IDAHO DEPARTMENT OF FISH AND GAME

Rod Sando, Director

FEDERAL AID IN FISH RESTORATION 1997 Job Performance Report Program F-71-R-22



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

PROJECT 1.	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

Ву

Dale B. Allen, Regional Fishery Manager. Steven P. Yundt, Regional Fishery Manager Brian J. Flatter, Fishery Technician

> February 2000 IDFG 00-13

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1997 ANNUAL PERFORMANCE REPORT

State of: <u>Idaho</u> Program: <u>Fisheries Management F-71-R-22</u>

Project I: <u>Surveys and Inventories</u> Subproject 1-D: <u>Southwest Region</u>

Job No.: <u>a</u> Title: <u>Mountain Lakes Investigations</u>

Contract Period: July 1, 1997-June 30, 1998

ABSTRACT

A total of 56 lakes, frog ponds, and marshes within the Flytrip Creek (Middle Fork Boise River drainage) and Tenlake Creek (South Fork Payette River drainage) drainages were visited in 1997.

Westslope cutthroat trout *Oncorhynchus clarki lewisi* were found in Heart, PS#1, Camp, PS#2, and PS#3 lakes in the Flytrip drainage, and in Helen, Linda, Tenlakes #2, #5, #6, #7, #8, and #9 in the Tenlake Creek drainage. Arctic grayling *Thymallus arcticus* were found in Herman Lake in the Flytrip drainage and in Tenlake #2 in the Tenlake Creek drainage.

Spotted frog *Rana luteiventris* adult or juveniles were found in 8 lakes and ponds in the Flytrip Creek drainage, and in 10 lakes and ponds in the Tenlake Creek drainage. Long-toed salamanders *Ambystoma macrodactylum* were found in 2 waters in the Tenlake Creek Drainage.

Author:

Steve P. Yundt Regional Fishery Manager

METHODS

Alpine lakes, ponds, and marshes were visited to document the distribution of fish and amphibians. Lake position was determined with a Global Positioning System (GPS) device. Some lakes were sampled with gill nets, some were angled, and some were observed for fish and amphibians. Gill nets were 30.5 m long with 7.6 m panels of 19, 25, 32, and 38 mm square mesh monofilament, and where set, were set overnight. All fish captured in gill nets were measured to the nearest mm and weighed to the nearest g. Lakes were visually surveyed for campsites and signs of human use and notes taken about difficulty of access. Amphibians were documented by walking around the water body, identifying and counting any amphibians observed. Water quality measurements were taken at some lakes. Data collected were entered into a mountain lake database and one-page reports were produced on each lake visited.

RESULTS

Fifty-six lakes, ponds, and marshes were visited by regional fishery staff in 1997. A total of 23 water bodies in the Flytrip Creek drainage (Middle Fork Boise River basin) and 33 water bodies in the Tenlake Creek (South Fork Payette River basin). Gill net sampling only was conducted in 21 waters.

Westslope cutthroat trout *Oncorhynchus clarki lewisi* were found in Camp, Heart, PS#1, PS#2, and PS#3 lakes in the Flytrip drainage, and in Helen, Linda, Tenlakes #2, #5, #6, #7, #8, and #9 in the Tenlake Creek drainage. Arctic grayling *Thymallus arcticus* were found in Herman Lake in the Flytrip drainage and in Tenlake #2 in the Tenlake Creek drainage.

Spotted frog *Rana luteiventris* adult or juveniles were found in 8 lakes and ponds in the Flytrip Creek drainage, and in 10 lakes and ponds in the Tenlake Creek drainage. Long-toed salamanders *Ambystoma macrodactylum* were found in 2 waters in the Tenlake Creek Drainage.

Summary information for each water visited is contained in Appendix A.

APPENDICES

APPENDIX A. Mountain Lake General Information.

Mountain Lake General Information

			Mounta	ain Lake General Information
Plant Cour Natio Town Rang Secti Latite	onal Forest: nship: ge: ion: ude: uitude: vning Potent	: 09 BC BC 7N 12 11 43	E	Quadmap: Mount Everly Outlet: Drainage: SFPR Tributary To: Lake Type: Bog Elevation: 2708 m Size: 0.45 ha Maximum Depth: 2 m Aspect: Comments: No inflow or outflow. No fish potential. Mud/gravel bottom. Down 18" from high water. No vegetation around shoreline.
Alkalir Hardne Cor	emical Repo nity (mg/l Ca ess (mg/l Ca nductivity (us Surface Ten Secci	Date: CO3): CO3): pH: S/cm): np(C): ni (m):		Human Use Report: Date: Human Use: Campsite Condition: Campsite Number: Campfire Rings: Trail Condition: Trail Difficulty: Litter: Mean Length and Weight Report:
Date:	of Anglers:	9/9/97 0 0 0		Species Geartype Date
Catch pe	r Hour: Number Caught 0 0	Minimum Length (mm) 0	Maximum Length (mm) 0	Mean Mean Species Length S.E. Weight S.E. C-Factor (mm) (g)
	0	0	ō	Amphibian Report: Date: 9/9/97 Spotted Frog Adults: 0 Spotted Frog Adults: 0 Tailed Frog Adults: 0 Tree Frog Adults: 0 Tree Frog Juv: 0

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

0

Salamanders:

Lake Name:	09-52	Quadmap:	Mount Everly
Planting Number:	09U159	Outlet:	-
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	
Township:	7N	Lake Type:	Bog
Range:	12 E	Elevation:	2695 m
Section:	12	Size:	0.11 ha
Latitude:	43 57.371	Maximum Depth:	1 m
Longitude:	111 00.265	Aspect:	

Spawning Potential:

Comments:

1-2' below high water. Mud/boulder substrate.

Human Use Report:

Date

10% of shoreline was vegetated.

Chemical Report:

Date: Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: Campsite Number: Conductivity (uS/cm): Campfire Rings: Surface Temp(C): Trail Condition: Secchi (m): Trail Difficulty: Litter:

Angler Information:

Mean Length and Weight Report:

(mm)

Date: 9/9/97 Species Geartype Number of Anglers: 0 Hours Fished: 0 0 Total Caught:

Catch per Hour: Mean Mean Species Length S.E. Weight S.E. C-Factor

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

Amphibian Report:

9/9/97 Date: 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:

Length Frequency

Species Captured:

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

APPENDIX A. (continued)

Mountain Lake General Information

Lake Name: 09-53
Planting Number: 09U160
County: BOISE
National Forest: BOISE
Township: 7N
Range: 12E
Section: 12

Section: 12 Latitude: 43 57.387 Longitude: 115 00.164

Spawning Potential:

Quadmap: Outlet: Mount Everly

SFPR

Outlet: Drainage:

Tributary To:

Lake Type: Elevation:

Size: Maximum Depth: 2695 m 0.11 ha 0.6 m

Aspect:

Aspect: Comments:

3' down from high water. Mostly boulder

substrate. No veg. along shore.

Chemical Report:

Date:
Alkalinity (mg/l CaCO3):
Hardness (mg/l CaCO3):
pH:

Conductivity (uS/cm):
Surface Temp(C):
Secchi (m):

Angler Information:

Date: 9/9/97
Number of Anglers: 0
Hours Fished: 0
Total Caught: 0

Catch per Hour:

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

Human Use Report:

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

Mean Length and Weight Report:

Species Geartype Date

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

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

lmm 151-200mm

201-250mm

251-300mm

301-350mm

>350mm

Mount Everly 22 Quadmap: Lake Name: Planting Number: 09U139 **Qutlet: SFPR BOISE** Drainage: County: National Forest: BOISE Tributary To: Township: Lake Type: Dry Elevation: 2708 m Range: 12E Size: 0 Section: 11 ha Maximum Depth: 0 m Latitude: Aspect: **ESE** Longitude: 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:

Date:

Human Use:

Campsite Condition:

Campsite Number:

Campsite Number:

Campfire Rings:

Trail Condition:

Trail Difficulty:

Litter:

Angler Information: Mean Length and Weight Report:

Date: 9/9/97 Species Geartype Date
Number of Anglers: 0

Hours Fished: 0
Total Caught: 0

Catch per Hour:

Species | Mean | Species | Length | S.E. | Weight | S.E. | C-Factor |

Minimum | Maximum | Maximum | (mm) | (g)

Number Length Length Species Caught (mm) (mm) 0 0 0 0 0 0 **Amphibian Report:** 0 0 0

Date:
Spotted Frog Adults:
Spotted Frog Juv:
Tailed Frog Adults:
Tailed Frog Juv:

Tree Frog Adults: Tree Frog Juv:

Length Frequency Salamanders:

Species Captured:

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

APPENDIX A. (continued)

Mountain Lake General Information

Mount Everly Lake Name: 24 Quadmap: 09U156 Tenlake Ck Planting Number: Outlet: BOISE County: Drainage: SFPR National Forest: **BOISE** Tributary To: Tenlake Ck Township: 7N Lake Type: Bog Range: Elevation: 12E 2592 m Section: 2 Size: 0.22 ha Latitude: 43 58.024 Maximum Depth: 2 m Longitude: 115 01.274 Aspect: N

Spawning Potential: Comments:

None Mud bottom. Outlet w/some flow- not much

Through a bog.

Chemical Report:

Date: Date: 9/9/97 Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: None Campsite Number: 0 pH: Conductivity (uS/cm): Campfire Rings: 0 Surface Temp(C): Trail Condition: None Trail Difficulty: Difficult Secchi (m): Litter: None

Angler Information:

Mean Length and Weight Report:

Date: 9/9/97 Geartype Date Species Number of Anglers: 0 Hours Fished: 0

Catch per Hour: Mean Mean S.E. C-Factor Length S.E. Weight Species

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

0

Amphibian Report:

(mm)

Date: 9/9/97 Spotted Frog Adults: 2 Spotted Frog Juv: 10 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 0

(g)

Human Use Report:

Tree Frog Juv: Salamanders: 0

Length Frequency

Species Captured:

Total Caught:

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

Lake Name:	26	Quadmap:	Mount Everly
Planting Number:	09U150	Outlet:	
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	
Township:	7 N	Lake Type:	Bog
Range:	12E	Elevation:	2592 m
Section:	11	Size:	0.45 ha
Latitude:	43 57.883	Maximum Depth:	1 m
Longitude:	115 01.252	Aspect:	N
Spawning Potential:		Comments:	

None

Mud bottom. Down 6" from high water. Mostly

mud around edge-not much/very little

Vegetation in water.

Chemical Report:

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

Human Use Report:

Date: 9/9/97 Human Use: Campsite Condition: None Campsite Number: 0 Campfire Rings: 0 Trail Condition: None Trail Difficulty: Difficult Litter: None

Angler Information:

Date: 9/9/97 Number of Anglers: 0 Hours Fished: 0 Total Caught: 0

Catch per Hour:

Minimum Maximum Number Length

Length Species Caught (mm) (mm) 0 0 0 0 0 0

0

Mean Length and Weight Report:

Species Geartype Date

Mean Mean Species Length S.E. Weight

(mm)

Amphibian Report: Date:

9/9/97 Spotted Frog Adults: Spotted Frog Juv: 10 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 0

Tree Frog Juv: Salamanders: 0

Length Frequency

Species

Captured:

<151mm 151-200mm

0

201-250mm

0

251-300mm

301-350mm

>350mm

S.E. C-Factor

Lake Name:	27	Quadmap:	Mount Everly
Planting Number:	09U151	Outlet:	•
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	
Township:	7N	Lake Type:	Bog
Range:	12E	Elevation:	2592 m
Section:	11	Size:	0.04 ha
Latitude:	43 57.883	Maximum Depth:	0.5 m
Longitude:	115 01.252	Aspect:	N
Spawning Potential:		Comments:	

None. Mud bottom. Down 6" from high water. Mostly

mud around edge-not much/very little

Human Use Report:

vegetation in water.

Chemical Report:

Date: Date: 9/9/97 Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: None Campsite Number: 0 Conductivity (uS/cm): Campfire Rings: 0 Surface Temp(C): Trail Condition: None Secchi (m): Trail Difficulty: Difficult Litter: None

Angler Information:

Mean Length and Weight Report: Date: 9/9/97 Species Geartype Date Number of Anglers: 0

Hours Fished: 0 Total Caught: 0

Catch per Hour: Меап Mean Length S.E. Weight S.E. C-Factor Species Minimum Maximum (mm) (g)

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

Amphibian Report:

Date: 9/9/97 Spotted Frog Adults: 0 Spotted Frog Juv: 1 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

Lake Name:	28	Quadmap:	Moun	t Everly
Planting Number:	09U152	Outlet:		
County:	BOISE	Drainage:	SFPF	₹
National Forest:	BOISE	Tributary To:		
Township:	7N	Lake Type:	Bog	
Range:	12E	Elevation:	2592	m
Section:	11	Size:	0.11	ha
Latitude:	43 57.815	Maximum Depth:	1	m
Longitude:	115 01.290	Aspect:	N	

Spawning Potential:

Frog pond-bog/mud bottom. Down 12" from high water. Little veg. along shoreline (10-20%). Rest

Human Use Report:

is mud.

Chemical Report:

Date: Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: Campsite Number: Conductivity (uS/cm): Campfire Rings: Surface Temp(C): Trail Condition: Trail Difficulty: Secchi (m): Litter:

Angler Information:

Mean Length and Weight Report:

9/9/97 Date Date: Species Geartype 0

Number of Anglers: Hours Fished: 0 Total Caught: 0

Catch per Hour: Mean Mean Species Length S.E. Weight S.E. C-Factor (mm) (g)

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

Amphibian Report:

Date: 9/9/97 Spotted Frog Adults: 2 Spotted Frog Juv: 40 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 Tree Frog Juv: 0

0

Length Frequency Salamanders:

Species

Captured:

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

APPENDIX A. (continued)

Mountain Lake General Information

Mount Everly Lake Name: 31 Quadmap: 09U153 Outlet: Planting Number: BOISE Drainage: **SFPR** County: National Forest: **BOISE** Tributary To: Lake Type: Bog Township: 7N 12E Elevation: 2598 m Range: Section: 11 Size: 0.45 ha Latitude: 43 57.681 Maximum Depth: m Longitude: 115 01.447 Aspect:

Longitude: 115 01.447 Aspect: Spawning Potential: Comments:

Bog-frog pond. Down 12" from high water. Mud

bottom. Very little veg. along water line

Human Use Report:

(5-10%)

Chemical Report:

Date:

Alkalinity (mg/l CaCO3):

Hardness (mg/l CaCO3):

pH:

Compsite Condition:

pH:

Conductivity (uS/cm):

Surface Temp(C):

Secchi (m):

Date:

Human Use:

Human Use:

Campsite Condition:

Campsite Number:

Campfire Rings:

Trail Condition:

Trail Difficulty:

Litter:

Angler Information:

Mean Length and Weight Report:

Date: 9/9/97 Species Geartype Date
Number of Anglers: 0
Hours Fished: 0

Total Caught: 0

Catch per Hour: Mean

Species Length S.E. Weight S.E. C-Factor

Minimum Maximum (mm) (g)

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

Amphibian Report:

Date: 9/9/97
Spotted Frog Adults: 0
Spotted Frog Juv: 0
Tailed Frog Adults: 0
Tailed Frog Juv: 0
Tree Frog Adults: 0

Mean

Tree Frog Juv: 0
Salamanders: 0

Length Frequency

Species Captured:

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

Lake Name:	32	Quadmap:	Mount Everly
Planting Number:	09U154	Outlet:	
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	
Township:	7 N	Lake Type:	Bog
Range:	12E	Elevation:	2598 m
Section:	11	Size:	0.45 ha
Latitude:	43 57.681	Maximum Depth:	1 m
Longitude:	115 01. 44 7	Aspect:	

Spawning Potential:

Bog-frog pond. Down 12" from high water. Mud

Human Use Report:

bottom. Very little veg. along water line

(5-10%)

Chemical Report:

Date: Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: Campsite Number: Conductivity (uS/cm): Campfire Rings: Surface Temp(C): Trail Condition: Trail Difficulty: Secchi (m): Litter:

Angler Information:

Mean Length and Weight Report:

Species Geartype

Date: 9/9/97 Number of Anglers: 0 Hours Fished: 0

Total Caught:

Catch per Hour:

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

Date

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

Amphibian Report:

Date: 9/9/97 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:

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

APPENDIX A. (continued)

Mountain Lake General Information

33 Quadmap: Mount Everly Lake Name: 09U155 Outlet: Planting Number: County: **BOISE** Drainage: **SFPR** National Forest: BOISE Tributary To: Lake Type: Township: 7N Range: 12E Elevation: 2708 m Section: 11 Size: 0.22 ha Latitude: Maximum Depth: 0.5 m Longitude: Aspect: Ε Spawning Potential: Comments: Mud/gravel/cobble bottom. 6" down from high water. **Chemical Report: Human Use Report:** Date: Date: Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: Campsite Number: Conductivity (uS/cm): Campfire Rings: Surface Temp(C): Trail Condition: Trail Difficulty: Secchi (m): Litter: Mean Length and Weight Report: Angler Information: 9/9/97 Date: Species Geartype Date Number of Anglers: 0 Hours Fished: 0 0 **Total Caught:** Catch per Hour: Mean Mean Weight S.E. C-Factor Species Length S.E. Minimum Maximum (mm) (g) Number Length Length Species Caught (mm) (mm) 0 0 0 0 0 0 0 0 0 Amphibian Report: Date: 9/9/97 Spotted Frog Adults: Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0

Length Frequency

Species

Captured:

<151mm 151-200mm 20

201-250mm

251-300mm

301-350mm

Tree Frog Juv:

Salamanders:

>350mm

0

0

Lake Name: 40A Quadmap: Mount Everly 09U142 Outlet: Planting Number: BOISE SFPR Drainage: County: BOISE Tenlake Ck National Forest: Tributary To: Township: 7N Lake Type: Bog Range: 12E Elevation: 2659 m Size: 0.11 Section: 12 ha Latitude: 43 57.552 Maximum Depth: 2 m Longitude: 115 00.775 Aspect: N Spawning Potential:

Comments:

Limited. Inflow from Ten Lake #9. Shallow.

Chemical Report:

9/9/97 Date: 9/9/97 Date: Alkalinity (mg/l CaCO3): Human Use: 0 Hardness (mg/l CaCO3): 0 Campsite Condition: None 0 Campsite Number: 0 pH: Conductivity (uS/cm): 0 Campfire Rings: 0 Trail Condition: None Surface Temp(C): 15.5 Secchi (m): 0 Trail Difficulty: Difficult Litter: None

Angler Information: Mean Length and Weight Report:

Date: 9/9/97 Geartype Date Species

Number of Anglers: 0 Hours Fished: 0 Total Caught: 0

Catch per Hour: Mean Mean Species Length S.E. Weight S.E. C-Factor

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

0 0 0 0 0 0 **Amphibian Report:** 0 0 0 Date: 9/9/97 Spotted Frog Adults: 1

Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 Tree Frog Juv: 0

Human Use Report:

Length Frequency Salamanders: 0

Species

Captured:

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

Lake Name:	40B	Quadmap:	Mount Everly
Planting Number:	09U141	Outlet:	•
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	Tenlake Ck
Township:	7 N	Lake Type:	Bog
Range:	12E	Elevation:	2659 m
Section:	12	Size:	0 ha
Latitude:	43 57.548	Maximum Depth:	1 m
Longitude:	115 00.794	Aspect:	N
Communica Detentials			

Spawning Potential: Comments:

This pond is w/in 30' of #40A. It is above #40A and off channel. There is no inflow or outflow. Water temp at grass along edge was 68 F.

Chemical Report: Human Use Report:

Date:	9/9/97	Date: 9/9/97
Alkalinity (mg/l CaCO3):	0	Human Use:
Hardness (mg/l CaCO3):	0	Campsite Condition: None
pH:	0	Campsite Number: 0
Conductivity (uS/cm):	0	Campfire Rings: 0
Surface Temp(C):	20	Trail Condition: None
Secchi (m):	0	Trail Difficulty: Difficult
		Litter: None

Angler Information: Mean Length and Weight Report:

Date: 9/9/97 Species Geartype Date

Number of Anglers: 0

Hours Fished: 0
Total Caught: 0
Catch per Hour: Mean Mean

Species Length S.E. Weight S.E. C-Factor

Minimum Maximum (mm) (g)

Number Length Length

Species Caught (mm) (mm)

0 0 0 0 0 0 0 0 0 **Amphibian Report:** 9/9/97 Date: Spotted Frog Adults: 2 Spotted Frog Juv: 30 Tailed Frog Adults: 0 Tailed Frog Juv: 0

Tree Frog Adults: 0
Tree Frog Juv: 0
Length Frequency Salamanders: 0

Species
Captured:

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

40C Lake Name: Quadmap: Planting Number: 09U140 Outlet: County: BOISE Drainage: National Forest: BOISE Tributary To: Township: 7N Lake Type: 12E Range: Elevation: Section: 12 Size: Latitude: Maximum Depth: Longitude: Aspect: Spawning Potential: Comments:

None. Comments:

Too shallow for fish.

Chemical Report:

9/9/97 Date: Alkalinity (mg/l CaCO3): 0 Human Use: Hardness (mg/l CaCO3): 0 Campsite Condition: 0 Campsite Number: Conductivity (uS/cm): 0 Campfire Rings: Surface Temp(C): 12.2 Trail Condition: Secchi (m): 0 Trail Difficulty: Litter:

Angler Information:

Mean Length and Weight Report:

Mount Everly

SFPR

Moraine

2677 m

ha

Human Use Report:

Date

0.11

0.5 m

W

Date: 9/9/97 Species Geartype
Number of Anglers: 0
Hours Fished: 0
Total Caught: 0

Catch per Hour: Mean Species Length S.E. Weight S.E. C-Factor Minimum Maximum (mm) (g)

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

Amphibian Report:

Date: 9/9/97
Spotted Frog Adults: 0
Spotted Frog Juv: 0
Tailed Frog Adults: 0
Tree Frog Adults: 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

Mud/gravel bottom.

Lake Name:	41	Quadmap:	Mount Everly
Planting Number:	09U143	Outlet:	Tenlake Ck
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	Tenlake Ck
Township:	7N	Lake Type:	Bog
Range:	12E	Elevation:	2659 m
Section:	12	Size:	ha
Latitude:		Maximum Depth:	0.2 m
Longitude:		Aspect:	
Spawning Potential:		Comments:	

Chemical Report:		Human Use Report:
Date:	9/9/97	Date:
Ikalinity (mg/LCaCO3):	0	Human Llea:

Hardness (mg/l CaCO3): 0 Campsite Condition: pH: 0 Campsite Number: Conductivity (uS/cm): 0 Campfire Rings: Surface Temp(C): 23.3 Trail Condition: Secchi (m): 0 Trail Difficulty: Litter:

Angler Information: Mean Length and Weight Report: Date: 9/9/97 Species Geartype Date Number of Anglers: 0

Hours Fished: 0 Total Caught: 0 Catch per Hour: Mean

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

Number Length Length **Species** Caught (mm) (mm) 0 0 0 0 0 0

0 0 0 Amphibian Report: Date: 9/9/97 Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0

Tree Frog Adults: Tree Frog Juv: 0 **Length Frequency** Salamanders: 0

Tailed Frog Juv:

Species

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

Lake Name:	42	Quadmap:	Mount Everly
Planting Number:	09U144	Outlet:	
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	Tenlake Ck
Township:	7N	Lake Type:	Bog
Range:	12E	Elevation:	2695 m
Section:	12	Size:	0 ha
Latitude:	43 57.458	Maximum Depth:	1 m
Longitude:	115 00.672	Aspect:	W
Snawning Potential:		Comments:	

Spawning Potential:

None.

Drains into tenlake #9 at high levels.

Chemical Report:	Human Use Report:
------------------	-------------------

Date:	9/9/97	Date:	9/9/97
Alkalinity (mg/l CaCO3):	0	Human Use:	
Hardness (mg/l CaCO3):	0	Campsite Condition:	None
pH:	0	Campsite Number:	0
Conductivity (uS/cm):	0	Campfire Rings:	0
Surface Temp(C):	18.8	Trail Condition:	None
Secchi (m):	0	Trail Difficulty:	Difficult
,		Litter:	None

Angler Information:

9/9/97 Date: 0 Number of Anglers: 0 Hours Fished: 0 Total Caught:

Catch per Hour:

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

Mean Length and Weight Report:

Date Species Geartype

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

Amphibian Report:	
Date:	9/9/97
Spotted Frog Adults:	1
Spotted Frog Juv:	0
Tailed Frog Adults:	0
Tailed Frog Juv:	0
Tree Frog Adults:	0
Tree Frog Juv:	0

Salamanders:

Length Frequency

Species Captured:

<151mm

151-200mm

201-250mm

251-300mm

301-350mm

>350mm

Comments:

Lake Name: Planting Number:	43 09U145	Quadmap: Outlet:	Mount Everly
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	Tenlake Ck
Township:	7N	Lake Type:	Bog
Range:	12E	Elevation:	2659 m
Section:	12	Size:	0.11 ha
Latitude:	43 57.432	Maximum Depth:	0.5 m
Longitude:	115 00.594	Aspect:	

Spawning Potential:

None.

Too shallow for fish. Drains into #42. Mud and rock bottom. No veg. along shoreline. Water

level down 18" from high water level.

Chemical Report:

Date:	9/9/97
Alkalinity (mg/l CaCO3):	Ü
Hardness (mg/l CaCO3):	0
pH:	0
Conductivity (uS/cm):	0
Surface Temp(C):	17.7
Secchi (m):	0

Human Use Report:

Date: 9/9/97
Human Use:
Campsite Condition: None
Campsite Number: 0
Campfire Rings: 0
Trail Condition: None
Trail Difficulty: Difficult
Litter: None

Angler Information:

Date:	9/9/97
Number of Anglers:	0
Hours Fished:	0
Total Caught:	0

Catch per Hour:

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
Opcoics	Countype	Duit

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

Amphibian	Report:
	Date:

Spotted Frog Adults: 0
Spotted Frog Juv: 0
Tailed Frog Adults: 0
Tailed Frog Juv: 0
Tree Frog Adults: 0
Tree Frog Juv: 0

Tree Frog Juv: 0
Salamanders: 0

Length Frequency

Species

Captured:

<151mm 151-200mm

201-250mm

251-300mm

301-350mm

>350mm

9/9/97

Lake Name:	43A	Quadmap:	Mount Everly
Planting Number:	09U147	Outlet:	
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	Tenlake Ck
Township:	7 N	Lake Type:	Bog
Range:	12E	Elevation:	2698 m
Section:	12	Size:	0.11 ha
Latitude:	43 57.400	Maximum Depth:	0 m
Longitude:	115 00.448	Aspect:	W

Spawning Potential:

None.

Comments: Mud/boulder/gravel bottom. Down 3-4' from high

water. No veg. along shoreline.

Chemical Report:

Date:	9/9/97
Alkalinity (mg/l CaCO3):	0
Hardness (mg/l CaCO3):	0
pH:	0
Conductivity (uS/cm):	0
Surface Temp(C):	18.9
Secchi (m):	0

Human Use Report:

Angler Information:

9/9/97 Date: 0 Number of Anglers: 0 Hours Fished: 0 Total Caught:

Catch per Hour:

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

Mean Length and Weight Report:

Date Species Geartype

Mean Mean

Species Length S.E. Weight S.E. C-Factor

Amphibian Report:

9/9/97 Date: 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:

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

APPENDIX A. (continued)

Mountain Lake General Information

Lake Name: 43B Quadmap: Mount Everly Planting Number: 09U148 Outlet: SFPR County: BOISE Drainage: National Forest: BOISE Tributary To: Tenlake Ck Township: 7N Lake Type: Range: Elevation: 12E 2698 m Section: 12 Size: 0.11 ha Latitude: Maximum Depth: 0.5 m Longitude: Aspect:

Spawning Potential: Comments:

Chemical Report:

9/9/97 Date: Date: Alkalinity (mg/l CaCO3): Human Use: 0 Hardness (mg/l CaCO3): 0 Campsite Condition: pH: 0 Campsite Number: Conductivity (uS/cm): Campfire Rings: 0 Surface Temp(C): 14.4 Trail Condition: Trail Difficulty: Secchi (m): 0 Litter:

Angler Information:

Mean Length and Weight Report: Date: 9/9/97 Date Species Geartype

Number of Anglers: 0 Hours Fished: 0 Total Caught: 0

Catch per Hour: Mean Mean S.E. C-Factor Species Length S.E. Weight Minimum Maximum (mm) (g)

Number Length Length Species 5 Caught (mm) (mm) 0 0 0 0 0 0

0 0 0 Amphibian Report: Date:

9/9/97 Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 0

Human Use Report:

Tree Frog Juv: Length Frequency Salamanders: 0

Species Captured:

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

Lake Name:	44	Quadmap:	Mount Everly
Planting Number:	09U146	Outlet:	•
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	Tenlake Ck
Township:	7N	Lake Type:	Bog
Range:	12E	Elevation:	2695 m
Section:	12	Size:	0.11 ha
Latitude:	43 57.521	Maximum Depth:	0.5 m
Longitude:	115 00.573	Aspect:	N
Snowning Potential:		Commonter	

Spawning Potential: Co None. Mu

Mud gravel. Water level down 2' from high Water. No veg around shore-only mud. Too

shallow for fish.

Chemical Report: Human Use Report:

Date:	9/9/97	Date:
Alkalinity (mg/l CaCO3):	0	Human Use:
Hardness (mg/l CaCO3):	0	Campsite Condition:
pH:	0	Campsite Number:
Conductivity (uS/cm):	0	Campfire Rings:
Surface Temp(C):	17.7	Trail Condition:
Secchi (m):	0	Trail Difficulty:
		Litter:

Angler Information: Mean Length and Weight Report:

Date:	9/9/97	Species	Geartype	Date
Number of Anglers:	0			

Hours Fished: 0
Total Caught: 0

Catch per Hour:

Mean
Species Length S.E. Weight S.E. C-Factor

Minimum Maximum

(mm)
(a)

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)	(mm) (g)
	0	0	0	
	0	0	0	
	0	0	0	Amphibian Report: Date:

Spotted Frog Adults: 0
Spotted Frog Juv: 0
Tailed Frog Adults: 0
Tailed Frog Juv: 0
Tree Frog Adults: 0
Tree Frog Juv: 0

9/9/97

Length Frequency Salamanders:

Species

Captured:

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

APPENDIX A . (continued)

Mountain Lake General Information

			Mounta	ain Lake	General Info	ormation	1	
Plant Cour Natio Towr Rang Secti Latitu	onal Forest: nship: ne: on:	BC BC 7N 12 12 43 11	U149 DISE DISE	ain Lake	Quadmap: Outlet: Drainage: Tributary To: Lake Type: Elevation: Size: Maximum Depth: Aspect: Comments: Mud/rock bottom: water edge. Pon	Mount SFPR Tenlak 2695 0.11 0.5 r	Everly e Ck m ha n	
Che	mical Repo	rt:				Human Us	se Report:	
Date: 9/9/97 Alkalinity (mg/l CaCO3): 0 Hardness (mg/l CaCO3): 0 pH: 0 Conductivity (uS/cm): 0 Surface Temp(C): 17.8 Secchi (m): 0				Date: Human Use: Campsite Condition: Campsite Number: Campfire Rings: Trail Condition: Trail Difficulty: Litter:				
A	ngler Inform	nation:			Mean Len	gth and Weig	ht Report:	
Hours Fis Total Car	ught:	9/9/97 0 0 0			Species	Geartype	Date	
Catch pe	r Hour: Number Caught 0	Minimum Length (mm) 0	Maximum Length (mm) 0	٠	•	Mean Length S.E. (mm)	Mean Weight S.E. C-Factor (g)	
	0	0	0		Spo	nphibian Rep Di otted Frog Adu Spotted Frog Adu ailed Frog Adu Tailed Frog .	ate: 9/9/97 ults: 0 luv: 0 ults: 0	

Length Frequency

Tree Frog Juv: 0 Salamanders: 0

Tree Frog Adults:

Species Captured:

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

Lake Name:	58	Quadmap:	Mount Everly	
Planting Number:	10U129	Outlet:	NONE	
County:	ELMORE	Drainage:	MFBR	
National Forest:	BOISE	Tributary To:	Flytrip Ck	
Township:	7 N	Lake Type:	Cirque	
Range:	12E	Elevation:	2701 m	
Section:	13	Size:	0.90 ha	
Latitude:	43 56.659	Maximum Depth:	4 m	
Longitude:	115 00.192	Aspect:	S	
Spawning Potential:		Comments:		

None, no inlet or outlet. No fish potential. Mud to rock bottom. Very little vegetation

around shoreline.

