
			18	0	0	1	0	0	1	2	
			19	0	0	1	0	0	1	2	
			22	0	0	1	0	0	0	1	
			23	0	0	1	0	0	0	1	
			26	0	0	2	0	0	0	2	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			27	0	0	2	0	0	0	2	
			28	0	0	1	0	0	0	1	
			29	0	0	1	0	0	0	1	
			35	0	0	1	0	0	0	1	
		Smallmouth bass									
			7	0	2	0	0	0	0	2	80.34
			8	0	1	0	0	0	0	1	79.13
			9	0	3	0	0	0	0	3	109.74
			10	0	6	0	0	0	0	6	70.99
			11	0	5	0	0	0	0	5	71.34
			12	0	4	0	0	0	0	4	83.79
			16	0	4	0	0	0	0	4	74.14
			18	0	2	0	0	0	0	2	78.10
			19	0	2	0	0	0	0	2	89.89
			20	0	1	0	0	0	0	1	93.28
			21	0	2	0	0	0	0	2	91.43
			23	0	1	1	0	0	0	2	104.32
		White crappie									
			11	0	1	0	0	0	0	1	59.67
			29	0	1	0	0	0	0	1	99.37
		Yellow perch									
			9	0	4	0	0	0	0	4	94.55
			10	0	3	0	0	0	0	3	100.85
			11	0	6	0	0	0	0	6	87.80
			12	0	7	0	0	0	0	7	94.66
			21	0	0	1	0	0	0	1	78.27
			22	0	0	1	0	0	0	1	72.67
	7/10/96										
		Bluegill									
			6	0	1	0	0	0	0	1	
			7	0	4	0	0	0	0	4	
			8	0	1	0	0	0	0	1	
			9	0	1	0	0	0	0	1	
			13	0	1	0	0	0	0	1	163.27
			14	0	1	0	0	0	0	1	96.62
		Channel catfish									
			15	0	1	0	0	0	0	1	156.31
			58	0	2	0	0	0	0	2	78.18
			65	0	1	0	0	0	0	1	90.80
			66	0	1	0	0	0	0	1	96.02
		Common carp									
			18	0	2	0	0	0	0	2	
			21	0	1	0	0	0	0	1	
			40	0	1	0	0	0	0	1	
			44	0	1	0	0	0	0	1	
			49	0	1	0	0	0	0	1	
		Largemouth bass									
			3	0	3	0	0	0	0	3	
			4	0	2	0	0	0	0	2	
			5	0	1	0	0	0	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			10	0	1	0	0	0	0	1	
			12	0	3	0	0	0	0	3	112.56
			13	0	3	0	0	0	0	3	118.91
			14	0	3	0	0	0	0	3	108.93
			15	0	3	0	0	0	0	3	102.64
			16	0	1	0	0	0	0	1	122.27
			17	0	2	0	0	0	0	2	97.61
			28	0	1	0	0	0	0	1	116.38
		Largescale sucker									
			13	0	2	0	0	0	0	2	
			14	0	3	0	0	0	0	3	
			15	0	11	0	0	0	0	11	
			16	0	5	0	0	0	0	5	
			17	0	2	0	0	0	0	2	
			18	0	4	0	0	0	0	4	
			19	0	4	0	0	0	0	4	
			20	0	2	0	0	0	0	2	
			28	0	1	0	0	0	0	1	
			31	0	1	0	0	0	0	1	
			32	0	1	0	0	0	0	1	
			33	0	1	0	0	0	0	1	
			36	0	1	0	0	0	0	1	
			40	0	1	0	0	0	0	1	
			43	0	2	0	0	0	0	2	
			44	0	1	0	0	0	0	1	
			48	0	2	0	0	0	0	2	
			49	0	2	0	0	0	0	2	
			52	0	1	0	0	0	0	1	
		Smallmouth bass									
			7	0	3	0	0	0	0	3	
			8	0	8	0	0	0	0	8	
			9	0	22	0	0	0	0	22	
			10	0	20	0	0	0	0	20	
			11	0	33	0	0	0	0	33	118.44
			12	0	14	0	0	0	0	14	101.90
			13	0	14	0	0	0	0	14	110.48
			14	0	7	0	0	0	0	7	95.37
			16	0	1	0	0	0	0	1	106.55
			20	0	2	0	0	0	0	2	98.80
			21	0	1	0	0	0	0	1	92.85
			22	0	4	0	0	0	0	4	106.74
			23	0	3	0	0	0	0	3	100.77
			24	0	2	0	0	0	0	2	97.77
			35	0	1	0	0	0	0	1	100.75
		White crappie									
			12	0	1	0	0	0	0	1	
		Yellow perch									
			4	0	2	0	0	0	0	2	
			12	0	9	0	0	0	0	9	115.01
			13	0	5	0	0	0	0	5	104.98

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			14	0	1	0	0	0	0	1	101.59
	8/8/96										
		Black crappie									
			16	0	1	0	0	0	0	1	93.30
		Bluegill									
			6	0	2	0	0	0	0	2	
			7	0	11	0	0	0	0	11	
			8	0	21	0	0	0	0	21	81.48
			9	0	17	0	0	0	0	17	109.54
			10	0	14	0	0	0	0	14	107.22
			11	0	4	0	0	0	0	4	122.97
			12	0	5	0	0	0	0	5	117.55
			16	0	1	0	0	0	0	1	103.56
		Brown bullhead									
			12	0	1	0	0	0	0	1	
			18	0	1	0	0	0	0	1	
			20	0	1	0	0	0	0	1	
			27	0	1	0	0	0	0	1	
			28	0	1	0	0	0	0	1	
		Channel catfish									
			11	0	1	0	0	0	0	1	99.35
		Chiselmouth									
			19	0	1	0	0	0	0	1	
		Common carp									
			19	0	1	0	0	0	0	1	
			22	0	1	0	0	0	0	1	
			23	0	2	0	0	0	0	2	
			24	0	2	0	0	0	0	2	
			25	0	1	0	0	0	0	1	
			42	0	1	0	0	0	0	1	
			45	0	3	0	0	0	0	3	
			46	0	3	0	0	0	0	3	
			48	0	2	0	0	0	0	2	
			51	0	1	0	0	0	0	1	
			52	0	1	0	0	0	0	1	
			58	0	1	0	0	0	0	1	
		Largemouth bass									
			4	0	4	0	0	0	0	4	
			5	0	21	0	0	0	0	21	
			6	0	27	0	0	0	0	27	
			7	0	22	0	0	0	0	22	
			8	0	19	0	0	0	0	19	
			9	0	20	0	0	0	0	20	126.17
			10	0	17	0	0	0	0	17	111.13
			11	0	3	0	0	0	0	3	154.71
			12	0	5	0	0	0	0	5	114.08
			13	0	15	0	0	0	0	15	100.68
			14	0	15	0	0	0	0	15	104.33
			15	0	24	0	0	0	0	24	107.87
			16	0	29	0	0	0	0	29	101.09

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			17	0	13	0	0	0	0	13	90.24
			18	0	10	0	0	0	0	10	102.48
			19	0	9	0	0	0	0	9	97.84
			20	0	3	0	0	0	0	3	97.37
			21	0	1	0	0	0	0	1	
			22	0	1	0	0	0	0	1	103.15
			25	0	1	0	0	0	0	1	83.94
			28	0	1	0	0	0	0	1	97.77
			30	0	2	0	0	0	0	2	99.16
			31	0	1	0	0	0	0	1	121.32
			32	0	1	0	0	0	0	1	95.52
		Largescale sucker									
			6	0	4	0	0	0	0	4	
			7	0	2	0	0	0	0	2	
			14	0	2	0	0	0	0	2	
			15	0	4	0	0	0	0	4	
			16	0	6	0	0	0	0	6	
			17	0	12	0	0	0	0	12	
			18	0	25	0	0	0	0	25	
			19	0	22	0	0	0	0	22	
			20	0	12	0	0	0	0	12	
			21	0	6	0	0	0	0	6	
			23	0	1	0	0	0	0	1	
			30	0	2	0	0	0	0	2	
			31	0	1	0	0	0	0	1	
			32	0	1	0	0	0	0	1	
			34	0	1	0	0	0	0	1	
			36	0	1	0	0	0	0	1	
			41	0	1	0	0	0	0	1	
			43	0	1	0	0	0	0	1	
			44	0	4	0	0	0	0	4	
			45	0	3	0	0	0	0	3	
			46	0	2	0	0	0	0	2	
			47	0	3	0	0	0	0	3	
			49	0	1	0	0	0	0	1	
			50	0	3	0	0	0	0	3	
			52	0	1	0	0	0	0	1	
			53	0	1	0	0	0	0	1	
		Pumpkinseed									
			8	0	1	0	0	0	0	1	
			9	0	3	0	0	0	0	3	
		Smallmouth bass									
			4	0	4	0	0	0	0	4	
			5	0	20	0	0	0	0	20	
			6	0	26	0	0	0	0	26	
			7	0	12	0	0	0	0	12	
			8	0	4	0	0	0	0	4	
			9	0	3	0	0	0	0	3	134.97
			10	0	14	0	0	0	0	14	
			11	0	39	0	0	0	0	39	99.04

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			12	0	38	0	0	0	0	38	93.41
			13	0	38	0	0	0	0	38	92.50
			14	0	19	0	0	0	0	19	92.30
			15	0	16	0	0	0	0	16	94.56
			16	0	11	0	0	0	0	11	86.72
			17	0	4	0	0	0	0	4	91.35
			18	0	1	0	0	0	0	1	
			23	0	1	0	0	0	0	1	101.59
			24	0	1	0	0	0	0	1	102.42
			26	0	1	0	0	0	0	1	114.15
			27	0	2	0	0	0	0	2	109.99
			28	0	1	0	0	0	0	1	120.47
			35	0	1	0	0	0	0	1	118.27
			44	0	1	0	0	0	0	1	117.79
		White crappie									
			5	0	1	0	0	0	0	1	
			7	0	1	0	0	0	0	1	
			8	0	1	0	0	0	0	1	
		Yellow perch									
			6	0	5	0	0	0	0	5	
			7	0	4	0	0	0	0	4	
			13	0	1	0	0	0	0	1	
			14	0	3	0	0	0	0	3	93.04
			15	0	3	0	0	0	0	3	78.58
			17	0	1	0	0	0	0	1	
	9/18/96										
		Bluegill									
			6	0	2	0	0	0	0	2	
			7	0	2	0	0	0	0	2	
			8	0	2	0	0	0	0	2	
			9	0	2	0	0	0	0	2	
			10	0	4	0	0	0	0	4	
			11	0	6	0	0	0	0	6	
			12	0	4	0	0	0	0	4	150.80
		Channel catfish									
			57	0	2	0	0	0	0	2	87.59
		Common carp									
			24	0	4	0	0	0	0	4	
			25	0	10	0	0	0	0	10	
			27	0	2	0	0	0	0	2	
			43	0	2	0	0	0	0	2	
			44	0	4	0	0	0	0	4	
			45	0	6	0	0	0	0	6	
			46	0	12	0	0	0	0	12	
			47	0	6	0	0	0	0	6	
			48	0	4	0	0	0	0	4	
			50	0	4	0	0	0	0	4	
			53	0	4	0	0	0	0	4	
		Fall chinook salmon									
			37	0	1	0	0	0	0	1	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
		Largemouth bass									
			6	0	8	0	0	0	0	8	
			7	0	8	0	0	0	0	8	
			8	0	18	0	0	0	0	18	
			9	0	12	0	0	0	0	12	
			10	0	14	0	0	0	0	14	
			11	0	4	0	0	0	0	4	
			12	0	2	0	0	0	0	2	
			15	0	6	0	0	0	0	6	146.07
			16	0	10	0	0	0	0	10	87.52
			17	0	2	0	0	0	0	2	144.78
			18	0	4	0	0	0	0	4	132.34
			19	0	2	0	0	0	0	2	102.52
			21	0	6	0	0	0	0	6	88.68
		Largescale sucker									
			7	0	2	0	0	0	0	2	
			8	0	2	0	0	0	0	2	
			9	0	6	0	0	0	0	6	
			10	0	8	0	0	0	0	8	
			11	0	2	0	0	0	0	2	
			17	0	4	0	0	0	0	4	
			18	0	4	0	0	0	0	4	
			19	0	4	0	0	0	0	4	
			20	0	2	0	0	0	0	2	
			21	0	18	0	0	0	0	18	
			22	0	14	0	0	0	0	14	
			23	0	8	0	0	0	0	8	
			36	0	2	0	0	0	0	2	
			43	0	4	0	0	0	0	4	
			44	0	2	0	0	0	0	2	
			45	0	14	0	0	0	0	14	
			46	0	22	0	0	0	0	22	
			47	0	8	0	0	0	0	8	
			48	0	24	0	0	0	0	24	
			49	0	14	0	0	0	0	14	
			50	0	8	0	0	0	0	8	
			51	0	12	0	0	0	0	12	
			52	0	2	0	0	0	0	2	
			53	0	6	0	0	0	0	6	
		Northern pikeminnow									
			20	0	4	0	0	0	0	4	
			22	0	2	0	0	0	0	2	
			26	0	2	0	0	0	0	2	
		Smallmouth bass									
			6	0	4	0	0	0	0	4	
			7	0	6	0	0	0	0	6	
			8	0	14	0	0	0	0	14	
			9	0	4	0	0	0	0	4	
			11	0	4	0	0	0	0	4	
			12	0	10	0	0	0	0	10	188.76

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			13	0	22	0	0	0	0	22	105.11
			14	0	24	0	0	0	0	24	136.05
			15	0	8	0	0	0	0	8	108.15
			16	0	4	0	0	0	0	4	
			18	0	2	0	0	0	0	2	
		Yellow perch									
			7	0	4	0	0	0	0	4	
			8	0	6	0	0	0	0	6	
LUCKY PEAK RES											
	7/15/96										
		Bridgelip sucker									
			35	0	0	0	2	0	0	2	
		Chiselmouth									
			19	0	0	0	4	0	0	4	
			23	0	0	0	3	0	0	3	
			24	0	0	0	2	0	0	2	
			25	0	0	0	1	0	0	1	
			26	0	0	0	2	0	0	2	
			29	0	0	0	2	0	0	2	
			30	0	0	0	3	0	0	3	
		Fall chinook salmon									
			28	0	0	0	2	0	0	2	
		Largescale sucker									
			17	0	0	0	4	0	0	4	
			19	0	0	0	2	0	0	2	
			23	0	0	0	2	0	0	2	
			24	0	0	0	2	0	0	2	
			25	0	0	0	2	0	0	2	
			26	0	0	0	4	0	0	4	
			28	0	0	0	6	0	0	6	
			29	0	0	0	8	0	0	8	
			30	0	0	0	6	0	0	6	
			31	0	0	0	6	0	0	6	
			33	0	0	0	2	0	0	2	
			34	0	0	0	7	0	0	7	
			35	0	0	0	2	0	0	2	
			36	0	0	0	2	0	0	2	
			37	0	0	0	2	0	0	2	
			38	0	0	0	6	0	0	6	
			39	0	0	0	4	0	0	4	
			40	0	0	0	4	0	0	4	
			42	0	0	0	2	0	0	2	
			43	0	0	0	2	0	0	2	
			44	0	0	0	1	0	0	1	
			46	0	0	0	2	0	0	2	
		Mountain whitefish									
			30	0	0	0	2	0	0	2	99.17
			32	0	0	0	5	0	0	5	103.93
			34	0	0	0	2	0	0	2	80.83
		Northern pikeminnow									
			17	0	0	0	2	0	0	2	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			18	0	0	0	8	0	0	8	
			19	0	0	0	2	0	0	2	
			20	0	0	0	12	0	0	12	
			21	0	0	0	4	0	0	4	
			22	0	0	0	6	0	0	6	
			23	0	0	0	2	0	0	2	
			24	0	0	0	2	0	0	2	
			25	0	0	0	2	0	0	2	
			26	0	0	0	2	0	0	2	
			27	0	0	0	2	0	0	2	
			28	0	0	0	8	0	0	8	
			29	0	0	0	4	0	0	4	
			30	0	0	0	2	0	0	2	
			31	0	0	0	10	0	0	10	
			32	0	0	0	14	0	0	14	
			33	0	0	0	12	0	0	12	
			34	0	0	0	8	0	0	8	
			35	0	0	0	5	0	0	5	
			36	0	0	0	2	0	0	2	
			37	0	0	0	4	0	0	4	
			39	0	0	0	2	0	0	2	
			40	0	0	0	1	0	0	1	
		Redside shiner									
			14	0	0	0	1	0	0	1	
		Smallmouth bass									
			23	0	0	0	4	0	0	4	105.57
			26	0	0	0	2	0	0	2	103.84
		Yellow perch									
			19	0	0	0	2	0	0	2	125.34
			20	0	0	0	2	0	0	2	107.86
			22	0	0	0	2	0	0	2	105.70
			23	0	0	0	2	0	0	2	116.91
MOUNTAIN HOME RES											
	5/22/96										
		Bluegill									
			4	0	1	0	0	0	0	1	
			7	0	1	0	0	0	0	1	
		Hatchery rainbow									
			9	0	1	0	0	0	0	1	
			11	0	3	0	0	0	0	3	153.00
			12	0	6	0	0	0	0	6	
			13	0	4	0	0	0	0	4	123.43
			14	0	4	0	0	0	0	4	122.06
			15	0	2	0	0	0	0	2	120.71
			16	0	2	0	0	0	0	2	143.47
			18	0	2	0	0	0	0	2	116.60
			21	0	1	0	0	0	0	1	114.78
			24	0	1	0	0	0	0	1	99.19
			25	0	1	0	0	0	0	1	112.24
			27	0	1	0	0	0	0	1	101.98