Chemical Report:

Date:	9/6/97	Date: 9/6/97
Alkalinity (mg/l CaCO3):	17	Human Use:
Hardness (mg/l CaCO3):	0	Campsite Condition: None
pH:	6.5	Campsite Number: 0
Conductivity (uS/cm):	0	Campfire Rings: 0
Surface Temp(C):	13.3	Trail Condition: None
Secchi (m):	4	Trail Difficulty: Difficult
		Litter: None

Angler Information:

Date:	9/6/97	Species	Geartype	Date
Number of Anglers:	0			
Hours Fished:	0			

Total Caught:

Catch pe	er Hour:			Speci	Mean s Length	S.E.	Mean Weight	S.E. C-Factor
		Minimum	Maximum	·	(mm)		(g)	
	Number	Length	Length					
Species	Caught	(mm)	(mm)					

Caught 0 0 0 0 0 0

0

Amphibian Report: Date: 9/6/97 Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 Tree Frog Juv: 0

Human Use Report:

Mean Length and Weight Report:

Length Frequency Salamanders:

Species Captured:

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

Quadmap: Lake Name: 58 Mount Everly 10U129 NONE Planting Number: Outlet: County: **ELMORE** Drainage: **MFBR** BOISE National Forest: Tributary To: Flytrip Ck 7N Lake Type: Township: Cirque Range: 12E Elevation: 2701 m Section: 13 Size: 0.90 ha Latitude: 43 56.659 Maximum Depth: m Longitude: 115 00.192 Aspect: S

Spawning Potential: Comments:

None, no inlet or outlet. No fish potential. Mud to rock bottom. Very little vegetation

around shoreline.

Chemical Report:

Date: Date: Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: Campsite Number: Conductivity (uS/cm): Campfire Rings: Surface Temp(C): Trail Condition:

Secchi (m): Trail Difficulty: Litter:

Angler Information:

Mean Length and Weight Report:

9/7/97 Date: Species Geartype Date Number of Anglers: 0

Hours Fished: 0 Total Caught: 0 Catch per Hour: Mean

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

Number Length Length Species Caught (mm) (mm) 0 0 0 0 0 0 0 0 0 Amphibian Report: Date:

Spotted Frog Adults: Spotted Frog Juv: Tailed Frog Adults: Tailed Frog Juv: Tree Frog Adults:

Human Use Report:

Tree Frog Juv: **Length Frequency** Salamanders:

Species

Captured:

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

66 Lake Name: Planting Number: 10U139 County: **ELMORE** National Forest: **BOISE**

Township: 7N 12E Range: Section: 24

Latitude: Longitude: Spawning Potential:

None.

Mount Everly Quadmap:

Outlet: Drainage:

MFBR

Tributary To: Lake Type:

Elevation: Size: Maximum Depth: 2464 m 0 ha 0 m

Aspect: Comments:

Marsh. No pond. Did not survey for amphibians.

Chemical Report:

Date: Alkalinity (mg/l CaCO3): Hardness (mg/l CaCO3): 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:

Mean Length and Weight Report:

Geartype

Angler Information:

9/9/97 Date: Number of Anglers: 0 Hours Fished: 0

Total Caught: 0

Catch per Hour:

Mean Species Length

(mm)

Species

Mean Weight

Date

S.E. C-Factor

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

Amphibian Report:

Date:

S.E.

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

Length Frequency

151-200mm

201-250mm

Species Captured: <151mm

Mountain Lake General Information

Lake Name: 68 Quadmap: Mount Everly Planting Number: 10U138 Outlet: County: **ELMORE** Drainage: **MFBR** National Forest: BOISE Tributary To: Township: 7N Lake Type: Range: 12E Elevation: 2482 m Section: 13 Size: 0 ha Latitude: Maximum Depth: 0 m Longitude: Aspect: Spawning Potential: Comments: None. Marsh w/stream running through it. No pond. Did not see any amphibs. **Chemical Report: Human Use Report:** Date: 9/6/97 Alkalinity (mg/I CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: None Campsite Number: 0 Conductivity (uS/cm): Campfire Rings: 0 Surface Temp(C): Trail Condition: None Secchi (m): Trail Difficulty: Difficult Litter: None Angler Information: Mean Length and Weight Report: 9/6/97 Date: Species Geartype Date Number of Anglers: 0 Hours Fished: 0 Total Caught: 0 Catch per Hour: Mean Mean Species Length S.E. Weight S.E. C-Factor Minimum Maximum (mm) (g) Number Length Length **Species** Caught (mm) (mm) 0 0 0 0 0 0 0 0 0 Amphibian Report: 9/6/97 Date: Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 Tree Frog Juv: 0

251-300mm

Salamanders:

301-350mm

0

>350mm

Lake Name: 6A Quadmap: Mount Everly 09U157 Planting Number: Outlet: **BOISE** Drainage: County: **SFPR** National Forest: **BOISE** Tributary To: Tenlake Ck 7N Township: Lake Type: Bog 12E Range: Elevation: 2695 m Size: Section: 12 0.11 ha Latitude: 43 57.430 Maximum Depth: 1 m

Longitude: 115 00.203 Aspect:

Spawning Potential: Comments:

1-2" down from high water. Lots of vegetation.

Mud/boulder. Should have had frogs.

Chemical Report:

Human Use Report:

Date: Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: Campsite Number: Conductivity (uS/cm): Campfire Rings: Surface Temp(C): Trail Condition:

Secchi (m): Trail Difficulty: Litter:

Angler Information:

Mean Length and Weight Report:

Date: 9/9/97 Species Geartype Date

Number of Anglers: 0 Hours Fished: 0 0 **Total Caught:**

Catch per Hour: Mean Mean S.E.

Species Length Weight S.E. C-Factor Minimum Maximum (mm) Number Length Length **Species** Caught (mm) (mm)

0 0 0 0 0 0 0 0 0 **Amphibian Report:** 9/9/97 Date:

> Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0

Tree Frog Juv: 0 0

Length Frequency Salamanders:

Species

Captured:

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

Lake Name: 80 Quadmap: Snowyside Peak 10U136 Planting Number: Flytrip Ck Outlet: County: **ELMORE** Drainage: MFBR **BOISE** National Forest: Tributary To: Flytrip Ck Township: 7N Lake Type: Cirque Elevation: Range: 13E 2738 m Section: 18 Size: 2.04 ha Latitude: 43 55.687 Maximum Depth: 6.8 m Longitude: 114 59.215 Aspect: NW Comments:

Spawning Potential:

Bottom type: silt/sand over boulder.

Chemical Report: Human Use Report:

Date: 9/6/97 Date: 9/6/97 Alkalinity (mg/l CaCO3): Human Use: 17 Hardness (mg/l CaCO3): 0 Campsite Condition: None 6.5 Campsite Number: 0 pH: Conductivity (uS/cm): Campfire Rings: 0 O Surface Temp(C): 13.9 Trail Condition: None Secchi (m): Trail Difficulty: 6

Litter: None

Angler Information: Mean Length and Weight Report:

Date: 9/6/97 Species Geartype Date

Number of Anglers: Hours Fished: 0.33 Total Caught: 0

Catch per Hour: 0 Mean Mean S.E. C-Factor **Species** Length S.E. Weight

Minimum Maximum (mm) (g) Number Length Length

Species Caught (mm) (mm) 0 0 0 0 0 0 0 0 0

Amphibian Report: Date:

> Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0

9/6/97

Tree Frog Juv: 0 Salamanders: 0

Species

Length Frequency

Captured:

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

83 Lake Name: Planting Number: 10U137 **ELMORE** County: National Forest: BOISE 7N Township: Range: 13E Section: 18 43 55.936 Latitude: 114 59.628 Longitude: Spawning Potential:

Quadmap: Snowyside Peak

Outlet: Drainage:

MFBR Flytrip Ck

Tributary To: Lake Type:

Elevation:

2598 m

Size: Maximum Depth: 0 ha 0 m

Aspect:

W

Comments: No frogs noted.

Chemical Report:

Date:

Alkalinity (mg/l CaCO3): Hardness (mg/l CaCO3):

> Conductivity (uS/cm): Surface Temp(C):

Secchi (m):

Human Use Report:

Date:

Human Use: Campsite Condition: Campsite Number: Campfire Rings: Trail Condition:

Mean Length and Weight Report:

Geartype

Trail Difficulty: Litter:

Angler Information:

9/7/97

Number of Anglers: 0 0

Hours Fished: 0 Total Caught:

Catch per Hour:

Date:

Mean

Species

Mean

Date

Species Length S.E. Weight S.E. C-Factor

(mm)

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

Lake Name: 84 Planting Number: 10U134 County: **ELMORE** National Forest: BOISE Township: 7N Range: 12E Section: 24 Latitude: 43 56.002 Longitude: 114 59.967 Spawning Potential:

Quadmap: Outlet: Drainage: Tributary To: Lake Type: Elevation: Size: Maximum Depth: Snowyside Peak

MFBR Flytrip Ck Bog 2598 m 0.45 ha 3 m

Aspect:

W

Comments:

Pond immediately below Herman. Mud bottom.

Chemical Report:

None.

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

Human Use Report:

Date: 9/7/97 Human Use: Campsite Condition: None Campsite Number: 0 Campfire Rings: 0 Trail Condition: None Trail Difficulty: Difficult Litter: None

Mean Length and Weight Report:

Angler Information:

Date: 9/7/97 Number of Anglers: 0 Hours Fished: 0 Total Caught: 0

Catch per Hour:

Mean Length S.E. Weight Species (mm)

Species Geartype

Mean

Date

(g)

S.E. C-Factor

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

Amphibian Report:

Date: 9/7/97 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

Species

Captured:

<151mm

151-200mm

Length Frequency

201-250mm

251-300mm

301-350mm

>350mm

Lake Name: 86 Quadmap: Snowyside Peak 10U133 Outlet: Planting Number: **ELMORE** Drainage: **MFBR** County: National Forest: **BOISE** Tributary To: Flytrip Ck 7N Lake Type: Frog Pond Township: 13E Elevation: 2636 m Range: 18 0.45 Section: Size: ha Latitude: Maximum Depth: 1 m Longitude: Aspect: W Spawning Potential: Comments: None. No fish potential.

Chemical Report:

Date:

Alkalinity (mg/I CaCO3): Hardness (mg/l CaCO3):

Conductivity (uS/cm): Surface Temp(C):

Secchi (m):

Angler Information: Date: 9/6/97

Number of Anglers: 0 Hours Fished: 0 0

Total Caught:

Catch per Hour:

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

Length Frequency Species

Captured:

<151mm

151-200mm

201-250mm

251-300mm

301-350mm

Human Use Report:

Date: 9/6/97 Human Use:

Campsite Condition: Poorly Developed

Campsite Number: 3 Campfire Rings: 3 Trail Condition: None Trail Difficulty: Difficult Litter: None

Mean Length and Weight Report:

Species

Species

Geartype

(mm)

Date

Mean

Mean Length S.E. Weight S.E. C-Factor

(g)

Amphibian Report:

9/6/97 Date:

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

>350mm

Lake Name: 87 Quadmap: Snowyside Peak Planting Number: 10U130 Outlet: County: **ELMORE** Drainage: **MFBR** National Forest: **BOISE** Tributary To: Flytrip Ck Township: 7N Lake Type: Range: 13E Elevation: 2683 m Section: 18 Size: 0.45 ha Latitude: Maximum Depth: 2 m Longitude: Aspect: S Spawning Potential: Comments:

None: no inlet or outlet, too shallow. Two ponds (0.454 ha each) located 50 yards apart. Upper

pond is 1 m deep.

Chemical Report:

Date: Date: 9/7/97 Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/l CaCO3): Campsite Condition: None Campsite Number: 0 Conductivity (uS/cm): Campfire Rings: 0 Surface Temp(C): Trail Condition: None Secchi (m): Trail Difficulty: Difficult Litter: None

Angler Information:

Mean Length and Weight Report: Date: 9/7/97 Species Geartype Number of Anglers: 0

Hours Fished: 0 Total Caught: 0

Catch per Hour: Mean Mean Species Length S.E. Weight S.E. C-Factor Minimum Maximum (mm) (g)

Number Length Length **Species** Caught (mm) (mm) 0 0 0 0 0 0 0 0 0

Amphibian Report:

Date: 9/7/97 Spotted Frog Adults: Spotted Frog Juv: 30 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 Tree Frog Juv: 0

Human Use Report:

Salamanders: 50 juv.

Length Frequency

Species Captured:

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

Lake Name:	88	Quadmap: Snowyside P	
Planting Number:	10U131	Outlet:	•
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	Flytrip Ck
Township:	7N	Lake Type:	
Range:	13E	Elevation:	2683 m
Section:	18	Size:	0 ha
Latitude:		Maximum Depth:	0 m
Longitude:		Aspect:	
Spawning Potential:		Comments:	
		Dry, grass meadow;	no standing water.

Chemical	Report:
----------	---------

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

Angler Information:

Date: 9/7/97

Number of Anglers: 0

Hours Fished: 0

Total Caught: 0

Catch per Hour:

Minimum Maximum
Number Length Length

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

Trail Difficulty: Difficult Litter: None Mean Length and Weight Report:

Human Use Report:

Human Use:

Campsite Condition: None Campsite Number: 0

Campfire Rings: 0
Trail Condition: None

Date: 9/7/97

Species Geartype Date

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

Amphibian Report:	
Date:	9/7/97
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:

Length Frequency

Species Captured:

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

Lake Name:	CAMP	Quadmap:	Mount Everly
Planting Number:	100291	Outlet:	Flytrip Ck
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	Flytrip Ck
Township:	7N	Lake Type:	Bog
Range:	12E	Elevation:	2592 m
Section:	13	Size:	ha
Latitude:		Maximum Depth:	4.3 m
Longitude:		Aspect:	SE
Spawning Potential:		Comments:	
Good; possible in bot	h inlet and outlet.	Saw six, 2" trout in o	utlet stream.

Chemical Report	t:			Human Us	se Report:	
	Date:	9/7/97		Da	te: 9/7/97	
Alkalinity (mg/l CaC	O3):	17		Human U	se:	
Hardness (mg/l CaC	O3):	0	Ca	ampsite Conditi	on: Well Devel	oped
	pH:	6.5	(Campsite Numb	er: 1	
Conductivity (uS/	/cm):	1		Campfire Rin	ġs: 1	
Surface Temp	p(C):	14.4	Trail Condition: Good			
Secchi	(m):	4.3	Trail Difficulty: Difficult			
				Litt	er: Abundant	
Angler Informa	ation:		Mean Le	ngth and Weig	ht Report:	
Date:	9/7/9	7	Species	Geartype	Date	
Number of Anglers:		1	WCT	Angling	9/7/97	
Hours Fished:	(0.25	WCT	Gill net	9/7/97	
Total Caught:		1				
Catch per Hour:		4		Mean	Mean	
			Species	Longth S.E.	Majaht CE	C Foo

Catch pe	er Hour:	4			Mean		Mean			
				Species	Length	S.E.	Weight	S.E.	C-Fa	ctor
		Minimum	Maximum		(mm)		(g)			
	Number	Length	Length	WCT	240		140			1.0
Species	Caught	(mm)	(mm)	WCT	360	20	395		5	0.9
WCT	1	240	240							
	0	0	0							
	0	0	0	,	Amphibia	n Repo	rt:			
					•	Ďа	te: 9/7	7/97		

Amphibian Report:
Date: 9/7/97
Spotted Frog Adults: 1
Spotted Frog Juv: 10
Tailed Frog Adults: 0
Tailed Frog Adults: 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 1 1 1

Lake Name:	FLYTRIP #1	Quadmap:	Snowyside Peak
Planting Number:	100287	Outlet:	Flytrip Ck
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	Flytrip Ck
Township:	7 N	Lake Type:	Cirque
Range:	12E	Elevation:	2634 m
Section:	24	Size:	ha
Latitude:	43 55.757	Maximum Depth:	8.5 m
Longitude:	114 59.784	Aspect:	W
Spawning Potential:		Comments:	

Chemical Report: Human Use Report:

9/7/97 Date: 9/7/97 Alkalinity (mg/l CaCO3): 17 Human Use: Hardness (mg/l CaCO3): 0 Campsite Condition: None 6.5 Campsite Number: 0 Conductivity (uS/cm): Campfire Rings: 0 0 Surface Temp(C): 12.2 Trail Condition: None Secchi (m): 7.5 Trail Difficulty: Difficult Litter: None

Angler Information: Mean Length and Weight Report:

9/7/97 Date: Species Geartype Date

Number of Anglers: Hours Fished: 0.25 Total Caught: 0

0

Catch per Hour: Length S.E. Weight S.E. C-Factor Species Minimum Maximum

Mean

Mean

(mm) (g) Number Length Length Species Caught (mm) (mm) 0 0 0

0 0 0 0 0 0 Amphibian Report: 9/7/97 Date: Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0

Tree Frog Adults: 0 Tree Frog Juv: 0

Length Frequency Salamanders: 0

Species Captured:

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

APPENDIX A. (continued)

Mountain Lake General Information

FLYTRIP #3 Lake Name: Quadmap: Snowyside Peak 100290 Planting Number: Outlet: *ck County: **ELMORE** Drainage: MFBR National Forest: BOISE Tributary To: Flytrip Ck Township: 7N Lake Type: Cirque Range: 12E Elevation: 2689 m Section: 25 Size: 0 ha Latitude: 43 55.685 Maximum Depth: 6.9 m Longitude: 114 59.218 Aspect: W

Spawning Potential: Comments:

Mostly silt in deep areas. Sand & detritus in gravel/cobble

around edges.

Chemical Report: Human Use Report:

9/7/97 Date: Date: 9/7/97 Alkalinity (mg/l CaCO3): 0 Human Use: Hardness (mg/l CaCO3): 0 Campsite Condition: None Campsite Number: 0 6.5 pH: Conductivity (uS/cm): Campfire Rings: 0 Surface Temp(C): 15.6 Trail Condition: None Secchi (m): 6.9 Trail Difficulty: Moderate Litter: None

Angler Information: Mean Length and Weight Report:

Date: 9/7/97 Species Geartype Date

 Number of Anglers:
 1

 Hours Fished:
 0.5

 Total Caught:
 0

 Catch per Hour:
 0

 Mean

cch per Hour: 0 Mean Mean Species Length S.E. Weight S.E. C-Factor Minimum Maximum (mm) (g)

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

0 0 0

0 0 0 0 0 **Amphibian Report**:

Date: 9/7/97
Spotted Frog Adults: 4
Spotted Frog Juv: 0
Tailed Frog Adults: 0
Tailed Frog Juv: 0
Tree Frog Adults: 0

Tree Frog Juv: 0

Length Frequency Salamanders: 6

Species Captured:

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

Quadmap:

Comments:

Outlet:

Lake Name: FLYTRIP #4
Planting Number: 10U127
County: ELMORE
National Forest: BOISE
Township: 7N
Range: 12E
Section: 25
Latitude:

Drainage:
Tributary To:
Lake Type:
Elevation:
Size:
Maximum Depth:
Aspect:

Longitude: Spawning Potential:

Chemical Report:

Alkalinity (mg/l CaCO3):

Hardness (mg/l CaCO3):

Conductivity (uS/cm):

Surface Temp(C):

Secchi (m):

9/7/97

Human Use Report:

Snowyside Peak

m

ha

m

*ck

0

۵

MFBR

Flytrip Ck

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

Angler Information:

Mean Length and Weight Report:

Species

Geartype

Date

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

Date:

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

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

Salamanders:

Amphibian Report:

Length Frequency

Species Captured:

<151mm 151-200mm

201-250mm

251-300mm

301-350mm

>350mm

APPENDIX A. (continued)

Mountain Lake General Information

Lake Name: FLYTRIP #5 Quadmap: Snowyside Peak Planting Number: 10U128 Outlet: *ck County: **ELMORE** Drainage: **MFBR** National Forest: BOISE Tributary To: Flytrip Ck Township: 7N Lake Type: Range: 12E Elevation: 2616 m Section: 18 Size: 1.04 ha Latitude: 43 55.811 Maximum Depth: m Longitude: 114 59.903 Aspect: Spawning Potential: Comments:

Chemical Report:

Human Use Report: Date: Date: 9/7/97 Alkalinity (mg/l CaCO3): Human Use:

Hardness (mg/l CaCO3): Campsite Condition: None Campsite Number: 0 Conductivity (uS/cm): Campfire Rings: 0 Surface Temp(C): Trail Condition: Poor Secchi (m): Trail Difficulty: Difficult

Litter: None

Mean Length and Weight Report:

Tailed Frog Juv:

0

Angler Information:

0

0

Date: 9/7/97 Species Geartype Date

Number of Anglers: Hours Fished: 0.33 Total Caught: 0

Catch per Hour: 0 Mean Mean Species Length S.E. Weight S.E. C-Factor

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

0 0 0 0 0 0 Amphibian Report: Date: 9/7/97 Spotted Frog Adults: 3 Spotted Frog Juv: 0 Tailed Frog Adults: 0

Tree Frog Adults: 0 Tree Frog Juv: 0

Length Frequency Salamanders: 0

Species Captured:

0

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

Lake Name: Planting Number:	FLYTRIP #5+1 10U135	Quadmap: Outlet:	Snowyside Peak
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	Flytrip Ck
Township:	7N	Lake Type:	Bog
Range:	12E	Elevation:	2622 m
Section:	24	Size:	0 ha
Latitude:		Maximum Depth:	0 m
Longitude:		Aspect:	W
Spawning Potential:		Comments:	

Chemical Report:

Human Use Report: Date: 9/7/97 Alkalinity (mg/l CaCO3): Human Use: Hardness (mg/I CaCO3): Campsite Condition: None Campsite Number: 0 Conductivity (uS/cm): Campfire Rings: 0 Surface Temp(C): Trail Condition: None Secchi (m): Trail Difficulty: Difficult Litter: None

Angler Information:

Mean Length and Weight Report: Date: 9/7/97 Species Geartype 0

Number of Anglers: Hours Fished: 0 Total Caught: 0

Catch per Hour: Mean Mean S.E. Length Weight S.E. C-Factor Minimum Maximum (mm) ·(g)

Number Length Length **Species** Caught (mm) (mm) 0 0 0 0 0 0 0 0 0

Amphibian Report: 9/7/97 Date: Spotted Frog Adults: 0

Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 Tree Frog Juv: 0

Length Frequency Salamanders: 0

Species Captured:

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

Lake Name:	HEART	Quadmap:	Snowyside Peak
Planting Number:	100292	Outlet:	Pack Ck
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	Flytrip Ck
Township:	7N	Lake Type:	Moraine
Range:	12E	Elevation:	2611 m
Section:	13	Size:	13.6 ha
Latitude:	43 56.415	Maximum Depth:	19 m
Longitude:	114 59.885	Aspect:	W
Spawning Potential:		Comments:	

Some. Observed 2" trout at outlet.

Rock, sand, mud bottom. Good inlet from PS#1. Limited

spawn potential. Saw several (>10) 2-3" trout in outlet.

Chemical Report:

9/7/97 Alkalinity (mg/l CaCO3): 17 Hardness (mg/l CaCO3): 0 pH: 6.5 Conductivity (uS/cm): 0 Surface Temp(C): 15

Secchi (m): 19

Angler Information:

9/7/97 Date: Number of Anglers: 1 Hours Fished: 0.5 **Total Caught:** 2 Catch per Hour: 4

Minimum Maximum Number Length Length Caught (mm) (mm) 2 260

Species WCT 280 0 0 0 0 0 0

Length Frequency

Species Captured:

<151mm 151-200mm WCT

1

201-250mm 5

251-300mm 1

Human Use Report:

Date: 9/7/97 Human Use:

Campsite Condition: Well Developed

Campsite Number: 2 Campfire Rings: 2 Trail Condition: None Trail Difficulty: Difficult Litter: None

Mean Length and Weight Report:

Species Geartype WCT 9/7/97 Angling Gill net WCT 9/7/97

Mean

Length S.E. S.E. C-Factor Species Weight (mm) (g) WCT 270 140 0.7 WCT 274 16 198 37 0.9

Mean

Amphibian Report:

Date: 9/7/97 Spotted Frog Adults: 0

Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0

> 0 Tree Frog Juv: Salamanders: 0

301-350mm

>350mm

Mount Everly HELEN Quadmap: Lake Name: Planting Number: 090209 Outlet: SFPR **BOISE** Drainage: County: Tributary To: **SFPR** National Forest: **BOISE** Township: 8N Lake Type: Cirque 12E Elevation: 2603 m Range: Size: Section: 35 ha 43 58.967 Maximum Depth: 10 m Latitude: 115 01.808 Aspect: Ν Longitude:

Spawning Potential: Comments:

Female WSC ripe and dripping eggs. Inlet dry; outlet wet but not flowing.

Chemical Report:

9/11/97 Date: 9/11/97 Date: Human Use: Alkalinity (mg/I CaCO3): 17 Campsite Condition: None 0 Hardness (mg/l CaCO3): 6.5 Campsite Number: 0 Conductivity (uS/cm): 0 Campfire Rings: 0 Trail Condition: None 14.4 Surface Temp(C): Trail Difficulty: Difficult Secchi (m): 10 Litter: None

Angler Information: Mean Length and Weight Report:

9/11/97 Date: Species Geartype Date 2 Number of Anglers:

2 Hours Fished: Total Caught: 13 6.5 Catch per Hour:

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

Number Length Length (mm) **Species** Caught (mm) WCT 12 340 550 0 **RCT** 1 0 0 0 0

Amphibian Report:

9/11/97 Date: Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0

Human Use Report:

Tree Frog Juv: 0 0

Length Frequency Salamanders:

Species Captured:

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

HERMAN Lake Name: 100285 Planting Number: County: **ELMORE** National Forest: **BOISE** 7N Township: 12E Range: Section: 24 Latitude: 43 56.001 Longitude: 114 59.832 Spawning Potential:

None: no inlet, small outlet.

Quadmap: Outlet: Drainage:

Tributary To:

Snowyside Peak Flytrip Ck MFBR Flytrip Ck Bog 2606 m

ha

m

Lake Type: Elevation: Size: Maximum Depth: 7.2 Aspect:

W

Comments:

Chemical Report:

9/7/97 Date: Alkalinity (mg/l CaCO3): 17 Hardness (mg/l CaCO3): 0 pH: 6.5 Conductivity (uS/cm): 0 Surface Temp(C): 16.7 Secchi (m): 7.2

Angler Information:

Date:	9/7/97
Number of Anglers:	1
Hours Fished:	0.5
Total Caught:	6
Catch per Hour:	12

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
GRY	6	170	200
	0	0	0
	0	0	0

Human Use Report:

Date:	9/7/97
Human Use:	
Campsite Condition:	Poorly Developed
Campsite Number:	1
Campfire Rings:	1

Trail Condition: None Trail Difficulty: Difficult Litter: None

Mean Length and Weight Report:

Species	Geartype	Date
GRY	Angling	9/7/97
GRY	Gill net	9/7/97

Amphibian Report:

Mean

Species	Length	S.E.	Weight	S.E.	C-Fa	ctor
	(mm)		(g)			
GRY	186	3	55		3	0.9
GRY	187	1	9		2	0.1

Mean

Date:	9/7/97
Spotted Frog Adults:	4
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 GRY

151-200mm 63

201-250mm

251-300mm

301-350mm

>350mm

HERMAN 1 Quadmap: Snowyside Peak Lake Name: Planting Number: 10U132 Outlet: MFBR County: **ELMORE** Drainage: Tributary To: National Forest: **BOISE** Flytrip Ck Township: 7N Lake Type: 2622 m 12E Elevation: Range:

 Range:
 12E
 Elevation:
 2622 m

 Section:
 24
 Size:
 0.45 ha

 Latitude:
 43 55.966
 Maximum Depth:
 2 m

Longitude: 114 59.810 Aspect: Spawning Potential: Comments:

None. Frog pond off SE corner of Herman lake.

Chemical Report:

 Date:
 Date:
 9/7/97

 Alkalinity (mg/l CaCO3):
 Human Use:
 Human Use:

 Hardness (mg/l CaCO3):
 Campsite Condition:
 None

 pH:
 Campsite Number:
 0

 Conductivity (uS/cm):
 Campfire Rings:
 0

 Surface Temp(C):
 Trail Condition:
 None

Secchi (m): Trail Difficulty: Difficult
Litter: None

Angler Information: Mean Length and Weight Report:

Date: 9/7/97 Species Geartype Date

Number of Anglers: 0
Hours Fished: 0

0

Catch per Hour: Mean Species Length S.E. Weight S.E. C-Factor

Minimum Maximum (mm) (g)

Number Length Length

Species Caught (mm) (mm)

0 0 0 0 0 0 0 0 0 **Amphibian Report:** Date: 9/7/97 Spotted Frog Adults: 2 Spotted Frog Juy: 10

Spotted Frog Juv: 10
Tailed Frog Adults: 0
Tailed Frog Juv: 0
Tree Frog Adults: 0
Tree Frog Juv: 0

Human Use Report:

Length Frequency Salamanders: 0

Species Captured:

Total Caught:

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

Lake Name:	ISLAND	Quadmap:	Snowyside Peak
Planting Number:	100298	Outlet:	Flytrip Ck
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	Flytrip Ck
Township:	7N	Lake Type:	Moraine
Range:	13E	Elevation:	2677 m
Section:	18	Size:	0.90 ha
Latitude:		Maximum Depth:	m
Longitude:		Aspect:	
		•	

Spawning Potential: Comments:

None. Shallow lake although there is some inflow. Recommend

no stocking.

Chemical Report: Human Use Report: Date: 9/5/97 Date: 9/5/97

Alkalinity (mg/l CaCO3): 17 Human Use: Hardness (mg/l CaCO3): 0 Campsite Condition: None 6.5 Campsite Number: 0 Conductivity (uS/cm): Campfire Rings: 0 0 Surface Temp(C): Trail Condition: Poor 13.9

Secchi (m): Trail Difficulty: Difficult Litter: None

Angler Information: Mean Length and Weight Report:

9/5/97 Date: Species Geartype Date

Number of Anglers: 0 Hours Fished: 0 Total Caught: 0

Catch per Hour: Mean Mean Species Length S.E. Weight S.E. C-Factor (g)

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

0 0 0 0 0 0 **Amphibian Report:**

9/5/97 Date: Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0

Tree Frog Juv: 0 **Length Frequency** Salamanders: 0

Species Captured:

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

LINDA Lake Name: Quadmap: Mount Everly Planting Number: 090210 Outlet: County: **BOISE** Drainage: **SFPR** BOISE National Forest: Tributary To: **SFPR** Township: 8N Lake Type: Cirque 12E Elevation: Range: 2604 m 35 Section: Size: ha 43 58.923 Latitude: Maximum Depth: 4 m Longitude: 115 01.893 Aspect: Ν Comments:

Spawning Potential:

Inlet wet but not flowing; outlet dry.