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			28	0	2	0	0	0	0	2	91.08
			29	0	4	0	0	0	0	4	100.98
			30	0	5	0	0	0	0	5	103.33
			31	0	2	0	0	0	0	2	103.39
			32	0	3	0	0	0	0	3	98.45
			33	0	4	0	0	0	0	4	98.46
			34	0	4	0	0	0	0	4	98.57
			37	0	3	0	0	0	0	3	95.65
			38	0	4	0	0	0	0	4	97.79
			39	0	2	0	0	0	0	2	105.18
			41	0	1	0	0	0	0	1	97.14
		Largemouth bass									
			7	0	3	0	0	0	0	3	
			8	0	4	0	0	0	0	4	
			9	0	11	0	0	0	0	11	
			10	0	13	0	0	0	0	13	
			11	0	8	0	0	0	0	8	
			12	0	11	0	0	0	0	11	
			13	0	10	0	0	0	0	10	
			14	0	9	0	0	0	0	9	
			16	0	1	0	0	0	0	1	96.34
		Redside shiner									
			8	0	1	0	0	0	0	1	
			9	0	1	0	0	0	0	1	
		Speckled dace									
			4	0	1	0	0	0	0	1	
		Sucker spp.									
			22	0	2	0	0	0	0	2	
	7/30/96										
		Bluegill									
			12	0	1	0	0	0	0	1	120.64
		Hatchery rainbow									
			19	0	1	0	0	0	0	1	119.93
			20	0	3	0	0	0	0	3	119.03
			21	0	1	0	0	0	0	1	99.95
			22	0	3	0	0	0	0	3	116.37
			23	0	4	0	0	0	0	4	105.85
			24	0	5	0	0	0	0	5	101.63
			25	0	2	0	0	0	0	2	109.54
			26	0	1	0	0	0	0	1	98.60
			27	0	1	0	0	0	0	1	93.11
			28	0	3	0	0	0	0	3	93.45
			29	0	2	0	0	0	0	2	82.47
			30	0	2	0	0	0	0	2	94.02
			31	0	2	0	0	0	0	2	99.15
			32	0	2	0	0	0	0	2	91.74
			33	0	1	0	0	0	0	1	87.06
			34	0	1	0	0	0	0	1	94.90
			36	0	2	0	0	0	0	2	81.14
			38	0	2	0	0	0	0	2	86.11

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			39	0	3	0	0	0	0	3	85.83
			40	0	7	0	0	0	0	7	90.56
			41	0	3	0	0	0	0	3	87.92
			42	0	2	0	0	0	0	2	94.79
			43	0	2	0	0	0	0	2	94.02
		Largemouth bass									
			7	0	1	0	0	0	0	1	
			8	0	1	0	0	0	0	1	
			15	0	3	0	0	0	0	3	111.41
			16	0	3	0	0	0	0	3	104.21
			17	0	1	0	0	0	0	1	97.74
			20	0	1	0	0	0	0	1	101.68
			22	0	1	0	0	0	0	1	104.66
	9/24/96										
		Bluegill									
			8	0	1	0	0	0	0	1	
			9	0	2	0	0	0	0	2	
			10	0	2	0	0	0	0	2	
			12	0	2	0	0	0	0	2	
			13	0	2	0	0	0	0	2	
			14	0	2	0	0	0	0	2	
		Hatchery rainbow									
			22	0	2	0	0	0	0	2	135.25
			23	0	4	0	0	0	0	4	100.21
			24	0	3	0	0	0	0	3	99.31
			25	0	5	0	0	0	0	5	101.09
			26	0	2	0	0	0	0	2	102.77
			27	0	1	0	0	0	0	1	95.36
			28	0	3	0	0	0	0	3	86.98
			29	0	5	0	0	0	0	5	88.67
			31	0	1	0	0	0	0	1	91.07
			32	0	1	0	0	0	0	1	84.02
			33	0	3	0	0	0	0	3	80.75
			34	0	1	0	0	0	0	1	81.59
			35	0	3	0	0	0	0	3	87.00
			38	0	1	0	0	0	0	1	99.35
			39	0	1	0	0	0	0	1	102.80
			40	0	1	0	0	0	0	1	105.90
			41	0	2	0	0	0	0	2	89.93
			42	0	3	0	0	0	0	3	93.46
			43	0	1	0	0	0	0	1	109.61
			45	0	1	0	0	0	0	1	82.95
		Largemouth bass									
			7	0	4	0	0	0	0	4	
			8	0	6	0	0	0	0	6	
			9	0	14	0	0	0	0	14	
			10	0	13	0	0	0	0	13	
			11	0	12	0	0	0	0	12	
			12	0	7	0	0	0	0	7	
			13	0	3	0	0	0	0	3	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			18	0	1	0	0	0	0	1	
			19	0	4	0	0	0	0	4	74.42
			21	0	2	0	0	0	0	2	82.05
			23	0	1	0	0	0	0	1	84.76
			24	0	2	0	0	0	0	2	74.00
			25	0	1	0	0	0	0	1	88.17
			34	0	1	0	0	0	0	1	102.98
		Redside shiner									
			7	0	3	0	0	0	0	3	
			8	0	2	0	0	0	0	2	
			9	0	3	0	0	0	0	3	
			10	0	4	0	0	0	0	4	
			11	0	1	0	0	0	0	1	
		Sucker spp.									
			14	0	1	0	0	0	0	1	
			17	0	1	0	0	0	0	1	
PADDOCK RES											
	5/23/96										
		Black crappie									
			25	0	1	0	0	0	0	1	125.60
		Largemouth bass									
			20	0	1	0	0	0	0	1	230.73
			23	0	4	0	0	0	0	4	113.40
			24	0	12	0	0	0	0	12	125.27
			25	0	16	0	0	0	0	16	114.43
			26	0	27	0	0	0	0	27	117.14
			27	0	23	0	0	0	0	23	110.46
			28	0	7	0	0	0	0	7	112.09
			29	0	3	0	0	0	0	3	111.90
			30	0	1	0	0	0	0	1	98.23
			31	0	2	0	0	0	0	2	100.15
SUCCOR CREEK RES											
	6/14/96										
		Bridgelip sucker									
			13	0	0	0	0	0	1	1	
			15	0	0	1	0	0	4	5	
			16	0	0	2	0	0	5	7	
			17	0	0	6	0	0	8	14	
			18	0	0	3	0	0	2	5	
			19	0	0	1	0	0	2	3	
			20	0	0	2	0	0	0	2	
			21	0	0	4	0	0	2	6	
			22	0	0	4	0	0	2	6	
			23	0	0	14	0	0	5	19	
			24	0	0	9	0	0	1	10	
			25	0	0	6	0	0	0	6	
			26	0	0	3	0	0	0	3	
			27	0	0	6	0	0	0	6	
			28	0	0	1	0	0	0	1	
			29	0	0	1	0	0	0	1	
			30	0	0	3	0	0	0	3	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
		Redside shiner									
			11	0	0	0	0	0	2	2	
			12	0	0	4	0	0	6	10	
			13	0	0	9	0	0	10	19	
			14	0	0	11	0	0	7	18	
			15	0	0	2	0	0	3	5	
			16	0	0	1	0	0	0	1	
		Wild rainbow/redband									
			16	0	0	1	0	0	0	1	102.11
			32	0	0	0	0	0	1	1	85.25
			36	0	0	1	0	0	0	1	89.71
			38	0	0	3	0	0	0	3	98.47
			39	0	0	2	0	0	1	3	103.06
			40	0	0	3	0	0	0	3	99.33
			41	0	0	1	0	0	0	1	106.35
			42	0	0	1	0	0	1	2	106.90
SWAN FALLS	6/9/96										
		Black crappie									
			16	0	0	0	0	0	1	1	179.28
			17	0	0	0	0	0	1	1	104.26
			18	0	0	0	0	0	1	1	94.89
			20	0	0	0	0	0	1	1	96.78
		Bridgelip sucker									
			36	0	0	0	0	0	1	1	
		Brown bullhead									
			12	0	1	0	0	0	0	1	
			24	0	2	0	0	0	0	2	
			25	0	0	1	0	0	0	1	
		Channel catfish									
			54	0	0	1	0	0	0	1	102.37
			57	0	0	1	0	0	0	1	110.11
		Common carp									
			55	0	1	0	0	0	0	1	
			56	0	1	0	0	0	0	1	
			57	0	0	1	0	0	0	1	
			58	0	1	1	0	0	0	2	
			60	0	1	0	0	0	0	1	
			61	0	0	1	0	0	0	1	
			62	0	1	0	0	0	0	1	
			64	0	1	0	0	0	0	1	
			67	0	1	0	0	0	0	1	
		Hatchery rainbow									
			15	0	1	0	0	0	0	1	170.07
			16	0	1	0	0	0	0	1	105.49
			33	0	1	0	0	0	0	1	78.85
		Largescale sucker									
			16	0	1	0	0	0	0	1	
			26	0	1	0	0	0	0	1	
			27	0	4	0	0	0	0	4	
			28	0	2	0	0	0	0	2	

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			29	0	2	0	0	0	0	2	
			30	0	4	0	0	0	0	4	
			31	0	4	0	0	0	0	4	
			32	0	1	0	0	0	0	1	
			35	0	1	0	0	0	0	1	
			36	0	1	0	0	0	0	1	
			37	0	1	0	0	0	0	1	
			38	0	5	0	0	0	0	5	
			40	0	2	0	0	0	0	2	
			41	0	2	0	0	0	0	2	
			43	0	1	0	0	0	0	1	
			44	0	1	0	0	0	0	1	
			45	0	2	0	0	0	0	2	
			46	0	4	0	0	0	0	4	
			48	0	1	3	0	0	1	5	
			49	0	2	0	0	0	2	4	
			50	0	5	0	0	0	0	5	
			51	0	3	1	0	0	2	6	
			52	0	2	0	0	0	0	2	
			54	0	2	0	0	0	2	4	
			55	0	0	0	0	0	1	1	
			56	0	1	0	0	0	0	1	
			57	0	1	1	0	0	0	2	
			60	0	0	0	0	0	1	1	
			65	0	0	0	0	0	1	1	
		Northern pikeminnow									
			19	0	0	1	0	0	0	1	
			20	0	0	1	0	0	0	1	
			21	0	1	0	0	0	0	1	
			24	0	0	1	0	0	0	1	
			26	0	1	0	0	0	0	1	
			27	0	0	1	0	0	0	1	
			29	0	0	1	0	0	0	1	
			35	0	0	1	0	0	0	1	
			47	0	1	0	0	0	0	1	
			51	0	1	0	0	0	0	1	
		Peamouth									
			24	0	1	0	0	0	0	1	
			27	0	0	1	0	0	0	1	
			29	0	1	0	0	0	0	1	
			32	0	0	1	0	0	0	1	
		Smallmouth bass									
			6	0	2	0	0	0	0	2	291.82
			7	0	8	0	0	0	0	8	159.46
			8	0	8	0	0	0	0	8	184.31
			9	0	7	0	0	0	0	7	136.80
			10	0	3	0	0	0	0	3	111.97
			11	0	1	0	0	0	0	1	111.58
			14	0	2	0	0	0	0	2	155.29
			15	0	13	0	0	0	0	13	122.58

Appendix B. (continued)

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			16	0	13	0	0	0	0	13	120.56
			17	0	10	0	0	0	0	10	116.29
			18	0	14	0	0	0	0	14	122.23
			19	0	7	1	0	0	0	8	109.90
			20	0	6	0	0	0	1	7	97.74
			21	0	8	0	0	0	0	8	102.20
			22	0	5	0	0	0	0	5	105.85
			23	0	2	0	0	0	0	2	102.37
			24	0	3	0	0	0	0	3	100.34
			25	0	3	0	0	0	0	3	95.53
			26	0	3	0	0	0	0	3	99.21
			27	0	6	0	0	0	0	6	98.18
			28	0	6	0	0	0	0	6	86.57
			29	0	5	0	0	0	0	5	93.09
			30	0	7	0	0	0	1	8	90.26
			31	0	4	0	0	0	0	4	87.47
			32	0	3	0	0	0	0	3	92.17
			33	0	1	0	0	0	0	1	84.80
			34	0	1	0	0	0	0	1	65.70
			35	0	2	0	0	0	0	2	77.81
			37	0	1	0	0	0	0	1	86.33
		White crappie									
			21	0	0	0	0	0	1	1	103.86

Appendix C. Electrofishing, gill net and trap net catch-per-unit-effort (CPUE) by number and weight for lowland lake sampling, 1996.

WATER	DATE	SPECIES	EF CPUE (Number)	GN CPUE (Number)	TN CPUE (Number)	TOTAL CPUE (Number)	EF CPUE (Weight kg)	GN CPUE (Weight kg)	TN CPUE (Weight kg)	Total CPUE (Weight kg)
BLACK CANYON										
	9/4/96									
		Black crappie	22	4	3	29	0.68	0.39	0.19	1.26
		Bluegill	3	0	0	3	0.02	0.00	0.00	0.02
		Bridgelip sucker	61	2	0	63	1.29	0.36	0.00	1.65
		Brown bullhead	5	41	0	46	1.06	6.52	0.00	7.57
		Chiselmouth	13	12	0	25	0.39	1.22	0.00	1.61
		Common carp	7	9	0	16	2.27	12.10	0.00	14.37
		Hatchery rainbow	1	0	0	1	0.03	0.00	0.00	0.03
		Largemouth bass	69	1	0	70	1.77	0.14	0.00	1.91
		Largescale sucker	285	54	1	340	39.38	33.23	0.60	73.21
		Northern pikeminnow	35	81	0	116	3.79	17.74	0.00	21.53
		Pumpkinseed	86	2	3	91	1.15	0.04	0.11	1.30
		Smallmouth bass	51	4	0	55	8.29	1.73	0.00	10.01
		Yellow perch	17	9	0	26	0.63	0.77	0.00	1.40
		Total	655	216	7	878	60.74	74.23	0.90	135.88
C J STRIKE RES										
	5/14/96									
		Black crappie	15	1	3	20	1.61	0.16	0.31	2.07
		Bluegill	50	0	0	50	5.49	0.00	0.00	5.49
		Bridgelip sucker	12	10	0	22	2.05	2.13	0.00	4.18
		Brown bullhead	0	1	0	1	0.00	0.19	0.00	0.19
		Channel catfish	1	5	0	6	3.49	10.73	0.00	14.23
		Chiselmouth	2	40	1	44	0.69	7.58	0.21	8.48
		Common carp	5	3	0	8	17.16	9.07	0.00	26.24
		Hatchery rainbow	2	14	0	16	0.41	5.45	0.20	6.06
		Largemouth bass	14	1	0	15	18.82	0.24	0.00	19.06
		Largescale sucker	117	48	0	165	39.54	29.22	0.00	68.76
		Northern pikeminnow	0	17	0	18	0.00	8.08	0.33	8.41
		Peamouth	0	2	0	2	0.00	0.49	0.00	0.49
		Smallmouth bass	109	6	0	115	16.46	1.48	0.13	18.08
		Warmouth sunfish	1	0	0	1	0.09	0.03	0.00	0.12
		White crappie	55	59	9	124	8.85	8.25	1.42	18.52
		Yellow perch	5	12	1	18	0.23	1.52	0.06	1.81
		Total	388	221	15	625	114.90	84.63	2.67	202.19

Appendix C. (continued)