Chemical Report:

Human Use Report:

9/10/97 Date: 9/10/97 Date: Alkalinity (mg/l CaCO3): 17 Human Use: 0 Campsite Condition: None Hardness (mg/l CaCO3): 6.5 Campsite Number: 0 Conductivity (uS/cm): 0 Campfire Rings: 0 Surface Temp(C): Trail Condition: None 14.4 Secchi (m): Trail Difficulty: Difficult Litter: None

Angler Information:

Mean Length and Weight Report:

Mean

Date: 9/10/97 Species Geartype Date

Number of Anglers: 2 0.5 Hours Fished: Total Caught: 0 0 Catch per Hour:

Length S.E. Weight S.E. C-Factor Species

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

Amphibian Report: 0 0 0 Date: 9/10/97

Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0

Mean

Tree Frog Juv: 0

Length Frequency Salamanders: 0

Species Captured:

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

Lake Name:	PS #1	Quadmap:	Snowyside Peak
Planting Number:	100294	Outlet:	Flytrip Ck
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	Flytrip Ck
Township:	7N	Lake Type:	Moraine
Range:	13E	Elevation:	2636 m
Section:	18	Size:	ha
Latitude:	43 56.323	Maximum Depth:	13 m
Longitude:	114 59.546	Aspect:	W
Spawning Potential:		Comments:	

Excellent in both inlet and outlet. Lake probably

doesn't need stocking.

Several 3" trout observed at outlet. Outlet to Heart Lake is passable down stream but probably not upstream.

Human Use Report:

Salamanders:

0

Chemical Report:

Date:	9/6/97	Date: 9/6/97
Alkalinity (mg/l CaCO3):	17	Human Use:
Hardness (mg/l CaCO3):	0	Campsite Condition: Well Develope
pH:	6.5	Campsite Number: 3
Conductivity (uS/cm):	0	Campfire Rings: 3
Surface Temp(C):	14.4	Trail Condition: Poor
Secchi (m):	13	Trail Difficulty: Difficult
		Litter: None

Angler Information:

Angler Information:		Mean Length and Weight Report:			
Date:	9/6/97	Species	Geartype	Date	
Number of Anglers:	2	WCT	Angling	9/6/97	
Hours Fished:	0.5	WCT	Gill net	9/6/97	
Total Caught:	7				
Catch per Hour:	14		Mean	Mean	

•				Species	Length	S.E.	Weight	S.E. C	-Factor
		Minimum	Maximum		(mm)		(g)		
	Number	Length	Length	WCT	271	11	174	18	0.9
Species	Caught	(mm)	(mm)	WCT	211	11	64	25	0.6
WCT	7	250	350						
	0	0	0						

0 0 0 **Amphibian Report:** Date: 9/6/97 Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: Tree Frog Juv: 0

Length Frequency

Species Captured:

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

Lake Name:	PS #2	Quadmap:	Snowyside Peak
Planting Number:	100295	Outlet:	Flytrip Ck
County:	ELMORE	Drainage:	MFBR
National Forest:	BOISE	Tributary To:	Flytrip Ck
Township:	7 N	Lake Type:	Moraine
Range:	13E	Elevation:	2659 m
Section:	18	Size:	0 ha
Latitude:	43 56.440	Maximum Depth:	5 m
Longitude:	114 59.449	Aspect:	W
Snawning Potential:		Comments:	

Spawning Potential:

Chemical Report:

Adequate to support lake fishery; inlet. 2nd inlet w/additional gravel - very little flow. Possible

spawning gravel in outlet.

Human Use Report:

9/5/97

S.E. C-Factor

1.0

Fairly shallow w/mud bottom. Small inlet w/flowing water.

Fish passage from PS2 - PS1; PS3 - PS2.

Mean Length and Weight Report:

Date:	9/5/97	Date: 9/5/97
Alkalinity (mg/l CaCO3):	17	Human Use:
Hardness (mg/l CaCO3):	0	Campsite Condition: None
pH:	6.5	Campsite Number: 0
Conductivity (uS/cm):	0	Campfire Rings: 0
Surface Temp(C):	13.9	Trail Condition: None
Secchi (m):	5	Trail Difficulty: Difficult
• •		Litter: None

Angler Information:

Date:	9/5/97	Species	Geartype	Date
Number of Anglers:	0	WCT	Angling	9/5
Hours Fished:	0			
Total Caught:	0			

Catch per Hour:			Mean Mean					
•		B. Similar	\$4 mainers and	Species	_	S.E.	Weight	;
Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)	WCT	(mm) 116	i	(g) 15	5
	0	0	0					
	0	0	0					
	0	0	0	,	Amphibia	п Кер	ort:	
						Da	ate:	

Tailed Frog Adults: Tailed Frog Juv: Tree Frog Adults: Tree Frog Juv: Salamanders:

Spotted Frog Adults: Spotted Frog Juv:

Length Frequency

Species Captured:

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

Lake Name: PS #3 Planting Number: 100296 **ELMORE** County: National Forest: BOISE Township: 7N 13E Range: Section: 18 43 56.590 Latitude: 114 58.920 Longitude:

Spawning Potential:

No fry observed in outlet stream. No inlet. Very

limited if any spawning potential.

Quadmap:

Snowyside Peak *ck

Outlet: Drainage: Tributary To: Lake Type:

MFBR Flytrip Ck Moraine 2726 m

Elevation: Size: Maximum Depth:

0.90 ha 5.6 m

Aspect:

W

Comments:

Several fish observed rising. Mostly small 6-10".

Chemical Report:

Date: 9/5/97 Alkalinity (mg/l CaCO3): 17 Hardness (mg/l CaCO3): 0 6.5 Conductivity (uS/cm): 0 Surface Temp(C): 58 Secchi (m): 5.6

Angler Information:

9/5/97 Date:

Number of Anglers: Hours Fished:

Total Caught:

0

Catch per Hour:

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

Human Use Report:

Date: 9/5/97 Human Use: Campsite Condition: None Campsite Number: 0 Campfire Rings: 1 Trail Condition: None Trail Difficulty: Difficult Litter: None

Mean Length and Weight Report:

Species WCT

Geartype

Gill net

9/5/97

Mean Mean Length S.E. S.E. C-Factor Weight Species (mm) WCT 70 177 41 45 1.0

Amphibian Report:

9/5/97 Date: 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 WCT

151-200mm

201-250mm 2

251-300mm 1

301-350mm

>350mm

PS #4 Quadmap: Snowyside Peak Lake Name: Flytrip Ck Planting Number: 10U070 Outlet: **MFBR ELMORE** Drainage: County: Tributary To: Flytrip Ck National Forest: BOISE Township: 7N Lake Type: Bog 2616 m 13E Elevation: Range: Size: 0 18 ha Section: Maximum Depth: 43 56.163 3.4 m Latitude: 114 59.849 Aspect: W Longitude: Comments:

Spawning Potential:

None.

Mud bottom, no inlet or outlet.

Human Use Report: Chemical Report:

Date: 9/7/97 9/7/97 Date: Alkalinity (mg/l CaCO3): Human Use: 17 0 Campsite Condition: None Hardness (mg/l CaCO3): 6.5 Campsite Number: 0 Campfire Rings: 0 Conductivity (uS/cm): 0 Trail Condition: None Surface Temp(C): 17.8 Trail Difficulty: Difficult Secchi (m): 3.4 Litter: None

Mean Length and Weight Report: Angler Information:

9/7/97 Species Geartype Date Date:

0 Number of Anglers: 0 Hours Fished: 0

Total Caught:

Mean Catch per Hour: Mean S.E. Weight S.E. C-Factor Species Length (mm)

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

Amphibian Report:

9/7/97 Date: Spotted Frog Adults: 0 Spotted Frog Juv: 30 Tailed Frog Adults: 0 Tailed Frog Juv: 0

(g)

Tree Frog Adults: 0 Tree Frog Juv: 0

Length Frequency Salamanders: 0

Species

Captured:

<151mm 151-200mm 201-250mm 251-300mm 301-350mm >350mm No obvious spawn potential.

Mountain Lake General Information

Mud bottom; meadow bog lake.

Lake Name:	TENLAKE #10	Quadmap:	Mount Everly
Planting Number:	090220	Outlet:	•
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	
Township:	7N	Lake Type:	Moraine
Range:	12E	Elevation:	2709 m
Section:	11	Size:	0 ha
Latitude:	43 57.913	Maximum Depth:	7.2 m
Longitude:	115 01.825	Aspect:	E
Spawning Potential:		Comments:	

Chemical Report:	Human Use Report:

Date:	9/9/97	Date:	9/9/97
Alkalinity (mg/l CaCO3):	17	Human Use:	
Hardness (mg/l CaCO3):	0	Campsite Condition:	None
pH:	6.5	Campsite Number:	0
Conductivity (uS/cm):	0	Campfire Rings:	0
Surface Temp(C):	17.8	Trail Condition:	None
Secchi (m):	7.2	Trail Difficulty:	Difficult
		Litter:	None

Angler Information: Mean Length and Weight Report:

Date:	9/9/97	Species	Geartype	Date
Number of Anglers:	0			
Hours Fished:	0			

Total Caught: 0

Catch per Hour:

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

Species	Number Caught	Length (mm)	Length (mm)		
	0	0	0		
	0	0	0		
	0	0	0	Amphibian Report:	
				Date:	9/9/97
				Spotted Frog Adults:	0
				Spotted Frog Juv:	6
				Tailed Frog Adults:	0
				Tailed Frog Juv:	0
				Tree Frog Adults:	0

Length Frequency Tree Frog Juv: 0 Salamanders: 0

Species
Captured:

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

Lake Name:	TENLAKE #2 SUMMIT #2	Quadmap:	Mount Everly
Planting Number:	090212	Outlet:	Tenlake Ck
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	SFPR
Township:	7N	Lake Type:	Moraine-meadow
Range:	12E	Elevation:	2592 m
Section:	2	Size:	13.6 ha
Latitude:	43 57.99 N	Maximum Depth:	5 m
Longitude:	115 01.32 W	Aspect:	NE
Spawning Potential:		Comments:	
Marginal, poor		Caught several GRY	in GN.

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

Angler Information:

Date: 9/9/97 Number of Anglers: 0 Hours Fished: 0 Total Caught: 0

Catch per Hour:

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

Human Use Report:

Date: 9/9/97 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 **GRY** Gill net 9/9/97 WCT Gill net 9/9/97

Mean Mean Length S.E. Weight S.E. C-Factor Species (mm) (g) **GRY** 179 53 0.9 WCT 440 0 0.0

Amphibian Report:

Date: 9/9/97 Spotted Frog Adults: 1 Spotted Frog Juv: 10 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0

> Tree Frog Juv: 0 Salamanders: 0

Length Frequency

Species Captured:

WCT

<151mm **GRY**

151-200mm 201-250mm

251-300mm

301-350mm

>350mm

Total Caught:

Species

Mountain Lake General Information

TENLAKE #4 Lake Name: Quadmap: Mount Everly Planting Number: 090214 Outlet: County: BOISE Drainage: **SFPR** BOISE National Forest: Tributary To: **SFPR** Township: 7N Lake Type: Cirque Range: 12E Elevation: 2683 m Section: 12 Size: 0 ha Latitude: 43 57.582 Maximum Depth: 4 m Longitude: 115 00.910 Aspect: W Spawning Potential:

awning Potential: Comments:

No fish observed, mud bottom.

Chemical Report:

0

Date: 9/9/97 Date: 9/9/97
Alkalinity (mg/l CaCO3): Human Use:

Hardness (mg/l CaCO3):

Campsite Condition: None
pH:

Conductivity (uS/cm):

Campsite Number: 0

Campfire Rings: 0

Surface Temp(C): 18.9 Trail Condition: None Secchi (m): 4 Trail Difficulty:

Litter: None

Angler Information:

Mean Length and Weight Report:

Date: 9/9/97 Species Geartype Date

Number of Anglers: 0
Hours Fished: 0

Catch per Hour: Mean Mean Species Length S.E. Weight S.E. C-Factor

Minimum Maximum (mm) (g)

Number Length Length

Species Caught (mm) (mm)

0 0 0

0 0 0 0 0 **Amphibian Report**:

Date: 9/9/97
Spotted Frog Adults: 0
Spotted Frog Juv: 0
Tailed Frog Adults: 0

Tailed Frog Juv: 0
Tree Frog Adults: 0
Tree Frog Juv: 0

Human Use Report:

Length Frequency Salamanders: 0

Captured:

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

Lake Name:	TENLAKE #5	Quadmap:	Mount Everly
Planting Number:	090215	Outlet:	Tenlake Ck
County:	BOISE	Drainage:	SFPR
National Forest:	BOISE	Tributary To:	Tenlake Ck
Township:	7 N	Lake Type:	Moraine
Range:	12E	Elevation:	2689 m
Section:	12	Size:	ha
Latitude:	43 57.447	Maximum Depth:	3.1 m
Longitude:	115 00.305	Aspect:	W
Spawning Potential:		Comments:	

None.

Chemical Report: Human Use Report:

Date:	9/9/97	Date: 9/9/97
Alkalinity (mg/l CaCO3):	17	Human Use:
Hardness (mg/l CaCO3):	0	Campsite Condition: Poorly Developed
pH:	6.5	Campsite Number: 4
Conductivity (uS/cm):	0	Campfire Rings: 4
Surface Temp(C):	14.4	Trail Condition: None
Secchi (m):	3.1	Trail Difficulty: Difficult
		Litter: None

Angler Information:

Date: 9/9/97 Species Geartype Date 0 Gill net 9/9/97 Number of Anglers: WCT 0 Hours Fished: Total Caught: 0

Catch per Hour:

Mean Меап Species Length S.E. Weight S.E. C-Factor Minimum Maximum (mm) 10 WCT 3 0 0.6 Number Length Length 118 Species Caught (mm) (mm) 0 0 0 0 0 0 0 0 0 Amphibian Report:

9/9/97 Date: Spotted Frog Adults: 0 Spotted Frog Juv: 0 Tailed Frog Adults: 0 Tailed Frog Juv: 0 Tree Frog Adults: 0 Tree Frog Juv: 0

Mean Length and Weight Report:

Length Frequency Salamanders: 0

Species Captured:

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

WCT

Lake Name: **TENLAKE #6** Planting Number: 090216 **BOISE** County: National Forest: BOISE Township: 7N Range: 12E Section: 12 Latitude:

Longitude: Spawning Potential:

Quadmap: Mount Everly Outlet: Tenlake Ck Drainage: **SFPR** Tributary To: **SFPR** Lake Type:

Elevation: 2689 m Size: ha Maximum Depth: m

Aspect: Comments:

Species

Chemical Report:

Date: Alkalinity (mg/I 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:

9/8/97 Date: Number of Anglers: Hours Fished: 0.25 Total Caught: 1 Catch per Hour: 4

WCT Angling 9/8/97 Mean Mean

Mean Length and Weight Report:

Geartype

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)	
WCT	1	280	280	
	0	0	0	
	0	0	0	

Length S.E. Weight S.E. C-Factor Species (mm) (g) WCT 215 280 1.0

Date:

Date

Spotted Frog Adults: Spotted Frog Juv: Tailed Frog Adults: Tailed Frog Juv: Tree Frog Adults: Tree Frog Juv:

Salamanders:

Amphibian Report:

Length Frequency

Species Captured:

<151mm WCT

151-200mm

201-250mm

251-300mm

301-350mm 1

>350mm

56

Species

Mountain Lake General Information

Lake Name: TENLAKE #7		Quadmap:	Mount Everly	
Planting Number:	090217	Outlet:	Tenlake Ck	
County:	BOISE	Drainage:	SFPR	
National Forest:	BOISE	Tributary To:	SFPR	
Township:	7N	Lake Type:		
Range:	12E	Elevation:	2692 m	
Section:	12	Size:	ha	
Latitude:		Maximum Depth:	m	
Longitude:		Aspect:		
Spawning Potential:		Comments:		

Chemical Report:	Human Use Report:
Date:	Date:
Alkalinity (mg/l CaCO3):	Human Use:

Alk Hardness (mg/l CaCO3): Campsite Condition: Campsite Number: Conductivity (uS/cm): Campfire Rings: Surface Temp(C): Trail Condition: Secchi (m):

Trail Difficulty: Litter:

Angler Information: Mean Length and Weight Report:

Date:	9/9/97	Species	Geartype	Date
Number of Anglers:	0	WCT	Angling	9/9/97
Hours Fished:	0	WCT	Gill net	9/9/97
Total Caught:	0			

Catch per Hour: Mean Mean Species Length S.E. Weight S.E. C-Factor

		WIIIIIIIIIIII	Maximum		(111111)		(9)		
	Number	Length	Length	WCT	353	23	283	81	0.7
Species	Caught	(mm)	(mm)	WCT	353	23	283	81	0.7
	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:

Length Frequency Salamanders:

Captured: <151mm 151-200mm 201-250mm 251-300mm 301-350mm >350mm WCT 6 10

Lake Name:	TENLAKE #8	Quadmap:	Mount Everly	
Planting Number:	090218	Outlet:	Tenlake Ck	
County:	BOISE	Drainage:	SFPR	
National Forest:	BOISE	Tributary To:	Tenlake Ck	
Township:	7N	Lake Type:	Moraine	
Range:	12E	Elevation:	2698 m	
Section:	12	Size:	ha	
Latitude:	43 57.415	Maximum Depth:	4.3 m	
Longitude:	115 00.436	Aspect:	W	
Spawning Potential:		Comments:		

No spawn potential in inlet. No inflow from surface

Ten Lake #8 drains west into Ten Lake #9. It is higher than

Ten Lake #7.

Chemical Report:

9/9/97
17
0
6.5
0
14.4
4.3

Angler Information:

Date:	9/9/97
Number of Anglers:	1
Hours Fished:	0.5
Total Caught:	6
Catch per Hour:	12

Species	Number Caught	Minimum Length (mm)	Maximum Length (mm)
WSC	6	180	310
	0	0	0
	0	0	0

Human Use Report:

Date:	9/9/97
Human Use:	
Campsite Condition:	Poorly Developed
Campsite Number:	4
Campfire Rings:	4
Trail Condition:	None
Trail Difficulty:	Difficult
Litter:	None

Mean Length and Weight Report:

Species	Geartype	Date
WSC	Angling	9/9/97
wsc	Gill net	9/9/97

Mean

Species	Length (mm)	S.E.	Weight (a)	S.E.	C-Factor
wsc	278	20	10/	32	2 0.7
WSC	284	17	180	40	0.7

Mean

Amphibian Report:	
Date:	9/9/97
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 1

Lake Name:	TENLAKE #9	Quadmap:	Mount Everly	
Planting Number:	090219	Outlet:	Tenlake Ck	
County:	BOISE	Drainage:	SFPR	
National Forest:	BOISE	Tributary To:	SFPR	
Township:	7 N	Lake Type:	Cirque	
Range:	12E	Elevation:	2697 m	
Section:	12	Size:	ha	
Latitude:	43 57.479	Maximum Depth:	19 m	
Longitude:	115 00.805	Aspect:	W	
Spawning Potential:		Comments:		

Ch	em	ical	ı D	an	art.

Human Use Report:

Mean

Chemical Report.		numan use Report.			
Date:	9/9/97	Date: 9/9/97			
Alkalinity (mg/l CaCO3):	17	Human Use:			
Hardness (mg/l CaCO3):	0	Campsite Condition: Poorly Developed			
pH:	6.5	Campsite Number: 4			
Conductivity (uS/cm):	0	Campfire Rings: 4			
Surface Temp(C):	13.3	Trail Condition: None			
Secchi (m):	10	Trail Difficulty: Difficult			
		Litter: None			

Angler Information:

Mean Length and Weight Report:

Date:	9/9/97	Species	Geartype	Date
Number of Anglers:	1	WCT	Angling	9/9/97
Hours Fished:	0.25			

Total Caught: 3
Catch per Hour: 12
Mean

				Species	Length	S.E.	Weight	S.E. C	-Factor
		Minimum	Maximum		(mm)		(g)		
	Number	Length	Length	WCT	242	15	146	38	1.1
Species	Caught	(mm)	(mm)						
		000	040						

WCT 200 312 0 0 0 0 0 0 Amphibian Report: Date: 9/9/97 Spotted Frog Adults: 0 Spotted Frog Juv: 0

Tailed Frog Adults: 0
Tailed Frog Juv: 0
Tree Frog Adults: 0
Tree Frog Juv: 0

Length Frequency Salamanders: 0

 Species

 Captured:
 <151mm</td>
 151-200mm
 201-250mm
 251-300mm
 301-350mm
 >350mm

 WCT
 2
 2
 2
 2
 1

1997 ANNUAL PERFORMANCE REPORT

State of: <u>Idaho</u> Program: <u>Fisheries Management F-71-R-22</u>

Project I: <u>Surveys and Inventories</u> Subproject I-D: <u>Southwest Region</u>

Job No.: <u>b</u> Title: <u>Lowland Lakes Investigations</u>

Contract Period: July 1, 1997 to June 30, 1998

ABSTRACT

Extensive sampling was conducted on Arrowrock Reservoir during the winter and spring of 1997 in an effort to capture bull trout *Salvelinus confluentus* as part of a cooperative project between the Department and the U.S. Bureau of Reclamation. This project included radio tagging 30 adults and conducting a population estimate of the bull trout found in Arrowrock Reservoir.

On May 8,1997 Beach's Pond was sampled for a total of 0.77 h of activated electrode time. A total of 296 fish was collected. The catch included bluegill *Lepomis macrochirus*, largemouth bass *Micropterus salmoides*, and pumpkinseed *Lepomis gibbosus*.

Following up on reports of white crappie *Pomoxis annularis* being harvested in April and May of 1997 by anglers, Black's Creek Reservoir was sampled with electrofishing equipment on June 9, 1997. Thirty minutes of activated electrode time was utilized to sample the reservoir. A total of 276 fish was sampled. White crappie made up 100% of the catch.

Blackstone Reservoir was sampled on November 17, 1997. Sampling effort included two units of gillnetting, four units of trapnetting, and 0.53 h of electrofishing. A total of 55 fish was sampled. The catch included brown bullhead *Ameiurus nebulosus*, bridgelip sucker *Catostomus columbianus*, Lahontan cutthroat *Oncorhynchus clarki henshawi*, largemouth bass *Micropterus salmoides*, redside shiner *Richardsonius balteatus*, wild rainbow/redbandtrout *O. mykiss gairdneri*.

C.J. Strike Reservoir was sampled on May 28, 29, and 30, 1997. Sampling included 1.3 h of electrofishing, four units of gillnetting, and four units of trapnetting. A total of 801 fish was caught.

Caldwell City Pond was sampled by electrofishing for 0.38 h on May 20, 1997. A total of 192 fish was sampled.

Caldwell pond #1 was sampled by electrofishing for 0.35 h on May 20, 1997. A total of 166 fish was sampled.

Caldwell pond #2 was sampled by electrofishing for 0.30 h on May 20,1997. A total of 135 fish was sampled.

Sampling was conducted on Crane Falls by electrofishing for one h on May 27, 1997. A total of 267 fish was captured.

Deadwood Reservoir sampling was conducted during the months of May, June, and October utilizing gill nets, trap nets, and backpack electrofishing. Extensive sampling of the reservoir and associated streams was an effort to capture bull trout as part of a cooperative project between the Department and the U.S. Bureau of Reclamation.

Duff Lane Pond was sampled on May 22,1997 with 0.39 h of electrofishing. Bluegill, brown bullhead, hatchery rainbow, and largemouth bass were represented in the sample.

Emmett Airport Pond was sampled on May 21,1997 utilizing 0.29 h of electrofishing. A total of 81 fish was captured. Black crappie, bluegill, brown bullhead, largemouth bass, and pumkinseed were represented in the catch.

Indian Creek Reservoir was sampled on April 22 and June 9, 1997 utilizing a total of 1.93 h of electrofishing. Bluegill and largemouth bass were represented in each sample. The total catch for April and June were 571, and 75, respectively.

Lake Lowell was sampled on May 7, May 14, July 10, and November 3, 1997. A total of 4.27 h of activated electrode time was utilized for sampling. Black crappie, bluegill, bridgelip sucker, brown bullhead, common carp, largemouth bass, largescale sucker *Catostomus macrochelius*, smallmouth bass, and yellow perch *Perca flavescens* were represented in the sampling. A fishing tournament was held on Lake Lowell on May 10 and 11. Sixty anglers fished for 960 h and caught 283 largemouth bass and 30 smallmouth bass.

Lucky Peak Reservoir was sampled on May 13, 1997 utilizing 1.13 h of electrofishing, two units of overnight gillnetting, four hours of sinking gill nets and four units of trapnetting. A total of 420 fish was caught. Nongame species represented 80% of the total CPUE by number and 86% of the total CPUE by weight. Additional sampling was conducted between March 6 and May 19 in an effort to capture bull trout as part of a cooperative project between the Department and the Bureau of Reclamation. This project included radio tagging Lucky Peak bull-trout and transporting them upstream of Arrowrock Dam.

Paddock Reservoir was sampled on April 16 and October 26,1997. Effort for both sampling days included one h of electrofishing, two units of gillnetting, and four units of trapnetting. A total of 656 fish was caught.

Quinn Pond was sampled on April 15, 1997 utilizing 0.82 h of activated electrode time. A total of 140 fish was captured.

Sawyers Pond was sampled on May 21, 1997 utilizing 0.38 h of activated electrode time. A total of 74 fish was captured.

Authors:

Dale B. Allen Regional Fishery Manager

Brian J. Flatter Senior Fishery Technician

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 CPUE 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 by 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 CPUE 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 $1.8 \text{ m} \times 0.9 \text{ m}$, 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 CPUE was calculated as catch of one trap net, by both number and weight, per night.

Attempts were made to measure a sample of each 10 mm 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.

RESULTS

Arrowrock Reservoir

Extensive sampling was conducted during the winter and spring of 1997 in an effort to capture bull trout *Salvelinus confluentus* as part of a cooperative project between the Department and the U.S. Bureau of Reclamation. This project included radio tagging of 30 adults and conducting a population estimate of the bull trout found in Arrowrock Reservoir. The results of this project can be found in Flatter 1997.

Beach's Pond

Electrofishing

Beach's Pond is approximately two acres and is located on Department property in Nampa. Catch and release regulations are in place to provide a quality warmwater fishing opportunity in this heavily utilized area. The pond was full at the time of sampling.

On May 8, 1997 Beach's Pond was sampled for a total of 0.77 h of activated electrode time. Two electrofishing samples were taken during daylight, one was taken after dark.

A total of 296 fish was collected. The catch included bluegill *Lepomis macrochirus*, largemouth bass *Micropterus salmoides*, and pumpkinseed *L. gibbosus*. The total number, lengths and standard errors, mean and standard errors for weights, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent by number and weight are presented by species in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Bluegill represented 55.4% of the catch by number and 55.3 % by weight. Largemouth bass represented 35.5% of the catch by number and 37.9% of the catch by weight. The remainder of the catch consisted of pumkinseed which made up 9.1% by number and 6.7% by weight of the total catch.

Blacks Creek Reservoir

Electrofishing

Black's Creek Reservoir is created by an 1,650 ft earthen dam owned by the Pleasant Valley Irrigation Company in Boise. At full pool the reservoir is approximately 220 surface acres. Only during years with normal precipitation does the reservoir reach full pool. The reservoir levels

during summer and winter months are commonly too low to support a sport fishery. Historical gillnetting has been unsuccessful in documenting fish in this reservoir. In 1974 an attempt was made to create a warmwater sport fishery in Black's Creek Reservoir by planting 500 crappie (unknown species), 150 yellow perch *Perca flavescens*, 6 bluegill, 20 largemouth bass, and 50 bullhead (unknown species). The reservoir has gone dry numerous times between this stocking and the early 1990s.

Following up on reports of white crappie *Pomoxis annularis* being harvested in April and May of 1997 by anglers, Black's Creek Reservoir was sampled with electrofishing equipment on June 9, 1997. Thirty minutes of activated electrode time was utilized to sample the reservoir.

A total of 276 fish was sampled. White crappie made up 100% of the catch. Several year-classes of crappie were present with sizes ranging from four to 28 cm. The lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent by number and weight are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Although the future availability of water to support a warmwater fishery is uncertain, Black's Creek Reservoir was stocked with 350 largemouth bass (44 kg total) and 75 bluegill (3 kg total) following the above mentioned sampling on June 9, 1997.

Blackstone Reservoir

Lowland Lake Sampling

Blackstone Reservoir is located in southern Owyhee County approximately 5.5 miles northeast of Grassmere. At approximately 88 surface acres, inflows to Blackstone are largely dependent on flashy, ephemeral streams, and the degree of irrigation use from the perennial Louse Creek. There is no historical record of any fish sampling conducted in this reservoir.

Blackstone was sampled on November 17, 1997. Sampling effort included two units of gillnetting, four units of trapnetting, and 0.53 h of electrofishing (Table 1). The water was very turbid at the time of sampling, with an estimated secchi disc of under one m.

A total of 55 fish was sampled. The total CPUE by number and weight was 36 and 10.42 kg, respectively. The catch included brown bullhead *Ameiurus nebulosus*, largemouth bass, bridgelip sucker *Catostomus columbianus*, Lahontan cutthroat *O. clarki henshawi*, largemouth bass, redside shiner *Richardsonius balteatus*, wild rainbow/redband trout *Oncorhynchus mykiss gairdneri*. Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent by number and weight for all gear types are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B. Catch-per-effort by species and gear type can be found in Appendix C.

Gill nets had the highest CPUE for all gear types, representing 52% of the total catch by number (38) and 71% by weight. Bridgelip sucker, wild rainbow/redband trout, and largemouth bass represented 39.5, 28.9, and 18.4% of the catch by number, respectively. Wild rainbow/redband trout represented 50.2% of the catch by weight.

Electrofishing caught 14.5% of the total fish (8). Largemouth bass represented 87.5% and 82.1% of the catch by number and weight, respectively. Brown bullhead made up the remainder of the catch.

Trap nets caught a total of nine fish. The catch consisted of brown bullhead, largemouth bass, and wild rainbow/redband trout. Largemouth bass represented 66.7% and 43.4% of the catch by number and weight, respectively.

C.J. Strike Reservoir

Lowland Lake Sampling

C.J. Strike Reservoir is a 7,500 acre reservoir located in southwestern Idaho. The reservoir is primarily managed as a warmwater fishery but fingerling rainbow trout are also planted to provide fishing opportunities.

Sampling was conducted on May 28, 29, and 30, 1997. Sampling included 1.3 h of electrofishing, four units of gillnetting, and four units of trapnetting (Table 1).

A total of 801 fish was caught. The total CPUE by number and weight was 471 and 159.6 kg, respectively. Black crappie *Pomoxis nigromaculatus*, bluegill, bridgelip sucker, brown bullhead, channel catfish *Ictalurus punctatus*, chiselmouth *Acrocheilus alutaceus*, common carp *Cyprinus carpio*, hatchery rainbow *Oncorhynchus mykiss*, largemouth bass, largescale sucker *Catostomus macrochelius*, mountain whitefish *Prosopium williamsoni*, northern squawfish *Ptychocheilus oregonensis*, peamouth *Mylocheilus caurinus*, pumpkinseed, smallmouth bass *Micropterus dolomieui*, warmouth *Lepomis gulosus*, white crappie, and yellow perch were represented in the catch.

Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent by number and weight for all gear types are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B. Catch-per-effort by species and gear type can be found in Appendix C.

Rainbow Trout:

The mean length and number captured by electrofishing and gillnetting were 270 mm, two, and 313 mm, two, respectively. No trout were captured in trap nets. The catch-per-effort by

number for electrofishing and gillnetting were 1.47, and 1.50, respectively. The catch-per-effort by weight for electrofishing and gillnetting were 0.46, and 0.56, respectively.

Caldwell City Pond

Electrofishing

Caldwell City Pond was sampled by electrofishing for 0.38 h on May 20, 1997.

A total of 192 fish was sampled. The catch included black crappie, bluegill, brown bullhead, channel catfish, common carp, hatchery rainbow, largemouth bass, and pumkinseed.

The total catch-per-effort by number and weight was 493.7 and 68.7 kg, respectively. Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Caldwell Pond #1

Electrofishing

Caldwell pond #1 was sampled by electrofishing for 0.35 h on May 20, 1997.

A total of 166 fish was sampled. The catch included black crappie, bluegill, brown bullhead, common carp, hatchery rainbow, largemouth bass, and pumkinseed.

The total CPUE by number and weight was 468.7 and 108.7 kg, respectively. Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Caldwell Pond #2

Electrofishing

Caldwell pond #2 was sampled by electrofishing for 0.30 h on May 20, 1997.

A total of 135 fish was sampled. The catch included bluegill, common carp, hatchery rainbow, and largemouth bass.

The total catch-per-effort by number and weight was 441.7 and 149.4 kg, respectively. Bluegill, common carp, hatchery rainbow, and largemouth bass represented 73.3, 5.9, 5.2, and 15.6% of the catch by number, respectively. Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Crane Falls

Electrofishing

Sampling was conducted by electrofishing for one h on May 27, 1997.

A total of 267 fish was caught. The total catch-per-effort by number and weight was 257.6 and 62.1 kg, respectively. Bluegill, hatchery rainbow, largemouth bass pumkinseed, and yellow perch were represented in the catch.

Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Deadwood Reservoir

Sampling was conducted during the months of May, June, and October utilizing gill nets, trap nets, and backpack electrofishing. Extensive sampling of the reservoir and associated streams was an effort to capture bull trout as part of a cooperative project between the Department and the U.S. Bureau of Reclamation. The results of this sampling can be found in Allen 1997.

Duff Lane Pond

Electrofishing

Duff Lane Pond was sampled on May 22, 1997 with 0.39 h of electrofishing. Total CPUE by number and weight was 106 and 27.7 kg, respectively. Bluegill, brown bullhead, hatchery rainbow, and largemouth bass were represented in the sample. Bluegill, largemouth bass, and

hatchery rainbow were the most abundant species and represented 38.04, 22.83, and 38.04% of the sample by number.

Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Emmett Airport Pond

Electrofishing

Sampling was conducted on May 21, 1997 utilizing 0.29 h of electrofishing. A total of 81 fish was captured. Total catch-per-unit-effort by number and weight was 284 and 42.72 kg, respectively. Black crappie, bluegill, brown bullhead, largemouth bass, and pumkinseed were represented in the catch. Largemouth bass dominated the total catch, 47% by number and 88% by weight.

Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Indian Creek Reservoir

Electrofishing

Indian Creek Reservoir is located 15 miles southeast of Boise. The reservoir is located on lands owned by the Bureau of Land Management and managed by the Department as a Sportsman's Access. At full pool Indian Creek Reservoir is approximately 221 surface acres. Inflows to the reservoir are largely dependent on the ephemeral Indian Creek. Fish populations in this reservoir have been historically limited by fluctuating water levels. The reservoir was treated with rotenone on September 23, 1992 and restocked with warmwater fish in 1993 as noted in Allen et al. 1995.

Sampling was conducted on April 22 and June 9, 1997 utilizing a total of 1.93 h of electrofishing. The total CPUE by number and weight for the April and June sampling was 611.6, 75.2 kg, 405, and 49.2 kg, respectively. Bluegill and largemouth bass were represented in each sample. Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Lake Lowell

Electrofishing

Sampling occurred on May 7, May 14, July 10, and November 3, 1997. A total of 4.27 h of activated electrode time was utilized for sampling.

On May 7, May 14, July 10, and November 3, a total of 175, 173, 237, and 220 fish was sampled, respectively. Black crappie, bluegill, bridgelip sucker, brown bullhead, common carp, largemouth bass, largescale sucker, smallmouth bass, and yellow perch were represented in the sampling. Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Nongame fish dominated the total catch by number and weight during May. Yellow perch and smallmouth bass were the most dominant game fish collected by number in the May 7 sample, representing 20.6% and 18.3% of the total catch. No bluegill or black crappie were captured or observed (Appendices A and B).

Brown bullhead, largemouth bass, and yellow perch dominated the game fish catch by number on May 14, representing 12.7%, 16.2, and 17.9%, respectively. Bluegill and black crappie made up 1.2, and 6.4% of the total catch by number respectively.

The dominant game fish sampled on July 10 was largemouth bass, smallmouth bass, and yellow perch, representing 4.6%, 51.0%, and 11.8% of the total catch by number respectively. Bluegill represented 0.4% of the total catch by number, only one 145 mm specimen was captured. No black crappie were captured or observed.

Bluegill, largemouth bass, and smallmouth bass dominated the game fish species collected on November 11 and represented 20%, 17.3%, and 33.6% of the total catch by number, respectively. Black crappie represented 0.4% of the total catch by number.

Fishing Tournament

A fishing tournament was held on Lake Lowell on May 10 and 11. Sixty anglers fished for 960 h and caught 283 largemouth bass and 30 smallmouth bass. Fish less than 305 mm were released immediately by anglers. The mean lengths and weights for largemouth and smallmouth bass were 392 mm (SE=3), 1210 g (SE=56), 369 mm (SE=8), and 857 g (SE=96), respectively. Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent by number and weight are presented in Appendix A. Length frequency, cm size group, and relative weight by cm size group can be found in Appendix B.

Lucky Peak

Lowland Lake Sample

Sampling was conducted on May 13 utilizing 1.13 h of electrofishing, two units of overnight gill nets, four hours of sinking gill nets, and four units of trapnetting.

A total of 420 fish was caught. The total CPUE by number and weight was 449, and 136.43 kg, respectively. Bridgelip sucker, bull trout, chiselmouth, fall chinook salmon *Oncorhynchus tshawytscha*, hatchery rainbow, kokanee salmon *Oncorhynchusnerka kennerlyi*, largescale sucker, mountain whitefish, northern squawfish, redside shiner, smallmouth bass, westslope cutthroat *Oncorhynchus clarki lewisi*, wild rainbow/redband trout, and yellow perch were represented in the sample. The water temperature was 14°C at the time of sampling.

Nongame species represented 80% of the total CPUE by number and 86% of the total CPUE by weight (Appendix C). Bull trout, fall chinook salmon, hatchery rainbow, kokanee salmon, mountain whitefish, smallmouth bass, westslope cutthroat, wild rainbow/redband trout, and yellow perch represented the remainder of the total CPUE by number. Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight for all gear types are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B. Catch-per-effort by species and gear type can be found in Appendix C.

Hatchery Rainbow Trout

The mean length and mean weight, captured by electrofishing, gillnetting, and trapnetting were 202 mm, 188 g, 309 mm, 283 g, and 323 mm, 323 g, respectively. The CPUE by number for electrofishing, gillnetting, and trapnetting were 35.34, 10.0, and one, respectively.

Kokanee Salmon

Two kokanee were captured in sampling efforts. The catch-per-effort by number for electrofishing and gillnetting were 0.88, and 0.5, respectively.

Additional Sampling

In addition to the above mentioned lowland lake sample, extensive sampling was conducted between March 6 and May 19 in an effort to capture bull trout as part of a cooperative project between the Department and the U.S. Bureau of Reclamation. This project included radio tagging Lucky Peak bull trout and transporting them upstream of Arrowrock Dam. The results of this project can be found in Flatter 1997.

Paddock Reservoir

Lowland Lake Sample

Sampling was conducted on April 16 and October 26, 1997. Effort for both sampling days included one h of electrofishing, two units of gillnetting, and four units of trapnetting. On April 16 the water temperature was 11°C, and had a secchi disc of 1 m.

On April 16 and October 26, a total of 217 and 439 fish were caught, respectively. Black crappie, bluegill, brown bullhead, hatchery rainbow trout, largemouth bass, and pumkinseed were represented in the sample. Number collected, lengths and standard errors, weights and standard errors, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight for all gear types are presented in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B. Catch-per-effort by species and gear type can be found in Appendix C.

Black Crappie

The mean length, mean weight and number captured by electrofishing and trapnetting on April 16 were 68 mm, 10 g, one, and 286 mm 495 g, six, respectively. No black crappie were captured on October 26. The CPUE by number for electrofishing and trapnetting were one and 1.5, respectively.

Bluegill

Bluegill numbers are increasing in the reservoir. The CPUE for electrofishing in the October sampling was 217. Anglers also confirm an increasing bluegill population.

Hatchery Rainbow

Hatchery rainbow (excess steelhead smolts) have survived and contributed to the fishery. The CPUE by number for electrofishing and gillnetting on April 16 and October 26, 1997 were four, four and 1.1, 5.5, respectively.

Largemouth Bass

Good numbers of largemouth bass remain in Paddock. The total CPUE by number in April was 116 and in October was 95 (Appendix C). Largemouth bass was the dominant species by weight in each sample.

Quinn Pond

Electrofishing

Sampling was conducted on April 15, 1997 utilizing 0.82 h of activated electrode time. Electrofishing was conducted around the entire pond shoreline. The pond was full at the time of sampling.

A total of 140 fish was captured. Black crappie, bluegill, common carp, hatchery rainbow, largemouth bass, largescale sucker, and yellow perch were represented in the sample. The total number, lengths and standard errors, mean and standard errors for weights, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented by species in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Sawyers Pond

Electrofishing

Sampling was conducted on May 21, 1997 utilizing 0.38 h of activated electrode time. The pond was full at the time of sampling.

A total of 74 fish was captured. Bluegill, brown bullhead, common carp, largemouth bass, pumkinseed, and yellow perch were represented in the sample. The total number, lengths and standard errors, mean and standard errors for weights, mean and standard error for condition factor, CPUE by number, CPUE by weight, and percent of the total catch by number and weight are presented by species in Appendix A. Length frequency by species, cm size group, and relative weight by cm size group can be found in Appendix B.

Bluegill, brown bullhead, common carp, largemouth bass, pumkinseed and yellow perch represented 55.4%, 2.7%, 8.1%, 4.0%, 13.5%, and 16.2% of the total catch by number.

LITERATURE CITED

- Allen, D.B. 1998. Deadwood River bull trout study. Interim Report for 1997 studies. Submitted to U.S. Bureau of Reclamation, Pacific Northwest Region. Agreement No. 1425-6-FC-10-02170. Project 98-10. Idaho Department of Fish and Game, Boise.
- Allen, D.B., T.B. Holubetz, and B.J. Flatter. 1995. Federal Aid in Fish Restoration. Regional Fisheries Management Investigations. Job Performance Report. Project F-71-R-17. Idaho Department of Fish and Game, Boise.
- Flatter, B.J. 1998. Life history and population status of migratory bull trout *Salvelinus confluentus* in Arrowrock Reservoir, Idaho. Final Report submitted to U.S. Bureau of Reclamation, Pacific Northwest Region. Agreement No. 1425-6-FC-10-02170. Project 98-7. Idaho Department of Fish and Game, Boise.

TABLES

Table 1. Units of sampling effort by geartype¹ and body of water, 1997.

Stream Name	Date	AN	EF	GN	HSGN	SGN	TN
Arrowrock Reservoir	1/02/97				18		
Arrowrock Reservoir	1/5/97				12		
Arrowrock Reservoir	1/7/97		1		14		
Arrowrock Reservoir	1/11/97		<u>†</u>		13		
Arrowrock Reservoir	3/1/97				11		
Arrowrock Reservoir	3/7/97				12		
Arrowrock Reservoir	3/11/97	****			16		
Arrowrock Reservoir	3/25/97				14.5		
Arrowrock Reservoir	3/26/97				12		5
Arrowrock Reservoir	3/28/97			-	10.5		5
Arrowrock Reservoir	3/31/97				9.5		8
Arrowrock Reservoir	4/1/97				6		8
Arrowrock Reservoir	4/2/97			<u> </u>	11		8
Arrowrock Reservoir	4/3/97		<u> </u>		10		8
Arrowrock Reservoir	4/4/97				6		8
Arrowrock Reservoir	4/7/97				57		8
Arrowrock Reservoir	4/8/97		 		6		8
Arrowrock Reservoir	4/9/97		· · · · · · · · · · · · · · · · · · ·		8		8
Arrowrock Reservoir	4/10/97				12		
Arrowrock Reservoir	4/18/97				14		
Arrowrock Reservoir	4/21/97				4		13
Arrowrock Reservoir	4/22/97				10		5
Arrowrock Reservoir	4/23/97					······································	5
Arrowrock Reservoir	4/24/97			-	7.5		5
Arrowrock Reservoir	4/25/97				15		5
Arrowrock Reservoir	4/28/97				12		5
Arrowrock Reservoir	4/29/97				10		5
Arrowrock Reservoir	4/30/97						5
Arrowrock Reservoir	5/1/97				8		5
Arrowrock Reservoir	5/2/97				8		5
Beech Pond	5/8/97		0.7778				-
Blacks Creek Reservoir	6/9/97		0.5		<u> </u>		
Blackstone Reservoir	11/17/97		0.53	2			4
C.J. Strike Reservoir	5/28/97		1.3564	4			4
Caldwell Pond #01 (City Pond)	5/20/97		0.3889	· · ·			•
Caldwell Pond #02	5/20/97		0.3542			<u></u> .	
Caldwell Pond #03	5/20/97		0.3056				
Crane Falls Reservoir	5/27/97		1.017				
Deadwood Reservoir	5/29/97	· · · · · · · · · · · · · · · · · · ·			66	4	42
Deadwood Reservoir	6/10/97				25	· ·	24
Deadwood Reservoir	10/9/97			2	 - 		
Duff Lane Pond	5/22/97		0.3889	-			
Emmett Airport Pond	5/21/97		0.2917		 		

Table 1. (continued)

Stream Name	Date	AN	EF	GN	HSGN	SGN	TN
Indian Creek Reservoir	4/22/97		0.9336				
Indian Creek Reservoir	6/9/97	***************************************	1				
Lake Lowell	5/7/97		1.1428				
Lake Loweli	5/10/97	1					
Lake Lowell	5/14/97		1.1389				
Lake Lowell	7/10/97		1			·	***
Lake Lowell	11/3/97		1				
Lucky Peak Reservoir	3/6/97				16		TL'
Lucky Peak Reservoir	3/12/97				10		
Lucky Peak Reservoir	3/18/97				22		
Lucky Peak Reservoir	3/19/97				20		
Lucky Peak Reservoir	3/20/97				22		
Lucky Peak Reservoir	4/15/97				16	"	*************
Lucky Peak Reservoir	4/17/97				6		
Lucky Peak Reservoir	5/6/97				. 14		5
Lucky Peak Reservoir	5/7/97				18		
Lucky Peak Reservoir	5/8/97	,			18		
Lucky Peak Reservoir	5/9/97				6.5		
Lucky Peak Reservoir	5/12/97				4		
Lucky Peak Reservoir	5/13/97		1.132	2	4		4
Lucky Peak Reservoir	5/14/97					2	
Lucky Peak Reservoir	5/19/97				6		
Paddock Reservoir	4/16/97		1	2			4
Paddock Reservoir	10/26/97		0.93	2			4
Quinn Pond	4/15/97		0.8214				·
Sawyers Pond	5/21/97		0.3889				

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

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Appendix A. Number of fish collected, minimum and 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, 1997.

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)
ARROW	ROCK RES													
	1/2/97													
	Sinking Gill													
Buil tro		11	302	494	379	19.84	494.09	105.68	0.79	0.04	0.61	0.30	84.62	76.71
Hatche Tota	ery rainbow	2 13	279	334	307	27.50	275.00	75.00	0.93	0.01	0.33	0.09	15.38	23.29
7018	'' 1/5/97	73									0.94	0.39		
	Sinking Gill	Net												
Bull tro		2	414	650	532	118.00	1802.50	1307.50	0.92	0.22	0.17	0.30	22.22	44.74
	inook salmon	6	282	310	296	4.20	229.17	15.94	0.88	0.22	0.17	0.30	66.67	14.74 5.62
	ain whitefish	1	436	436	436		590.00		0.71	0.00	2.75	1.62	11.11	79.63
Tota	n 1/7/97	9									3.42	2.04		
	Sinking Gill	Not												
Bull tro	-	2	459	485	472	40.00								
Tota		2	409	465	4/2	13.00	987.50	62.50	0.94	0.02	0.14 0.14	0.14	100.00	100.00
	1/11/97	_									0.14	0.14		
	Sinking Gill	Net												
Bull tro		2	412	435	424	11.50	615.00	15.00	0.81	0.05	0.15	0.09	100.00	100.00
Tota		2							0.0	0.00	0.15	0.09	100.00	100.00
	3/1/97													
5 04	Sinking Gill													
Bull tro <i>Tota</i>		1	441	441	441		700.00		0.82		0.09	0.06	100.00	100.00
rota	" 3/7/97	1									0.09	0.06		
	Sinking Gill	Net												
Bull tro		4	332	550	421	46.04	746.25	326.51	0.83	0.07	0.33	0.25	100.00	100.00
Tota		4	002	000	721	40.04	140.25	320.31	0.03	0.07	0.33	0.25 0.25	100.00	100.00
	3/11/97										0.00	0.20		
	Sinking Gill	Net												
Bull tro		3	315	355	334	11.57	278.33	33.71	0.74	0.03	0.19	0.05	100.00	100.00
Tota	il 3/25/97	3									0.19	0.05		
	Sinking Gill	Net												
Bull tro		. 5	410	676	522	EE 7E	1740.00	504.50	0.05	0.07	0.04		400.00	
Tota		. 5 5	410	0/0	533	55.75	1746.00	564.50	0.95	0.07	0.34 0.34	0.60 0.64	100.00	100.00
		•									0.34	U.04		

Water Sp	ecles	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)
3/26	/97													
	Sinking Gill N													
Bull trout <i>Total</i>		18 18	329	504	401	11.82	552.78	53.61	0.82	0.01	1.50	0.83	100.00	100.00
iOtai	Trap Net	10									1.50	0.83		
Bull trout	•	22	270	600	438	16.43	816.14	113.01	0.86	0.02	4.40	2 50	100.00	400.00
Total		22					010.14	110.01	0.00	0.02	4.40	3.58 3.58	100.00	100.00
3/28/	/97 Trap Net													
Buil trout	пар мес	10	145	435	353	27.70	400.00	40.00						
Total		10	145	433	333	27.70	423.89	49.60	0.77	0.02	2.00 2.00	0.76 0.76	100.00	100.00
3/31/											2.00	0.70		
Double America	Sinking Gill N													
Bull trout <i>Total</i>		5 5	305	360	331	9.83	318.00	33.82	0.86	0.02	0.53	0.17	100.00	100.00
701	Trap Net	J									0.53	0.17		
Bull trout		11	273	375	337	9.74	338.18	31.07	0.85	0.02	1.38	0.47	100.00	100.00
<i>Total</i> 4/1/9	17	11									1.38	0.47	, , , , , ,	
4/1/3	Sinking Gill N	ot												
Bull trout		12	305	490	419	15.15	712.92	84.41	0.92	0.03	2.00	1.44	100.00	100.00
Total		12				10.10	7 12.02	04.41	0.32	0.03	2.00 2.00	1.44 1.44	100.00	100.00
Deall Assess	Trap Net													
Bull trout <i>Total</i>		20 20	321	659	452	22.33	982.40	164.95	0.91	0.03	2.50	2.45	100.00	100.00
4/2/9	17										2.50	2.45		
	Sinking Gill N													
Bull trout <i>Total</i>		4 4	318	485	387	35.23	510.00	156.10	0.80	0.02	0.36	0.19	100.00	100.00
iotai	Trap Net	4							,		0.36	0.19		
Bull trout		5	254	452	379	33.84	504.00	70.47	1.03	0.26	0.63	0.32	100.00	100.00
Total	_	5								0.20	0.63	0.32	100.00	100.00
4/3/9	7 Trap Net													
Bull trout	ттар мец	14	290	445	376	11.84	445.00	40.04	0.00	0.00	4 ==			
Total		14	230	440	370	11.04	445.00	42.84	0.80	0.02	1.75 1.75	0.78 <i>0.78</i>	100.00	100.00
4/4/9											1.70	0.70		
Bull trout	Sinking Gill No		00-	70 -										
Buil trout Total		11 11	337	580	409	19.85	695.45	159.11	0.90	0.03	1.83	1.27	100.00	100.00
	Trap Net	••									1.83	1.27		

Water	Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Welght	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
Bull troi <i>Tota</i>	i 4/7/97	9 9	310	570	407	26.71	626.11	137.08	0.84	0.01	1.13 1.13	0.71 0.71	100.00	100.00
	Sinking Gill													
Bull troi <i>Tota</i>		2 2	326	446	386	60.00	520.00	240.00	0.83	0.02	0.04 0.04	0.02 0.02	100.00	100.00
Bull tro	ut	8 8	284	432	374	17.03	482.50	58.49	0.89	0.02	1.00 1.00	0.48 0.48	100.00	100.00
	Sinking Gill	Net												
Buil trou Tota	ut I	2 2	290	334	312	22.00	245.00	55.00	0.79	0.01	0.33 0.33	0.08 0.08	100.00	100.00
Bull trou Tota i		3 3	363	414	392	15.13	500.00	45.83	0.83	0.02	0.38 0.38	0.19 0.19	100.00	100.00
	4/9/97 Sinking Gill i	Net									0.30	0.19		
Bull trou Tota		4	300	415	363	23.84	400.00	71.76	0.81	0.02	0.50 0.50	0.20 0.20	100.00	100.00
Bull trou Tota i	ut I	4 4	393	566	453	38.64	900.00	278.21	0.89	0.04	0.50 0.50	0.45 0.45	100.00	100.00
	4/10/97 Sinking Gill I	Nat												
Bull trou Tota	ut	5 5	293	566	422	51.67	822.00	278.34	0.92	0.01	0.42 0.42	0.34 0.34	100.00	100.00
	Sinking Gill	Net												
Bull trou Tota i	ut I	14 14	303	610	407	28.27	790.00	202.87	0.91	0.04	1.00 1.00	0.79 0.79	100.00	100.00
	4/21/97 Trap Net													
Bull trou Total	ut .	9 9	301	456	362	18.46	436.67	71.80	0.86	0.02	0.69 0.69	0.30 0.30	100.00	100.00
	Sinking Gill I	Net												
Bull trou Total	ut	1 1	385	385	385		480.00		0.84		0.10 0.10	0.05 0.05	100.00	100.00

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 (Welght)
	Trap Net													
Bull troi <i>Tota</i>	i 4/23/97	3 3	315	370	345	16.02	363.33	57.83	0.87	0.02	0.60 0.60	0.22 0.22	100.00	100.00
	Trap Net													
Bull troi <i>Tota</i>		4 4	306	750	460	99.26	411.75	78.91	0.62	0.17	0.80 0.80	0.33 0.33	100.00	100.00
	Sinking Gill	Net												
Bull troi	ut <i>I</i>	5 5	305	583	381	53.86	642.00	320.86	0.87	0.03	0.67 0.67	0.43 0.43	100.00	100.00
	Trap Net										0.07	0.70		
Bull troi <i>Tota</i>		5 5	299	431	353	23.91	392.00	87.66	0.83	0.02	1.00 1.00	0.39 0.39	100.00	100.00
	Sinking Gill	Net												
Bull trou Tota	ut	1 1	190	190	190		50.00		0.73		0.07 0.07	0.00 0.00	100.00	100.00
	Trap Net										0.07	0.00		
Bull trou <i>Tota</i>		8 8	264	442	370	24.26	393.13	85.17	0.67	0.05	1.60 1.60	0.63 0.63	100.00	100.00
	4،20،91 Sinking Gill	Net												
Bull trou <i>Tota</i> i	ut I	4 4	337	474	404	28.88	592.50	137.56	0.84	0.04	0.33 0.33	0.20 0.20	100.00	100.00
Buil trou	Trap Net	10	207	440	0.40	40.44								
Total		10 10	287	442	342	16.14	338.00	51.51	0.79	0.01	2.00 2.00	0.68 0.68	100.00	100.00
	Sinking Gill	Net												
Buli trou <i>Tota</i> i	Ī	1	326	326	326		280.00		0.81		0.10 0.10	0.03 0.03	100.00	100.00
Bull trou	Trap Net	•	005	4.45		40.00								
Total		9 9	335	445	387	13.06	475.56	54.11	0.79	0.01	1.80 1.80	0.86 <i>0.86</i>	100.00	100.00
	Trap Net													
Bull trou <i>Total</i>	ıt	4	310	355	332	11.90	302.50	30.38	0.82	0.01	0.80 0.80	0.24 0.24	100.00	100.00

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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	e shiner	2	140	165	153	12.50	30.00	10.00	0.81	0.08	1.00	0.03	5.26	0.40
	nbow/redband	11	310	460	386	12.92	678.18	76.03	1.12	0.02	5.50	3.74	28.95	50.20
Total	•	38									19.00	7.44		
	Trap Net													
	bullhead	2	180	215	198	17.50	92.50	17.50	1.20	0.09	0.50	0.05	22.22	13.75
_	outh bass	6	160	245	200	11.90	95.83	16.90	1.13	0.03	1.50	0.15	66.67	43.69
	nbow/redband	1	370	370	370		585.00		1.15		0.25	0.14	11.11	42.56
Total		9									2.25	0.34		
C J STRI	IKE RES 5/28/97													
	Electrofishi	ng												
Black ci	rappie	11	105	223	183	14.35	123.00	18.44	1.59	0.04	8.11	0.89	2.50	1.07
Bluegill		88	45	206	146	3.50	90.62	4.92	2.33	0.04	64.88	5.44	20.00	6.53
	p sucker	21	186	365	261	10.49	225.29	24.77	1.05	0.03	15.48	2.98	4.77	3.58
Brown b	oullhead	1	284	284	284		400.00		1.75		0.74	0.29	0.23	0.35
Channe		2	605	660	633	27.50	3650.00	690.00	1.42	0.09	1.47	5.23	0.45	6.28
Chiselm		1	305	305	305						0.74	0.26	0.23	0.31
Commo	•	5	480	780	661	50.90	4068.00	723.10	1.36	0.08	3.69	15.00	1.14	18.01
	ry rainbow	2	165	374	270	104.50	310.00	260.00	1.10	0.01	1.47	0.46	0.45	0.55
	outh bass	14	155	525	355	30.23	840.00	195.80	1.35	0.05	10.32	8.67	3.18	10.41
	cale sucker	65	100	555	298	14.55	475.82	59.40	1.06	0.02	47.92	19.53	14.77	23.46
	in whitefish	1	75	75	75						0.74		0.23	
	n squawfish	3	85	155	132	23.33	40.00		1.07		2.21	0.06	0.68	0.07
Pumpki		1	110	110	110		30.00		2.25		0.74	0.02	0.23	0.03
	outh bass	220	70	421	211	4.52	172.73	8.78	1.27	0.04	162.19	24.05	50.00	28.88
	uth sunfish	2	122	140	131	9.00	50.00	0.00	2.29	0.47	1.47	0.07	0.45	0.09
White c		2	215	230	223	7.50	135.00	15.00	1.22	0.01	1.47	0.23	0.45	0.28
Yellow p <i>Total</i>		1 440	215	215	215		100.00		1.01		0.74	0.08	0.23	0.10
i Otai	Gill Net	440									324.39	83.26		
Black ci	rappie	5	205	235	218	6.12	150.00	20.74	1.40	0.08	1.25	0.20	1.79	0.27
•	p sucker	1	295	295	295		250.00		0.97		8.50	2.13	0.36	2.93
Brown b		1	257	257	257	•	360.00		2.12		0.25	0.09	0.36	0.12
Channe		56	187	680	497	16.25	1848.57	133.13	1.26	0.02	14.00	25.93	20.00	35.71
Chiselm		5	225	335	276	19.89	270.00	58.82	1.23	0.14	4.25	1.15	1.79	1.58
Commo	•	1	615	615	615		2900.00		1.25		0.25	0.72	0.36	1.00
	ry rainbow	6	250	413	313	25.92	376.67	120.71	1.08	0.11	1.50	0.56	2.14	0.78
Largeso	cale sucker	30	206	545	374	13.62	595.67	66.54	1.01	0.02	44.75	27.10	10.71	37.31

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)
Northe	rn squawfish	10	190	610	357	47.97	755.00	285.51	1.02	0.03	9.00	6.79	3.57	9.36
Peamo	outh	1	221	221	221		120.00		1.11	0.00	2.00	0.24	0.36	0.33
Smalln	nouth bass	16	157	410	258	16.45	269.38	60.77	1.28	0.06	4.00	1.05	5.71	1.45
White	crappie	117	204	350	240	1.76	192.74	4.47	1.39	0.02	29.25	5.71	41.79	7.86
Yellow	perch	31	162	274	221	4.28	122.26	8.75	1.11	0.06	7.75	0.95	11.07	1.30
Tota		280									126.75	72.62	, , , , ,	
	Trap Net											7 - 1 - 2 -		
	crappie	32	185	235	208	1.83	143,44	3.23	1.61	0.05	8.00	1.14	39.51	30.25
Bluegi	II	3	167	190	182	7.36	156.67	23.33	2.57	0.10	0.75	0.11	3.70	2.89
Chisel		3	204	345	267	41.45	240.00	83.27	1.36	0.50	0.75	0.18	3.70	4.76
	nouth bass	1	255	255	255		170.00		1.03		0.25	0.05	1.23	1.24
	crappie	40	202	342	249	3.52	233.25	12.12	1.48	0.03	10.00	2.25	49.38	59.55
Yellow	•	2	155	231	193	38.00	105.00	45.00	1.41	0.20	0.50	0.05	2.47	1.31
Tota	al	81									20.25	3.78		,,,,,
CALDW	/ELL POND #01(CI	TY POND)												
	Electrofishi	ina												
Black	crappie	1	230	230	230		150.00		4.00		0.57	0.00	0.50	
Bluegi		95	38	197	120	1.86	25.50	3.12	1.23 1.06	0.08	2.57	0.39	0.52	0.56
	bullhead	2	262	274	268	6.00	300.00	20.00	1.56	0.08	244.28 5.14	4.20	49.48	6.12
Chann	el catfish	1	504	504	504	0.00	1440.00	20.00	1.12	0.00	2.57	1.54 3.70	1.04 0.52	2.24
	on carp	1	670	670	670		4090.00		1.36		2.57 2.57	3.70 10.52	0.52 0.52	5.39
	ery rainbow	1	230	230	230		110.00		0.90		2.57 2.57	0.28	0.52 0.52	15.30 0.41
	nouth bass	74	75	585	215	12.23	296.13	64.59	1.09	0.05	2.57 190.28	0.28 47.60	0.5∠ 38.54	0.41 69.25
-	kinseed	17	105	135	116	1.81	16.67	4.94	0.87	0.03	43.71	0.50	36.54 8.85	0.73
Tota		192	100	100	110	1.01	10.07	4.34	0.07	0.17	43.71 493.70	68.74	0.00	0.73
CALDW	/ELL POND #02													
	5/20/97													
	Electrofish	ing												
Black	crappie	2	102	213	158	55.50	100.00		1.03		5.65	0.28	1.20	0.26
Bluegi	I	68	50	176	115	3.47	48.48	5.08	1.73	0.07	191.98	5.76	40.96	5.30
Brown	builhead	1	302	302	302		400.00		1.45		2.82	1.13	0.60	1.04
Comm	on carp	2	840	860	850	10.00	9400.00	400.00	1.53	0.12	5.65	53.08	1.20	48.83
Hatche	ery rainbow	3	264	308	279	14.50	180.00	30.55	0.81	0.03	8.47	1.52	1.81	1.40
	nouth bass	89	112	530	221	6.86	188.30	36.37	1.24	0.02	251.27	46.90	53.61	43.14
	kinseed	1	96	96	96		10.00		1.13		2.82	0.03	0.60	0.03
Tota	al	166									468.66	108.71		