WATER	DATE	SPECIES	EF CPUE (Number)	GN CPUE (Number)	TN CPUE (Number)	TOTAL CPUE (Number)	EF CPUE (Weight kg)	GN CPUE (Weight kg)	TN CPUE (Weight kg)	Total CPUE (Weight kg)
HORSESHOE BEND										
	6/26/96									
		Bluegill	73	2	18	93	3.00	0.08	0.84	3.92
		Brown bullhead	19	0	0	19	8.74	0.00	0.00	8.74
		Common carp	1	0	0	1	5.99	0.00	0.00	5.99
		Hatchery rainbow	4	29	0	33	0.68	4.79	0.00	5.47
		Largemouth bass	108	7	1	116	25.01	1.33	0.02	26.36
		Largescale sucker	2	2	0	4	1.83	3.06	0.00	4.89
		Northern pikeminnow	0	1	0	1	0.00	0.17	0.00	0.17
		Pumpkinseed	574	37	38	649	20.29	1.34	1.78	23.42
		Yellow perch	0	4	0	4	0.00	0.43	0.00	0.43
		Total	781	82	57	920	65.54	11.20	2.64	79.37
INDIAN CREEK RES										
	4/29/96									
		Bluegill	23	0	2	25	0.79	0.00	0.43	1.22
		Channel catfish	3	0	0	3	2.59	0.00	0.00	2.59
		Largemouth bass	294	0	1	295	14.66	0.00	0.01	14.67
		Total	319	0	3	322	18.04	0.00	0.44	18.48
LAKE LOWELL										
	5/20/96									
		Black crappie	0	1	0	1	0.00	0.01	0.00	0.01
		Bluegill	2	0	0	2	0.11	0.00	0.03	0.14
		Brown bullhead	2	0	3	5	0.36	0.00	1.08	1.43
		Channel catfish	0	8	0	8	0.00	8.38	0.00	8.38
		Chiselmouth	1	0	0	1	0.05	0.00	0.00	0.05
		Common carp	13	19	9	41	13.12	17.31	14.39	44.82
		Hatchery rainbow	0	0	0	0	0.00	0.05	0.00	0.05
		Kokanee salmon	0	0	0	0	0.00	0.11	0.00	0.11
		Largemouth bass	17	1	0	18	0.46	0.16	0.00	0.61
		Largescale sucker	23	35	13	71	18.14	32.73	12.35	63.23
		Northern pikeminnow	0	4	1	5	0.00	0.62	0.05	0.67
		Smallmouth bass	33	1	0	34	1.30	0.09	0.00	1.40
		White crappie	2	0	0	2	0.39	0.00	0.00	0.39
		Yellow perch	20	1	0	21	0.33	0.06	0.00	0.38
		Total	113	68	26	207	34.26	59.50	27.90	121.66
SWAN FALLS										
	6/9/96									
		Black crappie	0	0	2	2	0.00	0.00	0.20	0.20
		Bridgelip sucker	0	0	1	1	0.00	0.00	0.22	0.22

Appendix C. (continued)

WATER	DATE	SPECIES	EF CPUE (Number)	GN CPUE (Number)	TN CPUE (Number)	TOTAL CPUE (Number)	EF CPUE (Weight kg)	GN CPUE (Weight kg)	TN CPUE (Weight kg)	Total CPUE (Weight kg)
		Brown bullhead	3	1	0	4	0.61	0.17	0.00	0.78
		Channel catfish	0	1	0	1	0.00	1.98	0.00	1.98
		Common carp	8	2	0	9	24.62	4.10	0.00	28.72
		Hatchery rainbow	3	0	0	3	0.49	0.00	0.00	0.49
		Largescale sucker	63	3	5	71	51.58	3.09	7.27	61.94
		Northern pikeminnow	5	3	0	8	3.03	0.54	0.00	3.57
		Peamouth	2	1	0	3	0.46	0.21	0.00	0.67
		Smallmouth bass	174	1	1	176	26.33	0.06	0.24	26.62
		White crappie	0	0	1	1	0.00	0.00	0.07	0.07
		Total	259	10	9	278	107.12	10.13	8.00	125.25

1996 ANNUAL PERFORMANCE REPORT

State of: Idaho | Program: Fisheries Management F-71-R-21

Project I: Surveys and Inventories | Sub-Project I-D: Southwest Region

Job: c | Title: Rivers and Streams Investigations

Contract Period: July 1, 1996 to June 30, 1997

ABSTRACT

Twelve transects were snorkeled on the North Fork Boise River in August 1996 to document fish species and lengths. Snorkel results were compared against a 1988 data set of the same sites. In areas below the September 1995 landslide events, the wild trout numbers were reduced. Fish numbers upstream of the impact were the same or greater than 1988 numbers of fish observed.

Thirty sites on the South Fork Payette River and four sites on the Payette River were snorkeled during August 1996. Divers identified fish to species and length and data were entered into Southwest Region Streams Database.

Eight sections of the Boise River within the town of Boise were floated and sampled with an electrofishing raft during December 1996. The upper section began at Barber Park and the last section ended below the Broadway Bridge. Length frequencies and species composition for each of the eight sections were developed. This method will be used in the future because of less intensive manpower needs versus a walking electrofish gang probe used in the past.

Eleven sites were snorkeled on the Middle Fork Payette River during July 1996. All sites contained fish. Ten sites contained redband trout and two contained bull trout *Salvelinus confluentus.* Densities were within ranges observed in the drainage.

Three and one-half miles of fence were constructed along Long Tom Creek and the West Fork of Long Tom Creek. Fence construction was part of a cooperative project between Idaho Department of Fish and Game (IDFG), Boise Valley Fly Fishermen, Idaho Soil Conservation Service, Elmore County Soil Conservation District, Natural Resource Conservation Service, and private landowners Steve and Jim Percy of Mountain Home. Additionally, Boise Valley Fly Fishermen constructed a grazing exclosure on West Fork Long Tom Creek.

Electrofishing efforts in several sections of Long Tom Creek and West Fork Long Tom Creek produced two redband trout *Oncorhynchus mykiss gairdneri* from Long Tom Creek and one from West Fork Long Tom.

Forty redband trout (100-225 mm total length) from below Long Tom Reservoir and 90 redband trout (75-150 mm) from Syrup Creek were electrofished and transplanted into the West Fork Long Tom Creek.

Permanent transects were established inside and outside the grazing exclosure. Transect width, wetted channel width, depth, habitat type (pool, riffle, run, pocket water), and substrate composition were measured at each transect after the grazing season. Photo points were established, and photos were taken documenting the condition of the riparian area at each point.

On October 7, 1996, 64 bull trout were electrofished from Ballentyne Creek and transplanted into upper Bear River. Size range of bull trout collected was 75-150 mm total length. Fifty redband trout were collected from Big Silver Creek and transplanted into upper Bear River. Size range of redband trout was 100-150 mm.

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NORTH FORK BOISE RIVER

Methods

Twelve sections on the North Fork Boise River were snorkeled by two divers during late August 1996. Data from snorkeling sections were compared against 1988 data (Rohrer 1989). Information was collected to document the effects of major landslide events that occurred in early September 1995.

Divers moved from bottom to top of transects identifying and counting various fish species observed. The snorkeled areas were then measured for lengths and several widths; depths and substrate measurements were collected where possible. The transects in section 1, in the North Fork River canyon, were accessed via a two-man inflatable kayak.

Results

Summary of 1996 snorkel survey and data from 1988 (Rohrer 1989) compare the density of fish/100 m^2 (Table 1). The September 1995 landslides occurred mainly in section 3 (Table 11). Fish densities were reduced below this section in 1996 compared to 1988 data. Fish densities above the landslide impact area were generally higher in 1996 compared to 1988. Length frequency and measured habitat variables for all 12 sites from 1996 are presented in Appendix A.

Species abbreviations used in Appendix A include: BLS - bridgelip sucker *Catostomus columbianus;* HRB - hatchery rainbow trout *Oncorhynchus mykiss;* NSF - northern pikeminnow *Ptychocheilus oregonensis;* RSS - redside shiner *Richardsonius balteatus;* SCP - sculpin species *Cottus spp;* WRB - wild rainbow trout *Oncorhynchus mykiss gairdneri;* MWF - mountain whitefish *Prosopium williamsoni;* LSS - largescale sucker *C. macrocheilus;* SUK - unidentified sucker *Catostomus spp.*

SOUTH FORK PAYETTE RIVER

Methods

Thirty sites were snorkeled on the South Fork of the Payette River above the confluence of the Middle Fork of the Payette River during August 1996. Four snorkel sections were also done on the Payette River below Banks, Idaho.

Snorkeling was done with two divers either moving upstream or doing corridor downstream floats dependent on the width and flow of the river. Divers identified fish species and estimated fish

sizes as they moved through the section. A hand-held range finder was used to measure the average width and total length.

Site selection was related to geographic features, usually the roadway milepost. Legal descriptions to section, elevations, and an average stream gradient were obtained from topographical maps; sites were also marked on maps for a permanent record. Data were entered into the regional streams database and output to a single page report for each sample section.

Results

The summaries for the 34 sites are presented in Appendix B. Length frequencies were developed for all species observed. Fish density information was not calculated.

Species abbreviations used in Appendix B include: BLS - bridgelip sucker; HRB - hatchery rainbow trout; NSF - northern pikeminnow; RSS - redside shiner; SCP - sculpin species; WRB - wild rainbow trout; MWF - mountain whitefish; LSS - largescale sucker.

BEAR RIVER BULL TROUT AND REDBAND TROUT TRANSPLANT

Methods

On October 7, 1996 Ballantyne Creek (T8N, R10E, S24) and Big Silver Creek (T8N, R10E, S28) were electrofished to collect approximately 50 bull and redband trout, respectively. Fish were collected using battery-powered backpack shockers in Ballantyne Creek (inside wilderness), and using gasoline powered backpack shockers in Big Silver Creek (outside wilderness). Fish were airlifted via helicopter down into Bear River (T8N, R9E, S25) and released.

Results

Sixty-four bull trout (size range 75-150 mm total length) were collected from Ballantyne Creek. Bull trout were right pelvic fin-clipped prior to release. Fifty redband trout were collected from Big Silver Creek. All collected fish were airlifted via helicopter into Bear River and released. Bull trout and redband trout have been airlifted into Bear River for three consecutive years.

Recommendations

Sample Bear River using snorkel or electrofishing gear to determine if transplanted trout are surviving and/or reproducing.

BOISE RIVER ELECTROFISHING

Methods

Raft electrofishing occurred in a downstream direction on the Boise River within the town of Boise, Idaho. Attempts were made to collect a sample of all fish shocked. Eight sections of the river were shocked for 600 seconds each. Fish were measured for total length (mm), weighed (g) and released. Locations of the shocking sections were recorded and mapped for trend reference sites.

Equipment used included a 4.6 m raft and Coffelt model VVP-15 electrofishing box. Anodes were mounted on booms attached to both sides of the raft and extended 1.8 to 2.4 m in front of the raft. The anode on each boom consisted of a 76 cm ring from which eight dropper electrodes were suspended. Electrodes consisted of 20.3 cm pieces of 1.2 cm stainless steel conduit suspended 1.2 to 2.4 m below the water surface. The cathode consisted of three 2.4-m pieces of 0.95 cm diameter stainless steel cable suspended from each side of the raft.

Results

Length frequency of captured and measured fish species is presented in Appendix C. The use of this methodology for the Boise River will provide us with good trend information. The use of gang electrofishing probes did not work well at 240 + cfs flows that were present in late 1996. The use of the electrofishing raft did allow us to work and reduced the manpower needs. Two individuals could provide a trend count versus having to line up 12 people to do a 3-pass population estimate.

Species abbreviations used in Appendix C include: BLS - bridgelip sucker; HBN - hatchery brown trout *Salmo trutta*; HRB - hatchery rainbow; HSK - bridgelip x largescale sucker; MTS - mountain sucker *C. platyrhynchus*; NSF - northern pikeminnow; RSS - redside shiner; SCP - sculpin species; WBN - wild brown trout; WRB - wild rainbow trout; MWF - mountain whitefish.

MIDDLE FORK PAYETTE RIVER SNORKEL SURVEY

Methods

Snorkel survey methods were used to identify and count fish species and numbers in 11 transects in the Middle Fork Payette River and Silver Creek, a tributary, during July 1996. Two divers worked upstream in the sample transects counting and identifying fish. A third person walked the shoreline recording data relayed to him by the divers. The length, width, and substrate types were recorded. The density of gamefish was calculated on a basis of fish per 100 m^2. Data

was entered into the regional streams database and a summary report was calculated for each individual transect site.

Results

All 11 sampled sites had fish observed. Ten of the 11 sites contained redband trout and 2 sites had bull trout (Table 2). Two of the Silver Creek sites contained brook trout. Trout densities were comparable to other observed sites in the drainage. Appendix D provides length frequencies of all fish and habitat summaries.

Species abbreviation used in Appendix D include: HRB - hatchery rainbow trout; SCP - sculpin species; WRB - wild rainbow trout; MWF - mountain whitefish; SPD - speckled dace *Rhinichthys oculus*; BKT - brook trout *Salvelinus fontinalis*; BLT - bull trout; LND - longnose dace *R. cataractae*.

LONG TOM CREEK FENCING PROJECT

Introduction

Landowners Steve and Jim Percy expressed an interest in decreasing cattle grazing along Long Tom Creek and West Fork Long Tom Creek northeast of Mountain Home. They felt cattle grazing along the creeks could be reduced with little economic impact to their ranching operation if additional fence was constructed to keep cattle up on the hillside, away from the creek, during mid-summer to early fall.

A cooperative project was developed between the IDFG, Boise Valley Fly Fishermen, Idaho Soil Conservation Service, Elmore County Soil Conservation District, Natural Resource Conservation Service, and private landowners Steve and Jim Percy of Mountain Home. The objective of the project was to construct 3.5 miles of pasture fence, splitting one large pasture into four smaller pastures. Two off-stream water sites were also developed as part of the project.

The Idaho Soil Conservation Commission, through the Elmore Soil Conservation District contributed $10,000 to purchase fence and water site development materials. The IDFG reservists and volunteers, Boise Valley Fly Fishermen, and the Percys constructed the fence and water site developments. The IDFG and the Natural Resource Conservation Service provided technical guidance to the project.

The objective of the project was to improve riparian area conditions to benefit fish, while maintaining an economically viable cattle ranching operation on private land.

Methods

Idaho Fish and Game reservists, volunteers and Boise Valley Fly Fishermen constructed 3.5 miles of barbed wire and electric fence during April and May 1996. Additionally, Boise Valley Fly Fishermen constructed a grazing exclosure on West Fork Long Tom Creek during late April.

Long Tom Creek and West Fork Long Tom Creek were electrofished during September to determine species composition and numbers of fish present in the streams.

Redband trout were collected using backpack electrofishing gear from below Long Tom Reservoir and from Syrup Creek and transplanted into West Fork Long Tom Creek in October 1996.

Eleven permanent transects were established both inside and outside the grazing exclosure. Each transect was marked with rebar rods on both sides of the stream. Width between rebar rods, wetted channel width, depth, habitat type, and substrate composition were measured at each transect in November 1996. Photo points were established and photos taken during November 1996.

Results

Electrofishing activities in West Fork Long Tom Creek produced one redband trout and numerous mountain suckers *Catostomus platyrhynchus* and dace *Rhinichthys spp.* Two redband trout and numerous mountain suckers and dace were collected from Long Tom Creek. Electrofishing activity was designed to document the status of redband trout populations in the West Fork Long Tom Creek. No attempt was made to record area or time electrofished. Based on the capture of three redband trout, the population of reband trout in the West Fork Long Tom Creek was considered virtually nonexistent, and the population in Long Tom was very low.

Forty redband trout were collected from immediately below Long Tom Reservoir and 90 redband trout were collected from Syrup Creek October 8, 1996. Length of redband trout collected from below Long Tom Reservoir was 100-225 mm total length. Length of redband trout collected from Syrup Creek was 75-150 mm total length. All redband trout were released in the West Fork Long Tom Creek in an attempt to reestablish a reproducing population there.

Eleven experimental transects were established outside the grazing exclosure (E1-11), and 11 control transects (C1-11) were established inside the grazing exclosure. Habitat measurements were made on November 20 in all 22 transects. Habitat measurements are included in Table 3.

Photos were taken at photo points. Photos are stored in Southwest Region fishery files.

Recommendations

1. Make habitat measurements inside and outside the grazing exclosure annually to document change in channel morphology in the presence and absence of grazing. Take pictures at photo points as part of the monitoring.

2. Electrofish sections of West Fork Long Tom Creek to determine if transplanted redband trout successfully spawned during the spring of 1997. If spawning was unsuccessful, transplant additional redbands from Syrup Creek.

LITERATURE CITED

Rohrer, R.L. 1989. Lake and Reservoir Investigations. Study 1: Boise River Reservoirs. Idaho Department of Fish and Game. Job Performance Report, Project No. F-73-R-11.

TABLES

Table 1. Comparison of fish densities (number/100 m^2) for the North Fork Boise River from its mouth to Graham, 1988 versus 1996. Sections described below.

	Wild rainbow trout length (mm)				Whitefish	Hatchery Trout
	0-100	100-200	200-300	>300		
Section 1						
1996	0	0.02	0.06	0.07	0.84	0.08
1988	0.07	0.40	0.38	0.12	1.37	0
Section 2						
1996	0	0.09	0	0.04	0.23	0.11
1988	0.05	0.13	0.02	0	0.22	0.36
Section 3						
1996	0	0.15	0.08	0	0.21	0.09
*1996	0.35	0.71	1.42	0	5.0	10.6
1988	0.17	0.64	0.21	0	0.82	0.29
Section 4						
1996	1.01	5.43	2.54	1.09	2.31	1.41
1988	0	0.51	0.59	0.08	4.73	0

Footnotes:
Section 1 - Confluence with Middle Fork Boise River to Rabbit Creek, unroaded
Section 2 - Rabbit Creek to Crooked River mouth, roaded section
Section 3 - Crooked River to Deer Park, roaded section
* - This section was above the main blowouts on September 1995 but still in Section 3
Section 4 - Deer Park to Graham, unroaded section

Table 2. Densities of game fish (No./100 m^2) observed while snorkeling the Middle Fork Payette river and Silver creek, July 1996.

Site	Area	Wild Rainbow	Hatchery Rainbow	Brook Trout	Bull Trout	Mountain Whitefish
MF 1	1428	0.07				
MF 1A	875	0.90				1.30
MF 2	753	0.93	0.10		0.10	1.20
MF 3	865	1.9			0.10	1.20
MF 4	1234	1.22				
MF 5	1582	1.20	0.06			4.34
MF 6	853	0.35				2.93
MF 7	1579		0.06			1.84
Silver 1	372	4.50		1.88		
Silver 2	527	6.10		4.70		
Silver 3	245	0.40				

Site description in Appendix B

Table 3. Habitat measurements from West Fork Long Tom Creek, November 20, 1996.

Date	Transect	Stake width (m)	Wetted width (m)	Channel width (m)	Depth .25	Depth .50	Depth .75	Habitat[a]	%Sand	%Gravel
11/20/96	C1	4.1	3.3	3.3	0.07	0.16	0.11	3	50	50
11/20/96	C10	2.7	1	1	0.06	0.06	0.04	2	100	0
11/20/96	C11	4.2	2.8	1	0.19	0.26	0.18	3	100	0
11/20/96	C2	2.2	2	1.3	0.18	0.15	0.09	3	100	0
11/20/96	C3	2.7	2.1	0.03	0.07	0.08	0.03	3	50	50
11/20/96	C4	4.8	4.6	0	0.06	0.04	0.06	3	100	0
11/20/96	C5	3.2	2.4	1.1	0.09	0.25	0.26	3	100	0
11/20/96	C6	5.6	3.4	3.4	0.3	0.27	0.14	1	100	0
11/20/96	C7	2.9	1.8	1.7	0.13	0.13	0.1	3	100	0
11/20/96	C8	3.5	1.9	1.9	0.3	0.23	0.1	1	100	0
11/20/96	C9	4.1	2.3	1.6	0.09	0.08	0.03	3	100	0
11/20/96	E1	3.2	2.6	1.2	0.1	0.32	0.51	1	100	0
11/20/96	E10	6.4	4.9	1.9	0.04	0.25	0.1	3	100	0
11/20/96	E11	8.8	6.5	0	0.07	0.05	0.02	3	100	0
11/20/96	E2	4.7	3.2	1.3	0.07	0.1	0.07	3	100	0
11/20/96	E3	3.5	2.2	2.2	0.32	0.35	0.3	1	100	0
11/20/96	E4	4.8	3.6	3.6	0.47	0.52	0.4	1	100	0
11/20/96	E5	6.2	5.1	4.1	0.06	0.18	0.15	1	100	0
11/20/96	E6	4.6	3.5	2.3	0.24	0.2	0.13	3	100	0
11/20/96	E7	3.5	2.7	2.2	0.04	0.08	0.06	3	100	0
11/20/96	E8	3.7	7.7	0	0.1	0.16	0.11	3	100	0
11/20/96	E9	7.7	4.7	1.8	0.05	0.31	0.07	3	100	0

[a]1=Pool, 2=Riffle, 3=Run

APPENDICES

Appendix A

Summaries of snorkeled sample transects on the North Fork Boise River, August 1996.

STREAM: Boise R, N F SAMPLE DATE: 8/28/96
EPA REACH: 17050111024 QUAD MAP: Twin Springs
RTS: R7E, T5N, S28 LAT/LONG: 43 45.09 ; 115 37.72
SECTION DESCRIPTION: pool upstream from French Ck ~300m

Length Frequency

Species	CM Group	Method	Number Measured
MWF	15	SN	1.00
MWF	35	SN	3.00
RSS		SN	0.00

Transect Information:

Section Length (m):	25		
Elevation (m):	1098		
Gradient (%):	0.95%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):	13.5		
Mean Depth (m):	0.0		
Cover (%):	0		

Habitat Type:

Pool:	0.0	%
Riffle:	0.0	%
Run:	0.0	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	0	%
Gravel:	0	%
Rubble:	0	%
Boulder:	0	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F
EPA REACH: 17050111024
RTS: R7E, T5N, S10
SECTION DESCRIPTION: @ mouth of Rabbit creek

SAMPLE DATE: 8/28/96
QUAD MAP: Barber Flat
LAT/LONG: 43 47.44 ; 115 36.23

Length Frequency

Species	CM Group	Method	Number Measured
HRB	25	SN	2.00
LSS	35	SN	15.00
LSS	45	SN	2.00
NSF	33	SN	2.00
WRB	15	SN	1.00
WRB	30	SN	1.00

Transect Information:

Section Length (m):	64.5
Elevation (m):	1201
Gradient (%):	0.54%
Population Est:	0.0
Shade (%):	0.0
Mean Width (m):	19.3
Mean Depth (m):	0.9
Cover (%):	0

S.E(popest): 0

Habitat Type:

Pool:	13.3	%
Riffle:	0.0	%
Run:	86.7	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	21	%
Gravel:	21	%
Rubble:	36	%
Boulder:	22	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F
EPA REACH: 17050111024
RTS: R7E, T5N, S10
SECTION DESCRIPTION: @ mouth of Short Ck

SAMPLE DATE: 8/28/96
QUAD MAP: Barber Flat
LAT/LONG: 43 46.93 ; 115 36.83

Length Frequency

Species	CM Group	Method	Number Measured
LSS	33	SN	1.00
LSS	35	SN	1.00
LSS	40	SN	2.00
MWF		SN	0.00
MWF	30	SN	2.00
MWF	33	SN	2.00
NSF	33	SN	1.00
NSF	38	SN	1.00
SUK	35	SN	1.00
WRB	15	SN	1.00
WRB	22	SN	1.00

Transect Information:

Section Length (m):	50
Elevation (m):	1095
Gradient (%):	0.95%
Population Est:	0.0
Shade (%):	0.0
Mean Width (m):	24.3
Mean Depth (m):	0.7
Cover (%):	0

S.E(popest): 0

Habitat Type:

Pool:	8.3	%
Riffle:	8.3	%
Run:	83.3	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	16	%
Gravel:	10	%
Rubble:	35	%
Boulder:	33	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F
EPA REACH: 17050111024
RTS: R7E, T5N, S21
SECTION DESCRIPTION: see Quadmap

SAMPLE DATE: 8/28/96
QUAD MAP: Barber Flat
LAT/LONG: 43 45.63 ; 115 37.2

Length Frequency

Species	CM Group	Method	Number Measured
HRB	30	SN	1.00
LSS	35	SN	3.00
MWF	30	SN	2.00
MWF	35	SN	5.00
MWF	40	SN	3.00
NSF	30	SN	2.00
NSF	38	SN	1.00
RSS	10	SN	404.0
WRB	22	SN	1.00
WRB	30	SN	1.00
WRB	33	SN	1.00

Transect Information:

Section Length (m):	46
Elevation (m):	1146
Gradient (%):	1.89%
Population Est:	0.0
Shade (%):	0.0
Mean Width (m):	16.1
Mean Depth (m):	1.1
Cover (%):	0

S.E(popest): 0

Habitat Type:

Pool:	58.3	%
Riffle:	0.0	%
Run:	16.7	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	37	%
Gravel:	21	%
Rubble:	5	%
Boulder:	13	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F SAMPLE DATE: 8/28/96
EPA REACH: 17050111024 QUAD MAP: Sheep Creek
RTS: R7E, T5N, S33 LAT/LONG: 43 43.65 ; 115 36.98
SECTION DESCRIPTION: large pool below oxbow

Length Frequency

Species	CM Group	Method	Number Measured
BLS	33	SN	1.00
HRB	33	SN	1.00
LSS	30	SN	1.00
LSS	33	SN	2.00
LSS	35	SN	5.00
LSS	38	SN	28.00
LSS	40	SN	30.00
MWF	35	SN	1.00
MWF	38	SN	1.00
MWF	40	SN	1.00
NSF	25	SN	3.00
NSF	33	SN	5.00
NSF	35	SN	5.00
NSF	38	SN	3.00
NSF	40	SN	2.00
RSS		SN	0.00

Transect Information:

Section Length (m):	37		
Elevation (m):	1073		
Gradient (%):	0.95%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F SAMPLE DATE: 8/26/96
EPA REACH: 17050111025 QUAD MAP: Barber Flat
RTS: R7E, T5N, S2 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Below Black Rock @ Black Rock itself

Length Frequency

Species	CM Group	Method	Number Measured
HRB	33	SN	1.00
LSS	30	SN	1.00
LSS	33	SN	2.00
LSS	35	SN	2.00
LSS	38	SN	3.00
LSS	40	SN	7.00
LSS	45	SN	8.00
MWF	5	SN	2.00
MWF	7	SN	2.00
MWF	14	SN	3.00
MWF	15	SN	1.00
NSF	33	SN	1.00
NSF	35	SN	1.00
NSF	40	SN	2.00
RSS		SN	0.00
WRB	15	SN	2.00

Transect Information:

Section Length (m):	74
Elevation (m):	1214
Gradient (%):	0.47%
Population Est:	0.0
Shade (%):	0.0
Mean Width (m):	24.0
Mean Depth (m):	0.6
Cover (%):	0

S.E(popest): 0

Habitat Type:

Pool:	0.0	%
Riffle:	41.7	%
Run:	58.3	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	24	%
Gravel:	16	%
Rubble:	42	%
Boulder:	18	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F SAMPLE DATE: 8/26/96
EPA REACH: 17050111026 QUAD MAP: Barber Flat
RTS: R8E, T6N, S17 LAT/LONG: 43 51.24 ; 115 32.21
SECTION DESCRIPTION: Bottom of section is 300 yds downstream from Crooked r bridge on NFBR road

Length Frequency

Species	CM Group	Method	Number Measured
HRB	30	SN	1.00
HRB	35	SN	1.00
LSS	30	SN	2.00
LSS	35	SN	4.00
LSS	40	SN	4.00
LSS	45	SN	4.00
LSS	61	SN	1.00
MWF	7	SN	1.00
MWF	10	SN	1.00
NSF	30	SN	2.00
NSF	33	SN	2.00
NSF	35	SN	4.00
WRB	20	SN	1.00

Transect Information:

Section Length (m):	72.3		
Elevation (m):	1320		
Gradient (%):	0.95%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):	15.0		
Mean Depth (m):	0.8		
Cover (%):	0		

Habitat Type:

Pool:	33.3	%
Riffle:	6.7	%
Run:	60.0	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	30	%
Gravel:	11	%
Rubble:	13	%
Boulder:	45	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F
EPA REACH: 17050111028
RTS: R8E, T6N, S3
SECTION DESCRIPTION: Just above Bear R mouth

SAMPLE DATE: 8/26/96
QUAD MAP: Bear River
LAT/LONG: 43 53.51 ; 115 29.3

Length Frequency

Species	CM Group	Method	Number Measured
LSS	30	SN	5.00
LSS	33	SN	5.00
LSS	35	SN	5.00
LSS	40	SN	3.00
MWF	33	SN	1.00
MWF	38	SN	1.00
NSF	20	SN	2.00
NSF	27	SN	2.00
NSF	33	SN	5.00
NSF	35	SN	4.00
NSF	40	SN	3.00
WRB	15	SN	2.00
WRB	17	SN	1.00
WRB	20	SN	1.00
WRB	27	SN	1.00

Transect Information:

Section Length (m):	86
Elevation (m):	1372
Gradient (%):	0.65%
Population Est:	0.0
Shade (%):	0.0
Mean Width (m):	16.2
Mean Depth (m):	0.6
Cover (%):	0

S.E(popest): 0

Habitat Type:

Pool:	40.0	%
Riffle:	20.0	%
Run:	40.0	%
Pocket:	0.0	%

Substrate

Organic:	5	%
Sand:	26	%
Gravel:	27	%
Rubble:	41	%
Boulder:	5	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F
EPA REACH: 17050111028
RTS: R10E, T7N, S19
SECTION DESCRIPTION: 100 yds upstream from mouth of Bleu Jay Ck

SAMPLE DATE: 8/21/96
QUAD MAP: Swanholm Peak
LAT/LONG: 43 55.53 ; 115 19.42

Length Frequency

Species	CM Group	Method	Number Measured
BLT	25	SN	1.00
BLT	27	SN	1.00
HRB	33	SN	4.00
SCP		SN	0.00
WRB	7	SN	1.00
WRB	10	SN	3.00
WRB	15	SN	5.00
WRB	17	SN	4.00
WRB	20	SN	1.00
WRB	22	SN	2.00
WRB	25	SN	4.00
WRB	27	SN	2.00
WRB	30	SN	3.00

Transect Information:

Section Length (m):	37		
Elevation (m):	1653		
Gradient (%):	1.89%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):	14.1		
Mean Depth (m):	0.5		
Cover (%):	0		

Habitat Type:

Pool:	6.7	%
Riffle:	0.0	%
Run:	93.3	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	11	%
Gravel:	17	%
Rubble:	31	%
Boulder:	40	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F
EPA REACH: 17050111028
RTS: R9E, T6N, S29
SECTION DESCRIPTION: Pool below corner, MP 33.8

SAMPLE DATE: 8/26/96
QUAD MAP: Bear River
LAT/LONG: 43 54.73 ; 115 24.88

Length Frequency

Species	CM Group	Method	Number Measured
HRB		SN	0.00
LSS	30	SN	2.00
LSS	33	SN	2.00
LSS	35	SN	12.00
MWF	22	SN	1.00
MWF	25	SN	1.00
MWF	27	SN	1.00
MWF	30	SN	3.00
MWF	33	SN	2.00
MWF	38	SN	6.00
NSF	30	SN	2.00
NSF	33	SN	4.00
NSF	35	SN	4.00
WRB	7	SN	1.00
WRB	15	SN	2.00
WRB	20	SN	2.00
WRB	22	SN	1.00
WRB	27	SN	1.00

Transect Information:

Section Length (m):	20		
Elevation (m):	1457		
Gradient (%):	0.95%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):	14.1		
Mean Depth (m):	0.9		
Cover (%):	0		

Habitat Type:

Pool:	44.4	%
Riffle:	11.1	%
Run:	44.4	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	14	%
Gravel:	9	%
Rubble:	34	%
Boulder:	42	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F SAMPLE DATE: 8/21/96
EPA REACH: 17050111028 QUAD MAP: Swanholm Peak
RTS: R9E, T7N, S24 LAT/LONG: 43 55.4 ; 115 20.11
SECTION DESCRIPTION: @ mouth of Horsefly Ck

Length Frequency

Species	CM Group	Method	Number Measured
BLT	35	SN	1.00
BLT	40	SN	1.00
HRB	27	SN	1.00
HRB	30	SN	1.00
HRB	33	SN	1.00
MWF	5	SN	2.00
MWF	25	SN	1.00
MWF	30	SN	1.00
MWF	33	SN	1.00
MWF	35	SN	6.00
MWF	40	SN	1.00
NSF	33	SN	3.00
SCP		SN	0.00
WCT	10	SN	1.00
WRB	7	SN	3.00
WRB	10	SN	4.00
WRB	14	SN	3.00
WRB	15	SN	8.00
WRB	17	SN	2.00
WRB	20	SN	5.00
WRB	22	SN	1.00
WRB	25	SN	5.00
WRB	27	SN	3.00
WRB	30	SN	3.00
WRB	33	SN	2.00

Transect Information:

Section Length (m):	30
Elevation (m):	1640
Gradient (%):	1.18%
Population Est:	0.0
Shade (%):	0.0
Mean Width (m):	11.9
Mean Depth (m):	0.7
Cover (%):	0

S.E(popest): 0

Habitat Type:

Pool:	53.3	%
Riffle:	0.0	%
Run:	46.7	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	14	%
Gravel:	18	%
Rubble:	39	%
Boulder:	28	%
Bedrock:	0	%

Water Chemistry

Time:
H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Boise R, N F SAMPLE DATE: 8/21/96
EPA REACH: 17050111028 QUAD MAP: Swanholm Peak
RTS: R10E, T7N, S19 LAT/LONG: 43 55.7 ; 115 19.21
SECTION DESCRIPTION: Unnamed trib 200 yds above Blue Jay Creek

Length Frequency

Species	CM Group	Method	Number Measured
HRB	27	SN	2.00
HRB	30	SN	2.00
MWF	25	SN	1.00
MWF	27	SN	1.00
MWF	30	SN	4.00
MWF	33	SN	2.00
MWF	35	SN	3.00
WRB	7	SN	6.00
WRB	10	SN	9.00
WRB	14	SN	7.00
WRB	15	SN	9.00
WRB	17	SN	3.00
WRB	20	SN	1.00
WRB	25	SN	2.00
WRB	27	SN	3.00
WRB	30	SN	2.00
WRB	33	SN	2.00

Transect Information:

Section Length (m):	23
Elevation (m):	1659
Gradient (%):	1.89%
Population Est:	0.0
Shade (%):	0.0
Mean Width (m):	13.1
Mean Depth (m):	0.7
Cover (%):	0

S.E(popest): 0

Habitat Type:

Pool:	83.3	%
Riffle:	0.0	%
Run:	16.7	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	21	%
Gravel:	13	%
Rubble:	45	%
Boulder:	19	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B

Summaries of snorkeled sample transects on the South Fork Payette and Payette Rivers, August 1996.