Water Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Welght (g)	SE Weight	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
CALDWELL POND #03													
5/20/97													
Electrofish	ning												
Bluegill	99	30	208	118	3.38	75.25	7.60	2.44	0.09	323.95	15.63	70.00	40.40
Common carp	8	582	715	609	15.60	3340.00	523.27	1.42	0.09	26.18	87.43	73.33 5.93	10.46 58.51
Hatchery rainbow	7	217	273	232	7.41	164.29	31.84	1.32	0.27	22.91	3.76	5.93 5.19	2.52
Largemouth bass	21	72	505	307	23.35	651.00	138.75	1.52	0.03	68.72	42.60	15.56	28.51
Total	135								0.00	441.75	149.43	13.30	20.51
CRANE FALLS RES													
5/27/97													
Electrofish	ing												
Bluegill	70	50	180	107	3.40	45.45	6.62	1.98	0.10	68.83	2.04	00.70	
Hatchery rainbow	1	280	280	280	0.40	240.00	0.02	1.90	0.10	0.98	2.04 0.24	26.72 0.38	3.28
Largemouth bass	93	70	440	315	11.58	631.41	38.48	1.39	0.04	91.45	0.24 52.77	0.36 35.50	0.38
Pumpkinseed	94	86	200	146	2.16	78.39	3.33	2.30	0.04	92.43	6.94	35.88	85.00 11.18
Yellow perch	4	90	200	154	23.00	100.00	0.00	1.25	0.04	3.93	0.10	1.53	0.16
Total	262							0		257.62	62.08	1.55	0.10
DEADWOOD RES											02.00		
5/29/97													
Sinking Gi	il Net												
Atlantic salmon	2	333	385	359	26.00	325.00	60.00	0.70	0.02	0.03	0.04	4.00	0.00
Hatchery rainbow	3	250	325	280	23.02	196.00	52.00	0.70	0.02	0.03	0.01 0.01	1.96	0.99
Kokanee salmon	1	321	321	321	20.02	150.00	32.00	0.00	0.04	0.03	0.01	2.94 0.98	0.92
Mountain whitefish	70	208	396	285	5.91	217.03	21.02	0.89	0.05	3.64	0.80	68.63	81.58
Westslope cutthroat	10	195	380	308	24.84	285.00	59.92	0.89	0.02	0.18	0.06	9.80	5.70
Wild rainbow/redband	16	206	385	331	14.11	382.00	31.44	0.88	0.04	0.32	0.11	15.69	10.81
Total	102									4.23	0.98	10.00	10.01
Set Sinking	g Gill Net												
Atlantic salmon	1	330	330	330		238.00		0.66		0.25	0.06	1.11	0.50
Bull trout	1	355	355	355		440.00		0.98		0.25	0.11	1.11	0.87
Hatchery rainbow	6	270	340	302	10.66	249.00	23.88	0.90	0.04	2.00	0.51	6.67	4.01
Kokanee salmon	4	265	356	326	20.70	297.50	46.34	0.84	0.01	1.00	0.30	4.44	2.35
Mountain whitefish	63	200	402	298	6.42	250.17	16.29	0.87	0.02	37.75	9.50	70.00	75.08
Westslope cutthroat Wild rainbow/redband	1	355	355	355		400.00		0.89		2.50	1.00	1.11	7.90
Total	14 90	180	380	328	15.82	317.14	33.50	0.84	0.02	3.50	1.18	15.56	9.29
Trap Net	30		•							47.25	12.66		

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 salmon	1	380	380	380						0.02	0.01	0.62	1.02
Bull tro	· · · ·	1	342	342	342		370.00		0.92		0.02	0.01	0.62	0.98
	ery rainbow	10	273	365	311	9.59	263.00	24.19	0.94	0.03	0.24	0.05	6.21	5.34
	ose dace	2	95	125	110	15.00	0.00	0.00	0.00	0.00	0.05	0.00	1.24	0.00
	ain whitefish	27	124	420	276	15.90	282.00	56.12	0.91	0.02	1.10	0.22	16.77	24.33
	ow X cutthroat	5	285	380	331	18.70	360.00		0.90	5.02	0.12	0.01	3.11	0.96
	de shiner	21	75	130	103	3.09	7.67	0.33	1.03	0.05	1.31	0.00	13.04	0.43
•	led dace	16	76	112	102	2.24				0.00	0.38	0.00	9.94	0.43
	lope cutthroat	6	115	262	149	23.25	12.50	2.50	0.75	0.11	0.14	0.00	3.73	0.09
	ainbow/redband	72	105	400	323	8.54	330.81	24.78	0.94	0.05	1.86	0.60	44.72	66.84
Tota		161								0.00	5.24	0.90	77.72	00.04
	6/10/97										0,21	0.00		
	Sinking Gi	il Net												
	ee salmon	1	310	310	310						0.04		1.23	
	ain whitefish	76	215	390	290	4.96					4.68		93.83	
	lope cutthroat	2	340	340	340	0.00					0.08		2.47	
	ainbow/redband	2	350	350	350	0.00					0.08		2.47	
Tota		81									4.88			
	Trap Net													
Bull tro		1	250	250	250		150.00		0.96		0.04	0.01	1.85	100.00
	d rainbow	2	440	560	500	60.00					0.08		3.70	
	ain whitefish	31	80	335	254	11.97					1.71		57.41	
-	de shiner	12	70	125	97	4.82					4.83		22.22	
	led dace	4	100	100	100	0.00					0.58		7.41	
	ainbow/redband	4	256	350	303	20.48					0.17		7.41	
Tota		54									7.42	0.01		
	10/9/97													
F . 11 . 1.	Gill Net													
	inook salmon	21	230	510	352	17.58	535.57	97.06	0.99	0.03	10.50	5.62	9.91	20.29
	ery rainbow	5	215	260	232	8.31	127.80	12.18	1.03	0.10	2.50	0.32	2.36	1.15
	ee salmon	75	170	400	247	6.67	160.15	12.90	0.96	0.09	37.50	6.01	35.38	21.67
	ain whitefish	84	175	395	313	5.43	315.85	19.35	0.97	0.01	42.00	12.87	39.62	46.44
	w X cutthroat	1	400	400	400		508.00		0.79		0.50	0.25	0.47	0.92
	lope cutthroat	18	210	370	280	12.02	205.59	28.91	0.88	0.01	9.00	1.90	8.49	6.84
	inbow/redband	8	160	355	258	29.35	186.25	52.55	0.87	0.02	4.00	0.75	3.77	2.69
Tota	9/	212									106.00	27.71		

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)
DUFFY	LANE P 5/22/97													
	Electrofishir	U												
Bluegi		35	44	107	70	2.33	20.00		1.63		90.00	0.05	38.04	0.19
	bullhead ery rainbow	1	337	337	337		650.00		1.70		2.57	1.67	1.09	6.10
	nouth bass	21 35	219 72	306 346	258	6.10	175.50	15.85	0.98	0.03	54.00	9.57	22.83	34.90
Tota		9 2	12	346	220	12.64	184.41	23.67	1.35	0.06	90.00	16.12	38.04	58.82
EMMET	T AIRPORT P										236.56	27.41		
	5/21/97													
	Electrofishir	ng												
Black	crappie	1	235	235	235		200.00		1.54		3.43	0.69	1.20	1.61
Bluegil	11	21	38	215	68	10.20	240.00	20.00	2.75	0.13	71.99	1.65	25.30	1.61 3.85
	bullhead	1	271	271	271		400.00		2.01	0.10	3.43	1.37	1.20	3.21
	nouth bass	39	68	357	261	14.05	303.06	24.10	1.36	0.08	133.70	37.54	46.99	87.88
Pumpk		21	42	165	89	8.17	71.67	14.00	2.67	0.13	71.99	1.47	25.30	3.45
Tota		83									284.54	42.72		
INDIAN	CREEK RES 4/22/97													
	Electrofishir	ng												
Bluegil	I	45	35	218	154	6.09	134.44	13.69	2.73	0.08	48.20	6.19	7.88	8.23
•	nouth bass	526	75	482	200	1.44	129.97	15.80	1.43	0.06	563.41	69.04	92.12	91.77
Tota		571									611.61	75.23		
	6/9/97 Electrofishir													
Bluegil		12	20	200	00	40.00								
_	nouth bass	63	32 90	200 480	99 212	19.20 7.74	260.00 147.43	40.00 6.66	3.61	0.14	75.00	3.25	16.00	6.60
Tota		7 <i>5</i>	90	400	212	1.14	147.43	0.00	1.83	0.13	330.00 405.00	46.00 49.25	84.00	93.40
LAKE L	OWELL										403.00	49.23		
W 1112	5/7/97								•					
	Electrofishir	na												
Brown	bullhead	3	195	203	199	2.33	110.00	10.00	1.42	0.08	2.63	0.30	1.71	0.16
Chann	el catfish	1	555	555	555	2.00	1600.00	10.00	0.94	0.08	0.88	1.40	0.57	0.16
Comm	on carp	18	225	560	393	28.65	928.33	190.00	1.36	0.05	68.25	43.19	10.29	23.60
	nouth bass	9	60	198	109	17.55	50.00	10.00	1.11	0.08	7.88	0.09	5.14	0.05
•	cale sucker	76	90	525	417	11.55	756.51	62.27	0.97	0.01	180.26	135.10	43.43	73.83
	nouth bass	32	84	312	167	13.31	113.13	25.96	0.95	0.06	28.00	2.38	18.29	1.30
Yellow		36	60	197	109	7.35	50.42	8.13	1.01	0.06	31.50	0.53	20.57	0.29
Tota	11	175									319.39	182.98		

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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)
Bull tro		2	453	453	453	0.00	750.00	0.00	0.81	0.00	0.20	0.15	3.64	3.04
	inook salmon	1	285	285	285		140.00		0.60		0.20	0.03	1.82	0.57
	ery rainbow	1	270	270	270		200.00		1.02		0.20	0.04	1.82	0.81
_	scale sucker	13	330	445	389	9.22	550.77	47.43	0.92	0.03	3.80	2.09	23.64	42.45
	ain whitefish	8	245	360	308	11.95	207.50	28.01	0.68	0.04	1.80	0.37	14.55	7.58
	rn squawfish	26	190	360	329	6.06	327.69	14.51	0.89	0.02	6.00	1.97	47.27	39.88
vviid ra Tota	ainbow/redband	2	295	295	295	0.00	280.00	0.00	1.09	0.00	0.40	0.11	3.64	2.27
1018	ai 3/18/97	55									13.00	4.93		
	Sinking Gill	Net												
Bull tro		4	432	714	573	81.41	2210.00	848.70	0.96	0.03	0.18	0.40	20.00	100.00
Mount	ain whitefish	16	120	350	250	18.21	22.10.00	010.10	0.50	0.03	1.09	0.40	80.00	100.00
Tota		20									1.27	0.40	00.00	
	3/19/97											00		
	Sinking Gil	l Net												
Bull tro		6	290	514	401	40.90	713.33	232.93	0.88	0.06	0.30	0.21	26.09	31.99
	ain whitefish	17	250	360	318	8.26	267.65	19.45	0.80	0.02	1.70	0.46	73.91	68.01
Tota		23									2.00	0.67		
	3/20/97													
	Sinking Gill													
Bull tro	•	6	397	423	412	4.86	493.33	11.16	0.71	0.01	0.27	0.13	100.00	100.00
Tota	ai 4/15/97	6									0.27	0.13		
	Sinking Gill	Net												
Bull tro	-	16	243	480	333	21.49	356.88	76.89	0.77	0.02	1.00	0.20	04.40	67.40
	nouth bass	1	460	460	460	21.43	1375.00	10.09	1.41	0.02	1.00 0.13	0.36 0.17	94.12 5.88	67.49 32.51
Tota		17		400	400		1373.00		1.41		1.13	0.17	5.00	32.51
	4/17/97										1.13	0.55		
	Sinking Gill	l Net												
Bull tro		1	413	413	413		500.00		0.71		0.17	0.08	50.00	15.92
	nouth bass	1	440	440	440		1320.00		1.55		0.33	0.44	50.00	84.08
Tota		2									0.50	0.52		
	5/6/97													
	Sinking Gill													
Bull tro		6	180	435	347	38.68	497.00	117.49	0.84	0.07	0.43	0.18	100.00	100.00
Tota		6									0.43	0.18		
	5/7/97													
	Sinking Gill	Net												

Water	Species	Totai Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Weight (g)	SE Welght	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Weight)
Bull tro		8	294	640	428	40.34	876.25	286.36	0.90	0.03	0.44	0.39	100.00	100.00
Tota		8									0.44	0.39		
	5/8/97	N-4												
Dull Ass	Sinking Gill													
Bull tro <i>Tota</i>		14 14	291	660	458	33.05	1116.79	280.24	0.90	0.03	0.78	0.87	100.00	100.00
1018	'' 5/9/97	14									0.78	0.87		
	Sinking Gill	Net												
Bull tro	-	2	398	464	431	22.00	700 50	202.50	0.07					
Tota		2	330	404	431	33.00	792.50	202.50	0.97	0.03	0.31	0.24	100.00	100.00
	5/12/97	_									0.31	0.24		
	Sinking Gill	Net												
Bull tro	ut	6	323	528	413	31.61	695.00	145.73	0.93	0.04	1.50	1.04	100.00	100.00
Tota	•	6				• • • • • • • • • • • • • • • • • • • •			0.00	0.04	1.50	1.04	100.00	100.00
	5/13/97											1.04		
	Electrofishi	ng												
_	ip sucker	17	150	370	202	11.80	109.09	29.74	1.00	0.05	20.32	1.65	8.67	2.96
Bull tro		1	290	290	290		200.00		0.82		0.88	0.18	0.51	0.32
Chiseln		11	130	300	195	17.50	118.33	49.10	0.97	0.07	32.69	2.16	5.61	3.89
	nook salmon	1	270	270	270		150.00		0.76		0.88	0.14	0.51	0.25
	ry rainbow ee salmon	40	80	375	202	14.82	188.39	25.61	1.86	0.77	35.34	4.90	20.41	8.80
	cale sucker	1	100	100	100	40.00					0.88		0.51	
-	in whitefish	60 5	160 305	460 340	259	12.05	307.82	44.63	0.99	0.02	101.59	23.58	30.61	42.40
	n squawfish	34	150	575	328 311	6.82 16.30	286.67 420.00	18.56	0.82	0.03	4.42	1.36	2.55	2.45
	outh bass	24	100	365	238	9.94	420.00 219.55	79.54 29.13	0.91 1.39	0.02 0.04	48.59	17.04	17.35	30.64
Yellow		2	120	220	170	50.00	107.50	87.50	1.39	0.04	21.20 1.77	4.43 0.19	12.24 1.02	7.96 0.34
Tota	•	196	0			50.00	107.50	07.50	1.43	0.54	268.55	55.63	1.02	0.34
	Gill Net										200.00	55.05		
Bull tro	ut	1	457	457	457		930.00		0.97		0.50	0.47	0.53	0.60
Chisein		17	161	310	247	14.48	167.06	25.14	0.94	0.03	8.50	1.43	9.09	1.84
	nook salmon	4	277	415	334	31.87	335.00	87.03	0.84	0.05	2.00	0.67	2.14	0.86
	ry rainbow	20	213	376	309	7.39	282.50	19.75	0.92	0.02	10.00	2.80	10.70	3.60
-	e salmon	1	352	352	352		390.00		0.89		0.50	0.20	0.53	0.25
•	cale sucker	71	185	491	362	9.49	521.69	37.48	0.94	0.01	88.50	46.25	37.97	59.44
	in whitefish n squawfish	2 58	345	350	348	2.50	325.00	25.00	0.78	0.08	1.00	0.31	1.07	0.40
	e shiner	2	204 140	700 141	348	9.44	438.97	58.57	0.89	0.01	54.00	23.64	31.02	30.39
	outh bass	3	272	385	141 317	0.50 34.59	30.00 503.33	0.00 219.87	1.08	0.01	1.00	0.03	1.07	0.04
		3	212	500	317	J -1 .39	505.55	219.0/	1.38	0.14	1.50	0.76	1.60	0.97

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	Percent (Number)	Percent (Weight)
Montale	ppe cutthroat	•		` ,	, ,							kg)		
	nbow/redband	3 4	392	400	396	2.33	516.67	16.67	0.84	0.04	1.50	0.78	1.60	1.00
Yellow		1	145 190	320	264	40.95	215.00	68.13	0.98	0.04	2.00	0.43	2.14	0.56
Total		187	190	190	190		100.00		1.46		0.50	0.05	0.53	0.06
, 01.0.	Sinking Gil										171.50	77.81		
Bull trou		9	305	541	463	21.69	025.50	404.70	0.00					
Total		9	303	341	403	21.69	935.56	104.76	0.90	0.02	2.25	2.11	100.00	100.00
, , ,	Trap Net	•									2.25	2.11		
Bridgeli	p sucker	8	305	380	345	9.56	360.38	20.44	0.07	0.00				
Chiselm		1	160	160	160	9.50	300.30	28.41	0.87	0.03	2.00	0.72	21.62	23.94
	y rainbow	4	293	350	323	14.36	322.50	E4 E0	0.00	0.05	0.25	0.01	2.70	0.38
	ale sucker	7	344	445	387	14.30	547.14	54.52 58.34	0.93 0.93	0.05	1.00	0.33	10.81	11.09
	in whitefish	3	325	339	330	4.37	323.33	23.33	0.93	0.02 0.07	1.75	1.00	18.92	33.39
	n squawfish	3	336	351	344	4.41	356.67	20.28			0.75	0.24	8.11	8.03
	nbow/redband	3	138	380	264	70.06	233.33	124.68	0.87 1.00	0.05 0.09	0.75	0.28	8.11	9.26
Yellow		8	155	257	206	12.46	121.25	18.07	1.00	0.09	0.75	0.17	8.11	5.81
Total		37	100	20,	200	12.40	121.25	10.07	1.33	0.07	2.00 9.25	0.24 2.99	21.62	8.11
:	5/14/97										9.23	2.99		
	Set Sinking	Gill Net												
Bridgelij	p sucker	1	184	184	184		40.00		0.64		0.50	0.02	6.67	0.71
	ale sucker	7	193	458	359	34.13	460.00	98.00	0.84	0.03	3.50	1.61	46.67	56.99
Norther	n squawfish	6	335	360	350	3.60	393.33	14.06	0.92	0.02	3.00	1.18	40.00	41.77
Yellow p		1	160	160	160		30.00		0.73	0.02	0.50	0.01	6.67	0.53
Total		15									7.50	2.83	0.07	0.00
ŧ	5/19/97													
	Sinking Gil	l Net												
Bull trou	•	7	379	541	463	20.61	890.00	136.03	0.85	0.03	1.17	1.04	100.00	100.00
Total	'	7									1.17	1.04		
PADDOC														
4	4/16/97	•												
Dia de an	Electrofishi	_							•					
Black cr	арріе	1	68	68	68	•	10.00		3.18		1.00	0.01	0.77	0.02
Bluegili Brown b	الم مطالب	29	42	261	146	8.89	125.67	21.98	2.74	0.08	29.00	3.48	22.31	7.07
		3	218	327	289	35.38	565.33	155.82	2.24	0.15	3.00	1.70	2.31	3.45
	y rainbow	4	169	250	196	18.37	99.75	30.52	1.22	0.03	4.00	0.40	3.08	0.81
Largemo Total	outh bass	93 130	67	380	299	5.70	464.62	16.26	1.62	0.03	93.00	43.63	71.54	88.65
iotai	Gill Net	130									130.00	49.21		

Water	Species	Total Collected	Min Length (mm)	Max Length (mm)	Mean Length (mm)	SE Length	Mean Welght (g)	SE Welght	Mean CondFact	SE CondFact	CPUE (Number)	CPUE (Weight kg)	Percent (Number)	Percent (Welght)
	ry rainbow	8	184	272	224	12.30	153.75	23.59	1.30	0.05	4.00	0.61	19.51	6.86
Largen <i>Tota</i>	•	33 41	288	343	313	2.58	503.58	13.63	1.63	0.02	16.50 20.50	8.35 8.97	80.49	93.14
	Trap Net										20.00	0.07		
Black c	• •	6	250	303	286	7.51	494.67	30.25	2.12	0.06	1.50	0.74	13.04	15.52
Bluegill		14	128	263	170	9.27	176.86	32.32	3.21	0.05	3.50	0.60	30.43	12.49
	bullhead	2	300	350	325	25.00	736.00	104.00	2.15	0.19	0.50	0.37	4.35	7.70
	outh bass	24	264	332	313	3.10	533.17	15.98	1.74	0.03	6.00	3.07	52.17	64.29
Tota	•	46									11.50	4.78		01,20
	10/26/97													
D1 '''	Electrofishin	-												
Bluegill		202	30	218	104	3.36	68.31	5.42	2.27	0.05	217.20	9.24	68.47	27.89
	ry rainbow	1	365	365	365		755.00		1.55		1.08	0.73	0.34	2.20
	outh bass	86	68	375	213	9.38	253.95	28.52	1.73	0.15	92.47	22.68	29.15	68.49
Pumpki <i>Tota</i>		6	105	172	138	11.60	73.00	20.91	2.33	0.25	6.45	0.47	2.03	1.42
i Ola	, Gill Net	295									317.20	33.12		
Drown	bulihead	07												
	ry rainbow	87	205	345	278	3.35	472.75	17.23	2.11	0.02	43.50	20.32	86.14	82.24
	outh bass	11	350	403	366	5.06	648.00	39.26	1.30	0.03	5.50	3.56	10.89	14.41
Tota		3 101	312	333	324	6.24	623.00	39.02	1.83	0.03	1.50	0.83	2.97	3.35
iota	Trap Net	101									50.50	24.71		
Bluegill	•	5		200	407	04.00	4							
_	bullhead	35	50 195	200 345	127	31.02	175.00	54.08	2.96	0.27	1.25	0.12	11.63	2.34
	outh bass	35 3	322	345 325	291 323	5.66	502.46	24.74	1.99	0.03	8.75	4.52	81.40	89.15
Tota		43	322	323	323	0.88	561.67	15.90	1.66	0.06	0.75	0.43	6.98	8.50
		40									10.75	5.07		
QUINN F	4/15/97													
	Electrofishin													
Dinal		•												
Black c		1	150	150	150		40.00		1.19		1.22	0.05	0.71	0.14
Bluegill		87	73	163	123	2.09	41.60	2.30	1.98	0.03	105.92	4.23	62.14	12.14
Commo		8	118	495	420	43.52	1131.88	166.23	1.40	0.12	9.74	11.02	5.71	31.65
	ry rainbow	26	210	270	234	2.57	144.00	4.90	1.13	0.02	31.65	3.47	18.57	9.96
	outh bass	9	140	490	370	34.47	1154.67	302.25	1.71	0.16	10.96	12.65	6.43	36.33
	cale sucker	1	580	580	580	400.00	2550.00		1.31	<u> </u>	1.22	3.10	0.71	8.91
Yellow Tota		8 140	117	1440	302	162.68	30.75	2.30	1.03	0.17	9.74	0.30	5.71	0.86
i Ola	'	140									170.44	34.83		

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)
SAWYERS	SP													
5	/21/97													
	Electrofishir	ng												
Bluegill		41	55	137	86	2.30	30.00	10.00	1.42	0.14	105.43	0.15	55.41	0.28
Brown bu	ulihead	2	26	226	126	100.00	235.00	55.00	825.77	824.21	5.14	1.21	2.70	2.21
Common	carp	6	436	562	481	17.79	1340.00	155.43	1.18	0.02	15.43	20.67	8.11	37.85
Largemo	uth bass	3	526	550	537	7.00	4200.00	152.75	2.71	0.02	7.71	32.40	4.05	59.32
Pumpkin	seed	10	75	125	88	4.47	40.00		2.05		25.71	0.10	13.51	0.19
Yellow pe	erch	12	72	139	107	5.17	10.00	0.00	0.48	0.10	30.86	0.08	16.22	0.14
Total		74									190.28	54.62		

Appendix B. Length frequency for all species captured, all gear types combined by water and date.

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
ARROV	VROCK I 1/2/97	RES								
	112131	Bull trout								
			30				1			
			32				2			
			33				2			
			35				1			
			39				1			
			41				1			
			44				1			
			46 49				1			
		Hatchery ra					1			
		natchery ra	27				1			82.90
			33				1			83.08
	1/5/97		-				•			
		Bull trout								
			41				1			
			65				1			
		Fall chinook					4			
			28 29				1 2			
			30				2			
			31				1			
		Mountain wi					•	•		
			43				1			69.72
	1/7/97									
		Bull trout								
			45 48				1			
	1/11/97		40				1			
	1/11/9/	Bull trout								
		20.11.000	41				1			
			43				1			
	3/1/97									
		Bull trout								
	0.00		44				1			
	3/7/97	Bull trout								
		Buil (lout	33				1			
			39				1			
			40				1			
			55				1			
	3/11/97									
		Bull trout								
			31				1			
			33				1			
	2/25/27		35				1			
	3/25/97	Bull trout								
		בייי נוטענ	41				2			
			53				1			
							-			

64	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
Buil trout				64					1			
Bull trout 27 31 31 31 32 22 23 33 35 1 1 37 38 38 4 39 30 1 40 2 41 2 42 1 43 34 44 2 1 43 43 34 44 2 1 45 46 47 2 48 49 2 47 48 49 2 49 2 50 55 1 56 1 60 3/28/97 Bull trout 14 28 30 30 1 34 333/3/97 Bull trout 27 30 31 31 333 1 333 1 34 34 34 34 35 36 37 38 38 1 39 40 2 2 41 43 43 30 1 44 43 43 44 45 46 47 48 48 49 49 49 49 49 49 40 40 40 40 40 40 40 40 40 40 40 40 40		2/20/07										
27		3/26/97	Bull trout									
32 2 3 3 3 1 1 3 3 3 1 1 3 3 3 1 1 4 4 4 4 4												
33									_	1		
355												
37									'	1		
39 3 1 40 2 41 2 1 42 3 43 3 44 2 1 45 46 2 47 2 48 49 2 50 1 55 6 1 56 1 56 1 58 1 58 1 59 1 50 1 51 1 52 1 53/28/97 Bull trout 14 28 1 28 1 30 1 30 1 36 38 1 39 1 40 2 40 2 40 2 40 4 28 1 30 1 30 1 30 1 30 1 30 1 30 1 30 1 30									1			
40												
41									3			
42									2			
43 44 2 1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4									2			
44												
46									2			
47 2 48												
48 49 2 50 1 55 1 55 1 56 1 60 1 3/28/97 Bull trout 14 1 28 1 30 1 36 1 38 3 39 1 40 2 41 41 1 43 1 3731/97 Bull trout 27 1 30 1 30 1 32 1 31 1 32 1 31 1 32 1 31 1 32 1 34 1 35 2 31 1 32 1 34 1 35 32 1 37 1 38 35 2 4/1/97 Bull trout Bull trout Bull trout 8 30 1 2 31 31 32 31 31 32 31 32 32 33 31 34 32 32 32 33 33 31 34 34 34 34 34 34 34 34 34 34 34 34 34									2	2		
49 2 50 1 50 1 56 6 60 1 3/28/97 Bull trout 14 1 28 1 30 1 36 1 38 3 1 39 1 40 2 41 1 43 1 43 1 3/31/97 Bull trout 27 1 30 1 31 1 32 1 31 1 32 1 31 1 32 1 33 1 4 1 32 1 33 1 4 1 32 1 33 1 4 1 32 1 33 1 34 1 35 2 31 1 37 1 38 3 31 1 31 1 32 1 33 1 34 1 35 3 36 1 37 2 4/1/97 Bull trout Bull trout Bull trout 8 30 1 30 1 31 2 31 1 32 31 1 34 31 1 35 32 31 1 37 4 4/1/97 Bull trout 8 30 1 1 2 35 3 1 37 32 32 3 1 37 32 32 3 1 38 32 3 1 39 32 32 32 32 32 32 33 31 1 30 32 32 32 32 32 33 31 1 30 31 32 32 32 32 32 33 31 1 31 32 32 32 32 32 32 33 31 1 31 32 32 32 32 32 32 33 31 1 31 32 32 32 32 32 32 33 31 1 31 32 32 32 32 32 32 33 31 1 31 32 32 32 32 32 32 32 33 31 1 31 32 32 32 32 32 32 32 33 31 1 31 32 32 32 32 32 32 32 32 32 32 33 31 1 31 32 32 32 32 32 32 32 32 32 32 32 32 32									2	1		
55										2		
56 60 1 3/28/97 Bull trout 14 1 28 1 30 1 36 31 38 1 40 2 411 43 1 43 1 3/31/97 Bull trout 27 1 30 1 27 1 30 1 27 1 30 1 27 1 30 1 27 1 30 1 27 1 30 1 27 2 31 1 32 1 31 1 32 1 31 1 32 1 33 1 34 1 32 1 34 1 35 2 36 1 37 2 4/1/97 Bull trout 8									1			
800 1 3/28/97 Bull trout 14 1 1 1 28 1 1 30 36 38 1 1 33/31/97 Bull trout 27 1 1 30 1 2 31 1 32 31 31 32 3 1 1 33 3 3 1 1 3 3 3 3												
3/28/97 Bull trout 14 28 30 30 36 1 38 39 40 40 43 33/31/97 Bull trout 27 30 30 31 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 32 31 33 31 32 34 31 32 34 31 32 34 31 32 34 31 32 31 31 32 31 32 31 31 32 32 31 31 32 32 31 31 32 32 31 31 32 32 31 31 32 32 33 31 31 32 32 33 34 31 32 32 33 34 31 32 32 33 34 31 32 32 33 34 31 32 32 33 34 31 31 32 32 33 34 31 31 32 32 33 34 31 31 32 32 33 34 4/1/97 Bull trout 30 32 33 33 31 31 32 32 33 34 4/3/97 Bull trout										1		
Bull trout 14 28 30 30 31 36 38 39 1 40 40 2 41 43 3731/97 Bull trout 27 30 31 30 1 27 30 1 27 30 1 27 30 1 27 30 1 27 30 31 31 31 31 31 31 31 32 31 31 32 31 31 32 31 31 32 31 34 31 32 33 31 31 32 33 31 31 32 33 31 31 32 33 31 31 32 33 31 31 32 33 31 31 32 33 31 31 32 33 31 31 32 33 31 31 32 33 31 31 31 32 33 31 31 31 32 33 31 31 31 32 33 31 31 31 32 33 31 31 31 32 33 31 31 31 32 33 31 31 31 32 33 31 31 31 32 33 31 31 31 32 33 31 31 31 31 31 31 31 31 31 31 31 31		3/28/97		00						'		
14												
30 1 1 36 1 1 38 38 1 1 39 1 1 40 2 2 41 41 43 1 1 37 37 1 2 31 1 32 3 1 34 1 2 35 3 2 2 4/1/97 Bull trout 8ull trout 30 1 2 3 3 1 1 2 3 3 3 1 1 3 3 4 1 2 3 3 5 3 2 2 3 3 3 3 4 1 3 3 4 5 3 5 5 3 2 3 5 3 5 3 5 3 5 3 5 3 5 3 5										1		
36												
38				36								
40 41 43 3/31/97 Bull trout 27 30 31 32 31 33 31 32 31 32 31 32 32 33 31 1 2 34 35 36 37 2 4/1/97 Bull trout 30 30 31 31 32 31 31 32 31 31 32 31 31 32 31 31 32 31 31 32 31 31 32 31 31 31 31 32 31 31 31 31 31 31 31 31 31 31 31 31 31				38								
41												
3/31/97 Bull trout 27 30 31 32 31 32 31 34 34 35 35 36 37 22 4/1/97 Bull trout 30 30 31 31 31 32 31 31 31 31 31 31 31 31 31 31 31 31 31												
3/31/97 Bull trout 27												
Bull trout 27		3/31/97		70						•		
30 1 2 31 1 1 32 1 1 33 1 1 2 33 1 1 2 34 1 2 35 2 2 36 1 1 1 37 2 4/1/97 Bull trout 30 1 2 30 2 2 33 1 1 34 1 1			Bull trout									
31 1 1 32 1 33 3 1 34 1 2 35 2 2 33 3 1 34 34 1 1 34 34 34 34 34 34 34 34 34 34 34 34 34				27 30					1	1		
32 1 1 33 1 1 2 34 1 2 35 2 2 33 3 1 34 1 34 1 1 37 2 35 34 34 34 34 34 34 34 34 34 34 34 34 34				30 31						2		
33 1 2 2 35 2 2 33 3 1 3 34 1 1 3 34 34 1 1 3 3 3 3 3 3									•	1		
35 2 36 1 1 37 2 4/1/97 Bull trout 30 1 32 2 33 1 34 1				33					1			
37 2 4/1/97 Bull trout 30 1 32 2 33 1 34 1									1	2		
37 2 4/1/97 Bull trout 30 1 32 2 33 1 34 1									4	2		
4/1/97 Bull trout 30 1 32 2 33 1 34 1									ı	2		
Bull trout 30 1 32 2 33 1 34 1		4/1/97		0,						_		
32 2 33 1 34 1			Bull trout									
33 1 34 1				30						1		
34 1												
									1	•		