STREAM: SF PAYETTE R
EPA REACH: 17050120001
RTS: R4E, T9N, S27
SECTION DESCRIPTION: No Description - Garden Valley #2.

SAMPLE DATE: 8/30/96
QUAD MAP: Garden Valley
LAT/LONG: 44 5.14 ; 115 58.42

Length Frequency

Species	CM Group	Method	Number Measured
LSS	30	SN	2.00
LSS	35	SN	3.00
LSS	40	SN	4.00
LSS	45	SN	2.00
MWF	10	SN	2.00
MWF	25	SN	7.00
MWF	28	SN	6.00
MWF	30	SN	16.00
MWF	33	SN	2.00
MWF	35	SN	6.00
MWF	40	SN	6.00
MWF	50	SN	2.00
NSF	35	SN	1.00
RSS	0	SN	15.00
WRB	25	SN	1.00
WRB	30	SN	2.00

Transect Information:

Section Length (m):	192		
Elevation (m):	922		
Gradient (%):	0.00%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/30/96
EPA REACH: 17050120001 QUAD MAP: Garden Valley
RTS: R4E, T9N, S21 LAT/LONG: 44 5.41 ; 115 59.36
SECTION DESCRIPTION: No Description - Garden Valley #3.

Length Frequency

Species	CM Group	Method	Number Measured
LSS	35	SN	2.00
LSS	40	SN	2.00
LSS	45	SN	3.00
LSS	50	SN	2.00
MWF	7	SN	1.00
MWF	10	SN	2.00
MWF	20	SN	5.00
MWF	25	SN	6.00
MWF	30	SN	5.00
MWF	40	SN	7.00
MWF	50	SN	3.00

Transect Information:

Section Length (m):	203		
Elevation (m):	921		
Gradient (%):	0.00%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/30/96
EPA REACH: 17050120003 QUAD MAP: Grimes Pass
RTS: R5E, T9N, S36 LAT/LONG: 44 2.69 ; 115 51.69
SECTION DESCRIPTION: Section is located by the powerline near the Greenhouses.

Length Frequency

Species	CM Group	Method	Number Measured
LSS	33	SN	1.00
LSS	35	SN	2.00
MWF	10	SN	8.00
MWF	15	SN	11.00
MWF	20	SN	5.00
MWF	25	SN	22.00
MWF	30	SN	21.00
MWF	40	SN	1.00
MWF	50	SN	25.00
WRB	10	SN	1.00
WRB	22	SN	1.00

Transect Information:

Section Length (m):	142		
Elevation (m):	991		
Gradient (%):	0.00%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/14/96
EPA REACH: 17050120003 QUAD MAP: Garden Valley
RTS: R5E, T9N, S32 LAT/LONG: 44 4.49 ; 115 46.66
SECTION DESCRIPTION: Section begins below Little Falls just below the F&G property along Hwy.

Length Frequency

Species	CM Group	Method	Number Measured
LSS	35	SN	1.00
LSS	38	SN	1.00
LSS	40	SN	3.00
LSS	45	SN	2.00
LSS	50	SN	1.00
MWF	15	SN	5.00
MWF	20	SN	1.00
MWF	25	SN	13.00
MWF	30	SN	35.00
MWF	33	SN	5.00
MWF	35	SN	10.00
NSF	28	SN	1.00
NSF	33	SN	1.00
WRB	7	SN	1.00
WRB	10	SN	2.00
WRB	12	SN	2.00
WRB	15	SN	2.00
WRB	20	SN	5.00
WRB	25	SN	3.00
WRB	28	SN	2.00

Transect Information:

Section Length (m):	120		
Elevation (m):	1018		
Gradient (%):	0.84%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/14/96
EPA REACH: 17050120003 QUAD MAP: Gallagher Guard Stn
RTS: R5E, T9N, S31 LAT/LONG: 44 4.42 ; 115 46.99
SECTION DESCRIPTION: Section begins ~ 600 yds below the last site (#4).

Length Frequency

Species	CM Group	Method	Number Measured
LSS	33	SN	1.00
LSS	35	SN	5.00
LSS	45	SN	4.00
LSS	50	SN	2.00
MWF	10	SN	2.00
MWF	15	SN	16.00
MWF	20	SN	8.00
MWF	22	SN	1.00
MWF	25	SN	19.00
MWF	28	SN	2.00
MWF	30	SN	25.00
MWF	33	SN	1.00
MWF	35	SN	11.00
NSF	30	SN	1.00
WRB	12	SN	1.00
WRB	20	SN	2.00
WRB	25	SN	2.00
WRB	30	SN	1.00

Transect Information:

Section Length (m):	135		
Elevation (m):	1000		
Gradient (%):	0.00%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/14/96
EPA REACH: 17050120004 QUAD MAP: Pine Flat
RTS: R7E, T9N, S32 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Section is located ~100 yds upstream from the oxbow tunnel exit.

Length Frequency

Species	CM Group	Method	Number Measured
MWF	17	SN	2.00
MWF	25	SN	1.00
MWF	30	SN	2.00
MWF	35	SN	3.00
WRB	5	SN	1.00
WRB	7	SN	4.00
WRB	10	SN	8.00
WRB	12	SN	5.00
WRB	15	SN	33.00
WRB	17	SN	18.00
WRB	20	SN	19.00
WRB	25	SN	10.00
WRB	28	SN	1.00
WRB	30	SN	2.00

Transect Information:

Section Length (m):	129		
Elevation (m):	1104		
Gradient (%):	0.47%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/14/96
EPA REACH: 17050120004 QUAD MAP: Pine Flat
RTS: R6E, T9N, S1 LAT/LONG: 44 3.66 ; 115 41.55
SECTION DESCRIPTION: Section begins 100 yds downstream from hot springs below Pine Flats.

Length Frequency

Species	CM Group	Method	Number Measured
MWF	10	SN	1.00
MWF	20	SN	2.00
MWF	33	SN	2.00
MWF	35	SN	2.00
MWF	38	SN	1.00
MWF	40	SN	8.00
WRB	5	SN	1.00
WRB	7	SN	18.00
WRB	10	SN	27.00
WRB	12	SN	13.00
WRB	15	SN	18.00
WRB	17	SN	6.00
WRB	20	SN	19.00
WRB	22	SN	8.00
WRB	25	SN	11.00
WRB	28	SN	3.00
WRB	30	SN	3.00

Transect Information:

Section Length (m):	149		
Elevation (m):	1088		
Gradient (%):	0.47%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/14/96
EPA REACH: 17050120004 QUAD MAP: Pine Flat
RTS: R6E, T9N, S33 LAT/LONG: 44 4.23 ; 115 44.58
SECTION DESCRIPTION: Section begins in a big pool just below a drop just down from the big falls. Note the big spire at Birch Flat.

Length Frequency

Species	CM Group	Method	Number Measured
MWF	15	SN	3.00
MWF	20	SN	6.00
MWF	25	SN	2.00
MWF	30	SN	29.00
MWF	35	SN	14.00
MWF	40	SN	1.00
WRB	7	SN	4.00
WRB	10	SN	8.00
WRB	12	SN	6.00
WRB	15	SN	10.00
WRB	17	SN	4.00
WRB	20	SN	12.00
WRB	25	SN	10.00
WRB	28	SN	3.00
WRB	30	SN	4.00

Transect Information:

Section Length (m):	155		
Elevation (m):	1037		
Gradient (%):	0.90%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/19/96
EPA REACH: 17050120004 QUAD MAP: Garden Valley
RTS: R7E, T8N, S28 LAT/LONG: 44 5.16 ; 115 38.36
SECTION DESCRIPTION: Section begins 1.3 mi. downstream of Hwy 21 Junction. Start section at upstream telephone pole in parking area.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	28	SN	2.00
HRB	30	SN	1.00
MWF	7	SN	1.00
MWF	17	SN	1.00
MWF	20	SN	4.00
MWF	25	SN	1.00
MWF	30	SN	1.00
MWF	35	SN	8.00
MWF	40	SN	4.00
WRB	5	SN	2.00
WRB	7	SN	8.00
WRB	10	SN	16.00
WRB	12	SN	15.00
WRB	15	SN	12.00
WRB	17	SN	19.00
WRB	20	SN	12.00
WRB	22	SN	3.00
WRB	25	SN	6.00
WRB	28	SN	3.00

Transect Information:

Section Length (m):	110		
Elevation (m):	1143		
Gradient (%):	0.68%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/19/96
EPA REACH: 17050120004 QUAD MAP: Garden Valley
RTS: R7E, T8N, S28 LAT/LONG: 44 4.75 ; 115 38.42
SECTION DESCRIPTION: Section begins 2.0 mi. downstream of Hwy 21 Junction. Site begins at tail out of a pool ~ 35 yds upstream from the vehicle pullout.

Length Frequency

Species	CM Group	Method	Number Measured
BLT	33	SN	1.00
HRB	25	SN	1.00
HRB	28	SN	2.00
HRB	30	SN	1.00
MWF	15	SN	3.00
MWF	20	SN	4.00
MWF	25	SN	1.00
MWF	30	SN	10.00
MWF	35	SN	8.00
MWF	40	SN	3.00
WRB	7	SN	6.00
WRB	10	SN	19.00
WRB	12	SN	16.00
WRB	15	SN	26.00
WRB	17	SN	17.00
WRB	20	SN	16.00
WRB	22	SN	9.00
WRB	25	SN	11.00
WRB	28	SN	5.00
WRB	30	SN	2.00

Transect Information:

Section Length (m):	150		
Elevation (m):	1200		
Gradient (%):	0.00%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120008 QUAD MAP: Lowman
RTS: R8E, T9N, S31 LAT/LONG: 44 4.4 ; 115 33.09
SECTION DESCRIPTION: Section begins at rock outcrop at MP 76.3 just above the Stinker Station across the road.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	30	SN	1.00
MWF	12	SN	1.00
MWF	15	SN	1.00
MWF	33	SN	1.00
MWF	35	SN	1.00
WRB	7	SN	6.00
WRB	10	SN	14.00
WRB	12	SN	15.00
WRB	15	SN	19.00
WRB	17	SN	4.00
WRB	20	SN	4.00
WRB	22	SN	3.00

Transect Information:

Section Length (m):	130		
Elevation (m):	1253		
Gradient (%):	0.59%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120009 QUAD MAP: Jackson Peak
RTS: R8E, T9N, S34 LAT/LONG: 44 4.44 ; 115 29.99
SECTION DESCRIPTION: Section begins at MP 79.7, just above Meadow Creek.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	25	SN	1.00
HRB	33	SN	1.00
MWF	12	SN	1.00
MWF	15	SN	3.00
MWF	20	SN	3.00
MWF	25	SN	3.00
MWF	30	SN	9.00
MWF	33	SN	1.00
MWF	35	SN	2.00
MWF	38	SN	1.00
WRB	7	SN	8.00
WRB	10	SN	11.00
WRB	12	SN	10.00
WRB	17	SN	5.00
WRB	20	SN	7.00
WRB	22	SN	2.00
WRB	25	SN	3.00
WRB	30	SN	1.00

Transect Information:

Section Length (m):	185		
Elevation (m):	1234		
Gradient (%):	0.76%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120009 QUAD MAP: Jackson Peak
RTS: R8E, T9N, S26 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Section begins below Helende Campground at MP 81.5. Site ends at the end of natural slide.

Length Frequency

Species	CM Group	Method	Number Measured
MWF	10	SN	2.00
MWF	12	SN	2.00
MWF	15	SN	1.00
MWF	20	SN	1.00
MWF	30	SN	3.00
MWF	33	SN	2.00
MWF	38	SN	1.00
WRB	7	SN	2.00
WRB	10	SN	1.00
WRB	17	SN	1.00
WRB	20	SN	1.00

Transect Information:

Section Length (m):	170		
Elevation (m):	1262		
Gradient (%):	0.51%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120009 QUAD MAP: Jackson Peak
RTS: R8E, T9N, S24 LAT/LONG: 44 6.08 ; 115 27.37
SECTION DESCRIPTION: Section begins 160m upstream of the mouth of Five Mile Creek.

Length Frequency

Species	CM Group	Method	Number Measured
BLT	33	SN	1.00
HRB	28	SN	2.00
MWF	15	SN	1.00
MWF	25	SN	4.00
MWF	30	SN	2.00
WRB	7	SN	3.00
WRB	10	SN	7.00
WRB	12	SN	2.00
WRB	15	SN	8.00
WRB	17	SN	4.00
WRB	20	SN	4.00
WRB	22	SN	2.00
WRB	25	SN	1.00

Transect Information:

Section Length (m):	160		
Elevation (m):	1283		
Gradient (%):	0.70%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	
H2O Temp(C):	
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120009 QUAD MAP: Jackson Peak
RTS: R8E, T9N, S24 LAT/LONG: 44 5.89 ; 115 27.83
SECTION DESCRIPTION: Section begins at MP 82.4 and ends ~ 20 yds upstream of Helende Creek.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	28	SN	1.00
HRB	30	SN	2.00
MWF	22	SN	1.00
MWF	25	SN	6.00
MWF	30	SN	3.00
MWF	33	SN	5.00
MWF	35	SN	2.00
WRB	7	SN	5.00
WRB	10	SN	3.00
WRB	12	SN	4.00
WRB	15	SN	6.00
WRB	17	SN	2.00
WRB	20	SN	7.00
WRB	22	SN	1.00
WRB	25	SN	2.00
WRB	28	SN	1.00

Transect Information:

Section Length (m):	110		
Elevation (m):	1271		
Gradient (%):	0.70%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120009 QUAD MAP: Lowman
RTS: R8E, T9N, S32 LAT/LONG: 44 4.31 ; 115 31.97
SECTION DESCRIPTION: Section begins at MP 78 just above the pullout.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	28	SN	1.00
HRB	30	SN	12.00
MWF	15	SN	1.00
MWF	17	SN	1.00
MWF	30	SN	4.00
WRB	7	SN	2.00
WRB	10	SN	7.00
WRB	12	SN	9.00
WRB	15	SN	10.00
WRB	17	SN	2.00
WRB	20	SN	4.00
WRB	22	SN	2.00
WRB	30	SN	1.00

Transect Information:

Section Length (m):	135		
Elevation (m):	1271		
Gradient (%):	0.57%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120010 QUAD MAP: Jackson Peak
RTS: R8E, T9N, S24 LAT/LONG: 44 6.09 ; 115 26.96
SECTION DESCRIPTION: Section begins 150 yds upstream from USFS fire placards at MP 83.1.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	28	SN	2.00
HRB	30	SN	4.00
HRB	33	SN	1.00
MWF	7	SN	3.00
MWF	15	SN	6.00
MWF	17	SN	1.00
MWF	20	SN	2.00
MWF	25	SN	6.00
MWF	30	SN	6.00
MWF	33	SN	1.00
WRB	5	SN	1.00
WRB	7	SN	27.00
WRB	10	SN	25.00
WRB	12	SN	31.00
WRB	15	SN	27.00
WRB	17	SN	8.00
WRB	20	SN	18.00
WRB	22	SN	2.00
WRB	25	SN	4.00

Transect Information:

Section Length (m):	210		
Elevation (m):	1384		
Gradient (%):	0.76%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120010 QUAD MAP: Jackson Peak
RTS: R9E, T9N, S17 LAT/LONG: 44 6.95 ; 115 25.35
SECTION DESCRIPTION: Section begins downstream of Richards Creek below some cabins and ends at Red Root cabin.