37 39 1 1 3 40 3 2 41 41 1 1 4 42 42 1 1 43 43 44 44 1 1 4 5 44 44 4 1 1 4 5 4 5 7 1 1 4 5 4 5 7 1 1 4 5 5 5 1 1 5 5 5 1 1 5 5 1 1 5 5 5 5 1 1 5 5 5 5 5 1 1 5 5 5 5 5 1 1 5 5 5 5 5 1 1 5 5 5 5 5 1 1 5 5 5 5 5 1 1 5 5 5 5 5 1 1 5 5 5 5 5 1 1 5 5 5 5 5 1 1 5 5 5 5 5 1	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				37						1		
40 3 2 41 1 1 42 1 1 4 43 1 4 44 41 1 1 46 46 1 1 47 1 1 48 1 1 49 1 1 55 1 1 55 1 1 56 1 1 57 1 1 58 11 trout 25 1 1 31 1 1 36 1 1 37 3 1 1 38 1 1 473/97 Bull trout 29 1 1 41 48 1 41												
41									3	2		
43				41					1			
44												
46										4		
47									1	4		
48									1	1		
49 1 52 1 55 1 57 1 59 1 60 1 65 1 65 1 65 1 67 1 68 1 68 1 69 1 69 1 69 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60												
52												
57 59 60 61 65 11 4/2/97 Bull trout 25 31 36 1 37 1 38 1 39 42 1 45 45 45 1 48 1 4/3/97 Bull trout 29 31 31 31 31 31 31 31 31 31 31 31 31 31				52						1		
59 60 60 61 1 4/2/97 Bull trout 25 31 31 36 1 37 1 38 39 1 42 1 442 1 45 48 1 4/3/97 Bull trout 29 1 31 33 31 35 4 1 33 35 2 2 39 40 41/4/97 Bull trout 31 31 31 31 31 31 31 31 31 31 31 31 31												
60 1 41/2197 Bull trout 25 1 31 1 36 1 37 1 38 1 41/3197 Bull trout 29 1 31 31 1 33 1 1 33 1 1 33 1 1 33 1 1 34 1 41/4197 Bull trout 41/4197 B												
A/2/97 Bull trout 25												
### Additional Content of Part										1		
Buil trout 25		4/2/97		00						• •		
31 1 1 36 1 1 37 38 1 1 38 39 1 1 39 42 1 1 48 1 1 43/97 Bull trout 29 1 1 33 1 1 33 1 1 33 35 2 2 34 44 1 1 4 43 39 2 2 4 44 4 1 1 4 46 6 1 1 57 1 1 1 5 5 7			Bull trout									
36 1 1 37 1 1 38 1 1 4/3/97 Bull trout 29 1 1 33 1 1 33 1 1 33 1 1 33 3 1 1 34 34 1 1 44/97 Bull trout 8ull trout 4/4/97 Bull trout 31 33 1 1 1 33 3 1 1 34 3 1 1 3 3 3 3										1		
37												
38 1 1 39 1 1 42 42 1 1 45 48 1 1 48 1 1 43/3/97 Bull trout 29 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1										1		
39									1	•		
45 48 1 4/3/97 Bull trout 29 1 31 1 33 31 1 35 2 37 2 39 2 40 3 43 41 1 44/4/97 Bull trout 31 1 33 1 1 1 34 1 1 35 1 1 36 1 1 37 1 1 38 1 1 38 1 1 39 2 40 1 31 39 2 40 1 31 31 1 31 1 32 1 34 1 35 31 1 36 1 37 1 38 1 39 2 40 1 40 1 41 43 2 42 2 44 41 1 46 57 1				39								
48 1 4/3/97 Bull trout 29 1 1 31 1 33 1 1 35 2 37 2 2 39 2 40 3 3 43 1 1 4/4/97 Bull trout 31 1 1 33 1 1 1 4/4/97 Bull trout 31 1 1 33 1 1 1 34 1 1 35 1 1 1 36 31 1 1 37 1 1 38 1 1 38 1 1 38 1 1 39 2 2 40 40 1 43 2 2 2 44 41 1 46 57 1 1												
### Additional Part of									4	1		
Bull trout 29 1 31 31 31 35 35 2 37 39 2 40 30 43 41 44 41 41 41 41 41 41 41 41 41 41 41		1/3/97		48					1	•		
29 1 1 31 1 33 1 1 35 2 2 39 40 40 3 44 1 1 44497 Bull trout 31 33 1 1 1 33 3 1 1 1 33 34 1 1 1 35 35 1 1 36 37 1 1 1 38 39 2 4 40 43 39 40 1 43 39 40 1 43 39 40 40 41 43 40 40 41 43 40 40 40 41 43 40 40 40 40 40 40 40 40 40 40 40 40 40		4/0/3/	Bull trout									
33 1 2 3 2 3 3 3 4 40 3 3 44 4 1 1 446 57 1 1 57					•							
35 2 37 2 39 2 40 3 40 3 43 1 444 1 8ull trout 31 1 33 1 1 34 1 35 1 36 1 37 1 1 36 1 37 1 1 38 1 39 2 40 1 43 2 2 40 1 43 2 2 44 1 46 1 57 1												
40 3 43 1 44 1 44/4/97 Bull trout 31 1 33 1 1 34 1 35 1 36 1 37 1 1 38 1 39 2 40 1 43 2 2 40 1 43 2 2 44 1 46 1 57 1										2		
40 3 43 1 44 1 44/4/97 Bull trout 31 1 33 1 1 34 1 35 1 36 1 37 1 1 38 1 39 2 40 1 43 2 2 40 1 43 2 2 44 1 46 1 57 1										2		
40												
444 1 Bull trout 31 1 1 33 1 1 1 34 1 1 35 1 1 36 1 1 37 1 1 1 38 1 1 39 2 2 40 1 43 2 2 44 1 1 46 1 57 1				40						3		
Bull trout 31 1 33 1 1 34 1 35 1 36 1 37 1 1 38 1 1 39 2 40 1 43 2 2 44 4 1 46 1 57 1												
Bull trout 31		ΔΙΔΙΩΤ		44						1		
31 1 33 1 34 1 35 1 36 1 37 1 1 38 1 39 2 40 1 43 2 2 44 1 46 1 57 1		414131	Bull trout									
34 1 35 1 36 1 37 1 1 38 1 39 2 40 1 43 2 2 44 1 46 1 57 1												
35 1 36 1 37 1 1 38 1 39 2 40 1 43 2 2 44 1 46 57 1				33					1			
36 1 37 1 1 38 1 39 2 2 40 1 43 2 2 44 1 46 57 1 1				34 25					4	1		
37 1 1 38 1 39 39 2 40 40 1 1 43 2 2 44 1 46 57 1 1				35 36								-
38 1 39 2 40 1 43 2 2 44 1 46 1 57 1				37						1		
39 2 40 1 43 2 2 44 1 46 1 57 1				38					1			
43 2 2 44 1 1 46 1 57 1				39								
44 1 1 46 1 57 1 1									_	1		
46 1 57 1									2	2		
57 1									ı	1		
										1		
									1			

### Bull trout 28	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		4/7/97	Bull trout									
32 1 36 1 36 1 37 38 1 40 1 41 41 1 43 1 444 1 4597 Buil trout 29 1 33 1 36 1 37 39 1 41 1 479/97 Buil trout 29 1 30 1 31 1 32 1 34 49/97 Buil trout 29 1 30 1 30 1 30 1 30 1 30 1 30 1 30 1 30			Dan trout							1		
36									1			
37												
38												
40												
48/8/97 Bull trout 48/8/97 Bull trout 29 30 31 31 4/8/97 Bull trout 30 36 37 39 1 4/10/97 Bull trout 29 30 4/10/97 Bull trout 29 30 4/10/97 Bull trout 4												
44												
### Bull trout 29									1	1		
29 1 1 33 3 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4		4/8/97							·			
33 1 1 3 3 1 1 4 4 1 1 1 4 1 1 4 1 1 4 1 1 4 1 1 4 1 1 4 1 1 1 4 1 1 1 4 1			Bull trout	20					4			
36												
### Authors				36					•	1		
### Sull trout Bull trout												
Bull trout 30 36 37 37 1 39 41 41 42 1 43 36 1 1 37 4/10/97 Bull trout 29 1 29 1 32 42 1 42 1 42 1 43 42 1 43 42 42 1 44 42 43 44 44 41 41 41 41 41 41 41 41 41 41 41		4/9/97		41						·1		
36 1 1 37 1 1 39			Bull trout									
37 1 1 39 1 1 41 1 41 1 42 43 1 56 1 1 42 43 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 42 42 1 1 1 1												
39												
42				39					•	1		
43 56 1 4/10/97 Bull trout 29 1 32 1 42 1 50 1 56 1 4/18/97 Bull trout 30 2 31 2 34 2 34 2 36 1 38 1 38 1 39 1 43 41 1 442 1 56 1 58 1 61 1 4/21/97 Bull trout 80 1 30 2 31 3 32 3 35 3 31 2 33 3 35 3 36 1 38 3 39 1 40 42 1 40 42 1									1			
## Second Control of C												
## A/10/97 Bull trout 29												
29		4/10/97								•		
32			Bull trout	20					1			
42 1 50 1 56 1 4/18/97 Bull trout 30 2 31 2 34 2 36 1 38 1 39 1 43 1 44 1 56 1 58 1 61 1 4/21/97 Bull trout 30 1 2 2 3 3 3 1 2 3 3 1 3 5 1 3 7 40 42 1 1												
## A/18/97 Bull trout									1			
Bull trout 30 31 32 31 34 36 38 39 1 43 44 1 56 1 58 1 61 1 4/21/97 Bull trout 30 30 31 32 31 32 33 31 32 33 31 32 33 31 34 40 42 11												
Bull trout 30 2 31 2 34 2 36 31 38 31 39 1 43 44 1 56 1 58 1 61 1 4/21/97 Bull trout 30 31 2 33 31 2 33 31 35 37 40 40 42 1		4/18/97		30					ı			
31 2 34 2 36 1 38 1 39 1 43 4 44 1 56 1 58 1 61 1 4/21/97 Bull trout 30 1 31 2 33 1 2 33 1 35 1 37 1 40 42 11			Bull trout									
36 1 1 38 1 1 39 1 1 43 43 1 1 44 1 1 56 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									2			
36 1 1 38 1 1 39 1 1 43 43 1 1 44 1 1 56 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				34					2			
39 1 1 43 1 1 444 1 1 56 1 1 58 1 1 58 1 1 58 1 1 58 1 1 58 1 1 58 1 1 58 1 1 58 1 1 58 1 1 1 58 1 1 1 1				36								
43 1 1 44 1 56 56 1 1 58 61 1 1 4/21/97 Bull trout 30 1 2 33 1 2 33 1 35 1 37 1 40 40 42 1 1												
44 1 1 56 1 1 58 1 1 58 1 1 58 1 1 58 1 1 58 1 1 58 1 1 58 1 1 1 58 1 1 1 58 1 1 1 1				39 43								
58 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				44								
61 1 4/21/97 Bull trout 30 1 31 2 33 1 35 1 37 1 40 1 42 1												
4/21/97 Bull trout 30 1 31 2 33 1 35 1 37 1 40 42 1												
Bull trout 30 1 31 2 33 1 35 1 37 1 40 1 42 1				01					1			
31 2 33 1 35 1 37 1 40 1 42 1			Bull trout	00								
33 1 35 1 37 1 40 1 42 1										1		
35 1 37 1 40 1 42 1				33								
40 1 42 1				35								
42 1												

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
	4/22/97										
		Bull trout	31						1		
			34						1		
			37						1		
			38					1			
	4/23/97										
		Bull trout	30						4		
			36						1 1		
			41						1		
			75						1		
	4/24/97										
		Bull trout									
			29					•	1		
			30 31					3	1		
			34						1		
			37						.1		
			40					1			
			43						1		
			58					1			
	4/25/97										
		Bull trout	19					1			
			26					ı	1		
			31						1		
			33						2		
			42						1		
			43						2 .		
			44						1		
	4/28/97										
		Bull trout	28						1		
			29						1		
			30						1		
			31						1		
			33					1	2		
			34						1		
			38					1	1		
			40 42					1	1		
			44					•	1		
			47					1	·		
	4/29/97										
		Bull trout									
			32					1			-
			33 34						1 1		
			3 4 36						2		
			37						1		
			40						1		
			41						1		
			43						1		
			44						1		
	4/30/97	Bull trout									
		Duli trout	31						2		
			35						2 2		

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
	5/1/97									
		Bull trout	39				r	1		
			47				1			
	5/2/97		7.							
		Bull trout								
			29				1	1		
			34				1			
			37				1			
			39 42				1	1		
			43				1			
BEECH	HPOND		75				•			
5220.	5/8/97									
		Bluegill								
			5		3					280.23
			6		2					138.21
			7 8		11 26					131.45 143.04
			9		40			•		124.35
			10		23					126.64
			11		13					114.52
			12		5					121.40
			13		7					135.28
			14		3					121.95
			15		5					128.32
			16 17		18 4					110.14 132.71
			18		4					114.22
		Largemout			7					117.22
			12		9			•		103.07
			13		25					104.13
			14		27					105.54
			15		24					103.79
			16		13					102.65
			17		4					94.81
			28 29		1 1					
			32		1					67.00
		Pumpkinse			·					0,,00
			8		1					
			9		7					
			10		7					
			11		8					
			12 13		3 1					
BLACK	S CREE	K RES	13		Ţ					
	6/9/97									
		White crap	pie 4		1					
			5		4					
			6		13					
			7		46			•		
			8		59					
			9		47					91.19
			10		26					93.97
			11		28					98.25
			12		8					108.02
			13 15		1					95.18 111.59
			15		3	00				111.58

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 17		6 7						116.44 118.65
			18		5						121.50
			19		4						114.92
			20		7						119.41
			21 22		6 2						121.21 130.40
			27		2						107.46
			28		1						105.50
BLACK	STONE 11/17/9										
	11/17/	Bridgelip sı									
			21			1					
			22 23			1 1					
			25			2					
			28			1					
			29			1					
			30 31			1 1					
			32			1					
			33			1					
			34			1					
			36 40			2 1					
		Brown bullh	ead			•					
			18						1		
			21 26		1				1		
			30		•	1					
			36			1					
		Lahontan co	36			1					
		Largemouti	6		1						
			15			1					130.21
			16						1		86.71
			18 20						1		79.40 89.83
			21						2 1		90.10
			22			1					84.43
			23		3	•			4		92.58
			24 25		1	2 2			1		84.34 82.57
			26		,	1					77.80
			27		1						82.18
		M - 4 - 14 L:	28		1						77.91
		Redside shi	ner 14			1					
			16			1					
		Wild rainbov		d		4					00 -0
			31 34			1 1					86.73 103.06
			36			2					95.97
			37			1			1		98.97
			38			1					96.29
			41 42			3 1					99.53 97.90
			46			i					105.67

Append Water		(continue Species	c d) CM Group	Number Caught	Number Caught	Number Caught in	Number Caught	Number Caught in	Number Caught in	Total Caught	Relative Weight
			·	Angling	Electro fishing	Gill Nets	Hourly Sinking Gill Nets	Sinking Gill Nets	Trap Nets	-	_
CJSTR	RIKE RE	S									
	5/28/97										
		Black crap	pie 10		4						
			11		1 1						123.19
			12		1						138.12
			18		1				1		145.88
			19						2		126.30
			20		2	2			16		103.68
			21		2	1			8		103.53
			22		3				3		90.30
			23			2			2		93.57
		Bluegill	4		•						
			4 5		2 2						
			6		1						
			9		2						
			10		1						45.51
			11		4						121.48
			12		6				-		130.39
			13		11						119.13
			14		11						105.58
			15		11						109.89
			16		16				1		109.55
			17		10				4		116.10
			18 19		5 5				1 1		110.26 118.94
			20		1				1		110.57
		Bridgelip su			•						110.07
		gap a.	18		1						
			20		1				•		
			21		4						
			22		2						
			25		3						
			26		2						
			27 28		1 2						
			28 29		2	1					
			30		1						
			31		1						
			32		2						
			36		1						
		Brown bullh	ead								
			25			1					
			28		1						
		Channel ca				4					114 70
			18 21			1 3					114.70 129.65
			22			3 2					95.81
			22 25			1					144.98
			38			1					153.41
			41			1					122.49
			44			2					139.62
			45			2					121.03

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 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62		1	1 1 3 5 1 2 2 1 3 5 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					139.50 121.83 130.32 133.00 140.83 110.38 131.59 123.94 119.44 119.26 125.19 106.05 131.49 119.03 117.65 133.60 139.92
			66 67 68		1	1 1			-		138.90 105.63 134.51
		Common ca	20 22 24 25 27 30 33 34 arp 48 61 64 68 72 78		1 1 1 1 1 1 1	1 1 1 1 1			1 1 -		105.49
			25 28 33 34 37 41		1	2 1 1 1					98.53 108.65 65.25 88.03 95.31 116.82
		Largemouth	bass 15 21 30 32 34 35 37 42 44 46 52		1 2 1 2 1 1 1 1 1 1 2						85.29 81.76 98.57 90.35 93.06 83.40 89.36 95.64 101.73 110.79 95.15

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
		Largescale									
			10		2						
			11		1						
			12		1						
			13		2						
			14		4						
			16		2						
			19		1						
			20		3	1					
			21		5						
			22		1						
			23		1						
			24		3	2					
			25		1						
			28		1						
			29		2						
			30		1						
			31		2	1					
			32		3	1			-		
			33		2	4					
			34		6	3					
			35		2	3					
			36		1	4					
			37 38		3	1 1					
			39		1 3	'					
			40		3	4					
			41		3	3					
			44			1					
			45		1	1					
			46		•	1			•		
			47		2	•					
			48		_	2					
			49		2						
			53		1						
			54			1					
			55		2						
		Mountain w									
			7		1						
		Northern pil		٧							
			8		1						
			15		2						
			19		1						
			23			1					
			24			1					
			27			1					
			28			1					-
			30 34			1 · 1					
			53			1					
			56			1					
			61			1					
		Peamouth	01			'					
		, camoutil	22			1					
		Pumpkinsee				•					
		p	11		1						
		Smallmouth									
			7		1						
			8		6						

Water	Date	Species	C M 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
			9 10 11 12		10 7 5 2						85.53
			13 14 15		5 9 6	1					114.04 146.54 93.81
			16 17		8 8	'					92.46 87.87
			18 19 20		6 12 11	2					94.21 92.48 84.16
			21 22 23		15 18 9	2 3 1					89.66 90.84 85.87
			24 25 26		15 7 10				1		90.10 83.12 88.78
			27 28 29		12 12 10	2 1					80.80 86.06 79.60
			30 31 33		8 4 1	1					88.10 92.97 83.60
			34 35 36 41		1 1	2					91.47 89.38 90.62 100.22
		Warmouth	42		1	'					85.04
		White crap	14		1						
			20 21 22		5	8 8 12			2		108.73 101.36 99.07
			23 24 25 26		1	30 34 17			8 14 5		101.56 98.53 101.04
			27 28 29			5 4			4 3 1 1		103.04 96.01 97.99 93.63
			30 34 35			1			1		101.80 93.21 33.64
		Yellow perc	th 15 16			1			1		122.85 71.01
			18 19 20			1 2 3					56.81 91.61 76.80
			21 22 23		1	7 7 3			1		83.36 76.78 78.39
			24 25 27			4 1 2					90.78 80.99 40.04

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
CALDV	VELL PC 5/20/97										
	0,20,0,	Black crap	pie								
			23		1						78.36
		Bluegill	2								
			3 7		1 1						
			8		3						
			9		5						
			10		4						
			11		20						49.21
			12		38						52.18
			13 14		17						47.62 72.02
			15		4 1						72.92 74.22
			19		1						23.31
		Brown bull			•						
			26		1						
		. .	27		1				-		
		Channel ca	ittish 50		1						110.50
		Common c			,						110.50
			67		1						
		Hatchery ra	ainbow								
			23		1						82.94
		Largemout	7		1						
			8		1						
			10		1						
			11		3						58.56
			12		3						
			13 14		5 4						45.83 79.13
			15		5						65.07
			16		4						65.48
			17		4						83.04
			18		6						65.99
			19		8 5						85.90
			20 21		5 2						83.94
			22		4						82.69 81.58
			24		1						89.86
			25		1						81.43
			26		1						82.90
			27		3						105.26
			28		1						100.47
			30 34		1						93.99
			35		1 1						110.26 95.95
			39		1						95.93 95.04
			41		1						111.65
			43		1						119.81
			44		1						95.18
			45		1						105.20
			46 54		1						103.97
			54 58		1 1						82.56 61.63
			50		,						01.03

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
		Pumpkinse	.ed								
		Fumpamse	10		3						
			11		8						
			12		5						
CALDV	VELL PO	ND #02	13		1						
0,1201	5/20/97	•									
		Black crap	pie 10		1						
			21		1						67.54
		Bluegill									
			5		2						
			6 7		2 3						
			8		5 6						115.71
			9		6						
			10		9						88.23
			11		12				-		68.92
			12 14		11 6						91.48 94.34
			15		6						84.11
			16		3						90.05
			17		2						99.04
		Brown built	nead 30		1						
		Common c			1						
			84		1						
			86		1						
		Hatchery ra	inbow 26		2						73.33
			30		1						73.23
		Largemout									
			11		2						83.81
			12 13		2 3						107.69 118.54
			14		6						108.96
			15		3						110.03
			16		4						88.86
			17		4						99.95
			18 19		1						92.64 104.15
			20		3 4						96.79
			21		9						85.22
			22		10						87.59
			23		6						88.37
			24 25		7 9						87.30 87.30
			26		4						93.59
			27		3						86.87
			28		3						80.23
			29		1						75.15
			30		1						91.05
			31 33		1 1						94.51 88.24
			33 46		1						105.12
			53		1						120.76
		Pumpkinse	ed								
			9		1						

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
CALDV	VELL P	OND #03									
	5/20/9	/ Bluegili									
			3		2						
			4		2						
			5		1						
			6 7		4 6						
			8		4						
			9		2						145.58
			10		7						110.42
			11		16						139.81
			12		21						116.87
			13		12						108.90
			14 15		7 7						118.15 136.03
			16		2						117.07
			17		3						105.64
			18		1						136.40
			19		1				-		114.55
			20		1						97.35
		Common	carp 58		3						
			59		2						
			60		1						
			61		1						
			71		1						
		Hatchery	rainbow 21		2						98.55
			22		2						182.93
			23		2						98.16
			27		1						88.67
		Largemou									
			7		1						127.35
			11 24		1 2						104.32
			25		3						104.89
			27		1						101.65
			28		3						107.97
			29		1						90.10
			30		1						98.43
			32 33		1 1						102.43 104.81
			38		1						108.01
			40		1						109.92
			41		2						104.85
			49		1						111.84
CRANE	FALLS 5/27/97		50		1						108.87
	G(21131	Bluegill									
		-	5		1						
			6		1						
			7		3						143.32
			8 9		13 15						81.25 121.15
			10		14						87.44
			11		6						109.11
			12		4						85.37
			13		2						95.92

		(continue									
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
			15		3						105.77
			16		5						94.63
			17		2						104.53
			18		1						125.79
		Hatchery ra									
		•	28		1						98.38
		Largemout									
			7		2						
			8		1						
			9		2						
			10		1						
			11 16		2 2						96.07
			17		5						98.82
			18		8						98.05
			19		2						222,74
			20		3						91.68
			22		1						97.68
			23		1						169.60
			30		1				-		108.45
			32		2						89.23
			35		3						86.55
			36		9						90.18
			37		6						90.71
			38		10						91.29
			39		5						92.47
			40		13						95.27
			41		6						90.87
			42		4						92.53
			43		3						85.47
			44		1						76.45
		Pumpkinse	ea 8		1						
			9		2						
			10		5						
			11		1						
			12		3						
			13		9						
			14		28						
			15		27						
			16		10						
			17		3						
			19		4						
			20		1						
		Yellow perc	:h								
			9		1						
			16 20		2 1						00.00
DEADW	IOOD B	EC	20		ı						89.88
DEADW	5/29/97	7									
		Atlantic sali	33				1	1			
		.	38					1	1		
		Bull trout	24						4		
			34 35				4		1		
		Hatchery ra					1				
		naturery fa	25					1			83.28
			26					1			71.32
			27				1	-	2		94.77
											-

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				1		1		82.76
			29 31				1		2		80.82
			32				2	1	1 1		74.35
			33					•	1		81.44
			34				1		1		78.48
			36						1		
		Kokanee s									
			26				1				
			32 33				1	1			
			33 34				1 1				
			35				1				
		Longnose	dace								•
			9						1		0.00
			12						1		0.00
		Mountain	whitefish 12						3		
			13						2		
			20				2	1	_		126.26
			21				1	2	1		86.88
			22				1	6	1		106.38
			23				2	7			82.60
			24 25				3	5	1		85.34 81.79
			26				8 6	7 2			80.80
			27				5	3			80.49
			28					8	4		81.20
			29				2 2	3	2		84.75
			30				3	3	2		86.51
			31 32				3	3	2 .		83.68
			33				3 4	4 4	3 1		88.79 90.19
			34				5	1	2		84.87
			35				5	6	_		91.45
			36				3	2	1		84.14
			37				2	1			85.66
			38				1	1	1		92.92
			39 40				2	1			91.00 87.59
			42				2 1				67.59
		Rainbow X	cutthroat	hybrid							
			28						1		
			29						1		
			34 35						1 1		
			38						1		
		Redside sh							•		
			7						1		
			8						2		
			9						6		
			10 11						3 7		
			12						1		
			13						1		
		Speckled d									
			7						1		
			9						3		
			10 11						8		
			11						4		

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 Trap Nets	Total Caught	Relative Weight
			28					9	3		
			29					4	4		
			30					5	1		
			31 32					2 4	1 2		
			33					8	3		
			35					6	•		
			36					2			
			37					2			
		المادة المادة	39					1			
		Redside st	niner 7						1		
			8						4		
			10						2		
			11						4		
			. 12						1		
		Speckled of	10						4		
		Westslope		t					7		
			34	-					. 2		
		Wild rainbo		nd							
			25						1		
			28 32						1 1		
			35					2	1		
	10/9/97							_			
		Fall chinoo	k salmon)		•					
			23 27			2 1					
			28			1					
			29			1					
			30			3			-		
			31			1					
			32 33			1					
			33 34			1 1					
			36			1					
			39			2					
			40			1					
			42			1					
			45 46			1 1					
			48			1					
			51			1					
		Hatchery ra				_					400.00
			21 22			2 1					106.03 92.82
			24			1					85.91
			26			1					83.55
		Kokanee sa									
			17			4					
			18 19			9 12					
			20			8					
			21			2					
			23			2					
			25			1					
			26 27			1					
			28			2 6					
			_0			J					

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			29			9				
			30			12				
			31			5				
			40			2				
		Mountain	whitefish 17			1				83.10
			18			1				90.16
			19			1				95.64
			20			1				78.07
			21			1				
			22			2				88.06
			25 26			2				79.11
			27			1 4				88.95
			28			10				90.99
			29			8				93.45
			30			9				95.73
			31			3				101.76
			32			1		•		
			33 34			7 6				99.42
			35			7				99.89 99.86
			36			8				103.60
			37			7				101.61
			38			2				
		5	39			2				104.44
		Rainbow >	Coutthroa 40	t hybrid		1				
		Westslope		۱ -		'				
			21			1		•		
			22			2				
			23			1				
			25 26			4 2				
			29			3				
			32			2				
			35			1				
			37			2				
		Wild rainbo		nd		4				04.00
			16 18			1 1				81.23 88.62
			19			1				89.94
			20			1				75.57
			30			1				70.77
			32			1				74.92
חווברע			35			2				75.81
DUFFI	LANE P 5/22/97									
	Ç. , 7	Bluegill								
			4		1					
			5		8					
			6 7		9 8					
			8		6					
			9		2					
			10		1					88.23
		Brown bull								
			33		1					

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
		Hatchery	rainbow							
			21		1					70.21
			22		2					87.97
			23		2					80.37
			24		6					90.03
			25		2					97.86
			27		3					90.01
			28		1					81.08
			29		1					95.62
			30		3					95.37
		Largemou								
			7		1					
			11		1					215.00
			12		3					147.41
			13		2					103.55
			14		1					115.36
			15		2					111.66
			16		2					106.86
			17		1			_		91.79
			18		1					76.65
			19		2					87.62
			21		1					100.57
			22		1					97.68
			26		1					85.80
			27		5					85.90
			28		4					90.67
			29		3					92.28
			30		3					87.78
			34		1					85.58
EMMET								,		
	5/21/97									
		Black crap			4					97.23
		Bluegill	23		1					31.23
		biuegiii	3		1					
			4		5					
			5		10					
			6		2					
			7		1					
			19		1					128.23
			21		1					113.40
		Brown bull			•					
		Brown bun	27		1					
		Largemout			•					
			6		1					
			7		1					
			10		2					324.06
			11		1					127.35
			12		2					149.16
			13		1					112.11
			16		1					154.15
			19		1					111.37
			27		1					95.87
			28		1					85.55
			29		4					87.41
			30		11					81.21
			31		6					87.75
			32		2					87.15
			33		1					76.62
			34		1					85.39

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			35		2		O 11013				80.05
		Pumpkinse									
			4		1						
			5 6		2 8						
			7		3						
			11		1						
			12		2						
			13		1						
			14		1						
			15 16		1 1						
INDIAN	CREEK 4/22/97		10		•						
	4122191	Bluegill									
			3		1						
			4		1						
			10		1						93.92
			11 12		4 9						105.45 123.89
			13		1				-		115.65
			14		1						161.03
			15		2						129.23
			16	•	3						132.41
			17 18		5 11						132.63
			19		3						139.15 132.77
			21		3						146.70
		Largemouth	bass								
			7		2 2						172.84
			8 9		6				•		132.50 96.36
			10		5						262.64
			11		4						82.82
			12		1						96.48
			13		1						132.52
			14 15		2 2						87.74 110.53
			16		7						111.47
			17		27						101.48
			18		73						101.92
			19		116						108.30
			20 21		100 91						105.89 94.71
			22		40						108.99
			23		13						107.54
			24		16						110.61
			25		11						104.64
			27 28		2 1						95.87
			31		2						101.59 104.44
			44		1						114.30
			48		1						110.26
	6/9/97	Direct 10									
		Bluegill	3		1						
			4		2						
					1						
			5 6		3						
			8		1						