Length Frequency

Species	CM Group	Method	Number Measured
MWF	10	SN	1.00
MWF	25	SN	1.00
MWF	28	SN	1.00
MWF	30	SN	1.00
MWF	38	SN	1.00
WRB	5	SN	2.00
WRB	7	SN	6.00
WRB	10	SN	9.00
WRB	12	SN	4.00
WRB	15	SN	10.00
WRB	17	SN	1.00
WRB	20	SN	4.00
WRB	22	SN	1.00
WRB	25	SN	2.00

Transect Information:

Section Length (m):	115		
Elevation (m):	1311		
Gradient (%):	0.61%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120011 QUAD MAP: Jackson Peak
RTS: R9E, T9N, S10 LAT/LONG: 44 7.17 ; 115 23.17
SECTION DESCRIPTION: Section begins just above Tenmile Creek and ends at MP 86.7 - Hwy 21 and Little Tenmile.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	25	SN	2.00
HRB	28	SN	1.00
HRB	30	SN	1.00
MWF	12	SN	1.00
MWF	15	SN	1.00
MWF	17	SN	1.00
MWF	30	SN	5.00
WRB	7	SN	3.00
WRB	10	SN	2.00
WRB	12	SN	7.00
WRB	15	SN	4.00
WRB	17	SN	2.00
WRB	20	SN	5.00
WRB	22	SN	1.00

Transect Information:

Section Length (m):	125		
Elevation (m):	1329		
Gradient (%):	0.57%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	
H2O Temp(C):	
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/15/96
EPA REACH: 17050120013 QUAD MAP: Tyee Mountain
RTS: R9E, T9N, S14 LAT/LONG: 44 7.19 ; 115 21.48
SECTION DESCRIPTION: Section begins 170 m up from the mouth of Cassner Creek. at MP 88.1.

Length Frequency

Species	CM Group	Method	Number Measured
MWF	12	SN	2.00
MWF	15	SN	1.00
MWF	20	SN	2.00
MWF	25	SN	1.00
MWF	30	SN	5.00
WRB	7	SN	6.00
WRB	10	SN	7.00
WRB	12	SN	5.00
WRB	15	SN	6.00
WRB	20	SN	2.00

Transect Information:

Section Length (m):	170		
Elevation (m):	1345		
Gradient (%):	0.76%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/13/96
EPA REACH: 17050120013 QUAD MAP: Eightmile Mtn
RTS: R9E, T9N, S12 LAT/LONG: 44 7.77 ; 115 20.12
SECTION DESCRIPTION: Section begins .6 mi upstream from MP 89.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	30	SN	1.00
MWF	17	SN	1.00
MWF	28	SN	1.00
MWF	30	SN	1.00
MWF	33	SN	3.00
MWF	35	SN	1.00
WRB	5	SN	2.00
WRB	7	SN	9.00
WRB	10	SN	14.00
WRB	12	SN	15.00
WRB	15	SN	12.00
WRB	17	SN	7.00
WRB	20	SN	8.00
WRB	22	SN	4.00
WRB	25	SN	2.00
WRB	30	SN	2.00

Transect Information:

Section Length (m):	105		
Elevation (m):	1348		
Gradient (%):	0.79%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/13/96
EPA REACH: 17050120013 QUAD MAP: Eightmile Mtn
RTS: R10E, T9N, S7 LAT/LONG: 44 8.23 ; 115 18.89
SECTION DESCRIPTION: Section starts at MP 90.0 ~100 yds upstream from mouth of Chapman Creek.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	25	SN	1.00
MWF	25	SN	2.00
MWF	30	SN	3.00
WRB	5	SN	2.00
WRB	7	SN	10.00
WRB	10	SN	18.00
WRB	12	SN	18.00
WRB	15	SN	10.00
WRB	17	SN	7.00
WRB	20	SN	3.00
WRB	22	SN	3.00
WRB	25	SN	2.00
WRB	28	SN	1.00
WRB	30	SN	1.00

Transect Information:

Section Length (m):	105		
Elevation (m):	1384		
Gradient (%):	0.93%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/13/96
EPA REACH: 17050120016 QUAD MAP: Eightmile Mtn
RTS: R10E, T10N, S32 LAT/LONG: 44 9.01 ; 115 17.76
SECTION DESCRIPTION: Section begins at MP 92.3 at the middle of the pull off above guardrail.

Length Frequency

Species	CM Group	Method	Number Measured
MWF	30	SN	4.00
MWF	33	SN	2.00
MWF	35	SN	1.00
WRB	5	SN	1.00
WRB	7	SN	10.00
WRB	10	SN	14.00
WRB	12	SN	9.00
WRB	15	SN	9.00
WRB	20	SN	4.00
WRB	22	SN	2.00
WRB	25	SN	3.00
WRB	30	SN	1.00

Transect Information:

Section Length (m):	85		
Elevation (m):	1415		
Gradient (%):	0.83%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/13/96
EPA REACH: 17050120017 QUAD MAP: Grandjean
RTS: R11E, T10N, S33 LAT/LONG: 44 9.66 ; 115 11.49
SECTION DESCRIPTION: Section is located 60 yds downstream from the mouth of Bear Creek.

Length Frequency

Species	CM Group	Method	Number Measured
BKT	15	SN	1.00
MWF	7	SN	1.00
MWF	25	SN	1.00
WRB	5	SN	1.00
WRB	7	SN	4.00
WRB	10	SN	4.00
WRB	12	SN	3.00
WRB	15	SN	2.00
WRB	22	SN	1.00

Transect Information:

Section Length (m):	45		
Elevation (m):	1627		
Gradient (%):	0.76%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/13/96
EPA REACH: 17050120020 QUAD MAP: Grandjean
RTS: R11E, T9N, S2 LAT/LONG: 44 8.76 ; 115 9.22
SECTION DESCRIPTION: Section begins at the confl. of Trail Creek near Grandjean campground.

Length Frequency

Species	CM Group	Method	Number Measured
BKT	15	SN	1.00
MWF	25	SN	1.00
WRB	7	SN	1.00
WRB	10	SN	3.00
WRB	15	SN	2.00

Transect Information:

Section Length (m):	72		
Elevation (m):	1555		
Gradient (%):	0.76%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):	16.5		
Mean Depth (m):	0.7		
Cover (%):	0		

Habitat Type:

Pool:	0.0	%
Riffle:	100.0	%
Run:	0.0	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	3	%
Gravel:	27	%
Rubble:	42	%
Boulder:	28	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix B. (continued)

STREAM: SF PAYETTE R SAMPLE DATE: 8/13/96
EPA REACH: 17050120020 QUAD MAP: Grandjean
RTS: R11E, T10N, S34 LAT/LONG: 44 9.58 ; 115 10.5
SECTION DESCRIPTION: Section begins ~ 150 yds above hot springs below the Sawtooth Lodge

Length Frequency

Species	CM Group	Method	Number Measured
BKT	5	SN	1.00
BKT	7	SN	9.00
BKT	10	SN	8.00
BKT	15	SN	4.00
BLT	33	SN	1.00
MWF	15	SN	1.00
MWF	17	SN	1.00
MWF	20	SN	1.00
MWF	25	SN	2.00
MWF	30	SN	1.00
WCT	15	SN	1.00
WRB	5	SN	2.00
WRB	7	SN	2.00
WRB	10	SN	2.00
WRB	12	SN	1.00
WRB	15	SN	4.00
WRB	17	SN	1.00

Transect Information:

Section Length (m):	60		
Elevation (m):	1640		
Gradient (%):	1.01%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix C

Length frequency of captured and measured fish from raft electrofishing on the Boise River, December 1996.

STREAM: Boise R
EPA REACH: 17050114026
RTS: R3E, T3N, S30
SAMPLE DATE: 12/17/96
QUAD MAP: Boise South
LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Section begins at riffle immediately below Barber Park float tube launch.

Length Frequency

Species	CM Group	Method	Number Measured
BLS	38	EF	1.00
BLS	46	EF	1.00
HBN	15	EF	1.00
HBN	16	EF	1.00
HBN	20	EF	1.00
HRB	23	EF	2.00
HRB	24	EF	4.00
HRB	25	EF	1.00
HRB	26	EF	2.00
HRB	27	EF	3.00
HRB	28	EF	1.00
HRB	29	EF	2.00
HRB	33	EF	1.00
HSK	45	EF	1.00
LSS	46	EF	1.00
LSS	47	EF	3.00
LSS	48	EF	2.00
LSS	49	EF	1.00
LSS	51	EF	1.00
LSS	55	EF	1.00
LSS	59	EF	1.00
MTS	9	EF	1.00
MWF	24	EF	1.00
MWF	25	EF	1.00
MWF	27	EF	2.00
MWF	28	EF	9.00
MWF	29	EF	15.00
MWF	30	EF	24.00
MWF	31	EF	17.00
MWF	32	EF	9.00
MWF	33	EF	4.00
MWF	34	EF	3.00
NSF	43	EF	1.00
WRB	11	EF	2.00
WRB	13	EF	2.00
WRB	14	EF	4.00
WRB	15	EF	1.00
WRB	19	EF	1.00

Transect Information:

Section Length (m):	0		
Elevation (m):	2750		
Gradient (%):	0.23%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	11:00 AM
H2O Temp(C):	8
Air Temp(C):	1
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix C. (continued)

STREAM: Boise R
EPA REACH: 17050114026
RTS: R3E, T3N, S30
SECTION DESCRIPTION: Section begins immediately below 1st irrigation diversion structure drop downstream from Barber Park.

SAMPLE DATE: 12/17/96
QUAD MAP: Boise South
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
BLS	10	EF	1.00
BLS	18	EF	1.00
HBN	18	EF	1.00
HRB	25	EF	1.00
HRB	27	EF	1.00
LSS	58	EF	2.00
MWF	22	EF	1.00
MWF	23	EF	1.00
MWF	24	EF	1.00
MWF	26	EF	3.00
MWF	27	EF	6.00
MWF	28	EF	5.00
MWF	29	EF	15.00
MWF	30	EF	23.00
MWF	31	EF	14.00
MWF	32	EF	13.00
MWF	33	EF	5.00
MWF	34	EF	2.00
WBN	17	EF	1.00
WRB	9	EF	3.00
WRB	11	EF	2.00
WRB	13	EF	1.00
WRB	17	EF	1.00
WRB	18	EF	1.00
WRB	30	EF	1.00
WRB	36	EF	1.00

Transect Information:

Section Length (m):	0		
Elevation (m):	2740		
Gradient (%):	0.23%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	11:00 AM
H2O Temp(C):	8
Air Temp(C):	1
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix C. (continued)

STREAM: Boise R SAMPLE DATE: 12/17/96
EPA REACH: 17050114026 QUAD MAP: Boise South
RTS: R2E, T3N, S24 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Section begins at 2nd diversion downstream from Barber Park downstream to Goodwin Dam.

Length Frequency

Species	CM Group	Method	Number Measured
HBN	17	EF	1.00
HBN	19	EF	1.00
HRB	24	EF	1.00
HRB	26	EF	1.00
MWF	19	EF	1.00
MWF	24	EF	1.00
MWF	25	EF	1.00
MWF	27	EF	5.00
MWF	28	EF	2.00
MWF	29	EF	2.00
MWF	30	EF	6.00
MWF	31	EF	10.00
MWF	32	EF	7.00
MWF	33	EF	4.00
MWF	44	EF	1.00
WBN	14	EF	1.00
WBN	29	EF	1.00
WRB	12	EF	2.00
WRB	13	EF	1.00
WRB	14	EF	1.00
WRB	16	EF	2.00
WRB	17	EF	1.00
WRB	20	EF	1.00
WRB	25	EF	1.00

Transect Information:

Section Length (m):	0		
Elevation (m):	2735		
Gradient (%):	0.23%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	11:00 AM
H2O Temp(C):	8
Air Temp(C):	1
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix C. (continued)

STREAM: Boise R
EPA REACH: 17050114026
RTS: R2E, T3N, S13
SAMPLE DATE: 12/17/96
QUAD MAP: Boise South
LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Section begins where Goodwin channel returns to river at upstream end of Golf course downstream to 200 yds above water treatment plant.

Length Frequency

Species	CM Group	Method	Number Measured
BLS	44	EF	1.00
HRB	24	EF	1.00
HRB	27	EF	1.00
HSK	48	EF	1.00
HSK	52	EF	1.00
LSS	44	EF	2.00
LSS	46	EF	2.00
LSS	50	EF	1.00
LSS	52	EF	1.00
LSS	56	EF	1.00
MTS	10	EF	1.00
MWF	18	EF	3.00
MWF	19	EF	4.00
MWF	20	EF	1.00
MWF	25	EF	1.00
MWF	26	EF	2.00
MWF	27	EF	2.00
MWF	28	EF	12.00
MWF	29	EF	11.00
MWF	30	EF	11.00
MWF	31	EF	7.00
MWF	32	EF	12.00
MWF	33	EF	5.00
MWF	34	EF	1.00
MWF	35	EF	1.00
MWF	49	EF	1.00
NSF	47	EF	1.00
SCP	8	EF	1.00
WBN	14	EF	1.00
WRB	10	EF	2.00
WRB	11	EF	2.00
WRB	14	EF	1.00
WRB	34	EF	1.00

Transect Information:

Section Length (m):	0		
Elevation (m):	2710		
Gradient (%):	0.19%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	11:00 AM
H2O Temp(C):	8
Air Temp(C):	1
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix C. (continued)

STREAM: Boise R
EPA REACH: 17050114026
RTS: R2E, T3N, S14
SECTION DESCRIPTION: Section begins at special regulations sign at water treatment plant. end at outflow from Nature Center Pond.

SAMPLE DATE: 12/18/96
QUAD MAP: Boise South
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
BLS	45	EF	1.00
HRB	17	EF	1.00
HRB	20	EF	2.00
HRB	22	EF	1.00
HRB	25	EF	1.00
HSK	46	EF	1.00
HSK	49	EF	1.00
MWF	24	EF	1.00
MWF	25	EF	1.00
MWF	26	EF	2.00
MWF	27	EF	7.00
MWF	28	EF	10.00
MWF	29	EF	8.00
MWF	30	EF	15.00
MWF	31	EF	23.00
MWF	32	EF	14.00
MWF	33	EF	4.00
MWF	34	EF	2.00
MWF	40	EF	1.00
MWF	43	EF	1.00
RSS	9	EF	1.00
RSS	10	EF	1.00
WBN	11	EF	1.00
WBN	13	EF	2.00
WBN	15	EF	2.00
WBN	17	EF	1.00
WBN	27	EF	1.00
WBN	29	EF	2.00
WBN	30	EF	1.00
WBN	34	EF	1.00
WBN	37	EF	1.00
WBN	42	EF	1.00
WRB	10	EF	2.00
WRB	11	EF	4.00
WRB	13	EF	1.00
WRB	14	EF	2.00
WRB	16	EF	1.00
WRB	19	EF	1.00
WRB	39	EF	1.00

Transect Information:

Section Length (m):	0		
Elevation (m):	2705		
Gradient (%):	0.19%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	11:30 AM
H2O Temp(C):	7
Air Temp(C):	0
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix C. (continued)

STREAM: Boise R
EPA REACH: 17050114026
RTS: R2E, T3N, S14
SAMPLE DATE: 12/18/96
QUAD MAP: Boise South
LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Start at riprap on S. bank at top of riffle below mouth of Loggers creek. End 150 yds above Broadway Bridge.

Length Frequency

Species	CM Group	Method	Number Measured
HBN	14	EF	1.00
HBN	40	EF	1.00
HRB	15	EF	1.00
HRB	18	EF	2.00
HRB	20	EF	2.00
HRB	22	EF	1.00
HRB	23	EF	1.00
HRB	24	EF	2.00
HRB	25	EF	5.00
HRB	26	EF	1.00
HRB	27	EF	5.00
HRB	28	EF	2.00
HRB	29	EF	4.00
HRB	30	EF	1.00
HRB	31	EF	3.00
LSS	53	EF	1.00
MWF	17	EF	1.00
MWF	18	EF	1.00
MWF	19	EF	1.00
MWF	27	EF	1.00
MWF	28	EF	1.00
MWF	29	EF	1.00
MWF	30	EF	4.00
MWF	31	EF	2.00
MWF	32	EF	2.00
MWF	33	EF	1.00
MWF	38	EF	1.00
MWF	43	EF	1.00
WBN	13	EF	2.00
WBN	14	EF	2.00
WBN	15	EF	1.00
WBN	26	EF	1.00
WBN	29	EF	1.00
WBN	37	EF	1.00
WBN	40	EF	1.00
WRB	12	EF	2.00
WRB	13	EF	4.00
WRB	14	EF	4.00
WRB	15	EF	2.00
WRB	18	EF	1.00
WRB	24	EF	2.00
WRB	27	EF	1.00

Transect Information:

Section Length (m):	0		
Elevation (m):	2695		
Gradient (%):	0.27%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	11:30 AM
H2O Temp(C):	7
Air Temp(C):	0
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix C. (continued)

STREAM: Boise R SAMPLE DATE: 12/18/96
EPA REACH: 17050114026 QUAD MAP: Boise South
RTS: R2E, T3N, S10 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Section begins at Broadway bridge; ends 80 yds upstream from BSU foot bridge.

Length Frequency

Species	CM Group	Method	Number Measured
HBN	19	EF	1.00
HRB	19	EF	1.00
HRB	22	EF	2.00
HRB	23	EF	1.00
HRB	24	EF	2.00
HRB	25	EF	1.00
HRB	27	EF	2.00
HRB	28	EF	3.00
HRB	31	EF	1.00
HRB	62	EF	1.00
HSK	48	EF	1.00
LSS	44	EF	1.00
LSS	46	EF	1.00
LSS	49	EF	1.00
LSS	52	EF	1.00
LSS	53	EF	1.00
LSS	56	EF	1.00
MWF	16	EF	1.00
MWF	17	EF	3.00
MWF	18	EF	6.00
MWF	19	EF	5.00
MWF	21	EF	1.00
MWF	24	EF	1.00
MWF	25	EF	1.00
MWF	26	EF	4.00
MWF	27	EF	1.00
MWF	29	EF	5.00
MWF	30	EF	6.00
MWF	31	EF	9.00
MWF	32	EF	7.00
MWF	33	EF	2.00
MWF	34	EF	1.00
MWF	42	EF	2.00
RSS	9	EF	4.00
RSS	10	EF	4.00
RSS	11	EF	4.00
RSS	12	EF	2.00
RSS	13	EF	1.00
WBN	14	EF	1.00
WBN	31	EF	1.00
WBN	43	EF	1.00
WBN	45	EF	1.00
WRB	11	EF	1.00
WRB	12	EF	1.00
WRB	20	EF	1.00
WRB	24	EF	1.00
WRB	25	EF	1.00

Transect Information:

Section Length (m):	0		
Elevation (m):	2690		
Gradient (%):	0.27%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	11:30 AM
H2O Temp(C):	7
Air Temp(C):	0
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix C. (continued)

STREAM: Boise R
EPA REACH: 17050114026
RTS: R2E, T3N, S10
SECTION DESCRIPTION: BSU foot bridge to Capitol Bridge.

SAMPLE DATE: 12/18/96
QUAD MAP: Boise South
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
HBN	13	EF	1.00
HBN	15	EF	1.00
HBN	16	EF	1.00
HBN	18	EF	1.00
HRB	13	EF	1.00
HRB	19	EF	1.00
HRB	22	EF	1.00
HRB	25	EF	2.00
HRB	27	EF	1.00
HRB	28	EF	1.00
HSK	43	EF	1.00
HSK	44	EF	1.00
HSK	45	EF	1.00
HSK	46	EF	1.00
LSS	28	EF	1.00
LSS	47	EF	2.00
LSS	48	EF	1.00
LSS	49	EF	2.00
LSS	53	EF	2.00
MWF	17	EF	1.00
MWF	18	EF	1.00
MWF	20	EF	1.00
MWF	29	EF	1.00
MWF	31	EF	2.00
MWF	32	EF	1.00
MWF	33	EF	1.00
MWF	35	EF	1.00
SCP	8	EF	1.00
WBN	13	EF	2.00
WBN	14	EF	2.00
WBN	15	EF	1.00
WBN	16	EF	1.00
WBN	23	EF	1.00
WBN	24	EF	1.00
WBN	29	EF	1.00
WBN	32	EF	1.00
WBN	40	EF	2.00
WBN	44	EF	1.00
WBN	62	EF	1.00
WRB	15	EF	3.00

Transect Information:

Section Length (m):	0		
Elevation (m):	2685		
Gradient (%):	0.27%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	11:30 AM
H2O Temp(C):	7
Air Temp(C):	0
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix D

Summaries of snorkeled sample transects on the Middle Fork Payette River and Silver Creek, July 1996.

STREAM: Payette R, MF SAMPLE DATE: 7/25/96
EPA REACH: 17050121010 QUAD MAP: Pyle Creek
RTS: R5E, T11N, S21 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: 4.7 miles upstream from Tie Creek Campground.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	30	SN	1
MWF	5	SN	24
MWF	7	SN	16
MWF	10	SN	5
MWF	12	SN	1
MWF	15	SN	1
MWF	17	SN	1
MWF	20	SN	1
MWF	22	SN	1
MWF	25	SN	4
MWF	27	SN	3
MWF	30	SN	7
MWF	33	SN	5
MWF	35	SN	1
SPD	7	SN	12
WRB	5	SN	1
WRB	7	SN	3
WRB	10	SN	6
WRB	15	SN	1
WRB	17	SN	4
WRB	25	SN	2
WRB	33	SN	1

Transect Information:

Section Length (m):	61	
Elevation (m):		
Gradient (%):	0.00%	
Population Est:	0.0	S.E(popest):
Shade (%):	0.0	
Mean Width (m):	26.0	
Mean Depth (m):	0.8	
Cover (%):	0	

Species

Habitat Type:

Pool:	25.0	%
Riffle:	0.0	%
Run:	16.7	%
Pocket:	58.3	%

Appendix D. (continued)

STREAM: Payette R, MF
EPA REACH: 17050121010
RTS: R5E, T11N, S6
SAMPLE DATE: 7/25/96
QUAD MAP: Pyle Creek
LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: 2.5 miles above Tie Creek Campground.

Length Frequency

Species	CM Group	Method	Number Measured
MWF	25	SN	7
MWF	27	SN	1
MWF	33	SN	15
WRB	4	SN	1
WRB	15	SN	1
WRB	30	SN	1

Species

Transect Information:

Section Length (m):	51	
Elevation (m):		
Gradient (%):	0.00%	
Population Est:	0.0	S.E(popest):
Shade (%):	0.0	
Mean Width (m):	16.8	
Mean Depth (m):	0.8	
Cover (%):	0	

Habitat Type:

Pool:	0.0	%
Riffle:	20.0	%
Run:	80.0	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	25	%
Gravel:	10	%
Rubble:	19	%
Boulder:	45	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix D. (continued)

STREAM: Payette R, MF SAMPLE DATE: 7/25/96
EPA REACH: 17050121010 QUAD MAP: Pyle Creek
RTS: R5E, T11N, S6 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: 2.3 miles above Tie Creek Campground.

Length Frequency

Species	CM Group	Method	Number Measured
HRB	20	SN	1
MWF	20	SN	1
MWF	25	SN	8
MWF	27	SN	6
MWF	30	SN	1
MWF	33	SN	12
MWF	35	SN	1

Species

Transect Information:

Section Length (m):	76	
Elevation (m):		
Gradient (%):	0.00%	
Population Est:	0.0	S.E(popest):0
Shade (%):	0.0	
Mean Width (m):	20.8	
Mean Depth (m):	0.9	
Cover (%):	0	

Habitat Type:

Pool:	0.0	%
Riffle:	20.0	%
Run:	80.0	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	32	%
Gravel:	1	%
Rubble:	17	%
Boulder:	32	%
Bedrock:	17	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix D. (continued)

STREAM: Silver Creek SAMPLE DATE: 7/24/96
EPA REACH: 17050121011 QUAD MAP: Boiling Springs SE
RTS: R5E, T11N, S1 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: 100 m below bridge entering the valley.

Length Frequency

Species	CM Group	Method	Number Measured
BKT	12	SN	1
BKT	15	SN	5
BKT	25	SN	1
WRB	10	SN	2
WRB	12	SN	1
WRB	15	SN	3
WRB	20	SN	5

Species

Transect Information:

Section Length (m):	50	
Elevation (m):		
Gradient (%):	0.00%	
Population Est:	0.0	S.E(popest):
Shade (%):	0.0	
Mean Width (m):	7.5	
Mean Depth (m):	0.4	
Cover (%):	0	

Habitat Type:

Pool:	41.7	%
Riffle:	33.3	%
Run:	25.0	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	27	%
Gravel:	12	%
Rubble:	22	%
Boulder:	37	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix D. (continued)

STREAM: Silver Creek, Long Fork of SAMPLE DATE: 7/24/96
EPA REACH: 17050121013 QUAD MAP: Boiling Springs SE
RTS: R6E, T12N, S20 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Site is a jeep trial crossing of Silver Creek above road junction of 671 and 671 E.

Length Frequency

Species	CM Group	Method	Number Measured
BKT	12	SN	4
BKT	15	SN	5
BKT	20	SN	10
BKT	30	SN	4
WRB	5	SN	1
WRB	7	SN	1
WRB	10	SN	2
WRB	12	SN	5
WRB	15	SN	16
WRB	20	SN	8
WRB	25	SN	1

Species

Transect Information:

Section Length (m):	76.3	
Elevation (m):		
Gradient (%):	0.00%	
Population Est:	0.0	S.E(popest):0
Shade (%):	0.0	
Mean Width (m):	6.9	
Mean Depth (m):	0.3	
Cover (%):	0	

Habitat Type:

Pool:	26.7	%
Riffle:	33.3	%
Run:	0.0	%
Pocket:	40.0	%

Substrate

Organic:	0	%
Sand:	43	%
Gravel:	6	%
Rubble:	46	%
Boulder:	4	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix D. (continued)

Silver Creek, Long Fork of SAMPLE DATE: 7/24/96

STREAM:
EPA REACH: 17050121013 QUAD MAP: Boiling Springs SE
RTS: R6E, T12N, S9 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: Site starts at bridge at end of Road 671 E.

Length Frequency

Species	CM Group	Method	Number Measured

Species

Transect Information:

Section Length (m):	50		
Elevation (m):			
Gradient (%):	0.00%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):			
Mean Depth (m):			
Cover (%):			

Habitat Type:

Pool:	%
Riffle:	%
Run:	%
Pocket:	%

Substrate

Organic:	%
Sand:	%
Gravel:	%
Rubble:	%
Boulder:	%
Bedrock:	%

Water Chemistry

Time:	
H2O Temp(C):	
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix D. (continued)

STREAM: Payette R, MF SAMPLE DATE: 7/23/96
EPA REACH: 17050121014 QUAD MAP: Boiling Springs SE
RTS: R5E, T12N, S15 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: First trail crossing above Boiling Spring Guard Station.

Length Frequency

Species	CM Group	Method	Number Measured
WRB	15	SN	1

Species

Transect Information:

Section Length (m):	70.3		
Elevation (m):			
Gradient (%):	0.00%		
Population Est:	0.0	S.E(popest):	0
Shade (%):	0.0		
Mean Width (m):	20.3		
Mean Depth (m):	0.5		
Cover (%):	0		

Habitat Type:

Pool:	0.0	%
Riffle:	33.3	%
Run:	66.7	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	26	%
Gravel:	14	%
Rubble:	57	%
Boulder:	3	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix D. (continued)

STREAM: Payette R, MF SAMPLE DATE: 7/23/96
EPA REACH: 17050121014 QUAD MAP: Boiling Springs SE
RTS: R5E, T12N, S10 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: 1.5 miles above Boiling Springs Guard Station.

Length Frequency

Species	CM Group	Method	Number Measured
MWF	30	SN	5
MWF	35	SN	4
MWF	40	SN	2
WRB	10	SN	1
WRB	12	SN	1
WRB	15	SN	1
WRB	20	SN	2
WRB	25	SN	3

Species

Transect Information:

Section Length (m):	61.5	
Elevation (m):		
Gradient (%):	0.00%	
Population Est:	0.0	S.E(popest):0
Shade (%):	0.0	
Mean Width (m):	14.2	
Mean Depth (m):	0.8	
Cover (%):	0	

Habitat Type:

Pool:	13.3	%
Riffle:	0.0	%
Run:	86.7	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	33	%
Gravel:	7	%
Rubble:	27	%
Boulder:	15	%
Bedrock:	19	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix D. (continued)

STREAM: Payette R, MF SAMPLE DATE: 7/22/96
EPA REACH: 17050121014 QUAD MAP: Boiling Springs SE
RTS: R5E, T12N, S28 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: 0.7 miles below gate at Boiling Spring Guard Station.

Length Frequency

Species	CM Group	Method	Number Measured
BLT	27	SN	1
HRB	30	SN	1
LND	10	SN	1
MWF	7	SN	1
MWF	30	SN	2
MWF	33	SN	6
WRB	5	SN	2
WRB	7	SN	2
WRB	10	SN	4
WRB	12	SN	1
WRB	15	SN	1
WRB	20	SN	1

Species

Transect Information:

Section Length (m):	65	
Elevation (m):		
Gradient (%):	0.00%	
Population Est:	0.0	S.E(popest):0
Shade (%):	0.0	
Mean Width (m):	11.6	
Mean Depth (m):	0.9	
Cover (%):	0	

Habitat Type:

Pool:	6.7	%
Riffle:	40.0	%
Run:	53.3	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	36	%
Gravel:	18	%
Rubble:	19	%
Boulder:	21	%
Bedrock:	5	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix D. (continued)

STREAM: Payette R, MF SAMPLE DATE: 7/22/96
EPA REACH: 17050121014 QUAD MAP: Boiling Springs SE
RTS: R5E, T12N, S28 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: 2.2 miles below gate at Boiling Springs.

Length Frequency

Species	CM Group	Method	Number Measured
BLT	30	SN	1
MWF	30	SN	8
WRB	5	SN	2
WRB	7	SN	1
WRB	10	SN	6
WRB	12	SN	1
WRB	15	SN	4
WRB	20	SN	3
WRB	25	SN	2

Species

Transect Information:

Section Length (m):	69	
Elevation (m):		
Gradient (%):	0.00%	
Population Est:	0.0	S.E(popest):0
Shade (%):	0.0	
Mean Width (m):	12.5	
Mean Depth (m):	1.3	
Cover (%):	0	

Habitat Type:

Pool:	0.0	%
Riffle:	0.0	%
Run:	86.7	%
Pocket:	13.3	%

Substrate

Organic:	0	%
Sand:	47	%
Gravel:	11	%
Rubble:	13	%
Boulder:	29	%
Bedrock:	0	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix D. (continued)

STREAM: Payette R, MF SAMPLE DATE: 7/24/96
EPA REACH: 17050121014 QUAD MAP: Boiling Springs SE
RTS: R5E, T11N, S4 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: 3.9 miles below gate at Boiling Springs where West Fork Road leaves stream.

Length Frequency

Species	CM Group	Method	Number Measured
WRB	5	SN	2
WRB	10	SN	8
WRB	17	SN	3
WRB	20	SN	2

Species

Transect Information:

Section Length (m):	71	
Elevation (m):		
Gradient (%):	0.00%	
Population Est:	0.0	S.E(popest):0
Shade (%):	0.0	
Mean Width (m):	17.4	
Mean Depth (m):	1.1	
Cover (%):	0	

Habitat Type:

Pool:	46.7	%
Riffle:	0.0	%
Run:	53.3	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	58	%
Gravel:	4	%
Rubble:	8	%
Boulder:	8	%
Bedrock:	22	%

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

1996 ANNUAL PERFORMANCE REPORT

State of: Idaho

Program: Fisheries Management F-71-R-21

Project I: Surveys and Inventories

Subproject I-D: Southwest Region

Job: d

Title: Salmon and Steelhead Investigations

Contract Period: July 1, 1996 to June 30, 1997

ABSTRACT

Regional fisheries staff conducted snorkel surveys for chinook salmon *Oncorhynchus tshawytscha* parr monitoring in Bearskin, Elk, and Sulphur creeks in 1996. Only one chinook parr was observed in the parr monitoring sites in Sulphur Creek. No chinook parr were observed in Bearskin and Elk creeks. No redds were counted in Elk Creek and only one redd was counted in Sulphur Creek in 1995, so low numbers of chinook parr were expected.

Salmon spawning ground surveys were conducted in Bear Valley, Elk, and Sulphur creek trend areas on August 26-29. Redds numbered 15, 17, and 13 in Bear Valley, Elk, and Sulphur creek trend areas, respectively.

Authors:

Dale B. Allen
Regional Fishery Biologist

Steve P. Yundt
Regional Fishery Manager

METHODS

Snorkel Counts

Parr monitoring snorkel counts were conducted with two snorkelers moving upstream through the trend section identifying fish species and sizes, and recording information on waterproof tablets. Snorkel sections were then measured for area (length and minimum of four widths) snorkeled. Observations were also made and recorded concerning habitat type, substrate particle size, and depth and temperature of water.

Redd Counts

Redds were enumerated according criteria described in the draft Idaho Redd Counting Manual. Carcasses encountered were identified as to sex (F-female, M-male) and measured (fork length) where possible. Live fish observed were visually classified as to sex and ocean age (jacks, II, or III, IV) when possible.