Appendix B.	(continue	ed)								
Water Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
		17		1						
		18		1						157.94
		19 20		1 1						166.31
	Largemout	h bass		•						100.51
		9		1						005.44
		10 11		1 1						295.44 101.88
		12		2						141.41
		13		3						457.95
		16		1						127.75
		18 19		2 9						191.89 126.53
		20		10						117.88
		21		9						120.36
		22		7						107.56
		23 24		7						107.93
		24 25		3 3						111.14 106.73
		26		1				-		115.88
		32		1						
		45		1						
LAKE LOWELL		48		1						
5/7/97										
	Brown bull									
		19 20		1 2						
	Channel ca			-						
	•	55		1						89.82
	Common c	arp 22		1				•		
		23		1						
		24		1						
		25		3						
		29 42		1 1						
		43		1						
		44		1						
		45		1						
		47 48		1 1						
		49		2						
		52		1						
		53		1						
	Largemouth	56		1						
	Largemouti	6		1						-
		7		3						
		8		1	,					
		9 15		1 1						94.70
		18		1						94.70 79.40
		19		1						. 5. 10
	Largescale	sucker								
		9 11		1 1						
		12		1						
		22		1						
		23		2						

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			24 25		1						
			26		5 1						
			28		1						
			35 40		1 1						
			42		2						
			43		3						
			44		8						
			45 46		16 7						
			47		13						
			48 49		4						
			49 50		1 2						
			51		3						
		Smallmout	52		1						
		Smailmout	8		4						
			9		4				-		40.04
			11 12		1 4						46.21 57.61
			13		2						51.88
			14 15		1 4						47.98 68.23
			16		1						50.34
			17		2						68.49
			24 25		1						58.71 87.36
			26		2 2						92.89
			28		1				•		93.31
			29 31		1 2						92.02 76.73
		Yellow perd			2						70.75
			6		2						
			7 8		3 17						
			9		2						
			10		2 1						76.65
			14 16		1 2						95.09 62.53
			17		1						58.52
			18		4						74.69
	5/10/97	,	19		2						90.77
	5, 5 ,	Largemouth	bass								10/00
			31 32	12 14							104.88 106.84
			33	15							111.17
			34	26							113.44
			35 36	24 18							116.03 112.60
			37	21							120.58
			38	19							117.25
			39 40	6 13							135.92 140.93
			41	26							121.62
			42	20							122.95
			43 44	15 12							124.04 119.10
			• •								

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
			45	11							124.22
			46	14							112.94
			47	6							127.47
			48	3							
			49	2							132.45
			50	2							144.18
			51	2							
			52 53	1							109.26
		Smallmout		1							152.01
		Sillallillout	30	2							104.73
			31	3							102.72
			32	3							111.73
			34	2							105.28
			35	3							108.93
			36	3							109.93
			37	2 3							
			38								108.10
			39	1							
			40	2					-		104.29
			41	2							119.92
			43	3							118.35
	5/14/97		47	1							118.08
	5/14/9/	Black crapp	nie								
		Didok orapi	19		2						124.96
		Bluegill									
		•	4		2						
			5		1						
			6		1						
			9		3						118.07
			10		2						
			12 18		1						444.00
		Bridgelip su			1						141.03
		Dridgenp 30	40		1						
		Brown bullh									
			18		2						
			19		5						
			20		4						
			21		2						
			23 26		2						
			26 27		1 2						
			28		2						
			29		2						
		Common ca			_						
			23		1						
			27		1						
			28		1						
			29		1						
			43		1						
			45		5						
			46		1						
			47		5						
			48 49		2 2						
			49 50		1						
			51		1						
			54		2						
					_						

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
			55		1						
			58 67		1 1						
		Largemou	ith bass		•						
			7 8		4 3						
			9		2						
			11		1						
			14 15		2 3						80.95
			16		2						110.60 152.66
			17		1						111.70
			18 21		1 1						119.10 108.29
			22		2						98.51
			23		1						110.05
			24 25		1 1						87.51 72.39
			37		1				_		114.27
			39		1						117.95
		Largescale	45 sucker		1						15.66
		24.90004.0	10		1						
			11 12		2						
			13		1 1						
			21		4						
			22 23		1 4						
			24		8						
			25		3				•		
			26 27		2 1						
			28		1						
			37		1						
			44 45		1 1						
			46		3						
			47		1						
			48 50		2 1						
			51		1						
		Smallmout	52 h bass		1						
		Smallmout	12		1						
			13		1						
			14 15		1 1						415.43
			17		2	•					99.45
			18 26		1						59.90
			26 28		1 1						76.03 92.31
			30		i						101.50
		Yellow perd	ch 5		1						
			6		1						581.61
			7		2						
			8 9		12 6						160.10
			3		U						

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 Trap Nets	Total Caught	Relative Weight
			10 11 16		2 1 3					674.67 526.89 119.94
			17 21		1 1					84.12
	74440		28		1					62.99
	7/10/97	Bluegill								
			14		1					122.38
		Channel c	atrisn 51		2					
			52		1					
			53 58		1 1					
		Chiselmou			1					
			19		1					
		Common	arp 43		1					
			46 46		2					
			47		1			-		
			49		1					
			50 51		1 1					
			56		1					
		Lahontan d	outthroat 31		1					
		Largemout			•					
		•	3		3					
			4 5		1 2					
			19		1					196.67
			22		2			•		117.75
		Largescale	24 Sucker		2					120.18
		Largescale	15		1					
			18		1					
			28 29		3 4					
			30		6					
			31		3					
			32 36		1 1					
			36 37		1					
			38		1					
			39 42		1 1					
			42 43		4					
			45		3					-
			46 47		4 4					
			47 48		4					
			49		8					
			50 53		8					
			53 54		1 1					
		Smallmout	h bass							
			1		1					
			3 4		2 7					
			5		2					

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
			7 8		1 12						
			9		10						123.59
			10		11						128.62 121.91
			11 12		21 19						114.50
			13		2						120.56
			14		1						122.51
			15 16		6 6						97.69 115.32
			17		5						106.77
			18		8						95.36
			19		3						114.47
			20 22		3 1						104.74 81.48
		Yellow pero			,						01.40
		·	4		4						
			5 6		22 1						
			16		1				-		100.39
	11/3/97										
		Black crapp	pie 14		1						131.09
		Bluegill	14		•						101.00
		J	5		6						
			6 7		6 1						
			9		6						83.61
			10		5						76.31
			11 12		10						76.12 73.78
			13		6 1				•		81.63
			14		2						90.45
		_	17		1						112.09
		Common c	arp 44		1						
			46		1						
			47		1						
			48 49		2 1						
			49 50		2						
		Lahontan c	utthroat								
		Largemouth	35 hase		1						
		Largemout	7		2						
			8		3						115.94
			9		10						65.40
			10 12		9 2						55.39 74.11
			13		1						
			15		1						
			17 18		1 1						101.35 109.22
			19		1						100.22
			21		1						101.17
			22		1						
			24 27		1 2						89.02
			29		1						90.10
			30		1						90.79

Appen		(continue								
Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
		Largescale								
			13		2					
			14 40		2 1					
			41		1					
			43		2					
			46		4					
			47		3					
			48		4					
			49 50		6 3					
			51		3					
			52		5					
			53		1					
		.	55		1					
		Smallmout	th bass 7		3					
			8		7					
			9		9					46.27
			10		8					85.84
			11		2			•		83.68
			14 15		8 7					88.34 83.71
			16		10					79.23
			17		6					79.09
			18		5				,	83.51
			19		1					78.79
			20		2					86.23
			21 22		2 1	•				87.85 90.62
			23		2					90.14
			25		1					74.83
		Yellow per	ch							
			7		1					
			8 9		4 7					
			10		2					
			16		1					70.22
			17		1					83.01
LUCKY	PEAK F 3/6/97	RES			•					
	5,0,57	Fall chinoo		ì						
			25				1			
			27 28				3			
		Largescale					1			
		Largossaro	35				1			
			36				3			
			37				2			
			38 39				2 1			
			42				2			
			49				1			
		Northem pi	ikeminno	w						
			29 30				1 2			
			30 31				∠ 3			
			32				9			
			33				8			
			35				5			
			36				3			

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
	3/12/97	Bridgelip su	ıcker							
		Dragenp 30	33				1			
			37				1			
		Bull trout	45				2			
		Fall chinook					1			
		Hatchery ra					1			91.76
		Largescale								
			33 35				1 1			
			36				2			
			37				1			
			38				1			
			39				3			
			41				1			
			42				1			
			43				1	-		
			44				1			
		Mountain wi					4			60.00
			24 28				1 1			68.00 77.33
			29				1			46.43
			31				1			63.41
			32				3			71.43
			36				1			71.87
		Northern pik	eminnov	V						
			19				1			
			31				3			
			32				3			
			33 34				9			
			3 4 35				6 3			
			36				1			
		Wild rainboy		d			•			
			29	-			2			97.64
	3/18/97									
		Bull trout								
			43 71				2 2			
		Mountain wh					2			
		Wicamani Wi	12				2			
			16				1			
			20				1			
			21				1			
			24				3			-
			27				1			
			28				1			
			29				1			
			30 33				2			
			33 34				1 1			
			35				1			
	3/20/97						•			
		Bull trout								
			39				2			
			41				2			
			42				2			

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
	4/15/97										
		Bull trout	0.4					•			
			24 25					2 2			
			28					4			
			32					2			
			33					2			
			45					2			
			48					2			
		Smallmouth									
			46					1			96.96
	4/17/97	Bull trout									
		Duli trout	41					1			
		Smallmouth						•			
			44					1			106.62
	5/6/97										
		Bull trout	40					4			
			18 32					1 1			
			33					1	•		
			38					1			
			42					1			
			43					1			
	5/7/97										
		Bull trout									
			29					1			
			31 33					1 1			
			43					1			
			45					1			
			47					1	•		
			48					1			
			64					1			
	5/8/97										
		Bull trout	29					1			
			34					1			
			35					1			
			37					1			
			38					1			
			39					1			
			41					1			
			42					1			
			46					1			
			47 53					1 1			
			65					1			
			66					2			-
	5/9/97										
		Bull trout									
			39					1			
	E/10/07		46					1			
	5/12/97	Bull trout									
			32					1			
			34					1			
			38					1			
			42					1			
			47					1			
			52					1			
						447					

1178.19

235.71

140.40

153.64

156.65

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			17		1					96.17
			18		1					112.79
			21 24		2	1				66.95 76.08
			25		2					53.87
			26		1					56.73
			27		1					80.29
			28		1	_		4		85.37
			29 30		2 1	5 8		1 1		83.99 83.65
			31		2	1		•		75.01
			32		2	1				80.86
			33		1					75.15
			34 35		2	1 1		1 1		85.67 88.31
			36		2	1		Į.		73.39
			37		1	1				75.57
		Kokanee s								
			10 35		1	4				
		Largescale				1				
		Largesoule	16		3					
			17		2					
			18		7	2 2				
			19 20		8 8	2				
			21		7					
			22		3	1				
			23		1					
			24 25		1 1	3 1		,		
			26		'	2				
			27			4				
			28			2				
			29			1				
			30 32			1 1				
			33			1				
			34			2		1		
			35		3			1		
			36 37		2 1	5 7		2		
			38		5	6		1		
			39		1	8				
			40		3	4				
			41		1	3				
			42 43		1 1	1 1		1		-
			44		•	3		1		
			45			3				
			46		1	2				
			47 48			1				
			48 49			2 2				
		Mountain w				_				
			30		1			_		87.42
			32		1			2 1		91.31 82.63
			33 34		1 2	1		'		82.63 79.81
			5 ,		_	•				

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			35		1					69.08
		Northern p		w						
			15		2					
			17		2					
			19		1					
			20		3	2				
			21		2	1				
			24			1				
			28		1					
			29 30			2				
			31		1 2	4				
			32		2	5				
			33		2	16		1		
			34		4	6		1		
			35		4	7		1		
			36		1	3		•		
			37		2	2				
			38		4	1				
			39		1	2				
			42			1				
			44			1				
			45			1				
			46		1					
			48			1				
			51			1				
			57		1					
		6	70			1				
		Redside sh	niner 14			2				
		Smallmout				2				
		Omamioo	10		1					
			17		1					88.54
			19		2					101.05
			21		2					98.66
			22		1					117.47
			23		3					89.70
			24		4					89.39
			25		4					110.19
			26		3					101.41
			27		1	1				87.01
			29 31		4	1				91.35
			36		1 1					94.18
			38		1	1				103.64 114.17
		Westslope				'				114.17
		vvcotolope	39			2				
			40			1				
		Wild rainbo		d						
			13					1		110.10
			14					1		94.45
			27			1		1		88.86
			31			1				95.82
			32			1		_		78.60
		Vollanı	38					1		73.21
		Yellow perc	:n 12		1					03 60
			15		'			1		93.60 102.38
			17					1		102.38
			18					1		113.69
								•		

Appen	dix B.	(continue	ed)								
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
			19			1			1		104.31
			21 22		1				1		95.26 128.83
			23						2		76.33
			25						1		87.97
	5/14/97										
		Bridgelip sı	⊔cker 18				1				
		Largescale									
		3	19				1				
			29				1				
			37				2				
			41				1				
			42 45				1				
		Northern pi		M.			1				
		North City pi	33	***			1				
			34				2				
			35				2				
			36				1				
		Yellow perd	:h				4		•		55.44
	5/19/97		16				1				55.44
	3/13/3/	Bull trout									
			37					1			
			41					1			
			44					1			
			46					1			
			48					1			
			50 54					1 1			
PADDO	CK RES 4/16/97		54					'			
	4, 10,57	Black crapp	ie								
		• • •	6		1						307.79
			25						1		145.46
			28						2		120.81
			29						2		120.24
		Bluegill	30						1		122.58
		Diuegiii	4		2						
			9		2 2						140.93
			10		1						169.06
			11		1						121.56
			12		5				2		133.45
			13		2				1		134.60
			14 15		3 2				1		127.01
			16		4				4		145.88 143.52
			17		7				2		151.45
			18		1				_		135.78
			19		3				3		150.23
			20		2						131.74
			26		1				1		120.46
		Brown bullho			٠						
			21		1						
			30 32		2				1		
			32 35		2				1		
		Hatchery rai							'		
		, , iai	16		1						117.53
			17		1						108.42

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			18		1	2				123.64
			20			2				122.37
			23			1				109.94
			24		•	1				130.60
			25 26		1	1				110.65 110.18
			27			1				112.11
		Largemout				•				
			6		1					309.61
			7		1					270.60
			9 10		2 1					112.95 94.24
			19		1					118.66
			26					1		162.25
			27		1					85.68
			28		2	1				110.55
			29 30		13	6		0		112.73
			30 31		24 22	7 6		9 5		114.12 111.41
			32		12	6		. 5 . 5		114.59
			33		7	6		4		115.16
			34		5	1				109.21
	40,000,0	\ _	38		1					117.40
	10/26/9	Bluegill								
		21409	3		17					
			4		16					
			5		17			2		
			6 7		10 6					
			8		10					122.89
			9		18					102.05
			10		19					124.03
			11		16					125.53
			12 13		16 3					127.48 105.48
			14		10					123.03
			15		7			1		119.31
			16		11					106.58
			17		15			1		90.67
			18 19		5 5					95.09 144.94
			20		3			1		155.22
			21		1			•		146.63
		Brown bullh								
			19 20			4		1		
			21			1 2				-
			22			2		1		
			23			4				
			24			4		1		
			25			8		4		
			26 27			11 9		4		
			28			14		4		
			29			11		5		
			30			6		4		
			31			7		2		
			32 33			1 3		6		
			33							
						122				

Water	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
			34			4		3		
		Hatchery								
			35			6				111.29
			36		1	2				121.66
			37			1				104.35
			38 40			1				126.09
		Largemou				1				120.73
		Largemou	6		1					
			7		1					
			8		2					
			9		1					1093.34
			10		3					126.16
			12		2					127.05
			13		3					126.07
			14		9					111.42
			15		7					115.66
			16		6					114.13
			17		9					117.78
			18 19		4 4					120.41 116.54
			20		2					122.75
			21		3					213.50
			29		2					125.71
			30		3					118.99
			31		3	1				107.31
			32		10	1		3		115.78
			33		6	1				113.00
			34		1					111.37
			35		3					114.77
			37		1			•		106.93
		Pumpkins								
			10 11		1 1					
			12		1					
			14		1					
			17		2					
QUINN	POND 4/15/97									
		Black crap	pie 15							87.30
		Bluegill	15		1					67.30
		Diacalli	7		1					
			8		5					118.69
			9		3					97.10
			10		8					103.54
			11		19					99.88
			12		19					100.13
			13		10	÷				106.48
			14		15					101.42
			15		5					101.44
		0	16		2					98.86
		Common			4					
			11 44		1 1					
			45		2					
			46		2					
			47		1					
			49		1					
		Hatchery ra								
		•								

Wa	iter	Date	Species	CM Group	Number Caught Angling	Number Caught Electro fishing	Number Caught in Gill Nets	Number Caught Hourly Sinking Gill Nets	Caught in Sinking Gill Nets	Number Caught in Trap Nets	Total Caught	Relative Weight
				21		3						07.20
				22 23		5 9						97.38 103.55
				24		6						105.74
				25		2						
				27		1						
			Largemout			4						04.44
				14 34		1 2						94.41 83.70
				35		1						99.95
				37		1						146.40
				39		1						132.62
				41		1						115.17
				48		1						132.74
				49		1						149.14
			Largescale	sucker 58		1						
			Yellow per									
				11		1						142.21
				13		2				•		74.18
				14		2						96.71
				15 144		2 1						80.25 0.04
SA	WYE	ER\$ P 5/21/97		144		,						0.04
			Bluegill	-		•						
				5 6		2 2						
				7		7						
				8		15						
				9		11						
				10		2						
				11		1						67.50
			Daniel built	13		1						77.75
			Brown bull	nead 2		1						
				22		1						
			Common o	arp								
				43		1						
				45 46		1						
				46 48		1 2						
				5 6		1						
			Largemout			•						
			J	52		1						173.03
				53		1						168.01
				55		1						168.83
			Pumpkinse	eed 7		2						-
				8		5						
				9		2						
				12		1						
			Yellow per	ch _		=						
				7 8		1 2						
				8 10		3						
				11		3						
				12		2						46.80
				13		1						29.11

Appendix C. Electrofishing, gill net, and trap net catch-per-unit-effort (CPUE) by number and weight for lowland lake sampling 1997.

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)
BLACKSTONE RE	_									
DIACKS TONE RE	5 11/17/	vo.7								
	1 1/1 //	Bridgelip sucker	•		_	_				
		Brown bullhead	0	8 1	0	8	0.00	2.34	0.00	2.34
		Lahontan cutthroat	2 0	1	1	3	0.47	0.56	0.05	1.08
		Largemouth bass	13	•	0 2	1	0.00	0.23	0.00	0.23
		Redside shiner	0	4	0	18	2.17	0.54	0.15	2.86
		Wild rainbow/redband	0	6	0	1 6	0.00	0.03	0.00	0.03
		Total	15	19			0.00	3.74	0.14	3.88
C J STRIKE RES		rotar	15	19	2	36	2.64	7.44	0.34	10.42
O O O IT WILL IN E.O.	5/28/9	7								
	3/20/3	Black crappie	8	4	•	4=				
		Bluegill	65	1	8 1	17	0.89	0.20	1.14	2.23
		Bridgelip sucker	15	0 9	•	66	5.44	0.00	0.11	5.55
		Brown builhead	15	0	0	24	2.98	2.13	0.00	5.10
		Channel catfish	1	14	0	15	0.29 5.23	0.09	0.00	0.38
		Chiselmouth	1	4	1	6	5.23 0.26	25.93 1.15	0.00 0.18	31.16
		Common carp	4	0	Ó	4	15.00	0.72	0.18	1.59 15.72
		Hatchery rainbow	1	2	0	3	0.46	0.72	0.00	1.02
		Largemouth bass	10	0	0	10	8.67	0.00	0.00	8.67
		Largescale sucker	48	45	0	93	19.53	27.10	0.00	46.63
		Mountain whitefish	1	0	0	1	0.00	0.00	0.00	0.00
		Northern pikeminnow	2	9	ő	11	0.06	6.79	0.00	6.85
		Peamouth	ō	2	ŏ	2	0.00	0.79	0.00	0.24
		Pumpkinseed	1	ō	ŏ	1	0.02	0.00	0.00	0.24
		Smallmouth bass	162	4	Ö	166	24.05	1.05	0.05	25.15
		Warmouth sunfish	1	Ó	Ö	1	0.07	0.00	0.00	0.07
		White crappie	1	29	10	41	0.23	5.71	2.25	8.19
		Yellow perch	1	8	1	9	0.08	0.95	0.05	1.08
		Total	324	127	20	471	83.26	72.62	3.78	159.65
LUCKY PEAK RES	;					• • • • • • • • • • • • • • • • • • • •	55.25	, 2.02	0.70	700.00
	5/13/9	7								
		Bridgelip sucker	20	0	2	22	1.65	0.00	0.72	2.37
		Bull trout	1	1	ō	1	0.18	0.47	0.00	0.64
		Chiselmouth	33	9	0	41	2.16	1.43	0.01	3.61
		Fall chinook salmon	1	2	Ō	3	0.14	0.67	0.00	0.80
		Hatchery rainbow	35	10	1	46	4.90	2.80	0.33	8.03

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)
LUCKY PEAK RI	ES									
	5/13/9	7								
		Kokanee salmon	1	1	0	1	0.00	0.20	0.00	0.20
		Largescale sucker	102	89	2	192	23.58	46.25	1.00	0.20 70.83
		Mountain whitefish	4	1	1	6	1.36	0.31	0.24	1.91
		Northern pikeminnow	49	54	1	103	17.04	23.64	0.24	
		Redside shiner	0	1	Ó	1	0.00	0.03	0.28	40.96 0.03
		Smallmouth bass	21	2	Ö	23	4.43	0.76	0.00	5.18
		Westslope cutthroat	0	2	ō	2	0.00	0.78	0.00	0.78
		Wild rainbow/redband	0	2	1	3	0.00	0.43	0.00	0.78
		Yellow perch	2	1	2	4	0.19	0.05	0.24	0.48
		Total	269	172	9	449	55.63	77.81	2.99	136.43
PADDOCK RES					•	7.10	33.03	77.07	2.99	130.43
	4/16/9	97								
		Black crappie	1	0	2	3	0.01	0.00	0.74	0.75
		Bluegill	29	Ö	4	33	3.48	0.00	0.60	4.08
		Brown bullhead	3	Ö	1	4	1.70	0.00	0.37	
		Hatchery rainbow	4	4	ò	8	0.40	0.61	0.00	2.06 1.01
		Largemouth bass	93	17	6	116	43.63	8.35	3.07	55.05
	10/26/	97			•	1.0	40.00	0.55	3.07	33.03
		Bluegill	217	0	1	218	9.24	0.00	0.12	9.36
		Brown bullhead	0	44	9	52	0.00	20.32	4.52	24.84
		Hatchery rainbow	1	6	Ö	7	0.73	3.56	0.00	4.29
		Largemouth bass	92	2	1	95	22.68	0.83	0.43	23.94
		Pumpkinseed	6	ō	Ó	6	0.47	0.00	0.00	0.47
		Total	447	71	22	540	82.33	33.67	9.85	125.85

1997 ANNUAL PERFORMANCE REPORT

State of: <u>Idaho</u> Program: <u>Fisheries Management F-71-R-22</u>

Project I: <u>Surveys and Inventories</u> Subproject I-D: <u>Southwest Region</u>

Job No.: c Title: Rivers and Streams Investigations

Contract Period: July 1, 1997 to June 30, 1998

ABSTRACT

The South Fork Boise River from the Village Access downstream to one mile below the Cow Creek Bridge was electrofished. Rainbow trout *Oncorhynchus mykiss*, bull trout *Salvelinus confluentus*, whitefish *Prosopium wiliiamsoni*, largescale sucker *Catostomus macrochelius*, bridgelip sucker *C. columbianus*, kokanee *O. nerka kenneriyi*, northern pikeminnow *Ptychocheilus oregonensis*, dace spp. *Rhinicthys spp.*, and sculpin *Cottus spp.* were observed.

A total of 769 rainbow and six bull trout were netted. Mean length, weight, and condition factor for rainbow trout was 335 mm, 461 g, and 1.03, respectively. Mean length of bull trout was 401 mm.

The growth equation for rainbow trout was calculated to be weight =.000027 * length^{2.83}.

Rainbow population size was estimated to be 5,345 rainbow larger than 13 cm and 4,043 rainbow larger than 24 cm.

Three established snorkel sites were monitored on the upper North Fork Boise River. A slight increase in numbers of bull trout was documented.

Twelve snorkel sites on the South Fork Payette River were snorkeled. Fish species observed were identified to species, counted, and estimated for size.

The second year of monitoring was done on the West Fork Long Tom Creek Cooperative grazing project. Generally the stream is positively responding to reduction in stream-side grazing by moving fines downstream and increasing the amount of gravels in the substrate.

Authors:

Dale B. Allen Regional Fishery Manager

Steve P. Yundt Regional Fishery Manager

SOUTH FORK BOISE RIVER

Methods

Electrofishing

The section of river electrofished extended from the Village access area (T1S, R8E, S15) downstream to approximately one mile below Cow Creek bridge, a distance of 9.6 km.

Electrofishing equipment included a raft, two booms (anodes) each supporting a 76 cm ring from which eight dropper electrodes were suspended, 11 m of .95 cm diameter stainless steel cable (cathode), and a Coffelt VVP-15. VVP settings used to collect fish were 400 volt and approximately 3 amp, direct current.

Trout were collected on September 22 -24, and October 6-7, 1997. During mark runs, trout collected were marked by notching the caudal fin. During recapture runs, trout were marked by notching the anal fin. All trout collected were measured to the nearest mm. Samples of collected trout >10 cm were weighed to the nearest g, and scales collected. During recapture runs, trout were examined for caudal fin marks placed on the mark runs.

All trout collected were examined for the presence of scars indicating the fish had been angler caught and released. Trout with hook scars were recorded.

Trout collected were examined for deformities in the head area. Trout with abnormalities in the head area, particularly those with dolphin shaped heads, were considered to be infected with whirling disease. Trout infected with whirling disease were recorded.

River flow during electrofishing was approximately 8.5 m ³ sec⁻¹.

Population estimates and standard errors were calculated using the modified Petersen population and variance estimators (Seber, 1973, p. 60). Population estimates were calculated by pooling the number of rainbow collected for all cm size groups represented by the estimate. Population estimates were calculated for number of rainbow greater than 130 mm, and for the number of rainbow greater than 239 mm. These estimates correspond to estimates made in 1994 (Allen et al., In Press).

Results and Discussion

Species and Number Collected

Bull trout Salvelinus confluentus, rainbow trout Oncorhynchus mykiss, and kokanee O. nerka were collected during electrofishing. In addition, whitefish Prosopium williamsoni, bridgelip sucker Catostomus columbianus, largescale sucker C. macrochelius, northern pikeminnow Ptychocheilus oregonensis, dace spp. Rhinicthys spp., and sculpin spp. Cottus spp. were observed

but not collected. No redside shiners *Richardsonius balteatus* were observed in 1997, even though they were observed during 1994 surveys (Allen, et al., in press).

Mean number of rainbow collected per day of electrofishing in 1997 was 149 per day of electrofishing. During 1994 electrofishing, catch per day was 291 at flows of 8.5 m³ sec⁻¹ and 199 when flows were 17 m³ sec⁻¹. Greater daily catch was related to lower flow (Allen, et al., in press). Lower daily catch in 1997 suggests a smaller trout population.

Whirling disease was judged by observation to have deformed the heads of 14.6% (112 of 769) of the rainbows examined.

Hook scars were observed on 34.6 % (265 of 769) of the rainbows examined.

Length, Weight and Condition Factor

Mean length of rainbow collected was 335 mm (SE=4). Length frequency of rainbow collected is shown in Figure 1. Mean weight of rainbow collected was 461 g (SE=13). Mean condition factor for 422 rainbow that were weighed and measured was 1.03 (SE=.006). Mean length, weight, and condition factor for rainbow collected in 1994 was 290 mm (SE=3), 325 g (SE=13), and 0.97 (SE=.006) (Allen, et al., In Press). Mean length, weight, and condition factor of rainbow collected in 1997 were significantly less than those collected in 1994 (a=.05). Length frequency of 1994 rainbow catch is shown in Figure 1 for comparison.

Six bull trout and five kokanee were collected in 1997. Mean length of bull trout and kokanee was 401 mm and 283 mm, respectively.

Population and Biomass Estimates

Numbers of rainbow trout in the marked sample, the recapture sample, and the number of recaptures by cm size group are given in Table 1. The total number of rainbow in the marked sample, recapture sample, and the number of recaptures were 449, 296, and 22, respectively. A total of 22 rainbow recaptures, ranging from 19 to 47, cm were collected.

The pooled population estimates for rainbow trout greater than 13 cm and greater than 24 cm were 5,345 (SE=975) and 4,043 (SE=761), respectively. Pooled population estimates 13 cm and greater and 24 cm and greater rainbow in 1994 were 8,093 (SE=1132) and 4,898 (SE=811). Population estimates for 1994 and 1997 are not significantly different (a=.05).

Although population estimates are not statistically different, two factors suggest that the rainbow population in 1997 was considerably smaller than in 1994.

First, the number of rainbow collected per day of electrofishing in 1997 (149) was 51% of the number collected per day at 8.5 mm ³sec⁻¹ flow (291) in 1994. Electrofishing equipment and methods were similar in 1994 and 1997. Daily electrofishing catch would be expected to be equal in 1994 and 1997 if rainbow populations were similar.

Second, comparison of Figure 1 in general shows larger catch of rainbow between 14 and 33 cm, approximately equal catch of 34 to 39 cm, and smaller catch of greater than 400 mm

rainbow in 1994 than 1997. Overall, more rainbows were collected in 1994 than 1997, with the difference largely being the number of small rainbow collected. The observation of fewer small and more large rainbows in 1997 relative to 1994 is supported by the significantly larger mean length and weight of rainbow collected in 1997.

The mean weight of rainbow greater than 13 cm in the sample was 461 g. Using mean river width of 37 m (SE=2.4) (Allen et al., in press), biomass of rainbow in the 9.6 km section was estimated to be 2,464 kg or 6.9k g/ha. Rainbow biomass in 1994 was estimated to be 7.4 k g/ha.

Relative to 1994, the 1997 rainbow population is composed of a greater number of large rainbow, but fewer rainbow overall. Having a larger percentage of the total rainbow biomass in large fish appears beneficial to anglers. Since total rainbow biomass in 1997 is little changed from 1994, it could be the change in total number of trout is merely a redistribution of trout biomass among different size classes of trout.

The reduction in the number of smaller rainbow combined with whirling disease shaped heads on 14.6% of the rainbow could be cause for concern. If whirling disease is currently affecting survival of small rainbow, the population of large rainbow may be affected in the future.

Recommendations

- 1. Estimate rainbow population size approximately every three to four years. Monitor frequency of whirling disease affected rainbow trout in the population. Monitor frequency of hook scars on rainbow trout in the population.
- 2. Conduct creel survey to estimate angler use and catch from Anderson Ranch Dam downstream to Danskin Bridge.