RESULTS

Snorkel Counts

Three snorkel transects were completed in Bearskin Creek, five in Elk Creek, and two in Sulphur Creek. The only chinook parr seen was seen in Sulphur Creek in the section south of the Sulphur Creek Ranch lodge.

A summary of fish observed, and area, depth, temperature, substrate particle size, and habitat type measurements is included in Appendix A.

Redd Counts

Salmon redds were counted in trend areas in Bear Valley, Elk, and Sulphur creeks on August 26-29, 1996. Redds counted, dates of counts, live fish observed, and carcasses encountered by area are reported in Table 1.

Timing of redd counts is such that "on time" counts are made as soon as all redds for the year are under construction or complete (draft Idaho Redd Counting Manual). Relative to past years, timing of redd counts in 1996 was on time in Bear Valley Creek, early in Upper Elk Creek (WS-11a), on time in the remainder of Elk Creek, and late in Sulphur Creek.

TABLES

Table 1. 1996 salmon redd counts conducted by southwest regional fishery staff.

Bear Valley Creek

STREAM	SECTION	DATE	REDDS	LIVE FISH Age & Sex	CARCASSES (Number by sex)
Mine Exclosure	WS-9a	8/26	0	0	0
Mine-Cub Creek	WS-9b	8/26	0	0	0
Cub-Sack Creek	WS-9c	8/28	4	2F,2F,J,3M[1]	2/1
Sack-Elk Creek	WS-9d	8/29	5	2F,3M	0
Elk-Poker Br.	WS-10a	8/29	4	J	4/6
Poker Br.- Fir Creek	WS-10b	8/29	2	0	0/1

[1]In addition 7 live fish, unknown age and sex were observed.

Elk

STREAM	SECTION	DATE	REDDS	LIVE FISH Age & Sex	CARCASSES (Number by sex)
WF-Twin Br.	WS-11a	8/27	15	2F,2F,2F,3F 3F,3F,3F,J 2M,2M,2M 2M,2M,3M 3M,3M,3M 3M[1]	7/3
Twin Br.- Guard Sta.	WS-11b	8/28	2	2F,2F[2]	1/1
Guard Sta.- Mouth	WS-11c	8/28	0	2F	0/0

[1]In addition 1 live fish, unknown age and sex was observed.
[2]In addition 3 live fish, unknown age and sex were observed.

Sulphur Creek

STREAM	SECTION	DATE	REDDS	LIVE FISH Age & Sex	CARCASSES (Number by sex)
Below Ranch	WS-12	08/29	4	0	0
Above Ranch	OS-4	08/29	9	0	0

APPENDICES

Appendix: A

STREAM: Sulphur Creek
EPA REACH: 17060205021
RTS: R9E, T14N, S22
SAMPLE DATE: 8/1/96
QUAD MAP: Big Soldier Mountain, ID
LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION: opposite rockslide on north side of creek

Length Frequency

Species	CM Group	Method	Number Measured
MWF	5	SN	53
WCT	30	SN	1
WCT	33	SN	1

Species	
MWF	Mountain whitefish
WCT	Westslope Cutthroat trout

Transect Information:

Section Length (m):	100	
Elevation (m):	1750	
Gradient (%):		
Population Est:		S.E(popest):
Shade (%):		
Mean Width (m):	9.5	
Mean Depth (m):	0.6	
Cover (%):		

Habitat Type:

Pool:	20.0	%
Riffle:	0.0	%
Run:	80.0	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	25	%
Gravel:	56	%
Rubble:	18	%
Boulder:	1	%
Bedrock:	0	%

Water Chemistry

Time:	02:00 PM
H2O Temp(C):	17
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix A. (continued)

STREAM: Sulphur
EPA REACH: 17060205021
RTS: R9E, T14N, S21
SECTION DESCRIPTION: straight south of Lodge

SAMPLE DATE: 8/1/96
QUAD MAP: Big Soldier Mountain, ID
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
CH0	0	SN	1
MWF	0	SN	1
WCT	33	SN	1
WCT	38	SN	1

Species

CH0	Chinook, Age 0
MWF	Mountain whitefish
WCT	Westslope Cutthroat trout

Transect Information:

Section Length (m):	117	
Elevation (m):	1765	
Gradient (%):		
Population Est:		S.E(popest):
Shade (%):		
Mean Width (m):	11.6	
Mean Depth (m):	0.6	
Cover (%):		

Habitat Type:

Pool:	33.3	%
Riffle:	0.0	%
Run:	66.7	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	81	%
Gravel:	9	%
Rubble:	10	%
Boulder:	0	%
Bedrock:	0	%

Water Chemistry

Time:	12:00 PM
H2O Temp(C):	11
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix A. (continued)

STREAM: Elk Creek
EPA REACH: 17060205026
RTS: R8E, T13N, S35
SECTION DESCRIPTION:

SAMPLE DATE: 7/31/96
QUAD MAP: Bear Valley Mtn, ID
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
BKT	5	SN	1
BKT	15	SN	2
BKT	33	SN	1
MWF	5	SN	6
MWF	30	SN	2

Species

BKT	Brook trout
MWF	Mountain whitefish

Transect Information:

Section Length (m):	130	
Elevation (m):	1965	
Gradient (%):		
Population Est:		S.E(popest):
Shade (%):		
Mean Width (m):	15.2	
Mean Depth (m):	0.5	
Cover (%):		

Habitat Type:

Pool:	20.0	%
Riffle:	20.0	%
Run:	60.0	%
Pocket:	0.0	%

Substrate

Organic:	8	%
Sand:	25	%
Gravel:	46	%
Rubble:	21	%
Boulder:	0	%
Bedrock:	0	%

Water Chemistry

Time:	05:00 PM
H2O Temp(C):	17
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix A. (continued)

STREAM: Elk Creek
EPA REACH: 17060205026
RTS: R8E, T13N, S36
SECTION DESCRIPTION:

SAMPLE DATE: 7/31/96
QUAD MAP: Bear Valley Mtn, ID
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
BKT	7	SN	3
BKT	10	SN	1
BKT	12	SN	1
BKT	15	SN	1
BKT	17	SN	1
MWF	5	SN	42
MWF	15	SN	1
MWF	20	SN	4
MWF	25	SN	1
MWF	28	SN	1
MWF	30	SN	2
MWF	33	SN	1
MWF	35	SN	2
WRB	7	SN	3
WRB	10	SN	3

Species

BKT	Brook trout
MWF	Mountain whitefish
WRB	Wild (natural)

Transect Information:

Section Length (m):	99
Elevation (m):	1964
Gradient (%):	
Population Est:	S.E(popest):
Shade (%):	
Mean Width (m):	17.1
Mean Depth (m):	0.6
Cover (%):	

Habitat Type:

Pool:	20.0	%
Riffle:	26.7	%
Run:	53.3	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	43	%
Gravel:	57	%
Rubble:	0	%
Boulder:	0	%
Bedrock:	0	%

Water Chemistry

Time:	05:00 PM
H2O Temp(C):	17
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix A. (continued)

STREAM: Elk Creek
EPA REACH: 17060205026
RTS: R8E, T13N, S26
SECTION DESCRIPTION:

SAMPLE DATE: 7/31/96
QUAD MAP: Bear Valley Mtn, ID
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
CHA	0	SN	3
MWF	5	SN	14
MWF	10	SN	1
MWF	12	SN	1
MWF	15	SN	4
MWF	20	SN	1
MWF	25	SN	7
MWF	28	SN	5
MWF	30	SN	4
MWF	33	SN	6
MWF	35	SN	6

Species

CHA	Chinook, Adult
MWF	Mountain whitefish

Transect Information:

Section Length (m):	161	
Elevation (m):	1964	
Gradient (%):		
Population Est:		S.E(popest):
Shade (%):		
Mean Width (m):	12.4	
Mean Depth (m):	0.8	
Cover (%):		

Habitat Type:

Pool:	66.7	%
Riffle:	0.0	%
Run:	33.3	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	27	%
Gravel:	55	%
Rubble:	19	%
Boulder:	0	%
Bedrock:	0	%

Water Chemistry

Time:	03:00 PM
H2O Temp(C):	12
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix A. (continued)

Elk Creek SAMPLE DATE: 7/31/96

STREAM:
EPA REACH: 17060205026 QUAD MAP: Bear Valley Mtn, ID
RTS: R8E, T13N, S13 LAT/LONG: 0 0 ; 0 0
SECTION DESCRIPTION:

Length Frequency

Species	CM Group	Method	Number Measured
MWF	5	SN	14
MWF	30	SN	2
MWF	35	SN	1

Species
MWF Mountain whitefish

Transect Information:
Section Length (m): 212
Elevation (m): 1976
Gradient (%):
Population Est: S.E(popest):
Shade (%):
Mean Width (m): 11.4
Mean Depth (m): 0.4
Cover (%):

Habitat Type:
Pool: 6.7 %
Riffle: 53.3 %
Run: 40.0 %
Pocket: 0.0 %

Substrate
Organic: 0 %

Sand: 33 %
Gravel: 35 %
Rubble: 31 %
Boulder: 0 %
Bedrock: 0 %

Water Chemistry
Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Elk Creek
EPA REACH: 17060205026
RTS: R8E, T13N, S13
SECTION DESCRIPTION:

SAMPLE DATE: 7/31/96
QUAD MAP: Bear Valley Mtn, ID
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
MWF	5	SN	9

Species
MWF Mountain whitefish

Transect Information:
Section Length (m): 84

Elevation (m): 1979
Gradient (%):
Population Est: S.E(popest):
Shade (%):
Mean Width (m): 7.3
Mean Depth (m): 0.6
Cover (%):

Habitat Type:
Pool: 26.7 %
Riffle: 0.0 %
Run: 73.3 %
Pocket: 0.0 %

Substrate
Organic: 0 %

Sand: 20 %
Gravel: 48 %
Rubble: 27 %
Boulder: 5 %
Bedrock: 0 %

Water Chemistry
Time: 12:30 PM

H2O Temp(C): 12
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Bearskin Creek
EPA REACH: 17060205084
RTS: R8E, T12N, S10
SECTION DESCRIPTION:

SAMPLE DATE: 7/30/96
QUAD MAP: Bear Valley Mtn, ID
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
BKT	10	SN	2
BKT	12	SN	1
BKT	20	SN	3
WRB	5	SN	2

Species	
BKT	Brook trout
WRB	Wild (natural)

Transect Information:

Section Length (m):	90
Elevation (m):	1967
Gradient (%):	
Population Est:	S.E(popest):
Shade (%):	
Mean Width (m):	6.8
Mean Depth (m):	0.6
Cover (%):	

Habitat Type:

Pool:	33.3	%
Riffle:	6.7	%
Run:	53.3	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	65	%
Gravel:	35	%
Rubble:	0	%
Boulder:	0	%
Bedrock:	0	%

Water Chemistry

Time:	
H2O Temp(C):	
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

Appendix A. (continued)

STREAM: Bearskin Creek
EPA REACH: 17060205084
RTS: R8E, T12N, S10
SECTION DESCRIPTION:

SAMPLE DATE: 7/30/96
QUAD MAP: Bear Valley Mtn, ID
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
BKT	5	SN	2
BKT	7	SN	4
WRB	5	SN	2
WRB	7	SN	1

Species	
BKT	Brook trout
WRB	Wild (natural)

Transect Information:

Section Length (m): 92
Elevation (m): 1982
Gradient (%):
Population Est: S.E(popest):
Shade (%):
Mean Width (m): 5.0
Mean Depth (m): 0.4
Cover (%):

Habitat Type:

Pool: 46.7 %
Riffle: 26.7 %
Run: 26.7 %
Pocket: 0.0 %

Substrate

Organic: 0 %

Sand: 72 %
Gravel: 28 %
Rubble: 0 %
Boulder: 0 %
Bedrock: 0 %

Water Chemistry

Time:

H2O Temp(C):
Air Temp(C):
pH:
Alkalinity(mg/l CaCO3):
Hardness(uS/cm3):
Conductivity(mg/l CaCO3):

Appendix A. (continued)

STREAM: Bearskin Creek
EPA REACH: 17060205084
RTS: R8E, T12N, S16
SECTION DESCRIPTION:

SAMPLE DATE: 7/30/96
QUAD MAP: Cache Creek
LAT/LONG: 0 0 ; 0 0

Length Frequency

Species	CM Group	Method	Number Measured
BKT	15	SN	2
BKT	25	SN	2

Species	
BKT	Brook trout

Transect Information:

Section Length (m):	93
Elevation (m):	1988
Gradient (%):	
Population Est:	S.E(popest):
Shade (%):	
Mean Width (m):	5.2
Mean Depth (m):	0.5
Cover (%):	

Habitat Type:

Pool:	60.0	%
Riffle:	0.0	%
Run:	40.0	%
Pocket:	0.0	%

Substrate

Organic:	0	%
Sand:	53	%
Gravel:	47	%
Rubble:	0	%
Boulder:	0	%
Bedrock:	0	%

Water Chemistry

Time:	12:53 PM
H2O Temp(C):	9
Air Temp(C):	
pH:	
Alkalinity(mg/l CaCO3):	
Hardness(uS/cm3):	
Conductivity(mg/l CaCO3):	

1996 ANNUAL PERFORMANCE REPORT

State of: Idaho

Name: Fisheries Management F-71-R-21

Project II: Technical Guidance

Subproject II-D: Southwest Region

Period Covered: July 1, 1996 to June 30, 1997

ABSTRACT

Regional fisheries staff continue to provide a large amount of information about regional and statewide fisheries to the general public. Staff coordinated with the Natural Resource Policy Bureau Staff Biologist on comment letters on various topics. One paper was published.

Allen, D.B., K. Fite, J. Nelson, and B.J. Flatter. 1997. Redband Trout *Oncorhynchus mykiss gairdneri* Population and Stream Habitat Surveys in Western Owyhee County, Idaho. Idaho Bureau of Land Management, January 1997.

Authors:

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1996 ANNUAL PERFORMANCE REPORT

State of: Idaho

Name: Fisheries Management F-71-R-21

Project II: Habitat Management

Subproject III-D: Southwest Region

Period Covered: July 1, 1996 to June 30, 1997

ABSTRACT

Habitat type and substrate measurements, part of standard stream surveys, were made on 14 stream sections from streams in Owyhee County, 10 stream sections on the North Fork Boise River and tributaries, and 10 stream sections on the Middle Fork Payette River and tributaries. Results are reported in Project 1, Job c of this report.

Three and one-half miles of fence was constructed to divide one large pasture into four smaller pastures along West Fork Long Tom Creek and main Long Tom Creek. Also, a small riparian exclosure was constructed on West Fork Long Tom Creek. Four small pastures were created to better utilize existing forage and minimize grazing impacts in riparian areas. Permanent transects were established to monitor stream response to grazing and exclosure construction. Habitat measurements were made both within the exclosure and outside the exclosure. This was a cooperative project between Idaho Department of Fish and Game, Boise Valley Fly Fisherman, Idaho Soil Conservation Service, Elmore County soil Conservation District, Natural Resource Conservation Service and private landowners Steve and Jim Percy of Mountain Home.

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1996 ANNUAL PERFORMANCE REPORT

State of: Idaho Name: Fisheries Management F-71-R-21

Project II: Population Management Subproject IV-D: Southwest Region

Period Covered: July 1. 1996 to June 30. 1997

ABSTRACT

Warmwater fish species were captured and transferred to Lake Lowell, Paddock Valley Reservoir and C.J. Strike Reservoir rearing ponds in 1996. Lake Lowell received 541 bluegill *Lepomis macrochirus* (mean length =128 mm, mean weight = 69 g) from Brownlee Reservoir on May 29, 1996 and 70 largemouth bass *Micropterus salmoides* from Paddock Valley Reservoir on May 23, 1996. Paddock Valley Reservoir received 270 black crappie *Pomoxis nigromaculatus* (mean length = 163 mm, mean weight = 96 g) from Brownlee Reservoir on May 29, 1996.

C.J. Strike Reservoir rearing ponds received 57 adult white crappie *P. Annularis from* Brownlee Reservoiron May 29, 1996 and 20 adult largemouth bass from Paddock Valley Reservoir on May 23, 1996. White crappie and largemouth bass were placed in separate rearing ponds and allowed to spawn. Following rearing during the summer, juvenile white crappie and largemouth bass were released directly into C.J. Strike Reservoir in October.

Sixty-four bull trout *Salvelinus confluentus (size* range 75-150 mm) were collected from Ballentyne Creek and 50 redband trout Oncorhynchus mykiss gairdneri were collected from Big Silver Creek (tributaries to North Fork Boise River) and released in Bear River on October 7, 1996.

Forty redband trout (size range 100-225 mm) were collected from below Long Tom Reservoir and 90 redband trout (size range 75-150 mm) were collected from Syrup Creek and released in West Fork Long Tom Creek.

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