NORTH FORK BOISE RIVER

Methods

Three established transects in the upper North Fork Boise River were monitored by snorkeling. Two divers moved upstream counting and identifying fish species and their sizes.

Results

There was a slight upward trend in the number of bull trout identified. Transect data including length frequencies of fish encountered, substrate composition, and transect lengths and width were entered into the regional database and are presented in Appendix A.

SOUTH FORK PAYETTE RIVER

Methods

Twelve transects were snorkeled on the South Fork Payette River during August 1997. The transects were floated by two divers in a downstream direction. River size and flow are too great to snorkel upstream. Fish were identified to species, enumerated, sizes estimated and recorded. Length of the float section was measured.

Results

Data collected was entered into the regional database. Summary tables of transect data are provided in Appendix B.

LONG TOM CREEK

Introduction

A fencing and habitat improvement cooperative project was developed between the Department, 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 objective of the project was improve riparian area conditions to benefit fish, while maintaining an economically viable cattle ranching operation on private land.

Methods

Department reservists and volunteers, Boise Valley Fly Fishermen constructed 3.5 miles of barb 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.

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 and November of 1997.

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 11, 1997 in all 22 transects.

Results

The control transects (outside exclosure) changed by becoming wider, vegetation increased, average percentage of sand decreased, and average percent of gravel increased. In the exclosure the channel widened, vegetation slightly decreased, the amount of sand increased, and the amount of gravel increased (Table 2). The exclosure lies downstream of the control site and we may be observing a movement of fines downstream.

Recommendations

- 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 and 1998. If spawning was unsuccessful, transplant additional redbands from Syrup Creek.

LITERATURE CITED

Allen, D.B., S.P. Yundt and B.J. Flatter. (in press). Federal Aid in Fish Restoration. Regional Fisheries Management Investigations. Job Performance Report. Project F-71-R-19. Idaho Department of Fish and Game, Boise.

FIGURES

South Fork Boise River Rainbow Trout

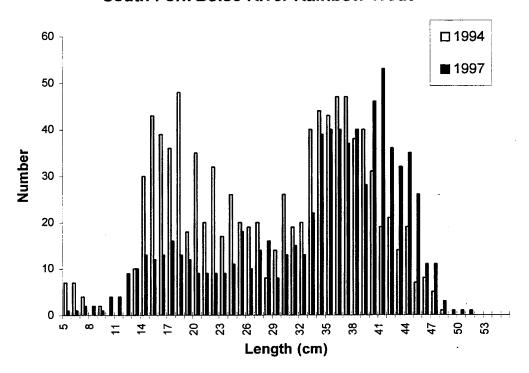


Figure 1. Comparison of 1994 and 1997 frequencies of rainbow trout collected in the South Fork Boise River by electrofishing.

TABLES

Table 1. Number of rainbow collected during mark and recapture samples and number of recaptures by cm size group, South Fork Boise River, September 1997.

Length (cm)	Mark sample	Recapture sample	Recaps	Length (cm)	Mark sample	Recapture sample	Recaps
13	6	4		32	8	5	
14	8	5		33	16	6	
15	10	2		34	24	15	2
16	6	7		35	25	15	1
17	11	5		36	22	18	2
18	8	5		37	24	13	2
19	8	4	1	38	31	9	
20	6	3	1	39	9	19	1
21	7	2		40	29	17	3
22	4	5		41	31	22	2
23	4	5		42	20	16	3
24	6	5		43	20	12	1
25	15	3	1	44	13	. 22	1
26	5	5		45	11	15	2
27	11	3		46	6	5	
28	12	4		47	6	5	1
29	5	3		48	1	2	
30	8	5		49		1	
31	11	4		>50	2		

Table 2. Summary of habitat characteristics on West Fork Long Tom Creek November of 1996 and 1997.

Transect	Date	Average of wetted width (m)	Average of channel width (m)	Depth (m)	Average of percent vegetation	Average of percent sand	Average of percent gravel
С	11/20/96	2.5	1.5	0.1	13.6	77.3	9.1
С	11/11/97	3.0	1.9	0.1	31.8	45.0	27.3
E	11/20/96	4.2	1.9	0.2	59.1	40.9	0.0
E	11/11/97	5.1	1.8	0.2	45.5	45.5	9.1

APPENDICES

Appendix A. Summary tables from NF Boise River snorkel surveys in August 1997.

STREAM:

NF Boise River

SAMPLE DATE:

8/27/97

SECTION: 01

EPA REACH: 17050111028

QUAD MAP:

RTS: R, T, S

LAT/LONG: 43 55.4; 115 20.11

Riffle:

Run:

Pocket:

SECTION DESCRIPTION: Horsefly Creek.

Transect Information:

Water Chemistry

Habitat Type: Pool: 0.0 %

Section Length (m):

88.5

Elevation (m):

11.1 %

0.00%

77.8 %

Gradient (%):

11.1 %

Population Est: Shade (%):

0.0 S.E(popest): 0.0

Substrate

Mean Width (m):

11.1

0.4

Mean Depth (m):

Organic:

0 %

Cover (%):

0

Sand:

%

Gravel:

17 %

Rubble:

37 %

Boulder: Bedrock: 31 % 11 %

Air Temp(C):

Time:

pH:

Alkalinity(mg/l CaCO3): Hardness(uS/cm3):

H2O Temp(C):

Conductivity(mg/l CaCO3):

Species

BLT

Bull trout

MWF NSF

Mountain whitefish Northern pikeminnow

WCT WRB

Westslope cutthroat Wild rainbow/redband

Length Frequency

Species CM Method Number

	Group	Measured
BLT	25 SN	1
BLT	27 SN	1
BLT	30 SN	1
BLT	33 SN	1
MWF	33 SN	8
NSF	35 SN	2
WCT	17 SN	1
WCT	20 SN	1
WCT	27 SN	1
WRB	7 SN	4
WRB	10 SN	8
WRB	12 SN	8
WRB	15 SN	3
WRB	17 SN	3
WRB	20 SN	5
WRB	22 SN	2
WRB	25 SN	6
WRB	27 SN	1
WRB	30 SN	2
WRB	33 SN	2
WRB	35 SN	1

STREAM:

NF Boise River

SAMPLE DATE:

8/27/97

SECTION: 02

EPA REACH: 17050111028

QUAD MAP:

RTS: R, T, S

LAT/LONG: 00;00

SECTION DESCRIPTION: Blue Jay Creek; 100m above Blue Jay Creek in deeper run.

Transect Inform	mation:		Habit	tat Type:
			Pool:	0.0 %
Section Length (m):	61			
			Riffle:	11.1 %
Elevation (m):			_	
0 (0/)	0.000/		Run:	77.8 %
Gradient (%):	0.00%		Pocket:	11.1 %
Population Est:	0.0 S.E(popest):	0	Pocket.	11.1 70
Shade (%):	0.0 0.2(popest).	J		
Silade (70).	0.0		S	Substrate
Mean Width (m):	15.5		_	
Mean Depth (m):	0.4			
			Organic:	0 %
Cover (%):	0		_	
			Sand:	4 %
Water Chem	nistry		Gravel:	18 %
			Rubble:	36 %
Time:			Boulder:	33 %
H2O Temp(C):			Bedrock:	9 %
Air Temp(C):				
pH:				
Alkalinity(mg/l CaCO3)):			
Hardness(uS/cm3):			Species	
Conductivity(mg/I CaC	O3):		WRB	Wild rainbow/redband

		•	
Length	Frequen	су	
Species	CM	Method	Number
	Group		Measured
WRB	7	SN	1
			_
WRB	10	SN	3
WRB	12	SN	2
WRB	15	SN	3
WRB	17	SN	1
WRB	20	SN	5
WRB	25	SN	3
WRB	30	SN	1

STREAM:

NF Boise River

SAMPLE DATE:

8/27/97

SECTION: 03

EPA REACH: 17050111028

QUAD MAP:

RTS: R, T, S

LAT/LONG: 00;00

SECTION DESCRIPTION: Unnamed drainage above Blue Jay Creek. ~300m above mouth of Blue Jay Creek. Site was in

pool just below mouth of trib.

T	ransect I	nformatio	n:		Habita Pool:	t Type: 22.2	%
Section L	.ength (n	י):	31				
Elevation	(m):				Riffle:		%
Gradient	(%):		0.00%		Run:	44.4	%
Populatio		n	0 S.E(popest):	0	Pocket:	0.0	%
Shade (%		J.	0.0	•	C.	hatrata	
Mean Wi	dth (m):		15.0		51	ubstrate	
			0.5				
Mean De	. , ,				Organic:	3	%
Cover (%	o):		Ο,		Sand:	10	%
	\A/=+== C	·			Sano: Gravel:	18 16	
	vvater C	hemistry			Rubble:	53	
Time:			05:00 PM		Boulder:	0	
H2O Tem	nn(C):		03.00 FW		Bedrock:	Ô	
Air Temp			26.6		Douroux.	·	,,
pH:	(0).		20.0				
Alkalinity	(ma/l Ca	CO3)·					
Hardness					Species		
	•	,,. CaCO3):			BLT	Bull trou	ıt
Conducti	* it y (1 . 1 . 9 / 1	OUOO).			MWF	-	n whitefish
Length	Frequen	icv					
3		-,			NSF	Norther	n pikeminnow
Species	CM	Method	Number				
					WRB	Wild rain	nbow/redband
	Group		Measured				
BLT	30	SN	1				
BLT	45	SN	1				
MWF	35	SN	4				
MWF	40	SN	4				
NSF	30	SN	3				
WRB	5	SN	1				
WRB	10	SN	4				
WRB	15	SN	1 .				
WRB	20	SN	3				
WRB	25	SN	1				
WRB	30	SN	2				

Appendix B. Summary tables from SF Payette River snorkel surveys in August 1997.

STREAM: SF Payette SAMPLE DATE:

8/19/97

SECTION:

MWF

MWF MWF

MWF

WRB

WRB

WRB

WRB

WRB

WRB

WRB

WRB

WRB

25 SN

28 SN

33 SN

35 SN

7 SN

10 SN

12 SN

15 SN

17 SN

20 SN

25 SN

30 SN 33 SN

MP1.3

EPA REACH: 17050120004

QUAD MAP:

Garden Valley

RTS: R7E, T8N, S28

LAT/LONG: 44 5.16 ; 115 38.36

SECTION DESCRIPTION: 1.3 miles downstream of junction with Hwy 21.

Transect Inform	nation:		Habit Pool:	at Type: %
Section Length (m):	82			
Elevation (m):	•		Riffle:	%
, ,			Run:	%
Gradient (%):	0.00%		Pocket:	%
Population Est: Shade (%):	0.0 SE(popest): 0.0	0		
Mean Width (m):			5	substrate
Mean Depth (m):			Organic:	%
Cover (%):			Sand:	%
Water Chemi	stry		Gravel: Rubble:	% %
Time: H2O Temp(C): Air Temp(C):			Boulder: Bedrock:	% %
pH: Alkalinity(mg/l CaCO3)	:			
Hardness(uS/cm3): Conductivity(mg/l CaCo			Species HRB MWF	Hatchery rainbow Mountain whitefish
Length Frequency			WRB	Wild rainbow/redband
Species CM Met Group	hod Number Measured		VVKB	wiid iaiiibow/iedbaiid
HRB 25 SN MWF 7 SN MWF 15 SN MWF 20 SN	2 1 1 2			

2

1

4

3

3

10 10

11

5 7

4

1

STREAM:

SF Payette

SAMPLE DATE:

8/19/97

SECTION:

MP2.0

EPA REACH: 17050120004

15 SN

7 SN

7 SN

HRB

MWF WRB

QUAD MAP:

Banks

RTS: R, T, S

LAT/LONG: 44 4.75 ; 115 36.42

SECTION DESCRIPTION: Junction of Hwy 21. Site begins upstream of parking area.

Т	ransect I	nformation	ı:		Habit Pool:	at Type: %
Section I	_ength (n	n):	82			
Elevation	n (m):				Riffle:	%
Gradient	(%):		0.00%		Run:	%
Populatio	• •	0.0) SE(popest):	0	Pocket:	%
Shade (%		4.4	0.0	•	c	ubstrate
Mean Wi Mean De					3	ubstrate
Cover (%					Organic:	%
Cover (x	0).				Sand:	%
	Water C	hemistry			Gravel:	%
					Rubble:	%
Time:					Boulder:	% %
H2O Ten	,				Bedrock:	70
Air Temp pH:)(C):					
Alkalinity	(ma/l Ca	CO3)·				
Hardness					Species	
		CaCO3):			HRB	Hatchery rainbow
Longth	Eroguon				MWF	Mountain whitefish
Lengui	Frequen	icy			WRB	Wild rainbow/redband
Species	CM Group	Method	Number Measured			
		SN	3			
		SN	9			
		SN	5			
		SN SN	15 7			
		SN	11			
		SN	2			
		SN	1			
	30	SN	5			
		SN	5			
	35	SN	3			

STREAM:

SF Payette

SAMPLE DATE:

8/19/97

SECTION: MP76.3

WRB

WRB

17 SN

20 SN

1

EPA REACH: 17050120008

QUAD MAP: Lowman

LAT/LONG: 44 4.4; 115 33.09

RTS: R8E, T9N, S31 SECTION DESCRIPTION: Begins above two-track road across from gas station.

Т	ransect l	nformation	1:			at Type:
Coation I	anath (٠.	7.4		Pool:	%
Section	_ength (m	1).	7.4		Riffle:	%
Elevation	n (m):		382		_	
Gradient	(%).		0.00%		Run:	%
Ciadiciii	(/0).		0.0070		Pocket:	· %
Populatio		0.0	SE(popest):	0		
Shade (%	(o):		0.0		S	ubstrate
Mean Wi						
Mean De	pth (m):				Organic:	%
Cover (%	5) :				Olganic.	70
					Sand:	%
	Water C	hemistry			Gravel:	%
					Rubble:	%
Time:					Boulder:	%
H2O Ten	np(C):				Bedrock:	%
Air Temp	(C):					
pH:						
Alkalinity	(mg/l Cat	CO3):				
Hardness					Species	
Conducti					MWF	Mountain whitefish
	* . +				WCT	Westslope cutthroat
Length	Frequen	су			WRB	Wild rainbow/redband
Species	СМ	Method	Number		VIND	Tambouneabana
	Group		Measured			
MWF		SN	2			
WCT	-	SN	1			
WRB	7		1			
WRB			2			
WRB	12	SN	1			
WRB	15	SN	6			

STREAM:

SF Payette

SAMPLE DATE:

8/19/97

SECTION: MP77.5

7 SN

15 SN

20 SN

1

WRB

WRB **WRB**

EPA REACH: 17050120009

QUAD MAP: Lowman

RTS: R8N, T9N, S32

LAT/LONG: 44 4.31 ; 115 31.97

SECTION DESCRIPTION: Begin at turnout at milepost 77.5.

Ti	ransect I	nformation	:			at Type:
Section L	ength (n	ո)։	73		Pool:	
Elevation	(m):		1271		Riffle:	%
Gradient	(%):	(0.00%		Run:	%
Populatio Shade (%		0.0	SE(popest): 0.0	0	Pocket:	%
Mean Wid			0.0		S	Substrate
Mean De	. ,					
Cover (%):				Organic:	%
,	•				Sand:	%
	Water C	hemistry			Gravel: Rubble:	% %
Time:					Boulder:	%
H2O Tem	ıp(C):				Bedrock:	%
Air Temp	(C):					
pH: Alkalinity(ma/l Cal	CO3)-				
Hardness					Species	
Conductiv	rity(mg/l	CaCO3):			HRB	Hatchery rainbow
Longth	Frequen				MWF	Mountain whitefish
Length	riequeii	Су			WRB	Wild rainbow/redband
Species	СМ	Method	Number			
	Group		Measured			
HRB		SN	1			
HRB		SN	1			
MWF	17	SN	3			

STREAM: SF Payette SAMPLE DATE:

8/20/97

SECTION: MP79.7

EPA REACH: 17050120009 RTS: R8E, T9N, S34

QUAD MAP: LAT/LONG: 44 4.44; 115 29.99

Jackson Peak

SECTION DESCRIPTION: Begins at camp site upstream of Meadow Creek.

т	ransect I	nformation	:		Habit Pool:	tat Type:
Section I	_ength (m	1):	90		P001.	76
	• •	,			Riffle:	%
Elevation	1 (m):				Run:	%
Gradient	(%):	(0.00%			•
Population		0.0	SE(popest): 0.0	0	Pocket:	%
	table down				S	Substrate
Mean Wi Mean De	٠,,					
					Organic:	%
Cover (%	6) :				Sand:	%
	Water C	hemistry			Gravel:	%
		•			Rubble:	%
Time:					Boulder:	%
H2O Ten	np(C):				Bedrock:	%
Air Temp pH:	(C):					
Alkalinity	(mg/l Ca(CO3):				
Hardness	s(uS/cm3): 			Species	
Conducti	vity(mg/l	CaCO3):			HRB	Hatchery rainbow
	_				MWF	Mountain whitefish
Length	Frequen	су			WRB	Wild rainbow/redband
Species	СМ	Method	Number		77.12	
	Group		Measured			
HRB	30	SN	1			
MWF	7	SN	39			
MWF	17	SN	3			

2

2

3

6

1

1 3

2

1

1

20 SN

25 SN

33 SN

35 SN

12 SN

15 SN

20 SN

25 SN

28 SN

30 SN

MWF

MWF

MWF

MWF WRB

WRB

WRB

WRB

WRB

WRB

STREAM:

MWF

MWF

MWF

WRB

WRB

WRB

WRB

30 SN

33 SN

35 SN

15 SN

20 SN

22 SN

30 SN

SF Payette

SAMPLE DATE:

8/20/97

SECTION: MP82.4

EPA REACH: 17050120009

QUAD MAP:

Jackson Peak

RTS: R8E, T9N, S24

LAT/LONG: 44 5.89; 115 27.83

SECTION DESCRIPTION: Begins at milepost 82.4 at pool below bedrock outcrop. Ends 20 yds. upstream of Helende

Creek.

Transect Infor	mation:			tat Type:
Section Length (m):	91		Pool:	%
Elevation (m):	1271		Riffle:	%
Gradient (%):	0.00%		Run:	%
` ,			Pocket:	%
Population Est: Shade (%):	0.0 SE(popest): 0.0	0		
Mean Width (m):			S	Substrate
Mean Depth (m):				
Cover (%):			Organic:	%
` ,	-1-1-		Sand: Gravel:	% %
Water Cher	nistry		Rubble:	% %
Time:			Boulder: Bedrock:	% %
H2O Temp(C): Air Temp(C):			bedrock.	76
pH:	· · ·			
Alkalinity(mg/l CaCO3 Hardness(uS/cm3):	o):		Species	
Conductivity(mg/l Cat	CO3):		MWF WRB	Mountain whitefish Wild rainbow/redband
Length Frequency				
Species CM Me Group	ethod Number Measured			
MWF 7 SI	•			
Hardness(uS/cm3): Conductivity(mg/l Ca(Length Frequency Species CM Mo	ethod Number Measured		•	

1

3

3

2

1

1

1

STREAM:

SF Payette

SAMPLE DATE:

8/20/97

SECTION: MP83.1

MWF

MWF

MWF

MWF

WRB

WRB

WRB

WRB

WRB

WRB

WRB

WRB

25 SN

28 SN

30 SN

33 SN

7 SN

10 SN

12 SN

15 SN

17 SN

20 SN

25 SN

28 SN

1

1

3

4

3

8 2

9

5

5

5

3

EPA REACH: 17050120010

QUAD MAP:

Jackson Peak

RTS: R8E, T9N, S24

LAT/LONG: 44 6.09 ; 115 26.96

SECTION DESCRIPTION: Begins at turnup just past milepost 83. Ends at second culvert downstream.

Transect Information:					Habitat Type:		
Section I	_ength (m	n):	163.8		Pool:	%	
Elevation	n (m):		1287		Riffle:	%	
Gradient	(%):		0.00%		Run:	%	
Population		0.0	SE(popest): 0.0	0	Pocket:	%	
Mean Wi	•		0.0		Substrate		
Mean De					Organic:	%	
Cover (%					Sand:	%	
	Water C	hemistry			Gravel: Rubble:	% %	
Time: H2O Temp(C):					Boulder: Bedrock:	% %	
Air Temp pH:)(C):						
Alkalinity Hardness					Species		
Conducti		-			HRB MWF	Hatchery rainbow Mountain whitefish	
Length	Frequen	су			WRB	Wild rainbow/redband	
Species	CM Group	Method	Number Measured		WIND	wild fairibow/redballd	
HRB		SN	1 6				
MWF MWF	15 17	SN	2				
MWF	20	SN	1				

STREAM:

SF Payette

SAMPLE DATE:

8/20/97

SECTION: MP86.7

EPA REACH: 17050120011

QUAD MAP: LAT/LONG: 44 7.17; 115 23.17

Jackson Peak

RTS: R9E, T9N, S10 SECTION DESCRIPTION: Begins at confluence of Ten Mile Creek.

Transect Information:					Habitat Type: Pool:			
Section Length (m): 82					Pool:			
Elevation	(m):		1329		Riffle:	%		
Gradient		1	0.00%		Run:	%		
Populatio		0.0	SE(popest):	0	Pocket:	%		
Shade (%		0.0	0.0	Ū	Substrate			
Mean Wid					Substrate			
Mean De					Organic:	%		
Cover (%):				Sand:	%		
	Water C	hemistry			Gravel:	%		
					Rubble:	%		
Time:					Boulder:	%		
H2O Tem	ıp(C):				Bedrock:	%		
Air Temp	(C):							
pH:								
Alkalinity(
Hardness					Species			
Conductiv	/ity(mg/l	CaCO3):			HRB	Hatchery rainbow		
Length Frequency					MWF	Mountain whitefish		
Species	СМ	Method	Number		WCT	Westslope cutthroat		
Opcoics	0111	1110(1100	rturno.		WRB	Wild rainbow/redband		
	Group		Measured					
HRB		SN	1					
MWF		SN	1					
MWF		SN	1					
MWF		SN	3					
MWF		SN	2					
MWF		SN	1 1					
WCT		SN SN	1					
WCT WRB		SN	5					
WRB		SN	3					
WRB		SN	4					
WRB		SN	7					
WRB		SN	3					
WRB		SN	2					
WRB		SN	4					
WRB		SN	1					
WRB		SN	3					
***	JU	5.4	J					

STREAM:

SF Payette

SAMPLE DATE:

8/18/97

SECTION: MP0.8

EPA REACH: 17050122033 RTS: R3E, T9N, S28

QUAD MAP:

Banks LAT/LONG: 44 5.39 ; 116 5.91

SECTION DESCRIPTION: Begins at rapid below second turnout and ends at telephone pole downstream.

Transect Information:					Habitat Type: Pool: %		
Section L	.ength (m	1):	109		Pool:		
Élevation	(m):				Riffle:	%	
Gradient	(%):		0.00%		Run:	%	
Population	n Est:	0.0	SE(popest): 0.0	0	Pocket:	%	
,	•				S	ubstrate	
Mean Wi Mean De							
Cover (%)):				Organic:	%	
		hemistry			Sand: Gravel:	% %	
	vvaler O	nemany			Rubble:	%	
Time:					Boulder:	%	
H2O Tem	np(C):				Bedrock:	%	
Air Temp							
pH:							
Alkalinity					Canaina		
Hardness					Species HRB	Hatabanı rainbau	
Conductiv	vity(mg/i	CaCO3):			LSS	Hatchery rainbow Largescale sucker	
Length	Frequen	су			_	-	
0	014	8.4 a.4 b. a. al	Nivershaa		MWF	Mountain whitefish	
Species	CM	Method	Number		WRB	Wild rainbow/redband	
	Group		Measured				
HRB	20	SN	1				
HRB	25	SN	2				
HRB		SN	1				
LSS		SN	1				
LSS		SN	1				
MWF		SN	1				
MWF		SN	1				
MWF		SN	1				
WRB		SN	1				
WRB		SN	2				
WRB		SN SN	2 2				
WRB	25	SIN	2				

STREAM:

WRB

WRB

28 SN

30 SN

SF Payette

SAMPLE DATE:

8/18/97

SECTION: MP2.0

EPA REACH: 17050122033

RTS: R3E, T9N, S22

QUAD MAP: Banks

LAT/LONG: 44 5.96; 116 5.27

SECTION DESCRIPTION: Begins 10 yds. below 2.0 mile post. Ends at rock outcrop where guardrail begins.

Tr	ansect Ir	nformation	:			at Type:	
Section L	ength (m):	118.3		Pool:	%	
Elevation	(m):		266		Riffle:	%	
Gradient ((%):	1	0.00%		Run:	%	
Population	n Est:	0.0	SE(popest):	0	Pocket:	%	
Shade (%			0.0		Substrate		
Mean Wid							
Mean Dep					Organic:	%	
Cover (%)):				Sand:	% .	
	Water C	hemistry			Gravel:	%	
		•			Rubble:	%	
Time:					Boulder:	%	
H2O Tem	n(C)·				Bedrock:	%	
Air Temp						,,	
pH:							
Alkalinity(mg/I Ca(CO3):					
Hardness	(uS/cm3)) :			Species		
Conductiv	/ity(mg/l	CaCO3):			HRB	Hatchery rainbow	
	• •	-			LSS	Largescale sucker	
Length	Frequen	СУ			MWF	Mountain whitefish	
Species	CM	Method	Number			same to a second	
	Group		Measured		WRB	Wild rainbow/redband	
HRB	20	SN	1				
HRB	30	SN	2				
LSS	15	SN	2				
LSS	30	SN	1				
LSS		SN	6				
LSS		SN	7				
MWF		SN	1				
MWF		SN	1				
		SN					
MWF			4				
MWF		SN	7				
MWF		SN	2				
MWF		SN	1				
WRB		SN	1				
WRB		SN	5				
WRB		SN	7				
WRB	15	SN	4				
WRB	17	SN	1				
WRB		SN	1				
WRB		SN	2				
		2	-				

STREAM:

WRB

102 SN

SF Payette

SAMPLE DATE:

8/18/97

SECTION: MP4.5

EPA REACH: 17050122033

QUAD MAP: Banks

RTS: R4E, T9N, S30

LAT/LONG: 44 5.56 ; 116 2.57

SECTION DESCRIPTION: Begins at first telephone pole above upper end of turnout at milepost 4.5.

Transect Information:					Habitat Type:			
					Pool:	%		
Section L	ength (m	ו):	116.5		Diffi.	%		
Elevation	(m).		273		Riffle:	76		
Lievation (iii).					Run:	%		
Gradient	(%):		0.00%			•		
Populatio	n Est:	0.0	SE(popest):	0	Pocket:	%		
Shade (%		0.0	0.0	U				
020 (7.	.,.				Substrate			
Mean Wid	, ,							
Mean De	pth (m):				Organic:	%		
Cover (%) :				Organic.	70		
	,,				Sand:	%		
	Water C	hemistry			Gravel:	%		
					Rubble:	%		
Time:					Boulder:	%		
H2O Tem					Bedrock:	%		
Air Temp((C):							
pH:								
Alkalinity(
Hardness					Species	t and a salar a salar		
Conductivity(mg/l CaCO3):					LSS	Largescale sucker Mountain whitefish		
Longth	Frequen	C) (MWF	Mountain whiterish		
Lengar	riequeii	Су			NSF	Northern pikeminnow		
Species	CM	Method	Number			·		
	_				WRB	Wild rainbow/redband		
	Group		Measured					
LSS		SN	1					
LSS		SN	2					
LSS		SN	7 7					
LSS		SN	2					
LSS MWF		SN SN	2					
MWF		SN	1					
MWF		SN	4					
MWF		SN	1					
MWF		SN	12					
MWF		SN	2					
NSF		SN	_ 1					
WRB		SN	1					
WRB	12	SN	3					
WRB	15	SN	3					
WRB	25	SN	4					

STREAM:

WRB

28 SN

SF Payette

SAMPLE DATE:

8/18/97

SECTION: MF0.0

EPA REACH: 17050122035

QUAD MAP:

Garden Valley

RTS: R4E, T9N, S20

LAT/LONG: 44 6.18; 116 0.32

SECTION DESCRIPTION: Begins at mouth of mf of Payette River. Ends at public access area.

т	ransect l	nformation	:			at Type:	
Section L	_ength (п	n):	318.5		Pool:	%	
Elevation	n (m):		290		Riffle:	%	
Gradient	(%):		0.00%		Run: Pocket:	%	
Population		0.0	SE(popest): 0.0	0	Pocket.	70	
	- 				Substrate		
Mean Wi Mean De					0	0/	
Cover (%	5):				Organic:	%	
		Chemistry			Sand: Gravel: Rubble:	% % %	
Time:					Boulder:	%	
H2O Ten					Bedrock:	%	
Air Temp pH:	(C):						
Alkalinity	(mg/l Ca	CO3):					
Hardness					Species		
Conducti	vity(mg/l	CaCO3):			HRB LSS	Hatchery rainbow Largescale sucker	
Length	Frequen	ісу			200	Largescale sucker	
			N/comptons		MWF	Mountain whitefish	
Species	CM	Method	Number		NSF	Northern pikeminnow	
	Group		Measured		\T		
					WCT WRB	Westslope cutthroat Wild rainbow/redband	
HRB	15	SN	2				
HRB		SN	1				
HRB		SN	2				
LSS		SN	30				
LSS LSS		SN SN	120 15				
MWF		SN	1				
MWF		SN	2				
MWF	25	SN	29				
MWF	28	SN	43				
MWF		SN	22		•		
MWF		SN	15				
NSF		SN	4				
NSF		SN	10				
NSF WCT		SN SN	1 1				
WRB		SN	2				
AAIZD	10	011	_				

1997 ANNUAL PERFORMANCE REPORT

State of: <u>Idaho</u> Program: <u>Fisheries Management F-71-R-22</u>

Project II: <u>Surveys and Inventories</u> Subproject II-D: <u>Southwest Region</u>

Job No.: d Title: Salmon and Steelhead Investigations

Contract Period: July 1, 1997 to June 30, 1998

ABSTRACT

Salmon spawning ground surveys were conducted in Bear Valley, Elk, and Sulphur Creek trend areas on August 21-28, 1997. Redds numbered 38, 86, and 17 in Bear Valley, Elk and Sulphur Creek trend areas, respectively.

Additional information on Southwest Region salmon and steelhead investigations are incorporated in a separate, statewide "Salmon and Steelhead Investigations" report.

Author:

Dale B. Allen Regional Fishery Manager

1997 ANNUAL PERFORMANCE REPORT

State of: <u>Idaho</u> Program: <u>Fisheries Management F-71-R-22</u>

Project II: <u>Technical Guidance</u> Subproject II-D: <u>Southwest Region</u>

Contract Period: July 1, 1997 to June 30, 1998

ABSTRACT

Regional fishery staff continue to respond to a large number of public requests for fishing information. Bi-weekly ASK FISH reports were prepared and forwarded to vendors for distribution. Regional fishery staff consulted with the Environmental Staff Biologist for requests on fish population status and concerns on a multitude of projects in the Southwest Region. Approximately 20 landowners were assisted with pond construction information. Numerous requests for fish stocking advice and/or rates were received from local Treasure Valley residents.

The regional fisheries database was expanded by incorporating fish population data from federal agencies and various holders of Department collecting permits along with the data collected by regional staff. The database now contains fishery survey data for most of the Boise National Forest drainages and a majority of BLM administered lands in The Department's Southwest Region.

Author:

Dale B. Allen Regional Fishery Manager

Submitted By:

Dale B. Allen Regional Fishery Manager

Steven P. Yundt Regional Fishery Manager

Brian J. Flatter Senior Fishery Technician

Approved By:

IDAHO DEPARTMENT OF FISH AND GAME

Dale B. Allen

Regional Fishery Manager

Al Van Vooren

Regional Supervisor